APPENDIX C

ANALYTICAL RESULTS, LABORATORY ANALYTICAL REPORTS, AND CHAIN OF CUSTODY FORMS

PART 16
ANALYTICAL REPORTS
240-49171-1
240-47172-1
240-49173-1

(Note—To be provided on disc only)

ANALYTICAL REPORT

Job Number: 240-49171-1

Job Description: RVAAP - ECC

For:
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Attention: Mr. Jackson Kiker

Approved for release.
Mark J Loeb
Project Manager II
4/30/2015 5:14 PM

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
Q	One or more quality control criteria failed.
^	Instrument related QC is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
^	Instrument related QC is outside acceptance limits.

GC Semi VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
Q	One or more quality control criteria failed.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
^	Instrument related QC is outside acceptance limits.
M	Manual integrated compound.

HPLC/IC

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
M	Manual integrated compound.

Metals

Qualifier	Qualifier Description
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
U	Undetected at the Limit of Detection.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
V	Serial Dilution exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Environmental Chemical Corp.

Project: RVAAP - ECC

Report Number: 240-49171-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 353.2 Nitrocellulose, 8330 Nitroguanidine and 8330B Explosives analysis were performed at the TestAmerica Sacramento Laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

TestAmerica utilizes USEPA approved methods and DOD QSM, where applicable, in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A summary of QC data for these analyses is included at the back of the report.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

All parameters for which TestAmerica North Canton has certification were evaluated to the limit of detection (LOD) and include qualified results where applicable. Parameters not certified under QSM, if any, were evaluated to the detection limit (DL) and include qualified results where applicable.

The sample(s) that contain constituents flagged with U are undetected. The result associated with this flag is the limit of detection (LOD).

RECEIPT

The samples were received on 4/9/2015 2:51 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.3º C, 4.1º C, 4.3º C and 4.5º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples 079SB-0352M-0001-SO (240-49171-5), 079SB-0353M-0001-SO (240-49171-7) and 079SB-0354M-0001-SO (240-49171-9) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B DoD. The samples were prepared on 04/09/2015 and analyzed on 04/14/2015.

4-Methyl-2-pentanone (MIBK) was detected in method blank MB 240-176277/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Acetone was detected in method blank MB 240-176387/33 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Methylene Chloride was detected in method blank MB 240-176387/33 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Toluene-d8 (Surr) failed the surrogate recovery criteria high for 079SB-0353M-0001-SO (240-49171-7). Refer to the QC report for details.

1,2-Dichloroethane, 4-Methyl-2-pentanone (MIBK), Acetone, Chloroethane, Chloroform and Methylene Chloride failed the recovery criteria

high for MRL 240-176387/30. 1,1-Dichloroethene, Acetone, Chloroethane, Chloromethane and Methylene Chloride failed the recovery criteria high for MRL 240-176387/6. Refer to the QC report for details.

Surrogate recovery for the following sample was outside of acceptance limits: 079SB-0353M-0001-SO (240-49171-7). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 176276.

The MRL opener and closer has Methylene Chloride and Acetone recovering greater than 140 percent. These two compounds are common lab contaminates which are out of the MSVOA lab control. At the reporting limit this contamination has a greater effect even if the Method Blank has these compounds below the reporting limit. The samples effected are079SB-0352M-0001-SO (240-49171-5), 079SB-0353M-0001-SO (240-49171-7), 079SB-0354M-0001-SO (240-49171-9), (MB 240-176387/33), (MRL 240-176387/30) and (MRL 240-176387/6). 079SB-0352M-0001-SO (240-49171-5), 079SB-0353M-0001-SO (240-49171-7), 079SB-0354M-0001-SO (240-49171-9), (MB 240-176387/33), (MRL 240-176387/30) and (MRL 240-176387/6)

The Internal standard (ISTD) response for the following samples was outside of acceptance limits: 079SB-0352M-0001-SO (240-49171-5) and 079SB-0353M-0001-SO (240-49171-7). The samples were not re-analyzed due to insufficient volume.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with 176387 on these samples 079SB-0352M-0001-SO (240-49171-5), 079SB-0353M-0001-SO (240-49171-7) and 079SB-0354M-0001-SO (240-49171-9).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample 079SB-0380M-0001-TB (240-49171-12) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B DoD. The samples were analyzed on 04/14/2015.

Bromomethane and Chloroethane failed the recovery criteria high for MRL 240-176298/15. Bromomethane, Chloroethane, Chloromethane and Vinyl chloride failed the recovery criteria high for MRL 240-176298/5. Refer to the QC report for details.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 176298. 79SB-0380M-0001-TB (240-49171-12)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS) WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SB-0352M-0001-SO (240-49171-6), 079SB-0353M-0001-SO (240-49171-8) and 079SB-0354M-0001-SO (240-49171-10) were analyzed for Polychlorinated biphenyls (PCBs) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 8082 DOD. The samples began the drying procss on 04/11/2015, were prepared on 04/14/2015 and analyzed on 04/16/2015.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required. All of the samples in this data set analyzed for PCBs were subjected to the sulfuric acid cleanup procedure before instrumental analysis, per EPA Method 3665A.

The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: (240-49071-A-2-D), (240-49071-A-2-E MS) and (240-49071-A-2-F MSD). Reagents 1942873 1848564 1931921

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS) WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SB-0352M-0001-SO (240-49171-6), 079SB-0353M-0001-SO (240-49171-8) and 079SB-0354M-0001-SO (240-49171-10) were analyzed for semivolatile organic compounds (GCMS) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 8270 DoD. The samples began the drying process on 04/11/2015, were prepared on 04/14/2015 and analyzed on 04/22/2015.

Butyl benzyl phthalate was detected in method blank MB 240-176319/23-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHLORINATED PESTICIDES WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SB-0352M-0001-SO (240-49171-6), 079SB-0353M-0001-SO (240-49171-8) and 079SB-0354M-0001-SO (240-49171-10) were analyzed for chlorinated pesticides with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 8081 DoD. The samples began the drying process on 04/11/2015, were prepared on 04/20/2015 and analyzed on 04/22/2015.

The continuing calibration verification (CCV) associated with batch recovered above the upper control limit for Multiple Analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 079SB-0352M-0001-SO (240-49171-6) and 079SB-0353M-0001-SO (240-49171-8).

The continuing calibration verification (CCV) associated with batch recovered above the upper control limit for Multiple Analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (LCS 240-177037/8-A).

MRL failed low for DDT on the confirmation column. DDT passed on the primary coulumn. Samples are ND. Data reported. 079SB-0352M-0001-SO (240-49171-6) and 079SB-0353M-0001-SO (240-49171-8)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITROGUANIDINE (HPLC)

Samples 079SB-0352M-0001-SO (240-49171-6), 079SB-0353M-0001-SO (240-49171-8) and 079SB-0354M-0001-SO (240-49171-10) were analyzed for nitroguanidine (HPLC) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 8330_Ngu. The samples began the drying process on 04/11/2015, were prepared on 04/18/2015 and analyzed on 04/22/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

EXPLOSIVES

Samples 079SB-0352M-0001-SO (240-49171-6), 079SB-0353M-0001-SO (240-49171-8) and 079SB-0354M-0001-SO (240-49171-10) were analyzed for explosives with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and in accordance with EPA SW-846 Method 8330B. The samples began the drying process on 04/11/2015, were prepared on 04/18/2015 and analyzed on 04/23/2015 and 04/28/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICPMS) WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SB-0339M-0001, 0002-SO (240-49171-1), 079SB-0340M-0001-SO (240-49171-2), 079SB-0341M-0001, 0002-SO (240-49171-3), 079SB-0351M-0001-SO (240-49171-4), 079SB-0352M-0001-SO (240-49171-6), 079SB-0353M-0001-SO (240-49171-8), 079SB-0354M-0001-SO (240-49171-10), 079SB-0357M-0001-SO (240-49171-11), 079SB-0355M-0001-SO (240-49171-13), 079SB-0356M-0001-SO (240-49171-14), 079SB-0358M-0001-SO (240-49171-15), 079SB-0359M-0001-SO (240-49171-16), 079SB-0360M-0001-SO (240-49171-17), 079SB-0361M-0001-SO (240-49171-18), 079SB-0363M-0001-SO (240-49171-20) and 079SB-0364M-0001-SO (240-49171-21) were analyzed for total metals (ICPMS) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 6020 DoD. The samples began the drying process on 04/10/2015, 04/11/2015 and 04/14/2015, prepared on 04/15/2015, 04/16/2015 and 04/20/2015 and analyzed on 04/20/2015, 04/21/2015, 04/22/2015, 04/24/2015, 04/27/2015 and 04/28/2015.

Aluminum was detected in method blank MB 240-176698/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Several analytes were detected in method blank MB 240-176698/1-A and MB 240-177128/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Antimony and Manganese failed the recovery criteria low for the MS of sample 079SB-0339M-0001, 0002-SOMS (240-49171-1) in batch 240-177880. Aluminum and Iron failed the recovery criteria high.

Several analytes failed the recovery criteria low for the MS of sample 079SB-0341M-0001, 0002-SOMS (240-49171-3) in batch 240-178352.

Antimony and Thallium exceeded the RPD limit for the duplicate of sample 079SB-0339M-0001, 0002-SODU (240-49171-1). Antimony, Copper, Thallium, Manganese and Lead exceeded the RPD limit for the duplicate of sample 079SB-0341M-0001, 0002-SODU (240-49171-3). Refer to the QC report for details.

Samples 079SB-0339M-0001, 0002-SO (240-49171-1)[20X], 079SB-0340M-0001-SO (240-49171-2)[20X], 079SB-0341M-0001, 0002-SO (240-49171-3)[20X], 079SB-0351M-0001-SO (240-49171-4)[20X], 079SB-0357M-0001-SO (240-49171-11)[20X], 079SB-0355M-0001-SO (240-49171-13)[20X], 079SB-0356M-0001-SO (240-49171-14)[20X], 079SB-0358M-0001-SO (240-49171-15)[20X], 079SB-0359M-0001-SO (240-49171-16)[20X], 079SB-0360M-0001-SO (240-49171-17)[20X], 079SB-0361M-0001-SO (240-49171-18)[20X], 079SB-0363M-0001-SO (240-49171-20)[20X] and 079SB-0364M-0001-SO (240-49171-21)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICPMS)

Sample 079SB-0362-0001-SO (240-49171-19) was analyzed for total metals (ICPMS) in accordance with EPA SW-846 Method 6020 DoD. The samples were prepared on 04/15/2015 and analyzed on 04/20/2015 and 04/21/2015.

ICB, CCB, and ICSA samples are evaluated using the lowest LOD and DL criteria in LIMS. Using this criteria, an individual element may occasionally be flagged as out of control. If the element has a higher LOD or DL, the data is evaluated to the higher limit and determined to be acceptable.

Several analytes were detected in method blank MB 240-176562/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Antimony and Calcium failed the recovery criteria low for the MS of sample 240-49071-2 in batch 240-177351. Aluminum, Iron and Manganese failed the recovery criteria high.

Antimony and Calcium exceeded the RPD limit for the duplicate of sample 240-49071-2. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MERCURY WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SB-0339M-0001, 0002-SO (240-49171-1), 079SB-0340M-0001-SO (240-49171-2), 079SB-0341M-0001, 0002-SO (240-49171-3), 079SB-0351M-0001-SO (240-49171-4), 079SB-0352M-0001-SO (240-49171-6), 079SB-0353M-0001-SO (240-49171-8), 079SB-0354M-0001-SO (240-49171-10), 079SB-0357M-0001-SO (240-49171-11), 079SB-0355M-0001-SO (240-49171-13), 079SB-0356M-0001-SO (240-49171-14), 079SB-0358M-0001-SO (240-49171-15), 079SB-0359M-0001-SO (240-49171-16), 079SB-0360M-0001-SO (240-49171-17), 079SB-0361M-0001-SO (240-49171-18), 079SB-0363M-0001-SO (240-49171-20) and 079SB-0364M-0001-SO (240-49171-21) were analyzed for mercury with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 7471A DOD. The samples began the drying process on 04/10/2015, 04/11/2015 and 04/14/2015, were prepared on 04/15/2015, 04/16/2015 and 04/20/2015 and analyzed on 04/16/2015, 04/20/2015 and 04/21/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MERCURY

Sample 079SB-0362-0001-SO (240-49171-19) was analyzed for mercury in accordance with EPA SW-846 Method 7471A DoD. The samples were prepared on 04/15/2015 and analyzed on 04/16/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITROCELLULOSE

Samples 079SB-0352M-0001-SO (240-49171-6), 079SB-0353M-0001-SO (240-49171-8) and 079SB-0354M-0001-SO (240-49171-10) were analyzed for Nitrocellulose with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA Method 353.2. The samples began the drying process on 04/11/2015, , were prepared on 04/21/2015 and analyzed on 04/22/2015.

Nitrocellulose was detected in method blank MB 320-71507/1-B at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL SOLIDS/PERCENT MOISTURE

Samples 079SB-0339M-0001, 0002-SO (240-49171-1), 079SB-0340M-0001-SO (240-49171-2), 079SB-0341M-0001, 0002-SO (240-49171-3), 079SB-0351M-0001-SO (240-49171-4), 079SB-0352M-0001-SO (240-49171-6), 079SB-0353M-0001-SO (240-49171-8), 079SB-0354M-0001-SO (240-49171-10), 079SB-0357M-0001-SO (240-49171-11), 079SB-0355M-0001-SO (240-49171-13), 079SB-0356M-0001-SO (240-49171-14), 079SB-0358M-0001-SO (240-49171-15), 079SB-0359M-0001-SO (240-49171-16), 079SB-0360M-0001-SO (240-49171-17), 079SB-0361M-0001-SO (240-49171-18), 079SB-0363M-0001-SO (240-49171-20) and 079SB-0364M-0001-SO (240-49171-21) were analyzed for Total Solids/Percent Moisture in accordance with Percent Moisture method. The samples began the drying process on 04/10/2015, 04/11/2015 and 04/14/2015 and analyzed on 04/13/2015 and 04/15/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples 079SB-0352M-0001-SO (240-49171-5), 079SB-0353M-0001-SO (240-49171-7), 079SB-0354M-0001-SO (240-49171-9) and 079SB-0362-0001-SO (240-49171-19) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 04/10/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-49171-1

Client Sample ID: 079SB-0339M-0001, 0002-SO — Lab Sample ID: 240-49171-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	6500	J D	18	0.55	mg/Kg	2	☼	6020	Total/NA
Antimony	0.13	J D	0.35	0.012	mg/Kg	2	☼	6020	Total/NA
Arsenic	13	D	0.89	0.023	mg/Kg	2	☼	6020	Total/NA
Barium	56	D J	0.89	0.20	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.54	D	0.18	0.0098	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.11	J D	0.35	0.0033	mg/Kg	2	☼	6020	Total/NA
Calcium	110	J D	350	20	mg/Kg	2	☼	6020	Total/NA
Chromium	16	D	0.89	0.053	mg/Kg	2	☼	6020	Total/NA
Cobalt	10	D	0.18	0.0015	mg/Kg	2	☼	6020	Total/NA
Copper	10	D	0.71	0.086	mg/Kg	2	☼	6020	Total/NA
Iron	36000	D J	890	28	mg/Kg	20	☼	6020	Total/NA
Lead	12	D	0.53	0.040	mg/Kg	2	☼	6020	Total/NA
Magnesium	1300	D	180	3.5	mg/Kg	2	☼	6020	Total/NA
Manganese	1400	D J	8.9	1.1	mg/Kg	20	☼	6020	Total/NA
Nickel	15	D	0.89	0.035	mg/Kg	2	☼	6020	Total/NA
Potassium	580	D	180	4.3	mg/Kg	2	☼	6020	Total/NA
Selenium	0.92	D	0.89	0.035	mg/Kg	2	☼	6020	Total/NA
Silver	0.017	J D	0.18	0.0012	mg/Kg	2	☼	6020	Total/NA
Sodium	22	J D	180	7.7	mg/Kg	2	☼	6020	Total/NA
Thallium	0.15	J D	0.35	0.017	mg/Kg	2	☼	6020	Total/NA
Vanadium	19	D	0.89	0.033	mg/Kg	2	☼	6020	Total/NA
Zinc	35	D	7.1	0.44	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: 079SB-0340M-0001-SO — Lab Sample ID: 240-49171-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11000	D	19	0.60	mg/Kg	2	☼	6020	Total/NA
Antimony	0.18	J D	0.39	0.014	mg/Kg	2	☼	6020	Total/NA
Arsenic	15	D	0.97	0.025	mg/Kg	2	☼	6020	Total/NA
Barium	75	D	0.97	0.21	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.67	D	0.19	0.011	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.15	J D	0.39	0.0036	mg/Kg	2	☼	6020	Total/NA
Calcium	180	J D	390	21	mg/Kg	2	☼	6020	Total/NA
Chromium	20	D	0.97	0.058	mg/Kg	2	☼	6020	Total/NA
Cobalt	9.4	D	0.19	0.0017	mg/Kg	2	☼	6020	Total/NA
Copper	17	D	0.78	0.095	mg/Kg	2	☼	6020	Total/NA
Iron	36000	D	970	31	mg/Kg	20	☼	6020	Total/NA
Lead	17	D	0.58	0.044	mg/Kg	2	☼	6020	Total/NA
Magnesium	2300	D	190	3.9	mg/Kg	2	☼	6020	Total/NA
Manganese	660	D	9.7	1.2	mg/Kg	20	☼	6020	Total/NA
Nickel	20	D	0.97	0.038	mg/Kg	2	☼	6020	Total/NA
Potassium	1000	D	190	4.8	mg/Kg	2	☼	6020	Total/NA
Selenium	1.3	D	0.97	0.039	mg/Kg	2	☼	6020	Total/NA
Silver	0.017	J D	0.19	0.0014	mg/Kg	2	☼	6020	Total/NA
Sodium	32	J D	190	8.5	mg/Kg	2	☼	6020	Total/NA
Thallium	0.20	J D	0.39	0.019	mg/Kg	2	☼	6020	Total/NA
Vanadium	23	D	0.97	0.036	mg/Kg	2	☼	6020	Total/NA
Zinc	50	D	7.8	0.49	mg/Kg	2	☼	6020	Total/NA
Mercury	0.026	J	0.10	0.015	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SB-0341M-0001, 0002-SO — Lab Sample ID: 240-49171-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8400	J D	20	0.61	mg/Kg	2	☼	6020	Total/NA
Antimony	0.14	J D	0.39	0.014	mg/Kg	2	☼	6020	Total/NA
Arsenic	43	D	0.98	0.026	mg/Kg	2	☼	6020	Total/NA
Barium	60	J D	0.98	0.22	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.51	D	0.20	0.011	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.11	J D	0.39	0.0036	mg/Kg	2	☼	6020	Total/NA
Chromium	15	D	0.98	0.059	mg/Kg	2	☼	6020	Total/NA
Cobalt	7.5	D	0.20	0.0017	mg/Kg	2	☼	6020	Total/NA
Copper	20	D	0.78	0.095	mg/Kg	2	☼	6020	Total/NA
Iron	20000	J D	98	3.1	mg/Kg	2	☼	6020	Total/NA
Lead	76	D	5.9	0.44	mg/Kg	20	☼	6020	Total/NA
Magnesium	2200	D	200	3.9	mg/Kg	2	☼	6020	Total/NA
Manganese	2500	D J	9.8	1.2	mg/Kg	20	☼	6020	Total/NA
Nickel	19	D	0.98	0.038	mg/Kg	2	☼	6020	Total/NA
Potassium	3000	J D	200	4.8	mg/Kg	2	☼	6020	Total/NA
Selenium	0.81	J D	0.98	0.039	mg/Kg	2	☼	6020	Total/NA
Silver	0.017	J D	0.20	0.0014	mg/Kg	2	☼	6020	Total/NA
Sodium	370	D	200	8.5	mg/Kg	2	☼	6020	Total/NA
Thallium	0.11	J D	0.39	0.019	mg/Kg	2	☼	6020	Total/NA
Vanadium	15	D	0.98	0.036	mg/Kg	2	☼	6020	Total/NA
Zinc	45	D	7.8	0.49	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: 079SB-0351M-0001-SO — Lab Sample ID: 240-49171-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7300	D	16	0.51	mg/Kg	2	☼	6020	Total/NA
Antimony	0.067	J D	0.33	0.011	mg/Kg	2	☼	6020	Total/NA
Arsenic	33	D	0.82	0.021	mg/Kg	2	☼	6020	Total/NA
Barium	56	D	0.82	0.18	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.47	D	0.16	0.0090	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.090	J D	0.33	0.0030	mg/Kg	2	☼	6020	Total/NA
Calcium	22	J D	330	18	mg/Kg	2	☼	6020	Total/NA
Chromium	13	D	0.82	0.049	mg/Kg	2	☼	6020	Total/NA
Cobalt	7.0	D	0.16	0.0014	mg/Kg	2	☼	6020	Total/NA
Copper	16	D	0.66	0.080	mg/Kg	2	☼	6020	Total/NA
Iron	20000	D	820	26	mg/Kg	20	☼	6020	Total/NA
Lead	66	D	0.49	0.037	mg/Kg	2	☼	6020	Total/NA
Magnesium	2000	D	160	3.3	mg/Kg	2	☼	6020	Total/NA
Manganese	1100	D	8.2	0.99	mg/Kg	20	☼	6020	Total/NA
Nickel	17	D	0.82	0.032	mg/Kg	2	☼	6020	Total/NA
Potassium	2700	D	160	4.0	mg/Kg	2	☼	6020	Total/NA
Selenium	0.62	J D	0.82	0.033	mg/Kg	2	☼	6020	Total/NA
Silver	0.013	J D	0.16	0.0011	mg/Kg	2	☼	6020	Total/NA
Sodium	300	D	160	7.1	mg/Kg	2	☼	6020	Total/NA
Thallium	0.094	J D	0.33	0.016	mg/Kg	2	☼	6020	Total/NA
Vanadium	13	D	0.82	0.030	mg/Kg	2	☼	6020	Total/NA
Zinc	40	D	6.6	0.41	mg/Kg	2	☼	6020	Total/NA
Mercury	0.018	J	0.089	0.012	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SB-0352M-0001-SO — Lab Sample ID: 240-49171-5

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SB-0352M-0001-SO (Continued) — Lab Sample ID: 240-49171-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.4	J Q	23	7.2	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: 079SB-0352M-0001-SO — Lab Sample ID: 240-49171-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	3.4	J	6.7	0.65	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	7.1		6.7	0.59	ug/Kg	1	☼	8270C	Total/NA
Benzoic acid	150	J	670	36	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	20	J	71	19	ug/Kg	1	☼	8270C	Total/NA
Chrysene	6.1	J	6.7	1.1	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	12		6.7	0.55	ug/Kg	1	☼	8270C	Total/NA
Isophorone	60		50	13	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	11		6.7	0.50	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	11		6.7	0.83	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	8.8		6.7	0.74	ug/Kg	1	☼	8270C	Total/NA
Pyrene	6.5	J	6.7	0.44	ug/Kg	1	☼	8270C	Total/NA
4,4'-DDE - RE	0.34	J	1.7	0.27	ug/Kg	1	☼	8081A	Total/NA
Aluminum	12000	D	440	14	mg/Kg	50	☼	6020	Total/NA
Antimony	0.088	J D	0.35	0.012	mg/Kg	2	☼	6020	Total/NA
Arsenic	11	D	0.87	0.023	mg/Kg	2	☼	6020	Total/NA
Barium	82	D	0.87	0.19	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.70	D	0.17	0.0096	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.13	J D	0.35	0.0032	mg/Kg	2	☼	6020	Total/NA
Calcium	150	J D	350	19	mg/Kg	2	☼	6020	Total/NA
Chromium	19	D	0.87	0.052	mg/Kg	2	☼	6020	Total/NA
Cobalt	10	D	0.17	0.0015	mg/Kg	2	☼	6020	Total/NA
Copper	13	D	0.70	0.085	mg/Kg	2	☼	6020	Total/NA
Iron	25000	D	2200	70	mg/Kg	50	☼	6020	Total/NA
Lead	16	D	0.52	0.039	mg/Kg	2	☼	6020	Total/NA
Magnesium	1900	D	170	3.5	mg/Kg	2	☼	6020	Total/NA
Manganese	820	D	22	2.6	mg/Kg	50	☼	6020	Total/NA
Nickel	16	D	0.87	0.034	mg/Kg	2	☼	6020	Total/NA
Potassium	670	D	170	4.3	mg/Kg	2	☼	6020	Total/NA
Selenium	1.0	D	0.87	0.035	mg/Kg	2	☼	6020	Total/NA
Silver	0.031	J D	0.17	0.0012	mg/Kg	2	☼	6020	Total/NA
Sodium	30	J D	170	7.6	mg/Kg	2	☼	6020	Total/NA
Thallium	0.15	J D	0.35	0.017	mg/Kg	2	☼	6020	Total/NA
Vanadium	23	D	0.87	0.032	mg/Kg	2	☼	6020	Total/NA
Zinc	49	D	7.0	0.44	mg/Kg	2	☼	6020	Total/NA
Mercury	0.040	J	0.12	0.016	mg/Kg	1	☼	7471A	Total/NA
Nitrocellulose	0.99	J	5.1	0.80	mg/Kg	1	☼	WS-WC-0050	Total/NA

Client Sample ID: 079SB-0353M-0001-SO — Lab Sample ID: 240-49171-7

No Detections.

Client Sample ID: 079SB-0353M-0001-SO — Lab Sample ID: 240-49171-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Benzoic acid	170	J	690	37	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	31	J	73	20	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SB-0353M-0001-SO (Continued) — Lab Sample ID: 240-49171-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Isophorone	36	J	52	13	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	7.4		6.9	0.52	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	7.1		6.9	0.85	ug/Kg	1	☼	8270C	Total/NA
Aluminum	16000	D	480	15	mg/Kg	50	☼	6020	Total/NA
Antimony	0.12	J D	0.39	0.014	mg/Kg	2	☼	6020	Total/NA
Arsenic	11	D	0.97	0.025	mg/Kg	2	☼	6020	Total/NA
Barium	87	D	0.97	0.21	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.76	D	0.19	0.011	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.19	J D	0.39	0.0036	mg/Kg	2	☼	6020	Total/NA
Calcium	250	J D	390	21	mg/Kg	2	☼	6020	Total/NA
Chromium	18	D	0.97	0.058	mg/Kg	2	☼	6020	Total/NA
Cobalt	10	D	0.19	0.0016	mg/Kg	2	☼	6020	Total/NA
Copper	16	D	0.77	0.094	mg/Kg	2	☼	6020	Total/NA
Iron	31000	D	2400	77	mg/Kg	50	☼	6020	Total/NA
Lead	13	D	0.58	0.043	mg/Kg	2	☼	6020	Total/NA
Magnesium	2100	D	190	3.9	mg/Kg	2	☼	6020	Total/NA
Manganese	710	D	24	2.9	mg/Kg	50	☼	6020	Total/NA
Nickel	21	D	0.97	0.038	mg/Kg	2	☼	6020	Total/NA
Potassium	780	D	190	4.7	mg/Kg	2	☼	6020	Total/NA
Selenium	1.2	D	0.97	0.039	mg/Kg	2	☼	6020	Total/NA
Silver	0.023	J D	0.19	0.0014	mg/Kg	2	☼	6020	Total/NA
Sodium	29	J D	190	8.4	mg/Kg	2	☼	6020	Total/NA
Thallium	0.17	J D	0.39	0.018	mg/Kg	2	☼	6020	Total/NA
Vanadium	25	D	0.97	0.036	mg/Kg	2	☼	6020	Total/NA
Zinc	57	D	7.7	0.48	mg/Kg	2	☼	6020	Total/NA
Mercury	0.038	J	0.10	0.015	mg/Kg	1	☼	7471A	Total/NA
Nitrocellulose	0.99	J	5.1	0.80	mg/Kg	1	☼	WS-WC-0050	Total/NA

Client Sample ID: 079SB-0354M-0001-SO — Lab Sample ID: 240-49171-9

No Detections.

Client Sample ID: 079SB-0354M-0001-SO — Lab Sample ID: 240-49171-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Benzoic acid	110	J M	670	36	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	19	J	71	19	ug/Kg	1	☼	8270C	Total/NA
Isophorone	25	J	50	13	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	3.7	J	6.7	0.50	ug/Kg	1	☼	8270C	Total/NA
Aluminum	6000	D	460	14	mg/Kg	50	☼	6020	Total/NA
Antimony	0.046	J D	0.37	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	11	D	0.92	0.024	mg/Kg	2	☼	6020	Total/NA
Barium	34	D	0.92	0.20	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.34	D	0.18	0.010	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.080	J D	0.37	0.0034	mg/Kg	2	☼	6020	Total/NA
Calcium	130	J D	370	20	mg/Kg	2	☼	6020	Total/NA
Chromium	17	D	0.92	0.055	mg/Kg	2	☼	6020	Total/NA
Cobalt	5.9	D	0.18	0.0016	mg/Kg	2	☼	6020	Total/NA
Copper	5.2	D	0.74	0.089	mg/Kg	2	☼	6020	Total/NA
Iron	16000	D	2300	74	mg/Kg	50	☼	6020	Total/NA
Lead	7.1	D	0.55	0.041	mg/Kg	2	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SB-0354M-0001-SO (Continued)

Lab Sample ID: 240-49171-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	1100	D	180	3.7	mg/Kg	2	☼	6020	Total/NA
Manganese	280	D	0.92	0.11	mg/Kg	2	☼	6020	Total/NA
Nickel	12	D	0.92	0.036	mg/Kg	2	☼	6020	Total/NA
Potassium	510	D	180	4.5	mg/Kg	2	☼	6020	Total/NA
Selenium	0.53	J D	0.92	0.037	mg/Kg	2	☼	6020	Total/NA
Silver	0.019	J D	0.18	0.0013	mg/Kg	2	☼	6020	Total/NA
Sodium	22	J D	180	8.0	mg/Kg	2	☼	6020	Total/NA
Thallium	0.081	J D	0.37	0.017	mg/Kg	2	☼	6020	Total/NA
Vanadium	15	D	0.92	0.034	mg/Kg	2	☼	6020	Total/NA
Zinc	30	D	7.4	0.46	mg/Kg	2	☼	6020	Total/NA
Mercury	0.022	J	0.11	0.015	mg/Kg	1	☼	7471A	Total/NA
Nitrocellulose	0.97	J	5.0	0.78	mg/Kg	1	☼	WS-WC-0050	Total/NA

Client Sample ID: 079SB-0357M-0001-SO

Lab Sample ID: 240-49171-11

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	9100	D	17	0.52	mg/Kg	2	☼	6020	Total/NA
Antimony	0.095	J D	0.33	0.012	mg/Kg	2	☼	6020	Total/NA
Arsenic	13	D	0.83	0.022	mg/Kg	2	☼	6020	Total/NA
Barium	66	D	0.83	0.18	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.41	D	0.17	0.0091	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.11	J D	0.33	0.0031	mg/Kg	2	☼	6020	Total/NA
Calcium	840	D	330	18	mg/Kg	2	☼	6020	Total/NA
Chromium	14	D	0.83	0.050	mg/Kg	2	☼	6020	Total/NA
Cobalt	6.5	D	0.17	0.0014	mg/Kg	2	☼	6020	Total/NA
Copper	8.0	D	0.66	0.081	mg/Kg	2	☼	6020	Total/NA
Iron	15000	D	830	27	mg/Kg	20	☼	6020	Total/NA
Lead	8.0	D	0.50	0.037	mg/Kg	2	☼	6020	Total/NA
Magnesium	1400	D	170	3.3	mg/Kg	2	☼	6020	Total/NA
Manganese	770	D	8.3	1.0	mg/Kg	20	☼	6020	Total/NA
Nickel	17	D	0.83	0.032	mg/Kg	2	☼	6020	Total/NA
Potassium	600	D	170	4.1	mg/Kg	2	☼	6020	Total/NA
Selenium	0.85	D	0.83	0.033	mg/Kg	2	☼	6020	Total/NA
Silver	0.024	J D	0.17	0.0012	mg/Kg	2	☼	6020	Total/NA
Sodium	52	J D	170	7.2	mg/Kg	2	☼	6020	Total/NA
Thallium	0.15	J D	0.33	0.016	mg/Kg	2	☼	6020	Total/NA
Vanadium	18	D	0.83	0.031	mg/Kg	2	☼	6020	Total/NA
Zinc	40	D	6.6	0.42	mg/Kg	2	☼	6020	Total/NA
Mercury	0.048	J	0.10	0.015	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SB-0380M-0001-TB

Lab Sample ID: 240-49171-12

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J	10	0.94	ug/L	1		8260B	Total/NA

Client Sample ID: 079SB-0355M-0001-SO

Lab Sample ID: 240-49171-13

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5800	D	15	0.47	mg/Kg	2	☼	6020	Total/NA
Antimony	0.058	J D	0.31	0.011	mg/Kg	2	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SB-0355M-0001-SO (Continued)

Lab Sample ID: 240-49171-13

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	15	D	0.77	0.020	mg/Kg	2	☼	6020	Total/NA
Barium	34	D	0.77	0.17	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.31	D	0.15	0.0084	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.10	J D	0.31	0.0028	mg/Kg	2	☼	6020	Total/NA
Calcium	130	J D	310	17	mg/Kg	2	☼	6020	Total/NA
Chromium	11	D	0.77	0.046	mg/Kg	2	☼	6020	Total/NA
Cobalt	5.6	D	0.15	0.0013	mg/Kg	2	☼	6020	Total/NA
Copper	6.2	D	0.61	0.074	mg/Kg	2	☼	6020	Total/NA
Iron	16000	D	770	24	mg/Kg	20	☼	6020	Total/NA
Lead	7.1	D	0.46	0.034	mg/Kg	2	☼	6020	Total/NA
Magnesium	770	D	150	3.1	mg/Kg	2	☼	6020	Total/NA
Manganese	320	D	7.7	0.92	mg/Kg	20	☼	6020	Total/NA
Nickel	13	D	0.77	0.030	mg/Kg	2	☼	6020	Total/NA
Potassium	390	D	150	3.7	mg/Kg	2	☼	6020	Total/NA
Selenium	0.52	J D	0.77	0.031	mg/Kg	2	☼	6020	Total/NA
Silver	0.014	J D	0.15	0.0011	mg/Kg	2	☼	6020	Total/NA
Sodium	13	J D	150	6.7	mg/Kg	2	☼	6020	Total/NA
Thallium	0.093	J D	0.31	0.015	mg/Kg	2	☼	6020	Total/NA
Vanadium	10	D	0.77	0.028	mg/Kg	2	☼	6020	Total/NA
Zinc	38	D	6.1	0.38	mg/Kg	2	☼	6020	Total/NA
Mercury	0.020	J	0.11	0.015	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SB-0356M-0001-SO

Lab Sample ID: 240-49171-14

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	6200	D	15	0.48	mg/Kg	2	☼	6020	Total/NA
Antimony	0.14	J D	0.31	0.011	mg/Kg	2	☼	6020	Total/NA
Arsenic	77	D	0.77	0.020	mg/Kg	2	☼	6020	Total/NA
Barium	47	D	0.77	0.17	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.37	D	0.15	0.0084	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.20	J D	0.31	0.0028	mg/Kg	2	☼	6020	Total/NA
Calcium	170	J D	310	17	mg/Kg	2	☼	6020	Total/NA
Chromium	12	D	0.77	0.046	mg/Kg	2	☼	6020	Total/NA
Cobalt	18	D	0.15	0.0013	mg/Kg	2	☼	6020	Total/NA
Copper	9.4	D	0.61	0.074	mg/Kg	2	☼	6020	Total/NA
Iron	17000	D	770	25	mg/Kg	20	☼	6020	Total/NA
Lead	12	D	0.46	0.035	mg/Kg	2	☼	6020	Total/NA
Magnesium	1300	D	150	3.1	mg/Kg	2	☼	6020	Total/NA
Manganese	490	D	7.7	0.92	mg/Kg	20	☼	6020	Total/NA
Nickel	20	D	0.77	0.030	mg/Kg	2	☼	6020	Total/NA
Potassium	630	D	150	3.8	mg/Kg	2	☼	6020	Total/NA
Selenium	0.67	J D	0.77	0.031	mg/Kg	2	☼	6020	Total/NA
Silver	0.045	J D	0.15	0.0011	mg/Kg	2	☼	6020	Total/NA
Sodium	24	J D	150	6.7	mg/Kg	2	☼	6020	Total/NA
Thallium	0.18	J D	0.31	0.015	mg/Kg	2	☼	6020	Total/NA
Vanadium	14	D	0.77	0.028	mg/Kg	2	☼	6020	Total/NA
Zinc	94	D	6.1	0.38	mg/Kg	2	☼	6020	Total/NA
Mercury	0.034	J	0.095	0.013	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SB-0358M-0001-SO

Lab Sample ID: 240-49171-15

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SB-0358M-0001-SO (Continued)

Lab Sample ID: 240-49171-15

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11000	D	15	0.45	mg/Kg	2	☼	6020	Total/NA
Antimony	0.14	J D	0.29	0.010	mg/Kg	2	☼	6020	Total/NA
Arsenic	14	D	0.73	0.019	mg/Kg	2	☼	6020	Total/NA
Barium	54	D	0.73	0.16	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.54	D	0.15	0.0080	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.16	J D	0.29	0.0027	mg/Kg	2	☼	6020	Total/NA
Calcium	270	J D	290	16	mg/Kg	2	☼	6020	Total/NA
Chromium	20	D	0.73	0.044	mg/Kg	2	☼	6020	Total/NA
Cobalt	8.3	D	0.15	0.0012	mg/Kg	2	☼	6020	Total/NA
Copper	20	D	0.58	0.071	mg/Kg	2	☼	6020	Total/NA
Iron	30000	D	730	23	mg/Kg	20	☼	6020	Total/NA
Lead	16	D	0.44	0.033	mg/Kg	2	☼	6020	Total/NA
Magnesium	2200	D	150	2.9	mg/Kg	2	☼	6020	Total/NA
Manganese	420	D	7.3	0.88	mg/Kg	20	☼	6020	Total/NA
Nickel	21	D	0.73	0.028	mg/Kg	2	☼	6020	Total/NA
Potassium	720	D	150	3.6	mg/Kg	2	☼	6020	Total/NA
Selenium	0.94	D	0.73	0.029	mg/Kg	2	☼	6020	Total/NA
Silver	0.019	J D	0.15	0.0010	mg/Kg	2	☼	6020	Total/NA
Sodium	26	J D	150	6.3	mg/Kg	2	☼	6020	Total/NA
Thallium	0.18	J D	0.29	0.014	mg/Kg	2	☼	6020	Total/NA
Vanadium	20	D	0.73	0.027	mg/Kg	2	☼	6020	Total/NA
Zinc	61	D	5.8	0.36	mg/Kg	2	☼	6020	Total/NA
Mercury	0.027	J	0.10	0.014	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SB-0359M-0001-SO

Lab Sample ID: 240-49171-16

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8200	D	19	0.58	mg/Kg	2	☼	6020	Total/NA
Antimony	0.095	J D	0.37	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	11	D	0.93	0.024	mg/Kg	2	☼	6020	Total/NA
Barium	61	D	0.93	0.21	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.56	D	0.19	0.010	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.12	J D	0.37	0.0035	mg/Kg	2	☼	6020	Total/NA
Calcium	620	D	370	21	mg/Kg	2	☼	6020	Total/NA
Chromium	14	D	0.93	0.056	mg/Kg	2	☼	6020	Total/NA
Cobalt	8.9	D	0.19	0.0016	mg/Kg	2	☼	6020	Total/NA
Copper	16	D	0.75	0.091	mg/Kg	2	☼	6020	Total/NA
Iron	24000	D	930	30	mg/Kg	20	☼	6020	Total/NA
Lead	14	D	0.56	0.042	mg/Kg	2	☼	6020	Total/NA
Magnesium	2500	D	190	3.7	mg/Kg	2	☼	6020	Total/NA
Manganese	550	D	9.3	1.1	mg/Kg	20	☼	6020	Total/NA
Nickel	19	D	0.93	0.036	mg/Kg	2	☼	6020	Total/NA
Potassium	920	D	190	4.6	mg/Kg	2	☼	6020	Total/NA
Selenium	0.82	J D	0.93	0.037	mg/Kg	2	☼	6020	Total/NA
Silver	0.019	J D	0.19	0.0013	mg/Kg	2	☼	6020	Total/NA
Sodium	39	J D	190	8.1	mg/Kg	2	☼	6020	Total/NA
Thallium	0.15	J D	0.37	0.018	mg/Kg	2	☼	6020	Total/NA
Vanadium	17	D	0.93	0.035	mg/Kg	2	☼	6020	Total/NA
Zinc	53	D	7.5	0.47	mg/Kg	2	☼	6020	Total/NA
Mercury	0.021	J	0.11	0.015	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-49171-1

Client Sample ID: 079SB-0360M-0001-SO — Lab Sample ID: 240-49171-17

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11000	D	17	0.54	mg/Kg	2	☼	6020	Total/NA
Antimony	0.094	J D	0.35	0.012	mg/Kg	2	☼	6020	Total/NA
Arsenic	13	D	0.87	0.023	mg/Kg	2	☼	6020	Total/NA
Barium	91	D	0.87	0.19	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.68	D	0.17	0.0096	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.18	J D	0.35	0.0032	mg/Kg	2	☼	6020	Total/NA
Calcium	870	D	350	19	mg/Kg	2	☼	6020	Total/NA
Chromium	16	D	0.87	0.052	mg/Kg	2	☼	6020	Total/NA
Cobalt	9.8	D	0.17	0.0015	mg/Kg	2	☼	6020	Total/NA
Copper	17	D	0.70	0.085	mg/Kg	2	☼	6020	Total/NA
Iron	31000	D	870	28	mg/Kg	20	☼	6020	Total/NA
Lead	14	D	0.52	0.039	mg/Kg	2	☼	6020	Total/NA
Magnesium	2300	D	170	3.5	mg/Kg	2	☼	6020	Total/NA
Manganese	780	D	8.7	1.0	mg/Kg	20	☼	6020	Total/NA
Nickel	18	D	0.87	0.034	mg/Kg	2	☼	6020	Total/NA
Potassium	910	D	170	4.3	mg/Kg	2	☼	6020	Total/NA
Selenium	1.1	D	0.87	0.035	mg/Kg	2	☼	6020	Total/NA
Silver	0.034	J D	0.17	0.0012	mg/Kg	2	☼	6020	Total/NA
Sodium	34	J D	170	7.6	mg/Kg	2	☼	6020	Total/NA
Thallium	0.16	J D	0.35	0.017	mg/Kg	2	☼	6020	Total/NA
Vanadium	21	D	0.87	0.032	mg/Kg	2	☼	6020	Total/NA
Zinc	55	D	7.0	0.44	mg/Kg	2	☼	6020	Total/NA
Mercury	0.031	J	0.097	0.014	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SB-0361M-0001-SO — Lab Sample ID: 240-49171-18

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	10000	D	18	0.56	mg/Kg	2	☼	6020	Total/NA
Antimony	0.075	J D	0.36	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	12	D	0.90	0.023	mg/Kg	2	☼	6020	Total/NA
Barium	66	D	0.90	0.20	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.62	D	0.18	0.0099	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.16	J D	0.36	0.0033	mg/Kg	2	☼	6020	Total/NA
Calcium	740	D	360	20	mg/Kg	2	☼	6020	Total/NA
Chromium	16	D	0.90	0.054	mg/Kg	2	☼	6020	Total/NA
Cobalt	9.3	D	0.18	0.0015	mg/Kg	2	☼	6020	Total/NA
Copper	17	D	0.72	0.088	mg/Kg	2	☼	6020	Total/NA
Iron	26000	D	900	29	mg/Kg	20	☼	6020	Total/NA
Lead	13	D	0.54	0.041	mg/Kg	2	☼	6020	Total/NA
Magnesium	2600	D	180	3.6	mg/Kg	2	☼	6020	Total/NA
Manganese	500	D	9.0	1.1	mg/Kg	20	☼	6020	Total/NA
Nickel	20	D	0.90	0.035	mg/Kg	2	☼	6020	Total/NA
Potassium	800	D	180	4.4	mg/Kg	2	☼	6020	Total/NA
Selenium	0.86	J D	0.90	0.036	mg/Kg	2	☼	6020	Total/NA
Silver	0.027	J D	0.18	0.0013	mg/Kg	2	☼	6020	Total/NA
Sodium	35	J D	180	7.9	mg/Kg	2	☼	6020	Total/NA
Thallium	0.17	J D	0.36	0.017	mg/Kg	2	☼	6020	Total/NA
Vanadium	20	D	0.90	0.033	mg/Kg	2	☼	6020	Total/NA
Zinc	75	D	7.2	0.45	mg/Kg	2	☼	6020	Total/NA
Mercury	0.024	J	0.090	0.013	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-49171-1

Client Sample ID: 079SB-0362-0001-SO — Lab Sample ID: 240-49171-19

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	1200	D	22	0.68	mg/Kg	2	☼	6020	Total/NA
Antimony	0.038	J D	0.44	0.015	mg/Kg	2	☼	6020	Total/NA
Arsenic	4.3	D	1.1	0.029	mg/Kg	2	☼	6020	Total/NA
Barium	6.1	D	1.1	0.24	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.10	J D	0.22	0.012	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.026	J D	0.44	0.0041	mg/Kg	2	☼	6020	Total/NA
Calcium	79	J D	440	24	mg/Kg	2	☼	6020	Total/NA
Chromium	2.8	D	1.1	0.066	mg/Kg	2	☼	6020	Total/NA
Cobalt	1.2	D	0.22	0.0019	mg/Kg	2	☼	6020	Total/NA
Copper	1.7	D	0.88	0.11	mg/Kg	2	☼	6020	Total/NA
Iron	3500	D	110	3.5	mg/Kg	2	☼	6020	Total/NA
Lead	1.9	D	0.66	0.050	mg/Kg	2	☼	6020	Total/NA
Magnesium	190	J D	220	4.4	mg/Kg	2	☼	6020	Total/NA
Manganese	29	D	1.1	0.13	mg/Kg	2	☼	6020	Total/NA
Nickel	3.5	D	1.1	0.043	mg/Kg	2	☼	6020	Total/NA
Potassium	210	J D	220	5.4	mg/Kg	2	☼	6020	Total/NA
Selenium	0.18	J D	1.1	0.044	mg/Kg	2	☼	6020	Total/NA
Silver	0.0024	J D	0.22	0.0015	mg/Kg	2	☼	6020	Total/NA
Sodium	20	J D	220	9.6	mg/Kg	2	☼	6020	Total/NA
Thallium	0.033	J D	0.44	0.021	mg/Kg	2	☼	6020	Total/NA
Vanadium	3.1	D	1.1	0.041	mg/Kg	2	☼	6020	Total/NA
Zinc	29	D	8.8	0.55	mg/Kg	2	☼	6020	Total/NA

Client Sample ID: 079SB-0363M-0001-SO — Lab Sample ID: 240-49171-20

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	12000	D	20	0.62	mg/Kg	2	☼	6020	Total/NA
Antimony	0.095	J D	0.40	0.014	mg/Kg	2	☼	6020	Total/NA
Arsenic	14	D	0.99	0.026	mg/Kg	2	☼	6020	Total/NA
Barium	84	D	0.99	0.22	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.73	D	0.20	0.011	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.15	J D	0.40	0.0037	mg/Kg	2	☼	6020	Total/NA
Calcium	1500	D	400	22	mg/Kg	2	☼	6020	Total/NA
Chromium	20	D	0.99	0.060	mg/Kg	2	☼	6020	Total/NA
Cobalt	13	D	0.20	0.0017	mg/Kg	2	☼	6020	Total/NA
Copper	21	D	0.79	0.096	mg/Kg	2	☼	6020	Total/NA
Iron	28000	D	990	32	mg/Kg	20	☼	6020	Total/NA
Lead	13	D	0.60	0.045	mg/Kg	2	☼	6020	Total/NA
Magnesium	3600	D	200	4.0	mg/Kg	2	☼	6020	Total/NA
Manganese	550	D	9.9	1.2	mg/Kg	20	☼	6020	Total/NA
Nickel	30	D	0.99	0.039	mg/Kg	2	☼	6020	Total/NA
Potassium	1300	D	200	4.9	mg/Kg	2	☼	6020	Total/NA
Selenium	0.98	J D	0.99	0.040	mg/Kg	2	☼	6020	Total/NA
Silver	0.021	J D	0.20	0.0014	mg/Kg	2	☼	6020	Total/NA
Sodium	56	J D	200	8.6	mg/Kg	2	☼	6020	Total/NA
Thallium	0.20	J D	0.40	0.019	mg/Kg	2	☼	6020	Total/NA
Vanadium	22	D	0.99	0.037	mg/Kg	2	☼	6020	Total/NA
Zinc	66	D	7.9	0.50	mg/Kg	2	☼	6020	Total/NA
Mercury	0.023	J	0.099	0.014	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-49171-1

Client Sample ID: 079SB-0364M-0001-SO

Lab Sample ID: 240-49171-21

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	12000	D	18	0.56	mg/Kg	2	☼	6020	Total/NA
Antimony	0.12	J D	0.36	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	16	D	0.90	0.023	mg/Kg	2	☼	6020	Total/NA
Barium	75	D	0.90	0.20	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.67	D	0.18	0.0099	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.17	J D	0.36	0.0033	mg/Kg	2	☼	6020	Total/NA
Calcium	1800	D	360	20	mg/Kg	2	☼	6020	Total/NA
Chromium	22	D	0.90	0.054	mg/Kg	2	☼	6020	Total/NA
Cobalt	14	D	0.18	0.0015	mg/Kg	2	☼	6020	Total/NA
Copper	23	D	0.72	0.087	mg/Kg	2	☼	6020	Total/NA
Iron	28000	D	900	29	mg/Kg	20	☼	6020	Total/NA
Lead	14	D	0.54	0.040	mg/Kg	2	☼	6020	Total/NA
Magnesium	3400	D	180	3.6	mg/Kg	2	☼	6020	Total/NA
Manganese	520	D	9.0	1.1	mg/Kg	20	☼	6020	Total/NA
Nickel	29	D	0.90	0.035	mg/Kg	2	☼	6020	Total/NA
Potassium	1400	D	180	4.4	mg/Kg	2	☼	6020	Total/NA
Selenium	1.4	D	0.90	0.036	mg/Kg	2	☼	6020	Total/NA
Silver	0.024	J D	0.18	0.0013	mg/Kg	2	☼	6020	Total/NA
Sodium	57	J D	180	7.8	mg/Kg	2	☼	6020	Total/NA
Thallium	0.19	J D	0.36	0.017	mg/Kg	2	☼	6020	Total/NA
Vanadium	22	D	0.90	0.033	mg/Kg	2	☼	6020	Total/NA
Zinc	70	D	7.2	0.45	mg/Kg	2	☼	6020	Total/NA
Mercury	0.017	J	0.10	0.014	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SB-0339M-0001, 0002-SO

Lab Sample ID: 240-49171-1

Date Collected: 04/08/15 11:06
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6500	J D	18	0.55	mg/Kg	☼	04/16/15 09:59	04/22/15 17:00	2
Antimony	0.13	J D	0.35	0.012	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Arsenic	13	D	0.89	0.023	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Barium	56	D J	0.89	0.20	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Beryllium	0.54	D	0.18	0.0098	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Cadmium	0.11	J D	0.35	0.0033	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Calcium	110	J D	350	20	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Chromium	16	D	0.89	0.053	mg/Kg	☼	04/16/15 09:59	04/22/15 17:00	2
Cobalt	10	D	0.18	0.0015	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Copper	10	D	0.71	0.086	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Iron	36000	D J	890	28	mg/Kg	☼	04/16/15 09:59	04/24/15 15:45	20
Lead	12	D	0.53	0.040	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Magnesium	1300	D	180	3.5	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Manganese	1400	D J	8.9	1.1	mg/Kg	☼	04/16/15 09:59	04/24/15 15:45	20
Nickel	15	D	0.89	0.035	mg/Kg	☼	04/16/15 09:59	04/22/15 17:00	2
Potassium	580	D	180	4.3	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Selenium	0.92	D	0.89	0.035	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Silver	0.017	J D	0.18	0.0012	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Sodium	22	J D	180	7.7	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Thallium	0.15	J D	0.35	0.017	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Vanadium	19	D	0.89	0.033	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2
Zinc	35	D	7.1	0.44	mg/Kg	☼	04/16/15 09:59	04/20/15 19:46	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039	U	0.12	0.016	mg/Kg	☼	04/16/15 14:45	04/20/15 11:15	1

Client Sample ID: 079SB-0340M-0001-SO

Lab Sample ID: 240-49171-2

Date Collected: 04/08/15 00:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	D	19	0.60	mg/Kg	☼	04/16/15 09:59	04/22/15 17:26	2
Antimony	0.18	J D	0.39	0.014	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Arsenic	15	D	0.97	0.025	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Barium	75	D	0.97	0.21	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Beryllium	0.67	D	0.19	0.011	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Cadmium	0.15	J D	0.39	0.0036	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Calcium	180	J D	390	21	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Chromium	20	D	0.97	0.058	mg/Kg	☼	04/16/15 09:59	04/22/15 17:26	2
Cobalt	9.4	D	0.19	0.0017	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Copper	17	D	0.78	0.095	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Iron	36000	D	970	31	mg/Kg	☼	04/16/15 09:59	04/24/15 16:03	20
Lead	17	D	0.58	0.044	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Magnesium	2300	D	190	3.9	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Manganese	660	D	9.7	1.2	mg/Kg	☼	04/16/15 09:59	04/24/15 16:03	20
Nickel	20	D	0.97	0.038	mg/Kg	☼	04/16/15 09:59	04/22/15 17:26	2
Potassium	1000	D	190	4.8	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Selenium	1.3	D	0.97	0.039	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2

Client Sample ID: 079SB-0340M-0001-SO

Lab Sample ID: 240-49171-2

Date Collected: 04/08/15 00:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.7

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.017	J D	0.19	0.0014	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Sodium	32	J D	190	8.5	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Thallium	0.20	J D	0.39	0.019	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Vanadium	23	D	0.97	0.036	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2
Zinc	50	D	7.8	0.49	mg/Kg	☼	04/16/15 09:59	04/20/15 20:05	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026	J	0.10	0.015	mg/Kg	☼	04/16/15 14:45	04/20/15 11:21	1

Client Sample ID: 079SB-0341M-0001, 0002-SO

Lab Sample ID: 240-49171-3

Date Collected: 04/08/15 11:30
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8400	J D	20	0.61	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Antimony	0.14	J D	0.39	0.014	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Arsenic	43	D	0.98	0.026	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Barium	60	J D	0.98	0.22	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Beryllium	0.51	D	0.20	0.011	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Cadmium	0.11	J D	0.39	0.0036	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Calcium	98	U	390	22	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Chromium	15	D	0.98	0.059	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Cobalt	7.5	D	0.20	0.0017	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Copper	20	D	0.78	0.095	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Iron	20000	J D	98	3.1	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Lead	76	D	5.9	0.44	mg/Kg	☼	04/20/15 12:52	04/28/15 12:36	20
Magnesium	2200	D	200	3.9	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Manganese	2500	D J	9.8	1.2	mg/Kg	☼	04/20/15 12:52	04/24/15 14:25	20
Nickel	19	D	0.98	0.038	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Potassium	3000	J D	200	4.8	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Selenium	0.81	J D	0.98	0.039	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Silver	0.017	J D	0.20	0.0014	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Sodium	370	D	200	8.5	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Thallium	0.11	J D	0.39	0.019	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Vanadium	15	D	0.98	0.036	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2
Zinc	45	D	7.8	0.49	mg/Kg	☼	04/20/15 12:52	04/22/15 19:12	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037	U	0.11	0.016	mg/Kg	☼	04/20/15 15:40	04/21/15 11:08	1

Client Sample ID: 079SB-0351M-0001-SO

Lab Sample ID: 240-49171-4

Date Collected: 04/08/15 00:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 99.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7300	D	16	0.51	mg/Kg	☼	04/16/15 09:59	04/22/15 17:30	2

Client Sample ID: 079SB-0351M-0001-SO

Lab Sample ID: 240-49171-4

Date Collected: 04/08/15 00:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 99.0

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.067	J D	0.33	0.011	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Arsenic	33	D	0.82	0.021	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Barium	56	D	0.82	0.18	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Beryllium	0.47	D	0.16	0.0090	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Cadmium	0.090	J D	0.33	0.0030	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Calcium	22	J D	330	18	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Chromium	13	D	0.82	0.049	mg/Kg	☼	04/16/15 09:59	04/22/15 17:30	2
Cobalt	7.0	D	0.16	0.0014	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Copper	16	D	0.66	0.080	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Iron	20000	D	820	26	mg/Kg	☼	04/16/15 09:59	04/24/15 16:07	20
Lead	66	D	0.49	0.037	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Magnesium	2000	D	160	3.3	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Manganese	1100	D	8.2	0.99	mg/Kg	☼	04/16/15 09:59	04/24/15 16:07	20
Nickel	17	D	0.82	0.032	mg/Kg	☼	04/16/15 09:59	04/22/15 17:30	2
Potassium	2700	D	160	4.0	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Selenium	0.62	J D	0.82	0.033	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Silver	0.013	J D	0.16	0.0011	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Sodium	300	D	160	7.1	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Thallium	0.094	J D	0.33	0.016	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Vanadium	13	D	0.82	0.030	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2
Zinc	40	D	6.6	0.41	mg/Kg	☼	04/16/15 09:59	04/20/15 20:08	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.089	0.012	mg/Kg	☼	04/16/15 14:45	04/20/15 11:27	1

Client Sample ID: 079SB-0352M-0001-SO

Lab Sample ID: 240-49171-5

Date Collected: 04/08/15 10:27
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 74.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.3	U	6.5	0.73	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
1,1,2,2-Tetrachloroethane	1.3	U	6.5	0.44	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
1,1,2-Trichloroethane	1.3	U	6.5	0.51	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
1,1-Dichloroethane	1.3	U	6.5	0.47	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
1,1-Dichloroethene	1.3	U	6.5	0.67	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
1,2-Dibromoethane	1.3	U	6.5	0.65	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
1,2-Dichloroethane	1.3	U	6.5	0.44	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
1,2-Dichloroethene, Total	2.6	U	13	0.47	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
1,2-Dichloropropane	2.6	U	6.5	0.89	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
2-Butanone (MEK)	5.2	U	26	1.8	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
2-Hexanone	1.3	U	26	0.82	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
4-Methyl-2-pentanone (MIBK)	1.3	U	26	0.70	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Acetone	8.4	J Q	23	7.2	ug/Kg	☼	04/09/15 18:20	04/14/15 20:51	1
Benzene	0.65	U	6.5	0.30	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Bromochloromethane	2.6	U	6.5	0.92	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Bromodichloromethane	0.65	U	6.5	0.36	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Bromoform	1.3	U	6.5	0.43	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Bromomethane	1.3	U	6.5	0.70	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1

Client Sample ID: 079SB-0352M-0001-SO

Lab Sample ID: 240-49171-5

Date Collected: 04/08/15 10:27
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 74.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	1.3	U	6.5	0.57	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Carbon tetrachloride	1.3	U	6.5	0.48	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Chlorobenzene	1.3	U	6.5	0.43	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Chloroethane	1.3	U	6.5	1.1	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Chloroform	0.65	U	6.5	0.38	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Chloromethane	0.65	U	6.5	0.53	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
cis-1,3-Dichloropropene	1.3	U	6.5	0.44	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Dibromochloromethane	1.3	U	6.5	0.71	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Ethylbenzene	0.65	U	6.5	0.34	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Methyl tert-butyl ether	1.3	U	6.5	0.56	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Methylene Chloride	2.6	U	6.5	0.87	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Styrene	0.65	U	6.5	0.19	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Tetrachloroethene	1.3	U	6.5	0.67	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Toluene	0.65	U	6.5	0.35	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
trans-1,3-Dichloropropene	1.3	U	6.5	0.70	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Trichloroethene	1.3	U	6.5	0.54	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Vinyl chloride	1.3	U	6.5	0.51	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1
Xylenes, Total	2.6	U	13	0.45	ug/Kg	☼	04/09/15 18:20	04/14/15 11:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*04/09/15 18:20*	*04/14/15 11:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*	*Q*	*61 - 130*	*04/09/15 18:20*	*04/14/15 20:51*	*1*
4-Bromofluorobenzene (Surr)	*91*		*85 - 120*	*04/09/15 18:20*	*04/14/15 11:05*	*1*
4-Bromofluorobenzene (Surr)	*96*	*Q*	*85 - 120*	*04/09/15 18:20*	*04/14/15 20:51*	*1*
Dibromofluoromethane (Surr)	*102*		*59 - 138*	*04/09/15 18:20*	*04/14/15 11:05*	*1*
Dibromofluoromethane (Surr)	*95*	*Q*	*59 - 138*	*04/09/15 18:20*	*04/14/15 20:51*	*1*
Toluene-d8 (Surr)	*111*		*85 - 115*	*04/09/15 18:20*	*04/14/15 11:05*	*1*
Toluene-d8 (Surr)	*104*	*Q*	*85 - 115*	*04/09/15 18:20*	*04/14/15 20:51*	*1*

Client Sample ID: 079SB-0352M-0001-SO

Lab Sample ID: 240-49171-6

Date Collected: 04/08/15 10:27
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.3	U	6.7	0.77	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Acenaphthylene	1.7	U	6.7	0.35	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Anthracene	3.3	U	6.7	0.79	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Benzo[a]anthracene	3.3	U	6.7	0.64	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Benzo[a]pyrene	**3.4**	**J**	6.7	0.65	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Benzo[b]fluoranthene	**7.1**		6.7	0.59	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Benzo[g,h,i]perylene	1.7	U	6.7	0.35	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Benzoic acid	**150**	**J**	670	36	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Benzo[k]fluoranthene	3.3	U	6.7	0.69	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Benzyl alcohol	67	U	330	21	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Bis(2-chloroethoxy)methane	67	U	100	22	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Bis(2-chloroethyl)ether	3.3	U	100	2.0	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
bis (2-chloroisopropyl) ether	34	U	100	9.6	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Bis(2-ethylhexyl) phthalate	**20**	**J**	71	19	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
4-Bromophenyl phenyl ether	34	U	50	13	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1

Client Sample ID: 079SB-0352M-0001-SO
Date Collected: 04/08/15 10:27
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49171-6
Matrix: Solid
Percent Solids: 97.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	34	U	71	10	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Carbazole	34	U	50	27	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
4-Chloroaniline	67	U	150	17	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
4-Chloro-3-methylphenol	67	U	150	21	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
2-Chloronaphthalene	1.7	U	50	0.45	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
2-Chlorophenol	34	U	50	8.3	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
4-Chlorophenyl phenyl ether	34	U	50	13	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Chrysene	**6.1**	**J**	6.7	1.1	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Dibenz(a,h)anthracene	3.3	U	6.7	0.67	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Dibenzofuran	3.3	U	50	0.67	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
1,2-Dichlorobenzene	34	U	50	9.8	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
1,3-Dichlorobenzene	34	U	50	11	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
1,4-Dichlorobenzene	34	U	50	20	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
3,3'-Dichlorobenzidine	67	U	100	18	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
2,4-Dichlorophenol	67	U	150	20	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Diethyl phthalate	34	U	71	16	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
2,4-Dimethylphenol	67	U	150	20	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Dimethyl phthalate	34	U	71	17	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Di-n-butyl phthalate	34	U	71	15	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
4,6-Dinitro-2-methylphenol	34	U	150	9.3	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
2,4-Dinitrophenol	67	U	330	21	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
2,4-Dinitrotoluene	67	U	200	17	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
2,6-Dinitrotoluene	67	U	200	21	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Di-n-octyl phthalate	34	U	71	8.0	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Fluoranthene	**12**		6.7	0.55	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Fluorene	3.3	U	6.7	0.53	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Hexachlorobenzene	3.3	U	6.7	2.1	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Hexachlorobutadiene	34	U	50	5.6	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Hexachlorocyclopentadiene	34	U	330	8.2	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Hexachloroethane	34	U	50	9.1	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.7	0.35	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Isophorone	**60**		50	13	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
2-Methylnaphthalene	**11**		6.7	0.50	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
2-Methylphenol	67	U	200	11	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
3 & 4 Methylphenol	67	U	400	20	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Naphthalene	**11**		6.7	0.83	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
2-Nitroaniline	34	U	200	9.2	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
3-Nitroaniline	67	U	200	16	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
4-Nitroaniline	67	U	200	26	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Nitrobenzene	3.3	U	100	2.2	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
2-Nitrophenol	34	U	50	8.4	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
4-Nitrophenol	67	U	330	17	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
N-Nitrosodi-n-propylamine	34	U	50	6.4	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
N-Nitrosodiphenylamine	34	U	50	21	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Pentachlorophenol	34	U	150	9.2	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Phenanthrene	**8.8**		6.7	0.74	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Phenol	34	U	50	7.4	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
Pyrene	**6.5**	**J**	6.7	0.44	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
1,2,4-Trichlorobenzene	17	U	50	3.5	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1

Client Sample ID: 079SB-0352M-0001-SO
Date Collected: 04/08/15 10:27
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49171-6
Matrix: Solid
Percent Solids: 97.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	67	U	150	25	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1
2,4,6-Trichlorophenol	34	U	150	9.0	ug/Kg	☼	04/14/15 08:47	04/22/15 13:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*78*		*45 - 105*	*04/14/15 08:47*	*04/22/15 13:29*	*1*
2-Fluorophenol (Surr)	*80*		*35 - 105*	*04/14/15 08:47*	*04/22/15 13:29*	*1*
Nitrobenzene-d5 (Surr)	*66*		*35 - 100*	*04/14/15 08:47*	*04/22/15 13:29*	*1*
Phenol-d5 (Surr)	*79*		*40 - 100*	*04/14/15 08:47*	*04/22/15 13:29*	*1*
Terphenyl-d14 (Surr)	*78*		*30 - 125*	*04/14/15 08:47*	*04/22/15 13:29*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*35 - 125*	*04/14/15 08:47*	*04/22/15 13:29*	*1*

Method: 8081A - Organochlorine Pesticides (GC) - RE

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.43	U Q	2.0	0.20	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
4,4'-DDE	**0.34**	**J**	1.7	0.27	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
4,4'-DDT	0.84	U Q	2.0	0.31	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
Aldrin	0.84	U	4.0	0.20	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
alpha-BHC	1.7	U Q	2.5	0.61	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
alpha-Chlordane	0.84	U	3.0	0.25	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
beta-BHC	0.84	U	3.5	0.36	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
delta-BHC	0.84	U	4.0	0.22	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
Dieldrin	0.43	U Q	1.7	0.16	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
Endosulfan I	0.84	U	1.7	0.25	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
Endosulfan II	0.84	U Q	2.5	0.38	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
Endosulfan sulfate	0.84	U Q	3.0	0.34	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
Endrin	0.84	U Q	1.7	0.21	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
Endrin aldehyde	0.84	U	3.0	0.32	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
Endrin ketone	1.7	U	2.0	0.43	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
gamma-BHC (Lindane)	1.7	U Q	2.5	0.47	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
gamma-Chlordane	1.7	U	1.7	0.87	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
Heptachlor	1.7	U Q	3.5	0.71	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
Heptachlor epoxide	1.7	U Q	2.5	0.40	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
Methoxychlor	1.7	U Q	5.1	0.55	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1
Toxaphene	17	U	68	9.9	ug/Kg	☼	04/20/15 09:00	04/22/15 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*93*	*Q*	*55 - 130*	*04/20/15 09:00*	*04/22/15 01:54*	*1*
DCB Decachlorobiphenyl	*89*	*Q*	*55 - 130*	*04/20/15 09:00*	*04/22/15 01:54*	*1*
Tetrachloro-m-xylene	*96*	*Q*	*70 - 125*	*04/20/15 09:00*	*04/22/15 01:54*	*1*
Tetrachloro-m-xylene	*89*		*70 - 125*	*04/20/15 09:00*	*04/22/15 01:54*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1221	34	U	52	17	ug/Kg	☼	04/14/15 07:22	04/16/15 13:31	1
Aroclor-1016	34	U	68	12	ug/Kg	☼	04/14/15 07:22	04/16/15 13:31	1
Aroclor-1232	34	U	47	21	ug/Kg	☼	04/14/15 07:22	04/16/15 13:31	1
Aroclor-1242	34	U	42	11	ug/Kg	☼	04/14/15 07:22	04/16/15 13:31	1
Aroclor-1248	34	U	57	8.3	ug/Kg	☼	04/14/15 07:22	04/16/15 13:31	1
Aroclor-1254	34	U	57	15	ug/Kg	☼	04/14/15 07:22	04/16/15 13:31	1
Aroclor-1260	34	U	57	9.4	ug/Kg	☼	04/14/15 07:22	04/16/15 13:31	1

Client Sample ID: 079SB-0352M-0001-SO

Date Collected: 04/08/15 10:27
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49171-6

Matrix: Solid
Percent Solids: 97.8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*110*		*40 - 140*	*04/14/15 07:22*	*04/16/15 13:31*	*1*
Tetrachloro-m-xylene	*85*		*40 - 140*	*04/14/15 07:22*	*04/16/15 13:31*	*1*
DCB Decachlorobiphenyl	*98*		*60 - 125*	*04/14/15 07:22*	*04/16/15 13:31*	*1*
DCB Decachlorobiphenyl	*91*		*60 - 125*	*04/14/15 07:22*	*04/16/15 13:31*	*1*

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.040	U	0.25	0.020	mg/Kg		04/18/15 14:00	04/22/15 17:08	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.050	U	0.25	0.012	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.25	0.010	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
1,3-Dinitrobenzene	0.050	U	0.25	0.0042	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
2,4-Dinitrotoluene	0.050	U	0.25	0.0053	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
2,6-Dinitrotoluene	0.050	U M	0.25	0.0073	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
HMX	0.050	U	0.25	0.012	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
Nitrobenzene	0.050	U	0.25	0.018	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
Nitroglycerin	0.25	U	0.50	0.015	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
2-Nitrotoluene	0.050	U	0.25	0.013	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
3-Nitrotoluene	0.050	U	0.25	0.015	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
4-Nitrotoluene	0.050	U	0.25	0.018	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
PETN	0.25	U	0.50	0.025	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
RDX	0.050	U	0.25	0.012	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
Tetryl	0.050	U	0.25	0.010	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
1,3,5-Trinitrobenzene	0.050	U	0.25	0.010	mg/Kg		04/18/15 14:00	04/23/15 21:54	1
2,4,6-Trinitrotoluene	0.050	U	0.25	0.019	mg/Kg		04/18/15 14:00	04/23/15 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*90*		*78 - 118*	*04/18/15 14:00*	*04/23/15 21:54*	*1*
3,4-Dinitrotoluene	*101*		*78 - 118*	*04/18/15 14:00*	*04/28/15 16:46*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12000**	**D**	440	14	mg/Kg	☼	04/15/15 11:42	04/21/15 21:49	50
Antimony	**0.088**	**J D**	0.35	0.012	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Arsenic	**11**	**D**	0.87	0.023	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Barium	**82**	**D**	0.87	0.19	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Beryllium	**0.70**	**D**	0.17	0.0096	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Cadmium	**0.13**	**J D**	0.35	0.0032	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Calcium	**150**	**J D**	350	19	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Chromium	**19**	**D**	0.87	0.052	mg/Kg	☼	04/15/15 11:42	04/21/15 22:56	2
Cobalt	**10**	**D**	0.17	0.0015	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Copper	**13**	**D**	0.70	0.085	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Iron	**25000**	**D**	2200	70	mg/Kg	☼	04/15/15 11:42	04/21/15 21:49	50
Lead	**16**	**D**	0.52	0.039	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Magnesium	**1900**	**D**	170	3.5	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Manganese	**820**	**D**	22	2.6	mg/Kg	☼	04/15/15 11:42	04/21/15 21:49	50
Nickel	**16**	**D**	0.87	0.034	mg/Kg	☼	04/15/15 11:42	04/21/15 22:56	2
Potassium	**670**	**D**	170	4.3	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Selenium	**1.0**	**D**	0.87	0.035	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2

Client Sample ID: 079SB-0352M-0001-SO

Lab Sample ID: 240-49171-6

Date Collected: 04/08/15 10:27
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.8

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.031	J D	0.17	0.0012	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Sodium	30	J D	170	7.6	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Thallium	0.15	J D	0.35	0.017	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Vanadium	23	D	0.87	0.032	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2
Zinc	49	D	7.0	0.44	mg/Kg	☼	04/15/15 11:42	04/20/15 19:15	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	J	0.12	0.016	mg/Kg	☼	04/15/15 15:00	04/16/15 09:52	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	0.99	J	5.1	0.80	mg/Kg	☼	04/21/15 06:29	04/22/15 14:11	1

Client Sample ID: 079SB-0353M-0001-SO

Lab Sample ID: 240-49171-7

Date Collected: 04/08/15 09:57
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 81.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	5.0	0.56	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
1,1,2,2-Tetrachloroethane	1.0	U	5.0	0.34	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
1,1,2-Trichloroethane	1.0	U	5.0	0.39	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
1,1-Dichloroethane	1.0	U	5.0	0.36	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
1,1-Dichloroethene	1.0	U	5.0	0.52	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
1,2-Dibromoethane	1.0	U Q	5.0	0.50	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
1,2-Dichloroethane	1.0	U	5.0	0.34	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
1,2-Dichloroethene, Total	2.0	U	10	0.36	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
1,2-Dichloropropane	2.0	U	5.0	0.69	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
2-Butanone (MEK)	4.0	U	20	1.4	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
2-Hexanone	1.0	U	20	0.63	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
4-Methyl-2-pentanone (MIBK)	1.0	U	20	0.54	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Acetone	15	U	20	6.3	ug/Kg	☼	04/09/15 18:20	04/14/15 21:12	1
Benzene	0.50	U	5.0	0.23	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Bromochloromethane	2.0	U	5.0	0.71	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Bromodichloromethane	0.50	U	5.0	0.28	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Bromoform	1.0	U Q	5.0	0.33	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Bromomethane	1.0	U	5.0	0.54	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Carbon disulfide	1.0	U	5.0	0.44	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Carbon tetrachloride	1.0	U	5.0	0.37	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Chlorobenzene	1.0	U	5.0	0.33	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Chloroethane	1.0	U	5.0	0.87	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Chloroform	0.50	U	5.0	0.29	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Chloromethane	0.50	U	5.0	0.41	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
cis-1,3-Dichloropropene	1.0	U	5.0	0.34	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Dibromochloromethane	1.0	U Q	5.0	0.55	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Ethylbenzene	0.50	U Q	5.0	0.26	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Methyl tert-butyl ether	1.0	U	5.0	0.43	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Methylene Chloride	2.0	U	5.0	0.67	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Styrene	0.50	U Q	5.0	0.15	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1

Client Sample ID: 079SB-0353M-0001-SO

Lab Sample ID: 240-49171-7

Date Collected: 04/08/15 09:57
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 81.9

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U Q	5.0	0.52	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Toluene	0.50	U	5.0	0.27	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
trans-1,3-Dichloropropene	1.0	U	5.0	0.54	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Trichloroethene	1.0	U	5.0	0.42	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Vinyl chloride	1.0	U	5.0	0.39	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1
Xylenes, Total	2.0	U Q	10	0.35	ug/Kg	☼	04/09/15 18:20	04/14/15 11:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*	*04/09/15 18:20*	*04/14/15 11:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*61 - 130*	*04/09/15 18:20*	*04/14/15 21:12*	*1*
4-Bromofluorobenzene (Surr)	*96*		*85 - 120*	*04/09/15 18:20*	*04/14/15 11:26*	*1*
4-Bromofluorobenzene (Surr)	*102*	*Q*	*85 - 120*	*04/09/15 18:20*	*04/14/15 21:12*	*1*
Dibromofluoromethane (Surr)	*103*		*59 - 138*	*04/09/15 18:20*	*04/14/15 11:26*	*1*
Dibromofluoromethane (Surr)	*98*		*59 - 138*	*04/09/15 18:20*	*04/14/15 21:12*	*1*
Toluene-d8 (Surr)	*116*	*Q*	*85 - 115*	*04/09/15 18:20*	*04/14/15 11:26*	*1*
Toluene-d8 (Surr)	*109*	*Q*	*85 - 115*	*04/09/15 18:20*	*04/14/15 21:12*	*1*

Client Sample ID: 079SB-0353M-0001-SO

Lab Sample ID: 240-49171-8

Date Collected: 04/08/15 09:57
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.4	U	6.9	0.79	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Acenaphthylene	1.7	U	6.9	0.36	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Anthracene	3.4	U	6.9	0.81	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Benzo[a]anthracene	3.4	U	6.9	0.65	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Benzo[a]pyrene	3.4	U	6.9	0.66	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Benzo[b]fluoranthene	3.4	U	6.9	0.61	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Benzo[g,h,i]perylene	1.7	U	6.9	0.36	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Benzoic acid	**170**	**J**	690	37	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Benzo[k]fluoranthene	3.4	U	6.9	0.71	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Benzyl alcohol	69	U	340	22	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Bis(2-chloroethoxy)methane	69	U	100	23	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Bis(2-chloroethyl)ether	3.4	U	100	2.1	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
bis (2-chloroisopropyl) ether	35	U	100	9.9	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Bis(2-ethylhexyl) phthalate	**31**	**J**	73	20	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
4-Bromophenyl phenyl ether	35	U	52	13	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Butyl benzyl phthalate	35	U	73	10	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Carbazole	35	U	52	28	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
4-Chloroaniline	69	U	160	18	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
4-Chloro-3-methylphenol	69	U	160	22	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2-Chloronaphthalene	1.7	U	52	0.47	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2-Chlorophenol	35	U	52	8.5	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
4-Chlorophenyl phenyl ether	35	U	52	13	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Chrysene	3.4	U	6.9	1.1	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Dibenz(a,h)anthracene	3.4	U	6.9	0.69	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Dibenzofuran	3.4	U	52	0.69	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
1,2-Dichlorobenzene	35	U	52	10	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
1,3-Dichlorobenzene	35	U	52	11	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1

Client Sample ID: 079SB-0353M-0001-SO
Date Collected: 04/08/15 09:57
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49171-8
Matrix: Solid
Percent Solids: 97.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	35	U	52	21	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
3,3'-Dichlorobenzidine	69	U	100	19	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2,4-Dichlorophenol	69	U	160	21	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Diethyl phthalate	35	U	73	17	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2,4-Dimethylphenol	69	U	160	21	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Dimethyl phthalate	35	U	73	18	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Di-n-butyl phthalate	35	U	73	16	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
4,6-Dinitro-2-methylphenol	35	U	160	9.6	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2,4-Dinitrophenol	69	U	340	22	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2,4-Dinitrotoluene	69	U	210	18	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2,6-Dinitrotoluene	69	U	210	22	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Di-n-octyl phthalate	35	U	73	8.2	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Fluoranthene	3.4	U	6.9	0.57	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Fluorene	3.4	U	6.9	0.55	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Hexachlorobenzene	3.4	U	6.9	2.2	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Hexachlorobutadiene	35	U	52	5.8	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Hexachlorocyclopentadiene	35	U	340	8.4	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Hexachloroethane	35	U	52	9.3	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.9	0.36	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Isophorone	**36**	**J**	52	13	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2-Methylnaphthalene	**7.4**		6.9	0.52	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2-Methylphenol	69	U	210	11	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
3 & 4 Methylphenol	69	U	420	21	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Naphthalene	**7.1**		6.9	0.85	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2-Nitroaniline	35	U	210	9.4	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
3-Nitroaniline	69	U	210	17	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
4-Nitroaniline	69	U	210	27	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Nitrobenzene	3.4	U	100	2.3	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2-Nitrophenol	35	U	52	8.6	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
4-Nitrophenol	69	U	340	18	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
N-Nitrosodi-n-propylamine	35	U	52	6.5	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
N-Nitrosodiphenylamine	35	U	52	22	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Pentachlorophenol	35	U	160	9.4	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Phenanthrene	3.4	U	6.9	0.76	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Phenol	35	U	52	7.6	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
Pyrene	1.7	U	6.9	0.46	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
1,2,4-Trichlorobenzene	17	U	52	3.6	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2,4,5-Trichlorophenol	69	U	160	26	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1
2,4,6-Trichlorophenol	35	U	160	9.2	ug/Kg	☼	04/14/15 08:47	04/22/15 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*45 - 105*	*04/14/15 08:47*	*04/22/15 13:04*	*1*
2-Fluorophenol (Surr)	*80*		*35 - 105*	*04/14/15 08:47*	*04/22/15 13:04*	*1*
Nitrobenzene-d5 (Surr)	*65*		*35 - 100*	*04/14/15 08:47*	*04/22/15 13:04*	*1*
Phenol-d5 (Surr)	*78*		*40 - 100*	*04/14/15 08:47*	*04/22/15 13:04*	*1*
Terphenyl-d14 (Surr)	*76*		*30 - 125*	*04/14/15 08:47*	*04/22/15 13:04*	*1*
2,4,6-Tribromophenol (Surr)	*63*		*35 - 125*	*04/14/15 08:47*	*04/22/15 13:04*	*1*

Client Sample ID: 079SB-0353M-0001-SO
Date Collected: 04/08/15 09:57
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49171-8
Matrix: Solid
Percent Solids: 97.6

Method: 8081A - Organochlorine Pesticides (GC) - RE

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.43	U Q	2.1	0.21	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
4,4'-DDE	0.43	U Q	1.7	0.28	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
4,4'-DDT	0.85	U Q	2.1	0.32	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
Aldrin	0.85	U	4.1	0.21	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
alpha-BHC	1.7	U Q	2.6	0.62	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
alpha-Chlordane	0.85	U	3.1	0.26	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
beta-BHC	0.85	U	3.6	0.37	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
delta-BHC	0.85	U	4.1	0.23	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
Dieldrin	0.43	U Q	1.7	0.16	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
Endosulfan I	0.85	U	1.7	0.26	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
Endosulfan II	0.85	U Q	2.6	0.39	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
Endosulfan sulfate	0.85	U Q	3.1	0.35	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
Endrin	0.85	U Q	1.7	0.22	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
Endrin aldehyde	0.85	U	3.1	0.33	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
Endrin ketone	1.7	U	2.1	0.43	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
gamma-BHC (Lindane)	1.7	U Q	2.6	0.47	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
gamma-Chlordane	1.7	U	1.7	0.88	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
Heptachlor	1.7	U Q	3.6	0.72	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
Heptachlor epoxide	1.7	U Q	2.6	0.41	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
Methoxychlor	1.7	U Q	5.1	0.55	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1
Toxaphene	17	U	69	10	ug/Kg	☼	04/20/15 09:00	04/22/15 02:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*	*Q*	*55 - 130*	*04/20/15 09:00*	*04/22/15 02:17*	*1*
DCB Decachlorobiphenyl	*59*	*Q*	*55 - 130*	*04/20/15 09:00*	*04/22/15 02:17*	*1*
Tetrachloro-m-xylene	*71*	*Q*	*70 - 125*	*04/20/15 09:00*	*04/22/15 02:17*	*1*
Tetrachloro-m-xylene	*65*	*Q*	*70 - 125*	*04/20/15 09:00*	*04/22/15 02:17*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1221	34	U	51	16	ug/Kg	☼	04/14/15 07:22	04/16/15 13:47	1
Aroclor-1016	34	U	66	12	ug/Kg	☼	04/14/15 07:22	04/16/15 13:47	1
Aroclor-1232	34	U	46	20	ug/Kg	☼	04/14/15 07:22	04/16/15 13:47	1
Aroclor-1242	34	U	41	11	ug/Kg	☼	04/14/15 07:22	04/16/15 13:47	1
Aroclor-1248	34	U	56	8.1	ug/Kg	☼	04/14/15 07:22	04/16/15 13:47	1
Aroclor-1254	34	U	56	14	ug/Kg	☼	04/14/15 07:22	04/16/15 13:47	1
Aroclor-1260	34	U	56	9.1	ug/Kg	☼	04/14/15 07:22	04/16/15 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*87*		*40 - 140*	*04/14/15 07:22*	*04/16/15 13:47*	*1*
Tetrachloro-m-xylene	*86*		*40 - 140*	*04/14/15 07:22*	*04/16/15 13:47*	*1*
DCB Decachlorobiphenyl	*101*		*60 - 125*	*04/14/15 07:22*	*04/16/15 13:47*	*1*
DCB Decachlorobiphenyl	*98*		*60 - 125*	*04/14/15 07:22*	*04/16/15 13:47*	*1*

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.039	U	0.25	0.020	mg/Kg		04/18/15 14:00	04/22/15 17:26	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.050	U	0.25	0.013	mg/Kg		04/18/15 14:00	04/23/15 22:38	1

Client Sample ID: 079SB-0353M-0001-SO

Date Collected: 04/08/15 09:57
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49171-8

Matrix: Solid

Method: 8330B - Nitroaromatics and Nitramines (HPLC) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4-Amino-2,6-dinitrotoluene	0.050	U	0.25	0.010	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
1,3-Dinitrobenzene	0.050	U	0.25	0.0042	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
2,4-Dinitrotoluene	0.050	U	0.25	0.0053	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
2,6-Dinitrotoluene	0.050	U M	0.25	0.0073	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
HMX	0.050	U	0.25	0.012	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
Nitrobenzene	0.050	U	0.25	0.018	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
Nitroglycerin	0.25	U	0.50	0.015	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
2-Nitrotoluene	0.050	U	0.25	0.013	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
3-Nitrotoluene	0.050	U	0.25	0.016	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
4-Nitrotoluene	0.050	U	0.25	0.018	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
PETN	0.25	U	0.50	0.025	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
RDX	0.050	U	0.25	0.012	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
Tetryl	0.050	U	0.25	0.010	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
1,3,5-Trinitrobenzene	0.050	U	0.25	0.010	mg/Kg		04/18/15 14:00	04/23/15 22:38	1
2,4,6-Trinitrotoluene	0.050	U	0.25	0.019	mg/Kg		04/18/15 14:00	04/23/15 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*90*		*78 - 118*	*04/18/15 14:00*	*04/23/15 22:38*	*1*
3,4-Dinitrotoluene	*99*		*78 - 118*	*04/18/15 14:00*	*04/28/15 17:52*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**16000**	**D**	480	15	mg/Kg	☼	04/15/15 11:42	04/21/15 21:53	50
Antimony	**0.12**	**J D**	0.39	0.014	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Arsenic	**11**	**D**	0.97	0.025	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Barium	**87**	**D**	0.97	0.21	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Beryllium	**0.76**	**D**	0.19	0.011	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Cadmium	**0.19**	**J D**	0.39	0.0036	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Calcium	**250**	**J D**	390	21	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Chromium	**18**	**D**	0.97	0.058	mg/Kg	☼	04/15/15 11:42	04/21/15 23:08	2
Cobalt	**10**	**D**	0.19	0.0016	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Copper	**16**	**D**	0.77	0.094	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Iron	**31000**	**D**	2400	77	mg/Kg	☼	04/15/15 11:42	04/21/15 21:53	50
Lead	**13**	**D**	0.58	0.043	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Magnesium	**2100**	**D**	190	3.9	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Manganese	**710**	**D**	24	2.9	mg/Kg	☼	04/15/15 11:42	04/21/15 21:53	50
Nickel	**21**	**D**	0.97	0.038	mg/Kg	☼	04/15/15 11:42	04/21/15 23:08	2
Potassium	**780**	**D**	190	4.7	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Selenium	**1.2**	**D**	0.97	0.039	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Silver	**0.023**	**J D**	0.19	0.0014	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Sodium	**29**	**J D**	190	8.4	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Thallium	**0.17**	**J D**	0.39	0.018	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Vanadium	**25**	**D**	0.97	0.036	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2
Zinc	**57**	**D**	7.7	0.48	mg/Kg	☼	04/15/15 11:42	04/20/15 19:19	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.038**	**J**	0.10	0.015	mg/Kg	☼	04/15/15 15:00	04/16/15 10:00	1

Client Sample ID: 079SB-0353M-0001-SO

Lab Sample ID: 240-49171-8

Date Collected: 04/08/15 09:57
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.6

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	0.99	J	5.1	0.80	mg/Kg	☼	04/21/15 06:29	04/22/15 14:21	1

Client Sample ID: 079SB-0354M-0001-SO

Lab Sample ID: 240-49171-9

Date Collected: 04/08/15 11:30
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 85.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.90	U	4.5	0.51	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
1,1,2,2-Tetrachloroethane	0.90	U	4.5	0.31	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
1,1,2-Trichloroethane	0.90	U	4.5	0.35	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
1,1-Dichloroethane	0.90	U	4.5	0.33	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
1,1-Dichloroethene	0.90	U	4.5	0.47	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
1,2-Dibromoethane	0.90	U	4.5	0.45	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
1,2-Dichloroethane	0.90	U	4.5	0.31	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
1,2-Dichloroethene, Total	1.8	U	9.0	0.33	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
1,2-Dichloropropane	1.8	U	4.5	0.62	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
2-Butanone (MEK)	3.6	U	18	1.3	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
2-Hexanone	0.90	U	18	0.57	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
4-Methyl-2-pentanone (MIBK)	0.90	U	18	0.49	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Acetone	13	U	17	5.3	ug/Kg	☼	04/09/15 18:20	04/14/15 21:34	1
Benzene	0.45	U	4.5	0.21	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Bromochloromethane	1.8	U	4.5	0.64	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Bromodichloromethane	0.45	U	4.5	0.25	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Bromoform	0.90	U	4.5	0.30	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Bromomethane	0.90	U	4.5	0.49	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Carbon disulfide	0.90	U	4.5	0.40	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Carbon tetrachloride	0.90	U	4.5	0.33	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Chlorobenzene	0.90	U	4.5	0.30	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Chloroethane	0.90	U	4.5	0.78	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Chloroform	0.45	U	4.5	0.26	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Chloromethane	0.45	U	4.5	0.37	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
cis-1,3-Dichloropropene	0.90	U	4.5	0.31	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Dibromochloromethane	0.90	U	4.5	0.50	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Ethylbenzene	0.45	U	4.5	0.23	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Methyl tert-butyl ether	0.90	U	4.5	0.39	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Methylene Chloride	1.8	U	4.5	0.60	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Styrene	0.45	U	4.5	0.14	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Tetrachloroethene	0.90	U	4.5	0.47	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Toluene	0.45	U	4.5	0.24	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
trans-1,3-Dichloropropene	0.90	U	4.5	0.49	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Trichloroethene	0.90	U	4.5	0.38	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Vinyl chloride	0.90	U	4.5	0.35	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1
Xylenes, Total	1.8	U	9.0	0.32	ug/Kg	☼	04/09/15 18:20	04/14/15 11:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*04/09/15 18:20*	*04/14/15 11:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*61 - 130*	*04/09/15 18:20*	*04/14/15 21:34*	*1*
4-Bromofluorobenzene (Surr)	*91*		*85 - 120*	*04/09/15 18:20*	*04/14/15 11:47*	*1*
4-Bromofluorobenzene (Surr)	*102*		*85 - 120*	*04/09/15 18:20*	*04/14/15 21:34*	*1*

Client Sample ID: 079SB-0354M-0001-SO

Lab Sample ID: 240-49171-9

Date Collected: 04/08/15 11:30
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 85.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*59 - 138*	*04/09/15 18:20*	*04/14/15 11:47*	*1*
Dibromofluoromethane (Surr)	*89*		*59 - 138*	*04/09/15 18:20*	*04/14/15 21:34*	*1*
Toluene-d8 (Surr)	*109*		*85 - 115*	*04/09/15 18:20*	*04/14/15 11:47*	*1*
Toluene-d8 (Surr)	*100*		*85 - 115*	*04/09/15 18:20*	*04/14/15 21:34*	*1*

Client Sample ID: 079SB-0354M-0001-SO

Lab Sample ID: 240-49171-10

Date Collected: 04/08/15 11:30
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.3	U	6.7	0.77	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Acenaphthylene	1.7	U	6.7	0.35	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Anthracene	3.3	U	6.7	0.79	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Benzo[a]anthracene	3.3	U	6.7	0.64	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Benzo[a]pyrene	3.3	U	6.7	0.65	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Benzo[b]fluoranthene	3.3	U	6.7	0.60	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Benzo[g,h,i]perylene	1.7	U	6.7	0.35	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Benzoic acid	**110**	**J M**	670	36	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Benzo[k]fluoranthene	3.3	U	6.7	0.69	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Benzyl alcohol	67	U	330	21	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Bis(2-chloroethoxy)methane	67	U	100	22	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Bis(2-chloroethyl)ether	3.3	U	100	2.0	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
bis (2-chloroisopropyl) ether	34	U	100	9.6	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Bis(2-ethylhexyl) phthalate	**19**	**J**	71	19	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
4-Bromophenyl phenyl ether	34	U	50	13	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Butyl benzyl phthalate	34	U	71	10	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Carbazole	34	U	50	27	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
4-Chloroaniline	67	U	150	17	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
4-Chloro-3-methylphenol	67	U	150	21	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2-Chloronaphthalene	1.7	U	50	0.45	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2-Chlorophenol	34	U	50	8.3	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
4-Chlorophenyl phenyl ether	34	U	50	13	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Chrysene	3.3	U	6.7	1.1	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Dibenz(a,h)anthracene	3.3	U	6.7	0.67	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Dibenzofuran	3.3	U	50	0.67	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
1,2-Dichlorobenzene	34	U	50	9.8	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
1,3-Dichlorobenzene	34	U	50	11	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
1,4-Dichlorobenzene	34	U	50	20	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
3,3'-Dichlorobenzidine	67	U	100	18	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2,4-Dichlorophenol	67	U	150	20	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Diethyl phthalate	34	U	71	16	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2,4-Dimethylphenol	67	U	150	20	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Dimethyl phthalate	34	U	71	17	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Di-n-butyl phthalate	34	U	71	15	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
4,6-Dinitro-2-methylphenol	34	U	150	9.3	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2,4-Dinitrophenol	67	U	330	21	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2,4-Dinitrotoluene	67	U	200	17	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2,6-Dinitrotoluene	67	U	200	21	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1

Client Sample ID: 079SB-0354M-0001-SO
Date Collected: 04/08/15 11:30
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49171-10
Matrix: Solid
Percent Solids: 98.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	34	U	71	8.0	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Fluoranthene	3.3	U	6.7	0.56	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Fluorene	3.3	U	6.7	0.54	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Hexachlorobenzene	3.3	U	6.7	2.1	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Hexachlorobutadiene	34	U	50	5.7	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Hexachlorocyclopentadiene	34	U	330	8.2	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Hexachloroethane	34	U	50	9.1	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.7	0.35	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Isophorone	**25**	**J**	50	13	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2-Methylnaphthalene	**3.7**	**J**	6.7	0.50	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2-Methylphenol	67	U	200	11	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
3 & 4 Methylphenol	67	U	400	20	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Naphthalene	3.3	U	6.7	0.83	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2-Nitroaniline	34	U	200	9.2	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
3-Nitroaniline	67	U	200	16	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
4-Nitroaniline	67	U	200	26	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Nitrobenzene	3.3	U	100	2.2	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2-Nitrophenol	34	U	50	8.4	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
4-Nitrophenol	67	U	330	17	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
N-Nitrosodi-n-propylamine	34	U	50	6.4	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
N-Nitrosodiphenylamine	34	U	50	21	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Pentachlorophenol	34	U	150	9.2	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Phenanthrene	3.3	U	6.7	0.74	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Phenol	34	U	50	7.4	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
Pyrene	1.7	U	6.7	0.44	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
1,2,4-Trichlorobenzene	17	U	50	3.5	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2,4,5-Trichlorophenol	67	U	150	25	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1
2,4,6-Trichlorophenol	34	U	150	9.0	ug/Kg	☼	04/14/15 08:47	04/22/15 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*93*		*45 - 105*	*04/14/15 08:47*	*04/22/15 12:39*	*1*
2-Fluorophenol (Surr)	*84*		*35 - 105*	*04/14/15 08:47*	*04/22/15 12:39*	*1*
Nitrobenzene-d5 (Surr)	*70*		*35 - 100*	*04/14/15 08:47*	*04/22/15 12:39*	*1*
Phenol-d5 (Surr)	*78*	*M*	*40 - 100*	*04/14/15 08:47*	*04/22/15 12:39*	*1*
Terphenyl-d14 (Surr)	*87*		*30 - 125*	*04/14/15 08:47*	*04/22/15 12:39*	*1*
2,4,6-Tribromophenol (Surr)	*98*		*35 - 125*	*04/14/15 08:47*	*04/22/15 12:39*	*1*

Method: 8081A - Organochlorine Pesticides (GC) - RE

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.42	U Q	2.0	0.20	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
4,4'-DDE	0.42	U Q	1.7	0.27	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
4,4'-DDT	0.84	U Q	2.0	0.31	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
Aldrin	0.84	U	4.0	0.20	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
alpha-BHC	1.7	U Q	2.5	0.61	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
alpha-Chlordane	0.84	U	3.0	0.25	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
beta-BHC	0.84	U	3.5	0.36	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
delta-BHC	0.84	U	4.0	0.22	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
Dieldrin	0.42	U Q	1.7	0.16	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
Endosulfan I	0.84	U	1.7	0.25	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
Endosulfan II	0.84	U Q	2.5	0.38	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1

Client Sample ID: 079SB-0354M-0001-SO
Date Collected: 04/08/15 11:30
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49171-10
Matrix: Solid
Percent Solids: 98.9

Method: 8081A - Organochlorine Pesticides (GC) - RE (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan sulfate	0.84	U	3.0	0.34	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
Endrin	0.84	U Q	1.7	0.21	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
Endrin aldehyde	0.84	U	3.0	0.32	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
Endrin ketone	1.7	U	2.0	0.42	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
gamma-BHC (Lindane)	1.7	U Q	2.5	0.46	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
gamma-Chlordane	1.7	U	1.7	0.87	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
Heptachlor	1.7	U Q	3.5	0.71	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
Heptachlor epoxide	1.7	U Q	2.5	0.40	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
Methoxychlor	1.7	U Q	5.0	0.54	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1
Toxaphene	17	U	68	9.9	ug/Kg	☼	04/20/15 09:00	04/22/15 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*	*Q*	*55 - 130*	*04/20/15 09:00*	*04/22/15 02:39*	*1*
DCB Decachlorobiphenyl	*96*	*Q*	*55 - 130*	*04/20/15 09:00*	*04/22/15 02:39*	*1*
Tetrachloro-m-xylene	*100*	*Q*	*70 - 125*	*04/20/15 09:00*	*04/22/15 02:39*	*1*
Tetrachloro-m-xylene	*102*		*70 - 125*	*04/20/15 09:00*	*04/22/15 02:39*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1221	34	U	51	16	ug/Kg	☼	04/14/15 07:22	04/16/15 14:02	1
Aroclor-1016	34	U	67	12	ug/Kg	☼	04/14/15 07:22	04/16/15 14:02	1
Aroclor-1232	34	U	46	20	ug/Kg	☼	04/14/15 07:22	04/16/15 14:02	1
Aroclor-1242	34	U	41	11	ug/Kg	☼	04/14/15 07:22	04/16/15 14:02	1
Aroclor-1248	34	U	56	8.2	ug/Kg	☼	04/14/15 07:22	04/16/15 14:02	1
Aroclor-1254	34	U	56	14	ug/Kg	☼	04/14/15 07:22	04/16/15 14:02	1
Aroclor-1260	34	U	56	9.2	ug/Kg	☼	04/14/15 07:22	04/16/15 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*89*		*40 - 140*	*04/14/15 07:22*	*04/16/15 14:02*	*1*
Tetrachloro-m-xylene	*87*		*40 - 140*	*04/14/15 07:22*	*04/16/15 14:02*	*1*
DCB Decachlorobiphenyl	*103*		*60 - 125*	*04/14/15 07:22*	*04/16/15 14:02*	*1*
DCB Decachlorobiphenyl	*100*		*60 - 125*	*04/14/15 07:22*	*04/16/15 14:02*	*1*

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.040	U	0.25	0.020	mg/Kg		04/18/15 14:00	04/22/15 17:44	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.050	U	0.25	0.012	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.25	0.010	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
1,3-Dinitrobenzene	0.050	U	0.25	0.0042	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
2,4-Dinitrotoluene	0.050	U	0.25	0.0053	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
2,6-Dinitrotoluene	0.050	U	0.25	0.0073	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
HMX	0.050	U	0.25	0.012	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
Nitrobenzene	0.050	U	0.25	0.018	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
Nitroglycerin	0.25	U	0.50	0.015	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
2-Nitrotoluene	0.050	U	0.25	0.013	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
3-Nitrotoluene	0.050	U	0.25	0.015	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
4-Nitrotoluene	0.050	U	0.25	0.018	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
PETN	0.25	U	0.50	0.025	mg/Kg		04/18/15 14:00	04/23/15 23:22	1

Client Sample ID: 079SB-0354M-0001-SO

Lab Sample ID: 240-49171-10

Date Collected: 04/08/15 11:30
Matrix: Solid
Date Received: 04/09/15 14:51

Method: 8330B - Nitroaromatics and Nitramines (HPLC) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
RDX	0.050	U	0.25	0.012	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
Tetryl	0.050	U	0.25	0.010	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
1,3,5-Trinitrobenzene	0.050	U	0.25	0.010	mg/Kg		04/18/15 14:00	04/23/15 23:22	1
2,4,6-Trinitrotoluene	0.050	U	0.25	0.019	mg/Kg		04/18/15 14:00	04/23/15 23:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*90*		*78 - 118*	*04/18/15 14:00*	*04/23/15 23:22*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6000**	**D**	460	14	mg/Kg	☼	04/15/15 11:42	04/21/15 21:57	50
Antimony	**0.046**	**J D**	0.37	0.013	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Arsenic	**11**	**D**	0.92	0.024	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Barium	**34**	**D**	0.92	0.20	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Beryllium	**0.34**	**D**	0.18	0.010	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Cadmium	**0.080**	**J D**	0.37	0.0034	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Calcium	**130**	**J D**	370	20	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Chromium	**17**	**D**	0.92	0.055	mg/Kg	☼	04/15/15 11:42	04/21/15 23:12	2
Cobalt	**5.9**	**D**	0.18	0.0016	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Copper	**5.2**	**D**	0.74	0.089	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Iron	**16000**	**D**	2300	74	mg/Kg	☼	04/15/15 11:42	04/21/15 21:57	50
Lead	**7.1**	**D**	0.55	0.041	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Magnesium	**1100**	**D**	180	3.7	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Manganese	**280**	**D**	0.92	0.11	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Nickel	**12**	**D**	0.92	0.036	mg/Kg	☼	04/15/15 11:42	04/21/15 23:12	2
Potassium	**510**	**D**	180	4.5	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Selenium	**0.53**	**J D**	0.92	0.037	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Silver	**0.019**	**J D**	0.18	0.0013	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Sodium	**22**	**J D**	180	8.0	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Thallium	**0.081**	**J D**	0.37	0.017	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Vanadium	**15**	**D**	0.92	0.034	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2
Zinc	**30**	**D**	7.4	0.46	mg/Kg	☼	04/15/15 11:42	04/20/15 19:23	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**	**J**	0.11	0.015	mg/Kg	☼	04/15/15 15:00	04/16/15 10:02	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	**0.97**	**J**	5.0	0.78	mg/Kg	☼	04/21/15 06:29	04/22/15 14:23	1

Client Sample ID: 079SB-0357M-0001-SO

Lab Sample ID: 240-49171-11

Date Collected: 04/08/15 09:12
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9100**	**D**	17	0.52	mg/Kg	☼	04/16/15 09:59	04/22/15 17:34	2
Antimony	**0.095**	**J D**	0.33	0.012	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Arsenic	**13**	**D**	0.83	0.022	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Barium	**66**	**D**	0.83	0.18	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2

Client Sample ID: 079SB-0357M-0001-SO

Lab Sample ID: 240-49171-11

Date Collected: 04/08/15 09:12
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.6

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.41	D	0.17	0.0091	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Cadmium	0.11	J D	0.33	0.0031	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Calcium	840	D	330	18	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Chromium	14	D	0.83	0.050	mg/Kg	☼	04/16/15 09:59	04/22/15 17:34	2
Cobalt	6.5	D	0.17	0.0014	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Copper	8.0	D	0.66	0.081	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Iron	15000	D	830	27	mg/Kg	☼	04/16/15 09:59	04/24/15 16:19	20
Lead	8.0	D	0.50	0.037	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Magnesium	1400	D	170	3.3	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Manganese	770	D	8.3	1.0	mg/Kg	☼	04/16/15 09:59	04/24/15 16:19	20
Nickel	17	D	0.83	0.032	mg/Kg	☼	04/16/15 09:59	04/22/15 17:34	2
Potassium	600	D	170	4.1	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Selenium	0.85	D	0.83	0.033	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Silver	0.024	J D	0.17	0.0012	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Sodium	52	J D	170	7.2	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Thallium	0.15	J D	0.33	0.016	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Vanadium	18	D	0.83	0.031	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2
Zinc	40	D	6.6	0.42	mg/Kg	☼	04/16/15 09:59	04/20/15 20:20	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.048	J	0.10	0.015	mg/Kg	☼	04/16/15 14:45	04/20/15 11:30	1

Client Sample ID: 079SB-0380M-0001-TB

Lab Sample ID: 240-49171-12

Date Collected: 04/08/15 08:00
Matrix: Water
Date Received: 04/09/15 14:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			04/14/15 10:47	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.22	ug/L			04/14/15 10:47	1
1,1,2-Trichloroethane	0.50	U	1.0	0.24	ug/L			04/14/15 10:47	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			04/14/15 10:47	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			04/14/15 10:47	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			04/14/15 10:47	1
1,2-Dichloroethene, Total	1.0	U	2.0	0.20	ug/L			04/14/15 10:47	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			04/14/15 10:47	1
2-Butanone (MEK)	2.0	U	10	0.53	ug/L			04/14/15 10:47	1
2-Hexanone	2.0	U	10	0.48	ug/L			04/14/15 10:47	1
4-Methyl-2-pentanone (MIBK)	2.0	U	10	0.99	ug/L			04/14/15 10:47	1
Acetone	1.8	J	10	0.94	ug/L			04/14/15 10:47	1
Benzene	1.0	U	1.0	0.35	ug/L			04/14/15 10:47	1
Bromoform	1.0	U	1.0	0.56	ug/L			04/14/15 10:47	1
Bromomethane	1.0	U	1.0	0.44	ug/L			04/14/15 10:47	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			04/14/15 10:47	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			04/14/15 10:47	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			04/14/15 10:47	1
Chloromethane	1.0	U	1.0	0.44	ug/L			04/14/15 10:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			04/14/15 10:47	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			04/14/15 10:47	1

Client Sample ID: 079SB-0380M-0001-TB

Lab Sample ID: 240-49171-12

Date Collected: 04/08/15 08:00

Matrix: Water

Date Received: 04/09/15 14:51

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			04/14/15 10:47	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			04/14/15 10:47	1
Methyl tert-butyl ether	0.50	U	1.0	0.20	ug/L			04/14/15 10:47	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			04/14/15 10:47	1
Styrene	0.50	U	1.0	0.45	ug/L			04/14/15 10:47	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			04/14/15 10:47	1
Toluene	1.0	U	1.0	0.23	ug/L			04/14/15 10:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			04/14/15 10:47	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			04/14/15 10:47	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			04/14/15 10:47	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			04/14/15 10:47	1
Chloroform	1.0	U	1.0	0.25	ug/L			04/14/15 10:47	1
Bromochloromethane	1.0	U	1.0	0.50	ug/L			04/14/15 10:47	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			04/14/15 10:47	1
Chloroethane	1.0	U	1.0	0.32	ug/L			04/14/15 10:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*85 - 120*		*04/14/15 10:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 120*		*04/14/15 10:47*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*04/14/15 10:47*	*1*
Dibromofluoromethane (Surr)	*98*		*85 - 115*		*04/14/15 10:47*	*1*

Client Sample ID: 079SB-0355M-0001-SO

Lab Sample ID: 240-49171-13

Date Collected: 04/08/15 13:30

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 99.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5800**	**D**	15	0.47	mg/Kg	☼	04/16/15 09:59	04/22/15 17:37	2
Antimony	**0.058**	**J D**	0.31	0.011	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Arsenic	**15**	**D**	0.77	0.020	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Barium	**34**	**D**	0.77	0.17	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Beryllium	**0.31**	**D**	0.15	0.0084	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Cadmium	**0.10**	**J D**	0.31	0.0028	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Calcium	**130**	**J D**	310	17	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Chromium	**11**	**D**	0.77	0.046	mg/Kg	☼	04/16/15 09:59	04/22/15 17:37	2
Cobalt	**5.6**	**D**	0.15	0.0013	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Copper	**6.2**	**D**	0.61	0.074	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Iron	**16000**	**D**	770	24	mg/Kg	☼	04/16/15 09:59	04/24/15 16:22	20
Lead	**7.1**	**D**	0.46	0.034	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Magnesium	**770**	**D**	150	3.1	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Manganese	**320**	**D**	7.7	0.92	mg/Kg	☼	04/16/15 09:59	04/24/15 16:22	20
Nickel	**13**	**D**	0.77	0.030	mg/Kg	☼	04/16/15 09:59	04/22/15 17:37	2
Potassium	**390**	**D**	150	3.7	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Selenium	**0.52**	**J D**	0.77	0.031	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Silver	**0.014**	**J D**	0.15	0.0011	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Sodium	**13**	**J D**	150	6.7	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Thallium	**0.093**	**J D**	0.31	0.015	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Vanadium	**10**	**D**	0.77	0.028	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2
Zinc	**38**	**D**	6.1	0.38	mg/Kg	☼	04/16/15 09:59	04/20/15 20:24	2

Client Sample ID: 079SB-0355M-0001-SO

Lab Sample ID: 240-49171-13

Date Collected: 04/08/15 13:30
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 99.0

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	J	0.11	0.015	mg/Kg	☼	04/16/15 14:45	04/20/15 11:32	1

Client Sample ID: 079SB-0356M-0001-SO

Lab Sample ID: 240-49171-14

Date Collected: 04/08/15 13:10
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6200	D	15	0.48	mg/Kg	☼	04/16/15 09:59	04/22/15 17:41	2
Antimony	0.14	J D	0.31	0.011	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Arsenic	77	D	0.77	0.020	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Barium	47	D	0.77	0.17	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Beryllium	0.37	D	0.15	0.0084	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Cadmium	0.20	J D	0.31	0.0028	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Calcium	170	J D	310	17	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Chromium	12	D	0.77	0.046	mg/Kg	☼	04/16/15 09:59	04/22/15 17:41	2
Cobalt	18	D	0.15	0.0013	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Copper	9.4	D	0.61	0.074	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Iron	17000	D	770	25	mg/Kg	☼	04/16/15 09:59	04/24/15 16:26	20
Lead	12	D	0.46	0.035	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Magnesium	1300	D	150	3.1	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Manganese	490	D	7.7	0.92	mg/Kg	☼	04/16/15 09:59	04/24/15 16:26	20
Nickel	20	D	0.77	0.030	mg/Kg	☼	04/16/15 09:59	04/22/15 17:41	2
Potassium	630	D	150	3.8	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Selenium	0.67	J D	0.77	0.031	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Silver	0.045	J D	0.15	0.0011	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Sodium	24	J D	150	6.7	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Thallium	0.18	J D	0.31	0.015	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Vanadium	14	D	0.77	0.028	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2
Zinc	94	D	6.1	0.38	mg/Kg	☼	04/16/15 09:59	04/20/15 20:27	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034	J	0.095	0.013	mg/Kg	☼	04/16/15 14:45	04/20/15 11:34	1

Client Sample ID: 079SB-0358M-0001-SO

Lab Sample ID: 240-49171-15

Date Collected: 04/08/15 14:41
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	D	15	0.45	mg/Kg	☼	04/16/15 09:59	04/22/15 17:45	2
Antimony	0.14	J D	0.29	0.010	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Arsenic	14	D	0.73	0.019	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Barium	54	D	0.73	0.16	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Beryllium	0.54	D	0.15	0.0080	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Cadmium	0.16	J D	0.29	0.0027	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Calcium	270	J D	290	16	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Chromium	20	D	0.73	0.044	mg/Kg	☼	04/16/15 09:59	04/22/15 17:45	2
Cobalt	8.3	D	0.15	0.0012	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2

Client Sample ID: 079SB-0358M-0001-SO

Lab Sample ID: 240-49171-15

Date Collected: 04/08/15 14:41
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	20	D	0.58	0.071	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Iron	30000	D	730	23	mg/Kg	☼	04/16/15 09:59	04/24/15 16:30	20
Lead	16	D	0.44	0.033	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Magnesium	2200	D	150	2.9	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Manganese	420	D	7.3	0.88	mg/Kg	☼	04/16/15 09:59	04/24/15 16:30	20
Nickel	21	D	0.73	0.028	mg/Kg	☼	04/16/15 09:59	04/22/15 17:45	2
Potassium	720	D	150	3.6	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Selenium	0.94	D	0.73	0.029	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Silver	0.019	J D	0.15	0.0010	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Sodium	26	J D	150	6.3	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Thallium	0.18	J D	0.29	0.014	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Vanadium	20	D	0.73	0.027	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2
Zinc	61	D	5.8	0.36	mg/Kg	☼	04/16/15 09:59	04/20/15 20:31	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	J	0.10	0.014	mg/Kg	☼	04/16/15 14:45	04/20/15 11:36	1

Client Sample ID: 079SB-0359M-0001-SO

Lab Sample ID: 240-49171-16

Date Collected: 04/08/15 15:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8200	D	19	0.58	mg/Kg	☼	04/16/15 09:59	04/22/15 17:56	2
Antimony	0.095	J D	0.37	0.013	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Arsenic	11	D	0.93	0.024	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Barium	61	D	0.93	0.21	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Beryllium	0.56	D	0.19	0.010	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Cadmium	0.12	J D	0.37	0.0035	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Calcium	620	D	370	21	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Chromium	14	D	0.93	0.056	mg/Kg	☼	04/16/15 09:59	04/22/15 17:56	2
Cobalt	8.9	D	0.19	0.0016	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Copper	16	D	0.75	0.091	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Iron	24000	D	930	30	mg/Kg	☼	04/16/15 09:59	04/24/15 16:34	20
Lead	14	D	0.56	0.042	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Magnesium	2500	D	190	3.7	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Manganese	550	D	9.3	1.1	mg/Kg	☼	04/16/15 09:59	04/24/15 16:34	20
Nickel	19	D	0.93	0.036	mg/Kg	☼	04/16/15 09:59	04/22/15 17:56	2
Potassium	920	D	190	4.6	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Selenium	0.82	J D	0.93	0.037	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Silver	0.019	J D	0.19	0.0013	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Sodium	39	J D	190	8.1	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Thallium	0.15	J D	0.37	0.018	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Vanadium	17	D	0.93	0.035	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2
Zinc	53	D	7.5	0.47	mg/Kg	☼	04/16/15 09:59	04/20/15 20:35	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021	J	0.11	0.015	mg/Kg	☼	04/16/15 14:45	04/20/15 11:38	1

Client Sample ID: 079SB-0360M-0001-SO

Lab Sample ID: 240-49171-17

Date Collected: 04/08/15 16:28
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	D	17	0.54	mg/Kg	☼	04/16/15 09:59	04/22/15 18:00	2
Antimony	0.094	J D	0.35	0.012	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Arsenic	13	D	0.87	0.023	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Barium	91	D	0.87	0.19	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Beryllium	0.68	D	0.17	0.0096	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Cadmium	0.18	J D	0.35	0.0032	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Calcium	870	D	350	19	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Chromium	16	D	0.87	0.052	mg/Kg	☼	04/16/15 09:59	04/22/15 18:00	2
Cobalt	9.8	D	0.17	0.0015	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Copper	17	D	0.70	0.085	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Iron	31000	D	870	28	mg/Kg	☼	04/16/15 09:59	04/24/15 16:38	20
Lead	14	D	0.52	0.039	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Magnesium	2300	D	170	3.5	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Manganese	780	D	8.7	1.0	mg/Kg	☼	04/16/15 09:59	04/24/15 16:38	20
Nickel	18	D	0.87	0.034	mg/Kg	☼	04/16/15 09:59	04/22/15 18:00	2
Potassium	910	D	170	4.3	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Selenium	1.1	D	0.87	0.035	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Silver	0.034	J D	0.17	0.0012	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Sodium	34	J D	170	7.6	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Thallium	0.16	J D	0.35	0.017	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Vanadium	21	D	0.87	0.032	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2
Zinc	55	D	7.0	0.44	mg/Kg	☼	04/16/15 09:59	04/20/15 20:39	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031	J	0.097	0.014	mg/Kg	☼	04/16/15 14:45	04/20/15 11:40	1

Client Sample ID: 079SB-0361M-0001-SO

Lab Sample ID: 240-49171-18

Date Collected: 04/08/15 16:41
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10000	D	18	0.56	mg/Kg	☼	04/16/15 09:59	04/22/15 18:04	2
Antimony	0.075	J D	0.36	0.013	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Arsenic	12	D	0.90	0.023	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Barium	66	D	0.90	0.20	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Beryllium	0.62	D	0.18	0.0099	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Cadmium	0.16	J D	0.36	0.0033	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Calcium	740	D	360	20	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Chromium	16	D	0.90	0.054	mg/Kg	☼	04/16/15 09:59	04/22/15 18:04	2
Cobalt	9.3	D	0.18	0.0015	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Copper	17	D	0.72	0.088	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Iron	26000	D	900	29	mg/Kg	☼	04/16/15 09:59	04/27/15 15:58	20
Lead	13	D	0.54	0.041	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Magnesium	2600	D	180	3.6	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Manganese	500	D	9.0	1.1	mg/Kg	☼	04/16/15 09:59	04/27/15 15:58	20
Nickel	20	D	0.90	0.035	mg/Kg	☼	04/16/15 09:59	04/22/15 18:04	2
Potassium	800	D	180	4.4	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Selenium	0.86	J D	0.90	0.036	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2

Client Sample ID: 079SB-0361M-0001-SO

Lab Sample ID: 240-49171-18

Date Collected: 04/08/15 16:41
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.1

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.027	J D	0.18	0.0013	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Sodium	35	J D	180	7.9	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Thallium	0.17	J D	0.36	0.017	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Vanadium	20	D	0.90	0.033	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2
Zinc	75	D	7.2	0.45	mg/Kg	☼	04/16/15 09:59	04/20/15 20:43	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024	J	0.090	0.013	mg/Kg	☼	04/16/15 14:45	04/20/15 11:42	1

Client Sample ID: 079SB-0362-0001-SO

Lab Sample ID: 240-49171-19

Date Collected: 04/08/15 16:53
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 88.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1200	D	22	0.68	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Antimony	0.038	J D	0.44	0.015	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Arsenic	4.3	D	1.1	0.029	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Barium	6.1	D	1.1	0.24	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Beryllium	0.10	J D	0.22	0.012	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Cadmium	0.026	J D	0.44	0.0041	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Calcium	79	J D	440	24	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Chromium	2.8	D	1.1	0.066	mg/Kg	☼	04/15/15 11:42	04/21/15 22:53	2
Cobalt	1.2	D	0.22	0.0019	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Copper	1.7	D	0.88	0.11	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Iron	3500	D	110	3.5	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Lead	1.9	D	0.66	0.050	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Magnesium	190	J D	220	4.4	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Manganese	29	D	1.1	0.13	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Nickel	3.5	D	1.1	0.043	mg/Kg	☼	04/15/15 11:42	04/21/15 22:53	2
Potassium	210	J D	220	5.4	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Selenium	0.18	J D	1.1	0.044	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Silver	0.0024	J D	0.22	0.0015	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Sodium	20	J D	220	9.6	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Thallium	0.033	J D	0.44	0.021	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Vanadium	3.1	D	1.1	0.041	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2
Zinc	29	D	8.8	0.55	mg/Kg	☼	04/15/15 11:42	04/20/15 19:11	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036	U	0.11	0.015	mg/Kg	☼	04/15/15 15:00	04/16/15 09:51	1

Client Sample ID: 079SB-0363M-0001-SO

Lab Sample ID: 240-49171-20

Date Collected: 04/08/15 15:37
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000	D	20	0.62	mg/Kg	☼	04/16/15 09:59	04/22/15 18:08	2

Client Sample ID: 079SB-0363M-0001-SO

Lab Sample ID: 240-49171-20

Date Collected: 04/08/15 15:37
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.8

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.095	J D	0.40	0.014	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Arsenic	14	D	0.99	0.026	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Barium	84	D	0.99	0.22	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Beryllium	0.73	D	0.20	0.011	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Cadmium	0.15	J D	0.40	0.0037	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Calcium	1500	D	400	22	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Chromium	20	D	0.99	0.060	mg/Kg	☼	04/16/15 09:59	04/22/15 18:08	2
Cobalt	13	D	0.20	0.0017	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Copper	21	D	0.79	0.096	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Iron	28000	D	990	32	mg/Kg	☼	04/16/15 09:59	04/24/15 16:45	20
Lead	13	D	0.60	0.045	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Magnesium	3600	D	200	4.0	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Manganese	550	D	9.9	1.2	mg/Kg	☼	04/16/15 09:59	04/24/15 16:45	20
Nickel	30	D	0.99	0.039	mg/Kg	☼	04/16/15 09:59	04/22/15 18:08	2
Potassium	1300	D	200	4.9	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Selenium	0.98	J D	0.99	0.040	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Silver	0.021	J D	0.20	0.0014	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Sodium	56	J D	200	8.6	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Thallium	0.20	J D	0.40	0.019	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Vanadium	22	D	0.99	0.037	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2
Zinc	66	D	7.9	0.50	mg/Kg	☼	04/16/15 09:59	04/20/15 20:47	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023	J	0.099	0.014	mg/Kg	☼	04/16/15 14:45	04/20/15 11:44	1

Client Sample ID: 079SB-0364M-0001-SO

Lab Sample ID: 240-49171-21

Date Collected: 04/08/15 00:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000	D	18	0.56	mg/Kg	☼	04/16/15 09:59	04/22/15 18:12	2
Antimony	0.12	J D	0.36	0.013	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Arsenic	16	D	0.90	0.023	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Barium	75	D	0.90	0.20	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Beryllium	0.67	D	0.18	0.0099	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Cadmium	0.17	J D	0.36	0.0033	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Calcium	1800	D	360	20	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Chromium	22	D	0.90	0.054	mg/Kg	☼	04/16/15 09:59	04/22/15 18:12	2
Cobalt	14	D	0.18	0.0015	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Copper	23	D	0.72	0.087	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Iron	28000	D	900	29	mg/Kg	☼	04/16/15 09:59	04/24/15 16:49	20
Lead	14	D	0.54	0.040	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Magnesium	3400	D	180	3.6	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Manganese	520	D	9.0	1.1	mg/Kg	☼	04/16/15 09:59	04/24/15 16:49	20
Nickel	29	D	0.90	0.035	mg/Kg	☼	04/16/15 09:59	04/22/15 18:12	2
Potassium	1400	D	180	4.4	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Selenium	1.4	D	0.90	0.036	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Silver	0.024	J D	0.18	0.0013	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2

Client Sample ID: 079SB-0364M-0001-SO
Date Collected: 04/08/15 00:00
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49171-21
Matrix: Solid
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	57	J D	180	7.8	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Thallium	0.19	J D	0.36	0.017	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Vanadium	22	D	0.90	0.033	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2
Zinc	70	D	7.2	0.45	mg/Kg	☼	04/16/15 09:59	04/20/15 20:50	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	J	0.10	0.014	mg/Kg	☼	04/16/15 14:45	04/20/15 11:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	LOQ	DL	Units	Method
1,1,1-Trichloroethane	1.0	0.44	ug/L	8260B
1,1,1-Trichloroethane	5.0	0.56	ug/Kg	8260B
1,1,2,2-Tetrachloroethane	1.0	0.22	ug/L	8260B
1,1,2,2-Tetrachloroethane	5.0	0.34	ug/Kg	8260B
1,1,2-Trichloroethane	1.0	0.24	ug/L	8260B
1,1,2-Trichloroethane	5.0	0.39	ug/Kg	8260B
1,1-Dichloroethane	1.0	0.30	ug/L	8260B
1,1-Dichloroethane	5.0	0.36	ug/Kg	8260B
1,1-Dichloroethene	1.0	0.45	ug/L	8260B
1,1-Dichloroethene	5.0	0.52	ug/Kg	8260B
1,2-Dibromoethane	1.0	0.32	ug/L	8260B
1,2-Dibromoethane	5.0	0.50	ug/Kg	8260B
1,2-Dichloroethane	1.0	0.23	ug/L	8260B
1,2-Dichloroethane	5.0	0.34	ug/Kg	8260B
1,2-Dichloroethene, Total	2.0	0.20	ug/L	8260B
1,2-Dichloroethene, Total	10	0.36	ug/Kg	8260B
1,2-Dichloropropane	1.0	0.25	ug/L	8260B
1,2-Dichloropropane	5.0	0.69	ug/Kg	8260B
2-Butanone (MEK)	10	0.53	ug/L	8260B
2-Butanone (MEK)	20	1.4	ug/Kg	8260B
2-Hexanone	10	0.48	ug/L	8260B
2-Hexanone	20	0.63	ug/Kg	8260B
4-Methyl-2-pentanone (MIBK)	10	0.99	ug/L	8260B
4-Methyl-2-pentanone (MIBK)	20	0.54	ug/Kg	8260B
Acetone	10	0.94	ug/L	8260B
Acetone	20	6.3	ug/Kg	8260B
Benzene	1.0	0.35	ug/L	8260B
Benzene	5.0	0.23	ug/Kg	8260B
Bromochloromethane	1.0	0.50	ug/L	8260B
Bromochloromethane	5.0	0.71	ug/Kg	8260B
Bromodichloromethane	1.0	0.29	ug/L	8260B
Bromodichloromethane	5.0	0.28	ug/Kg	8260B
Bromoform	1.0	0.56	ug/L	8260B
Bromoform	5.0	0.33	ug/Kg	8260B
Bromomethane	1.0	0.44	ug/L	8260B
Bromomethane	5.0	0.54	ug/Kg	8260B
Carbon disulfide	1.0	0.38	ug/L	8260B
Carbon disulfide	5.0	0.44	ug/Kg	8260B
Carbon tetrachloride	1.0	0.43	ug/L	8260B
Carbon tetrachloride	5.0	0.37	ug/Kg	8260B
Chlorobenzene	1.0	0.25	ug/L	8260B
Chlorobenzene	5.0	0.33	ug/Kg	8260B
Chloroethane	1.0	0.32	ug/L	8260B
Chloroethane	5.0	0.86	ug/Kg	8260B
Chloroform	1.0	0.25	ug/L	8260B
Chloroform	5.0	0.29	ug/Kg	8260B
Chloromethane	1.0	0.44	ug/L	8260B
Chloromethane	5.0	0.41	ug/Kg	8260B
cis-1,3-Dichloropropene	1.0	0.46	ug/L	8260B
cis-1,3-Dichloropropene	5.0	0.34	ug/Kg	8260B
Dibromochloromethane	1.0	0.43	ug/L	8260B
Dibromochloromethane	5.0	0.55	ug/Kg	8260B

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	LOQ	DL	Units	Method
Ethylbenzene	1.0	0.25	ug/L	8260B
Ethylbenzene	5.0	0.26	ug/Kg	8260B
Methyl tert-butyl ether	1.0	0.20	ug/L	8260B
Methyl tert-butyl ether	5.0	0.43	ug/Kg	8260B
Methylene Chloride	1.0	0.33	ug/L	8260B
Methylene Chloride	5.0	0.67	ug/Kg	8260B
Styrene	1.0	0.45	ug/L	8260B
Styrene	5.0	0.15	ug/Kg	8260B
Tetrachloroethene	1.0	0.31	ug/L	8260B
Tetrachloroethene	5.0	0.52	ug/Kg	8260B
Toluene	1.0	0.23	ug/L	8260B
Toluene	5.0	0.27	ug/Kg	8260B
trans-1,3-Dichloropropene	1.0	0.56	ug/L	8260B
trans-1,3-Dichloropropene	5.0	0.54	ug/Kg	8260B
Trichloroethene	1.0	0.22	ug/L	8260B
Trichloroethene	5.0	0.42	ug/Kg	8260B
Vinyl chloride	1.0	0.29	ug/L	8260B
Vinyl chloride	5.0	0.39	ug/Kg	8260B
Xylenes, Total	2.0	0.52	ug/L	8260B
Xylenes, Total	10	0.35	ug/Kg	8260B

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	LOQ	DL	Units	Method
1,2,4-Trichlorobenzene	50	3.5	ug/Kg	8270C
1,2-Dichlorobenzene	50	9.7	ug/Kg	8270C
1,3-Dichlorobenzene	50	11	ug/Kg	8270C
1,4-Dichlorobenzene	50	20	ug/Kg	8270C
2,4,5-Trichlorophenol	150	25	ug/Kg	8270C
2,4,6-Trichlorophenol	150	8.9	ug/Kg	8270C
2,4-Dichlorophenol	150	20	ug/Kg	8270C
2,4-Dimethylphenol	150	20	ug/Kg	8270C
2,4-Dinitrophenol	330	21	ug/Kg	8270C
2,4-Dinitrotoluene	200	17	ug/Kg	8270C
2,6-Dinitrotoluene	200	21	ug/Kg	8270C
2-Chloronaphthalene	50	0.45	ug/Kg	8270C
2-Chlorophenol	50	8.2	ug/Kg	8270C
2-Methylnaphthalene	6.7	0.50	ug/Kg	8270C
2-Methylphenol	200	11	ug/Kg	8270C
2-Nitroaniline	200	9.1	ug/Kg	8270C
2-Nitrophenol	50	8.3	ug/Kg	8270C
3 & 4 Methylphenol	400	20	ug/Kg	8270C
3,3'-Dichlorobenzidine	100	18	ug/Kg	8270C
3-Nitroaniline	200	16	ug/Kg	8270C
4,6-Dinitro-2-methylphenol	150	9.2	ug/Kg	8270C
4-Bromophenyl phenyl ether	50	13	ug/Kg	8270C
4-Chloro-3-methylphenol	150	21	ug/Kg	8270C
4-Chloroaniline	150	17	ug/Kg	8270C
4-Chlorophenyl phenyl ether	50	13	ug/Kg	8270C
4-Nitroaniline	200	26	ug/Kg	8270C
4-Nitrophenol	330	17	ug/Kg	8270C
Acenaphthene	6.7	0.76	ug/Kg	8270C

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	LOQ	DL	Units	Method
Acenaphthylene	6.7	0.35	ug/Kg	8270C
Anthracene	6.7	0.78	ug/Kg	8270C
Benzo[a]anthracene	6.7	0.63	ug/Kg	8270C
Benzo[a]pyrene	6.7	0.64	ug/Kg	8270C
Benzo[b]fluoranthene	6.7	0.59	ug/Kg	8270C
Benzo[g,h,i]perylene	6.7	0.35	ug/Kg	8270C
Benzo[k]fluoranthene	6.7	0.68	ug/Kg	8270C
Benzoic acid	660	36	ug/Kg	8270C
Benzyl alcohol	330	21	ug/Kg	8270C
bis (2-chloroisopropyl) ether	100	9.5	ug/Kg	8270C
Bis(2-chloroethoxy)methane	100	22	ug/Kg	8270C
Bis(2-chloroethyl)ether	100	2.0	ug/Kg	8270C
Bis(2-ethylhexyl) phthalate	70	19	ug/Kg	8270C
Butyl benzyl phthalate	70	10	ug/Kg	8270C
Carbazole	50	27	ug/Kg	8270C
Chrysene	6.7	1.1	ug/Kg	8270C
Dibenz(a,h)anthracene	6.7	0.66	ug/Kg	8270C
Dibenzofuran	50	0.66	ug/Kg	8270C
Diethyl phthalate	70	16	ug/Kg	8270C
Dimethyl phthalate	70	17	ug/Kg	8270C
Di-n-butyl phthalate	70	15	ug/Kg	8270C
Di-n-octyl phthalate	70	7.9	ug/Kg	8270C
Fluoranthene	6.7	0.55	ug/Kg	8270C
Fluorene	6.7	0.53	ug/Kg	8270C
Hexachlorobenzene	6.7	2.1	ug/Kg	8270C
Hexachlorobutadiene	50	5.6	ug/Kg	8270C
Hexachlorocyclopentadiene	330	8.1	ug/Kg	8270C
Hexachloroethane	50	9.0	ug/Kg	8270C
Indeno[1,2,3-cd]pyrene	6.7	0.35	ug/Kg	8270C
Isophorone	50	13	ug/Kg	8270C
Naphthalene	6.7	0.82	ug/Kg	8270C
Nitrobenzene	100	2.2	ug/Kg	8270C
N-Nitrosodi-n-propylamine	50	6.3	ug/Kg	8270C
N-Nitrosodiphenylamine	50	21	ug/Kg	8270C
Pentachlorophenol	150	9.1	ug/Kg	8270C
Phenanthrene	6.7	0.73	ug/Kg	8270C
Phenol	50	7.3	ug/Kg	8270C
Pyrene	6.7	0.44	ug/Kg	8270C

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	LOQ	DL	Units	Method
4,4'-DDD	2.0	0.20	ug/Kg	8081A
4,4'-DDE	1.7	0.27	ug/Kg	8081A
4,4'-DDT	2.0	0.31	ug/Kg	8081A
Aldrin	4.0	0.20	ug/Kg	8081A
alpha-BHC	2.5	0.60	ug/Kg	8081A
alpha-Chlordane	3.0	0.25	ug/Kg	8081A
beta-BHC	3.5	0.36	ug/Kg	8081A
delta-BHC	4.0	0.22	ug/Kg	8081A
Dieldrin	1.7	0.16	ug/Kg	8081A
Endosulfan I	1.7	0.25	ug/Kg	8081A

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	LOQ	DL	Units	Method
Endosulfan II	2.5	0.38	ug/Kg	8081A
Endosulfan sulfate	3.0	0.34	ug/Kg	8081A
Endrin	1.7	0.21	ug/Kg	8081A
Endrin aldehyde	3.0	0.32	ug/Kg	8081A
Endrin ketone	2.0	0.42	ug/Kg	8081A
gamma-BHC (Lindane)	2.5	0.46	ug/Kg	8081A
gamma-Chlordane	1.7	0.86	ug/Kg	8081A
Heptachlor	3.5	0.70	ug/Kg	8081A
Heptachlor epoxide	2.5	0.40	ug/Kg	8081A
Methoxychlor	5.0	0.54	ug/Kg	8081A
Toxaphene	67	9.8	ug/Kg	8081A

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	LOQ	DL	Units	Method
Aroclor-1016	65	12	ug/Kg	8082
Aroclor-1221	50	16	ug/Kg	8082
Aroclor-1232	45	20	ug/Kg	8082
Aroclor-1242	40	11	ug/Kg	8082
Aroclor-1248	55	8.0	ug/Kg	8082
Aroclor-1254	55	14	ug/Kg	8082
Aroclor-1260	55	9.0	ug/Kg	8082

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	LOQ	DL	Units	Method
Nitroguanidine	0.25	0.020	mg/Kg	8330 Modified

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	LOQ	DL	Units	Method
1,3,5-Trinitrobenzene	0.25	0.010	mg/Kg	8330B
1,3-Dinitrobenzene	0.25	0.0042	mg/Kg	8330B
2,4,6-Trinitrotoluene	0.25	0.019	mg/Kg	8330B
2,4-Dinitrotoluene	0.25	0.0053	mg/Kg	8330B
2,6-Dinitrotoluene	0.25	0.0073	mg/Kg	8330B
2-Amino-4,6-dinitrotoluene	0.25	0.013	mg/Kg	8330B
2-Nitrotoluene	0.25	0.013	mg/Kg	8330B
3-Nitrotoluene	0.25	0.016	mg/Kg	8330B
4-Amino-2,6-dinitrotoluene	0.25	0.010	mg/Kg	8330B
4-Nitrotoluene	0.25	0.018	mg/Kg	8330B
HMX	0.25	0.012	mg/Kg	8330B
Nitrobenzene	0.25	0.018	mg/Kg	8330B
Nitroglycerin	0.50	0.015	mg/Kg	8330B
PETN	0.50	0.025	mg/Kg	8330B
RDX	0.25	0.012	mg/Kg	8330B
Tetryl	0.25	0.010	mg/Kg	8330B

Method: 6020 - Metals (ICP/MS)

Analyte	LOQ	DL	Units	Method
Aluminum	20	0.62	mg/Kg	6020

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	LOQ	DL	Units	Method
Antimony	0.40	0.014	mg/Kg	6020
Arsenic	1.0	0.026	mg/Kg	6020
Barium	1.0	0.22	mg/Kg	6020
Beryllium	0.20	0.011	mg/Kg	6020
Cadmium	0.40	0.0037	mg/Kg	6020
Calcium	400	22	mg/Kg	6020
Chromium	1.0	0.060	mg/Kg	6020
Cobalt	0.20	0.0017	mg/Kg	6020
Copper	0.80	0.097	mg/Kg	6020
Iron	100	3.2	mg/Kg	6020
Lead	0.60	0.045	mg/Kg	6020
Magnesium	200	4.0	mg/Kg	6020
Manganese	1.0	0.12	mg/Kg	6020
Nickel	1.0	0.039	mg/Kg	6020
Potassium	200	4.9	mg/Kg	6020
Selenium	1.0	0.040	mg/Kg	6020
Silver	0.20	0.0014	mg/Kg	6020
Sodium	200	8.7	mg/Kg	6020
Thallium	0.40	0.019	mg/Kg	6020
Vanadium	1.0	0.037	mg/Kg	6020
Zinc	8.0	0.50	mg/Kg	6020

Method: 7471A - Mercury (CVAA)

Analyte	LOQ	DL	Units	Method
Mercury	0.10	0.014	mg/Kg	7471A

General Chemistry

Analyte	LOQ	DL	Units	Method
Nitrocellulose	5.0	0.78	mg/Kg	WS-WC-0050

Surrogate Summary

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-49171-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(61-130)	(85-120)	(59-138)	(85-115)
240-49171-5	079SB-0352M-0001-SO	99	91	102	111
240-49171-5	079SB-0352M-0001-SO	102 Q	96 Q	95 Q	104 Q
240-49171-7	079SB-0353M-0001-SO	96	96	103	116 Q
240-49171-7	079SB-0353M-0001-SO	114	102 Q	98	109 Q
240-49171-9	079SB-0354M-0001-SO	98	91	101	109
240-49171-9	079SB-0354M-0001-SO	111	102	89	100
LCS 240-176276/6	Lab Control Sample	91	99	102	110
LCS 240-176387/5	Lab Control Sample	99	101	96	102
MB 240-176277/1-A	Method Blank	98	94	99	108
MB 240-176387/33	Method Blank	105	96	95	103

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)
MRL 240-176276/33	Lab Control Sample	97	115	102	106
MRL 240-176276/7	Lab Control Sample	90	112	100	104
MRL 240-176387/30	Lab Control Sample	110	107	102	98
MRL 240-176387/6	Lab Control Sample	104	108	100	101

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	12DCE	BFB	DBFM
Lab Sample ID	Client Sample ID	(85-120)	(70-120)	(75-120)	(85-115)
240-49171-12	079SB-0380M-0001-TB	95	99	94	98
LCS 240-176298/4	Lab Control Sample	97	100	98	98
MB 240-176298/6	Method Blank	95	99	95	95

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Surrogate Summary

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-49171-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)
MRL 240-176298/15	Lab Control Sample	101	96	97	96
MRL 240-176298/5	Lab Control Sample	100	96	99	99

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(45-105)	(35-105)	(35-100)	(40-100)	(30-125)	(35-125)
240-49171-6	079SB-0352M-0001-SO	78	80	66	79	78	73
240-49171-8	079SB-0353M-0001-SO	77	80	65	78	76	63
240-49171-10	079SB-0354M-0001-SO	93	84	70	78 M	87	98
LCS 240-176319/24-A	Lab Control Sample	76	81	74	81	83	63
MB 240-176319/23-A	Method Blank	75	67	68	76	75	36

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
MRL 240-177355/18	Lab Control Sample	99	104	95	101	95	106
MRL 240-177355/3	Lab Control Sample	99	106	93	100	95	103

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Surrogate Summary

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-49171-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(55-130)	(55-130)	(70-125)	(70-125)
240-49171-6 - RE	079SB-0352M-0001-SO	93 Q	89 Q	96 Q	89
240-49171-8 - RE	079SB-0353M-0001-SO	57 Q	59 Q	71 Q	65 Q
240-49171-10 - RE	079SB-0354M-0001-SO	96 Q	96 Q	100 Q	102
LCS 240-177037/8-A	Lab Control Sample	95	89	90	84
MB 240-177037/7-A	Method Blank	105	103	100	98

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)
MRL 240-177258/31	Lab Control Sample	123	123	116	120
MRL 240-177258/49	Lab Control Sample	116	117	117	118
MRL 240-177463/18	Lab Control Sample	114	110	108	113
MRL 240-177463/21	Lab Control Sample	114	115	111	117

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(40-140)	(40-140)	(60-125)	(60-125)
240-49171-6	079SB-0352M-0001-SO	110	85	98	91
240-49171-8	079SB-0353M-0001-SO	87	86	101	98
240-49171-10	079SB-0354M-0001-SO	89	87	103	100
LCS 240-176299/13-A	Lab Control Sample	104	82	99	98
MB 240-176299/12-A	Method Blank	90	84	104	103

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)
MRL 240-176718/13	Lab Control Sample	178 ^	107	118	119
MRL 240-176718/4	Lab Control Sample	188 ^	111	116	126

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
		DNT1						
Lab Sample ID	Client Sample ID	(78-118)						
240-49171-6	079SB-0352M-0001-SO	90						
240-49171-6	079SB-0352M-0001-SO	101						
240-49171-8	079SB-0353M-0001-SO	90						
240-49171-8	079SB-0353M-0001-SO	99						
240-49171-10	079SB-0354M-0001-SO	90						
LCS 320-71481/2-A	Lab Control Sample	92						
MB 320-71481/1-A	Method Blank	90						

Surrogate Legend

DNT = 3,4-Dinitrotoluene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LCS 240-176276/6
Matrix: Solid
Analysis Batch: 176276

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	48.1		ug/Kg		96	70 - 135
1,1,2,2-Tetrachloroethane	50.0	51.2		ug/Kg		102	55 - 130
1,1,2-Trichloroethane	50.0	49.9		ug/Kg		100	60 - 125
1,1-Dichloroethane	50.0	46.6		ug/Kg		93	75 - 125
1,1-Dichloroethene	50.0	50.3		ug/Kg		101	65 - 135
1,2-Dichloroethane	50.0	43.4		ug/Kg		87	70 - 135
1,2-Dichloropropane	50.0	47.3		ug/Kg		95	70 - 120
2-Butanone (MEK)	100	87.3		ug/Kg		87	30 - 160
2-Hexanone	100	101		ug/Kg		101	45 - 145
4-Methyl-2-pentanone (MIBK)	100	101		ug/Kg		101	45 - 145
Benzene	50.0	48.7		ug/Kg		97	75 - 125
Bromoform	50.0	47.7		ug/Kg		95	55 - 135
Bromomethane	50.0	53.8		ug/Kg		108	30 - 160
Carbon disulfide	50.0	58.4		ug/Kg		117	45 - 160
Carbon tetrachloride	50.0	49.9		ug/Kg		100	65 - 135
Chlorobenzene	50.0	48.2		ug/Kg		96	75 - 125
Bromodichloromethane	50.0	51.5		ug/Kg		103	70 - 130
Chloromethane	50.0	43.0		ug/Kg		86	50 - 130
cis-1,3-Dichloropropene	50.0	52.9		ug/Kg		106	70 - 125
Dibromochloromethane	50.0	55.3		ug/Kg		111	65 - 130
Ethylbenzene	50.0	50.0		ug/Kg		100	75 - 125
Methyl tert-butyl ether	50.0	47.7		ug/Kg		95	70 - 130
Methylene Chloride	50.0	51.5		ug/Kg		103	55 - 140
Styrene	50.0	56.4		ug/Kg		113	75 - 125
Tetrachloroethene	50.0	49.4		ug/Kg		99	65 - 140
Toluene	50.0	49.9		ug/Kg		100	70 - 125
Chloroform	50.0	46.9		ug/Kg		94	70 - 125
Bromochloromethane	50.0	51.1		ug/Kg		102	70 - 125
trans-1,3-Dichloropropene	50.0	54.8		ug/Kg		110	65 - 125
Trichloroethene	50.0	51.4		ug/Kg		103	75 - 125
Vinyl chloride	50.0	44.9		ug/Kg		90	60 - 125
Chloroethane	50.0	49.1		ug/Kg		98	40 - 155
Xylenes, Total	100	104		ug/Kg		104	75 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 130*
Toluene-d8 (Surr)	*110*		*85 - 115*
4-Bromofluorobenzene (Surr)	*99*		*85 - 120*
Dibromofluoromethane (Surr)	*102*		*59 - 138*

Lab Sample ID: MRL 240-176276/33
Matrix: Solid
Analysis Batch: 176276

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.00500	0.00501		ng/uL		100	70 - 130
1,1,2,2-Tetrachloroethane	0.00500	0.00538		ng/uL		108	70 - 130
1,1,2-Trichloroethane	0.00500	0.00588		ng/uL		118	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 240-176276/33
Matrix: Solid
Analysis Batch: 176276

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	0.00500	0.00524		ng/uL		105	70 - 130
1,1-Dichloroethene	0.00500	0.00495		ng/uL		99	70 - 130
1,2-Dichloroethane	0.00500	0.00520		ng/uL		104	70 - 130
1,2-Dichloropropane	0.00500	0.00551		ng/uL		110	70 - 130
2-Butanone (MEK)	0.0100	0.0101		ng/uL		101	70 - 130
2-Hexanone	0.0100	0.0105		ng/uL		105	70 - 130
4-Methyl-2-pentanone (MIBK)	0.0100	0.0106		ng/uL		106	70 - 130
Benzene	0.00500	0.00561		ng/uL		112	70 - 130
Bromoform	0.00500	0.00485		ng/uL		97	70 - 130
Bromomethane	0.00500	0.00603		ng/uL		121	70 - 130
Carbon disulfide	0.00500	0.00431		ng/uL		86	70 - 130
Carbon tetrachloride	0.00500	0.00474		ng/uL		95	70 - 130
Chlorobenzene	0.00500	0.00563		ng/uL		113	70 - 130
Bromodichloromethane	0.00500	0.00492		ng/uL		98	70 - 130
Chloromethane	0.00500	0.00503		ng/uL		101	70 - 130
cis-1,3-Dichloropropene	0.00500	0.00452		ng/uL		90	70 - 130
Dibromochloromethane	0.00500	0.00478		ng/uL		96	70 - 130
Ethylbenzene	0.00500	0.00524		ng/uL		105	70 - 130
Methyl tert-butyl ether	0.00500	0.00514		ng/uL		103	70 - 130
Methylene Chloride	0.00500	0.00486		ng/uL		97	70 - 130
Styrene	0.00500	0.00527		ng/uL		105	70 - 130
Tetrachloroethene	0.00500	0.00511		ng/uL		102	70 - 130
Toluene	0.00500	0.00575		ng/uL		115	70 - 130
Chloroform	0.00500	0.00527		ng/uL		105	70 - 130
Bromochloromethane	0.00500	0.00574		ng/uL		115	70 - 130
trans-1,3-Dichloropropene	0.00500	0.00414		ng/uL		83	70 - 130
Trichloroethene	0.00500	0.00531		ng/uL		106	70 - 130
Vinyl chloride	0.00500	0.00510		ng/uL		102	70 - 130
Chloroethane	0.00500	0.00483		ng/uL		97	70 - 130
Xylenes, Total	0.0100	0.0106		ng/uL		106	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*50 - 150*
Toluene-d8 (Surr)	*115*		*50 - 150*
4-Bromofluorobenzene (Surr)	*102*		*50 - 150*
Dibromofluoromethane (Surr)	*106*		*50 - 150*

Lab Sample ID: MRL 240-176276/7
Matrix: Solid
Analysis Batch: 176276

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.00500	0.00479		ng/uL		96	70 - 130
1,1,2,2-Tetrachloroethane	0.00500	0.00528		ng/uL		106	70 - 130
1,1,2-Trichloroethane	0.00500	0.00522		ng/uL		104	70 - 130
1,1-Dichloroethane	0.00500	0.00462		ng/uL		92	70 - 130
1,1-Dichloroethene	0.00500	0.00484		ng/uL		97	70 - 130
1,2-Dichloroethane	0.00500	0.00446		ng/uL		89	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 240-176276/7
Matrix: Solid
Analysis Batch: 176276

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.00500	0.00473		ng/uL		95	70 - 130
2-Butanone (MEK)	0.0100	0.00962	J	ng/uL		96	70 - 130
2-Hexanone	0.0100	0.0101		ng/uL		101	70 - 130
4-Methyl-2-pentanone (MIBK)	0.0100	0.00986	J	ng/uL		99	70 - 130
Benzene	0.00500	0.00508		ng/uL		102	70 - 130
Bromoform	0.00500	0.00439		ng/uL		88	70 - 130
Bromomethane	0.00500	0.00565		ng/uL		113	70 - 130
Carbon disulfide	0.00500	0.00442		ng/uL		88	70 - 130
Carbon tetrachloride	0.00500	0.00433		ng/uL		87	70 - 130
Chlorobenzene	0.00500	0.00528		ng/uL		106	70 - 130
Bromodichloromethane	0.00500	0.00479		ng/uL		96	70 - 130
Chloromethane	0.00500	0.00488		ng/uL		98	70 - 130
cis-1,3-Dichloropropene	0.00500	0.00430		ng/uL		86	70 - 130
Dibromochloromethane	0.00500	0.00459		ng/uL		92	70 - 130
Ethylbenzene	0.00500	0.00506		ng/uL		101	70 - 130
Methyl tert-butyl ether	0.00500	0.00468		ng/uL		94	70 - 130
Methylene Chloride	0.00500	0.00486		ng/uL		97	70 - 130
Styrene	0.00500	0.00508		ng/uL		102	70 - 130
Tetrachloroethene	0.00500	0.00511		ng/uL		102	70 - 130
Toluene	0.00500	0.00528		ng/uL		106	70 - 130
Chloroform	0.00500	0.00473		ng/uL		95	70 - 130
Bromochloromethane	0.00500	0.00500		ng/uL		100	70 - 130
trans-1,3-Dichloropropene	0.00500	0.00397		ng/uL		79	70 - 130
Trichloroethene	0.00500	0.00518		ng/uL		104	70 - 130
Vinyl chloride	0.00500	0.00523		ng/uL		105	70 - 130
Chloroethane	0.00500	0.00517		ng/uL		103	70 - 130
Xylenes, Total	0.0100	0.0106		ng/uL		106	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*50 - 150*
Toluene-d8 (Surr)	*112*		*50 - 150*
4-Bromofluorobenzene (Surr)	*100*		*50 - 150*
Dibromofluoromethane (Surr)	*104*		*50 - 150*

Lab Sample ID: MB 240-176277/1-A
Matrix: Solid
Analysis Batch: 176276

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176277

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	5.0	0.56	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
1,1,2,2-Tetrachloroethane	1.0	U	5.0	0.34	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
1,1,2-Trichloroethane	1.0	U	5.0	0.39	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
1,1-Dichloroethane	1.0	U	5.0	0.36	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
1,1-Dichloroethene	1.0	U	5.0	0.52	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
1,2-Dichloroethane	1.0	U	5.0	0.34	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
1,2-Dichloroethene, Total	2.0	U	10	0.36	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
1,2-Dichloropropane	2.0	U	5.0	0.69	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
2-Butanone (MEK)	4.0	U	20	1.4	ug/Kg		04/14/15 05:29	04/14/15 10:43	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-176277/1-A
Matrix: Solid
Analysis Batch: 176276

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176277

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	1.0	U	20	0.63	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
4-Methyl-2-pentanone (MIBK)	0.653	J	20	0.54	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Benzene	0.50	U	5.0	0.23	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Bromoform	1.0	U	5.0	0.33	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Bromomethane	1.0	U	5.0	0.54	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Carbon disulfide	1.0	U	5.0	0.44	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Carbon tetrachloride	1.0	U	5.0	0.37	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Chlorobenzene	1.0	U	5.0	0.33	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Bromodichloromethane	0.50	U	5.0	0.28	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Chloromethane	0.50	U	5.0	0.41	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
cis-1,3-Dichloropropene	1.0	U	5.0	0.34	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Dibromochloromethane	1.0	U	5.0	0.55	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Ethylbenzene	0.50	U	5.0	0.26	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Methyl tert-butyl ether	1.0	U	5.0	0.43	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Methylene Chloride	2.0	U	5.0	0.67	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Styrene	0.50	U	5.0	0.15	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Tetrachloroethene	1.0	U	5.0	0.52	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Toluene	0.50	U	5.0	0.27	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Chloroform	0.50	U	5.0	0.29	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Bromochloromethane	2.0	U	5.0	0.71	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
1,2-Dibromoethane	1.0	U	5.0	0.50	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
trans-1,3-Dichloropropene	1.0	U	5.0	0.54	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Trichloroethene	1.0	U	5.0	0.42	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Vinyl chloride	1.0	U	5.0	0.39	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Chloroethane	1.0	U	5.0	0.86	ug/Kg		04/14/15 05:29	04/14/15 10:43	1
Xylenes, Total	2.0	U	10	0.35	ug/Kg		04/14/15 05:29	04/14/15 10:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*04/14/15 05:29*	*04/14/15 10:43*	*1*
Toluene-d8 (Surr)	*108*		*85 - 115*	*04/14/15 05:29*	*04/14/15 10:43*	*1*
4-Bromofluorobenzene (Surr)	*94*		*85 - 120*	*04/14/15 05:29*	*04/14/15 10:43*	*1*
Dibromofluoromethane (Surr)	*99*		*59 - 138*	*04/14/15 05:29*	*04/14/15 10:43*	*1*

Lab Sample ID: MB 240-176298/6
Matrix: Water
Analysis Batch: 176298

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			04/14/15 09:38	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.22	ug/L			04/14/15 09:38	1
1,1,2-Trichloroethane	0.50	U	1.0	0.24	ug/L			04/14/15 09:38	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			04/14/15 09:38	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			04/14/15 09:38	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			04/14/15 09:38	1
1,2-Dichloroethene, Total	1.0	U	2.0	0.20	ug/L			04/14/15 09:38	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			04/14/15 09:38	1
2-Butanone (MEK)	2.0	U	10	0.53	ug/L			04/14/15 09:38	1
2-Hexanone	2.0	U	10	0.48	ug/L			04/14/15 09:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-176298/6
Matrix: Water
Analysis Batch: 176298

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	2.0	U	10	0.99	ug/L			04/14/15 09:38	1
Acetone	2.0	U	10	0.94	ug/L			04/14/15 09:38	1
Benzene	1.0	U	1.0	0.35	ug/L			04/14/15 09:38	1
Bromoform	1.0	U	1.0	0.56	ug/L			04/14/15 09:38	1
Bromomethane	1.0	U	1.0	0.44	ug/L			04/14/15 09:38	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			04/14/15 09:38	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			04/14/15 09:38	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			04/14/15 09:38	1
Bromodichloromethane	1.0	U	1.0	0.29	ug/L			04/14/15 09:38	1
Chloromethane	1.0	U	1.0	0.44	ug/L			04/14/15 09:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			04/14/15 09:38	1
Dibromochloromethane	1.0	U	1.0	0.43	ug/L			04/14/15 09:38	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			04/14/15 09:38	1
Methyl tert-butyl ether	0.50	U	1.0	0.20	ug/L			04/14/15 09:38	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			04/14/15 09:38	1
Styrene	0.50	U	1.0	0.45	ug/L			04/14/15 09:38	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			04/14/15 09:38	1
Toluene	1.0	U	1.0	0.23	ug/L			04/14/15 09:38	1
Chloroform	1.0	U	1.0	0.25	ug/L			04/14/15 09:38	1
Bromochloromethane	1.0	U	1.0	0.50	ug/L			04/14/15 09:38	1
1,2-Dibromoethane	1.0	U	1.0	0.32	ug/L			04/14/15 09:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			04/14/15 09:38	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			04/14/15 09:38	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			04/14/15 09:38	1
Chloroethane	1.0	U	1.0	0.32	ug/L			04/14/15 09:38	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			04/14/15 09:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 120*		*04/14/15 09:38*	*1*
Toluene-d8 (Surr)	*95*		*85 - 120*		*04/14/15 09:38*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*04/14/15 09:38*	*1*
Dibromofluoromethane (Surr)	*95*		*85 - 115*		*04/14/15 09:38*	*1*

Lab Sample ID: LCS 240-176298/4
Matrix: Water
Analysis Batch: 176298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	10.7		ug/L		107	65 - 130
1,1,2,2-Tetrachloroethane	10.0	9.22		ug/L		92	65 - 130
1,1,2-Trichloroethane	10.0	9.39		ug/L		94	75 - 125
1,1-Dichloroethane	10.0	10.6		ug/L		106	70 - 135
1,1-Dichloroethene	10.0	10.9		ug/L		109	70 - 130
1,2-Dichloroethane	10.0	10.5		ug/L		105	70 - 130
1,2-Dichloropropane	10.0	10.2		ug/L		102	75 - 125
2-Butanone (MEK)	20.0	19.4		ug/L		97	30 - 150
2-Hexanone	20.0	17.8		ug/L		89	55 - 130
4-Methyl-2-pentanone (MIBK)	20.0	19.4		ug/L		97	60 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-176298/4
Matrix: Water
Analysis Batch: 176298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	16.4		ug/L		82	40 - 140
Benzene	10.0	10.2		ug/L		102	80 - 120
Bromoform	10.0	9.41		ug/L		94	70 - 130
Bromomethane	10.0	8.72		ug/L		87	30 - 145
Carbon disulfide	10.0	11.3		ug/L		113	35 - 160
Carbon tetrachloride	10.0	11.2		ug/L		112	65 - 140
Chlorobenzene	10.0	9.48		ug/L		95	80 - 120
Bromodichloromethane	10.0	9.94		ug/L		99	75 - 120
Chloromethane	10.0	10.3		ug/L		103	40 - 125
cis-1,3-Dichloropropene	10.0	10.6		ug/L		106	70 - 130
Dibromochloromethane	10.0	9.75		ug/L		97	60 - 135
Ethylbenzene	10.0	9.93		ug/L		99	75 - 125
Methyl tert-butyl ether	10.0	10.2		ug/L		102	65 - 125
Methylene Chloride	10.0	10.1		ug/L		101	55 - 140
Styrene	10.0	10.1		ug/L		101	65 - 135
Tetrachloroethene	10.0	10.0		ug/L		100	45 - 150
Toluene	10.0	9.79		ug/L		98	75 - 120
Chloroform	10.0	10.3		ug/L		103	65 - 135
Bromochloromethane	10.0	10.2		ug/L		102	65 - 130
trans-1,3-Dichloropropene	10.0	10.7		ug/L		107	55 - 140
Trichloroethene	10.0	10.5		ug/L		105	70 - 125
Vinyl chloride	10.0	9.95		ug/L		100	50 - 145
Chloroethane	10.0	9.31		ug/L		93	60 - 135
Xylenes, Total	20.0	19.8		ug/L		99	75 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 120*
Toluene-d8 (Surr)	*97*		*85 - 120*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*
Dibromofluoromethane (Surr)	*98*		*85 - 115*

Lab Sample ID: MRL 240-176298/15
Matrix: Water
Analysis Batch: 176298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.00100	0.000982	J	ng/uL		98	70 - 130
1,1,2,2-Tetrachloroethane	0.00100	0.000945	J	ng/uL		95	70 - 130
1,1,2-Trichloroethane	0.00100	0.000931	J	ng/uL		93	70 - 130
1,1-Dichloroethane	0.00100	0.000968	J	ng/uL		97	70 - 130
1,1-Dichloroethene	0.00100	0.000965	J	ng/uL		97	70 - 130
1,2-Dichloroethane	0.00100	0.000984	J	ng/uL		98	70 - 130
1,2-Dichloropropane	0.00100	0.000928	J	ng/uL		93	70 - 130
2-Butanone (MEK)	0.0100	0.00811	J	ng/uL		81	70 - 130
2-Hexanone	0.0100	0.00817	J	ng/uL		82	70 - 130
4-Methyl-2-pentanone (MIBK)	0.0100	0.00909	J	ng/uL		91	70 - 130
Acetone	0.0100	0.00706	J	ng/uL		71	70 - 130
Benzene	0.00100	0.000970	J	ng/uL		97	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 240-176298/15
Matrix: Water
Analysis Batch: 176298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	0.00100	0.000830	J	ng/uL		83	70 - 130
Bromomethane	0.00100	0.00136	^	ng/uL		136	70 - 130
Carbon disulfide	0.00100	0.000787	J	ng/uL		79	70 - 130
Carbon tetrachloride	0.00100	0.000935	J	ng/uL		94	70 - 130
Chlorobenzene	0.00100	0.000960	J	ng/uL		96	70 - 130
Bromodichloromethane	0.00100	0.000958	J	ng/uL		96	70 - 130
Chloromethane	0.00100	0.00130		ng/uL		130	70 - 130
cis-1,3-Dichloropropene	0.00100	0.000825	J	ng/uL		83	70 - 130
Dibromochloromethane	0.00100	0.000768	J	ng/uL		77	70 - 130
Ethylbenzene	0.00100	0.00101		ng/uL		101	70 - 130
Methyl tert-butyl ether	0.00100	0.000891	J	ng/uL		89	70 - 130
Methylene Chloride	0.00100	0.000972	J	ng/uL		97	70 - 130
Styrene	0.00100	0.000846	J	ng/uL		85	70 - 130
Tetrachloroethene	0.00100	0.00102		ng/uL		102	70 - 130
Toluene	0.00100	0.000947	J	ng/uL		95	70 - 130
Chloroform	0.00100	0.000964	J	ng/uL		96	70 - 130
Bromochloromethane	0.00100	0.000981	J	ng/uL		98	70 - 130
trans-1,3-Dichloropropene	0.00100	0.000794	J	ng/uL		79	70 - 130
Trichloroethene	0.00100	0.000992	J	ng/uL		99	70 - 130
Vinyl chloride	0.00100	0.00130		ng/uL		130	70 - 130
Chloroethane	0.00100	0.00131	^	ng/uL		131	70 - 130
Xylenes, Total	0.00200	0.00189	J	ng/uL		95	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*50 - 150*
Toluene-d8 (Surr)	*96*		*50 - 150*
4-Bromofluorobenzene (Surr)	*97*		*50 - 150*
Dibromofluoromethane (Surr)	*96*		*50 - 150*

Lab Sample ID: MRL 240-176298/5
Matrix: Water
Analysis Batch: 176298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.00100	0.00109		ng/uL		109	70 - 130
1,1,2,2-Tetrachloroethane	0.00100	0.000903	J	ng/uL		90	70 - 130
1,1,2-Trichloroethane	0.00100	0.000924	J	ng/uL		92	70 - 130
1,1-Dichloroethane	0.00100	0.00104		ng/uL		104	70 - 130
1,1-Dichloroethene	0.00100	0.00100		ng/uL		100	70 - 130
1,2-Dichloroethane	0.00100	0.000987	J	ng/uL		99	70 - 130
1,2-Dichloropropane	0.00100	0.00102		ng/uL		102	70 - 130
2-Butanone (MEK)	0.0100	0.00892	J	ng/uL		89	70 - 130
2-Hexanone	0.0100	0.00881	J	ng/uL		88	70 - 130
4-Methyl-2-pentanone (MIBK)	0.0100	0.00924	J	ng/uL		92	70 - 130
Acetone	0.0100	0.00855	J	ng/uL		85	70 - 130
Benzene	0.00100	0.00102		ng/uL		102	70 - 130
Bromoform	0.00100	0.000768	J	ng/uL		77	70 - 130
Bromomethane	0.00100	0.00143	^	ng/uL		143	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 240-176298/5
Matrix: Water
Analysis Batch: 176298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	0.00100	0.000940	J	ng/uL		94	70 - 130
Carbon tetrachloride	0.00100	0.000976	J	ng/uL		98	70 - 130
Chlorobenzene	0.00100	0.000987	J	ng/uL		99	70 - 130
Bromodichloromethane	0.00100	0.000930	J	ng/uL		93	70 - 130
Chloromethane	0.00100	0.00138	^	ng/uL		138	70 - 130
cis-1,3-Dichloropropene	0.00100	0.000980	J	ng/uL		98	70 - 130
Dibromochloromethane	0.00100	0.000862	J	ng/uL		86	70 - 130
Ethylbenzene	0.00100	0.000988	J	ng/uL		99	70 - 130
Methyl tert-butyl ether	0.00100	0.00101		ng/uL		101	70 - 130
Methylene Chloride	0.00100	0.000888	J	ng/uL		89	70 - 130
Styrene	0.00100	0.000929	J	ng/uL		93	70 - 130
Tetrachloroethene	0.00100	0.00110		ng/uL		110	70 - 130
Toluene	0.00100	0.000982	J	ng/uL		98	70 - 130
Chloroform	0.00100	0.000987	J	ng/uL		99	70 - 130
Bromochloromethane	0.00100	0.00104		ng/uL		104	70 - 130
trans-1,3-Dichloropropene	0.00100	0.000921	J	ng/uL		92	70 - 130
Trichloroethene	0.00100	0.00105		ng/uL		105	70 - 130
Vinyl chloride	0.00100	0.00137	^	ng/uL		137	70 - 130
Chloroethane	0.00100	0.00133	^	ng/uL		133	70 - 130
Xylenes, Total	0.00200	0.00187	J	ng/uL		93	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*50 - 150*
Toluene-d8 (Surr)	*96*		*50 - 150*
4-Bromofluorobenzene (Surr)	*99*		*50 - 150*
Dibromofluoromethane (Surr)	*99*		*50 - 150*

Lab Sample ID: MB 240-176387/33
Matrix: Solid
Analysis Batch: 176387

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	5.0	0.56	ug/Kg			04/14/15 15:28	1
1,1,2,2-Tetrachloroethane	1.0	U	5.0	0.34	ug/Kg			04/14/15 15:28	1
1,1,2-Trichloroethane	1.0	U	5.0	0.39	ug/Kg			04/14/15 15:28	1
1,1-Dichloroethane	1.0	U	5.0	0.36	ug/Kg			04/14/15 15:28	1
1,1-Dichloroethene	1.0	U	5.0	0.52	ug/Kg			04/14/15 15:28	1
1,2-Dichloroethane	1.0	U	5.0	0.34	ug/Kg			04/14/15 15:28	1
1,2-Dichloroethene, Total	2.0	U	10	0.36	ug/Kg			04/14/15 15:28	1
1,2-Dichloropropane	2.0	U	5.0	0.69	ug/Kg			04/14/15 15:28	1
2-Butanone (MEK)	4.0	U	20	1.4	ug/Kg			04/14/15 15:28	1
2-Hexanone	1.0	U	20	0.63	ug/Kg			04/14/15 15:28	1
4-Methyl-2-pentanone (MIBK)	1.0	U	20	0.54	ug/Kg			04/14/15 15:28	1
Acetone	8.91	J	20	6.3	ug/Kg			04/14/15 15:28	1
Benzene	0.50	U	5.0	0.23	ug/Kg			04/14/15 15:28	1
Bromoform	1.0	U	5.0	0.33	ug/Kg			04/14/15 15:28	1
Bromomethane	1.0	U	5.0	0.54	ug/Kg			04/14/15 15:28	1
Carbon disulfide	1.0	U	5.0	0.44	ug/Kg			04/14/15 15:28	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-176387/33
Matrix: Solid
Analysis Batch: 176387

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	1.0	U	5.0	0.37	ug/Kg			04/14/15 15:28	1
Chlorobenzene	1.0	U	5.0	0.33	ug/Kg			04/14/15 15:28	1
Bromodichloromethane	0.50	U	5.0	0.28	ug/Kg			04/14/15 15:28	1
Chloromethane	0.50	U	5.0	0.41	ug/Kg			04/14/15 15:28	1
cis-1,3-Dichloropropene	1.0	U	5.0	0.34	ug/Kg			04/14/15 15:28	1
Dibromochloromethane	1.0	U	5.0	0.55	ug/Kg			04/14/15 15:28	1
Ethylbenzene	0.50	U	5.0	0.26	ug/Kg			04/14/15 15:28	1
Methyl tert-butyl ether	1.0	U	5.0	0.43	ug/Kg			04/14/15 15:28	1
Methylene Chloride	2.50	J	5.0	0.67	ug/Kg			04/14/15 15:28	1
Styrene	0.50	U	5.0	0.15	ug/Kg			04/14/15 15:28	1
Tetrachloroethene	1.0	U	5.0	0.52	ug/Kg			04/14/15 15:28	1
Toluene	0.50	U	5.0	0.27	ug/Kg			04/14/15 15:28	1
Chloroform	0.50	U	5.0	0.29	ug/Kg			04/14/15 15:28	1
Bromochloromethane	2.0	U	5.0	0.71	ug/Kg			04/14/15 15:28	1
1,2-Dibromoethane	1.0	U	5.0	0.50	ug/Kg			04/14/15 15:28	1
trans-1,3-Dichloropropene	1.0	U	5.0	0.54	ug/Kg			04/14/15 15:28	1
Trichloroethene	1.0	U	5.0	0.42	ug/Kg			04/14/15 15:28	1
Vinyl chloride	1.0	U	5.0	0.39	ug/Kg			04/14/15 15:28	1
Chloroethane	1.0	U	5.0	0.86	ug/Kg			04/14/15 15:28	1
Xylenes, Total	2.0	U	10	0.35	ug/Kg			04/14/15 15:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*61 - 130*		*04/14/15 15:28*	*1*
Toluene-d8 (Surr)	*103*		*85 - 115*		*04/14/15 15:28*	*1*
4-Bromofluorobenzene (Surr)	*96*		*85 - 120*		*04/14/15 15:28*	*1*
Dibromofluoromethane (Surr)	*95*		*59 - 138*		*04/14/15 15:28*	*1*

Lab Sample ID: LCS 240-176387/5
Matrix: Solid
Analysis Batch: 176387

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	58.3		ug/Kg		117	70 - 135
1,1,2,2-Tetrachloroethane	50.0	50.6		ug/Kg		101	55 - 130
1,1,2-Trichloroethane	50.0	51.9		ug/Kg		104	60 - 125
1,1-Dichloroethane	50.0	55.1		ug/Kg		110	75 - 125
1,1-Dichloroethene	50.0	57.2		ug/Kg		114	65 - 135
1,2-Dichloroethane	50.0	54.0		ug/Kg		108	70 - 135
1,2-Dichloropropane	50.0	53.6		ug/Kg		107	70 - 120
2-Butanone (MEK)	100	95.2		ug/Kg		95	30 - 160
2-Hexanone	100	96.5		ug/Kg		96	45 - 145
4-Methyl-2-pentanone (MIBK)	100	106		ug/Kg		106	45 - 145
Acetone	100	107		ug/Kg		107	20 - 160
Benzene	50.0	52.6		ug/Kg		105	75 - 125
Bromoform	50.0	44.9		ug/Kg		90	55 - 135
Bromomethane	50.0	52.2		ug/Kg		104	30 - 160
Carbon disulfide	50.0	58.9		ug/Kg		118	45 - 160
Carbon tetrachloride	50.0	59.3		ug/Kg		119	65 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-176387/5
Matrix: Solid
Analysis Batch: 176387

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	50.0	51.4		ug/Kg		103	75 - 125
Bromodichloromethane	50.0	54.2		ug/Kg		108	70 - 130
Chloromethane	50.0	56.9		ug/Kg		114	50 - 130
cis-1,3-Dichloropropene	50.0	56.7		ug/Kg		113	70 - 125
Dibromochloromethane	50.0	56.1		ug/Kg		112	65 - 130
Ethylbenzene	50.0	52.1		ug/Kg		104	75 - 125
Methyl tert-butyl ether	50.0	53.6		ug/Kg		107	70 - 130
Methylene Chloride	50.0	58.5		ug/Kg		117	55 - 140
Styrene	50.0	55.7		ug/Kg		111	75 - 125
Tetrachloroethene	50.0	52.8		ug/Kg		106	65 - 140
Toluene	50.0	51.0		ug/Kg		102	70 - 125
Chloroform	50.0	54.4		ug/Kg		109	70 - 125
Bromochloromethane	50.0	52.0		ug/Kg		104	70 - 125
trans-1,3-Dichloropropene	50.0	60.5		ug/Kg		121	65 - 125
Trichloroethene	50.0	52.7		ug/Kg		105	75 - 125
Vinyl chloride	50.0	55.0		ug/Kg		110	60 - 125
Chloroethane	50.0	56.6		ug/Kg		113	40 - 155
Xylenes, Total	100	107		ug/Kg		107	75 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*
Toluene-d8 (Surr)	*102*		*85 - 115*
4-Bromofluorobenzene (Surr)	*101*		*85 - 120*
Dibromofluoromethane (Surr)	*96*		*59 - 138*

Lab Sample ID: MRL 240-176387/30
Matrix: Solid
Analysis Batch: 176387

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.00500	0.00614		ng/uL		123	70 - 130
1,1,2,2-Tetrachloroethane	0.00500	0.00551		ng/uL		110	70 - 130
1,1,2-Trichloroethane	0.00500	0.00568		ng/uL		114	70 - 130
1,1-Dichloroethane	0.00500	0.00646		ng/uL		129	70 - 130
1,1-Dichloroethene	0.00500	0.00573		ng/uL		115	70 - 130
1,2-Dichloroethane	0.00500	0.00676	^	ng/uL		135	70 - 130
1,2-Dichloropropane	0.00500	0.00584		ng/uL		117	70 - 130
2-Butanone (MEK)	0.0100	0.0125		ng/uL		125	70 - 130
2-Hexanone	0.0100	0.0114		ng/uL		114	70 - 130
4-Methyl-2-pentanone (MIBK)	0.0100	0.0132	^	ng/uL		132	70 - 130
Acetone	0.0100	0.0248	^	ng/uL		248	70 - 130
Benzene	0.00500	0.00601		ng/uL		120	70 - 130
Bromoform	0.00500	0.00532		ng/uL		106	70 - 130
Bromomethane	0.00500	0.00634		ng/uL		127	70 - 130
Carbon disulfide	0.00500	0.00465		ng/uL		93	70 - 130
Carbon tetrachloride	0.00500	0.00575		ng/uL		115	70 - 130
Chlorobenzene	0.00500	0.00557		ng/uL		111	70 - 130
Bromodichloromethane	0.00500	0.00496		ng/uL		99	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 240-176387/30
Matrix: Solid
Analysis Batch: 176387

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	0.00500	0.00580		ng/uL		116	70 - 130
cis-1,3-Dichloropropene	0.00500	0.00459		ng/uL		92	70 - 130
Dibromochloromethane	0.00500	0.00463		ng/uL		93	70 - 130
Ethylbenzene	0.00500	0.00583		ng/uL		117	70 - 130
Methyl tert-butyl ether	0.00500	0.00590		ng/uL		118	70 - 130
Methylene Chloride	0.00500	0.00857	^	ng/uL		171	70 - 130
Styrene	0.00500	0.00523		ng/uL		105	70 - 130
Tetrachloroethene	0.00500	0.00555		ng/uL		111	70 - 130
Toluene	0.00500	0.00613		ng/uL		123	70 - 130
Chloroform	0.00500	0.00653	^	ng/uL		131	70 - 130
Bromochloromethane	0.00500	0.00561		ng/uL		112	70 - 130
trans-1,3-Dichloropropene	0.00500	0.00503		ng/uL		101	70 - 130
Trichloroethene	0.00500	0.00540		ng/uL		108	70 - 130
Vinyl chloride	0.00500	0.00570		ng/uL		114	70 - 130
Chloroethane	0.00500	0.00666	^	ng/uL		133	70 - 130
Xylenes, Total	0.0100	0.0110		ng/uL		110	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*50 - 150*
Toluene-d8 (Surr)	*107*		*50 - 150*
4-Bromofluorobenzene (Surr)	*102*		*50 - 150*
Dibromofluoromethane (Surr)	*98*		*50 - 150*

Lab Sample ID: MRL 240-176387/6
Matrix: Solid
Analysis Batch: 176387

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.00500	0.00642		ng/uL		128	70 - 130
1,1,2,2-Tetrachloroethane	0.00500	0.00555		ng/uL		111	70 - 130
1,1,2-Trichloroethane	0.00500	0.00526		ng/uL		105	70 - 130
1,1-Dichloroethane	0.00500	0.00609		ng/uL		122	70 - 130
1,1-Dichloroethene	0.00500	0.00658	^	ng/uL		132	70 - 130
1,2-Dichloroethane	0.00500	0.00630		ng/uL		126	70 - 130
1,2-Dichloropropane	0.00500	0.00627		ng/uL		125	70 - 130
2-Butanone (MEK)	0.0100	0.0109		ng/uL		109	70 - 130
2-Hexanone	0.0100	0.0111		ng/uL		111	70 - 130
4-Methyl-2-pentanone (MIBK)	0.0100	0.0110		ng/uL		110	70 - 130
Acetone	0.0100	0.0174	^	ng/uL		174	70 - 130
Benzene	0.00500	0.00612		ng/uL		122	70 - 130
Bromoform	0.00500	0.00512		ng/uL		102	70 - 130
Bromomethane	0.00500	0.00638		ng/uL		128	70 - 130
Carbon disulfide	0.00500	0.00563		ng/uL		113	70 - 130
Carbon tetrachloride	0.00500	0.00638		ng/uL		128	70 - 130
Chlorobenzene	0.00500	0.00635		ng/uL		127	70 - 130
Bromodichloromethane	0.00500	0.00515		ng/uL		103	70 - 130
Chloromethane	0.00500	0.00659	^	ng/uL		132	70 - 130
cis-1,3-Dichloropropene	0.00500	0.00484		ng/uL		97	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 240-176387/6
Matrix: Solid
Analysis Batch: 176387

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromochloromethane	0.00500	0.00496		ng/uL		99	70 - 130
Ethylbenzene	0.00500	0.00576		ng/uL		115	70 - 130
Methyl tert-butyl ether	0.00500	0.00575		ng/uL		115	70 - 130
Methylene Chloride	0.00500	0.00803	^	ng/uL		161	70 - 130
Styrene	0.00500	0.00542		ng/uL		108	70 - 130
Tetrachloroethene	0.00500	0.00550		ng/uL		110	70 - 130
Toluene	0.00500	0.00583		ng/uL		117	70 - 130
Chloroform	0.00500	0.00618		ng/uL		124	70 - 130
Bromochloromethane	0.00500	0.00580		ng/uL		116	70 - 130
trans-1,3-Dichloropropene	0.00500	0.00529		ng/uL		106	70 - 130
Trichloroethene	0.00500	0.00579		ng/uL		116	70 - 130
Vinyl chloride	0.00500	0.00636		ng/uL		127	70 - 130
Chloroethane	0.00500	0.00772	^	ng/uL		154	70 - 130
Xylenes, Total	0.0100	0.0116		ng/uL		116	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*50 - 150*
Toluene-d8 (Surr)	*108*		*50 - 150*
4-Bromofluorobenzene (Surr)	*100*		*50 - 150*
Dibromofluoromethane (Surr)	*101*		*50 - 150*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-176319/23-A
Matrix: Solid
Analysis Batch: 177355

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176319

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.3	U	6.7	0.76	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Acenaphthylene	1.7	U	6.7	0.35	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Anthracene	3.3	U	6.7	0.78	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Benzo[a]anthracene	3.3	U	6.7	0.63	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Benzo[a]pyrene	3.3	U	6.7	0.64	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Benzo[b]fluoranthene	3.3	U	6.7	0.59	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Benzo[g,h,i]perylene	1.7	U	6.7	0.35	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Benzoic acid	130	U	660	36	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Benzo[k]fluoranthene	3.3	U	6.7	0.68	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Benzyl alcohol	67	U	330	21	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Bis(2-chloroethoxy)methane	67	U	100	22	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Bis(2-chloroethyl)ether	3.3	U	100	2.0	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
bis (2-chloroisopropyl) ether	33	U	100	9.5	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Bis(2-ethylhexyl) phthalate	33	U	70	19	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
4-Bromophenyl phenyl ether	33	U	50	13	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Butyl benzyl phthalate	12.3	J	70	10	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Carbazole	33	U	50	27	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
4-Chloroaniline	67	U	150	17	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
4-Chloro-3-methylphenol	67	U	150	21	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
2-Chloronaphthalene	1.7	U	50	0.45	ug/Kg		04/14/15 08:47	04/22/15 09:19	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-176319/23-A
Matrix: Solid
Analysis Batch: 177355

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176319

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	33	U	50	8.2	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
4-Chlorophenyl phenyl ether	33	U	50	13	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Chrysene	3.3	U	6.7	1.1	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Dibenz(a,h)anthracene	3.3	U	6.7	0.66	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Dibenzofuran	3.3	U	50	0.66	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
1,2-Dichlorobenzene	33	U	50	9.7	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
1,3-Dichlorobenzene	33	U	50	11	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
1,4-Dichlorobenzene	33	U	50	20	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
3,3'-Dichlorobenzidine	67	U	100	18	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
2,4-Dichlorophenol	67	U	150	20	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Diethyl phthalate	33	U	70	16	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
2,4-Dimethylphenol	67	U	150	20	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Dimethyl phthalate	33	U	70	17	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Di-n-butyl phthalate	33	U	70	15	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
4,6-Dinitro-2-methylphenol	33	U	150	9.2	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
2,4-Dinitrophenol	67	U	330	21	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
2,4-Dinitrotoluene	67	U	200	17	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
2,6-Dinitrotoluene	67	U	200	21	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Di-n-octyl phthalate	33	U	70	7.9	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Fluoranthene	3.3	U	6.7	0.55	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Fluorene	3.3	U	6.7	0.53	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Hexachlorobenzene	3.3	U	6.7	2.1	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Hexachlorobutadiene	33	U	50	5.6	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Hexachlorocyclopentadiene	33	U	330	8.1	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Hexachloroethane	33	U	50	9.0	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.7	0.35	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Isophorone	33	U	50	13	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
2-Methylnaphthalene	3.3	U	6.7	0.50	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
2-Methylphenol	67	U	200	11	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
3 & 4 Methylphenol	67	U	400	20	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Naphthalene	3.3	U	6.7	0.82	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
2-Nitroaniline	33	U	200	9.1	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
3-Nitroaniline	67	U	200	16	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
4-Nitroaniline	67	U	200	26	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Nitrobenzene	3.3	U	100	2.2	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
2-Nitrophenol	33	U	50	8.3	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
4-Nitrophenol	67	U	330	17	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
N-Nitrosodi-n-propylamine	33	U	50	6.3	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
N-Nitrosodiphenylamine	33	U	50	21	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Pentachlorophenol	33	U	150	9.1	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Phenanthrene	3.3	U	6.7	0.73	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Phenol	33	U	50	7.3	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
Pyrene	1.7	U	6.7	0.44	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
1,2,4-Trichlorobenzene	17	U	50	3.5	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
2,4,5-Trichlorophenol	67	U	150	25	ug/Kg		04/14/15 08:47	04/22/15 09:19	1
2,4,6-Trichlorophenol	33	U	150	8.9	ug/Kg		04/14/15 08:47	04/22/15 09:19	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-176319/23-A
Matrix: Solid
Analysis Batch: 177355

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176319

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	75		45 - 105	04/14/15 08:47	04/22/15 09:19	1
2-Fluorophenol (Surr)	67		35 - 105	04/14/15 08:47	04/22/15 09:19	1
Nitrobenzene-d5 (Surr)	68		35 - 100	04/14/15 08:47	04/22/15 09:19	1
Phenol-d5 (Surr)	76		40 - 100	04/14/15 08:47	04/22/15 09:19	1
Terphenyl-d14 (Surr)	75		30 - 125	04/14/15 08:47	04/22/15 09:19	1
2,4,6-Tribromophenol (Surr)	36		35 - 125	04/14/15 08:47	04/22/15 09:19	1

Lab Sample ID: LCS 240-176319/24-A
Matrix: Solid
Analysis Batch: 177355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176319

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	667	540		ug/Kg		81	45 - 110
Acenaphthylene	667	526		ug/Kg		79	45 - 105
Anthracene	667	584		ug/Kg		88	55 - 105
Benzo[a]anthracene	667	580		ug/Kg		87	50 - 110
Benzo[a]pyrene	667	592		ug/Kg		89	50 - 110
Benzo[b]fluoranthene	667	588		ug/Kg		88	45 - 115
Benzo[g,h,i]perylene	667	586		ug/Kg		88	40 - 125
Benzoic acid	1330	172	J	ug/Kg		13	0 - 110
Benzo[k]fluoranthene	667	600		ug/Kg		90	45 - 125
Benzyl alcohol	667	518		ug/Kg		78	20 - 125
Bis(2-chloroethoxy)methane	667	562		ug/Kg		84	45 - 110
Bis(2-chloroethyl)ether	667	525		ug/Kg		79	40 - 105
bis (2-chloroisopropyl) ether	667	612		ug/Kg		92	20 - 115
Bis(2-ethylhexyl) phthalate	667	610		ug/Kg		92	45 - 125
4-Bromophenyl phenyl ether	667	613		ug/Kg		92	45 - 115
Butyl benzyl phthalate	667	577		ug/Kg		86	50 - 125
Carbazole	667	625		ug/Kg		94	45 - 115
4-Chloroaniline	667	439		ug/Kg		66	10 - 110
4-Chloro-3-methylphenol	667	566		ug/Kg		85	45 - 115
2-Chloronaphthalene	667	526		ug/Kg		79	45 - 105
2-Chlorophenol	667	529		ug/Kg		79	45 - 105
4-Chlorophenyl phenyl ether	667	548		ug/Kg		82	45 - 110
Chrysene	667	613		ug/Kg		92	55 - 110
Dibenz(a,h)anthracene	667	587		ug/Kg		88	40 - 125
Dibenzofuran	667	550		ug/Kg		82	50 - 105
1,2-Dichlorobenzene	667	503		ug/Kg		75	45 - 110
1,3-Dichlorobenzene	667	492		ug/Kg		74	40 - 100
1,4-Dichlorobenzene	667	477		ug/Kg		72	35 - 105
3,3'-Dichlorobenzidine	1330	976		ug/Kg		73	10 - 130
2,4-Dichlorophenol	667	537		ug/Kg		81	45 - 110
Diethyl phthalate	667	550		ug/Kg		82	50 - 115
2,4-Dimethylphenol	667	375		ug/Kg		56	30 - 105
Dimethyl phthalate	667	574		ug/Kg		86	50 - 110
Di-n-butyl phthalate	667	650		ug/Kg		98	55 - 110
4,6-Dinitro-2-methylphenol	1330	798		ug/Kg		60	30 - 135
2,4-Dinitrophenol	1330	472		ug/Kg		35	15 - 130

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-176319/24-A
Matrix: Solid
Analysis Batch: 177355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176319

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	667	572		ug/Kg		86	50 - 115
2,6-Dinitrotoluene	667	563		ug/Kg		85	50 - 110
Di-n-octyl phthalate	667	588		ug/Kg		88	40 - 130
Fluoranthene	667	633		ug/Kg		95	55 - 115
Fluorene	667	539		ug/Kg		81	50 - 110
Hexachlorobenzene	667	567		ug/Kg		85	45 - 120
Hexachlorobutadiene	667	465		ug/Kg		70	40 - 115
Hexachlorocyclopentadiene	667	296	J	ug/Kg		44	12 - 110
Hexachloroethane	667	483		ug/Kg		72	35 - 110
Indeno[1,2,3-cd]pyrene	667	602		ug/Kg		90	40 - 120
Isophorone	667	526		ug/Kg		79	45 - 110
2-Methylnaphthalene	667	500		ug/Kg		75	45 - 105
2-Methylphenol	667	531		ug/Kg		80	40 - 105
3 & 4 Methylphenol	667	549		ug/Kg		82	40 - 105
Naphthalene	667	514		ug/Kg		77	40 - 105
2-Nitroaniline	667	587		ug/Kg		88	45 - 120
3-Nitroaniline	667	572		ug/Kg		86	25 - 110
4-Nitroaniline	667	575		ug/Kg		86	35 - 115
Nitrobenzene	667	515		ug/Kg		77	40 - 115
2-Nitrophenol	667	497		ug/Kg		75	40 - 110
4-Nitrophenol	1330	1040		ug/Kg		78	15 - 140
N-Nitrosodi-n-propylamine	667	539		ug/Kg		81	40 - 115
N-Nitrosodiphenylamine	1330	1230		ug/Kg		92	50 - 115
Pentachlorophenol	1330	770		ug/Kg		58	25 - 120
Phenanthrene	667	568		ug/Kg		85	50 - 110
Phenol	667	551		ug/Kg		83	40 - 100
Pyrene	667	592		ug/Kg		89	45 - 125
1,2,4-Trichlorobenzene	667	497		ug/Kg		74	45 - 110
2,4,5-Trichlorophenol	667	497		ug/Kg		74	50 - 110
2,4,6-Trichlorophenol	667	442		ug/Kg		66	45 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*76*		*45 - 105*
2-Fluorophenol (Surr)	*81*		*35 - 105*
Nitrobenzene-d5 (Surr)	*74*		*35 - 100*
Phenol-d5 (Surr)	*81*		*40 - 100*
Terphenyl-d14 (Surr)	*83*		*30 - 125*
2,4,6-Tribromophenol (Surr)	*63*		*35 - 125*

Lab Sample ID: MRL 240-177355/18
Matrix: Solid
Analysis Batch: 177355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	5.00	5.11		ng/uL		102	70 - 130
Acenaphthylene	5.00	5.13		ng/uL		103	70 - 130
Anthracene	5.00	5.06		ng/uL		101	70 - 130
Benzo[a]anthracene	5.00	4.78		ng/uL		96	70 - 130

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 240-177355/18
Matrix: Solid
Analysis Batch: 177355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	5.00	4.88		ng/uL		98	70 - 130
Benzo[b]fluoranthene	5.00	4.96		ng/uL		99	70 - 130
Benzo[g,h,i]perylene	5.00	4.78		ng/uL		96	70 - 130
Benzoic acid	10.0	7.20	M	ng/uL		72	70 - 130
Benzo[k]fluoranthene	5.00	4.71		ng/uL		94	70 - 130
Benzyl alcohol	5.00	4.60		ng/uL		92	70 - 130
Bis(2-chloroethoxy)methane	5.00	5.34		ng/uL		107	70 - 130
Bis(2-chloroethyl)ether	5.00	4.94		ng/uL		99	70 - 130
bis (2-chloroisopropyl) ether	5.00	5.57		ng/uL		111	70 - 130
Bis(2-ethylhexyl) phthalate	5.00	4.97		ng/uL		99	70 - 130
4-Bromophenyl phenyl ether	5.00	4.99		ng/uL		100	70 - 130
Butyl benzyl phthalate	5.00	4.81		ng/uL		96	70 - 130
Carbazole	5.00	4.87		ng/uL		97	70 - 130
4-Chloroaniline	5.00	5.14		ng/uL		103	70 - 130
4-Chloro-3-methylphenol	5.00	4.83		ng/uL		97	70 - 130
2-Chloronaphthalene	5.00	4.99		ng/uL		100	70 - 130
2-Chlorophenol	5.00	4.92		ng/uL		98	70 - 130
4-Chlorophenyl phenyl ether	5.00	5.04		ng/uL		101	70 - 130
Chrysene	5.00	5.07		ng/uL		101	70 - 130
Dibenz(a,h)anthracene	5.00	4.81		ng/uL		96	70 - 130
Dibenzofuran	5.00	5.14		ng/uL		103	70 - 130
1,2-Dichlorobenzene	5.00	5.01		ng/uL		100	70 - 130
1,3-Dichlorobenzene	5.00	4.88		ng/uL		98	70 - 130
1,4-Dichlorobenzene	5.00	4.98		ng/uL		100	70 - 130
3,3'-Dichlorobenzidine	10.0	9.70		ng/uL		97	70 - 130
2,4-Dichlorophenol	5.00	4.95		ng/uL		99	70 - 130
Diethyl phthalate	5.00	5.30		ng/uL		106	70 - 130
2,4-Dimethylphenol	5.00	4.93		ng/uL		99	70 - 130
Dimethyl phthalate	5.00	5.18		ng/uL		104	70 - 130
Di-n-butyl phthalate	5.00	4.81		ng/uL		96	70 - 130
4,6-Dinitro-2-methylphenol	10.0	4.67	^	ng/uL		47	70 - 130
2,4-Dinitrophenol	10.0	3.89	^	ng/uL		39	70 - 130
2,4-Dinitrotoluene	5.00	5.09		ng/uL		102	70 - 130
2,6-Dinitrotoluene	5.00	4.95		ng/uL		99	70 - 130
Di-n-octyl phthalate	5.00	4.81		ng/uL		96	70 - 130
Fluoranthene	5.00	4.76		ng/uL		95	70 - 130
Fluorene	5.00	5.18		ng/uL		104	70 - 130
Hexachlorobenzene	5.00	4.64		ng/uL		93	70 - 130
Hexachlorobutadiene	5.00	4.73		ng/uL		95	70 - 130
Hexachlorocyclopentadiene	5.00	3.15	^	ng/uL		63	70 - 130
Hexachloroethane	5.00	5.10		ng/uL		102	70 - 130
Indeno[1,2,3-cd]pyrene	5.00	4.82		ng/uL		96	70 - 130
Isophorone	5.00	5.00		ng/uL		100	70 - 130
2-Methylnaphthalene	5.00	4.81		ng/uL		96	70 - 130
2-Methylphenol	5.00	5.22		ng/uL		104	70 - 130
3 & 4 Methylphenol	5.00	5.13		ng/uL		103	70 - 130
Naphthalene	5.00	4.81		ng/uL		96	70 - 130
2-Nitroaniline	5.00	5.25		ng/uL		105	70 - 130

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 240-177355/18
Matrix: Solid
Analysis Batch: 177355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
3-Nitroaniline	5.00	5.78		ng/uL		116	70 - 130
4-Nitroaniline	5.00	5.23		ng/uL		105	70 - 130
Nitrobenzene	5.00	4.91		ng/uL		98	70 - 130
2-Nitrophenol	5.00	4.71		ng/uL		94	70 - 130
4-Nitrophenol	10.0	9.26		ng/uL		93	70 - 130
N-Nitrosodi-n-propylamine	5.00	5.17		ng/uL		103	70 - 130
N-Nitrosodiphenylamine	10.0	10.2		ng/uL		102	70 - 130
Pentachlorophenol	10.0	6.27	^	ng/uL		63	70 - 130
Phenanthrene	5.00	4.95		ng/uL		99	70 - 130
Phenol	5.00	5.15		ng/uL		103	70 - 130
Pyrene	5.00	4.82		ng/uL		96	70 - 130
1,2,4-Trichlorobenzene	5.00	4.81		ng/uL		96	70 - 130
2,4,5-Trichlorophenol	5.00	5.09		ng/uL		102	70 - 130
2,4,6-Trichlorophenol	5.00	5.01		ng/uL		100	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*99*		*50 - 150*
2-Fluorophenol (Surr)	*104*		*50 - 150*
Nitrobenzene-d5 (Surr)	*95*		*50 - 150*
Phenol-d5 (Surr)	*101*		*50 - 150*
Terphenyl-d14 (Surr)	*95*		*50 - 150*
2,4,6-Tribromophenol (Surr)	*106*		*50 - 150*

Lab Sample ID: MRL 240-177355/3
Matrix: Solid
Analysis Batch: 177355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	5.00	4.98		ng/uL		100	70 - 130
Acenaphthylene	5.00	5.15		ng/uL		103	70 - 130
Anthracene	5.00	4.89		ng/uL		98	70 - 130
Benzo[a]anthracene	5.00	4.77		ng/uL		95	70 - 130
Benzo[a]pyrene	5.00	4.86		ng/uL		97	70 - 130
Benzo[b]fluoranthene	5.00	4.86		ng/uL		97	70 - 130
Benzo[g,h,i]perylene	5.00	4.98		ng/uL		100	70 - 130
Benzoic acid	10.0	9.19	M	ng/uL		92	70 - 130
Benzo[k]fluoranthene	5.00	4.88		ng/uL		98	70 - 130
Benzyl alcohol	5.00	4.79		ng/uL		96	70 - 130
Bis(2-chloroethoxy)methane	5.00	5.15		ng/uL		103	70 - 130
Bis(2-chloroethyl)ether	5.00	5.13		ng/uL		103	70 - 130
bis (2-chloroisopropyl) ether	5.00	5.31		ng/uL		106	70 - 130
Bis(2-ethylhexyl) phthalate	5.00	5.03		ng/uL		101	70 - 130
4-Bromophenyl phenyl ether	5.00	5.11		ng/uL		102	70 - 130
Butyl benzyl phthalate	5.00	4.88		ng/uL		98	70 - 130
Carbazole	5.00	4.78		ng/uL		96	70 - 130
4-Chloroaniline	5.00	4.97		ng/uL		99	70 - 130
4-Chloro-3-methylphenol	5.00	4.99		ng/uL		100	70 - 130
2-Chloronaphthalene	5.00	4.96		ng/uL		99	70 - 130

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 240-177355/3
Matrix: Solid
Analysis Batch: 177355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorophenol	5.00	4.86		ng/uL		97	70 - 130
4-Chlorophenyl phenyl ether	5.00	4.94		ng/uL		99	70 - 130
Chrysene	5.00	4.97		ng/uL		99	70 - 130
Dibenz(a,h)anthracene	5.00	4.94		ng/uL		99	70 - 130
Dibenzofuran	5.00	5.05		ng/uL		101	70 - 130
1,2-Dichlorobenzene	5.00	4.99		ng/uL		100	70 - 130
1,3-Dichlorobenzene	5.00	4.96		ng/uL		99	70 - 130
1,4-Dichlorobenzene	5.00	5.09		ng/uL		102	70 - 130
3,3'-Dichlorobenzidine	10.0	9.89		ng/uL		99	70 - 130
2,4-Dichlorophenol	5.00	4.77		ng/uL		95	70 - 130
Diethyl phthalate	5.00	5.07		ng/uL		101	70 - 130
2,4-Dimethylphenol	5.00	4.99		ng/uL		100	70 - 130
Dimethyl phthalate	5.00	5.02		ng/uL		100	70 - 130
Di-n-butyl phthalate	5.00	4.93		ng/uL		99	70 - 130
4,6-Dinitro-2-methylphenol	10.0	8.81		ng/uL		88	70 - 130
2,4-Dinitrophenol	10.0	8.42		ng/uL		84	70 - 130
2,4-Dinitrotoluene	5.00	4.95		ng/uL		99	70 - 130
2,6-Dinitrotoluene	5.00	5.04		ng/uL		101	70 - 130
Di-n-octyl phthalate	5.00	4.79		ng/uL		96	70 - 130
Fluoranthene	5.00	4.86		ng/uL		97	70 - 130
Fluorene	5.00	5.12		ng/uL		102	70 - 130
Hexachlorobenzene	5.00	4.79		ng/uL		96	70 - 130
Hexachlorobutadiene	5.00	4.57		ng/uL		91	70 - 130
Hexachlorocyclopentadiene	5.00	4.42		ng/uL		88	70 - 130
Hexachloroethane	5.00	5.00		ng/uL		100	70 - 130
Indeno[1,2,3-cd]pyrene	5.00	4.98		ng/uL		100	70 - 130
Isophorone	5.00	4.90		ng/uL		98	70 - 130
2-Methylnaphthalene	5.00	4.69		ng/uL		94	70 - 130
2-Methylphenol	5.00	5.26		ng/uL		105	70 - 130
3 & 4 Methylphenol	5.00	5.08		ng/uL		102	70 - 130
Naphthalene	5.00	4.83		ng/uL		97	70 - 130
2-Nitroaniline	5.00	5.27		ng/uL		105	70 - 130
3-Nitroaniline	5.00	5.51		ng/uL		110	70 - 130
4-Nitroaniline	5.00	5.03		ng/uL		101	70 - 130
Nitrobenzene	5.00	4.76		ng/uL		95	70 - 130
2-Nitrophenol	5.00	4.75		ng/uL		95	70 - 130
4-Nitrophenol	10.0	9.44		ng/uL		94	70 - 130
N-Nitrosodi-n-propylamine	5.00	5.03		ng/uL		101	70 - 130
N-Nitrosodiphenylamine	10.0	10.6		ng/uL		106	70 - 130
Pentachlorophenol	10.0	8.73		ng/uL		87	70 - 130
Phenanthrene	5.00	4.90		ng/uL		98	70 - 130
Phenol	5.00	5.20		ng/uL		104	70 - 130
Pyrene	5.00	4.76		ng/uL		95	70 - 130
1,2,4-Trichlorobenzene	5.00	4.85		ng/uL		97	70 - 130
2,4,5-Trichlorophenol	5.00	5.11		ng/uL		102	70 - 130
2,4,6-Trichlorophenol	5.00	4.92		ng/uL		98	70 - 130

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 240-177355/3
Matrix: Solid
Analysis Batch: 177355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Fluorobiphenyl (Surr)	*99*		*50 - 150*
2-Fluorophenol (Surr)	*106*		*50 - 150*
Nitrobenzene-d5 (Surr)	*93*		*50 - 150*
Phenol-d5 (Surr)	*100*		*50 - 150*
Terphenyl-d14 (Surr)	*95*		*50 - 150*
2,4,6-Tribromophenol (Surr)	*103*		*50 - 150*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 240-177037/7-A
Matrix: Solid
Analysis Batch: 177258

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177037

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.42	U	2.0	0.20	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
4,4'-DDE	0.42	U	1.7	0.27	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
4,4'-DDT	0.83	U	2.0	0.31	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
Aldrin	0.83	U	4.0	0.20	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
alpha-BHC	1.7	U	2.5	0.60	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
alpha-Chlordane	0.83	U	3.0	0.25	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
beta-BHC	0.83	U	3.5	0.36	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
delta-BHC	0.83	U	4.0	0.22	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
Dieldrin	0.42	U	1.7	0.16	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
Endosulfan I	0.83	U	1.7	0.25	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
Endosulfan II	0.83	U	2.5	0.38	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
Endosulfan sulfate	0.83	U	3.0	0.34	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
Endrin	0.83	U	1.7	0.21	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
Endrin aldehyde	0.83	U	3.0	0.32	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
Endrin ketone	1.7	U	2.0	0.42	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
gamma-BHC (Lindane)	1.7	U	2.5	0.46	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
gamma-Chlordane	1.7	U	1.7	0.86	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
Heptachlor	1.7	U	3.5	0.70	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
Heptachlor epoxide	1.7	U	2.5	0.40	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
Methoxychlor	1.7	U	5.0	0.54	ug/Kg		04/20/15 09:00	04/22/15 03:02	1
Toxaphene	17	U	67	9.8	ug/Kg		04/20/15 09:00	04/22/15 03:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*105*		*55 - 130*	*04/20/15 09:00*	*04/22/15 03:02*	*1*
DCB Decachlorobiphenyl	*103*		*55 - 130*	*04/20/15 09:00*	*04/22/15 03:02*	*1*
Tetrachloro-m-xylene	*100*		*70 - 125*	*04/20/15 09:00*	*04/22/15 03:02*	*1*
Tetrachloro-m-xylene	*98*		*70 - 125*	*04/20/15 09:00*	*04/22/15 03:02*	*1*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 240-177037/8-A
Matrix: Solid
Analysis Batch: 177463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177037

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	33.3	32.6		ug/Kg		98	30 - 135
4,4'-DDE	33.3	25.9		ug/Kg		78	70 - 125
4,4'-DDT	33.3	30.8		ug/Kg		92	45 - 140
Aldrin	33.3	23.1		ug/Kg		69	45 - 140
alpha-BHC	33.3	28.8		ug/Kg		86	60 - 125
alpha-Chlordane	33.3	27.7		ug/Kg		83	65 - 120
beta-BHC	33.3	26.6		ug/Kg		80	60 - 125
delta-BHC	33.3	28.4		ug/Kg		85	55 - 130
Dieldrin	33.3	29.1		ug/Kg		87	65 - 125
Endosulfan I	33.3	16.8		ug/Kg		50	15 - 135
Endosulfan II	33.3	22.8		ug/Kg		68	35 - 140
Endosulfan sulfate	33.3	28.4		ug/Kg		85	60 - 135
Endrin	33.3	30.1		ug/Kg		90	60 - 135
Endrin aldehyde	33.3	27.8		ug/Kg		83	35 - 145
Endrin ketone	33.3	27.0		ug/Kg		81	65 - 135
gamma-BHC (Lindane)	33.3	29.1		ug/Kg		87	60 - 125
gamma-Chlordane	33.3	28.2		ug/Kg		85	65 - 125
Heptachlor	33.3	31.5		ug/Kg		94	50 - 140
Heptachlor epoxide	33.3	28.7		ug/Kg		86	65 - 130
Methoxychlor	33.3	30.7		ug/Kg		92	55 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*95*		*55 - 130*
DCB Decachlorobiphenyl	*89*		*55 - 130*
Tetrachloro-m-xylene	*90*		*70 - 125*
Tetrachloro-m-xylene	*84*		*70 - 125*

Lab Sample ID: MRL 240-177258/31
Matrix: Solid
Analysis Batch: 177258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	5.00	5.36		ug/L		107	70 - 130
4,4'-DDD	5.00	5.27		ug/L		105	70 - 130
4,4'-DDE	5.00	5.45		ug/L		109	70 - 130
4,4'-DDE	5.00	5.62		ug/L		112	70 - 130
4,4'-DDT	5.00	4.88		ug/L		98	70 - 130
4,4'-DDT	5.00	4.99		ug/L		100	70 - 130
Aldrin	5.00	5.49		ug/L		110	70 - 130
Aldrin	5.00	5.59		ug/L		112	70 - 130
alpha-BHC	5.00	5.33		ug/L		107	70 - 130
alpha-BHC	5.00	5.41		ug/L		108	70 - 130
alpha-Chlordane	5.00	5.66		ug/L		113	70 - 130
alpha-Chlordane	5.00	5.78		ug/L		116	70 - 130
beta-BHC	5.00	6.10		ug/L		122	70 - 130
beta-BHC	5.00	6.12		ug/L		122	70 - 130
delta-BHC	5.00	5.07		ug/L		101	70 - 130
delta-BHC	5.00	5.22		ug/L		104	70 - 130

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MRL 240-177258/31
Matrix: Solid
Analysis Batch: 177258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Dieldrin	5.00	5.61		ug/L		112	70 - 130
Dieldrin	5.00	5.81		ug/L		116	70 - 130
Endosulfan I	5.00	5.86		ug/L		117	70 - 130
Endosulfan I	5.00	6.00		ug/L		120	70 - 130
Endosulfan II	5.00	6.21		ug/L		124	70 - 130
Endosulfan II	5.00	6.43		ug/L		129	70 - 130
Endosulfan sulfate	5.00	6.06		ug/L		121	70 - 130
Endosulfan sulfate	5.00	6.12		ug/L		122	70 - 130
Endrin	5.00	5.75		ug/L		115	70 - 130
Endrin	5.00	5.81		ug/L		116	70 - 130
Endrin aldehyde	5.00	6.03		ug/L		121	70 - 130
Endrin aldehyde	5.00	6.07		ug/L		121	70 - 130
Endrin ketone	5.00	5.88		ug/L		118	70 - 130
Endrin ketone	5.00	5.82		ug/L		116	70 - 130
gamma-BHC (Lindane)	5.00	5.48		ug/L		110	70 - 130
gamma-BHC (Lindane)	5.00	5.54		ug/L		111	70 - 130
gamma-Chlordane	5.00	5.54		ug/L		111	70 - 130
gamma-Chlordane	5.00	5.77		ug/L		115	70 - 130
Heptachlor	5.00	5.88		ug/L		118	70 - 130
Heptachlor	5.00	6.12		ug/L		122	70 - 130
Heptachlor epoxide	5.00	5.86		ug/L		117	70 - 130
Heptachlor epoxide	5.00	6.00		ug/L		120	70 - 130
Methoxychlor	5.00	5.97		ug/L		119	70 - 130
Methoxychlor	5.00	6.05		ug/L		121	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
DCB Decachlorobiphenyl	*123*		*50 - 150*
DCB Decachlorobiphenyl	*123*		*50 - 150*
Tetrachloro-m-xylene	*116*		*50 - 150*
Tetrachloro-m-xylene	*120*		*50 - 150*

Lab Sample ID: MRL 240-177258/49
Matrix: Solid
Analysis Batch: 177258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	5.00	5.35		ug/L		107	70 - 130
4,4'-DDD	5.00	5.23		ug/L		105	70 - 130
4,4'-DDE	5.00	5.35		ug/L		107	70 - 130
4,4'-DDE	5.00	5.45		ug/L		109	70 - 130
4,4'-DDT	5.00	3.49		ug/L		70	70 - 130
4,4'-DDT	5.00	3.45	^	ug/L		69	70 - 130
Aldrin	5.00	5.43		ug/L		109	70 - 130
Aldrin	5.00	5.55		ug/L		111	70 - 130
alpha-BHC	5.00	5.37		ug/L		107	70 - 130
alpha-BHC	5.00	5.38		ug/L		108	70 - 130
alpha-Chlordane	5.00	5.57		ug/L		111	70 - 130
alpha-Chlordane	5.00	5.64		ug/L		113	70 - 130

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MRL 240-177258/49
Matrix: Solid
Analysis Batch: 177258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
beta-BHC	5.00	5.80		ug/L		116	70 - 130
beta-BHC	5.00	6.04		ug/L		121	70 - 130
delta-BHC	5.00	4.82		ug/L		96	70 - 130
delta-BHC	5.00	4.89		ug/L		98	70 - 130
Dieldrin	5.00	5.56		ug/L		111	70 - 130
Dieldrin	5.00	5.67		ug/L		113	70 - 130
Endosulfan I	5.00	5.78		ug/L		116	70 - 130
Endosulfan I	5.00	5.87		ug/L		117	70 - 130
Endosulfan II	5.00	6.16		ug/L		123	70 - 130
Endosulfan II	5.00	6.49		ug/L		130	70 - 130
Endosulfan sulfate	5.00	5.67		ug/L		113	70 - 130
Endosulfan sulfate	5.00	5.64		ug/L		113	70 - 130
Endrin	5.00	5.61		ug/L		112	70 - 130
Endrin	5.00	5.42		ug/L		108	70 - 130
Endrin aldehyde	5.00	5.29		ug/L		106	70 - 130
Endrin aldehyde	5.00	5.21		ug/L		104	70 - 130
Endrin ketone	5.00	5.38		ug/L		108	70 - 130
Endrin ketone	5.00	5.35		ug/L		107	70 - 130
gamma-BHC (Lindane)	5.00	5.36		ug/L		107	70 - 130
gamma-BHC (Lindane)	5.00	5.46		ug/L		109	70 - 130
gamma-Chlordane	5.00	5.45		ug/L		109	70 - 130
gamma-Chlordane	5.00	5.65		ug/L		113	70 - 130
Heptachlor	5.00	5.73		ug/L		115	70 - 130
Heptachlor	5.00	5.96		ug/L		119	70 - 130
Heptachlor epoxide	5.00	5.76		ug/L		115	70 - 130
Heptachlor epoxide	5.00	5.86		ug/L		117	70 - 130
Methoxychlor	5.00	4.23		ug/L		85	70 - 130
Methoxychlor	5.00	3.94		ug/L		79	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
DCB Decachlorobiphenyl	*116*		*50 - 150*
DCB Decachlorobiphenyl	*117*		*50 - 150*
Tetrachloro-m-xylene	*117*		*50 - 150*
Tetrachloro-m-xylene	*118*		*50 - 150*

Lab Sample ID: MRL 240-177463/18
Matrix: Solid
Analysis Batch: 177463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	5.00	3.82		ug/L		76	70 - 130
4,4'-DDD	5.00	3.99		ug/L		80	70 - 130
4,4'-DDE	5.00	4.48		ug/L		90	70 - 130
4,4'-DDE	5.00	4.80		ug/L		96	70 - 130
4,4'-DDT	5.00	3.60		ug/L		72	70 - 130
4,4'-DDT	5.00	3.63		ug/L		73	70 - 130
Aldrin	5.00	5.08		ug/L		102	70 - 130
Aldrin	5.00	5.27		ug/L		105	70 - 130

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MRL 240-177463/18
Matrix: Solid
Analysis Batch: 177463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
alpha-BHC	5.00	4.93		ug/L		99	70 - 130
alpha-BHC	5.00	5.04		ug/L		101	70 - 130
alpha-Chlordane	5.00	5.13		ug/L		103	70 - 130
alpha-Chlordane	5.00	5.27		ug/L		105	70 - 130
beta-BHC	5.00	5.49		ug/L		110	70 - 130
beta-BHC	5.00	5.53		ug/L		111	70 - 130
delta-BHC	5.00	4.34		ug/L		87	70 - 130
delta-BHC	5.00	4.37		ug/L		87	70 - 130
Dieldrin	5.00	5.01		ug/L		100	70 - 130
Dieldrin	5.00	5.30		ug/L		106	70 - 130
Endosulfan I	5.00	5.27		ug/L		105	70 - 130
Endosulfan I	5.00	5.49		ug/L		110	70 - 130
Endosulfan II	5.00	6.00		ug/L		120	70 - 130
Endosulfan II	5.00	6.34		ug/L		127	70 - 130
Endosulfan sulfate	5.00	5.49		ug/L		110	70 - 130
Endosulfan sulfate	5.00	5.32		ug/L		106	70 - 130
Endrin	5.00	5.07		ug/L		101	70 - 130
Endrin	5.00	5.09		ug/L		102	70 - 130
Endrin aldehyde	5.00	4.94		ug/L		99	70 - 130
Endrin aldehyde	5.00	4.95		ug/L		99	70 - 130
Endrin ketone	5.00	5.28		ug/L		106	70 - 130
Endrin ketone	5.00	5.23		ug/L		105	70 - 130
gamma-BHC (Lindane)	5.00	4.99		ug/L		100	70 - 130
gamma-BHC (Lindane)	5.00	5.12		ug/L		102	70 - 130
gamma-Chlordane	5.00	5.04		ug/L		101	70 - 130
gamma-Chlordane	5.00	5.25		ug/L		105	70 - 130
Heptachlor	5.00	5.36		ug/L		107	70 - 130
Heptachlor	5.00	5.78		ug/L		116	70 - 130
Heptachlor epoxide	5.00	5.37		ug/L		107	70 - 130
Heptachlor epoxide	5.00	5.56		ug/L		111	70 - 130
Methoxychlor	5.00	4.76		ug/L		95	70 - 130
Methoxychlor	5.00	4.19		ug/L		84	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
DCB Decachlorobiphenyl	*114*		*50 - 150*
DCB Decachlorobiphenyl	*110*		*50 - 150*
Tetrachloro-m-xylene	*108*		*50 - 150*
Tetrachloro-m-xylene	*113*		*50 - 150*

Lab Sample ID: MRL 240-177463/21
Matrix: Solid
Analysis Batch: 177463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	5.00	4.20		ug/L		84	70 - 130
4,4'-DDD	5.00	4.33		ug/L		87	70 - 130
4,4'-DDE	5.00	5.09		ug/L		102	70 - 130
4,4'-DDE	5.00	5.20		ug/L		104	70 - 130

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MRL 240-177463/21
Matrix: Solid
Analysis Batch: 177463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
4,4'-DDT			5.00	3.95		ug/L		79	70 - 130		
4,4'-DDT			5.00	3.94		ug/L		79	70 - 130		
Aldrin			5.00	5.25		ug/L		105	70 - 130		
Aldrin			5.00	5.43		ug/L		109	70 - 130		
alpha-BHC			5.00	5.14		ug/L		103	70 - 130		
alpha-BHC			5.00	5.22		ug/L		104	70 - 130		
alpha-Chlordane			5.00	5.31		ug/L		106	70 - 130		
alpha-Chlordane			5.00	5.60		ug/L		112	70 - 130		
beta-BHC			5.00	5.58		ug/L		112	70 - 130		
beta-BHC			5.00	5.96		ug/L		119	70 - 130		
delta-BHC			5.00	4.62		ug/L		92	70 - 130		
delta-BHC			5.00	4.61		ug/L		92	70 - 130		
Dieldrin			5.00	5.39		ug/L		108	70 - 130		
Dieldrin			5.00	5.65		ug/L		113	70 - 130		
Endosulfan I			5.00	5.58		ug/L		112	70 - 130		
Endosulfan I			5.00	5.86		ug/L		117	70 - 130		
Endosulfan II			5.00	6.01		ug/L		120	70 - 130		
Endosulfan II			5.00	6.55	^	ug/L		131	70 - 130		
Endosulfan sulfate			5.00	5.59		ug/L		112	70 - 130		
Endosulfan sulfate			5.00	5.75		ug/L		115	70 - 130		
Endrin			5.00	5.44		ug/L		109	70 - 130		
Endrin			5.00	5.41		ug/L		108	70 - 130		
Endrin aldehyde			5.00	5.04		ug/L		101	70 - 130		
Endrin aldehyde			5.00	5.05		ug/L		101	70 - 130		
Endrin ketone			5.00	5.43		ug/L		109	70 - 130		
Endrin ketone			5.00	5.49		ug/L		110	70 - 130		
gamma-BHC (Lindane)			5.00	5.14		ug/L		103	70 - 130		
gamma-BHC (Lindane)			5.00	5.37		ug/L		107	70 - 130		
gamma-Chlordane			5.00	5.26		ug/L		105	70 - 130		
gamma-Chlordane			5.00	5.59		ug/L		112	70 - 130		
Heptachlor			5.00	5.60		ug/L		112	70 - 130		
Heptachlor			5.00	6.02		ug/L		120	70 - 130		
Heptachlor epoxide			5.00	5.57		ug/L		111	70 - 130		
Heptachlor epoxide			5.00	5.80		ug/L		116	70 - 130		
Methoxychlor			5.00	5.06		ug/L		101	70 - 130		
Methoxychlor			5.00	4.61		ug/L		92	70 - 130		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
DCB Decachlorobiphenyl	*114*		*50 - 150*
DCB Decachlorobiphenyl	*115*		*50 - 150*
Tetrachloro-m-xylene	*111*		*50 - 150*
Tetrachloro-m-xylene	*117*		*50 - 150*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-176299/12-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 176718 — **Prep Batch: 176299**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1221	33	U	50	16	ug/Kg		04/14/15 07:22	04/16/15 14:18	1
Aroclor-1016	33	U	65	12	ug/Kg		04/14/15 07:22	04/16/15 14:18	1
Aroclor-1232	33	U	45	20	ug/Kg		04/14/15 07:22	04/16/15 14:18	1
Aroclor-1242	33	U	40	11	ug/Kg		04/14/15 07:22	04/16/15 14:18	1
Aroclor-1248	33	U	55	8.0	ug/Kg		04/14/15 07:22	04/16/15 14:18	1
Aroclor-1254	33	U	55	14	ug/Kg		04/14/15 07:22	04/16/15 14:18	1
Aroclor-1260	33	U	55	9.0	ug/Kg		04/14/15 07:22	04/16/15 14:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*40 - 140*	*04/14/15 07:22*	*04/16/15 14:18*	*1*
Tetrachloro-m-xylene	*84*		*40 - 140*	*04/14/15 07:22*	*04/16/15 14:18*	*1*
DCB Decachlorobiphenyl	*104*		*60 - 125*	*04/14/15 07:22*	*04/16/15 14:18*	*1*
DCB Decachlorobiphenyl	*103*		*60 - 125*	*04/14/15 07:22*	*04/16/15 14:18*	*1*

Lab Sample ID: LCS 240-176299/13-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 176718 — **Prep Batch: 176299**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			333	257		ug/Kg		77	40 - 140		
Aroclor-1260			333	283		ug/Kg		85	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*104*		*40 - 140*
Tetrachloro-m-xylene	*82*		*40 - 140*
DCB Decachlorobiphenyl	*99*		*60 - 125*
DCB Decachlorobiphenyl	*98*		*60 - 125*

Lab Sample ID: MRL 240-176718/13 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 176718

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			0.0500	0.0512		ng/uL		102	70 - 130		
Aroclor-1016			0.0500	0.0539		ng/uL		108	70 - 130		
Aroclor-1260			0.0500	0.0540		ng/uL		108	70 - 130		
Aroclor-1260			0.0500	0.0516		ng/uL		103	70 - 130		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
Tetrachloro-m-xylene	*178*	^	*50 - 150*
Tetrachloro-m-xylene	*107*		*50 - 150*
DCB Decachlorobiphenyl	*118*		*50 - 150*
DCB Decachlorobiphenyl	*119*		*50 - 150*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MRL 240-176718/4
Matrix: Solid
Analysis Batch: 176718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	0.0500	0.0529		ng/uL		106	70 - 130
Aroclor-1016	0.0500	0.0533		ng/uL		107	70 - 130
Aroclor-1260	0.0500	0.0553		ng/uL		111	70 - 130
Aroclor-1260	0.0500	0.0551		ng/uL		110	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
Tetrachloro-m-xylene	*188*	^	*50 - 150*
Tetrachloro-m-xylene	*111*		*50 - 150*
DCB Decachlorobiphenyl	*116*		*50 - 150*
DCB Decachlorobiphenyl	*126*		*50 - 150*

Method: 8330 Modified - Nitroguanidine (HPLC)

Lab Sample ID: MB 320-71482/1-A
Matrix: Solid
Analysis Batch: 71845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 71482

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.040	U	0.25	0.020	mg/Kg		04/18/15 14:00	04/22/15 15:40	1

Lab Sample ID: LCS 320-71482/2-A
Matrix: Solid
Analysis Batch: 71845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 71482

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitroguanidine	1.00	0.815	M	mg/Kg		82	72 - 121

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 320-71481/1-A
Matrix: Solid
Analysis Batch: 71988

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 71481

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.050	U	0.25	0.013	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
4-Amino-2,6-dinitrotoluene	0.050	U	0.25	0.010	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
1,3-Dinitrobenzene	0.050	U	0.25	0.0042	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
2,4-Dinitrotoluene	0.050	U	0.25	0.0053	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
2,6-Dinitrotoluene	0.050	U	0.25	0.0073	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
HMX	0.050	U	0.25	0.012	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
Nitrobenzene	0.050	U	0.25	0.018	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
Nitroglycerin	0.25	U	0.50	0.015	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
2-Nitrotoluene	0.050	U	0.25	0.013	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
3-Nitrotoluene	0.050	U	0.25	0.016	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
4-Nitrotoluene	0.050	U	0.25	0.018	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
PETN	0.25	U	0.50	0.025	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
RDX	0.050	U	0.25	0.012	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
Tetryl	0.050	U	0.25	0.010	mg/Kg		04/18/15 14:00	04/23/15 18:16	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC) (Continued)

Lab Sample ID: MB 320-71481/1-A
Matrix: Solid
Analysis Batch: 71988

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 71481

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.050	U	0.25	0.010	mg/Kg		04/18/15 14:00	04/23/15 18:16	1
2,4,6-Trinitrotoluene	0.050	U	0.25	0.019	mg/Kg		04/18/15 14:00	04/23/15 18:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*90*		*78 - 118*	*04/18/15 14:00*	*04/23/15 18:16*	*1*

Lab Sample ID: LCS 320-71481/2-A
Matrix: Solid
Analysis Batch: 71988

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 71481

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Amino-4,6-dinitrotoluene	0.500	0.465		mg/Kg		93	79 - 119
4-Amino-2,6-dinitrotoluene	0.500	0.460		mg/Kg		92	81 - 121
1,3-Dinitrobenzene	0.500	0.471		mg/Kg		94	81 - 121
2,4-Dinitrotoluene	0.500	0.470		mg/Kg		94	79 - 119
2,6-Dinitrotoluene	0.500	0.469		mg/Kg		94	79 - 119
HMX	0.500	0.463		mg/Kg		93	80 - 120
Nitrobenzene	0.500	0.475		mg/Kg		95	80 - 120
Nitroglycerin	1.00	1.00		mg/Kg		100	76 - 116
2-Nitrotoluene	0.500	0.471		mg/Kg		94	78 - 118
3-Nitrotoluene	0.500	0.470		mg/Kg		94	77 - 117
4-Nitrotoluene	0.500	0.471		mg/Kg		94	78 - 118
PETN	1.00	0.975		mg/Kg		98	76 - 116
RDX	0.500	0.463		mg/Kg		93	82 - 122
Tetryl	0.500	0.472		mg/Kg		94	63 - 120
1,3,5-Trinitrobenzene	0.500	0.468		mg/Kg		94	81 - 121
2,4,6-Trinitrotoluene	0.500	0.470		mg/Kg		94	65 - 105

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
3,4-Dinitrotoluene	*92*		*78 - 118*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-176562/1-A ^2
Matrix: Solid
Analysis Batch: 177115

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176562

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1.27	J D	20	0.62	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Antimony	0.0204	J D	0.40	0.014	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Arsenic	0.0692	J D	1.0	0.026	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Barium	0.229	J D	1.0	0.22	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Beryllium	0.0212	J D	0.20	0.011	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Cadmium	0.0232	J D	0.40	0.0037	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Calcium	100	U	400	22	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Cobalt	0.00940	J D	0.20	0.0017	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Copper	0.30	U	0.80	0.097	mg/Kg		04/15/15 11:42	04/20/15 18:14	2

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-176562/1-A ^2
Matrix: Solid
Analysis Batch: 177115

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176562

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	30	U	100	3.2	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Lead	0.0474	J D	0.60	0.045	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Magnesium	6.19	J D	200	4.0	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Manganese	0.40	U	1.0	0.12	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Potassium	8.46	J D	200	4.9	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Selenium	0.0650	J D	1.0	0.040	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Silver	0.050	U	0.20	0.0014	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Sodium	11.5	J D	200	8.7	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Thallium	0.15	U	0.40	0.019	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Vanadium	0.0582	J D	1.0	0.037	mg/Kg		04/15/15 11:42	04/20/15 18:14	2
Zinc	2.0	U	8.0	0.50	mg/Kg		04/15/15 11:42	04/20/15 18:14	2

Lab Sample ID: MB 240-176562/1-A ^2
Matrix: Solid
Analysis Batch: 177351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176562

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.176	J D	1.0	0.060	mg/Kg		04/15/15 11:42	04/21/15 22:00	2
Nickel	0.0396	J D	1.0	0.039	mg/Kg		04/15/15 11:42	04/21/15 22:00	2

Lab Sample ID: LCS 240-176562/2-A ^2
Matrix: Solid
Analysis Batch: 177115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176562

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1000	998	D	mg/Kg		100	80 - 120
Antimony	10.0	10.4	D	mg/Kg		104	68 - 113
Arsenic	100	90.5	D	mg/Kg		90	73 - 110
Barium	100	105	D	mg/Kg		105	70 - 110
Beryllium	100	103	D	mg/Kg		103	79 - 110
Cadmium	100	95.4	D	mg/Kg		95	74 - 110
Calcium	1000	964	D	mg/Kg		96	80 - 120
Cobalt	100	94.4	D	mg/Kg		94	74 - 110
Copper	100	96.0	D	mg/Kg		96	73 - 110
Iron	1000	1050	D	mg/Kg		105	80 - 120
Lead	100	96.8	D	mg/Kg		97	75 - 110
Magnesium	1000	1030	D	mg/Kg		103	80 - 120
Manganese	100	104	D	mg/Kg		104	80 - 120
Potassium	1000	1070	D	mg/Kg		107	80 - 120
Selenium	100	89.0	D	mg/Kg		89	65 - 110
Silver	10.0	9.96	D	mg/Kg		100	60 - 114
Sodium	1000	1040	D	mg/Kg		104	80 - 120
Thallium	25.0	23.8	D	mg/Kg		95	71 - 110
Vanadium	100	106	D	mg/Kg		106	72 - 110
Zinc	100	90.2	D	mg/Kg		90	72 - 113

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-176562/2-A ^2
Matrix: Solid
Analysis Batch: 177351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176562

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	103	D	mg/Kg		103	70 - 110
Nickel	100	95.3	D	mg/Kg		95	75 - 110

Lab Sample ID: MB 240-176698/1-A ^2
Matrix: Solid
Analysis Batch: 177115

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176698

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5.48	J D	20	0.62	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Antimony	0.0160	J D	0.40	0.014	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Arsenic	0.101	J D	1.0	0.026	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Barium	0.30	U	1.0	0.22	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Beryllium	0.0162	J D	0.20	0.011	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Cadmium	0.00860	J D	0.40	0.0037	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Calcium	26.1	J D	400	22	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Cobalt	0.0196	J D	0.20	0.0017	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Copper	0.30	U	0.80	0.097	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Lead	0.0506	J D	0.60	0.045	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Magnesium	7.60	J D	200	4.0	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Potassium	8.33	J D	200	4.9	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Selenium	0.0960	J D	1.0	0.040	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Silver	0.00180	J D	0.20	0.0014	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Sodium	9.54	J D	200	8.7	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Thallium	0.0656	J D	0.40	0.019	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Vanadium	0.0556	J D	1.0	0.037	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Zinc	0.673	J D	8.0	0.50	mg/Kg		04/16/15 09:59	04/20/15 19:38	2

Lab Sample ID: MB 240-176698/1-A ^2
Matrix: Solid
Analysis Batch: 177559

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176698

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.164	J D	1.0	0.060	mg/Kg		04/16/15 09:59	04/22/15 16:52	2
Nickel	0.0558	J D	1.0	0.039	mg/Kg		04/16/15 09:59	04/22/15 16:52	2

Lab Sample ID: MB 240-176698/1-A ^2
Matrix: Solid
Analysis Batch: 177880

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176698

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4.34	J D	100	3.2	mg/Kg		04/16/15 09:59	04/24/15 15:37	2
Manganese	0.40	U	1.0	0.12	mg/Kg		04/16/15 09:59	04/24/15 15:37	2

Lab Sample ID: LCS 240-176698/2-A ^2
Matrix: Solid
Analysis Batch: 177115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1000	950	D	mg/Kg		95	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-176698/2-A ^2
Matrix: Solid
Analysis Batch: 177115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	10.0	10.1	D	mg/Kg		101	68 - 113
Arsenic	100	87.9	D	mg/Kg		88	73 - 110
Barium	100	103	D	mg/Kg		103	70 - 110
Beryllium	100	101	D	mg/Kg		101	79 - 110
Cadmium	100	95.2	D	mg/Kg		95	74 - 110
Calcium	1000	910	D	mg/Kg		91	80 - 120
Cobalt	100	92.1	D	mg/Kg		92	74 - 110
Copper	100	94.3	D	mg/Kg		94	73 - 110
Lead	100	95.9	D	mg/Kg		96	75 - 110
Magnesium	1000	1000	D	mg/Kg		100	80 - 120
Potassium	1000	1020	D	mg/Kg		102	80 - 120
Selenium	100	87.4	D	mg/Kg		87	65 - 110
Silver	10.0	9.84	D	mg/Kg		98	60 - 114
Sodium	1000	1010	D	mg/Kg		101	80 - 120
Thallium	25.0	23.6	D	mg/Kg		94	71 - 110
Vanadium	100	103	D	mg/Kg		103	72 - 110
Zinc	100	88.9	D	mg/Kg		89	72 - 113

Lab Sample ID: LCS 240-176698/2-A ^2
Matrix: Solid
Analysis Batch: 177559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	98.6	D	mg/Kg		99	70 - 110
Nickel	100	89.2	D	mg/Kg		89	75 - 110

Lab Sample ID: LCS 240-176698/2-A ^2
Matrix: Solid
Analysis Batch: 177880

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	987	D	mg/Kg		99	80 - 120
Manganese	100	99.0	D	mg/Kg		99	80 - 120

Lab Sample ID: 240-49171-1 MS
Matrix: Solid
Analysis Batch: 177115

Client Sample ID: 079SB-0339M-0001, 0002-SO
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.13	J J D	8.87	2.91	J D	mg/Kg	☼	31	75 - 125
Arsenic	13	D	8.87	21.4	D	mg/Kg	☼	94	23 - 131
Barium	56	D J	8.87	64.5	4 D	mg/Kg	☼	98	10 - 199
Beryllium	0.54	D	8.87	9.10	D	mg/Kg	☼	96	58 - 112
Cadmium	0.11	J D	8.87	8.45	D	mg/Kg	☼	94	58 - 110
Calcium	110	J D	887	884	D	mg/Kg	☼	87	70 - 130
Cobalt	10	D	8.87	18.6	D	mg/Kg	☼	94	55 - 110
Copper	10	D	8.87	18.0	D	mg/Kg	☼	89	10 - 199
Lead	12	D	8.87	21.6	D	mg/Kg	☼	106	10 - 199
Magnesium	1300	D	887	2170	D	mg/Kg	☼	97	70 - 130

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-49171-1 MS
Matrix: Solid
Analysis Batch: 177115

Client Sample ID: 079SB-0339M-0001, 0002-SO
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	580	D	887	1300	D	mg/Kg	☼	82	70 - 130
Selenium	0.92	D	8.87	8.36	D	mg/Kg	☼	84	39 - 116
Silver	0.017	J D	8.87	8.44	D	mg/Kg	☼	95	75 - 125
Sodium	22	J D	887	810	D	mg/Kg	☼	89	70 - 130
Thallium	0.15	J D	8.87	7.45	D	mg/Kg	☼	82	82 - 110
Vanadium	19	D	8.87	29.8	D	mg/Kg	☼	116	39 - 129
Zinc	35	D	8.87	44.2	D	mg/Kg	☼	102	10 - 199

Lab Sample ID: 240-49171-1 MS
Matrix: Solid
Analysis Batch: 177559

Client Sample ID: 079SB-0339M-0001, 0002-SO
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	6500	J D	887	8410	4 D	mg/Kg	☼	211	70 - 130
Chromium	16	D	8.87	24.9	D	mg/Kg	☼	101	10 - 199
Nickel	15	D	8.87	22.6	D	mg/Kg	☼	86	10 - 176

Lab Sample ID: 240-49171-1 MS
Matrix: Solid
Analysis Batch: 177880

Client Sample ID: 079SB-0339M-0001, 0002-SO
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	36000	D J	887	38400	D 4	mg/Kg	☼	260	70 - 130
Manganese	1400	D J	8.87	1430	D 4	mg/Kg	☼	-205	10 - 199

Lab Sample ID: 240-49171-1 DU
Matrix: Solid
Analysis Batch: 177115

Client Sample ID: 079SB-0339M-0001, 0002-SO
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.13	J J D	0.173	J D	mg/Kg	☼	26	20
Arsenic	13	D	12.7	D	mg/Kg	☼	3	20
Barium	56	D J	55.5	D	mg/Kg	☼	0.5	20
Beryllium	0.54	D	0.592	D	mg/Kg	☼	9	20
Cadmium	0.11	J D	0.126	J D	mg/Kg	☼	16	20
Calcium	110	J D	118	J D	mg/Kg	☼	7	20
Cobalt	10	D	9.03	D	mg/Kg	☼	13	20
Copper	10	D	10.2	D	mg/Kg	☼	1	20
Lead	12	D	12.6	D	mg/Kg	☼	4	20
Magnesium	1300	D	1380	D	mg/Kg	☼	5	20
Potassium	580	D	672	D	mg/Kg	☼	15	20
Selenium	0.92	D	1.04	D	mg/Kg	☼	12	20
Silver	0.017	J D	0.0177	J D	mg/Kg	☼	5	20
Sodium	22	J D	22.6	J D	mg/Kg	☼	5	20
Thallium	0.15	J D	0.201	J D	mg/Kg	☼	30	20
Vanadium	19	D	20.5	D	mg/Kg	☼	5	20
Zinc	35	D	36.3	D	mg/Kg	☼	3	20

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-49171-1 DU — **Client Sample ID: 079SB-0339M-0001, 0002-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 177559 — **Prep Batch: 176698**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	6500	J D	7650	D	mg/Kg	☼	16	20
Chromium	16	D	17.9	D	mg/Kg	☼	12	20
Nickel	15	D	15.3	D	mg/Kg	☼	3	20

Lab Sample ID: 240-49171-1 DU — **Client Sample ID: 079SB-0339M-0001, 0002-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 177880 — **Prep Batch: 176698**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iron	36000	D J	37000	D	mg/Kg	☼	2	20
Manganese	1400	D J	1230	D	mg/Kg	☼	16	20

Lab Sample ID: MB 240-177128/1-A ^2 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 177559 — **Prep Batch: 177128**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4.0	U	20	0.62	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Antimony	0.0474	J D	0.40	0.014	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Arsenic	0.0316	J D	1.0	0.026	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Barium	0.30	U	1.0	0.22	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Beryllium	0.10	U	0.20	0.011	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Cadmium	0.010	U	0.40	0.0037	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Calcium	100	U	400	22	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Chromium	0.163	J D	1.0	0.060	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Cobalt	0.00320	J D	0.20	0.0017	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Copper	0.308	J D	0.80	0.097	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Iron	5.93	J D	100	3.2	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Magnesium	6.13	J D	200	4.0	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Nickel	0.25	U	1.0	0.039	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Potassium	10	U	200	4.9	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Selenium	0.060	U	1.0	0.040	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Silver	0.050	U	0.20	0.0014	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Sodium	40	U	200	8.7	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Thallium	0.15	U	0.40	0.019	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Vanadium	0.0472	J D	1.0	0.037	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Zinc	0.612	J D	8.0	0.50	mg/Kg		04/20/15 12:52	04/22/15 19:05	2

Lab Sample ID: MB 240-177128/1-A ^2 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 177880 — **Prep Batch: 177128**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.40	U	1.0	0.12	mg/Kg		04/20/15 12:52	04/24/15 14:18	2

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-177128/1-A ^2
Matrix: Solid
Analysis Batch: 178352

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177128

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.102	J D	0.60	0.045	mg/Kg		04/20/15 12:52	04/28/15 12:29	2

Lab Sample ID: LCS 240-177128/2-A ^2
Matrix: Solid
Analysis Batch: 177559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1000	950	D	mg/Kg		95	80 - 120
Antimony	10.0	9.83	D	mg/Kg		98	68 - 113
Arsenic	100	88.2	D	mg/Kg		88	73 - 110
Barium	100	96.9	D	mg/Kg		97	70 - 110
Beryllium	100	96.8	D	mg/Kg		97	79 - 110
Cadmium	100	98.9	D	mg/Kg		99	74 - 110
Calcium	1000	910	D	mg/Kg		91	80 - 120
Chromium	100	101	D	mg/Kg		101	70 - 110
Cobalt	100	98.8	D	mg/Kg		99	74 - 110
Copper	100	101	D	mg/Kg		101	73 - 110
Iron	1000	1020	D	mg/Kg		102	80 - 120
Magnesium	1000	986	D	mg/Kg		99	80 - 120
Nickel	100	94.9	D	mg/Kg		95	75 - 110
Potassium	1000	993	D	mg/Kg		99	80 - 120
Selenium	100	84.2	D	mg/Kg		84	65 - 110
Silver	10.0	10.5	D	mg/Kg		105	60 - 114
Sodium	1000	966	D	mg/Kg		97	80 - 120
Thallium	25.0	24.3	D	mg/Kg		97	71 - 110
Vanadium	100	99.9	D	mg/Kg		100	72 - 110
Zinc	100	91.4	D	mg/Kg		91	72 - 113

Lab Sample ID: LCS 240-177128/2-A ^2
Matrix: Solid
Analysis Batch: 177880

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	100	100	D	mg/Kg		100	80 - 120

Lab Sample ID: LCS 240-177128/2-A ^2
Matrix: Solid
Analysis Batch: 178352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	100	97.8	D	mg/Kg		98	75 - 110

Lab Sample ID: 240-49171-3 MS
Matrix: Solid
Analysis Batch: 177559

Client Sample ID: 079SB-0341M-0001, 0002-SO
Prep Type: Total/NA
Prep Batch: 177128

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8400	J D	981	8680	4 D	mg/Kg	☼	32	70 - 130
Antimony	0.14	J J D	9.81	3.35	J D	mg/Kg	☼	33	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-49171-3 MS — **Client Sample ID: 079SB-0341M-0001, 0002-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 177559 — **Prep Batch: 177128**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	43	D	9.81	46.1	4 D	mg/Kg	☼	35	23 - 131
Barium	60	J D	9.81	63.7	4 D	mg/Kg	☼	36	10 - 199
Beryllium	0.51	D	9.81	9.45	D	mg/Kg	☼	91	58 - 112
Cadmium	0.11	J D	9.81	9.62	D	mg/Kg	☼	97	58 - 110
Calcium	98	U	981	856	D	mg/Kg	☼	87	70 - 130
Chromium	15	D	9.81	23.0	D	mg/Kg	☼	79	10 - 199
Cobalt	7.5	D	9.81	15.8	D	mg/Kg	☼	85	55 - 110
Copper	20	D	9.81	26.3	D	mg/Kg	☼	68	10 - 199
Iron	20000	J D	981	19200	4 D	mg/Kg	☼	-48	70 - 130
Magnesium	2200	D	981	2910	D	mg/Kg	☼	76	70 - 130
Nickel	19	D	9.81	26.2	D	mg/Kg	☼	71	10 - 176
Potassium	3000	J D	981	3570	J D	mg/Kg	☼	56	70 - 130
Selenium	0.81	J D	9.81	8.43	D	mg/Kg	☼	78	39 - 116
Silver	0.017	J D	9.81	9.86	D	mg/Kg	☼	100	75 - 125
Sodium	370	D	981	1220	D	mg/Kg	☼	87	70 - 130
Thallium	0.11	J D	9.81	8.18	D	mg/Kg	☼	82	82 - 110
Vanadium	15	D	9.81	22.6	D	mg/Kg	☼	79	39 - 129
Zinc	45	D	9.81	47.3	4 D	mg/Kg	☼	22	10 - 199

Lab Sample ID: 240-49171-3 MS — **Client Sample ID: 079SB-0341M-0001, 0002-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 177880 — **Prep Batch: 177128**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	2500	D J	9.81	2010	D 4	mg/Kg	☼	-4464	10 - 199

Lab Sample ID: 240-49171-3 MS — **Client Sample ID: 079SB-0341M-0001, 0002-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178352 — **Prep Batch: 177128**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	76	D	9.81	81.3	D 4	mg/Kg	☼	58	10 - 199

Lab Sample ID: 240-49171-3 DU — **Client Sample ID: 079SB-0341M-0001, 0002-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 177559 — **Prep Batch: 177128**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	8400	J D	7580	D	mg/Kg	☼	10	20
Antimony	0.14	J J D	0.196	J D	mg/Kg	☼	35	20
Arsenic	43	D	39.8	D	mg/Kg	☼	7	20
Barium	60	J D	54.0	D	mg/Kg	☼	11	20
Beryllium	0.51	D	0.472	D	mg/Kg	☼	7	20
Cadmium	0.11	J D	0.121	J D	mg/Kg	☼	11	20
Calcium	98	U	57.8	J D	mg/Kg	☼	NC	20
Chromium	15	D	14.6	D	mg/Kg	☼	4	20
Cobalt	7.5	D	7.05	D	mg/Kg	☼	6	20
Copper	20	D	15.8	J D	mg/Kg	☼	22	20
Iron	20000	J D	19100	D	mg/Kg	☼	3	20

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-49171-3 DU — **Client Sample ID: 079SB-0341M-0001, 0002-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 177559 — **Prep Batch: 177128**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Magnesium	2200	D	2020	D	mg/Kg	☼	7	20
Nickel	19	D	17.8	D	mg/Kg	☼	7	20
Potassium	3000	J D	2800	D	mg/Kg	☼	7	20
Selenium	0.81	J D	0.823	J D	mg/Kg	☼	1	20
Silver	0.017	J D	0.0161	J D	mg/Kg	☼	6	20
Sodium	370	D	352	D	mg/Kg	☼	6	20
Thallium	0.11	J D	0.159	J D	mg/Kg	☼	36	20
Vanadium	15	D	13.7	D	mg/Kg	☼	8	20
Zinc	45	D	38.3	D	mg/Kg	☼	16	20

Lab Sample ID: 240-49171-3 DU — **Client Sample ID: 079SB-0341M-0001, 0002-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 177880 — **Prep Batch: 177128**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Manganese	2500	D J	1130	D J	mg/Kg	☼	73	20

Lab Sample ID: 240-49171-3 DU — **Client Sample ID: 079SB-0341M-0001, 0002-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 178352 — **Prep Batch: 177128**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	76	D	46.9	D J	mg/Kg	☼	47	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-176570/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 176708 — **Prep Batch: 176570**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033	U	0.10	0.014	mg/Kg		04/15/15 15:00	04/16/15 09:25	1

Lab Sample ID: LCS 240-176570/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 176708 — **Prep Batch: 176570**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.836		mg/Kg		100	80 - 120

Lab Sample ID: MB 240-176711/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 177149 — **Prep Batch: 176711**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033	U	0.10	0.014	mg/Kg		04/16/15 14:45	04/20/15 11:11	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-176711/2-A
Matrix: Solid
Analysis Batch: 177149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176711

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.839		mg/Kg		101	80 - 120		

Lab Sample ID: 240-49171-1 MS
Matrix: Solid
Analysis Batch: 177149

Client Sample ID: 079SB-0339M-0001, 0002-SO
Prep Type: Total/NA
Prep Batch: 176711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.039	U	0.196	0.219		mg/Kg	☼	112	80 - 120		

Lab Sample ID: 240-49171-1 DU
Matrix: Solid
Analysis Batch: 177149

Client Sample ID: 079SB-0339M-0001, 0002-SO
Prep Type: Total/NA
Prep Batch: 176711

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.039	U		0.0198	J	mg/Kg	☼			NC	20

Lab Sample ID: MB 240-177137/1-A
Matrix: Solid
Analysis Batch: 177294

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177137

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033	U	0.10	0.014	mg/Kg		04/20/15 15:40	04/21/15 11:04	1

Lab Sample ID: LCS 240-177137/2-A
Matrix: Solid
Analysis Batch: 177294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177137

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.825		mg/Kg		99	80 - 120		

Lab Sample ID: 240-49171-3 MS
Matrix: Solid
Analysis Batch: 177294

Client Sample ID: 079SB-0341M-0001, 0002-SO
Prep Type: Total/NA
Prep Batch: 177137

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.037	U	0.187	0.200		mg/Kg	☼	107	80 - 120		

Lab Sample ID: 240-49171-3 DU
Matrix: Solid
Analysis Batch: 177294

Client Sample ID: 079SB-0341M-0001, 0002-SO
Prep Type: Total/NA
Prep Batch: 177137

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.037	U		0.037	U	mg/Kg	☼			NC	20

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-49171-1

Method: WS-WC-0050 - Nitrocellulose

Lab Sample ID: MB 320-71507/1-B
Matrix: Solid
Analysis Batch: 72011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 71631

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	1.07	J	5.0	0.78	mg/Kg		04/21/15 06:29	04/22/15 13:53	1

Lab Sample ID: LCS 320-71507/2-B
Matrix: Solid
Analysis Batch: 72011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 71631

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrocellulose	50.7	24.3		mg/Kg		48	34 - 115

Lab Sample ID: MRL 320-72011/11
Matrix: Solid
Analysis Batch: 72011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrocellulose	0.417	0.492	J	mg/L		118	70 - 130

Lab Sample ID: MRL 320-72011/27
Matrix: Solid
Analysis Batch: 72011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrocellulose	0.417	1.0	U	mg/L		114	70 - 130

Lab Sample ID: MRL 320-72011/36
Matrix: Solid
Analysis Batch: 72011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrocellulose	0.417	1.0	U	mg/L		114	70 - 130

GC/MS VOA

Analysis Batch: 176276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-5	079SB-0352M-0001-SO	Total/NA	Solid	8260B	176277
240-49171-7	079SB-0353M-0001-SO	Total/NA	Solid	8260B	176277
240-49171-9	079SB-0354M-0001-SO	Total/NA	Solid	8260B	176277
LCS 240-176276/6	Lab Control Sample	Total/NA	Solid	8260B	
MB 240-176277/1-A	Method Blank	Total/NA	Solid	8260B	176277
MRL 240-176276/33	Lab Control Sample	Total/NA	Solid	8260B	
MRL 240-176276/7	Lab Control Sample	Total/NA	Solid	8260B	

Prep Batch: 176277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-5	079SB-0352M-0001-SO	Total/NA	Solid	5035	
240-49171-5	079SB-0352M-0001-SO	Total/NA	Solid	5035	
240-49171-7	079SB-0353M-0001-SO	Total/NA	Solid	5035	
240-49171-7	079SB-0353M-0001-SO	Total/NA	Solid	5035	
240-49171-9	079SB-0354M-0001-SO	Total/NA	Solid	5035	
240-49171-9	079SB-0354M-0001-SO	Total/NA	Solid	5035	
MB 240-176277/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 176298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-12	079SB-0380M-0001-TB	Total/NA	Water	8260B	
LCS 240-176298/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-176298/6	Method Blank	Total/NA	Water	8260B	
MRL 240-176298/15	Lab Control Sample	Total/NA	Water	8260B	
MRL 240-176298/5	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 176387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-5	079SB-0352M-0001-SO	Total/NA	Solid	8260B	176277
240-49171-7	079SB-0353M-0001-SO	Total/NA	Solid	8260B	176277
240-49171-9	079SB-0354M-0001-SO	Total/NA	Solid	8260B	176277
LCS 240-176387/5	Lab Control Sample	Total/NA	Solid	8260B	
MB 240-176387/33	Method Blank	Total/NA	Solid	8260B	
MRL 240-176387/30	Lab Control Sample	Total/NA	Solid	8260B	
MRL 240-176387/6	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

ISM Prep Batch: 176220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	Increment, Prep	

Prep Batch: 176319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	3540C	176220
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	3540C	176220
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	3540C	176220
LCS 240-176319/24-A	Lab Control Sample	Total/NA	Solid	3540C	

GC/MS Semi VOA (Continued)

Prep Batch: 176319 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-176319/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 177355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	8270C	176319
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	8270C	176319
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	8270C	176319
LCS 240-176319/24-A	Lab Control Sample	Total/NA	Solid	8270C	176319
MB 240-176319/23-A	Method Blank	Total/NA	Solid	8270C	176319
MRL 240-177355/18	Lab Control Sample	Total/NA	Solid	8270C	
MRL 240-177355/3	Lab Control Sample	Total/NA	Solid	8270C	

GC Semi VOA

Analysis Batch: 174448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
PEM 240-174448/24	PEM		Solid	8081A	

ISM Prep Batch: 176220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-6 - RE	079SB-0352M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-8 - RE	079SB-0353M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-10 - RE	079SB-0354M-0001-SO	Total/NA	Solid	Increment, Prep	

Prep Batch: 176299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	3540C	176220
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	3540C	176220
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	3540C	176220
LCS 240-176299/13-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-176299/12-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 176718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	8082	176299
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	8082	176299
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	8082	176299
LCS 240-176299/13-A	Lab Control Sample	Total/NA	Solid	8082	176299
MB 240-176299/12-A	Method Blank	Total/NA	Solid	8082	176299
MRL 240-176718/13	Lab Control Sample	Total/NA	Solid	8082	
MRL 240-176718/4	Lab Control Sample	Total/NA	Solid	8082	

Prep Batch: 177037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6 - RE	079SB-0352M-0001-SO	Total/NA	Solid	3540C	176220
240-49171-8 - RE	079SB-0353M-0001-SO	Total/NA	Solid	3540C	176220
240-49171-10 - RE	079SB-0354M-0001-SO	Total/NA	Solid	3540C	176220

GC Semi VOA (Continued)

Prep Batch: 177037 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-177037/8-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-177037/7-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 177258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6 - RE	079SB-0352M-0001-SO	Total/NA	Solid	8081A	177037
240-49171-8 - RE	079SB-0353M-0001-SO	Total/NA	Solid	8081A	177037
240-49171-10 - RE	079SB-0354M-0001-SO	Total/NA	Solid	8081A	177037
MB 240-177037/7-A	Method Blank	Total/NA	Solid	8081A	177037
MRL 240-177258/29	Lab Control Sample	Total/NA	Solid	8081A	
MRL 240-177258/31	Lab Control Sample	Total/NA	Solid	8081A	
MRL 240-177258/47	Lab Control Sample	Total/NA	Solid	8081A	
MRL 240-177258/49	Lab Control Sample	Total/NA	Solid	8081A	
PEM 240-177258/27	PEM		Solid	8081A	

Analysis Batch: 177463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-177037/8-A	Lab Control Sample	Total/NA	Solid	8081A	177037
MRL 240-177463/17	Lab Control Sample	Total/NA	Solid	8081A	
MRL 240-177463/18	Lab Control Sample	Total/NA	Solid	8081A	
MRL 240-177463/20	Lab Control Sample	Total/NA	Solid	8081A	
MRL 240-177463/21	Lab Control Sample	Total/NA	Solid	8081A	
PEM 240-177463/5	PEM		Solid	8081A	

HPLC/IC

Prep Batch: 71481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	8330B	
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	8330B	
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	8330B	
LCS 320-71481/2-A	Lab Control Sample	Total/NA	Solid	8330B	
MB 320-71481/1-A	Method Blank	Total/NA	Solid	8330B	

Prep Batch: 71482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	Sieve/Ultrasoni	
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	Sieve/Ultrasoni	
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	Sieve/Ultrasoni	
LCS 320-71482/2-A	Lab Control Sample	Total/NA	Solid	Sieve/Ultrasoni	
MB 320-71482/1-A	Method Blank	Total/NA	Solid	Sieve/Ultrasoni	

Analysis Batch: 71845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	8330 Modified	71482
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	8330 Modified	71482
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	8330 Modified	71482
LCS 320-71482/2-A	Lab Control Sample	Total/NA	Solid	8330 Modified	71482
MB 320-71482/1-A	Method Blank	Total/NA	Solid	8330 Modified	71482

HPLC/IC (Continued)

Analysis Batch: 71988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	8330B	71481
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	8330B	71481
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	8330B	71481
LCS 320-71481/2-A	Lab Control Sample	Total/NA	Solid	8330B	71481
MB 320-71481/1-A	Method Blank	Total/NA	Solid	8330B	71481

Analysis Batch: 72338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	8330B	71481
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	8330B	71481

Metals

ISM Prep Batch: 176220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	Increment, Prep	

ISM Prep Batch: 176431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-1	079SB-0339M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-1 DU	079SB-0339M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-1 MS	079SB-0339M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-1 PDS	079SB-0339M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-1 SD	079SB-0339M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-2	079SB-0340M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-3	079SB-0341M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-3 DU	079SB-0341M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-3 MS	079SB-0341M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-3 PDS	079SB-0341M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-3 SD	079SB-0341M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-4	079SB-0351M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-11	079SB-0357M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-13	079SB-0355M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-14	079SB-0356M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-15	079SB-0358M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-16	079SB-0359M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-17	079SB-0360M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-18	079SB-0361M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-20	079SB-0363M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-21	079SB-0364M-0001-SO	Total/NA	Solid	Increment, Prep	

Prep Batch: 176499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CRA 240-176499/9-A	DL		Solid	7471A	

Prep Batch: 176562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	3050B	176220

Metals (Continued)

Prep Batch: 176562 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	3050B	176220
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	3050B	176220
240-49171-19	079SB-0362-0001-SO	Total/NA	Solid	3050B	
LCS 240-176562/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-176562/1-A ^2	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 176570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	7471A	176220
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	7471A	176220
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	7471A	176220
240-49171-19	079SB-0362-0001-SO	Total/NA	Solid	7471A	
LCS 240-176570/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-176570/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 176698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-1	079SB-0339M-0001, 0002-SO	Total/NA	Solid	3050B	176431
240-49171-1 DU	079SB-0339M-0001, 0002-SO	Total/NA	Solid	3050B	176431
240-49171-1 MS	079SB-0339M-0001, 0002-SO	Total/NA	Solid	3050B	176431
240-49171-1 PDS	079SB-0339M-0001, 0002-SO	Total/NA	Solid	3050B	176431
240-49171-1 SD	079SB-0339M-0001, 0002-SO	Total/NA	Solid	3050B	176431
240-49171-2	079SB-0340M-0001-SO	Total/NA	Solid	3050B	176431
240-49171-4	079SB-0351M-0001-SO	Total/NA	Solid	3050B	176431
240-49171-11	079SB-0357M-0001-SO	Total/NA	Solid	3050B	176431
240-49171-13	079SB-0355M-0001-SO	Total/NA	Solid	3050B	176431
240-49171-14	079SB-0356M-0001-SO	Total/NA	Solid	3050B	176431
240-49171-15	079SB-0358M-0001-SO	Total/NA	Solid	3050B	176431
240-49171-16	079SB-0359M-0001-SO	Total/NA	Solid	3050B	176431
240-49171-17	079SB-0360M-0001-SO	Total/NA	Solid	3050B	176431
240-49171-18	079SB-0361M-0001-SO	Total/NA	Solid	3050B	176431
240-49171-20	079SB-0363M-0001-SO	Total/NA	Solid	3050B	176431
240-49171-21	079SB-0364M-0001-SO	Total/NA	Solid	3050B	176431
LCS 240-176698/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-176698/1-A ^2	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 176708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	7471A	176570
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	7471A	176570
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	7471A	176570
240-49171-19	079SB-0362-0001-SO	Total/NA	Solid	7471A	176570
CRA 240-176499/9-A	DL		Solid	7471A	176499
CRA 240-176499/9-A	DL		Solid	7471A	176499
LCS 240-176570/2-A	Lab Control Sample	Total/NA	Solid	7471A	176570
MB 240-176570/1-A	Method Blank	Total/NA	Solid	7471A	176570

Prep Batch: 176711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-1	079SB-0339M-0001, 0002-SO	Total/NA	Solid	7471A	176431
240-49171-1 DU	079SB-0339M-0001, 0002-SO	Total/NA	Solid	7471A	176431

Metals (Continued)

Prep Batch: 176711 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-1 MS	079SB-0339M-0001, 0002-SO	Total/NA	Solid	7471A	176431
240-49171-2	079SB-0340M-0001-SO	Total/NA	Solid	7471A	176431
240-49171-4	079SB-0351M-0001-SO	Total/NA	Solid	7471A	176431
240-49171-11	079SB-0357M-0001-SO	Total/NA	Solid	7471A	176431
240-49171-13	079SB-0355M-0001-SO	Total/NA	Solid	7471A	176431
240-49171-14	079SB-0356M-0001-SO	Total/NA	Solid	7471A	176431
240-49171-15	079SB-0358M-0001-SO	Total/NA	Solid	7471A	176431
240-49171-16	079SB-0359M-0001-SO	Total/NA	Solid	7471A	176431
240-49171-17	079SB-0360M-0001-SO	Total/NA	Solid	7471A	176431
240-49171-18	079SB-0361M-0001-SO	Total/NA	Solid	7471A	176431
240-49171-20	079SB-0363M-0001-SO	Total/NA	Solid	7471A	176431
240-49171-21	079SB-0364M-0001-SO	Total/NA	Solid	7471A	176431
LCS 240-176711/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-176711/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 177030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CRA 240-177030/9-A	DL		Solid	7471A	

Analysis Batch: 177115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-1	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-1 DU	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-1 MS	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-1 PDS	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-1 SD	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-2	079SB-0340M-0001-SO	Total/NA	Solid	6020	176698
240-49171-4	079SB-0351M-0001-SO	Total/NA	Solid	6020	176698
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	6020	176562
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	6020	176562
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	6020	176562
240-49171-11	079SB-0357M-0001-SO	Total/NA	Solid	6020	176698
240-49171-13	079SB-0355M-0001-SO	Total/NA	Solid	6020	176698
240-49171-14	079SB-0356M-0001-SO	Total/NA	Solid	6020	176698
240-49171-15	079SB-0358M-0001-SO	Total/NA	Solid	6020	176698
240-49171-16	079SB-0359M-0001-SO	Total/NA	Solid	6020	176698
240-49171-17	079SB-0360M-0001-SO	Total/NA	Solid	6020	176698
240-49171-18	079SB-0361M-0001-SO	Total/NA	Solid	6020	176698
240-49171-19	079SB-0362-0001-SO	Total/NA	Solid	6020	176562
240-49171-20	079SB-0363M-0001-SO	Total/NA	Solid	6020	176698
240-49171-21	079SB-0364M-0001-SO	Total/NA	Solid	6020	176698
CRI 240-177115/10	DL		Solid	6020	
CRI 240-177115/142	DL		Solid	6020	
CRI 240-177115/175	DL		Solid	6020	
ICSA 240-177115/11	ICS		Solid	6020	
ICSAB 240-177115/12	ICS		Solid	6020	
LCS 240-176562/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	176562
LCS 240-176698/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	176698
MB 240-176562/1-A ^2	Method Blank	Total/NA	Solid	6020	176562
MB 240-176698/1-A ^2	Method Blank	Total/NA	Solid	6020	176698

Metals (Continued)

Prep Batch: 177128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-3	079SB-0341M-0001, 0002-SO	Total/NA	Solid	3050B	176431
240-49171-3 DU	079SB-0341M-0001, 0002-SO	Total/NA	Solid	3050B	176431
240-49171-3 MS	079SB-0341M-0001, 0002-SO	Total/NA	Solid	3050B	176431
240-49171-3 PDS	079SB-0341M-0001, 0002-SO	Total/NA	Solid	3050B	176431
240-49171-3 SD	079SB-0341M-0001, 0002-SO	Total/NA	Solid	3050B	176431
LCS 240-177128/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-177128/1-A ^2	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 177137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-3	079SB-0341M-0001, 0002-SO	Total/NA	Solid	7471A	176431
240-49171-3 DU	079SB-0341M-0001, 0002-SO	Total/NA	Solid	7471A	176431
240-49171-3 MS	079SB-0341M-0001, 0002-SO	Total/NA	Solid	7471A	176431
LCS 240-177137/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-177137/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 177149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-1	079SB-0339M-0001, 0002-SO	Total/NA	Solid	7471A	176711
240-49171-1 DU	079SB-0339M-0001, 0002-SO	Total/NA	Solid	7471A	176711
240-49171-1 MS	079SB-0339M-0001, 0002-SO	Total/NA	Solid	7471A	176711
240-49171-2	079SB-0340M-0001-SO	Total/NA	Solid	7471A	176711
240-49171-4	079SB-0351M-0001-SO	Total/NA	Solid	7471A	176711
240-49171-11	079SB-0357M-0001-SO	Total/NA	Solid	7471A	176711
240-49171-13	079SB-0355M-0001-SO	Total/NA	Solid	7471A	176711
240-49171-14	079SB-0356M-0001-SO	Total/NA	Solid	7471A	176711
240-49171-15	079SB-0358M-0001-SO	Total/NA	Solid	7471A	176711
240-49171-16	079SB-0359M-0001-SO	Total/NA	Solid	7471A	176711
240-49171-17	079SB-0360M-0001-SO	Total/NA	Solid	7471A	176711
240-49171-18	079SB-0361M-0001-SO	Total/NA	Solid	7471A	176711
240-49171-20	079SB-0363M-0001-SO	Total/NA	Solid	7471A	176711
240-49171-21	079SB-0364M-0001-SO	Total/NA	Solid	7471A	176711
CRA 240-177030/9-A	DL		Solid	7471A	177030
CRA 240-177030/9-A	DL		Solid	7471A	177030
LCS 240-176711/2-A	Lab Control Sample	Total/NA	Solid	7471A	176711
MB 240-176711/1-A	Method Blank	Total/NA	Solid	7471A	176711

Analysis Batch: 177294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-3	079SB-0341M-0001, 0002-SO	Total/NA	Solid	7471A	177137
240-49171-3 DU	079SB-0341M-0001, 0002-SO	Total/NA	Solid	7471A	177137
240-49171-3 MS	079SB-0341M-0001, 0002-SO	Total/NA	Solid	7471A	177137
CRA 240-177030/9-A	DL		Solid	7471A	177030
CRA 240-177030/9-A	DL		Solid	7471A	177030
LCS 240-177137/2-A	Lab Control Sample	Total/NA	Solid	7471A	177137
MB 240-177137/1-A	Method Blank	Total/NA	Solid	7471A	177137

Analysis Batch: 177351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	6020	176562
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	6020	176562

Metals (Continued)

Analysis Batch: 177351 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	6020	176562
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	6020	176562
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	6020	176562
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	6020	176562
240-49171-19	079SB-0362-0001-SO	Total/NA	Solid	6020	176562
CRI 240-177351/9	DL		Solid	6020	
CRI 240-177351/91	DL		Solid	6020	
ICSA 240-177351/10	ICS		Solid	6020	
ICSAB 240-177351/11	ICS		Solid	6020	
LCS 240-176562/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	176562
MB 240-176562/1-A ^2	Method Blank	Total/NA	Solid	6020	176562

Analysis Batch: 177559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-1	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-1 DU	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-1 MS	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-1 PDS	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-1 SD	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-2	079SB-0340M-0001-SO	Total/NA	Solid	6020	176698
240-49171-3	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-3 DU	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-3 MS	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-3 PDS	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-3 SD	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-4	079SB-0351M-0001-SO	Total/NA	Solid	6020	176698
240-49171-11	079SB-0357M-0001-SO	Total/NA	Solid	6020	176698
240-49171-13	079SB-0355M-0001-SO	Total/NA	Solid	6020	176698
240-49171-14	079SB-0356M-0001-SO	Total/NA	Solid	6020	176698
240-49171-15	079SB-0358M-0001-SO	Total/NA	Solid	6020	176698
240-49171-16	079SB-0359M-0001-SO	Total/NA	Solid	6020	176698
240-49171-17	079SB-0360M-0001-SO	Total/NA	Solid	6020	176698
240-49171-18	079SB-0361M-0001-SO	Total/NA	Solid	6020	176698
240-49171-20	079SB-0363M-0001-SO	Total/NA	Solid	6020	176698
240-49171-21	079SB-0364M-0001-SO	Total/NA	Solid	6020	176698
CRI 240-177559/67	DL		Solid	6020	
CRI 240-177559/88	DL		Solid	6020	
CRI 240-177559/9	DL		Solid	6020	
ICSA 240-177559/10	ICS		Solid	6020	
ICSAB 240-177559/11	ICS		Solid	6020	
LCS 240-176698/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	176698
LCS 240-177128/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	177128
MB 240-176698/1-A ^2	Method Blank	Total/NA	Solid	6020	176698
MB 240-177128/1-A ^2	Method Blank	Total/NA	Solid	6020	177128

Analysis Batch: 177880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-1	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-1 DU	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-1 MS	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-1 PDS	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698

Metals (Continued)

Analysis Batch: 177880 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-1 SD	079SB-0339M-0001, 0002-SO	Total/NA	Solid	6020	176698
240-49171-2	079SB-0340M-0001-SO	Total/NA	Solid	6020	176698
240-49171-3	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-3 DU	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-3 MS	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-3 PDS	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-3 SD	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-4	079SB-0351M-0001-SO	Total/NA	Solid	6020	176698
240-49171-11	079SB-0357M-0001-SO	Total/NA	Solid	6020	176698
240-49171-13	079SB-0355M-0001-SO	Total/NA	Solid	6020	176698
240-49171-14	079SB-0356M-0001-SO	Total/NA	Solid	6020	176698
240-49171-15	079SB-0358M-0001-SO	Total/NA	Solid	6020	176698
240-49171-16	079SB-0359M-0001-SO	Total/NA	Solid	6020	176698
240-49171-17	079SB-0360M-0001-SO	Total/NA	Solid	6020	176698
240-49171-20	079SB-0363M-0001-SO	Total/NA	Solid	6020	176698
240-49171-21	079SB-0364M-0001-SO	Total/NA	Solid	6020	176698
CRI 240-177880/118	DL		Solid	6020	
CRI 240-177880/85	DL		Solid	6020	
CRI 240-177880/9	DL		Solid	6020	
ICSA 240-177880/10	ICS		Solid	6020	
ICSAB 240-177880/11	ICS		Solid	6020	
LCS 240-176698/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	176698
LCS 240-177128/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	177128
MB 240-176698/1-A ^2	Method Blank	Total/NA	Solid	6020	176698
MB 240-177128/1-A ^2	Method Blank	Total/NA	Solid	6020	177128

Analysis Batch: 178191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-18	079SB-0361M-0001-SO	Total/NA	Solid	6020	176698
CRI 240-178191/37	DL		Solid	6020	
CRI 240-178191/9	DL		Solid	6020	
ICSA 240-178191/10	ICS		Solid	6020	
ICSAB 240-178191/11	ICS		Solid	6020	

Analysis Batch: 178352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-3	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-3 DU	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-3 MS	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-3 PDS	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
240-49171-3 SD	079SB-0341M-0001, 0002-SO	Total/NA	Solid	6020	177128
CRI 240-178352/40	DL		Solid	6020	
CRI 240-178352/9	DL		Solid	6020	
ICSA 240-178352/10	ICS		Solid	6020	
ICSAB 240-178352/11	ICS		Solid	6020	
LCS 240-177128/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	177128
MB 240-177128/1-A ^2	Method Blank	Total/NA	Solid	6020	177128

General Chemistry

Pre Prep Batch: 71507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	353.2 (NCell)	
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	353.2 (NCell)	
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	353.2 (NCell)	
LCS 320-71507/2-B	Lab Control Sample	Total/NA	Solid	353.2 (NCell)	
MB 320-71507/1-B	Method Blank	Total/NA	Solid	353.2 (NCell)	

Prep Batch: 71631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	353 (NCell-Hyd)	71507
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	353 (NCell-Hyd)	71507
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	353 (NCell-Hyd)	71507
LCS 320-71507/2-B	Lab Control Sample	Total/NA	Solid	353 (NCell-Hyd)	71507
MB 320-71507/1-B	Method Blank	Total/NA	Solid	353 (NCell-Hyd)	71507

Analysis Batch: 72011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	WS-WC-0050	71631
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	WS-WC-0050	71631
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	WS-WC-0050	71631
LCS 320-71507/2-B	Lab Control Sample	Total/NA	Solid	WS-WC-0050	71631
MB 320-71507/1-B	Method Blank	Total/NA	Solid	WS-WC-0050	71631
MRL 320-72011/11	Lab Control Sample	Total/NA	Solid	WS-WC-0050	
MRL 320-72011/27	Lab Control Sample	Total/NA	Solid	WS-WC-0050	
MRL 320-72011/36	Lab Control Sample	Total/NA	Solid	WS-WC-0050	

Analysis Batch: 175905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-5	079SB-0352M-0001-SO	Total/NA	Solid	Moisture	
240-49171-7	079SB-0353M-0001-SO	Total/NA	Solid	Moisture	
240-49171-9	079SB-0354M-0001-SO	Total/NA	Solid	Moisture	
240-49171-19	079SB-0362-0001-SO	Total/NA	Solid	Moisture	
240-49171-19 DU	079SB-0362-0001-SO	Total/NA	Solid	Moisture	

Analysis Batch: 176189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	Moisture	176220
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	Moisture	176220
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	Moisture	176220

ISM Prep Batch: 176220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-6	079SB-0352M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-8	079SB-0353M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-10	079SB-0354M-0001-SO	Total/NA	Solid	Increment, Prep	

ISM Prep Batch: 176431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-1	079SB-0339M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-1 DU	079SB-0339M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-2	079SB-0340M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-3	079SB-0341M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	

General Chemistry (Continued)

ISM Prep Batch: 176431 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-3 DU	079SB-0341M-0001, 0002-SO	Total/NA	Solid	Increment, Prep	
240-49171-4	079SB-0351M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-11	079SB-0357M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-13	079SB-0355M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-14	079SB-0356M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-15	079SB-0358M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-16	079SB-0359M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-17	079SB-0360M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-18	079SB-0361M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-20	079SB-0363M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49171-21	079SB-0364M-0001-SO	Total/NA	Solid	Increment, Prep	

Analysis Batch: 176546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49171-1	079SB-0339M-0001, 0002-SO	Total/NA	Solid	Moisture	176431
240-49171-1 DU	079SB-0339M-0001, 0002-SO	Total/NA	Solid	Moisture	176431
240-49171-2	079SB-0340M-0001-SO	Total/NA	Solid	Moisture	176431
240-49171-3	079SB-0341M-0001, 0002-SO	Total/NA	Solid	Moisture	176431
240-49171-3 DU	079SB-0341M-0001, 0002-SO	Total/NA	Solid	Moisture	176431
240-49171-4	079SB-0351M-0001-SO	Total/NA	Solid	Moisture	176431
240-49171-11	079SB-0357M-0001-SO	Total/NA	Solid	Moisture	176431
240-49171-13	079SB-0355M-0001-SO	Total/NA	Solid	Moisture	176431
240-49171-14	079SB-0356M-0001-SO	Total/NA	Solid	Moisture	176431
240-49171-15	079SB-0358M-0001-SO	Total/NA	Solid	Moisture	176431
240-49171-16	079SB-0359M-0001-SO	Total/NA	Solid	Moisture	176431
240-49171-17	079SB-0360M-0001-SO	Total/NA	Solid	Moisture	176431
240-49171-18	079SB-0361M-0001-SO	Total/NA	Solid	Moisture	176431
240-49171-20	079SB-0363M-0001-SO	Total/NA	Solid	Moisture	176431
240-49171-21	079SB-0364M-0001-SO	Total/NA	Solid	Moisture	176431

Client Sample ID: 079SB-0339M-0001, 0002-SO

Lab Sample ID: 240-49171-1

Date Collected: 04/08/15 11:06

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 98.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 19:46	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 17:00	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 15:45	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:15	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SB-0340M-0001-SO

Lab Sample ID: 240-49171-2

Date Collected: 04/08/15 00:00

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 20:05	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 17:26	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 16:03	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:21	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SB-0341M-0001, 0002-SO

Lab Sample ID: 240-49171-3

Date Collected: 04/08/15 11:30

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 98.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 19:12	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN

Client Sample ID: 079SB-0341M-0001, 0002-SO

Lab Sample ID: 240-49171-3

Date Collected: 04/08/15 11:30

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 98.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 14:25	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	178352	04/28/15 12:36	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			177137	04/20/15 15:40	DEE	TAL CAN
Total/NA	Analysis	7471A		1	177294	04/21/15 11:08	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:43	SEM	TAL CAN

Client Sample ID: 079SB-0351M-0001-SO

Lab Sample ID: 240-49171-4

Date Collected: 04/08/15 00:00

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 99.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 20:08	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 17:30	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 16:07	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:27	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SB-0352M-0001-SO

Lab Sample ID: 240-49171-5

Date Collected: 04/08/15 10:27

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 74.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			176277	04/09/15 18:20	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	176387	04/14/15 20:51	SAM	TAL CAN
Total/NA	Prep	5035			176277	04/09/15 18:20	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	176276	04/14/15 11:05	TJL2	TAL CAN
Total/NA	Analysis	Moisture		1	175905	04/10/15 18:17	SEM	TAL CAN

Client Sample ID: 079SB-0352M-0001-SO

Lab Sample ID: 240-49171-6

Date Collected: 04/08/15 10:27

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 97.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			176319	04/14/15 08:47	SDE	TAL CAN
Total/NA	Analysis	8270C		1	177355	04/22/15 13:29	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep	RE		176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C	RE		177037	04/20/15 09:00	CSC	TAL CAN
Total/NA	Analysis	8081A	RE	1	177258	04/22/15 01:54	BPM	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			176299	04/14/15 07:22	SDE	TAL CAN
Total/NA	Analysis	8082		1	176718	04/16/15 13:31	LSH	TAL CAN
Total/NA	Prep	Sieve/Ultrasoni			71482	04/18/15 14:00	HJA	TAL SAC
Total/NA	Analysis	8330 Modified		1	71845	04/22/15 17:08	YPH	TAL SAC
Total/NA	Prep	8330B			71481	04/18/15 14:00	JER	TAL SAC
Total/NA	Analysis	8330B		1	71988	04/23/15 21:54	YPH	TAL SAC
Total/NA	Prep	8330B			71481	04/18/15 14:00	JER	TAL SAC
Total/NA	Analysis	8330B		1	72338	04/28/15 16:46	YPH	TAL SAC
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176562	04/15/15 11:42	DEE	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 19:15	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176562	04/15/15 11:42	DEE	TAL CAN
Total/NA	Analysis	6020		50	177351	04/21/15 21:49	AMM2	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176562	04/15/15 11:42	DEE	TAL CAN
Total/NA	Analysis	6020		2	177351	04/21/15 22:56	AMM2	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176570	04/15/15 15:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	176708	04/16/15 09:52	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176189	04/13/15 15:59	SEM	TAL CAN
Total/NA	Pre Prep	353.2 (NCell)			71507	04/20/15 08:52	HJA	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			71631	04/21/15 06:29	HJA	TAL SAC
Total/NA	Analysis	WS-WC-0050		1	72011	04/22/15 14:11	JCB	TAL SAC

Client Sample ID: 079SB-0353M-0001-SO

Lab Sample ID: 240-49171-7

Date Collected: 04/08/15 09:57

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			176277	04/09/15 18:20	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	176387	04/14/15 21:12	SAM	TAL CAN
Total/NA	Prep	5035			176277	04/09/15 18:20	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	176276	04/14/15 11:26	TJL2	TAL CAN
Total/NA	Analysis	Moisture		1	175905	04/10/15 18:17	SEM	TAL CAN

Client Sample ID: 079SB-0353M-0001-SO

Lab Sample ID: 240-49171-8

Date Collected: 04/08/15 09:57

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 97.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			176319	04/14/15 08:47	SDE	TAL CAN
Total/NA	Analysis	8270C		1	177355	04/22/15 13:04	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep	RE		176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C	RE		177037	04/20/15 09:00	CSC	TAL CAN
Total/NA	Analysis	8081A	RE	1	177258	04/22/15 02:17	BPM	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			176299	04/14/15 07:22	SDE	TAL CAN
Total/NA	Analysis	8082		1	176718	04/16/15 13:47	LSH	TAL CAN
Total/NA	Prep	Sieve/Ultrasoni			71482	04/18/15 14:00	HJA	TAL SAC
Total/NA	Analysis	8330 Modified		1	71845	04/22/15 17:26	YPH	TAL SAC
Total/NA	Prep	8330B			71481	04/18/15 14:00	JER	TAL SAC
Total/NA	Analysis	8330B		1	71988	04/23/15 22:38	YPH	TAL SAC
Total/NA	Prep	8330B			71481	04/18/15 14:00	JER	TAL SAC
Total/NA	Analysis	8330B		1	72338	04/28/15 17:52	YPH	TAL SAC
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176562	04/15/15 11:42	DEE	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 19:19	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176562	04/15/15 11:42	DEE	TAL CAN
Total/NA	Analysis	6020		50	177351	04/21/15 21:53	AMM2	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176562	04/15/15 11:42	DEE	TAL CAN
Total/NA	Analysis	6020		2	177351	04/21/15 23:08	AMM2	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176570	04/15/15 15:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	176708	04/16/15 10:00	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176189	04/13/15 15:59	SEM	TAL CAN
Total/NA	Pre Prep	353.2 (NCell)			71507	04/20/15 08:52	HJA	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			71631	04/21/15 06:29	HJA	TAL SAC
Total/NA	Analysis	WS-WC-0050		1	72011	04/22/15 14:21	JCB	TAL SAC

Client Sample ID: 079SB-0354M-0001-SO

Lab Sample ID: 240-49171-9

Date Collected: 04/08/15 11:30

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			176277	04/09/15 18:20	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	176387	04/14/15 21:34	SAM	TAL CAN
Total/NA	Prep	5035			176277	04/09/15 18:20	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	176276	04/14/15 11:47	TJL2	TAL CAN
Total/NA	Analysis	Moisture		1	175905	04/10/15 18:17	SEM	TAL CAN

Client Sample ID: 079SB-0354M-0001-SO — **Lab Sample ID: 240-49171-10**
Date Collected: 04/08/15 11:30 — **Matrix: Solid**
Date Received: 04/09/15 14:51 — **Percent Solids: 98.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			176319	04/14/15 08:47	SDE	TAL CAN
Total/NA	Analysis	8270C		1	177355	04/22/15 12:39	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep	RE		176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C	RE		177037	04/20/15 09:00	CSC	TAL CAN
Total/NA	Analysis	8081A	RE	1	177258	04/22/15 02:39	BPM	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			176299	04/14/15 07:22	SDE	TAL CAN
Total/NA	Analysis	8082		1	176718	04/16/15 14:02	LSH	TAL CAN
Total/NA	Prep	Sieve/Ultrasoni			71482	04/18/15 14:00	HJA	TAL SAC
Total/NA	Analysis	8330 Modified		1	71845	04/22/15 17:44	YPH	TAL SAC
Total/NA	Prep	8330B			71481	04/18/15 14:00	JER	TAL SAC
Total/NA	Analysis	8330B		1	71988	04/23/15 23:22	YPH	TAL SAC
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176562	04/15/15 11:42	DEE	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 19:23	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176562	04/15/15 11:42	DEE	TAL CAN
Total/NA	Analysis	6020		50	177351	04/21/15 21:57	AMM2	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176562	04/15/15 11:42	DEE	TAL CAN
Total/NA	Analysis	6020		2	177351	04/21/15 23:12	AMM2	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176570	04/15/15 15:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	176708	04/16/15 10:02	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176220	04/11/15 16:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176189	04/13/15 15:59	SEM	TAL CAN
Total/NA	Pre Prep	353.2 (NCell)			71507	04/20/15 08:52	HJA	TAL SAC
Total/NA	Prep	353 (NCell-Hyd)			71631	04/21/15 06:29	HJA	TAL SAC
Total/NA	Analysis	WS-WC-0050		1	72011	04/22/15 14:23	JCB	TAL SAC

Client Sample ID: 079SB-0357M-0001-SO — **Lab Sample ID: 240-49171-11**
Date Collected: 04/08/15 09:12 — **Matrix: Solid**
Date Received: 04/09/15 14:51 — **Percent Solids: 98.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 20:20	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 17:34	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 16:19	AS1	TAL CAN

Client Sample ID: 079SB-0357M-0001-SO

Lab Sample ID: 240-49171-11

Date Collected: 04/08/15 09:12

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 98.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:30	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SB-0380M-0001-TB

Lab Sample ID: 240-49171-12

Date Collected: 04/08/15 08:00

Matrix: Water

Date Received: 04/09/15 14:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	176298	04/14/15 10:47	RJQ	TAL CAN

Client Sample ID: 079SB-0355M-0001-SO

Lab Sample ID: 240-49171-13

Date Collected: 04/08/15 13:30

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 99.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 20:24	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 17:37	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 16:22	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:32	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SB-0356M-0001-SO

Lab Sample ID: 240-49171-14

Date Collected: 04/08/15 13:10

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 98.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 20:27	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 17:41	AS1	TAL CAN

Client Sample ID: 079SB-0356M-0001-SO

Lab Sample ID: 240-49171-14

Date Collected: 04/08/15 13:10

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 98.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 16:26	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:34	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SB-0358M-0001-SO

Lab Sample ID: 240-49171-15

Date Collected: 04/08/15 14:41

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 20:31	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 17:45	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 16:30	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:36	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SB-0359M-0001-SO

Lab Sample ID: 240-49171-16

Date Collected: 04/08/15 15:00

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 98.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 20:35	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 17:56	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 16:34	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN

Client Sample ID: 079SB-0359M-0001-SO

Lab Sample ID: 240-49171-16

Date Collected: 04/08/15 15:00

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 98.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:38	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SB-0360M-0001-SO

Lab Sample ID: 240-49171-17

Date Collected: 04/08/15 16:28

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 98.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 20:39	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 18:00	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 16:38	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:40	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SB-0361M-0001-SO

Lab Sample ID: 240-49171-18

Date Collected: 04/08/15 16:41

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 98.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 20:43	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 18:04	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	178191	04/27/15 15:58	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:42	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SB-0362-0001-SO

Lab Sample ID: 240-49171-19

Date Collected: 04/08/15 16:53

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			176562	04/15/15 11:42	DEE	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 19:11	AS1	TAL CAN
Total/NA	Prep	3050B			176562	04/15/15 11:42	DEE	TAL CAN
Total/NA	Analysis	6020		2	177351	04/21/15 22:53	AMM2	TAL CAN
Total/NA	Prep	7471A			176570	04/15/15 15:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	176708	04/16/15 09:51	BW	TAL CAN
Total/NA	Analysis	Moisture		1	175905	04/10/15 08:35	SEM	TAL CAN

Client Sample ID: 079SB-0363M-0001-SO

Lab Sample ID: 240-49171-20

Date Collected: 04/08/15 15:37

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 97.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 20:47	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 18:08	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 16:45	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:44	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SB-0364M-0001-SO

Lab Sample ID: 240-49171-21

Date Collected: 04/08/15 00:00

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 20:50	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 18:12	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 16:49	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN

Lab Chronicle

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-49171-1

Client Sample ID: 079SB-0364M-0001-SO
Date Collected: 04/08/15 00:00
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49171-21
Matrix: Solid
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	177149	04/20/15 11:46	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:43	SEM	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Certification Summary

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-49171-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-15 *
Connecticut	State Program	1	PH-0590	12-31-15
Florida	NELAP	4	E87225	06-30-15 *
Georgia	State Program	4	N/A	06-30-15 *
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	04-30-15 *
Kentucky (UST)	State Program	4	58	06-30-15 *
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	10-31-15
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-15

Laboratory: TestAmerica Sacramento

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-16
Alaska (UST)	State Program	10	UST-055	12-18-15
Arizona	State Program	9	AZ0708	08-11-15
Arkansas DEQ	State Program	6	88-0691	06-17-15
California	State Program	9	2897	01-31-16
Colorado	State Program	8	N/A	08-31-15
Connecticut	State Program	1	PH-0691	06-30-15
Florida	NELAP	4	E87570	06-30-15
Hawaii	State Program	9	N/A	01-29-16
Illinois	NELAP	5	200060	03-17-16
Kansas	NELAP	7	E-10375	10-31-15
Louisiana	NELAP	6	30612	06-30-15
Michigan	State Program	5	9947	01-31-16
Nevada	State Program	9	CA44	07-31-15
New Jersey	NELAP	2	CA005	06-30-15
New York	NELAP	2	11666	04-01-16
Oregon	NELAP	10	CA200005	01-29-16
Oregon	NELAP Secondary AB	10	E87570	06-30-15
Pennsylvania	NELAP	3	9947	03-31-16
Texas	NELAP	6	T104704399-08-TX	05-31-15
US Fish & Wildlife	Federal		LE148388-0	02-28-16
USDA	Federal		P330-11-00436	12-30-17

* Certification renewal pending - certification considered valid.

Laboratory: TestAmerica Sacramento (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
USEPA UCMR	Federal	1	CA00044	11-06-16
Utah	NELAP	8	QUAN1	02-28-16
Washington	State Program	10	C581	05-05-15
West Virginia (DW)	State Program	3	9930C	12-31-15
Wyoming	State Program	8	8TMS-Q	01-29-16

Method Summary

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-49171-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8081A	Organochlorine Pesticides (GC)	SW846	TAL CAN
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
8330 Modified	Nitroguanidine (HPLC)	SW846	TAL SAC
8330B	Nitroaromatics and Nitramines (HPLC)	SW846	TAL SAC
6020	Metals (ICP/MS)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
WS-WC-0050	Nitrocellulose	TAL-SAC	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-SAC = TestAmerica Laboratories, West Sacramento, Facility Standard Operating Procedure.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Environmental Chemical Corp.
Project/Site: RVAAP - ECC

TestAmerica Job ID: 240-49171-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-49171-1	079SB-0339M-0001, 0002-SO	Solid	04/08/15 11:06	04/09/15 14:51
240-49171-2	079SB-0340M-0001-SO	Solid	04/08/15 00:00	04/09/15 14:51
240-49171-3	079SB-0341M-0001, 0002-SO	Solid	04/08/15 11:30	04/09/15 14:51
240-49171-4	079SB-0351M-0001-SO	Solid	04/08/15 00:00	04/09/15 14:51
240-49171-5	079SB-0352M-0001-SO	Solid	04/08/15 10:27	04/09/15 14:51
240-49171-6	079SB-0352M-0001-SO	Solid	04/08/15 10:27	04/09/15 14:51
240-49171-7	079SB-0353M-0001-SO	Solid	04/08/15 09:57	04/09/15 14:51
240-49171-8	079SB-0353M-0001-SO	Solid	04/08/15 09:57	04/09/15 14:51
240-49171-9	079SB-0354M-0001-SO	Solid	04/08/15 11:30	04/09/15 14:51
240-49171-10	079SB-0354M-0001-SO	Solid	04/08/15 11:30	04/09/15 14:51
240-49171-11	079SB-0357M-0001-SO	Solid	04/08/15 09:12	04/09/15 14:51
240-49171-12	079SB-0380M-0001-TB	Water	04/08/15 08:00	04/09/15 14:51
240-49171-13	079SB-0355M-0001-SO	Solid	04/08/15 13:30	04/09/15 14:51
240-49171-14	079SB-0356M-0001-SO	Solid	04/08/15 13:10	04/09/15 14:51
240-49171-15	079SB-0358M-0001-SO	Solid	04/08/15 14:41	04/09/15 14:51
240-49171-16	079SB-0359M-0001-SO	Solid	04/08/15 15:00	04/09/15 14:51
240-49171-17	079SB-0360M-0001-SO	Solid	04/08/15 16:28	04/09/15 14:51
240-49171-18	079SB-0361M-0001-SO	Solid	04/08/15 16:41	04/09/15 14:51
240-49171-19	079SB-0362-0001-SO	Solid	04/08/15 16:53	04/09/15 14:51
240-49171-20	079SB-0363M-0001-SO	Solid	04/08/15 15:37	04/09/15 14:51
240-49171-21	079SB-0364M-0001-SO	Solid	04/08/15 00:00	04/09/15 14:51

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 177011

Lab Sample ID: STD4 240-177011/3 IC Client Sample ID:

Date Analyzed: 04/20/15 09:14 Lab File ID: 50420003.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.08	Poor Chromatography	ulmanm	04/20/15 09:44
Pyridine	3.62	Poor Chromatography	ulmanm	04/20/15 09:44
Benzoic acid	7.18	Poor Chromatography	ulmanm	04/20/15 09:44

Lab Sample ID: STD3 240-177011/4 IC Client Sample ID:

Date Analyzed: 04/20/15 09:40 Lab File ID: 50420004.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.07	Poor Chromatography	ulmanm	04/20/15 10:06
2,4-Dinitrophenol	9.02	Poor Chromatography	ulmanm	04/20/15 10:06
Dibenz(a,h)anthracene	16.31	Poor Chromatography	ulmanm	04/20/15 10:06

Lab Sample ID: STD2 240-177011/5 IC Client Sample ID:

Date Analyzed: 04/20/15 10:05 Lab File ID: 50420005.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosodimethylamine	3.57	Poor Chromatography	ulmanm	04/20/15 11:55
Pyridine	3.63	Poor Chromatography	ulmanm	04/20/15 11:55
4-Chloroaniline	7.53	Poor Chromatography	ulmanm	04/20/15 11:55
Indeno[1,2,3-cd]pyrene	16.30	Poor Chromatography	ulmanm	04/20/15 11:55
Dibenz(a,h)anthracene	16.31	Poor Chromatography	ulmanm	04/20/15 11:55

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 177011

Lab Sample ID: STD1 240-177011/6 IC Client Sample ID:

Date Analyzed: 04/20/15 10:31 Lab File ID: 50420006.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	16.30	Poor Chromatography	ulmanm	04/20/15 11:57
Dibenz(a,h)anthracene	16.31	Poor Chromatography	ulmanm	04/20/15 11:57
Benzo[g,h,i]perylene	16.90	Poor Chromatography	ulmanm	04/20/15 11:57

Lab Sample ID: STD9 240-177011/7 IC Client Sample ID:

Date Analyzed: 04/20/15 10:56 Lab File ID: 50420007.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.09	Poor Chromatography	ulmanm	04/20/15 11:59
Benzoic acid	7.26	Poor Chromatography	ulmanm	04/20/15 11:59
Caprolactam	7.84	Poor Chromatography	ulmanm	04/20/15 11:59

Lab Sample ID: STD8 240-177011/8 IC Client Sample ID:

Date Analyzed: 04/20/15 11:22 Lab File ID: 50420008.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.25	Poor Chromatography	ulmanm	04/20/15 12:02
4-Chloroaniline	7.54	Poor Chromatography	ulmanm	04/20/15 12:02
Caprolactam	7.83	Poor Chromatography	ulmanm	04/20/15 12:02

Lab Sample ID: STD7 240-177011/9 IC Client Sample ID:

Date Analyzed: 04/20/15 11:47 Lab File ID: 50420009.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.09	Poor Chromatography	ulmanm	04/20/15 12:14
Caprolactam	7.83	Poor Chromatography	ulmanm	04/20/15 12:14

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 177011

Lab Sample ID: STD6 240-177011/10 ICIS Client Sample ID:

Date Analyzed: 04/20/15 12:41 Lab File ID: 50420010.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.08	Poor Chromatography	ulmanm	04/20/15 13:08

Lab Sample ID: ICV 240-177011/11 Client Sample ID:

Date Analyzed: 04/20/15 13:07 Lab File ID: 50420011.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.08	Poor Chromatography	ulmanm	04/20/15 13:39

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 177355

Lab Sample ID: CCV 240-177355/2 Client Sample ID:

Date Analyzed: 04/22/15 07:35 Lab File ID: 50422002.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	7.80	Poor Chromatography	ulmanm	04/22/15 08:08

Lab Sample ID: MRL 240-177355/3 Client Sample ID:

Date Analyzed: 04/22/15 08:04 Lab File ID: 50422003.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.18	Poor Chromatography	ulmanm	04/22/15 08:30

Lab Sample ID: 240-49171-10 Client Sample ID: 079SB-0354M-0001-SO

Date Analyzed: 04/22/15 12:39 Lab File ID: 50422014.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Phenol-d5 (Surr)	6.01	Split Peak	ulmanm	04/22/15 13:15
Benzoic acid	7.16	Split Peak	ulmanm	04/22/15 13:15

Lab Sample ID: MRL 240-177355/18 Client Sample ID:

Date Analyzed: 04/22/15 14:44 Lab File ID: 50422018.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.20	Poor Chromatography	ulmanm	04/22/15 15:14

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 177355

Lab Sample ID: LODV 240-177355/19 Client Sample ID:

Date Analyzed: 04/22/15 15:09 Lab File ID: 50422019.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	16.24	Poor Chromatography	ulmanm	04/23/15 09:11
Dibenz(a,h)anthracene	16.25	Poor Chromatography	ulmanm	04/23/15 09:11
Benzo[g,h,i]perylene	16.84	Poor Chromatography	ulmanm	04/23/15 09:11

Lab Sample ID: LODV 240-177355/20 Client Sample ID:

Date Analyzed: 04/22/15 15:34 Lab File ID: 50422020.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.00	Poor Chromatography	ulmanm	04/23/15 09:14
N-Nitrosodimethylamine	3.50	Poor Chromatography	ulmanm	04/23/15 09:14
Benzyl alcohol	6.46	Poor Chromatography	ulmanm	04/23/15 09:14

Lab Sample ID: LODV 240-177355/21 Client Sample ID:

Date Analyzed: 04/22/15 15:59 Lab File ID: 50422021.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.16	Poor Chromatography	ulmanm	04/23/15 09:31

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Analysis Batch Number: 174448

Lab Sample ID: STD 240-174448/12 IC Client Sample ID:

Date Analyzed: 03/31/15 15:37 Lab File ID: P3033112.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.71	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 2	10.17	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 3	10.48	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 4	10.82	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 5	10.92	Baseline Event	matthewsb	04/01/15 08:31

Lab Sample ID: STD 240-174448/12 IC Client Sample ID:

Date Analyzed: 03/31/15 15:37 Lab File ID: P3033112.D GC Column: CLP-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	11.11	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 2	11.28	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 3	11.70	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 4	12.43	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 5	12.52	Baseline Event	matthewsb	04/01/15 08:31

Lab Sample ID: STD 240-174448/13 IC Client Sample ID:

Date Analyzed: 03/31/15 16:01 Lab File ID: P3033113.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.71	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 2	10.17	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 3	10.48	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 4	10.82	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 5	10.92	Baseline Event	matthewsb	04/01/15 08:31

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Analysis Batch Number: 174448

Lab Sample ID: STD 240-174448/13 IC Client Sample ID:

Date Analyzed: 03/31/15 16:01 Lab File ID: P3033113.D GC Column: CLP-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	11.11	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 2	11.28	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 3	11.70	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 4	12.43	Baseline Event	matthewsb	04/01/15 08:31
Toxaphene Peak 5	12.52	Baseline Event	matthewsb	04/01/15 08:31

Lab Sample ID: STD 240-174448/14 ICRT Client Sample ID:

Date Analyzed: 03/31/15 16:24 Lab File ID: P3033114.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.71	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 2	10.17	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 3	10.48	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 4	10.81	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 5	10.92	Baseline Event	matthewsb	04/01/15 08:32

Lab Sample ID: STD 240-174448/14 ICRT Client Sample ID:

Date Analyzed: 03/31/15 16:24 Lab File ID: P3033114.D GC Column: CLP-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	11.11	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 2	11.28	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 3	11.70	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 4	12.43	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 5	12.52	Baseline Event	matthewsb	04/01/15 08:32

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Analysis Batch Number: 174448

Lab Sample ID: STD 240-174448/15 IC Client Sample ID:

Date Analyzed: 03/31/15 16:47 Lab File ID: P3033115.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.71	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 2	10.17	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 3	10.48	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 4	10.82	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 5	10.92	Baseline Event	matthewsb	04/01/15 08:32

Lab Sample ID: STD 240-174448/15 IC Client Sample ID:

Date Analyzed: 03/31/15 16:47 Lab File ID: P3033115.D GC Column: CLP-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	11.11	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 2	11.28	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 3	11.70	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 4	12.43	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 5	12.52	Baseline Event	matthewsb	04/01/15 08:32

Lab Sample ID: STD 240-174448/16 IC Client Sample ID:

Date Analyzed: 03/31/15 17:11 Lab File ID: P3033116.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.71	Baseline Event	matthewsb	04/01/15 08:41
Toxaphene Peak 2	10.17	Baseline Event	matthewsb	04/01/15 08:41
Toxaphene Peak 3	10.48	Baseline Event	matthewsb	04/01/15 08:41
Toxaphene Peak 4	10.81	Baseline Event	matthewsb	04/01/15 08:41
Toxaphene Peak 5	10.92	Baseline Event	matthewsb	04/01/15 08:41

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Analysis Batch Number: 174448

Lab Sample ID: STD 240-174448/16 IC Client Sample ID:

Date Analyzed: 03/31/15 17:11 Lab File ID: P3033116.D GC Column: CLP-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	11.11	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 2	11.27	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 3	11.70	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 4	12.43	Baseline Event	matthewsb	04/01/15 08:32
Toxaphene Peak 5	12.52	Baseline Event	matthewsb	04/01/15 08:32

Lab Sample ID: ICV 240-174448/17 Client Sample ID:

Date Analyzed: 03/31/15 17:34 Lab File ID: P3033117.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.71	Baseline Event	matthewsb	04/01/15 08:40
Toxaphene Peak 2	10.17	Baseline Event	matthewsb	04/01/15 08:40
Toxaphene Peak 3	10.48	Baseline Event	matthewsb	04/01/15 08:40
Toxaphene Peak 4	10.82	Baseline Event	matthewsb	04/01/15 08:40
Toxaphene Peak 5	10.93	Baseline Event	matthewsb	04/01/15 08:40

Lab Sample ID: ICV 240-174448/17 Client Sample ID:

Date Analyzed: 03/31/15 17:34 Lab File ID: P3033117.D GC Column: CLP-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	11.11	Baseline Event	matthewsb	04/01/15 08:42
Toxaphene Peak 2	11.28	Baseline Event	matthewsb	04/01/15 08:42
Toxaphene Peak 3	11.70	Baseline Event	matthewsb	04/01/15 08:42
Toxaphene Peak 4	12.43	Baseline Event	matthewsb	04/01/15 08:42
Toxaphene Peak 5	12.52	Baseline Event	matthewsb	04/01/15 08:42

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Analysis Batch Number: 174448

Lab Sample ID: PEM 240-174448/24 Client Sample ID:

Date Analyzed: 03/31/15 20:11 Lab File ID: P3033124.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4,4'-DDE	8.18	Baseline Event	matthewsb	04/01/15 08:46

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Analysis Batch Number: 177258

Lab Sample ID: CCV 240-177258/8 CCVRT Client Sample ID:

Date Analyzed: 04/21/15 15:32 Lab File ID: P3042108.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.62	Baseline Event	matthewsb	04/22/15 07:18
Toxaphene Peak 2	10.08	Baseline Event	matthewsb	04/22/15 07:18
Toxaphene Peak 3	10.39	Baseline Event	matthewsb	04/22/15 07:18
Toxaphene Peak 4	10.74	Baseline Event	matthewsb	04/22/15 07:18
Toxaphene Peak 5	10.84	Baseline Event	matthewsb	04/22/15 07:18

Lab Sample ID: CCV 240-177258/8 CCVRT Client Sample ID:

Date Analyzed: 04/21/15 15:32 Lab File ID: P3042108.D GC Column: CLP-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	11.03	Baseline Event	matthewsb	04/22/15 07:18
Toxaphene Peak 2	11.20	Baseline Event	matthewsb	04/22/15 07:18
Toxaphene Peak 3	11.62	Baseline Event	matthewsb	04/22/15 07:18
Toxaphene Peak 4	12.35	Baseline Event	matthewsb	04/22/15 07:18
Toxaphene Peak 5	12.44	Baseline Event	matthewsb	04/22/15 07:18

Lab Sample ID: PEM 240-177258/27 Client Sample ID:

Date Analyzed: 04/21/15 22:49 Lab File ID: P3042127.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4,4'-DDE	8.05	Baseline Event	matthewsb	04/22/15 07:28

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Analysis Batch Number: 177258

Lab Sample ID: MRL 240-177258/29 Client Sample ID:

Date Analyzed: 04/21/15 23:35 Lab File ID: P3042129.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.62	Baseline Event	matthewsb	04/22/15 07:29
Toxaphene Peak 2	10.08	Baseline Event	matthewsb	04/22/15 07:29
Toxaphene Peak 3	10.40	Baseline Event	matthewsb	04/22/15 07:29
Toxaphene Peak 4	10.74	Baseline Event	matthewsb	04/22/15 07:29
Toxaphene Peak 5	10.85	Baseline Event	matthewsb	04/22/15 07:29

Lab Sample ID: CCV 240-177258/40 Client Sample ID:

Date Analyzed: 04/22/15 03:48 Lab File ID: P3042140.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
beta-BHC	4.78	Baseline Event	matthewsb	04/22/15 07:35

Lab Sample ID: MRL 240-177258/47 Client Sample ID:

Date Analyzed: 04/22/15 06:25 Lab File ID: P3042147.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.62	Baseline Event	matthewsb	04/22/15 07:37
Toxaphene Peak 2	10.08	Baseline Event	matthewsb	04/22/15 07:37
Toxaphene Peak 3	10.39	Baseline Event	matthewsb	04/22/15 07:37
Toxaphene Peak 4	10.74	Baseline Event	matthewsb	04/22/15 07:37
Toxaphene Peak 5	10.84	Baseline Event	matthewsb	04/22/15 07:37

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Analysis Batch Number: 177258

Lab Sample ID: MRL 240-177258/47 Client Sample ID:

Date Analyzed: 04/22/15 06:25 Lab File ID: P3042147.D GC Column: CLP-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	11.03	Baseline Event	matthewsb	04/22/15 07:37
Toxaphene Peak 2	11.20	Baseline Event	matthewsb	04/22/15 07:37
Toxaphene Peak 3	11.62	Baseline Event	matthewsb	04/22/15 07:37
Toxaphene Peak 4	12.36	Baseline Event	matthewsb	04/22/15 07:37
Toxaphene Peak 5	12.44	Baseline Event	matthewsb	04/22/15 07:37

Lab Sample ID: CCV 240-177258/52 Client Sample ID:

Date Analyzed: 04/22/15 08:22 Lab File ID: P3042152.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.62	Baseline Event	matthewsb	04/22/15 08:57
Toxaphene Peak 2	10.08	Baseline Event	matthewsb	04/22/15 08:57
Toxaphene Peak 3	10.40	Baseline Event	matthewsb	04/22/15 08:57
Toxaphene Peak 4	10.74	Baseline Event	matthewsb	04/22/15 08:57
Toxaphene Peak 5	10.84	Baseline Event	matthewsb	04/22/15 08:57

Lab Sample ID: CCV 240-177258/52 Client Sample ID:

Date Analyzed: 04/22/15 08:22 Lab File ID: P3042152.D GC Column: CLP-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	11.03	Baseline Event	matthewsb	04/22/15 08:56
Toxaphene Peak 2	11.20	Baseline Event	matthewsb	04/22/15 08:56
Toxaphene Peak 3	11.62	Baseline Event	matthewsb	04/22/15 08:56
Toxaphene Peak 4	12.35	Baseline Event	matthewsb	04/22/15 08:56
Toxaphene Peak 5	12.44	Baseline Event	matthewsb	04/22/15 08:56

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Analysis Batch Number: 177463

Lab Sample ID: PEM 240-177463/5 Client Sample ID:

Date Analyzed: 04/22/15 16:07 Lab File ID: P3042205.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4,4'-DDE	8.09	Baseline Event	matthewsb	04/23/15 07:21

Lab Sample ID: CCV 240-177463/6 CCVRT Client Sample ID:

Date Analyzed: 04/22/15 16:30 Lab File ID: P3042206.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.63	Baseline Event	matthewsb	04/23/15 07:22
Toxaphene Peak 2	10.08	Baseline Event	matthewsb	04/23/15 07:22
Toxaphene Peak 3	10.40	Baseline Event	matthewsb	04/23/15 07:22
Toxaphene Peak 4	10.74	Baseline Event	matthewsb	04/23/15 07:22
Toxaphene Peak 5	10.85	Baseline Event	matthewsb	04/23/15 07:22

Lab Sample ID: MRL 240-177463/17 Client Sample ID:

Date Analyzed: 04/22/15 20:53 Lab File ID: P3042217.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.62	Baseline Event	matthewsb	04/23/15 07:30
Toxaphene Peak 2	10.09	Baseline Event	matthewsb	04/23/15 07:30
Toxaphene Peak 3	10.40	Baseline Event	matthewsb	04/23/15 07:30
Toxaphene Peak 4	10.74	Baseline Event	matthewsb	04/23/15 07:30
Toxaphene Peak 5	10.85	Baseline Event	matthewsb	04/23/15 07:30

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Analysis Batch Number: 177463

Lab Sample ID: MRL 240-177463/17 Client Sample ID:

Date Analyzed: 04/22/15 20:53 Lab File ID: P3042217.D GC Column: CLP-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	11.03	Baseline Event	matthewsb	04/23/15 07:30
Toxaphene Peak 2	11.19	Baseline Event	matthewsb	04/23/15 07:30
Toxaphene Peak 3	11.62	Baseline Event	matthewsb	04/23/15 07:30
Toxaphene Peak 4	12.36	Baseline Event	matthewsb	04/23/15 07:30
Toxaphene Peak 5	12.44	Baseline Event	matthewsb	04/23/15 07:30

Lab Sample ID: MRL 240-177463/20 Client Sample ID:

Date Analyzed: 04/22/15 22:04 Lab File ID: P3042220.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.62	Baseline Event	matthewsb	04/23/15 07:38
Toxaphene Peak 2	10.08	Baseline Event	matthewsb	04/23/15 07:38
Toxaphene Peak 3	10.39	Baseline Event	matthewsb	04/23/15 07:38
Toxaphene Peak 4	10.74	Baseline Event	matthewsb	04/23/15 07:38
Toxaphene Peak 5	10.84	Baseline Event	matthewsb	04/23/15 07:38

Lab Sample ID: MRL 240-177463/20 Client Sample ID:

Date Analyzed: 04/22/15 22:04 Lab File ID: P3042220.D GC Column: CLP-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	11.02	Baseline Event	matthewsb	04/23/15 07:38
Toxaphene Peak 2	11.20	Baseline Event	matthewsb	04/23/15 07:38
Toxaphene Peak 3	11.62	Baseline Event	matthewsb	04/23/15 07:38
Toxaphene Peak 4	12.35	Baseline Event	matthewsb	04/23/15 07:38
Toxaphene Peak 5	12.44	Baseline Event	matthewsb	04/23/15 07:38

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Analysis Batch Number: 177463

Lab Sample ID: CCV 240-177463/22 Client Sample ID:

Date Analyzed: 04/22/15 22:50 Lab File ID: P3042222.D GC Column: CLP-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	9.62	Baseline Event	matthewsb	04/23/15 07:39
Toxaphene Peak 2	10.08	Baseline Event	matthewsb	04/23/15 07:39
Toxaphene Peak 3	10.39	Baseline Event	matthewsb	04/23/15 07:39
Toxaphene Peak 4	10.74	Baseline Event	matthewsb	04/23/15 07:39
Toxaphene Peak 5	10.84	Baseline Event	matthewsb	04/23/15 07:39

Lab Sample ID: CCV 240-177463/22 Client Sample ID:

Date Analyzed: 04/22/15 22:50 Lab File ID: P3042222.D GC Column: CLP-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	11.03	Baseline Event	matthewsb	04/23/15 07:39
Toxaphene Peak 2	11.20	Baseline Event	matthewsb	04/23/15 07:39
Toxaphene Peak 3	11.62	Baseline Event	matthewsb	04/23/15 07:39
Toxaphene Peak 4	12.35	Baseline Event	matthewsb	04/23/15 07:39
Toxaphene Peak 5	12.44	Baseline Event	matthewsb	04/23/15 07:39

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: PDA1 Analysis Batch Number: 70867

Lab Sample ID: STD03 320-70867/5 IC Client Sample ID:

Date Analyzed: 04/10/15 17:35 Lab File ID: 320-0020944-005-1.d GC Column: Luna NH2 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroguanidine	4.25	Incomplete Integration	huangyun	04/13/15 10:21

Lab Sample ID: STD02 320-70867/43 IC Client Sample ID:

Date Analyzed: 04/10/15 19:22 Lab File ID: STD02-1.d GC Column: Luna NH2 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroguanidine	4.24	Incomplete Integration	huangyun	04/13/15 10:20

Lab Sample ID: LODV 320-70867/12 Client Sample ID:

Date Analyzed: 04/10/15 19:57 Lab File ID: 320-0020944-012-1.d GC Column: Luna NH2 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroguanidine	4.26	Incomplete Integration	huangyun	04/13/15 10:36

8330 Modified

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: PDA1 Analysis Batch Number: 71845

Lab Sample ID: CCVL 320-71845/3 Client Sample ID:

Date Analyzed: 04/22/15 15:04 Lab File ID: 320-0021236-003-1.d GC Column: Luna NH2 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroguanidine	4.15	Wrong Peak	huangyun	04/22/15 15:22

Lab Sample ID: LCS 320-71482/2-A Client Sample ID:

Date Analyzed: 04/22/15 15:57 Lab File ID: 320-0021236-006-1.d GC Column: Luna NH2 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroguanidine	4.16	Baseline	huangyun	04/22/15 16:14

Lab Sample ID: CCVL 320-71845/17 Client Sample ID:

Date Analyzed: 04/22/15 19:13 Lab File ID: 320-0021236-017-1.d GC Column: Luna NH2 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroguanidine	4.13	Incomplete Integration	huangyun	04/23/15 09:06

8330 Modified

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: LC10 Analysis Batch Number: 67883

Lab Sample ID: IC 320-67883/4 Client Sample ID:

Date Analyzed: 03/11/15 15:47 Lab File ID: J000007.D GC Column: Synergi C18 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.41	Baseline	phant	03/12/15 06:49
2,6-Dinitrotoluene	18.50	Baseline	phant	03/12/15 06:49
2,4-Dinitrotoluene	19.06	Baseline	phant	03/12/15 06:49
2-Nitrotoluene	22.41	Baseline	phant	03/12/15 06:49
4-Nitrotoluene	24.05	Baseline	phant	03/12/15 06:49
3-Nitrotoluene	25.84	Baseline	phant	03/12/15 06:49

Lab Sample ID: IC 320-67883/5 Client Sample ID:

Date Analyzed: 03/11/15 16:31 Lab File ID: J000008.D GC Column: Synergi C18 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.41	Baseline	phant	03/12/15 06:31
2-Nitrotoluene	22.44	Baseline	phant	03/12/15 06:31
4-Nitrotoluene	24.07	Baseline	phant	03/12/15 06:31
3-Nitrotoluene	25.84	Baseline	phant	03/12/15 06:31
PETN	28.30	Baseline	phant	03/12/15 06:18

Lab Sample ID: IC 320-67883/6 Client Sample ID:

Date Analyzed: 03/11/15 17:14 Lab File ID: J000009.D GC Column: Synergi C18 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.40	Baseline	phant	03/12/15 06:38
2-Nitrotoluene	22.43	Baseline	phant	03/12/15 06:39
4-Nitrotoluene	24.07	Baseline	phant	03/12/15 06:39
3-Nitrotoluene	25.83	Baseline	phant	03/12/15 06:39
PETN	28.33	Baseline	phant	03/12/15 06:17

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: LC10 Analysis Batch Number: 67883

Lab Sample ID: IC 320-67883/7 Client Sample ID:

Date Analyzed: 03/11/15 17:58 Lab File ID: J000010.D GC Column: Synergi C18 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	22.46	Baseline	phant	03/12/15 06:40
4-Nitrotoluene	24.08	Baseline	phant	03/12/15 06:40
3-Nitrotoluene	25.84	Baseline	phant	03/12/15 06:40
PETN	28.31	Baseline	phant	03/12/15 06:17

Lab Sample ID: IC 320-67883/8 Client Sample ID:

Date Analyzed: 03/11/15 18:42 Lab File ID: J000011.D GC Column: Synergi C18 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	22.45	Baseline	phant	03/12/15 06:41
4-Nitrotoluene	24.09	Baseline	phant	03/12/15 06:41
3-Nitrotoluene	25.85	Baseline	phant	03/12/15 06:41
PETN	28.30	Baseline	phant	03/12/15 06:17

Lab Sample ID: IC 320-67883/9 Client Sample ID:

Date Analyzed: 03/11/15 19:25 Lab File ID: J000012.D GC Column: Synergi C18 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	22.46	Baseline	phant	03/12/15 06:42
4-Nitrotoluene	24.09	Baseline	phant	03/12/15 06:42
3-Nitrotoluene	25.85	Baseline	phant	03/12/15 06:42
PETN	28.33	Baseline	phant	03/12/15 06:18

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: LC10 Analysis Batch Number: 67883

Lab Sample ID: IC 320-67883/10 Client Sample ID:

Date Analyzed: 03/11/15 20:09 Lab File ID: J000013.D GC Column: Synergi C18 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.38	Baseline	phant	03/12/15 06:47
PETN	28.30	Baseline	phant	03/12/15 06:18

Lab Sample ID: ICV 320-67883/12 Client Sample ID:

Date Analyzed: 03/11/15 21:36 Lab File ID: J000015.D GC Column: Synergi C18 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	28.31	Baseline	phant	03/12/15 06:43

Lab Sample ID: LODV 320-67883/13 Client Sample ID:

Date Analyzed: 03/11/15 22:20 Lab File ID: J000016.D GC Column: Synergi C18 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene	12.21	Baseline	phant	03/12/15 06:46
3,5-Dinitroaniline	12.92	Baseline	phant	03/12/15 06:46
Tetryl	13.47	Baseline	phant	03/12/15 06:46
Nitrobenzene	13.94	Baseline	phant	03/12/15 06:46
2,4,6-Trinitrotoluene	15.44	Baseline	phant	03/12/15 06:46
4-Amino-2,6-dinitrotoluene	16.11	Baseline	phant	03/12/15 06:46
3,4-Dinitrotoluene	16.55	Baseline	phant	03/12/15 06:46
2-Amino-4,6-dinitrotoluene	16.95	Baseline	phant	03/12/15 06:46
2,6-Dinitrotoluene	18.51	Baseline	phant	03/12/15 06:46
2,4-Dinitrotoluene	19.10	Baseline	phant	03/12/15 06:46
2-Nitrotoluene	22.47	Baseline	phant	03/12/15 06:46
4-Nitrotoluene	24.08	Baseline	phant	03/12/15 06:46
3-Nitrotoluene	25.88	Baseline	phant	03/12/15 06:46
PETN	28.37	Baseline	phant	03/12/15 06:46

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: LC10 Analysis Batch Number: 71988

Lab Sample ID: CCVL 320-71988/3 Client Sample ID:

Date Analyzed: 04/23/15 16:49 Lab File ID: W000003.D GC Column: Synergi C18 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene	15.53	Baseline	huangyun	04/23/15 17:37
4-Amino-2,6-dinitrotoluene	16.23	Baseline	huangyun	04/23/15 17:37
3,4-Dinitrotoluene	16.66	Baseline	huangyun	04/23/15 17:37
2-Amino-4,6-dinitrotoluene	17.11	Baseline	huangyun	04/23/15 17:37
2,6-Dinitrotoluene	18.62	Baseline	huangyun	04/23/15 17:37
2,4-Dinitrotoluene	19.23	Baseline	huangyun	04/23/15 17:37
2-Nitrotoluene	22.58	Baseline	huangyun	04/23/15 17:37
4-Nitrotoluene	24.21	Baseline	huangyun	04/23/15 17:37
3-Nitrotoluene	26.01	Baseline	huangyun	04/23/15 17:37

Lab Sample ID: 240-49171-6 Client Sample ID: 079SB-0352M-0001-SO

Date Analyzed: 04/23/15 21:54 Lab File ID: W000010.D GC Column: Synergi C18 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	18.64	Peak not integrated	huangyun	04/24/15 17:00

Lab Sample ID: 240-49171-8 Client Sample ID: 079SB-0353M-0001-SO

Date Analyzed: 04/23/15 22:38 Lab File ID: W000011.D GC Column: Synergi C18 ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	18.58	Peak not integrated	huangyun	04/24/15 17:01

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: LC9 Analysis Batch Number: 63675

Lab Sample ID: STD1 320-63675/4 IC Client Sample ID:

Date Analyzed: 01/23/15 14:34 Lab File ID: W000004.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	34.79	Baseline	phant	01/26/15 10:15
4-Amino-2,6-dinitrotoluene	35.23	Baseline	phant	01/26/15 10:15

Lab Sample ID: STD2 320-63675/5 IC Client Sample ID:

Date Analyzed: 01/23/15 15:41 Lab File ID: W000005.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene glycol dinitrate	22.76	Baseline	phant	01/26/15 10:27
2-Amino-4,6-dinitrotoluene	34.82	Baseline	phant	01/26/15 10:16
4-Amino-2,6-dinitrotoluene	35.23	Peak not integrated	phant	01/26/15 10:16
Nitroglycerin	43.29	Baseline	phant	01/26/15 10:16
PETN	51.54	Baseline	phant	01/26/15 10:16

Lab Sample ID: STD3 320-63675/6 IC Client Sample ID:

Date Analyzed: 01/23/15 16:48 Lab File ID: W000006.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	34.83	Incomplete Integration	phant	01/26/15 10:26
4-Amino-2,6-dinitrotoluene	35.26	Incomplete Integration	phant	01/26/15 10:26
PETN	51.56	Baseline	phant	01/26/15 10:26

Lab Sample ID: STD4 320-63675/7 IC Client Sample ID:

Date Analyzed: 01/23/15 17:54 Lab File ID: W000007.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	34.88	Baseline	phant	01/26/15 10:25
PETN	51.59	Baseline	phant	01/26/15 10:25

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: LC9 Analysis Batch Number: 63675

Lab Sample ID: STD5 320-63675/8 IC Client Sample ID:

Date Analyzed: 01/23/15 19:01 Lab File ID: W000008.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	51.57	Baseline	phant	01/26/15 10:25

Lab Sample ID: STD6 320-63675/9 IC Client Sample ID:

Date Analyzed: 01/23/15 20:08 Lab File ID: W000009.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	51.57	Baseline	phant	01/26/15 10:24

Lab Sample ID: STD7 320-63675/10 IC Client Sample ID:

Date Analyzed: 01/23/15 21:15 Lab File ID: W000010.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	51.55	Baseline	phant	01/26/15 10:04

Lab Sample ID: ICV 320-63675/12 Client Sample ID:

Date Analyzed: 01/23/15 23:28 Lab File ID: W000012.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	51.57	Baseline	phant	01/26/15 10:04

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: LC9 Analysis Batch Number: 63675

Lab Sample ID: LODV 320-63675/13 Client Sample ID:

Date Analyzed: 01/24/15 00:35 Lab File ID: W000013.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene	26.87	Baseline	phant	01/26/15 10:19
2-Amino-4,6-dinitrotoluene	34.78	Baseline	phant	01/26/15 10:19
4-Amino-2,6-dinitrotoluene	35.19	Peak not integrated	phant	01/26/15 10:19
PETN	51.53	Baseline	phant	01/26/15 10:04

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: LC9 Analysis Batch Number: 72338

Lab Sample ID: CCVL 320-72338/3 Client Sample ID:

Date Analyzed: 04/28/15 13:26 Lab File ID: ZB000003.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene	21.40	Incomplete Integration	huangyun	04/28/15 14:59
2-Amino-4,6-dinitrotoluene	34.50	Baseline	huangyun	04/28/15 14:59
4-Amino-2,6-dinitrotoluene	34.93	Peak not integrated	huangyun	04/28/15 14:59
PETN	51.33	Baseline	huangyun	04/28/15 14:59

Lab Sample ID: CCV 320-72338/4 CCVRT Client Sample ID:

Date Analyzed: 04/28/15 14:33 Lab File ID: ZB000004.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	51.30	Baseline	huangyun	04/28/15 15:59

Lab Sample ID: 240-49171-6 Client Sample ID: 079SB-0352M-0001-SO

Date Analyzed: 04/28/15 16:46 Lab File ID: ZB000006.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	43.01	Incomplete Integration	huangyun	04/29/15 09:17

Lab Sample ID: CCVL 320-72338/9 Client Sample ID:

Date Analyzed: 04/28/15 20:06 Lab File ID: ZB000009.D GC Column: Zorbax CN ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene	21.32	Incomplete Integration	huangyun	04/29/15 09:15
2-Amino-4,6-dinitrotoluene	34.37	Incomplete Integration	huangyun	04/29/15 09:15
4-Amino-2,6-dinitrotoluene	34.77	Incomplete Integration	huangyun	04/29/15 09:15
PETN	51.26	Baseline	huangyun	04/29/15 09:15

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
EX10PPMSPK_00016	06/10/16	04/03/15	MEOH, Lot 0000085233	1000 mL	EXPCB1016_00006	2 mL	Aroclor-1016	10 ug/mL
					EXPCB1260_00007	2 mL	Aroclor-1260	10 ug/mL
.EXPCB1016_00006	12/20/23	AccuStandard, Inc., Lot 213121297			(Purchased Reagent)		Aroclor-1016	5000 ug/mL
.EXPCB1260_00007	02/07/23	AccuStandard, Lot B3020274-1A			(Purchased Reagent)		Aroclor-1260	5000 ug/mL
EX2/.2SURRW_00053	06/10/16	03/24/15	MEOH, Lot 0000085233	2000 mL	EXPESTSURR_00001	2 mL	DCB Decachlorobiphenyl	0.2 ug/mL
							Tetrachloro-m-xylene	0.2 ug/mL
.EXPESTSURR_00001	05/31/21	Restek, Lot A0108779			(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
EXBenzaldehyd_00019	05/28/15	03/23/15	MEOH, Lot 0000085233	200 mL	SMLIST1 S8_00002	4 mL	Benzaldehyde	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
.SMLIST1 S8_00002	05/28/15	Restek, Lot A0103145			(Purchased Reagent)		Benzaldehyde	2000 ug/mL
							Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
EXBNASPIKE_00038	07/30/15	03/25/15	MEOH, Lot 0000085233	200 mL	SMLIST1 S1_00004	4 mL	1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Diphenylhydrazine	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,3-Dinitrobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							1,4-Dioxane	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2,3,4,6-Tetrachlorophenol	20 ug/mL
							2,4,5-Trichlorophenol	20 ug/mL
							2,4,6-Trichlorophenol	20 ug/mL
							2,4-Dichlorophenol	20 ug/mL
							2,4-Dimethylphenol	20 ug/mL
							2,4-Dinitrophenol	40 ug/mL
							2,4-Dinitrotoluene	20 ug/mL
							2,6-Dinitrotoluene	20 ug/mL
							2-Chloronaphthalene	20 ug/mL
							2-Chlorophenol	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							2-Methylphenol	20 ug/mL
							2-Nitroaniline	20 ug/mL
							2-Nitrophenol	20 ug/mL
							3 & 4 Methylphenol	20 ug/mL
							3-Nitroaniline	20 ug/mL
							4,6-Dinitro-2-methylphenol	40 ug/mL
							4-Bromophenyl phenyl ether	20 ug/mL
							4-Chloro-3-methylphenol	20 ug/mL
							4-Chloroaniline	20 ug/mL
							4-Chlorophenyl phenyl ether	20 ug/mL
							4-Nitroaniline	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrophenol	40 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Acetophenone	20 ug/mL
							Aniline	20 ug/mL
							Anthracene	20 ug/mL
							Azobenzene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Benzyl alcohol	20 ug/mL
							bis (2-chloroisopropyl) ether	20 ug/mL
							Bis(2-chloroethoxy)methane	20 ug/mL
							Bis(2-chloroethyl)ether	20 ug/mL
							Bis(2-ethylhexyl) phthalate	20 ug/mL
							Butyl benzyl phthalate	20 ug/mL
							Carbazole	20 ug/mL
							Chrysene	20 ug/mL
							Di-n-butyl phthalate	20 ug/mL
							Di-n-octyl phthalate	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Dibenzofuran	20 ug/mL
							Diethyl phthalate	20 ug/mL
							Dimethyl phthalate	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Hexachlorobenzene	20 ug/mL
							Hexachlorobutadiene	20 ug/mL
							Hexachlorocyclopentadiene	20 ug/mL
							Hexachloroethane	20 ug/mL
							Hexadecane	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Isophorone	20 ug/mL
							n-Decane	20 ug/mL
							N-Nitrosodi-n-propylamine	20 ug/mL
							N-Nitrosodimethylamine	20 ug/mL
							n-Octadecane	20 ug/mL
							Naphthalene	20 ug/mL
							Nitrobenzene	20 ug/mL
							Pentachlorophenol	40 ug/mL
							Phenanthrene	20 ug/mL
							Phenol	20 ug/mL
							Pyrene	20 ug/mL
							Pyridine	20 ug/mL
					SMLIST1 S2_00008	4 mL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SMLIST1 S7_00001	4 mL	N-Nitrosodiphenylamine	40 ug/mL
.SMLIST1 S1_00004	08/31/15		Restek, Lot A0101615		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
.SMLIST1 S2_00008	07/30/15		Restek, Lot A0100824		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
.SMLIST1 S7_00001	02/28/17		Restek, Lot A0101573		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
EXBNASURR W_00021	06/10/16	03/16/15	MEOH, Lot 85233	2000 mL	SMLIST1 SURR_00003	8 mL	2,4,6-Tribromophenol (Surr)	20 ug/mL
							2-Fluorobiphenyl (Surr)	20 ug/mL
							2-Fluorophenol (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20 ug/mL
							Phenol-d5 (Surr)	20 ug/mL
							Terphenyl-d14 (Surr)	20 ug/mL
.SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
exNPDES spike_00003	06/10/16	03/04/15	MEOH, Lot 82533	200 mL	exNPDES stock_00001	0.1 mL	4,4'-DDD	1 ug/mL
							4,4'-DDE	1 ug/mL
							4,4'-DDT	1 ug/mL
							Aldrin	1 ug/mL
							alpha-BHC	1 ug/mL
							alpha-Chlordane	1 ug/mL
							beta-BHC	1 ug/mL
							delta-BHC	1 ug/mL
							Dieldrin	1 ug/mL
							Endosulfan I	1 ug/mL
							Endosulfan II	1 ug/mL
							Endosulfan sulfate	1 ug/mL
							Endrin	1 ug/mL
							Endrin aldehyde	1 ug/mL
							Endrin ketone	1 ug/mL
							gamma-BHC (Lindane)	1 ug/mL
							gamma-Chlordane	1 ug/mL
							Heptachlor	1 ug/mL
							Heptachlor epoxide	1 ug/mL
							Methoxychlor	1 ug/mL
.exNPDES stock_00001	02/28/18		Restek, Lot A0101246		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
MT1TO1HN03_00946	04/15/15	04/15/15	DIWATER, Lot DI WATER	600 mL	MTTMHNO3_00054	300 mL	Nitric acid	0.5 mL/mL
.MTTMHNO3_00054	04/07/17		Macron/Avantor, Lot 0000104740		(Purchased Reagent)		Nitric acid	100 %
MT1TO1HN03_00947	04/16/15	04/16/15	DIWATER, Lot DI WATER	800 mL	MTTMHNO3_00054	400 mL	Nitric acid	0.5 mL/mL
.MTTMHNO3_00054	04/07/17		Macron/Avantor, Lot 0000104740		(Purchased Reagent)		Nitric acid	100 %

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MT1TO1HN03_00949	04/20/15	04/20/15	DIWATER, Lot DI WATER	800 mL	MTTMHNO3_00054	400 mL	Nitric acid	0.5 mL/mL
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_00995	04/15/15	04/15/15	NA, Lot NA	80 mL	MTTMHCL_00062	60 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00053	20 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00062	04/02/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00053	03/24/17	Macron/Avantor, Lot 0000093717			(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_00996	04/15/15	04/15/15	NA, Lot NA	200 mL	MTTMHCL_00062	150 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00054	50 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00062	04/02/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_00997	04/16/15	04/16/15	NA, Lot NA	360 mL	MTTMHCL_00062	270 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00054	90 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00062	04/02/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_01001	04/20/15	04/20/15	NA, Lot NA	80 mL	MTTMHCL_00062	60 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00054	20 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00062	04/02/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_01002	04/20/15	04/20/15	NA, Lot NA	320 mL	MTTMHCL_00062	240 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00054	80 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00062	04/02/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTH202_00041	05/13/16	Macron, Lot 0000079375			(Purchased Reagent)		Hydrogen Peroxide	30 %
MTH202_00042	10/01/16	Macron, Lot 0000092419			(Purchased Reagent)		Hydrogen Peroxide	30 %
MTHGCALW_00881	04/15/15	04/15/15	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00016	1 mL	Mercury	100 ug/L
					MTTMHNO3_00053	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00016	05/09/17	INORGANIC VENTURES, Lot H2-HG02126			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00053	03/24/17	Macron/Avantor, Lot 0000093717			(Purchased Reagent)		Nitric acid	100 %
MTHGCALW_00883	04/16/15	04/16/15	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00016	1 mL	Mercury	100 ug/L
					MTTMHNO3_00054	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00016	05/09/17	INORGANIC VENTURES, Lot H2-HG02126			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTHGCALW_00885	04/20/15	04/20/15	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00016	1 mL	Mercury	100 ug/L
					MTTMHNO3_00054	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00016	05/09/17	INORGANIC VENTURES, Lot H2-HG02126			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTHgStd_00016	10/07/15	HPS, Lot 1509117			(Purchased Reagent)		Mercury	1 ug/mL
MTICPMS2_00020	02/01/16	Inorganic Ventures, Lot H2-MEB559070			(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MTICPMS2_00021	05/01/16	Inorganic Ventures, Lot J2-MEB574105			(Purchased Reagent)		Iron	1000 ug/mL
MTICPMSA_00021	12/15/15	High Purity Standards, Lot 1434610			(Purchased Reagent)		Arsenic	10 ug/mL
							B	10 ug/mL
							Barium	10 ug/mL
							Beryllium	10 ug/mL
							Cadmium	10 ug/mL
							Chromium	10 ug/mL
							Cobalt	10 ug/mL
							Copper	10 ug/mL
							Lead	10 ug/mL
							Manganese	10 ug/mL
							Nickel	10 ug/mL
							Selenium	10 ug/mL
							Sr	10 ug/mL
							Thallium	10 ug/mL
							Vanadium	10 ug/mL
							Zinc	10 ug/mL
MTICPMSA_00022	02/01/16	Inorganic Ventures, Lot H2-MEB552051			(Purchased Reagent)		Arsenic	100 ug/mL
							Barium	100 ug/mL
							Beryllium	100 ug/mL
							Cadmium	100 ug/mL
							Chromium	100 ug/mL
							Cobalt	100 ug/mL
							Copper	100 ug/mL
							Lead	100 ug/mL
							Manganese	100 ug/mL
							Nickel	100 ug/mL
							Selenium	100 ug/mL
							Sr	100 ug/mL
							Thallium	25 ug/mL
							Vanadium	100 ug/mL
							Zinc	100 ug/mL
MTICPMSA_00023	05/01/16	Inorganic Ventures, Lot H2-MEB552051			(Purchased Reagent)		Lead	100 ug/mL
							Manganese	100 ug/mL
MTICPMSB_00021	12/15/15	High Purity Standards, Lot 1434611			(Purchased Reagent)		Antimony	10 ug/mL
							Mo	10 ug/mL
							Silver	10 ug/mL
							Sn	10 ug/mL
							Ti	10 ug/mL
							W	10 ug/mL
							Zr	10 ug/mL
MTICPMSB_00022	02/01/16	Inorganic Ventures, Lot H2-MEB559071			(Purchased Reagent)		Antimony	10 ug/mL
							B	10 ug/mL
							Mo	10 ug/mL
							Silver	10 ug/mL
							Sn	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ti	10 ug/mL
							W	10 ug/mL
MTKMN04W_00081	04/07/17	04/07/15	DIWATER, Lot DIWATER	2.5 L	MTKMN04_00022	125 g	Potassium Permanganate	0.05 g/g
.MTKMN04_00022	02/18/20	Fisher, Lot 121666			(Purchased Reagent)		Potassium Permanganate	1 g/g
MTMSCAL2CCVW_00110	10/01/15	03/10/15	DIWATER, Lot DIWATER	500 mL	MTMSCAL3_00008	5 mL	Aluminum	250 ug/L
							Arsenic	50 ug/L
							Barium	50 ug/L
							Beryllium	50 ug/L
							Cadmium	50 ug/L
							Calcium	25000 ug/L
							Chromium	50 ug/L
							Cobalt	50 ug/L
							Copper	50 ug/L
							Iron	12500 ug/L
							Lead	50 ug/L
							Magnesium	25000 ug/L
							Manganese	250 ug/L
							Nickel	50 ug/L
							Potassium	25000 ug/L
							Selenium	50 ug/L
							Silver	50 ug/L
							Sodium	25000 ug/L
							Thallium	50 ug/L
							Vanadium	50 ug/L
							Zinc	50 ug/L
					MTMSCAL4_00009	5 mL	Antimony	50 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCAL2CCVW_00116	10/01/15	04/09/15	DIWATER, Lot DIWATER	500 mL	MTMSCAL3_00008	5 mL	Aluminum	250 ug/L
							Arsenic	50 ug/L
							Barium	50 ug/L
							Beryllium	50 ug/L
							Cadmium	50 ug/L
							Calcium	25000 ug/L
							Chromium	50 ug/L
							Cobalt	50 ug/L
							Copper	50 ug/L
							Iron	12500 ug/L
							Lead	50 ug/L
							Magnesium	25000 ug/L
							Manganese	250 ug/L
							Nickel	50 ug/L
							Potassium	25000 ug/L
							Selenium	50 ug/L
							Silver	50 ug/L
							Sodium	25000 ug/L
							Thallium	50 ug/L
							Vanadium	50 ug/L
							Zinc	50 ug/L
					MTMSCAL4_00009	5 mL	Antimony	50 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCAL3W_00039	10/01/15	03/11/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL3_00008	5 mL	Aluminum	500 ug/L
							Arsenic	100 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Barium	100 ug/L
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Calcium	50000 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Iron	25000 ug/L
							Lead	100 ug/L
							Magnesium	50000 ug/L
							Manganese	500 ug/L
							Nickel	100 ug/L
							Potassium	50000 ug/L
							Selenium	100 ug/L
							Silver	100 ug/L
							Sodium	50000 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L
							Zinc	100 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
MTMSCAL4W_00035	10/01/15	03/11/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL4_00009	5 mL	Antimony	100 ug/L
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCRI6020AW_00019	05/18/15	03/16/15	DIWATER, Lot DIWATER	500 mL	MS6020ACRIA_00002	0.5 mL	Aluminum	50 ug/L
							Arsenic	5 ug/L
							Barium	5 ug/L
							Beryllium	1 ug/L
							Cadmium	1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Calcium	1000 ug/L
							Chromium	2 ug/L
							Cobalt	1 ug/L
							Copper	2 ug/L
							Iron	100 ug/L
							Lead	1 ug/L
							Magnesium	1000 ug/L
							Manganese	5 ug/L
							Nickel	2 ug/L
							Potassium	1000 ug/L
							Selenium	5 ug/L
							Sodium	1000 ug/L
							Thallium	2 ug/L
							Vanadium	5 ug/L
							Zinc	20 ug/L
					MS6020ACRIB_00002	0.5 mL	Antimony	2 ug/L
					MTAGSPIKEW_00045	0.2 mL	Silver	1 ug/L
.MS6020ACRIA_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537060			(Purchased Reagent)		Aluminum	50 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	1 ug/mL
							Cadmium	1 ug/mL
							Calcium	1000 ug/mL
							Chromium	2 ug/mL
							Cobalt	1 ug/mL
							Copper	2 ug/mL
							Iron	100 ug/mL
							Lead	1 ug/mL
							Magnesium	1000 ug/mL
							Manganese	5 ug/mL
							Nickel	2 ug/mL
							Potassium	1000 ug/mL
							Selenium	5 ug/mL
							Sodium	1000 ug/mL
							Thallium	2 ug/mL
							Vanadium	5 ug/mL
							Zinc	20 ug/mL
.MS6020ACRIB_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537061			(Purchased Reagent)		Antimony	2 ug/mL
.MTAGSPIKEW_00045	05/18/15	11/18/14	DIWATER, Lot DIWATER	1000 mL	MTAG_00005	2.5 mL	Silver	2500 ug/L
..MTAG_00005	12/27/15	HIGH PURITY STANDARDS, Lot 1401302			(Purchased Reagent)		Silver	1000 ug/mL
MTMSCRI6020AW_00021	05/18/15	04/20/15	DIWATER, Lot DIWATER	500 mL	MS6020ACRIA_00002	0.5 mL	Aluminum	50 ug/L
							Arsenic	5 ug/L
							Barium	5 ug/L
							Beryllium	1 ug/L
							Cadmium	1 ug/L
							Calcium	1000 ug/L
							Chromium	2 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cobalt	1 ug/L
							Copper	2 ug/L
							Iron	100 ug/L
							Lead	1 ug/L
							Magnesium	1000 ug/L
							Manganese	5 ug/L
							Nickel	2 ug/L
							Potassium	1000 ug/L
							Selenium	5 ug/L
							Sodium	1000 ug/L
							Thallium	2 ug/L
							Vanadium	5 ug/L
							Zinc	20 ug/L
					MS6020ACRIB_00002	0.5 mL	Antimony	2 ug/L
					MTAGSPIKEW_00045	0.2 mL	Silver	1 ug/L
.MS6020ACRIA_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537060			(Purchased Reagent)		Aluminum	50 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	1 ug/mL
							Cadmium	1 ug/mL
							Calcium	1000 ug/mL
							Chromium	2 ug/mL
							Cobalt	1 ug/mL
							Copper	2 ug/mL
							Iron	100 ug/mL
							Lead	1 ug/mL
							Magnesium	1000 ug/mL
							Manganese	5 ug/mL
							Nickel	2 ug/mL
							Potassium	1000 ug/mL
							Selenium	5 ug/mL
							Sodium	1000 ug/mL
							Thallium	2 ug/mL
							Vanadium	5 ug/mL
							Zinc	20 ug/mL
.MS6020ACRIB_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537061			(Purchased Reagent)		Antimony	2 ug/mL
.MTAGSPIKEW_00045	05/18/15	11/18/14	DIWATER, Lot DIWATER	1000 mL	MTAG_00005	2.5 mL	Silver	2500 ug/L
..MTAG_00005	12/27/15	HIGH PURITY STANDARDS, Lot 1401302			(Purchased Reagent)		Silver	1000 ug/mL
MTMSICSABW_00043	05/01/15	02/20/15	DIWATER, Lot DIWATER	200 mL	MTMSICSA_00009	10 mL	Aluminum	50000 ug/L
							Calcium	50000 ug/L
							Iron	50000 ug/L
							Magnesium	50000 ug/L
							Mo	1100 ug/L
							Potassium	50000 ug/L
							Sodium	50000 ug/L
							Ti	1100 ug/L
					MTMSICSABSOLA_00006	1 mL	Arsenic	100 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							B	100 ug/L
							Barium	100 ug/L
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Lead	100 ug/L
							Manganese	100 ug/L
							Nickel	100 ug/L
							Selenium	100 ug/L
							Sr	100 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L
							Zinc	100 ug/L
					MTMSICSABSOLB_00006	1 mL	Antimony	100 ug/L
							Mo	1100 ug/L
							Silver	100 ug/L
							Sn	100 ug/L
							Ti	1100 ug/L
							W	100 ug/L
.MTMSICSA_00009	05/01/15	INORGANIC VENTURES, Lot G2-MEB476152MCA			(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Mo	20 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
							Ti	20 ug/mL
.MTMSICSABSOLA_00006	02/10/16	HIGH PURITY STANDARDS, Lot 1503726			(Purchased Reagent)		Arsenic	20 ug/mL
							B	20 ug/mL
							Barium	20 ug/mL
							Beryllium	20 ug/mL
							Cadmium	20 ug/mL
							Chromium	20 ug/mL
							Cobalt	20 ug/mL
							Copper	20 ug/mL
							Lead	20 ug/mL
							Manganese	20 ug/mL
							Nickel	20 ug/mL
							Selenium	20 ug/mL
							Sr	20 ug/mL
							Thallium	20 ug/mL
							Vanadium	20 ug/mL
							Zinc	20 ug/mL
.MTMSICSABSOLB_00006	02/10/16	HIGH PURITY STANDARDS, Lot 1504002			(Purchased Reagent)		Antimony	20 ug/mL
							Mo	20 ug/mL
							Silver	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sn	20 ug/mL
							Ti	20 ug/mL
							W	20 ug/mL
MTMSICSAW_00044	05/01/15	03/16/15	DIWATER, Lot DIWATER	200 mL	MTMSICSA_00009	10 mL	Aluminum	50000 ug/L
							Calcium	50000 ug/L
							Iron	50000 ug/L
							Magnesium	50000 ug/L
							Mo	1000 ug/L
							Potassium	50000 ug/L
							Sodium	50000 ug/L
							Ti	1000 ug/L
.MTMSICSA_00009	05/01/15	INORGANIC VENTURES, Lot G2-MEB476152MCA			(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Mo	20 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
							Ti	20 ug/mL
MTMSICVW_00043	08/01/15	03/11/15	DIWATER, Lot DIWATER	250 mL	MTMSICVA_00005	2.5 mL	Aluminum	200 ug/L
							Antimony	40 ug/L
							Arsenic	40 ug/L
							Barium	40 ug/L
							Beryllium	40 ug/L
							Cadmium	40 ug/L
							Chromium	40 ug/L
							Cobalt	40 ug/L
							Copper	40 ug/L
							Lead	40 ug/L
							Manganese	200 ug/L
							Nickel	40 ug/L
							Selenium	40 ug/L
							Silver	40 ug/L
							Thallium	40 ug/L
							Vanadium	40 ug/L
							Zinc	40 ug/L
					MTMSICVB_00005	2.5 mL	Calcium	20000 ug/L
							Iron	10000 ug/L
							Magnesium	20000 ug/L
							Potassium	20000 ug/L
							Sodium	20000 ug/L
.MTMSICVA_00005	08/01/15	CPI, Lot 1063211			(Purchased Reagent)		Aluminum	20 mg/L
							Antimony	4 mg/L
							Arsenic	4 mg/L
							Barium	4 mg/L
							Beryllium	4 mg/L
							Cadmium	4 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chromium	4 mg/L
							Cobalt	4 mg/L
							Copper	4 mg/L
							Lead	4 mg/L
							Manganese	20 mg/L
							Nickel	4 mg/L
							Selenium	4 mg/L
							Silver	4 mg/L
							Thallium	4 mg/L
							Vanadium	4 mg/L
							Zinc	4 mg/L
.MTMSICVB_00005	08/01/15	CPI, Lot 1063211			(Purchased Reagent)		Calcium	2000 mg/L
							Iron	1000 mg/L
							Magnesium	2000 mg/L
							Potassium	2000 mg/L
							Sodium	2000 mg/L
MTMSSCAL1_00014	10/01/15	03/11/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL3_00008	0.5 mL	Aluminum	50 ug/L
							Arsenic	10 ug/L
							Barium	10 ug/L
							Beryllium	10 ug/L
							Cadmium	10 ug/L
							Calcium	5000 ug/L
							Chromium	10 ug/L
							Cobalt	10 ug/L
							Copper	10 ug/L
							Iron	2500 ug/L
							Lead	10 ug/L
							Magnesium	5000 ug/L
							Manganese	50 ug/L
							Nickel	10 ug/L
							Potassium	5000 ug/L
							Selenium	10 ug/L
							Silver	10 ug/L
							Sodium	5000 ug/L
							Thallium	10 ug/L
							Vanadium	10 ug/L
							Zinc	10 ug/L
					MTMSCAL4_00009	0.5 mL	Antimony	10 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTTMHCL_00062	04/02/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
MTTMHCL_00063	04/15/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
SG1221ICV@1.0_00003	07/06/15	01/06/15	HEXANE, Lot 0000086560	10 mL	SG1221ICV@10_00002	1 mL	Aroclor-1221	1 ug/mL
.SG1221ICV@10_00002	07/06/15	01/06/15	HEXANE, Lot 0000086560	10 mL	SG1221ICV@100_00001	1 mL	Aroclor-1221	10 ug/mL
..SG1221ICV@100_00001	08/20/15	08/20/14	HEXANE, Lot 0000075731	10 mL	SG 1221 ICV_00007	1 mL	Aroclor-1221	100 ug/mL
...SG 1221 ICV_00007	06/30/19	restek, Lot a094157			(Purchased Reagent)		Aroclor-1221	1000 ug/mL
SG1232ICV@1.0_00004	07/06/15	01/06/15	HEXANE, Lot 0000086560	10 mL	SG1232ICV@10_00003	1 mL	Aroclor-1232	1 ug/mL
.SG1232ICV@10_00003	07/06/15	01/06/15	HEXANE, Lot 0000086560	10 mL	SG1232ICV@100_00002	1 mL	Aroclor-1232	10 ug/mL
..SG1232ICV@100_00002	08/22/15	08/22/14	HEXANE, Lot 0000075731	10 mL	SG 1232 ICV_00007	1 mL	Aroclor-1232	100 ug/mL
...SG 1232 ICV_00007	09/30/19	restek, Lot a095877			(Purchased Reagent)		Aroclor-1232	1000 ug/mL
SG1242ICV@1.0_00003	07/06/15	01/06/15	HEXANE, Lot 0000086560	10 mL	SG1242ICV@10_00003	1 mL	Aroclor-1242	1 ug/mL
.SG1242ICV@10_00003	07/06/15	01/06/15	HEXANE, Lot 0000086560	10 mL	SG1242ICV@100_00001	1 mL	Aroclor-1242	10 ug/mL
..SG1242ICV@100_00001	08/20/15	08/20/14	HEXANE, Lot 0000075731	10 mL	SG 1242 ICV_00006	1 mL	Aroclor-1242	100 ug/mL
...SG 1242 ICV_00006	09/30/19	restek, Lot a095785			(Purchased Reagent)		Aroclor-1242	1000 ug/mL
SG1248@.05ppm_00015	09/09/15	03/10/15	HEXANE, Lot 0000086559	100 mL	SG1248@10ppm_00006	0.5 mL	PCB-1248 Peak 1	0.05 ug/mL
							PCB-1248 Peak 2	0.05 ug/mL
							PCB-1248 Peak 3	0.05 ug/mL
							PCB-1248 Peak 4	0.05 ug/mL
							PCB-1248 Peak 5	0.05 ug/mL
.SG1248@10ppm_00006	09/09/15	09/09/14	Hexane, Lot 0000078259	100 mL	SG1248_00003	1 mL	PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL
..SG1248_00003	04/30/18	Restek, Lot A086044			(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
SG1248@0.1PPM_00012	09/09/15	03/10/15	HEXANE, Lot 0000086559	100 mL	SG1248@10ppm_00006	1 mL	PCB-1248 Peak 1	0.1 ug/mL
							PCB-1248 Peak 2	0.1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1248 Peak 3	0.1 ug/mL
							PCB-1248 Peak 4	0.1 ug/mL
							PCB-1248 Peak 5	0.1 ug/mL
.SG1248@10ppm_00006	09/09/15	09/09/14	Hexane, Lot 0000078259	100 mL	SG1248_00003	1 mL	PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL
..SG1248_00003	04/30/18		Restek, Lot A086044		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
SG1248@0.2ppm_00012	09/09/15	03/10/15	HEXANE, Lot 0000086559	100 mL	SG1248@10ppm_00006	2 mL	PCB-1248 Peak 1	0.2 ug/mL
							PCB-1248 Peak 2	0.2 ug/mL
							PCB-1248 Peak 3	0.2 ug/mL
							PCB-1248 Peak 4	0.2 ug/mL
							PCB-1248 Peak 5	0.2 ug/mL
.SG1248@10ppm_00006	09/09/15	09/09/14	Hexane, Lot 0000078259	100 mL	SG1248_00003	1 mL	PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL
..SG1248_00003	04/30/18		Restek, Lot A086044		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
SG1248@0.5ppm_00015	06/01/15	12/01/14	HEXANE, Lot 00000078259	100 mL	SG1248@10ppm_00006	5 mL	PCB-1248 Peak 1	0.5 ug/mL
							PCB-1248 Peak 2	0.5 ug/mL
							PCB-1248 Peak 3	0.5 ug/mL
							PCB-1248 Peak 4	0.5 ug/mL
							PCB-1248 Peak 5	0.5 ug/mL
.SG1248@10ppm_00006	09/09/15	09/09/14	Hexane, Lot 0000078259	100 mL	SG1248_00003	1 mL	PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL
..SG1248_00003	04/30/18		Restek, Lot A086044		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
SG1248@1.0ppm_00010	09/09/15	03/10/15	HEXANE, Lot 0000086559	100 mL	SG1248@10ppm_00006	10 mL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1248 Peak 5	1 ug/mL
.SG1248@10ppm_00006	09/09/15	09/09/14	Hexane, Lot 0000078259	100 mL	SG1248_00003	1 mL	PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL
..SG1248_00003	04/30/18		Restek, Lot A086044		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
SG1248@2.0ppm_00010	09/09/15	03/10/15	HEXANE, Lot 0000086559	100 mL	SG1248@10ppm_00006	20 mL	PCB-1248 Peak 1	2 ug/mL
							PCB-1248 Peak 2	2 ug/mL
							PCB-1248 Peak 3	2 ug/mL
							PCB-1248 Peak 4	2 ug/mL
							PCB-1248 Peak 5	2 ug/mL
.SG1248@10ppm_00006	09/09/15	09/09/14	Hexane, Lot 0000078259	100 mL	SG1248_00003	1 mL	PCB-1248 Peak 1	10 ug/mL
							PCB-1248 Peak 2	10 ug/mL
							PCB-1248 Peak 3	10 ug/mL
							PCB-1248 Peak 4	10 ug/mL
							PCB-1248 Peak 5	10 ug/mL
..SG1248_00003	04/30/18		Restek, Lot A086044		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
SG1248ICV@1.0_00003	07/06/15	01/06/15	HEXANE, Lot 0000086560	10 mL	SG1248ICV@10_00002	1 mL	Aroclor-1248	1 ug/mL
.SG1248ICV@10_00002	07/06/15	01/06/15	HEXANE, Lot 0000086560	10 mL	SG1248ICV@100_00001	1 mL	Aroclor-1248	10 ug/mL
..SG1248ICV@100_00001	08/20/15	08/20/14	HEXANE, Lot 0000075731	10 mL	SG 1248 ICV_00006	1 mL	Aroclor-1248	100 ug/mL
...SG 1248 ICV_00006	06/30/19		restek, Lot a094339		(Purchased Reagent)		Aroclor-1248	1000 ug/mL
SG1254ICV@1.0_00004	07/06/15	01/06/15	HEXANE, Lot 0000086560	10 mL	SG1254@10_00003	1 mL	Aroclor-1254	1 ug/mL
.SG1254@10_00003	07/06/15	01/06/15	HEXANE, Lot 0000086560	10 mL	SG1254ICV@100_00002	1 mL	Aroclor-1254	10 ug/mL
..SG1254ICV@100_00002	08/22/15	08/22/14	HEXANE, Lot 0000075731	10 mL	SG 1254 ICV_00007	1 mL	Aroclor-1254	100 ug/mL
...SG 1254 ICV_00007	09/30/19		restek, Lot a095778		(Purchased Reagent)		Aroclor-1254	1000 ug/mL
SG1660@.05PPM_00012	07/01/15	01/08/15	HEXANE, Lot 0000086560	100 mL	SG1016/1260_00012	0.5 mL	PCB-1016 Peak 1	0.05 ug/mL
							PCB-1016 Peak 2	0.05 ug/mL
							PCB-1016 Peak 3	0.05 ug/mL
							PCB-1016 Peak 4	0.05 ug/mL
							PCB-1016 Peak 5	0.05 ug/mL
							PCB-1260 Peak 1	0.05 ug/mL
							PCB-1260 Peak 2	0.05 ug/mL
							PCB-1260 Peak 3	0.05 ug/mL
							PCB-1260 Peak 4	0.05 ug/mL
							PCB-1260 Peak 5	0.05 ug/mL
					SGPCGSURRSTK_00005	0.125 mL	DCB Decachlorobiphenyl	0.0025 ug/mL
							Tetrachloro-m-xylene	0.0025 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SG1016/1260_00012	08/25/15	08/25/14	HEXANE, Lot 0000075731	100 mL	SG1016/1260MX_00006	1 mL	PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00006	04/30/19		Restek, Lot a092844		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCGSURRSTK_00005	07/31/15	07/31/14	HEXANE, Lot 0000075731	100 mL	SGPCBSURRMX_00007	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPCBSURRMX_00007	03/31/19		restek, Lot a092533		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG1660@.05PPM_00012	07/01/15	01/08/15	HEXANE, Lot 0000086560	100 mL	SG1016/1260_00012	0.5 mL	Aroclor-1016	0.05 ug/mL
							Aroclor-1260	0.05 ug/mL
.SG1016/1260_00012	08/25/15	08/25/14	HEXANE, Lot 0000075731	100 mL	SG1016/1260MX_00006	1 mL	Aroclor-1016	10 ug/mL
							Aroclor-1260	10 ug/mL
..SG1016/1260MX_00006	04/30/19		Restek, Lot a092844		(Purchased Reagent)		Aroclor-1016	1000 ug/mL
							Aroclor-1260	1000 ug/mL
SG1660@0.2ppm_00011	07/31/15	02/23/15	HEXANE, Lot 86559	100 mL	SG1016/1260_00013	2 mL	PCB-1016 Peak 1	0.2 ug/mL
							PCB-1016 Peak 2	0.2 ug/mL
							PCB-1016 Peak 3	0.2 ug/mL
							PCB-1016 Peak 4	0.2 ug/mL
							PCB-1016 Peak 5	0.2 ug/mL
							PCB-1260 Peak 1	0.2 ug/mL
							PCB-1260 Peak 2	0.2 ug/mL
							PCB-1260 Peak 3	0.2 ug/mL
							PCB-1260 Peak 4	0.2 ug/mL
							PCB-1260 Peak 5	0.2 ug/mL
					SGPCGSURRSTK_00005	0.5 mL	DCB Decachlorobiphenyl	0.01 ug/mL
							Tetrachloro-m-xylene	0.01 ug/mL
.SG1016/1260_00013	01/12/16	01/12/15	HEXANE, Lot 0000086560	100 mL	SG1016/1260MX_00006	1 mL	PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00006	04/30/19		Restek, Lot a092844		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCGSURRSTK_00005	07/31/15	07/31/14	HEXANE, Lot 0000075731	100 mL	SGPCBSURRMX_00007	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPCBSURRMX_00007	03/31/19		restek, Lot a092533		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG1660@0.5PPM_00042	07/31/15	02/04/15	HEXANE, Lot 0000086560	200 mL	SG1016/1260_00013	10 mL	PCB-1016 Peak 1	0.5 ug/mL
							PCB-1016 Peak 2	0.5 ug/mL
							PCB-1016 Peak 3	0.5 ug/mL
							PCB-1016 Peak 4	0.5 ug/mL
							PCB-1016 Peak 5	0.5 ug/mL
							PCB-1260 Peak 1	0.5 ug/mL
							PCB-1260 Peak 2	0.5 ug/mL
							PCB-1260 Peak 3	0.5 ug/mL
							PCB-1260 Peak 4	0.5 ug/mL
							PCB-1260 Peak 5	0.5 ug/mL
					SGPCGSURRSTK_00005	2.5 mL	DCB Decachlorobiphenyl	0.025 ug/mL
							Tetrachloro-m-xylene	0.025 ug/mL
.SG1016/1260_00013	01/12/16	01/12/15	HEXANE, Lot 0000086560	100 mL	SG1016/1260MX_00006	1 mL	PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00006	04/30/19		Restek, Lot a092844		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCGSURRSTK_00005	07/31/15	07/31/14	HEXANE, Lot 0000075731	100 mL	SGPCBSURRMX_00007	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPCBSURRMX_00007	03/31/19		restek, Lot a092533		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG1660@0.5PPM_00044	07/31/15	03/17/15	HEXANE, Lot 0000086559	200 mL	SG1016/1260_00013	10 mL	Aroclor-1016	0.5 ug/mL
							Aroclor-1260	0.5 ug/mL
							PCB-1016 Peak 1	0.5 ug/mL
							PCB-1016 Peak 2	0.5 ug/mL
							PCB-1016 Peak 3	0.5 ug/mL
							PCB-1016 Peak 4	0.5 ug/mL
							PCB-1016 Peak 5	0.5 ug/mL
							PCB-1260 Peak 1	0.5 ug/mL
							PCB-1260 Peak 2	0.5 ug/mL
							PCB-1260 Peak 3	0.5 ug/mL
							PCB-1260 Peak 4	0.5 ug/mL
							PCB-1260 Peak 5	0.5 ug/mL
					SGPCGSURRSTK_00005	2.5 mL	DCB Decachlorobiphenyl	0.025 ug/mL
							Tetrachloro-m-xylene	0.025 ug/mL
.SG1016/1260_00013	01/12/16	01/12/15	HEXANE, Lot 0000086560	100 mL	SG1016/1260MX_00006	1 mL	Aroclor-1016	10 ug/mL
							Aroclor-1260	10 ug/mL
							PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00006	04/30/19		Restek, Lot a092844		(Purchased Reagent)		Aroclor-1016	1000 ug/mL
							Aroclor-1260	1000 ug/mL
							PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCGSURRSTK_00005	07/31/15	07/31/14	HEXANE, Lot 0000075731	100 mL	SGPCBSURRMX_00007	1 mL	DCB Decachlorobiphenyl	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloro-m-xylene	2 ug/mL
..SGPCBSURRMX_00007	03/31/19		restek, Lot a092533		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG1660@1.0PPM_00011	07/31/15	02/23/15	HEXANE, Lot 86559	100 mL	SG1016/1260_00013	10 mL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
							PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					SGPCGSURRSTK_00005	2.5 mL	DCB Decachlorobiphenyl	0.05 ug/mL
							Tetrachloro-m-xylene	0.05 ug/mL
.SG1016/1260_00013	01/12/16	01/12/15	HEXANE, Lot 0000086560	100 mL	SG1016/1260MX_00006	1 mL	PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00006	04/30/19		Restek, Lot a092844		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCGSURRSTK_00005	07/31/15	07/31/14	HEXANE, Lot 0000075731	100 mL	SGPCBSURRMX_00007	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPCBSURRMX_00007	03/31/19		restek, Lot a092533		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG1660@2.0PPM_00012	07/31/15	02/23/15	HEXANE, Lot 86559	100 mL	SG1016/1260_00013	20 mL	PCB-1016 Peak 1	2 ug/mL
							PCB-1016 Peak 2	2 ug/mL
							PCB-1016 Peak 3	2 ug/mL
							PCB-1016 Peak 4	2 ug/mL
							PCB-1016 Peak 5	2 ug/mL
							PCB-1260 Peak 1	2 ug/mL
							PCB-1260 Peak 2	2 ug/mL
							PCB-1260 Peak 3	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 4	2 ug/mL
							PCB-1260 Peak 5	2 ug/mL
					SGPCGSURRSTK_00005	5 mL	DCB Decachlorobiphenyl	0.1 ug/mL
							Tetrachloro-m-xylene	0.1 ug/mL
.SG1016/1260_00013	01/12/16	01/12/15	HEXANE, Lot 0000086560	100 mL	SG1016/1260MX_00006	1 mL	PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00006	04/30/19		Restek, Lot a092844		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCGSURRSTK_00005	07/31/15	07/31/14	HEXANE, Lot 0000075731	100 mL	SGPCBSURRMX_00007	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPCBSURRMX_00007	03/31/19		restek, Lot a092533		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG1660ICV@1.0_00004	07/05/15	01/05/15	HEXANE, Lot 0000086560	10 mL	SG1660ICV@10_00004	1 mL	Aroclor-1016	1 ug/mL
							Aroclor-1260	1 ug/mL
.SG1660ICV@10_00004	07/05/15	01/05/15	HEXANE, Lot 0000086560	10 mL	SG1660ICV@100_00002	1 mL	Aroclor-1016	10 ug/mL
							Aroclor-1260	10 ug/mL
..SG1660ICV@100_00002	08/22/15	08/22/14	HEXANE, Lot 0000075731	10 mL	SG 1660 ICV_00010	1 mL	Aroclor-1016	100 ug/mL
							Aroclor-1260	100 ug/mL
...SG 1660 ICV_00010	06/30/19		restek, Lot a094336		(Purchased Reagent)		Aroclor-1016	1000 ug/mL
							Aroclor-1260	1000 ug/mL
SG1660STD@0.1_00012	07/31/15	02/23/15	HEXANE, Lot 86559	100 mL	SG1016/1260_00013	1 mL	PCB-1016 Peak 1	0.1 ug/mL
							PCB-1016 Peak 2	0.1 ug/mL
							PCB-1016 Peak 3	0.1 ug/mL
							PCB-1016 Peak 4	0.1 ug/mL
							PCB-1016 Peak 5	0.1 ug/mL
							PCB-1260 Peak 1	0.1 ug/mL
							PCB-1260 Peak 2	0.1 ug/mL
							PCB-1260 Peak 3	0.1 ug/mL
							PCB-1260 Peak 4	0.1 ug/mL
							PCB-1260 Peak 5	0.1 ug/mL
					SGPCGSURRSTK_00005	0.25 mL	DCB Decachlorobiphenyl	0.005 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloro-m-xylene	0.005 ug/mL
.SG1016/1260_00013	01/12/16	01/12/15	HEXANE, Lot 0000086560	100 mL	SG1016/1260MX_00006	1 mL	PCB-1016 Peak 1	10 ug/mL
							PCB-1016 Peak 2	10 ug/mL
							PCB-1016 Peak 3	10 ug/mL
							PCB-1016 Peak 4	10 ug/mL
							PCB-1016 Peak 5	10 ug/mL
							PCB-1260 Peak 1	10 ug/mL
							PCB-1260 Peak 2	10 ug/mL
							PCB-1260 Peak 3	10 ug/mL
							PCB-1260 Peak 4	10 ug/mL
							PCB-1260 Peak 5	10 ug/mL
..SG1016/1260MX_00006	04/30/19		Restek, Lot a092844		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.SGPCGSURRSTK_00005	07/31/15	07/31/14	HEXANE, Lot 0000075731	100 mL	SGPCBSURRMX_00007	1 mL	DCB Decachlorobiphenyl	2 ug/mL
							Tetrachloro-m-xylene	2 ug/mL
..SGPCBSURRMX_00007	03/31/19		restek, Lot a092533		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SG2154@0.05PP_00008	05/22/15	12/22/14	HEXANE, Lot 000078259	100 mL	SG2154@10ppm_00008	0.5 mL	PCB-1221 Peak 1	0.05 ug/mL
							PCB-1221 Peak 2	0.05 ug/mL
							PCB-1221 Peak 3	0.05 ug/mL
							PCB-1254 Peak 1	0.05 ug/mL
							PCB-1254 Peak 2	0.05 ug/mL
							PCB-1254 Peak 3	0.05 ug/mL
							PCB-1254 Peak 4	0.05 ug/mL
							PCB-1254 Peak 5	0.05 ug/mL
.SG2154@10ppm_00008	12/22/15	12/22/14	HEXANE, Lot 0000078259	100 mL	SGPCB1221_00004	1 mL	PCB-1221 Peak 1	10 ug/mL
							PCB-1221 Peak 2	10 ug/mL
							PCB-1221 Peak 3	10 ug/mL
					SGPCB1254_00007	1 mL	PCB-1254 Peak 1	10 ug/mL
							PCB-1254 Peak 2	10 ug/mL
							PCB-1254 Peak 3	10 ug/mL
							PCB-1254 Peak 4	10 ug/mL
							PCB-1254 Peak 5	10 ug/mL
..SGPCB1221_00004	12/31/18		RESTEK, Lot a090667		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..SGPCB1254_00007	05/30/18		restek, Lot A093609		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
SG2154@0.2PPM_00009	05/22/15	12/22/14	HEXANE, Lot 0000078259	100 mL	SG2154@10ppm_00008	2 mL	PCB-1221 Peak 1	0.2 ug/mL
							PCB-1221 Peak 2	0.2 ug/mL
							PCB-1221 Peak 3	0.2 ug/mL
							PCB-1254 Peak 1	0.2 ug/mL
							PCB-1254 Peak 2	0.2 ug/mL
							PCB-1254 Peak 3	0.2 ug/mL
							PCB-1254 Peak 4	0.2 ug/mL
							PCB-1254 Peak 5	0.2 ug/mL
.SG2154@10ppm_00008	12/22/15	12/22/14	HEXANE, Lot 0000078259	100 mL	SGPCB1221_00004	1 mL	PCB-1221 Peak 1	10 ug/mL
							PCB-1221 Peak 2	10 ug/mL
							PCB-1221 Peak 3	10 ug/mL
					SGPCB1254_00007	1 mL	PCB-1254 Peak 1	10 ug/mL
							PCB-1254 Peak 2	10 ug/mL
							PCB-1254 Peak 3	10 ug/mL
							PCB-1254 Peak 4	10 ug/mL
							PCB-1254 Peak 5	10 ug/mL
..SGPCB1221_00004	12/31/18		RESTEK, Lot a090667		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..SGPCB1254_00007	05/30/18		restek, Lot A093609		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
SG2154@0.5PPM_00016	05/22/15	12/22/14	HEXANE, Lot 00000078259	100 mL	SG2154@10ppm_00008	5 mL	PCB-1221 Peak 1	0.5 ug/mL
							PCB-1221 Peak 2	0.5 ug/mL
							PCB-1221 Peak 3	0.5 ug/mL
							PCB-1254 Peak 1	0.5 ug/mL
							PCB-1254 Peak 2	0.5 ug/mL
							PCB-1254 Peak 3	0.5 ug/mL
							PCB-1254 Peak 4	0.5 ug/mL
							PCB-1254 Peak 5	0.5 ug/mL
.SG2154@10ppm_00008	12/22/15	12/22/14	HEXANE, Lot 0000078259	100 mL	SGPCB1221_00004	1 mL	PCB-1221 Peak 1	10 ug/mL
							PCB-1221 Peak 2	10 ug/mL
							PCB-1221 Peak 3	10 ug/mL
					SGPCB1254_00007	1 mL	PCB-1254 Peak 1	10 ug/mL
							PCB-1254 Peak 2	10 ug/mL
							PCB-1254 Peak 3	10 ug/mL
							PCB-1254 Peak 4	10 ug/mL
							PCB-1254 Peak 5	10 ug/mL
..SGPCB1221_00004	12/31/18		RESTEK, Lot a090667		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..SGPCB1254_00007	05/30/18		restek, Lot A093609		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
SG2154@1.0PPM_00010	05/22/15	12/22/14	HEXANE, Lot 0000078259	100 mL	SG2154@10ppm_00008	10 mL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
							PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
.SG2154@10ppm_00008	12/22/15	12/22/14	HEXANE, Lot 0000078259	100 mL	SGPCB1221_00004	1 mL	PCB-1221 Peak 1	10 ug/mL
							PCB-1221 Peak 2	10 ug/mL
							PCB-1221 Peak 3	10 ug/mL
					SGPCB1254_00007	1 mL	PCB-1254 Peak 1	10 ug/mL
							PCB-1254 Peak 2	10 ug/mL
							PCB-1254 Peak 3	10 ug/mL
							PCB-1254 Peak 4	10 ug/mL
							PCB-1254 Peak 5	10 ug/mL
..SGPCB1221_00004	12/31/18		RESTEK, Lot a090667		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..SGPCB1254_00007	05/30/18		restek, Lot A093609		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
SG2154@2.0PPM_00009	05/22/15	12/22/14	HEXANE, Lot 0000078259	100 mL	SG2154@10ppm_00008	20 mL	PCB-1221 Peak 1	2 ug/mL
							PCB-1221 Peak 2	2 ug/mL
							PCB-1221 Peak 3	2 ug/mL
							PCB-1254 Peak 1	2 ug/mL
							PCB-1254 Peak 2	2 ug/mL
							PCB-1254 Peak 3	2 ug/mL
							PCB-1254 Peak 4	2 ug/mL
							PCB-1254 Peak 5	2 ug/mL
.SG2154@10ppm_00008	12/22/15	12/22/14	HEXANE, Lot 0000078259	100 mL	SGPCB1221_00004	1 mL	PCB-1221 Peak 1	10 ug/mL
							PCB-1221 Peak 2	10 ug/mL
							PCB-1221 Peak 3	10 ug/mL
					SGPCB1254_00007	1 mL	PCB-1254 Peak 1	10 ug/mL
							PCB-1254 Peak 2	10 ug/mL
							PCB-1254 Peak 3	10 ug/mL
							PCB-1254 Peak 4	10 ug/mL
							PCB-1254 Peak 5	10 ug/mL
..SGPCB1221_00004	12/31/18		RESTEK, Lot a090667		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..SGPCB1254_00007	05/30/18		restek, Lot A093609		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
SG2154@0.1PPM_00010	05/22/15	12/22/14	HEXANE, Lot 0000078259	100 mL	SG2154@10ppm_00008	1 mL	PCB-1221 Peak 1	0.1 ug/mL
							PCB-1221 Peak 2	0.1 ug/mL
							PCB-1221 Peak 3	0.1 ug/mL
							PCB-1254 Peak 1	0.1 ug/mL
							PCB-1254 Peak 2	0.1 ug/mL
							PCB-1254 Peak 3	0.1 ug/mL
							PCB-1254 Peak 4	0.1 ug/mL
							PCB-1254 Peak 5	0.1 ug/mL
.SG2154@10ppm_00008	12/22/15	12/22/14	HEXANE, Lot 0000078259	100 mL	SGPCB1221_00004	1 mL	PCB-1221 Peak 1	10 ug/mL
							PCB-1221 Peak 2	10 ug/mL
							PCB-1221 Peak 3	10 ug/mL
					SGPCB1254_00007	1 mL	PCB-1254 Peak 1	10 ug/mL
							PCB-1254 Peak 2	10 ug/mL
							PCB-1254 Peak 3	10 ug/mL
							PCB-1254 Peak 4	10 ug/mL
							PCB-1254 Peak 5	10 ug/mL
..SGPCB1221_00004	12/31/18		RESTEK, Lot a090667		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..SGPCB1254_00007	05/30/18		restek, Lot A093609		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
SG3262@.05PPM_00002	05/30/15	12/31/14	HEXANE, Lot 0000078259	100 mL	SG32/6210PPM_00001	0.5 mL	PCB-1232 Peak 1	50 ug/L
							PCB-1232 Peak 2	50 ug/L
							PCB-1232 Peak 3	50 ug/L
							PCB-1232 Peak 4	50 ug/L
							PCB-1232 Peak 5	50 ug/L
							PCB-1262 Peak 1	50 ug/L
							PCB-1262 Peak 2	50 ug/L
							PCB-1262 Peak 3	50 ug/L
							PCB-1262 Peak 4	50 ug/L
							PCB-1262 Peak 5	50 ug/L
.SG32/6210PPM_00001	07/11/15	07/11/14	HEXANE, Lot 1561873	100 mL	SGPCB1232STD_00005	1 mL	PCB-1232 Peak 1	10000 ug/L
							PCB-1232 Peak 2	10000 ug/L
							PCB-1232 Peak 3	10000 ug/L
							PCB-1232 Peak 4	10000 ug/L
							PCB-1232 Peak 5	10000 ug/L
					SGPCB1262STD_00004	1 mL	PCB-1262 Peak 1	10000 ug/L
							PCB-1262 Peak 2	10000 ug/L
							PCB-1262 Peak 3	10000 ug/L
							PCB-1262 Peak 4	10000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1262 Peak 5	10000 ug/L
..SGPCB1232STD_00005	04/30/18		restek, Lot A086119		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..SGPCB1262STD_00004	03/31/19		restek, Lot A092660		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
SG3262@.2PPM_00002	05/30/15	12/31/14	HEXANE, Lot 0000078259	100 mL	SG32/6210PPM_00001	2 mL	PCB-1232 Peak 1	200 ug/L
							PCB-1232 Peak 2	200 ug/L
							PCB-1232 Peak 3	200 ug/L
							PCB-1232 Peak 4	200 ug/L
							PCB-1232 Peak 5	200 ug/L
							PCB-1262 Peak 1	200 ug/L
							PCB-1262 Peak 2	200 ug/L
							PCB-1262 Peak 3	200 ug/L
							PCB-1262 Peak 4	200 ug/L
							PCB-1262 Peak 5	200 ug/L
.SG32/6210PPM_00001	07/11/15	07/11/14	HEXANE, Lot 1561873	100 mL	SGPCB1232STD_00005	1 mL	PCB-1232 Peak 1	10000 ug/L
							PCB-1232 Peak 2	10000 ug/L
							PCB-1232 Peak 3	10000 ug/L
							PCB-1232 Peak 4	10000 ug/L
							PCB-1232 Peak 5	10000 ug/L
					SGPCB1262STD_00004	1 mL	PCB-1262 Peak 1	10000 ug/L
							PCB-1262 Peak 2	10000 ug/L
							PCB-1262 Peak 3	10000 ug/L
							PCB-1262 Peak 4	10000 ug/L
							PCB-1262 Peak 5	10000 ug/L
..SGPCB1232STD_00005	04/30/18		restek, Lot A086119		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..SGPCB1262STD_00004	03/31/19		restek, Lot A092660		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
SG3262@0.1PPM_00002	05/30/15	12/31/14	HEXANE, Lot 0000078259	100 mL	SG32/6210PPM_00001	1 mL	PCB-1232 Peak 1	100 ug/L
							PCB-1232 Peak 2	100 ug/L
							PCB-1232 Peak 3	100 ug/L
							PCB-1232 Peak 4	100 ug/L
							PCB-1232 Peak 5	100 ug/L
							PCB-1262 Peak 1	100 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1262 Peak 2	100 ug/L
							PCB-1262 Peak 3	100 ug/L
							PCB-1262 Peak 4	100 ug/L
							PCB-1262 Peak 5	100 ug/L
.SG32/6210PPM_00001	07/11/15	07/11/14	HEXANE, Lot 1561873	100 mL	SGPCB1232STD_00005	1 mL	PCB-1232 Peak 1	10000 ug/L
							PCB-1232 Peak 2	10000 ug/L
							PCB-1232 Peak 3	10000 ug/L
							PCB-1232 Peak 4	10000 ug/L
							PCB-1232 Peak 5	10000 ug/L
					SGPCB1262STD_00004	1 mL	PCB-1262 Peak 1	10000 ug/L
							PCB-1262 Peak 2	10000 ug/L
							PCB-1262 Peak 3	10000 ug/L
							PCB-1262 Peak 4	10000 ug/L
							PCB-1262 Peak 5	10000 ug/L
..SGPCB1232STD_00005	04/30/18		restek, Lot A086119		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..SGPCB1262STD_00004	03/31/19		restek, Lot A092660		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
SG3262@0.5PPM_00004	05/30/15	12/31/14	HEXANE, Lot 0000078259	100 mL	SG32/6210PPM_00001	5 mL	PCB-1232 Peak 1	500 ug/L
							PCB-1232 Peak 2	500 ug/L
							PCB-1232 Peak 3	500 ug/L
							PCB-1232 Peak 4	500 ug/L
							PCB-1232 Peak 5	500 ug/L
							PCB-1262 Peak 1	500 ug/L
							PCB-1262 Peak 2	500 ug/L
							PCB-1262 Peak 3	500 ug/L
							PCB-1262 Peak 4	500 ug/L
							PCB-1262 Peak 5	500 ug/L
.SG32/6210PPM_00001	07/11/15	07/11/14	HEXANE, Lot 1561873	100 mL	SGPCB1232STD_00005	1 mL	PCB-1232 Peak 1	10000 ug/L
							PCB-1232 Peak 2	10000 ug/L
							PCB-1232 Peak 3	10000 ug/L
							PCB-1232 Peak 4	10000 ug/L
							PCB-1232 Peak 5	10000 ug/L
					SGPCB1262STD_00004	1 mL	PCB-1262 Peak 1	10000 ug/L
							PCB-1262 Peak 2	10000 ug/L
							PCB-1262 Peak 3	10000 ug/L
							PCB-1262 Peak 4	10000 ug/L
							PCB-1262 Peak 5	10000 ug/L
..SGPCB1232STD_00005	04/30/18		restek, Lot A086119		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..SGPCB1262STD_00004	03/31/19		restek, Lot A092660		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
SG3262@1.0PPM_00002	05/30/15	12/31/14	HEXANE, Lot 0000078259	100 mL	SG32/6210PPM_00001	10 mL	PCB-1232 Peak 1	1000 ug/L
							PCB-1232 Peak 2	1000 ug/L
							PCB-1232 Peak 3	1000 ug/L
							PCB-1232 Peak 4	1000 ug/L
							PCB-1232 Peak 5	1000 ug/L
							PCB-1262 Peak 1	1000 ug/L
							PCB-1262 Peak 2	1000 ug/L
							PCB-1262 Peak 3	1000 ug/L
							PCB-1262 Peak 4	1000 ug/L
							PCB-1262 Peak 5	1000 ug/L
.SG32/6210PPM_00001	07/11/15	07/11/14	HEXANE, Lot 1561873	100 mL	SGPCB1232STD_00005	1 mL	PCB-1232 Peak 1	10000 ug/L
							PCB-1232 Peak 2	10000 ug/L
							PCB-1232 Peak 3	10000 ug/L
							PCB-1232 Peak 4	10000 ug/L
							PCB-1232 Peak 5	10000 ug/L
					SGPCB1262STD_00004	1 mL	PCB-1262 Peak 1	10000 ug/L
							PCB-1262 Peak 2	10000 ug/L
							PCB-1262 Peak 3	10000 ug/L
							PCB-1262 Peak 4	10000 ug/L
							PCB-1262 Peak 5	10000 ug/L
..SGPCB1232STD_00005	04/30/18		restek, Lot A086119		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..SGPCB1262STD_00004	03/31/19		restek, Lot A092660		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
SG3262@2.0ppm_00002	05/30/15	12/31/14	HEXANE, Lot 0000078259	100 mL	SG32/6210PPM_00001	20 mL	PCB-1232 Peak 1	2000 ug/L
							PCB-1232 Peak 2	2000 ug/L
							PCB-1232 Peak 3	2000 ug/L
							PCB-1232 Peak 4	2000 ug/L
							PCB-1232 Peak 5	2000 ug/L
							PCB-1262 Peak 1	2000 ug/L
							PCB-1262 Peak 2	2000 ug/L
							PCB-1262 Peak 3	2000 ug/L
							PCB-1262 Peak 4	2000 ug/L
							PCB-1262 Peak 5	2000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SG32/6210PPM_00001	07/11/15	07/11/14	HEXANE, Lot 1561873	100 mL	SGPCB1232STD_00005	1 mL	PCB-1232 Peak 1	10000 ug/L
							PCB-1232 Peak 2	10000 ug/L
							PCB-1232 Peak 3	10000 ug/L
							PCB-1232 Peak 4	10000 ug/L
							PCB-1232 Peak 5	10000 ug/L
					SGPCB1262STD_00004	1 mL	PCB-1262 Peak 1	10000 ug/L
							PCB-1262 Peak 2	10000 ug/L
							PCB-1262 Peak 3	10000 ug/L
							PCB-1262 Peak 4	10000 ug/L
							PCB-1262 Peak 5	10000 ug/L
..SGPCB1232STD_00005	04/30/18		restek, Lot A086119		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..SGPCB1262STD_00004	03/31/19		restek, Lot A092660		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
SG42/68@1.0PP_00003	07/02/15	01/02/15	HEXANE, Lot 0000078259	100 mL	SG42/6810PPM_00001	10 mL	PCB-1242 Peak 1	1000 ug/L
							PCB-1242 Peak 2	1000 ug/L
							PCB-1242 Peak 3	1000 ug/L
							PCB-1242 Peak 4	1000 ug/L
							PCB-1242 Peak 5	1000 ug/L
							PCB-1268 Peak 1	1000 ug/L
							PCB-1268 Peak 2	1000 ug/L
							PCB-1268 Peak 3	1000 ug/L
							PCB-1268 Peak 4	1000 ug/L
							PCB-1268 Peak 5	1000 ug/L
.SG42/6810PPM_00001	07/11/15	07/11/14	HEXANE, Lot 0000075731	100 mL	SG1242_00005	1 mL	PCB-1242 Peak 1	10000 ug/L
							PCB-1242 Peak 2	10000 ug/L
							PCB-1242 Peak 3	10000 ug/L
							PCB-1242 Peak 4	10000 ug/L
							PCB-1242 Peak 5	10000 ug/L
					SGpcb1268std_00005	1 mL	PCB-1268 Peak 1	10000 ug/L
							PCB-1268 Peak 2	10000 ug/L
							PCB-1268 Peak 3	10000 ug/L
							PCB-1268 Peak 4	10000 ug/L
							PCB-1268 Peak 5	10000 ug/L
..SG1242_00005	11/30/18		Restek, Lot A090182		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..SGpcb1268std_00005	01/31/19		Restek, Lot a091468		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
SG4268@.05PPM_00003	07/02/15	01/02/15	HEXANE, Lot 0000078259	100 mL	SG42/6810PPM_00001	0.5 mL	PCB-1242 Peak 1	50 ug/L
							PCB-1242 Peak 2	50 ug/L
							PCB-1242 Peak 3	50 ug/L
							PCB-1242 Peak 4	50 ug/L
							PCB-1242 Peak 5	50 ug/L
							PCB-1268 Peak 1	50 ug/L
							PCB-1268 Peak 2	50 ug/L
							PCB-1268 Peak 3	50 ug/L
							PCB-1268 Peak 4	50 ug/L
							PCB-1268 Peak 5	50 ug/L
.SG42/6810PPM_00001	07/11/15	07/11/14	HEXANE, Lot 0000075731	100 mL	SG1242_00005	1 mL	PCB-1242 Peak 1	10000 ug/L
							PCB-1242 Peak 2	10000 ug/L
							PCB-1242 Peak 3	10000 ug/L
							PCB-1242 Peak 4	10000 ug/L
							PCB-1242 Peak 5	10000 ug/L
					SGpcb1268std_00005	1 mL	PCB-1268 Peak 1	10000 ug/L
							PCB-1268 Peak 2	10000 ug/L
							PCB-1268 Peak 3	10000 ug/L
							PCB-1268 Peak 4	10000 ug/L
							PCB-1268 Peak 5	10000 ug/L
..SG1242_00005	11/30/18		Restek, Lot A090182		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..SGpcb1268std_00005	01/31/19		Restek, Lot a091468		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
SG4268@.1PPM_00003	07/02/15	01/02/15	HEXANE, Lot 0000078259	100 mL	SG42/6810PPM_00001	1 mL	PCB-1242 Peak 1	100 ug/L
							PCB-1242 Peak 2	100 ug/L
							PCB-1242 Peak 3	100 ug/L
							PCB-1242 Peak 4	100 ug/L
							PCB-1242 Peak 5	100 ug/L
							PCB-1268 Peak 1	100 ug/L
							PCB-1268 Peak 2	100 ug/L
							PCB-1268 Peak 3	100 ug/L
							PCB-1268 Peak 4	100 ug/L
							PCB-1268 Peak 5	100 ug/L
.SG42/6810PPM_00001	07/11/15	07/11/14	HEXANE, Lot 0000075731	100 mL	SG1242_00005	1 mL	PCB-1242 Peak 1	10000 ug/L
							PCB-1242 Peak 2	10000 ug/L
							PCB-1242 Peak 3	10000 ug/L
							PCB-1242 Peak 4	10000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1242 Peak 5	10000 ug/L
					SGpcb1268std_00005	1 mL	PCB-1268 Peak 1	10000 ug/L
							PCB-1268 Peak 2	10000 ug/L
							PCB-1268 Peak 3	10000 ug/L
							PCB-1268 Peak 4	10000 ug/L
							PCB-1268 Peak 5	10000 ug/L
..SG1242_00005	11/30/18		Restek, Lot A090182		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..SGpcb1268std_00005	01/31/19		Restek, Lot a091468		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
SG4268@.2PPM_00002	07/02/15	01/02/15	HEXANE, Lot 0000078259	100 mL	SG42/6810PPM_00001	2 mL	PCB-1242 Peak 1	200 ug/L
							PCB-1242 Peak 2	200 ug/L
							PCB-1242 Peak 3	200 ug/L
							PCB-1242 Peak 4	200 ug/L
							PCB-1242 Peak 5	200 ug/L
							PCB-1268 Peak 1	200 ug/L
							PCB-1268 Peak 2	200 ug/L
							PCB-1268 Peak 3	200 ug/L
							PCB-1268 Peak 4	200 ug/L
							PCB-1268 Peak 5	200 ug/L
.SG42/6810PPM_00001	07/11/15	07/11/14	HEXANE, Lot 0000075731	100 mL	SG1242_00005	1 mL	PCB-1242 Peak 1	10000 ug/L
							PCB-1242 Peak 2	10000 ug/L
							PCB-1242 Peak 3	10000 ug/L
							PCB-1242 Peak 4	10000 ug/L
							PCB-1242 Peak 5	10000 ug/L
					SGpcb1268std_00005	1 mL	PCB-1268 Peak 1	10000 ug/L
							PCB-1268 Peak 2	10000 ug/L
							PCB-1268 Peak 3	10000 ug/L
							PCB-1268 Peak 4	10000 ug/L
							PCB-1268 Peak 5	10000 ug/L
..SG1242_00005	11/30/18		Restek, Lot A090182		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..SGpcb1268std_00005	01/31/19		Restek, Lot a091468		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
SG4268@0.5PPM_00003	06/11/15	12/11/14	HEXANE, Lot 0000078259	100 mL	SG42/6810PPM_00001	5 mL	PCB-1242 Peak 1	500 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1242 Peak 2	500 ug/L
							PCB-1242 Peak 3	500 ug/L
							PCB-1242 Peak 4	500 ug/L
							PCB-1242 Peak 5	500 ug/L
							PCB-1268 Peak 1	500 ug/L
							PCB-1268 Peak 2	500 ug/L
							PCB-1268 Peak 3	500 ug/L
							PCB-1268 Peak 4	500 ug/L
							PCB-1268 Peak 5	500 ug/L
.SG42/6810PPM_00001	07/11/15	07/11/14	HEXANE, Lot 0000075731	100 mL	SG1242_00005	1 mL	PCB-1242 Peak 1	10000 ug/L
							PCB-1242 Peak 2	10000 ug/L
							PCB-1242 Peak 3	10000 ug/L
							PCB-1242 Peak 4	10000 ug/L
							PCB-1242 Peak 5	10000 ug/L
					SGpcb1268std_00005	1 mL	PCB-1268 Peak 1	10000 ug/L
							PCB-1268 Peak 2	10000 ug/L
							PCB-1268 Peak 3	10000 ug/L
							PCB-1268 Peak 4	10000 ug/L
							PCB-1268 Peak 5	10000 ug/L
..SG1242_00005	11/30/18		Restek, Lot A090182		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..SGpcb1268std_00005	01/31/19		Restek, Lot a091468		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
SG4268@2.0PPM_00002	07/02/15	01/02/15	HEXANE, Lot 0000078259	100 mL	SG42/6810PPM_00001	20 mL	PCB-1242 Peak 1	2000 ug/L
							PCB-1242 Peak 2	2000 ug/L
							PCB-1242 Peak 3	2000 ug/L
							PCB-1242 Peak 4	2000 ug/L
							PCB-1242 Peak 5	2000 ug/L
							PCB-1268 Peak 1	2000 ug/L
							PCB-1268 Peak 2	2000 ug/L
							PCB-1268 Peak 3	2000 ug/L
							PCB-1268 Peak 4	2000 ug/L
							PCB-1268 Peak 5	2000 ug/L
.SG42/6810PPM_00001	07/11/15	07/11/14	HEXANE, Lot 0000075731	100 mL	SG1242_00005	1 mL	PCB-1242 Peak 1	10000 ug/L
							PCB-1242 Peak 2	10000 ug/L
							PCB-1242 Peak 3	10000 ug/L
							PCB-1242 Peak 4	10000 ug/L
							PCB-1242 Peak 5	10000 ug/L
					SGpcb1268std_00005	1 mL	PCB-1268 Peak 1	10000 ug/L
							PCB-1268 Peak 2	10000 ug/L
							PCB-1268 Peak 3	10000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1268 Peak 4	10000 ug/L
							PCB-1268 Peak 5	10000 ug/L
..SG1242_00005	11/30/18		Restek, Lot A090182		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..SGpcb1268std_00005	01/31/19		Restek, Lot a091468		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
SGPestAB1_00011	06/02/15	01/02/15	HEXANE, Lot 80387	100 mL	SGPESTABST_00010	25 uL	4,4'-DDD	0.005 ug/mL
							4,4'-DDE	0.005 ug/mL
							4,4'-DDT	0.005 ug/mL
							Aldrin	0.005 ug/mL
							alpha-BHC	0.005 ug/mL
							alpha-Chlordane	0.005 ug/mL
							beta-BHC	0.005 ug/mL
							delta-BHC	0.005 ug/mL
							Dieldrin	0.005 ug/mL
							Endosulfan I	0.005 ug/mL
							Endosulfan II	0.005 ug/mL
							Endosulfan sulfate	0.005 ug/mL
							Endrin	0.005 ug/mL
							Endrin aldehyde	0.005 ug/mL
							Endrin ketone	0.005 ug/mL
							gamma-BHC (Lindane)	0.005 ug/mL
							gamma-Chlordane	0.005 ug/mL
							Heptachlor	0.005 ug/mL
							Heptachlor epoxide	0.005 ug/mL
							Methoxychlor	0.005 ug/mL
							DCB Decachlorobiphenyl	0.005 ug/mL
							Tetrachloro-m-xylene	0.005 ug/mL
.SGPESTABST_00010	06/29/15	12/30/14	HEXANE, Lot 0000080387	10 mL	sgpestabcorp1_00004	1 mL	4,4'-DDD	20 ug/mL
							4,4'-DDE	20 ug/mL
							4,4'-DDT	20 ug/mL
							Aldrin	20 ug/mL
							alpha-BHC	20 ug/mL
							alpha-Chlordane	20 ug/mL
							beta-BHC	20 ug/mL
							delta-BHC	20 ug/mL
							Dieldrin	20 ug/mL
							Endosulfan I	20 ug/mL
							Endosulfan II	20 ug/mL
							Endosulfan sulfate	20 ug/mL
							Endrin	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Endrin aldehyde	20 ug/mL
							Endrin ketone	20 ug/mL
							gamma-BHC (Lindane)	20 ug/mL
							gamma-Chlordane	20 ug/mL
							Heptachlor	20 ug/mL
							Heptachlor epoxide	20 ug/mL
							Methoxychlor	20 ug/mL
					SGPESTSURR_00006	1 mL	DCB Decachlorobiphenyl	20 ug/mL
							Tetrachloro-m-xylene	20 ug/mL
..sgpestabcorp1_00004	06/29/15	12/30/14	HEXANE, Lot 0000080387	10 mL	SGPESTAB #3_00003	1 mL	4,4'-DDD	200 ug/mL
							4,4'-DDE	200 ug/mL
							4,4'-DDT	200 ug/mL
							Aldrin	200 ug/mL
							alpha-BHC	200 ug/mL
							alpha-Chlordane	200 ug/mL
							beta-BHC	200 ug/mL
							delta-BHC	200 ug/mL
							Dieldrin	200 ug/mL
							Endosulfan I	200 ug/mL
							Endosulfan II	200 ug/mL
							Endosulfan sulfate	200 ug/mL
							Endrin	200 ug/mL
							Endrin aldehyde	200 ug/mL
							Endrin ketone	200 ug/mL
							gamma-BHC (Lindane)	200 ug/mL
							gamma-Chlordane	200 ug/mL
							Heptachlor	200 ug/mL
							Heptachlor epoxide	200 ug/mL
							Methoxychlor	200 ug/mL
...SGPESTAB #3_00003	08/31/16		Restek, Lot A090294		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methoxychlor	2000 ug/mL
..SGPESTSURR_00006	12/20/19	Restek, Lot A089210			(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SGPestAB2_00009	06/02/15	01/02/15	HEXANE, Lot 80387	100 mL	SGPESTABST_00010	50 uL	4,4'-DDD	0.01 ug/mL
							4,4'-DDE	0.01 ug/mL
							4,4'-DDT	0.01 ug/mL
							Aldrin	0.01 ug/mL
							alpha-BHC	0.01 ug/mL
							alpha-Chlordane	0.01 ug/mL
							beta-BHC	0.01 ug/mL
							delta-BHC	0.01 ug/mL
							Dieldrin	0.01 ug/mL
							Endosulfan I	0.01 ug/mL
							Endosulfan II	0.01 ug/mL
							Endosulfan sulfate	0.01 ug/mL
							Endrin	0.01 ug/mL
							Endrin aldehyde	0.01 ug/mL
							Endrin ketone	0.01 ug/mL
							gamma-BHC (Lindane)	0.01 ug/mL
							gamma-Chlordane	0.01 ug/mL
							Heptachlor	0.01 ug/mL
							Heptachlor epoxide	0.01 ug/mL
							Methoxychlor	0.01 ug/mL
							DCB Decachlorobiphenyl	0.01 ug/mL
							Tetrachloro-m-xylene	0.01 ug/mL
.SGPESTABST_00010	06/29/15	12/30/14	HEXANE, Lot 0000080387	10 mL	sgpestabcorp1_00004	1 mL	4,4'-DDD	20 ug/mL
							4,4'-DDE	20 ug/mL
							4,4'-DDT	20 ug/mL
							Aldrin	20 ug/mL
							alpha-BHC	20 ug/mL
							alpha-Chlordane	20 ug/mL
							beta-BHC	20 ug/mL
							delta-BHC	20 ug/mL
							Dieldrin	20 ug/mL
							Endosulfan I	20 ug/mL
							Endosulfan II	20 ug/mL
							Endosulfan sulfate	20 ug/mL
							Endrin	20 ug/mL
							Endrin aldehyde	20 ug/mL
							Endrin ketone	20 ug/mL
							gamma-BHC (Lindane)	20 ug/mL
							gamma-Chlordane	20 ug/mL
							Heptachlor	20 ug/mL
							Heptachlor epoxide	20 ug/mL
							Methoxychlor	20 ug/mL
					SGPESTSURR_00006	1 mL	DCB Decachlorobiphenyl	20 ug/mL
							Tetrachloro-m-xylene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..sgpestabcorp1_00004	06/29/15	12/30/14	HEXANE, Lot 0000080387	10 mL	SGPESTAB #3_00003	1 mL	4,4'-DDD	200 ug/mL
							4,4'-DDE	200 ug/mL
							4,4'-DDT	200 ug/mL
							Aldrin	200 ug/mL
							alpha-BHC	200 ug/mL
							alpha-Chlordane	200 ug/mL
							beta-BHC	200 ug/mL
							delta-BHC	200 ug/mL
							Dieldrin	200 ug/mL
							Endosulfan I	200 ug/mL
							Endosulfan II	200 ug/mL
							Endosulfan sulfate	200 ug/mL
							Endrin	200 ug/mL
							Endrin aldehyde	200 ug/mL
							Endrin ketone	200 ug/mL
							gamma-BHC (Lindane)	200 ug/mL
							gamma-Chlordane	200 ug/mL
							Heptachlor	200 ug/mL
							Heptachlor epoxide	200 ug/mL
							Methoxychlor	200 ug/mL
...SGPESTAB #3_00003	08/31/16		Restek, Lot A090294		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..SGPESTSURR_00006	12/20/19		Restek, Lot A089210		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SGPestAB3_00015	06/29/15	02/18/15	HEXANE, Lot 86560	200 mL	SGPESTABST_00010	250 uL	4,4'-DDD	0.025 ug/mL
							4,4'-DDE	0.025 ug/mL
							4,4'-DDT	0.025 ug/mL
							Aldrin	0.025 ug/mL
							alpha-BHC	0.025 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							alpha-Chlordane	0.025 ug/mL
							beta-BHC	0.025 ug/mL
							delta-BHC	0.025 ug/mL
							Dieldrin	0.025 ug/mL
							Endosulfan I	0.025 ug/mL
							Endosulfan II	0.025 ug/mL
							Endosulfan sulfate	0.025 ug/mL
							Endrin	0.025 ug/mL
							Endrin aldehyde	0.025 ug/mL
							Endrin ketone	0.025 ug/mL
							gamma-BHC (Lindane)	0.025 ug/mL
							gamma-Chlordane	0.025 ug/mL
							Heptachlor	0.025 ug/mL
							Heptachlor epoxide	0.025 ug/mL
							Methoxychlor	0.025 ug/mL
							DCB Decachlorobiphenyl	0.025 ug/mL
							Tetrachloro-m-xylene	0.025 ug/mL
.SGPESTABST_00010	06/29/15	12/30/14	HEXANE, Lot 0000080387	10 mL	sgpestabcorp1_00004	1 mL	4,4'-DDD	20 ug/mL
							4,4'-DDE	20 ug/mL
							4,4'-DDT	20 ug/mL
							Aldrin	20 ug/mL
							alpha-BHC	20 ug/mL
							alpha-Chlordane	20 ug/mL
							beta-BHC	20 ug/mL
							delta-BHC	20 ug/mL
							Dieldrin	20 ug/mL
							Endosulfan I	20 ug/mL
							Endosulfan II	20 ug/mL
							Endosulfan sulfate	20 ug/mL
							Endrin	20 ug/mL
							Endrin aldehyde	20 ug/mL
							Endrin ketone	20 ug/mL
							gamma-BHC (Lindane)	20 ug/mL
							gamma-Chlordane	20 ug/mL
							Heptachlor	20 ug/mL
							Heptachlor epoxide	20 ug/mL
							Methoxychlor	20 ug/mL
					SGPESTSURR_00006	1 mL	DCB Decachlorobiphenyl	20 ug/mL
							Tetrachloro-m-xylene	20 ug/mL
..sgpestabcorp1_00004	06/29/15	12/30/14	HEXANE, Lot 0000080387	10 mL	SGPESTAB #3_00003	1 mL	4,4'-DDD	200 ug/mL
							4,4'-DDE	200 ug/mL
							4,4'-DDT	200 ug/mL
							Aldrin	200 ug/mL
							alpha-BHC	200 ug/mL
							alpha-Chlordane	200 ug/mL
							beta-BHC	200 ug/mL
							delta-BHC	200 ug/mL
							Dieldrin	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Endosulfan I	200 ug/mL
							Endosulfan II	200 ug/mL
							Endosulfan sulfate	200 ug/mL
							Endrin	200 ug/mL
							Endrin aldehyde	200 ug/mL
							Endrin ketone	200 ug/mL
							gamma-BHC (Lindane)	200 ug/mL
							gamma-Chlordane	200 ug/mL
							Heptachlor	200 ug/mL
							Heptachlor epoxide	200 ug/mL
							Methoxychlor	200 ug/mL
...SGPESTAB #3_00003	08/31/16		Restek, Lot A090294		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..SGPESTSURR_00006	12/20/19		Restek, Lot A089210		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SGPestAB4_00009	06/02/15	01/02/15	HEXANE, Lot 80387	100 mL	SGPESTABST_00010	250 uL	4,4'-DDD	0.05 ug/mL
							4,4'-DDE	0.05 ug/mL
							4,4'-DDT	0.05 ug/mL
							Aldrin	0.05 ug/mL
							alpha-BHC	0.05 ug/mL
							alpha-Chlordane	0.05 ug/mL
							beta-BHC	0.05 ug/mL
							delta-BHC	0.05 ug/mL
							Dieldrin	0.05 ug/mL
							Endosulfan I	0.05 ug/mL
							Endosulfan II	0.05 ug/mL
							Endosulfan sulfate	0.05 ug/mL
							Endrin	0.05 ug/mL
							Endrin aldehyde	0.05 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Endrin ketone	0.05 ug/mL
							gamma-BHC (Lindane)	0.05 ug/mL
							gamma-Chlordane	0.05 ug/mL
							Heptachlor	0.05 ug/mL
							Heptachlor epoxide	0.05 ug/mL
							Methoxychlor	0.05 ug/mL
							DCB Decachlorobiphenyl	0.05 ug/mL
							Tetrachloro-m-xylene	0.05 ug/mL
.SGPESTABST_00010	06/29/15	12/30/14	HEXANE, Lot 0000080387	10 mL	sgpestabcorp1_00004	1 mL	4,4'-DDD	20 ug/mL
							4,4'-DDE	20 ug/mL
							4,4'-DDT	20 ug/mL
							Aldrin	20 ug/mL
							alpha-BHC	20 ug/mL
							alpha-Chlordane	20 ug/mL
							beta-BHC	20 ug/mL
							delta-BHC	20 ug/mL
							Dieldrin	20 ug/mL
							Endosulfan I	20 ug/mL
							Endosulfan II	20 ug/mL
							Endosulfan sulfate	20 ug/mL
							Endrin	20 ug/mL
							Endrin aldehyde	20 ug/mL
							Endrin ketone	20 ug/mL
							gamma-BHC (Lindane)	20 ug/mL
							gamma-Chlordane	20 ug/mL
							Heptachlor	20 ug/mL
							Heptachlor epoxide	20 ug/mL
							Methoxychlor	20 ug/mL
					SGPESTSURR_00006	1 mL	DCB Decachlorobiphenyl	20 ug/mL
							Tetrachloro-m-xylene	20 ug/mL
..sgpestabcorp1_00004	06/29/15	12/30/14	HEXANE, Lot 0000080387	10 mL	SGPESTAB #3_00003	1 mL	4,4'-DDD	200 ug/mL
							4,4'-DDE	200 ug/mL
							4,4'-DDT	200 ug/mL
							Aldrin	200 ug/mL
							alpha-BHC	200 ug/mL
							alpha-Chlordane	200 ug/mL
							beta-BHC	200 ug/mL
							delta-BHC	200 ug/mL
							Dieldrin	200 ug/mL
							Endosulfan I	200 ug/mL
							Endosulfan II	200 ug/mL
							Endosulfan sulfate	200 ug/mL
							Endrin	200 ug/mL
							Endrin aldehyde	200 ug/mL
							Endrin ketone	200 ug/mL
							gamma-BHC (Lindane)	200 ug/mL
							gamma-Chlordane	200 ug/mL
							Heptachlor	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Heptachlor epoxide	200 ug/mL
							Methoxychlor	200 ug/mL
...SGPESTAB #3_00003	08/31/16		Restek, Lot A090294		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..SGPESTSURR_00006	12/20/19		Restek, Lot A089210		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SGPestAB5_00009	06/02/15	01/02/15	HEXANE, Lot 80387	100 mL	SGPESTABST_00010	500 uL	4,4'-DDD	0.1 ug/mL
							4,4'-DDE	0.1 ug/mL
							4,4'-DDT	0.1 ug/mL
							Aldrin	0.1 ug/mL
							alpha-BHC	0.1 ug/mL
							alpha-Chlordane	0.1 ug/mL
							beta-BHC	0.1 ug/mL
							delta-BHC	0.1 ug/mL
							Dieldrin	0.1 ug/mL
							Endosulfan I	0.1 ug/mL
							Endosulfan II	0.1 ug/mL
							Endosulfan sulfate	0.1 ug/mL
							Endrin	0.1 ug/mL
							Endrin aldehyde	0.1 ug/mL
							Endrin ketone	0.1 ug/mL
							gamma-BHC (Lindane)	0.1 ug/mL
							gamma-Chlordane	0.1 ug/mL
							Heptachlor	0.1 ug/mL
							Heptachlor epoxide	0.1 ug/mL
							Methoxychlor	0.1 ug/mL
							DCB Decachlorobiphenyl	0.1 ug/mL
							Tetrachloro-m-xylene	0.1 ug/mL
.SGPESTABST_00010	06/29/15	12/30/14	HEXANE, Lot 0000080387	10 mL	sgpestabcorp1_00004	1 mL	4,4'-DDD	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,4'-DDE	20 ug/mL
							4,4'-DDT	20 ug/mL
							Aldrin	20 ug/mL
							alpha-BHC	20 ug/mL
							alpha-Chlordane	20 ug/mL
							beta-BHC	20 ug/mL
							delta-BHC	20 ug/mL
							Dieldrin	20 ug/mL
							Endosulfan I	20 ug/mL
							Endosulfan II	20 ug/mL
							Endosulfan sulfate	20 ug/mL
							Endrin	20 ug/mL
							Endrin aldehyde	20 ug/mL
							Endrin ketone	20 ug/mL
							gamma-BHC (Lindane)	20 ug/mL
							gamma-Chlordane	20 ug/mL
							Heptachlor	20 ug/mL
							Heptachlor epoxide	20 ug/mL
							Methoxychlor	20 ug/mL
					SGPESTSURR_00006	1 mL	DCB Decachlorobiphenyl	20 ug/mL
							Tetrachloro-m-xylene	20 ug/mL
..sgpestabcorp1_00004	06/29/15	12/30/14	HEXANE, Lot 0000080387	10 mL	SGPESTAB #3_00003	1 mL	4,4'-DDD	200 ug/mL
							4,4'-DDE	200 ug/mL
							4,4'-DDT	200 ug/mL
							Aldrin	200 ug/mL
							alpha-BHC	200 ug/mL
							alpha-Chlordane	200 ug/mL
							beta-BHC	200 ug/mL
							delta-BHC	200 ug/mL
							Dieldrin	200 ug/mL
							Endosulfan I	200 ug/mL
							Endosulfan II	200 ug/mL
							Endosulfan sulfate	200 ug/mL
							Endrin	200 ug/mL
							Endrin aldehyde	200 ug/mL
							Endrin ketone	200 ug/mL
							gamma-BHC (Lindane)	200 ug/mL
							gamma-Chlordane	200 ug/mL
							Heptachlor	200 ug/mL
							Heptachlor epoxide	200 ug/mL
							Methoxychlor	200 ug/mL
...SGPESTAB #3_00003	08/31/16		Restek, Lot A090294		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..SGPESTSURR_00006	12/20/19		Restek, Lot A089210		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SGPestAB6_00010	06/29/15	12/30/14	HEXANE, Lot 80387	100 mL	SGPESTABST_00010	1 mL	4,4'-DDD	0.2 ug/mL
							4,4'-DDE	0.2 ug/mL
							4,4'-DDT	0.2 ug/mL
							Aldrin	0.2 ug/mL
							alpha-BHC	0.2 ug/mL
							alpha-Chlordane	0.2 ug/mL
							beta-BHC	0.2 ug/mL
							delta-BHC	0.2 ug/mL
							Dieldrin	0.2 ug/mL
							Endosulfan I	0.2 ug/mL
							Endosulfan II	0.2 ug/mL
							Endosulfan sulfate	0.2 ug/mL
							Endrin	0.2 ug/mL
							Endrin aldehyde	0.2 ug/mL
							Endrin ketone	0.2 ug/mL
							gamma-BHC (Lindane)	0.2 ug/mL
							gamma-Chlordane	0.2 ug/mL
							Heptachlor	0.2 ug/mL
							Heptachlor epoxide	0.2 ug/mL
							Methoxychlor	0.2 ug/mL
							DCB Decachlorobiphenyl	0.2 ug/mL
							Tetrachloro-m-xylene	0.2 ug/mL
.SGPESTABST_00010	06/29/15	12/30/14	HEXANE, Lot 0000080387	10 mL	sgpestabcorp1_00004	1 mL	4,4'-DDD	20 ug/mL
							4,4'-DDE	20 ug/mL
							4,4'-DDT	20 ug/mL
							Aldrin	20 ug/mL
							alpha-BHC	20 ug/mL
							alpha-Chlordane	20 ug/mL
							beta-BHC	20 ug/mL
							delta-BHC	20 ug/mL
							Dieldrin	20 ug/mL
							Endosulfan I	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Endosulfan II	20 ug/mL
							Endosulfan sulfate	20 ug/mL
							Endrin	20 ug/mL
							Endrin aldehyde	20 ug/mL
							Endrin ketone	20 ug/mL
							gamma-BHC (Lindane)	20 ug/mL
							gamma-Chlordane	20 ug/mL
							Heptachlor	20 ug/mL
							Heptachlor epoxide	20 ug/mL
							Methoxychlor	20 ug/mL
					SGPESTSURR_00006	1 mL	DCB Decachlorobiphenyl	20 ug/mL
							Tetrachloro-m-xylene	20 ug/mL
..sgpestabcorp1_00004	06/29/15	12/30/14	HEXANE, Lot 0000080387	10 mL	SGPESTAB #3_00003	1 mL	4,4'-DDD	200 ug/mL
							4,4'-DDE	200 ug/mL
							4,4'-DDT	200 ug/mL
							Aldrin	200 ug/mL
							alpha-BHC	200 ug/mL
							alpha-Chlordane	200 ug/mL
							beta-BHC	200 ug/mL
							delta-BHC	200 ug/mL
							Dieldrin	200 ug/mL
							Endosulfan I	200 ug/mL
							Endosulfan II	200 ug/mL
							Endosulfan sulfate	200 ug/mL
							Endrin	200 ug/mL
							Endrin aldehyde	200 ug/mL
							Endrin ketone	200 ug/mL
							gamma-BHC (Lindane)	200 ug/mL
							gamma-Chlordane	200 ug/mL
							Heptachlor	200 ug/mL
							Heptachlor epoxide	200 ug/mL
							Methoxychlor	200 ug/mL
...SGPESTAB #3_00003	08/31/16		Restek, Lot A090294		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..SGPESTSURR_00006	12/20/19		Restek, Lot A089210		(Purchased Reagent)		DCB Decachlorobiphenyl	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
SGPESTABCV_00017	06/01/15	12/01/14	HEXANE, Lot 80387	100 mL	SGPESTABIC_00008	125 uL	4,4'-DDD	0.025 ug/mL
							4,4'-DDE	0.025 ug/mL
							4,4'-DDT	0.025 ug/mL
							Aldrin	0.025 ug/mL
							alpha-BHC	0.025 ug/mL
							alpha-Chlordane	0.025 ug/mL
							beta-BHC	0.025 ug/mL
							delta-BHC	0.025 ug/mL
							Dieldrin	0.025 ug/mL
							Endosulfan I	0.025 ug/mL
							Endosulfan II	0.025 ug/mL
							Endosulfan sulfate	0.025 ug/mL
							Endrin	0.025 ug/mL
							Endrin aldehyde	0.025 ug/mL
							Endrin ketone	0.025 ug/mL
							gamma-BHC (Lindane)	0.025 ug/mL
							gamma-Chlordane	0.025 ug/mL
							Heptachlor	0.025 ug/mL
							Heptachlor epoxide	0.025 ug/mL
							Methoxychlor	0.025 ug/mL
.SGPESTABIC_00008	06/01/15	12/01/14	HEXANE, Lot 80387	25 mL	SGPESTABIV_00010	0.5 mL	4,4'-DDD	20 ug/mL
							4,4'-DDE	20 ug/mL
							4,4'-DDT	20 ug/mL
							Aldrin	20 ug/mL
							alpha-BHC	20 ug/mL
							alpha-Chlordane	20 ug/mL
							beta-BHC	20 ug/mL
							delta-BHC	20 ug/mL
							Dieldrin	20 ug/mL
							Endosulfan I	20 ug/mL
							Endosulfan II	20 ug/mL
							Endosulfan sulfate	20 ug/mL
							Endrin	20 ug/mL
							Endrin aldehyde	20 ug/mL
							Endrin ketone	20 ug/mL
							gamma-BHC (Lindane)	20 ug/mL
							gamma-Chlordane	20 ug/mL
							Heptachlor	20 ug/mL
							Heptachlor epoxide	20 ug/mL
							Methoxychlor	20 ug/mL
..SGPESTABIV_00010	04/30/16		Ultra Scientific, Lot CL-1069		(Purchased Reagent)		4,4'-DDD	1000 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,4'-DDE	1000 ug/mL
							4,4'-DDT	1000 ug/mL
							Aldrin	1000 ug/mL
							alpha-BHC	1000 ug/mL
							alpha-Chlordane	1000 ug/mL
							beta-BHC	1000 ug/mL
							delta-BHC	1000 ug/mL
							Dieldrin	1000 ug/mL
							Endosulfan I	1000 ug/mL
							Endosulfan II	1000 ug/mL
							Endosulfan sulfate	1000 ug/mL
							Endrin	1000 ug/mL
							Endrin aldehyde	1000 ug/mL
							Endrin ketone	1000 ug/mL
							gamma-BHC (Lindane)	1000 ug/mL
							gamma-Chlordane	1000 ug/mL
							Heptachlor	1000 ug/mL
							Heptachlor epoxide	1000 ug/mL
							Methoxychlor	1000 ug/mL
SGPESTPEM_00014	07/25/15	01/26/15	HEXANE, Lot 86560	100 mL	SGPESTPEMS_00011	1 mL	4,4'-DDT	0.1 ug/mL
							alpha-BHC	0.01 ug/mL
							beta-BHC	0.01 ug/mL
							Endrin	0.05 ug/mL
							gamma-BHC (Lindane)	0.01 ug/mL
							Methoxychlor	0.25 ug/mL
							Tetrachloro-m-xylene	0.01 ug/mL
.SGPESTPEMS_00011	12/31/15		Restek, Lot A085642		(Purchased Reagent)		4,4'-DDT	10 ug/mL
							alpha-BHC	1 ug/mL
							beta-BHC	1 ug/mL
							Endrin	5 ug/mL
							gamma-BHC (Lindane)	1 ug/mL
							Methoxychlor	25 ug/mL
							Tetrachloro-m-xylene	1 ug/mL
SMLIST1 L1 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1PAH ST_00004	2 uL	1,1'-Biphenyl	0.1 ug/mL
							1-Methylnaphthalene	0.1 ug/mL
							2-Chloronaphthalene	0.1 ug/mL
							2-Methylnaphthalene	0.1 ug/mL
							Acenaphthene	0.1 ug/mL
							Acenaphthylene	0.1 ug/mL
							Anthracene	0.1 ug/mL
							Benzo[a]anthracene	0.1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]pyrene	0.1 ug/mL
							Benzo[b]fluoranthene	0.1 ug/mL
							Benzo[g,h,i]perylene	0.1 ug/mL
							Benzo[k]fluoranthene	0.1 ug/mL
							Chrysene	0.1 ug/mL
							Dibenz(a,h)anthracene	0.1 ug/mL
							Dibenzofuran	0.1 ug/mL
							Fluoranthene	0.1 ug/mL
							Fluorene	0.1 ug/mL
							Hexachlorobenzene	0.1 ug/mL
							Indeno[1,2,3-cd]pyrene	0.1 ug/mL
							Naphthalene	0.1 ug/mL
							Phenanthrene	0.1 ug/mL
							Pyrene	0.1 ug/mL
							2-Fluorobiphenyl (Surr)	0.1 ug/mL
							Nitrobenzene-d5 (Surr)	0.1 ug/mL
							Terphenyl-d14 (Surr)	0.1 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19	Restek, Lot A0101020			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1PAH ST_00004	05/31/16	01/26/15	MECL2, Lot 0000093871	3 mL	SMLIST1 PAH_00004	300 uL	1,1'-Biphenyl	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	100 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL
					SMLIST1 SURR_00003	60 uL	2-Fluorobiphenyl (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 PAH_00004	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Pyrene	1000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L1 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMLIST1PAH ST_00004	2 uL	2,4,6-Tribromophenol (Surr)	0.1 ug/mL
							2-Fluorophenol (Surr)	0.1 ug/mL
							Phenol-d5 (Surr)	0.1 ug/mL
.SMLIST1PAH ST_00004	05/31/16	01/26/15	MECL2, Lot 0000093871	3 mL	SMLIST1 SURR_00003	60 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
SMLIST1 L2 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	10 uL	1,1'-Biphenyl	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4,5-Tetrachlorobenzene	0.5 ug/mL
							1,2,4-Trichlorobenzene	0.5 ug/mL
							1,2-Dichlorobenzene	0.5 ug/mL
							1,2-Diphenylhydrazine	0.5 ug/mL
							1,3-Dichlorobenzene	0.5 ug/mL
							1,3-Dinitrobenzene	0.5 ug/mL
							1,4-Dichlorobenzene	0.5 ug/mL
							1,4-Dioxane	0.5 ug/mL
							1-Methylnaphthalene	0.5 ug/mL
							2,3,4,6-Tetrachlorophenol	0.5 ug/mL
							2,4,5-Trichlorophenol	0.5 ug/mL
							2,4,6-Trichlorophenol	0.5 ug/mL
							2,4-Dichlorophenol	0.5 ug/mL
							2,4-Dimethylphenol	0.5 ug/mL
							2,4-Dinitrophenol	1 ug/mL
							2,4-Dinitrotoluene	0.5 ug/mL
							2,6-Dichlorophenol	0.5 ug/mL
							2,6-Dinitrotoluene	0.5 ug/mL
							2-Chloronaphthalene	0.5 ug/mL
							2-Chlorophenol	0.5 ug/mL
							2-Methylnaphthalene	0.5 ug/mL
							2-Methylphenol	0.5 ug/mL
							2-Nitroaniline	0.5 ug/mL
							2-Nitrophenol	0.5 ug/mL
							3 & 4 Methylphenol	0.5 ug/mL
							3-Nitroaniline	0.5 ug/mL
							4,6-Dinitro-2-methylphenol	1 ug/mL
							4-Bromophenyl phenyl ether	0.5 ug/mL
							4-Chloro-3-methylphenol	0.5 ug/mL
							4-Chloroaniline	0.5 ug/mL
							4-Chlorophenyl phenyl ether	0.5 ug/mL
							4-Nitroaniline	0.5 ug/mL
							4-Nitrophenol	1 ug/mL
							Acenaphthene	0.5 ug/mL
							Acenaphthylene	0.5 ug/mL
							Acetophenone	0.5 ug/mL
							Aniline	0.5 ug/mL
							Anthracene	0.5 ug/mL
							Azobenzene	0.5 ug/mL
							Benzo[a]anthracene	0.5 ug/mL
							Benzo[a]pyrene	0.5 ug/mL
							Benzo[b]fluoranthene	0.5 ug/mL
							Benzo[g,h,i]perylene	0.5 ug/mL
							Benzo[k]fluoranthene	0.5 ug/mL
							Benzyl alcohol	0.5 ug/mL
							bis (2-chloroisopropyl) ether	0.5 ug/mL
							Bis(2-chloroethoxy)methane	0.5 ug/mL
							Bis(2-chloroethyl)ether	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	0.5 ug/mL
							Butyl benzyl phthalate	0.5 ug/mL
							Carbazole	0.5 ug/mL
							Chrysene	0.5 ug/mL
							Di-n-butyl phthalate	0.5 ug/mL
							Di-n-octyl phthalate	0.5 ug/mL
							Dibenz(a,h)anthracene	0.5 ug/mL
							Dibenzofuran	0.5 ug/mL
							Diethyl phthalate	0.5 ug/mL
							Dimethyl phthalate	0.5 ug/mL
							Fluoranthene	0.5 ug/mL
							Fluorene	0.5 ug/mL
							Hexachlorobenzene	0.5 ug/mL
							Hexachlorobutadiene	0.5 ug/mL
							Hexachlorocyclopentadiene	0.5 ug/mL
							Hexachloroethane	0.5 ug/mL
							Indeno[1,2,3-cd]pyrene	0.5 ug/mL
							Isophorone	0.5 ug/mL
							N-Nitrosodi-n-propylamine	0.5 ug/mL
							N-Nitrosodimethylamine	0.5 ug/mL
							N-Nitrosodiphenylamine	1 ug/mL
							Naphthalene	0.5 ug/mL
							Nitrobenzene	0.5 ug/mL
							Pentachlorophenol	1 ug/mL
							Phenanthrene	0.5 ug/mL
							Phenol	0.5 ug/mL
							Pyrene	0.5 ug/mL
							Pyridine	0.5 ug/mL
							Benzoic acid	1 ug/mL
							Indene	1 ug/mL
							Atrazine	1 ug/mL
							Benzaldehyde	1 ug/mL
							Caprolactam	1 ug/mL
							3,3'-Dichlorobenzidine	1 ug/mL
							Benzidine	1 ug/mL
							2,4,6-Tribromophenol (Surr)	0.5 ug/mL
							2-Fluorobiphenyl (Surr)	0.5 ug/mL
							2-Fluorophenol (Surr)	0.5 ug/mL
							Nitrobenzene-d5 (Surr)	0.5 ug/mL
							Phenol-d5 (Surr)	0.5 ug/mL
							Terphenyl-d14 (Surr)	0.5 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19	Restek, Lot A0101020			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L3 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SMLIST1 STOCK_00005	20 uL	1,1'-Biphenyl	1 ug/mL
							1,2,4,5-Tetrachlorobenzene	1 ug/mL
							1,2,4-Trichlorobenzene	1 ug/mL
							1,2-Dichlorobenzene	1 ug/mL
							1,2-Diphenylhydrazine	1 ug/mL
							1,3-Dichlorobenzene	1 ug/mL
							1,3-Dinitrobenzene	1 ug/mL
							1,4-Dichlorobenzene	1 ug/mL
							1,4-Dioxane	1 ug/mL
							1-Methylnaphthalene	1 ug/mL
							2,3,4,6-Tetrachlorophenol	1 ug/mL
							2,4,5-Trichlorophenol	1 ug/mL
							2,4,6-Trichlorophenol	1 ug/mL
							2,4-Dichlorophenol	1 ug/mL
							2,4-Dimethylphenol	1 ug/mL
							2,4-Dinitrophenol	2 ug/mL
							2,4-Dinitrotoluene	1 ug/mL
							2,6-Dichlorophenol	1 ug/mL
							2,6-Dinitrotoluene	1 ug/mL
							2-Chloronaphthalene	1 ug/mL
							2-Chlorophenol	1 ug/mL
							2-Methylnaphthalene	1 ug/mL
							2-Methylphenol	1 ug/mL
							2-Nitroaniline	1 ug/mL
							2-Nitrophenol	1 ug/mL
							3 & 4 Methylphenol	1 ug/mL
							3-Nitroaniline	1 ug/mL
							4,6-Dinitro-2-methylphenol	2 ug/mL
							4-Bromophenyl phenyl ether	1 ug/mL
							4-Chloro-3-methylphenol	1 ug/mL
							4-Chloroaniline	1 ug/mL
							4-Chlorophenyl phenyl ether	1 ug/mL
							4-Nitroaniline	1 ug/mL
							4-Nitrophenol	2 ug/mL
							Acenaphthene	1 ug/mL
							Acenaphthylene	1 ug/mL
							Acetophenone	1 ug/mL
							Aniline	1 ug/mL
							Anthracene	1 ug/mL
							Azobenzene	1 ug/mL
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	1 ug/mL
							Benzo[g,h,i]perylene	1 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Benzyl alcohol	1 ug/mL
							bis (2-chloroisopropyl) ether	1 ug/mL
							Bis(2-chloroethoxy)methane	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethyl)ether	1 ug/mL
							Bis(2-ethylhexyl) phthalate	1 ug/mL
							Butyl benzyl phthalate	1 ug/mL
							Carbazole	1 ug/mL
							Chrysene	1 ug/mL
							Di-n-butyl phthalate	1 ug/mL
							Di-n-octyl phthalate	1 ug/mL
							Dibenz(a,h)anthracene	1 ug/mL
							Dibenzofuran	1 ug/mL
							Diethyl phthalate	1 ug/mL
							Dimethyl phthalate	1 ug/mL
							Fluoranthene	1 ug/mL
							Fluorene	1 ug/mL
							Hexachlorobenzene	1 ug/mL
							Hexachlorobutadiene	1 ug/mL
							Hexachlorocyclopentadiene	1 ug/mL
							Hexachloroethane	1 ug/mL
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Isophorone	1 ug/mL
							N-Nitrosodi-n-propylamine	1 ug/mL
							N-Nitrosodimethylamine	1 ug/mL
							N-Nitrosodiphenylamine	2 ug/mL
							Naphthalene	1 ug/mL
							Nitrobenzene	1 ug/mL
							Pentachlorophenol	2 ug/mL
							Phenanthrene	1 ug/mL
							Phenol	1 ug/mL
							Pyrene	1 ug/mL
							Pyridine	1 ug/mL
							Benzoic acid	2 ug/mL
							Indene	2 ug/mL
							Atrazine	2 ug/mL
							Benzaldehyde	2 ug/mL
							Caprolactam	2 ug/mL
							3,3'-Dichlorobenzidine	2 ug/mL
							Benzidine	2 ug/mL
							2,4,6-Tribromophenol (Surr)	1 ug/mL
							2-Fluorobiphenyl (Surr)	1 ug/mL
							2-Fluorophenol (Surr)	1 ug/mL
							Nitrobenzene-d5 (Surr)	1 ug/mL
							Phenol-d5 (Surr)	1 ug/mL
							Terphenyl-d14 (Surr)	1 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SMIS R_00005	01/31/19		Restek, Lot A0101020		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L4 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	40 uL	1,1'-Biphenyl	2 ug/mL
							1,2,4,5-Tetrachlorobenzene	2 ug/mL
							1,2,4-Trichlorobenzene	2 ug/mL
							1,2-Dichlorobenzene	2 ug/mL
							1,2-Diphenylhydrazine	2 ug/mL
							1,3-Dichlorobenzene	2 ug/mL
							1,3-Dinitrobenzene	2 ug/mL
							1,4-Dichlorobenzene	2 ug/mL
							1,4-Dioxane	2 ug/mL
							1-Methylnaphthalene	2 ug/mL
							2,3,4,6-Tetrachlorophenol	2 ug/mL
							2,4,5-Trichlorophenol	2 ug/mL
							2,4,6-Trichlorophenol	2 ug/mL
							2,4-Dichlorophenol	2 ug/mL
							2,4-Dimethylphenol	2 ug/mL
							2,4-Dinitrophenol	4 ug/mL
							2,4-Dinitrotoluene	2 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							2,6-Dinitrotoluene	2 ug/mL
							2-Chloronaphthalene	2 ug/mL
							2-Chlorophenol	2 ug/mL
							2-Methylnaphthalene	2 ug/mL
							2-Methylphenol	2 ug/mL
							2-Nitroaniline	2 ug/mL
							2-Nitrophenol	2 ug/mL
							3 & 4 Methylphenol	2 ug/mL
							3-Nitroaniline	2 ug/mL
							4,6-Dinitro-2-methylphenol	4 ug/mL
							4-Bromophenyl phenyl ether	2 ug/mL
							4-Chloro-3-methylphenol	2 ug/mL
							4-Chloroaniline	2 ug/mL
							4-Chlorophenyl phenyl ether	2 ug/mL
							4-Nitroaniline	2 ug/mL
							4-Nitrophenol	4 ug/mL
							Acenaphthene	2 ug/mL
							Acenaphthylene	2 ug/mL
							Acetophenone	2 ug/mL
							Aniline	2 ug/mL
							Anthracene	2 ug/mL
							Azobenzene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Benzyl alcohol	2 ug/mL
							bis (2-chloroisopropyl) ether	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethoxy)methane	2 ug/mL
							Bis(2-chloroethyl)ether	2 ug/mL
							Bis(2-ethylhexyl) phthalate	2 ug/mL
							Butyl benzyl phthalate	2 ug/mL
							Carbazole	2 ug/mL
							Chrysene	2 ug/mL
							Di-n-butyl phthalate	2 ug/mL
							Di-n-octyl phthalate	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Dibenzofuran	2 ug/mL
							Diethyl phthalate	2 ug/mL
							Dimethyl phthalate	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Hexachlorobenzene	2 ug/mL
							Hexachlorobutadiene	2 ug/mL
							Hexachlorocyclopentadiene	2 ug/mL
							Hexachloroethane	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Isophorone	2 ug/mL
							N-Nitrosodi-n-propylamine	2 ug/mL
							N-Nitrosodimethylamine	2 ug/mL
							N-Nitrosodiphenylamine	4 ug/mL
							Naphthalene	2 ug/mL
							Nitrobenzene	2 ug/mL
							Pentachlorophenol	4 ug/mL
							Phenanthrene	2 ug/mL
							Phenol	2 ug/mL
							Pyrene	2 ug/mL
							Pyridine	2 ug/mL
							Benzoic acid	4 ug/mL
							Indene	4 ug/mL
							Atrazine	4 ug/mL
							Benzaldehyde	4 ug/mL
							Caprolactam	4 ug/mL
							3,3'-Dichlorobenzidine	4 ug/mL
							Benzidine	4 ug/mL
							2,4,6-Tribromophenol (Surr)	2 ug/mL
							2-Fluorobiphenyl (Surr)	2 ug/mL
							2-Fluorophenol (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2 ug/mL
							Phenol-d5 (Surr)	2 ug/mL
							Terphenyl-d14 (Surr)	2 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19		Restek, Lot A0101020		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L5 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	100 uL	1,1'-Biphenyl	5 ug/mL
							1,2,4,5-Tetrachlorobenzene	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,2-Diphenylhydrazine	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dinitrobenzene	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	5 ug/mL
							1-Methylnaphthalene	5 ug/mL
							2,3,4,6-Tetrachlorophenol	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dichlorophenol	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Methylphenol	5 ug/mL
							2-Nitroaniline	5 ug/mL
							2-Nitrophenol	5 ug/mL
							3 & 4 Methylphenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Nitroaniline	5 ug/mL
							4-Nitrophenol	10 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Acetophenone	5 ug/mL
							Aniline	5 ug/mL
							Anthracene	5 ug/mL
							Azobenzene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Benzyl alcohol	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							bis (2-chloroisopropyl) ether	5 ug/mL
							Bis(2-chloroethoxy)methane	5 ug/mL
							Bis(2-chloroethyl)ether	5 ug/mL
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Butyl benzyl phthalate	5 ug/mL
							Carbazole	5 ug/mL
							Chrysene	5 ug/mL
							Di-n-butyl phthalate	5 ug/mL
							Di-n-octyl phthalate	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Dibenzofuran	5 ug/mL
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexachlorocyclopentadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Isophorone	5 ug/mL
							N-Nitrosodi-n-propylamine	5 ug/mL
							N-Nitrosodimethylamine	5 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL
							Naphthalene	5 ug/mL
							Nitrobenzene	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Phenanthrene	5 ug/mL
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							Pyridine	5 ug/mL
							Benzoic acid	10 ug/mL
							Indene	10 ug/mL
							Atrazine	10 ug/mL
							Benzaldehyde	10 ug/mL
							Caprolactam	10 ug/mL
							3,3'-Dichlorobenzidine	10 ug/mL
							Benzidine	10 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl (Surr)	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19		Restek, Lot A0101020		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L6 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	200 uL	1,1'-Biphenyl	10 ug/mL
							1,2,4,5-Tetrachlorobenzene	10 ug/mL
							1,2,4-Trichlorobenzene	10 ug/mL
							1,2-Dichlorobenzene	10 ug/mL
							1,2-Diphenylhydrazine	10 ug/mL
							1,3-Dichlorobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							1,4-Dichlorobenzene	10 ug/mL
							1,4-Dioxane	10 ug/mL
							1-Methylnaphthalene	10 ug/mL
							2,3,4,6-Tetrachlorophenol	10 ug/mL
							2,4,5-Trichlorophenol	10 ug/mL
							2,4,6-Trichlorophenol	10 ug/mL
							2,4-Dichlorophenol	10 ug/mL
							2,4-Dimethylphenol	10 ug/mL
							2,4-Dinitrophenol	20 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Chloronaphthalene	10 ug/mL
							2-Chlorophenol	10 ug/mL
							2-Methylnaphthalene	10 ug/mL
							2-Methylphenol	10 ug/mL
							2-Nitroaniline	10 ug/mL
							2-Nitrophenol	10 ug/mL
							3 & 4 Methylphenol	10 ug/mL
							3-Nitroaniline	10 ug/mL
							4,6-Dinitro-2-methylphenol	20 ug/mL
							4-Bromophenyl phenyl ether	10 ug/mL
							4-Chloro-3-methylphenol	10 ug/mL
							4-Chloroaniline	10 ug/mL
							4-Chlorophenyl phenyl ether	10 ug/mL
							4-Nitroaniline	10 ug/mL
							4-Nitrophenol	20 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Acetophenone	10 ug/mL
							Aniline	10 ug/mL
							Anthracene	10 ug/mL
							Azobenzene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl alcohol	10 ug/mL
							bis (2-chloroisopropyl) ether	10 ug/mL
							Bis(2-chloroethoxy)methane	10 ug/mL
							Bis(2-chloroethyl)ether	10 ug/mL
							Bis(2-ethylhexyl) phthalate	10 ug/mL
							Butyl benzyl phthalate	10 ug/mL
							Carbazole	10 ug/mL
							Chrysene	10 ug/mL
							Di-n-butyl phthalate	10 ug/mL
							Di-n-octyl phthalate	10 ug/mL
							Dibenz(a,h)anthracene	10 ug/mL
							Dibenzofuran	10 ug/mL
							Diethyl phthalate	10 ug/mL
							Dimethyl phthalate	10 ug/mL
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							N-Nitrosodimethylamine	10 ug/mL
							N-Nitrosodiphenylamine	20 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
							Pyridine	10 ug/mL
							Benzoic acid	20 ug/mL
							Indene	20 ug/mL
							Atrazine	20 ug/mL
							Benzaldehyde	20 ug/mL
							Caprolactam	20 ug/mL
							3,3'-Dichlorobenzidine	20 ug/mL
							Benzidine	20 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl (Surr)	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19		Restek, Lot A0101020		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L7 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	300 uL	1,1'-Biphenyl	15 ug/mL
							1,2,4,5-Tetrachlorobenzene	15 ug/mL
							1,2,4-Trichlorobenzene	15 ug/mL
							1,2-Dichlorobenzene	15 ug/mL
							1,2-Diphenylhydrazine	15 ug/mL
							1,3-Dichlorobenzene	15 ug/mL
							1,3-Dinitrobenzene	15 ug/mL
							1,4-Dichlorobenzene	15 ug/mL
							1,4-Dioxane	15 ug/mL
							1-Methylnaphthalene	15 ug/mL
							2,3,4,6-Tetrachlorophenol	15 ug/mL
							2,4,5-Trichlorophenol	15 ug/mL
							2,4,6-Trichlorophenol	15 ug/mL
							2,4-Dichlorophenol	15 ug/mL
							2,4-Dimethylphenol	15 ug/mL
							2,4-Dinitrophenol	30 ug/mL
							2,4-Dinitrotoluene	15 ug/mL
							2,6-Dichlorophenol	15 ug/mL
							2,6-Dinitrotoluene	15 ug/mL
							2-Chloronaphthalene	15 ug/mL
							2-Chlorophenol	15 ug/mL
							2-Methylnaphthalene	15 ug/mL
							2-Methylphenol	15 ug/mL
							2-Nitroaniline	15 ug/mL
							2-Nitrophenol	15 ug/mL
							3 & 4 Methylphenol	15 ug/mL
							3-Nitroaniline	15 ug/mL
							4,6-Dinitro-2-methylphenol	30 ug/mL
							4-Bromophenyl phenyl ether	15 ug/mL
							4-Chloro-3-methylphenol	15 ug/mL
							4-Chloroaniline	15 ug/mL
							4-Chlorophenyl phenyl ether	15 ug/mL
							4-Nitroaniline	15 ug/mL
							4-Nitrophenol	30 ug/mL
							Acenaphthene	15 ug/mL
							Acenaphthylene	15 ug/mL
							Acetophenone	15 ug/mL
							Aniline	15 ug/mL
							Anthracene	15 ug/mL
							Azobenzene	15 ug/mL
							Benzo[a]anthracene	15 ug/mL
							Benzo[a]pyrene	15 ug/mL
							Benzo[b]fluoranthene	15 ug/mL
							Benzo[g,h,i]perylene	15 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	15 ug/mL
							Benzyl alcohol	15 ug/mL
							bis (2-chloroisopropyl) ether	15 ug/mL
							Bis(2-chloroethoxy)methane	15 ug/mL
							Bis(2-chloroethyl)ether	15 ug/mL
							Bis(2-ethylhexyl) phthalate	15 ug/mL
							Butyl benzyl phthalate	15 ug/mL
							Carbazole	15 ug/mL
							Chrysene	15 ug/mL
							Di-n-butyl phthalate	15 ug/mL
							Di-n-octyl phthalate	15 ug/mL
							Dibenz(a,h)anthracene	15 ug/mL
							Dibenzofuran	15 ug/mL
							Diethyl phthalate	15 ug/mL
							Dimethyl phthalate	15 ug/mL
							Fluoranthene	15 ug/mL
							Fluorene	15 ug/mL
							Hexachlorobenzene	15 ug/mL
							Hexachlorobutadiene	15 ug/mL
							Hexachlorocyclopentadiene	15 ug/mL
							Hexachloroethane	15 ug/mL
							Indeno[1,2,3-cd]pyrene	15 ug/mL
							Isophorone	15 ug/mL
							N-Nitrosodi-n-propylamine	15 ug/mL
							N-Nitrosodimethylamine	15 ug/mL
							N-Nitrosodiphenylamine	30 ug/mL
							Naphthalene	15 ug/mL
							Nitrobenzene	15 ug/mL
							Pentachlorophenol	30 ug/mL
							Phenanthrene	15 ug/mL
							Phenol	15 ug/mL
							Pyrene	15 ug/mL
							Pyridine	15 ug/mL
							Benzoic acid	30 ug/mL
							Indene	30 ug/mL
							Atrazine	30 ug/mL
							Benzaldehyde	30 ug/mL
							Caprolactam	30 ug/mL
							3,3'-Dichlorobenzidine	30 ug/mL
							Benzidine	30 ug/mL
							2,4,6-Tribromophenol (Surr)	15 ug/mL
							2-Fluorobiphenyl (Surr)	15 ug/mL
							2-Fluorophenol (Surr)	15 ug/mL
							Nitrobenzene-d5 (Surr)	15 ug/mL
							Phenol-d5 (Surr)	15 ug/mL
							Terphenyl-d14 (Surr)	15 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19		Restek, Lot A0101020		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L8 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	400 uL	1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Diphenylhydrazine	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,3-Dinitrobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							1,4-Dioxane	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2,3,4,6-Tetrachlorophenol	20 ug/mL
							2,4,5-Trichlorophenol	20 ug/mL
							2,4,6-Trichlorophenol	20 ug/mL
							2,4-Dichlorophenol	20 ug/mL
							2,4-Dimethylphenol	20 ug/mL
							2,4-Dinitrophenol	40 ug/mL
							2,4-Dinitrotoluene	20 ug/mL
							2,6-Dichlorophenol	20 ug/mL
							2,6-Dinitrotoluene	20 ug/mL
							2-Chloronaphthalene	20 ug/mL
							2-Chlorophenol	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							2-Methylphenol	20 ug/mL
							2-Nitroaniline	20 ug/mL
							2-Nitrophenol	20 ug/mL
							3 & 4 Methylphenol	20 ug/mL
							3-Nitroaniline	20 ug/mL
							4,6-Dinitro-2-methylphenol	40 ug/mL
							4-Bromophenyl phenyl ether	20 ug/mL
							4-Chloro-3-methylphenol	20 ug/mL
							4-Chloroaniline	20 ug/mL
							4-Chlorophenyl phenyl ether	20 ug/mL
							4-Nitroaniline	20 ug/mL
							4-Nitrophenol	40 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Acetophenone	20 ug/mL
							Aniline	20 ug/mL
							Anthracene	20 ug/mL
							Azobenzene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Benzyl alcohol	20 ug/mL
							bis (2-chloroisopropyl) ether	20 ug/mL
							Bis(2-chloroethoxy)methane	20 ug/mL
							Bis(2-chloroethyl)ether	20 ug/mL
							Bis(2-ethylhexyl) phthalate	20 ug/mL
							Butyl benzyl phthalate	20 ug/mL
							Carbazole	20 ug/mL
							Chrysene	20 ug/mL
							Di-n-butyl phthalate	20 ug/mL
							Di-n-octyl phthalate	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Dibenzofuran	20 ug/mL
							Diethyl phthalate	20 ug/mL
							Dimethyl phthalate	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Hexachlorobenzene	20 ug/mL
							Hexachlorobutadiene	20 ug/mL
							Hexachlorocyclopentadiene	20 ug/mL
							Hexachloroethane	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Isophorone	20 ug/mL
							N-Nitrosodi-n-propylamine	20 ug/mL
							N-Nitrosodimethylamine	20 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							Naphthalene	20 ug/mL
							Nitrobenzene	20 ug/mL
							Pentachlorophenol	40 ug/mL
							Phenanthrene	20 ug/mL
							Phenol	20 ug/mL
							Pyrene	20 ug/mL
							Pyridine	20 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
							Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
							3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
							2,4,6-Tribromophenol (Surr)	20 ug/mL
							2-Fluorobiphenyl (Surr)	20 ug/mL
							2-Fluorophenol (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20 ug/mL
							Phenol-d5 (Surr)	20 ug/mL
							Terphenyl-d14 (Surr)	20 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19		Restek, Lot A0101020		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SMLIST1 L9 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	500 uL	1,1'-Biphenyl	25 ug/mL
							1,2,4,5-Tetrachlorobenzene	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Diphenylhydrazine	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dinitrobenzene	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	25 ug/mL
							1-Methylnaphthalene	25 ug/mL
							2,3,4,6-Tetrachlorophenol	25 ug/mL
							2,4,5-Trichlorophenol	25 ug/mL
							2,4,6-Trichlorophenol	25 ug/mL
							2,4-Dichlorophenol	25 ug/mL
							2,4-Dimethylphenol	25 ug/mL
							2,4-Dinitrophenol	50 ug/mL
							2,4-Dinitrotoluene	25 ug/mL
							2,6-Dichlorophenol	25 ug/mL
							2,6-Dinitrotoluene	25 ug/mL
							2-Chloronaphthalene	25 ug/mL
							2-Chlorophenol	25 ug/mL
							2-Methylnaphthalene	25 ug/mL
							2-Methylphenol	25 ug/mL
							2-Nitroaniline	25 ug/mL
							2-Nitrophenol	25 ug/mL
							3 & 4 Methylphenol	25 ug/mL
							3-Nitroaniline	25 ug/mL
							4,6-Dinitro-2-methylphenol	50 ug/mL
							4-Bromophenyl phenyl ether	25 ug/mL
							4-Chloro-3-methylphenol	25 ug/mL
							4-Chloroaniline	25 ug/mL
							4-Chlorophenyl phenyl ether	25 ug/mL
							4-Nitroaniline	25 ug/mL
							4-Nitrophenol	50 ug/mL
							Acenaphthene	25 ug/mL
							Acenaphthylene	25 ug/mL
							Acetophenone	25 ug/mL
							Aniline	25 ug/mL
							Anthracene	25 ug/mL
							Azobenzene	25 ug/mL
							Benzo[a]anthracene	25 ug/mL
							Benzo[a]pyrene	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	25 ug/mL
							Benzo[g,h,i]perylene	25 ug/mL
							Benzo[k]fluoranthene	25 ug/mL
							Benzyl alcohol	25 ug/mL
							bis (2-chloroisopropyl) ether	25 ug/mL
							Bis(2-chloroethoxy)methane	25 ug/mL
							Bis(2-chloroethyl)ether	25 ug/mL
							Bis(2-ethylhexyl) phthalate	25 ug/mL
							Butyl benzyl phthalate	25 ug/mL
							Carbazole	25 ug/mL
							Chrysene	25 ug/mL
							Di-n-butyl phthalate	25 ug/mL
							Di-n-octyl phthalate	25 ug/mL
							Dibenz(a,h)anthracene	25 ug/mL
							Dibenzofuran	25 ug/mL
							Diethyl phthalate	25 ug/mL
							Dimethyl phthalate	25 ug/mL
							Fluoranthene	25 ug/mL
							Fluorene	25 ug/mL
							Hexachlorobenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexachlorocyclopentadiene	25 ug/mL
							Hexachloroethane	25 ug/mL
							Indeno[1,2,3-cd]pyrene	25 ug/mL
							Isophorone	25 ug/mL
							N-Nitrosodi-n-propylamine	25 ug/mL
							N-Nitrosodimethylamine	25 ug/mL
							N-Nitrosodiphenylamine	50 ug/mL
							Naphthalene	25 ug/mL
							Nitrobenzene	25 ug/mL
							Pentachlorophenol	50 ug/mL
							Phenanthrene	25 ug/mL
							Phenol	25 ug/mL
							Pyrene	25 ug/mL
							Pyridine	25 ug/mL
							Benzoic acid	50 ug/mL
							Indene	50 ug/mL
							Atrazine	50 ug/mL
							Benzaldehyde	50 ug/mL
							Caprolactam	50 ug/mL
							3,3'-Dichlorobenzidine	50 ug/mL
							Benzidine	50 ug/mL
							2,4,6-Tribromophenol (Surr)	25 ug/mL
							2-Fluorobiphenyl (Surr)	25 ug/mL
							2-Fluorophenol (Surr)	25 ug/mL
							Nitrobenzene-d5 (Surr)	25 ug/mL
							Phenol-d5 (Surr)	25 ug/mL
							Terphenyl-d14 (Surr)	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19		Restek, Lot A0101020		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SMLIST1 SS W_00004	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMLIST1 SS ST_00004	200 uL	1,2,4-Trichlorobenzene	10 ug/mL
							1,2-Dichlorobenzene	10 ug/mL
							1,3-Dichlorobenzene	10 ug/mL
							1,4-Dichlorobenzene	10 ug/mL
							2,4,5-Trichlorophenol	10 ug/mL
							2,4,6-Trichlorophenol	10 ug/mL
							2,4-Dichlorophenol	10 ug/mL
							2,4-Dimethylphenol	10 ug/mL
							2,4-Dinitrophenol	20 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Chloronaphthalene	10 ug/mL
							2-Chlorophenol	10 ug/mL
							2-Methylnaphthalene	10 ug/mL
							2-Methylphenol	10 ug/mL
							2-Nitroaniline	10 ug/mL
							2-Nitrophenol	10 ug/mL
							3 & 4 Methylphenol	10 ug/mL
							3-Nitroaniline	10 ug/mL
							4,6-Dinitro-2-methylphenol	20 ug/mL
							4-Bromophenyl phenyl ether	10 ug/mL
							4-Chloro-3-methylphenol	10 ug/mL
							4-Chloroaniline	10 ug/mL
							4-Chlorophenyl phenyl ether	10 ug/mL
							4-Nitroaniline	10 ug/mL
							4-Nitrophenol	20 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Benzyl alcohol	10 ug/mL
							bis (2-chloroisopropyl) ether	10 ug/mL
							Bis(2-chloroethoxy)methane	10 ug/mL
							Bis(2-chloroethyl)ether	10 ug/mL
							Bis(2-ethylhexyl) phthalate	10 ug/mL
							Butyl benzyl phthalate	10 ug/mL
							Carbazole	10 ug/mL
							Chrysene	10 ug/mL
							Di-n-butyl phthalate	10 ug/mL
							Di-n-octyl phthalate	10 ug/mL
							Dibenz(a,h)anthracene	10 ug/mL
							Dibenzofuran	10 ug/mL
							Diethyl phthalate	10 ug/mL
							Dimethyl phthalate	10 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							N-Nitrosodiphenylamine	20 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
							3,3'-Dichlorobenzidine	20 ug/mL
							Benzoic acid	20 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl (Surr)	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
.SMLIST1 SS ST_00004	06/30/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 SS S1_00004	1 mL	1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
					SMLIST1 SS S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
					SMLIST1SS S10_00001	1 mL	Benzoic acid	200 ug/mL
					SMLIST1SS SUR_00002	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SMLIST1 SS S1_00004	06/30/16		Restek, Lot A0107697		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
..SMLIST1 SS S9_00001	07/31/16		Restek, Lot A0108170		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
..SMLIST1SS S10_00001	06/30/16		Restek, Lot A0107944		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SMLIST1SS SUR_00002	09/30/18		Restek, Lot A092712		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
TOX ChemS_00004	08/11/15	02/11/15	HEXANE, Lot 86560	50 mL	TOX ChemServ_00002	0.5 mL	Toxaphene	10 ug/mL
							Toxaphene Peak 1	10 ug/mL
							Toxaphene Peak 2	10 ug/mL
							Toxaphene Peak 3	10 ug/mL
							Toxaphene Peak 4	10 ug/mL
							Toxaphene Peak 5	10 ug/mL
.TOX ChemServ_00002	11/30/15		ChemService, Lot 2180700		(Purchased Reagent)		Toxaphene	1000 ug/mL
							Toxaphene Peak 1	1000 ug/mL
							Toxaphene Peak 2	1000 ug/mL
							Toxaphene Peak 3	1000 ug/mL
							Toxaphene Peak 4	1000 ug/mL
							Toxaphene Peak 5	1000 ug/mL
Tox Ultra_00008	09/05/15	03/05/15	HEXANE, Lot 86559	50 mL	Tox Ultra_00006	0.5 mL	Toxaphene Peak 1	10 ug/mL
							Toxaphene Peak 2	10 ug/mL
							Toxaphene Peak 3	10 ug/mL
							Toxaphene Peak 4	10 ug/mL
							Toxaphene Peak 5	10 ug/mL
.Tox Ultra_00006	02/28/17		Ultra Scientific, Lot CK-0004		(Purchased Reagent)		Toxaphene Peak 1	1000 ug/mL
							Toxaphene Peak 2	1000 ug/mL
							Toxaphene Peak 3	1000 ug/mL
							Toxaphene Peak 4	1000 ug/mL
							Toxaphene Peak 5	1000 ug/mL
Tox Ultra_00008	09/05/15	03/05/15	HEXANE, Lot 86559	50 mL	Tox Ultra_00006	0.5 mL	Toxaphene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.Tox Ultra_00006	02/28/17	Ultra Scientific, Lot CK-0004			(Purchased Reagent)		Toxaphene	1000 ug/mL
vm250-IS_00021	03/12/15	09/12/14	MEOH, Lot 134079	100 mL	vmcus8126_00008	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
.vmcus8126_00008	09/30/16	Ultra Scientific, Lot CL-3192			(Purchased Reagent)		1,4-Dichlorobenzene-d4	25000 ug/mL
							Chlorobenzene-d5	25000 ug/mL
							Fluorobenzene	25000 ug/mL
VM250-IS_00028	09/13/15	03/13/15	MEOH, Lot 0000085233	100 mL	vmcus8126_00008	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
.vmcus8126_00008	09/30/16	Ultra Scientific, Lot CL-3192			(Purchased Reagent)		1,4-Dichlorobenzene-d4	25000 ug/mL
							Chlorobenzene-d5	25000 ug/mL
							Fluorobenzene	25000 ug/mL
VM250SS_00030	09/17/15	03/17/15	MEOH, Lot +161620000085233JB	50 mL	VM567650_00021	5 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.VM567650_00021	04/30/19	Restek, Lot A0102817			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VM50IS_00048	08/06/15	02/05/15	MEOH, Lot 85233	100 mL	vm30241_00001	2 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.vm30241_00001	01/31/18	restek, Lot A093261			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
vm50ss_00192	03/07/15	02/28/15	MEOH, Lot na	2 mL	vm50ss_stk_00063	2 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00063	06/08/15	12/08/14	MEOH, Lot 0000085233	200 mL	VM567650_00021	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00021	04/30/19	Restek, Lot A0102817			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_00196	04/08/15	04/01/15	MEOH, Lot na	2 mL	vm50ss_stk_00065	2 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00065	09/08/15	03/08/15	MEOH, Lot 0000085233	200 mL	VM567650_00021	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00021	04/30/19		Restek, Lot A0102817		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_00197	04/16/15	04/09/15	MEOH, Lot na	2 mL	vm50ss_stk_00065	2 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00065	09/08/15	03/08/15	MEOH, Lot 0000085233	200 mL	VM567650_00021	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00021	04/30/19		Restek, Lot A0102817		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00063	06/08/15	12/08/14	MEOH, Lot 0000085233	200 mL	VM567650_00021	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00021	04/30/19		Restek, Lot A0102817		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00065	09/08/15	03/08/15	MEOH, Lot 0000085233	200 mL	VM567650_00021	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00021	04/30/19		Restek, Lot A0102817		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMAROLISTDW_00090	03/07/15	02/28/15	MEOH, Lot na	3 mL	VMACROLSTD_00023	3 mL	Acrolein	250 ug/mL
.VMACROLSTD_00023	03/31/15	02/28/15	MEOH, Lot 0000085233	20 mL	VM568720_00005	0.25 mL	Acrolein	250 ug/mL
..VM568720_00005	03/31/15		restek, Lot A0107338		(Purchased Reagent)		Acrolein	20000 ug/mL
VMAROLISTDW_00095	04/14/15	04/07/15	MEOH, Lot na	3 mL	VMACROLSTD_00024	3 mL	Acrolein	250 ug/mL
.VMACROLSTD_00024	04/30/15	03/31/15	MEOH, Lot 0000085233	20 mL	VM568720_00006	0.25 mL	Acrolein	250 ug/mL
..VM568720_00006	05/31/15		restek, Lot A0108734		(Purchased Reagent)		Acrolein	20000 ug/mL
VMFASGW_00084	03/07/15	02/28/15	MEOH, Lot NA	2 mL	VMFASG_00026	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00026	03/12/15	02/12/15	MEOH, Lot +161620000085233JB	50 mL	VM567645S_00017	1.25 mL	Bromomethane	50 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..VM567645S_00017	11/30/15		Restek, Lot A099261		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
VMFASGW_00089	04/13/15	04/07/15	MEOH, Lot NA	2 mL	VMFASG_00027	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00027	04/13/15	03/13/15	MEOH, Lot 0000085233	50 mL	VM567645S_00017	1.25 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..VM567645S_00017	11/30/15		Restek, Lot A099261		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
VMFASGW_00090	04/20/15	04/13/15	MEOH, Lot NA	2 mL	VMFASG_00028	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00028	05/13/15	04/13/15	MEOH, Lot 0000085233	50 mL	VM567645S_00017	1.25 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..VM567645S_00017	11/30/15		Restek, Lot A099261		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
VMFASPW_00087	03/04/15	02/25/15	MEOH, Lot n/a	2 mL	VMRFASP_00018	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
							2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
.VMRFASP_00018	03/12/15	02/12/15	MEOH, Lot +161620000085233JB	100 mL	VM567641S_00006	2.5 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
					VM567642S_00003	1 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
..VM567641S_00006	02/29/16		Restek, Lot A093733		(Purchased Reagent)		1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							Benzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							o-Xylene	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
							Xylenes, Total	4000 ug/mL
..VM567642S_00003	02/29/16		Restek, Lot A093472		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
VMFASPW_00093	04/11/15	04/07/15	MEOH, Lot n/a	2 mL	VMRFASP_00019	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
							2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
.VMRFASP_00019	04/11/15	03/11/15	MEOH, Lot +161620000085233JB	100 mL	VM567641S_00006	2.5 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
					VM567642S_00005	1 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
..VM567641S_00006	02/29/16		Restek, Lot A093733		(Purchased Reagent)		1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							Benzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							o-Xylene	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Xylenes, Total	4000 ug/mL
..VM567642S_00005	02/29/16	Restek, Lot A093472			(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
VMFASPW_00094	04/18/15	04/11/15	MEOH, Lot n/a	2 mL	VMRFASP_00020	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
							2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
.VMRFASP_00020	05/31/15	04/11/15	MEOH, Lot 0000085233	100 mL	VM567641S_00007	2.5 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
					VM567642S_00005	1 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
..VM567641S_00007	02/29/16		Restek, Lot A093733		(Purchased Reagent)		1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							Benzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							o-Xylene	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
							Xylenes, Total	4000 ug/mL
..VM567642S_00005	02/29/16		Restek, Lot A093472		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
VMRGAS_00092	03/07/15	02/28/15	MEOH, Lot 0000085233	10 mL	vm569722_00001	0.2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00001	01/31/18		Restek, Lot A0108198		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00097	04/14/15	04/07/15	MEOH, Lot 0000085233	10 mL	vm569722_00001	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00001	01/31/18		Restek, Lot A0108198		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRPRIMW_00114	03/07/15	02/28/15	MEOH, Lot NA	1 mL	VMRPRIM_00010	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
							2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	48 ug/mL
.VMRPRIM_00010	05/31/15	12/10/14	MEOH, Lot +161620000085233JB	50 mL	VM567641_00012	1.25 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
					VM567642_00014	0.5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM567643_00020	2.5 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM567646_00016	0.6 mL	Vinyl acetate	48 ug/mL
..VM567641_00012	02/29/16		restek, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							2-Methyl-2-propanol	20000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Ethyl ether	2000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexane	2000 ug/mL
							Iodomethane	2000 ug/mL
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							n-Heptane	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
..VM567642_00014	02/29/16		Restek, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
..VM567643_00020	02/29/16		restek, Lot A093368		(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
..VM567646_00016	05/31/15		Restek, Lot A0107309		(Purchased Reagent)		Vinyl acetate	4000 ug/mL
VMRPRIMW_00114	03/07/15	02/28/15	MEOH, Lot NA	1 mL	VMRPRIM_00010	1 mL	1,2-Dichloroethene, Total	100 ug/mL
							Xylenes, Total	100 ug/mL
.VMRPRIM_00010	05/31/15	12/10/14	MEOH, Lot +161620000085233JB	50 mL	VM567641_00012	1.25 mL	1,2-Dichloroethene, Total	100 ug/mL
							Xylenes, Total	100 ug/mL
..VM567641_00012	02/29/16		restek, Lot A093581		(Purchased Reagent)		1,2-Dichloroethene, Total	4000 ug/mL
							Xylenes, Total	4000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VMRPRIMW_00120	04/14/15	04/07/15	MEOH, Lot NA	1 mL	VMRPRIM_00010	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
							2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	48 ug/mL
.VMRPRIM_00010	05/31/15	12/10/14	MEOH, Lot +161620000085233JB	50 mL	VM567641_00012	1.25 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
					VM567642_00014	0.5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM567643_00020	2.5 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM567646_00016	0.6 mL	Vinyl acetate	48 ug/mL
..VM567641_00012	02/29/16		restek, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							2-Methyl-2-propanol	20000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Ethyl ether	2000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexane	2000 ug/mL
							Iodomethane	2000 ug/mL
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							n-Heptane	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
..VM567642_00014	02/29/16		Restek, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
..VM567643_00020	02/29/16		restek, Lot A093368		(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
..VM567646_00016	05/31/15		Restek, Lot A0107309		(Purchased Reagent)		Vinyl acetate	4000 ug/mL
VMRPRIMW_00120	04/14/15	04/07/15	MEOH, Lot NA	1 mL	VMRPRIM_00010	1 mL	1,2-Dichloroethene, Total	100 ug/mL
							Xylenes, Total	100 ug/mL
.VMRPRIM_00010	05/31/15	12/10/14	MEOH, Lot +161620000085233JB	50 mL	VM567641_00012	1.25 mL	1,2-Dichloroethene, Total	100 ug/mL
							Xylenes, Total	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VM567641_00012	02/29/16		restek, Lot A093581		(Purchased Reagent)		1,2-Dichloroethene, Total	4000 ug/mL
							Xylenes, Total	4000 ug/mL
VMRPRIMW_00121	04/20/15	04/13/15	MEOH, Lot NA	1 mL	VMRPRIM_00010	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
							2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	48 ug/mL
.VMRPRIM_00010	05/31/15	12/10/14	MEOH, Lot +161620000085233JB	50 mL	VM567641_00012	1.25 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
					VM567642_00014	0.5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM567643_00020	2.5 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM567646_00016	0.6 mL	Vinyl acetate	48 ug/mL
..VM567641_00012	02/29/16		restek, Lot A093581		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							2-Methyl-2-propanol	20000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Ethyl ether	2000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexane	2000 ug/mL
							Iodomethane	2000 ug/mL
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							n-Heptane	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
..VM567642_00014	02/29/16		Restek, Lot A093365		(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
..VM567643_00020	02/29/16		restek, Lot A093368		(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
..VM567646_00016	05/31/15		Restek, Lot A0107309		(Purchased Reagent)		Vinyl acetate	4000 ug/mL
VMRPRIMW_00121	04/20/15	04/13/15	MEOH, Lot NA	1 mL	VMRPRIM_00010	1 mL	1,2-Dichloroethene, Total	100 ug/mL
							Xylenes, Total	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VMRPRIM_00010	05/31/15	12/10/14	MEOH, Lot +161620000085233JB	50 mL	VM567641_00012	1.25 mL	1,2-Dichloroethene, Total	100 ug/mL
							Xylenes, Total	100 ug/mL
..VM567641_00012	02/29/16	restek, Lot A093581			(Purchased Reagent)		1,2-Dichloroethene, Total	4000 ug/mL
							Xylenes, Total	4000 ug/mL
VMUX8SS_00017	04/27/15	01/27/15	MEOH, Lot 0000085233	100 mL	VMCUS8125_00009	866 uL	1,2-Dichloroethane-d4 (Surr)	216.5 ug/mL
							4-Bromofluorobenzene (Surr)	216.5 ug/mL
							Dibromofluoromethane (Surr)	216.5 ug/mL
							Toluene-d8 (Surr)	216.5 ug/mL
.VMCUS8125_00009	09/30/16	Ultra Scientific, Lot CJ-3208			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	25000 ug/mL
							4-Bromofluorobenzene (Surr)	25000 ug/mL
							Dibromofluoromethane (Surr)	25000 ug/mL
							Toluene-d8 (Surr)	25000 ug/mL
VMUX8SS_00018	06/18/15	03/18/15	MEOH, Lot 0000085233	100 mL	VMCUS8125_00009	866 uL	1,2-Dichloroethane-d4 (Surr)	216.5 ug/mL
							4-Bromofluorobenzene (Surr)	216.5 ug/mL
							Dibromofluoromethane (Surr)	216.5 ug/mL
							Toluene-d8 (Surr)	216.5 ug/mL
.VMCUS8125_00009	09/30/16	Ultra Scientific, Lot CJ-3208			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	25000 ug/mL
							4-Bromofluorobenzene (Surr)	25000 ug/mL
							Dibromofluoromethane (Surr)	25000 ug/mL
							Toluene-d8 (Surr)	25000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
HP34DNTSU_00039	09/02/15	03/02/15	Acetonitrile, Lot Acetonitrile_00023	25 mL	HP8330SU_00032	1.25 mL	3,4-Dinitrotoluene	50 ug/mL
.HP8330SU_00032	03/02/16		Restek, Lot A0102330		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
HP8330IC_00025	02/20/15	01/08/15	25% 0.1%HOAc in ACN, Lot 5160-009C	10 mL	HP8330TA_00031	10 uL	1,3,5-Trinitrobenzene	200 ng/mL
							1,3-Dinitrobenzene	200 ng/mL
							2,4,6-Trinitrotoluene	200 ng/mL
							2,4-Dinitrotoluene	200 ng/mL
							2,6-Dinitrotoluene	200 ng/mL
							2-Amino-4,6-dinitrotoluene	200 ng/mL
							2-Nitrotoluene	200 ng/mL
							3-Nitrotoluene	200 ng/mL
							4-Amino-2,6-dinitrotoluene	200 ng/mL
							4-Nitrotoluene	200 ng/mL
							HMX	200 ng/mL
							Nitrobenzene	200 ng/mL
							RDX	200 ng/mL
							Tetryl	200 ng/mL
					HPNGTA_00027	20 uL	Nitroglycerin	200 ng/mL
					HPPETNTA_00025	20 uL	PETN	200 ng/mL
.HP8330TA_00031	10/13/15		Cerilliant, Lot ER083011-01		(Purchased Reagent)		1,3,5-Trinitrobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							2,4,6-Trinitrotoluene	200 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Amino-4,6-dinitrotoluene	200 ug/mL
							2-Nitrotoluene	200 ug/mL
							3-Nitrotoluene	200 ug/mL
							4-Amino-2,6-dinitrotoluene	200 ug/mL
							4-Nitrotoluene	200 ug/mL
							HMX	200 ug/mL
							Nitrobenzene	200 ug/mL
							RDX	200 ug/mL
							Tetryl	200 ug/mL
.HPNGTA_00027	03/07/15		Accustandard, Lot 212031351-01		(Purchased Reagent)		Nitroglycerin	100 ug/mL
.HPPETNTA_00025	02/20/15		Accustandard, Lot 211081055-01		(Purchased Reagent)		PETN	0.1 mg/mL
HP8330IC_00028	05/07/15	03/02/15	25% 0.1%HOAc in ACN, Lot 5160-029A	10 mL	HP8330TA_00034	10 uL	1,3,5-Trinitrobenzene	200 ng/mL
							1,3-Dinitrobenzene	200 ng/mL
							2,4,6-Trinitrotoluene	200 ng/mL
							2,4-Dinitrotoluene	200 ng/mL
							2,6-Dinitrotoluene	200 ng/mL
							2-Amino-4,6-dinitrotoluene	200 ng/mL
							2-Nitrotoluene	200 ng/mL
							3-Nitrotoluene	200 ng/mL
							4-Amino-2,6-dinitrotoluene	200 ng/mL
							4-Nitrotoluene	200 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							HMX	200 ng/mL
							Nitrobenzene	200 ng/mL
							RDX	200 ng/mL
							Tetryl	200 ng/mL
					HPNGTA_00035	20 uL	Nitroglycerin	200 ng/mL
					HPPETNTA_00032	20 uL	PETN	200 ng/mL
.HP8330TA_00034	10/13/15	Cerilliant, Lot ER083011-01			(Purchased Reagent)		1,3,5-Trinitrobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							2,4,6-Trinitrotoluene	200 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Amino-4,6-dinitrotoluene	200 ug/mL
							2-Nitrotoluene	200 ug/mL
							3-Nitrotoluene	200 ug/mL
							4-Amino-2,6-dinitrotoluene	200 ug/mL
							4-Nitrotoluene	200 ug/mL
							HMX	200 ug/mL
							Nitrobenzene	200 ug/mL
							RDX	200 ug/mL
							Tetryl	200 ug/mL
.HPNGTA_00035	05/07/15	Accustandard, Lot 212031351-01			(Purchased Reagent)		Nitroglycerin	100 ug/mL
.HPPETNTA_00032	03/01/16	Accustandard, Lot 211081055-02			(Purchased Reagent)		PETN	0.1 mg/mL
HP8330ICL_00019	04/18/15	10/18/14	25:75 HOAc/ACN, Lot 5160-001B	50 mL	HP34DNTSU_00035	5 uL	3,4-Dinitrotoluene	5 ng/mL
					HP8330SP_00046	5 uL	1,3,5-Trinitrobenzene	5 ng/mL
							1,3-Dinitrobenzene	5 ng/mL
							2,4,6-Trinitrotoluene	5 ng/mL
							2,4-Dinitrotoluene	5 ng/mL
							2,6-Dinitrotoluene	5 ng/mL
							2-Amino-4,6-dinitrotoluene	5 ng/mL
							2-Nitrotoluene	5 ng/mL
							3-Nitrotoluene	5 ng/mL
							4-Amino-2,6-dinitrotoluene	5 ng/mL
							4-Nitrotoluene	5 ng/mL
							HMX	5 ng/mL
							Nitrobenzene	5 ng/mL
							RDX	5 ng/mL
							Tetryl	5 ng/mL
					HPNGPETNSP_00024	20 uL	Nitroglycerin	20 ng/mL
							PETN	20 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15	Restek, Lot A095548			(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
HP8330ICL_00025	10/20/15	04/23/15	25:75 HOAc/ACN, Lot 5160-041E	50 mL	HP34DNTSU_00041	5 uL	3,4-Dinitrotoluene	5 ng/mL
					HP8330SP_00052	5 uL	1,3,5-Trinitrobenzene	5 ng/mL
							1,3-Dinitrobenzene	5 ng/mL
							2,4,6-Trinitrotoluene	5 ng/mL
							2,4-Dinitrotoluene	5 ng/mL
							2,6-Dinitrotoluene	5 ng/mL
							2-Amino-4,6-dinitrotoluene	5 ng/mL
							2-Nitrotoluene	5 ng/mL
							3-Nitrotoluene	5 ng/mL
							4-Amino-2,6-dinitrotoluene	5 ng/mL
							4-Nitrotoluene	5 ng/mL
							HMX	5 ng/mL
							Nitrobenzene	5 ng/mL
							RDX	5 ng/mL
							Tetryl	5 ng/mL
					HPNGPETNSP_00029	20 uL	Nitroglycerin	20 ng/mL
							PETN	20 ng/mL
.HP34DNTSU_00041	10/20/15	04/20/15	Acetonitrile, Lot 91053	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00052	10/20/15	04/20/15	Acetonitrile, Lot 91053	10 mL	HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPNGPETNSP_00029	10/21/15	04/21/15	Methanol, Lot 90285	10 mL	HPNGTA_00036	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00033	500 uL	PETN	50 ug/mL
..HPNGTA_00036	04/20/16		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00033	04/20/16		Restek, Lot A0106847		(Purchased Reagent)		PETN	1000 ug/mL
HP8330L1_00019	04/18/15	11/18/14	25% 0.1%HoAC in ACN, Lot 5160-001B	50 mL	HP34DNTSU_00035	5 uL	3,4-Dinitrotoluene	5 ng/mL
					HP8330SP_00046	5 uL	3,5-Dinitroaniline	5 ng/mL
							1,3,5-Trinitrobenzene	5 ng/mL
							1,3-Dinitrobenzene	5 ng/mL
							2,4,6-Trinitrotoluene	5 ng/mL
							2,4-Dinitrotoluene	5 ng/mL
							2,6-Dinitrotoluene	5 ng/mL
							2-Amino-4,6-dinitrotoluene	5 ng/mL
							2-Nitrotoluene	5 ng/mL
							3-Nitrotoluene	5 ng/mL
							4-Amino-2,6-dinitrotoluene	5 ng/mL
							4-Nitrotoluene	5 ng/mL
							HMX	5 ng/mL
							Nitrobenzene	5 ng/mL
							RDX	5 ng/mL
							Tetryl	5 ng/mL
					HPEGDNSP_00019	5 uL	Ethylene glycol dinitrate	5 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					HPNGPETNSP_00024	5 uL	Nitroglycerin	5 ng/mL
							PETN	5 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
HP8330L1_00021	04/18/15	02/13/15	25% 0.1%HoAC in ACN, Lot 5160-23B	50 mL	HP34DNTSU_00035	5 uL	3,4-Dinitrotoluene	5 ng/mL
					HP8330SP_00046	5 uL	3,5-Dinitroaniline	5 ng/mL
							1,3,5-Trinitrobenzene	5 ng/mL
							1,3-Dinitrobenzene	5 ng/mL
							2,4,6-Trinitrotoluene	5 ng/mL
							2,4-Dinitrotoluene	5 ng/mL
							2,6-Dinitrotoluene	5 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Amino-4,6-dinitrotoluene	5 ng/mL
							2-Nitrotoluene	5 ng/mL
							3-Nitrotoluene	5 ng/mL
							4-Amino-2,6-dinitrotoluene	5 ng/mL
							4-Nitrotoluene	5 ng/mL
							HMX	5 ng/mL
							Nitrobenzene	5 ng/mL
							RDX	5 ng/mL
							Tetryl	5 ng/mL
					HPEGDNSP_00019	5 uL	Ethylene glycol dinitrate	5 ng/mL
					HPNGPETNSP_00024	5 uL	Nitroglycerin	5 ng/mL
					HPPASP_00022	10 uL	2,4,6-Trinitrophenol	10 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.HPPASP_00022	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPPATA_00020	500 uL	2,4,6-Trinitrophenol	50 ug/mL
..HPPATA_00020	11/18/15		restek, Lot A0101731		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
HP8330L2_00013	04/18/15	11/18/14	25% 0.1%HoAC in ACN, Lot 5160-001B	50 mL	HP34DNTSU_00035	10 uL	3,4-Dinitrotoluene	10 ng/mL
					HP8330SP_00046	10 uL	3,5-Dinitroaniline	10 ng/mL
							1,3,5-Trinitrobenzene	10 ng/mL
							1,3-Dinitrobenzene	10 ng/mL
							2,4,6-Trinitrotoluene	10 ng/mL
							2,4-Dinitrotoluene	10 ng/mL
							2,6-Dinitrotoluene	10 ng/mL
							2-Amino-4,6-dinitrotoluene	10 ng/mL
							2-Nitrotoluene	10 ng/mL
							3-Nitrotoluene	10 ng/mL
							4-Amino-2,6-dinitrotoluene	10 ng/mL
							4-Nitrotoluene	10 ng/mL
							HMX	10 ng/mL
							Nitrobenzene	10 ng/mL
							RDX	10 ng/mL
							Tetryl	10 ng/mL
					HPEGDNSP_00019	10 uL	Ethylene glycol dinitrate	10 ng/mL
					HPNGPETNSP_00024	10 uL	Nitroglycerin	10 ng/mL
							PETN	10 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
HP8330L2_00015	04/18/15	03/02/15	25% 0.1%HoAC in ACN, Lot 5160-023E	50 mL	HP34DNTSU_00035	10 uL	3,4-Dinitrotoluene	10 ng/mL
					HP8330SP_00046	10 uL	3,5-Dinitroaniline	10 ng/mL
							1,3,5-Trinitrobenzene	10 ng/mL
							1,3-Dinitrobenzene	10 ng/mL
							2,4,6-Trinitrotoluene	10 ng/mL
							2,4-Dinitrotoluene	10 ng/mL
							2,6-Dinitrotoluene	10 ng/mL
							2-Amino-4,6-dinitrotoluene	10 ng/mL
							2-Nitrotoluene	10 ng/mL
							3-Nitrotoluene	10 ng/mL
							4-Amino-2,6-dinitrotoluene	10 ng/mL
							4-Nitrotoluene	10 ng/mL
							HMX	10 ng/mL
							Nitrobenzene	10 ng/mL
							RDX	10 ng/mL
							Tetryl	10 ng/mL
					HPEGDNSP_00019	10 uL	Ethylene glycol dinitrate	10 ng/mL
					HPNGPETNSP_00024	10 uL	Nitroglycerin	10 ng/mL
							PETN	10 ng/mL
					HPPASP_00022	20 uL	2,4,6-Trinitrophenol	20 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
.HPPASP_00022	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPPATA_00020	500 uL	2,4,6-Trinitrophenol	50 ug/mL
..HPPATA_00020	11/18/15		restek, Lot A0101731		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
HP8330L3_00014	04/18/15	11/18/14	25% 0.1%HoAC in ACN, Lot 5160-001B	25 mL	HP34DNTSU_00035	10 uL	3,4-Dinitrotoluene	20 ng/mL
					HP8330SP_00046	10 uL	3,5-Dinitroaniline	20 ng/mL
							1,3,5-Trinitrobenzene	20 ng/mL
							1,3-Dinitrobenzene	20 ng/mL
							2,4,6-Trinitrotoluene	20 ng/mL
							2,4-Dinitrotoluene	20 ng/mL
							2,6-Dinitrotoluene	20 ng/mL
							2-Amino-4,6-dinitrotoluene	20 ng/mL
							2-Nitrotoluene	20 ng/mL
							3-Nitrotoluene	20 ng/mL
							4-Amino-2,6-dinitrotoluene	20 ng/mL
							4-Nitrotoluene	20 ng/mL
							HMX	20 ng/mL
							Nitrobenzene	20 ng/mL
							RDX	20 ng/mL
							Tetryl	20 ng/mL
					HPEGDNSP_00019	10 uL	Ethylene glycol dinitrate	20 ng/mL
					HPNGPETNSP_00024	10 uL	Nitroglycerin	20 ng/mL
							PETN	20 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
HP8330L3_00016	04/18/15	03/11/15	25% 0.1%HoAC in ACN, Lot 5160-029A	25 mL	HP34DNTSU_00035	10 uL	3,4-Dinitrotoluene	20 ng/mL
					HP8330SP_00046	10 uL	3,5-Dinitroaniline	20 ng/mL
							1,3,5-Trinitrobenzene	20 ng/mL
							1,3-Dinitrobenzene	20 ng/mL
							2,4,6-Trinitrotoluene	20 ng/mL
							2,4-Dinitrotoluene	20 ng/mL
							2,6-Dinitrotoluene	20 ng/mL
							2-Amino-4,6-dinitrotoluene	20 ng/mL
							2-Nitrotoluene	20 ng/mL
							3-Nitrotoluene	20 ng/mL
							4-Amino-2,6-dinitrotoluene	20 ng/mL
							4-Nitrotoluene	20 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							HMX	20 ng/mL
							Nitrobenzene	20 ng/mL
							RDX	20 ng/mL
							Tetryl	20 ng/mL
					HPEGDNSP_00019	10 uL	Ethylene glycol dinitrate	20 ng/mL
					HPNGPETNSP_00024	10 uL	Nitroglycerin	20 ng/mL
							PETN	20 ng/mL
					HPPASP_00022	25 uL	2,4,6-Trinitrophenol	50 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
.HPPASP_00022	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPPATA_00020	500 uL	2,4,6-Trinitrophenol	50 ug/mL
..HPPATA_00020	11/18/15		restek, Lot A0101731		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
HP8330L4_00023	04/18/15	01/07/14	25% 0.1%HoAC in ACN, Lot 5160-009C	200 mL	HP34DNTSU_00035	200 uL	3,4-Dinitrotoluene	50 ng/mL
					HP8330SP_00046	200 uL	3,5-Dinitroaniline	50 ng/mL
							1,3,5-Trinitrobenzene	50 ng/mL
							1,3-Dinitrobenzene	50 ng/mL
							2,4,6-Trinitrotoluene	50 ng/mL
							2,4-Dinitrotoluene	50 ng/mL
							2,6-Dinitrotoluene	50 ng/mL
							2-Amino-4,6-dinitrotoluene	50 ng/mL
							2-Nitrotoluene	50 ng/mL
							3-Nitrotoluene	50 ng/mL
							4-Amino-2,6-dinitrotoluene	50 ng/mL
							4-Nitrotoluene	50 ng/mL
							HMX	50 ng/mL
							Nitrobenzene	50 ng/mL
							RDX	50 ng/mL
							Tetryl	50 ng/mL
					HPEGDNSP_00019	200 uL	Ethylene glycol dinitrate	50 ng/mL
					HPNGPETNSP_00024	200 uL	Nitroglycerin	50 ng/mL
							PETN	50 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
HP8330L4_00024	04/18/15	02/07/15	25% 0.1%HoAC in ACN, Lot 5160-023E	200 mL	HP34DNTSU_00035	200 uL	3,4-Dinitrotoluene	50 ng/mL
					HP8330SP_00046	200 uL	3,5-Dinitroaniline	50 ng/mL
							1,3,5-Trinitrobenzene	50 ng/mL
							1,3-Dinitrobenzene	50 ng/mL
							2,4,6-Trinitrotoluene	50 ng/mL
							2,4-Dinitrotoluene	50 ng/mL
							2,6-Dinitrotoluene	50 ng/mL
							2-Amino-4,6-dinitrotoluene	50 ng/mL
							2-Nitrotoluene	50 ng/mL
							3-Nitrotoluene	50 ng/mL
							4-Amino-2,6-dinitrotoluene	50 ng/mL
							4-Nitrotoluene	50 ng/mL
							HMX	50 ng/mL
							Nitrobenzene	50 ng/mL
							RDX	50 ng/mL
							Tetryl	50 ng/mL
					HPEGDNSP_00019	200 uL	Ethylene glycol dinitrate	50 ng/mL
					HPNGPETNSP_00024	200 uL	Nitroglycerin	50 ng/mL
							PETN	50 ng/mL
					HPPASP_00022	400 uL	2,4,6-Trinitrophenol	100 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
.HPPASP_00022	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPPATA_00020	500 uL	2,4,6-Trinitrophenol	50 ug/mL
..HPPATA_00020	11/18/15		restek, Lot A0101731		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
HP8330L4_00026	10/20/15	04/20/15	25% 0.1%HoAC in ACN, Lot 5160-029A	200 mL	HP34DNTSU_00041	200 uL	3,4-Dinitrotoluene	50 ng/mL
					HP8330SP_00052	200 uL	1,3,5-Trinitrobenzene	50 ng/mL
							1,3-Dinitrobenzene	50 ng/mL
							2,4,6-Trinitrotoluene	50 ng/mL
							2,4-Dinitrotoluene	50 ng/mL
							2,6-Dinitrotoluene	50 ng/mL
							2-Amino-4,6-dinitrotoluene	50 ng/mL
							2-Nitrotoluene	50 ng/mL
							3-Nitrotoluene	50 ng/mL
							4-Amino-2,6-dinitrotoluene	50 ng/mL
							4-Nitrotoluene	50 ng/mL
							HMX	50 ng/mL
							Nitrobenzene	50 ng/mL
							RDX	50 ng/mL
							Tetryl	50 ng/mL
					HPNGPETNSP_00028	200 uL	Nitroglycerin	50 ng/mL
							PETN	50 ng/mL
.HP34DNTSU_00041	10/20/15	04/20/15	Acetonitrile, Lot 91053	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00052	10/20/15	04/20/15	Acetonitrile, Lot 91053	10 mL	HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPNGPETNSP_00028	10/20/15	04/20/15	Methanol, Lot 90285	10 mL	HPNGTA_00036	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00033	500 uL	PETN	50 ug/mL
..HPNGTA_00036	04/20/16		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00033	04/20/16		Restek, Lot A0106847		(Purchased Reagent)		PETN	1000 ug/mL
HP8330L5_00032	04/18/15	11/18/14	25% 0.1%HoAC in ACN, Lot 5160-009C	100 mL	HP34DNTSU_00035	200 uL	3,4-Dinitrotoluene	100 ng/mL
					HP8330SP_00046	200 uL	3,5-Dinitroaniline	100 ng/mL
							1,3,5-Trinitrobenzene	100 ng/mL
							1,3-Dinitrobenzene	100 ng/mL
							2,4,6-Trinitrotoluene	100 ng/mL
							2,4-Dinitrotoluene	100 ng/mL
							2,6-Dinitrotoluene	100 ng/mL
							2-Amino-4,6-dinitrotoluene	100 ng/mL
							2-Nitrotoluene	100 ng/mL
							3-Nitrotoluene	100 ng/mL
							4-Amino-2,6-dinitrotoluene	100 ng/mL
							4-Nitrotoluene	100 ng/mL
							HMX	100 ng/mL
							Nitrobenzene	100 ng/mL
							RDX	100 ng/mL
							Tetryl	100 ng/mL
					HPEGDNSP_00019	200 uL	Ethylene glycol dinitrate	100 ng/mL
					HPNGPETNSP_00024	200 uL	Nitroglycerin	100 ng/mL
							PETN	100 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
HP8330L5_00033	04/18/15	02/07/15	25% 0.1%HoAC in ACN, Lot 5160-023E	100 mL	HP34DNTSU_00035	200 uL	3,4-Dinitrotoluene	100 ng/mL
					HP8330SP_00046	200 uL	3,5-Dinitroaniline	100 ng/mL
							1,3,5-Trinitrobenzene	100 ng/mL
							1,3-Dinitrobenzene	100 ng/mL
							2,4,6-Trinitrotoluene	100 ng/mL
							2,4-Dinitrotoluene	100 ng/mL
							2,6-Dinitrotoluene	100 ng/mL
							2-Amino-4,6-dinitrotoluene	100 ng/mL
							2-Nitrotoluene	100 ng/mL
							3-Nitrotoluene	100 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Amino-2,6-dinitrotoluene	100 ng/mL
							4-Nitrotoluene	100 ng/mL
							HMX	100 ng/mL
							Nitrobenzene	100 ng/mL
							RDX	100 ng/mL
							Tetryl	100 ng/mL
					HPEGDNSP_00019	200 uL	Ethylene glycol dinitrate	100 ng/mL
					HPNGPETNSP_00024	200 uL	Nitroglycerin	100 ng/mL
							PETN	100 ng/mL
					HPPASP_00022	400 uL	2,4,6-Trinitrophenol	200 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.HPPASP_00022	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPPATA_00020	500 uL	2,4,6-Trinitrophenol	50 ug/mL
..HPPATA_00020	11/18/15		restek, Lot A0101731		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
HP8330L5_00035	10/20/15	04/21/15	25% 0.1%HoAC in ACN, Lot 5160-029A	50 mL	HP34DNTSU_00041	100 uL	3,4-Dinitrotoluene	100 ng/mL
					HP8330SP_00052	100 uL	1,3,5-Trinitrobenzene	100 ng/mL
							1,3-Dinitrobenzene	100 ng/mL
							2,4,6-Trinitrotoluene	100 ng/mL
							2,4-Dinitrotoluene	100 ng/mL
							2,6-Dinitrotoluene	100 ng/mL
							2-Amino-4,6-dinitrotoluene	100 ng/mL
							2-Nitrotoluene	100 ng/mL
							3-Nitrotoluene	100 ng/mL
							4-Amino-2,6-dinitrotoluene	100 ng/mL
							4-Nitrotoluene	100 ng/mL
							HMX	100 ng/mL
							Nitrobenzene	100 ng/mL
							RDX	100 ng/mL
							Tetryl	100 ng/mL
					HPNGPETNSP_00028	100 uL	Nitroglycerin	100 ng/mL
							PETN	100 ng/mL
.HP34DNTSU_00041	10/20/15	04/20/15	Acetonitrile, Lot 91053	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00052	10/20/15	04/20/15	Acetonitrile, Lot 91053	10 mL	HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPNGPETNSP_00028	10/20/15	04/20/15	Methanol, Lot 90285	10 mL	HPNGTA_00036	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00033	500 uL	PETN	50 ug/mL
..HPNGTA_00036	04/20/16		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00033	04/20/16		Restek, Lot A0106847		(Purchased Reagent)		PETN	1000 ug/mL
HP8330L6_00026	04/18/15	11/17/14	25% 0.1%HoAC in ACN, Lot 5160-001B	25 mL	HP34DNTSU_00035	100 uL	3,4-Dinitrotoluene	200 ng/mL
					HP8330SP_00046	100 uL	3,5-Dinitroaniline	200 ng/mL
							1,3,5-Trinitrobenzene	200 ng/mL
							1,3-Dinitrobenzene	200 ng/mL
							2,4,6-Trinitrotoluene	200 ng/mL
							2,4-Dinitrotoluene	200 ng/mL
							2,6-Dinitrotoluene	200 ng/mL
							2-Amino-4,6-dinitrotoluene	200 ng/mL
							2-Nitrotoluene	200 ng/mL
							3-Nitrotoluene	200 ng/mL
							4-Amino-2,6-dinitrotoluene	200 ng/mL
							4-Nitrotoluene	200 ng/mL
							HMX	200 ng/mL
							Nitrobenzene	200 ng/mL
							RDX	200 ng/mL
							Tetryl	200 ng/mL
					HPEGDNSP_00019	100 uL	Ethylene glycol dinitrate	200 ng/mL
					HPNGPETNSP_00024	100 uL	Nitroglycerin	200 ng/mL
							PETN	200 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
HP8330L6_00027	04/18/15	02/07/15	25% 0.1%HoAC in ACN, Lot 5160-023E	25 mL	HP34DNTSU_00035	100 uL	3,4-Dinitrotoluene	200 ng/mL
					HP8330SP_00046	100 uL	3,5-Dinitroaniline	200 ng/mL
							1,3,5-Trinitrobenzene	200 ng/mL
							1,3-Dinitrobenzene	200 ng/mL
							2,4,6-Trinitrotoluene	200 ng/mL
							2,4-Dinitrotoluene	200 ng/mL
							2,6-Dinitrotoluene	200 ng/mL
							2-Amino-4,6-dinitrotoluene	200 ng/mL
							2-Nitrotoluene	200 ng/mL
							3-Nitrotoluene	200 ng/mL
							4-Amino-2,6-dinitrotoluene	200 ng/mL
							4-Nitrotoluene	200 ng/mL
							HMX	200 ng/mL
							Nitrobenzene	200 ng/mL
							RDX	200 ng/mL
							Tetryl	200 ng/mL
					HPEGDNSP_00019	100 uL	Ethylene glycol dinitrate	200 ng/mL
					HPNGPETNSP_00024	100 uL	Nitroglycerin	200 ng/mL
							PETN	200 ng/mL
					HPPASP_00022	250 uL	2,4,6-Trinitrophenol	500 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
.HPPASP_00022	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPPATA_00020	500 uL	2,4,6-Trinitrophenol	50 ug/mL
..HPPATA_00020	11/18/15		restek, Lot A0101731		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
HP8330L7_00016	04/18/15	01/08/15	25% 0.1%HoAC in ACN, Lot 5160-009C	10 mL	HP34DNTSU_00035	100 uL	3,4-Dinitrotoluene	500 ng/mL
					HP8330SP_00046	100 uL	3,5-Dinitroaniline	500 ng/mL
							1,3,5-Trinitrobenzene	500 ng/mL
							1,3-Dinitrobenzene	500 ng/mL
							2,4,6-Trinitrotoluene	500 ng/mL
							2,4-Dinitrotoluene	500 ng/mL
							2,6-Dinitrotoluene	500 ng/mL
							2-Amino-4,6-dinitrotoluene	500 ng/mL
							2-Nitrotoluene	500 ng/mL
							3-Nitrotoluene	500 ng/mL
							4-Amino-2,6-dinitrotoluene	500 ng/mL
							4-Nitrotoluene	500 ng/mL
							HMX	500 ng/mL
							Nitrobenzene	500 ng/mL
							RDX	500 ng/mL
							Tetryl	500 ng/mL
					HPEGDNSP_00019	100 uL	Ethylene glycol dinitrate	500 ng/mL
					HPNGPETNSP_00024	100 uL	Nitroglycerin	500 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PETN	500 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
HP8330L7_00018	04/18/15	02/07/15	25% 0.1%HoAC in ACN, Lot 5160-023E	25 mL	HP34DNTSU_00035	250 uL	3,4-Dinitrotoluene	500 ng/mL
					HP8330SP_00046	250 uL	3,5-Dinitroaniline	500 ng/mL
							1,3,5-Trinitrobenzene	500 ng/mL
							1,3-Dinitrobenzene	500 ng/mL
							2,4,6-Trinitrotoluene	500 ng/mL
							2,4-Dinitrotoluene	500 ng/mL
							2,6-Dinitrotoluene	500 ng/mL
							2-Amino-4,6-dinitrotoluene	500 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitrotoluene	500 ng/mL
							3-Nitrotoluene	500 ng/mL
							4-Amino-2,6-dinitrotoluene	500 ng/mL
							4-Nitrotoluene	500 ng/mL
							HMX	500 ng/mL
							Nitrobenzene	500 ng/mL
							RDX	500 ng/mL
							Tetryl	500 ng/mL
					HPEGDNSP_00019	250 uL	Ethylene glycol dinitrate	500 ng/mL
					HPNGPETNSP_00024	250 uL	Nitroglycerin	500 ng/mL
							PETN	500 ng/mL
					HPPASP_00022	500 uL	2,4,6-Trinitrophenol	1000 ng/mL
.HP34DNTSU_00035	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP8330SU_00029	500 uL	3,4-Dinitrotoluene	50 ug/mL
..HP8330SU_00029	11/18/15		Restek, Lot A095548		(Purchased Reagent)		3,4-Dinitrotoluene	1000 ug/mL
.HP8330SP_00046	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HP35DNATA_00031	500 uL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00033	500 uL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
..HP35DNATA_00031	11/18/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
..HP8330TA_00033	11/18/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
.HPEGDNSP_00019	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPEGDNTA_00016	500 uL	Ethylene glycol dinitrate	50 ug/mL
..HPEGDNTA_00016	11/18/15		Restek, Lot A097821		(Purchased Reagent)		Ethylene glycol dinitrate	1000 ug/mL
.HPNGPETNSP_00024	04/18/15	11/18/14	Methanol, Lot 80908	10 mL	HPNGTA_00034	500 uL	Nitroglycerin	50 ug/mL
					HPPETNTA_00031	500 uL	PETN	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..HPNGTA_00034	11/18/15		Restek, Lot A096573		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
..HPPETNTA_00031	11/18/15		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
.HPPASP_00022	04/18/15	11/18/14	Acetonitrile, Lot 69312	10 mL	HPPATA_00020	500 uL	2,4,6-Trinitrophenol	50 ug/mL
..HPPATA_00020	11/18/15		restek, Lot A0101731		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
HP8330SP_00051	09/11/15	03/11/15	Acetonitrile, Lot Acetonitrile_00024	10 mL	HP35DNATA_00030	0.5 mL	3,5-Dinitroaniline	50 ug/mL
					HP8330TA_00032	0.5 mL	1,3,5-Trinitrobenzene	50 ug/mL
							1,3-Dinitrobenzene	50 ug/mL
							2,4,6-Trinitrotoluene	50 ug/mL
							2,4-Dinitrotoluene	50 ug/mL
							2,6-Dinitrotoluene	50 ug/mL
							2-Amino-4,6-dinitrotoluene	50 ug/mL
							2-Nitrotoluene	50 ug/mL
							3-Nitrotoluene	50 ug/mL
							4-Amino-2,6-dinitrotoluene	50 ug/mL
							4-Nitrotoluene	50 ug/mL
							HMX	50 ug/mL
							Nitrobenzene	50 ug/mL
							RDX	50 ug/mL
							Tetryl	50 ug/mL
.HP35DNATA_00030	11/17/15		Restek, Lot A0101716		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.HP8330TA_00032	11/17/15		Restek, Lot A0102389		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
HPNCSP_00013	07/14/15	01/14/15	Acetone, Lot 0000090987	200 mL	HPNCTA_00005	0.1014 g	Nitrocellulose	507 ug/mL
.HPNCTA_00005	11/01/17		Theater Affects, Lot 4721		(Purchased Reagent)		Nitrocellulose	1 g/g
HPNGPETNSP_00026	07/29/15	01/29/15	Methanol, Lot Methanol_00025	25 mL	HPNGTA_00033	1.25 mL	Nitroglycerin	50 ug/mL
					HPPETNTA_00030	1.25 mL	PETN	50 ug/mL
.HPNGTA_00033	01/29/16		Restek, Lot A0105695		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.HPPETNTA_00030	01/29/16		Restek, Lot AO98102		(Purchased Reagent)		PETN	1000 ug/mL
HPNQIC_00007	07/03/15	04/10/15	Water, Lot M04102015	50 mL	HPNQTA_00017	250 uL	Nitroguanidine	500 ng/mL
.HPNQTA_00017	07/03/15		AccuStandard, Inc, Lot 213071053		(Purchased Reagent)		Nitroguanidine	100 ug/mL
HPNQL2_00008	04/27/15	11/19/14	Water, Lot M11172014	50 mL	HPNQSP_00016	20 uL	Nitroguanidine	20 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.HPNQSP_00016	04/27/15	10/27/14	Methanol, Lot 0000042259	5 mL	HPNQTA_00016	250 uL	Nitroguanidine	50 ug/mL
..HPNQTA_00016	09/30/15		Restek, Lot A076817		(Purchased Reagent)		Nitroguanidine	1000 ug/mL
HPNQL3_00007	04/27/15	11/19/14	Water, Lot M11172014	25 mL	HPNQSP_00016	25 uL	Nitroguanidine	50 ng/mL
.HPNQSP_00016	04/27/15	10/27/14	Methanol, Lot 0000042259	5 mL	HPNQTA_00016	250 uL	Nitroguanidine	50 ug/mL
..HPNQTA_00016	09/30/15		Restek, Lot A076817		(Purchased Reagent)		Nitroguanidine	1000 ug/mL
HPNQL4_00009	04/27/15	10/28/14	Water, Lot M10272014	50 mL	HPNQSP_00016	100 uL	Nitroguanidine	100 ng/mL
.HPNQSP_00016	04/27/15	10/27/14	Methanol, Lot 0000042259	5 mL	HPNQTA_00016	250 uL	Nitroguanidine	50 ug/mL
..HPNQTA_00016	09/30/15		Restek, Lot A076817		(Purchased Reagent)		Nitroguanidine	1000 ug/mL
HPNQL5_00008	04/27/15	10/27/14	Water, Lot M10272014	50 mL	HPNQSP_00016	200 uL	Nitroguanidine	200 ng/mL
.HPNQSP_00016	04/27/15	10/27/14	Methanol, Lot 0000042259	5 mL	HPNQTA_00016	250 uL	Nitroguanidine	50 ug/mL
..HPNQTA_00016	09/30/15		Restek, Lot A076817		(Purchased Reagent)		Nitroguanidine	1000 ug/mL
HPNQL6_00007	04/27/15	11/19/14	Water, Lot M11172014	25 mL	HPNQSP_00016	250 uL	Nitroguanidine	500 ng/mL
.HPNQSP_00016	04/27/15	10/27/14	Methanol, Lot 0000042259	5 mL	HPNQTA_00016	250 uL	Nitroguanidine	50 ug/mL
..HPNQTA_00016	09/30/15		Restek, Lot A076817		(Purchased Reagent)		Nitroguanidine	1000 ug/mL
HPNQL7_00007	04/27/15	11/19/14	Water, Lot M11192014	25 mL	HPNQSP_00016	500 uL	Nitroguanidine	1000 ng/mL
.HPNQSP_00016	04/27/15	10/27/14	Methanol, Lot 0000042259	5 mL	HPNQTA_00016	250 uL	Nitroguanidine	50 ug/mL
..HPNQTA_00016	09/30/15		Restek, Lot A076817		(Purchased Reagent)		Nitroguanidine	1000 ug/mL
HPNQSP_00018	10/20/15	04/20/15	Methanol, Lot 420099	10 mL	HPNQTA_00019	0.5 mL	Nitroguanidine	50 ug/mL
.HPNQTA_00019	04/20/16		Restek, Lot A0100497		(Purchased Reagent)		Nitroguanidine	1000 ug/mL
WC-353.2-ICV_00046	05/06/15	04/06/15	DI Water, Lot xxxxxxx	100 mL	WC-N02-1000_00052	0.05 mL	Nitrate Nitrite as N	1 mg/L as N
							Nitrocellulose	8.33333 mg/L as N
					WC-N03-1000_00028	0.05 mL	Nitrate Nitrite as N	1 mg/L as N
							Nitrocellulose	8.33333 mg/L as N
.WC-N02-1000_00052	05/25/15		CPI International, Lot 1064466		(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L as N
							Nitrocellulose	8333.33 mg/L as N
.WC-N03-1000_00028	08/12/15		CPI, Lot 1070689		(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L as N
							Nitrocellulose	8333.33 mg/L as N
WC-353.2-L1_00051	05/06/15	04/06/15	DI Water, Lot xxxx	100 mL	WC-353.2-INT_00049	0.05 mL	Nitrocellulose	0.416667 mg/L as N
.WC-353.2-INT_00049	05/06/15	04/06/15	DI Water, Lot xxxxxxx	10 mL	WC-N02SS50223_00002	0.5 mL	Nitrocellulose	833.333 mg/L as N
					WC-N03SS50223_00002	0.5 mL	Nitrocellulose	833.333 mg/L as N
..WC-N02SS50223_00002	08/23/15		ERA, Lot 070414		(Purchased Reagent)		Nitrocellulose	8333.33 mg/L as N

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..WC-N03SS50223_00002	08/23/15	ERA, Lot 320614			(Purchased Reagent)		Nitrocellulose	8333.33 mg/L as N
WC-353.2-L4_00042	05/06/15	04/06/15	DI Water, Lot xxxx	100 mL	WC-353.2-INT_00049	1 mL	Nitrate Nitrite as N	1 mg/L as N
							Nitrocellulose	8.33333 mg/L as N
.WC-353.2-INT_00049	05/06/15	04/06/15	DI Water, Lot xxxxxxx	10 mL	WC-N02SS50223_00002	0.5 mL	Nitrate Nitrite as N	100 mg/L as N
							Nitrocellulose	833.333 mg/L as N
					WC-N03SS50223_00002	0.5 mL	Nitrate Nitrite as N	100 mg/L as N
							Nitrocellulose	833.333 mg/L as N
..WC-N02SS50223_00002	08/23/15	ERA, Lot 070414			(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L as N
							Nitrocellulose	8333.33 mg/L as N
..WC-N03SS50223_00002	08/23/15	ERA, Lot 320614			(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L as N
							Nitrocellulose	8333.33 mg/L as N

Reagent

exNPDES stock_00001

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32415 Lot No.: A0101246

Description : Organochlorine Pesticide Mix AB #3

Organochlorine Pesticide Mix AB #3 2,000 µg/mL, Hexane/Toluene (50:50), 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : February 28, 2018 Storage: 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	alpha-BHC		2,000.0 µg/mL	+/- 11.7371	µg/mL	Gravimetric
	CAS # 319-84-6	(Lot 27275-15)		+/- 78.2355	µg/mL	Unstressed
	Purity 99%			+/- 124.1521	µg/mL	Stressed
2	gamma-BHC (Lindane)		2,002.0 µg/mL	+/- 11.7489	µg/mL	Gravimetric
	CAS # 58-89-9	(Lot 2038100)		+/- 78.3137	µg/mL	Unstressed
	Purity 99%			+/- 124.2763	µg/mL	Stressed
3	beta-BHC		2,000.0 µg/mL	+/- 11.7371	µg/mL	Gravimetric
	CAS # 319-85-7	(Lot ER031313-01)		+/- 78.2355	µg/mL	Unstressed
	Purity 99%			+/- 124.1521	µg/mL	Stressed
4	delta-BHC		2,000.0 µg/mL	+/- 11.7371	µg/mL	Gravimetric
	CAS # 319-86-8	(Lot ER030911-01)		+/- 78.2355	µg/mL	Unstressed
	Purity 99%			+/- 124.1521	µg/mL	Stressed
5	Heptachlor		2,000.2 µg/mL	+/- 11.7382	µg/mL	Gravimetric
	CAS # 76-44-8	(Lot RM03111)		+/- 78.2425	µg/mL	Unstressed
	Purity 98%			+/- 124.1633	µg/mL	Stressed
6	Aldrin		2,001.0 µg/mL	+/- 11.7430	µg/mL	Gravimetric
	CAS # 309-00-2	(Lot 1949600)		+/- 78.2746	µg/mL	Unstressed
	Purity 99%			+/- 124.2142	µg/mL	Stressed
7	Heptachlor epoxide (isomer B)		2,000.0 µg/mL	+/- 11.7371	µg/mL	Gravimetric
	CAS # 1024-57-3	(Lot 34750-73)		+/- 78.2355	µg/mL	Unstressed
	Purity 99%			+/- 124.1521	µg/mL	Stressed
8	trans-Chlordane		2,000.0 µg/mL	+/- 11.7371	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot ER061906-04)		+/- 78.2355	µg/mL	Unstressed
	Purity 99%			+/- 124.1521	µg/mL	Stressed

9	cis-Chlordane CAS # 5103-71-9 Purity 99%	(Lot ER062410-01)	2,000.0	µg/mL	+/- 11.7371 +/- 78.2355 +/- 124.1521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	4,4'-DDE CAS # 72-55-9 Purity 99%	(Lot ER011106-01)	2,000.0	µg/mL	+/- 11.7371 +/- 78.2355 +/- 124.1521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Endosulfan I CAS # 959-98-8 Purity 98%	(Lot ER012105-02)	2,001.2	µg/mL	+/- 11.7439 +/- 78.2809 +/- 124.2241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Dieldrin CAS # 60-57-1 Purity 98%	(Lot ER030105-03)	1,999.2	µg/mL	+/- 11.7324 +/- 78.2042 +/- 124.1025	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Endrin CAS # 72-20-8 Purity 99%	(Lot 461-108A)	2,001.0	µg/mL	+/- 11.7430 +/- 78.2746 +/- 124.2142	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	4,4'-DDD CAS # 72-54-8 Purity 97%	(Lot ER061207-01)	2,002.1	µg/mL	+/- 11.7493 +/- 78.3169 +/- 124.2813	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Endosulfan II CAS # 33213-65-9 Purity 99%	(Lot ER102407-02)	2,000.0	µg/mL	+/- 11.7371 +/- 78.2355 +/- 124.1521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	4,4'-DDT CAS # 50-29-3 Purity 98%	(Lot ER012306-03)	2,000.2	µg/mL	+/- 11.7382 +/- 78.2425 +/- 124.1633	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Endrin aldehyde CAS # 7421-93-4 Purity 98%	(Lot ER082306-01)	1,999.2	µg/mL	+/- 11.7324 +/- 78.2042 +/- 124.1025	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Methoxychlor CAS # 72-43-5 Purity 99%	(Lot 1977500)	2,000.0	µg/mL	+/- 11.7371 +/- 78.2355 +/- 124.1521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Endosulfan sulfate CAS # 1031-07-8 Purity 99%	(Lot ER042406-04)	2,000.0	µg/mL	+/- 11.7371 +/- 78.2355 +/- 124.1521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Endrin ketone CAS # 53494-70-5 Purity 98%	(Lot ER062806-01)	2,005.1	µg/mL	+/- 11.7669 +/- 78.4342 +/- 124.4675	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Reagent

MS6020ACRIA_00002

INORGANIC VENTURES™
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-6020A-CRI-A
Lot Number:	H2-MEB537060
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Ca, K, Mg, Na, 100 µg/mL ea: Fe, 50 µg/mL ea: Al, 20 µg/mL ea: B, Zn, 10 µg/mL ea: Sr, 5 µg/mL ea: As, Ba, Mn, Se, V, 2 µg/mL ea: Cr3, Cu, Ni, Tl, 1 µg/mL ea: Be, Cd, Co, Pb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	50.02 ± 0.30 µg/mL	Arsenic, As	5.001 ± 0.032 µg/mL	Barium, Ba	5.001 ± 0.032 µg/mL
Beryllium, Be	1.000 ± 0.007 µg/mL	Boron, B	20.00 ± 0.13 µg/mL	Cadmium, Cd	0.999 ± 0.008 µg/mL
Calcium, Ca	1,000 ± 6 µg/mL	Chromium+3, Cr3	2.000 ± 0.012 µg/mL	Cobalt, Co	0.999 ± 0.008 µg/mL
Copper, Cu	2.001 ± 0.013 µg/mL	Iron, Fe	100.0 ± 0.5 µg/mL	Lead, Pb	1.000 ± 0.006 µg/mL
Magnesium, Mg	1,000 ± 5 µg/mL	Manganese, Mn	5.000 ± 0.029 µg/mL	Nickel, Ni	2.000 ± 0.012 µg/mL
Potassium, K	1,001 ± 4 µg/mL	Selenium, Se	5.000 ± 0.029 µg/mL	Sodium, Na	999 ± 4 µg/mL
Strontium, Sr	10.00 ± 0.06 µg/mL	Thallium, Tl	2.001 ± 0.013 µg/mL	Vanadium, V	5.000 ± 0.032 µg/mL
Zinc, Zn	20.02 ± 0.11 µg/mL				

Certified Density: 1.036 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 14, 2014

11.2 Expiration Date

EXPIRES
1 Aug 2015

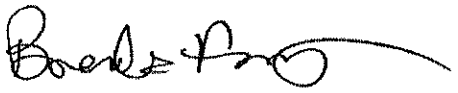
11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

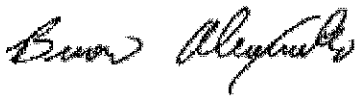
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

MS6020ACRIB_00002

INORGANIC VENTURES™
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 — ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-6020A-CRI-B
Lot Number:	H2-MEB537061
Matrix:	5% (v/v) HNO3 tr HF
Value / Analyte(s):	10 µg/mL ea: Mo, Sn, Ti, W, 2 µg/mL ea: Sb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	2.001 ± 0.013 µg/mL	Molybdenum, Mo	10.00 ± 0.06 µg/mL	Tin, Sn	10.00 ± 0.06 µg/mL
Titanium, Ti	10.00 ± 0.07 µg/mL	Tungsten, W	10.00 ± 0.06 µg/mL		

Certified Density: 1.023 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2
W	ICP Assay	3163	060331

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 14, 2014

11.2 Expiration Date

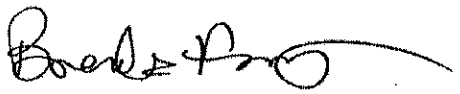
11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

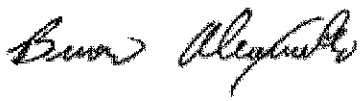
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
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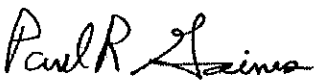

Reagent

MTAG_00005

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	Silver	Source Material:	Silver metal
Part Number:	**100051-1**	Material Purity:	99.999%
Lot Number:	**1401302**	Matrix:	2% (v/v) HNO_3

Certified Value: 1000 µg/mL ± 3 µg/mL

The Certified value is based on gravimetric and volumetric preparation, and confirmed against SRM 3151 (lot number 992212) by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

Density: 1.008 g/mL ± 0.002 g/mL @ 21.6°C

Uncertified Values:

Trace Metal Impurity Scan: The data reported are based upon a scan of this specific lot at 1000 µg/mL via ICP analysis. The values are reported in µg/L.

Ag		M	Cu	<	0.1	Li	<	0.5	Rb	<	0.02	Th	<	0.02
Al	<	0.1	Dy	<	0.02	Lu	<	0.02	Re	<	0.02	Ti	<	0.02
As	<	0.05	Er	<	0.02	Mg	<	0.5	Rh	<	0.02	Tl	<	0.02
Au	<	0.02	Eu	<	0.02	Mn	<	0.1	Ru	<	0.02	Tm	<	0.02
B	<	1	Fe	<	1	Mo	<	0.02	Sb	<	0.02	U	<	0.1
Ba	<	0.02	Ga	<	0.02	Na	<	3	Sc	<	0.02	V	<	0.05
Be	<	0.02	Gd	<	0.02	Nb	<	0.02	Se	<	0.1	W	<	0.02
Bi	<	0.02	Ge	<	0.02	Nd	<	0.02	Si	<	50	Y	<	0.02
Ca	<	1	Hf	<	0.02	Ni	<	0.1	Sm	<	0.02	Yb	<	0.02
Cd	<	0.02	Ho	<	0.02	Os	<	0.02	Sn	<	1	Zn	<	1
Ce	<	0.02	In	<	0.02	Pb	<	0.05	Sr	<	0.02	Zr	<	0.02
Co	<	1	Ir	<	0.02	Pd	<	0.1	Ta	<	0.02			
Cr	<	0.1	K	<	1	Pr	<	0.02	Tb	<	0.02			
Cs	<	6	La	<	0.02	Pt	<	0.02	Te	<	0.02			

Preparation Information:

The standard solution is prepared using high purity materials and assayed by analytical methods for conformity prior to use. This standard was prepared using the methods developed at NIST for SRM Spectrometric Standard Solutions under appropriate laboratory conditions.

Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Intended Use:

This Certified Reference Material (CRM) is intended for use as a calibration standard for the quantitative determination of silver, calibration of instruments such as ICPOES, ICPMS, AAS and XRF, and validation of analytical methods. It also can be used in EPA, ASTM and other methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
   The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
   The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.
b. **Volumetric Device**
   The calibration of volumetric vessels is checked annually using the ASTM method E542.
c. **Thermometer**
   The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.
d. **Calibration Standards:**
   The Calibration Standard is directly traceable to SRM 3100 Series Spectrometric Standard Solutions.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for eighteen months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**January 13, 2014**
Shipped Date:	**6/27/14**
Expiration Date:	**12/27/15**
Certificate Issue Date:	**February 28, 2014**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Certificate Revision History: Rev No.: **5.2.1** –modified uncertainty. Rev No.: **5.2.0** – Original Certificate.

Reagent

MTHGCAL_00016

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CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHGN-10PPM
Lot Number:	H2-HG02126
Matrix:	10% (v/v) HNO3
Value/Analyte(s):	10 µg/mL Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1780
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.009 ± 0.077 µg/mL

Certified Density: 1.050 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1

ICP Assay NIST SRM 3133 Lot Number: 061204

Assay Method #2

EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

No correction has been applied for transpiration that will occur after the CRM/RM bottle has been removed from the sealed aluminized bag. See Sec. 7.0 (Instructions for the Correct Use of this Reference Material) for more information.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004113	M	Er	<	0.010282	M	Mn	<	0.008226	O	S	<	0.025000	M	V	<	0.004113
O	Al			M	Eu	<	0.006169	M	Mo	<	0.004113	M	Sb	<	0.001028	M	W	<	0.020564
M	As	<	0.020564	O	Fe	<	0.001100	O	Na		0.000005	M	Sc	<	0.020564	M	Y	<	0.082257
M	Au	<	0.006169	M	Ga	<	0.002056	M	Nb	<	0.001028	M	Se	<	0.016451	M	Yb	<	0.002056
M	B	<	0.143950	M	Gd	<	0.002056	M	Nd	<	0.004113	O	Si	<	0.003400	M	Zn	<	0.041129
M	Ba	<	0.020564	O	Ge	<	0.018000	O	Ni	<	0.001000	M	Sm	<	0.002056	M	Zr	<	0.010282
M	Be	<	0.001028	M	Hf	<	0.004113	n	Os	<		M	Sn	<	0.010282				
M	Bi	<	0.000823	s	Hg	<		O	P	<	0.002600	M	Sr	<	0.001028				
O	Ca		0.000022	M	Ho	<	0.001028	M	Pb	<	0.006169	M	Ta	<	0.014395				
O	Cd	<	0.004600	M	In	<	0.020564	O	Pd	<	0.003800	M	Tb	<	0.000617				
M	Ce	<	0.010282	M	Ir	<	0.010282	M	Pr	<	0.000617	M	Te	<	0.061693				
M	Co	<	0.006169	O	K	<	0.002000	M	Pt	<	0.004113	M	Th	<	0.002056				
M	Cr	<	0.010282	M	La	<	0.001028	M	Rb	<	0.002056	M	Ti	<	0.102822				
M	Cs	<	0.000617	O	Li	<	0.000020	M	Re	<	0.002056	O	Tl	<	0.006000				
M	Cu	<	0.012339	M	Lu	<	0.000823	M	Rh	<	0.002056	M	Tm	<	0.000823				
M	Dy	<	0.012339	O	Mg		0.000006	M	Ru	<	0.004113	M	U	<	0.004113				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30°C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT.**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO_3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO_3 / LDPE container, stable in 10% HNO_3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO_3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO_3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxide (Soluble in HNO_3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

- May 09, 2014

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec. 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of opening the sealed TCT bag or after the date given in Sec. 11.3, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.3 Lot Expiration Date

- May 09, 2017

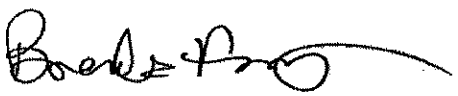
- The date after which this CRM/RM should not be used (See Sec. 11.2).

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

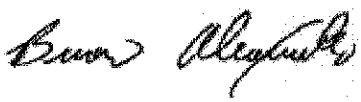
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



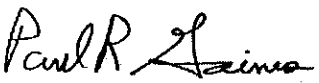
Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTHgStd_00016

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	Mercury	Source Material:	Mercury Metal
Part Number:	**1 33-1**	Material Purity:	99.9998%
Lot Number:	**1509117**	Matrix:	5% (v/v) HNO_3

Certified Value: 1.00 µg/mL ± 0.02 µg/mL

The Certified value is based on gravimetric and volumetric preparation, and confirmed against SRM 3133 (lot number 061204) by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

Preparation Information:

The standard solution is prepared using high purity materials and assayed by analytical methods for conformity prior to use. This standard was prepared using the methods developed at NIST for SRM Spectrometric Standard Solutions under appropriate laboratory conditions.

Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product.

Intended Use:

This Certified Reference Material (CRM) is intended for use as a calibration standard for the quantitative determination of mercury, calibration of instruments such as ICPOES, ICPMS, AAS and XRF, and validation of analytical methods. It also can be used in EPA, ASTM and other methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards:**
The Calibration Standard is directly traceable to SRM 3100 Series Spectrometric Standard Solutions.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for six months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**April 2, 2015**
Shipped Date:	**April 7, 2015**
Expiration Date:	**October 7, 2015**
Certificate Issue Date:	**April 2, 2015**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTICPMS2_00020

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-84
Lot Number:	H2-MEB559070
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea:

Al, Ca, Fe,
K, Mg, Na

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum	1 000 ± 5 µg/mL	Calcium	1 000 ± 4 µg/mL
Iron	1 000 ± 5 µg/mL	Magnesium	1 000 ± 5 µg/mL
Potassium	1 000 ± 4 µg/mL	Sodium	1 000 ± 4 µg/mL

Certified Density: 1.035 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2 [\Sigma(s_i)^2]^{1/2}$ 2 = the coverage factor.
$[\Sigma(s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 30, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date EXPIRES 1 FEB 2016

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

MTICPMS2_00021

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CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-84
Lot Number:	J2-MEB574105
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea:

Al, Ca, Fe,
K, Mg, Na

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	1 000 ± 5 µg/mL	Calcium, Ca	1 000 ± 4 µg/mL
Iron, Fe	1 000 ± 5 µg/mL	Magnesium, Mg	1 000 ± 5 µg/mL
Potassium, K	1 000 ± 4 µg/mL	Sodium, Na	1 000 ± 4 µg/mL

Certified Density: 1.035 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EOTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2 [\Sigma(s_i)^2]^{1/2}$ 2 = the coverage factor.
$[\Sigma(s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at 20 ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 06, 2015

11.2 Expiration Date

EXPIRES
1 MAY 2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

MTICPMSA_00021

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	ICV/LCS-1 10ppm
Part Number:	**SM-606-021 Solution A**
Lot Number:	**1434610**
Matrix:	2% HNO_3
Purity:	99.99% - 99.9999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
As	10.0 ± 0.1	3103a	100818	Pb	10.00 ± 0.06	3128	101026
Ba	10.00 ± 0.06	3104a	070222	Mn	10.0 ± 0.1	3132	050429
Be	10.0 ± 0.1	3105a	090514	Ni	10.00 ± 0.05	3136	120619
B	10.00 ± 0.05	3107	070514	Se	10.0 ± 0.1	3149	100901
Cd	10.00 ± 0.05	3108	130116	Sr	10.00 ± 0.05	3153a	990906
Cr	10.00 ± 0.05	3112a	030730	Tl	10.00 ± 0.05	3158	993012
Co	10.00 ± 0.05	3113	000630	V	10.00 ± 0.06	3165	992706
Cu	10.00 ± 0.05	3114	121207	Zn	10.00 ± 0.05	3168a	120629

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2
* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**December 12, 2014**
Shipped Date:	**December 15, 2014**
Expiration Date:	**December 15, 2015**
Certificate Issue Date:	**December 12, 2014**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTICPMSA_00022

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: TA-ICPMS-1A

Lot Number: H2-MEB552051

Matrix: 5% (v/v) HNO3

Value / Analyte(s): 100 µg/mL ea:

As,	Ba,	Be,
Cd,	Co,	Cr3,
Cu,	Mn,	Ni,
Pb,	Se,	Sr,
V,	Zn,	

25 µg/mL ea:
Tl

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic	100.0 ± 0.9 µg/mL	Barium	100.0 ± 0.5 µg/mL
Beryllium	100.0 ± 0.5 µg/mL	Cadmium	100.0 ± 0.5 µg/mL
Chromium+3	100.0 ± 0.6 µg/mL	Cobalt	100.0 ± 0.6 µg/mL
Copper	100.0 ± 0.6 µg/mL	Lead	100.0 ± 0.6 µg/mL
Manganese	100.0 ± 0.6 µg/mL	Nickel	100.0 ± 0.6 µg/mL
Selenium	100.0 ± 0.6 µg/mL	Strontium	100.0 ± 0.5 µg/mL
Thallium	25.01 ± 0.15 µg/mL	Vanadium	100.0 ± 0.6 µg/mL
Zinc	100.0 ± 0.7 µg/mL		

Certified Density: 1.029 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 22, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date

EXPIRES
1 FEB 2016

Reagent

MTICPMSA_00023

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-1A
Lot Number:	H2-MEB552051
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	100 µg/mL ea:

As, Ba, Be,
Cd, Co, Cr3,
Cu, Mn, Ni,
Pb, Se, Sr,
V, Zn,

25 µg/mL ea:
Tl

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	100.0 ± 0.9 µg/mL	Barium, Ba	100.0 ± 0.5 µg/mL
Beryllium, Be	100.0 ± 0.5 µg/mL	Cadmium, Cd	100.0 ± 0.5 µg/mL
Chromium+3, Cr3	100.0 ± 0.6 µg/mL	Cobalt, Co	100.0 ± 0.6 µg/mL
Copper, Cu	100.0 ± 0.6 µg/mL	Lead, Pb	100.0 ± 0.6 µg/mL
Manganese, Mn	100.0 ± 0.6 µg/mL	Nickel, Ni	100.0 ± 0.6 µg/mL
Selenium, Se	100.0 ± 0.6 µg/mL	Strontium, Sr	100.0 ± 0.5 µg/mL
Thallium, Tl	25.01 ± 0.15 µg/mL	Vanadium, V	100.0 ± 0.6 µg/mL
Zinc, Zn	100.0 ± 0.7 µg/mL		

Certified Density: 1.029 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty $(\pm) = 2 [\Sigma(s_i)^2]^{1/2}$ 2 = the coverage factor.
$[\Sigma(s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at 20 ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 22, 2014

11.2 Expiration Date

EXPIRES
1 MAY 2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Christy Shortridge
Product Documentation Technician

Christy Shortridge

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

Reagent

MTICPMSB_00021

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	ICV/LCS-1 10ppm
Part Number:	**SM-606-021 Solution B**
Lot Number:	**1434611**
Matrix:	2% HNO_3 + Tr HF
Purity:	99.92% - 99.999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Sb	10.00 ± 0.06	*		Ti	10.00 ± 0.06	3162a	130925
Mo	10.00 ± 0.06	3134	891307	W	10.00 ± 0.06	3163	080331
Ag	10.00 ± 0.05	3151	992212	Zr	10.00 ± 0.06	3169	130920
Sn	10.00 ± 0.06	3161a	070330				

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**December 12, 2014**
Shipped Date:	**December 15, 2014**
Expiration Date:	**December 15, 2015**
Certificate Issue Date:	**December 12, 2014**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTICPMSB_00022

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 · ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-1BREV1
Lot Number:	H2-MEB559071
Matrix:	5% (v/v) HNO3 tr HF
Value / Analyte(s):	100 µg/mL ea: Sn, 10 µg/mL ea: Ag, B, Mo, Sb, Ti, W

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony	10.01 ± 0.07 µg/mL	Boron	10.00 ± 0.06 µg/mL
Molybdenum	10.00 ± 0.06 µg/mL	Silver	10.00 ± 0.07 µg/mL
Tin	100.0 ± 0.5 µg/mL	Titanium	10.01 ± 0.06 µg/mL
Tungsten	10.00 ± 0.06 µg/mL		

Certified Density: 1.025 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2
W	ICP Assay	3163	080331

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2\ [\ \Sigma(s_i)^2\ ]^{1/2}$ 2 = the coverage factor.
$[\ \Sigma(s_i)^2\ ]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

- **HF Note:** This standard should not be prepared or stored in glass.

- **Low Silver Note:** This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 30, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date EXPIRES 1 FEB 2016

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Donna Senn

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

Reagent

MTMSCAL3_00008

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CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: STLPA-CAL-SPECA-REV

Lot Number: H2-MEB544052

Matrix: 3% (v/v) HNO3

Value / Analyte(s):

2 500 µg/mL ea:
Ca, K, Mg, Na,
1 250 µg/mL ea:
Fe,
25 µg/mL ea:
Al, Mn,
5 µg/mL ea:
Ag, As, Ba, Be, Cd, Co,
Cr3, Cu, Ni, Pb, Se, Sr,
Tl, V, Zn

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	25.01 ± 0.17 µg/mL	Arsenic, As	5.000 ± 0.032 µg/mL	Barium, Ba	5.002 ± 0.029 µg/mL
Beryllium, Be	4.999 ± 0.029 µg/mL	Cadmium, Cd	4.999 ± 0.032 µg/mL	Calcium, Ca	2 500 ± 11 µg/mL
Chromium+3, Cr3	5.002 ± 0.029 µg/mL	Cobalt, Co	5.000 ± 0.032 µg/mL	Copper, Cu	4.998 ± 0.032 µg/mL
Iron, Fe	1 250 ± 6 µg/mL	Lead, Pb	5.002 ± 0.025 µg/mL	Magnesium, Mg	2 500 ± 12 µg/mL
Manganese, Mn	25.01 ± 0.17 µg/mL	Nickel, Ni	5.000 ± 0.029 µg/mL	Potassium, K	2 501 ± 11 µg/mL
Selenium, Se	5.001 ± 0.029 µg/mL	Silver, Ag	4.999 ± 0.036 µg/mL	Sodium, Na	2 500 ± 11 µg/mL
Strontium, Sr	5.001 ± 0.032 µg/mL	Thallium, Tl	4.998 ± 0.032 µg/mL	Vanadium, V	5.000 ± 0.032 µg/mL
Zinc, Zn	5.002 ± 0.029 µg/mL				

Certified Density: 1.052 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 22, 2014

11.2 Expiration Date

EXPIRES
1 2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Christy Shortridge
Product Documentation Technician

Christy Shortridge

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

Reagent

MTMSCAL4_00009

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CAL-SPECC
Lot Number:	H2-MEB544053
Matrix:	3% (v/v) HNO_3 tr. HF
Value / Analyte(s):	5 µg/mL ea: B, Mo, Sb, Sn, Ti, W

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	5.001 ± 0.047 µg/mL	Boron, B	5.000 ± 0.032 µg/mL	Molybdenum, Mo	5.001 ± 0.039 µg/mL
Tin, Sn	5.001 ± 0.036 µg/mL	Titanium, Ti	5.001 ± 0.043 µg/mL	Tungsten, W	5.002 ± 0.032 µg/mL

Certified Density: 1.017 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2
W	ICP Assay	3163	080331

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2\ [\ \Sigma(s_i)^2\ ]^{1/2}$ 2 = the coverage factor.
$[\ \Sigma(s_i)^2\ ]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 22, 2014

11.2 Expiration Date

EXPIRES
1 2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Christy Shortridge
Product Documentation Technician

Christy Shortridge

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

Reagent

MTMSICSA_00009

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Christiansburg, VA 24073 · USA
inorganicventures.com

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

CERTIFICATE OF ANALYSIS

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 960.02

2.0 **DESCRIPTION OF CRM**

Stock Solution

Catalog No.: 6020ICS-0A

Lot Number: **G2-MEB476152MCA**

Matrix: 1.4% HNO3(v/v)

10,000 µg/mL ea:
Chloride,

2,000 µg/mL ea:
C,

1,000 µg/mL ea:
Al, Ca, Fe, K, Mg, Na, P, S,

20 µg/mL ea:
Mo, Ti

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	1,002 ± 6 µg/mL	Calcium, Ca	1,002 ± 6 µg/mL	Carbon, C	2,004 ± 13 µg/mL
Chloride, Chloride	10,020.0 ± 50.0 µg/mL	Iron, Fe	1,002 ± 7 µg/mL	Magnesium, Mg	1,002 ± 4 µg/mL
Molybdenum, Mo	20.04 ± 0.14 µg/mL	Phosphorus, P	1,002 ± 7 µg/mL	Potassium, K	1,002 ± 4 µg/mL
Sodium, Na	1,002 ± 7 µg/mL	Sulfur, S	1,002 ± 5 µg/mL	Titanium, Ti	20.04 ± 0.13 µg/mL

Certified Density: 1.034 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

$$\text{Uncertainty } (\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$$

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.
- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
C	Gravimetric		See Sec. 4.2
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Chloride	Acidimetric	84L	84L
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	010728
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84k	84k
Ti	ICP Assay	3162a	060808

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 THERMOMETER CALIBRATION - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 GLASSWARE CALIBRATION - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL

Custom-Grade solutions are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Al		M	Dy	< 0.000100	O	Li	0.002000	M	Pr	< 0.000100	M	Te	< 0.012007
M	Sb	< 0.000600	M	Er	< 0.000100	M	Lu	< 0.000100	M	Re	< 0.000100	M	Tb	< 0.000100
O	As	< 0.020000	M	Eu	< 0.000100	s	Mg		M	Rh	< 0.000100	M	Tl	< 0.000100
O	Ba	< 0.000200	M	Gd	< 0.000100	O	Mn	0.003000	M	Rb	< 0.020012	M	Th	< 0.000100
O	Be	< 0.000090	M	Ga	< 0.001001	O	Hg	< 0.005000	M	Ru	< 0.000100	M	Tm	< 0.000100
M	Bi	< 0.005003	O	Ge	< 0.015000	s	Mo		M	Sm	< 0.000100	M	Sn	< 0.003002
O	B	< 0.005000	M	Au	< 0.001001	M	Nd	< 0.000100	O	Sc	< 0.000700	s	Tl	
O	Cd	0.003400	M	Hf	< 0.002001	O	Ni	< 0.002000	M	Se	< 0.050029	O	W	< 0.007000
s	Ca		M	Ho	< 0.000100	M	Nb	< 0.002001	n	Si		M	U	< 0.000100
M	Ce	< 0.000500	M	In	< 0.001001	n	Os		M	Ag	< 0.001001	O	V	< 0.004000
M	Cs	< 0.001001	M	Ir	< 0.000100	M	Pd	< 0.003002	s	Na		M	Yb	< 0.000100
O	Cr	< 0.010000	s	Fe		s	P		O	Sr	0.005000	M	Y	< 0.000100
M	Co	< 0.001001	M	La	< 0.000200	M	Pt	< 0.000100	s	S		M	Zn	0.016610
O	Cu	< 0.020000	M	Pb	0.002001	s	K		M	Ta	< 0.001001	M	Zr	< 0.004002

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- SAI Global File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: July 12, 2013

Expiration Date:

EXPIRES
01 Mo 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Zach Saunders
Product Documentation Technician

Certificate Approved By: Allyson Gulliams
Quality Control Supervisor

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Reagent

MTMSICSABSOLA_00006

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Part Number:	**SM-606-031**
	Solution A
Lot Number:	**1503726**
Matrix:	2% HNO_3
Purity:	99.99% - 99.9995%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
As	20.0 ± 0.2	3103a	100818	Pb	20.00 ± 0.12	3128	101026
Ba	20.00 ± 0.12	3104a	070222	Mn	20.0 ± 0.2	3132	050429
Be	20.0 ± 0.2	3105a	090514	Ni	20.0 ± 0.1	3136	120619
B	20.0 ± 0.1	3107	070514	Se	20.0 ± 0.2	3149	100901
Cd	20.0 ± 0.1	3108	130116	Sr	20.0 ± 0.1	3153a	990906
Cr	20.0 ± 0.1	3112a	030730	Tl	20.0 ± 0.1	3158	993012
Co	20.0 ± 0.1	3113	000630	V	20.00 ± 0.12	3165	992706
Cu	20.0 ± 0.1	3114	121207	Zn	20.0 ± 0.1	3168a	120629

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2
* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**February 6, 2015**
Shipped Date:	**February 10, 2015**
Expiratiou Date:	**February 10, 2016**
Certificate Issue Date:	**February 6, 2015**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTMSICSABSOLB_00006

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7908

Certificate of Analysis

Product Description:

Part Number:	**SM-606-031**
	Solution B
Lot Number:	**1504002**
Matrix:	2% HNO_3 + Tr HF
Purity:	99.92% - 99.999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Sb	20.00 ± 0.12	*		Ti	20.00 ± 0.12	3162a	130925
Mo	20.00 ± 0.12	3134	891307	W	20.00 ± 0.12	3163	080331
Ag	20.0 ± 0.1	3151	992212	Zr	20.00 ± 0.12	3169	130920
Sn	20.00 ± 0.12	3161a	070330				

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**February 9, 2015**
Shipped Date:	**February 10, 2015**
Expiration Date:	**February 10, 2016**
Certificate Issue Date:	**February 9, 2015**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTMSICVA_00005

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Additional Information:

Date Received: 29/Aug/2014

Container: 4 oz (125 mL) Narrow Mouth, LDPE clean

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

Element	Symbol	CAS No	SRM No	NIST Lot No	Source Lot No	Purity %	Concentration mg/L	Uncertainty ± mg/L
Aluminum	Al	7429-90-5	3101	060502	7001.46.7P	99.9995	20	0.09
Manganese	Mn	7439-96-5	3132	050429	7017.46.5P	99.95	20	0.07
Silver	Ag	7440-22-4	3151	992212	7000.29.1P	99.999	4	0.04001
Arsenic	As	7440-38-2	3103	010713	7002.46.5P	99.9999	4	0.04
Boron	B	7440-42-8	3107	070514	7003.46.5P	99.999	4	0.04
Barium	Ba	7440-39-3	3104	070222	7004.29.2P	99.997	4	0.04
Beryllium	Be	7440-41-7	3105	892707	7005.46.5P	99.999	4	0.04
Cadmium	Cd	7440-43-9	3108	060531	7007.46.3P	99.9999	4	0.04002
Cobalt	Co	7440-48-4	3113	000630	7008.46.8P	99.995	4	0.04003
Chromium	Cr	7440-47-3	3112	030730	7009.46.3P	99.998	4	0.044
Copper	Cu	7440-50-8	3114	011017	7011.46.5P	99.9995	4	0.04001
Molybdenum	Mo	7439-98-7	3134	891307	7018.29.3P	99.999	4	0.04
Nickel	Ni	7440-02-0	3136	000612	7021.46.8P	99.995	4	0.04001
Lead	Pb	7439-92-1	3128	030721	7023.29.2P	99.999	4	0.04001
Antimony	Sb	7440-36-0	3102	061229	7026.46.3P	99.999	4	0.04002
Selenium	Se	7782-49-2	3149	992106	7027.46.4P	99.999	4	0.04001
Tin	Sn	7440-31-5	3161	070330	7029.46.4P	99.999	4	0.04
Strontium	Sr	7440-24-6	3153	990906	7030.46.4P	99.998	4	0.04001
Titanium	Ti	7440-32-6	3162	060808	7033.343.1P	99.995	4	0.04001
Thallium	Tl	7440-28-0	3158	993012	7034.29.3P	99.999	4	0.04
Vanadium	V	7440-62-2	3165	992706	7036.46.5P	99.99	4	0.04
Tungsten	W	7440-33-7	3163	080331	7072.46.2P	99.99	4	0.044011
Zinc	Zn	7440-66-6	3168	080123	7037.46.5P	99.9995	4	0.04002
Calcium	Ca	7440-70-2	3109	050825	7006.29.2P	99.999	2000	7
Potassium	K	7440-09-7	3141	051220	7013.46.9P	99.999	2000	7
Magnesium	Mg	7439-95-4	3131	050302	7016.46.5P	99.99	2000	7
Sodium	Na	7440-23-5	3152	010728	7020.46.7P	99.999	2000	7
Iron	Fe	7439-89-6	3126	051031	7012.46.14P	99.99	1000	3.5

USA

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The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Intended Uses:

This Certified Reference material, CRM, is intended for use as a calibration standard or a quality control standard for Inorganic Speetrometry Equipment such as ICP-OES, ICP-MS, AA, and XRF, It may aslo be used for various USEPA and ASTM methods.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

Packaging and Storage:

The Solution should be kept trightly capped and stored under normal laboratory conditions. Pre-cleaned polyethlene bottles are used to package this material. Special storage information: Ambient

Glassware Calibration:

Only Class A glassware is used in the manufacture and quality control of Standards. All Glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used perform daily checks on balances calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to the National Institute of Standards and Technology (NIST). Balances are checked daily in accordance to in house procedure O2-LB-004. Balances are calibrated annually by an ISO 17025 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-10 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC Guide 17025:2005 and ISO Guide 34:2009. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous information:

Refer to MSDS

USA

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Europe

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
$u_c = \sqrt{\sum u_i^2}$ where u_i are the individual uncertainty components for raw material, transportation, homogeneity, and shelf life.

Expiration Information:

The Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. This standard is guaranteed until the expiration date listed above.

Accreditation:

This standard was manufactured by an ISO 17025 Chemical Testing Lab (Certificate number 3031.01) and ISO Guide 34 Reference Material Producer (RMP) Certificate number 3031.02 accredited by The American Association of Laboratory Accreditation (A2LA). Manufacturer's Quality System audited and registered by NSF-ISR to ISO 9001:2008 (Certificate number IZ391-IS4).

Manufactured By:

Tiffany Kwasigroch

Manufacture Date: 7/18/2014

Certified By:

Zachary Spinelli

Certified Date:7/21/2014

Released By:

HuiChen Stavros, Ph.D.

Original Issue Date: 7/22/2014

Reagent

MTMSICVB_00005

USA

5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe

P.O. Box 2704 P: +31 20 638 05 97
1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Additional Information:

Date Received: 29/Aug/2014

Container: 4 oz (125 mL) Narrow Mouth, LDPE clean

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

Element	Symbol	CAS No	SRM No	NIST Lot No	Source Lot No	Purity %	Concentration mg/L	Uncertainty ± mg/L
Aluminum	Al	7429-90-5	3101	060502	7001.46.7P	99.9995	20	0.09
Manganese	Mn	7439-96-5	3132	050429	7017.46.5P	99.95	20	0.07
Silver	Ag	7440-22-4	3151	992212	7000.29.1P	99.999	4	0.04001
Arsenic	As	7440-38-2	3103	010713	7002.46.5P	99.9999	4	0.04
Boron	B	7440-42-8	3107	070514	7003.46.5P	99.999	4	0.04
Barium	Ba	7440-39-3	3104	070222	7004.29.2P	99.997	4	0.04
Beryllium	Be	7440-41-7	3105	892707	7005.46.5P	99.999	4	0.04
Cadmium	Cd	7440-43-9	3108	060531	7007.46.3P	99.9999	4	0.04002
Cobalt	Co	7440-48-4	3113	000630	7008.46.8P	99.995	4	0.04003
Chromium	Cr	7440-47-3	3112	030730	7009.46.3P	99.998	4	0.044
Copper	Cu	7440-50-8	3114	011017	7011.46.5P	99.9995	4	0.04001
Molybdenum	Mo	7439-98-7	3134	891307	7018.29.3P	99.999	4	0.04
Nickel	Ni	7440-02-0	3136	000612	7021.46.8P	99.995	4	0.04001
Lead	Pb	7439-92-1	3128	030721	7023.29.2P	99.999	4	0.04001
Antimony	Sb	7440-36-0	3102	061229	7026.46.3P	99.999	4	0.04002
Selenium	Se	7782-49-2	3149	992106	7027.46.4P	99.999	4	0.04001
Tin	Sn	7440-31-5	3161	070330	7029.46.4P	99.999	4	0.04
Strontium	Sr	7440-24-6	3153	990906	7030.46.4P	99.998	4	0.04001
Titanium	Ti	7440-32-6	3162	060808	7033.343.1P	99.995	4	0.04001
Thallium	Tl	7440-28-0	3158	993012	7034.29.3P	99.999	4	0.04
Vanadium	V	7440-62-2	3165	992706	7036.46.5P	99.99	4	0.04
Tungsten	W	7440-33-7	3163	080331	7072.46.2P	99.99	4	0.044011
Zinc	Zn	7440-66-6	3168	080123	7037.46.5P	99.9995	4	0.04002
Calcium	Ca	7440-70-2	3109	050825	7006.29.2P	99.999	2000	7
Potassium	K	7440-09-7	3141	051220	7013.46.9P	99.999	2000	7
Magnesium	Mg	7439-95-4	3131	050302	7016.46.5P	99.99	2000	7
Sodium	Na	7440-23-5	3152	010728	7020.46.7P	99.999	2000	7
Iron	Fe	7439-89-6	3126	051031	7012.46.14P	99.99	1000	3.5

USA

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The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Intended Uses:

This Certified Reference material, CRM, is intended for use as a calibration standard or a quality control standard for Inorganic Speetrometry Equipment such as ICP-OES, ICP-MS, AA, and XRF, It may aslo be used for various USEPA and ASTM methods.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

Packaging and Storage:

The Solution should be kept trightly capped and stored under normal laboratory conditions. Pre-cleaned polyethlene bottles are used to package this material. Special storage information: Ambient

Glassware Calibration:

Only Class A glassware is used in the manufacture and quality control of Standards. All Glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used perform daily checks on balances calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to the National Institute of Standards and Technology (NIST). Balances are checked daily in accordance to in house procedure O2-LB-004. Balances are calibrated annually by an ISO 17025 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-10 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC Guide 17025:2005 and ISO Guide 34:2009. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous information:

Refer to MSDS

USA

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The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
$u_c = \sqrt{\sum u_i^2}$ where u_i are the individual uncertainty components for raw material, transportation, homogeneity, and shelf life.

Expiration Information:

The Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. This standard is guaranteed until the expiration date listed above.

Accreditation:

This standard was manufactured by an ISO 17025 Chemical Testing Lab (Certificate number 3031.01) and ISO Guide 34 Reference Material Producer (RMP) Certificate number 3031.02 accredited by The American Association of Laboratory Accreditation (A2LA). Manufacturer's Quality System audited and registered by NSF-ISR to ISO 9001:2008 (Certificate number IZ391-IS4).

Manufactured By:

Tiffany Kwasigroch

Manufacture Date: 7/18/2014

Certified By:

Zachary Spinelli

Certified Date:7/21/2014

Released By:

HuiChen Stavros, Ph.D.

Original Issue Date: 7/22/2014

Reagent

SG 1221 ICV_00007

RESTEK

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32007.sec **Lot No.:** A094157

Description : Aroclor® 1221 Standard

Aroclor® 1221 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 2019 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1221	1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 11104-28-2.SEC		+/- 20.8959	µg/mL	Unstressed
	Purity ----%		+/- 34.3792	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

SG 1232 ICV_00007

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32008.sec **Lot No.:** A095877

Description : Aroclor® 1232 Standard

Aroclor® 1232 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2019 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1232	1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 11141-16-5.SEC (Lot 130604JLM)		+/- 20.8959	µg/mL	Unstressed
	Purity ----%		+/- 34.3792	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

1638047
ID: SG 1232 ICV_00007
Exp: 09/30/19 Prpd: HMB
Aroclor 1232 ICV @ 1000pp

Rec'd 8.22.14
HB

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

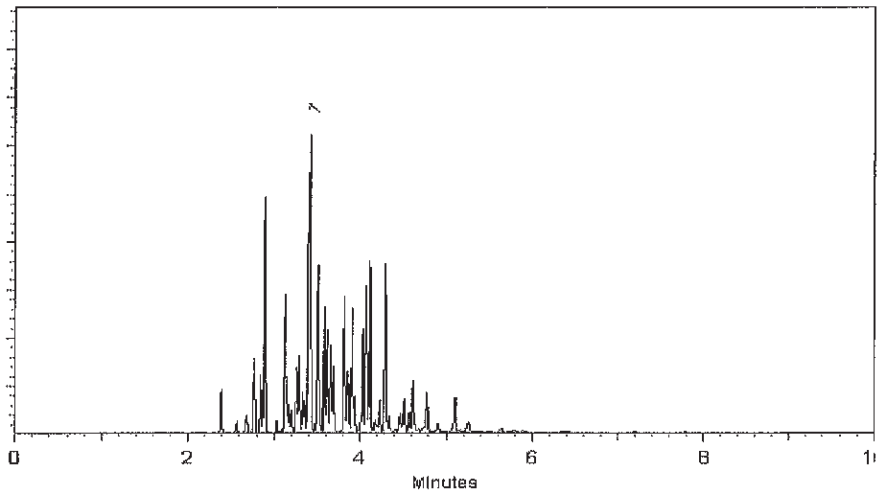
Carrier Gas:
hellium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen to guarantee product quality. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Moyer

Jennifer L. Pollino - QC Analyst

Date Mixed: 07-Jun-2013 **Balance:** 1128353505

Date Passed: 11-Jun-2013

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SG 1242 ICV_00006

RESTEK CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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Certificate of Analysis

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32009.sec **Lot No.:** A095785

Description : Aroclor® 1242 Standard

Aroclor® 1242 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2019 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1242	1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 53469-21-9.SEC (Lot NTO1020)		+/- 20.9795	µg/mL	Unstressed
	Purity ----%		+/- 34.5167	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

SG 1248 ICV_00006

RESTEK

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Certificate 03222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32010.sec **Lot No.:** A094339

Description : Aroclor® 1248 Standard

Aroclor® 1248 Standard 1,000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 2019 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1248	1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 12672-29-6.SEC		+/- 20.9168	µg/mL	Unstressed
	Purity ----%		+/- 34.4136	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

SG 1254 ICV_00007

RESTEK CERTIFIED REFERENCE MATERIAL

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32011.sec **Lot No.:** A095778

Description : Aroclor® 1254 Standard

Aroclor® 1254 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2019 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1254	1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 11097-69-1,SEC (Lot RM00922)		+/- 20.9377	µg/mL	Unstressed
	Purity ----%		+/- 34.4480	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

1638220
ID: SG 1254 ICV_00007
Exp: 09/30/19 Prpd: HMB
Aroclor 1254 ICV @ 1000pp

Rec'd 8.22.14
HMB

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

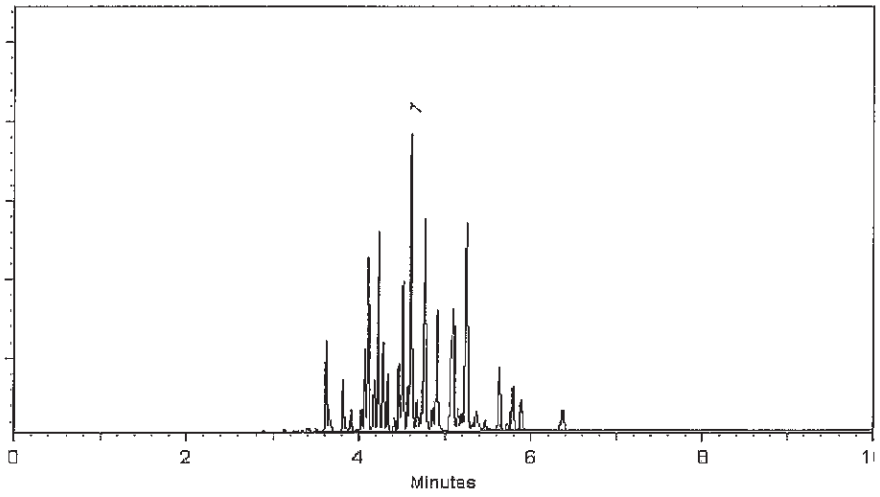
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen to guarantee product quality. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 03-Jun-2013 **Balance:** 1128353505

Jennifer L Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 05-Jun-2013

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SG 1660 ICV_00010

RESTEK

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Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32039.sec **Lot No.:** A094336

Description : Aroclor® 1016/1260 Mix

Aroclor® 1016/1260 Mix 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 2019 **Storage:** 25°C nominal

Handling: This product contains PCB's

1637993
ID: SG 1660 ICV_00010
Exp: 06/30/19 Prpd: LSH
Arochlor 1016/1260 sec

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1016	1,000.0 µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 12674-11-2.SEC		+/- 20.8758	µg/mL	Unstressed
	Purity ----%		+/- 34.3670	µg/mL	Stressed
2	Aroclor 1260	1,000.5 µg/mL	+/- 5.8715	µg/mL	Gravimetric
	CAS # 11096-82-5.SEC		+/- 20.8863	µg/mL	Unstressed
	Purity ----%		+/- 34.3842	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

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SH

Reagent

SG1016/1260MX_00006

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32039 **Lot No.:** A092844

Description : Aroclor® 1016/1260 Mix

Aroclor 1016/1260 1000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 2019 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1016	1,000.0 µg/mL	+/- 5.8275	µg/mL	Gravimetric
	CAS # 12674-11-2		+/- 20.8643	µg/mL	Unstressed
	Purity 99%		+/- 34.3600	µg/mL	Stressed
2	Aroclor 1260	1,000.0 µg/mL	+/- 5.8275	µg/mL	Gravimetric
	CAS # 11096-82-5		+/- 20.8643	µg/mL	Unstressed
	Purity ----%		+/- 34.3600	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

SG1242_00005

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32009 **Lot No.:** A090182

Description : Aroclor® 1242 Standard

Aroclor® 1242 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1242		1,000.0	µg/mL	+/- 5.8275	µg/mL	Gravimetric
	CAS # 53469-21-9	(Lot 01141-A)			+/- 20.8643	µg/mL	Unstressed
	Purity ----%				+/- 34.3600	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

SG1248_00003

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32010 **Lot No.:** A086044

Description : Aroclor® 1248 Standard

Aroclor 1248 1000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 2018 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1248	1,000.0 µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 12672-29-6		+/- 20.8758	µg/mL	Unstressed
	Purity ----%		+/- 34.3670	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

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Reagent

SGPCB1221_00004

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32007 **Lot No.:** A090667

Description : Aroclor® 1221 Standard

Aroclor 1221 1000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 2018 **Storage:** 25°C nominal

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1221	1,000.0 µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 11104-28-2		+/- 20.8758	µg/mL	Unstressed
	Purity -----%		+/- 34.3670	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

SGPCB1232STD_00005

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32008 **Lot No.:** A086119

Description : Aroclor® 1232 Standard

Aroclor 1232 1000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 2018 **Storage:** 25°C nominal

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1232	1,000.0 µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 11141-16-5		+/- 20.8758	µg/mL	Unstressed
	Purity 99%		+/- 34.3670	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

2 UNITS
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Reagent

SGPCB1254_00007

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32011 **Lot No.:** A093609

Description : Aroclor® 1254 Standard

Aroclor 1254 1000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 2019 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1254	1,000.0 µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 11097-69-1		+/- 20.8758	µg/mL	Unstressed
	Purity 99%		+/- 34.3670	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

SGPCB1262STD_00004

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32409 **Lot No.:** A092660

Description : Aroclor® 1262 Standard

Aroclor 1262 Std 1000µg/mL, 1mL/ampul, Hexane

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 2019 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1262	1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 37324-23-5		+/- 20.8959	µg/mL	Unstressed
	Purity ----%		+/- 34.3792	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

SGpcb1268std_00005

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32410 **Lot No.:** A091468

Description : Aroclor® 1268 Standard

Aroclor 1268 Std 1000µg/mL, 1mL/ampul, Hexane

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 2019 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1268	1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 11100-14-4		+/- 20.8959	µg/mL	Unstressed
	Purity ----%		+/- 34.3792	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

recd 7-1-13

Reagent

SGPCBSURRMX_00007

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A092533

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 2019 **Storage:** 10°C or colder

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5,6-Tetrachloro-m-xylene	200.1 µg/mL	+/- 1.1662	µg/mL	Gravimetric
	CAS # 877-09-8		+/- 4.1753	µg/mL	Unstressed
	Purity 98%		+/- 6.8760	µg/mL	Stressed
2	Decachlorobiphenyl	200.0 µg/mL	+/- 1.1655	µg/mL	Gravimetric
	CAS # 2051-24-3		+/- 4.1729	µg/mL	Unstressed
	Purity 99%		+/- 6.8720	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Tech Tips:

Decachlorobiphenyl has poor solubility in most organic solvents. The maximum concentration that can be prepared in acetone, hexane, or isooctane is 200µg/mL. Temperature will affect the solubility as well. Storing solutions at reduced temperatures will cause decachlorobiphenyl to precipitate.

Products containing decachlorobiphenyl must be sonicated for a minimum of 10 minutes prior to opening the ampul. Because each ultrasonic bath operates at a different energy level, 10 minutes is a guideline only. Longer sonication time will not affect product quality.

These precautions apply to working solutions prepared in your laboratory as well. The amount of compound that precipitates depends on concentration AND temperature. If you store your your standards at a temperature lower than 4°C (even dilute solutions), allow extra sonication time.

Reagent

SGPESTAB #3_00003

Reagent

SGPESTABIV_00010

Certificate of Analysis

Organochlorine Pesticides Mixture

Product Number: PPM-808C **Page:** 1 of 2

Lot Number: CL-1069 **Lot Issue Date:** 24-Mar-2014 **Expiration Date:** 30-Apr-2016

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
aldrin	000309-00-2	RM00635	1004 ± 5 µg/mL
alpha-BHC	000319-84-6	RM02725	1003 ± 5 µg/mL
beta-BHC	000319-85-7	RM06986	1003 ± 5 µg/mL
delta-BHC	000319-86-8	RM05696	1003 ± 5 µg/mL
gamma-BHC	000058-89-9	RM02694	1003 ± 5 µg/mL
cis-chlordane	005103-71-9	RM02742	1003 ± 5 µg/mL
trans-chlordane	005103-74-2	RM02726	1003 ± 5 µg/mL
4,4'-DDD	000072-54-8	RM00615	1004 ± 5 µg/mL
4,4'-DDE	000072-55-9	RM02892	1004 ± 5 µg/mL
4,4'-DDT	000050-29-3	RM06888	1003 ± 5 µg/mL
dieldrin	000060-57-1	RM03957	1003 ± 5 µg/mL
endosulfan I	000959-98-8	RM00834	1003 ± 5 µg/mL
endosulfan II	033213-65-9	RM07039	1003 ± 5 µg/mL
endosulfan sulfate	001031-07-8	RM06741	1003 ± 5 µg/mL
endrin	000072-20-8	NT01979	1003 ± 5 µg/mL
endrin aldehyde	007421-93-4	RM04131	1003 ± 5 µg/mL
endrin ketone	053494-70-5	RM07329	1003 ± 5 µg/mL
heptachlor	000076-44-8	RM03111	1004 ± 5 µg/mL
heptachlor epoxide - isomer B	001024-57-3	RM05373	1003 ± 5 µg/mL
methoxychlor	000072-43-5	RM07523	1004 ± 5 µg/mL

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

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ISO 9001 Registered TUV USA, Inc. Cert. No. 09-1006

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William J. Leahy
Quality Assurance Manager

Reagent

SGPESTPEMS_00011

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1361168
ID: SGPESTPEMS_00011
Exp:12/31/15 Prpd:RES Opn:01/29/14
PEM Source RESTEK

1361167
ID: SGPESTPEMS_00011
Exp:12/31/15 Prpd:RES Opn:01/29/14
PEM Source RESTEK

1361166
ID: SGPESTPEMS_00011
Exp:12/31/15 Prpd:RES Opn:01/29/14
PEM Source RESTEK

Catalog No. : 32074 **Lot No.:** A085642

Description : Pesticide Performance Eval Mix w/Surrogate

Performance Evaluation Std. 3/90 SOW w/surrogates 1-25ug/mL, Hexane, 1mL/ampul

Container Size : **Pkg Amt:**

Expiration Date : December 2015 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5,6-Tetrachloro-m-xylene **CAS #** 877-09-8 **Purity** 98%	2.0 ug/mL	+/- 0.0332 +/- 0.0770 +/- 0.1256	ug/mL ug/mL ug/mL	Gravimetric Unstressed Stressed
2	alpha-BHC **CAS #** 319-84-6 **Purity** 99%	1.0 ug/mL	+/- 0.0166 +/- 0.0385 +/- 0.0628	ug/mL ug/mL ug/mL	Gravimetric Unstressed Stressed
3	gamma-BHC (Lindane) **CAS #** 58-89-9 **Purity** 99%	1.0 ug/mL	+/- 0.0166 +/- 0.0385 +/- 0.0628	ug/mL ug/mL ug/mL	Gravimetric Unstressed Stressed
4	beta-BHC **CAS #** 319-85-7 **Purity** 98%	1.0 ug/mL	+/- 0.0166 +/- 0.0385 +/- 0.0628	ug/mL ug/mL ug/mL	Gravimetric Unstressed Stressed
5	Endrin **CAS #** 72-20-8 **Purity** 99%	5.0 ug/mL	+/- 0.0808 +/- 0.1917 +/- 0.3135	ug/mL ug/mL ug/mL	Gravimetric Unstressed Stressed
6	4,4'-DDT **CAS #** 50-29-3 **Purity** 99%	10.0 ug/mL	+/- 0.1615 +/- 0.3834 +/- 0.6269	ug/mL ug/mL ug/mL	Gravimetric Unstressed Stressed
7	Methoxychlor **CAS #** 72-43-5 **Purity** 99%	25.0 ug/mL	+/- 0.4032 +/- 0.9583 +/- 1.5672	ug/mL ug/mL ug/mL	Gravimetric Unstressed Stressed
8	Decachlorobiphenyl **CAS #** 2051-24-3 **Purity** 99%	2.0 ug/mL	+/- 0.0332 +/- 0.0771 +/- 0.1256	ug/mL ug/mL ug/mL	Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Tech Tips:

Decachlorobiphenyl has poor solubility in most organic solvents. The maximum concentration that can be prepared in acetone, hexane, or isooctane is 200µg/mL. Temperature will affect the solubility as well. Storing solutions at reduced temperatures will cause decachlorobiphenyl to precipitate.

Products containing decachlorobiphenyl must be sonicated for a minimum of 10 minutes prior to opening the ampul. Because each ultrasonic bath operates at a different energy level, 10 minutes is a guideline only. Longer sonication time will not affect product quality.

These precautions apply to working solutions prepared in your laboratory as well. The amount of compound that precipitates depends on concentration AND temperature. If you store your your standards at a temperature lower than 4°C (even dilute solutions), allow extra sonication time.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

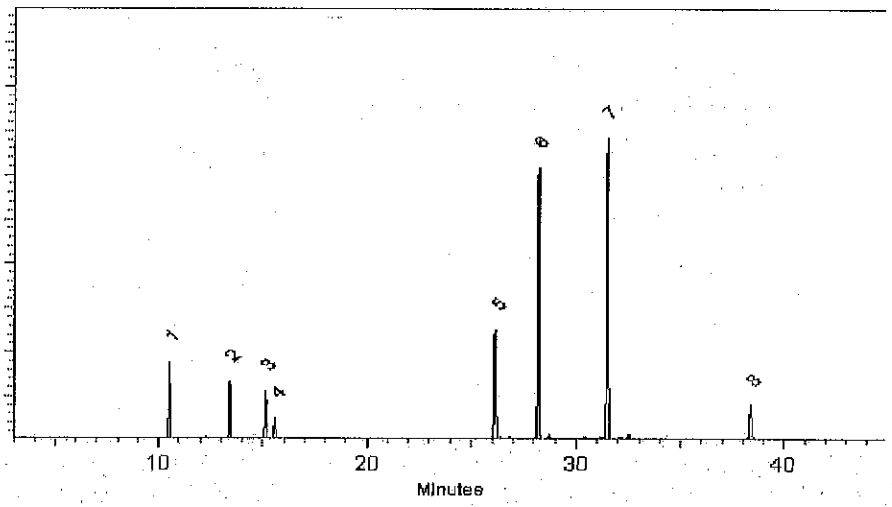
Carrier Gas:
helium-constant pressure 7 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



Diane Shaffer - QA Analyst

Date Passed: 22-Dec-2011 **Balance:** 1128360905

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

SGPESTSURR_00006

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SMIS R_00005

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567684 **Lot No.:** A0101020

Description : 8270 Internal Standard

8270 Internal Standard 2,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2019 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4	2,005.4 µg/mL	+/- 11.6596	µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 89.1010	µg/mL	Unstressed
	Purity 99%		+/- 97.8939	µg/mL	Stressed
2	Naphthalene-d8	2,005.8 µg/mL	+/- 11.6619	µg/mL	Gravimetric
	CAS # 1146-65-2 (Lot PR-20449)		+/- 89.1187	µg/mL	Unstressed
	Purity 99%		+/- 97.9134	µg/mL	Stressed
3	Acenaphthene-d10	1,998.2 µg/mL	+/- 11.6177	µg/mL	Gravimetric
	CAS # 15067-26-2 (Lot PR-21070)		+/- 88.7811	µg/mL	Unstressed
	Purity 97%		+/- 97.5424	µg/mL	Stressed
4	Phenanthrene-d10	2,001.2 µg/mL	+/- 11.6351	µg/mL	Gravimetric
	CAS # 1517-22-2 (Lot PR-23065)		+/- 88.9144	µg/mL	Unstressed
	Purity 99%		+/- 97.6889	µg/mL	Stressed
5	Chrysene-d12	1,999.6 µg/mL	+/- 11.6258	µg/mL	Gravimetric
	CAS # 1719-03-5 (Lot PR-24875)		+/- 88.8429	µg/mL	Unstressed
	Purity 98%		+/- 97.6104	µg/mL	Stressed
6	Perylene-d12	2,002.6 µg/mL	+/- 11.6433	µg/mL	Gravimetric
	CAS # 1520-96-3 (Lot PR-24113)		+/- 88.9766	µg/mL	Unstressed
	Purity 99%		+/- 97.7572	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

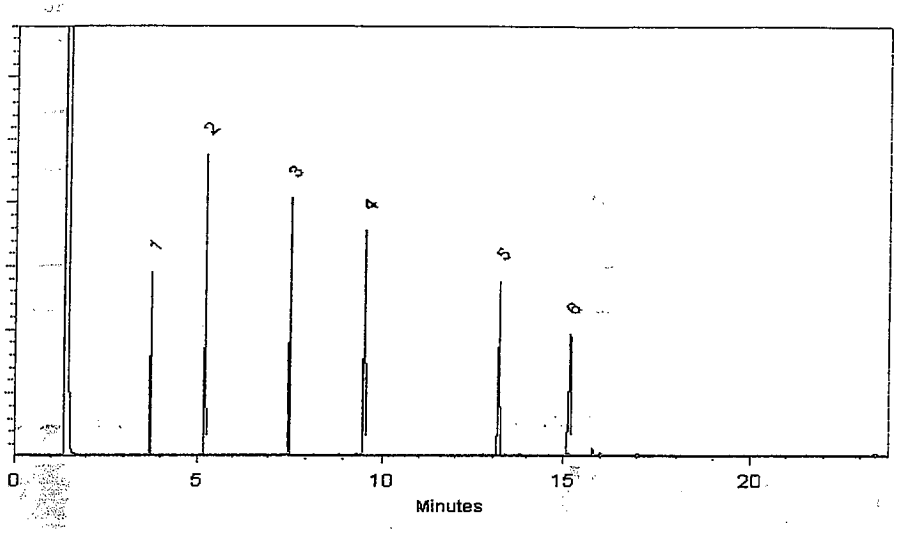
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen to guarantee product quality. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kendra Swope - Mix Technician

Date Mixed: 30-Jan-2014 **Balance:** 1128342313

Jennifer L. Pollino - QC Analyst

Date Passed: 03-Feb-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\,stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\,stability} + U^2_{shipping\,stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SMLIST1 PAH_00004

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569729 **Lot No.:** A0107399

Description : 8270 List 1 / Std #1 MegaMix (2015)

8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : May 31, 2016 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBD8744V)	1,004.4 µg/mL	+/- 5.8397 µg/mL +/- 10.9969 µg/mL +/- 18.6525 µg/mL	Gravimetric Unstressed Stressed
2	Pyridine **CAS #** 110-86-1 **Purity** 99%	(Lot SHBC7174V)	1,001.0 µg/mL	+/- 5.8199 µg/mL +/- 10.9596 µg/mL +/- 18.5894 µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine **CAS #** 62-75-9 **Purity** 99%	(Lot 3213100)	1,000.2 µg/mL	+/- 5.8152 µg/mL +/- 10.9509 µg/mL +/- 18.5745 µg/mL	Gravimetric Unstressed Stressed
4	Aniline **CAS #** 62-53-3 **Purity** 99%	(Lot K22Z462)	1,002.3 µg/mL	+/- 5.8275 µg/mL +/- 10.9739 µg/mL +/- 18.6135 µg/mL	Gravimetric Unstressed Stressed
5	Bis(2-chloroethyl)ether **CAS #** 111-44-4 **Purity** 99%	(Lot 45296HKV)	1,001.4 µg/mL	+/- 5.8222 µg/mL +/- 10.9640 µg/mL +/- 18.5968 µg/mL	Gravimetric Unstressed Stressed
6	2-Chlorophenol **CAS #** 95-57-8 **Purity** 99%	(Lot MKBD3900V)	1,000.8 µg/mL	+/- 5.8187 µg/mL +/- 10.9575 µg/mL +/- 18.5856 µg/mL	Gravimetric Unstressed Stressed
7	Phenol **CAS #** 108-95-2 **Purity** 99%	(Lot SHBC6998V)	1,006.9 µg/mL	+/- 5.8542 µg/mL +/- 11.0242 µg/mL +/- 18.6989 µg/mL	Gravimetric Unstressed Stressed

8	n-Decane (C10)		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 124-18-5	(Lot SHBF1587V)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
9	1,4-Dichlorobenzene		1,005.3	µg/mL	+/-	5.8449	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBL3891V)			+/-	11.0067	µg/mL	Unstressed
	Purity 99%				+/-	18.6692	µg/mL	Stressed
10	1,3-Dichlorobenzene		1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBC1891V)			+/-	10.9706	µg/mL	Unstressed
	Purity 99%				+/-	18.6079	µg/mL	Stressed
11	1,2-Dichlorobenzene		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot 68996CMV)			+/-	11.0199	µg/mL	Unstressed
	Purity 99%				+/-	18.6915	µg/mL	Stressed
12	Benzyl alcohol		1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBC1850V)			+/-	10.9531	µg/mL	Unstressed
	Purity 99%				+/-	18.5782	µg/mL	Stressed
13	2,2'-oxybis(1-chloropropane)		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 2-EAW-18-3)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
14	2-Methylphenol (o-cresol)		1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBC1479V)			+/-	10.9881	µg/mL	Unstressed
	Purity 99%				+/-	18.6376	µg/mL	Stressed
15	Hexachloroethane		1,005.9	µg/mL	+/-	5.8484	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/-	11.0133	µg/mL	Unstressed
	Purity 99%				+/-	18.6804	µg/mL	Stressed
16	Acetophenone		1,002.7	µg/mL	+/-	5.8298	µg/mL	Gravimetric
	CAS # 98-86-2	(Lot MKBR7156V)			+/-	10.9783	µg/mL	Unstressed
	Purity 99%				+/-	18.6209	µg/mL	Stressed
17	N-Nitroso-di-n-propylamine		1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot OPAGF)			+/-	10.9914	µg/mL	Unstressed
	Purity 99%				+/-	18.6432	µg/mL	Stressed
18	4-Methylphenol (p-cresol)		500.4	µg/mL	+/-	2.9161	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot 49396APV)			+/-	5.4823	µg/mL	Unstressed
	Purity 99%				+/-	9.2949	µg/mL	Stressed
19	3-Methylphenol (m-cresol)		500.2	µg/mL	+/-	2.9149	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot SHBD0627V)			+/-	5.4801	µg/mL	Unstressed
	Purity 99%				+/-	9.2912	µg/mL	Stressed
20	Nitrobenzene		1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot 65096APV)			+/-	10.9607	µg/mL	Unstressed
	Purity 99%				+/-	18.5912	µg/mL	Stressed
21	Isophorone		999.3	µg/mL	+/-	5.8100	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot 06705DE)			+/-	10.9410	µg/mL	Unstressed
	Purity 97%				+/-	18.5577	µg/mL	Stressed
22	2-Nitrophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCBH7602V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
23	2,4-Dimethylphenol		1,003.2	µg/mL	+/-	5.8327	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot 10165155)			+/-	10.9837	µg/mL	Unstressed
	Purity 99%				+/-	18.6302	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,004.5	µg/mL	+/-	5.8402	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 317200)			+/-	10.9980	µg/mL	Unstressed
	Purity 99%				+/-	18.6544	µg/mL	Stressed
25	2,4-Dichlorophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot 26896BM)			+/-	10.9553	µg/mL	Unstressed
	Purity 99%				+/-	18.5819	µg/mL	Stressed
27	Naphthalene		1,002.3	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBH4351V)			+/-	10.9739	µg/mL	Unstressed
	Purity 99%				+/-	18.6135	µg/mL	Stressed
28	2,6-Dichlorophenol		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKBN2776V)			+/-	10.9498	µg/mL	Unstressed
	Purity 99%				+/-	18.5726	µg/mL	Stressed
29	4-Chloroaniline		1,000.3	µg/mL	+/-	5.8157	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot 12528PH)			+/-	10.9518	µg/mL	Unstressed
	Purity 98%				+/-	18.5761	µg/mL	Stressed
30	Hexachlorobutadiene		999.9	µg/mL	+/-	5.8135	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot K22W009)			+/-	10.9475	µg/mL	Unstressed
	Purity 98%				+/-	18.5688	µg/mL	Stressed
31	2-Methylnaphthalene		998.6	µg/mL	+/-	5.8059	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot 19399MJV)			+/-	10.9333	µg/mL	Unstressed
	Purity 96%				+/-	18.5446	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC0769V)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
33	1-Methylnaphthalene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 525000-10)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot 06024AIV)			+/-	10.9509	µg/mL	Unstressed
	Purity 99%				+/-	18.5745	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 3140300)			+/-	10.9750	µg/mL	Unstressed
	Purity 99%				+/-	18.6154	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBH7393V)			+/-	10.9640	µg/mL	Unstressed
	Purity 99%				+/-	18.5968	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHM01)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
38	2-Chloronaphthalene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot FIJ01)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
39	Biphenyl		1,006.1	µg/mL	+/-	5.8496	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot 1277976)			+/-	11.0155	µg/mL	Unstressed
	Purity 99%				+/-	18.6841	µg/mL	Stressed

40	2-Nitroaniline		1,004.6	µg/mL	+/-	5.8408	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/-	10.9991	µg/mL	Unstressed
	Purity 99%				+/-	18.6562	µg/mL	Stressed
41	Acenaphthylene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot ER030707-01)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,006.4	µg/mL	+/-	5.8513	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)			+/-	11.0188	µg/mL	Unstressed
	Purity 99%				+/-	18.6896	µg/mL	Stressed
43	Dimethylphthalate		1,001.0	µg/mL	+/-	5.8199	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/-	10.9596	µg/mL	Unstressed
	Purity 99%				+/-	18.5894	µg/mL	Stressed
44	2,6-Dimitrotoluene		1,001.6	µg/mL	+/-	5.8234	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot 1437483V)			+/-	10.9662	µg/mL	Unstressed
	Purity 99%				+/-	18.6005	µg/mL	Stressed
45	Acenaphthene		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKBP0384V)			+/-	10.9684	µg/mL	Unstressed
	Purity 99%				+/-	18.6042	µg/mL	Stressed
46	2,4-Dinitrophenol		2,008.7	µg/mL	+/-	11.6788	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot MKBP5833V)			+/-	21.9927	µg/mL	Unstressed
	Purity 99%				+/-	37.3031	µg/mL	Stressed
47	Dibenzofuran		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBK2375V)			+/-	10.9684	µg/mL	Unstressed
	Purity 99%				+/-	18.6042	µg/mL	Stressed
48	3-Nitroaniline		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBH5131V)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
49	2,4-Dinitrotoluene		1,001.7	µg/mL	+/-	5.8240	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/-	10.9673	µg/mL	Unstressed
	Purity 99%				+/-	18.6024	µg/mL	Stressed
50	4-Nitrophenol		2,001.0	µg/mL	+/-	11.6340	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBK1842V)			+/-	21.9083	µg/mL	Unstressed
	Purity 99%				+/-	37.1601	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot FN10221307)			+/-	10.9717	µg/mL	Unstressed
	Purity 99%				+/-	18.6098	µg/mL	Stressed
52	Fluorene		1,000.5	µg/mL	+/-	5.8169	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10174662)			+/-	10.9540	µg/mL	Unstressed
	Purity 98%				+/-	18.5797	µg/mL	Stressed
53	4-Chlorophenyl phenyl ether		1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKBL1347V)			+/-	10.9531	µg/mL	Unstressed
	Purity 99%				+/-	18.5782	µg/mL	Stressed
54	n-Hexadecane (C16)		1,002.2	µg/mL	+/-	5.8269	µg/mL	Gravimetric
	CAS # 544-76-3	(Lot SHBD4570V)			+/-	10.9728	µg/mL	Unstressed
	Purity 99%				+/-	18.6116	µg/mL	Stressed
55	Diethylphthalate		1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBJ3578V)			+/-	10.9607	µg/mL	Unstressed
	Purity 99%				+/-	18.5912	µg/mL	Stressed

56	Azobenzene		1,002.3	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot MKBS2559V)			+/-	10.9739	µg/mL	Unstressed
	Purity 99%				+/-	18.6135	µg/mL	Stressed
57	Diphenylamine		1,713.4	µg/mL	+/-	9.9619	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot 07525MF)			+/-	18.7595	µg/mL	Unstressed
	Purity 99%				+/-	31.8192	µg/mL	Stressed
58	4-Nitroaniline		1,002.8	µg/mL	+/-	5.8304	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	10.9794	µg/mL	Unstressed
	Purity 99%				+/-	18.6228	µg/mL	Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,002.0	µg/mL	+/-	11.6398	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC06195V)			+/-	21.9193	µg/mL	Unstressed
	Purity 99%				+/-	37.1787	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
61	Hexachlorobenzene		1,002.1	µg/mL	+/-	5.8260	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LC04221V)			+/-	10.9711	µg/mL	Unstressed
	Purity 98%				+/-	18.6089	µg/mL	Stressed
62	Pentachlorophenol		2,000.3	µg/mL	+/-	11.6299	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 140626JLM)			+/-	21.9007	µg/mL	Unstressed
	Purity 99%				+/-	37.1471	µg/mL	Stressed
63	Phenanthrene		999.0	µg/mL	+/-	5.8083	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKBL6906V)			+/-	10.9379	µg/mL	Unstressed
	Purity 98%				+/-	18.5524	µg/mL	Stressed
64	n-Octadecane (C18)		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 593-45-3	(Lot OGCDK)			+/-	11.0199	µg/mL	Unstressed
	Purity 99%				+/-	18.6915	µg/mL	Stressed
65	Anthracene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBK5208V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
66	Carbazole		1,000.1	µg/mL	+/-	5.8146	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot S42950-417)			+/-	10.9497	µg/mL	Unstressed
	Purity 98%				+/-	18.5725	µg/mL	Stressed
67	Di-n-butylphthalate		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBL8501V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
68	Fluoranthene		999.7	µg/mL	+/-	5.8123	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	10.9454	µg/mL	Unstressed
	Purity 98%				+/-	18.5652	µg/mL	Stressed
69	Pyrene		999.1	µg/mL	+/-	5.8089	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBJ0984V)			+/-	10.9390	µg/mL	Unstressed
	Purity 98%				+/-	18.5543	µg/mL	Stressed
70	Benzyl butyl phthalate		1,001.2	µg/mL	+/-	5.8211	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot 03027HV)			+/-	10.9618	µg/mL	Unstressed
	Purity 99%				+/-	18.5931	µg/mL	Stressed
71	Benz(a)anthracene		1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	10.9640	µg/mL	Unstressed
	Purity 99%				+/-	18.5968	µg/mL	Stressed

72	Chrysene		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot ER120810-02)			+/-	11.0199	µg/mL	Unstressed
	Purity 99%				+/-	18.6915	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBK2695V)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
74	Di-n-octyl phthalate		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 3128600)			+/-	10.9717	µg/mL	Unstressed
	Purity 99%				+/-	18.6098	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)			+/-	10.9498	µg/mL	Unstressed
	Purity 99%				+/-	18.5726	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,003.3	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot ER041513-01)			+/-	10.9848	µg/mL	Unstressed
	Purity 99%				+/-	18.6321	µg/mL	Stressed
77	Benzo(a)pyrene		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	10.9553	µg/mL	Unstressed
	Purity 99%				+/-	18.5819	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,004.4	µg/mL	+/-	5.8397	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	10.9969	µg/mL	Unstressed
	Purity 99%				+/-	18.6525	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER020708-08)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:

N-nitrosodiphenylamine 2000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 1710 ug/mL. N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine. N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

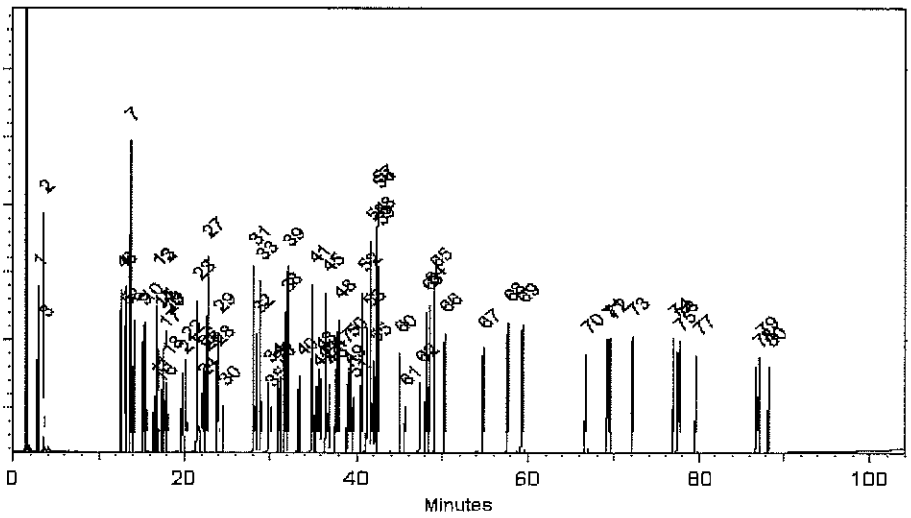
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician

Date Mixed: 24-Nov-2014 **Balance:** 1128360905

Jodi E. Breon - QA Analyst

Date Passed: 05-Dec-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SMLIST1 S1_00004

SMList 1 SI_00004

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567672 **Lot No.:** A0101615

Description : 8270 List 1 / Std #1 MegaMix

8270 List 1 / Std #1 MegaMix 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : August 31, 2015 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane		1,006.4 µg/mL	+/- 5.8510	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBD4119V)		+/- 11.0182	µg/mL	Unstressed
	Purity 99%			+/- 18.6887	µg/mL	Stressed
2	Pyridine		1,001.7 µg/mL	+/- 5.8237	µg/mL	Gravimetric
	CAS # 110-86-1	(Lot 02718MW)		+/- 10.9668	µg/mL	Unstressed
	Purity 99%			+/- 18.6014	µg/mL	Stressed
3	N-Nitrosodimethylamine		1,001.4 µg/mL	+/- 5.8222	µg/mL	Gravimetric
	CAS # 62-75-9	(Lot 2179300)		+/- 10.9640	µg/mL	Unstressed
	Purity 99%			+/- 18.5968	µg/mL	Stressed
4	Aniline		1,009.3 µg/mL	+/- 5.8682	µg/mL	Gravimetric
	CAS # 62-53-3	(Lot 68396APV)		+/- 11.0505	µg/mL	Unstressed
	Purity 99%			+/- 18.7435	µg/mL	Stressed
5	Phenol		1,009.5 µg/mL	+/- 5.8690	µg/mL	Gravimetric
	CAS # 108-95-2	(Lot SHBC6998V)		+/- 11.0522	µg/mL	Unstressed
	Purity 99%			+/- 18.7463	µg/mL	Stressed
6	Bis(2-chloroethyl)ether		1,005.2 µg/mL	+/- 5.8440	µg/mL	Gravimetric
	CAS # 111-44-4	(Lot 45296HKV)		+/- 11.0051	µg/mL	Unstressed
	Purity 99%			+/- 18.6664	µg/mL	Stressed
7	2-Chlorophenol		1,006.4 µg/mL	+/- 5.8510	µg/mL	Gravimetric
	CAS # 95-57-8	(Lot MKBD3900V)		+/- 11.0182	µg/mL	Unstressed
	Purity 99%			+/- 18.6887	µg/mL	Stressed
8	1,3-Dichlorobenzene		1,009.2 µg/mL	+/- 5.8673	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBC1891V)		+/- 11.0489	µg/mL	Unstressed
	Purity 99%			+/- 18.7407	µg/mL	Stressed

9	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBL3891V)	1,003.8	µg/mL	+/- 5.8359 +/- 10.9898 +/- 18.6404	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot 68996CMV)	1,001.3	µg/mL	+/- 5.8214 +/- 10.9624 +/- 18.5940	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Benzyl alcohol **CAS #** 100-51-6 **Purity** 99%	(Lot SHBC1850V)	1,006.0	µg/mL	+/- 5.8490 +/- 11.0144 +/- 18.6822	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	2,2'-oxybis(1-chloropropane) **CAS #** 108-60-1 **Purity** 97%	(Lot 22-GHZ-160-1)	998.6	µg/mL	+/- 5.8060 +/- 10.9335 +/- 18.5451	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2-Methylphenol (o-cresol) **CAS #** 95-48-7 **Purity** 99%	(Lot SHBC1479V)	1,002.3	µg/mL	+/- 5.8275 +/- 10.9739 +/- 18.6135	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Acetophenone **CAS #** 98-86-2 **Purity** 99%	(Lot MKBH7920V)	1,003.2	µg/mL	+/- 5.8324 +/- 10.9832 +/- 18.6293	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Hexachloroethane **CAS #** 67-72-1 **Purity** 99%	(Lot 4H3SF)	1,008.3	µg/mL	+/- 5.8621 +/- 11.0390 +/- 18.7240	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	N-Nitroso-di-n-propylamine **CAS #** 621-64-7 **Purity** 99%	(Lot OPAGF)	1,003.7	µg/mL	+/- 5.8356 +/- 10.9892 +/- 18.6395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	4-Methylphenol (p-cresol) **CAS #** 106-44-5 **Purity** 99%	(Lot 49396APV)	501.5	µg/mL	+/- 2.9155 +/- 5.4902 +/- 9.3123	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	3-Methylphenol (m-cresol) **CAS #** 108-39-4 **Purity** 99%	(Lot SHBD0627V)	500.0	µg/mL	+/- 2.9070 +/- 5.4743 +/- 9.2854	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	n-Decane (C10) **CAS #** 124-18-5 **Purity** 99%	(Lot SHBC4624V)	1,007.6	µg/mL	+/- 5.8583 +/- 11.0319 +/- 18.7119	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	n-Octadecane (C18) **CAS #** 593-45-3 **Purity** 99%	(Lot OGCDK)	1,004.5	µg/mL	+/- 5.8402 +/- 10.9980 +/- 18.6544	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBB0245V)	1,000.7	µg/mL	+/- 5.8179 +/- 10.9558 +/- 18.5829	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Isophorone **CAS #** 78-59-1 **Purity** 97%	(Lot 06705DE)	1,000.1	µg/mL	+/- 5.8148 +/- 10.9500 +/- 18.5730	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	2-Nitrophenol **CAS #** 88-75-5 **Purity** 99%	(Lot BCBH7602V)	1,005.1	µg/mL	+/- 5.8437 +/- 11.0045 +/- 18.6655	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
24	2,4-Dimethylphenol **CAS #** 105-67-9 **Purity** 99%	(Lot 10165155)	1,002.1	µg/mL	+/- 5.8260 +/- 10.9711 +/- 18.6089	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

25	Bis(2-chloroethoxy)methane		1,006.3	µg/mL	+/-	5.8507	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 2238100)			+/-	11.0177	µg/mL	Unstressed
	Purity 99%				+/-	18.6878	µg/mL	Stressed
26	2,4-Dichlorophenol		1,009.7	µg/mL	+/-	5.8705	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	11.0549	µg/mL	Unstressed
	Purity 99%				+/-	18.7509	µg/mL	Stressed
27	1,2,4-Trichlorobenzene		1,000.7	µg/mL	+/-	5.8179	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot 26896BM)			+/-	10.9558	µg/mL	Unstressed
	Purity 99%				+/-	18.5829	µg/mL	Stressed
28	Naphthalene		1,001.0	µg/mL	+/-	5.8196	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBH4351V)			+/-	10.9591	µg/mL	Unstressed
	Purity 99%				+/-	18.5884	µg/mL	Stressed
29	4-Chloroaniline		999.5	µg/mL	+/-	5.8112	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot 12528PH)			+/-	10.9432	µg/mL	Unstressed
	Purity 98%				+/-	18.5615	µg/mL	Stressed
30	Hexachlorobutadiene		1,001.9	µg/mL	+/-	5.8249	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot K22W009)			+/-	10.9690	µg/mL	Unstressed
	Purity 98%				+/-	18.6052	µg/mL	Stressed
31	2-Methylnaphthalene		1,006.1	µg/mL	+/-	5.8497	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot 19399MJV)			+/-	11.0158	µg/mL	Unstressed
	Purity 96%				+/-	18.6846	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,004.2	µg/mL	+/-	5.8382	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC0769V)			+/-	10.9941	µg/mL	Unstressed
	Purity 99%				+/-	18.6479	µg/mL	Stressed
33	1-Methylnaphthalene		1,000.6	µg/mL	+/-	5.8173	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 5250.00-10)			+/-	10.9547	µg/mL	Unstressed
	Purity 99%				+/-	18.5810	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot 06024AIV)			+/-	10.9717	µg/mL	Unstressed
	Purity 99%				+/-	18.6098	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,009.5	µg/mL	+/-	5.8690	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 2220500)			+/-	11.0522	µg/mL	Unstressed
	Purity 99%				+/-	18.7463	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBH7393V)			+/-	10.9881	µg/mL	Unstressed
	Purity 99%				+/-	18.6376	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,008.9	µg/mL	+/-	5.8658	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHM01)			+/-	11.0461	µg/mL	Unstressed
	Purity 99%				+/-	18.7361	µg/mL	Stressed
38	2-Chloronaphthalene		1,004.8	µg/mL	+/-	5.8417	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot FIJ01)			+/-	11.0007	µg/mL	Unstressed
	Purity 99%				+/-	18.6590	µg/mL	Stressed
39	Biphenyl		1,005.6	µg/mL	+/-	5.8464	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot 1277976)			+/-	11.0095	µg/mL	Unstressed
	Purity 99%				+/-	18.6739	µg/mL	Stressed
40	2-Nitroaniline		1,007.1	µg/mL	+/-	5.8551	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBF9132V)			+/-	11.0259	µg/mL	Unstressed
	Purity 99%				+/-	18.7017	µg/mL	Stressed

41	Acenaphthylene		1,005.6 µg/mL	+/- 5.8466	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot ER030707-01)		+/- 11.0100	µg/mL	Unstressed
	Purity 99%			+/- 18.6748	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,006.2 µg/mL	+/- 5.8498	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)		+/- 11.0160	µg/mL	Unstressed
	Purity 99%			+/- 18.6850	µg/mL	Stressed
43	Dimethylphthalate		1,004.0 µg/mL	+/- 5.8371	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)		+/- 10.9919	µg/mL	Unstressed
	Purity 99%			+/- 18.6441	µg/mL	Stressed
44	2,6-Dinitrotoluene		1,003.3 µg/mL	+/- 5.8330	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot 1437483V)		+/- 10.9843	µg/mL	Unstressed
	Purity 99%			+/- 18.6311	µg/mL	Stressed
45	Acenaphthene		1,003.7 µg/mL	+/- 5.8353	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKBJ4871V)		+/- 10.9887	µg/mL	Unstressed
	Purity 99%			+/- 18.6386	µg/mL	Stressed
46	3-Nitroaniline		1,004.4 µg/mL	+/- 5.8396	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBH5131V)		+/- 10.9967	µg/mL	Unstressed
	Purity 97%			+/- 18.6522	µg/mL	Stressed
47	2,4-Dinitrophenol		2,009.3 µg/mL	+/- 11.6820	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot MKBP5833V)		+/- 21.9987	µg/mL	Unstressed
	Purity 99%			+/- 37.3133	µg/mL	Stressed
48	Dibenzofuran		1,008.5 µg/mL	+/- 5.8635	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBK2375V)		+/- 11.0418	µg/mL	Unstressed
	Purity 99%			+/- 18.7286	µg/mL	Stressed
49	2,4-Dinitrotoluene		1,004.8 µg/mL	+/- 5.8417	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)		+/- 11.0007	µg/mL	Unstressed
	Purity 99%			+/- 18.6590	µg/mL	Stressed
50	4-Nitrophenol		2,000.6 µg/mL	+/- 11.6317	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBK1842V)		+/- 21.9040	µg/mL	Unstressed
	Purity 99%			+/- 37.1527	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,001.3 µg/mL	+/- 5.8216	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot ER100206-01)		+/- 10.9629	µg/mL	Unstressed
	Purity 99%			+/- 18.5949	µg/mL	Stressed
52	Fluorene		1,000.4 µg/mL	+/- 5.8161	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot BCBF8646V)		+/- 10.9525	µg/mL	Unstressed
	Purity 99%			+/- 18.5773	µg/mL	Stressed
53	4-Chlorophenyl phenyl ether		1,001.3 µg/mL	+/- 5.8214	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKBM4925V)		+/- 10.9624	µg/mL	Unstressed
	Purity 99%			+/- 18.5940	µg/mL	Stressed
54	Diethylphthalate		1,001.2 µg/mL	+/- 5.8211	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBJ3578V)		+/- 10.9618	µg/mL	Unstressed
	Purity 99%			+/- 18.5931	µg/mL	Stressed
55	4-Nitroaniline		1,006.9 µg/mL	+/- 5.8539	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)		+/- 11.0237	µg/mL	Unstressed
	Purity 99%			+/- 18.6980	µg/mL	Stressed
56	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,003.0 µg/mL	+/- 11.6456	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC02329V)		+/- 21.9302	µg/mL	Unstressed
	Purity 99%			+/- 37.1973	µg/mL	Stressed

57	Azobenzene		1,006.5	µg/mL	+/-	5.8516	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot 130305JLM)			+/-	11.0193	µg/mL	Unstressed
	Purity 99%				+/-	18.6906	µg/mL	Stressed
58	4-Bromophenyl phenyl ether		1,003.7	µg/mL	+/-	5.8353	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	10.9887	µg/mL	Unstressed
	Purity 99%				+/-	18.6386	µg/mL	Stressed
59	Hexachlorobenzene		1,008.0	µg/mL	+/-	5.8606	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LB93343V)			+/-	11.0363	µg/mL	Unstressed
	Purity 99%				+/-	18.7193	µg/mL	Stressed
60	Pentachlorophenol		2,006.3	µg/mL	+/-	11.6648	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 130826JLM)			+/-	21.9664	µg/mL	Unstressed
	Purity 99%				+/-	37.2586	µg/mL	Stressed
61	Phenanthrene		1,004.4	µg/mL	+/-	5.8394	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKBJ4205V)			+/-	10.9963	µg/mL	Unstressed
	Purity 99%				+/-	18.6516	µg/mL	Stressed
62	Anthracene		1,007.3	µg/mL	+/-	5.8565	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBK5208V)			+/-	11.0286	µg/mL	Unstressed
	Purity 99%				+/-	18.7064	µg/mL	Stressed
63	n-Hexadecane (C16)		1,001.9	µg/mL	+/-	5.8248	µg/mL	Gravimetric
	CAS # 544-76-3	(Lot SHBC3991V)			+/-	10.9690	µg/mL	Unstressed
	Purity 99%				+/-	18.6051	µg/mL	Stressed
64	Carbazole		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot S42950-417)			+/-	10.9685	µg/mL	Unstressed
	Purity 98%				+/-	18.6043	µg/mL	Stressed
65	Di-n-butylphthalate		1,002.5	µg/mL	+/-	5.8286	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBG1851V)			+/-	10.9761	µg/mL	Unstressed
	Purity 99%				+/-	18.6172	µg/mL	Stressed
66	Fluoranthene		1,009.4	µg/mL	+/-	5.8685	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot 00828AJ)			+/-	11.0511	µg/mL	Unstressed
	Purity 98%				+/-	18.7444	µg/mL	Stressed
67	Pyrene		1,004.0	µg/mL	+/-	5.8371	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBJ0984V)			+/-	10.9921	µg/mL	Unstressed
	Purity 98%				+/-	18.6443	µg/mL	Stressed
68	Benzyl butyl phthalate		1,005.4	µg/mL	+/-	5.8452	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot 03027HV)			+/-	11.0073	µg/mL	Unstressed
	Purity 99%				+/-	18.6701	µg/mL	Stressed
69	Benz(a)anthracene		1,006.4	µg/mL	+/-	5.8513	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	11.0188	µg/mL	Unstressed
	Purity 99%				+/-	18.6896	µg/mL	Stressed
70	Chrysene		1,003.2	µg/mL	+/-	5.8327	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot PR121912-01)			+/-	10.9837	µg/mL	Unstressed
	Purity 99%				+/-	18.6302	µg/mL	Stressed
71	Bis(2-ethylhexyl)phthalate		1,000.9	µg/mL	+/-	5.8190	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBH9511V)			+/-	10.9580	µg/mL	Unstressed
	Purity 99%				+/-	18.5866	µg/mL	Stressed
72	Di-n-octyl phthalate		1,002.3	µg/mL	+/-	5.8272	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 1674300)			+/-	10.9733	µg/mL	Unstressed
	Purity 99%				+/-	18.6126	µg/mL	Stressed

73	Benzo(b)fluoranthene		999.5	µg/mL	+/-	5.8109	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER022008-02)			+/-	10.9427	µg/mL	Unstressed
	Purity 99%				+/-	18.5606	µg/mL	Stressed
74	Benzo(k)fluoranthene		1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot ER061608-02)			+/-	10.9914	µg/mL	Unstressed
	Purity 99%				+/-	18.6432	µg/mL	Stressed
75	Benzo(a)pyrene		1,008.3	µg/mL	+/-	5.8621	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	11.0390	µg/mL	Unstressed
	Purity 99%				+/-	18.7240	µg/mL	Stressed
76	Indeno(1,2,3-cd)pyrene		1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	10.9509	µg/mL	Unstressed
	Purity 99%				+/-	18.5745	µg/mL	Stressed
77	Dibenz(a,h)anthracene		999.4	µg/mL	+/-	5.8103	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	10.9416	µg/mL	Unstressed
	Purity 99%				+/-	18.5587	µg/mL	Stressed
78	Benzo(g,h,i)perylene		1,001.7	µg/mL	+/-	5.8240	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER020708-08)			+/-	10.9673	µg/mL	Unstressed
	Purity 99%				+/-	18.6024	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

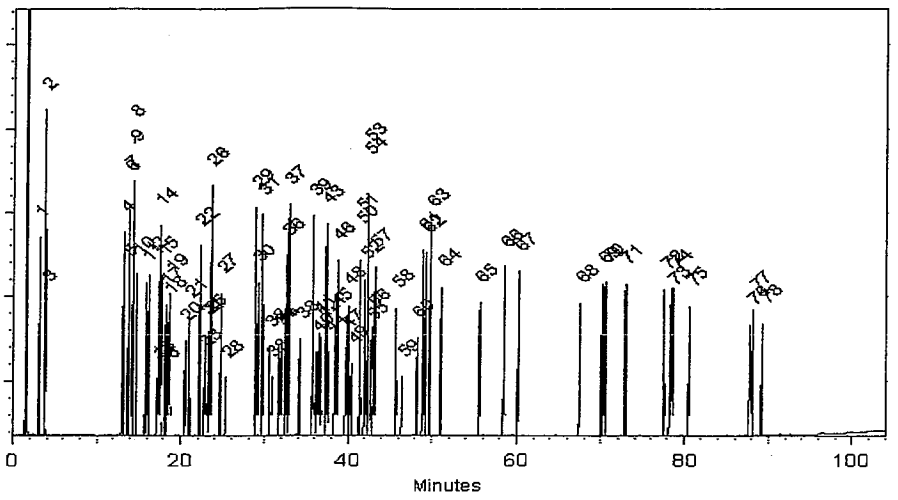
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Sawver

Date Mixed: 26-Feb-2014 **Balance:** 1128360905

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 04-Mar-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SMLIST1 S1_00005

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569729 **Lot No.:** A0107399

Description : 8270 List 1 / Std #1 MegaMix (2015)

8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : May 31, 2016 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

C E R T I F I E D V A L U E S

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBD8744V)	1,004.4 µg/mL	+/- 5.8397 µg/mL +/- 10.9969 µg/mL +/- 18.6525 µg/mL	Gravimetric Unstressed Stressed
2	Pyridine **CAS #** 110-86-1 **Purity** 99%	(Lot SHBC7174V)	1,001.0 µg/mL	+/- 5.8199 µg/mL +/- 10.9596 µg/mL +/- 18.5894 µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine **CAS #** 62-75-9 **Purity** 99%	(Lot 3213100)	1,000.2 µg/mL	+/- 5.8152 µg/mL +/- 10.9509 µg/mL +/- 18.5745 µg/mL	Gravimetric Unstressed Stressed
4	Aniline **CAS #** 62-53-3 **Purity** 99%	(Lot K22Z462)	1,002.3 µg/mL	+/- 5.8275 µg/mL +/- 10.9739 µg/mL +/- 18.6135 µg/mL	Gravimetric Unstressed Stressed
5	Bis(2-chloroethyl)ether **CAS #** 111-44-4 **Purity** 99%	(Lot 45296HKV)	1,001.4 µg/mL	+/- 5.8222 µg/mL +/- 10.9640 µg/mL +/- 18.5968 µg/mL	Gravimetric Unstressed Stressed
6	2-Chlorophenol **CAS #** 95-57-8 **Purity** 99%	(Lot MKBD3900V)	1,000.8 µg/mL	+/- 5.8187 µg/mL +/- 10.9575 µg/mL +/- 18.5856 µg/mL	Gravimetric Unstressed Stressed
7	Phenol **CAS #** 108-95-2 **Purity** 99%	(Lot SHBC6998V)	1,006.9 µg/mL	+/- 5.8542 µg/mL +/- 11.0242 µg/mL +/- 18.6989 µg/mL	Gravimetric Unstressed Stressed

8	n-Decane (C10)		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 124-18-5	(Lot SHBF1587V)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
9	1,4-Dichlorobenzene		1,005.3	µg/mL	+/-	5.8449	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBL3891V)			+/-	11.0067	µg/mL	Unstressed
	Purity 99%				+/-	18.6692	µg/mL	Stressed
10	1,3-Dichlorobenzene		1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBC1891V)			+/-	10.9706	µg/mL	Unstressed
	Purity 99%				+/-	18.6079	µg/mL	Stressed
11	1,2-Dichlorobenzene		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot 68996CMV)			+/-	11.0199	µg/mL	Unstressed
	Purity 99%				+/-	18.6915	µg/mL	Stressed
12	Benzyl alcohol		1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBC1850V)			+/-	10.9531	µg/mL	Unstressed
	Purity 99%				+/-	18.5782	µg/mL	Stressed
13	2,2'-oxybis(1-chloropropane)		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 2-EAW-18-3)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
14	2-Methylphenol (o-cresol)		1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBC1479V)			+/-	10.9881	µg/mL	Unstressed
	Purity 99%				+/-	18.6376	µg/mL	Stressed
15	Hexachloroethane		1,005.9	µg/mL	+/-	5.8484	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/-	11.0133	µg/mL	Unstressed
	Purity 99%				+/-	18.6804	µg/mL	Stressed
16	Acetophenone		1,002.7	µg/mL	+/-	5.8298	µg/mL	Gravimetric
	CAS # 98-86-2	(Lot MKBR7156V)			+/-	10.9783	µg/mL	Unstressed
	Purity 99%				+/-	18.6209	µg/mL	Stressed
17	N-Nitroso-di-n-propylamine		1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot OPAGF)			+/-	10.9914	µg/mL	Unstressed
	Purity 99%				+/-	18.6432	µg/mL	Stressed
18	4-Methylphenol (p-cresol)		500.4	µg/mL	+/-	2.9161	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot 49396APV)			+/-	5.4823	µg/mL	Unstressed
	Purity 99%				+/-	9.2949	µg/mL	Stressed
19	3-Methylphenol (m-cresol)		500.2	µg/mL	+/-	2.9149	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot SHBD0627V)			+/-	5.4801	µg/mL	Unstressed
	Purity 99%				+/-	9.2912	µg/mL	Stressed
20	Nitrobenzene		1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot 65096APV)			+/-	10.9607	µg/mL	Unstressed
	Purity 99%				+/-	18.5912	µg/mL	Stressed
21	Isophorone		999.3	µg/mL	+/-	5.8100	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot 06705DE)			+/-	10.9410	µg/mL	Unstressed
	Purity 97%				+/-	18.5577	µg/mL	Stressed
22	2-Nitrophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCBH7602V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
23	2,4-Dimethylphenol		1,003.2	µg/mL	+/-	5.8327	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot 10165155)			+/-	10.9837	µg/mL	Unstressed
	Purity 99%				+/-	18.6302	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,004.5	µg/mL	+/-	5.8402	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 317200)			+/-	10.9980	µg/mL	Unstressed
	Purity 99%				+/-	18.6544	µg/mL	Stressed
25	2,4-Dichlorophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot 26896BM)			+/-	10.9553	µg/mL	Unstressed
	Purity 99%				+/-	18.5819	µg/mL	Stressed
27	Naphthalene		1,002.3	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBH4351V)			+/-	10.9739	µg/mL	Unstressed
	Purity 99%				+/-	18.6135	µg/mL	Stressed
28	2,6-Dichlorophenol		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKBN2776V)			+/-	10.9498	µg/mL	Unstressed
	Purity 99%				+/-	18.5726	µg/mL	Stressed
29	4-Chloroaniline		1,000.3	µg/mL	+/-	5.8157	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot 12528PH)			+/-	10.9518	µg/mL	Unstressed
	Purity 98%				+/-	18.5761	µg/mL	Stressed
30	Hexachlorobutadiene		999.9	µg/mL	+/-	5.8135	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot K22W009)			+/-	10.9475	µg/mL	Unstressed
	Purity 98%				+/-	18.5688	µg/mL	Stressed
31	2-Methylnaphthalene		998.6	µg/mL	+/-	5.8059	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot 19399MJV)			+/-	10.9333	µg/mL	Unstressed
	Purity 96%				+/-	18.5446	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC0769V)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
33	1-Methylnaphthalene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 525000-10)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot 06024AIV)			+/-	10.9509	µg/mL	Unstressed
	Purity 99%				+/-	18.5745	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 3140300)			+/-	10.9750	µg/mL	Unstressed
	Purity 99%				+/-	18.6154	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBH7393V)			+/-	10.9640	µg/mL	Unstressed
	Purity 99%				+/-	18.5968	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHM01)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
38	2-Chloronaphthalene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot FIJ01)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
39	Biphenyl		1,006.1	µg/mL	+/-	5.8496	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot 1277976)			+/-	11.0155	µg/mL	Unstressed
	Purity 99%				+/-	18.6841	µg/mL	Stressed

40	2-Nitroaniline **CAS #** 88-74-4 **Purity** 99%	(Lot MKBK7597V)	1,004.6	µg/mL	+/- 5.8408 +/- 10.9991 +/- 18.6562	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Acenaphthylene **CAS #** 208-96-8 **Purity** 99%	(Lot ER030707-01)	1,000.0	µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot BCBB1436V)	1,006.4	µg/mL	+/- 5.8513 +/- 11.0188 +/- 18.6896	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Dimethylphthalate **CAS #** 131-11-3 **Purity** 99%	(Lot 10117699)	1,001.0	µg/mL	+/- 5.8199 +/- 10.9596 +/- 18.5894	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	2,6-Dimitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot 1437483V)	1,001.6	µg/mL	+/- 5.8234 +/- 10.9662 +/- 18.6005	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Acenaphthene **CAS #** 83-32-9 **Purity** 99%	(Lot MKBP0384V)	1,001.8	µg/mL	+/- 5.8246 +/- 10.9684 +/- 18.6042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	2,4-Dinitrophenol **CAS #** 51-28-5 **Purity** 99%	(Lot MKBP5833V)	2,008.7	µg/mL	+/- 11.6788 +/- 21.9927 +/- 37.3031	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	Dibenzofuran **CAS #** 132-64-9 **Purity** 99%	(Lot MKBK2375V)	1,001.8	µg/mL	+/- 5.8246 +/- 10.9684 +/- 18.6042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	3-Nitroaniline **CAS #** 99-09-2 **Purity** 99%	(Lot MKBH5131V)	1,001.3	µg/mL	+/- 5.8216 +/- 10.9629 +/- 18.5949	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690V)	1,001.7	µg/mL	+/- 5.8240 +/- 10.9673 +/- 18.6024	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	4-Nitrophenol **CAS #** 100-02-7 **Purity** 99%	(Lot MKBK1842V)	2,001.0	µg/mL	+/- 11.6340 +/- 21.9083 +/- 37.1601	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	2,3,4,6-Tetrachlorophenol **CAS #** 58-90-2 **Purity** 99%	(Lot FN10221307)	1,002.1	µg/mL	+/- 5.8263 +/- 10.9717 +/- 18.6098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluorene **CAS #** 86-73-7 **Purity** 98%	(Lot 10174662)	1,000.5	µg/mL	+/- 5.8169 +/- 10.9540 +/- 18.5797	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	4-Chlorophenyl phenyl ether **CAS #** 7005-72-3 **Purity** 99%	(Lot MKBL1347V)	1,000.4	µg/mL	+/- 5.8164 +/- 10.9531 +/- 18.5782	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	n-Hexadecane (C16) **CAS #** 544-76-3 **Purity** 99%	(Lot SHBD4570V)	1,002.2	µg/mL	+/- 5.8269 +/- 10.9728 +/- 18.6116	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	Diethylphthalate **CAS #** 84-66-2 **Purity** 99%	(Lot MKBJ3578V)	1,001.1	µg/mL	+/- 5.8205 +/- 10.9607 +/- 18.5912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Azobenzene		1,002.3	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot MKBS2559V)			+/-	10.9739	µg/mL	Unstressed
	Purity 99%				+/-	18.6135	µg/mL	Stressed
57	Diphenylamine		1,713.4	µg/mL	+/-	9.9619	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot 07525MF)			+/-	18.7595	µg/mL	Unstressed
	Purity 99%				+/-	31.8192	µg/mL	Stressed
58	4-Nitroaniline		1,002.8	µg/mL	+/-	5.8304	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	10.9794	µg/mL	Unstressed
	Purity 99%				+/-	18.6228	µg/mL	Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,002.0	µg/mL	+/-	11.6398	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC06195V)			+/-	21.9193	µg/mL	Unstressed
	Purity 99%				+/-	37.1787	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
61	Hexachlorobenzene		1,002.1	µg/mL	+/-	5.8260	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LC04221V)			+/-	10.9711	µg/mL	Unstressed
	Purity 98%				+/-	18.6089	µg/mL	Stressed
62	Pentachlorophenol		2,000.3	µg/mL	+/-	11.6299	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 140626JLM)			+/-	21.9007	µg/mL	Unstressed
	Purity 99%				+/-	37.1471	µg/mL	Stressed
63	Phenanthrene		999.0	µg/mL	+/-	5.8083	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKBL6906V)			+/-	10.9379	µg/mL	Unstressed
	Purity 98%				+/-	18.5524	µg/mL	Stressed
64	n-Octadecane (C18)		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 593-45-3	(Lot OGCDK)			+/-	11.0199	µg/mL	Unstressed
	Purity 99%				+/-	18.6915	µg/mL	Stressed
65	Anthracene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBK5208V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
66	Carbazole		1,000.1	µg/mL	+/-	5.8146	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot S42950-417)			+/-	10.9497	µg/mL	Unstressed
	Purity 98%				+/-	18.5725	µg/mL	Stressed
67	Di-n-butylphthalate		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBL8501V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
68	Fluoranthene		999.7	µg/mL	+/-	5.8123	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	10.9454	µg/mL	Unstressed
	Purity 98%				+/-	18.5652	µg/mL	Stressed
69	Pyrene		999.1	µg/mL	+/-	5.8089	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBJ0984V)			+/-	10.9390	µg/mL	Unstressed
	Purity 98%				+/-	18.5543	µg/mL	Stressed
70	Benzyl butyl phthalate		1,001.2	µg/mL	+/-	5.8211	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot 03027HV)			+/-	10.9618	µg/mL	Unstressed
	Purity 99%				+/-	18.5931	µg/mL	Stressed
71	Benz(a)anthracene		1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	10.9640	µg/mL	Unstressed
	Purity 99%				+/-	18.5968	µg/mL	Stressed

72	Chrysene		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot ER120810-02)			+/-	11.0199	µg/mL	Unstressed
	Purity 99%				+/-	18.6915	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBK2695V)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
74	Di-n-octyl phthalate		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 3128600)			+/-	10.9717	µg/mL	Unstressed
	Purity 99%				+/-	18.6098	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)			+/-	10.9498	µg/mL	Unstressed
	Purity 99%				+/-	18.5726	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,003.3	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot ER041513-01)			+/-	10.9848	µg/mL	Unstressed
	Purity 99%				+/-	18.6321	µg/mL	Stressed
77	Benzo(a)pyrene		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	10.9553	µg/mL	Unstressed
	Purity 99%				+/-	18.5819	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,004.4	µg/mL	+/-	5.8397	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	10.9969	µg/mL	Unstressed
	Purity 99%				+/-	18.6525	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER020708-08)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:

N-nitrosodiphenylamine 2000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 1710 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

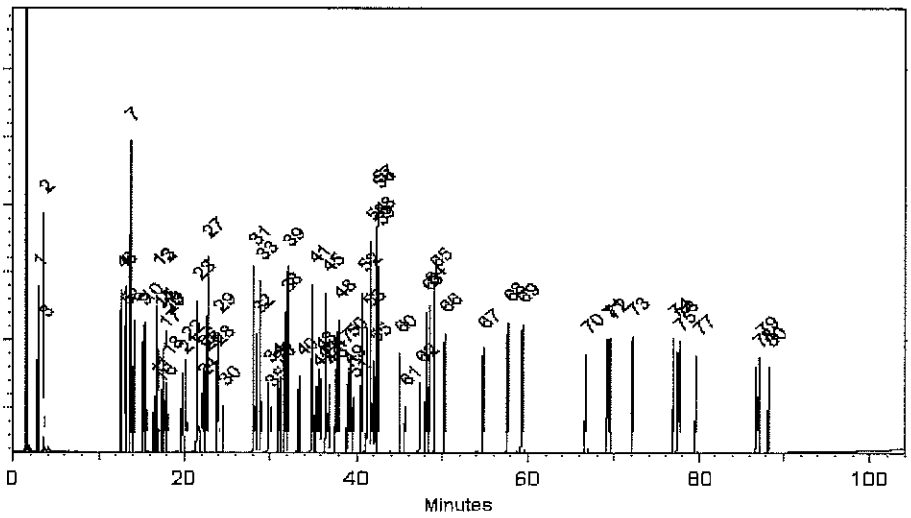
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician

Date Mixed: 24-Nov-2014 **Balance:** 1128360905

Jodi E. Breon - QA Analyst

Date Passed: 05-Dec-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569731 **Lot No.:** A0107943

Description : 8270 List 1 / Std #10

8270 List 1 / Std #10 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2016 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Indene		2,001.4	µg/mL	+/- 11.6363	µg/mL	Gravimetric
	CAS # 95-13-6	(Lot MKBP3098V)			+/- 22.5687	µg/mL	Unstressed
	Purity 99%				+/- 25.9700	µg/mL	Stressed
2	Benzoic acid		2,005.8	µg/mL	+/- 11.6619	µg/mL	Gravimetric
	CAS # 65-85-0	(Lot MKBL6689V)			+/- 22.6183	µg/mL	Unstressed
	Purity 99%				+/- 26.0271	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

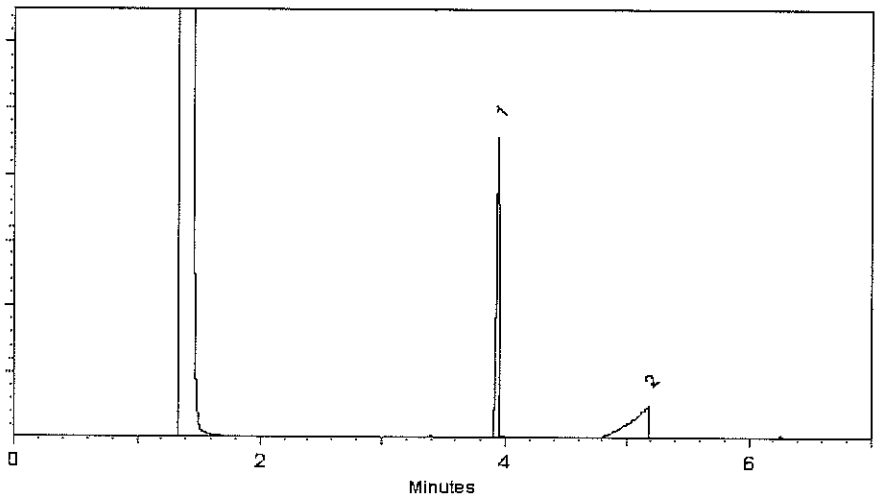
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician

Date Mixed: 22-Dec-2014 **Balance:** 1128360905

Tyler Brown - QA Analyst

Date Passed: 29-Dec-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569732 **Lot No.:** A0108035

Description : 8270 List 1 / Std #11

8270 List 1 / Std #11 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2016 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Benzaldehyde **CAS #** 100-52-7 (Lot SHBD3510V) **Purity** 99%	2,000.6 µg/mL	+/- 11.6317 µg/mL +/- 64.1305 µg/mL +/- 74.5493 µg/mL	Gravimetric Unstressed Stressed
2	epsilon-Caprolactam **CAS #** 105-60-2 (Lot I16X016) **Purity** 99%	2,001.2 µg/mL	+/- 11.6351 µg/mL +/- 64.1498 µg/mL +/- 74.5716 µg/mL	Gravimetric Unstressed Stressed
3	Atrazine **CAS #** 1912-24-9 (Lot TZ8ED) **Purity** 98%	2,004.3 µg/mL	+/- 11.6532 µg/mL +/- 64.2490 µg/mL +/- 74.6870 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

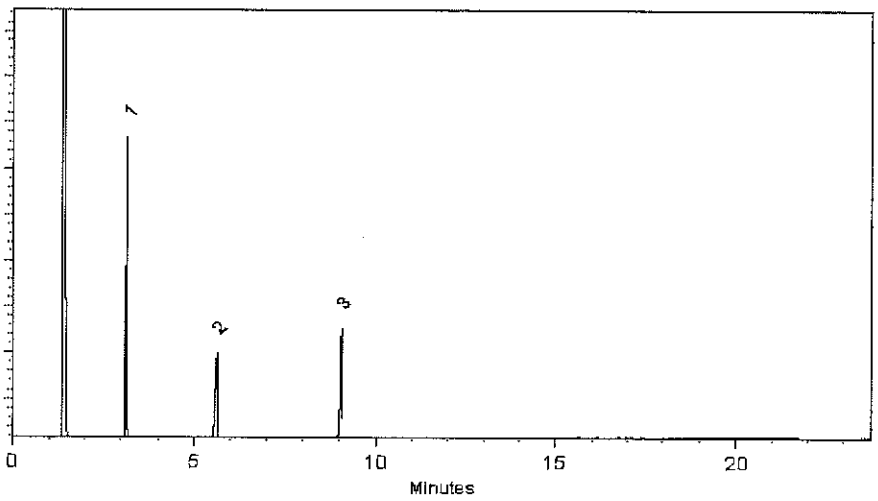
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician

Date Mixed: 30-Dec-2014 **Balance:** 1128360905

Jennifer L. Pollino - QC Analyst

Date Passed: 02-Jan-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567673 **Lot No.:** A0100824

Description : 8270 List 1 / Std #2 Amines

8270 List 1 / Std #2 Amines 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2015 **Storage:** 10°C or colder

Handling: Contains carcinogen

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	epsilon-Caprolactam **CAS #** 105-60-2 (Lot 10000218) **Purity** 99%	2,004.8 µg/mL	+/- 11.7653 µg/mL +/- 22.0081 µg/mL +/- 37.2650 µg/mL	Gravimetric Unstressed Stressed
2	Atrazine **CAS #** 1912-24-9 (Lot TZ8ED) **Purity** 98%	2,000.4 µg/mL	+/- 11.7393 µg/mL +/- 21.9596 µg/mL +/- 37.1828 µg/mL	Gravimetric Unstressed Stressed
3	Benzidine **CAS #** 92-87-5 (Lot 140107JLM) **Purity** 99%	2,010.4 µg/mL	+/- 11.7982 µg/mL +/- 22.0696 µg/mL +/- 37.3691 µg/mL	Gravimetric Unstressed Stressed
4	3,3'-Dichlorobenzidine **CAS #** 91-94-1 (Lot 140109JLM) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 21.9554 µg/mL +/- 37.1758 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

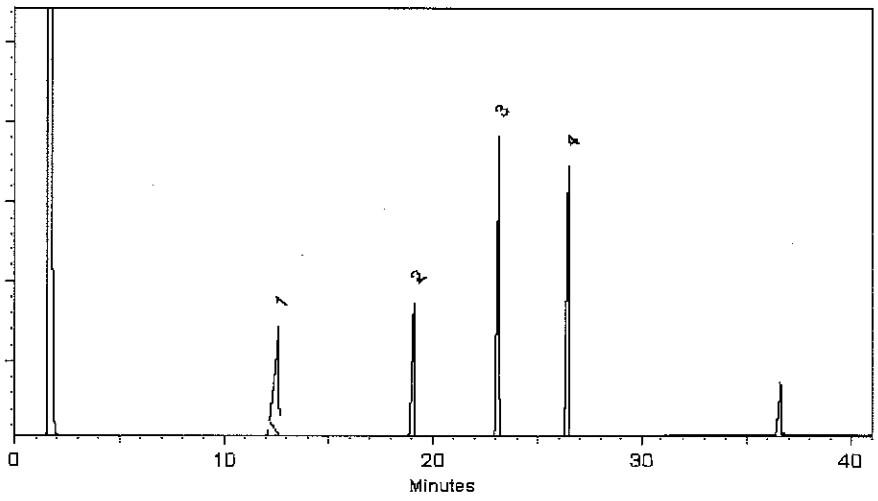
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen to guarantee product quality. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Sawyer

Date Mixed: 22-Jan-2014 **Balance:** 1128360905

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 26-Jan-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568725 **Lot No.:** A0101573

Description : 8270 List 1/ Std #7 Diphenylamine

8270 List 1/ Std #7 Diphenylamine 1,710 µg/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : February 28, 2017 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diphenylamine	1,706.8 µg/mL	+/- 10.0165	µg/mL	Gravimetric
	CAS # 122-39-4 (Lot 07525MF)		+/- 18.7368	µg/mL	Unstressed
	Purity 99%		+/- 31.7258	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:

N-nitrosodiphenylamine 2000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 1710 ug/mL.

Tech Tips:

N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

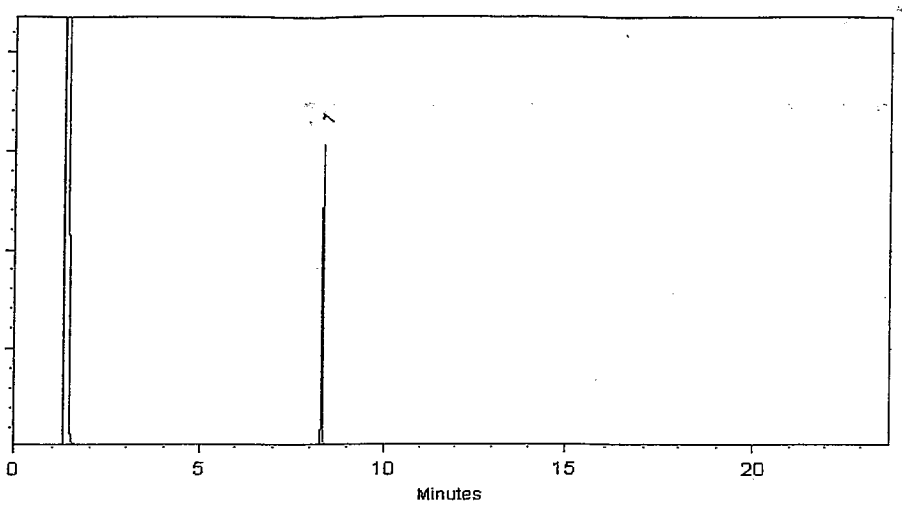
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Sauver

Jennifer L Pollino

Jennifer L. Pollino - QC Analyst

Date Mixed: 25-Feb-2014 **Balance:** 1128360905

Date Passed: 27-Feb-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568724 **Lot No.:** A0105548

Description : 8270 List 1/ Std #8

8270 List 1/ Std #8 2,000 µg/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : August 31, 2015 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzaldehyde	2,008.0 µg/mL	+/- 11.7841	µg/mL	Gravimetric
	CAS # 100-52-7 (Lot SHBC6366V)		+/- 64.3877	µg/mL	Unstressed
	Purity 99%		+/- 74.8422	µg/mL	Stressed
2	Indene	2,004.0 µg/mL	+/- 11.7606	µg/mL	Gravimetric
	CAS # 95-13-6 (Lot MKBH4027V)		+/- 64.2594	µg/mL	Unstressed
	Purity 99%		+/- 74.6931	µg/mL	Stressed
3	Benzoic acid	2,013.0 µg/mL	+/- 11.8134	µg/mL	Gravimetric
	CAS # 65-85-0 (Lot MKBL6689V)		+/- 64.5480	µg/mL	Unstressed
	Purity 99%		+/- 75.0285	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

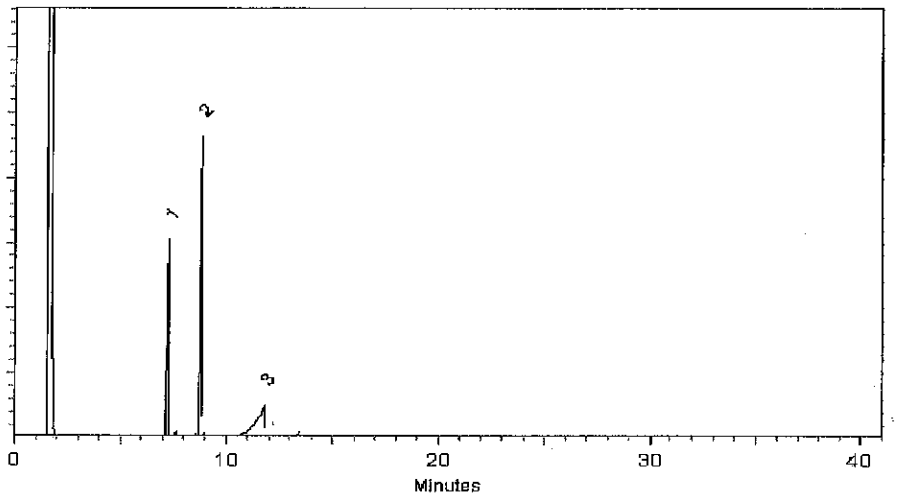
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kendra Swope - Mix Technician

Date Mixed: 22-Aug-2014 **Balance:** 1128342313

Jennifer L. Pollino - QC Analyst

Date Passed: 26-Aug-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569730 **Lot No.:** A0108174

Description : 8270 List 1 / Std #9

8270 List 1 / Std #9 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2016 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzidine	2,008.4 µg/mL	+/- 11.6770	µg/mL	Gravimetric
	CAS # 92-87-5 (Lot 141208JLM)		+/- 21.9894	µg/mL	Unstressed
	Purity 99%		+/- 37.2976	µg/mL	Stressed
2	3,3'-Dichlorobenzidine	2,003.0 µg/mL	+/- 11.6456	µg/mL	Gravimetric
	CAS # 91-94-1 (Lot 141205JLM)		+/- 21.9302	µg/mL	Unstressed
	Purity 99%		+/- 37.1973	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

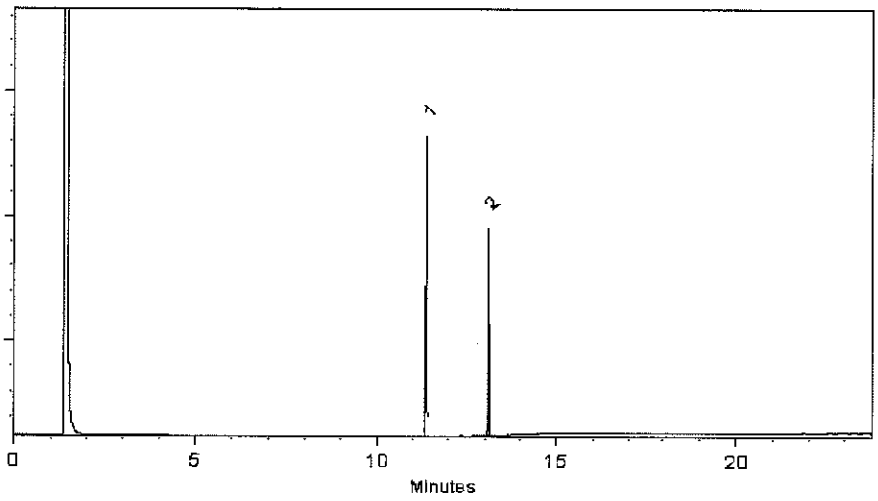
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Sauver

Jennifer L. Pollino - QC Analyst

Date Mixed: 07-Jan-2015 **Balance:** 1122030677

Date Passed: 13-Jan-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569729.SEC **Lot No.:** A0107697

Description : 8270 List 1 / Std #1 MegaMix (2015)

8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2016 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane	1,005.6 µg/mL	+/- 5.8602	µg/mL	Gravimetric
	CAS # 123-91-1.SEC (Lot CHA4A)		+/- 11.0172	µg/mL	Unstressed
	Purity 99%		+/- 18.6790	µg/mL	Stressed
2	Pyridine	1,000.2 µg/mL	+/- 5.8287	µg/mL	Gravimetric
	CAS # 110-86-1.SEC (Lot QN8DK)		+/- 10.9580	µg/mL	Unstressed
	Purity 99%		+/- 18.5787	µg/mL	Stressed
3	N-Nitrosodimethylamine	1,004.1 µg/mL	+/- 5.8515	µg/mL	Gravimetric
	CAS # 62-75-9.SEC (Lot 41B67)		+/- 11.0008	µg/mL	Unstressed
	Purity 98%		+/- 18.6513	µg/mL	Stressed
4	Aniline	1,002.8 µg/mL	+/- 5.8438	µg/mL	Gravimetric
	CAS # 62-53-3.SEC (Lot ZCD3N)		+/- 10.9865	µg/mL	Unstressed
	Purity 99%		+/- 18.6270	µg/mL	Stressed
5	Bis(2-chloroethyl)ether	1,002.4 µg/mL	+/- 5.8415	µg/mL	Gravimetric
	CAS # 111-44-4.SEC (Lot FA010143)		+/- 10.9821	µg/mL	Unstressed
	Purity 99%		+/- 18.6196	µg/mL	Stressed
6	2-Chlorophenol	1,006.0 µg/mL	+/- 5.8625	µg/mL	Gravimetric
	CAS # 95-57-8.SEC (Lot GJ01)		+/- 11.0216	µg/mL	Unstressed
	Purity 99%		+/- 18.6864	µg/mL	Stressed
7	Phenol	1,004.2 µg/mL	+/- 5.8520	µg/mL	Gravimetric
	CAS # 108-95-2.SEC (Lot EDPYN)		+/- 11.0019	µg/mL	Unstressed
	Purity 99%		+/- 18.6530	µg/mL	Stressed

8	n-Decane (C10)		1,000.2	µg/mL	+/-	5.8287	µg/mL	Gravimetric
	CAS # 124-18-5.SEC	(Lot UCVNN)			+/-	10.9580	µg/mL	Unstressed
	Purity 99%				+/-	18.5787	µg/mL	Stressed
9	1,4-Dichlorobenzene		1,005.2	µg/mL	+/-	5.8578	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot YWKDC-MK)			+/-	11.0128	µg/mL	Unstressed
	Purity 99%				+/-	18.6716	µg/mL	Stressed
10	1,3-Dichlorobenzene		1,004.2	µg/mL	+/-	5.8520	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD-KA)			+/-	11.0019	µg/mL	Unstressed
	Purity 99%				+/-	18.6530	µg/mL	Stressed
11	1,2-Dichlorobenzene		1,003.8	µg/mL	+/-	5.8497	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot 4NRGF-OT)			+/-	10.9975	µg/mL	Unstressed
	Purity 99%				+/-	18.6456	µg/mL	Stressed
12	Benzyl alcohol		1,004.8	µg/mL	+/-	5.8555	µg/mL	Gravimetric
	CAS # 100-51-6.SEC	(Lot QZBUO)			+/-	11.0084	µg/mL	Unstressed
	Purity 99%				+/-	18.6642	µg/mL	Stressed
13	2,2'-oxybis(1-chloropropane)		1,002.2	µg/mL	+/-	5.8403	µg/mL	Gravimetric
	CAS # 108-60-1 *	(Lot 2-EAW-18-3)			+/-	10.9799	µg/mL	Unstressed
	Purity 99%				+/-	18.6159	µg/mL	Stressed
14	2-Methylphenol (o-cresol)		1,002.9	µg/mL	+/-	5.8446	µg/mL	Gravimetric
	CAS # 95-48-7.SEC	(Lot NC7HL)			+/-	10.9880	µg/mL	Unstressed
	Purity 98%				+/-	18.6295	µg/mL	Stressed
15	Hexachloroethane		1,005.1	µg/mL	+/-	5.8572	µg/mL	Gravimetric
	CAS # 67-72-1.SEC	(Lot 10173016)			+/-	11.0116	µg/mL	Unstressed
	Purity 98%				+/-	18.6695	µg/mL	Stressed
16	Acetophenone		1,004.4	µg/mL	+/-	5.8532	µg/mL	Gravimetric
	CAS # 98-86-2.SEC	(Lot NSGTI)			+/-	11.0040	µg/mL	Unstressed
	Purity 99%				+/-	18.6567	µg/mL	Stressed
17	N-Nitroso-di-n-propylamine		1,001.2	µg/mL	+/-	5.8345	µg/mL	Gravimetric
	CAS # 621-64-7.SEC	(Lot 1528900)			+/-	10.9690	µg/mL	Unstressed
	Purity 99%				+/-	18.5973	µg/mL	Stressed
18	4-Methylphenol (p-cresol)		500.8	µg/mL	+/-	2.9184	µg/mL	Gravimetric
	CAS # 106-44-5.SEC	(Lot 65S2E)			+/-	5.4867	µg/mL	Unstressed
	Purity 99%				+/-	9.3024	µg/mL	Stressed
19	3-Methylphenol (m-cresol)		502.8	µg/mL	+/-	2.9301	µg/mL	Gravimetric
	CAS # 108-39-4.SEC	(Lot 6LHTM)			+/-	5.5086	µg/mL	Unstressed
	Purity 99%				+/-	9.3395	µg/mL	Stressed
20	Nitrobenzene		1,001.0	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 98-95-3.SEC	(Lot FLYIG)			+/-	10.9668	µg/mL	Unstressed
	Purity 99%				+/-	18.5936	µg/mL	Stressed
21	Isophorone		1,003.2	µg/mL	+/-	5.8462	µg/mL	Gravimetric
	CAS # 78-59-1.SEC	(Lot XHGJI)			+/-	10.9909	µg/mL	Unstressed
	Purity 99%				+/-	18.6344	µg/mL	Stressed
22	2-Nitrophenol		1,003.8	µg/mL	+/-	5.8497	µg/mL	Gravimetric
	CAS # 88-75-5.SEC	(Lot GXJ7J)			+/-	10.9975	µg/mL	Unstressed
	Purity 99%				+/-	18.6456	µg/mL	Stressed
23	2,4-Dimethylphenol		1,001.8	µg/mL	+/-	5.8380	µg/mL	Gravimetric
	CAS # 105-67-9.SEC	(Lot MKBL3650V)			+/-	10.9756	µg/mL	Unstressed
	Purity 99%				+/-	18.6084	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,005.0	µg/mL	+/-	5.8567	µg/mL	Gravimetric
	CAS # 111-91-1 *	(Lot 317200)			+/-	11.0106	µg/mL	Unstressed
	Purity 99%				+/-	18.6679	µg/mL	Stressed
25	2,4-Dichlorophenol		1,001.6	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 120-83-2.SEC	(Lot FHM01)			+/-	10.9734	µg/mL	Unstressed
	Purity 99%				+/-	18.6047	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,002.0	µg/mL	+/-	5.8392	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot OGO01)			+/-	10.9778	µg/mL	Unstressed
	Purity 99%				+/-	18.6121	µg/mL	Stressed
27	Naphthalene		1,006.4	µg/mL	+/-	5.8648	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	11.0260	µg/mL	Unstressed
	Purity 99%				+/-	18.6939	µg/mL	Stressed
28	2,6-Dichlorophenol		1,005.6	µg/mL	+/-	5.8602	µg/mL	Gravimetric
	CAS # 87-65-0.SEC	(Lot SIDBB)			+/-	11.0172	µg/mL	Unstressed
	Purity 99%				+/-	18.6790	µg/mL	Stressed
29	4-Chloroaniline		1,000.2	µg/mL	+/-	5.8287	µg/mL	Gravimetric
	CAS # 106-47-8.SEC	(Lot 10171860)			+/-	10.9580	µg/mL	Unstressed
	Purity 99%				+/-	18.5787	µg/mL	Stressed
30	Hexachlorobutadiene		1,002.4	µg/mL	+/-	5.8415	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 2009400)			+/-	10.9821	µg/mL	Unstressed
	Purity 97%				+/-	18.6195	µg/mL	Stressed
31	2-Methylnaphthalene		1,001.0	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 91-57-6.SEC	(Lot 76023-1)			+/-	10.9668	µg/mL	Unstressed
	Purity 99%				+/-	18.5936	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,006.8	µg/mL	+/-	5.8671	µg/mL	Gravimetric
	CAS # 59-50-7.SEC	(Lot FDO02)			+/-	11.0303	µg/mL	Unstressed
	Purity 99%				+/-	18.7013	µg/mL	Stressed
33	1-Methylnaphthalene		1,003.8	µg/mL	+/-	5.8497	µg/mL	Gravimetric
	CAS # 90-12-0.SEC	(Lot UATSA)			+/-	10.9975	µg/mL	Unstressed
	Purity 99%				+/-	18.6456	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,002.6	µg/mL	+/-	5.8427	µg/mL	Gravimetric
	CAS # 95-94-3.SEC	(Lot AF02)			+/-	10.9843	µg/mL	Unstressed
	Purity 99%				+/-	18.6233	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,004.0	µg/mL	+/-	5.8508	µg/mL	Gravimetric
	CAS # 77-47-4.SEC	(Lot 0012013)			+/-	10.9997	µg/mL	Unstressed
	Purity 99%				+/-	18.6493	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,006.7	µg/mL	+/-	5.8663	µg/mL	Gravimetric
	CAS # 88-06-2.SEC	(Lot UUMYM)			+/-	11.0288	µg/mL	Unstressed
	Purity 98%				+/-	18.6986	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,002.8	µg/mL	+/-	5.8438	µg/mL	Gravimetric
	CAS # 95-95-4.SEC	(Lot MKBQ9937V)			+/-	10.9864	µg/mL	Unstressed
	Purity 97%				+/-	18.6267	µg/mL	Stressed
38	2-Chloronaphthalene		1,006.4	µg/mL	+/-	5.8648	µg/mL	Gravimetric
	CAS # 91-58-7.SEC	(Lot LC03928V)			+/-	11.0260	µg/mL	Unstressed
	Purity 99%				+/-	18.6939	µg/mL	Stressed
39	Biphenyl		1,005.8	µg/mL	+/-	5.8613	µg/mL	Gravimetric
	CAS # 92-52-4.SEC	(Lot 330QE)			+/-	11.0194	µg/mL	Unstressed
	Purity 99%				+/-	18.6827	µg/mL	Stressed

40	4-Nitroaniline		1,005.4	µg/mL	+/-	5.8590	µg/mL	Gravimetric
	CAS # 100-01-6.SEC	(Lot 5ITRC)			+/-	11.0150	µg/mL	Unstressed
	Purity 99%				+/-	18.6753	µg/mL	Stressed
41	Acenaphthylene		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 208-96-8.SEC	(Lot 062013)			+/-	10.9558	µg/mL	Unstressed
	Purity 98%				+/-	18.5748	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,004.8	µg/mL	+/-	5.8555	µg/mL	Gravimetric
	CAS # 99-65-0.SEC	(Lot 3XXLB)			+/-	11.0084	µg/mL	Unstressed
	Purity 99%				+/-	18.6642	µg/mL	Stressed
43	Dimethylphthalate		1,000.6	µg/mL	+/-	5.8310	µg/mL	Gravimetric
	CAS # 131-11-3.SEC	(Lot 483WC)			+/-	10.9624	µg/mL	Unstressed
	Purity 99%				+/-	18.5861	µg/mL	Stressed
44	2,6-Dinitrotoluene		1,006.8	µg/mL	+/-	5.8671	µg/mL	Gravimetric
	CAS # 606-20-2.SEC	(Lot GE01)			+/-	11.0303	µg/mL	Unstressed
	Purity 99%				+/-	18.7013	µg/mL	Stressed
45	Acenaphthene		1,001.8	µg/mL	+/-	5.8380	µg/mL	Gravimetric
	CAS # 83-32-9.SEC	(Lot BWZJE)			+/-	10.9756	µg/mL	Unstressed
	Purity 99%				+/-	18.6084	µg/mL	Stressed
46	2,4-Dinitrophenol		2,006.2	µg/mL	+/-	11.6642	µg/mL	Gravimetric
	CAS # 51-28-5.SEC	(Lot 2TXXH)			+/-	21.9653	µg/mL	Unstressed
	Purity 99%				+/-	37.2567	µg/mL	Stressed
47	Dibenzofuran		1,000.8	µg/mL	+/-	5.8322	µg/mL	Gravimetric
	CAS # 132-64-9.SEC	(Lot 27ZGC)			+/-	10.9646	µg/mL	Unstressed
	Purity 99%				+/-	18.5899	µg/mL	Stressed
48	3-Nitroaniline		1,002.6	µg/mL	+/-	5.8427	µg/mL	Gravimetric
	CAS # 99-09-2.SEC	(Lot FGN03)			+/-	10.9843	µg/mL	Unstressed
	Purity 99%				+/-	18.6233	µg/mL	Stressed
49	2,4-Dinitrotoluene		1,003.6	µg/mL	+/-	5.8485	µg/mL	Gravimetric
	CAS # 121-14-2.SEC	(Lot SHRSA)			+/-	10.9953	µg/mL	Unstressed
	Purity 99%				+/-	18.6419	µg/mL	Stressed
50	4-Nitrophenol		2,004.2	µg/mL	+/-	11.6526	µg/mL	Gravimetric
	CAS # 100-02-7.SEC	(Lot 2J5LB)			+/-	21.9434	µg/mL	Unstressed
	Purity 99%				+/-	37.2196	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,005.4	µg/mL	+/-	5.8590	µg/mL	Gravimetric
	CAS # 58-90-2.SEC	(Lot LB98980V)			+/-	11.0150	µg/mL	Unstressed
	Purity 99%				+/-	18.6753	µg/mL	Stressed
52	Fluorene		995.1	µg/mL	+/-	5.7989	µg/mL	Gravimetric
	CAS # 86-73-7.SEC	(Lot 1240200)			+/-	10.9021	µg/mL	Unstressed
	Purity 98%				+/-	18.4838	µg/mL	Stressed
53	4-Chlorophenyl phenyl ether		1,005.4	µg/mL	+/-	5.8590	µg/mL	Gravimetric
	CAS # 7005-72-3.SEC	(Lot P31G)			+/-	11.0150	µg/mL	Unstressed
	Purity 99%				+/-	18.6753	µg/mL	Stressed
54	n-Hexadecane (C16)		1,005.4	µg/mL	+/-	5.8590	µg/mL	Gravimetric
	CAS # 544-76-3.SEC	(Lot A0328141)			+/-	11.0150	µg/mL	Unstressed
	Purity 99%				+/-	18.6753	µg/mL	Stressed
55	Diethylphthalate		1,000.2	µg/mL	+/-	5.8287	µg/mL	Gravimetric
	CAS # 84-66-2.SEC	(Lot UMBJC)			+/-	10.9580	µg/mL	Unstressed
	Purity 99%				+/-	18.5787	µg/mL	Stressed

56	Azobenzene		1,003.2	µg/mL	+/-	5.8462	µg/mL	Gravimetric
	CAS # 103-33-3.SEC	(Lot JUWAG)			+/-	10.9909	µg/mL	Unstressed
	Purity 99%				+/-	18.6344	µg/mL	Stressed
57	Diphenylamine		1,711.8	µg/mL	+/-	9.9756	µg/mL	Gravimetric
	CAS # 122-39-4.SEC	(Lot 10164691)			+/-	18.7542	µg/mL	Unstressed
	Purity 99%				+/-	31.7967	µg/mL	Stressed
58	2-Nitroaniline		1,000.2	µg/mL	+/-	5.8287	µg/mL	Gravimetric
	CAS # 88-74-4.SEC	(Lot T6E7B)			+/-	10.9580	µg/mL	Unstressed
	Purity 99%				+/-	18.5787	µg/mL	Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,009.8	µg/mL	+/-	11.6852	µg/mL	Gravimetric
	CAS # 534-52-1.SEC	(Lot 1791900)			+/-	22.0047	µg/mL	Unstressed
	Purity 99%				+/-	37.3236	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,003.8	µg/mL	+/-	5.8497	µg/mL	Gravimetric
	CAS # 101-55-3.SEC	(Lot 84C6D)			+/-	10.9975	µg/mL	Unstressed
	Purity 99%				+/-	18.6456	µg/mL	Stressed
61	Hexachlorobenzene		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 118-74-1.SEC	(Lot 20625)			+/-	10.9558	µg/mL	Unstressed
	Purity 98%				+/-	18.5748	µg/mL	Stressed
62	Pentachlorophenol		2,002.2	µg/mL	+/-	11.6410	µg/mL	Gravimetric
	CAS # 87-86-5.SEC	(Lot 1239600)			+/-	21.9215	µg/mL	Unstressed
	Purity 99%				+/-	37.1824	µg/mL	Stressed
63	Phenanthrene		1,004.4	µg/mL	+/-	5.8532	µg/mL	Gravimetric
	CAS # 85-01-8.SEC	(Lot 1238300)			+/-	11.0040	µg/mL	Unstressed
	Purity 99%				+/-	18.6567	µg/mL	Stressed
64	n-Octadecane (C18)		1,001.2	µg/mL	+/-	5.8345	µg/mL	Gravimetric
	CAS # 593-45-3.SEC	(Lot G14U045)			+/-	10.9690	µg/mL	Unstressed
	Purity 99%				+/-	18.5973	µg/mL	Stressed
65	Anthracene		1,000.6	µg/mL	+/-	5.8310	µg/mL	Gravimetric
	CAS # 120-12-7.SEC	(Lot WDFNJ)			+/-	10.9624	µg/mL	Unstressed
	Purity 99%				+/-	18.5861	µg/mL	Stressed
66	Carbazole		1,001.8	µg/mL	+/-	5.8380	µg/mL	Gravimetric
	CAS # 86-74-8.SEC	(Lot LMIZB)			+/-	10.9756	µg/mL	Unstressed
	Purity 99%				+/-	18.6084	µg/mL	Stressed
67	Di-n-butylphthalate		1,000.8	µg/mL	+/-	5.8322	µg/mL	Gravimetric
	CAS # 84-74-2.SEC	(Lot 42FSG)			+/-	10.9646	µg/mL	Unstressed
	Purity 99%				+/-	18.5899	µg/mL	Stressed
68	Fluoranthene		1,002.6	µg/mL	+/-	5.8427	µg/mL	Gravimetric
	CAS # 206-44-0.SEC	(Lot FREGF)			+/-	10.9843	µg/mL	Unstressed
	Purity 99%				+/-	18.6233	µg/mL	Stressed
69	Pyrene		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 129-00-0.SEC	(Lot ROVJC)			+/-	10.9558	µg/mL	Unstressed
	Purity 99%				+/-	18.5750	µg/mL	Stressed
70	Benzyl butyl phthalate		1,004.5	µg/mL	+/-	5.8537	µg/mL	Gravimetric
	CAS # 85-68-7.SEC	(Lot GX3GL)			+/-	11.0051	µg/mL	Unstressed
	Purity 98%				+/-	18.6586	µg/mL	Stressed
71	Benz(a)anthracene		999.7	µg/mL	+/-	5.8257	µg/mL	Gravimetric
	CAS # 56-55-3.SEC	(Lot MTENF)			+/-	10.9524	µg/mL	Unstressed
	Purity 97%				+/-	18.5691	µg/mL	Stressed

72	chrysene		1,003.0	µg/mL	+/-	5.8450	µg/mL	Gravimetric
	CAS # 218-01-9.SEC	(Lot KQ4SE)			+/-	10.9887	µg/mL	Unstressed
	Purity 99%				+/-	18.6307	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,003.6	µg/mL	+/-	5.8485	µg/mL	Gravimetric
	CAS # 117-81-7.SEC	(Lot MT8AG)			+/-	10.9953	µg/mL	Unstressed
	Purity 99%				+/-	18.6419	µg/mL	Stressed
74	Di-n-octyl phthalate		1,002.0	µg/mL	+/-	5.8389	µg/mL	Gravimetric
	CAS # 117-84-0.SEC	(Lot O8DLD)			+/-	10.9772	µg/mL	Unstressed
	Purity 98%				+/-	18.6113	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,002.2	µg/mL	+/-	5.8403	µg/mL	Gravimetric
	CAS # 205-99-2.SEC	(Lot 022011)			+/-	10.9799	µg/mL	Unstressed
	Purity 99%				+/-	18.6159	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,006.6	µg/mL	+/-	5.8660	µg/mL	Gravimetric
	CAS # 207-08-9.SEC	(Lot 022011)			+/-	11.0281	µg/mL	Unstressed
	Purity 99%				+/-	18.6976	µg/mL	Stressed
77	Benzo(a)pyrene		1,000.2	µg/mL	+/-	5.8287	µg/mL	Gravimetric
	CAS # 50-32-8.SEC	(Lot 2IGMD)			+/-	10.9580	µg/mL	Unstressed
	Purity 99%				+/-	18.5787	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 193-39-5.SEC	(Lot 012011)			+/-	10.9558	µg/mL	Unstressed
	Purity 99%				+/-	18.5750	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,002.4	µg/mL	+/-	5.8415	µg/mL	Gravimetric
	CAS # 53-70-3.SEC	(Lot 0012012)			+/-	10.9821	µg/mL	Unstressed
	Purity 99%				+/-	18.6196	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,007.6	µg/mL	+/-	5.8718	µg/mL	Gravimetric
	CAS # 191-24-2.SEC	(Lot 0022012)			+/-	11.0391	µg/mL	Unstressed
	Purity 99%				+/-	18.7162	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Specific Reference Material Notes:

N-nitrosodiphenylamine 2000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 1710 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

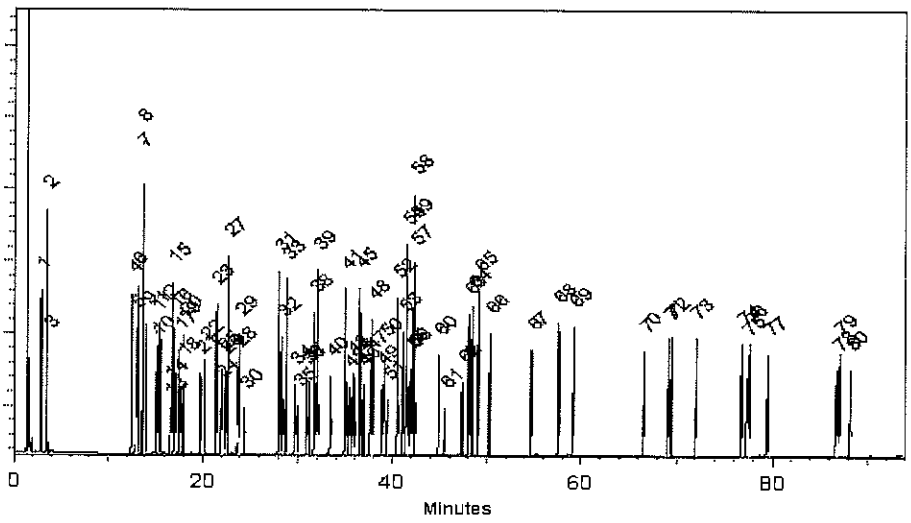
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 5 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 10-Dec-2014 **Balance:** 1128353505

Tyler Brown - QA Analyst

Date Passed: 23-Dec-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SMLIST1 SS S9_00001

RESTEK®
110 Benner Circle
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Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569730.SEC **Lot No.:** A0108170

Description : 8270 List 1 / Std #9

8270 List 1 / Std #9 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2016 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzidine		2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 92-87-5.SEC	(Lot 3241700)		+/- 21.8974	µg/mL	Unstressed
	Purity 99%			+/- 37.1416	µg/mL	Stressed
2	3,3'-Dichlorobenzidine		2,007.4 µg/mL	+/- 11.6712	µg/mL	Gravimetric
	CAS # 91-94-1.SEC	(Lot 2982200)		+/- 21.9784	µg/mL	Unstressed
	Purity 99%			+/- 37.2790	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

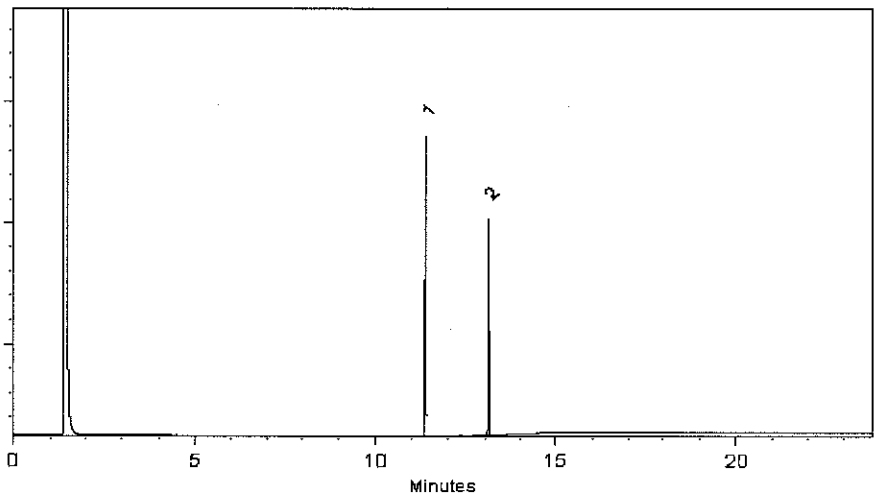
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 07-Jan-2015 **Balance:** 1128353505

Jennifer L. Pollino - QC Analyst

Date Passed: 13-Jan-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SMLIST1 SURR_00003

5MLIST1 SURR-00002

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567685 **Lot No.:** A093638

Description : 8270 Surrogate Standard

8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : February 2018 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Fluorophenol	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 367-12-4		+/- 132.9492	µg/mL	Unstressed
	Purity 99%		+/- 163.4029	µg/mL	Stressed
2	Phenol-d5	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 4165-62-2		+/- 132.9492	µg/mL	Unstressed
	Purity 99%		+/- 163.4029	µg/mL	Stressed
3	Nitrobenzene-d5	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 4165-60-0		+/- 132.9492	µg/mL	Unstressed
	Purity 99%		+/- 163.4029	µg/mL	Stressed
4	2-Fluorobiphenyl	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 321-60-8		+/- 132.9492	µg/mL	Unstressed
	Purity 99%		+/- 163.4029	µg/mL	Stressed
5	2,4,6-Tribromophenol	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 118-79-6		+/- 132.9492	µg/mL	Unstressed
	Purity 99%		+/- 163.4029	µg/mL	Stressed
6	p-Terphenyl-d14	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 1718-51-0		+/- 132.9492	µg/mL	Unstressed
	Purity 99%		+/- 163.4029	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

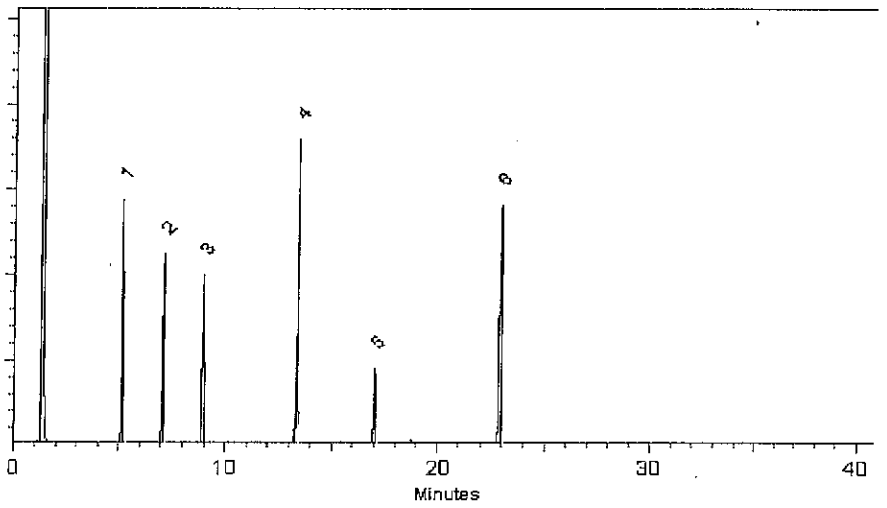
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Diane Shaffer - QA Analyst

Date Passed: 22-Feb-2013 **Balance:** 1128342313

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date of the unopened ampul stored at the recommended storage condition is the last day of the month listed in the expiration date field.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569731.sec **Lot No.:** A0107944

Description : 8270 List 1 / Std #10

8270 List 1 / Std #10 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2016 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Indene	2,000.4 µg/mL	+/- 11.6305	µg/mL	Gravimetric
	CAS # 95-13-6.SEC (Lot IG5TI)		+/- 22.5574	µg/mL	Unstressed
	Purity 99%		+/- 25.9570	µg/mL	Stressed
2	Benzoic acid	2,000.7 µg/mL	+/- 11.6324	µg/mL	Gravimetric
	CAS # 65-85-0.SEC (Lot QD3UO)		+/- 22.5610	µg/mL	Unstressed
	Purity 97%		+/- 25.9612	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

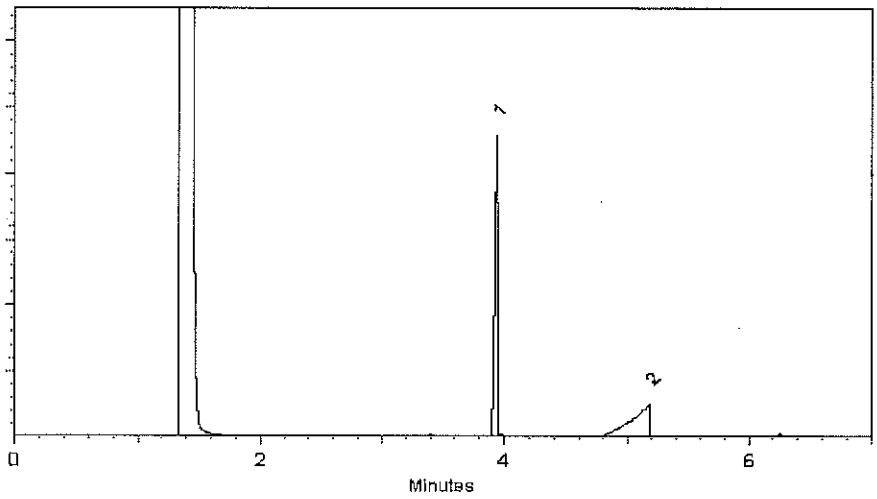
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 22-Dec-2014 **Balance:** 1128353505

Tyler Brown - QA Analyst

Date Passed: 29-Dec-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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Certificate #3222.02

Certificate of Composition

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567685 **Lot No.:** A092712

Description : 8270 Surrogate Standard

8270 Surrogate Standard 5000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 2018 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Fluorophenol	5,000.0 µg/mL	+/- 29.2761	µg/mL	Gravimetric
	CAS # 367-12-4		+/- 132.9947	µg/mL	Unstressed
	Purity 99%		+/- 163.4399	µg/mL	Stressed
2	Phenol-d5	5,000.0 µg/mL	+/- 29.2761	µg/mL	Gravimetric
	CAS # 4165-62-2		+/- 132.9947	µg/mL	Unstressed
	Purity 99%		+/- 163.4399	µg/mL	Stressed
3	Nitrobenzene-d5	5,000.0 µg/mL	+/- 29.2761	µg/mL	Gravimetric
	CAS # 4165-60-0		+/- 132.9947	µg/mL	Unstressed
	Purity 99%		+/- 163.4399	µg/mL	Stressed
4	2-Fluorobiphenyl	5,000.0 µg/mL	+/- 29.2761	µg/mL	Gravimetric
	CAS # 321-60-8		+/- 132.9947	µg/mL	Unstressed
	Purity 99%		+/- 163.4399	µg/mL	Stressed
5	2,4,6-Tribromophenol	5,000.0 µg/mL	+/- 29.2761	µg/mL	Gravimetric
	CAS # 118-79-6		+/- 132.9947	µg/mL	Unstressed
	Purity 99%		+/- 163.4399	µg/mL	Stressed
6	p-Terphenyl-d14	5,000.0 µg/mL	+/- 29.2761	µg/mL	Gravimetric
	CAS # 1718-51-0		+/- 132.9947	µg/mL	Unstressed
	Purity 99%		+/- 163.4399	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Tech Tips:

Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

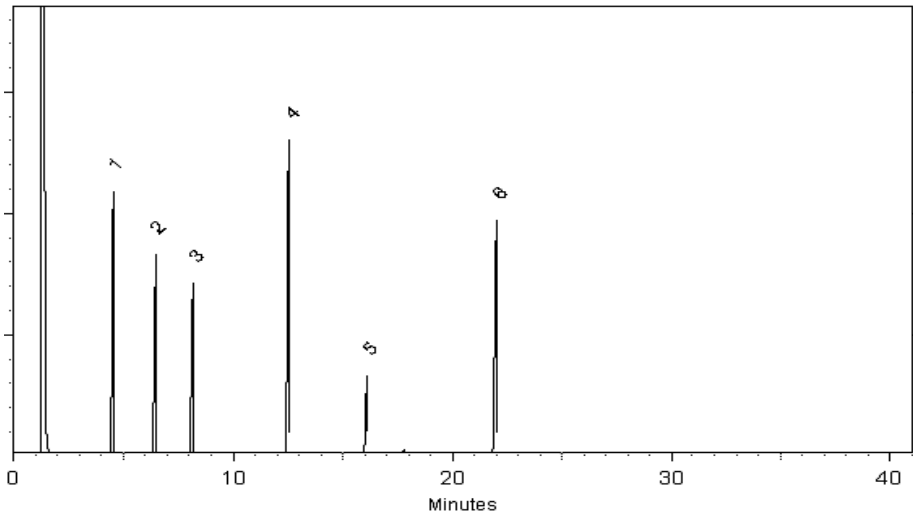
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2013 **Balance:** 1128342314

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date of the unopened ampul stored at the recommended storage condition is the last day of the month listed in the expiration date field.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

REVIEWED
By jlidgett at 8:46 am, Jan 15, 2013

Reagent

TOX ChemServ_00002

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info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Camphechlor Solution

CONCENTRATION	1000ug/ml In Hexane
CATALOG NUMBER	S-13586J4-1ML
LOT NUMBER	2180700
DATE CERTIFIED	11/20/13
EXPIRATION DATE	11/30/15
STORAGE	Room Temperature
HANDLING	See MSDS.
INTENDED USE	For laboratory use only.

ID	Analyte	CAS	Weight Analyte (mg)	Lot	Purity	Certified Concentration (ug/mL)
N-13586	Camphechlor	8001-35-2	202.300	1171300	100.00	1011.5

Analytical Test	Value
CONCENTRATION (GC/MSD)	VERIFIED

Instructions for Use:
Mix/shake solution prior to use. If particles are present, sonicate for homogeneity. If sample is diluted to lower concentrations, Class A volumetric glassware must be used.
Minimum Sample Size- 0.2 uL for Direct Injection.
Chem Service Inc. guarantees the expanded uncertainty of the above analyte to be +/- 2.0% of the certified concentration based on gravimetric preparation. The test results published in this report were obtained using equipment capable of producing results that are traceable to NIST and through NIST to the International System of Units (SI). The reported expanded uncertainty of measurement is stated as the combined standard uncertainty of measurement multiplied by the coverage factor k (k=2) such that the coverage probability corresponds to approximately 95%. For certified reference materials, homogeneity and thermal stability testing are available upon request.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

ISO 9001
Certificate Number:31610
ISO/IEC 17025
Accreditation Number:83520
ISO GUIDE 34
Accreditation Number:88520

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CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	S-13586J4-1ML
Description:	Camphechlor Solution
Lot Number:	2180700
Expiration Date:	11/30/15

ISO 9001
Certificate Number:91610
ISO/IEC 17025
Accreditation Number:63520
ISO GUIDE 84
Accreditation Number:68520

Reagent

Tox Ultra_00006

ULTRA SCIENTIFIC
Analytical Solutions

Certificate of Analysis

RCVD 10/1/14

Toxaphene Solution

Product Number: EPA-1161 **Page:** 1 of 1

Lot Number: CK-0004 **Lot Issue Date:** 16-Jan-2013 **Expiration Date:** 28-Feb-2017

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
toxaphene	008001-35-2	NT01909	1002 ± 5 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at Room Temperature (15-30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

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Cert. No. 09-1009

William J. Leahy
Quality Assurance Manager

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Reagent

vm30241_00001

Rec: 10/7/13

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Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 **Lot No.:** A093261

Description : 8260A Internal Standard Mix

Method 8260A Internal Std 2500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Fluorobenzene	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 462-06-6		+/- 30.1344 µg/mL	Unstressed
	Purity 99%		+/- 34.0022 µg/mL	Stressed
2	Chlorobenzene-d5	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 3114-55-4		+/- 30.1344 µg/mL	Unstressed
	Purity 99%		+/- 34.0022 µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 3855-82-1		+/- 30.1344 µg/mL	Unstressed
	Purity 99%		+/- 34.0022 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567641_00012

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

VM 56764_00001

Rec'd 7-8-13

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ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567641 **Lot No.:** A093581

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1000-50,000 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 60-29-7		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	1,999.9 µg/mL	+/- 11.6279	µg/mL	Gravimetric
	CAS # 76-13-1		+/- 44.2519	µg/mL	Unstressed
	Purity 97%		+/- 44.4323	µg/mL	Stressed
3	1,1-dichloroethene	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 75-35-4		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
4	tert-Butanol (TBA)	20,000.0 µg/mL	+/- 116.2756	µg/mL	Gravimetric
	CAS # 75-65-0		+/- 442.5291	µg/mL	Unstressed
	Purity 99%		+/- 444.3332	µg/mL	Stressed
5	Iodomethane (methyl iodide)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 74-88-4		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed
6	Allyl chloride (3-chloropropene)	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 107-05-1		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
7	Methyl acetate	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 79-20-9		+/- 221.2646	µg/mL	Unstressed
	Purity 99%		+/- 222.1666	µg/mL	Stressed
8	Carbon disulfide	2,000.0 µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 75-15-0		+/- 44.2527	µg/mL	Unstressed
	Purity 98%		+/- 44.4331	µg/mL	Stressed
9	Methylene chloride (dichloromethane)	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 75-09-2		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1			+/-	442.5291	µg/mL	Unstressed
	Purity 99%			+/-	444.3332	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
13	n-Hexane (C6)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-54-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 75-34-3			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 594-20-7			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-60-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
17	chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1			+/-	1,106.3228	µg/mL	Unstressed
	Purity 99%			+/-	1,110.8331	µg/mL	Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9			+/-	88.5061	µg/mL	Unstressed
	Purity 99%			+/-	88.8670	µg/mL	Stressed
21	1,1,1-trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-82-7			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
23	1,1-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 563-58-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
24	carbon tetrachloride	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 56-23-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
25	n-Heptane (C7)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-82-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
28	Trichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-01-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

29	Methylcyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-87-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
30	1,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 78-87-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
31	1,4-Dioxane	40,000.0	µg/mL	+/-	232.5513	µg/mL	Gravimetric
	CAS # 123-91-1			+/-	885.0582	µg/mL	Unstressed
	Purity 99%			+/-	888.6665	µg/mL	Stressed
32	Dibromomethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-95-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
33	bromodichloromethane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 75-27-4			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
34	cis-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 10061-01-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
35	Toluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-88-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
36	Ethyl methacrylate	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 97-63-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
37	trans-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 10061-02-6			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
38	1,1,2-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-00-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
39	1,3-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-28-9			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
40	Tetrachloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 127-18-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
41	dibromochloromethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 124-48-1			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
42	1,2-Dibromoethane (EDB)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-93-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
43	Chlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-90-7			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
44	1,1,1,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 630-20-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
45	m-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-38-3			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
46	p-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-42-3			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
47	o-Xylene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-47-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

48	Ethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-41-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
49	Styrene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-42-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
50	Isopropylbenzene (cumene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-82-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
51	bromoform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-25-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-34-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
53	1,2,3-Trichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 96-18-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-57-6			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
55	n-Propylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 103-65-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
56	Bromobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-86-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
57	1,3,5-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-67-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
58	2-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-49-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
59	4-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-43-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
60	tert-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-06-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
61	1,2,4-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 95-63-6			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
62	sec-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 135-98-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
63	4-Isopropyltoluene (p-Cymene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 99-87-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
64	1,3-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 541-73-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
65	1,4-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-46-7			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
66	n-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 104-51-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

67	1,2-Dichlorobenzene	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-50-1		+/-	44.2531	µg/mL	Unstressed
	Purity 99%		+/-	44.4335	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 96-12-8		+/-	44.2531	µg/mL	Unstressed
	Purity 99%		+/-	44.4335	µg/mL	Stressed
69	1,2,4-Trichlorobenzene	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 120-82-1		+/-	44.2531	µg/mL	Unstressed
	Purity 99%		+/-	44.4335	µg/mL	Stressed
70	Hexachlorobutadiene	2,000.0 µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 87-68-3		+/-	44.2540	µg/mL	Unstressed
	Purity 97%		+/-	44.4344	µg/mL	Stressed
71	Naphthalene	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 91-20-3		+/-	44.2531	µg/mL	Unstressed
	Purity 99%		+/-	44.4335	µg/mL	Stressed
72	1,2,3-Trichlorobenzene	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 87-61-6		+/-	44.2531	µg/mL	Unstressed
	Purity 99%		+/-	44.4335	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x .25mm x 1.4um
Rtx-502.2 (cat.#10916)

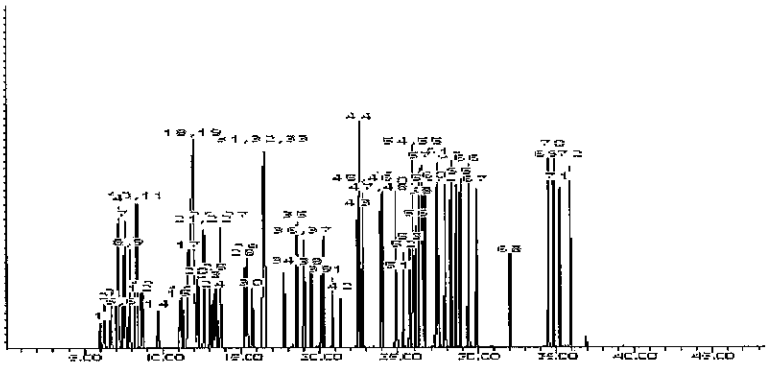
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** B251644995

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

VM567641S_00006

RESTEK

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Bellefonte, PA 16823-8812
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2

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567641.sec **Lot No.:** A093733

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1,000-50,000 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC **Purity** 99%	20,000.0 µg/mL	+/- 116.2756 +/- 442.5291 +/- 444.3332	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC **Purity** 97%	2,000.0 µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Methyl acetate **CAS #** 79-20-9.SEC **Purity** 99%	10,000.0 µg/mL	+/- 58.1378 +/- 221.2646 +/- 222.1666	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	Carbon disulfide **CAS #** 75-15-0.SEC **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1.SEC			+/-	442.5291	µg/mL	Unstressed
	Purity 99%			+/-	444.3332	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
13	n-Hexane (C6)	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 110-54-3.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 75-34-3.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 594-20-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 156-60-5.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
17	Chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1.SEC			+/-	1,106.3228	µg/mL	Unstressed
	Purity 99%			+/-	1,110.8331	µg/mL	Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9.SEC			+/-	88.5061	µg/mL	Unstressed
	Purity 99%			+/-	88.8670	µg/mL	Stressed
21	1,1,1-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-82-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
23	1,1-Dichloropropene	2,010.5	µg/mL	+/-	11.6890	µg/mL	Gravimetric
	CAS # 563-58-6.SEC			+/-	44.4847	µg/mL	Unstressed
	Purity 98%			+/-	44.6661	µg/mL	Stressed
24	Carbon tetrachloride	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 56-23-5.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed
25	n-Heptane (C7)	2,000.1	µg/mL	+/-	11.6288	µg/mL	Gravimetric
	CAS # 142-82-5.SEC			+/-	44.2553	µg/mL	Unstressed
	Purity 99%			+/-	44.4357	µg/mL	Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
28	Trichloroethene	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 79-01-6.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed

29	Methylcyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-87-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
30	1,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 78-87-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
31	1,4-Dioxane	40,000.0	µg/mL	+/-	232.5513	µg/mL	Gravimetric
	CAS # 123-91-1.SEC			+/-	885.0582	µg/mL	Unstressed
	Purity 99%			+/-	888.6665	µg/mL	Stressed
32	Dibromomethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-95-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
33	Bromodichloromethane	2,000.1	µg/mL	+/-	11.6290	µg/mL	Gravimetric
	CAS # 75-27-4.SEC			+/-	44.2562	µg/mL	Unstressed
	Purity 97%			+/-	44.4366	µg/mL	Stressed
34	cis-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
35	Toluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-88-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
36	Ethyl methacrylate	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 97-63-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
37	trans-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
38	1,1,2-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-00-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
39	1,3-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-28-9.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
40	Tetrachloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 127-18-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
41	Dibromochloromethane	2,000.1	µg/mL	+/-	11.6290	µg/mL	Gravimetric
	CAS # 124-48-1.SEC			+/-	44.2562	µg/mL	Unstressed
	Purity 97%			+/-	44.4366	µg/mL	Stressed
42	1,2-Dibromoethane (EDB)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-93-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
43	Chlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-90-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
44	1,1,1,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 630-20-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
45	m-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-38-3.SEC			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
46	p-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-42-3.SEC			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
47	o-Xylene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-47-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

48	Ethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-41-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
49	Styrene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-42-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
50	Isopropylbenzene (cumene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-82-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
51	Bromoform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-25-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-34-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
53	1,2,3-Trichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 96-18-4.SEC			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 110-57-6.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
55	n-Propylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 103-65-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
56	Bromobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-86-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
57	1,3,5-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-67-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
58	2-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-49-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
59	4-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-43-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
60	tert-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-06-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
61	1,2,4-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-63-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
62	sec-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 135-98-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)	2,000.1	µg/mL	+/-	11.6285	µg/mL	Gravimetric
	CAS # 99-87-6.SEC			+/-	44.2545	µg/mL	Unstressed
	Purity 96%			+/-	44.4349	µg/mL	Stressed
64	1,3-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 541-73-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
65	1,4-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-46-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
66	n-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 104-51-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

67	1,2-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-50-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 96-12-8.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
69	1,2,4-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 120-82-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
70	Hexachlorobutadiene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 87-68-3.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
71	Naphthalene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 91-20-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
72	1,2,3-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 87-61-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x .25mm x 1.4um
Rtx-502.2 (cat.#10916)

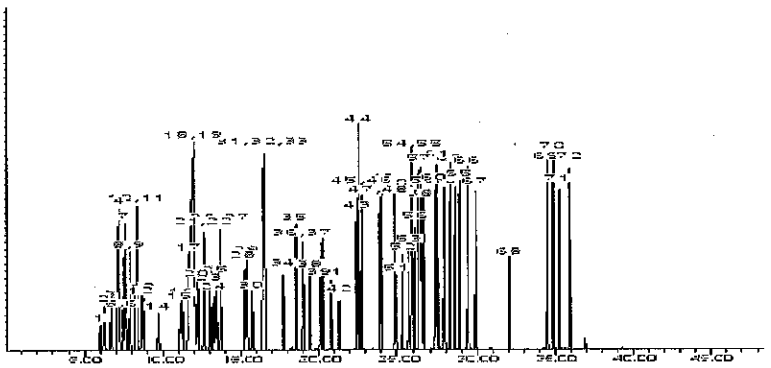
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

VM567641S_00007

RESTEK

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Bellefonte, PA 16823-8812
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Fax: (814)353-1309

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ACCREDITED
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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567641.sec **Lot No.:** A093733

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1,000-50,000 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC **Purity** 99%	20,000.0 µg/mL	+/- 116.2756 +/- 442.5291 +/- 444.3332	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC **Purity** 97%	2,000.0 µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Methyl acetate **CAS #** 79-20-9.SEC **Purity** 99%	10,000.0 µg/mL	+/- 58.1378 +/- 221.2646 +/- 222.1666	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	Carbon disulfide **CAS #** 75-15-0.SEC **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1.SEC			+/-	442.5291	µg/mL	Unstressed
	Purity 99%			+/-	444.3332	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
13	n-Hexane (C6)	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 110-54-3.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 75-34-3.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 594-20-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 156-60-5.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
17	Chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1.SEC			+/-	1,106.3228	µg/mL	Unstressed
	Purity 99%			+/-	1,110.8331	µg/mL	Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9.SEC			+/-	88.5061	µg/mL	Unstressed
	Purity 99%			+/-	88.8670	µg/mL	Stressed
21	1,1,1-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-82-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
23	1,1-Dichloropropene	2,010.5	µg/mL	+/-	11.6890	µg/mL	Gravimetric
	CAS # 563-58-6.SEC			+/-	44.4847	µg/mL	Unstressed
	Purity 98%			+/-	44.6661	µg/mL	Stressed
24	Carbon tetrachloride	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 56-23-5.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed
25	n-Heptane (C7)	2,000.1	µg/mL	+/-	11.6288	µg/mL	Gravimetric
	CAS # 142-82-5.SEC			+/-	44.2553	µg/mL	Unstressed
	Purity 99%			+/-	44.4357	µg/mL	Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
28	Trichloroethene	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 79-01-6.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed

29	Methylcyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-87-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
30	1,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 78-87-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
31	1,4-Dioxane	40,000.0	µg/mL	+/-	232.5513	µg/mL	Gravimetric
	CAS # 123-91-1.SEC			+/-	885.0582	µg/mL	Unstressed
	Purity 99%			+/-	888.6665	µg/mL	Stressed
32	Dibromomethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-95-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
33	Bromodichloromethane	2,000.1	µg/mL	+/-	11.6290	µg/mL	Gravimetric
	CAS # 75-27-4.SEC			+/-	44.2562	µg/mL	Unstressed
	Purity 97%			+/-	44.4366	µg/mL	Stressed
34	cis-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
35	Toluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-88-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
36	Ethyl methacrylate	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 97-63-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
37	trans-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
38	1,1,2-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-00-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
39	1,3-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-28-9.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
40	Tetrachloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 127-18-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
41	Dibromochloromethane	2,000.1	µg/mL	+/-	11.6290	µg/mL	Gravimetric
	CAS # 124-48-1.SEC			+/-	44.2562	µg/mL	Unstressed
	Purity 97%			+/-	44.4366	µg/mL	Stressed
42	1,2-Dibromoethane (EDB)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-93-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
43	Chlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-90-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
44	1,1,1,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 630-20-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
45	m-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-38-3.SEC			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
46	p-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-42-3.SEC			+/-	22.1265	µg/mL	Unstressed
	Purity 99%			+/-	22.2167	µg/mL	Stressed
47	o-Xylene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-47-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

48	Ethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-41-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
49	Styrene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-42-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
50	Isopropylbenzene (cumene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-82-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
51	Bromoform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-25-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-34-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
53	1,2,3-Trichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 96-18-4.SEC			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 110-57-6.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
55	n-Propylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 103-65-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
56	Bromobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-86-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
57	1,3,5-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-67-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
58	2-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-49-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
59	4-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-43-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
60	tert-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-06-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
61	1,2,4-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-63-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
62	sec-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 135-98-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)	2,000.1	µg/mL	+/-	11.6285	µg/mL	Gravimetric
	CAS # 99-87-6.SEC			+/-	44.2545	µg/mL	Unstressed
	Purity 96%			+/-	44.4349	µg/mL	Stressed
64	1,3-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 541-73-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
65	1,4-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-46-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
66	n-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 104-51-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

67	1,2-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-50-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 96-12-8.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
69	1,2,4-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 120-82-1.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
70	Hexachlorobutadiene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 87-68-3.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
71	Naphthalene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 91-20-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
72	1,2,3-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 87-61-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x .25mm x 1.4um
Rtx-502.2 (cat.#10916)

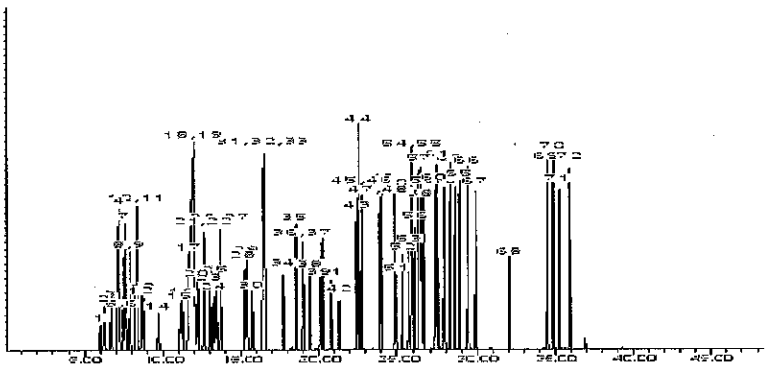
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

VM567642_00014

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567642 **Lot No.:** A093365

Description : 8260 List 1 / Std #2 Ketones

8260 List 1 / Std #2 Ketones 10,000 ug/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 67-64-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
2	2-Butanone (MEK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 78-93-3		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 108-10-1		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed
4	2-Hexanone	10,000.0 µg/mL	+/- 58.1378	µg/mL	Gravimetric
	CAS # 591-78-6		+/- 798.6896	µg/mL	Unstressed
	Purity 99%		+/- 799.0807	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM567642S_00003

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Certificate of Composition

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567642.sec **Lot No.:** A093472

Description : 8260 List 1 / Std #2 Ketones

8260/624 Ketones Standard 10,000 ug/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone	10,000.0 µg/mL	+/- 58.1409	µg/mL	Gravimetric
	CAS # 67-64-1.SEC		+/- 798.6898	µg/mL	Unstressed
	Purity 99%		+/- 799.0809	µg/mL	Stressed
2	2-Butanone (MEK)	10,000.0 µg/mL	+/- 58.1409	µg/mL	Gravimetric
	CAS # 78-93-3.SEC		+/- 798.6898	µg/mL	Unstressed
	Purity 99%		+/- 799.0809	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	10,000.0 µg/mL	+/- 58.1409	µg/mL	Gravimetric
	CAS # 108-10-1.SEC		+/- 798.6898	µg/mL	Unstressed
	Purity 99%		+/- 799.0809	µg/mL	Stressed
4	2-Hexanone	10,000.0 µg/mL	+/- 58.1409	µg/mL	Gravimetric
	CAS # 591-78-6.SEC		+/- 798.6898	µg/mL	Unstressed
	Purity 99%		+/- 799.0809	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM567642S_00005

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567642.sec **Lot No.:** A093472

Description : 8260 List 1 / Std #2 Ketones

8260/624 Ketones Standard 10,000 ug/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone	10,000.0 µg/mL	+/- 58.1409	µg/mL	Gravimetric
	CAS # 67-64-1.SEC		+/- 798.6898	µg/mL	Unstressed
	Purity 99%		+/- 799.0809	µg/mL	Stressed
2	2-Butanone (MEK)	10,000.0 µg/mL	+/- 58.1409	µg/mL	Gravimetric
	CAS # 78-93-3.SEC		+/- 798.6898	µg/mL	Unstressed
	Purity 99%		+/- 799.0809	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	10,000.0 µg/mL	+/- 58.1409	µg/mL	Gravimetric
	CAS # 108-10-1.SEC		+/- 798.6898	µg/mL	Unstressed
	Purity 99%		+/- 799.0809	µg/mL	Stressed
4	2-Hexanone	10,000.0 µg/mL	+/- 58.1409	µg/mL	Gravimetric
	CAS # 591-78-6.SEC		+/- 798.6898	µg/mL	Unstressed
	Purity 99%		+/- 799.0809	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM567643_00020

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567643 **Lot No.:** A093368

Description : 8260 List 1 / Std #4 2-Chloroethylvinyl Ether

8260 List 1 / Std #4 2-Chloroethylvinyl Ether 2,000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 110-75-8		+/- 44.2531	µg/mL	Unstressed
	Purity 99%		+/- 44.4335	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM567645S_00017

VM567645S_00016 Rec: 4/9/14

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567645.sec **Lot No.:** A099261

Description : 8260 List 1 / Std #3 Gases

8260 List 1 / Std #3 Gases 2,000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 18348) **Purity** 99%	2,002.2 µg/mL	+/- 16.7616 µg/mL +/- 21.2987 µg/mL +/- 24.7536 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,000.6 µg/mL	+/- 15.8216 µg/mL +/- 21.2729 µg/mL +/- 24.7262 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,001.9 µg/mL	+/- 14.6785 µg/mL +/- 21.2759 µg/mL +/- 24.7329 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 18349) **Purity** 99%	2,002.8 µg/mL	+/- 16.7307 µg/mL +/- 21.3051 µg/mL +/- 24.7611 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	1,999.6 µg/mL	+/- 16.2313 µg/mL +/- 21.2671 µg/mL +/- 24.7183 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot Q18B-13) **Purity** 99%	2,001.0 µg/mL	+/- 14.6721 µg/mL +/- 21.2666 µg/mL +/- 24.7221 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,004.4 µg/mL	+/- 15.1665 µg/mL +/- 21.3071 µg/mL +/- 24.7678 µg/mL	Gravimetric Unstressed Stressed
8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4.SEC (Lot Q139-99) **Purity** 99%	2,001.8 µg/mL	+/- 16.2157 µg/mL +/- 21.2894 µg/mL +/- 24.7442 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM567646_00016

VM567646_00016 Rec: 11/25/14

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567646 **Lot No.:** A0107309

Description : 8260 List 1 / Std #6 Vinyl Acetate

8260 List 1 / Std #6 Vinyl Acetate 4000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	4,013.0 µg/mL	+/- 23.5505	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBC8935V)		+/- 213.5870	µg/mL	Unstressed
	Purity 99%		+/- 213.8225	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM567650_00021

Rec: 6/6/14

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0102817

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane		2,503.8 µg/mL	+/- 14.5573	µg/mL	Gravimetric
	CAS # 1868-53-7	(Lot 022012)		+/- 28.2339	µg/mL	Unstressed
	Purity 99%			+/- 32.4891	µg/mL	Stressed
2	1,2-Dichloroethane-d4		2,502.4 µg/mL	+/- 14.5492	µg/mL	Gravimetric
	CAS # 17060-07-0	(Lot 13J-483)		+/- 28.2182	µg/mL	Unstressed
	Purity 99%			+/- 32.4709	µg/mL	Stressed
3	Toluene-d8		2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 2037-26-5	(Lot 13I-050)		+/- 28.1911	µg/mL	Unstressed
	Purity 99%			+/- 32.4398	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,503.6 µg/mL	+/- 14.5561	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 01127COV)		+/- 28.2317	µg/mL	Unstressed
	Purity 99%			+/- 32.4865	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM568720_00005

VM568720_00005 Rec: 2/3/15

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0107338

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750 µg/ml, Water, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2015 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acrolein **CAS #** 107-02-8 (Lot 140429JLM) **Purity** 99%	19,759.0 µg/mL	+/- 115.6933 µg/mL +/- 633.5357 µg/mL +/- 736.4159 µg/mL	Gravimetric Unstressed Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720_00006

Vm 56872-__ 00006 Rec'd 3/19/15

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0108734

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750 µg/mL, Water, 1 mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2015 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,890.0 µg/mL	+/- 116.4603	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 150115JLM)		+/- 637.7359	µg/mL	Unstressed
	Purity 99%		+/- 741.2982	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

vm569722_00001

VM569722-00001 Rec: 1/15/15

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0108198

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,504.8 µg/mL	+/- 21.9788 µg/mL	Gravimetric
✓	**CAS #** 75-71-8 (Lot Q167-08)		+/- 32.6918 µg/mL	Unstressed
	Purity 99%		+/- 36.4326 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,509.8 µg/mL	+/- 19.6377 µg/mL	Gravimetric
✓	**CAS #** 74-87-3 (Lot SHBC8470V)		+/- 31.2039 µg/mL	Unstressed
	Purity 99%		+/- 35.1185 µg/mL	Stressed
3	Vinyl chloride	2,515.3 µg/mL	+/- 22.1368 µg/mL	Gravimetric
✓	**CAS #** 75-01-4 (Lot 17542)		+/- 32.8734 µg/mL	Unstressed
	Purity 99%		+/- 36.6254 µg/mL	Stressed
4	1,3-Butadiene	2,498.0 µg/mL	+/- 23.6713 µg/mL	Gravimetric
✓	**CAS #** 106-99-0 (Lot SHBD5808V)		+/- 33.8065 µg/mL	Unstressed
	Purity 99%		+/- 37.4176 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,503.7 µg/mL	+/- 30.8470 µg/mL	Gravimetric
✓	**CAS #** 74-83-9 (Lot 101604)		+/- 39.2011 µg/mL	Unstressed
	Purity 99%		+/- 42.3685 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,507.7 µg/mL	+/- 21.9404 µg/mL	Gravimetric
✓	**CAS #** 75-00-3 (Lot SHBD1717V)		+/- 32.6873 µg/mL	Unstressed
	Purity 99%		+/- 36.4370 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.7 µg/mL	+/- 26.0039 µg/mL	Gravimetric
✓	**CAS #** 75-43-4 (Lot Q9B-58)		+/- 35.4965 µg/mL	Unstressed
	Purity 99%		+/- 38.9583 µg/mL	Stressed

Reagent

VMCUS8125_00009

VMCU58125_00009

Rcld 8/21/14

Certificate of Analysis

Custom Standard

Product Number: CUS-8125 **Page:** 1 of 1

Lot Number: CL-3208 **Lot Issue Date:** 14-Aug-2014 **Expiration Date:** 30-Sep-2016

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
4-bromofluorobenzene	000460-00-4	RM03908	25081 ± 125 µg/mL
dibromofluoromethane	001868-53-7	RM01021	25049 ± 125 µg/mL
1,2-dichloroethane-d4	017060-07-0	RM07547	25006 ± 125 µg/mL
toluene-d8	002037-26-5	RM07385	25025 ± 125 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at < 4°C.

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ACCREDITED

ISO 17025 Accredited A2LA Cert. No. 0861-01

ISO 9001 Registered TUV USA, Inc. Cert. No. 09-1009

William J. Leahy
Quality Assurance Manager

250 SMITH STREET N. KINGSTOWN, RHODE ISLAND 02852 USA WWW.ULTRASCI.COM

Reagent

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vmcus8126_00008

VMCUS8126 — 00008

Rcvd 1/21/14

Certificate of Analysis

Custom Standard

Product Number: CUS-8126 **Page:** 1 of 1

Lot Number: CL-3192 **Lot Issue Date:** 14-Aug-2014 **Expiration Date:** 30-Sep-2016

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
chlorobenzene-d5	003114-55-4	RM07755	25006 ± 125 µg/mL
1,4-dichlorobenzene-d4	003855-82-1	RM07757	25055 ± 125 µg/mL
fluorobenzene	000462-06-6	RM07272	25025 ± 125 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at Room Temperature (15-30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ACCREDITED

ISO 17025 Accredited A2LA Cert. No. 0851-01

ISO 9001 Registered TUV USA, Inc. Cert. No. 09-1009

William J. Leary
Quality Assurance Manager

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Reagent

HP35DNATA_00030

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Recd 8-22-14

Catalog No. : 31661 **Lot No.:** A0101716

Description : 3,5-Dinitroaniline Standard

3, 5-Dinitroaniline Std 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2018 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	3,5-Dinitroaniline	1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 618-87-1 (Lot 10311HS)		+/- 27.6728	µg/mL	Unstressed
	Purity 99%		+/- 27.6728	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

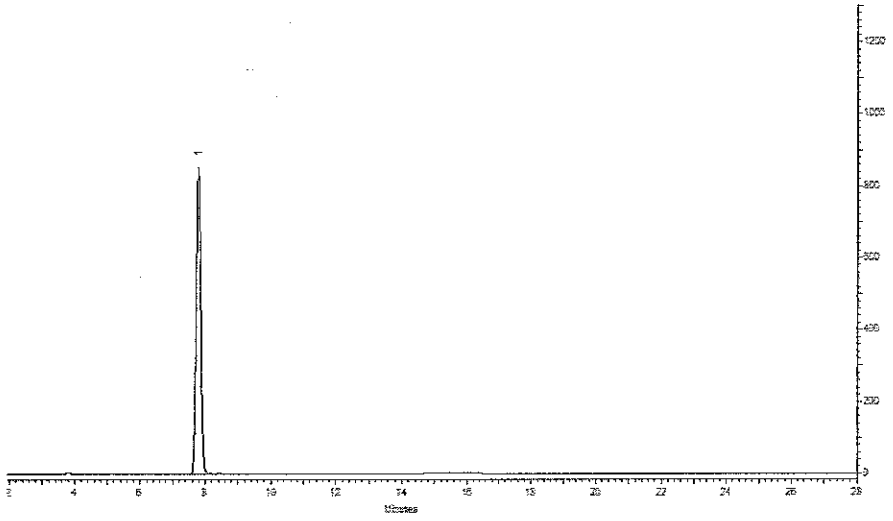
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:

Det. Type:
Wavelength: 210 nm



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kendra Swope - Mix Technician

Date Mixed: 04-Mar-2014 **Balance:** 1125113331

Diane Shaffer - QA Analyst

Date Passed: 06-Mar-2014

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

HP35DNATA_00031

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31661 **Lot No.:** A0101716

Description : 3,5-Dinitroaniline Standard

3, 5-Dinitroaniline Std 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2018 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L., K=2)		
1	3,5-Dinitroaniline		1,002.0	µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 618-87-1	(Lot 10311HS)			+/- 27.6728	µg/mL	Unstressed
	Purity 99%				+/- 27.6728	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

R. 7/25/14 TQF

Reagent

HP8330SU_00029

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31452 **Lot No.:** A095548

Description : 8330 Internal Standard Mix

8330 Internal Std 3, 4-Dinitrotoluene 1000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2018 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	3,4-Dinitrotoluene CAS # 610-39-9 Purity 99%	(Lot 1433716V)	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 12.2118 µg/mL +/- 13.7643 µg/mL		Gravimetric Unstressed Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Reagent

HP8330SU_00032

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31452 **Lot No.:** A0102330

Description : 8330 Internal Standard Mix

8330 Internal Std 3, 4-Dinitrotoluene 1000µg/mL, Methanol, 1mL/ampul

Recd 11-24-14 HSA

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	3,4-Dinitrotoluene	1,001.6 µg/mL	+/- 5.9490	µg/mL	Gravimetric
	CAS # 610-39-9 (Lot 01416AZ)		+/- 11.3594	µg/mL	Unstressed
	Purity 98%		+/- 13.0530	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

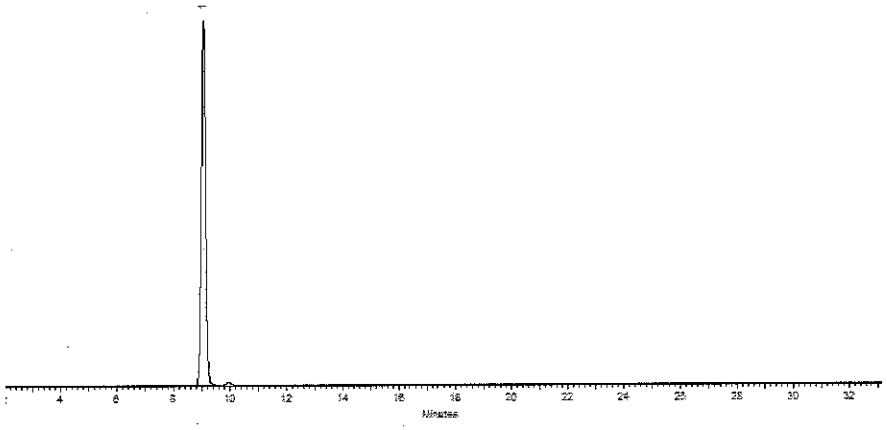
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:

Det. Type:
Wavelength: 210 nm



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cheryl Graham - Mix Technician

Date Mixed: 30-Mar-2014 **Balance:** B251644995

Diane Shaffer - QAAnalyst

Date Passed: 01-Apr-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

HP8330TA_00031

Cerilliant
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Certificate of Analysis

ISO GUIDE 34
ISO/IEC 17025
ISO 13485
ISO 9001
GMP/GLP

Method 8330 Stock Standard

Catalog Number: ERE-021
Solution Lot: ER083011-01
Expiration Date: August 2016
Solvent: Acetonitrile
Volume per Ampule: Not less than 1.2 mL
Storage: Store unopened in Freezer.
Intended Use: For R&D/ analytical purposes only. Not suitable for human or animal consumption.
Safety: Flammable, Poison

- Expiration Date has been established through real time stability studies.
- Ampules are overfilled to ensure a minimum 1.2 mL volume. We advise laboratories to use measured volumes of this standard solution before diluting to the desired concentration.

Component	Chromatographic Purity	Concentration
2-Amino-4,6-dinitrotoluene	99.98%	200.0 µg/mL
4-Amino-2,6-dinitrotoluene	99.88%	200.0 µg/mL
1,3-Dinitrobenzene	98.72%	200.0 µg/mL
2,4-Dinitrotoluene	99.00%	200.0 µg/mL
2,6-Dinitrotoluene	99.59%	200.0 µg/mL
HMX	98.41%	200.0 µg/mL
Nitrobenzene	99.96%	200.0 µg/mL
2-Nitrotoluene	99.95%	200.0 µg/mL
3-Nitrotoluene	99.94%	200.0 µg/mL
4-Nitrotoluene	99.81%	200.0 µg/mL
RDX	99.94%	200.0 µg/mL
Tetryl	98.67%	200.0 µg/mL
1,3,5-Trinitrobenzene	99.96%	200.0 µg/mL
2,4,6-Trinitrotoluene (TNT)	99.89%	200.0 µg/mL

- Concentration is corrected for chromatographic purity, residual water, residual solvents and residual inorganics.

Traceability

- Gravimetrically prepared using qualified balances calibrated semi-annually by Mettler Toledo using NIST traceable weights. Calibration verification performed weekly and prior to each use utilizing NIST traceable weights. Each balance has been assigned a minimum weighing by Mettler Toledo taking into consideration the balance and installed environmental conditions to ensure weighing complies with USP tolerances of no more than 0.1% relative error.
- Concentration is verified against an independently prepared calibration solution gravimetrically prepared using balances calibrated to NIST.
- In addition, each neat material utilized has been identified and thoroughly characterized through the use of multiple analytical techniques. Spectral data is provided on subsequent pages of the COA.

Cerilliant certifies that this standard meets the specifications stated in this certificate and warrants this product to meet the stated acceptance criteria through the expiration/retest date when stored unopened as recommended. Product should be used shortly after opening to avoid concentration changes due to evaporation. Warranty does not apply to ampoules stored after opening.

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REFERENCE MATERIAL PRODUCER

Lara Sparks

Lara Sparks, Quality Assurance Director

September 27, 2011
Date

Reagent

HP8330TA_00032

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 33905 **Lot No.:** A0102389

Description : 8330 Calibration Standard

Nitroaromatics and Nitramine Explosives by HPLC, 1mL/ampul
1000µg/mL Acetonitrile *PGI BOX REQUIRED* SHIP FED EX
GROUND ONLY

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2017 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	HMX		1,000.0 µg/mL	+/-	5.9397	µg/mL	Gravimetric
	CAS # 2691-41-0	(Lot 111005JLM)		+/-	53.7722	µg/mL	Unstressed
	Purity 99%			+/-	58.4689	µg/mL	Stressed
2	RDX		1,002.0 µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 121-82-4	(Lot 080220JLM)		+/-	53.8797	µg/mL	Unstressed
	Purity 99%			+/-	58.5858	µg/mL	Stressed
3	1,3,5-Trinitrobenzene		1,005.5 µg/mL	+/-	5.9722	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot UNVVB)		+/-	54.0669	µg/mL	Unstressed
	Purity 98%			+/-	58.7893	µg/mL	Stressed
4	1,3-Dinitrobenzene		1,000.0 µg/mL	+/-	5.9397	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)		+/-	53.7722	µg/mL	Unstressed
	Purity 99%			+/-	58.4689	µg/mL	Stressed
5	Nitrobenzene		1,000.0 µg/mL	+/-	5.9397	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBB0246V)		+/-	53.7722	µg/mL	Unstressed
	Purity 99%			+/-	58.4689	µg/mL	Stressed
6	Tetryl		1,006.0 µg/mL	+/-	5.9753	µg/mL	Gravimetric
	CAS # 479-45-8	(Lot 091120JLM)		+/-	54.0948	µg/mL	Unstressed
	Purity 99%			+/-	58.8197	µg/mL	Stressed
7	2,4,6-Trinitrotoluene		1,000.0 µg/mL	+/-	5.9397	µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 2554100)		+/-	53.7722	µg/mL	Unstressed
	Purity 99%			+/-	58.4689	µg/mL	Stressed

8	2-Amino-4,6-dinitrotoluene		1,004.0	µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 35572-78-2	(Lot 29550-55)			+/- 53.9873	µg/mL	Unstressed
	Purity 99%				+/- 58.7028	µg/mL	Stressed
9	4-Amino-2,6-dinitrotoluene		1,000.0	µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 19406-51-0	(Lot ER070908-01)			+/- 53.7722	µg/mL	Unstressed
	Purity 99%				+/- 58.4689	µg/mL	Stressed
10	2,4-Dinitrotoluene		1,002.0	µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/- 53.8797	µg/mL	Unstressed
	Purity 99%				+/- 58.5858	µg/mL	Stressed
11	2,6-Dinitrotoluene		1,004.0	µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot 1437483V)			+/- 53.9873	µg/mL	Unstressed
	Purity 99%				+/- 58.7028	µg/mL	Stressed
12	2-Nitrotoluene		1,006.0	µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 88-72-2	(Lot GA01)			+/- 54.0948	µg/mL	Unstressed
	Purity 99%				+/- 58.8197	µg/mL	Stressed
13	4-Nitrotoluene		991.3	µg/mL	+/- 5.8883	µg/mL	Gravimetric
	CAS # 99-99-0	(Lot FAU01)			+/- 53.3065	µg/mL	Unstressed
	Purity 97%				+/- 57.9626	µg/mL	Stressed
14	3-Nitrotoluene		1,003.0	µg/mL	+/- 5.9574	µg/mL	Gravimetric
	CAS # 99-08-1	(Lot FBO01)			+/- 53.9324	µg/mL	Unstressed
	Purity 97%				+/- 58.6431	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Specific Reference Material Notes:

Reagent

HP8330TA_00033

R. 7/28/14 TQF

RESTEK CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 33905 **Lot No.:** A0102389

Description : 8330 Calibration Standard

Nitroaromatics and Nitramine Explosives by HPLC, 1mL/ampul
1000µg/mL Acetonitrile *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2017 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	HMX		1,000.0 µg/mL	+/- 5.9397 µg/mL	Gravimetric
	CAS # 2691-41-0	(Lot 111005JLM)		+/- 53.7722 µg/mL	Unstressed
	Purity 99%			+/- 58.4689 µg/mL	Stressed
2	RDX		1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 121-82-4	(Lot 080220JLM)		+/- 53.8797 µg/mL	Unstressed
	Purity 99%			+/- 58.5858 µg/mL	Stressed
3	1,3,5-Trinitrobenzene		1,005.5 µg/mL	+/- 5.9722 µg/mL	Gravimetric
	CAS # 99-35-4	(Lot UNVVB)		+/- 54.0669 µg/mL	Unstressed
	Purity 98%			+/- 58.7893 µg/mL	Stressed
4	1,3-Dinitrobenzene		1,000.0 µg/mL	+/- 5.9397 µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)		+/- 53.7722 µg/mL	Unstressed
	Purity 99%			+/- 58.4689 µg/mL	Stressed
5	Nitrobenzene		1,000.0 µg/mL	+/- 5.9397 µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBB0246V)		+/- 53.7722 µg/mL	Unstressed
	Purity 99%			+/- 58.4689 µg/mL	Stressed
6	Tetryl		1,006.0 µg/mL	+/- 5.9753 µg/mL	Gravimetric
	CAS # 479-45-8	(Lot 091120JLM)		+/- 54.0948 µg/mL	Unstressed
	Purity 99%			+/- 58.8197 µg/mL	Stressed
7	2,4,6-Trinitrotoluene		1,000.0 µg/mL	+/- 5.9397 µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 2554100)		+/- 53.7722 µg/mL	Unstressed
	Purity 99%			+/- 58.4689 µg/mL	Stressed

Reagent

HPEGDNTA_00016

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31601 **Lot No.:** A097821

Description : EGDN Standard

1000µg/mL, Methanol, 1mL/ampul *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2018 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	EGDN		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 628-96-6	(Lot 120716JLM)		+/- 31.6700	µg/mL	Unstressed
	Purity 99%			+/- 44.3869	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

R. 7/28/14 TRP

Reagent

HPNCTA_00005

University of California, Santa Barbara
Marine Science Institute
Analytical Lab

Date 12/17/2014

Invoice # AL1264

Jason Baynes
Dept. of General Chemistry
Test America
880 Riverside Parkway
West Sacramento, CA 95605

Work performed for: Jason Baynes
P.O. 2590928

Date	Comment	Item	Item Description	Unit	Quantity	Rate	Rate Group	Total
11/25/14	Batch # 4721	CHN_SYN	CHN Synthetic	sampl	2.00	$30.40	Non-UC	$60.80

Amount Due: **$60.80**

For questions about services provided please contact:

Georges Paradis
paradis@msi.ucsb.edu
805 893-3802

[redacted]

For questions about remitting your payment please contact:

Tim Schmidt, 4401 MSRB, UCSB
Santa Barbara, CA 93106
805 893-4093

Please make checks payable to the UC Regents.
Please referenceMSI/8-261802-61802-0/RECH01.

Mail check to: Georges Paradis
4002 MSRB, UCSB
Santa Barbara, CA 93106-6150

Sample Batch:	Jason Baynes	AL 4721	P1		Run Date:	25-Nov-14
Sample ID	Weight (ug)	Weight Percent			C/N ratio	Flags
		C	H	N		
Flash Cotton	1948	7.17	0.69	3.32	2.16	
Flash Cotton	2095	7.29	0.64	3.37	2.16	

Detection Limit (µg)	C	H	N
	0.42	1.21	3.15

Sample Batch:	Jason Baynes	AL 4721	P2		Run Date:	3-Dec-14
Sample ID	Weight (ug)	Weight Percent			C/N ratio	Flags
		C	H	N		
Flash Cotton	2578	24.7	2.39	12.1	2.04	
Flash Cotton	1713	25.2	2.65	12.0	2.10	

Detection Limit (µg)	C	H	N
	1.74	3.48	1.01

Assayed at Marine Science

Read 12/15/14

Reagent

HPNGTA_00027

125 Market Street
New Haven, CT 06513 US

Tel (203) 786-5290 Fax (203) 786-5287
Web www.accustandard.com

AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

CATALOG NO: M-8330-ADD-1
DESCRIPTION: Nitroglycerin
LOT: 212031351-01
SOLVENT: Ethanol

DATE CERTIFIED: May 7, 2013
EXPIRATION: May 7, 2015
SAMPLE SIZE: 1 mL
STORAGE CONDITION: Refrig (0-5° C)
HAZARDS: HIGHLY FLAMMABLE

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Component	CAS No.	Purity % (HPLC)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
Nitroglycerin	55-63-0	99.4	100.6	100.0

AccuStandard

Please note:
A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

AccuStandard follows U.S. conventions in reporting numerical values on both certificates and labels:

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through NIST, Test No. 822-275872-11
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Certified by: R. Cooper
Russ Cooper, QC Manager

For use in routine laboratory analysis. Refer to the MSDS for additional information.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001.

QR-ORG/INC-001
Rev. 06/05

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Reagent

HPNGTA_00033

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31498 Lot No.: A0105695

Description : Nitroglycerin Standard

Nitroglycerin Standard 1,000µg/mL, Methanol, 1mL/ampul

Recd 11-29-14

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : September 30, 2019 Storage: 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.I., K=2)		
1	Nitroglycerin	1,010.0 µg/mL	+/- 5.9991	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 13102IJLM)		+/- 54.3099	µg/mL	Unstressed
	Purity 99%		+/- 59.0536	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

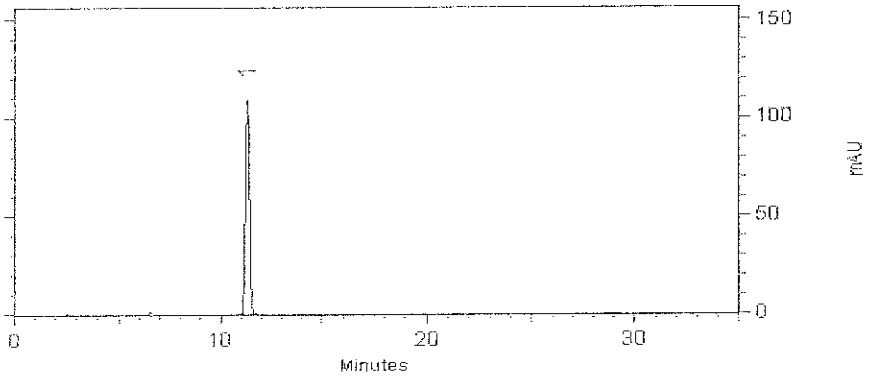
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:

Det. Type:
Wavelength: 210 nm



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cheryl Graham - Mix Technician

Date Mixed: 02-Sep-2014 Balance: 1128342313

Diane Shaffer - QA Analyst

Date Passed: 08-Sep-2014

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

HPNGTA_00034

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31498 **Lot No.:** A096573

Description : Nitroglycerin Standard

1000µg/mL, Methanol, 1mL/ampul *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	1,003.6 µg/mL	+/- 5.8897	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 121115JLM)		+/- 31.7838	µg/mL	Unstressed
	Purity 99%		+/- 44.5465	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

R. 7/28/14 TAP

Reagent

HPNGTA_00035

125 Market Street
New Haven, CT 06513 US

Tel (203) 786-5290 Fax (203) 786-5287
Web www.accustandard.com

AccuStandard, Inc.

CERTIFICATE OF ANALYSIS

CATALOG NO: M-8330-ADD-1
DESCRIPTION: Nitroglycerin
LOT: 212031351-01
SOLVENT: Ethanol

DATE CERTIFIED: May 7, 2013
EXPIRATION: May 7, 2015
SAMPLE SIZE: 1 mL
STORAGE CONDITION: Refrig (0-5° C)
HAZARDS: HIGHLY FLAMMABLE

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Component	CAS No.	Purity % (HPLC)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
Nitroglycerin	55-63-0	99.4	100.6	100.0

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Please note:
A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

AccuStandard follows U.S. conventions in reporting numerical values on both certificates and labels:

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through NIST, Test No. 822-275872-11
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Certified by: R. Cooper
Russ Cooper, QC Manager

For use in routine laboratory analysis. Refer to the MSDS for additional information.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001.

QR-ORGMND-001
Rev. 09/05

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Reagent

HPNGTA_00036

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Certificate of Analysis

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31498 **Lot No.:** A096573

Description : Nitroglycerin Standard

1000µg/mL, Methanol, 1mL/ampul *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	1,003.6 µg/mL	+/- 5.8897	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 121115JLM)		+/- 31.7838	µg/mL	Unstressed
	Purity 99%		+/- 44.5465	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

R. 7/28/14 TAP

Reagent

HPNQTA_00016

HPNQTA-00001

5

10

RESTEK

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FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

Catalog No. :	31602	**Lot No.:**	A076817
Description :	Nitroguanidine Standard		
Container Size :	2 mL	**Pkg Amt:**	> 1 mL
Expiration Date : [1]	September 2015	**Storage:**	Refrigerate

Elution Order	Compound	CAS #	Percent Purity [2]	Grav. Conc. [3] (weight/volume)	% Grav.Uncert. [4] (95% C.L., K=2)
1	Nitroguanidine	556-88-7	99%	1,000.000 ug/ml	+/-0.59 %
Solvent:	Methanol	67-56-1	99%		

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

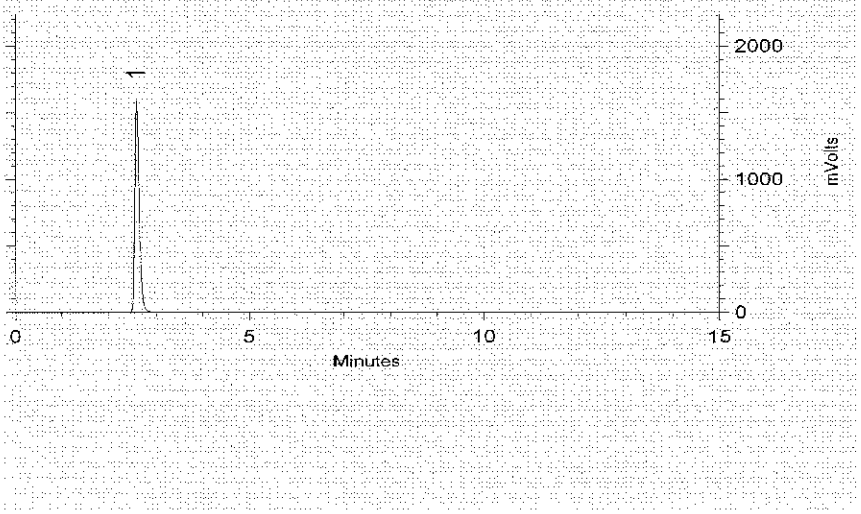
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Comp

Det. Type:
Wavelength: 210 nm



Diane Shaffer - QA Analyst

Date Passed: 16-Sep-2010 **Balance:** 1128342313

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

1 Expiration date of the unopened ampule stored at the recommended storage condition.

2A Purity is determined by one or more of the following techniques: GC/FID, HPLC, GC/ECD, GC/MS. Value is rounded to the nearest whole number. Chemical identity is confirmed using GC/MS. See data pack or contact provider for further details.

2B Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities.

2C The following types of compounds will have a listed purity of less than 99%: Aldehyde/Ketone-DNPH compounds, Bromides, Chlorides, HCL salts, HBR salts, sulfates, hydrates, and other compounds as necessary. The listed purity is a correction factor that is equivalent to the percentage of parent compound in the molecule. This correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution. The concentration listed on the certificate is the concentration of the parent compound in the solution.

2D Purity of isomeric compounds is reported as the sum of the isomers. Value is rounded to the nearest whole number after summation.

3 Based upon gravimetric preparation with balance calibration verified using NIST traceable weights (seven mass levels) and/or class A glassware used for dilutions.

4 Uncertainties determined using data for balances and glassware from measurement systems analysis methodology, raw material purity, and, when significant, equipment tolerances or calibration results.

Reagent

HPNQTA_00017

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-6
Description: Nitroguanidine
Lot: 213071053
Solvent: Methanol
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*

Danger 2

Date Certified: Jul 3, 2013
Expiration: Jul 3, 2015
Sample Size: 1 mL
Storage Condition: Freeze (<-10° C)

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Component	CAS #	Purity % (HPLC)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
Nitroguanidine	556-88-7	100.0	100.1	100.1

Recd 12/1/M TQP

[1] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

Labels and certificates follow U.S. Conventions in reporting numerical values:
A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

See reverse side for additional information

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

CERTIFICATION REPORT

1. **Quality Documentation:** This certificate is designed in accordance with ISO Guide 31 (Reference Materials - Contents of Certificates and Labels) and ISO Guide 35 (Reference Materials – General and Statistical Principles for Certification).

2. **Quality Standards:**

   ISO Guide 34 - General Requirements for the Competence of Reference Material Producers ACLASS Certificate Number AR-1463

   AR-1463

   ISO/IEC 17025:2005 - General Requirements for the Competence of Testing and Calibration Laboratories ACLASS Certificate Number AT-1339

   AT-1339

   ISO 9001:2008 Quality Management System - Requirements Eagle Registrations Certificate Number 3774

3. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 11. If dilution is required, use only Class A glassware and diluent compatible with all certified analytes in this preparation. All solutions should be thoroughly mixed prior to use.

4. **Raw Materials:** Reference standards are prepared from the highest quality starting materials with defined purities. All analytes and solvents are obtained from pre-qualified vendors and then analyzed or evaluated prior to use.

5. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.

6. **Homogeneity Assessment:** Homogeneity of the finished product is assessed by analyzing sample batches or by other methods consistent with the intended use of the product and by procedures that comply with the appropriate Quality System requirements, and ISO Guide 35.

7. **Stability Assessment:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label. To ensure a uniform solution, mix the contents of the sealed container thoroughly prior to use. Care should be taken not to contaminate the contents of the original container.

8. **Analytical Quality Control:** Products are tested by validated analytical methods specified in the manufacturer's quality system.

9. **Uncertainty Statistics and Confidence Limits:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide (Quantifying Uncertainty in Analytical Measurement). We have evaluated both Type A (based on a series of observations) and Type B (manufacturers specifications and calibration data) factors and report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_m = \sqrt{(u(P))^2 + (u(m))^2 + (u(V))^2}$. The expanded uncertainty, U, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level. Laboratories accredited to ISO/IEC 17025 and ISO Guide 34 are required to estimate uncertainty budgets associated with the measurements they make. However, for analysis, the certified value should be used as the actual value.

10. **Warranties:** The manufacturer warrants that its products shall conform to the description of such products as provided in its catalog or on the specific product label. This warranty is exclusive, and the manufacturer makes no other warranty, express or implied, including any implied warranty of merchantability or fitness for any particular purpose.

11. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. Due to the hazardous nature, only trained personnel should handle this product. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

HPNQTA_00019

RESTEK
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Bellefonte, PA 16823-8812
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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31602 **Lot No.:** A0100497

Description : Nitroguanidine Standard

Nitroguanidine 1000µg/mL, Methanol, 1mL/ampul *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroguanidine	1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 556-88-7 (Lot 03708HN)		+/- 53.8797	µg/mL	Unstressed
	Purity 99%		+/- 58.5858	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

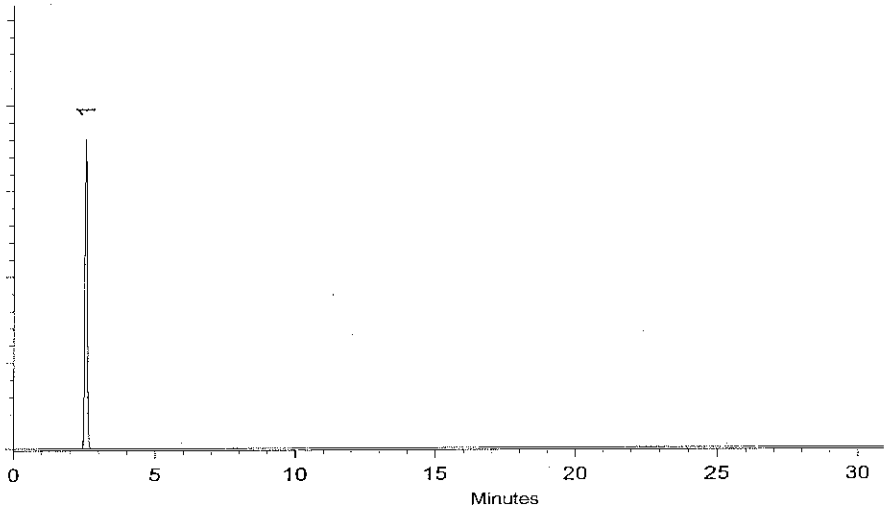
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:

Det. Type:
Wavelength: 210 nm



This chromatogram represents a general set of testing conditions chosen to guarantee product quality. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kendra Swope - Mix Technician

Date Mixed: 08-Jan-2014 **Balance:** 1128342313

Jennifer L. Pollino - QC Analyst

Date Passed: 10-Jan-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

HPPATA_00020

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
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Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31499 **Lot No.:** A0101731

Description : Picric Acid Standard

1000µg/mL, Methanol, 1mL/ampul *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Picric Acid	1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 88-89-1 (Lot 06130CU)		+/- 53.8797	µg/mL	Unstressed
	Purity 99%		+/- 58.5858	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

R. 7/28/14 TQP

Specific Reference Material Notes:
This is a derivatized analysis.

Reagent

HPPETNTA_00025

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-2
Description: PETN

Lot: 211081055-01
Solvent: Methanol

Date Certified: Feb 20, 2013
Expiration: Feb 20, 2015
Sample Size: 1 mL
Storage Condition: Refrig (0-5° C)
Hazards: HIGHLY FLAMMABLE

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Component	CAS #	Purity % (HPLC)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
PETN	78-11-5	99.3	100.3	99.6

AccuStandard follows U.S. conventions in reporting numerical values on both certificates and labels:

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through NIST, Test No822-275872-11
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.
3. A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

See reverse side for additional information
Refer to the MSDS for additional safety information

For use in routine laboratory analysis.

Certified by: R. Cooper
Russ Cooper, QC Manager

Reagent

HPPETNTA_00030

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Certificate of Analysis

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Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31600 Lot No.: A098102

Description : PETN Standard

1000µg/mL, Methanol, 1mL/ampul *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

Recd 11-29-14

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : September 30, 2018 Storage: 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., k=2)	
1	PETN	1,001.5 µg/mL	+/- 5.8774	µg/mL Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 31.7173	µg/mL Unstressed
	Purity 99%		+/- 44.4533	µg/mL Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

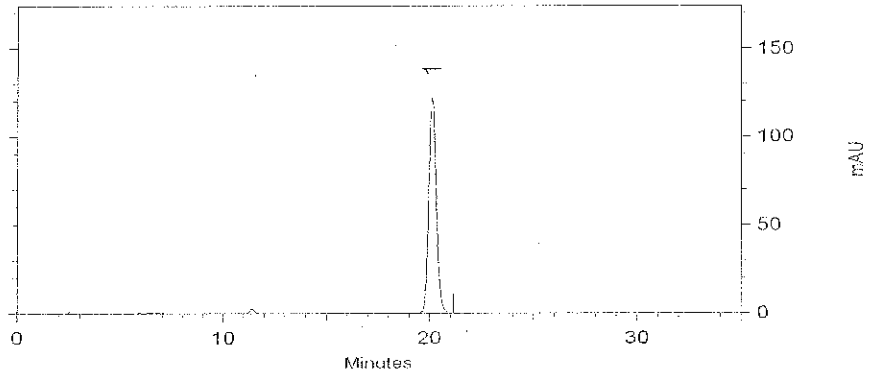
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:

Det. Type:
Wavelength: 210 nm



This chromatogram represents a general set of testing conditions chosen to guarantee product quality. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Maye

Date Mixed: 17-Sep-2013 Balance: 1128353505

Jodi E. Breon - QA Analyst

Date Passed: 19-Sep-2013

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

HPPETNTA_00031

RESTEK® CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31600 **Lot No.:** A098102

Description : PETN Standard

1000µg/mL, Methanol, 1mL/ampul *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2018 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	PETN		1,001.5 µg/mL		+/- 5.8774	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)			+/- 31.7173	µg/mL	Unstressed
	Purity 99%				+/- 44.4533	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

R. 7/25/14 TQP

Reagent

HPPETNTA_00032

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-2
Description: PETN
Lot: 211081055-02
Solvent: Methanol
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*

Danger 2

Date Certified: Sep 2, 2014
Expiration: Sep 2, 2016
Sample Size: 1 mL
Storage Condition: Refrig (0-5° C)

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Component	CAS #	Purity % (HPLC)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
PETN	78-11-5	99.3	100.3	99.6

Recd 12/1/14 TQP

[1] All weights are traceable through NIST, Test No. 822/272103-05

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

Labels and certificates follow U.S. Conventions in reporting numerical values:
A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

See reverse side for additional information

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

OR-ORG/INO-001
Rev. 7/11

Reagent

HPPETNTA_00033

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Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31600 **Lot No.:** A0106847

Description : PETN Standard

PETN Standard 1000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)		+/- 53.7722	µg/mL	Unstressed
	Purity 99%			+/- 58.4689	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Rec'd 11/25/14 TQP

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

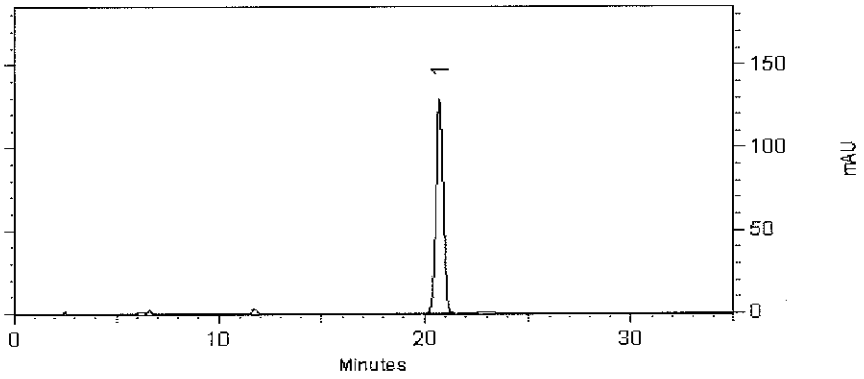
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:

Det. Type:
Wavelength: 210 nm



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Sawyer

Diane Shaffer

Diane Shaffer - QA Analyst

Date Mixed: 27-Oct-2014 **Balance:** 1128360905

Date Passed: 07-Nov-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

WC-N02-1000_00052

USA

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Europe

P.O. Box 2704 P: +31 20 638 05 97
1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-062004-01-01	1064466	21-Feb-2016	H_2O	ISO Guide 34 - Ion Chromatography Standard Nitrite as N, 100 mL 1,000 mg/L in H_2O

Additional Information:

Date Received: _____

Container: 4 oz (125 mL) Narrow Mouth, HDPE

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

Element	Symbol	CAS No	SRM No	NIST Lot No	Source Lot No	Purity %	Concentration mg/L	Uncertainty ± mg/L
NO_2 as N	N	7727-37-9	3152	010728	7097.46.6P	99.999	1000	3.5

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F: 707.545.7901

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-062004-01-01	I064466	21-Feb-2016	H_2O	ISO Guide 34 - Ion Chromatography Standard Nitrite as N, 100 mL 1,000 mg/L in H_2O

Intended Uses:

This Certified Reference material, CRM, is intended for use as a calibration standard or a quality control standard for Inorganic Speetrometry Equipment such as ICP-OES, ICP-MS, AA, and XRF, It may aslo be used for various USEPA and ASTM methods.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

Packaging and Storage:

The Solution should be kept trightly capped and stored under normal laboratory conditions. Pre-cleaned polyethlene bottles are used to package this material. Special storage information: Ambient

Glassware Calibration:

Only Class A glassware is used in the manufacture and quality control of Standards. All Glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used perform daily checks on balances calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to the National Institute of Standards and Technology (NIST). Balances are checked daily in accordance to in house procedure O2-LB-004. Balances are calibrated annually by an ISO 17025 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-10 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC Guide 17025:2005 and ISO Guide 34:2009. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous information:

Refer to MSDS

USA

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F: 707.545.7901

Europe

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-062004-01-01	1064466	21-Feb-2016	H_2O	ISO Guide 34 - Ion Chromatography Standard Nitrite as N, 100 mL 1,000 mg/L in H_2O

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
$u_c=\sqrt{\sum u_i^2}$ where u_i are the individual uncertainty components for raw material, transportation, homogeneity, and shelf life.

Expiration Information:

The Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. This standard is guaranteed for thirteen months from the date manufactured.

Accreditation:

This standard was manufactured by an ISO 17025 Chemical Testing Lab (Certificate number 3031.01) and ISO Guide 34 Reference Material Producer (RMP) Certificate number 3031.02 accredited by The American Association of Laboratory Accreditation (A2LA). Manufacturer's Quality System audited and registered by NSF-ISR to ISO 9001:2008 (Certificate number IZ391-IS4).

Manufactured By:

Carrie Bibbins

Manufacture Date: 8/20/2014

Certified By:

Zachary Spinelli

Certified Date:8/21/2014

Released By:

HuiChen Stavros, Ph.D.

Original Issue Date: 8/21/2014

Reagent

WC-N02SS50223_00002

ERA

A Waters Company

Certificate of Analysis

Scanned 8/27/14

PRODUCT:	1000 mg/L Nitrite as N (NO_2-N)
CATALOG NUMBER:	053 -125 mL; 990 - 500 mL
LOT NUMBER:	070414
ISSUE DATE:	April 21, 2014
REVISION DATE:	Original
STARTING MATERIAL:	Sodium Nitrite ($NaNO_2$)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	1.0009 ± 0.0005 g/mL at 21.5°C and 767 mm Hg
TRACEABILITY[3]:	NA
NIST/SRM:	SRM not available
VERIFICATION METHOD:	Ion Chromatography
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor which is equal to the student t factor at a 95% confidence interval at n-1 degrees of freedom. The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability Recovery = ((% Recovery certified standard)/(% Recovery NIST SRM))*100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

This standard **expires 4/2016**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Tom Widera

ISO/IEC GUIDE 34:2009

ACCREDITED

REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1939.03

ISO/IEC 17025:2005

ACCREDITED

CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1529.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

WC-N03-1000_00028

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F: 707.545.7901

Europe

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-062003-01-01	1070689	5-Aug-2016	H_2O	ISO Guide 34 - Ion Chromatography Standard Nitrate as N (from $NaNO_3$), 100 mL 1,000 mg/L in H_2O

Additional Information:

Date Received: 2/10/15

Container: 4 oz (125 mL) Narrow Mouth, HDPE

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

Element	Symbol	CAS No	SRM No	NIST Lot No	Source Lot No	Purity %	Concentration mg/L	Uncertainty ± mg/L
NO_3 as N	N	7631-99-4	3152	010728	7019.46.5P	99.999	1000	4.0

Signed 2/12/15

CPI INTERNATIONAL

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Europe

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-062003-01-01	1070689	5-Aug-2016	H_2O	ISO Guide 34 - Ion Chromatography Standard Nitrate as N (from $NaNO_3$), 100 mL 1,000 mg/L in H_2O

Intended Uses:

This Certified Reference material, CRM, is intended for use as a calibration standard or a quality control standard for Inorganic Speetrometry Equipment such as ICP-OES, ICP-MS, AA, and XRF, It may aslo be used for various USEPA and ASTM methods.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

Packaging and Storage:

The Solution should be kept trightly capped and stored under normal laboratory conditions. Pre-cleaned polyethlene bottles are used to package this material. Special storage information: Refrigerated

Glassware Calibration:

Only Class A glassware is used in the manufacture and quality control of Standards. All Glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used perform daily checks on balances calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to the National Institute of Standards and Technology (NIST). Balances are checked daily in accordance to in house procedure O2-LB-004. Balances are calibrated annually by an ISO 17025 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-10 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC Guide 17025:2005 and ISO Guide 34:2009. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous information:

Refer to MSDS

USA

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1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 0

Comment:

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-062003-01-01	1070689	5-Aug-2016	H_2O	ISO Guide 34 - Ion Chromatography Standard Nitrate as N (from $NaNO_3$), 100 mL 1,000 mg/L in H_2O

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
$u_c=\sqrt{\sum u_i^2}$ where u_i are the individual uncertainty components for raw material, transportation, homogeneity, and shelf life.

Expiration Information:

The Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. This standard is guaranteed until the expiration date listed above.

Accreditation:

This standard was manufactured by an ISO 17025 Chemical Testing Lab (Certificate number 3031.01) and ISO Guide 34 Reference Material Producer (RMP) Certificate number 3031.02 accredited by The American Association of Laboratory Accreditation (A2LA). Manufacturer's Quality System audited and registered by NSF-ISR to ISO 9001:2008 (Certificate number IZ391-IS4).

Manufactured By:

Carrie Bibbins
Manufacture Date: 2/2/2015

Certified By:

Zachary Spinelli
Certified Date:2/2/2015

Released By:

Mark Filla
Original Issue Date: 2/2/2015

Reagent

WC-N03SS50223_00002

ERA

A Waters Company

Certificate of Analysis

Rcd 9/24/14

Scanned 10/17/14

PRODUCT:	1000 mg/L Nitrate as N (NO_3-N)
CATALOG NUMBER:	052 -125 mL; 991 - 500 mL
LOT NUMBER:	320614
ISSUE DATE:	June 26, 2014
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Nitrate (KNO_3)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	1.0015 ± 0.0005 g/mL at 21.5°C and 764 mm Hg
TRACEABILITY[3]:	100%
NIST/SRM:	3185 Nitrate
VERIFICATION METHOD:	Ion Chromatography
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor which is equal to the student t factor at a 95% confidence interval at n-1 degrees of freedom. The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability Recovery = ((% Recovery certified standard)/(% Recovery NIST SRM))*100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

This standard **expires 6/2016**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Tom Widera

ISO/IEC GUIDE 34:2009 — ACCREDITED — REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 — ACCREDITED — CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02

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Method 8260B DOD

Volatile Organic Compounds (GC/MS) by Method 8260B/DOD

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
	MRL 240-176276/7	104	90	112	100
	MRL 240-176276/33	106	97	115	102
	MRL 240-176387/6	101	104	108	100
	MRL 240-176387/30	98	110	107	102

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	50-150
DCA = 1,2-Dichloroethane-d4 (Surr)	50-150
TOL = Toluene-d8 (Surr)	50-150
BFB = 4-Bromofluorobenzene (Surr)	50-150

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM	#	DCA	#	TOL	#	BFB	#
079SB-0352M-0001-SO	240-49171-5	95	Q	102	Q	104	Q	96	Q
079SB-0352M-0001-SO	240-49171-5	102		99		111		91	
079SB-0353M-0001-SO	240-49171-7	98		114		109	Q	102	Q
079SB-0353M-0001-SO	240-49171-7	103		96		116	Q	96	
079SB-0354M-0001-SO	240-49171-9	89		111		100		102	
079SB-0354M-0001-SO	240-49171-9	101		98		109		91	
	MB 240-176277/1-A	99		98		108		94	
	MB 240-176387/33	95		105		103		96	
	LCS 240-176276/6	102		91		110		99	
	LCS 240-176387/5	96		99		102		101	

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	59-138
DCA = 1,2-Dichloroethane-d4 (Surr)	61-130
TOL = Toluene-d8 (Surr)	85-115
BFB = 4-Bromofluorobenzene (Surr)	85-120

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
	MRL 240-176298/5	99	100	96	99
	MRL 240-176298/15	96	101	96	97

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	50-150
DCA = 1,2-Dichloroethane-d4 (Surr)	50-150
TOL = Toluene-d8 (Surr)	50-150
BFB = 4-Bromofluorobenzene (Surr)	50-150

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
079SB-0380M-0001-TB	240-49171-12	98	99	95	94
	MB 240-176298/6	95	99	95	95
	LCS 240-176298/4	98	100	97	98

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	85-115
DCA = 1,2-Dichloroethane-d4 (Surr)	70-120
TOL = Toluene-d8 (Surr)	85-120
BFB = 4-Bromofluorobenzene (Surr)	75-120

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX86973.D

Lab ID: LCS 240-176276/6 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	48.1	96	70-135	
1,1,2,2-Tetrachloroethane	50.0	51.2	102	55-130	
1,1,2-Trichloroethane	50.0	49.9	100	60-125	
1,1-Dichloroethane	50.0	46.6	93	75-125	
1,1-Dichloroethene	50.0	50.3	101	65-135	
1,2-Dichloroethane	50.0	43.4	87	70-135	
1,2-Dichloropropane	50.0	47.3	95	70-120	
2-Butanone (MEK)	100	87.3	87	30-160	
2-Hexanone	100	101	101	45-145	
4-Methyl-2-pentanone (MIBK)	100	101	101	45-145	
Benzene	50.0	48.7	97	75-125	
Bromoform	50.0	47.7	95	55-135	
Bromomethane	50.0	53.8	108	30-160	
Carbon disulfide	50.0	58.4	117	45-160	
Carbon tetrachloride	50.0	49.9	100	65-135	
Chlorobenzene	50.0	48.2	96	75-125	
Bromodichloromethane	50.0	51.5	103	70-130	
Chloromethane	50.0	43.0	86	50-130	
cis-1,3-Dichloropropene	50.0	52.9	106	70-125	
Dibromochloromethane	50.0	55.3	111	65-130	
Ethylbenzene	50.0	50.0	100	75-125	
Methyl tert-butyl ether	50.0	47.7	95	70-130	
Methylene Chloride	50.0	51.5	103	55-140	
Styrene	50.0	56.4	113	75-125	
Tetrachloroethene	50.0	49.4	99	65-140	
Toluene	50.0	49.9	100	70-125	
Chloroform	50.0	46.9	94	70-125	
Bromochloromethane	50.0	51.1	102	70-125	
trans-1,3-Dichloropropene	50.0	54.8	110	65-125	
Trichloroethene	50.0	51.4	103	75-125	
Vinyl chloride	50.0	44.9	90	60-125	
Chloroethane	50.0	49.1	98	40-155	
Xylenes, Total	100	104	104	75-125	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7136.D

Lab ID: LCS 240-176298/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	10.7	107	65-130	
1,1,2,2-Tetrachloroethane	10.0	9.22	92	65-130	
1,1,2-Trichloroethane	10.0	9.39	94	75-125	
1,1-Dichloroethane	10.0	10.6	106	70-135	
1,1-Dichloroethene	10.0	10.9	109	70-130	
1,2-Dichloroethane	10.0	10.5	105	70-130	
1,2-Dichloropropane	10.0	10.2	102	75-125	
2-Butanone (MEK)	20.0	19.4	97	30-150	
2-Hexanone	20.0	17.8	89	55-130	
4-Methyl-2-pentanone (MIBK)	20.0	19.4	97	60-135	
Acetone	20.0	16.4	82	40-140	
Benzene	10.0	10.2	102	80-120	
Bromoform	10.0	9.41	94	70-130	
Bromomethane	10.0	8.72	87	30-145	
Carbon disulfide	10.0	11.3	113	35-160	
Carbon tetrachloride	10.0	11.2	112	65-140	
Chlorobenzene	10.0	9.48	95	80-120	
Bromodichloromethane	10.0	9.94	99	75-120	
Chloromethane	10.0	10.3	103	40-125	
cis-1,3-Dichloropropene	10.0	10.6	106	70-130	
Dibromochloromethane	10.0	9.75	97	60-135	
Ethylbenzene	10.0	9.93	99	75-125	
Methyl tert-butyl ether	10.0	10.2	102	65-125	
Methylene Chloride	10.0	10.1	101	55-140	
Styrene	10.0	10.1	101	65-135	
Tetrachloroethene	10.0	10.0	100	45-150	
Toluene	10.0	9.79	98	75-120	
Chloroform	10.0	10.3	103	65-135	
Bromochloromethane	10.0	10.2	102	65-130	
trans-1,3-Dichloropropene	10.0	10.7	107	55-140	
Trichloroethene	10.0	10.5	105	70-125	
Vinyl chloride	10.0	9.95	100	50-145	
Chloroethane	10.0	9.31	93	60-135	
Xylenes, Total	20.0	19.8	99	75-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 142400.D

Lab ID: LCS 240-176387/5 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	58.3	117	70-135	
1,1,2,2-Tetrachloroethane	50.0	50.6	101	55-130	
1,1,2-Trichloroethane	50.0	51.9	104	60-125	
1,1-Dichloroethane	50.0	55.1	110	75-125	
1,1-Dichloroethene	50.0	57.2	114	65-135	
1,2-Dichloroethane	50.0	54.0	108	70-135	
1,2-Dichloropropane	50.0	53.6	107	70-120	
2-Butanone (MEK)	100	95.2	95	30-160	
2-Hexanone	100	96.5	96	45-145	
4-Methyl-2-pentanone (MIBK)	100	106	106	45-145	
Acetone	100	107	107	20-160	
Benzene	50.0	52.6	105	75-125	
Bromoform	50.0	44.9	90	55-135	
Bromomethane	50.0	52.2	104	30-160	
Carbon disulfide	50.0	58.9	118	45-160	
Carbon tetrachloride	50.0	59.3	119	65-135	
Chlorobenzene	50.0	51.4	103	75-125	
Bromodichloromethane	50.0	54.2	108	70-130	
Chloromethane	50.0	56.9	114	50-130	
cis-1,3-Dichloropropene	50.0	56.7	113	70-125	
Dibromochloromethane	50.0	56.1	112	65-130	
Ethylbenzene	50.0	52.1	104	75-125	
Methyl tert-butyl ether	50.0	53.6	107	70-130	
Methylene Chloride	50.0	58.5	117	55-140	
Styrene	50.0	55.7	111	75-125	
Tetrachloroethene	50.0	52.8	106	65-140	
Toluene	50.0	51.0	102	70-125	
Chloroform	50.0	54.4	109	70-125	
Bromochloromethane	50.0	52.0	104	70-125	
trans-1,3-Dichloropropene	50.0	60.5	121	65-125	
Trichloroethene	50.0	52.7	105	75-125	
Vinyl chloride	50.0	55.0	110	60-125	
Chloroethane	50.0	56.6	113	40-155	
Xylenes, Total	100	107	107	75-125	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX86974.D

Lab ID: MRL 240-176276/7 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.00500	0.00479	96	70-130	
1,1,2,2-Tetrachloroethane	0.00500	0.00528	106	70-130	
1,1,2-Trichloroethane	0.00500	0.00522	104	70-130	
1,1-Dichloroethane	0.00500	0.00462	92	70-130	
1,1-Dichloroethene	0.00500	0.00484	97	70-130	
1,2-Dichloroethane	0.00500	0.00446	89	70-130	
1,2-Dichloropropane	0.00500	0.00473	95	70-130	
2-Butanone (MEK)	0.0100	0.00962 J	96	70-130	
2-Hexanone	0.0100	0.0101	101	70-130	
4-Methyl-2-pentanone (MIBK)	0.0100	0.00986 J	99	70-130	
Benzene	0.00500	0.00508	102	70-130	
Bromoform	0.00500	0.00439	88	70-130	
Bromomethane	0.00500	0.00565	113	70-130	
Carbon disulfide	0.00500	0.00442	88	70-130	
Carbon tetrachloride	0.00500	0.00433	87	70-130	
Chlorobenzene	0.00500	0.00528	106	70-130	
Bromodichloromethane	0.00500	0.00479	96	70-130	
Chloromethane	0.00500	0.00488	98	70-130	
cis-1,3-Dichloropropene	0.00500	0.00430	86	70-130	
Dibromochloromethane	0.00500	0.00459	92	70-130	
Ethylbenzene	0.00500	0.00506	101	70-130	
Methyl tert-butyl ether	0.00500	0.00468	94	70-130	
Methylene Chloride	0.00500	0.00486	97	70-130	
Styrene	0.00500	0.00508	102	70-130	
Tetrachloroethene	0.00500	0.00511	102	70-130	
Toluene	0.00500	0.00528	106	70-130	
Chloroform	0.00500	0.00473	95	70-130	
Bromochloromethane	0.00500	0.00500	100	70-130	
trans-1,3-Dichloropropene	0.00500	0.00397	79	70-130	
Trichloroethene	0.00500	0.00518	104	70-130	
Vinyl chloride	0.00500	0.00523	105	70-130	
Chloroethane	0.00500	0.00517	103	70-130	
Xylenes, Total	0.0100	0.0106	106	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX87000.D

Lab ID: MRL 240-176276/33 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.00500	0.00501	100	70-130	
1,1,2,2-Tetrachloroethane	0.00500	0.00538	108	70-130	
1,1,2-Trichloroethane	0.00500	0.00588	118	70-130	
1,1-Dichloroethane	0.00500	0.00524	105	70-130	
1,1-Dichloroethene	0.00500	0.00495	99	70-130	
1,2-Dichloroethane	0.00500	0.00520	104	70-130	
1,2-Dichloropropane	0.00500	0.00551	110	70-130	
2-Butanone (MEK)	0.0100	0.0101	101	70-130	
2-Hexanone	0.0100	0.0105	105	70-130	
4-Methyl-2-pentanone (MIBK)	0.0100	0.0106	106	70-130	
Benzene	0.00500	0.00561	112	70-130	
Bromoform	0.00500	0.00485	97	70-130	
Bromomethane	0.00500	0.00603	121	70-130	
Carbon disulfide	0.00500	0.00431	86	70-130	
Carbon tetrachloride	0.00500	0.00474	95	70-130	
Chlorobenzene	0.00500	0.00563	113	70-130	
Bromodichloromethane	0.00500	0.00492	98	70-130	
Chloromethane	0.00500	0.00503	101	70-130	
cis-1,3-Dichloropropene	0.00500	0.00452	90	70-130	
Dibromochloromethane	0.00500	0.00478	96	70-130	
Ethylbenzene	0.00500	0.00524	105	70-130	
Methyl tert-butyl ether	0.00500	0.00514	103	70-130	
Methylene Chloride	0.00500	0.00486	97	70-130	
Styrene	0.00500	0.00527	105	70-130	
Tetrachloroethene	0.00500	0.00511	102	70-130	
Toluene	0.00500	0.00575	115	70-130	
Chloroform	0.00500	0.00527	105	70-130	
Bromochloromethane	0.00500	0.00574	115	70-130	
trans-1,3-Dichloropropene	0.00500	0.00414	83	70-130	
Trichloroethene	0.00500	0.00531	106	70-130	
Vinyl chloride	0.00500	0.00510	102	70-130	
Chloroethane	0.00500	0.00483	97	70-130	
Xylenes, Total	0.0100	0.0106	106	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7137.D

Lab ID: MRL 240-176298/5 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.00100	0.00109	109	70-130	
1,1,2,2-Tetrachloroethane	0.00100	0.000903 J	90	70-130	
1,1,2-Trichloroethane	0.00100	0.000924 J	92	70-130	
1,1-Dichloroethane	0.00100	0.00104	104	70-130	
1,1-Dichloroethene	0.00100	0.00100	100	70-130	
1,2-Dichloroethane	0.00100	0.000987 J	99	70-130	
1,2-Dichloropropane	0.00100	0.00102	102	70-130	
2-Butanone (MEK)	0.0100	0.00892 J	89	70-130	
2-Hexanone	0.0100	0.00881 J	88	70-130	
4-Methyl-2-pentanone (MIBK)	0.0100	0.00924 J	92	70-130	
Acetone	0.0100	0.00855 J	85	70-130	
Benzene	0.00100	0.00102	102	70-130	
Bromoform	0.00100	0.000768 J	77	70-130	
Bromomethane	0.00100	0.00143	143	70-130	^
Carbon disulfide	0.00100	0.000940 J	94	70-130	
Carbon tetrachloride	0.00100	0.000976 J	98	70-130	
Chlorobenzene	0.00100	0.000987 J	99	70-130	
Bromodichloromethane	0.00100	0.000930 J	93	70-130	
Chloromethane	0.00100	0.00138	138	70-130	^
cis-1,3-Dichloropropene	0.00100	0.000980 J	98	70-130	
Dibromochloromethane	0.00100	0.000862 J	86	70-130	
Ethylbenzene	0.00100	0.000988 J	99	70-130	
Methyl tert-butyl ether	0.00100	0.00101	101	70-130	
Methylene Chloride	0.00100	0.000888 J	89	70-130	
Styrene	0.00100	0.000929 J	93	70-130	
Tetrachloroethene	0.00100	0.00110	110	70-130	
Toluene	0.00100	0.000982 J	98	70-130	
Chloroform	0.00100	0.000987 J	99	70-130	
Bromochloromethane	0.00100	0.00104	104	70-130	
trans-1,3-Dichloropropene	0.00100	0.000921 J	92	70-130	
Trichloroethene	0.00100	0.00105	105	70-130	
Vinyl chloride	0.00100	0.00137	137	70-130	^
Chloroethane	0.00100	0.00133	133	70-130	^
Xylenes, Total	0.00200	0.00187 J	93	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7147.D

Lab ID: MRL 240-176298/15 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.00100	0.000982 J	98	70-130	
1,1,2,2-Tetrachloroethane	0.00100	0.000945 J	95	70-130	
1,1,2-Trichloroethane	0.00100	0.000931 J	93	70-130	
1,1-Dichloroethane	0.00100	0.000968 J	97	70-130	
1,1-Dichloroethene	0.00100	0.000965 J	97	70-130	
1,2-Dichloroethane	0.00100	0.000984 J	98	70-130	
1,2-Dichloropropane	0.00100	0.000928 J	93	70-130	
2-Butanone (MEK)	0.0100	0.00811 J	81	70-130	
2-Hexanone	0.0100	0.00817 J	82	70-130	
4-Methyl-2-pentanone (MIBK)	0.0100	0.00909 J	91	70-130	
Acetone	0.0100	0.00706 J	71	70-130	
Benzene	0.00100	0.000970 J	97	70-130	
Bromoform	0.00100	0.000830 J	83	70-130	
Bromomethane	0.00100	0.00136	136	70-130	^
Carbon disulfide	0.00100	0.000787 J	79	70-130	
Carbon tetrachloride	0.00100	0.000935 J	94	70-130	
Chlorobenzene	0.00100	0.000960 J	96	70-130	
Bromodichloromethane	0.00100	0.000958 J	96	70-130	
Chloromethane	0.00100	0.00130	130	70-130	
cis-1,3-Dichloropropene	0.00100	0.000825 J	83	70-130	
Dibromochloromethane	0.00100	0.000768 J	77	70-130	
Ethylbenzene	0.00100	0.00101	101	70-130	
Methyl tert-butyl ether	0.00100	0.000891 J	89	70-130	
Methylene Chloride	0.00100	0.000972 J	97	70-130	
Styrene	0.00100	0.000846 J	85	70-130	
Tetrachloroethene	0.00100	0.00102	102	70-130	
Toluene	0.00100	0.000947 J	95	70-130	
Chloroform	0.00100	0.000964 J	96	70-130	
Bromochloromethane	0.00100	0.000981 J	98	70-130	
trans-1,3-Dichloropropene	0.00100	0.000794 J	79	70-130	
Trichloroethene	0.00100	0.000992 J	99	70-130	
Vinyl chloride	0.00100	0.00130	130	70-130	
Chloroethane	0.00100	0.00131	131	70-130	^
Xylenes, Total	0.00200	0.00189 J	95	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 142401.D

Lab ID: MRL 240-176387/6 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.00500	0.00642	128	70-130	
1,1,2,2-Tetrachloroethane	0.00500	0.00555	111	70-130	
1,1,2-Trichloroethane	0.00500	0.00526	105	70-130	
1,1-Dichloroethane	0.00500	0.00609	122	70-130	
1,1-Dichloroethene	0.00500	0.00658	132	70-130	^
1,2-Dichloroethane	0.00500	0.00630	126	70-130	
1,2-Dichloropropane	0.00500	0.00627	125	70-130	
2-Butanone (MEK)	0.0100	0.0109	109	70-130	
2-Hexanone	0.0100	0.0111	111	70-130	
4-Methyl-2-pentanone (MIBK)	0.0100	0.0110	110	70-130	
Acetone	0.0100	0.0174	174	70-130	^
Benzene	0.00500	0.00612	122	70-130	
Bromoform	0.00500	0.00512	102	70-130	
Bromomethane	0.00500	0.00638	128	70-130	
Carbon disulfide	0.00500	0.00563	113	70-130	
Carbon tetrachloride	0.00500	0.00638	128	70-130	
Chlorobenzene	0.00500	0.00635	127	70-130	
Bromodichloromethane	0.00500	0.00515	103	70-130	
Chloromethane	0.00500	0.00659	132	70-130	^
cis-1,3-Dichloropropene	0.00500	0.00484	97	70-130	
Dibromochloromethane	0.00500	0.00496	99	70-130	
Ethylbenzene	0.00500	0.00576	115	70-130	
Methyl tert-butyl ether	0.00500	0.00575	115	70-130	
Methylene Chloride	0.00500	0.00803	161	70-130	^
Styrene	0.00500	0.00542	108	70-130	
Tetrachloroethene	0.00500	0.00550	110	70-130	
Toluene	0.00500	0.00583	117	70-130	
Chloroform	0.00500	0.00618	124	70-130	
Bromochloromethane	0.00500	0.00580	116	70-130	
trans-1,3-Dichloropropene	0.00500	0.00529	106	70-130	
Trichloroethene	0.00500	0.00579	116	70-130	
Vinyl chloride	0.00500	0.00636	127	70-130	
Chloroethane	0.00500	0.00772	154	70-130	^
Xylenes, Total	0.0100	0.0116	116	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 142426.D

Lab ID: MRL 240-176387/30 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.00500	0.00614	123	70-130	
1,1,2,2-Tetrachloroethane	0.00500	0.00551	110	70-130	
1,1,2-Trichloroethane	0.00500	0.00568	114	70-130	
1,1-Dichloroethane	0.00500	0.00646	129	70-130	
1,1-Dichloroethene	0.00500	0.00573	115	70-130	
1,2-Dichloroethane	0.00500	0.00676	135	70-130	^
1,2-Dichloropropane	0.00500	0.00584	117	70-130	
2-Butanone (MEK)	0.0100	0.0125	125	70-130	
2-Hexanone	0.0100	0.0114	114	70-130	
4-Methyl-2-pentanone (MIBK)	0.0100	0.0132	132	70-130	^
Acetone	0.0100	0.0248	248	70-130	^
Benzene	0.00500	0.00601	120	70-130	
Bromoform	0.00500	0.00532	106	70-130	
Bromomethane	0.00500	0.00634	127	70-130	
Carbon disulfide	0.00500	0.00465	93	70-130	
Carbon tetrachloride	0.00500	0.00575	115	70-130	
Chlorobenzene	0.00500	0.00557	111	70-130	
Bromodichloromethane	0.00500	0.00496	99	70-130	
Chloromethane	0.00500	0.00580	116	70-130	
cis-1,3-Dichloropropene	0.00500	0.00459	92	70-130	
Dibromochloromethane	0.00500	0.00463	93	70-130	
Ethylbenzene	0.00500	0.00583	117	70-130	
Methyl tert-butyl ether	0.00500	0.00590	118	70-130	
Methylene Chloride	0.00500	0.00857	171	70-130	^
Styrene	0.00500	0.00523	105	70-130	
Tetrachloroethene	0.00500	0.00555	111	70-130	
Toluene	0.00500	0.00613	123	70-130	
Chloroform	0.00500	0.00653	131	70-130	^
Bromochloromethane	0.00500	0.00561	112	70-130	
trans-1,3-Dichloropropene	0.00500	0.00503	101	70-130	
Trichloroethene	0.00500	0.00540	108	70-130	
Vinyl chloride	0.00500	0.00570	114	70-130	
Chloroethane	0.00500	0.00666	133	70-130	^
Xylenes, Total	0.0100	0.0110	110	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab File ID: 142405.D Lab Sample ID: MB 240-176387/33

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: A3UX14 Date Analyzed: 04/14/2015 15:28

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-176387/5	142400.D	04/14/2015 13:41
079SB-0352M-0001-SO	240-49171-5	142420.D	04/14/2015 20:51
079SB-0353M-0001-SO	240-49171-7	142421.D	04/14/2015 21:12
079SB-0354M-0001-SO	240-49171-9	142422.D	04/14/2015 21:34

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab File ID: UX86993.D Lab Sample ID: MB 240-176277/1-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: A3UX8 Date Analyzed: 04/14/2015 10:43

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-176276/6	UX86973.D	04/14/2015 03:38
079SB-0352M-0001-SO	240-49171-5	UX86994.D	04/14/2015 11:05
079SB-0353M-0001-SO	240-49171-7	UX86995.D	04/14/2015 11:26
079SB-0354M-0001-SO	240-49171-9	UX86996.D	04/14/2015 11:47

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab File ID: UXM7138.D Lab Sample ID: MB 240-176298/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX16 Date Analyzed: 04/14/2015 09:38

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-176298/4	UXM7136.D	04/14/2015 08:52
079SB-0380M-0001-TB	240-49171-12	UXM7141.D	04/14/2015 10:47

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab File ID: BFB14922.D BFB Injection Date: 04/13/2015

Instrument ID: A3UX14 BFB Injection Time: 14:04

Analysis Batch No.: 176233

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.3	
75	30.0 - 60.0 % of mass 95	54.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.4	(0.6)1
174	50.0 - 120.00 % of mass 95	69.9	
175	5.0 - 9.0 % of mass 174	5.1	(7.3)1
176	95.0 - 101.0 % of mass 174	68.9	(98.6)1
177	5.0 - 9.0 % of mass 176	4.6	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-176233/3	142375.D	04/13/2015	14:47
	IC 240-176233/4	142376.D	04/13/2015	15:08
	IC 240-176233/5	142377.D	04/13/2015	15:30
	ICIS 240-176233/6	142378.D	04/13/2015	15:52
	IC 240-176233/7	142379.D	04/13/2015	16:13
	IC 240-176233/8	142380.D	04/13/2015	16:34
	IC 240-176233/9	142381.D	04/13/2015	16:56
	IC 240-176233/10	142382.D	04/13/2015	17:17
	IC 240-176233/11	142383.D	04/13/2015	17:39
	ICV 240-176233/12	142384.D	04/13/2015	18:00

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab File ID: BFB14924.D BFB Injection Date: 04/14/2015

Instrument ID: A3UX14 BFB Injection Time: 12:15

Analysis Batch No.: 176387

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.6	
75	30.0 - 60.0 % of mass 95	54.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.2	(0.3)1
174	50.0 - 120.00 % of mass 95	69.3	
175	5.0 - 9.0 % of mass 174	4.6	(6.6)1
176	95.0 - 101.0 % of mass 174	67.8	(97.9)1
177	5.0 - 9.0 % of mass 176	4.0	(5.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-176387/3	142398.D	04/14/2015	12:58
	CCV 240-176387/4	142399.D	04/14/2015	13:19
	LCS 240-176387/5	142400.D	04/14/2015	13:41
	MRL 240-176387/6	142401.D	04/14/2015	14:02
	MB 240-176387/33	142405.D	04/14/2015	15:28
079SB-0352M-0001-SO	240-49171-5	142420.D	04/14/2015	20:51
079SB-0353M-0001-SO	240-49171-7	142421.D	04/14/2015	21:12
079SB-0354M-0001-SO	240-49171-9	142422.D	04/14/2015	21:34
	MRL 240-176387/30	142426.D	04/14/2015	23:00

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab File ID: BFB4271.D BFB Injection Date: 04/08/2015

Instrument ID: A3UX16 BFB Injection Time: 12:22

Analysis Batch No.: 175604

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.2	
75	30.0 - 60.0 % of mass 95	43.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.6	(0.7)1
174	50.0 - 120.00 % of mass 95	89.8	
175	5.0 - 9.0 % of mass 174	5.9	(6.6)1
176	95.0 - 101.0 % of mass 174	87.4	(97.3)1
177	5.0 - 9.0 % of mass 176	5.5	(6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-175604/2	UXM7066.D	04/08/2015	12:59
	STD8260 240-175604/3	UXM7067.D	04/08/2015	13:22
	STD8260 240-175604/4	UXM7068.D	04/08/2015	13:44
	STD8260 240-175604/5	UXM7069.D	04/08/2015	14:07
	STD8260 240-175604/6	UXM7070.D	04/08/2015	14:30
	STD8260 240-175604/7	UXM7071.D	04/08/2015	14:53
	ICV 240-175604/8	UXM7072.D	04/08/2015	15:15

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab File ID: BFB4274.D BFB Injection Date: 04/14/2015

Instrument ID: A3UX16 BFB Injection Time: 07:39

Analysis Batch No.: 176298

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.3	
75	30.0 - 60.0 % of mass 95	46.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.6	(0.7)1
174	50.0 - 120.00 % of mass 95	81.0	
175	5.0 - 9.0 % of mass 174	5.9	(7.3)1
176	95.0 - 101.0 % of mass 174	77.3	(95.5)1
177	5.0 - 9.0 % of mass 176	5.1	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-176298/2	UXM7134.D	04/14/2015	08:07
	CCV 240-176298/3	UXM7135.D	04/14/2015	08:30
	LCS 240-176298/4	UXM7136.D	04/14/2015	08:52
	MRL 240-176298/5	UXM7137.D	04/14/2015	09:15
	MB 240-176298/6	UXM7138.D	04/14/2015	09:38
079SB-0380M-0001-TB	240-49171-12	UXM7141.D	04/14/2015	10:47
	MRL 240-176298/15	UXM7147.D	04/14/2015	13:13

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab File ID: BFB8752.D BFB Injection Date: 03/02/2015

Instrument ID: A3UX8 BFB Injection Time: 23:39

Analysis Batch No.: 170352

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.3	
75	30.0 - 60.0 % of mass 95	46.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.3	(0.3)1
174	50.0 - 120.00 % of mass 95	86.6	
175	5.0 - 9.0 % of mass 174	6.1	(7.0)1
176	95.0 - 101.0 % of mass 174	83.8	(96.8)1
177	5.0 - 9.0 % of mass 176	5.6	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-170352/3	UX86154.D	03/03/2015	00:12
	STD8260 240-170352/4	UX86155.D	03/03/2015	00:34
	STD8260 240-170352/5	UX86156.D	03/03/2015	00:55
	ICIS 240-170352/6	UX86157.D	03/03/2015	01:34
	STD8260 240-170352/7	UX86158.D	03/03/2015	01:56
	STD8260 240-170352/8	UX86159.D	03/03/2015	02:17
	STD8260 240-170352/9	UX86160.D	03/03/2015	02:38
	STD8260 240-170352/10	UX86161.D	03/03/2015	03:00
	ICV 240-170352/11	UX86162.D	03/03/2015	03:21

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab File ID: BFB8785.D BFB Injection Date: 04/14/2015

Instrument ID: A3UX8 BFB Injection Time: 02:25

Analysis Batch No.: 176276

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.0	
75	30.0 - 60.0 % of mass 95	43.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.6	(0.7)1
174	50.0 - 120.00 % of mass 95	91.4	
175	5.0 - 9.0 % of mass 174	6.7	(7.4)1
176	95.0 - 101.0 % of mass 174	88.8	(97.1)1
177	5.0 - 9.0 % of mass 176	6.0	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-176276/4	UX86971.D	04/14/2015	02:56
	CCV 240-176276/5	UX86972.D	04/14/2015	03:17
	LCS 240-176276/6	UX86973.D	04/14/2015	03:38
	MRL 240-176276/7	UX86974.D	04/14/2015	04:00
	MB 240-176277/1-A	UX86993.D	04/14/2015	10:43
079SB-0352M-0001-SO	240-49171-5	UX86994.D	04/14/2015	11:05
079SB-0353M-0001-SO	240-49171-7	UX86995.D	04/14/2015	11:26
079SB-0354M-0001-SO	240-49171-9	UX86996.D	04/14/2015	11:47
	MRL 240-176276/33	UX87000.D	04/14/2015	13:12

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: ICIS 240-176233/6 Date Analyzed: 04/13/2015 15:52

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 142378.D Heated Purge: (Y/N) Y

Calibration ID: 27832

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1563167	6.65	968462	9.39	482391	11.35
UPPER LIMIT		3126334	7.15	1936924	9.89	964782	11.85
LOWER LIMIT		781584	6.15	484231	8.89	241196	10.85
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-176233/12		1386313	6.65	840125	9.39	435444	11.35
CCV 240-176387/3		1221051	6.65	749206	9.39	384224	11.35
CCV 240-176387/4		1227393	6.65	698940	9.39	359120	11.35
LCS 240-176387/5		1290613	6.65	786094	9.39	399245	11.35
MRL 240-176387/6		1161774	6.65	659372	9.39	345282	11.35
MB 240-176387/33		1165451	6.65	666484	9.39	346955	11.35
240-49171-5	079SB-0352M-0001-SO	425733Q	6.66	208773Q	9.39	93922Q	11.35
240-49171-7	079SB-0353M-0001-SO	871247	6.66	481934Q	9.39	233834Q	11.35
240-49171-9	079SB-0354M-0001-SO	970169	6.65	544322	9.39	270343	11.35
MRL 240-176387/30		931186	6.66	512870	9.39	263710	11.35

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: STD8260 240-175604/4 Date Analyzed: 04/08/2015 13:44

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM7068.D Heated Purge: (Y/N) N

Calibration ID: 27788

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1548065	5.59	1098353	8.28	639037	10.51
UPPER LIMIT		3096130	6.09	2196706	8.78	1278074	11.01
LOWER LIMIT		774033	5.09	549177	7.78	319519	10.01
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-175604/8		1626133	5.59	1148226	8.28	645335	10.51
CCV 240-176298/2		1564934	5.59	1124476	8.28	663043	10.51
CCV 240-176298/3		1576730	5.59	1149428	8.28	608763	10.51
LCS 240-176298/4		1542337	5.59	1139963	8.28	636499	10.51
MRL 240-176298/5		1491885	5.59	1107792	8.28	606528	10.51
MB 240-176298/6		1520465	5.59	1113789	8.28	583965	10.51
240-49171-12	079SB-0380M-0001-TB	1495299	5.59	1104561	8.28	569859	10.51
MRL 240-176298/15		1496350	5.59	1092798	8.28	604321	10.51

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: ICIS 240-170352/6 Date Analyzed: 03/03/2015 01:34

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX86157.D Heated Purge: (Y/N) Y

Calibration ID: 27146

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1259665	5.16	916655	7.69	494963	9.88
UPPER LIMIT		2519330	5.66	1833310	8.19	989926	10.38
LOWER LIMIT		629833	4.66	458328	7.19	247482	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-170352/11		1272907	5.16	926219	7.69	502598	9.88
CCV 240-176276/4		1307982	5.16	963984	7.69	498368	9.88
CCV 240-176276/5		1303637	5.16	936024	7.69	452463	9.88
LCS 240-176276/6		1314606	5.16	957722	7.69	500639	9.88
MRL 240-176276/7		1277442	5.16	932221	7.68	485994	9.88
MB 240-176277/1-A		1281078	5.16	973617	7.68	467084	9.88
240-49171-5	079SB-0352M-0001-SO	1191445	5.16	878275	7.69	444739	9.88
240-49171-7	079SB-0353M-0001-SO	1197727	5.16	880729	7.69	414969	9.88
240-49171-9	079SB-0354M-0001-SO	1246497	5.16	924694	7.68	453438	9.88
MRL 240-176276/33		1260521	5.16	917231	7.68	488281	9.88

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO | Lab Sample ID: 240-49171-5

Matrix: Solid | Lab File ID: UX86994.D

Analysis Method: 8260B | Date Collected: 04/08/2015 10:27

Sample wt/vol: 5.197(g) | Date Analyzed: 04/14/2015 11:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 25.8 | Level: (low/med) Low

Analysis Batch No.: 176276 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	1.3	U	6.5	1.3	0.73
79-34-5	1,1,2,2-Tetrachloroethane	1.3	U	6.5	1.3	0.44
79-00-5	1,1,2-Trichloroethane	1.3	U	6.5	1.3	0.51
75-34-3	1,1-Dichloroethane	1.3	U	6.5	1.3	0.47
75-35-4	1,1-Dichloroethene	1.3	U	6.5	1.3	0.67
106-93-4	1,2-Dibromoethane	1.3	U	6.5	1.3	0.65
107-06-2	1,2-Dichloroethane	1.3	U	6.5	1.3	0.44
540-59-0	1,2-Dichloroethene, Total	2.6	U	13	2.6	0.47
78-87-5	1,2-Dichloropropane	2.6	U	6.5	2.6	0.89
78-93-3	2-Butanone (MEK)	5.2	U	26	5.2	1.8
591-78-6	2-Hexanone	1.3	U	26	1.3	0.82
108-10-1	4-Methyl-2-pentanone (MIBK)	1.3	U	26	1.3	0.70
71-43-2	Benzene	0.65	U	6.5	0.65	0.30
74-97-5	Bromochloromethane	2.6	U	6.5	2.6	0.92
75-27-4	Bromodichloromethane	0.65	U	6.5	0.65	0.36
75-25-2	Bromoform	1.3	U	6.5	1.3	0.43
74-83-9	Bromomethane	1.3	U	6.5	1.3	0.70
75-15-0	Carbon disulfide	1.3	U	6.5	1.3	0.57
56-23-5	Carbon tetrachloride	1.3	U	6.5	1.3	0.48
108-90-7	Chlorobenzene	1.3	U	6.5	1.3	0.43
75-00-3	Chloroethane	1.3	U	6.5	1.3	1.1
67-66-3	Chloroform	0.65	U	6.5	0.65	0.38
74-87-3	Chloromethane	0.65	U	6.5	0.65	0.53
10061-01-5	cis-1,3-Dichloropropene	1.3	U	6.5	1.3	0.44
124-48-1	Dibromochloromethane	1.3	U	6.5	1.3	0.71
100-41-4	Ethylbenzene	0.65	U	6.5	0.65	0.34
1634-04-4	Methyl tert-butyl ether	1.3	U	6.5	1.3	0.56
75-09-2	Methylene Chloride	2.6	U	6.5	2.6	0.87
100-42-5	Styrene	0.65	U	6.5	0.65	0.19
127-18-4	Tetrachloroethene	1.3	U	6.5	1.3	0.67
108-88-3	Toluene	0.65	U	6.5	0.65	0.35
10061-02-6	trans-1,3-Dichloropropene	1.3	U	6.5	1.3	0.70
79-01-6	Trichloroethene	1.3	U	6.5	1.3	0.54
75-01-4	Vinyl chloride	1.3	U	6.5	1.3	0.51
1330-20-7	Xylenes, Total	2.6	U	13	2.6	0.45

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO Lab Sample ID: 240-49171-5

Matrix: Solid Lab File ID: UX86994.D

Analysis Method: 8260B Date Collected: 04/08/2015 10:27

Sample wt/vol: 5.197(g) Date Analyzed: 04/14/2015 11:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 25.8 Level: (low/med) Low

Analysis Batch No.: 176276 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		61-130
460-00-4	4-Bromofluorobenzene (Surr)	91		85-120
1868-53-7	Dibromofluoromethane (Surr)	102		59-138
2037-26-5	Toluene-d8 (Surr)	111		85-115

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86994.D
Lims ID: 240-49171-B-5-A Lab Sample ID: 240-49171-5
Client ID: 079SB-0352M-0001-SO
Sample Type: Client
Inject. Date: 14-Apr-2015 11:05:30 ALS Bottle#: 25 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042522-027
Operator ID: 402279 Instrument ID: A3UX8

Method: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 00:48:07 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: latat Date: 15-Apr-2015 00:25:45

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.158	5.157	0.001	99	1191445	50.0	
*	2 Chlorobenzene-d5	117	7.690	7.689	0.001	94	878275	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.879	9.878	0.001	98	444739	50.0	
$	4 Dibromofluoromethane (Surr	113	4.625	4.624	0.001	95	247263	51.2	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.897	4.896	0.001	90	272067	49.7	
$	6 Toluene-d8 (Surr)	98	6.424	6.422	0.002	93	1060352	55.4	
$	7 4-Bromofluorobenzene (Surr	95	8.767	8.765	0.002	97	316727	45.6	
	10 Chloromethane	50		1.748				ND	
	11 Vinyl chloride	62		1.866				ND	
	13 Bromomethane	94		2.186				ND	
	14 Chloroethane	64		2.281				ND	
	19 1,1-Dichloroethene	96		2.931				ND	
	21 Acetone	43	2.969	2.955	0.014	100	39537	2.27	
	24 Carbon disulfide	76		3.121				ND	
	28 Methylene Chloride	84		3.298				ND	
	31 trans-1,2-Dichloroethene	96		3.523				ND	
	32 Methyl tert-butyl ether	73		3.523				ND	
	34 1,1-Dichloroethane	63		3.843				ND	
	40 2-Butanone (MEK)	43		4.269				ND	
	39 cis-1,2-Dichloroethene	96		4.280				ND	
	45 Chlorobromomethane	128		4.458				ND	
	47 Chloroform	83		4.505				ND	
	48 1,1,1-Trichloroethane	97		4.671				ND	
	51 Carbon tetrachloride	117		4.801				ND	
	53 1,2-Dichloroethane	62		4.955				ND	
	54 Benzene	78		4.955				ND	
	58 Trichloroethene	130		5.440				ND	
	61 1,2-Dichloropropane	63		5.617				ND	
	65 Dichlorobromomethane	83		5.830				ND	
	68 cis-1,3-Dichloropropene	75		6.185				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.304				ND	
	70 Toluene	91		6.481				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
71 trans-1,3-Dichloropropene	75		6.647				ND	
73 1,1,2-Trichloroethane	97		6.813				ND	
75 Tetrachloroethene	164		6.966				ND	
76 2-Hexanone	43		7.002				ND	
78 Chlorodibromomethane	129		7.168				ND	
80 Ethylene Dibromide	107		7.274				ND	
82 Chlorobenzene	112		7.712				ND	
84 Ethylbenzene	106		7.807				ND	
85 m-Xylene & p-Xylene	106		7.901				ND	
87 Styrene	104		8.280				ND	
86 o-Xylene	106		8.280				ND	
88 Bromoform	173		8.457				ND	
92 1,1,2,2-Tetrachloroethane	83		8.871				ND	
S 126 1,2-Dichloroethene, Total	96		1.140				ND	
S 128 Xylenes, Total	106		16.530				ND	

Reagents:

VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00018	Amount Added:	1.15	Units: uL	Run Reagent
vmDist_H2o_00045	Amount Added:	0.00	Units:	Run Reagent

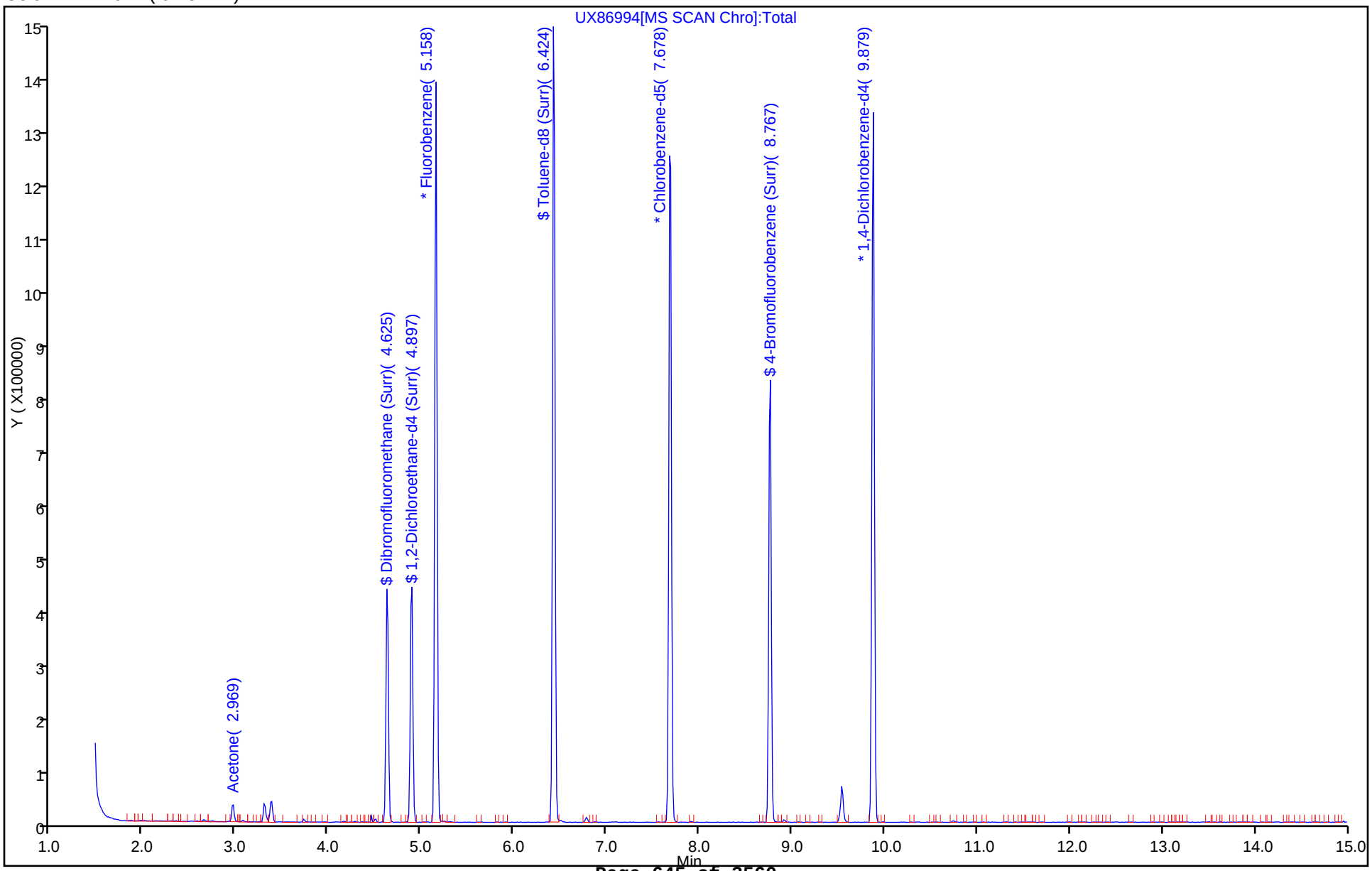
Report Date: 15-Apr-2015 00:48:25 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86994.D

Injection Date:	14-Apr-2015 11:05:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	240-49171-B-5-A	Lab Sample ID:	240-49171-5	Worklist Smp#:	27
Client ID:	079SB-0352M-0001-SO				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO Lab Sample ID: 240-49171-5

Matrix: Solid Lab File ID: 142420.D

Analysis Method: 8260B Date Collected: 04/08/2015 10:27

Sample wt/vol: 5.924(g) Date Analyzed: 04/14/2015 20:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 25.8 Level: (low/med) Low

Analysis Batch No.: 176387 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-64-1	Acetone	8.4	J Q	23	17	7.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102	Q	61-130
460-00-4	4-Bromofluorobenzene (Surr)	96	Q	85-120
1868-53-7	Dibromofluoromethane (Surr)	95	Q	59-138
2037-26-5	Toluene-d8 (Surr)	104	Q	85-115

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142420.D
Lims ID: 240-49171-C-5-A Lab Sample ID: 240-49171-5
Client ID: 079SB-0352M-0001-SO
Sample Type: Client
Inject. Date: 14-Apr-2015 20:51:30 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-49171-c-5-a
Misc. Info.: 240-0042552-024240-0042552-024
Operator ID: 002808 Instrument ID: A3UX14

Method: \\NCChrom\ChromData\A3UX14\20150414-42552.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:28:47 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 15-Apr-2015 12:55:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.789				ND	
* 1 Fluorobenzene	96	6.664	6.652	0.012	99	425733	50.0	s
* 4 Dioxane-d8 (IS)	96		7.339				ND	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	96	208773	50.0	s
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	92	93922	50.0	s
$ 6 Dibromofluoromethane (Surr	113	5.990	5.990	0.000	92	105522	47.4	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	94	134891	50.8	
$ 8 Toluene-d8 (Surr)	98	8.131	8.131	0.000	95	322985	51.8	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	85	89885	47.8	
12 Chloromethane	50		1.481				ND	
13 Vinyl chloride	62		1.600				ND	
15 Bromomethane	94		1.907				ND	
17 Chloroethane	64		2.002				ND	
23 1,1-Dichloroethene	96		2.889				ND	
26 Acetone	43	3.031	3.031	0.000	99	7956	7.41	
28 Carbon disulfide	76		3.150				ND	
32 Methylene Chloride	84	3.611	3.588	0.023	96	8428	1.00	
34 trans-1,2-Dichloroethene	96		3.990				ND	
35 Methyl tert-butyl ether	73		4.025				ND	
38 1,1-Dichloroethane	63		4.641				ND	
44 cis-1,2-Dichloroethene	96		5.410				ND	
45 2-Butanone (MEK)	43		5.481				ND	
48 Chlorobromomethane	128		5.694				ND	
51 Chloroform	83		5.800				ND	
52 1,1,1-Trichloroethane	97		5.954				ND	
54 Carbon tetrachloride	117		6.120				ND	
56 Benzene	78		6.356				ND	
58 1,2-Dichloroethane	62		6.404				ND	
61 Trichloroethene	130		7.007				ND	
65 1,2-Dichloropropane	63		7.232				ND	
70 Dichlorobromomethane	83		7.504				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 cis-1,3-Dichloropropene	75		7.907				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.060				ND	
76 Toluene	91		8.191				ND	
77 trans-1,3-Dichloropropene	75		8.404				ND	
79 1,1,2-Trichloroethane	97		8.569				ND	
80 Tetrachloroethene	164		8.664				ND	
82 2-Hexanone	43		8.782				ND	
84 Chlorodibromomethane	129		8.901				ND	
85 Ethylene Dibromide	107		8.995				ND	
87 Chlorobenzene	112		9.409				ND	
89 Ethylbenzene	106	9.504	9.504	0.000	1	511	0.2147	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	50	1562	0.5656	
91 o-Xylene	106		9.930				ND	
92 Styrene	104		9.954				ND	
93 Bromoform	173		10.119				ND	
96 1,1,2,2-Tetrachloroethane	83		10.522				ND	
S 134 1,2-Dichloroethene, Total	96		1.140				ND	
S 136 Xylenes, Total	106				0		0.5656	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Reagents:

vmDist_H2o_00046	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VM250SS_00030	Amount Added:	1.00	Units: uL	Run Reagent

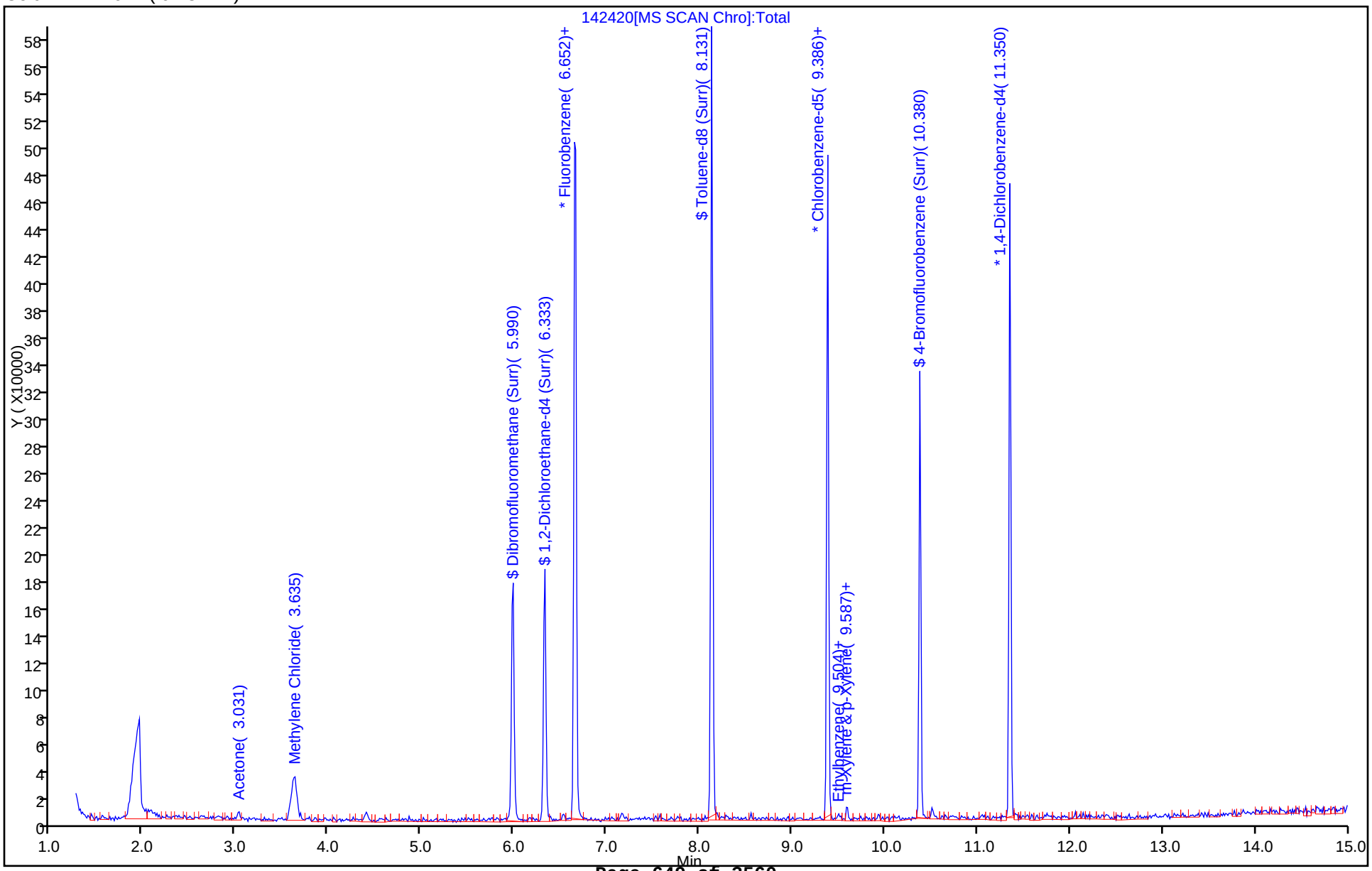
Report Date: 15-Apr-2015 13:29:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142420.D

Injection Date:	14-Apr-2015 20:51:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	240-49171-C-5-A	Lab Sample ID:	240-49171-5	Worklist Smp#:	24
Client ID:	079SB-0352M-0001-SO				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



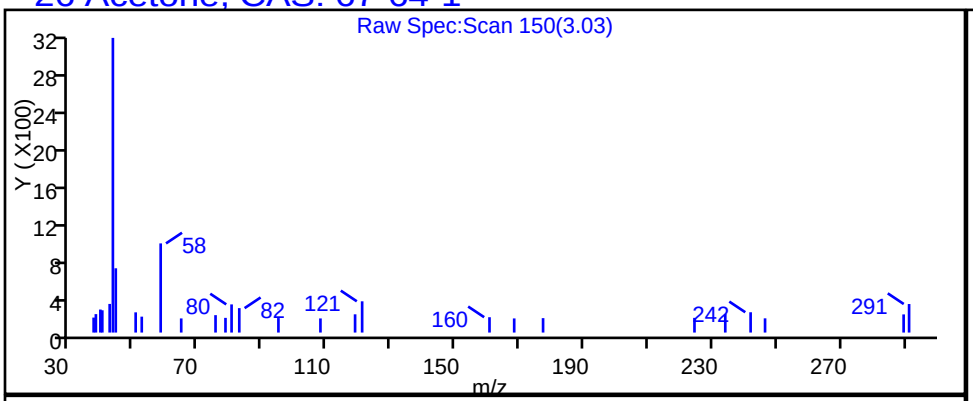
Report Date: 15-Apr-2015 13:29:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

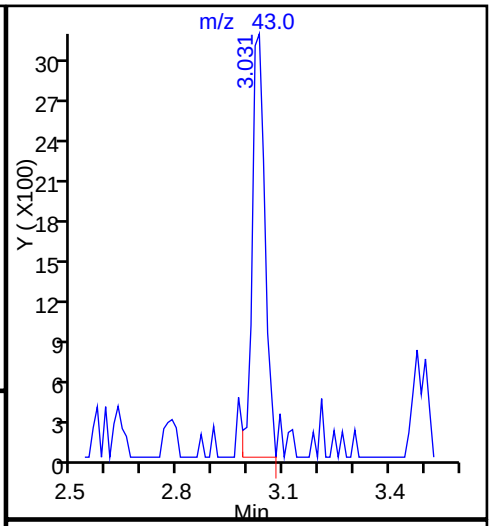
TestAmerica Canton

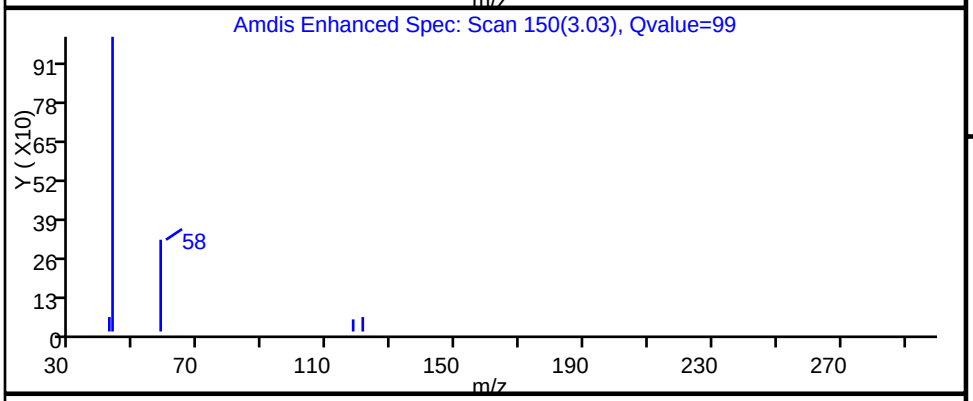
Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142420.D

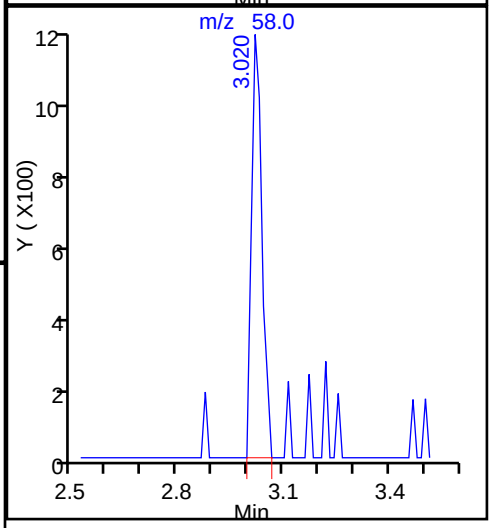
Injection Date:	14-Apr-2015 20:51:30	Instrument ID:	A3UX14
Lims ID:	240-49171-C-5-A	Lab Sample ID:	240-49171-5
Client ID:	079SB-0352M-0001-SO		
Operator ID:	002808	ALS Bottle#:	24 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

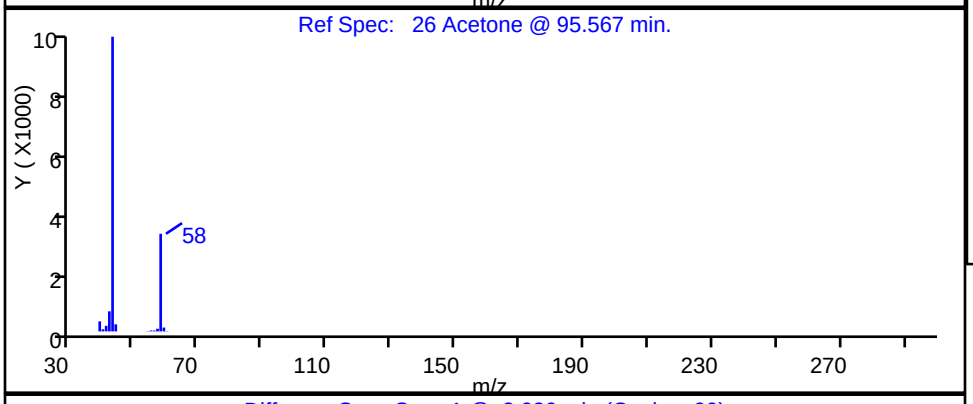
26 Acetone, CAS: 67-64-1

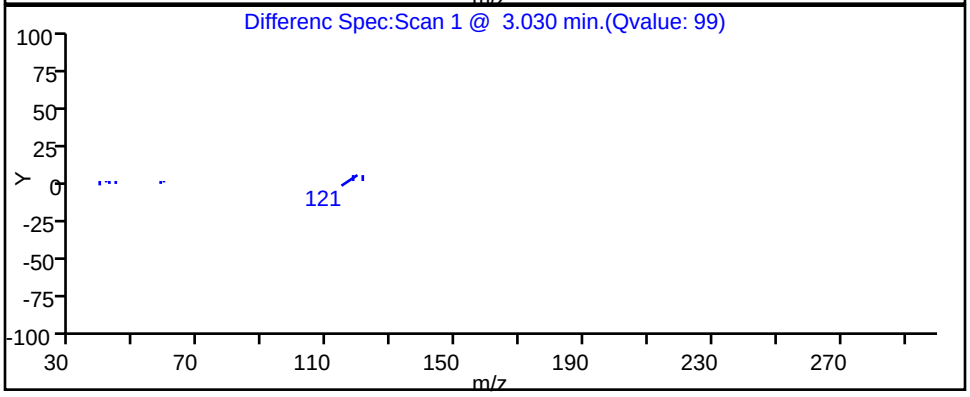












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO | Lab Sample ID: 240-49171-7

Matrix: Solid | Lab File ID: UX86995.D

Analysis Method: 8260B | Date Collected: 04/08/2015 09:57

Sample wt/vol: 6.071(g) | Date Analyzed: 04/14/2015 11:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 18.1 | Level: (low/med) Low

Analysis Batch No.: 176276 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	1.0	U	5.0	1.0	0.56
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	5.0	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	5.0	1.0	0.39
75-34-3	1,1-Dichloroethane	1.0	U	5.0	1.0	0.36
75-35-4	1,1-Dichloroethene	1.0	U	5.0	1.0	0.52
106-93-4	1,2-Dibromoethane	1.0	U Q	5.0	1.0	0.50
107-06-2	1,2-Dichloroethane	1.0	U	5.0	1.0	0.34
540-59-0	1,2-Dichloroethene, Total	2.0	U	10	2.0	0.36
78-87-5	1,2-Dichloropropane	2.0	U	5.0	2.0	0.69
78-93-3	2-Butanone (MEK)	4.0	U	20	4.0	1.4
591-78-6	2-Hexanone	1.0	U	20	1.0	0.63
108-10-1	4-Methyl-2-pentanone (MIBK)	1.0	U	20	1.0	0.54
71-43-2	Benzene	0.50	U	5.0	0.50	0.23
74-97-5	Bromochloromethane	2.0	U	5.0	2.0	0.71
75-27-4	Bromodichloromethane	0.50	U	5.0	0.50	0.28
75-25-2	Bromoform	1.0	U Q	5.0	1.0	0.33
74-83-9	Bromomethane	1.0	U	5.0	1.0	0.54
75-15-0	Carbon disulfide	1.0	U	5.0	1.0	0.44
56-23-5	Carbon tetrachloride	1.0	U	5.0	1.0	0.37
108-90-7	Chlorobenzene	1.0	U	5.0	1.0	0.33
75-00-3	Chloroethane	1.0	U	5.0	1.0	0.87
67-66-3	Chloroform	0.50	U	5.0	0.50	0.29
74-87-3	Chloromethane	0.50	U	5.0	0.50	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	5.0	1.0	0.34
124-48-1	Dibromochloromethane	1.0	U Q	5.0	1.0	0.55
100-41-4	Ethylbenzene	0.50	U Q	5.0	0.50	0.26
1634-04-4	Methyl tert-butyl ether	1.0	U	5.0	1.0	0.43
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.67
100-42-5	Styrene	0.50	U Q	5.0	0.50	0.15
127-18-4	Tetrachloroethene	1.0	U Q	5.0	1.0	0.52
108-88-3	Toluene	0.50	U	5.0	0.50	0.27
10061-02-6	trans-1,3-Dichloropropene	1.0	U	5.0	1.0	0.54
79-01-6	Trichloroethene	1.0	U	5.0	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	5.0	1.0	0.39
1330-20-7	Xylenes, Total	2.0	U Q	10	2.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO Lab Sample ID: 240-49171-7

Matrix: Solid Lab File ID: UX86995.D

Analysis Method: 8260B Date Collected: 04/08/2015 09:57

Sample wt/vol: 6.071(g) Date Analyzed: 04/14/2015 11:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 18.1 Level: (low/med) Low

Analysis Batch No.: 176276 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		61-130
460-00-4	4-Bromofluorobenzene (Surr)	96		85-120
1868-53-7	Dibromofluoromethane (Surr)	103		59-138
2037-26-5	Toluene-d8 (Surr)	116	Q	85-115

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86995.D
Lims ID: 240-49171-B-7-A Lab Sample ID: 240-49171-7
Client ID: 079SB-0353M-0001-SO
Sample Type: Client
Inject. Date: 14-Apr-2015 11:26:30 ALS Bottle#: 26 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042522-028
Operator ID: 402279 Instrument ID: A3UX8

Method: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 00:48:07 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK001

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.157	5.157	0.000	99	1197727	50.0	
*	2 Chlorobenzene-d5	117	7.689	7.689	0.000	94	880729	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.878	9.878	0.000	98	414969	50.0	
$	4 Dibromofluoromethane (Surr	113	4.624	4.624	0.000	95	249135	51.4	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.897	4.896	0.001	90	263355	47.8	
$	6 Toluene-d8 (Surr)	98	6.423	6.422	0.001	93	1107361	57.8	
$	7 4-Bromofluorobenzene (Surr	95	8.766	8.765	0.001	96	334639	48.2	
	10 Chloromethane	50		1.748				ND	
	11 Vinyl chloride	62		1.866				ND	
	13 Bromomethane	94		2.186				ND	
	14 Chloroethane	64		2.281				ND	
	19 1,1-Dichloroethene	96		2.931				ND	
	21 Acetone	43		2.955				ND	
	24 Carbon disulfide	76		3.121				ND	
	28 Methylene Chloride	84		3.298				ND	
	31 trans-1,2-Dichloroethene	96		3.523				ND	
	32 Methyl tert-butyl ether	73		3.523				ND	
	34 1,1-Dichloroethane	63		3.843				ND	
	40 2-Butanone (MEK)	43		4.269				ND	
	39 cis-1,2-Dichloroethene	96		4.280				ND	
	45 Chlorobromomethane	128		4.458				ND	
	47 Chloroform	83		4.505				ND	
	48 1,1,1-Trichloroethane	97		4.671				ND	
	51 Carbon tetrachloride	117		4.801				ND	
	53 1,2-Dichloroethane	62		4.955				ND	
	54 Benzene	78		4.955				ND	
	58 Trichloroethene	130		5.440				ND	
	61 1,2-Dichloropropane	63		5.617				ND	
	65 Dichlorobromomethane	83		5.830				ND	
	68 cis-1,3-Dichloropropene	75		6.185				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.304				ND	
	70 Toluene	91		6.481				ND	
	71 trans-1,3-Dichloropropene	75		6.647				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 1,1,2-Trichloroethane	97		6.813				ND	
75 Tetrachloroethene	164		6.966				ND	
76 2-Hexanone	43		7.002				ND	
78 Chlorodibromomethane	129		7.168				ND	
80 Ethylene Dibromide	107		7.274				ND	
82 Chlorobenzene	112		7.712				ND	
84 Ethylbenzene	106		7.807				ND	
85 m-Xylene & p-Xylene	106		7.901				ND	
87 Styrene	104		8.280				ND	
86 o-Xylene	106		8.280				ND	
88 Bromoform	173		8.457				ND	
92 1,1,2,2-Tetrachloroethane	83		8.871				ND	
S 126 1,2-Dichloroethene, Total	96		1.140				ND	
S 128 Xylenes, Total	106		16.530				ND	

Reagents:

VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00018	Amount Added:	1.15	Units: uL	Run Reagent
vmDist_H2o_00045	Amount Added:	0.00	Units:	Run Reagent

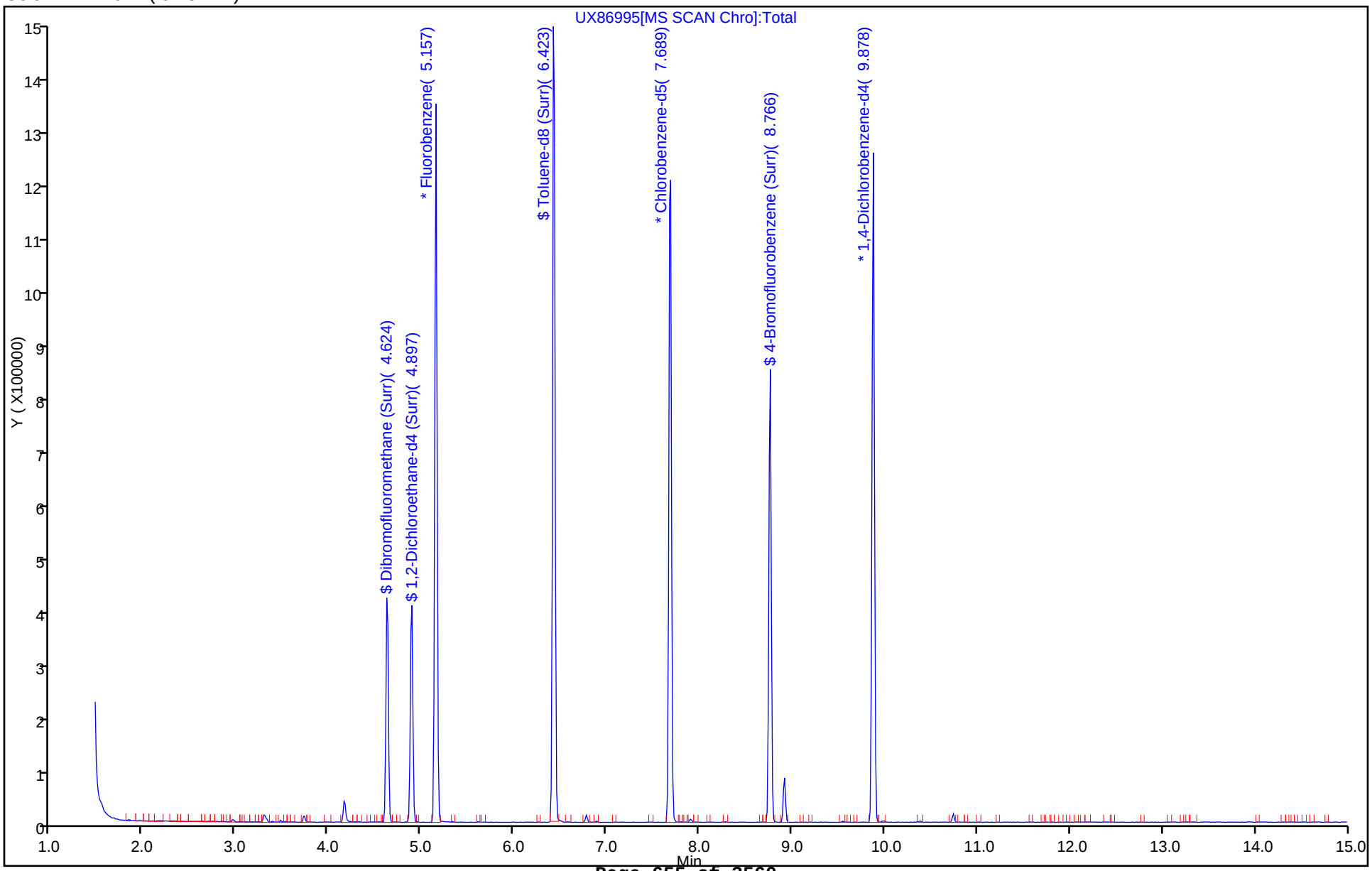
Report Date: 15-Apr-2015 00:48:25 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86995.D

Injection Date:	14-Apr-2015 11:26:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	240-49171-B-7-A	Lab Sample ID:	240-49171-7	Worklist Smp#:	28
Client ID:	079SB-0353M-0001-SO				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO Lab Sample ID: 240-49171-7

Matrix: Solid Lab File ID: 142421.D

Analysis Method: 8260B Date Collected: 04/08/2015 09:57

Sample wt/vol: 6.093(g) Date Analyzed: 04/14/2015 21:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 18.1 Level: (low/med) Low

Analysis Batch No.: 176387 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-64-1	Acetone	15	U	20	15	6.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		61-130
460-00-4	4-Bromofluorobenzene (Surr)	102	Q	85-120
1868-53-7	Dibromofluoromethane (Surr)	98		59-138
2037-26-5	Toluene-d8 (Surr)	109	Q	85-115

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142421.D
Lims ID: 240-49171-C-7-A Lab Sample ID: 240-49171-7
Client ID: 079SB-0353M-0001-SO
Sample Type: Client
Inject. Date: 14-Apr-2015 21:12:30 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-49171-c-7-a
Misc. Info.: 240-0042552-025240-0042552-025
Operator ID: 002808 Instrument ID: A3UX14

Method: \\NCChrom\ChromData\A3UX14\20150414-42552.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:28:47 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: latat Date: 15-Apr-2015 00:40:19

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	5 TBA-d9 (IS)	65		3.789				ND	
*	1 Fluorobenzene	96	6.664	6.652	0.012	99	871247	50.0	
*	4 Dioxane-d8 (IS)	96		7.339				ND	
*	2 Chlorobenzene-d5	117	9.386	9.386	0.000	96	481934	50.0	s
*	3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	93	233834	50.0	s
$	6 Dibromofluoromethane (Surr	113	5.990	5.990	0.000	90	223237	49.1	
$	7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	93	308269	57.0	
$	8 Toluene-d8 (Surr)	98	8.131	8.131	0.000	95	780426	54.4	
$	9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	82	237446	50.9	
	12 Chloromethane	50		1.481				ND	
	13 Vinyl chloride	62		1.600				ND	
	15 Bromomethane	94		1.907				ND	
	17 Chloroethane	64		2.002				ND	
	23 1,1-Dichloroethene	96		2.889				ND	
	26 Acetone	43		3.031				ND	
	28 Carbon disulfide	76		3.150				ND	
	32 Methylene Chloride	84		3.588				ND	
	34 trans-1,2-Dichloroethene	96		3.990				ND	
	35 Methyl tert-butyl ether	73		4.025				ND	
	38 1,1-Dichloroethane	63		4.641				ND	
	44 cis-1,2-Dichloroethene	96		5.410				ND	
	45 2-Butanone (MEK)	43		5.481				ND	
	48 Chlorobromomethane	128		5.694				ND	
	51 Chloroform	83		5.800				ND	
	52 1,1,1-Trichloroethane	97		5.954				ND	
	54 Carbon tetrachloride	117		6.120				ND	
	56 Benzene	78		6.356				ND	
	58 1,2-Dichloroethane	62		6.404				ND	
	61 Trichloroethene	130		7.007				ND	
	65 1,2-Dichloropropane	63		7.232				ND	
	70 Dichlorobromomethane	83		7.504				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 cis-1,3-Dichloropropene	75		7.907				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.060				ND	
76 Toluene	91	8.191	8.191	0.000	58	2256	0.1345	
77 trans-1,3-Dichloropropene	75		8.404				ND	
79 1,1,2-Trichloroethane	97		8.569				ND	
80 Tetrachloroethene	164		8.664				ND	
82 2-Hexanone	43		8.782				ND	
84 Chlorodibromomethane	129		8.901				ND	
85 Ethylene Dibromide	107		8.995				ND	
87 Chlorobenzene	112		9.409				ND	
89 Ethylbenzene	106	9.504	9.504	0.000	97	2309	0.4203	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	96	8536	1.34	
91 o-Xylene	106	9.942	9.930	0.012	94	2454	0.3592	
92 Styrene	104		9.954				ND	
93 Bromoform	173		10.119				ND	
96 1,1,2,2-Tetrachloroethane	83		10.522				ND	
S 134 1,2-Dichloroethene, Total	96		1.140				ND	
S 136 Xylenes, Total	106				0		1.70	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Reagents:

vmDist_H2o_00046	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VM250SS_00030	Amount Added:	1.00	Units: uL	Run Reagent

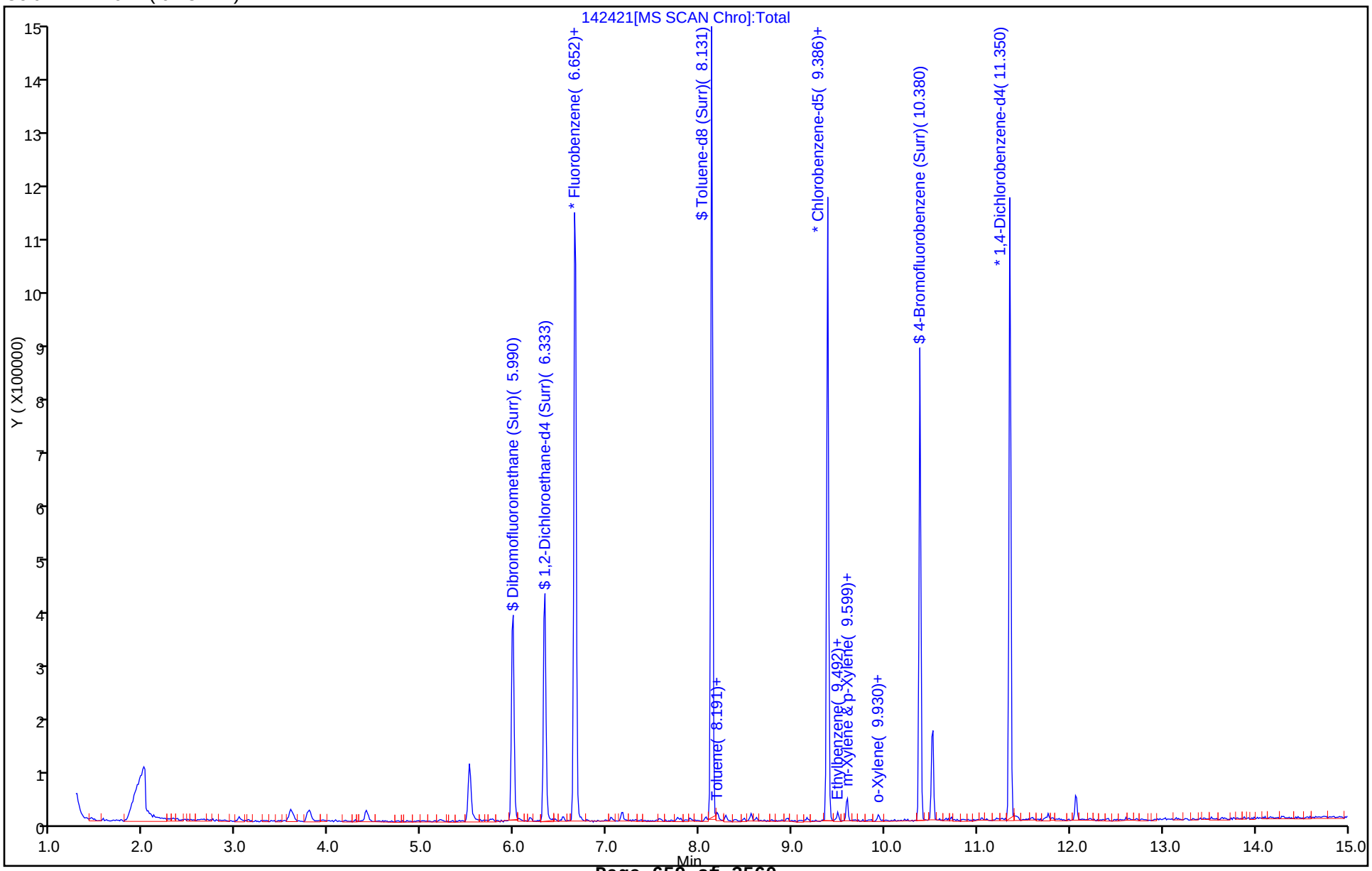
Report Date: 15-Apr-2015 13:29:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142421.D

Injection Date:	14-Apr-2015 21:12:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	240-49171-C-7-A	Lab Sample ID:	240-49171-7	Worklist Smp#:	25
Client ID:	079SB-0353M-0001-SO				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0354M-0001-SO | Lab Sample ID: 240-49171-9

Matrix: Solid | Lab File ID: UX86996.D

Analysis Method: 8260B | Date Collected: 04/08/2015 11:30

Sample wt/vol: 6.494(g) | Date Analyzed: 04/14/2015 11:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.7 | Level: (low/med) Low

Analysis Batch No.: 176276 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.90	U	4.5	0.90	0.51
79-34-5	1,1,2,2-Tetrachloroethane	0.90	U	4.5	0.90	0.31
79-00-5	1,1,2-Trichloroethane	0.90	U	4.5	0.90	0.35
75-34-3	1,1-Dichloroethane	0.90	U	4.5	0.90	0.33
75-35-4	1,1-Dichloroethene	0.90	U	4.5	0.90	0.47
106-93-4	1,2-Dibromoethane	0.90	U	4.5	0.90	0.45
107-06-2	1,2-Dichloroethane	0.90	U	4.5	0.90	0.31
540-59-0	1,2-Dichloroethene, Total	1.8	U	9.0	1.8	0.33
78-87-5	1,2-Dichloropropane	1.8	U	4.5	1.8	0.62
78-93-3	2-Butanone (MEK)	3.6	U	18	3.6	1.3
591-78-6	2-Hexanone	0.90	U	18	0.90	0.57
108-10-1	4-Methyl-2-pentanone (MIBK)	0.90	U	18	0.90	0.49
71-43-2	Benzene	0.45	U	4.5	0.45	0.21
74-97-5	Bromochloromethane	1.8	U	4.5	1.8	0.64
75-27-4	Bromodichloromethane	0.45	U	4.5	0.45	0.25
75-25-2	Bromoform	0.90	U	4.5	0.90	0.30
74-83-9	Bromomethane	0.90	U	4.5	0.90	0.49
75-15-0	Carbon disulfide	0.90	U	4.5	0.90	0.40
56-23-5	Carbon tetrachloride	0.90	U	4.5	0.90	0.33
108-90-7	Chlorobenzene	0.90	U	4.5	0.90	0.30
75-00-3	Chloroethane	0.90	U	4.5	0.90	0.78
67-66-3	Chloroform	0.45	U	4.5	0.45	0.26
74-87-3	Chloromethane	0.45	U	4.5	0.45	0.37
10061-01-5	cis-1,3-Dichloropropene	0.90	U	4.5	0.90	0.31
124-48-1	Dibromochloromethane	0.90	U	4.5	0.90	0.50
100-41-4	Ethylbenzene	0.45	U	4.5	0.45	0.23
1634-04-4	Methyl tert-butyl ether	0.90	U	4.5	0.90	0.39
75-09-2	Methylene Chloride	1.8	U	4.5	1.8	0.60
100-42-5	Styrene	0.45	U	4.5	0.45	0.14
127-18-4	Tetrachloroethene	0.90	U	4.5	0.90	0.47
108-88-3	Toluene	0.45	U	4.5	0.45	0.24
10061-02-6	trans-1,3-Dichloropropene	0.90	U	4.5	0.90	0.49
79-01-6	Trichloroethene	0.90	U	4.5	0.90	0.38
75-01-4	Vinyl chloride	0.90	U	4.5	0.90	0.35
1330-20-7	Xylenes, Total	1.8	U	9.0	1.8	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0354M-0001-SO Lab Sample ID: 240-49171-9

Matrix: Solid Lab File ID: UX86996.D

Analysis Method: 8260B Date Collected: 04/08/2015 11:30

Sample wt/vol: 6.494(g) Date Analyzed: 04/14/2015 11:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.7 Level: (low/med) Low

Analysis Batch No.: 176276 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		61-130
460-00-4	4-Bromofluorobenzene (Surr)	91		85-120
1868-53-7	Dibromofluoromethane (Surr)	101		59-138
2037-26-5	Toluene-d8 (Surr)	109		85-115

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86996.D
Lims ID: 240-49171-B-9-A Lab Sample ID: 240-49171-9
Client ID: 079SB-0354M-0001-SO
Sample Type: Client
Inject. Date: 14-Apr-2015 11:47:30 ALS Bottle#: 27 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042522-029
Operator ID: 402279 Instrument ID: A3UX8

Method: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 00:48:07 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: latat Date: 15-Apr-2015 00:27:58

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.160	5.157	0.003	99	1246497	50.0	
*	2 Chlorobenzene-d5	117	7.680	7.689	-0.009	94	924694	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.881	9.878	0.003	98	453438	50.0	
$	4 Dibromofluoromethane (Surr	113	4.627	4.624	0.003	95	256133	50.7	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.888	4.896	-0.008	91	279665	48.8	
$	6 Toluene-d8 (Surr)	98	6.426	6.422	0.004	93	1100315	54.6	
$	7 4-Bromofluorobenzene (Surr	95	8.757	8.765	-0.008	97	334393	45.7	
	10 Chloromethane	50		1.748				ND	
	11 Vinyl chloride	62		1.866				ND	
	13 Bromomethane	94		2.186				ND	
	14 Chloroethane	64		2.281				ND	
	19 1,1-Dichloroethene	96		2.931				ND	
	21 Acetone	43		2.955				ND	
	24 Carbon disulfide	76		3.121				ND	
	28 Methylene Chloride	84		3.298				ND	
	31 trans-1,2-Dichloroethene	96		3.523				ND	
	32 Methyl tert-butyl ether	73		3.523				ND	
	34 1,1-Dichloroethane	63		3.843				ND	
	40 2-Butanone (MEK)	43		4.269				ND	
	39 cis-1,2-Dichloroethene	96		4.280				ND	
	45 Chlorobromomethane	128		4.458				ND	
	47 Chloroform	83		4.505				ND	
	48 1,1,1-Trichloroethane	97		4.671				ND	
	51 Carbon tetrachloride	117		4.801				ND	
	53 1,2-Dichloroethane	62		4.955				ND	
	54 Benzene	78		4.955				ND	
	58 Trichloroethene	130		5.440				ND	
	61 1,2-Dichloropropane	63		5.617				ND	
	65 Dichlorobromomethane	83		5.830				ND	
	68 cis-1,3-Dichloropropene	75		6.185				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.304				ND	
	70 Toluene	91	6.485	6.481	0.004	93	2667	0.1049	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
71 trans-1,3-Dichloropropene	75		6.647				ND	
73 1,1,2-Trichloroethane	97		6.813				ND	
75 Tetrachloroethene	164		6.966				ND	
76 2-Hexanone	43		7.002				ND	
78 Chlorodibromomethane	129		7.168				ND	
80 Ethylene Dibromide	107		7.274				ND	
82 Chlorobenzene	112		7.712				ND	
84 Ethylbenzene	106		7.807				ND	
85 m-Xylene & p-Xylene	106	7.905	7.901	0.004	93	4004	0.3791	
87 Styrene	104		8.280				ND	
86 o-Xylene	106		8.280				ND	
88 Bromoform	173		8.457				ND	
92 1,1,2,2-Tetrachloroethane	83		8.871				ND	
S 126 1,2-Dichloroethene, Total	96		1.140				ND	
S 128 Xylenes, Total	106				0		0.3791	

Reagents:

VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00018	Amount Added:	1.15	Units: uL	Run Reagent
vmDist_H2o_00045	Amount Added:	0.00	Units:	Run Reagent

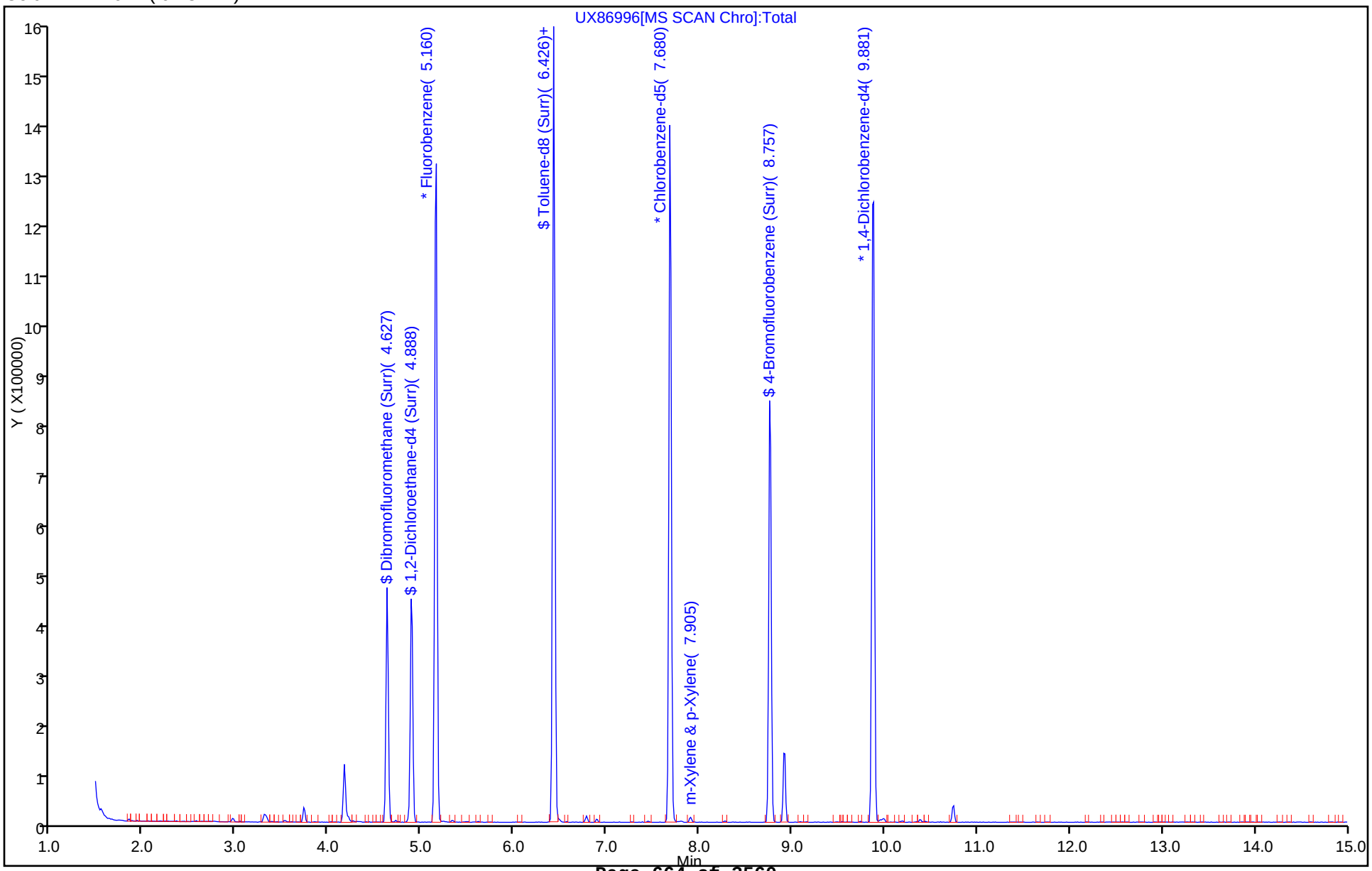
Report Date: 15-Apr-2015 00:48:26 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86996.D

Injection Date:	14-Apr-2015 11:47:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	240-49171-B-9-A	Lab Sample ID:	240-49171-9	Worklist Smp#:	29
Client ID:	079SB-0354M-0001-SO				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0354M-0001-SO | Lab Sample ID: 240-49171-9

Matrix: Solid | Lab File ID: 142422.D

Analysis Method: 8260B | Date Collected: 04/08/2015 11:30

Sample wt/vol: 7(g) | Date Analyzed: 04/14/2015 21:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.7 | Level: (low/med) Low

Analysis Batch No.: 176387 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
67-64-1	Acetone	13	U	17	13	5.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		61-130
460-00-4	4-Bromofluorobenzene (Surr)	102		85-120
1868-53-7	Dibromofluoromethane (Surr)	89		59-138
2037-26-5	Toluene-d8 (Surr)	100		85-115

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142422.D
Lims ID: 240-49171-C-9-A Lab Sample ID: 240-49171-9
Client ID: 079SB-0354M-0001-SO
Sample Type: Client
Inject. Date: 14-Apr-2015 21:34:30 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-49171-c-9-a
Misc. Info.: 240-0042552-026240-0042552-026
Operator ID: 002808 Instrument ID: A3UX14

Method: \\NCChrom\ChromData\A3UX14\20150414-42552.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:28:47 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 15-Apr-2015 12:56:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.789				ND	
* 1 Fluorobenzene	96	6.652	6.652	0.000	99	970169	50.0	
* 4 Dioxane-d8 (IS)	96		7.339				ND	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	96	544322	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	94	270343	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.978	5.990	-0.012	91	226595	44.6	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	93	333380	55.3	
$ 8 Toluene-d8 (Surr)	98	8.132	8.131	0.001	96	814934	50.1	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	81	273919	50.8	
12 Chloromethane	50		1.481				ND	
13 Vinyl chloride	62		1.600				ND	
15 Bromomethane	94		1.907				ND	
17 Chloroethane	64		2.002				ND	
23 1,1-Dichloroethene	96		2.889				ND	
26 Acetone	43	3.032	3.031	0.001	99	12532	2.16	
28 Carbon disulfide	76		3.150				ND	
32 Methylene Chloride	84		3.588				ND	
34 trans-1,2-Dichloroethene	96		3.990				ND	
35 Methyl tert-butyl ether	73		4.025				ND	
38 1,1-Dichloroethane	63		4.641				ND	
44 cis-1,2-Dichloroethene	96		5.410				ND	
45 2-Butanone (MEK)	43		5.481				ND	
48 Chlorobromomethane	128		5.694				ND	
51 Chloroform	83		5.800				ND	
52 1,1,1-Trichloroethane	97		5.954				ND	
54 Carbon tetrachloride	117		6.120				ND	
56 Benzene	78		6.356				ND	
58 1,2-Dichloroethane	62		6.404				ND	
61 Trichloroethene	130		7.007				ND	
65 1,2-Dichloropropane	63		7.232				ND	
70 Dichlorobromomethane	83		7.504				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
73 cis-1,3-Dichloropropene	75		7.907				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.060				ND	
76 Toluene	91	8.191	8.191	0.000	54	2318	0.1223	
77 trans-1,3-Dichloropropene	75		8.404				ND	
79 1,1,2-Trichloroethane	97		8.569				ND	
80 Tetrachloroethene	164		8.664				ND	
82 2-Hexanone	43		8.782				ND	
84 Chlorodibromomethane	129		8.901				ND	
85 Ethylene Dibromide	107		8.995				ND	
87 Chlorobenzene	112		9.409				ND	
89 Ethylbenzene	106	9.492	9.504	-0.012	97	2507	0.4041	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	95	10597	1.47	
91 o-Xylene	106	9.930	9.930	0.000	95	3350	0.4341	
92 Styrene	104		9.954				ND	
93 Bromoform	173		10.119				ND	
96 1,1,2,2-Tetrachloroethane	83		10.522				ND	
S 134 1,2-Dichloroethene, Total	96		1.140				ND	
S 136 Xylenes, Total	106				0		1.91	

Reagents:

vmDist_H2o_00046	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VM250SS_00030	Amount Added:	1.00	Units: uL	Run Reagent

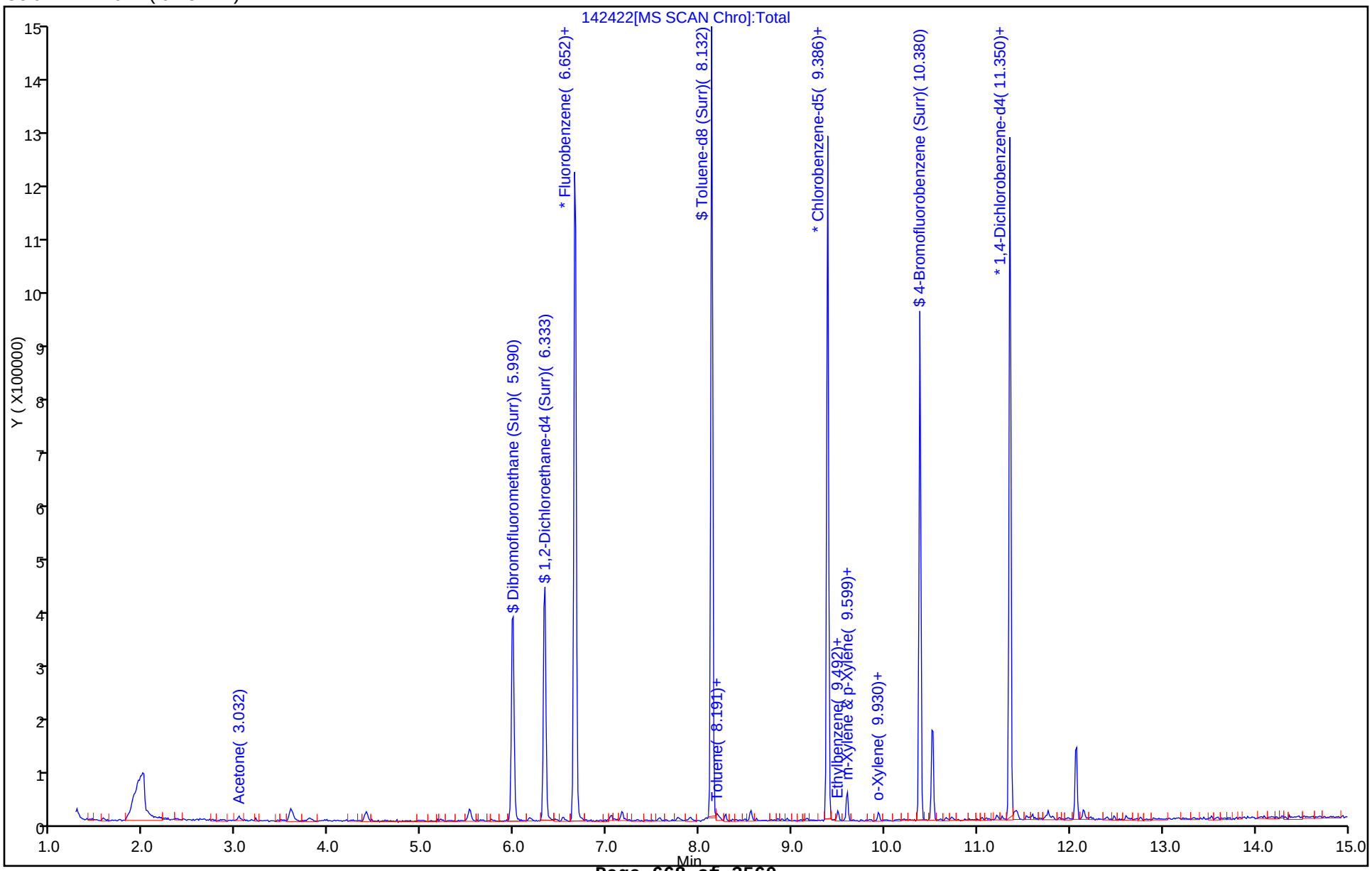
Report Date: 15-Apr-2015 13:29:12 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142422.D

Injection Date:	14-Apr-2015 21:34:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	240-49171-C-9-A	Lab Sample ID:	240-49171-9	Worklist Smp#:	26
Client ID:	079SB-0354M-0001-SO				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0380M-0001-TB | Lab Sample ID: 240-49171-12

Matrix: Water | Lab File ID: UXM7141.D

Analysis Method: 8260B | Date Collected: 04/08/2015 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 04/14/2015 10:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176298 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	0.22
79-00-5	1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	1.0	0.45
107-06-2	1,2-Dichloroethane	1.0	U	1.0	1.0	0.23
540-59-0	1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0	U	1.0	1.0	0.25
78-93-3	2-Butanone (MEK)	2.0	U	10	2.0	0.53
591-78-6	2-Hexanone	2.0	U	10	2.0	0.48
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0	U	10	2.0	0.99
67-64-1	Acetone	1.8	J	10	2.0	0.94
71-43-2	Benzene	1.0	U	1.0	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	1.0	0.44
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.46
124-48-1	Dibromochloromethane	1.0	U	1.0	1.0	0.43
75-27-4	Bromodichloromethane	1.0	U	1.0	1.0	0.29
100-41-4	Ethylbenzene	1.0	U	1.0	1.0	0.25
1634-04-4	Methyl tert-butyl ether	0.50	U	1.0	0.50	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	1.0	0.33
100-42-5	Styrene	0.50	U	1.0	0.50	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	1.0	0.23
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.56
79-01-6	Trichloroethene	1.0	U	1.0	1.0	0.22
75-01-4	Vinyl chloride	1.0	U	1.0	1.0	0.29
1330-20-7	Xylenes, Total	2.0	U	2.0	2.0	0.52
67-66-3	Chloroform	1.0	U	1.0	1.0	0.25
74-97-5	Bromochloromethane	1.0	U	1.0	1.0	0.50
106-93-4	1,2-Dibromoethane	1.0	U	1.0	1.0	0.32
75-00-3	Chloroethane	1.0	U	1.0	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0380M-0001-TB Lab Sample ID: 240-49171-12

Matrix: Water Lab File ID: UXM7141.D

Analysis Method: 8260B Date Collected: 04/08/2015 08:00

Sample wt/vol: 5(mL) Date Analyzed: 04/14/2015 10:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176298 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	95		85-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-120
460-00-4	4-Bromofluorobenzene (Surr)	94		75-120
1868-53-7	Dibromofluoromethane (Surr)	98		85-115

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7141.D
Lims ID: 240-49171-A-12 Lab Sample ID: 240-49171-12
Client ID: 079SB-0380M-0001-TB
Sample Type: Client
Inject. Date: 14-Apr-2015 10:47:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042532-009
Operator ID: 1904 Instrument ID: A3UX16

Method: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 14-Apr-2015 13:40:55 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: quayler Date: 14-Apr-2015 11:06:29

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.588	5.588	0.000	100	1495299	10.0	
*	2 Chlorobenzene-d5	117	8.279	8.279	0.000	85	1104561	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	94	569859	10.0	
$	4 Dibromofluoromethane (Surr	113	5.007	5.007	0.000	94	333442	11.2	
$	5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	372596	11.3	
$	6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	93	1431670	10.9	
$	7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	93	505675	10.7	
	10 Chloromethane	50		1.769				ND	
	11 Vinyl chloride	62		1.888				ND	
	13 Bromomethane	94		2.232				ND	
	14 Chloroethane	64		2.327				ND	
	19 1,1-Dichloroethene	96		3.050				ND	
	21 Acetone	43	3.097	3.085	0.012	97	16218	1.79	
	24 Carbon disulfide	76		3.263				ND	
	28 Methylene Chloride	84	3.489	3.489	0.000	94	25999	0.2440	
	31 Methyl tert-butyl ether	73		3.738				ND	
	32 trans-1,2-Dichloroethene	96		3.738				ND	
	34 1,1-Dichloroethane	63		4.105				ND	
	40 2-Butanone (MEK)	43		4.603				ND	
	39 cis-1,2-Dichloroethene	96		4.603				ND	
	45 Chlorobromomethane	128		4.805				ND	
	47 Chloroform	83		4.864				ND	
	48 1,1,1-Trichloroethane	97		5.042				ND	
	51 Carbon tetrachloride	117		5.196				ND	
	53 1,2-Dichloroethane	62		5.362				ND	
	54 Benzene	78		5.362				ND	
	58 Trichloroethene	130		5.908				ND	
	61 1,2-Dichloropropane	63		6.098				ND	
	65 Dichlorobromomethane	83		6.323				ND	
	68 cis-1,3-Dichloropropene	75		6.714				ND	
	69 4-Methyl-2-pentanone (MIBK	43		6.833				ND	
	70 Toluene	91		7.022				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
71 trans-1,3-Dichloropropene	75		7.188				ND	
73 1,1,2-Trichloroethane	97		7.366				ND	
75 Tetrachloroethene	164		7.521				ND	
76 2-Hexanone	43		7.580				ND	
78 Chlorodibromomethane	129		7.734				ND	
80 Ethylene Dibromide	107		7.841				ND	
82 Chlorobenzene	112		8.303				ND	
84 Ethylbenzene	106		8.398				ND	
85 m-Xylene & p-Xylene	106		8.505				ND	
86 o-Xylene	106		8.884				ND	
87 Styrene	104		8.896				ND	
88 Bromoform	173		9.074				ND	
92 1,1,2,2-Tetrachloroethane	83		9.501				ND	
S 131 1,2-Dichloroethene, Total	96		1.140				ND	
S 133 Xylenes, Total	106		16.530				ND	

Reagents:

VM50IS_00045	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00063	Amount Added:	1.14	Units: uL	Run Reagent
vmDist_H2o_00042	Amount Added:	0.00	Units:	Run Reagent

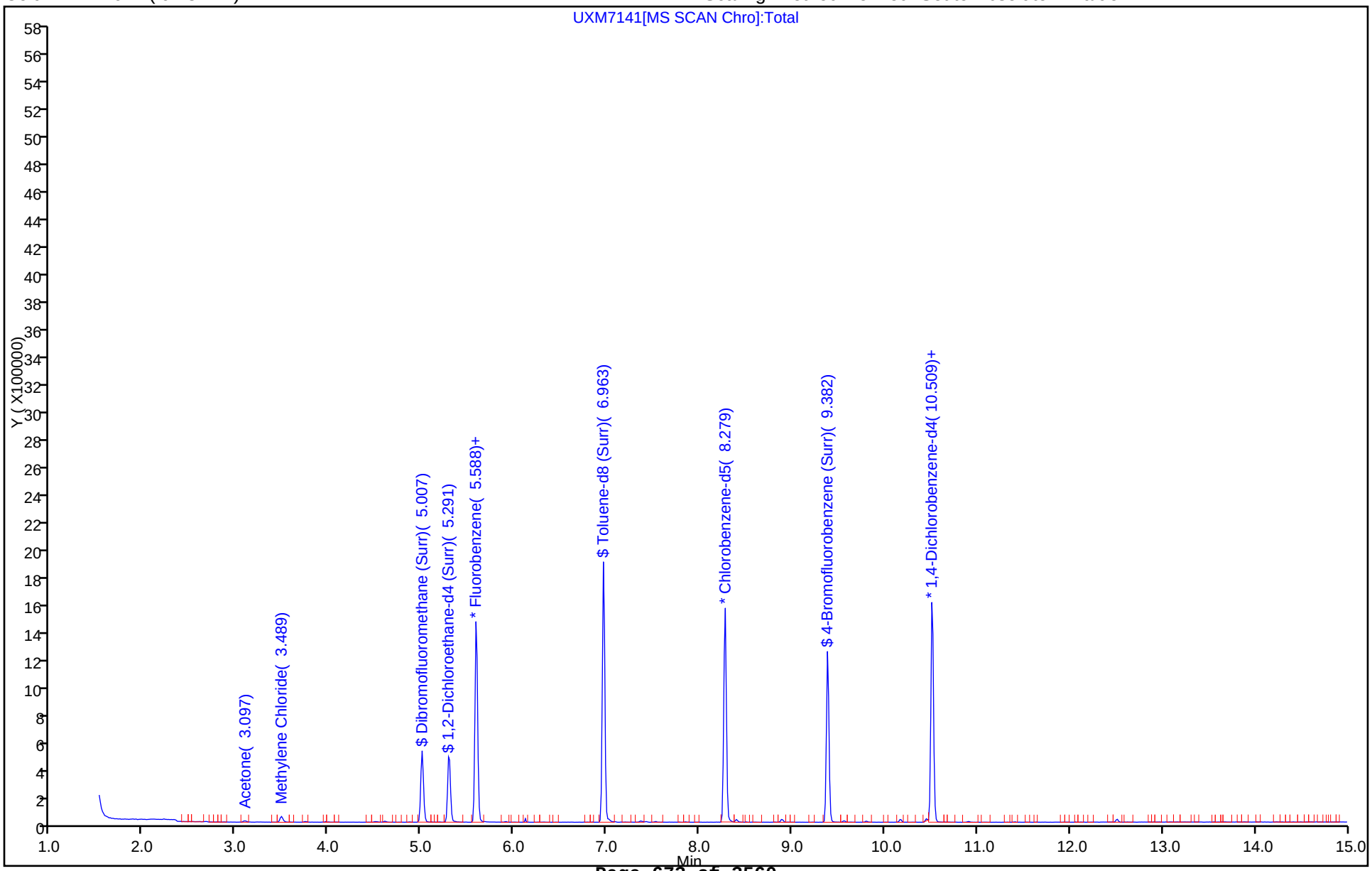
Report Date: 14-Apr-2015 13:41:02 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7141.D

Injection Date:	14-Apr-2015 10:47:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	240-49171-A-12	Lab Sample ID:	240-49171-12	Worklist Smp#:	9
Client ID:	079SB-0380M-0001-TB				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



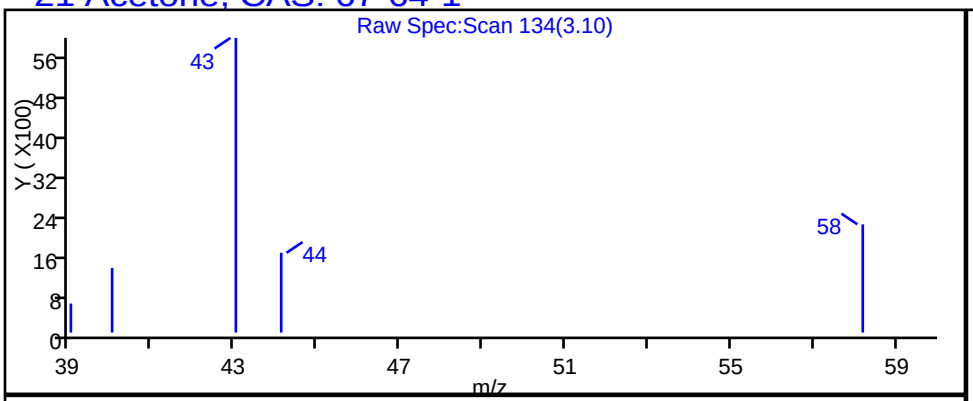
Report Date: 14-Apr-2015 13:41:02 Chrom Revision: 2.2 13-Mar-2015 11:20:44

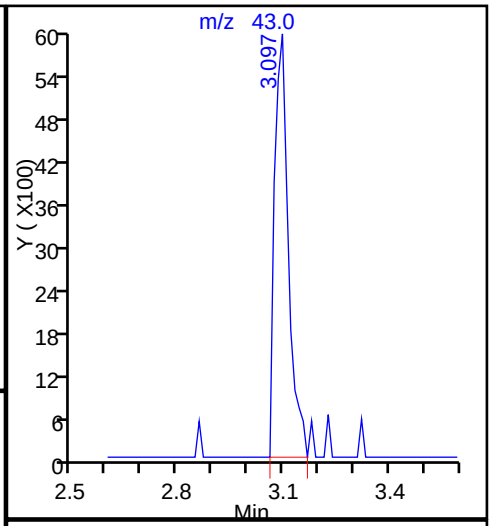
TestAmerica Canton

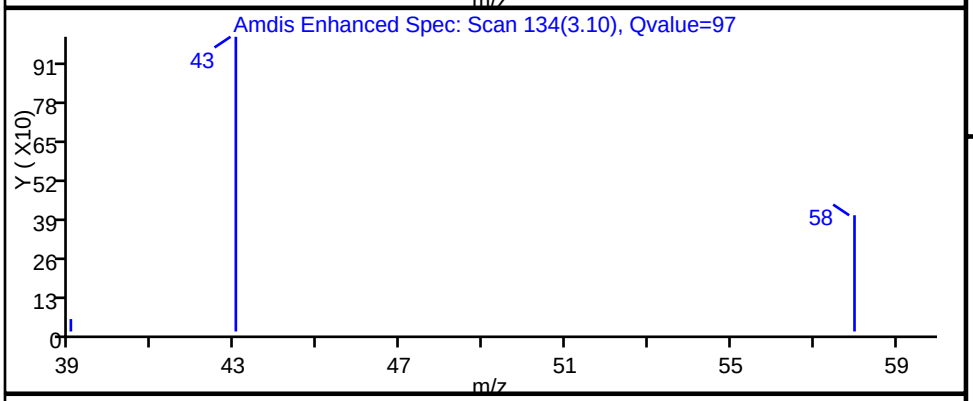
Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7141.D

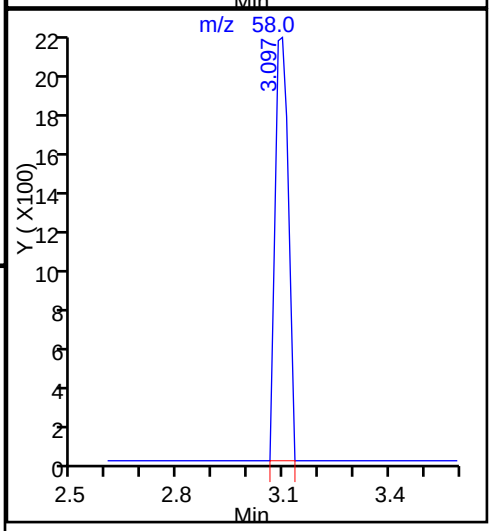
Injection Date:	14-Apr-2015 10:47:30	Instrument ID:	A3UX16		
Lims ID:	240-49171-A-12	Lab Sample ID:	240-49171-12		
Client ID:	079SB-0380M-0001-TB				
Operator ID:	1904	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

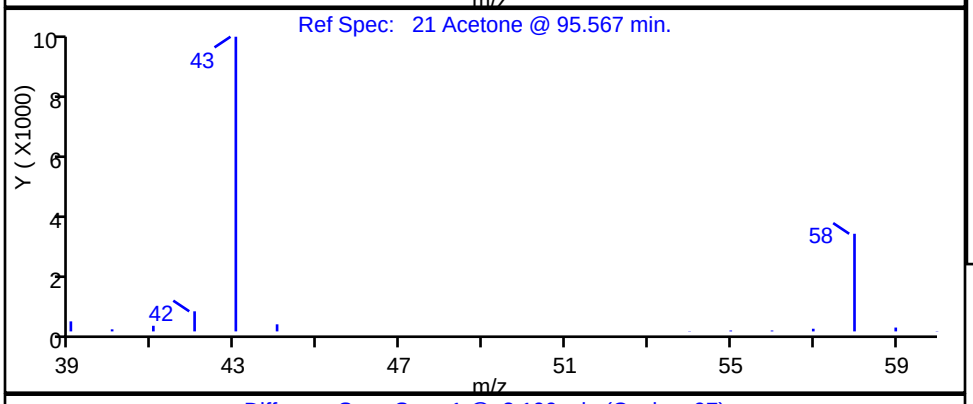
21 Acetone, CAS: 67-64-1

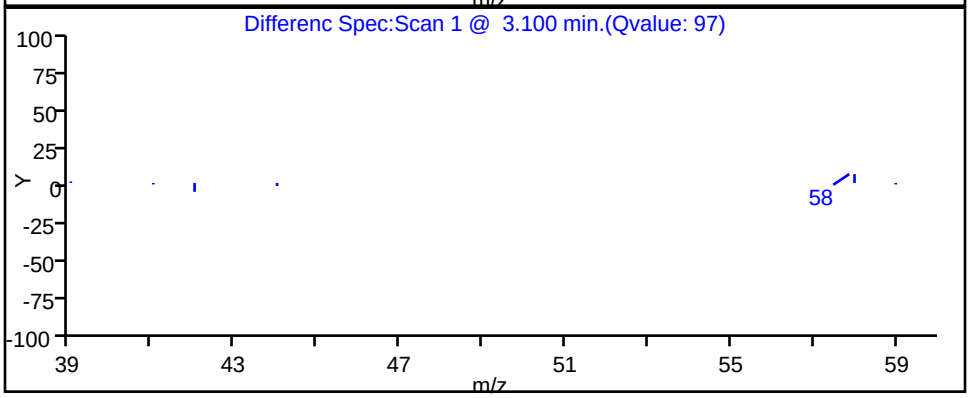












FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 176233

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/13/2015 14:47 Calibration End Date: 04/13/2015 17:39 Calibration ID: 27832

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-176233/11	142383.D
Level 2	IC 240-176233/10	142382.D
Level 3	IC 240-176233/9	142381.D
Level 4	IC 240-176233/8	142380.D
Level 5	IC 240-176233/7	142379.D
Level 6	ICIS 240-176233/6	142378.D
Level 7	IC 240-176233/5	142377.D
Level 8	IC 240-176233/4	142376.D
Level 9	IC 240-176233/3	142375.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.2924	+++++ 0.2993	0.3672 0.3059	0.3103 0.3219	0.2893	Ave		0.3123			0.1000	8.5		15.0			
Chloromethane	0.3557 0.2960	0.3043 0.3161	0.3878 0.3092	0.3249 0.3038	0.3124	Ave		0.3234			0.1000	9.2		15.0			
Vinyl chloride	0.3206 0.3100	0.2645 0.3321	0.3875 0.3183	0.3227 0.3145	0.3330	Ave		0.3226			0.1000	9.8		15.0			
Butadiene	0.2193 0.3104	0.2553 0.3227	0.3815 0.3192	0.3159 0.3145	0.3092	Ave		0.3053				14.8		15.0			
Bromomethane	0.2937 0.2290	0.2664 0.2353	0.2886 0.2322	0.2309 0.2332	0.2408	Ave		0.2500			0.0500	10.4		15.0			
Chloroethane	0.2325 0.1403	0.1903 0.1445	0.1929 0.1651	0.1523 0.1702	0.1388	Lin1	0.0426	0.1607							0.9940		0.9900
Dichlorofluoromethane	0.5110 0.4490	0.4910 0.4798	0.5658 0.4969	0.5059 0.4882	0.4607	Ave		0.4942				6.8		15.0			
Trichlorofluoromethane	0.3439 0.4547	0.3926 0.4935	0.5365 0.4983	0.4445 0.5105	0.4617	Ave		0.4596			0.1000	13.2		15.0			
Ethyl ether	0.1761 0.1937	0.2058 0.1913	0.2166 0.1874	0.1895 0.1918	0.2061	Ave		0.1953				6.2		15.0			
Acrolein	0.0247 0.0204	0.0271 0.0210	0.0238 0.0197	0.0201 0.0201	0.0223	Ave		0.0221				11.6		15.0			
1,1-Dichloroethene	0.2302 0.2197	0.2351 0.2336	0.2432 0.2300	0.2276 0.2321	0.2172	Ave		0.2298			0.1000	3.4		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1696 0.1772	0.1386 0.1839	0.2020 0.1837	0.1847 0.1834	0.1842	Ave		0.1786			0.0500	9.7		15.0			
Acetone	0.2927 0.0621	0.2048 0.0584	0.1050 0.0547	0.0837 0.0560	0.0753	Lin1	0.5270	0.0550			0.0500				0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 176233

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/13/2015 14:47 Calibration End Date: 04/13/2015 17:39 Calibration ID: 27832

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Iodomethane	+++++ 0.2866	+++++ 0.3063	0.3150 0.3064	0.3167 0.3063	0.2897	Ave		0.3039				3.8		15.0			
Carbon disulfide	0.4486 0.5742	0.4110 0.6422	0.5320 0.6614	0.5124 0.6549	0.5129	Lin1	-0.459	0.6464			0.1000				0.9970		0.9900
3-Chloro-1-propene	0.1201 0.1400	0.1308 0.1577	0.1507 0.1560	0.1372 0.1541	0.1413	Ave		0.1431				8.9		15.0			
Methyl acetate	0.1921 0.1599	0.1826 0.1561	0.1727 0.1508	0.1621 0.1541	0.1619	Ave		0.1658			0.1000	8.4		15.0			
Methylene Chloride	1.0067 0.2458	0.6453 0.2498	0.3790 0.2434	0.2905 0.2448	0.2675	Lin1	0.7499	0.2396			0.1000				1.0000		0.9900
2-Methyl-2-propanol	0.0274 0.0237	0.0319 0.0240	0.0265 0.0219	0.0246 0.0229	0.0249	Ave		0.0253				11.8		15.0			
trans-1,2-Dichloroethene	0.2671 0.2584	0.2553 0.2701	0.2901 0.2659	0.2733 0.2697	0.2555	Ave		0.2673			0.1000	4.0		15.0			
Methyl tert-butyl ether	0.6830 0.7552	0.8270 0.7698	0.7926 0.7446	0.7304 0.7830	0.7373	Ave		0.7581			0.1000	5.5		15.0			
Acrylonitrile	0.0704 0.0699	0.0802 0.0682	0.0790 0.0658	0.0746 0.0664	0.0739	Ave		0.0720				7.3		15.0			
Hexane	0.0848 0.0636	0.0751 0.0640	0.0785 0.0662	0.0665 0.0630	0.0610	Ave		0.0692				11.9		15.0			
1,1-Dichloroethane	0.5924 0.5312	0.4814 0.5470	0.5793 0.5477	0.5580 0.5635	0.5278	Ave		0.5476			0.1000	5.9		15.0			
Vinyl acetate	+++++ 0.0174	+++++ 0.0170	0.0187 0.0176	0.0176 0.0178	0.0168	Ave		0.0175				3.4		15.0			
2,2-Dichloropropane	0.2064 0.2204	0.2440 0.2360	0.2485 0.2401	0.2142 0.2292	0.2173	Ave		0.2285				6.4		15.0			
cis-1,2-Dichloroethene	0.2879 0.2859	0.2819 0.2917	0.3075 0.2855	0.2787 0.2926	0.2785	Ave		0.2878			0.1000	3.1		15.0			
2-Butanone (MEK)	0.0918 0.0872	0.1081 0.0806	0.0842 0.0808	0.0855 0.0819	0.0885	Ave		0.0876			0.0500	9.7		15.0			
Chlorobromomethane	0.1123 0.1173	0.1227 0.1198	0.1332 0.1179	0.1216 0.1180	0.1126	Ave		0.1195				5.2		15.0			
Tetrahydrofuran	+++++ 0.0620	+++++ 0.0613	0.0630 0.0588	0.0629 0.0604	0.0619	Ave		0.0615				2.4		15.0			
Chloroform	0.4959 0.5034	0.4885 0.5252	0.5454 0.5241	0.5153 0.5415	0.4989	Ave		0.5154				3.9		15.0			
1,1,1-Trichloroethane	0.3629 0.4175	0.3580 0.4456	0.4152 0.4526	0.4076 0.4557	0.3956	Ave		0.4123			0.1000	8.7		15.0			
Cyclohexane	0.4112 0.5037	0.4908 0.5265	0.5650 0.5162	0.5234 0.5173	0.5071	Ave		0.5068			0.1000	8.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 176233

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/13/2015 14:47 Calibration End Date: 04/13/2015 17:39 Calibration ID: 27832

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Carbon tetrachloride	0.2821 0.3931	0.3241 0.4215	0.3879 0.4342	0.3682 0.4416	0.3739	Ave		0.3807			0.1000	13.6		15.0			
1,1-Dichloropropene	0.3614 0.3940	0.3522 0.4028	0.4341 0.4029	0.3890 0.4028	0.3745	Ave		0.3904				6.4		15.0			
Benzene	1.2278 1.0457	1.0516 1.0925	1.1415 1.1030	1.0970 1.1246	1.0233	Ave		1.1008			0.5000	5.6		15.0			
Isobutyl alcohol	0.0085 0.0071	0.0072 0.0068	0.0078 0.0066	0.0072 0.0067	0.0078	Ave		0.0073				8.3		15.0			
1,2-Dichloroethane	0.3770 0.3493	0.3395 0.3536	0.3815 0.3522	0.3499 0.3697	0.3472	Ave		0.3578			0.1000	4.1		15.0			
n-Heptane	0.0420 0.0662	0.0553 0.0662	0.0685 0.0717	0.0606 0.0685	0.0638	Ave		0.0625				14.6		15.0			
Trichloroethene	0.2603 0.2608	0.2487 0.2742	0.2974 0.2743	0.2686 0.2809	0.2538	Ave		0.2688			0.2000	5.6		15.0			
Methylcyclohexane	0.4004 0.5159	0.4346 0.5337	0.5747 0.5367	0.5312 0.5373	0.4925	Ave		0.5063			0.1000	10.9		15.0			
1,2-Dichloropropane	0.2294 0.2557	0.2594 0.2505	0.2574 0.2586	0.2469 0.2611	0.2366	Ave		0.2506			0.1000	4.4		15.0			
Dibromomethane	0.1176 0.1266	0.1445 0.1282	0.1449 0.1284	0.1220 0.1296	0.1262	Ave		0.1298				7.1		15.0			
1,4-Dioxane	0.0020 0.0020	0.0019 0.0020	0.0020 0.0017	0.0018 0.0018	0.0019	Ave		0.0019				5.5		15.0			
Dichlorobromomethane	0.2896 0.3386	0.2729 0.3489	0.2895 0.3655	0.3044 0.3780	0.3042	Ave		0.3213			0.1000	11.6		15.0			
2-Chloroethyl vinyl ether	0.0879 0.1076	0.0964 0.1070	0.0816 0.1169	0.0856 0.1156	0.0924	Ave		0.0990				13.3		15.0			
cis-1,3-Dichloropropene	0.3118 0.3647	0.2855 0.3738	0.3151 0.3935	0.3050 0.4075	0.3326	Ave		0.3433			0.1500	12.5		15.0			
4-Methyl-2-pentanone (MIBK)	0.2659 0.2940	0.3541 0.2893	0.3283 0.2722	0.2999 0.2710	0.3029	Ave		0.2975			0.0500	9.7		15.0			
Toluene	1.9275 1.6592	1.6127 1.6961	1.9844 1.6879	1.7478 1.6960	1.6552	Ave		1.7408			0.4000	7.4		15.0			
trans-1,3-Dichloropropene	0.3887 0.4637	0.3779 0.4682	0.3952 0.4825	0.4151 0.4812	0.4205	Ave		0.4325			0.1000	9.6		15.0			
Ethyl methacrylate	0.2626 0.3027	0.2594 0.2959	0.2572 0.3054	0.2648 0.3014	0.2637	Ave		0.2792				7.6		15.0			
1,1,2-Trichloroethane	0.2698 0.2542	0.2605 0.2570	0.2957 0.2529	0.2623 0.2449	0.2582	Ave		0.2617			0.1000	5.5		15.0			
Tetrachloroethene	0.3049 0.3065	0.2699 0.3146	0.3636 0.3125	0.3419 0.3137	0.2975	Ave		0.3139			0.2000	8.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 176233

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/13/2015 14:47 Calibration End Date: 04/13/2015 17:39 Calibration ID: 27832

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,3-Dichloropropane	0.5041 0.4848	0.4778 0.4718	0.5458 0.4670	0.4750 0.4679	0.4626	Ave		0.4841				5.4		15.0			
2-Hexanone	0.2218 0.1688	0.2111 0.1599	0.1633 0.1602	0.1679 0.1591	0.1745	Ave		0.1763			0.0500	13.3		15.0			
Chlorodibromomethane	0.2310 0.3075	0.2383 0.3217	0.2535 0.3309	0.2520 0.3299	0.2767	Ave		0.2824				14.4		15.0			
Ethylene Dibromide	0.2852 0.2482	0.2684 0.2457	0.2842 0.2451	0.2546 0.2407	0.2437	Ave		0.2573				6.8		15.0			
Chlorobenzene	0.9900 0.9653	0.9673 0.9840	1.1009 1.0128	0.9708 1.0115	0.9253	Ave		0.9920			0.3000	4.9		15.0			
1,1,1,2-Tetrachloroethane	0.3331 0.3847	0.3426 0.4071	0.4210 0.3894	0.4022 0.3941	0.3937	Ave		0.3853				7.5		15.0			
Ethylbenzene	0.6073 0.5599	0.4979 0.5591	0.6706 0.5835	0.5456 0.5757	0.5299	Ave		0.5699				8.6		15.0			
m-Xylene & p-Xylene	0.6669 0.6565	0.5689 0.6842	0.7004 0.6941	0.6584 0.6909	0.6319	Ave		0.6614				6.2		15.0			
o-Xylene	0.7501 0.6968	0.6185 0.7159	0.7508 0.7181	0.7207 0.7103	0.6981	Ave		0.7088				5.5		15.0			
Styrene	0.9405 0.9251	0.8667 0.9551	0.8928 1.0111	0.8274 1.0086	0.8400	Ave		0.9186			0.3000	7.3		15.0			
Bromoform	0.1382 0.1568	0.0957 0.1704	0.1201 0.1794	0.1321 0.1782	0.1359	Lin1	-0.141	0.1748			0.1000				0.9960		0.9900
Isopropylbenzene	1.9783 2.0054	1.6805 2.1133	2.1978 2.0969	2.0312 2.1046	1.9472	Ave		2.0172			0.1000	7.4		15.0			
1,1,2,2-Tetrachloroethane	0.7738 0.6546	0.6841 0.6539	0.6341 0.6256	0.6586 0.6376	0.6665	Ave		0.6654			0.3000	6.7		15.0			
Bromobenzene	0.8494 0.7390	0.7093 0.7460	0.7784 0.7478	0.7100 0.7814	0.6857	Ave		0.7497				6.5		15.0			
1,2,3-Trichloropropane	0.2510 0.1946	0.2232 0.1928	0.2083 0.1893	0.2033 0.1889	0.1940	Ave		0.2050				10.0		15.0			
trans-1,4-Dichloro-2-butene	0.1316 0.1924	0.1828 0.1930	0.1595 0.1974	0.1791 0.2008	0.1848	Ave		0.1802				12.2		15.0			
N-Propylbenzene	0.9093 0.9557	0.8005 1.0085	1.0008 0.9974	0.9517 1.0274	0.9587	Ave		0.9567				7.2		15.0			
2-Chlorotoluene	0.6812 0.8217	0.7287 0.8433	0.9350 0.8325	0.7977 0.8451	0.8016	Ave		0.8096				9.0		15.0			
1,3,5-Trimethylbenzene	2.9639 3.3349	2.7660 3.4361	3.2346 3.3902	3.2647 3.4573	3.2415	Ave		3.2321				7.1		15.0			
4-Chlorotoluene	0.6927 0.7791	0.7143 0.7954	0.8068 0.8084	0.7879 0.8471	0.7534	Ave		0.7761				6.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 176233

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/13/2015 14:47 Calibration End Date: 04/13/2015 17:39 Calibration ID: 27832

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
tert-Butylbenzene	2.2222 3.1303	2.3586 3.2165	3.0107 3.0841	3.0930 3.1434	3.0163	Ave		2.9195				12.5		15.0			
1,2,4-Trimethylbenzene	2.7144 3.2433	2.6397 3.4149	3.3942 3.3669	3.2052 3.4971	3.1905	Ave		3.1851				9.6		15.0			
sec-Butylbenzene	3.4884 4.4520	3.2667 4.6660	4.4115 4.4959	4.3434 4.6352	4.2929	Ave		4.2280				11.8		15.0			
1,3-Dichlorobenzene	1.5934 1.4829	1.5791 1.5513	1.6569 1.5637	1.4378 1.6205	1.4277	Ave		1.5459			0.6000	5.2		15.0			
4-Isopropyltoluene	2.9742 3.5730	2.8666 3.8051	3.5247 3.6911	3.4785 3.9043	3.4878	Ave		3.4783				10.0		15.0			
1,4-Dichlorobenzene	1.8230 1.4432	1.5364 1.4954	1.6182 1.5146	1.5054 1.5613	1.4566	Ave		1.5505			0.5000	7.4		15.0			
n-Butylbenzene	2.8656 3.3375	2.8800 3.5847	3.4960 3.5480	3.2883 3.6495	3.3226	Ave		3.3302				8.6		15.0			
1,2-Dichlorobenzene	1.5593 1.4246	1.5430 1.4664	1.5895 1.4267	1.4426 1.4754	1.4484	Ave		1.4862			0.4000	4.1		15.0			
1,2-Dibromo-3-Chloropropane	0.1120 0.1147	0.1052 0.1197	0.1076 0.1154	0.1073 0.1200	0.1148	Ave		0.1130			0.0500	4.7		15.0			
1,2,4-Trichlorobenzene	1.4683 1.0321	1.0960 1.0750	1.2365 1.0277	1.1359 1.0835	1.1116	Ave		1.1407			0.2000	12.1		15.0			
Hexachlorobutadiene	0.7581 0.6710	0.7333 0.6763	0.7535 0.6105	0.7293 0.6350	0.7205	Ave		0.6986				7.6		15.0			
Naphthalene	2.1641 2.1568	2.6156 2.2803	2.3757 2.0677	2.4290 2.1532	2.3819	Ave		2.2916				7.6		15.0			
1,2,3-Trichlorobenzene	1.2136 0.9503	1.1459 0.9568	1.1469 0.8728	1.0812 0.9244	1.0373	Ave		1.0366				11.3		15.0			
Dibromofluoromethane (Surr)	0.6859 0.2447	0.4194 0.2538	0.3466 0.2518	0.2859 0.2621	0.2663	Lin1	0.3915	0.2530							0.9990		0.9900
1,2-Dichloroethane-d4 (Surr)	0.9356 0.2882	0.6859 0.2959	0.4790 0.2979	0.3561 0.3130	0.3260	Lin1	0.6834	0.2985							0.9980		0.9900
Toluene-d8 (Surr)	5.4959 1.4396	3.3154 1.4783	2.4731 1.4344	1.8046 1.4281	1.6178	Lin1	4.1127	1.4132							1.0000		0.9900
4-Bromofluorobenzene (Surr)	3.5756 0.9683	2.2821 0.9585	1.5652 0.9466	1.0909 0.9847	1.0289	Lin1	2.5840	0.9466							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 176233

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/13/2015 14:47 Calibration End Date: 04/13/2015 17:39 Calibration ID: 27832

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-176233/11	142383.D
Level 2	IC 240-176233/10	142382.D
Level 3	IC 240-176233/9	142381.D
Level 4	IC 240-176233/8	142380.D
Level 5	IC 240-176233/7	142379.D
Level 6	ICIS 240-176233/6	142378.D
Level 7	IC 240-176233/5	142377.D
Level 8	IC 240-176233/4	142376.D
Level 9	IC 240-176233/3	142375.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Dichlorodifluoromethane	FB	Ave	+++++ 457072	+++++ 867640	50741 1744614	92504 2079977	177199	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0
Chloromethane	FB	Ave	9208 462717	17126 916293	53585 1763559	96855 1963025	191317	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Vinyl chloride	FB	Ave	8300 484631	14887 962801	53538 1815047	96204 2032667	203950	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Butadiene	FB	Ave	5677 485186	14370 935425	52716 1820468	94160 2032701	189400	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromomethane	FB	Ave	7603 357895	14994 682039	39874 1324452	68831 1506940	147460	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Chloroethane	FB	Lin1	6019 219241	10709 418909	26656 941714	45412 1100055	84998	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Dichlorofluoromethane	FB	Ave	13227 701824	27631 1390837	78179 2833473	150827 3154968	282168	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Trichlorofluoromethane	FB	Ave	8901 710832	22094 1430805	74135 2841501	132513 3299047	282780	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl ether	FB	Ave	4559 302728	11582 554492	29922 1068515	56479 1239439	126224	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Acrolein	FB	Ave	3191 159580	7628 303795	16437 561381	29969 648795	68324	5.00 250	10.0 500	25.0 1000	50.0 1250	100
1,1-Dichloroethene	FB	Ave	5958 343454	13229 677150	33604 1311508	67852 1499840	133038	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	4391 277007	7799 533042	27908 1047610	55056 1185287	112842	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Acetone	FB	Lin1	15152 193996	23051 338395	29020 624349	49896 723557	92206	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Iodomethane	FB	Ave	+++++ 448033	+++++ 887933	43527 1747190	94414 1979415	177433	+++++ 50.0	+++++ 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 176233

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/13/2015 14:47 Calibration End Date: 04/13/2015 17:39 Calibration ID: 27832

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Carbon disulfide	FB	Lin1	11612 897605	23128 1861727	73508 3771974	152748 4231960	314133	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
3-Chloro-1-propene	FB	Ave	3109 218811	7360 457283	20829 889683	40910 996018	86558	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methyl acetate	FB	Ave	24863 1249988	51386 2262763	119335 4299977	241583 4980747	495871	5.00 250	10.0 500	25.0 1000	50.0 1250	100
Methylene Chloride	FB	Lin1	26058 384215	36316 724120	52367 1388046	86599 1582190	163840	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Methyl-2-propanol	FB	Ave	7086 370274	17950 696007	36553 1249910	73346 1481309	152745	10.0 500	20.0 1000	50.0 2000	100 2500	200
trans-1,2-Dichloroethene	FB	Ave	6913 403974	14368 783065	40090 1516543	81471 1743110	156512	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methyl tert-butyl ether	FB	Ave	17680 1180484	46542 2231635	109518 4246319	217733 5060146	451555	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Acrylonitrile	FB	Ave	18220 1091995	45147 1976071	109143 3752860	222251 4289028	452518	10.0 500	20.0 1000	50.0 2000	100 2500	200
Hexane	FB	Ave	2195 99416	4228 185441	10845 377502	19822 407104	37389	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1-Dichloroethane	FB	Ave	15334 830332	27094 1585743	80045 3123271	166340 3641629	323268	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Vinyl acetate	FB	Ave	+++++ 26064	+++++ 47281	2474 96542	5037 110170	9880	+++++ 48.0	+++++ 96.0	4.80 192	9.60 240	19.2
2,2-Dichloropropane	FB	Ave	5343 344466	13734 684127	34334 1369322	63852 1481297	133099	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
cis-1,2-Dichloroethene	FB	Ave	7452 446882	15865 845592	42485 1628306	83095 1891012	170545	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Butanone (MEK)	FB	Ave	4751 272637	12168 467221	23267 921208	50950 1058993	108467	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Chlorobromomethane	FB	Ave	2908 183366	6908 347277	18399 672429	36254 762543	68991	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Tetrahydrofuran	FB	Ave	+++++ 193974	+++++ 355251	17412 670738	37502 780097	75764	+++++ 100	+++++ 200	10.0 400	20.0 500	40.0
Chloroform	FB	Ave	12837 786940	27492 1522519	75352 2989112	153605 3499012	305573	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,1-Trichloroethane	FB	Ave	9393 652549	20146 1291925	57375 2580975	121515 2945177	242273	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Cyclohexane	FB	Ave	10645 787344	27623 1526337	78065 2943551	156030 3342886	310564	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Carbon tetrachloride	FB	Ave	7303 614529	18239 1221970	53593 2476409	109773 2853662	228993	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1-Dichloropropene	FB	Ave	9355 615836	19824 1167703	59973 2297767	115979 2603286	229350	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 176233

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/13/2015 14:47 Calibration End Date: 04/13/2015 17:39 Calibration ID: 27832

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Benzene	FB	Ave	31782 1634609	59183 3167216	157728 6290034	327023 7267794	626745	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Isobutyl alcohol	FB	Ave	5490 278842	10190 494996	26860 938146	53826 1088044	119110	25.0 1250	50.0 2500	125 5000	250 6250	500
1,2-Dichloroethane	FB	Ave	9758 546042	19108 1025241	52718 2008581	104317 2389115	212661	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
n-Heptane	FB	Ave	1086 103552	3113 192055	9461 408991	18069 442487	39100	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Trichloroethene	FB	Ave	6737 407714	13998 794807	41091 1564266	80070 1815366	155451	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methylcyclohexane	FB	Ave	10364 806377	24458 1547331	79404 3060633	158363 3472137	301634	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichloropropane	FB	Ave	5937 399654	14600 726327	35567 1474943	73589 1687556	144880	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Dibromomethane	FB	Ave	3044 197921	8135 371554	20026 732381	36357 837583	77265	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,4-Dioxane	FB	Ave	1020 62788	2083 113715	5516 197867	10679 230264	23755	20.0 1000	40.0 2000	100 4000	200 5000	400
Dichlorobromomethane	FB	Ave	7497 529306	15359 1011543	40005 2084288	90757 2442893	186337	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Chloroethyl vinyl ether	FB	Ave	4553 336468	10852 620488	22551 1332988	51042 1494542	113146	2.00 100	4.00 200	10.0 400	20.0 500	40.0
cis-1,3-Dichloropropene	FB	Ave	8072 570017	16069 1083564	43542 2244017	90917 2633127	203722	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	7696 569478	22670 1053645	50010 2077878	101191 2411328	221448	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Toluene	CBZ	Ave	27889 1606889	51626 3088346	151159 6442117	294873 7545183	605006	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
trans-1,3-Dichloropropene	CBZ	Ave	5624 449058	12097 852540	30102 1841479	70034 2140765	153697	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl methacrylate	CBZ	Ave	3800 293163	8303 538732	19595 1165665	44668 1340948	96399	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2-Trichloroethane	CBZ	Ave	3904 246168	8339 468016	22526 965253	44249 1089609	94385	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Tetrachloroethene	CBZ	Ave	4411 296860	8639 572835	27698 1192584	57678 1395788	108741	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3-Dichloropropane	CBZ	Ave	7294 469521	15296 859074	41579 1782240	80131 2081454	169075	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Hexanone	CBZ	Ave	6418 326888	13513 582154	24881 1222773	56659 1415719	127574	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Chlorodibromomethane	CBZ	Ave	3343 297773	7628 585799	19314 1263022	42516 1467885	101147	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 176233

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/13/2015 14:47 Calibration End Date: 04/13/2015 17:39 Calibration ID: 27832

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Ethylene Dibromide	CBZ	Ave	4127 240352	8591 447439	21652 935622	42951 1070667	89096	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Chlorobenzene	CBZ	Ave	14324 934897	30965 1791634	83863 3865377	163776 4499906	338223	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	4819 372612	10966 741300	32071 1486184	67858 1753310	143891	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethylbenzene	CBZ	Ave	8787 542260	15940 1018045	51082 2226828	92043 2561287	193684	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
m-Xylene & p-Xylene	CBZ	Ave	9650 635821	18211 1245882	53355 2649033	111070 3073714	230963	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
o-Xylene	CBZ	Ave	10853 674856	19800 1303463	57193 2740743	121591 3159873	255173	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Styrene	CBZ	Ave	13609 895921	27745 1739003	68011 3858832	139589 4487389	307027	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromoform	CBZ	Lin1	1999 151824	3065 310309	9148 684821	22288 792591	49661	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Isopropylbenzene	CBZ	Ave	28624 1942109	53797 3847910	167419 8002849	342682 9363235	711761	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	6148 315778	11768 606257	26403 1218604	58707 1409890	122501	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromobenzene	DCB	Ave	6749 356469	12201 691694	32408 1456533	63288 1727779	126037	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,3-Trichloropropane	DCB	Ave	1994 93864	3839 178772	8672 368791	18121 417682	35663	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	1046 92820	3145 178933	6640 384394	15965 444023	33972	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
N-Propylbenzene	DCB	Ave	7225 461013	13770 935099	41667 1942696	84827 2271802	176214	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Chlorotoluene	DCB	Ave	5413 396380	12534 781902	38931 1621562	71101 1868609	147338	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3,5-Trimethylbenzene	DCB	Ave	23550 1608722	47578 3185948	134673 6603182	291003 7644733	595811	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Chlorotoluene	DCB	Ave	5504 375812	12287 737522	33593 1574544	70232 1873139	138477	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
tert-Butylbenzene	DCB	Ave	17657 1510028	40570 2982351	125353 6006996	275698 6950633	554434	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,4-Trimethylbenzene	DCB	Ave	21568 1564525	45405 3166287	141317 6557900	285694 7732772	586453	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
sec-Butylbenzene	DCB	Ave	27718 2147606	56190 4326268	183676 8756903	387150 10249214	789075	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3-Dichlorobenzene	DCB	Ave	12661 715319	27163 1438319	68987 3045675	128163 3583220	262430	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 176233

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/13/2015 14:47 Calibration End Date: 04/13/2015 17:39 Calibration ID: 27832

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Isopropyltoluene	DCB	Ave	23632 1723589	49308 3528038	146751 7189317	310056 8633002	641089	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,4-Dichlorobenzene	DCB	Ave	14485 696189	26428 1386574	67374 2950027	134188 3452220	267730	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
n-Butylbenzene	DCB	Ave	22769 1609987	49539 3323764	145558 6910542	293103 8069664	610718	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichlorobenzene	DCB	Ave	12390 687234	26542 1359660	66181 2778843	128584 3262421	266239	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	890 55324	1809 110998	4479 224704	9562 265252	21105	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,4-Trichlorobenzene	DCB	Ave	11667 497881	18853 996774	51480 2001672	101251 2395883	204327	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Hexachlorobutadiene	DCB	Ave	6024 323688	12614 627033	31371 1189040	65010 1404067	132443	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Naphthalene	DCB	Ave	17195 1040438	44992 2114240	98914 4027278	216513 4761107	437825	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,3-Trichlorobenzene	DCB	Ave	9643 458419	19711 887187	47752 1700031	96369 2044057	190657	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Dibromofluoromethane (Surr)	FB	Lin1	17755 382452	23606 735669	47891 1435788	85223 1693723	163082	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Lin1	24219 450544	38601 857945	66180 1698703	106146 2022506	199681	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Toluene-d8 (Surr)	CBZ	Lin1	79521 1394204	106134 2691727	188391 5474427	304451 6353490	591341	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Bromofluorobenzene (Surr)	DCB	Lin1	28411 467117	39254 888754	65166 1843691	97242 2177293	189114	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142375.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 13-Apr-2015 14:47:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 240-0042511-003240-0042511-003
Operator ID: 002808 Instrument ID: A3UX14
Sublist: chrom-8260_14*sub40

Method: \\NCChrom\ChromData\A3UX14\20150413-42511.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:05:36 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 13-Apr-2015 15:47:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.664	6.652	0.012	99	1292458	50.0	50.0	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	95	889785	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	95	442235	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.990	5.978	0.012	92	1693723	250.0	257.5	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	95	2022506	250.0	259.8	
$ 8 Toluene-d8 (Surr)	98	8.131	8.132	-0.001	94	6353490	250.0	249.7	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	84	2177293	250.0	257.3	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	99	2079977	250.0	257.6	
12 Chloromethane	50	1.481	1.481	0.000	99	1963025	250.0	234.9	
13 Vinyl chloride	62	1.600	1.600	0.000	98	2032667	250.0	243.8	
14 Butadiene	54	1.623	1.623	0.000	94	2032701	250.0	257.5	
15 Bromomethane	94	1.907	1.907	0.000	89	1506940	250.0	233.2	
17 Chloroethane	64	2.002	2.002	0.000	99	1100055	250.0	264.5	
18 Dichlorofluoromethane	67	2.262	2.262	0.000	97	3154968	250.0	246.9	
19 Trichlorofluoromethane	101	2.298	2.298	0.000	97	3299047	250.0	277.7	
20 Ethyl ether	59	2.641	2.641	0.000	93	1239439	250.0	245.5	
21 Acrolein	56	2.818	2.818	0.000	99	648795	1250.0	1134.5	
23 1,1-Dichloroethene	96	2.901	2.889	0.012	93	1499840	250.0	252.4	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	94	1185287	250.0	256.8	
26 Acetone	43	3.031	3.031	0.000	98	723557	500.0	499.5	
27 Iodomethane	142	3.091	3.091	0.000	97	1979415	250.0	252.0	
28 Carbon disulfide	76	3.150	3.150	0.000	100	4231960	250.0	254.0	
29 3-Chloro-1-propene	76	3.398	3.398	0.000	91	996018	250.0	269.2	
31 Methyl acetate	43	3.481	3.481	0.000	99	4980747	1250.0	1162.0	
32 Methylene Chloride	84	3.599	3.599	0.000	97	1582190	250.0	252.4	
33 2-Methyl-2-propanol	59	3.919	3.919	0.000	98	1481309	2500.0	2264.0	
34 trans-1,2-Dichloroethene	96	3.990	3.990	0.000	95	1743110	250.0	252.3	
35 Methyl tert-butyl ether	73	4.025	4.025	0.000	94	5060146	250.0	258.2	
36 Acrylonitrile	53	4.049	4.037	0.012	99	4289028	2500.0	2303.7	
37 Hexane	86	4.404	4.404	0.000	95	407104	250.0	227.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 1,1-Dichloroethane	63	4.641	4.641	0.000	96	3641629	250.0	257.3	
41 Vinyl acetate	86	4.783	4.783	0.000	97	110170	240.0	242.9	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	87	1481297	250.0	250.8	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	84	1891012	250.0	254.2	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	100	1058993	500.0	467.6	
48 Chlorobromomethane	128	5.694	5.694	0.000	97	762543	250.0	246.9	
50 Tetrahydrofuran	42	5.741	5.741	0.000	90	780097	500.0	491.0	
51 Chloroform	83	5.800	5.800	0.000	93	3499012	250.0	262.7	
52 1,1,1-Trichloroethane	97	5.966	5.954	0.012	97	2945177	250.0	276.3	
53 Cyclohexane	56	5.990	5.990	0.000	93	3342886	250.0	255.2	
54 Carbon tetrachloride	117	6.132	6.120	0.012	97	2853662	250.0	290.0	
55 1,1-Dichloropropene	75	6.143	6.132	0.011	95	2603286	250.0	258.0	
56 Benzene	78	6.356	6.356	0.000	97	7267794	250.0	255.4	
57 Isobutyl alcohol	41	6.392	6.392	0.000	94	1088044	6250.0	5758.7	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	98	2389115	250.0	258.3	
60 n-Heptane	100	6.640	6.640	0.000	95	442487	250.0	273.7	
61 Trichloroethene	130	7.007	7.007	0.000	98	1815366	250.0	261.3	
64 Methylcyclohexane	83	7.161	7.161	0.000	91	3472137	250.0	265.3	
65 1,2-Dichloropropane	63	7.244	7.232	0.012	93	1687556	250.0	260.5	
67 Dibromomethane	93	7.350	7.350	0.000	94	837583	250.0	249.7	
69 1,4-Dioxane	88	7.374	7.386	-0.012	99	230264	5000.0	4706.8	
70 Dichlorobromomethane	83	7.504	7.504	0.000	100	2442893	250.0	294.1	
72 2-Chloroethyl vinyl ether	63	7.800	7.788	0.012	92	1494542	500.0	584.0	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.001	95	2633127	250.0	296.7	
75 4-Methyl-2-pentanone (MIBK	43	8.060	8.060	0.000	98	2411328	500.0	455.4	
76 Toluene	91	8.191	8.191	0.001	97	7545183	250.0	243.6	
77 trans-1,3-Dichloropropene	75	8.415	8.403	0.012	93	2140765	250.0	278.1	
78 Ethyl methacrylate	69	8.486	8.486	0.000	91	1340948	250.0	269.8	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	93	1089609	250.0	233.9	
80 Tetrachloroethene	164	8.664	8.664	0.000	96	1395788	250.0	249.9	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	93	2081454	250.0	241.6	
82 2-Hexanone	43	8.782	8.782	0.000	99	1415719	500.0	451.3	
84 Chlorodibromomethane	129	8.901	8.900	0.001	90	1467885	250.0	292.1	
85 Ethylene Dibromide	107	8.995	8.995	0.000	98	1070667	250.0	233.8	
87 Chlorobenzene	112	9.409	9.409	0.000	92	4499906	250.0	254.9	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	93	1753310	250.0	255.7	
89 Ethylbenzene	106	9.504	9.492	0.012	99	2561287	250.0	252.5	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	99	3073714	250.0	261.2	
91 o-Xylene	106	9.930	9.930	0.000	98	3159873	250.0	250.5	
92 Styrene	104	9.954	9.954	0.000	95	4487389	250.0	274.5	
93 Bromoform	173	10.119	10.119	0.000	96	792591	250.0	255.6	
94 Isopropylbenzene	105	10.238	10.238	0.000	96	9363235	250.0	260.8	
97 Bromobenzene	156	10.510	10.510	0.000	96	1727779	250.0	260.6	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.510	0.000	94	1409890	250.0	239.6	
98 1,2,3-Trichloropropane	110	10.557	10.557	0.000	81	417682	250.0	230.3	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	84	444023	250.0	278.7	
100 N-Propylbenzene	120	10.593	10.593	0.000	99	2271802	250.0	268.5	
101 2-Chlorotoluene	126	10.675	10.664	0.011	96	1868609	250.0	260.9	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	92	7644733	250.0	267.4	
103 4-Chlorotoluene	126	10.758	10.758	0.000	98	1873139	250.0	272.9	
105 tert-Butylbenzene	119	11.019	11.007	0.012	92	6950633	250.0	269.2	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	94	7732772	250.0	274.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 sec-Butylbenzene	105	11.196	11.196	0.000	94	10249214	250.0	274.1	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	97	3583220	250.0	262.1	
111 4-Isopropyltoluene	119	11.314	11.314	0.000	97	8633002	250.0	280.6	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	92	3452220	250.0	251.7	
115 n-Butylbenzene	91	11.658	11.658	0.000	98	8069664	250.0	274.0	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	97	3262421	250.0	248.2	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	82	265252	250.0	265.5	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	94	2395883	250.0	237.5	
120 Hexachlorobutadiene	225	13.160	13.160	0.000	98	1404067	250.0	227.2	
121 Naphthalene	128	13.231	13.231	0.000	97	4761107	250.0	234.9	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	95	2044057	250.0	222.9	
S 134 1,2-Dichloroethene, Total	96				0		500.0	506.5	
S 135 1,3-Dichloropropene, Total	75				0		500.0	574.9	
S 136 Xylenes, Total	106				0		500.0	511.7	
S 137 Trihalomethanes, Total	1				0		1000.0	1104.4	

Reagents:

VMRGAS_00097	Amount Added:	25.00	Units: uL
VMAROLISTDW_00095	Amount Added:	25.00	Units: uL
vm50ss_00197	Amount Added:	25.00	Units: uL
VMRPRIMW_00121	Amount Added:	25.00	Units: uL
VM250-IS_00028	Amount Added:	1.00	Units: uL

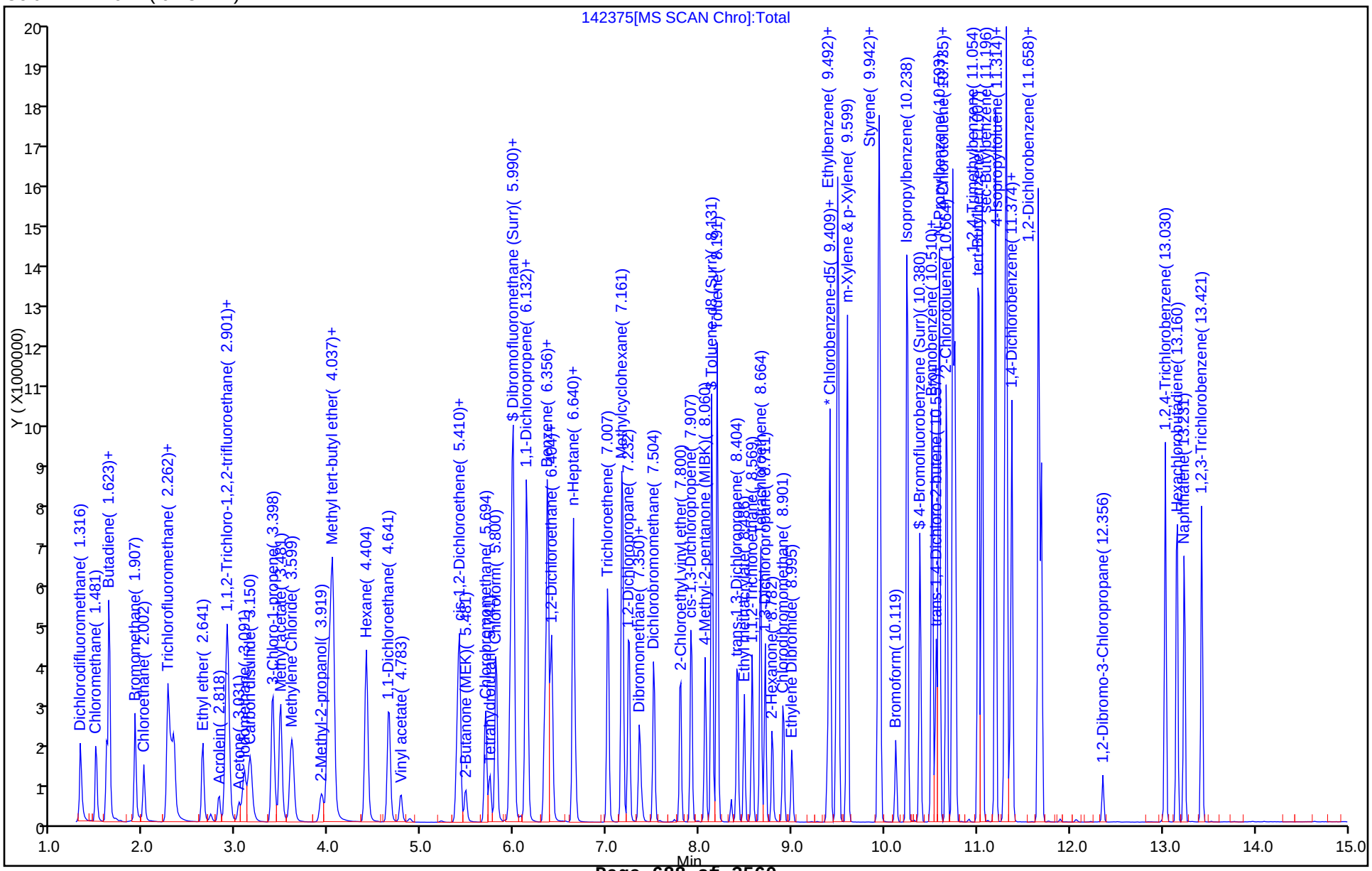
Report Date: 15-Apr-2015 13:05:37 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142375.D

Injection Date:	13-Apr-2015 14:47:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



Report Date: 15-Apr-2015 13:05:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142376.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 13-Apr-2015 15:08:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 240-0042511-004240-0042511-004
Operator ID: 002808 Instrument ID: A3UX14
Sublist: chrom-8260_14*sub40

Method: \\NCChrom\ChromData\A3UX14\20150413-42511.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:05:37 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 13-Apr-2015 15:51:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.652	6.652	0.000	99	1425713	50.0	50.0	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	97	954141	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	98	486938	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.990	5.978	0.012	92	1435788	200.0	197.5	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	95	1698703	200.0	197.3	
$ 8 Toluene-d8 (Surr)	98	8.131	8.132	-0.001	94	5474427	200.0	200.1	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	84	1843691	200.0	197.3	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	99	1744614	200.0	195.9	
12 Chloromethane	50	1.481	1.481	0.000	99	1763559	200.0	191.3	
13 Vinyl chloride	62	1.600	1.600	0.000	98	1815047	200.0	197.3	
14 Butadiene	54	1.623	1.623	0.000	94	1820468	200.0	209.1	
15 Bromomethane	94	1.907	1.907	0.000	89	1324452	200.0	185.8	
17 Chloroethane	64	2.002	2.002	0.000	99	941714	200.0	205.2	
18 Dichlorofluoromethane	67	2.262	2.262	0.000	97	2833473	200.0	201.1	
19 Trichlorofluoromethane	101	2.298	2.298	0.000	97	2841501	200.0	216.8	
20 Ethyl ether	59	2.641	2.641	0.000	92	1068515	200.0	191.8	
21 Acrolein	56	2.818	2.818	0.000	99	561381	1000.0	889.9	
23 1,1-Dichloroethene	96	2.889	2.889	0.000	93	1311508	200.0	200.1	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	95	1047610	200.0	205.7	
26 Acetone	43	3.031	3.031	0.000	99	624349	400.0	388.6	
27 Iodomethane	142	3.091	3.091	0.000	98	1747190	200.0	201.7	
28 Carbon disulfide	76	3.150	3.150	0.000	99	3771974	200.0	205.4	
29 3-Chloro-1-propene	76	3.398	3.398	0.000	91	889683	200.0	218.0	
31 Methyl acetate	43	3.481	3.481	0.000	99	4299977	1000.0	909.4	
32 Methylene Chloride	84	3.599	3.599	0.000	96	1388046	200.0	200.1	
33 2-Methyl-2-propanol	59	3.919	3.919	0.000	99	1249910	2000.0	1731.8	
34 trans-1,2-Dichloroethene	96	3.990	3.990	0.000	95	1516543	200.0	199.0	
35 Methyl tert-butyl ether	73	4.025	4.025	0.000	95	4246319	200.0	196.4	
36 Acrylonitrile	53	4.037	4.037	0.000	99	3752860	2000.0	1827.3	
37 Hexane	86	4.404	4.404	0.000	95	377502	200.0	191.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 1,1-Dichloroethane	63	4.641	4.641	0.000	96	3123271	200.0	200.0	
41 Vinyl acetate	86	4.783	4.783	0.000	97	96542	192.0	193.0	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	87	1369322	200.0	210.2	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	84	1628306	200.0	198.4	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	100	921208	400.0	368.7	
48 Chlorobromomethane	128	5.694	5.694	0.000	98	672429	200.0	197.3	
50 Tetrahydrofuran	42	5.741	5.741	0.000	89	670738	400.0	382.7	
51 Chloroform	83	5.800	5.800	0.000	93	2989112	200.0	203.4	
52 1,1,1-Trichloroethane	97	5.966	5.954	0.012	97	2580975	200.0	219.5	
53 Cyclohexane	56	5.990	5.990	0.000	93	2943551	200.0	203.7	
54 Carbon tetrachloride	117	6.132	6.120	0.012	97	2476409	200.0	228.1	
55 1,1-Dichloropropene	75	6.143	6.132	0.011	96	2297767	200.0	206.4	
56 Benzene	78	6.356	6.356	0.000	97	6290034	200.0	200.4	
57 Isobutyl alcohol	41	6.392	6.392	0.000	96	938146	5000.0	4501.3	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	98	2008581	200.0	196.9	
60 n-Heptane	100	6.640	6.640	0.000	95	408991	200.0	229.3	
61 Trichloroethene	130	7.007	7.007	0.000	98	1564266	200.0	204.1	
64 Methylcyclohexane	83	7.161	7.161	0.000	91	3060633	200.0	212.0	
65 1,2-Dichloropropane	63	7.232	7.232	0.000	94	1474943	200.0	206.4	
67 Dibromomethane	93	7.350	7.350	0.000	95	732381	200.0	197.9	
69 1,4-Dioxane	88	7.386	7.386	0.000	97	197867	4000.0	3666.5	
70 Dichlorobromomethane	83	7.504	7.504	0.000	99	2084288	200.0	227.5	
72 2-Chloroethyl vinyl ether	63	7.800	7.788	0.012	92	1332988	400.0	472.2	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.001	95	2244017	200.0	229.3	
75 4-Methyl-2-pentanone (MIBK	43	8.060	8.060	0.000	98	2077878	400.0	366.0	
76 Toluene	91	8.191	8.191	0.001	97	6442117	200.0	193.9	
77 trans-1,3-Dichloropropene	75	8.415	8.403	0.012	93	1841479	200.0	223.1	
78 Ethyl methacrylate	69	8.486	8.486	0.000	91	1165665	200.0	218.8	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	92	965253	200.0	193.3	
80 Tetrachloroethene	164	8.664	8.664	0.000	95	1192584	200.0	199.1	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	93	1782240	200.0	192.9	
82 2-Hexanone	43	8.782	8.782	0.000	99	1222773	400.0	363.5	
84 Chlorodibromomethane	129	8.901	8.900	0.001	90	1263022	200.0	234.4	
85 Ethylene Dibromide	107	8.995	8.995	0.000	97	935622	200.0	190.5	
87 Chlorobenzene	112	9.409	9.409	0.000	93	3865377	200.0	204.2	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	94	1486184	200.0	202.1	
89 Ethylbenzene	106	9.504	9.492	0.012	99	2226828	200.0	204.7	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	99	2649033	200.0	209.9	
91 o-Xylene	106	9.930	9.930	0.000	98	2740743	200.0	202.6	
92 Styrene	104	9.954	9.954	0.000	94	3858832	200.0	220.1	
93 Bromoform	173	10.119	10.119	0.000	96	684821	200.0	206.1	
94 Isopropylbenzene	105	10.238	10.238	0.000	96	8002849	200.0	207.9	
97 Bromobenzene	156	10.510	10.510	0.000	96	1456533	200.0	199.5	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.510	0.000	94	1218604	200.0	188.0	
98 1,2,3-Trichloropropane	110	10.557	10.557	0.000	85	368791	200.0	184.7	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	87	384394	200.0	219.1	
100 N-Propylbenzene	120	10.593	10.593	0.000	99	1942696	200.0	208.5	
101 2-Chlorotoluene	126	10.664	10.664	0.000	95	1621562	200.0	205.7	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	92	6603182	200.0	209.8	
103 4-Chlorotoluene	126	10.758	10.758	0.000	98	1574544	200.0	208.3	
105 tert-Butylbenzene	119	11.019	11.007	0.012	93	6006996	200.0	211.3	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	94	6557900	200.0	211.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 sec-Butylbenzene	105	11.196	11.196	0.000	94	8756903	200.0	212.7	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	97	3045675	200.0	202.3	
111 4-Isopropyltoluene	119	11.314	11.314	0.000	97	7189317	200.0	212.2	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	93	2950027	200.0	195.4	
115 n-Butylbenzene	91	11.658	11.658	0.000	98	6910542	200.0	213.1	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	97	2778843	200.0	192.0	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	82	224704	200.0	204.3	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	94	2001672	200.0	180.2	
120 Hexachlorobutadiene	225	13.160	13.160	0.000	98	1189040	200.0	174.8	
121 Naphthalene	128	13.231	13.231	0.000	97	4027278	200.0	180.5	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	94	1700031	200.0	168.4	
S 134 1,2-Dichloroethene, Total	96				0		400.0	397.4	
S 135 1,3-Dichloropropene, Total	75				0		400.0	452.4	
S 136 Xylenes, Total	106				0		400.0	412.5	
S 137 Trihalomethanes, Total	1				0		800.0	871.3	

Reagents:

vm50ss_00197	Amount Added:	20.00	Units: uL
VMRGAS_00097	Amount Added:	20.00	Units: uL
VMAROLISTDW_00095	Amount Added:	20.00	Units: uL
VMRPRIMW_00121	Amount Added:	20.00	Units: uL
VM250-IS_00028	Amount Added:	1.00	Units: uL

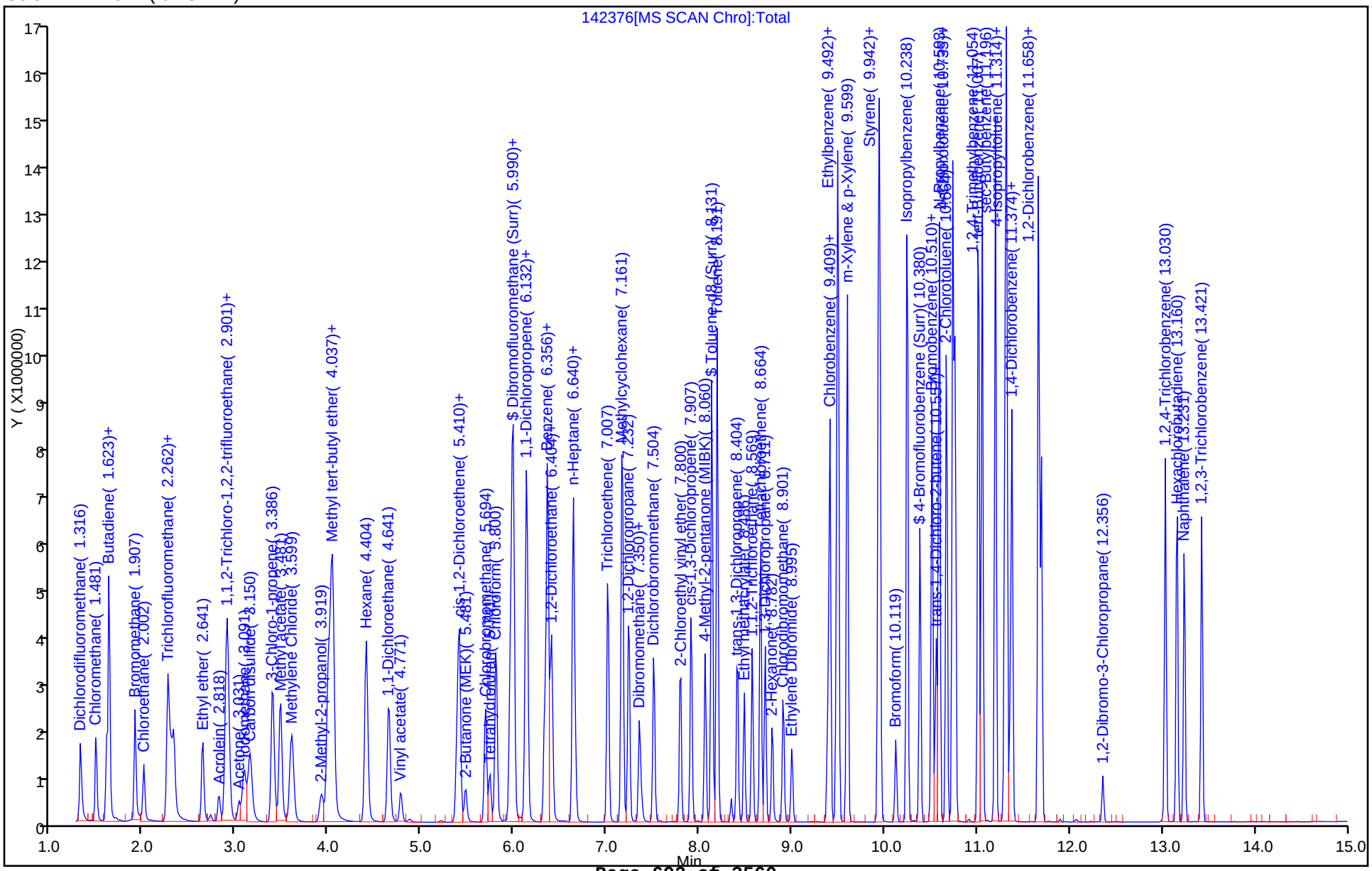
Report Date: 15-Apr-2015 13:05:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142376.D

Injection Date:	13-Apr-2015 15:08:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142377.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 13-Apr-2015 15:30:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 240-0042511-005240-0042511-005
Operator ID: 002808 Instrument ID: A3UX14
Sublist: chrom-8260_14*sub40

Method: \\NCChrom\ChromData\A3UX14\20150413-42511.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:05:39 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 13-Apr-2015 16:05:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.664	6.652	0.012	99	1449521	50.0	50.0	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	96	910407	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	98	463598	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.990	5.978	0.012	92	735669	100.0	98.8	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	95	857945	100.0	96.8	
$ 8 Toluene-d8 (Surr)	98	8.131	8.132	-0.001	94	2691727	100.0	101.7	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	84	888754	100.0	98.5	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	99	867640	100.0	95.8	
12 Chloromethane	50	1.481	1.481	0.000	99	916293	100.0	97.7	
13 Vinyl chloride	62	1.600	1.600	0.000	98	962801	100.0	103.0	
14 Butadiene	54	1.635	1.623	0.012	96	935425	100.0	105.7	
15 Bromomethane	94	1.907	1.907	0.000	88	682039	100.0	94.1	
17 Chloroethane	64	2.002	2.002	0.000	99	418909	100.0	89.6	
18 Dichlorofluoromethane	67	2.262	2.262	0.000	97	1390837	100.0	97.1	
19 Trichlorofluoromethane	101	2.298	2.298	0.000	99	1430805	100.0	107.4	
20 Ethyl ether	59	2.641	2.641	0.000	93	554492	100.0	97.9	
21 Acrolein	56	2.818	2.818	0.000	99	303795	500.0	473.7	
23 1,1-Dichloroethene	96	2.901	2.889	0.012	94	677150	100.0	101.6	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	94	533042	100.0	103.0	
26 Acetone	43	3.031	3.031	0.000	99	338395	200.0	202.7	
27 Iodomethane	142	3.091	3.091	0.000	98	887933	100.0	100.8	
28 Carbon disulfide	76	3.150	3.150	0.000	99	1861727	100.0	100.1	
29 3-Chloro-1-propene	76	3.398	3.398	0.000	91	457283	100.0	110.2	
31 Methyl acetate	43	3.481	3.481	0.000	99	2262763	500.0	470.7	
32 Methylene Chloride	84	3.599	3.599	0.000	96	724120	100.0	101.1	
33 2-Methyl-2-propanol	59	3.919	3.919	0.000	98	696007	1000.0	948.5	
34 trans-1,2-Dichloroethene	96	3.990	3.990	0.000	95	783065	100.0	101.1	
35 Methyl tert-butyl ether	73	4.025	4.025	0.000	95	2231635	100.0	101.5	
36 Acrylonitrile	53	4.049	4.037	0.012	98	1976071	1000.0	946.4	
37 Hexane	86	4.404	4.404	0.000	95	185441	100.0	92.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 1,1-Dichloroethane	63	4.641	4.641	0.000	96	1585743	100.0	99.9	
41 Vinyl acetate	86	4.783	4.783	0.000	97	47281	96.0	93.0	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	87	684127	100.0	103.3	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	84	845592	100.0	101.3	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	100	467221	200.0	183.9	
48 Chlorobromomethane	128	5.694	5.694	0.000	98	347277	100.0	100.2	
50 Tetrahydrofuran	42	5.741	5.741	0.000	90	355251	200.0	199.4	
51 Chloroform	83	5.800	5.800	0.000	94	1522519	100.0	101.9	
52 1,1,1-Trichloroethane	97	5.954	5.954	0.000	97	1291925	100.0	108.1	
53 Cyclohexane	56	5.990	5.990	0.000	94	1526337	100.0	103.9	
54 Carbon tetrachloride	117	6.132	6.120	0.012	97	1221970	100.0	110.7	
55 1,1-Dichloropropene	75	6.144	6.132	0.012	97	1167703	100.0	103.2	
56 Benzene	78	6.357	6.356	0.001	97	3167216	100.0	99.2	
57 Isobutyl alcohol	41	6.392	6.392	0.000	95	494996	2500.0	2336.0	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	98	1025241	100.0	98.8	
60 n-Heptane	100	6.641	6.640	0.000	95	192055	100.0	105.9	
61 Trichloroethene	130	7.007	7.007	0.000	98	794807	100.0	102.0	
64 Methylcyclohexane	83	7.161	7.161	0.000	91	1547331	100.0	105.4	
65 1,2-Dichloropropane	63	7.232	7.232	0.000	94	726327	100.0	100.0	
67 Dibromomethane	93	7.350	7.350	0.000	95	371554	100.0	98.8	
69 1,4-Dioxane	88	7.386	7.386	0.000	98	113715	2000.0	2072.5	
70 Dichlorobromomethane	83	7.504	7.504	0.000	100	1011543	100.0	108.6	
72 2-Chloroethyl vinyl ether	63	7.788	7.788	0.000	91	620488	200.0	216.2	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.001	95	1083564	100.0	108.9	
75 4-Methyl-2-pentanone (MIBK	43	8.060	8.060	0.000	98	1053645	200.0	194.5	
76 Toluene	91	8.191	8.191	0.001	97	3088346	100.0	97.4	
77 trans-1,3-Dichloropropene	75	8.404	8.403	0.001	93	852540	100.0	108.2	
78 Ethyl methacrylate	69	8.486	8.486	0.000	91	538732	100.0	106.0	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	92	468016	100.0	98.2	
80 Tetrachloroethene	164	8.664	8.664	0.000	95	572835	100.0	100.2	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	93	859074	100.0	97.5	
82 2-Hexanone	43	8.782	8.782	0.000	99	582154	200.0	181.4	
84 Chlorodibromomethane	129	8.901	8.900	0.001	92	585799	100.0	113.9	
85 Ethylene Dibromide	107	8.995	8.995	0.000	97	447439	100.0	95.5	
87 Chlorobenzene	112	9.409	9.409	0.000	93	1791634	100.0	99.2	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	93	741300	100.0	105.7	
89 Ethylbenzene	106	9.492	9.492	0.000	99	1018045	100.0	98.1	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	100	1245882	100.0	103.5	
91 o-Xylene	106	9.930	9.930	0.000	98	1303463	100.0	101.0	
92 Styrene	104	9.954	9.954	0.000	95	1739003	100.0	104.0	
93 Bromoform	173	10.119	10.119	0.000	96	310309	100.0	98.3	
94 Isopropylbenzene	105	10.238	10.238	0.000	96	3847910	100.0	104.8	
97 Bromobenzene	156	10.510	10.510	0.000	96	691694	100.0	99.5	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.510	0.000	93	606257	100.0	98.3	
98 1,2,3-Trichloropropane	110	10.557	10.557	0.000	84	178772	100.0	94.0	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	80	178933	100.0	107.1	
100 N-Propylbenzene	120	10.593	10.593	0.000	99	935099	100.0	105.4	
101 2-Chlorotoluene	126	10.664	10.664	0.000	95	781902	100.0	104.2	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	93	3185948	100.0	106.3	
103 4-Chlorotoluene	126	10.758	10.758	0.000	98	737522	100.0	102.5	
105 tert-Butylbenzene	119	11.007	11.007	0.000	93	2982351	100.0	110.2	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	94	3166287	100.0	107.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 sec-Butylbenzene	105	11.196	11.196	0.000	94	4326268	100.0	110.4	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	97	1438319	100.0	100.3	
111 4-Isopropyltoluene	119	11.315	11.314	0.000	97	3528038	100.0	109.4	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	93	1386574	100.0	96.5	
115 n-Butylbenzene	91	11.658	11.658	0.000	98	3323764	100.0	107.6	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	97	1359660	100.0	98.7	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	82	110998	100.0	106.0	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	94	996774	100.0	94.2	
120 Hexachlorobutadiene	225	13.160	13.160	0.000	98	627033	100.0	96.8	
121 Naphthalene	128	13.231	13.231	0.000	98	2114240	100.0	99.5	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	94	887187	100.0	92.3	
S 134 1,2-Dichloroethene, Total	96				0		200.0	202.4	
S 135 1,3-Dichloropropene, Total	75				0		200.0	217.1	
S 136 Xylenes, Total	106				0		200.0	204.5	
S 137 Trihalomethanes, Total	1				0		400.0	422.7	

Reagents:

vm50ss_00197	Amount Added:	10.00	Units: uL
VMRGAS_00097	Amount Added:	10.00	Units: uL
VMAROLISTDW_00095	Amount Added:	10.00	Units: uL
VMRPRIMW_00121	Amount Added:	10.00	Units: uL
VM250-IS_00028	Amount Added:	1.00	Units: uL

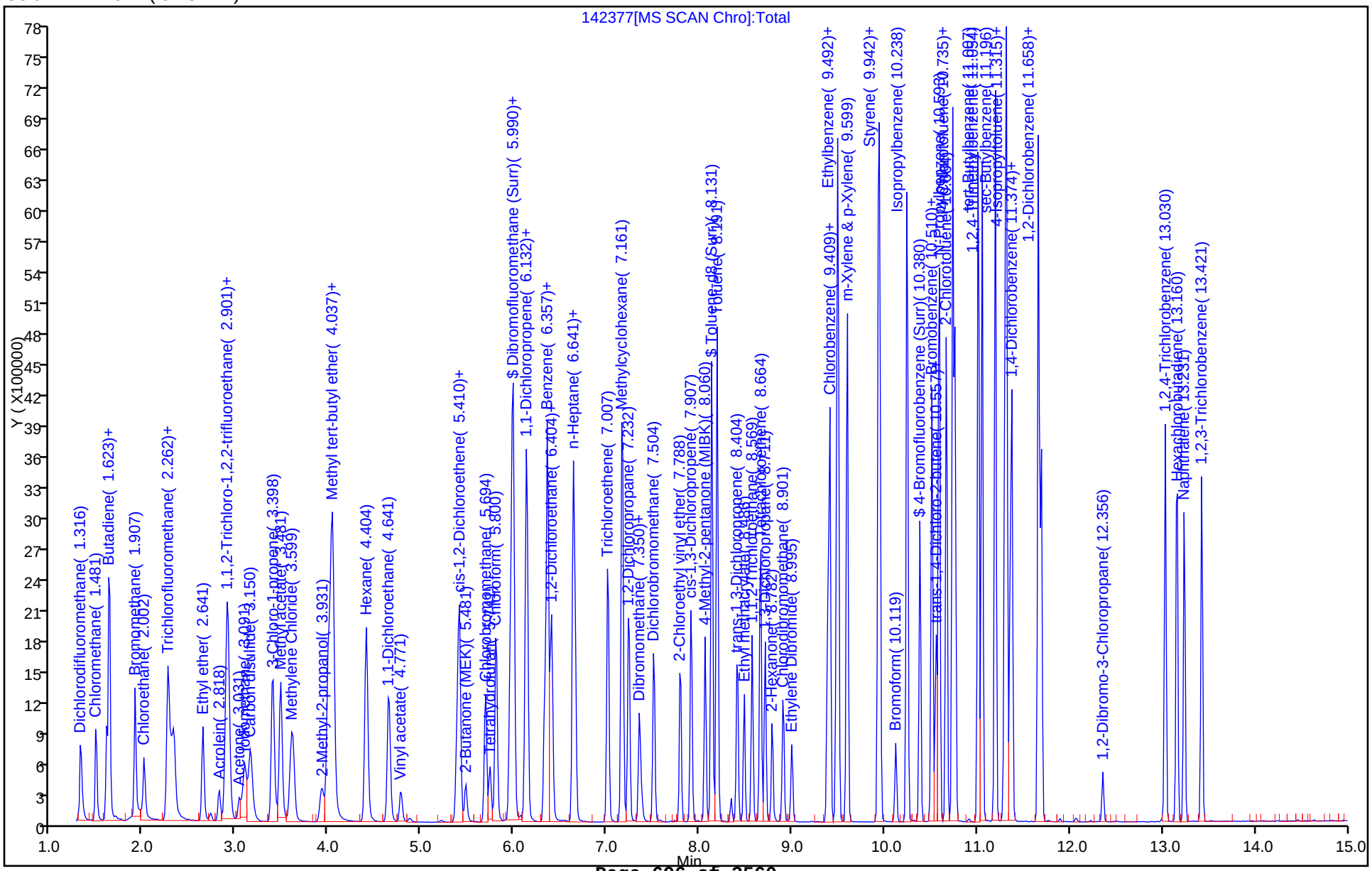
Report Date: 15-Apr-2015 13:05:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142377.D

Injection Date:	13-Apr-2015 15:30:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142378.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 13-Apr-2015 15:52:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Misc. Info.: 240-0042511-006240-0042511-006
Operator ID: 002808 Instrument ID: A3UX14
Sublist: chrom-8260_14*sub40

Method: \\NCChrom\ChromData\A3UX14\20150413-42511.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:05:40 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 13-Apr-2015 16:20:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.652	6.652	0.000	99	1563167	50.0	50.0	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	96	968462	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	98	482391	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.978	5.978	0.000	92	382452	50.0	46.8	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	94	450544	50.0	46.0	
$ 8 Toluene-d8 (Surr)	98	8.131	8.131	0.000	94	1394204	50.0	48.0	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	84	467117	50.0	48.4	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	99	457072	50.0	46.8	
12 Chloromethane	50	1.481	1.481	0.000	99	462717	50.0	45.8	
13 Vinyl chloride	62	1.600	1.600	0.000	98	484631	50.0	48.1	
14 Butadiene	54	1.623	1.623	0.000	95	485186	50.0	50.8	
15 Bromomethane	94	1.907	1.907	0.000	89	357895	50.0	45.8	
17 Chloroethane	64	2.002	2.002	0.000	99	219241	50.0	43.4	
18 Dichlorofluoromethane	67	2.262	2.262	0.000	97	701824	50.0	45.4	
19 Trichlorofluoromethane	101	2.298	2.298	0.000	99	710832	50.0	49.5	
20 Ethyl ether	59	2.641	2.641	0.000	90	302728	50.0	49.6	
21 Acrolein	56	2.818	2.818	0.000	97	159580	250.0	230.7	
23 1,1-Dichloroethene	96	2.889	2.889	0.000	94	343454	50.0	47.8	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	94	277007	50.0	49.6	
26 Acetone	43	3.031	3.031	0.000	99	193996	100.0	103.3	
27 Iodomethane	142	3.091	3.091	0.000	98	448033	50.0	47.2	
28 Carbon disulfide	76	3.150	3.150	0.000	99	897605	50.0	45.1	
29 3-Chloro-1-propene	76	3.398	3.398	0.000	90	218811	50.0	48.9	
31 Methyl acetate	43	3.481	3.481	0.000	99	1249988	250.0	241.1	
32 Methylene Chloride	84	3.599	3.599	0.000	97	384215	50.0	48.2	
33 2-Methyl-2-propanol	59	3.919	3.919	0.000	98	370274	500.0	467.9	
34 trans-1,2-Dichloroethene	96	3.990	3.990	0.000	95	403974	50.0	48.3	
35 Methyl tert-butyl ether	73	4.025	4.025	0.000	95	1180484	50.0	49.8	
36 Acrylonitrile	53	4.037	4.037	0.000	100	1091995	500.0	484.9	
37 Hexane	86	4.404	4.404	0.000	95	99416	50.0	46.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 1,1-Dichloroethane	63	4.641	4.641	0.000	96	830332	50.0	48.5	
41 Vinyl acetate	86	4.783	4.783	0.000	97	26064	48.0	47.5	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	88	344466	50.0	48.2	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	84	446882	50.0	49.7	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	100	272637	100.0	99.5	
48 Chlorobromomethane	128	5.694	5.694	0.000	98	183366	50.0	49.1	
50 Tetrahydrofuran	42	5.741	5.741	0.000	88	193974	100.0	100.9	
51 Chloroform	83	5.800	5.800	0.000	93	786940	50.0	48.8	
52 1,1,1-Trichloroethane	97	5.954	5.954	0.000	98	652549	50.0	50.6	
53 Cyclohexane	56	5.990	5.990	0.000	94	787344	50.0	49.7	
54 Carbon tetrachloride	117	6.120	6.120	0.000	96	614529	50.0	51.6	
55 1,1-Dichloropropene	75	6.132	6.132	0.000	96	615836	50.0	50.5	
56 Benzene	78	6.356	6.356	0.000	97	1634609	50.0	47.5	
57 Isobutyl alcohol	41	6.392	6.392	0.000	95	278842	1250.0	1220.2	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	98	546042	50.0	48.8	
60 n-Heptane	100	6.640	6.640	0.000	95	103552	50.0	53.0	
61 Trichloroethene	130	7.007	7.007	0.000	97	407714	50.0	48.5	
64 Methylcyclohexane	83	7.161	7.161	0.000	93	806377	50.0	50.9	
65 1,2-Dichloropropane	63	7.232	7.232	0.000	94	399654	50.0	51.0	
67 Dibromomethane	93	7.350	7.350	0.000	94	197921	50.0	48.8	
69 1,4-Dioxane	88	7.386	7.386	0.000	94	62788	1000.0	1061.2	
70 Dichlorobromomethane	83	7.504	7.504	0.000	99	529306	50.0	52.7	
72 2-Chloroethyl vinyl ether	63	7.788	7.788	0.000	91	336468	100.0	108.7	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.000	95	570017	50.0	53.1	
75 4-Methyl-2-pentanone (MIBK	43	8.060	8.060	0.000	98	569478	100.0	98.8	
76 Toluene	91	8.191	8.191	0.000	97	1606889	50.0	47.7	
77 trans-1,3-Dichloropropene	75	8.403	8.403	0.000	93	449058	50.0	53.6	
78 Ethyl methacrylate	69	8.486	8.486	0.000	91	293163	50.0	54.2	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	94	246168	50.0	48.6	
80 Tetrachloroethene	164	8.664	8.664	0.000	95	296860	50.0	48.8	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	93	469521	50.0	50.1	
82 2-Hexanone	43	8.782	8.782	0.000	99	326888	100.0	95.7	
84 Chlorodibromomethane	129	8.900	8.900	0.000	89	297773	50.0	54.4	
85 Ethylene Dibromide	107	8.995	8.995	0.000	100	240352	50.0	48.2	
87 Chlorobenzene	112	9.409	9.409	0.000	92	934897	50.0	48.7	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	93	372612	50.0	49.9	
89 Ethylbenzene	106	9.492	9.492	0.000	99	542260	50.0	49.1	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	99	635821	50.0	49.6	
91 o-Xylene	106	9.930	9.930	0.000	98	674856	50.0	49.2	
92 Styrene	104	9.954	9.954	0.000	94	895921	50.0	50.4	
93 Bromoform	173	10.119	10.119	0.000	96	151824	50.0	45.6	
94 Isopropylbenzene	105	10.238	10.238	0.000	97	1942109	50.0	49.7	
97 Bromobenzene	156	10.510	10.510	0.000	96	356469	50.0	49.3	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.510	0.000	94	315778	50.0	49.2	
98 1,2,3-Trichloropropane	110	10.557	10.557	0.000	83	93864	50.0	47.4	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	82	92820	50.0	53.4	
100 N-Propylbenzene	120	10.593	10.593	0.000	99	461013	50.0	49.9	
101 2-Chlorotoluene	126	10.664	10.664	0.000	95	396380	50.0	50.7	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	92	1608722	50.0	51.6	
103 4-Chlorotoluene	126	10.758	10.758	0.000	99	375812	50.0	50.2	
105 tert-Butylbenzene	119	11.007	11.007	0.000	93	1510028	50.0	53.6	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	95	1564525	50.0	50.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 sec-Butylbenzene	105	11.196	11.196	0.000	94	2147606	50.0	52.6	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	97	715319	50.0	48.0	
111 4-Isopropyltoluene	119	11.314	11.314	0.000	97	1723589	50.0	51.4	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	92	696189	50.0	46.5	
115 n-Butylbenzene	91	11.658	11.658	0.000	98	1609987	50.0	50.1	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	97	687234	50.0	47.9	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	78	55324	50.0	50.8	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	94	497881	50.0	45.2	
120 Hexachlorobutadiene	225	13.160	13.160	0.000	98	323688	50.0	48.0	
121 Naphthalene	128	13.231	13.231	0.000	98	1040438	50.0	47.1	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	94	458419	50.0	45.8	
S 134 1,2-Dichloroethene, Total	96				0		100.0	98.0	
S 135 1,3-Dichloropropene, Total	75				0		100.0	106.7	
S 136 Xylenes, Total	106				0		100.0	98.8	
S 137 Trihalomethanes, Total	1				0		200.0	201.6	

Reagents:

vm50ss_00197	Amount Added:	5.00	Units: uL
VMRGAS_00097	Amount Added:	5.00	Units: uL
VMAROLISTDW_00095	Amount Added:	5.00	Units: uL
VMRPRIMW_00121	Amount Added:	5.00	Units: uL
VM250-IS_00028	Amount Added:	1.00	Units: uL

Report Date: 15-Apr-2015 13:05:41 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142378.D

Injection Date: 13-Apr-2015 15:52:30 Instrument ID: A3UX14 Operator ID: 002808

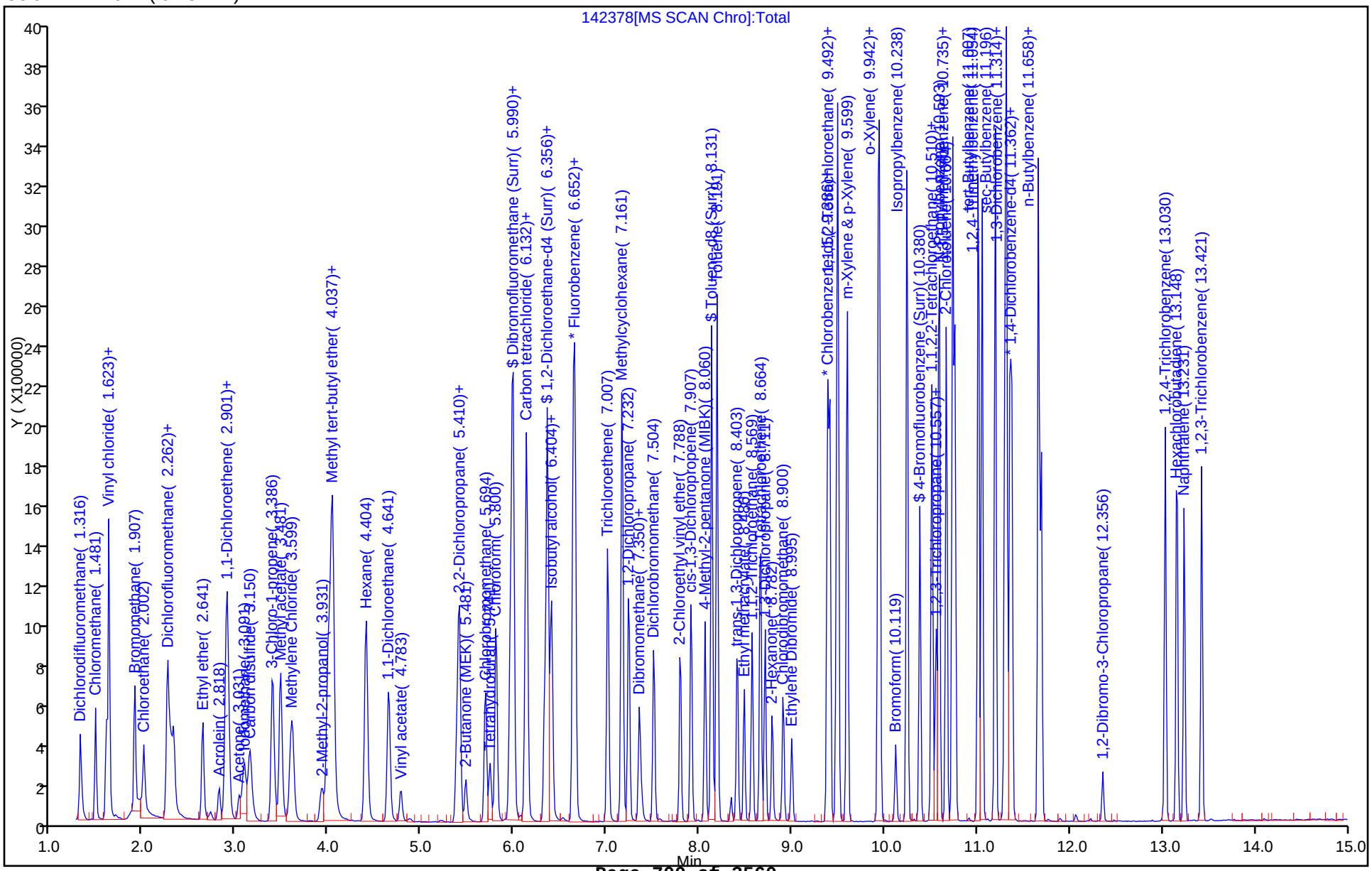
Lims ID: ICIS Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8260_14 Limit Group: MSV 8260DOD ICAL

Column: DB-624 (0.18 mm)



Report Date: 15-Apr-2015 13:05:42 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142379.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 13-Apr-2015 16:13:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 240-0042511-007240-0042511-007
Operator ID: 002808 Instrument ID: A3UX14
Sublist: chrom-8260_14*sub40

Method: \\NCChrom\ChromData\A3UX14\20150413-42511.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:05:42 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 13-Apr-2015 16:37:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.652	6.652	0.000	99	1531158	50.0	50.0	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	96	913819	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	97	459525	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.990	5.978	0.012	92	163082	20.0	19.5	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	93	199681	20.0	19.6	
$ 8 Toluene-d8 (Surr)	98	8.131	8.131	0.000	94	591341	20.0	20.0	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	85	189114	20.0	19.0	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	99	177199	20.0	18.5	
12 Chloromethane	50	1.481	1.481	0.000	99	191317	20.0	19.3	
13 Vinyl chloride	62	1.600	1.600	0.000	97	203950	20.0	20.6	
14 Butadiene	54	1.623	1.623	0.000	94	189400	20.0	20.3	
15 Bromomethane	94	1.907	1.907	0.000	89	147460	20.0	19.3	
17 Chloroethane	64	2.002	2.002	0.000	98	84998	20.0	17.0	
18 Dichlorofluoromethane	67	2.262	2.262	0.000	97	282168	20.0	18.6	
19 Trichlorofluoromethane	101	2.298	2.298	0.000	97	282780	20.0	20.1	
20 Ethyl ether	59	2.641	2.641	0.000	93	126224	20.0	21.1	
21 Acrolein	56	2.818	2.818	0.000	97	68324	100.0	100.8	
23 1,1-Dichloroethene	96	2.889	2.889	0.000	94	133038	20.0	18.9	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	92	112842	20.0	20.6	
26 Acetone	43	3.031	3.031	0.000	98	92206	40.0	45.2	
27 Iodomethane	142	3.091	3.091	0.000	98	177433	20.0	19.1	
28 Carbon disulfide	76	3.150	3.150	0.000	99	314133	20.0	16.6	
29 3-Chloro-1-propene	76	3.398	3.398	0.000	90	86558	20.0	19.8	
31 Methyl acetate	43	3.481	3.481	0.000	99	495871	100.0	97.6	
32 Methylene Chloride	84	3.611	3.599	0.012	98	163840	20.0	19.2	
33 2-Methyl-2-propanol	59	3.931	3.919	0.012	97	152745	200.0	197.1	
34 trans-1,2-Dichloroethene	96	3.990	3.990	0.000	95	156512	20.0	19.1	
35 Methyl tert-butyl ether	73	4.025	4.025	0.000	96	451555	20.0	19.5	
36 Acrylonitrile	53	4.049	4.037	0.012	100	452518	200.0	205.2	
37 Hexane	86	4.404	4.404	0.000	94	37389	20.0	17.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 1,1-Dichloroethane	63	4.653	4.641	0.012	96	323268	20.0	19.3	
41 Vinyl acetate	86	4.783	4.783	0.000	97	9880	19.2	18.4	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	88	133099	20.0	19.0	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	84	170545	20.0	19.4	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	100	108467	40.0	40.4	
48 Chlorobromomethane	128	5.694	5.694	0.000	97	68991	20.0	18.9	
50 Tetrahydrofuran	42	5.741	5.741	0.000	91	75764	40.0	40.3	
51 Chloroform	83	5.800	5.800	0.000	93	305573	20.0	19.4	
52 1,1,1-Trichloroethane	97	5.954	5.954	0.000	97	242273	20.0	19.2	
53 Cyclohexane	56	5.990	5.990	0.000	95	310564	20.0	20.0	
54 Carbon tetrachloride	117	6.132	6.120	0.012	96	228993	20.0	19.6	
55 1,1-Dichloropropene	75	6.144	6.132	0.012	97	229350	20.0	19.2	
56 Benzene	78	6.356	6.356	0.000	97	626745	20.0	18.6	
57 Isobutyl alcohol	41	6.392	6.392	0.000	92	119110	500.0	532.1	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	98	212661	20.0	19.4	
60 n-Heptane	100	6.640	6.640	0.000	96	39100	20.0	20.4	
61 Trichloroethene	130	7.007	7.007	0.000	96	155451	20.0	18.9	
64 Methylcyclohexane	83	7.161	7.161	0.000	94	301634	20.0	19.5	
65 1,2-Dichloropropane	63	7.232	7.232	0.000	93	144880	20.0	18.9	
67 Dibromomethane	93	7.350	7.350	0.000	95	77265	20.0	19.4	
69 1,4-Dioxane	88	7.386	7.386	0.000	96	23755	400.0	409.9	
70 Dichlorobromomethane	83	7.504	7.504	0.000	99	186337	20.0	18.9	
72 2-Chloroethyl vinyl ether	63	7.788	7.788	0.000	92	113146	40.0	37.3	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.001	94	203722	20.0	19.4	
75 4-Methyl-2-pentanone (MIBK	43	8.060	8.060	0.000	98	221448	40.0	40.7	
76 Toluene	91	8.191	8.191	0.001	96	605006	20.0	19.0	
77 trans-1,3-Dichloropropene	75	8.404	8.403	0.001	94	153697	20.0	19.4	
78 Ethyl methacrylate	69	8.486	8.486	0.000	91	96399	20.0	18.9	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	94	94385	20.0	19.7	
80 Tetrachloroethene	164	8.664	8.664	0.000	95	108741	20.0	19.0	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	93	169075	20.0	19.1	
82 2-Hexanone	43	8.782	8.782	0.000	98	127574	40.0	39.6	
84 Chlorodibromomethane	129	8.901	8.900	0.001	90	101147	20.0	19.6	
85 Ethylene Dibromide	107	8.995	8.995	0.000	99	89096	20.0	18.9	
87 Chlorobenzene	112	9.409	9.409	0.000	93	338223	20.0	18.7	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	91	143891	20.0	20.4	
89 Ethylbenzene	106	9.492	9.492	0.000	99	193684	20.0	18.6	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	99	230963	20.0	19.1	
91 o-Xylene	106	9.930	9.930	0.000	98	255173	20.0	19.7	
92 Styrene	104	9.954	9.954	0.000	93	307027	20.0	18.3	
93 Bromoform	173	10.119	10.119	0.000	93	49661	20.0	16.3	
94 Isopropylbenzene	105	10.238	10.238	0.000	96	711761	20.0	19.3	
97 Bromobenzene	156	10.510	10.510	0.000	96	126037	20.0	18.3	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.510	0.000	95	122501	20.0	20.0	
98 1,2,3-Trichloropropane	110	10.557	10.557	0.000	82	35663	20.0	18.9	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	76	33972	20.0	20.5	
100 N-Propylbenzene	120	10.593	10.593	0.000	98	176214	20.0	20.0	
101 2-Chlorotoluene	126	10.664	10.664	0.000	95	147338	20.0	19.8	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	94	595811	20.0	20.1	
103 4-Chlorotoluene	126	10.758	10.758	0.000	99	138477	20.0	19.4	
105 tert-Butylbenzene	119	11.007	11.007	0.000	93	554434	20.0	20.7	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	95	586453	20.0	20.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 sec-Butylbenzene	105	11.196	11.196	0.000	95	789075	20.0	20.3	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	97	262430	20.0	18.5	
111 4-Isopropyltoluene	119	11.314	11.314	0.000	96	641089	20.0	20.1	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	95	267730	20.0	18.8	
115 n-Butylbenzene	91	11.658	11.658	0.000	98	610718	20.0	20.0	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	96	266239	20.0	19.5	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	80	21105	20.0	20.3	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	95	204327	20.0	19.5	
120 Hexachlorobutadiene	225	13.160	13.160	0.000	97	132443	20.0	20.6	
121 Naphthalene	128	13.231	13.231	0.000	97	437825	20.0	20.8	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	96	190657	20.0	20.0	
S 134 1,2-Dichloroethene, Total	96				0		40.0	38.5	
S 135 1,3-Dichloropropene, Total	75				0		40.0	38.8	
S 136 Xylenes, Total	106				0		40.0	38.8	
S 137 Trihalomethanes, Total	1				0		80.0	74.2	

Reagents:

vm50ss_00197	Amount Added:	2.00	Units: uL
VMRGAS_00097	Amount Added:	2.00	Units: uL
VMAROLISTDW_00095	Amount Added:	2.00	Units: uL
VMRPRIMW_00121	Amount Added:	2.00	Units: uL
VM250-IS_00028	Amount Added:	1.00	Units: uL

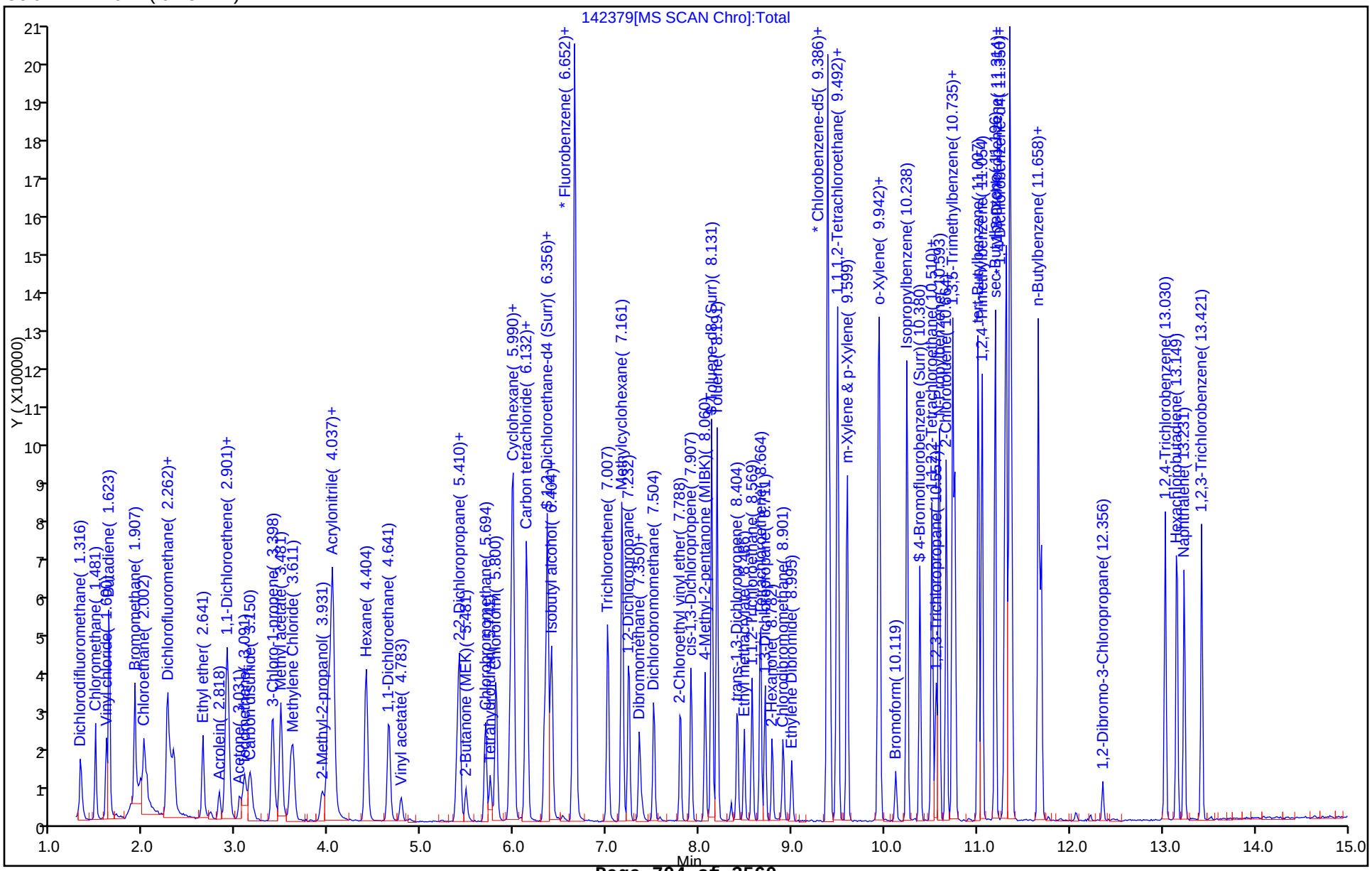
Report Date: 15-Apr-2015 13:05:42 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142379.D

Injection Date:	13-Apr-2015 16:13:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



Report Date: 15-Apr-2015 13:05:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142380.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 13-Apr-2015 16:34:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 240-0042511-008240-0042511-008
Operator ID: 002808 Instrument ID: A3UX14
Sublist: chrom-8260_14*sub40

Method: \\NCChrom\ChromData\A3UX14\20150413-42511.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:05:43 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 14-Apr-2015 09:30:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.652	6.652	0.000	99	1490557	50.0	50.0	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	95	843532	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	96	445677	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.978	5.978	0.000	92	85223	10.0	9.75	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	94	106146	10.0	9.64	
$ 8 Toluene-d8 (Surr)	98	8.132	8.131	0.001	94	304451	10.0	9.86	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	87	97242	10.0	8.79	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	98	92504	10.0	9.93	
12 Chloromethane	50	1.481	1.481	0.000	98	96855	10.0	10.0	
13 Vinyl chloride	62	1.600	1.600	0.000	98	96204	10.0	10.0	
14 Butadiene	54	1.623	1.623	0.000	94	94160	10.0	10.3	
15 Bromomethane	94	1.907	1.907	0.000	89	68831	10.0	9.24	
17 Chloroethane	64	2.002	2.002	0.000	97	45412	10.0	9.21	
18 Dichlorofluoromethane	67	2.262	2.262	0.000	97	150827	10.0	10.2	
19 Trichlorofluoromethane	101	2.298	2.298	0.000	97	132513	10.0	9.67	
20 Ethyl ether	59	2.641	2.641	0.000	96	56479	10.0	9.70	
21 Acrolein	56	2.819	2.818	0.001	96	29969	50.0	45.4	
23 1,1-Dichloroethene	96	2.890	2.889	0.001	93	67852	10.0	9.90	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	94	55056	10.0	10.3	
26 Acetone	43	3.032	3.031	0.001	99	49896	20.0	20.9	
27 Iodomethane	142	3.079	3.091	-0.012	99	94414	10.0	10.4	
28 Carbon disulfide	76	3.150	3.150	0.000	100	152748	10.0	8.64	
29 3-Chloro-1-propene	76	3.398	3.398	0.000	89	40910	10.0	9.59	
31 Methyl acetate	43	3.481	3.481	0.000	99	241583	50.0	48.9	
32 Methylene Chloride	84	3.600	3.599	0.001	98	86599	10.0	8.99	
33 2-Methyl-2-propanol	59	3.931	3.919	0.012	98	73346	100.0	97.2	
34 trans-1,2-Dichloroethene	96	3.990	3.990	0.000	95	81471	10.0	10.2	
35 Methyl tert-butyl ether	73	4.026	4.025	0.001	96	217733	10.0	9.63	
36 Acrylonitrile	53	4.049	4.037	0.012	98	222251	100.0	103.5	
37 Hexane	86	4.404	4.404	0.000	96	19822	10.0	9.61	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 1,1-Dichloroethane	63	4.641	4.641	0.000	97	166340	10.0	10.2	
41 Vinyl acetate	86	4.795	4.783	0.012	96	5037	9.60	9.63	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	90	63852	10.0	9.38	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	84	83095	10.0	9.69	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	100	50950	20.0	19.5	
48 Chlorobromomethane	128	5.694	5.694	0.000	96	36254	10.0	10.2	
50 Tetrahydrofuran	42	5.741	5.741	0.000	89	37502	20.0	20.5	
51 Chloroform	83	5.800	5.800	0.000	93	153605	10.0	10.0	
52 1,1,1-Trichloroethane	97	5.954	5.954	0.000	97	121515	10.0	9.89	
53 Cyclohexane	56	5.990	5.990	0.000	93	156030	10.0	10.3	
54 Carbon tetrachloride	117	6.120	6.120	0.000	96	109773	10.0	9.67	
55 1,1-Dichloropropene	75	6.132	6.132	0.000	95	115979	10.0	9.96	
56 Benzene	78	6.357	6.356	0.001	97	327023	10.0	9.97	
57 Isobutyl alcohol	41	6.392	6.392	0.000	97	53826	250.0	247.0	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	98	104317	10.0	9.78	
60 n-Heptane	100	6.641	6.640	0.001	97	18069	10.0	9.69	
61 Trichloroethene	130	7.007	7.007	0.000	97	80070	10.0	10.0	
64 Methylcyclohexane	83	7.161	7.161	0.000	92	158363	10.0	10.5	
65 1,2-Dichloropropane	63	7.232	7.232	0.000	94	73589	10.0	9.85	
67 Dibromomethane	93	7.351	7.350	0.001	95	36357	10.0	9.40	
69 1,4-Dioxane	88	7.386	7.386	0.000	88	10679	200.0	189.3	
70 Dichlorobromomethane	83	7.504	7.504	0.000	98	90757	10.0	9.47	
72 2-Chloroethyl vinyl ether	63	7.788	7.788	0.000	92	51042	20.0	17.3	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.001	94	90917	10.0	8.88	
75 4-Methyl-2-pentanone (MIBK	43	8.061	8.060	0.001	96	101191	20.0	20.2	
76 Toluene	91	8.191	8.191	0.001	98	294873	10.0	10.0	
77 trans-1,3-Dichloropropene	75	8.404	8.403	0.001	93	70034	10.0	9.60	
78 Ethyl methacrylate	69	8.487	8.486	0.000	89	44668	10.0	9.48	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	92	44249	10.0	10.0	
80 Tetrachloroethene	164	8.664	8.664	0.000	94	57678	10.0	10.9	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	93	80131	10.0	9.81	
82 2-Hexanone	43	8.782	8.782	0.000	98	56659	20.0	19.1	
84 Chlorodibromomethane	129	8.901	8.900	0.001	90	42516	10.0	8.92	
85 Ethylene Dibromide	107	8.995	8.995	0.000	100	42951	10.0	9.89	
87 Chlorobenzene	112	9.409	9.409	0.000	92	163776	10.0	9.79	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	91	67858	10.0	10.4	
89 Ethylbenzene	106	9.492	9.492	0.000	99	92043	10.0	9.57	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	100	111070	10.0	9.95	
91 o-Xylene	106	9.930	9.930	0.000	98	121591	10.0	10.2	
92 Styrene	104	9.954	9.954	0.000	93	139589	10.0	9.01	
93 Bromoform	173	10.119	10.119	0.000	94	22288	10.0	8.36	
94 Isopropylbenzene	105	10.238	10.238	0.000	96	342682	10.0	10.1	
97 Bromobenzene	156	10.510	10.510	0.000	95	63288	10.0	9.47	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.510	0.000	94	58707	10.0	9.90	
98 1,2,3-Trichloropropane	110	10.557	10.557	0.000	84	18121	10.0	9.91	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	67	15965	10.0	9.94	
100 N-Propylbenzene	120	10.593	10.593	0.000	99	84827	10.0	9.95	
101 2-Chlorotoluene	126	10.664	10.664	0.000	95	71101	10.0	9.85	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	92	291003	10.0	10.1	
103 4-Chlorotoluene	126	10.758	10.758	0.000	99	70232	10.0	10.2	
105 tert-Butylbenzene	119	11.007	11.007	0.000	92	275698	10.0	10.6	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	95	285694	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 sec-Butylbenzene	105	11.196	11.196	0.000	95	387150	10.0	10.3	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	96	128163	10.0	9.30	
111 4-Isopropyltoluene	119	11.315	11.314	0.001	97	310056	10.0	10.0	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	96	134188	10.0	9.71	
115 n-Butylbenzene	91	11.658	11.658	0.000	98	293103	10.0	9.87	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	97	128584	10.0	9.71	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	79	9562	10.0	9.50	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	93	101251	10.0	9.96	
120 Hexachlorobutadiene	225	13.161	13.160	0.000	97	65010	10.0	10.4	
121 Naphthalene	128	13.232	13.231	0.001	97	216513	10.0	10.6	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	95	96369	10.0	10.4	
S 134 1,2-Dichloroethene, Total	96				0		20.0	19.9	
S 135 1,3-Dichloropropene, Total	75				0		20.0	18.5	
S 136 Xylenes, Total	106				0		20.0	20.1	
S 137 Trihalomethanes, Total	1				0		40.0	36.8	

Reagents:

vm50ss_00197	Amount Added:	1.00	Units: uL
VMRGAS_00097	Amount Added:	1.00	Units: uL
VMAROLISTDW_00095	Amount Added:	1.00	Units: uL
VMRPRIMW_00121	Amount Added:	1.00	Units: uL
VM250-IS_00028	Amount Added:	1.00	Units: uL

Report Date: 15-Apr-2015 13:05:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142380.D

Injection Date: 13-Apr-2015 16:34:30 Instrument ID: A3UX14 Operator ID: 002808

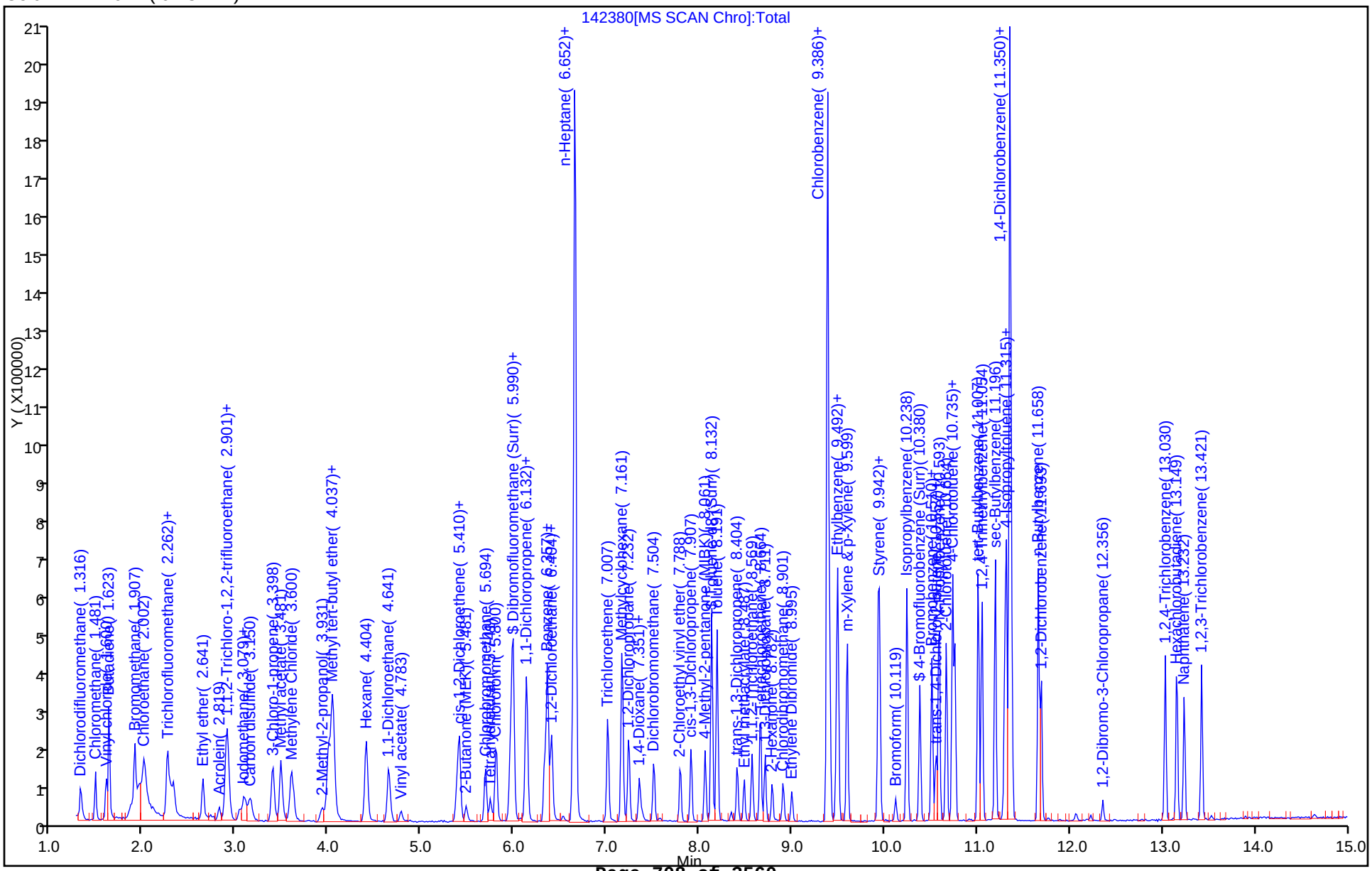
Lims ID: IC Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260_14 Limit Group: MSV 8260DOD ICAL

Column: DB-624 (0.18 mm)



Report Date: 15-Apr-2015 13:05:45 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142381.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 13-Apr-2015 16:56:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 240-0042511-009240-0042511-009
Operator ID: 002808 Instrument ID: A3UX14
Sublist: chrom-8260_14*sub40

Method: \\NCChrom\ChromData\A3UX14\20150413-42511.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:05:44 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 14-Apr-2015 09:31:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.652	6.652	0.000	99	1381703	50.0	50.0	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	95	761755	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	96	416353	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.978	5.978	0.000	92	47891	5.00	5.30	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	97	66180	5.00	5.73	
$ 8 Toluene-d8 (Surr)	98	8.131	8.131	0.000	94	188391	5.00	5.84	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	84	65166	5.00	5.54	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	99	50741	5.00	5.88	
12 Chloromethane	50	1.481	1.481	0.000	99	53585	5.00	6.00	
13 Vinyl chloride	62	1.600	1.600	0.000	98	53538	5.00	6.01	
14 Butadiene	54	1.623	1.623	0.000	92	52716	5.00	6.25	
15 Bromomethane	94	1.907	1.907	0.000	91	39874	5.00	5.77	
17 Chloroethane	64	2.002	2.002	0.000	93	26656	5.00	5.74	
18 Dichlorofluoromethane	67	2.250	2.262	-0.012	97	78179	5.00	5.72	
19 Trichlorofluoromethane	101	2.298	2.298	0.000	96	74135	5.00	5.84	
20 Ethyl ether	59	2.641	2.641	0.000	95	29922	5.00	5.54	
21 Acrolein	56	2.818	2.818	0.000	91	16437	25.0	26.9	
23 1,1-Dichloroethene	96	2.901	2.889	0.012	93	33604	5.00	5.29	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	94	27908	5.00	5.65	
26 Acetone	43	3.031	3.031	0.000	99	29020	10.0	9.52	
27 Iodomethane	142	3.091	3.091	0.000	99	43527	5.00	5.18	
28 Carbon disulfide	76	3.150	3.150	0.000	99	73508	5.00	4.83	
29 3-Chloro-1-propene	76	3.386	3.398	-0.012	89	20829	5.00	5.27	
31 Methyl acetate	43	3.481	3.481	0.000	99	119335	25.0	26.0	
32 Methylene Chloride	84	3.599	3.599	0.000	97	52367	5.00	4.78	
33 2-Methyl-2-propanol	59	3.931	3.919	0.012	96	36553	50.0	52.3	
34 trans-1,2-Dichloroethene	96	4.002	3.990	0.012	93	40090	5.00	5.43	
35 Methyl tert-butyl ether	73	4.025	4.025	0.000	95	109518	5.00	5.23	
36 Acrylonitrile	53	4.049	4.037	0.012	98	109143	50.0	54.8	
37 Hexane	86	4.404	4.404	0.000	94	10845	5.00	5.67	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 1,1-Dichloroethane	63	4.653	4.641	0.011	96	80045	5.00	5.29	
41 Vinyl acetate	86	4.783	4.783	0.000	97	2474	4.80	5.10	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	87	34334	5.00	5.44	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	84	42485	5.00	5.34	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	99	23267	10.0	9.61	
48 Chlorobromomethane	128	5.682	5.694	-0.012	92	18399	5.00	5.57	
50 Tetrahydrofuran	42	5.741	5.741	0.000	90	17412	10.0	10.3	
51 Chloroform	83	5.812	5.800	0.012	93	75352	5.00	5.29	
52 1,1,1-Trichloroethane	97	5.954	5.954	0.000	97	57375	5.00	5.04	
53 Cyclohexane	56	5.990	5.990	0.000	95	78065	5.00	5.57	
54 Carbon tetrachloride	117	6.132	6.120	0.012	96	53593	5.00	5.09	
55 1,1-Dichloropropene	75	6.132	6.132	0.000	96	59973	5.00	5.56	
56 Benzene	78	6.356	6.356	0.000	97	157728	5.00	5.19	
57 Isobutyl alcohol	41	6.392	6.392	0.000	96	26860	125.0	133.0	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	97	52718	5.00	5.33	
60 n-Heptane	100	6.640	6.640	0.000	96	9461	5.00	5.47	
61 Trichloroethene	130	7.007	7.007	0.000	97	41091	5.00	5.53	
64 Methylcyclohexane	83	7.161	7.161	0.000	92	79404	5.00	5.68	
65 1,2-Dichloropropane	63	7.232	7.232	0.000	93	35567	5.00	5.14	
67 Dibromomethane	93	7.350	7.350	0.000	91	20026	5.00	5.58	
69 1,4-Dioxane	88	7.386	7.386	0.000	90	5516	100.0	105.5	
70 Dichlorobromomethane	83	7.504	7.504	0.000	99	40005	5.00	4.51	
72 2-Chloroethyl vinyl ether	63	7.788	7.788	0.000	91	22551	10.0	8.24	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.001	94	43542	5.00	4.59	
75 4-Methyl-2-pentanone (MIBK	43	8.060	8.060	0.000	98	50010	10.0	11.0	
76 Toluene	91	8.191	8.191	0.001	97	151159	5.00	5.70	
77 trans-1,3-Dichloropropene	75	8.404	8.403	0.001	93	30102	5.00	4.57	
78 Ethyl methacrylate	69	8.486	8.486	0.000	95	19595	5.00	4.61	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	92	22526	5.00	5.65	
80 Tetrachloroethene	164	8.664	8.664	0.000	97	27698	5.00	5.79	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	90	41579	5.00	5.64	
82 2-Hexanone	43	8.782	8.782	0.000	98	24881	10.0	9.26	
84 Chlorodibromomethane	129	8.901	8.900	0.001	93	19314	5.00	4.49	
85 Ethylene Dibromide	107	8.995	8.995	0.000	94	21652	5.00	5.52	
87 Chlorobenzene	112	9.409	9.409	0.000	92	83863	5.00	5.55	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	88	32071	5.00	5.46	
89 Ethylbenzene	106	9.492	9.492	0.000	99	51082	5.00	5.88	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	99	53355	5.00	5.30	
91 o-Xylene	106	9.930	9.930	0.000	98	57193	5.00	5.30	
92 Styrene	104	9.942	9.954	-0.012	93	68011	5.00	4.86	
93 Bromoform	173	10.119	10.119	0.000	90	9148	5.00	4.24	
94 Isopropylbenzene	105	10.238	10.238	0.000	96	167419	5.00	5.45	
97 Bromobenzene	156	10.510	10.510	0.000	95	32408	5.00	5.19	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.510	0.000	93	26403	5.00	4.76	
98 1,2,3-Trichloropropane	110	10.545	10.557	-0.012	87	8672	5.00	5.08	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	63	6640	5.00	4.43	
100 N-Propylbenzene	120	10.593	10.593	0.000	99	41667	5.00	5.23	
101 2-Chlorotoluene	126	10.664	10.664	0.000	95	38931	5.00	5.77	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	94	134673	5.00	5.00	
103 4-Chlorotoluene	126	10.758	10.758	0.000	99	33593	5.00	5.20	
105 tert-Butylbenzene	119	11.007	11.007	0.000	92	125353	5.00	5.16	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	95	141317	5.00	5.33	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 sec-Butylbenzene	105	11.196	11.196	0.000	95	183676	5.00	5.22	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	97	68987	5.00	5.36	
111 4-Isopropyltoluene	119	11.314	11.314	0.000	96	146751	5.00	5.07	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	92	67374	5.00	5.22	
115 n-Butylbenzene	91	11.658	11.658	0.000	98	145558	5.00	5.25	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	96	66181	5.00	5.35	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	77	4479	5.00	4.76	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	92	51480	5.00	5.42	
120 Hexachlorobutadiene	225	13.160	13.160	0.000	97	31371	5.00	5.39	
121 Naphthalene	128	13.231	13.231	0.000	97	98914	5.00	5.18	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	93	47752	5.00	5.53	
S 134 1,2-Dichloroethene, Total	96				0		10.0	10.8	
S 135 1,3-Dichloropropene, Total	75				0		10.0	9.16	
S 136 Xylenes, Total	106				0		10.0	10.6	
S 137 Trihalomethanes, Total	1				0		20.0	18.5	

Reagents:

vm50ss_00197	Amount Added:	0.50	Units: uL
VMRGAS_00097	Amount Added:	0.50	Units: uL
VMAROLISTDW_00095	Amount Added:	0.50	Units: uL
VMRPRIMW_00121	Amount Added:	0.50	Units: uL
VM250-IS_00028	Amount Added:	1.00	Units: uL

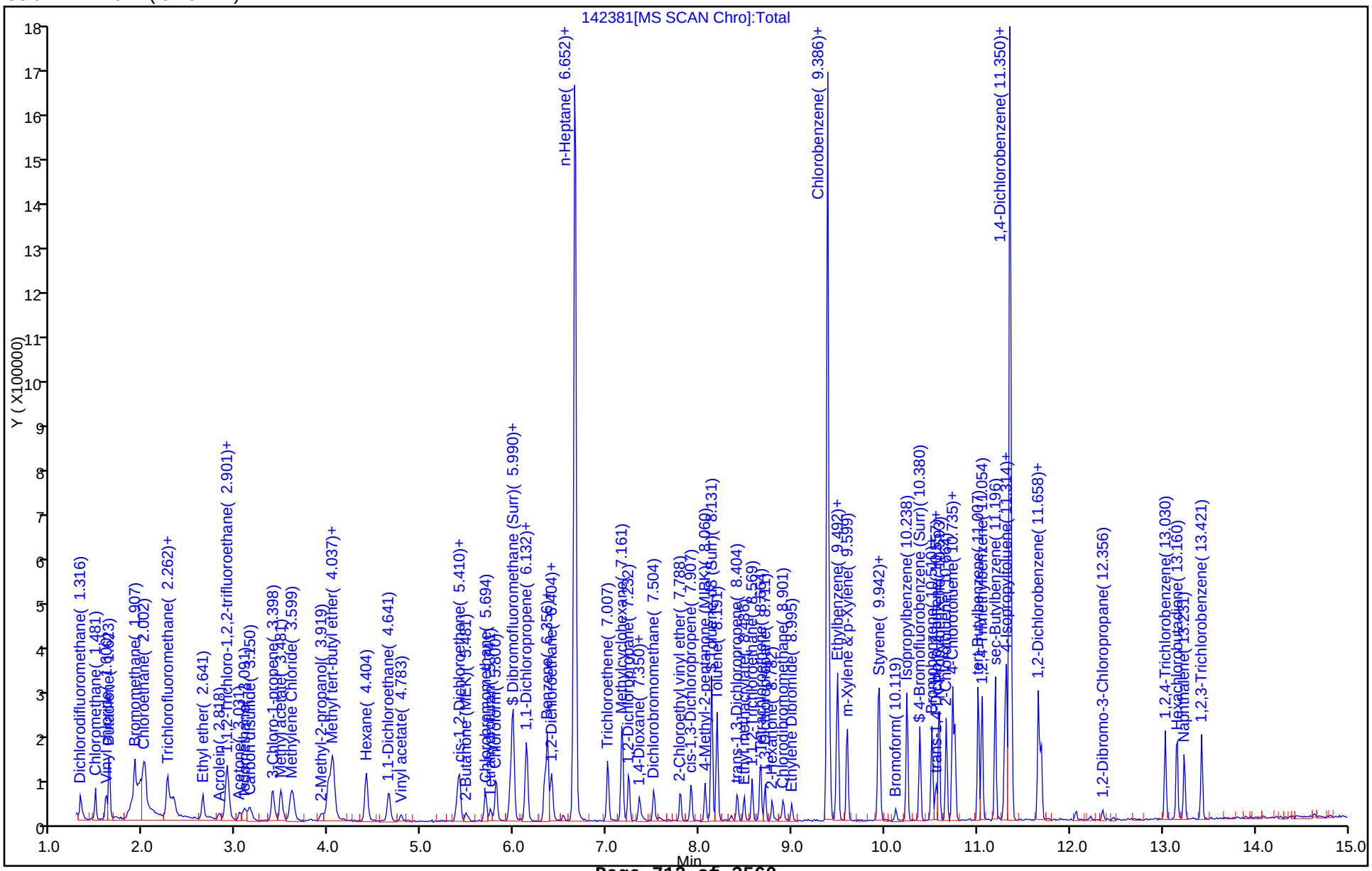
Report Date: 15-Apr-2015 13:05:45 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142381.D

Injection Date:	13-Apr-2015 16:56:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



Report Date: 15-Apr-2015 13:05:47 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142382.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 13-Apr-2015 17:17:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 240-0042511-010240-0042511-010
Operator ID: 002808 Instrument ID: A3UX14
Sublist: chrom-8260_14*sub40

Method: \\NCChrom\ChromData\A3UX14\20150413-42511.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:05:46 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 14-Apr-2015 09:32:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.652	6.652	0.000	99	1406964	50.0	50.0	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	95	800299	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	96	430027	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.990	5.978	0.012	93	23606	2.00	1.77	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	96	38601	2.00	2.31	
$ 8 Toluene-d8 (Surr)	98	8.131	8.131	0.000	94	106134	2.00	1.78	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	83	39254	2.00	2.09	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	98	13590	2.00	1.55	
12 Chloromethane	50	1.481	1.481	0.000	98	17126	2.00	1.88	
13 Vinyl chloride	62	1.588	1.600	-0.012	97	14887	2.00	1.64	
14 Butadiene	54	1.623	1.623	0.000	94	14370	2.00	1.67	
15 Bromomethane	94	1.907	1.907	0.000	90	14994	2.00	2.13	
17 Chloroethane	64	2.002	2.002	0.000	85	10709	2.00	2.10	
18 Dichlorofluoromethane	67	2.250	2.262	-0.012	97	27631	2.00	1.99	
19 Trichlorofluoromethane	101	2.298	2.298	0.000	95	22094	2.00	1.71	
20 Ethyl ether	59	2.641	2.641	0.000	89	11582	2.00	2.11	
21 Acrolein	56	2.818	2.818	0.000	96	7628	10.0	12.3	
23 1,1-Dichloroethene	96	2.889	2.889	0.000	97	13229	2.00	2.05	
24 1,1,2-Trichloro-1,2,2-trif	151	2.901	2.913	-0.012	67	7799	2.00	1.55	
26 Acetone	43	3.043	3.031	0.012	97	23051	4.00	5.31	
27 Iodomethane	142	3.091	3.091	0.000	98	16932	2.00	1.98	
28 Carbon disulfide	76	3.138	3.150	-0.012	97	23128	2.00	1.98	
29 3-Chloro-1-propene	76	3.398	3.398	0.000	87	7360	2.00	1.83	
31 Methyl acetate	43	3.481	3.481	0.000	97	51386	10.0	11.0	
32 Methylene Chloride	84	3.588	3.599	-0.011	96	36316	2.00	2.26	
33 2-Methyl-2-propanol	59	3.943	3.919	0.024	91	17950	20.0	25.2	
34 trans-1,2-Dichloroethene	96	3.990	3.990	0.000	94	14368	2.00	1.91	
35 Methyl tert-butyl ether	73	4.025	4.025	0.000	93	46542	2.00	2.18	
36 Acrylonitrile	53	4.049	4.037	0.012	99	45147	20.0	22.3	
37 Hexane	86	4.404	4.404	0.000	91	4228	2.00	2.17	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 1,1-Dichloroethane	63	4.653	4.641	0.012	93	27094	2.00	1.76	
41 Vinyl acetate	86		4.783				ND	ND	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	70	13734	2.00	2.14	
44 cis-1,2-Dichloroethene	96	5.398	5.410	-0.012	82	15865	2.00	1.96	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	98	12168	4.00	4.94	
48 Chlorobromomethane	128	5.694	5.694	0.000	90	6908	2.00	2.05	
50 Tetrahydrofuran	42	5.741	5.741	0.000	93	10588	4.00	6.12	
51 Chloroform	83	5.800	5.800	0.000	94	27492	2.00	1.90	
52 1,1,1-Trichloroethane	97	5.954	5.954	0.000	97	20146	2.00	1.74	
53 Cyclohexane	56	5.990	5.990	0.000	89	27623	2.00	1.94	
54 Carbon tetrachloride	117	6.120	6.120	0.000	79	18239	2.00	1.70	
55 1,1-Dichloropropene	75	6.132	6.132	0.000	94	19824	2.00	1.80	
56 Benzene	78	6.356	6.356	0.000	97	59183	2.00	1.91	
57 Isobutyl alcohol	41	6.392	6.392	0.000	82	10190	50.0	49.5	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	97	19108	2.00	1.90	
60 n-Heptane	100	6.640	6.640	0.000	94	3113	2.00	1.77	
61 Trichloroethene	130	7.007	7.007	0.000	91	13998	2.00	1.85	
64 Methylcyclohexane	83	7.161	7.161	0.000	92	24458	2.00	1.72	
65 1,2-Dichloropropane	63	7.232	7.232	0.000	93	14600	2.00	2.07	
67 Dibromomethane	93	7.350	7.350	0.000	91	8135	2.00	2.23	
69 1,4-Dioxane	88	7.398	7.386	0.012	53	2083	40.0	39.1	
70 Dichlorobromomethane	83	7.504	7.504	0.000	97	15359	2.00	1.70	
72 2-Chloroethyl vinyl ether	63	7.788	7.788	0.000	91	10852	4.00	3.90	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.001	90	16069	2.00	1.66	
75 4-Methyl-2-pentanone (MIBK	43	8.060	8.060	0.000	97	22670	4.00	4.76	
76 Toluene	91	8.191	8.191	0.001	98	51626	2.00	1.85	
77 trans-1,3-Dichloropropene	75	8.415	8.403	0.012	93	12097	2.00	1.75	
78 Ethyl methacrylate	69	8.486	8.486	0.000	92	8303	2.00	1.86	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	92	8339	2.00	1.99	
80 Tetrachloroethene	164	8.664	8.664	0.000	92	8639	2.00	1.72	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	90	15296	2.00	1.97	
82 2-Hexanone	43	8.782	8.782	0.000	93	13513	4.00	4.79	
84 Chlorodibromomethane	129	8.901	8.900	0.001	88	7628	2.00	1.69	
85 Ethylene Dibromide	107	8.995	8.995	0.000	99	8591	2.00	2.09	
87 Chlorobenzene	112	9.409	9.409	0.000	96	30965	2.00	1.95	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	84	10966	2.00	1.78	
89 Ethylbenzene	106	9.504	9.492	0.012	98	15940	2.00	1.75	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	98	18211	2.00	1.72	
91 o-Xylene	106	9.930	9.930	0.000	97	19800	2.00	1.75	
92 Styrene	104	9.942	9.954	-0.012	94	27745	2.00	1.89	
93 Bromoform	173	10.119	10.119	0.000	88	3065	2.00	1.90	
94 Isopropylbenzene	105	10.238	10.238	0.000	97	53797	2.00	1.67	
97 Bromobenzene	156	10.510	10.510	0.000	94	12201	2.00	1.89	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.510	0.000	71	11768	2.00	2.06	
98 1,2,3-Trichloropropane	110	10.545	10.557	-0.012	85	3839	2.00	2.18	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	61	3145	2.00	2.03	
100 N-Propylbenzene	120	10.593	10.593	0.000	98	13770	2.00	1.67	
101 2-Chlorotoluene	126	10.664	10.664	0.000	95	12534	2.00	1.80	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	93	47578	2.00	1.71	
103 4-Chlorotoluene	126	10.758	10.758	0.000	98	12287	2.00	1.84	
105 tert-Butylbenzene	119	11.007	11.007	0.000	93	40570	2.00	1.62	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	96	45405	2.00	1.66	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 sec-Butylbenzene	105	11.196	11.196	0.000	96	56190	2.00	1.55	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	97	27163	2.00	2.04	
111 4-Isopropyltoluene	119	11.314	11.314	0.000	95	49308	2.00	1.65	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	90	26428	2.00	1.98	
115 n-Butylbenzene	91	11.658	11.658	0.000	98	49539	2.00	1.73	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	94	26542	2.00	2.08	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	77	1809	2.00	1.86	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	93	18853	2.00	1.92	
120 Hexachlorobutadiene	225	13.160	13.160	0.000	96	12614	2.00	2.10	
121 Naphthalene	128	13.231	13.231	0.000	96	44992	2.00	2.28	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	94	19711	2.00	2.21	
S 134 1,2-Dichloroethene, Total	96				0		4.00	3.87	
S 135 1,3-Dichloropropene, Total	75				0		4.00	3.41	
S 136 Xylenes, Total	106				0		4.00	3.47	
S 137 Trihalomethanes, Total	1				0		8.00	7.19	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

vm50ss_00197	Amount Added:	0.20	Units: uL
VMRGAS_00097	Amount Added:	0.20	Units: uL
VMAROLISTDW_00095	Amount Added:	0.20	Units: uL
VMRPRIMW_00121	Amount Added:	0.20	Units: uL
VM250-IS_00028	Amount Added:	1.00	Units: uL

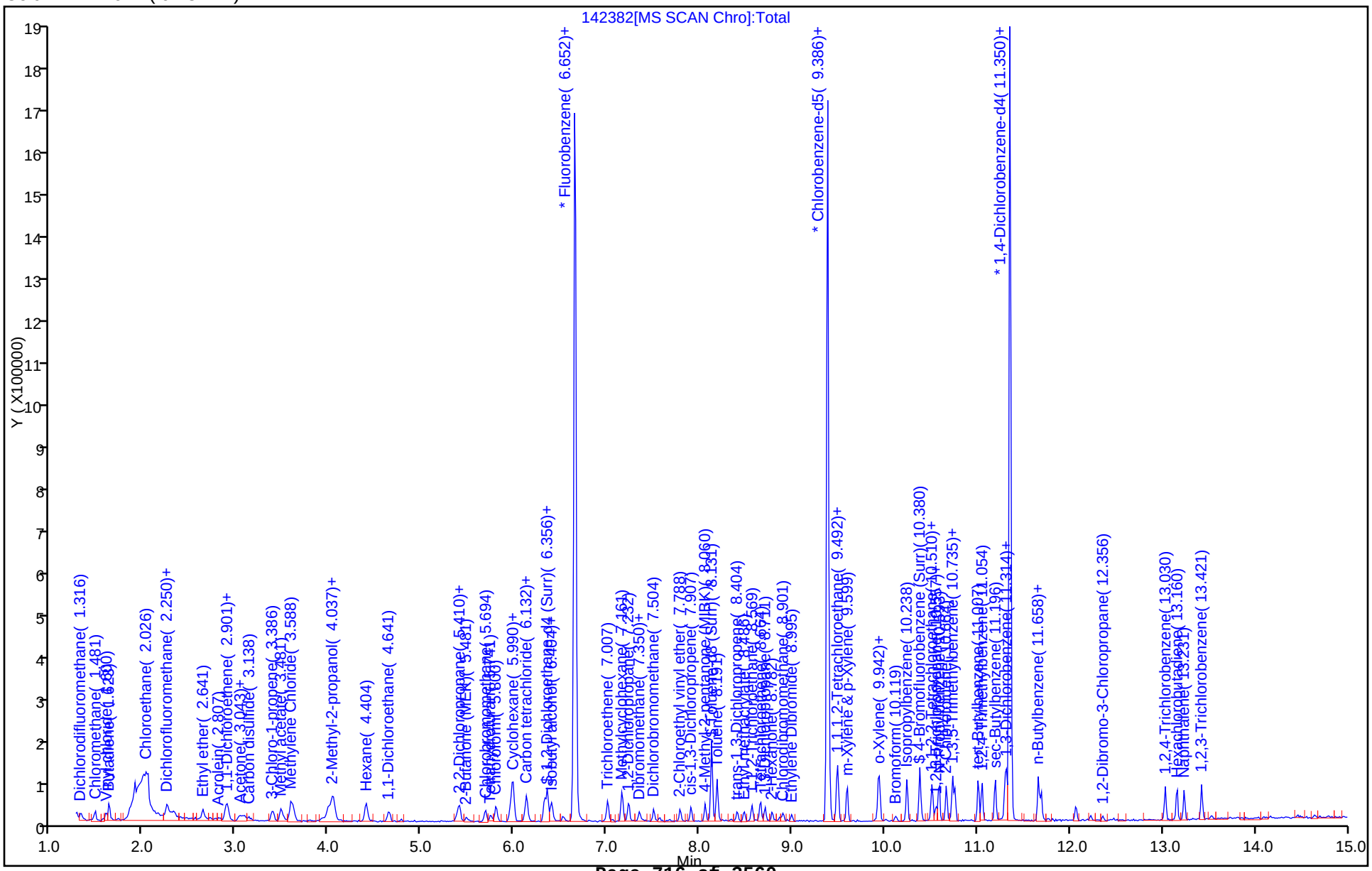
Report Date: 15-Apr-2015 13:05:47 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142382.D

Injection Date:	13-Apr-2015 17:17:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



Report Date: 15-Apr-2015 13:05:48 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 13-Apr-2015 17:39:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 240-0042511-011240-0042511-011
Operator ID: 002808 Instrument ID: A3UX14
Sublist: chrom-8260_14*sub40

Method: \\NCChrom\ChromData\A3UX14\20150413-42511.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:05:48 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 14-Apr-2015 09:34:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.652	6.652	0.000	99	1294248	50.0	50.0	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	95	723462	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	96	397285	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.978	5.978	0.000	92	17755	1.00	1.16	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	96	24219	1.00	0.8450	
$ 8 Toluene-d8 (Surr)	98	8.132	8.131	0.001	93	79521	1.00	0.9788	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	82	28411	1.00	1.05	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	93	5807	1.00	0.7183	
12 Chloromethane	50	1.481	1.481	0.000	99	9208	1.00	1.10	
13 Vinyl chloride	62	1.588	1.600	-0.012	95	8300	1.00	0.99	
14 Butadiene	54	1.623	1.623	0.000	88	5677	1.00	0.7183	
15 Bromomethane	94	1.907	1.907	0.000	86	7603	1.00	1.17	
17 Chloroethane	64	2.002	2.002	0.000	36	6019	1.00	1.18	
18 Dichlorofluoromethane	67	2.251	2.262	-0.011	98	13227	1.00	1.03	
19 Trichlorofluoromethane	101	2.286	2.298	-0.012	90	8901	1.00	0.7482	
20 Ethyl ether	59	2.641	2.641	0.000	79	4559	1.00	0.9016	
21 Acrolein	56	2.807	2.818	-0.011	89	3191	5.00	5.57	
23 1,1-Dichloroethene	96	2.890	2.889	0.001	94	5958	1.00	1.00	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	66	4391	1.00	0.9499	
26 Acetone	43	3.032	3.031	0.001	99	15152	2.00	1.06	
27 Iodomethane	142	3.091	3.091	0.000	96	6925	1.00	0.8804	
28 Carbon disulfide	76	3.138	3.150	-0.012	95	11612	1.00	1.40	
29 3-Chloro-1-propene	76	3.398	3.398	0.000	91	3109	1.00	0.8392	
31 Methyl acetate	43	3.481	3.481	0.000	99	24863	5.00	5.79	
32 Methylene Chloride	84	3.600	3.599	0.001	97	26058	1.00	1.07	
33 2-Methyl-2-propanol	59	3.919	3.919	0.000	96	7086	10.0	10.8	
34 trans-1,2-Dichloroethene	96	3.990	3.990	0.000	93	6913	1.00	1.00	
35 Methyl tert-butyl ether	73	4.026	4.025	0.001	94	17680	1.00	0.9010	
36 Acrylonitrile	53	4.049	4.037	0.012	96	18220	10.0	9.77	
37 Hexane	86	4.404	4.404	0.000	88	2195	1.00	1.23	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 1,1-Dichloroethane	63	4.641	4.641	0.000	96	15334	1.00	1.08	
41 Vinyl acetate	86		4.783				ND	ND	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	52	5343	1.00	0.9035	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	85	7452	1.00	1.00	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	72	4751	2.00	2.09	
48 Chlorobromomethane	128	5.694	5.694	0.000	95	2908	1.00	0.9401	
50 Tetrahydrofuran	42	5.741	5.741	0.000	84	5042	2.00	3.17	
51 Chloroform	83	5.800	5.800	0.000	95	12837	1.00	0.9623	
52 1,1,1-Trichloroethane	97	5.954	5.954	0.000	74	9393	1.00	0.8801	
53 Cyclohexane	56	5.990	5.990	0.000	74	10645	1.00	0.8115	
54 Carbon tetrachloride	117	6.120	6.120	0.000	74	7303	1.00	0.7410	
55 1,1-Dichloropropene	75	6.144	6.132	0.012	94	9355	1.00	0.9257	
56 Benzene	78	6.357	6.356	0.001	95	31782	1.00	1.12	
57 Isobutyl alcohol	41	6.404	6.392	0.012	62	5490	25.0	29.0	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	96	9758	1.00	1.05	
60 n-Heptane	100	6.629	6.640	-0.011	50	1086	1.00	0.6708	
61 Trichloroethene	130	7.019	7.007	0.012	93	6737	1.00	0.9683	
64 Methylcyclohexane	83	7.161	7.161	0.000	91	10364	1.00	0.7908	
65 1,2-Dichloropropane	63	7.232	7.232	0.000	89	5937	1.00	0.9152	
67 Dibromomethane	93	7.351	7.350	0.001	85	3044	1.00	0.9061	
69 1,4-Dioxane	88	7.386	7.386	0.000	1	1020	20.0	20.8	
70 Dichlorobromomethane	83	7.504	7.504	0.000	92	7497	1.00	0.9014	
72 2-Chloroethyl vinyl ether	63	7.788	7.788	0.000	91	4553	2.00	1.78	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.001	92	8072	1.00	0.9084	
75 4-Methyl-2-pentanone (MIBK	43	8.061	8.060	0.001	92	7696	2.00	1.79	
76 Toluene	91	8.191	8.191	0.001	97	27889	1.00	1.11	
77 trans-1,3-Dichloropropene	75	8.404	8.403	0.001	88	5624	1.00	0.8986	
78 Ethyl methacrylate	69	8.487	8.486	0.001	91	3800	1.00	0.9405	
79 1,1,2-Trichloroethane	97	8.558	8.569	-0.011	84	3904	1.00	1.03	
80 Tetrachloroethene	164	8.664	8.664	0.000	87	4411	1.00	0.9712	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	90	7294	1.00	1.04	
82 2-Hexanone	43	8.782	8.782	0.000	94	6418	2.00	2.52	
84 Chlorodibromomethane	129	8.913	8.900	0.013	83	3343	1.00	0.8181	
85 Ethylene Dibromide	107	8.995	8.995	0.000	86	4127	1.00	1.11	
87 Chlorobenzene	112	9.410	9.409	0.001	90	14324	1.00	1.00	
88 1,1,1,2-Tetrachloroethane	131	9.481	9.480	0.001	60	4819	1.00	0.8644	
89 Ethylbenzene	106	9.492	9.492	0.000	98	8787	1.00	1.07	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	96	9650	1.00	1.01	
91 o-Xylene	106	9.930	9.930	0.000	94	10853	1.00	1.06	
92 Styrene	104	9.942	9.954	-0.012	94	13609	1.00	1.02	
93 Bromoform	173	10.120	10.119	0.001	43	1999	1.00	1.60	
94 Isopropylbenzene	105	10.238	10.238	0.000	94	28624	1.00	0.9807	
97 Bromobenzene	156	10.510	10.510	0.000	94	6749	1.00	1.13	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.510	0.000	72	6148	1.00	1.16	
98 1,2,3-Trichloropropane	110	10.545	10.557	-0.012	77	1994	1.00	1.22	
99 trans-1,4-Dichloro-2-buten	53	10.545	10.557	-0.012	58	1046	1.00	0.7307	
100 N-Propylbenzene	120	10.593	10.593	0.000	99	7225	1.00	0.9505	
101 2-Chlorotoluene	126	10.664	10.664	0.000	94	5413	1.00	0.8414	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	91	23550	1.00	0.9170	
103 4-Chlorotoluene	126	10.758	10.758	0.000	96	5504	1.00	0.8925	
105 tert-Butylbenzene	119	11.007	11.007	0.000	89	17657	1.00	0.7612	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	92	21568	1.00	0.8522	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 sec-Butylbenzene	105	11.196	11.196	0.000	94	27718	1.00	0.8251	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	98	12661	1.00	1.03	
111 4-Isopropyltoluene	119	11.315	11.314	0.001	94	23632	1.00	0.8551	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	89	14485	1.00	1.18	
115 n-Butylbenzene	91	11.658	11.658	0.000	95	22769	1.00	0.8605	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	90	12390	1.00	1.05	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	22	890	1.00	0.99	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	90	11667	1.00	1.29	
120 Hexachlorobutadiene	225	13.161	13.160	0.001	62	6024	1.00	1.09	
121 Naphthalene	128	13.232	13.231	0.001	97	17195	1.00	0.9443	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	94	9643	1.00	1.17	
S 134 1,2-Dichloroethene, Total	96				0		2.00	2.00	
S 135 1,3-Dichloropropene, Total	75				0		2.00	1.81	
S 136 Xylenes, Total	106				0		2.00	2.07	
S 137 Trihalomethanes, Total	1				0		4.00	4.28	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

vm50ss_00197	Amount Added:	0.10	Units: uL
VMRGAS_00097	Amount Added:	0.10	Units: uL
VMAROLISTDW_00095	Amount Added:	0.10	Units: uL
VMRPRIMW_00121	Amount Added:	0.10	Units: uL
VM250-IS_00028	Amount Added:	1.00	Units: uL

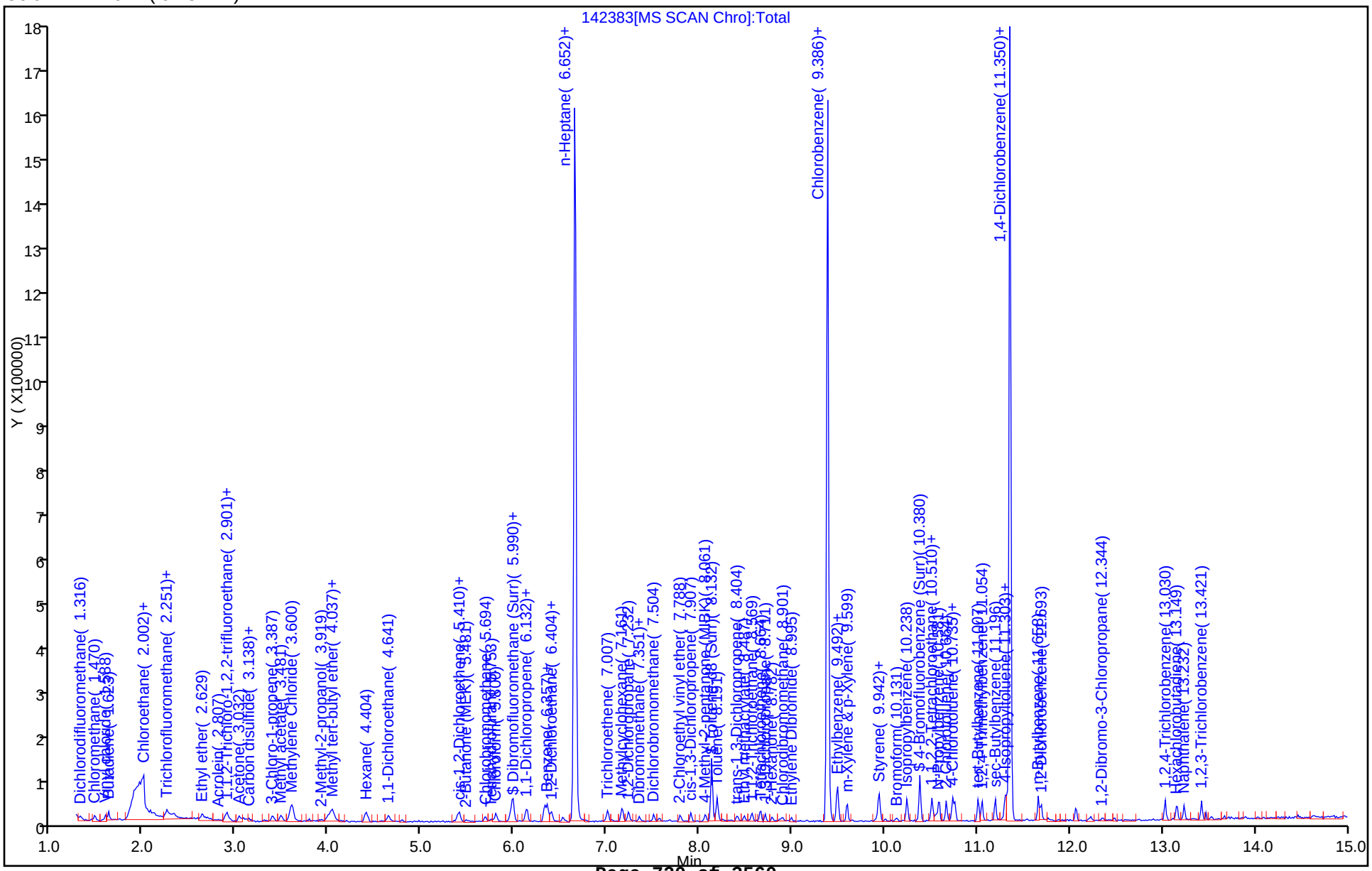
Report Date: 15-Apr-2015 13:05:48 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Injection Date:	13-Apr-2015 17:39:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	IC			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 175604

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27788

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-175604/7	UXM7071.D
Level 2	STD8260 240-175604/6	UXM7070.D
Level 3	STD8260 240-175604/5	UXM7069.D
Level 4	STD8260 240-175604/4	UXM7068.D
Level 5	STD8260 240-175604/3	UXM7067.D
Level 6	STD8260 240-175604/2	UXM7066.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1833 0.2041	0.1781	0.1744	0.1568	0.2090	Ave		0.1843			0.1000	10.6		15.0			
Chloromethane	0.2517 0.2544	0.2624	0.2546	0.2508	0.2480	Ave		0.2536			0.1000	1.9		15.0			
Vinyl chloride	0.2837 0.2921	0.2803	0.2773	0.2582	0.2802	Ave		0.2786			0.1000	4.0		15.0			
Butadiene	0.2508 0.2658	0.2588	0.2486	0.2172	0.2639	Ave		0.2509				7.1		15.0			
Bromomethane	0.1508 0.1269	0.1380	0.1275	0.1338	0.1289	Ave		0.1343			0.0500	6.8		15.0			
Chloroethane	0.1685 0.1630	0.1697	0.1592	0.1588	0.1615	Ave		0.1634				2.8		15.0			
Dichlorofluoromethane	0.3803 0.3626	0.3786	0.3496	0.3636	0.3596	Ave		0.3657				3.2		15.0			
Trichlorofluoromethane	0.2373 0.2626	0.2504	0.2297	0.2163	0.2607	Ave		0.2428			0.1000	7.5		15.0			
Ethyl ether	0.1803 0.1824	0.1847	0.1741	0.1841	0.1760	Ave		0.1803				2.4		15.0			
Acrolein	0.0215 0.0247	0.0233	0.0240	0.0216	0.0247	Ave		0.0233				6.2		15.0			
1,1-Dichloroethene	0.2005 0.2123	0.1917	0.1993	0.2051	0.2048	Ave		0.2023			0.1000	3.4		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1546 0.1634	0.1426	0.1497	0.1644	0.1685	Ave		0.1572			0.0500	6.3		15.0			
Acetone	0.0710 0.0550	0.0645	0.0573	0.0573	0.0576	Ave		0.0604			0.0500	10.1		15.0			
Iodomethane	0.3228 0.3200	0.3186	0.3109	0.3321	0.3049	Ave		0.3182				3.0		15.0			
Carbon disulfide	0.6144 0.6473	0.6200	0.6167	0.6180	0.6164	Ave		0.6221			0.1000	2.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 175604

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27788

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.1334 0.1427	0.1387	0.1342	0.1426	0.1349	Ave		0.1377				3.1		15.0			
Methyl acetate	0.1300 0.1383	0.1321	0.1294	0.1357	0.1337	Ave		0.1332			0.1000	2.6		15.0			
Methylene Chloride	0.3536 0.2403	0.2921	0.2540	0.2585	0.2339	Lin1	0.1164	0.2357			0.1000				0.9990		0.9900
2-Methyl-2-propanol	0.0132 0.0125	0.0133	0.0123	0.0127	0.0127	Ave		0.0128				3.0		15.0			
Acrylonitrile	0.0675 0.0726	0.0660	0.0653	0.0723	0.0711	Ave		0.0691				4.8		15.0			
trans-1,2-Dichloroethene	0.2473 0.2416	0.2540	0.2379	0.2443	0.2312	Ave		0.2427			0.1000	3.2		15.0			
Methyl tert-butyl ether	0.5747 0.6168	0.5772	0.5867	0.6059	0.5892	Ave		0.5917			0.1000	2.8		15.0			
Hexane	0.0550 0.0638	0.0504	0.0570	0.0601	0.0649	Ave		0.0585				9.4		15.0			
1,1-Dichloroethane	0.4018 0.4100	0.3831	0.3874	0.4100	0.3890	Ave		0.3969			0.1000	3.0		15.0			
Vinyl acetate	0.1646 0.1765	0.1621	0.1610	0.1725	0.1681	Ave		0.1675				3.6		15.0			
2-Butanone (MEK)	0.0747 0.0760	0.0750	0.0727	0.0760	0.0766	Ave		0.0752			0.0500	1.9		15.0			
cis-1,2-Dichloroethene	0.2507 0.2661	0.2645	0.2547	0.2694	0.2488	Ave		0.2590			0.1000	3.4		15.0			
2,2-Dichloropropane	0.2655 0.2497	0.2482	0.2589	0.2602	0.2434	Ave		0.2543				3.3		15.0			
Bromochloromethane	0.1265 0.1238	0.1168	0.1176	0.1275	0.1170	Ave		0.1215				4.1		15.0			
Tetrahydrofuran	0.0510 0.0477	0.0502	0.0452	0.0467	0.0464	Ave		0.0479				4.8		15.0			
Chloroform	0.3796 0.3964	0.3849	0.3953	0.4052	0.3705	Ave		0.3887				3.3		15.0			
1,1,1-Trichloroethane	0.2899 0.3024	0.2855	0.2972	0.3084	0.2910	Ave		0.2957			0.1000	2.9		15.0			
Cyclohexane	0.3496 0.3871	0.3268	0.3615	0.3732	0.3956	Ave		0.3656			0.1000	6.9		15.0			
1,1-Dichloropropene	0.2946 0.3099	0.3016	0.2962	0.2984	0.2972	Ave		0.2996				1.8		15.0			
Carbon tetrachloride	0.2280 0.2579	0.2402	0.2379	0.2447	0.2479	Ave		0.2428			0.1000	4.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 175604

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27788

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0045 0.0044	0.0046	0.0043	0.0044	0.0044	Ave		0.0044				2.4		15.0			
1,2-Dichloroethane	0.2488 0.2792	0.2747	0.2705	0.2842	0.2650	Ave		0.2704			0.1000	4.6		15.0			
Benzene	0.9963 1.0421	0.9831	0.9902	1.0340	0.9655	Ave		1.0019			0.5000	3.0		15.0			
n-Heptane	0.4108 0.1539	0.2574	0.1957	0.1662	0.1711	Lin1	0.2434	0.1498							0.9980		0.9900
Trichloroethene	0.2482 0.2624	0.2520	0.2554	0.2625	0.2472	Ave		0.2546			0.2000	2.6		15.0			
Methylcyclohexane	0.3760 0.4084	0.3601	0.3743	0.3879	0.4198	Ave		0.3877			0.1000	5.8		15.0			
1,2-Dichloropropane	0.2116 0.2377	0.2235	0.2308	0.2357	0.2207	Ave		0.2267			0.1000	4.4		15.0			
Dibromomethane	0.1112 0.1252	0.1202	0.1186	0.1268	0.1197	Ave		0.1203				4.6		15.0			
1,4-Dioxane	0.0014 0.0017	0.0017	0.0017	0.0017	0.0017	Ave		0.0017				7.0		15.0			
Bromodichloromethane	0.2601 0.2993	0.2722	0.2736	0.2929	0.2728	Ave		0.2785			0.1000	5.3		15.0			
2-Chloroethyl vinyl ether	0.1069 0.1290	0.1150	0.1168	0.1249	0.1236	Ave		0.1194				6.7		15.0			
cis-1,3-Dichloropropene	0.2996 0.3589	0.3198	0.3178	0.3421	0.3297	Ave		0.3280			0.1500	6.3		15.0			
4-Methyl-2-pentanone (MIBK)	0.1423 0.1538	0.1486	0.1430	0.1525	0.1512	Ave		0.1486			0.0500	3.3		15.0			
Toluene	1.4247 1.5718	1.4555	1.4684	1.5094	1.4540	Ave		1.4806			0.4000	3.5		15.0			
trans-1,3-Dichloropropene	0.3439 0.4051	0.3727	0.3697	0.3854	0.3793	Ave		0.3760			0.1000	5.4		15.0			
Ethyl methacrylate	0.2923 0.3233	0.2909	0.2973	0.3095	0.3102	Ave		0.3039				4.2		15.0			
1,1,2-Trichloroethane	0.2707 0.2654	0.2634	0.2612	0.2725	0.2605	Ave		0.2656			0.1000	1.9		15.0			
1,3-Dichloropropane	0.4657 0.4872	0.4534	0.4672	0.4845	0.4670	Ave		0.4708				2.7		15.0			
Tetrachloroethene	0.2854 0.2886	0.2689	0.2748	0.2870	0.2778	Ave		0.2804			0.2000	2.8		15.0			
2-Hexanone	0.1440 0.1445	0.1434	0.1447	0.1443	0.1474	Ave		0.1447			0.0500	1.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 175604

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27788

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromochloromethane	0.2611 0.3026	0.2588	0.2617	0.2728	0.2748	Ave		0.2720				6.0		15.0			
1,2-Dibromoethane	0.2394 0.2611	0.2528	0.2444	0.2649	0.2503	Ave		0.2521				3.8		15.0			
Chlorobenzene	0.9603 0.9689	0.9350	0.9438	0.9738	0.9128	Ave		0.9491			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2861 0.3202	0.2998	0.2980	0.3138	0.2947	Ave		0.3021				4.2		15.0			
Ethylbenzene	0.4672 0.5352	0.5035	0.5112	0.5240	0.5046	Ave		0.5076				4.6		15.0			
m-Xylene & p-Xylene	0.5783 0.6653	0.6454	0.6325	0.6657	0.6261	Ave		0.6356				5.1		15.0			
o-Xylene	0.5843 0.6555	0.5765	0.6126	0.6501	0.6056	Ave		0.6141				5.3		15.0			
Styrene	0.9252 1.0625	0.9554	0.9576	1.0266	0.9787	Ave		0.9843			0.3000	5.2		15.0			
Bromoform	0.1498 0.1896	0.1497	0.1590	0.1714	0.1748	Ave		0.1657			0.1000	9.5		15.0			
Isopropylbenzene	1.5435 1.7660	1.5369	1.5930	1.6826	1.6262	Ave		1.6247			0.1000	5.4		15.0			
1,1,2,2-Tetrachloroethane	0.6061 0.5908	0.5888	0.5615	0.5956	0.5777	Ave		0.5868			0.3000	2.6		15.0			
Bromobenzene	0.7526 0.7383	0.7366	0.7011	0.7216	0.6869	Ave		0.7228				3.4		15.0			
1,2,3-Trichloropropane	0.1800 0.1810	0.1968	0.1757	0.1820	0.1785	Ave		0.1823				4.1		15.0			
trans-1,4-Dichloro-2-butene	0.1513 0.1508	0.1307	0.1391	0.1422	0.1464	Ave		0.1434				5.5		15.0			
N-Propylbenzene	0.7824 0.8278	0.7676	0.7975	0.7939	0.7805	Ave		0.7916				2.6		15.0			
2-Chlorotoluene	0.7373 0.6951	0.6650	0.6740	0.6840	0.6452	Ave		0.6834				4.6		15.0			
1,3,5-Trimethylbenzene	2.3143 2.5771	2.3696	2.3861	2.4000	2.3390	Ave		2.3977				3.9		15.0			
4-Chlorotoluene	0.7520 0.7364	0.7207	0.7475	0.7196	0.6860	Ave		0.7270				3.3		15.0			
tert-Butylbenzene	2.0967 2.2264	1.9952	2.0926	2.0850	2.0441	Ave		2.0900				3.7		15.0			
1,2,4-Trimethylbenzene	2.4434 2.6940	2.4789	2.4417	2.5599	2.4309	Ave		2.5081				4.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 175604

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27788

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	3.0228 3.2181	2.8658	2.9969	3.0086	2.9700	Ave		3.0137				3.8		15.0			
1,3-Dichlorobenzene	1.4178 1.4588	1.4468	1.4062	1.4177	1.3387	Ave		1.4143			0.6000	3.0		15.0			
4-Isopropyltoluene	2.6290 2.8568	2.5110	2.5616	2.6250	2.5941	Ave		2.6296				4.6		15.0			
1,4-Dichlorobenzene	1.5483 1.4920	1.4035	1.4295	1.4519	1.3664	Ave		1.4486			0.5000	4.5		15.0			
n-Butylbenzene	2.0632 2.3894	2.1608	2.1481	2.2375	2.1731	Ave		2.1953				5.0		15.0			
1,2-Dichlorobenzene	1.3829 1.3600	1.3509	1.3013	1.3534	1.2795	Ave		1.3380			0.4000	2.9		15.0			
1,2-Dibromo-3-Chloropropane	0.0879 0.1062	0.0925	0.0937	0.1035	0.1059	Ave		0.0983			0.0500	8.0		15.0			
1,2,4-Trichlorobenzene	0.8049 0.8643	0.8367	0.8059	0.8563	0.8197	Ave		0.8313			0.2000	3.1		15.0			
Hexachlorobutadiene	0.3756 0.3321	0.3394	0.3346	0.3519	0.3344	Ave		0.3447				4.9		15.0			
Naphthalene	1.7275 1.8957	1.7546	1.7541	1.8123	1.8417	Ave		1.7977				3.6		15.0			
1,2,3-Trichlorobenzene	0.7772 0.7381	0.7117	0.7428	0.7603	0.7300	Ave		0.7434				3.1		15.0			
Dibromofluoromethane (Surr)	0.2071 0.2051	0.2005	0.1961	0.1941	0.1965	Ave		0.1999				2.6		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2362 0.2240	0.2190	0.2141	0.2115	0.2138	Ave		0.2198				4.2		15.0			
Toluene-d8 (Surr)	1.1963 1.2683	1.1869	1.1733	1.1439	1.1943	Ave		1.1938				3.5		15.0			
4-Bromofluorobenzene (Surr)	0.4380 0.4362	0.4242	0.4298	0.4207	0.4229	Ave		0.4286				1.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 175604

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27788

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-175604/7	UXM7071.D
Level 2	STD8260 240-175604/6	UXM7070.D
Level 3	STD8260 240-175604/5	UXM7069.D
Level 4	STD8260 240-175604/4	UXM7068.D
Level 5	STD8260 240-175604/3	UXM7067.D
Level 6	STD8260 240-175604/2	UXM7066.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	28917 1337941	55676	140857	242698	654342	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	39695 1668028	82030	205715	388184	776582	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	44743 1914766	87630	223994	399722	877355	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	39558 1742621	80915	200871	336247	826213	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	23786 832148	43161	103009	207068	403753	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	26576 1068302	53063	128633	245799	505635	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	59976 2377077	118360	282460	562834	1126131	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	37426 1721199	78305	185528	334848	816184	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	28439 1195543	57764	140678	285000	551195	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	16994 810121	36457	96810	166842	387150	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	31625 1391709	59936	161038	317431	641262	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	24378 1071088	44591	120932	254560	527554	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Ave	22402 720650	40303	92528	177442	360826	2.00 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	50914 2097802	99607	251156	514079	954782	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	96908 4243718	193845	498244	956729	1930056	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	21041 935602	43357	108379	220761	422434	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 175604

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27788

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methyl acetate	FB	Ave	102515 4532585	206540	522740	1050530	2092779	5.00 200	10.0	25.0	50.0	100
Methylene Chloride	FB	Lin1	55764 1575545	91345	205234	400235	732381	1.00 40.0	2.00	5.00	10.0	20.0
2-Methyl-2-propanol	FB	Ave	20864 821282	41529	99599	196624	398073	10.0 400	20.0	50.0	100	200
Acrylonitrile	FB	Ave	106416 4762499	206234	527388	1119754	2227630	10.0 400	20.0	50.0	100	200
trans-1,2-Dichloroethene	FB	Ave	39000 1584112	79405	192169	378226	724105	1.00 40.0	2.00	5.00	10.0	20.0
Methyl tert-butyl ether	FB	Ave	90640 4043206	180473	473972	937984	1844898	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	8682 418195	15768	46020	93096	203111	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	63377 2687459	119780	312956	634661	1218029	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	24926 1110740	48645	124883	256374	505225	0.960 38.4	1.92	4.80	9.60	19.2
2-Butanone (MEK)	FB	Ave	23553 995821	46903	117472	235342	479775	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	39548 1744211	82689	205785	417073	779088	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	41868 1637169	77591	209114	402860	762113	1.00 40.0	2.00	5.00	10.0	20.0
Bromochloromethane	FB	Ave	19945 811318	36532	95005	197438	366316	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	16100 625734	31410	73033	144627	290335	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	59879 2598769	120340	319367	627339	1160076	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	45727 1982397	89274	240082	477408	911244	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	55140 2537686	102189	292014	577795	1238714	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	46457 2031242	94286	239308	461974	930586	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	35954 1690925	75098	192165	378785	776323	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	FB	Ave	17879 728819	35877	86934	168927	345672	25.0 1000	50.0	125	250	500
1,2-Dichloroethane	FB	Ave	39243 1830226	85876	218533	439901	829916	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI

GC/MS VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 175604

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27788

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	157136 6831596	307377	799946	1600731	3023331	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Lin1	64799 1008824	80485	158070	257320	535664	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	39145 1720443	78784	206338	406306	774022	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	59299 2677033	112582	302407	600527	1314375	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	33374 1558233	69884	186424	364937	691031	1.00 40.0	2.00	5.00	10.0	20.0
Dibromomethane	FB	Ave	17545 820681	37594	95833	196259	374840	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Ave	4528 216590	10888	27293	53729	107755	20.0 800	40.0	100	200	400
Bromodichloromethane	FB	Ave	41017 1962005	85112	220994	453434	854238	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	33706 1691518	71924	188701	386667	774211	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	47246 2352543	99996	256701	529653	1032269	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	44881 2016114	92946	231016	472020	947026	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	158809 7321596	327977	836157	1657841	3233786	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Ave	38332 1886900	83980	210531	423296	843701	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	32579 1506095	65551	169293	339950	689972	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	30179 1236313	59363	148725	299335	579355	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	51904 2269203	102163	266053	532175	1038725	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	31809 1344334	60595	156477	315179	617820	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	32101 1345845	64637	164796	316954	655516	2.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Ave	29103 1409447	58315	149029	299624	611228	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	26687 1216021	56955	139164	290915	556631	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	107038 4513086	210696	537400	1069581	2030052	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 175604

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27788

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBZ	Ave	31888 1491712	67561	169683	344706	655526	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	52078 2492722	113464	291113	575507	1122373	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	64465 3099024	145431	360143	731190	1392483	1.00 40.0	2.00	5.00	10.0	20.0
o-Xylene	CBZ	Ave	65124 3053079	129904	348841	714012	1346892	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	103130 4949000	215294	545252	1127566	2176702	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBZ	Ave	16692 882996	33744	90533	188261	388875	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	172044 8225855	346325	907101	1848075	3616868	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	36065 1553377	71837	179157	380619	739115	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	44780 1941323	89860	223701	461127	878811	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	10712 476037	24014	56075	116273	228346	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	9003 396411	15946	44369	90862	187283	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCB	Ave	46555 2176692	93650	254462	507345	998554	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	43871 1827779	81124	215043	437074	825480	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	137702 6776517	289090	761323	1533706	2992535	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	44743 1936347	87928	238520	459872	877636	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	124757 5854333	243411	667699	1332376	2615271	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	145383 7083933	302427	779068	1635840	3110140	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	179857 8462061	349623	956212	1922604	3799898	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	84359 3835946	176506	448685	905984	1712753	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCB	Ave	156428 7511918	306339	817341	1677489	3318892	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	92128 3923201	171223	456122	927811	1748229	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 175604

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27788

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCB	Ave	122761 6282819	263622	685404	1429823	2780296	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	82283 3576090	164804	415221	864865	1637059	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	5233 279200	11289	29908	66116	135520	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	47895 2272778	102074	257150	547207	1048708	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCB	Ave	22350 873236	41409	106764	224846	427869	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	102789 4984706	214063	559666	1158120	2356360	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	46243 1940882	86828	237020	485845	933941	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	32663 1344293	62674	158433	300503	615314	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	37257 1468188	68480	172978	327407	669473	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	133342 5907752	267445	668083	1256422	2656188	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	48826 2031763	95592	244718	462107	940483	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7066.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 08-Apr-2015 12:59:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042365-002
Operator ID: 1904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub29

Method: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 09-Apr-2015 07:46:36 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.587	5.588	-0.001	99	1638886	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.279	8.279	0.000	83	1164493	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	93	657371	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.006	5.007	-0.001	94	1344293	40.0	41.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	1468188	40.0	40.8	
$ 6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	92	5907752	40.0	42.5	
$ 7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	92	2031763	40.0	40.7	
9 Dichlorodifluoromethane	85	1.615	1.615	0.000	99	1337941	40.0	44.3	
10 Chloromethane	50	1.769	1.769	0.000	99	1668028	40.0	40.1	
11 Vinyl chloride	62	1.888	1.888	0.000	98	1914766	40.0	41.9	
12 Butadiene	54	1.923	1.923	0.000	0	1742621	40.0	42.4	
13 Bromomethane	94	2.220	2.220	0.000	90	832148	40.0	37.8	
14 Chloroethane	64	2.326	2.327	-0.001	99	1068302	40.0	39.9	
15 Dichlorofluoromethane	67	2.516	2.516	0.000	97	2377077	40.0	39.7	
16 Trichlorofluoromethane	101	2.575	2.564	0.011	97	1721199	40.0	43.3	
17 Ethyl ether	59	2.836	2.837	0.000	88	1195543	40.0	40.5	
18 Acrolein	56	2.943	2.943	0.000	100	810121	200.0	212.1	
19 1,1-Dichloroethene	96	3.050	3.050	0.000	97	1391709	40.0	42.0	
20 1,1,2-Trichloro-1,2,2-trif	151	3.085	3.086	-0.001	91	1071088	40.0	41.6	
21 Acetone	43	3.085	3.086	-0.001	76	720650	80.0	72.8	
23 Iodomethane	142	3.180	3.192	-0.012	96	2097802	40.0	40.2	
24 Carbon disulfide	76	3.251	3.263	-0.012	98	4243718	40.0	41.6	
26 3-Chloro-1-propene	76	3.382	3.382	0.000	94	935602	40.0	41.4	
27 Methyl acetate	43	3.394	3.394	0.000	97	4532585	200.0	207.6	
28 Methylene Chloride	84	3.477	3.489	-0.012	89	1575545	40.0	40.3	
29 2-Methyl-2-propanol	59	3.571	3.572	-0.001	99	821282	400.0	391.6	
30 Acrylonitrile	53	3.690	3.690	0.000	99	4762499	400.0	420.3	
32 trans-1,2-Dichloroethene	96	3.738	3.738	0.000	99	1584112	40.0	39.8	
31 Methyl tert-butyl ether	73	3.738	3.738	0.000	94	4043206	40.0	41.7	
33 Hexane	86	3.987	3.999	-0.012	89	418195	40.0	43.6	
34 1,1-Dichloroethane	63	4.105	4.105	0.000	96	2687459	40.0	41.3	
35 Vinyl acetate	43	4.141	4.141	0.000	97	1110740	38.4	40.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.603	4.603	0.000	80	1744211	40.0	41.1	
40 2-Butanone (MEK)	43	4.603	4.603	0.000	57	995821	80.0	80.8	
41 2,2-Dichloropropane	77	4.603	4.610	-0.007	87	1637169	40.0	39.3	
45 Chlorobromomethane	128	4.805	4.805	0.000	94	811318	40.0	40.7	
46 Tetrahydrofuran	42	4.852	4.852	0.000	87	625734	80.0	79.7	
47 Chloroform	83	4.864	4.864	0.000	92	2598769	40.0	40.8	
48 1,1,1-Trichloroethane	97	5.042	5.042	0.000	98	1982397	40.0	40.9	
49 Cyclohexane	56	5.101	5.113	-0.012	87	2537686	40.0	42.3	
50 1,1-Dichloropropene	75	5.184	5.184	0.000	99	2031242	40.0	41.4	
51 Carbon tetrachloride	117	5.196	5.196	0.000	97	1690925	40.0	42.5	
52 Isobutyl alcohol	41	5.232	5.232	0.000	95	728819	1000.0	1001.0	
54 Benzene	78	5.362	5.362	0.000	94	6831596	40.0	41.6	
53 1,2-Dichloroethane	62	5.362	5.362	0.000	54	1830226	40.0	41.3	
56 n-Heptane	57	5.576	5.588	-0.012	89	1008824	40.0	39.5	
58 Trichloroethene	130	5.908	5.908	0.000	96	1720443	40.0	41.2	
60 Methylcyclohexane	83	6.085	6.086	-0.001	89	2677033	40.0	42.1	
61 1,2-Dichloropropane	63	6.097	6.098	-0.001	97	1558233	40.0	41.9	
63 Dibromomethane	93	6.192	6.192	0.000	92	820681	40.0	41.6	
64 1,4-Dioxane	88	6.204	6.204	0.000	88	216590	800.0	795.0	
65 Dichlorobromomethane	83	6.323	6.323	0.000	99	1962005	40.0	43.0	
67 2-Chloroethyl vinyl ether	63	6.572	6.572	0.000	91	1691518	80.0	86.5	
68 cis-1,3-Dichloropropene	75	6.714	6.714	0.000	97	2352543	40.0	43.8	
69 4-Methyl-2-pentanone (MIBK	43	6.833	6.833	0.000	96	2016114	80.0	82.8	
70 Toluene	91	7.022	7.023	-0.001	98	7321596	40.0	42.5	
71 trans-1,3-Dichloropropene	75	7.188	7.200	-0.012	90	1886900	40.0	43.1	
72 Ethyl methacrylate	69	7.271	7.272	-0.001	87	1506095	40.0	42.6	
73 1,1,2-Trichloroethane	97	7.366	7.366	0.000	89	1236313	40.0	40.0	
74 1,3-Dichloropropane	76	7.520	7.521	-0.001	88	2269203	40.0	41.4	
75 Tetrachloroethene	164	7.520	7.532	-0.012	95	1344334	40.0	41.2	
76 2-Hexanone	43	7.580	7.580	0.000	94	1345845	80.0	79.9	
78 Chlorodibromomethane	129	7.734	7.734	0.000	90	1409447	40.0	44.5	
80 Ethylene Dibromide	107	7.841	7.853	-0.012	99	1216021	40.0	41.4	
82 Chlorobenzene	112	8.303	8.303	0.000	96	4513086	40.0	40.8	
83 1,1,1,2-Tetrachloroethane	131	8.374	8.374	0.000	96	1491712	40.0	42.4	
84 Ethylbenzene	106	8.398	8.398	0.000	98	2492722	40.0	42.2	
85 m-Xylene & p-Xylene	106	8.505	8.505	0.000	96	3099024	40.0	41.9	
86 o-Xylene	106	8.884	8.884	0.000	96	3053079	40.0	42.7	
87 Styrene	104	8.896	8.896	0.000	93	4949000	40.0	43.2	
88 Bromoform	173	9.074	9.074	0.000	99	882996	40.0	45.8	
89 Isopropylbenzene	105	9.240	9.240	0.000	94	8225855	40.0	43.5	
92 1,1,2,2-Tetrachloroethane	83	9.501	9.501	0.000	94	1553377	40.0	40.3	
93 Bromobenzene	156	9.536	9.537	-0.001	92	1941323	40.0	40.9	
95 1,2,3-Trichloropropane	110	9.548	9.548	0.000	81	476037	40.0	39.7	
94 trans-1,4-Dichloro-2-buten	53	9.560	9.560	0.000	78	396411	40.0	42.1	
96 N-Propylbenzene	120	9.631	9.631	0.000	99	2176692	40.0	41.8	
97 2-Chlorotoluene	126	9.726	9.726	0.000	97	1827779	40.0	40.7	
99 1,3,5-Trimethylbenzene	105	9.797	9.797	0.000	94	6776517	40.0	43.0	
100 4-Chlorotoluene	126	9.821	9.821	0.000	98	1936347	40.0	40.5	
102 tert-Butylbenzene	119	10.129	10.129	0.000	89	5854333	40.0	42.6	
104 1,2,4-Trimethylbenzene	105	10.165	10.165	0.000	94	7083933	40.0	43.0	
105 sec-Butylbenzene	105	10.343	10.343	0.000	93	8462061	40.0	42.7	
106 1,3-Dichlorobenzene	146	10.449	10.450	-0.001	97	3835946	40.0	41.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	10.485	10.485	0.000	97	7511918	40.0	43.5	
108 1,4-Dichlorobenzene	146	10.532	10.533	-0.001	96	3923201	40.0	41.2	
111 n-Butylbenzene	91	10.888	10.888	0.000	97	6282819	40.0	43.5	
112 1,2-Dichlorobenzene	146	10.900	10.900	0.000	99	3576090	40.0	40.7	
113 1,2-Dibromo-3-Chloropropan	157	11.671	11.671	0.000	91	279200	40.0	43.2	
115 1,2,4-Trichlorobenzene	180	12.513	12.513	0.000	93	2272778	40.0	41.6	
116 Hexachlorobutadiene	225	12.679	12.679	0.000	95	873236	40.0	38.5	
117 Naphthalene	128	12.750	12.750	0.000	96	4984706	40.0	42.2	
118 1,2,3-Trichlorobenzene	180	13.011	13.011	0.000	96	1940882	40.0	39.7	
S 131 1,2-Dichloroethene, Total	96				0		80.0	80.9	
S 132 1,3-Dichloropropene, Total	75				0		80.0	86.9	
S 133 Xylenes, Total	106				0		80.0	84.6	
S 134 Trihalomethanes, Total	1				0		160.0	174.0	

Reagents:

VMRPRIMW_00120	Amount Added:	32.00	Units: uL
VMRGAS_00097	Amount Added:	32.00	Units: uL
VMAROLISTDW_00095	Amount Added:	32.00	Units: uL
vm50ss_00196	Amount Added:	32.00	Units: uL
VM50IS_00048	Amount Added:	1.00	Units: uL

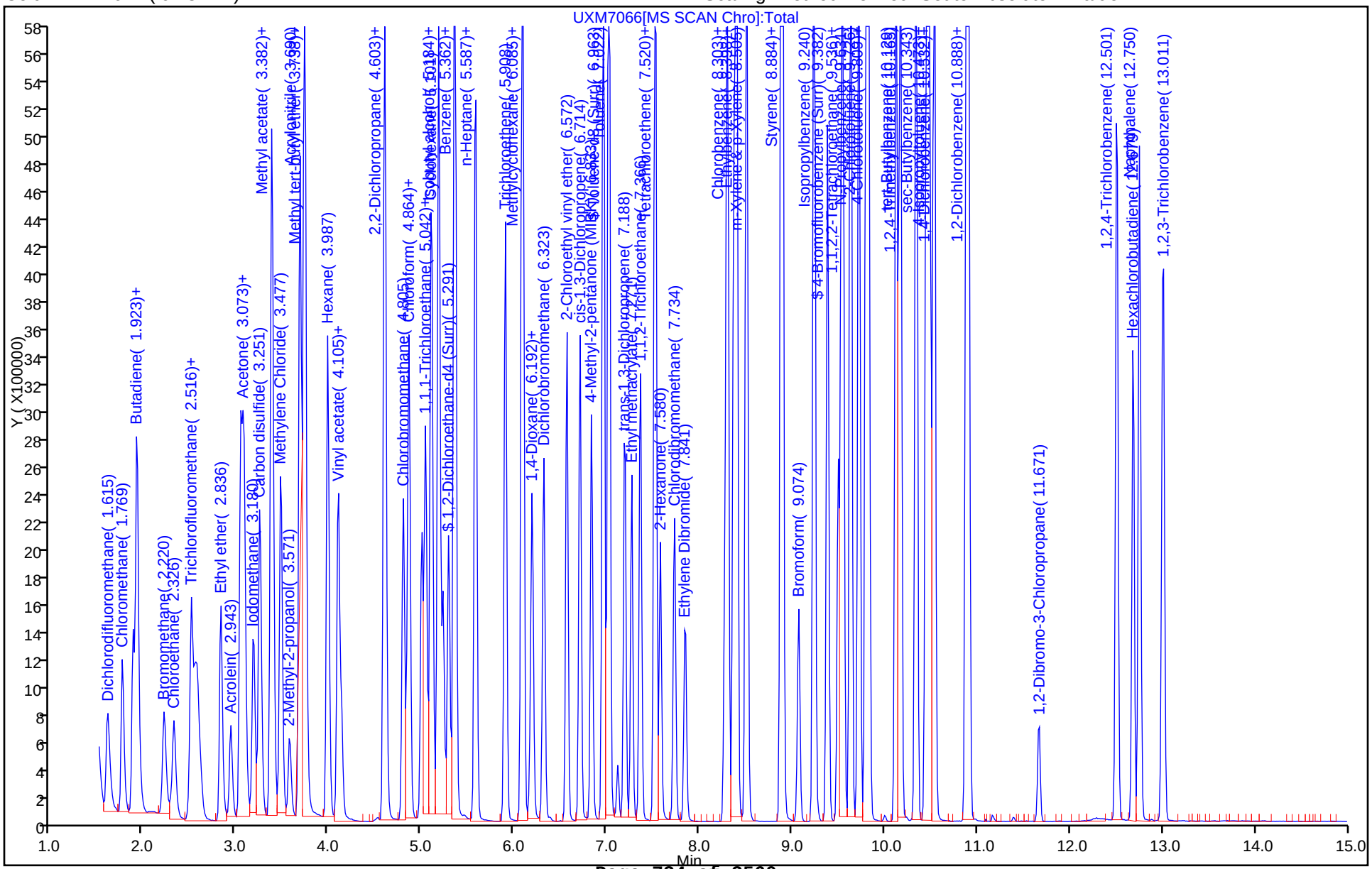
Report Date: 09-Apr-2015 07:46:37 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7066.D

Injection Date:	08-Apr-2015 12:59:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	STD8260 L6			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7067.D
Lims ID: STD8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 08-Apr-2015 13:22:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042365-003
Operator ID: 1904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub29

Method: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 09-Apr-2015 07:46:38 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.588	5.588	0.000	99	1565654	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.279	8.279	0.000	83	1112052	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	92	639708	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.007	5.007	0.000	95	615314	20.0	19.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	669473	20.0	19.5	
$ 6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	93	2656188	20.0	20.0	
$ 7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	93	940483	20.0	19.7	
9 Dichlorodifluoromethane	85	1.615	1.615	0.000	99	654342	20.0	22.7	
10 Chloromethane	50	1.769	1.769	0.000	99	776582	20.0	19.6	
11 Vinyl chloride	62	1.888	1.888	0.000	98	877355	20.0	20.1	
12 Butadiene	54	1.935	1.935	0.000	0	826213	20.0	21.0	
13 Bromomethane	94	2.232	2.232	0.000	88	403753	20.0	19.2	
14 Chloroethane	64	2.326	2.326	0.000	99	505635	20.0	19.8	
15 Dichlorofluoromethane	67	2.516	2.516	0.000	96	1126131	20.0	19.7	
16 Trichlorofluoromethane	101	2.576	2.576	0.000	98	816184	20.0	21.5	
17 Ethyl ether	59	2.836	2.836	0.000	89	551195	20.0	19.5	
18 Acrolein	56	2.943	2.943	0.000	98	387150	100.0	106.1	
19 1,1-Dichloroethene	96	3.050	3.050	0.000	96	641262	20.0	20.2	
20 1,1,2-Trichloro-1,2,2-trif	151	3.085	3.085	0.000	93	527554	20.0	21.4	
21 Acetone	43	3.085	3.085	0.000	99	360826	40.0	38.1	
23 Iodomethane	142	3.192	3.192	0.000	96	954782	20.0	19.2	
24 Carbon disulfide	76	3.263	3.263	0.000	98	1930056	20.0	19.8	
26 3-Chloro-1-propene	76	3.382	3.382	0.000	94	422434	20.0	19.6	
27 Methyl acetate	43	3.394	3.394	0.000	97	2092779	100.0	100.4	
28 Methylene Chloride	84	3.489	3.489	0.000	88	732381	20.0	19.4	
29 2-Methyl-2-propanol	59	3.583	3.583	0.000	99	398073	200.0	198.7	
30 Acrylonitrile	53	3.690	3.690	0.000	99	2227630	200.0	205.8	
32 trans-1,2-Dichloroethene	96	3.738	3.738	0.000	98	724105	20.0	19.1	
31 Methyl tert-butyl ether	73	3.750	3.750	0.000	94	1844898	20.0	19.9	
33 Hexane	86	3.987	3.987	0.000	90	203111	20.0	22.2	
34 1,1-Dichloroethane	63	4.105	4.105	0.000	96	1218029	20.0	19.6	
35 Vinyl acetate	43	4.141	4.141	0.000	96	505225	19.2	19.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.603	4.603	0.000	80	779088	20.0	19.2	
40 2-Butanone (MEK)	43	4.603	4.603	0.000	60	479775	40.0	40.8	
41 2,2-Dichloropropane	77	4.615	4.610	0.005	87	762113	20.0	19.1	
45 Chlorobromomethane	128	4.805	4.805	0.000	93	366316	20.0	19.3	
46 Tetrahydrofuran	42	4.852	4.852	0.000	87	290335	40.0	38.7	
47 Chloroform	83	4.864	4.864	0.000	92	1160076	20.0	19.1	
48 1,1,1-Trichloroethane	97	5.042	5.042	0.000	98	911244	20.0	19.7	
49 Cyclohexane	56	5.113	5.113	0.000	87	1238714	20.0	21.6	
50 1,1-Dichloropropene	75	5.184	5.184	0.000	99	930586	20.0	19.8	
51 Carbon tetrachloride	117	5.196	5.196	0.000	98	776323	20.0	20.4	
52 Isobutyl alcohol	41	5.232	5.232	0.000	92	345672	500.0	497.0	
54 Benzene	78	5.362	5.362	0.000	94	3023331	20.0	19.3	
53 1,2-Dichloroethane	62	5.362	5.362	0.000	55	829916	20.0	19.6	
56 n-Heptane	57	5.588	5.588	0.000	87	535664	20.0	21.2	
58 Trichloroethene	130	5.908	5.908	0.000	97	774022	20.0	19.4	
60 Methylcyclohexane	83	6.098	6.098	0.000	89	1314375	20.0	21.7	
61 1,2-Dichloropropane	63	6.098	6.098	0.000	76	691031	20.0	19.5	
63 Dibromomethane	93	6.192	6.192	0.000	97	374840	20.0	19.9	
64 1,4-Dioxane	88	6.204	6.204	0.000	90	107755	400.0	414.0	
65 Dichlorobromomethane	83	6.323	6.323	0.000	99	854238	20.0	19.6	
67 2-Chloroethyl vinyl ether	63	6.572	6.572	0.000	91	774211	40.0	41.4	
68 cis-1,3-Dichloropropene	75	6.714	6.714	0.000	97	1032269	20.0	20.1	
69 4-Methyl-2-pentanone (MIBK	43	6.833	6.833	0.000	95	947026	40.0	40.7	
70 Toluene	91	7.022	7.022	0.000	98	3233786	20.0	19.6	
71 trans-1,3-Dichloropropene	75	7.200	7.200	0.000	90	843701	20.0	20.2	
72 Ethyl methacrylate	69	7.271	7.271	0.000	88	689972	20.0	20.4	
73 1,1,2-Trichloroethane	97	7.366	7.366	0.000	88	579355	20.0	19.6	
74 1,3-Dichloropropane	76	7.521	7.521	0.000	88	1038725	20.0	19.8	
75 Tetrachloroethene	164	7.532	7.532	0.000	92	617820	20.0	19.8	
76 2-Hexanone	43	7.580	7.580	0.000	95	655516	40.0	40.7	
78 Chlorodibromomethane	129	7.734	7.734	0.000	90	611228	20.0	20.2	
80 Ethylene Dibromide	107	7.853	7.853	0.000	98	556631	20.0	19.9	
82 Chlorobenzene	112	8.303	8.303	0.000	96	2030052	20.0	19.2	
83 1,1,1,2-Tetrachloroethane	131	8.374	8.374	0.000	96	655526	20.0	19.5	
84 Ethylbenzene	106	8.398	8.398	0.000	98	1122373	20.0	19.9	
85 m-Xylene & p-Xylene	106	8.505	8.505	0.000	96	1392483	20.0	19.7	
86 o-Xylene	106	8.884	8.884	0.000	94	1346892	20.0	19.7	
87 Styrene	104	8.896	8.896	0.000	94	2176702	20.0	19.9	
88 Bromoform	173	9.074	9.074	0.000	99	388875	20.0	21.1	
89 Isopropylbenzene	105	9.240	9.240	0.000	95	3616868	20.0	20.0	
92 1,1,2,2-Tetrachloroethane	83	9.501	9.501	0.000	94	739115	20.0	19.7	
93 Bromobenzene	156	9.536	9.536	0.000	92	878811	20.0	19.0	
95 1,2,3-Trichloropropane	110	9.548	9.548	0.000	82	228346	20.0	19.6	
94 trans-1,4-Dichloro-2-buten	53	9.560	9.560	0.000	75	187283	20.0	20.4	
96 N-Propylbenzene	120	9.631	9.631	0.000	99	998554	20.0	19.7	
97 2-Chlorotoluene	126	9.726	9.726	0.000	97	825480	20.0	18.9	
99 1,3,5-Trimethylbenzene	105	9.797	9.797	0.000	94	2992535	20.0	19.5	
100 4-Chlorotoluene	126	9.821	9.821	0.000	98	877636	20.0	18.9	
102 tert-Butylbenzene	119	10.129	10.129	0.000	90	2615271	20.0	19.6	
104 1,2,4-Trimethylbenzene	105	10.165	10.165	0.000	94	3110140	20.0	19.4	
105 sec-Butylbenzene	105	10.343	10.343	0.000	93	3799898	20.0	19.7	
106 1,3-Dichlorobenzene	146	10.450	10.450	0.000	98	1712753	20.0	18.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	10.473	10.473	0.000	97	3318892	20.0	19.7	
108 1,4-Dichlorobenzene	146	10.533	10.533	0.000	95	1748229	20.0	18.9	
111 n-Butylbenzene	91	10.876	10.876	0.000	98	2780296	20.0	19.8	
112 1,2-Dichlorobenzene	146	10.900	10.900	0.000	99	1637059	20.0	19.1	
113 1,2-Dibromo-3-Chloropropan	157	11.671	11.671	0.000	90	135520	20.0	21.6	
115 1,2,4-Trichlorobenzene	180	12.513	12.513	0.000	93	1048708	20.0	19.7	
116 Hexachlorobutadiene	225	12.679	12.679	0.000	95	427869	20.0	19.4	
117 Naphthalene	128	12.750	12.750	0.000	96	2356360	20.0	20.5	
118 1,2,3-Trichlorobenzene	180	13.011	13.011	0.000	96	933941	20.0	19.6	
S 131 1,2-Dichloroethene, Total	96				0		40.0	38.3	
S 132 1,3-Dichloropropene, Total	75				0		40.0	40.3	
S 133 Xylenes, Total	106				0		40.0	39.4	
S 134 Trihalomethanes, Total	1				0		80.0	80.0	

Reagents:

VMRPRIMW_00120	Amount Added:	16.00	Units: uL
VMRGAS_00097	Amount Added:	16.00	Units: uL
VMAROLISTDW_00095	Amount Added:	16.00	Units: uL
vm50ss_stk_00065	Amount Added:	16.00	Units: uL
VM50IS_00048	Amount Added:	1.00	Units: uL

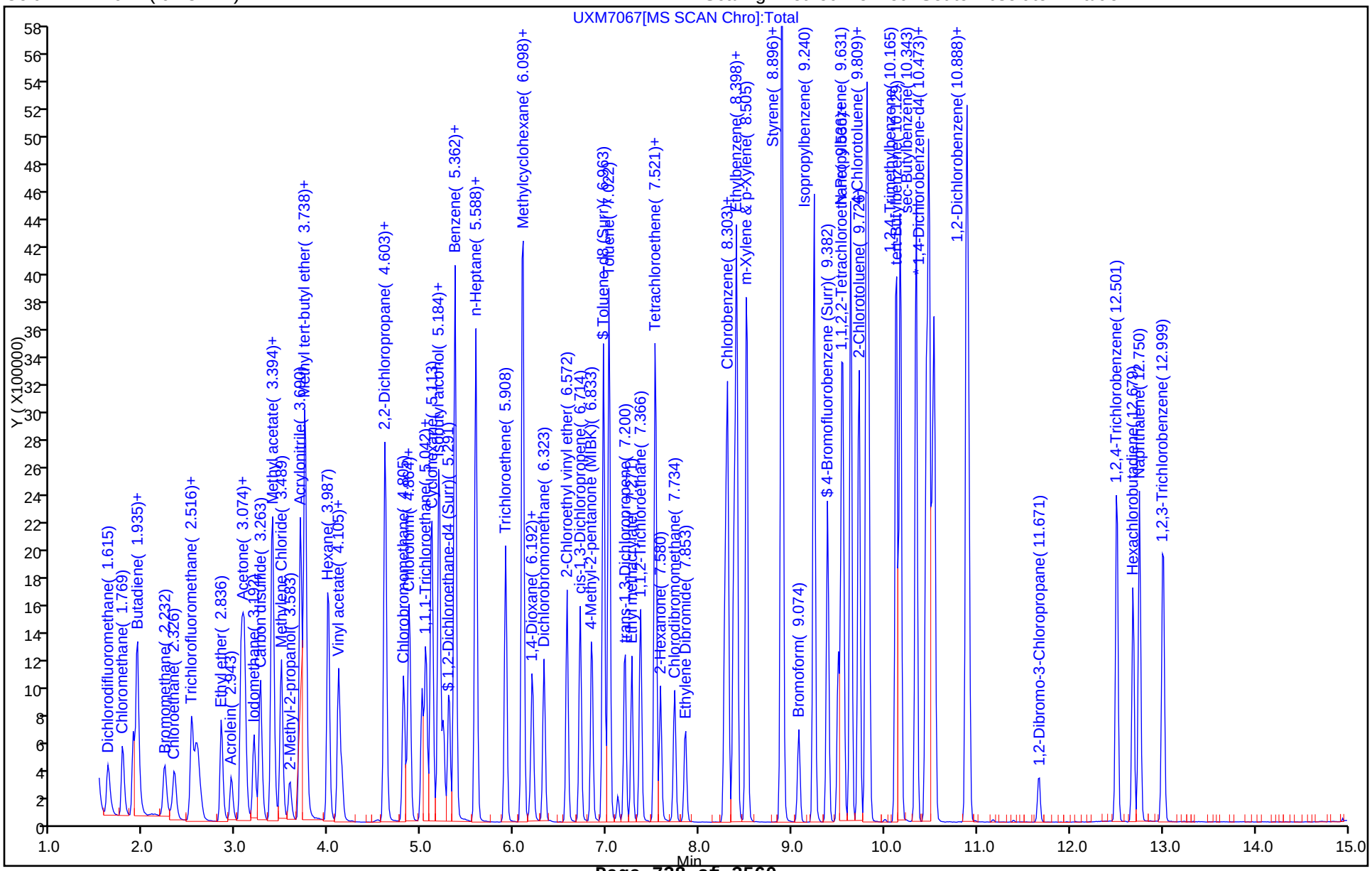
Report Date: 09-Apr-2015 07:46:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7067.D

Injection Date:	08-Apr-2015 13:22:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	STD8260 L5			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7068.D
Lims ID: STD8260 L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 08-Apr-2015 13:44:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042365-004
Operator ID: 1904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub29

Method: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 09-Apr-2015 07:46:40 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.588	5.588	0.000	99	1548065	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.280	8.280	0.000	84	1098353	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	91	639037	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.007	5.007	0.000	95	300503	10.0	9.71	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	327407	10.0	9.62	
$ 6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	92	1256422	10.0	9.58	
$ 7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	92	462107	10.0	9.82	
9 Dichlorodifluoromethane	85	1.615	1.615	0.000	98	242698	10.0	8.51	
10 Chloromethane	50	1.769	1.769	0.000	99	388184	10.0	9.89	
11 Vinyl chloride	62	1.888	1.888	0.000	98	399722	10.0	9.27	
12 Butadiene	54	1.923	1.923	0.000	0	336247	10.0	8.66	
13 Bromomethane	94	2.220	2.220	0.000	88	207068	10.0	9.96	
14 Chloroethane	64	2.327	2.327	0.000	99	245799	10.0	9.71	
15 Dichlorofluoromethane	67	2.516	2.516	0.000	96	562834	10.0	9.94	
16 Trichlorofluoromethane	101	2.564	2.564	0.000	99	334848	10.0	8.91	
17 Ethyl ether	59	2.837	2.837	0.000	89	285000	10.0	10.2	
18 Acrolein	56	2.943	2.943	0.000	98	166842	50.0	46.2	
19 1,1-Dichloroethene	96	3.050	3.050	0.000	96	317431	10.0	10.1	
20 1,1,2-Trichloro-1,2,2-trif	151	3.086	3.086	0.000	92	254560	10.0	10.5	
21 Acetone	43	3.086	3.086	0.000	100	177442	20.0	19.0	
23 Iodomethane	142	3.192	3.192	0.000	96	514079	10.0	10.4	
24 Carbon disulfide	76	3.263	3.263	0.000	98	956729	10.0	9.93	
26 3-Chloro-1-propene	76	3.382	3.382	0.000	93	220761	10.0	10.4	
27 Methyl acetate	43	3.394	3.394	0.000	97	1050530	50.0	50.9	
28 Methylene Chloride	84	3.489	3.489	0.000	88	400235	10.0	10.5	
29 2-Methyl-2-propanol	59	3.572	3.572	0.000	99	196624	100.0	99.3	
30 Acrylonitrile	53	3.690	3.690	0.000	99	1119754	100.0	104.6	
32 trans-1,2-Dichloroethene	96	3.738	3.738	0.000	97	378226	10.0	10.1	
31 Methyl tert-butyl ether	73	3.738	3.738	0.000	94	937984	10.0	10.2	
33 Hexane	86	3.999	3.999	0.000	89	93096	10.0	10.3	
34 1,1-Dichloroethane	63	4.105	4.105	0.000	96	634661	10.0	10.3	
35 Vinyl acetate	43	4.141	4.141	0.000	96	256374	9.60	9.89	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.603	4.603	0.000	79	417073	10.0	10.4	
40 2-Butanone (MEK)	43	4.603	4.603	0.000	54	235342	20.0	20.2	
41 2,2-Dichloropropane	77	4.615	4.610	0.005	86	402860	10.0	10.2	
45 Chlorobromomethane	128	4.805	4.805	0.000	91	197438	10.0	10.5	
46 Tetrahydrofuran	42	4.852	4.852	0.000	88	144627	20.0	19.5	
47 Chloroform	83	4.864	4.864	0.000	92	627339	10.0	10.4	
48 1,1,1-Trichloroethane	97	5.042	5.042	0.000	97	477408	10.0	10.4	
49 Cyclohexane	56	5.113	5.113	0.000	87	577795	10.0	10.2	
50 1,1-Dichloropropene	75	5.184	5.184	0.000	98	461974	10.0	9.96	
51 Carbon tetrachloride	117	5.196	5.196	0.000	97	378785	10.0	10.1	
52 Isobutyl alcohol	41	5.232	5.232	0.000	94	168927	250.0	245.6	
54 Benzene	78	5.362	5.362	0.000	94	1600731	10.0	10.3	
53 1,2-Dichloroethane	62	5.362	5.362	0.000	55	439901	10.0	10.5	
56 n-Heptane	57	5.588	5.588	0.000	85	257320	10.0	9.47	
58 Trichloroethene	130	5.908	5.908	0.000	97	406306	10.0	10.3	
60 Methylcyclohexane	83	6.086	6.086	0.000	90	600527	10.0	10.0	
61 1,2-Dichloropropane	63	6.098	6.098	0.000	91	364937	10.0	10.4	
63 Dibromomethane	93	6.192	6.192	0.000	93	196259	10.0	10.5	
64 1,4-Dioxane	88	6.204	6.204	0.000	91	53729	200.0	208.8	
65 Dichlorobromomethane	83	6.323	6.323	0.000	99	453434	10.0	10.5	
67 2-Chloroethyl vinyl ether	63	6.572	6.572	0.000	90	386667	20.0	20.9	
68 cis-1,3-Dichloropropene	75	6.714	6.714	0.000	97	529653	10.0	10.4	
69 4-Methyl-2-pentanone (MIBK	43	6.833	6.833	0.000	95	472020	20.0	20.5	
70 Toluene	91	7.023	7.023	0.000	98	1657841	10.0	10.2	
71 trans-1,3-Dichloropropene	75	7.200	7.200	0.000	91	423296	10.0	10.2	
72 Ethyl methacrylate	69	7.272	7.272	0.000	87	339950	10.0	10.2	
73 1,1,2-Trichloroethane	97	7.366	7.366	0.000	88	299335	10.0	10.3	
74 1,3-Dichloropropane	76	7.521	7.521	0.000	91	532175	10.0	10.3	
75 Tetrachloroethene	164	7.532	7.532	0.000	94	315179	10.0	10.2	
76 2-Hexanone	43	7.580	7.580	0.000	94	316954	20.0	19.9	
78 Chlorodibromomethane	129	7.734	7.734	0.000	91	299624	10.0	10.0	
80 Ethylene Dibromide	107	7.853	7.853	0.000	97	290915	10.0	10.5	
82 Chlorobenzene	112	8.303	8.303	0.000	96	1069581	10.0	10.3	
83 1,1,1,2-Tetrachloroethane	131	8.374	8.374	0.000	96	344706	10.0	10.4	
84 Ethylbenzene	106	8.398	8.398	0.000	98	575507	10.0	10.3	
85 m-Xylene & p-Xylene	106	8.505	8.505	0.000	97	731190	10.0	10.5	
86 o-Xylene	106	8.884	8.884	0.000	96	714012	10.0	10.6	
87 Styrene	104	8.896	8.896	0.000	92	1127566	10.0	10.4	
88 Bromoform	173	9.074	9.074	0.000	98	188261	10.0	10.3	
89 Isopropylbenzene	105	9.240	9.240	0.000	95	1848075	10.0	10.4	
92 1,1,2,2-Tetrachloroethane	83	9.501	9.501	0.000	93	380619	10.0	10.2	
93 Bromobenzene	156	9.537	9.537	0.000	91	461127	10.0	9.98	
95 1,2,3-Trichloropropane	110	9.548	9.548	0.000	81	116273	10.0	9.98	
94 trans-1,4-Dichloro-2-buten	53	9.560	9.560	0.000	76	90862	10.0	9.92	
96 N-Propylbenzene	120	9.631	9.631	0.000	99	507345	10.0	10.0	
97 2-Chlorotoluene	126	9.726	9.726	0.000	97	437074	10.0	10.0	
99 1,3,5-Trimethylbenzene	105	9.797	9.797	0.000	94	1533706	10.0	10.0	
100 4-Chlorotoluene	126	9.821	9.821	0.000	98	459872	10.0	9.90	
102 tert-Butylbenzene	119	10.129	10.129	0.000	90	1332376	10.0	9.98	
104 1,2,4-Trimethylbenzene	105	10.165	10.165	0.000	94	1635840	10.0	10.2	
105 sec-Butylbenzene	105	10.343	10.343	0.000	93	1922604	10.0	9.98	
106 1,3-Dichlorobenzene	146	10.450	10.450	0.000	97	905984	10.0	10.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	10.485	10.485	0.000	97	1677489	10.0	9.98	
108 1,4-Dichlorobenzene	146	10.533	10.533	0.000	94	927811	10.0	10.0	
111 n-Butylbenzene	91	10.888	10.888	0.000	97	1429823	10.0	10.2	
112 1,2-Dichlorobenzene	146	10.900	10.900	0.000	99	864865	10.0	10.1	
113 1,2-Dibromo-3-Chloropropan	157	11.671	11.671	0.000	91	66116	10.0	10.5	
115 1,2,4-Trichlorobenzene	180	12.513	12.513	0.000	93	547207	10.0	10.3	
116 Hexachlorobutadiene	225	12.679	12.679	0.000	94	224846	10.0	10.2	
117 Naphthalene	128	12.750	12.750	0.000	96	1158120	10.0	10.1	
118 1,2,3-Trichlorobenzene	180	13.011	13.011	0.000	95	485845	10.0	10.2	
S 131 1,2-Dichloroethene, Total	96				0		20.0	20.5	
S 132 1,3-Dichloropropene, Total	75				0		20.0	20.7	
S 133 Xylenes, Total	106				0		20.0	21.1	
S 134 Trihalomethanes, Total	1				0		40.0	41.3	

Reagents:

VMRPRIMW_00120	Amount Added:	8.00	Units: uL
VMRGAS_00097	Amount Added:	8.00	Units: uL
VMAROLISTDW_00095	Amount Added:	8.00	Units: uL
vm50ss_stk_00065	Amount Added:	8.00	Units: uL
VM50IS_00048	Amount Added:	1.00	Units: uL

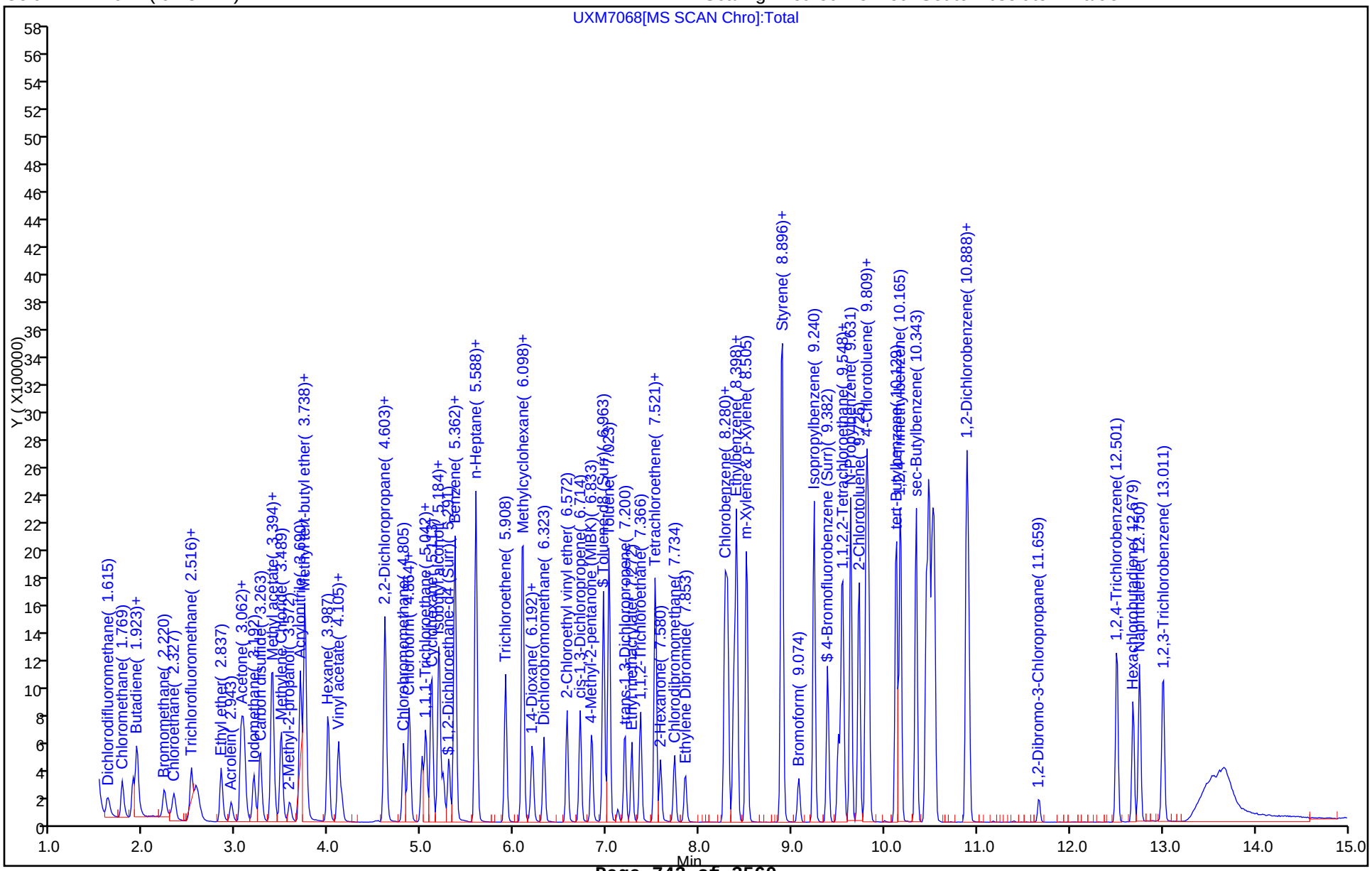
Report Date: 09-Apr-2015 07:46:41 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7068.D

Injection Date:	08-Apr-2015 13:44:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	STD8260 L4			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7069.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 08-Apr-2015 14:07:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042365-005
Operator ID: 1904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub29

Method: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 09-Apr-2015 07:46:41 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.588	5.588	0.000	99	1615711	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.280	8.280	0.000	85	1138838	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	92	638139	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.007	5.007	0.000	94	158433	5.00	4.91	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	172978	5.00	4.87	
$ 6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	92	668083	5.00	4.91	
$ 7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	92	244718	5.00	5.01	
9 Dichlorodifluoromethane	85	1.615	1.615	0.000	99	140857	5.00	4.73	
10 Chloromethane	50	1.769	1.769	0.000	99	205715	5.00	5.02	
11 Vinyl chloride	62	1.888	1.888	0.000	98	223994	5.00	4.98	
12 Butadiene	54	1.935	1.923	0.012	0	200871	5.00	4.96	
13 Bromomethane	94	2.232	2.220	0.012	90	103009	5.00	4.75	
14 Chloroethane	64	2.338	2.327	0.011	99	128633	5.00	4.87	
15 Dichlorofluoromethane	67	2.516	2.516	0.000	97	282460	5.00	4.78	
16 Trichlorofluoromethane	101	2.564	2.564	0.000	97	185528	5.00	4.73	
17 Ethyl ether	59	2.836	2.837	0.000	89	140678	5.00	4.83	
18 Acrolein	56	2.943	2.943	0.000	96	96810	25.0	25.7	
19 1,1-Dichloroethene	96	3.050	3.050	0.000	97	161038	5.00	4.93	
20 1,1,2-Trichloro-1,2,2-trif	151	3.085	3.086	-0.001	91	120932	5.00	4.76	
21 Acetone	43	3.085	3.086	-0.001	71	92528	10.0	9.48	
23 Iodomethane	142	3.192	3.192	0.000	96	251156	5.00	4.88	
24 Carbon disulfide	76	3.263	3.263	0.000	98	498244	5.00	4.96	
26 3-Chloro-1-propene	76	3.382	3.382	0.000	93	108379	5.00	4.87	
27 Methyl acetate	43	3.394	3.394	0.000	97	522740	25.0	24.3	
28 Methylene Chloride	84	3.489	3.489	0.000	89	205234	5.00	4.90	
29 2-Methyl-2-propanol	59	3.572	3.572	0.000	99	99599	50.0	48.2	
30 Acrylonitrile	53	3.690	3.690	0.000	98	527388	50.0	47.2	
32 trans-1,2-Dichloroethene	96	3.738	3.738	0.000	67	192169	5.00	4.90	
31 Methyl tert-butyl ether	73	3.738	3.738	0.000	94	473972	5.00	4.96	
33 Hexane	86	3.987	3.999	-0.012	89	46020	5.00	4.87	
34 1,1-Dichloroethane	63	4.105	4.105	0.000	96	312956	5.00	4.88	
35 Vinyl acetate	43	4.141	4.141	0.000	97	124883	4.80	4.62	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.603	4.603	0.000	80	205785	5.00	4.92	
40 2-Butanone (MEK)	43	4.603	4.603	0.000	54	117472	10.0	9.67	
41 2,2-Dichloropropane	77	4.615	4.610	0.005	85	209114	5.00	5.09	
45 Chlorobromomethane	128	4.805	4.805	0.000	93	95005	5.00	4.84	
46 Tetrahydrofuran	42	4.852	4.852	0.000	87	73033	10.0	9.44	
47 Chloroform	83	4.864	4.864	0.000	93	319367	5.00	5.09	
48 1,1,1-Trichloroethane	97	5.042	5.042	0.000	97	240082	5.00	5.02	
49 Cyclohexane	56	5.113	5.113	0.000	86	292014	5.00	4.94	
50 1,1-Dichloropropene	75	5.184	5.184	0.000	98	239308	5.00	4.94	
51 Carbon tetrachloride	117	5.196	5.196	0.000	96	192165	5.00	4.90	
52 Isobutyl alcohol	41	5.232	5.232	0.000	92	86934	125.0	121.1	
54 Benzene	78	5.362	5.362	0.000	94	799946	5.00	4.94	
53 1,2-Dichloroethane	62	5.362	5.362	0.000	54	218533	5.00	5.00	
56 n-Heptane	57	5.588	5.588	0.000	88	158070	5.00	4.91	
58 Trichloroethene	130	5.908	5.908	0.000	96	206338	5.00	5.02	
60 Methylcyclohexane	83	6.086	6.086	0.000	90	302407	5.00	4.83	
61 1,2-Dichloropropane	63	6.098	6.098	0.000	94	186424	5.00	5.09	
63 Dibromomethane	93	6.192	6.192	0.000	93	95833	5.00	4.93	
64 1,4-Dioxane	88	6.204	6.204	0.000	40	27293	100.0	101.6	
65 Dichlorobromomethane	83	6.323	6.323	0.000	99	220994	5.00	4.91	
67 2-Chloroethyl vinyl ether	63	6.572	6.572	0.000	92	188701	10.0	9.78	
68 cis-1,3-Dichloropropene	75	6.714	6.714	0.000	97	256701	5.00	4.84	
69 4-Methyl-2-pentanone (MIBK	43	6.833	6.833	0.000	95	231016	10.0	9.62	
70 Toluene	91	7.023	7.023	-0.001	98	836157	5.00	4.96	
71 trans-1,3-Dichloropropene	75	7.200	7.200	0.000	90	210531	5.00	4.92	
72 Ethyl methacrylate	69	7.272	7.272	0.000	88	169293	5.00	4.89	
73 1,1,2-Trichloroethane	97	7.366	7.366	0.000	88	148725	5.00	4.92	
74 1,3-Dichloropropane	76	7.521	7.521	0.000	88	266053	5.00	4.96	
75 Tetrachloroethene	164	7.532	7.532	0.000	91	156477	5.00	4.90	
76 2-Hexanone	43	7.580	7.580	0.000	96	164796	10.0	10.0	
78 Chlorodibromomethane	129	7.734	7.734	0.000	90	149029	5.00	4.81	
80 Ethylene Dibromide	107	7.853	7.853	0.000	98	139164	5.00	4.85	
82 Chlorobenzene	112	8.303	8.303	0.000	95	537400	5.00	4.97	
83 1,1,1,2-Tetrachloroethane	131	8.374	8.374	0.000	95	169683	5.00	4.93	
84 Ethylbenzene	106	8.398	8.398	0.000	98	291113	5.00	5.04	
85 m-Xylene & p-Xylene	106	8.505	8.505	0.000	97	360143	5.00	4.98	
86 o-Xylene	106	8.884	8.884	0.000	94	348841	5.00	4.99	
87 Styrene	104	8.896	8.896	0.000	93	545252	5.00	4.86	
88 Bromoform	173	9.074	9.074	0.000	98	90533	5.00	4.80	
89 Isopropylbenzene	105	9.240	9.240	0.000	95	907101	5.00	4.90	
92 1,1,2,2-Tetrachloroethane	83	9.501	9.501	0.000	95	179157	5.00	4.78	
93 Bromobenzene	156	9.537	9.537	-0.001	93	223701	5.00	4.85	
95 1,2,3-Trichloropropane	110	9.548	9.548	0.000	81	56075	5.00	4.82	
94 trans-1,4-Dichloro-2-buten	53	9.560	9.560	0.000	74	44369	5.00	4.85	
96 N-Propylbenzene	120	9.631	9.631	0.000	99	254462	5.00	5.04	
97 2-Chlorotoluene	126	9.726	9.726	0.000	97	215043	5.00	4.93	
99 1,3,5-Trimethylbenzene	105	9.797	9.797	0.000	95	761323	5.00	4.98	
100 4-Chlorotoluene	126	9.821	9.821	0.000	98	238520	5.00	5.14	
102 tert-Butylbenzene	119	10.129	10.129	0.000	90	667699	5.00	5.01	
104 1,2,4-Trimethylbenzene	105	10.165	10.165	0.000	94	779068	5.00	4.87	
105 sec-Butylbenzene	105	10.343	10.343	0.000	93	956212	5.00	4.97	
106 1,3-Dichlorobenzene	146	10.450	10.450	0.000	97	448685	5.00	4.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	10.473	10.485	-0.012	97	817341	5.00	4.87	
108 1,4-Dichlorobenzene	146	10.533	10.533	0.000	96	456122	5.00	4.93	
111 n-Butylbenzene	91	10.888	10.888	0.000	97	685404	5.00	4.89	
112 1,2-Dichlorobenzene	146	10.912	10.900	0.012	99	415221	5.00	4.86	
113 1,2-Dibromo-3-Chloropropan	157	11.671	11.671	0.000	88	29908	5.00	4.77	
115 1,2,4-Trichlorobenzene	180	12.501	12.513	-0.012	94	257150	5.00	4.85	
116 Hexachlorobutadiene	225	12.679	12.679	0.000	95	106764	5.00	4.85	
117 Naphthalene	128	12.750	12.750	0.000	96	559666	5.00	4.88	
118 1,2,3-Trichlorobenzene	180	13.011	13.011	0.000	96	237020	5.00	5.00	
S 131 1,2-Dichloroethene, Total	96				0		10.0	9.82	
S 132 1,3-Dichloropropene, Total	75				0		10.0	9.76	
S 133 Xylenes, Total	106				0		10.0	9.96	
S 134 Trihalomethanes, Total	1				0		20.0	19.6	

Reagents:

VMRPRIMW_00120	Amount Added:	4.00	Units: uL
VMRGAS_00097	Amount Added:	4.00	Units: uL
VMAROLISTDW_00095	Amount Added:	4.00	Units: uL
vm50ss_stk_00065	Amount Added:	4.00	Units: uL
VM50IS_00048	Amount Added:	1.00	Units: uL

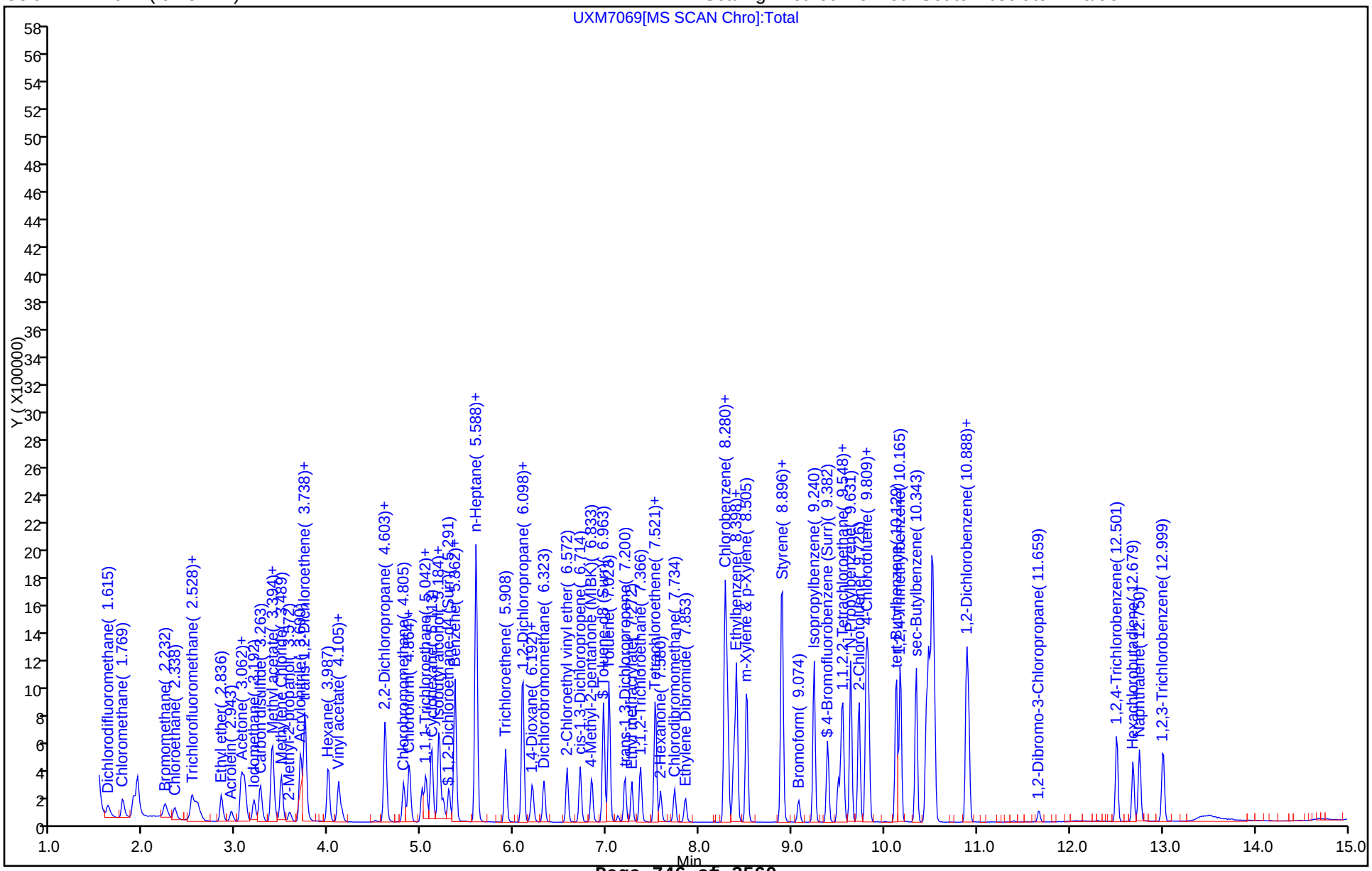
Report Date: 09-Apr-2015 07:46:42 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7069.D

Injection Date:	08-Apr-2015 14:07:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	STD8260 L3			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7070.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 08-Apr-2015 14:30:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042365-006
Operator ID: 1904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub29

Method: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 09-Apr-2015 07:46:43 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: quayler Date: 09-Apr-2015 07:37:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.588	5.588	0.000	99	1563330	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.279	8.280	-0.001	84	1126692	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	94	609997	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.006	5.007	-0.001	94	62674	2.00	2.01	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	68480	2.00	1.99	
$ 6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	92	267445	2.00	1.99	
$ 7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	92	95592	2.00	1.98	
9 Dichlorodifluoromethane	85	1.615	1.615	0.000	98	55676	2.00	1.93	
10 Chloromethane	50	1.769	1.769	0.000	99	82030	2.00	2.07	
11 Vinyl chloride	62	1.888	1.888	0.000	98	87630	2.00	2.01	
12 Butadiene	54	1.923	1.923	0.000	0	80915	2.00	2.06	
13 Bromomethane	94	2.232	2.220	0.012	89	43161	2.00	2.06	
14 Chloroethane	64	2.338	2.327	0.011	98	53063	2.00	2.08	
15 Dichlorofluoromethane	67	2.516	2.516	0.000	97	118360	2.00	2.07	
16 Trichlorofluoromethane	101	2.564	2.564	0.000	98	78305	2.00	2.06	
17 Ethyl ether	59	2.836	2.837	0.000	92	57764	2.00	2.05	
18 Acrolein	56	2.943	2.943	0.000	96	36457	10.0	10.0	
19 1,1-Dichloroethene	96	3.050	3.050	0.000	98	59936	2.00	1.90	
20 1,1,2-Trichloro-1,2,2-trif	151	3.085	3.086	-0.001	89	44591	2.00	1.81	
21 Acetone	43	3.097	3.086	0.011	93	40303	4.00	4.27	
23 Iodomethane	142	3.192	3.192	0.000	96	99607	2.00	2.00	
24 Carbon disulfide	76	3.263	3.263	0.000	98	193845	2.00	1.99	
26 3-Chloro-1-propene	76	3.382	3.382	0.000	93	43357	2.00	2.01	
27 Methyl acetate	43	3.394	3.394	0.000	97	206540	10.0	9.92	
28 Methylene Chloride	84	3.489	3.489	0.000	90	91345	2.00	1.99	
29 2-Methyl-2-propanol	59	3.572	3.572	0.000	99	41529	20.0	20.8	
30 Acrylonitrile	53	3.690	3.690	0.000	99	206234	20.0	19.1	
32 trans-1,2-Dichloroethene	96	3.738	3.738	0.000	70	79405	2.00	2.09	
31 Methyl tert-butyl ether	73	3.738	3.738	0.000	95	180473	2.00	1.95	
33 Hexane	86	3.987	3.999	-0.012	89	15768	2.00	1.72	
34 1,1-Dichloroethane	63	4.105	4.105	0.000	95	119780	2.00	1.93	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.141	4.141	0.000	97	48645	1.92	1.86	
39 cis-1,2-Dichloroethene	96	4.603	4.603	0.000	82	82689	2.00	2.04	
40 2-Butanone (MEK)	43	4.603	4.603	0.000	53	46903	4.00	3.99	
41 2,2-Dichloropropane	77	4.615	4.610	0.005	88	77591	2.00	1.95	
45 Chlorobromomethane	128	4.805	4.805	0.000	89	36532	2.00	1.92	
46 Tetrahydrofuran	42	4.852	4.852	0.000	87	31410	4.00	4.20	
47 Chloroform	83	4.864	4.864	0.000	92	120340	2.00	1.98	
48 1,1,1-Trichloroethane	97	5.042	5.042	0.000	98	89274	2.00	1.93	
49 Cyclohexane	56	5.101	5.113	-0.012	86	102189	2.00	1.79	
50 1,1-Dichloropropene	75	5.184	5.184	0.000	98	94286	2.00	2.01	
51 Carbon tetrachloride	117	5.196	5.196	0.000	95	75098	2.00	1.98	
52 Isobutyl alcohol	41	5.244	5.232	0.012	98	35877	50.0	51.7	
54 Benzene	78	5.362	5.362	0.000	95	307377	2.00	1.96	
53 1,2-Dichloroethane	62	5.362	5.362	0.000	55	85876	2.00	2.03	
56 n-Heptane	57	5.588	5.588	0.000	39	80485	2.00	1.81	
58 Trichloroethene	130	5.908	5.908	0.000	96	78784	2.00	1.98	
60 Methylcyclohexane	83	6.086	6.086	0.000	87	112582	2.00	1.86	
61 1,2-Dichloropropane	63	6.097	6.098	-0.001	78	69884	2.00	1.97	
63 Dibromomethane	93	6.192	6.192	0.000	89	37594	2.00	2.00	
64 1,4-Dioxane	88	6.204	6.204	0.000	37	10888	40.0	41.9	
65 Dichlorobromomethane	83	6.323	6.323	0.000	100	85112	2.00	1.96	
67 2-Chloroethyl vinyl ether	63	6.572	6.572	0.000	92	71924	4.00	3.85	
68 cis-1,3-Dichloropropene	75	6.714	6.714	0.000	97	99996	2.00	1.95	
69 4-Methyl-2-pentanone (MIBK	43	6.833	6.833	0.000	95	92946	4.00	4.00	
70 Toluene	91	7.022	7.023	-0.001	98	327977	2.00	1.97	
71 trans-1,3-Dichloropropene	75	7.200	7.200	0.000	91	83980	2.00	1.98	
72 Ethyl methacrylate	69	7.271	7.272	-0.001	88	65551	2.00	1.91	
73 1,1,2-Trichloroethane	97	7.366	7.366	0.000	88	59363	2.00	1.98	
74 1,3-Dichloropropane	76	7.521	7.521	-0.001	88	102163	2.00	1.93	
75 Tetrachloroethene	164	7.532	7.532	0.000	90	60595	2.00	1.92	
76 2-Hexanone	43	7.580	7.580	0.000	94	64637	4.00	3.96	
78 Chlorodibromomethane	129	7.734	7.734	0.000	90	58315	2.00	1.90	
80 Ethylene Dibromide	107	7.853	7.853	0.000	99	56955	2.00	2.00	
82 Chlorobenzene	112	8.303	8.303	0.000	96	210696	2.00	1.97	
83 1,1,1,2-Tetrachloroethane	131	8.374	8.374	0.000	92	67561	2.00	1.98	
84 Ethylbenzene	106	8.398	8.398	0.000	97	113464	2.00	1.98	
85 m-Xylene & p-Xylene	106	8.517	8.505	0.012	98	145431	2.00	2.03	
86 o-Xylene	106	8.884	8.884	0.000	96	129904	2.00	1.88	
87 Styrene	104	8.896	8.896	0.000	92	215294	2.00	1.94	
88 Bromoform	173	9.074	9.074	0.000	97	33744	2.00	1.81	
89 Isopropylbenzene	105	9.240	9.240	0.000	95	346325	2.00	1.89	
92 1,1,2,2-Tetrachloroethane	83	9.501	9.501	0.000	95	71837	2.00	2.01	
93 Bromobenzene	156	9.536	9.537	-0.001	93	89860	2.00	2.04	
95 1,2,3-Trichloropropane	110	9.548	9.548	0.000	82	24014	2.00	2.16	
94 trans-1,4-Dichloro-2-buten	53	9.560	9.560	0.000	69	15946	2.00	1.82	
96 N-Propylbenzene	120	9.631	9.631	0.000	99	93650	2.00	1.94	
97 2-Chlorotoluene	126	9.726	9.726	0.000	96	81124	2.00	1.95	
99 1,3,5-Trimethylbenzene	105	9.797	9.797	0.000	94	289090	2.00	1.98	
100 4-Chlorotoluene	126	9.821	9.821	0.000	97	87928	2.00	1.98	
102 tert-Butylbenzene	119	10.129	10.129	0.000	90	243411	2.00	1.91	
104 1,2,4-Trimethylbenzene	105	10.165	10.165	0.000	94	302427	2.00	1.98	
105 sec-Butylbenzene	105	10.343	10.343	0.000	93	349623	2.00	1.90	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.450	10.450	0.000	96	176506	2.00	2.05	
107 4-Isopropyltoluene	119	10.485	10.485	0.000	97	306339	2.00	1.91	
108 1,4-Dichlorobenzene	146	10.533	10.533	0.000	94	171223	2.00	1.94	
111 n-Butylbenzene	91	10.888	10.888	0.000	97	263622	2.00	1.97	
112 1,2-Dichlorobenzene	146	10.900	10.900	0.000	98	164804	2.00	2.02	
113 1,2-Dibromo-3-Chloropropan	157	11.671	11.671	0.000	81	11289	2.00	1.88	
115 1,2,4-Trichlorobenzene	180	12.513	12.513	0.000	93	102074	2.00	2.01	
116 Hexachlorobutadiene	225	12.679	12.679	0.000	95	41409	2.00	1.97	
117 Naphthalene	128	12.750	12.750	0.000	96	214063	2.00	1.95	
118 1,2,3-Trichlorobenzene	180	13.011	13.011	0.000	94	86828	2.00	1.91	
S 131 1,2-Dichloroethene, Total	96				0		4.00	4.13	
S 132 1,3-Dichloropropene, Total	75				0		4.00	3.93	
S 133 Xylenes, Total	106				0		4.00	3.91	
S 134 Trihalomethanes, Total	1				0		8.00	7.65	

Reagents:

VMRPRIMW_00120	Amount Added:	1.60	Units: uL
VMRGAS_00097	Amount Added:	1.60	Units: uL
VMAROLISTDW_00095	Amount Added:	1.60	Units: uL
vm50ss_stk_00065	Amount Added:	1.60	Units: uL
VM50IS_00048	Amount Added:	1.00	Units: uL

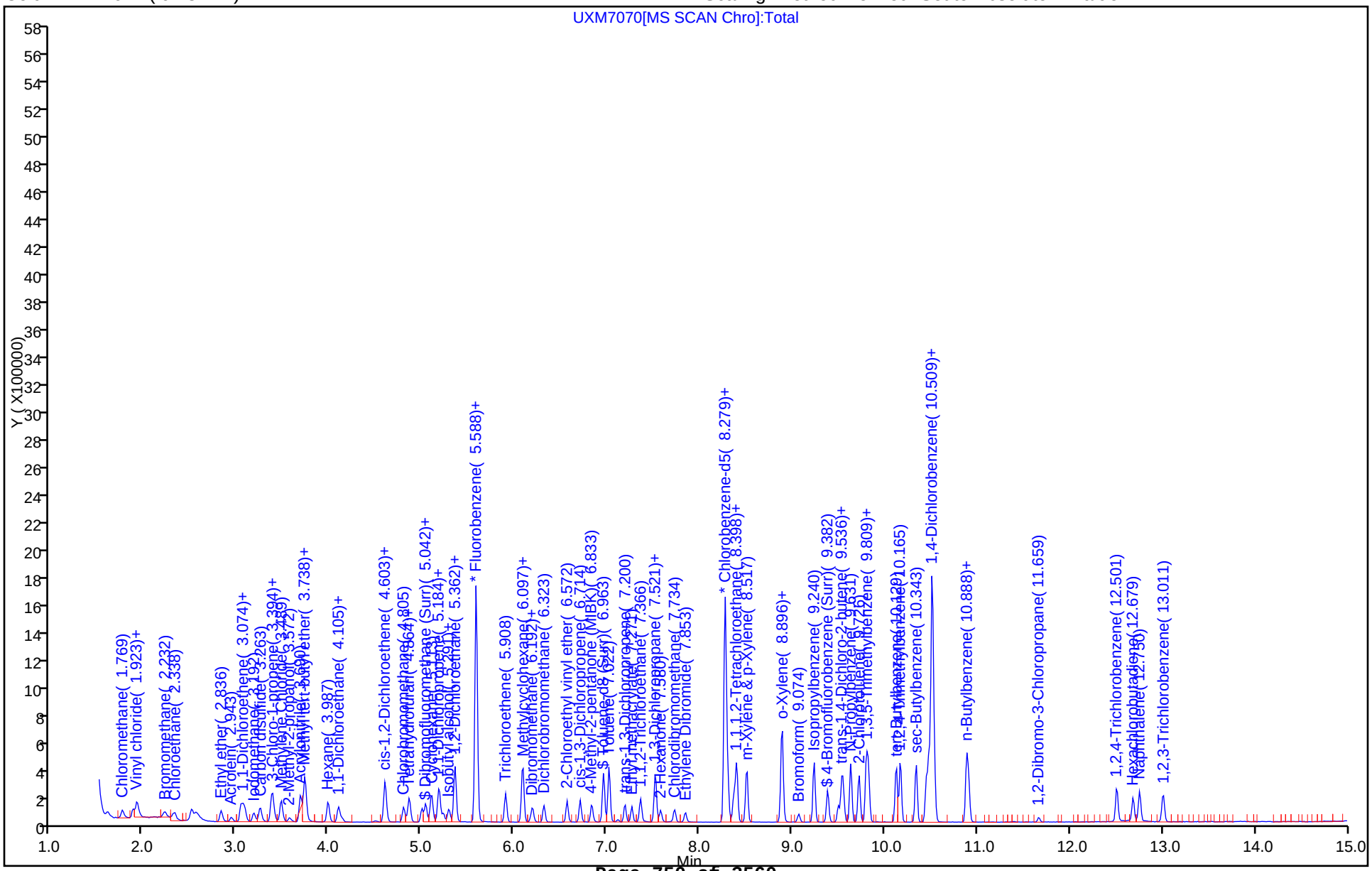
Report Date: 09-Apr-2015 07:46:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7070.D

Injection Date:	08-Apr-2015 14:30:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	STD8260 L2			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7071.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 08-Apr-2015 14:53:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042365-007
Operator ID: 1904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub29

Method: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 09-Apr-2015 07:46:44 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: quayler Date: 09-Apr-2015 07:37:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.587	5.588	-0.001	99	1577216	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.279	8.280	-0.001	84	1114650	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	94	595011	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.006	5.007	-0.001	94	32663	1.00	1.04	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	37257	1.00	1.07	
$ 6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	92	133342	1.00	1.00	
$ 7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	91	48826	1.00	1.02	
9 Dichlorodifluoromethane	85	1.615	1.615	0.000	98	28917	1.00	0.99	
10 Chloromethane	50	1.769	1.769	0.000	98	39695	1.00	0.99	
11 Vinyl chloride	62	1.888	1.888	0.000	96	44743	1.00	1.02	
12 Butadiene	54	1.935	1.923	0.012	0	39558	1.00	1.00	
13 Bromomethane	94	2.243	2.220	0.023	90	23786	1.00	1.12	
14 Chloroethane	64	2.326	2.327	-0.001	82	26576	1.00	1.03	
15 Dichlorofluoromethane	67	2.516	2.516	0.000	97	59976	1.00	1.04	
16 Trichlorofluoromethane	101	2.564	2.564	0.000	94	37426	1.00	0.9772	
17 Ethyl ether	59	2.836	2.837	0.000	87	28439	1.00	1.00	
18 Acrolein	56	2.943	2.943	0.000	95	16994	5.00	4.62	
19 1,1-Dichloroethene	96	3.050	3.050	0.000	96	31625	1.00	0.99	
20 1,1,2-Trichloro-1,2,2-trif	151	3.085	3.086	-0.001	90	24378	1.00	0.9833	
21 Acetone	43	3.097	3.086	0.011	76	22402	2.00	2.35	
23 Iodomethane	142	3.192	3.192	0.000	96	50914	1.00	1.01	
24 Carbon disulfide	76	3.263	3.263	0.000	99	96908	1.00	0.9876	
26 3-Chloro-1-propene	76	3.382	3.382	0.000	93	21041	1.00	0.9685	
27 Methyl acetate	43	3.394	3.394	0.000	96	102515	5.00	4.88	
28 Methylene Chloride	84	3.488	3.489	-0.001	93	55764	1.00	1.01	
29 2-Methyl-2-propanol	59	3.583	3.572	0.011	98	20864	10.0	10.3	
30 Acrylonitrile	53	3.702	3.690	0.012	100	106416	10.0	9.76	
32 trans-1,2-Dichloroethene	96	3.749	3.738	0.011	77	39000	1.00	1.02	
31 Methyl tert-butyl ether	73	3.738	3.738	0.000	93	90640	1.00	0.9712	
33 Hexane	86	3.998	3.999	-0.001	88	8682	1.00	0.9403	
34 1,1-Dichloroethane	63	4.105	4.105	0.000	96	63377	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.141	4.141	0.000	97	24926	0.9600	0.9437	
39 cis-1,2-Dichloroethene	96	4.603	4.603	0.000	81	39548	1.00	0.9680	
40 2-Butanone (MEK)	43	4.603	4.603	0.000	52	23553	2.00	1.99	
41 2,2-Dichloropropane	77	4.615	4.610	0.005	91	41868	1.00	1.04	
45 Chlorobromomethane	128	4.805	4.805	0.000	92	19945	1.00	1.04	
46 Tetrahydrofuran	42	4.852	4.852	0.000	82	16100	2.00	2.13	
47 Chloroform	83	4.864	4.864	0.000	94	59879	1.00	0.9768	
48 1,1,1-Trichloroethane	97	5.054	5.042	0.012	98	45727	1.00	0.9803	
49 Cyclohexane	56	5.113	5.113	0.000	85	55140	1.00	0.9561	
50 1,1-Dichloropropene	75	5.184	5.184	0.000	97	46457	1.00	0.9830	
51 Carbon tetrachloride	117	5.196	5.196	0.000	94	35954	1.00	0.9390	
52 Isobutyl alcohol	41	5.244	5.232	0.012	91	17879	25.0	25.5	
54 Benzene	78	5.362	5.362	0.000	94	157136	1.00	0.99	
53 1,2-Dichloroethane	62	5.362	5.362	0.000	54	39243	1.00	0.9202	
56 n-Heptane	57	5.587	5.588	-0.001	38	64799	1.00	1.12	
58 Trichloroethene	130	5.908	5.908	0.000	94	39145	1.00	0.9748	
60 Methylcyclohexane	83	6.097	6.086	0.011	87	59299	1.00	0.9697	
61 1,2-Dichloropropane	63	6.097	6.098	-0.001	78	33374	1.00	0.9335	
63 Dibromomethane	93	6.192	6.192	0.000	90	17545	1.00	0.9247	
64 1,4-Dioxane	88	6.204	6.204	0.000	37	4528	20.0	17.3	
65 Dichlorobromomethane	83	6.323	6.323	0.000	99	41017	1.00	0.9339	
67 2-Chloroethyl vinyl ether	63	6.572	6.572	0.000	91	33706	2.00	1.79	
68 cis-1,3-Dichloropropene	75	6.714	6.714	0.000	96	47246	1.00	0.9134	
69 4-Methyl-2-pentanone (MIBK	43	6.833	6.833	0.000	94	44881	2.00	1.92	
70 Toluene	91	7.022	7.023	-0.001	99	158809	1.00	0.9622	
71 trans-1,3-Dichloropropene	75	7.200	7.200	0.000	92	38332	1.00	0.9146	
72 Ethyl methacrylate	69	7.271	7.272	-0.001	90	32579	1.00	0.9617	
73 1,1,2-Trichloroethane	97	7.366	7.366	0.000	87	30179	1.00	1.02	
74 1,3-Dichloropropane	76	7.520	7.521	-0.001	87	51904	1.00	0.9890	
75 Tetrachloroethene	164	7.520	7.532	-0.012	89	31809	1.00	1.02	
76 2-Hexanone	43	7.580	7.580	0.000	94	32101	2.00	1.99	
78 Chlorodibromomethane	129	7.734	7.734	0.000	91	29103	1.00	0.9600	
80 Ethylene Dibromide	107	7.852	7.853	-0.001	99	26687	1.00	0.9496	
82 Chlorobenzene	112	8.303	8.303	0.000	96	107038	1.00	1.01	
83 1,1,1,2-Tetrachloroethane	131	8.374	8.374	0.000	90	31888	1.00	0.9469	
84 Ethylbenzene	106	8.398	8.398	0.000	98	52078	1.00	0.9204	
85 m-Xylene & p-Xylene	106	8.516	8.505	0.011	96	64465	1.00	0.9100	
86 o-Xylene	106	8.884	8.884	0.000	95	65124	1.00	0.9514	
87 Styrene	104	8.896	8.896	0.000	93	103130	1.00	0.9400	
88 Bromoform	173	9.074	9.074	0.000	96	16692	1.00	0.9037	
89 Isopropylbenzene	105	9.240	9.240	0.000	95	172044	1.00	0.9500	
92 1,1,2,2-Tetrachloroethane	83	9.501	9.501	0.000	92	36065	1.00	1.03	
93 Bromobenzene	156	9.536	9.537	-0.001	93	44780	1.00	1.04	
95 1,2,3-Trichloropropane	110	9.548	9.548	0.000	82	10712	1.00	0.9873	
94 trans-1,4-Dichloro-2-buten	53	9.560	9.560	0.000	73	9003	1.00	1.06	
96 N-Propylbenzene	120	9.631	9.631	0.000	99	46555	1.00	0.9884	
97 2-Chlorotoluene	126	9.726	9.726	0.000	97	43871	1.00	1.08	
99 1,3,5-Trimethylbenzene	105	9.797	9.797	0.000	95	137702	1.00	0.9652	
100 4-Chlorotoluene	126	9.821	9.821	0.000	96	44743	1.00	1.03	
102 tert-Butylbenzene	119	10.129	10.129	0.000	89	124757	1.00	1.00	
104 1,2,4-Trimethylbenzene	105	10.165	10.165	0.000	94	145383	1.00	0.9742	
105 sec-Butylbenzene	105	10.343	10.343	0.000	93	179857	1.00	1.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.449	10.450	-0.001	95	84359	1.00	1.00	
107 4-Isopropyltoluene	119	10.473	10.485	-0.012	97	156428	1.00	1.00	
108 1,4-Dichlorobenzene	146	10.532	10.533	-0.001	95	92128	1.00	1.07	
111 n-Butylbenzene	91	10.888	10.888	0.000	97	122761	1.00	0.9398	
112 1,2-Dichlorobenzene	146	10.912	10.900	0.012	98	82283	1.00	1.03	
113 1,2-Dibromo-3-Chloropropan	157	11.659	11.671	-0.012	79	5233	1.00	0.8947	
115 1,2,4-Trichlorobenzene	180	12.513	12.513	0.000	91	47895	1.00	0.9683	
116 Hexachlorobutadiene	225	12.679	12.679	0.000	92	22350	1.00	1.09	
117 Naphthalene	128	12.750	12.750	0.000	97	102789	1.00	0.9610	
118 1,2,3-Trichlorobenzene	180	13.011	13.011	0.000	95	46243	1.00	1.05	
S 131 1,2-Dichloroethene, Total	96				0		2.00	1.99	
S 132 1,3-Dichloropropene, Total	75				0		2.00	1.83	
S 133 Xylenes, Total	106				0		2.00	1.86	
S 134 Trihalomethanes, Total	1				0		4.00	3.77	

Reagents:

VMRPRIMW_00120	Amount Added:	0.80	Units: uL
VMRGAS_00097	Amount Added:	0.80	Units: uL
VMAROLISTDW_00095	Amount Added:	0.80	Units: uL
vm50ss_stk_00065	Amount Added:	0.80	Units: uL
VM50IS_00048	Amount Added:	1.00	Units: uL

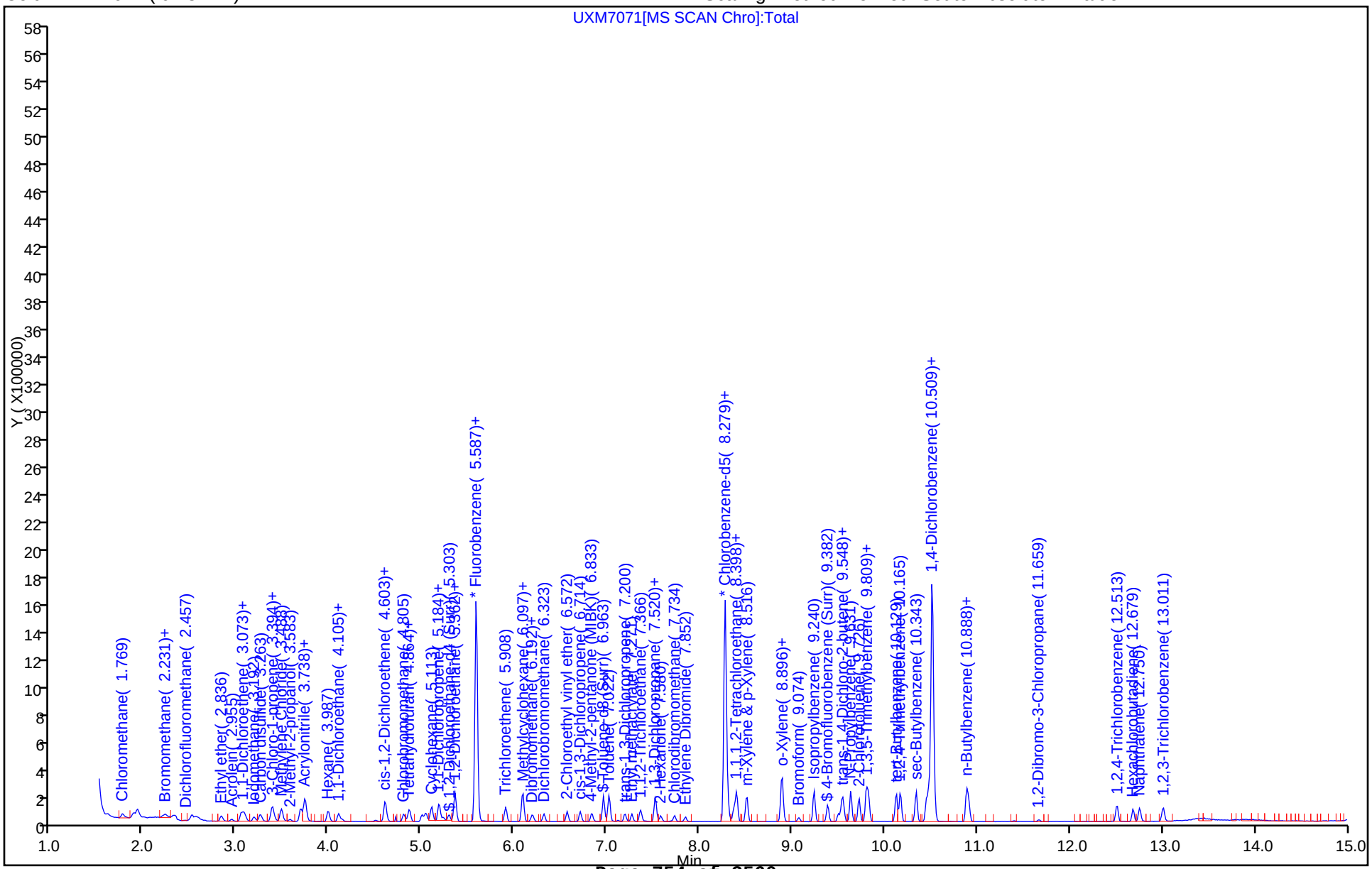
Report Date: 09-Apr-2015 07:46:45 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7071.D

Injection Date:	08-Apr-2015 14:53:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	STD8260 L1			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-170352/10	UX86161.D
Level 2	STD8260 240-170352/9	UX86160.D
Level 3	STD8260 240-170352/8	UX86159.D
Level 4	STD8260 240-170352/7	UX86158.D
Level 5	ICIS 240-170352/6	UX86157.D
Level 6	STD8260 240-170352/5	UX86156.D
Level 7	STD8260 240-170352/4	UX86155.D
Level 8	STD8260 240-170352/3	UX86154.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1564 0.1887	0.1715 0.1985	0.1946 0.1840	0.2066	0.1844	Ave		0.1856			0.1000	8.5		15.0			
Chloromethane	0.2048 0.2108	0.2277 0.2314	0.2332 0.2083	0.2289	0.2224	Ave		0.2209			0.1000	5.1		15.0			
Vinyl chloride	0.1478 0.1529	0.1775 0.1608	0.1676 0.1598	0.1858	0.1579	Ave		0.1638			0.1000	7.7		15.0			
Bromomethane	0.1071 0.0870	0.1172 0.0823	0.1087 0.0632	0.1164	0.1042	Qua	0.0723	0.0985	-0.000178		0.0500				0.9990		0.9900
Chloroethane	0.0677 0.0859	0.1085 0.0784	0.0892 0.0635	0.1049	0.0947	Qua	0.0366	0.0931	-0.000149						1.0000		0.9900
Dichlorofluoromethane	0.2675 0.2181	0.2484 0.2099	0.2416 0.1876	0.2554	0.2243	Ave		0.2316				11.0		15.0			
Trichlorofluoromethane	0.2037 0.2306	0.2326 0.2296	0.2172 0.2186	0.2673	0.2282	Ave		0.2285			0.1000	8.1		15.0			
Ethyl ether	0.1660 0.1384	0.1777 0.1319	0.1977 +++++	0.1719	0.1542	Ave		0.1626				14.0		15.0			
Acrolein	0.0213 0.0206	0.0151 0.0140	0.0232 +++++	0.0183	0.0235	Qua	-0.142	0.0274	-0.000026						0.9980		0.9900
1,1-Dichloroethene	0.2008 0.1872	0.2042 0.1866	0.1934 0.1887	0.2099	0.1852	Ave		0.1945			0.1000	4.8		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1515 0.1533	0.1628 0.1608	0.1474 0.1591	0.1717	0.1560	Ave		0.1578			0.0500	4.8		15.0			
Acetone	+++++ 0.1117	+++++ 0.1056	0.2169 0.1031	0.1870	0.1504	Lin1	1.4323	0.0998			0.0500				0.9960		0.9900
Iodomethane	0.3112 0.2885	0.3326 0.2930	0.3051 0.2905	0.3366	0.3051	Ave		0.3078				6.0		15.0			
Carbon disulfide	0.4014 0.4962	0.4691 0.4971	0.4438 0.5321	0.5063	0.4630	Ave		0.4761			0.1000	8.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.0859 0.1143	0.0895 0.1221	0.1120 0.1204	0.1260	0.1087	Ave		0.1099				13.0		15.0			
Methyl acetate	0.2446 0.2166	0.2639 0.2196	0.2292 0.2261	0.2710	0.2518	Ave		0.2404			0.1000	8.6		15.0			
Methylene Chloride	+++++ 0.2450	+++++ 0.2289	0.4507 0.2254	0.3697	0.2764	Lin1	1.2590	0.2186			0.1000				0.9990		0.9900
2-Methyl-2-propanol	0.0285 0.0267	0.0281 0.0266	0.0250 0.0225	0.0338	0.0317	Ave		0.0279				13.0		15.0			
Acrylonitrile	0.1012 0.0969	0.1135 0.0993	0.1008 0.1003	0.1193	0.1142	Ave		0.1057				8.1		15.0			
trans-1,2-Dichloroethene	0.2147 0.2207	0.2330 0.2250	0.2405 0.2218	0.2511	0.2239	Ave		0.2288			0.1000	5.2		15.0			
Methyl tert-butyl ether	0.6090 0.6371	0.6468 0.6656	0.6354 0.6511	0.7315	0.6943	Ave		0.6588			0.1000	5.8		15.0			
Hexane	+++++ 0.0614	0.0794 0.0634	0.0619 0.0638	0.0736	0.0616	Ave		0.0664				11.0		15.0			
1,1-Dichloroethane	0.4224 0.3785	0.4175 0.3912	0.4092 0.3924	0.4268	0.3936	Ave		0.4039			0.1000	4.3		15.0			
Vinyl acetate	0.1670 0.2195	0.2206 0.2393	0.2019 0.2328	0.2502	0.1999	Ave		0.2164				12.0		15.0			
2-Butanone (MEK)	0.1518 0.1445	0.1768 0.1439	0.1565 0.1456	0.1728	0.1660	Ave		0.1572			0.0500	8.4		15.0			
cis-1,2-Dichloroethene	0.2505 0.2426	0.2480 0.2522	0.2567 0.2488	0.2701	0.2482	Ave		0.2521			0.1000	3.3		15.0			
2,2-Dichloropropane	0.1554 0.1793	0.1789 0.1767	0.1701 0.1769	0.2059	0.1842	Ave		0.1784				7.9		15.0			
Bromochloromethane	0.1366 0.1248	0.1300 0.1264	0.1287 0.1235	0.1390	0.1297	Ave		0.1298				4.2		15.0			
Tetrahydrofuran	0.0816 0.0826	0.0850 0.0863	0.0810 0.0874	0.1003	0.0954	Ave		0.0875				7.9		15.0			
Chloroform	0.4094 0.3690	0.4017 0.3769	0.3941 0.3749	0.4321	0.3758	Ave		0.3917				5.6		15.0			
1,1,1-Trichloroethane	0.2959 0.2905	0.2873 0.2980	0.2658 0.3051	0.3166	0.2863	Ave		0.2932			0.1000	5.1		15.0			
Cyclohexane	0.3382 0.3707	0.3551 0.3851	0.3558 0.3847	0.4097	0.3533	Ave		0.3691			0.1000	6.3		15.0			
1,1-Dichloropropene	0.2465 0.2685	0.2764 0.2786	0.2655 0.2814	0.3186	0.2646	Ave		0.2750				7.5		15.0			
Carbon tetrachloride	0.2529 0.2573	0.2426 0.2725	0.2477 0.2777	0.2759	0.2408	Ave		0.2584			0.1000	5.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0093 0.0105	0.0112 0.0105	0.0097 0.0095	0.0131	0.0125	Ave		0.0108				13.0		15.0			
1,2-Dichloroethane	0.3413 0.2892	0.3330 0.2958	0.3000 0.2915	0.3319	0.3090	Ave		0.3115			0.1000	6.7		15.0			
Benzene	1.0042 0.8984	1.0032 0.9154	0.9905 0.9081	1.0272	0.9139	Ave		0.9576			0.5000	5.6		15.0			
n-Heptane	+++++ 0.0743	+++++ 0.0751	0.0621 0.0737	0.0809	0.0653	Ave		0.0719				9.6		15.0			
Trichloroethene	0.2681 0.2394	0.2722 0.2475	0.2549 0.2488	0.2651	0.2436	Ave		0.2549			0.2000	4.8		15.0			
Methylcyclohexane	0.3826 0.3806	0.3958 0.4000	0.3591 0.3963	0.4190	0.3572	Ave		0.3863			0.1000	5.4		15.0			
1,2-Dichloropropane	0.2552 0.2259	0.2388 0.2293	0.2398 0.2232	0.2595	0.2265	Ave		0.2373			0.1000	5.8		15.0			
Dibromomethane	0.1129 0.1303	0.1394 0.1332	0.1280 0.1304	0.1392	0.1366	Ave		0.1313				6.5		15.0			
1,4-Dioxane	0.0022 0.0027	0.0024 0.0027	0.0027 0.0023	0.0031	0.0026	Ave		0.0026				12.0		15.0			
Bromodichloromethane	0.2118 0.2683	0.2067 0.2871	0.2387 0.2911	0.2752	0.2615	Ave		0.2550			0.1000	13.0		15.0			
2-Chloroethyl vinyl ether	+++++ 0.0627	0.0453 0.0687	0.0519 0.0720	0.0630	0.0582	Ave		0.0602				15.0		15.0			
cis-1,3-Dichloropropene	0.2725 0.3244	0.2489 0.3408	0.2812 0.3442	0.3185	0.2979	Ave		0.3036			0.1500	11.0		15.0			
4-Methyl-2-pentanone (MIBK)	0.2116 0.2763	0.2360 0.2727	0.2505 0.2660	0.3110	0.2950	Ave		0.2649			0.0500	12.0		15.0			
Toluene	1.5016 1.3090	1.3867 1.3149	1.3331 1.3637	1.4933	1.2962	Ave		1.3748			0.4000	5.9		15.0			
trans-1,3-Dichloropropene	+++++ 0.3745	+++++ 0.3889	0.2799 0.4051	0.3532	0.3449	Ave		0.3577			0.1000	12.0		15.0			
Ethyl methacrylate	+++++ 0.3622	+++++ 0.3569	0.2914 0.3580	0.3688	0.3393	Ave		0.3461				8.2		15.0			
1,1,2-Trichloroethane	0.3165 0.2733	0.2634 0.2727	0.2937 0.2737	0.3218	0.2861	Ave		0.2876			0.1000	7.5		15.0			
1,3-Dichloropropane	0.4280 0.4647	0.4777 0.4619	0.4706 0.4652	0.5353	0.4831	Ave		0.4733				6.3		15.0			
Tetrachloroethene	0.3196 0.2649	0.2761 0.2667	0.2789 0.2676	0.3047	0.2514	Ave		0.2787			0.2000	8.1		15.0			
2-Hexanone	0.2071 0.2821	0.2420 0.2674	0.2326 0.2623	0.3130	0.3017	Ave		0.2635			0.0500	14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibromochloromethane	+++++ 0.2826	0.2036 0.2943	0.2150 0.3076	0.2825	0.2662	Ave		0.2645				15.0		15.0			
1,2-Dibromoethane	0.1884 0.2744	0.2663 0.2766	0.2766 0.2800	0.3094	0.2845	Ave		0.2695				13.0		15.0			
Chlorobenzene	1.0023 0.8672	1.0131 0.8677	0.9540 0.8681	1.0006	0.8633	Ave		0.9295			0.3000	7.5		15.0			
1,1,1,2-Tetrachloroethane	0.2505 0.2923	0.2554 0.2984	0.2586 0.2987	0.3077	0.2886	Ave		0.2813				8.1		15.0			
Ethylbenzene	0.4861 0.4758	0.4876 0.4697	0.4995 0.4743	0.5263	0.4493	Ave		0.4836				4.7		15.0			
m-Xylene & p-Xylene	0.5350 0.5855	0.5527 0.5688	0.5611 0.5772	0.6437	0.5453	Ave		0.5712				5.9		15.0			
o-Xylene	0.4441 0.5555	0.5400 0.5551	0.5386 0.5392	0.6420	0.5451	Ave		0.5449				9.8		15.0			
Styrene	0.6563 0.8992	0.7699 0.8849	0.7727 0.8775	0.9203	0.8455	Ave		0.8283			0.3000	11.0		15.0			
Bromoform	0.0978 0.1834	0.1087 0.1955	0.1259 0.2033	0.1815	0.1651	Lin1	-0.171	0.1980			0.1000				0.9970		0.9900
Isopropylbenzene	1.1423 1.4570	1.2214 1.4715	1.3005 1.4586	1.5782	1.3734	Ave		1.3754			0.1000	11.0		15.0			
1,1,2,2-Tetrachloroethane	0.6849 0.6624	0.6570 0.6478	0.6045 0.6699	0.7985	0.6677	Ave		0.6741			0.3000	8.2		15.0			
Bromobenzene	0.7446 0.7282	0.7583 0.7219	0.7710 0.7557	0.8237	0.7144	Ave		0.7522				4.6		15.0			
1,2,3-Trichloropropane	0.2166 0.2311	0.2015 0.2201	0.2340 0.2294	0.2953	0.2506	Ave		0.2348				12.0		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1980	0.1779 0.1957	0.1692 0.2079	0.2194	0.1827	Ave		0.1930				9.1		15.0			
N-Propylbenzene	0.5689 0.7854	0.6155 0.7815	0.7408 0.8242	0.8723	0.7534	Ave		0.7428				14.0		15.0			
2-Chlorotoluene	0.5605 0.6624	0.5827 0.6594	0.6479 0.6853	0.7511	0.6358	Ave		0.6481				9.1		15.0			
1,3,5-Trimethylbenzene	1.7342 2.3076	1.8431 2.3386	2.1033 2.3921	2.5729	2.2024	Ave		2.1868				13.0		15.0			
4-Chlorotoluene	0.6127 0.6995	0.5976 0.6874	0.7120 0.7121	0.8098	0.6558	Ave		0.6858				9.7		15.0			
tert-Butylbenzene	1.4839 2.1301	1.5955 2.1216	1.8968 2.1512	2.2751	1.9777	Ave		1.9540				14.0		15.0			
1,2,4-Trimethylbenzene	1.6814 2.4192	1.9856 2.4299	2.2754 2.4626	2.7038	2.3309	Ave		2.2861				14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	2.1401 2.9860	2.4933 3.0191	2.7669 3.0336	3.2898	2.7551	Ave		2.8105				13.0		15.0			
1,3-Dichlorobenzene	1.4762 1.3178	1.4205 1.3120	1.4191 1.3227	1.5883	1.3029	Ave		1.3950			0.6000	7.3		15.0			
4-Isopropyltoluene	+++++ 2.5570	1.9978 2.6136	2.3109 2.5603	2.8183	2.4325	Ave		2.4701				11.0		15.0			
1,4-Dichlorobenzene	1.7621 1.3405	1.4395 1.3468	1.4811 1.3356	1.6724	1.3655	Ave		1.4679			0.5000	11.0		15.0			
n-Butylbenzene	1.6923 2.1625	1.8200 2.2637	1.9844 2.1701	2.3153	2.0127	Ave		2.0526				11.0		15.0			
1,2-Dichlorobenzene	1.3078 1.2586	1.3936 1.2752	1.3975 1.2501	1.5545	1.3505	Ave		1.3485			0.4000	7.5		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1225	0.1046 0.1324	0.0995 0.1435	0.1349	0.1290	Ave		0.1238			0.0500	13.0		15.0			
1,2,4-Trichlorobenzene	0.8421 0.8460	0.8580 0.9119	0.8112 0.9023	0.9203	0.8693	Ave		0.8701			0.2000	4.4		15.0			
Hexachlorobutadiene	0.5622 0.4780	0.5048 0.4922	0.5020 0.4698	0.5370	0.4832	Ave		0.5037				6.2		15.0			
Naphthalene	1.7179 2.2787	1.7202 2.4240	1.7775 2.2957	2.2933	2.4185	Ave		2.1157				15.0		15.0			
1,2,3-Trichlorobenzene	0.9801 0.8666	0.8402 0.8988	0.8278 0.8671	0.9583	0.9289	Ave		0.8960				6.2		15.0			
Dibromofluoromethane (Surr)	+++++ 0.2035	0.4464 0.2004	0.3310 0.2063	0.2530	0.2172	Qua	0.6302	0.1857	0.0000869						1.0000		0.9900
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2225	0.5122 0.2286	0.3979 0.2346	0.3140	0.2615	Qua	0.8698	0.2061	0.0001210						1.0000		0.9900
Toluene-d8 (Surr)	+++++ 1.1257	2.3212 1.0783	1.7853 1.1326	1.4062	1.1310	Qua	3.5028	0.9923	0.0006103						1.0000		0.9900
4-Bromofluorobenzene (Surr)	+++++ 0.3991	0.8616 0.3791	0.7120 0.3856	0.5259	0.4489	Qua	1.5846	0.3557	0.0001081						1.0000		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-170352/10	UX86161.D
Level 2	STD8260 240-170352/9	UX86160.D
Level 3	STD8260 240-170352/8	UX86159.D
Level 4	STD8260 240-170352/7	UX86158.D
Level 5	ICIS 240-170352/6	UX86157.D
Level 6	STD8260 240-170352/5	UX86156.D
Level 7	STD8260 240-170352/4	UX86155.D
Level 8	STD8260 240-170352/3	UX86154.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	3746 251176	8380 517858	24299 1020234	53676	92925	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chloromethane	FB	Ave	4906 280520	11129 603678	29111 1154899	59456	112051	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl chloride	FB	Ave	3539 203524	8672 419593	20932 885989	48274	79560	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromomethane	FB	Qua	2565 115756	5728 214835	13568 350225	30236	52522	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chloroethane	FB	Qua	1622 114370	5300 204568	11139 352207	27259	47704	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dichlorofluoromethane	FB	Ave	6406 290246	12140 547578	30165 1040128	66340	113019	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Trichlorofluoromethane	FB	Ave	4878 306873	11366 598951	27122 1211923	69444	114969	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl ether	FB	Ave	3977 184187	8685 344253	24685 +++++	44665	77718	1.00 50.0	2.00 100	5.00 +++++	10.0	20.0
Acrolein	FB	Qua	2547 136786	3701 182187	14486 +++++	23740	59121	5.00 250	10.0 500	25.0 +++++	50.0	100
1,1-Dichloroethene	FB	Ave	4809 249125	9981 486715	24153 1046029	54544	93300	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	3629 204040	7958 419537	18407 882110	44606	78620	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acetone	FB	Lin1	+++++ 297225	+++++ 551021	54156 1143323	97186	151525	+++++ 100	+++++ 200	10.0 400	20.0	40.0
Iodomethane	FB	Ave	7454 383908	16254 764539	38096 1610175	87446	153743	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon disulfide	FB	Ave	9614 660358	22924 1296823	55412 2949804	131522	233266	1.00 50.0	2.00 100	5.00 200	10.0	20.0
3-Chloro-1-propene	FB	Ave	2058 152087	4374 318618	13990 667293	32727	54777	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI

GC/MS VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Methyl acetate	FB	Ave	29290 1441376	64483 2864669	143103 6267592	351963	634426	5.00 250	10.0 500	25.0 1000	50.0	100
Methylene Chloride	FB	Lin1	+++++ 326073	+++++ 597190	56270 1249548	96035	139281	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
2-Methyl-2-propanol	FB	Ave	6829 354737	13746 693436	31227 1249970	87810	159599	10.0 500	20.0 1000	50.0 2000	100	200
Acrylonitrile	FB	Ave	24230 1290141	55473 2590093	125851 5558383	309930	575627	10.0 500	20.0 1000	50.0 2000	100	200
trans-1,2-Dichloroethene	FB	Ave	5142 293680	11386 587054	30023 1229351	65242	112801	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl tert-butyl ether	FB	Ave	14586 847838	31610 1736457	79334 3609743	190039	349825	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexane	FB	Ave	+++++ 81731	3878 165346	7730 353867	19127	31019	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloroethane	FB	Ave	10117 503677	20404 1020526	51089 2175083	110888	198329	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl acetate	FB	Ave	3840 280423	10348 599318	24206 1238845	62399	96712	0.960 48.0	1.92 96.0	4.80 192	9.60	19.2
2-Butanone (MEK)	FB	Ave	7271 384576	17279 751029	39075 1614052	89778	167280	2.00 100	4.00 200	10.0 400	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	6001 322878	12117 658097	32045 1379260	70161	125068	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	3723 238612	8742 461098	21235 980520	53498	92793	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromochloromethane	FB	Ave	3273 166100	6354 329901	16071 684756	36102	65334	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrahydrofuran	FB	Ave	3911 219923	8304 450196	20234 968949	52097	96186	2.00 100	4.00 200	10.0 400	20.0	40.0
Chloroform	FB	Ave	9806 491055	19629 983425	49212 2078203	112262	189353	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	7087 386625	14040 777558	33182 1691624	82250	144266	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Cyclohexane	FB	Ave	8101 493376	17352 1004781	44419 2132781	106448	177991	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloropropene	FB	Ave	5904 357342	13507 726728	33148 1559996	82766	133306	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon tetrachloride	FB	Ave	6057 342366	11856 711068	30921 1539751	71679	121316	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Isobutyl alcohol	FB	Ave	5552 349039	13740 686607	30197 1315780	85297	157253	25.0 1250	50.0 2500	125 5000	250	500
1,2-Dichloroethane	FB	Ave	8174 384931	16273 771811	37460 1615877	86219	155694	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzene	FB	Ave	24052 1195591	49022 2388128	123667 5034065	266853	460470	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Heptane	FB	Ave	+++++ 98860	+++++ 195852	7757 408337	21007	32908	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Trichloroethene	FB	Ave	6422 318617	13302 645797	31821 1379289	68861	122742	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methylcyclohexane	FB	Ave	9163 506560	19343 1043572	44839 2197216	108864	179971	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloropropane	FB	Ave	6113 300609	11668 598258	29941 1237377	67411	114127	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dibromomethane	FB	Ave	2704 173472	6813 347497	15977 722879	36171	68832	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dioxane	FB	Ave	1039 71356	2366 138705	6709 249826	16226	25764	20.0 1000	40.0 2000	100 4000	200	400
Bromodichloromethane	FB	Ave	5074 357066	10100 749091	29804 1613750	71483	131750	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 166921	4424 358320	12955 798679	32721	58651	+++++ 100	4.00 200	10.0 400	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	6528 431708	12162 889075	35106 1908395	82755	150110	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	10136 735321	23065 1423106	62565 2949618	161600	297246	2.00 100	4.00 200	10.0 400	20.0	40.0
Toluene	CBZ	Ave	27355 1308073	49880 2576332	127552 5486100	285792	475267	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Ave	+++++ 374192	+++++ 761895	26778 1629786	67587	126474	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Ethyl methacrylate	CBZ	Ave	+++++ 361900	+++++ 699196	27885 1440405	70584	124396	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	5765 273156	9473 534345	28098 1101257	61579	104901	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	7797 464404	17184 905097	45024 1871486	102438	177129	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrachloroethene	CBZ	Ave	5823 264679	9932 522567	26683 1076734	58307	92185	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Hexanone	CBZ	Ave	7544 563853	17412 1047707	44518 2110114	119786	221209	2.00 100	4.00 200	10.0 400	20.0	40.0
Dibromochloromethane	CBZ	Ave	+++++ 282358	7324 576635	20567 1237345	54058	97600	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	3432 274176	9579 541854	26465 1126380	59216	104303	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chlorobenzene	CBZ	Ave	18260 866581	36441 1700017	91278 3492453	191499	316530	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBZ	Ave	4564 292141	9186 584652	24739 1201872	58895	105818	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethylbenzene	CBZ	Ave	8855 475437	17538 920210	47792 1908298	100716	164729	1.00 50.0	2.00 100	5.00 200	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	9747 585132	19881 1114505	53687 2322017	123182	199947	1.00 50.0	2.00 100	5.00 200	10.0	20.0
o-Xylene	CBZ	Ave	8090 555144	19423 1087583	51532 2169346	122871	199864	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Styrene	CBZ	Ave	11956 898542	27695 1733825	73930 3530126	176122	310009	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromoform	CBZ	Lin1	1782 183227	3909 383004	12042 817999	34743	60546	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Isopropylbenzene	CBZ	Ave	20810 1455954	43935 2883103	124437 5868112	302032	503589	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	6343 349496	12906 669844	30022 1292627	79455	132203	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromobenzene	DCB	Ave	6896 384175	14897 746407	38290 1458021	81970	141435	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	2006 121923	3959 227615	11621 442560	29387	49607	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	+++++ 104469	3495 202370	8402 401124	21836	36170	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
N-Propylbenzene	DCB	Ave	5269 414360	12091 808016	36791 1590300	86803	149165	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chlorotoluene	DCB	Ave	5191 349499	11448 681848	32177 1322168	74740	125870	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	16061 1217483	36207 2418136	104451 4615532	256025	436033	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Chlorotoluene	DCB	Ave	5674 369059	11739 710767	35359 1373931	80579	129830	1.00 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butylbenzene	DCB	Ave	13743 1123842	31344 2193722	94194 4150735	226398	391546	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	15572 1276363	39008 2512530	112999 4751419	269052	461481	1.00 50.0	2.00 100	5.00 200	10.0	20.0
sec-Butylbenzene	DCB	Ave	19820 1575428	48980 3121718	137408 5853186	327363	545467	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	13671 695292	27906 1356626	70475 2552180	158051	257960	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Isopropyltoluene	DCB	Ave	+++++ 1349059	39247 2702403	114762 4939926	280450	481597	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	16319 707247	28279 1392577	73552 2576899	166416	270341	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
n-Butylbenzene	DCB	Ave	15673 1140954	35753 2340628	98548 4187048	230396	398476	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	12112 664029	27378 1318513	69400 2411969	154686	267385	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	+++++ 64629	2055 136941	4939 276967	13425	25539	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	7799 446327	16856 942856	40283 1740875	91574	172104	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexachlorobutadiene	DCB	Ave	5207 252184	9916 508970	24928 906512	53441	95659	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Naphthalene	DCB	Ave	15910 1202261	33793 2506363	88270 4429380	228207	478826	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	9077 457239	16505 929396	41110 1672935	95362	183899	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Qua	+++++ 270863	21813 522896	41323 1143596	65724	109442	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Qua	+++++ 296150	25032 596321	49683 1300516	81568	131736	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Toluene-d8 (Surr)	CBZ	Qua	+++++ 1124932	83495 2112751	170823 4556666	269121	414688	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Qua	+++++ 398794	30993 742681	68128 1551254	100638	164587	+++++ 50.0	2.00 100	5.00 200	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86154.D
Lims ID: STD8260 L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 03-Mar-2015 00:12:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0040994-003
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub32

Method: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 03-Mar-2015 23:34:35 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: latat Date: 03-Mar-2015 01:11:12

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.157	5.159	-0.002	99	1385916	50.0	50.0	
*	2 Chlorobenzene-d5	117	7.689	7.691	-0.002	94	1005765	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.878	9.880	-0.002	97	482364	50.0	50.0	
$	5 Dibromofluoromethane (Surr	113	4.624	4.626	-0.002	95	1143596	200.0	200.0	
$	6 1,2-Dichloroethane-d4 (Sur	65	4.896	4.886	0.010	92	1300516	200.0	199.9	
$	7 Toluene-d8 (Surr)	98	6.423	6.425	-0.002	93	4556666	200.0	200.1	
$	8 4-Bromofluorobenzene (Surr	95	8.766	8.768	-0.002	96	1551254	200.0	200.2	
	19 Dichlorodifluoromethane	85	1.583	1.585	-0.002	100	1020234	200.0	198.3	
	20 Chloromethane	50	1.749	1.751	-0.002	100	1154899	200.0	188.6	
	21 Vinyl chloride	62	1.879	1.869	0.010	99	885989	200.0	195.2	
	152 Butadiene	54	1.903	1.905	-0.002	0	974112	NC	NC	
	22 Bromomethane	94	2.163	2.177	-0.014	92	350225	200.0	199.6	
	23 Chloroethane	64	2.269	2.283	-0.014	97	352207	200.0	200.1	
	24 Dichlorofluoromethane	67	2.447	2.449	-0.002	99	1040128	200.0	162.0	
	25 Trichlorofluoromethane	101	2.506	2.508	-0.002	99	1211923	200.0	191.4	
	26 Ethyl ether	59	2.731	2.733	-0.002	97	681284	200.0	151.2	
	27 Acrolein	56	2.837	2.839	-0.002	97	409035	1000.0	NQ	
	28 1,1-Dichloroethene	96	2.920	2.922	-0.002	99	1046029	200.0	194.0	
	29 1,1,2-Trichloro-1,2,2-trif	151	2.932	2.946	-0.014	92	882110	200.0	201.6	
	30 Acetone	43	2.956	2.958	-0.002	100	1143323	400.0	398.9	
	32 Iodomethane	142	3.050	3.052	-0.002	97	1610175	200.0	188.7	
	33 Carbon disulfide	76	3.110	3.112	-0.002	99	2949804	200.0	223.5	
	35 3-Chloro-1-propene	76	3.204	3.206	-0.002	92	667293	200.0	219.1	
	36 Methyl acetate	43	3.216	3.218	-0.002	99	6267592	1000.0	940.8	
	37 Methylene Chloride	84	3.299	3.301	-0.002	95	1249548	200.0	200.5	
	38 2-Methyl-2-propanol	59	3.393	3.384	0.009	97	1249970	2000.0	1618.5	
	39 Acrylonitrile	53	3.488	3.478	0.010	99	5558383	2000.0	1897.4	
	40 trans-1,2-Dichloroethene	96	3.512	3.526	-0.014	98	1229351	200.0	193.8	
	41 Methyl tert-butyl ether	73	3.524	3.526	-0.002	96	3609743	200.0	197.7	
	42 Hexane	86	3.725	3.727	-0.002	94	353867	200.0	192.2	
	43 1,1-Dichloroethane	63	3.831	3.833	-0.002	97	2175083	200.0	194.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	3.855	3.857	-0.002	97	1238845	192.0	206.5	
49 2-Butanone (MEK)	43	4.269	4.271	-0.002	94	1614052	400.0	370.4	
48 cis-1,2-Dichloroethene	96	4.269	4.271	-0.002	82	1379260	200.0	197.4	
50 2,2-Dichloropropane	77	4.281	4.283	-0.002	90	980520	200.0	198.3	
54 Chlorobromomethane	128	4.458	4.461	-0.002	97	684756	200.0	190.3	
55 Tetrahydrofuran	42	4.494	4.496	-0.002	92	968949	400.0	399.7	
56 Chloroform	83	4.506	4.508	-0.002	95	2078203	200.0	191.4	
57 1,1,1-Trichloroethane	97	4.671	4.673	-0.002	97	1691624	200.0	208.2	
58 Cyclohexane	56	4.719	4.721	-0.002	91	2132781	200.0	208.5	
59 1,1-Dichloropropene	75	4.790	4.792	-0.002	96	1559996	200.0	204.7	
60 Carbon tetrachloride	117	4.802	4.804	-0.002	98	1539751	200.0	215.0	
61 Isobutyl alcohol	41	4.825	4.827	-0.002	97	1315780	5000.0	4399.4	
63 1,2-Dichloroethane	62	4.944	4.946	-0.002	58	1615877	200.0	187.2	
62 Benzene	78	4.955	4.946	0.009	96	5034065	200.0	189.7	
65 n-Heptane	100	5.133	5.135	-0.002	95	408337	200.0	204.9	
67 Trichloroethene	130	5.441	5.443	-0.002	97	1379289	200.0	195.2	
69 Methylcyclohexane	83	5.618	5.608	0.010	90	2197216	200.0	205.2	
70 1,2-Dichloropropane	63	5.618	5.620	-0.002	96	1237377	200.0	188.1	
73 Dibromomethane	93	5.713	5.715	-0.002	92	722879	200.0	198.7	
72 1,4-Dioxane	88	5.713	5.715	-0.002	54	249826	4000.0	3509.0	
74 Dichlorobromomethane	83	5.831	5.821	0.010	100	1613750	200.0	228.3	
76 2-Chloroethyl vinyl ether	63	6.056	6.058	-0.002	92	798679	400.0	478.3	
77 cis-1,3-Dichloropropene	75	6.186	6.188	-0.002	95	1908395	200.0	226.8	
78 4-Methyl-2-pentanone (MIBK	43	6.304	6.306	-0.002	97	2949618	400.0	401.7	
79 Toluene	91	6.482	6.484	-0.002	98	5486100	200.0	198.4	
80 trans-1,3-Dichloropropene	75	6.648	6.650	-0.002	93	1629786	200.0	226.5	
81 Ethyl methacrylate	69	6.707	6.709	-0.002	91	1440405	200.0	206.9	
82 1,1,2-Trichloroethane	97	6.813	6.803	0.010	89	1101257	200.0	190.3	
83 1,3-Dichloropropane	76	6.955	6.957	-0.002	94	1871486	200.0	196.6	
84 Tetrachloroethene	164	6.967	6.969	-0.002	92	1076734	200.0	192.0	
85 2-Hexanone	43	7.002	7.005	-0.003	97	2110114	400.0	398.1	
87 Chlorodibromomethane	129	7.156	7.158	-0.002	91	1237345	200.0	232.5	
89 Ethylene Dibromide	107	7.275	7.277	-0.002	98	1126380	200.0	207.8	
91 Chlorobenzene	112	7.712	7.715	-0.003	97	3492453	200.0	186.8	
92 1,1,1,2-Tetrachloroethane	131	7.772	7.774	-0.002	96	1201872	200.0	212.4	
93 Ethylbenzene	106	7.807	7.797	0.010	98	1908298	200.0	196.2	
94 m-Xylene & p-Xylene	106	7.902	7.904	-0.002	100	2322017	200.0	202.1	
95 o-Xylene	106	8.280	8.271	0.009	95	2169346	200.0	197.9	
96 Styrene	104	8.280	8.282	-0.002	92	3530126	200.0	211.9	
97 Bromoform	173	8.458	8.460	-0.002	98	817999	200.0	206.3	
98 Isopropylbenzene	105	8.612	8.614	-0.002	95	5868112	200.0	212.1	
101 1,1,2,2-Tetrachloroethane	83	8.872	8.874	-0.002	95	1292627	200.0	198.8	
102 Bromobenzene	156	8.919	8.921	-0.002	92	1458021	200.0	200.9	
104 1,2,3-Trichloropropane	110	8.931	8.933	-0.002	83	442560	200.0	195.4	
103 trans-1,4-Dichloro-2-buten	53	8.931	8.933	-0.002	71	401124	200.0	215.5	
105 N-Propylbenzene	120	9.002	9.004	-0.002	99	1590300	200.0	221.9	
106 2-Chlorotoluene	126	9.097	9.099	-0.002	97	1322168	200.0	211.5	
107 1,3,5-Trimethylbenzene	105	9.168	9.170	-0.002	93	4615532	200.0	218.8	
108 4-Chlorotoluene	126	9.203	9.194	0.009	96	1373931	200.0	207.7	
109 tert-Butylbenzene	119	9.487	9.489	-0.002	92	4150735	200.0	220.2	
110 1,2,4-Trimethylbenzene	105	9.535	9.537	-0.002	94	4751419	200.0	215.4	
111 sec-Butylbenzene	105	9.700	9.702	-0.002	94	5853186	200.0	215.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 1,3-Dichlorobenzene	146	9.819	9.821	-0.002	98	2552180	200.0	189.6	
113 4-Isopropyltoluene	119	9.842	9.844	-0.002	98	4939926	200.0	207.3	
114 1,4-Dichlorobenzene	146	9.902	9.904	-0.002	95	2576899	200.0	182.0	
117 n-Butylbenzene	91	10.245	10.247	-0.002	97	4187048	200.0	211.4	
118 1,2-Dichlorobenzene	146	10.268	10.270	-0.002	99	2411969	200.0	185.4	
119 1,2-Dibromo-3-Chloropropan	157	11.026	11.028	-0.002	89	276967	200.0	231.9	
121 1,2,4-Trichlorobenzene	180	11.866	11.868	-0.002	94	1740875	200.0	207.4	
122 Hexachlorobutadiene	225	12.031	12.033	-0.002	95	906512	200.0	186.6	
123 Naphthalene	128	12.102	12.104	-0.002	96	4429380	200.0	217.0	
124 1,2,3-Trichlorobenzene	180	12.363	12.365	-0.002	96	1672935	200.0	193.5	
S 127 1,2-Dichloroethene, Total	96				0		400.0	391.2	
S 128 1,3-Dichloropropene, Total	75				0		400.0	453.3	
S 129 Xylenes, Total	106				0		400.0	400.0	
S 126 Trihalomethanes, Total	1				0		800.0	858.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

NQ - Not Quantifiable

Reagents:

vm50ss_00192	Amount Added:	20.00	Units: uL	
VMRPRIMW_00114	Amount Added:	20.00	Units: uL	
VMRGAS_00092	Amount Added:	20.00	Units: uL	
VMAROLISTDW_00090	Amount Added:	20.00	Units: uL	
vm250-IS_00021	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00044	Amount Added:	0.00	Units:	Run Reagent

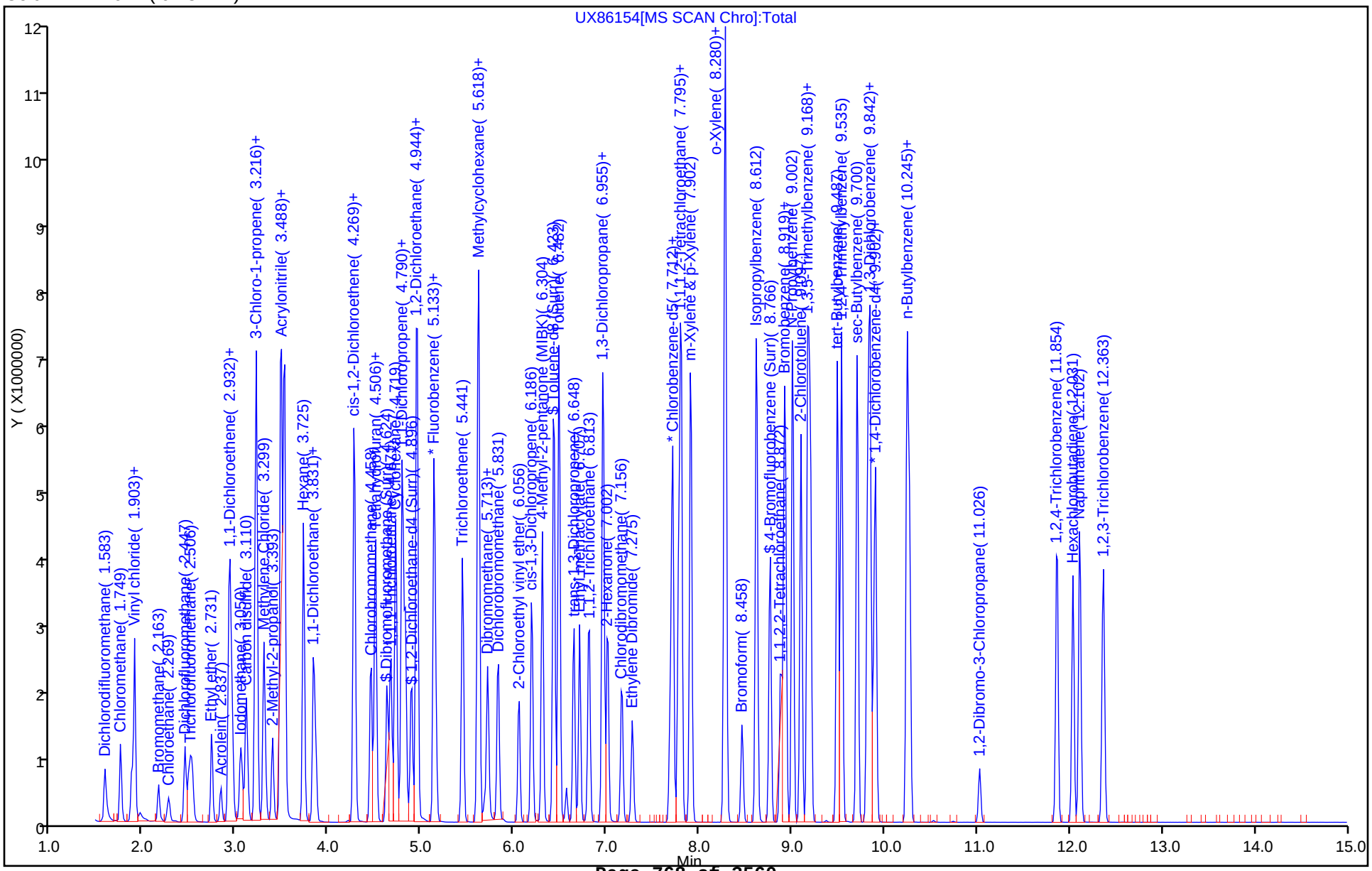
Report Date: 03-Mar-2015 23:34:36 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86154.D

Injection Date:	03-Mar-2015 00:12:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L8			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86155.D
Lims ID: STD8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 03-Mar-2015 00:34:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0040994-004
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub32

Method: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 03-Mar-2015 23:34:36 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: latat Date: 03-Mar-2015 01:12:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.159	-0.002	99	1304483	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.691	-0.002	95	979650	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.878	9.880	-0.002	98	516996	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	4.624	4.626	-0.002	95	522896	100.0	99.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	4.896	4.886	0.010	93	596321	100.0	100.7	
$ 7 Toluene-d8 (Surr)	98	6.423	6.425	-0.002	93	2112751	100.0	99.1	
$ 8 4-Bromofluorobenzene (Surr	95	8.766	8.768	-0.002	95	742681	100.0	99.1	
19 Dichlorodifluoromethane	85	1.583	1.585	-0.002	100	517858	100.0	106.9	
20 Chloromethane	50	1.749	1.751	-0.002	100	603678	100.0	104.7	
21 Vinyl chloride	62	1.867	1.869	-0.002	99	419593	100.0	98.2	
152 Butadiene	54	1.903	1.905	-0.002	0	444126	NC	NC	
22 Bromomethane	94	2.163	2.177	-0.014	91	214835	100.0	101.5	
23 Chloroethane	64	2.281	2.283	-0.002	98	204568	100.0	99.8	
24 Dichlorofluoromethane	67	2.447	2.449	-0.002	99	547578	100.0	90.6	
25 Trichlorofluoromethane	101	2.506	2.508	-0.002	98	598951	100.0	100.5	
26 Ethyl ether	59	2.731	2.733	-0.002	97	344253	100.0	81.2	
27 Acrolein	56	2.837	2.839	-0.002	99	182187	500.0	489.4	
28 1,1-Dichloroethene	96	2.932	2.922	0.010	98	486715	100.0	95.9	
29 1,1,2-Trichloro-1,2,2-trif	151	2.944	2.946	-0.002	92	419537	100.0	101.9	
30 Acetone	43	2.956	2.958	-0.002	100	551021	200.0	197.2	
32 Iodomethane	142	3.050	3.052	-0.002	97	764539	100.0	95.2	
33 Carbon disulfide	76	3.109	3.112	-0.003	99	1296823	100.0	104.4	
35 3-Chloro-1-propene	76	3.204	3.206	-0.002	92	318618	100.0	111.2	
36 Methyl acetate	43	3.216	3.218	-0.002	99	2864669	500.0	456.8	
37 Methylene Chloride	84	3.299	3.301	-0.002	95	597190	100.0	99.0	
38 2-Methyl-2-propanol	59	3.382	3.384	-0.002	97	693436	1000.0	953.9	
39 Acrylonitrile	53	3.476	3.478	-0.002	98	2590093	1000.0	939.3	
40 trans-1,2-Dichloroethene	96	3.524	3.526	-0.002	98	587054	100.0	98.3	
41 Methyl tert-butyl ether	73	3.524	3.526	-0.002	96	1736457	100.0	101.0	
42 Hexane	86	3.725	3.727	-0.002	95	165346	100.0	95.4	
43 1,1-Dichloroethane	63	3.831	3.833	-0.002	97	1020526	100.0	96.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	3.867	3.857	0.010	97	599318	96.0	106.2	
49 2-Butanone (MEK)	43	4.269	4.271	-0.002	95	751029	200.0	183.1	
48 cis-1,2-Dichloroethene	96	4.269	4.271	-0.002	82	658097	100.0	100.0	
50 2,2-Dichloropropane	77	4.281	4.283	-0.002	92	461098	100.0	99.1	
54 Chlorobromomethane	128	4.458	4.461	-0.002	95	329901	100.0	97.4	
55 Tetrahydrofuran	42	4.494	4.496	-0.002	92	450196	200.0	197.3	
56 Chloroform	83	4.506	4.508	-0.002	94	983425	100.0	96.2	
57 1,1,1-Trichloroethane	97	4.671	4.673	-0.002	97	777558	100.0	101.7	
58 Cyclohexane	56	4.719	4.721	-0.002	91	1004781	100.0	104.3	
59 1,1-Dichloropropene	75	4.790	4.792	-0.002	96	726728	100.0	101.3	
60 Carbon tetrachloride	117	4.802	4.804	-0.002	98	711068	100.0	105.5	
61 Isobutyl alcohol	41	4.825	4.827	-0.002	95	686607	2500.0	2439.0	
63 1,2-Dichloroethane	62	4.955	4.946	0.009	58	771811	100.0	95.0	
62 Benzene	78	4.955	4.946	0.009	96	2388128	100.0	95.6	
65 n-Heptane	100	5.133	5.135	-0.002	94	195852	100.0	104.4	
67 Trichloroethene	130	5.441	5.443	-0.002	98	645797	100.0	97.1	
69 Methylcyclohexane	83	5.618	5.608	0.010	91	1043572	100.0	103.5	
70 1,2-Dichloropropane	63	5.618	5.620	-0.002	96	598258	100.0	96.6	
73 Dibromomethane	93	5.713	5.715	-0.002	92	347497	100.0	101.5	
72 1,4-Dioxane	88	5.713	5.715	-0.002	78	138705	2000.0	2069.9	
74 Dichlorobromomethane	83	5.831	5.821	0.010	100	749091	100.0	112.6	
76 2-Chloroethyl vinyl ether	63	6.056	6.058	-0.002	93	358320	200.0	228.0	
77 cis-1,3-Dichloropropene	75	6.186	6.188	-0.002	95	889075	100.0	112.3	
78 4-Methyl-2-pentanone (MIBK	43	6.304	6.306	-0.002	97	1423106	200.0	205.9	
79 Toluene	91	6.482	6.484	-0.002	98	2576332	100.0	95.6	
80 trans-1,3-Dichloropropene	75	6.647	6.650	-0.003	94	761895	100.0	108.7	
81 Ethyl methacrylate	69	6.707	6.709	-0.002	91	699196	100.0	103.1	
82 1,1,2-Trichloroethane	97	6.813	6.803	0.010	90	534345	100.0	94.8	
83 1,3-Dichloropropane	76	6.955	6.957	-0.002	95	905097	100.0	97.6	
84 Tetrachloroethene	164	6.967	6.969	-0.002	92	522567	100.0	95.7	
85 2-Hexanone	43	7.002	7.005	-0.003	98	1047707	200.0	202.9	
87 Chlorodibromomethane	129	7.168	7.158	0.010	91	576635	100.0	111.3	
89 Ethylene Dibromide	107	7.275	7.277	-0.002	98	541854	100.0	102.6	
91 Chlorobenzene	112	7.712	7.715	-0.003	96	1700017	100.0	93.3	
92 1,1,1,2-Tetrachloroethane	131	7.772	7.774	-0.002	96	584652	100.0	106.1	
93 Ethylbenzene	106	7.807	7.797	0.010	98	920210	100.0	97.1	
94 m-Xylene & p-Xylene	106	7.902	7.904	-0.002	100	1114505	100.0	99.6	
95 o-Xylene	106	8.280	8.271	0.009	95	1087583	100.0	101.9	
96 Styrene	104	8.280	8.282	-0.002	92	1733825	100.0	106.8	
97 Bromoform	173	8.458	8.460	-0.002	98	383004	100.0	99.6	
98 Isopropylbenzene	105	8.612	8.614	-0.002	95	2883103	100.0	107.0	
101 1,1,2,2-Tetrachloroethane	83	8.872	8.874	-0.002	95	669844	100.0	96.1	
102 Bromobenzene	156	8.919	8.921	-0.002	96	746407	100.0	96.0	
104 1,2,3-Trichloropropane	110	8.931	8.933	-0.002	83	227615	100.0	93.7	
103 trans-1,4-Dichloro-2-buten	53	8.931	8.933	-0.002	75	202370	100.0	101.4	
105 N-Propylbenzene	120	9.002	9.004	-0.002	99	808016	100.0	105.2	
106 2-Chlorotoluene	126	9.097	9.099	-0.002	97	681848	100.0	101.7	
107 1,3,5-Trimethylbenzene	105	9.168	9.170	-0.002	94	2418136	100.0	106.9	
108 4-Chlorotoluene	126	9.203	9.194	0.009	98	710767	100.0	100.2	
109 tert-Butylbenzene	119	9.487	9.489	-0.002	93	2193722	100.0	108.6	
110 1,2,4-Trimethylbenzene	105	9.535	9.537	-0.002	94	2512530	100.0	106.3	
111 sec-Butylbenzene	105	9.700	9.702	-0.002	94	3121718	100.0	107.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 1,3-Dichlorobenzene	146	9.819	9.821	-0.002	98	1356626	100.0	94.1	
113 4-Isopropyltoluene	119	9.842	9.844	-0.002	98	2702403	100.0	105.8	
114 1,4-Dichlorobenzene	146	9.902	9.904	-0.002	96	1392577	100.0	91.7	
117 n-Butylbenzene	91	10.245	10.247	-0.002	98	2340628	100.0	110.3	
118 1,2-Dichlorobenzene	146	10.268	10.270	-0.002	99	1318513	100.0	94.6	
119 1,2-Dibromo-3-Chloropropan	157	11.026	11.028	-0.002	87	136941	100.0	107.0	
121 1,2,4-Trichlorobenzene	180	11.866	11.868	-0.002	94	942856	100.0	104.8	
122 Hexachlorobutadiene	225	12.031	12.033	-0.002	95	508970	100.0	97.7	
123 Naphthalene	128	12.102	12.104	-0.002	96	2506363	100.0	114.6	
124 1,2,3-Trichlorobenzene	180	12.363	12.365	-0.002	96	929396	100.0	100.3	
S 127 1,2-Dichloroethene, Total	96				0		200.0	198.4	
S 128 1,3-Dichloropropene, Total	75				0		200.0	221.0	
S 129 Xylenes, Total	106				0		200.0	201.5	
S 126 Trihalomethanes, Total	1				0		400.0	419.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

vm50ss_00192	Amount Added:	10.00	Units: uL	
VMRPRIMW_00114	Amount Added:	10.00	Units: uL	
VMRGAS_00092	Amount Added:	10.00	Units: uL	
VMAROLISTDW_00090	Amount Added:	10.00	Units: uL	
vm250-IS_00021	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00044	Amount Added:	0.00	Units:	Run Reagent

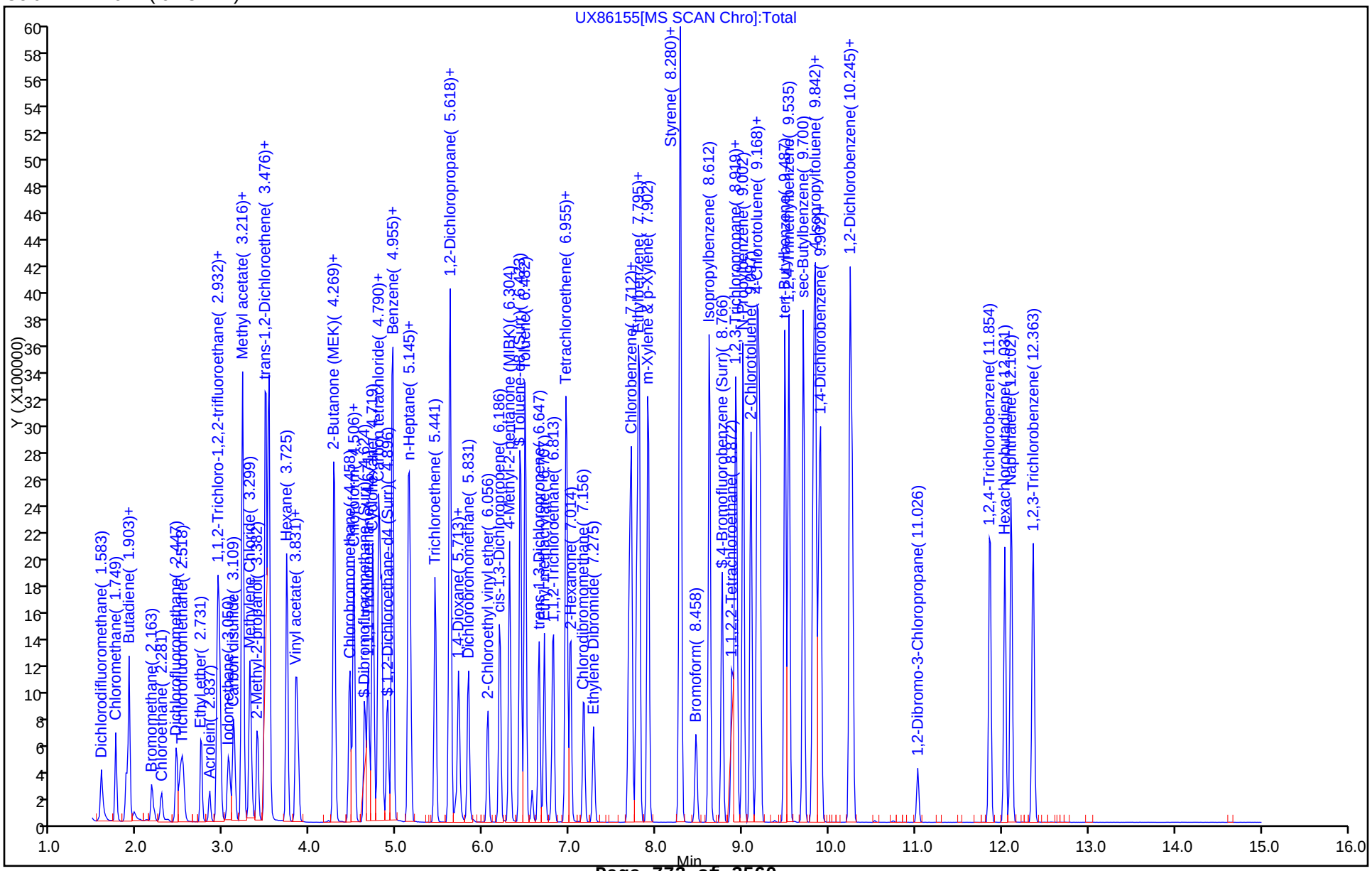
Report Date: 03-Mar-2015 23:34:37 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86155.D

Injection Date:	03-Mar-2015 00:34:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L7			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



Report Date: 03-Mar-2015 23:34:39 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86156.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Mar-2015 00:55:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0040994-005
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub32

Method: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 03-Mar-2015 23:34:38 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: latat Date: 03-Mar-2015 01:34:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.159	5.159	0.000	99	1330841	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.691	7.691	0.000	95	999296	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.880	9.880	0.000	98	527598	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	4.626	4.626	0.000	95	270863	50.0	50.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	4.887	4.886	0.001	93	296150	50.0	48.4	
$ 7 Toluene-d8 (Surr)	98	6.425	6.425	0.000	92	1124932	50.0	51.6	
$ 8 4-Bromofluorobenzene (Surr	95	8.756	8.768	-0.012	94	398794	50.0	50.8	
19 Dichlorodifluoromethane	85	1.585	1.585	0.000	100	251176	50.0	50.8	
20 Chloromethane	50	1.751	1.751	0.000	100	280520	50.0	47.7	
21 Vinyl chloride	62	1.869	1.869	0.000	99	203524	50.0	46.7	
152 Butadiene	54	1.905	1.905	0.000	0	218784	NC	NC	
22 Bromomethane	94	2.177	2.177	0.000	90	115756	50.0	47.5	
23 Chloroethane	64	2.283	2.283	0.000	98	114370	50.0	49.7	
24 Dichlorofluoromethane	67	2.449	2.449	0.000	98	290246	50.0	47.1	
25 Trichlorofluoromethane	101	2.508	2.508	0.000	99	306873	50.0	50.5	
26 Ethyl ether	59	2.733	2.733	0.000	96	184187	50.0	42.6	
27 Acrolein	56	2.840	2.839	0.001	99	136786	250.0	254.8	
28 1,1-Dichloroethene	96	2.922	2.922	0.000	98	249125	50.0	48.1	
29 1,1,2-Trichloro-1,2,2-trif	151	2.946	2.946	0.000	92	204040	50.0	48.6	
30 Acetone	43	2.958	2.958	0.000	100	297225	100.0	97.5	
32 Iodomethane	142	3.052	3.052	0.000	97	383908	50.0	46.9	
33 Carbon disulfide	76	3.112	3.112	0.000	99	660358	50.0	52.1	
35 3-Chloro-1-propene	76	3.206	3.206	0.000	93	152087	50.0	52.0	
36 Methyl acetate	43	3.218	3.218	0.000	99	1441376	250.0	225.3	
37 Methylene Chloride	84	3.301	3.301	0.000	95	326073	50.0	50.3	
38 2-Methyl-2-propanol	59	3.384	3.384	0.000	97	354737	500.0	478.3	
39 Acrylonitrile	53	3.478	3.478	0.000	98	1290141	500.0	458.6	
40 trans-1,2-Dichloroethene	96	3.526	3.526	0.000	64	293680	50.0	48.2	
41 Methyl tert-butyl ether	73	3.526	3.526	0.000	96	847838	50.0	48.3	
42 Hexane	86	3.727	3.727	0.000	95	81731	50.0	46.2	
43 1,1-Dichloroethane	63	3.833	3.833	0.000	96	503677	50.0	46.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	3.857	3.857	0.000	97	280423	48.0	48.7	
49 2-Butanone (MEK)	43	4.271	4.271	0.000	99	384576	100.0	91.9	
48 cis-1,2-Dichloroethene	96	4.271	4.271	0.000	82	322878	50.0	48.1	
50 2,2-Dichloropropane	77	4.283	4.283	0.000	92	238612	50.0	50.2	
54 Chlorobromomethane	128	4.461	4.461	0.001	96	166100	50.0	48.1	
55 Tetrahydrofuran	42	4.496	4.496	0.000	92	219923	100.0	94.5	
56 Chloroform	83	4.508	4.508	0.000	95	491055	50.0	47.1	
57 1,1,1-Trichloroethane	97	4.674	4.673	0.001	97	386625	50.0	49.5	
58 Cyclohexane	56	4.721	4.721	0.000	91	493376	50.0	50.2	
59 1,1-Dichloropropene	75	4.792	4.792	0.000	96	357342	50.0	48.8	
60 Carbon tetrachloride	117	4.804	4.804	0.000	99	342366	50.0	49.8	
61 Isobutyl alcohol	41	4.827	4.827	0.000	95	349039	1250.0	1215.3	
63 1,2-Dichloroethane	62	4.946	4.946	0.000	58	384931	50.0	46.4	
62 Benzene	78	4.946	4.946	0.000	96	1195591	50.0	46.9	
65 n-Heptane	100	5.135	5.135	0.000	94	98860	50.0	51.7	
67 Trichloroethene	130	5.443	5.443	0.000	97	318617	50.0	47.0	
69 Methylcyclohexane	83	5.608	5.608	0.000	91	506560	50.0	49.3	
70 1,2-Dichloropropane	63	5.620	5.620	0.000	96	300609	50.0	47.6	
73 Dibromomethane	93	5.715	5.715	0.000	92	173472	50.0	49.7	
72 1,4-Dioxane	88	5.715	5.715	0.000	46	71356	1000.0	1043.7	
74 Dichlorobromomethane	83	5.821	5.821	0.000	99	357066	50.0	52.6	
76 2-Chloroethyl vinyl ether	63	6.058	6.058	0.000	93	166921	100.0	104.1	
77 cis-1,3-Dichloropropene	75	6.188	6.188	0.000	95	431708	50.0	53.4	
78 4-Methyl-2-pentanone (MIBK	43	6.307	6.306	0.000	97	735321	100.0	104.3	
79 Toluene	91	6.484	6.484	0.000	98	1308073	50.0	47.6	
80 trans-1,3-Dichloropropene	75	6.650	6.650	0.000	94	374192	50.0	52.3	
81 Ethyl methacrylate	69	6.709	6.709	0.000	91	361900	50.0	52.3	
82 1,1,2-Trichloroethane	97	6.803	6.803	0.000	91	273156	50.0	47.5	
83 1,3-Dichloropropane	76	6.957	6.957	0.000	92	464404	50.0	49.1	
84 Tetrachloroethene	164	6.957	6.969	-0.012	95	264679	50.0	47.5	
85 2-Hexanone	43	7.005	7.005	0.000	98	563853	100.0	107.1	
87 Chlorodibromomethane	129	7.158	7.158	0.000	90	282358	50.0	53.4	
89 Ethylene Dibromide	107	7.277	7.277	0.000	99	274176	50.0	50.9	
91 Chlorobenzene	112	7.715	7.715	0.000	96	866581	50.0	46.6	
92 1,1,1,2-Tetrachloroethane	131	7.774	7.774	0.000	95	292141	50.0	52.0	
93 Ethylbenzene	106	7.797	7.797	0.000	98	475437	50.0	49.2	
94 m-Xylene & p-Xylene	106	7.904	7.904	0.000	99	585132	50.0	51.3	
95 o-Xylene	106	8.271	8.271	0.000	96	555144	50.0	51.0	
96 Styrene	104	8.283	8.282	0.001	94	898542	50.0	54.3	
97 Bromoform	173	8.460	8.460	0.000	98	183227	50.0	47.2	
98 Isopropylbenzene	105	8.614	8.614	0.000	95	1455954	50.0	53.0	
101 1,1,2,2-Tetrachloroethane	83	8.874	8.874	0.000	95	349496	50.0	49.1	
102 Bromobenzene	156	8.922	8.921	0.001	95	384175	50.0	48.4	
104 1,2,3-Trichloropropane	110	8.933	8.933	0.000	85	121923	50.0	49.2	
103 trans-1,4-Dichloro-2-buten	53	8.933	8.933	0.000	74	104469	50.0	51.3	
105 N-Propylbenzene	120	9.004	9.004	0.000	99	414360	50.0	52.9	
106 2-Chlorotoluene	126	9.099	9.099	0.000	97	349499	50.0	51.1	
107 1,3,5-Trimethylbenzene	105	9.170	9.170	0.000	95	1217483	50.0	52.8	
108 4-Chlorotoluene	126	9.194	9.194	0.000	98	369059	50.0	51.0	
109 tert-Butylbenzene	119	9.490	9.489	0.001	92	1123842	50.0	54.5	
110 1,2,4-Trimethylbenzene	105	9.537	9.537	0.000	94	1276363	50.0	52.9	
111 sec-Butylbenzene	105	9.703	9.702	0.001	93	1575428	50.0	53.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 1,3-Dichlorobenzene	146	9.821	9.821	0.000	97	695292	50.0	47.2	
113 4-Isopropyltoluene	119	9.845	9.844	0.000	97	1349059	50.0	51.8	
114 1,4-Dichlorobenzene	146	9.904	9.904	0.000	97	707247	50.0	45.7	
117 n-Butylbenzene	91	10.247	10.247	0.000	98	1140954	50.0	52.7	
118 1,2-Dichlorobenzene	146	10.270	10.270	0.000	99	664029	50.0	46.7	
119 1,2-Dibromo-3-Chloropropan	157	11.028	11.028	0.000	87	64629	50.0	49.5	
121 1,2,4-Trichlorobenzene	180	11.856	11.868	-0.012	94	446327	50.0	48.6	
122 Hexachlorobutadiene	225	12.034	12.033	0.001	95	252184	50.0	47.5	
123 Naphthalene	128	12.105	12.104	0.001	96	1202261	50.0	53.9	
124 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	96	457239	50.0	48.4	
S 127 1,2-Dichloroethene, Total	96				0		100.0	96.3	
S 128 1,3-Dichloropropene, Total	75				0		100.0	105.8	
S 129 Xylenes, Total	106				0		100.0	102.2	
S 126 Trihalomethanes, Total	1				0		200.0	200.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

vm50ss_00192	Amount Added:	5.00	Units: uL	
VMRPRIMW_00114	Amount Added:	5.00	Units: uL	
VMRGAS_00092	Amount Added:	5.00	Units: uL	
VMAROLISTDW_00090	Amount Added:	5.00	Units: uL	
vm250-IS_00021	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00044	Amount Added:	0.00	Units:	Run Reagent

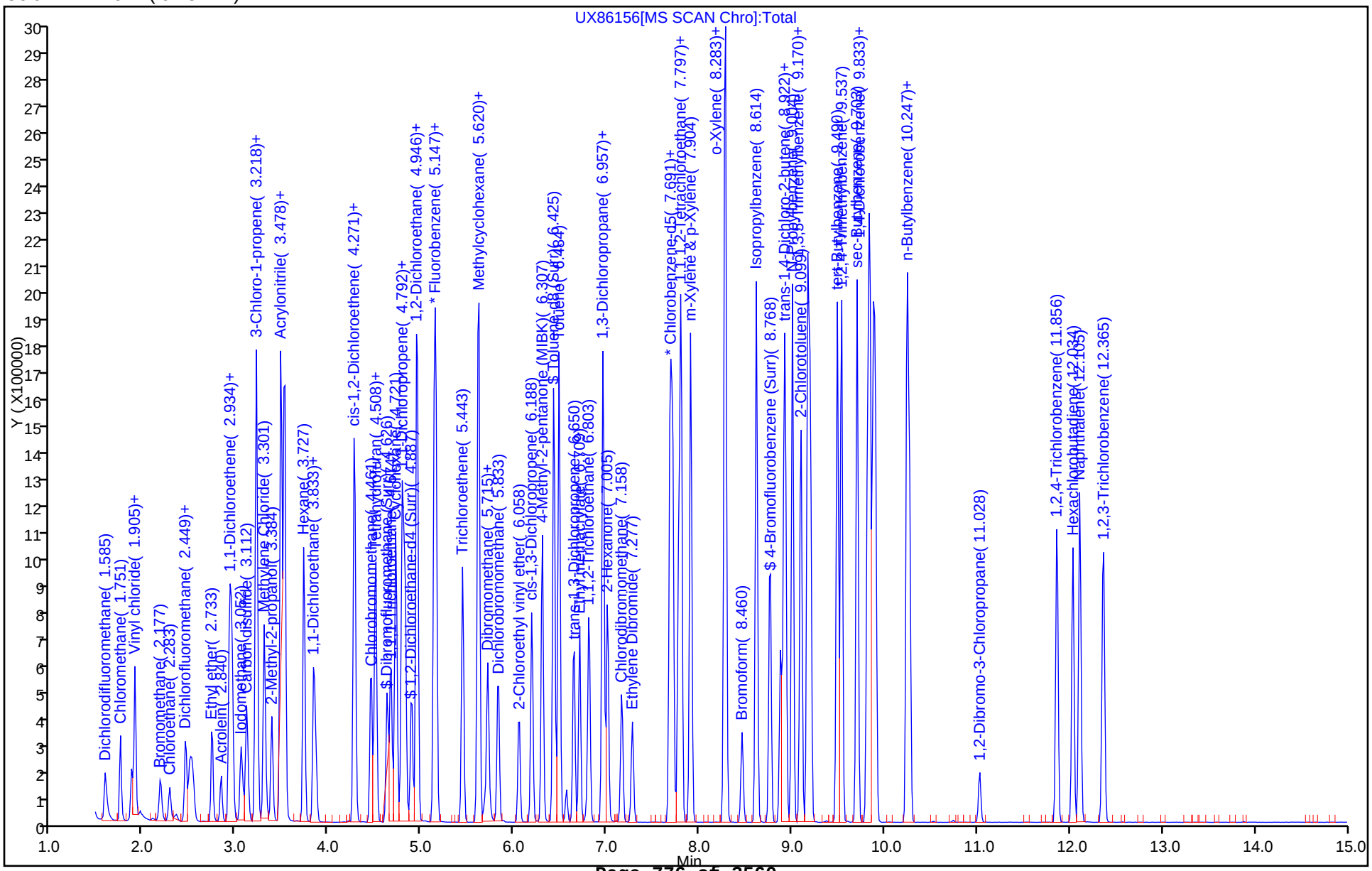
Report Date: 03-Mar-2015 23:34:39 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86156.D

Injection Date:	03-Mar-2015 00:55:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L6			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86157.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 03-Mar-2015 01:34:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0040994-006
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub32

Method: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 03-Mar-2015 23:34:40 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: latat Date: 03-Mar-2015 02:53:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.159	5.159	0.000	99	1259665	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.691	7.691	0.000	96	916655	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.880	9.880	0.000	99	494963	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	4.626	4.626	0.000	94	109442	20.0	19.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	4.886	4.886	0.000	94	131736	20.0	20.9	
$ 7 Toluene-d8 (Surr)	98	6.425	6.425	0.000	93	414688	20.0	19.0	
$ 8 4-Bromofluorobenzene (Surr	95	8.768	8.768	0.000	93	164587	20.0	20.7	
19 Dichlorodifluoromethane	85	1.585	1.585	0.000	99	92925	20.0	19.9	
20 Chloromethane	50	1.751	1.751	0.000	99	112051	20.0	20.1	
21 Vinyl chloride	62	1.869	1.869	0.000	98	79560	20.0	19.3	
152 Butadiene	54	1.905	1.905	0.000	0	82355	NC	NC	
22 Bromomethane	94	2.177	2.177	0.000	91	52522	20.0	21.2	
23 Chloroethane	64	2.283	2.283	0.000	99	47704	20.0	20.6	
24 Dichlorofluoromethane	67	2.449	2.449	0.000	98	113019	20.0	19.4	
25 Trichlorofluoromethane	101	2.508	2.508	0.000	99	114969	20.0	20.0	
26 Ethyl ether	59	2.733	2.733	0.000	95	77718	20.0	19.0	
27 Acrolein	56	2.839	2.839	0.000	99	59121	100.0	100.4	
28 1,1-Dichloroethene	96	2.922	2.922	0.000	99	93300	20.0	19.0	
29 1,1,2-Trichloro-1,2,2-trif	151	2.946	2.946	0.000	91	78620	20.0	19.8	
30 Acetone	43	2.958	2.958	0.000	100	151525	40.0	45.9	
32 Iodomethane	142	3.052	3.052	0.000	97	153743	20.0	19.8	
33 Carbon disulfide	76	3.112	3.112	0.000	99	233266	20.0	19.4	
35 3-Chloro-1-propene	76	3.206	3.206	0.000	92	54777	20.0	19.8	
36 Methyl acetate	43	3.218	3.218	0.000	98	634426	100.0	104.8	
37 Methylene Chloride	84	3.301	3.301	0.000	96	139281	20.0	19.5	
38 2-Methyl-2-propanol	59	3.384	3.384	0.000	96	159599	200.0	227.4	
39 Acrylonitrile	53	3.478	3.478	0.000	98	575627	200.0	216.2	
40 trans-1,2-Dichloroethene	96	3.526	3.526	0.000	62	112801	20.0	19.6	
41 Methyl tert-butyl ether	73	3.526	3.526	0.000	96	349825	20.0	21.1	
42 Hexane	86	3.727	3.727	0.000	95	31019	20.0	18.5	
43 1,1-Dichloroethane	63	3.833	3.833	0.000	97	198329	20.0	19.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	3.857	3.857	0.000	97	96712	19.2	17.7	
49 2-Butanone (MEK)	43	4.271	4.271	0.000	99	167280	40.0	42.2	
48 cis-1,2-Dichloroethene	96	4.271	4.271	0.000	82	125068	20.0	19.7	
50 2,2-Dichloropropane	77	4.283	4.283	0.000	91	92793	20.0	20.6	
54 Chlorobromomethane	128	4.461	4.461	0.000	96	65334	20.0	20.0	
55 Tetrahydrofuran	42	4.496	4.496	0.000	90	96186	40.0	43.7	
56 Chloroform	83	4.508	4.508	0.000	95	189353	20.0	19.2	
57 1,1,1-Trichloroethane	97	4.673	4.673	0.000	97	144266	20.0	19.5	
58 Cyclohexane	56	4.721	4.721	0.000	92	177991	20.0	19.1	
59 1,1-Dichloropropene	75	4.792	4.792	0.000	96	133306	20.0	19.2	
60 Carbon tetrachloride	117	4.804	4.804	0.000	99	121316	20.0	18.6	
61 Isobutyl alcohol	41	4.827	4.827	0.000	94	157253	500.0	578.5	
63 1,2-Dichloroethane	62	4.946	4.946	0.000	59	155694	20.0	19.8	
62 Benzene	78	4.946	4.946	0.000	96	460470	20.0	19.1	
65 n-Heptane	100	5.135	5.135	0.000	94	32908	20.0	18.2	
67 Trichloroethene	130	5.443	5.443	0.000	98	122742	20.0	19.1	
69 Methylcyclohexane	83	5.608	5.608	0.000	91	179971	20.0	18.5	
70 1,2-Dichloropropane	63	5.620	5.620	0.000	94	114127	20.0	19.1	
73 Dibromomethane	93	5.715	5.715	0.000	92	68832	20.0	20.8	
72 1,4-Dioxane	88	5.715	5.715	0.000	45	25764	400.0	398.1	
74 Dichlorobromomethane	83	5.821	5.821	0.000	99	131750	20.0	20.5	
76 2-Chloroethyl vinyl ether	63	6.058	6.058	0.000	93	58651	40.0	38.6	
77 cis-1,3-Dichloropropene	75	6.188	6.188	0.000	95	150110	20.0	19.6	
78 4-Methyl-2-pentanone (MIBK	43	6.306	6.306	0.000	97	297246	40.0	44.5	
79 Toluene	91	6.484	6.484	0.000	99	475267	20.0	18.9	
80 trans-1,3-Dichloropropene	75	6.650	6.650	0.000	94	126474	20.0	19.3	
81 Ethyl methacrylate	69	6.709	6.709	0.000	91	124396	20.0	19.6	
82 1,1,2-Trichloroethane	97	6.803	6.803	0.000	90	104901	20.0	19.9	
83 1,3-Dichloropropane	76	6.957	6.957	0.000	93	177129	20.0	20.4	
84 Tetrachloroethene	164	6.969	6.969	0.000	90	92185	20.0	18.0	
85 2-Hexanone	43	7.005	7.005	0.000	99	221209	40.0	45.8	
87 Chlorodibromomethane	129	7.158	7.158	0.000	90	97600	20.0	20.1	
89 Ethylene Dibromide	107	7.277	7.277	0.000	98	104303	20.0	21.1	
91 Chlorobenzene	112	7.715	7.715	0.000	95	316530	20.0	18.6	
92 1,1,1,2-Tetrachloroethane	131	7.774	7.774	0.000	95	105818	20.0	20.5	
93 Ethylbenzene	106	7.797	7.797	0.000	98	164729	20.0	18.6	
94 m-Xylene & p-Xylene	106	7.904	7.904	0.000	99	199947	20.0	19.1	
95 o-Xylene	106	8.271	8.271	0.000	95	199864	20.0	20.0	
96 Styrene	104	8.282	8.282	0.000	93	310009	20.0	20.4	
97 Bromoform	173	8.460	8.460	0.000	98	60546	20.0	17.5	
98 Isopropylbenzene	105	8.614	8.614	0.000	95	503589	20.0	20.0	
101 1,1,2,2-Tetrachloroethane	83	8.874	8.874	0.000	96	132203	20.0	19.8	
102 Bromobenzene	156	8.921	8.921	0.000	92	141435	20.0	19.0	
104 1,2,3-Trichloropropane	110	8.933	8.933	0.000	84	49607	20.0	21.3	
103 trans-1,4-Dichloro-2-buten	53	8.933	8.933	0.000	70	36170	20.0	18.9	
105 N-Propylbenzene	120	9.004	9.004	0.000	98	149165	20.0	20.3	
106 2-Chlorotoluene	126	9.099	9.099	0.000	97	125870	20.0	19.6	
107 1,3,5-Trimethylbenzene	105	9.170	9.170	0.000	94	436033	20.0	20.1	
108 4-Chlorotoluene	126	9.194	9.194	0.000	98	129830	20.0	19.1	
109 tert-Butylbenzene	119	9.489	9.489	0.000	92	391546	20.0	20.2	
110 1,2,4-Trimethylbenzene	105	9.537	9.537	0.000	94	461481	20.0	20.4	
111 sec-Butylbenzene	105	9.702	9.702	0.000	94	545467	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 1,3-Dichlorobenzene	146	9.821	9.821	0.000	98	257960	20.0	18.7	
113 4-Isopropyltoluene	119	9.844	9.844	0.000	97	481597	20.0	19.7	
114 1,4-Dichlorobenzene	146	9.904	9.904	0.000	96	270341	20.0	18.6	
117 n-Butylbenzene	91	10.247	10.247	0.000	97	398476	20.0	19.6	
118 1,2-Dichlorobenzene	146	10.270	10.270	0.000	98	267385	20.0	20.0	
119 1,2-Dibromo-3-Chloropropan	157	11.028	11.028	0.000	83	25539	20.0	20.8	
121 1,2,4-Trichlorobenzene	180	11.868	11.868	0.000	94	172104	20.0	20.0	
122 Hexachlorobutadiene	225	12.033	12.033	0.000	94	95659	20.0	19.2	
123 Naphthalene	128	12.104	12.104	0.000	96	478826	20.0	22.9	
124 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	97	183899	20.0	20.7	
S 127 1,2-Dichloroethene, Total	96				0		40.0	39.3	
S 128 1,3-Dichloropropene, Total	75				0		40.0	38.9	
S 129 Xylenes, Total	106				0		40.0	39.1	
S 126 Trihalomethanes, Total	1				0		80.0	77.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

vm50ss_00192	Amount Added:	2.00	Units: uL	
VMRPRIMW_00114	Amount Added:	2.00	Units: uL	
VMRGAS_00092	Amount Added:	2.00	Units: uL	
VMAROLISTDW_00090	Amount Added:	2.00	Units: uL	
vm250-IS_00021	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00044	Amount Added:	0.00	Units:	Run Reagent

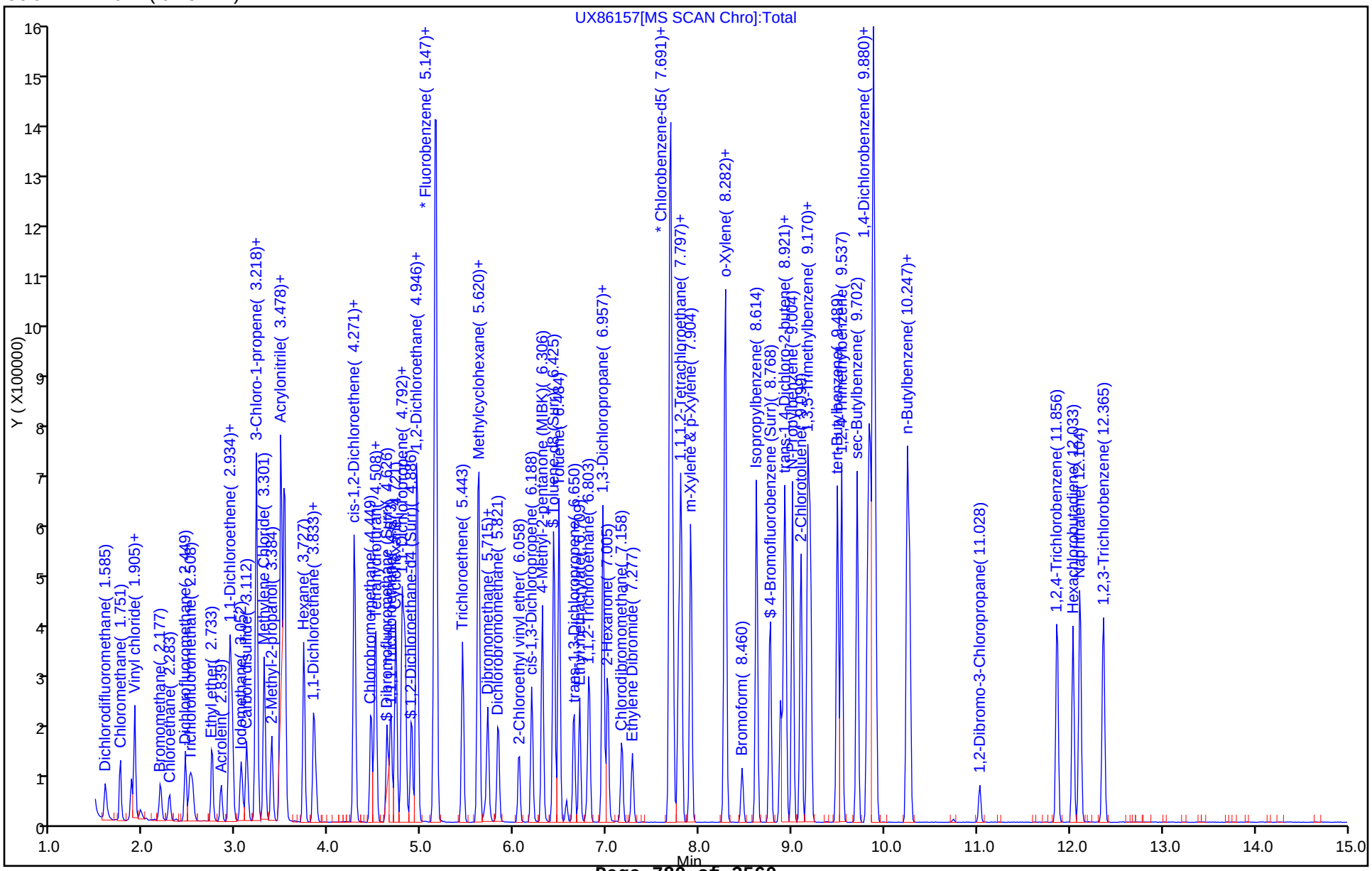
Report Date: 03-Mar-2015 23:34:42 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86157.D

Injection Date:	03-Mar-2015 01:34:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	ICIS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86158.D
Lims ID: STD8260 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Mar-2015 01:56:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0040994-007
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub32

Method: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 03-Mar-2015 23:34:43 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: latat Date: 03-Mar-2015 02:54:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.159	-0.002	99	1298982	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.691	-0.002	95	956889	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.878	9.880	-0.002	99	497548	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	4.624	4.626	-0.002	94	65724	10.0	10.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	4.896	4.886	0.010	94	81568	10.0	10.9	
$ 7 Toluene-d8 (Surr)	98	6.423	6.425	-0.002	92	269121	10.0	10.6	
$ 8 4-Bromofluorobenzene (Surr	95	8.766	8.768	-0.002	95	100638	10.0	10.3	
19 Dichlorodifluoromethane	85	1.583	1.585	-0.002	100	53676	10.0	11.1	
20 Chloromethane	50	1.749	1.751	-0.002	99	59456	10.0	10.4	
21 Vinyl chloride	62	1.867	1.869	-0.002	97	48274	10.0	11.3	
152 Butadiene	54	1.903	1.905	-0.002	0	48298	NC	NC	
22 Bromomethane	94	2.187	2.177	0.010	91	30236	10.0	11.3	
23 Chloroethane	64	2.281	2.283	-0.002	99	27259	10.0	11.1	
24 Dichlorofluoromethane	67	2.459	2.449	0.010	98	66340	10.0	11.0	
25 Trichlorofluoromethane	101	2.506	2.508	-0.002	97	69444	10.0	11.7	
26 Ethyl ether	59	2.743	2.733	0.010	93	44665	10.0	10.6	
27 Acrolein	56	2.837	2.839	-0.002	97	23740	50.0	40.0	
28 1,1-Dichloroethene	96	2.932	2.922	0.010	97	54544	10.0	10.8	
29 1,1,2-Trichloro-1,2,2-trif	151	2.944	2.946	-0.002	92	44606	10.0	10.9	
30 Acetone	43	2.956	2.958	-0.002	99	97186	20.0	23.1	
32 Iodomethane	142	3.050	3.052	-0.002	97	87446	10.0	10.9	
33 Carbon disulfide	76	3.110	3.112	-0.002	99	131522	10.0	10.6	
35 3-Chloro-1-propene	76	3.216	3.206	0.010	92	32727	10.0	11.5	
36 Methyl acetate	43	3.216	3.218	-0.002	99	351963	50.0	56.4	
37 Methylene Chloride	84	3.299	3.301	-0.002	95	96035	10.0	11.2	
38 2-Methyl-2-propanol	59	3.382	3.384	-0.002	95	87810	100.0	121.3	
39 Acrylonitrile	53	3.488	3.478	0.010	98	309930	100.0	112.9	
40 trans-1,2-Dichloroethene	96	3.524	3.526	-0.002	65	65242	10.0	11.0	
41 Methyl tert-butyl ether	73	3.524	3.526	-0.002	97	190039	10.0	11.1	
42 Hexane	86	3.737	3.727	0.010	94	19127	10.0	11.1	
43 1,1-Dichloroethane	63	3.843	3.833	0.010	96	110888	10.0	10.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	3.867	3.857	0.010	97	62399	9.60	11.1	
49 2-Butanone (MEK)	43	4.269	4.271	-0.002	96	89778	20.0	22.0	
48 cis-1,2-Dichloroethene	96	4.281	4.271	0.010	84	70161	10.0	10.7	
50 2,2-Dichloropropane	77	4.281	4.283	-0.002	91	53498	10.0	11.5	
54 Chlorobromomethane	128	4.458	4.461	-0.002	95	36102	10.0	10.7	
55 Tetrahydrofuran	42	4.494	4.496	-0.002	90	52097	20.0	22.9	
56 Chloroform	83	4.506	4.508	-0.002	95	112262	10.0	11.0	
57 1,1,1-Trichloroethane	97	4.671	4.673	-0.002	97	82250	10.0	10.8	
58 Cyclohexane	56	4.719	4.721	-0.002	91	106448	10.0	11.1	
59 1,1-Dichloropropene	75	4.790	4.792	-0.002	98	82766	10.0	11.6	
60 Carbon tetrachloride	117	4.802	4.804	-0.002	98	71679	10.0	10.7	
61 Isobutyl alcohol	41	4.825	4.827	-0.002	93	85297	250.0	304.3	
63 1,2-Dichloroethane	62	4.955	4.946	0.009	59	86219	10.0	10.7	
62 Benzene	78	4.955	4.946	0.009	96	266853	10.0	10.7	
65 n-Heptane	100	5.145	5.135	0.010	94	21007	10.0	11.2	
67 Trichloroethene	130	5.441	5.443	-0.002	96	68861	10.0	10.4	
69 Methylcyclohexane	83	5.618	5.608	0.010	91	108864	10.0	10.8	
70 1,2-Dichloropropane	63	5.618	5.620	-0.002	97	67411	10.0	10.9	
73 Dibromomethane	93	5.713	5.715	-0.002	88	36171	10.0	10.6	
72 1,4-Dioxane	88	5.713	5.715	-0.002	46	16226	200.0	243.2	
74 Dichlorobromomethane	83	5.831	5.821	0.010	99	71483	10.0	10.8	
76 2-Chloroethyl vinyl ether	63	6.056	6.058	-0.002	93	32721	20.0	20.9	
77 cis-1,3-Dichloropropene	75	6.186	6.188	-0.002	94	82755	10.0	10.5	
78 4-Methyl-2-pentanone (MIBK	43	6.304	6.306	-0.002	98	161600	20.0	23.5	
79 Toluene	91	6.482	6.484	-0.002	99	285792	10.0	10.9	
80 trans-1,3-Dichloropropene	75	6.648	6.650	-0.002	94	67587	10.0	9.87	
81 Ethyl methacrylate	69	6.707	6.709	-0.002	92	70584	10.0	10.7	
82 1,1,2-Trichloroethane	97	6.813	6.803	0.010	89	61579	10.0	11.2	
83 1,3-Dichloropropane	76	6.955	6.957	-0.002	91	102438	10.0	11.3	
84 Tetrachloroethene	164	6.967	6.969	-0.002	89	58307	10.0	10.9	
85 2-Hexanone	43	7.014	7.005	0.009	97	119786	20.0	23.8	
87 Chlorodibromomethane	129	7.168	7.158	0.010	88	54058	10.0	10.7	
89 Ethylene Dibromide	107	7.275	7.277	-0.002	97	59216	10.0	11.5	
91 Chlorobenzene	112	7.712	7.715	-0.003	95	191499	10.0	10.8	
92 1,1,1,2-Tetrachloroethane	131	7.772	7.774	-0.002	96	58895	10.0	10.9	
93 Ethylbenzene	106	7.807	7.797	0.010	98	100716	10.0	10.9	
94 m-Xylene & p-Xylene	106	7.902	7.904	-0.002	99	123182	10.0	11.3	
95 o-Xylene	106	8.280	8.271	0.009	95	122871	10.0	11.8	
96 Styrene	104	8.280	8.282	-0.002	92	176122	10.0	11.1	
97 Bromoform	173	8.458	8.460	-0.002	98	34743	10.0	10.0	
98 Isopropylbenzene	105	8.612	8.614	-0.002	96	302032	10.0	11.5	
101 1,1,2,2-Tetrachloroethane	83	8.872	8.874	-0.002	96	79455	10.0	11.8	
102 Bromobenzene	156	8.919	8.921	-0.002	94	81970	10.0	11.0	
104 1,2,3-Trichloropropane	110	8.931	8.933	-0.002	84	29387	10.0	12.6	
103 trans-1,4-Dichloro-2-buten	53	8.931	8.933	-0.002	70	21836	10.0	11.4	
105 N-Propylbenzene	120	9.002	9.004	-0.002	99	86803	10.0	11.7	
106 2-Chlorotoluene	126	9.097	9.099	-0.002	97	74740	10.0	11.6	
107 1,3,5-Trimethylbenzene	105	9.168	9.170	-0.002	93	256025	10.0	11.8	
108 4-Chlorotoluene	126	9.203	9.194	0.009	96	80579	10.0	11.8	
109 tert-Butylbenzene	119	9.487	9.489	-0.002	93	226398	10.0	11.6	
110 1,2,4-Trimethylbenzene	105	9.535	9.537	-0.002	94	269052	10.0	11.8	
111 sec-Butylbenzene	105	9.700	9.702	-0.002	93	327363	10.0	11.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 1,3-Dichlorobenzene	146	9.819	9.821	-0.002	97	158051	10.0	11.4	
113 4-Isopropyltoluene	119	9.842	9.844	-0.002	97	280450	10.0	11.4	
114 1,4-Dichlorobenzene	146	9.902	9.904	-0.002	96	166416	10.0	11.4	
117 n-Butylbenzene	91	10.245	10.247	-0.002	97	230396	10.0	11.3	
118 1,2-Dichlorobenzene	146	10.268	10.270	-0.002	98	154686	10.0	11.5	
119 1,2-Dibromo-3-Chloropropan	157	11.026	11.028	-0.002	84	13425	10.0	10.9	
121 1,2,4-Trichlorobenzene	180	11.866	11.868	-0.002	94	91574	10.0	10.6	
122 Hexachlorobutadiene	225	12.031	12.033	-0.002	94	53441	10.0	10.7	
123 Naphthalene	128	12.102	12.104	-0.002	97	228207	10.0	10.8	
124 1,2,3-Trichlorobenzene	180	12.363	12.365	-0.002	96	95362	10.0	10.7	
S 127 1,2-Dichloroethene, Total	96				0		20.0	21.7	
S 128 1,3-Dichloropropene, Total	75				0		20.0	20.4	
S 129 Xylenes, Total	106				0		20.0	23.1	
S 126 Trihalomethanes, Total	1				0		40.0	42.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

vm50ss_00192	Amount Added:	1.00	Units: uL	
VMRPRIMW_00114	Amount Added:	1.00	Units: uL	
VMRGAS_00092	Amount Added:	1.00	Units: uL	
VMAROLISTDW_00090	Amount Added:	1.00	Units: uL	
vm250-IS_00021	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00044	Amount Added:	0.00	Units:	Run Reagent

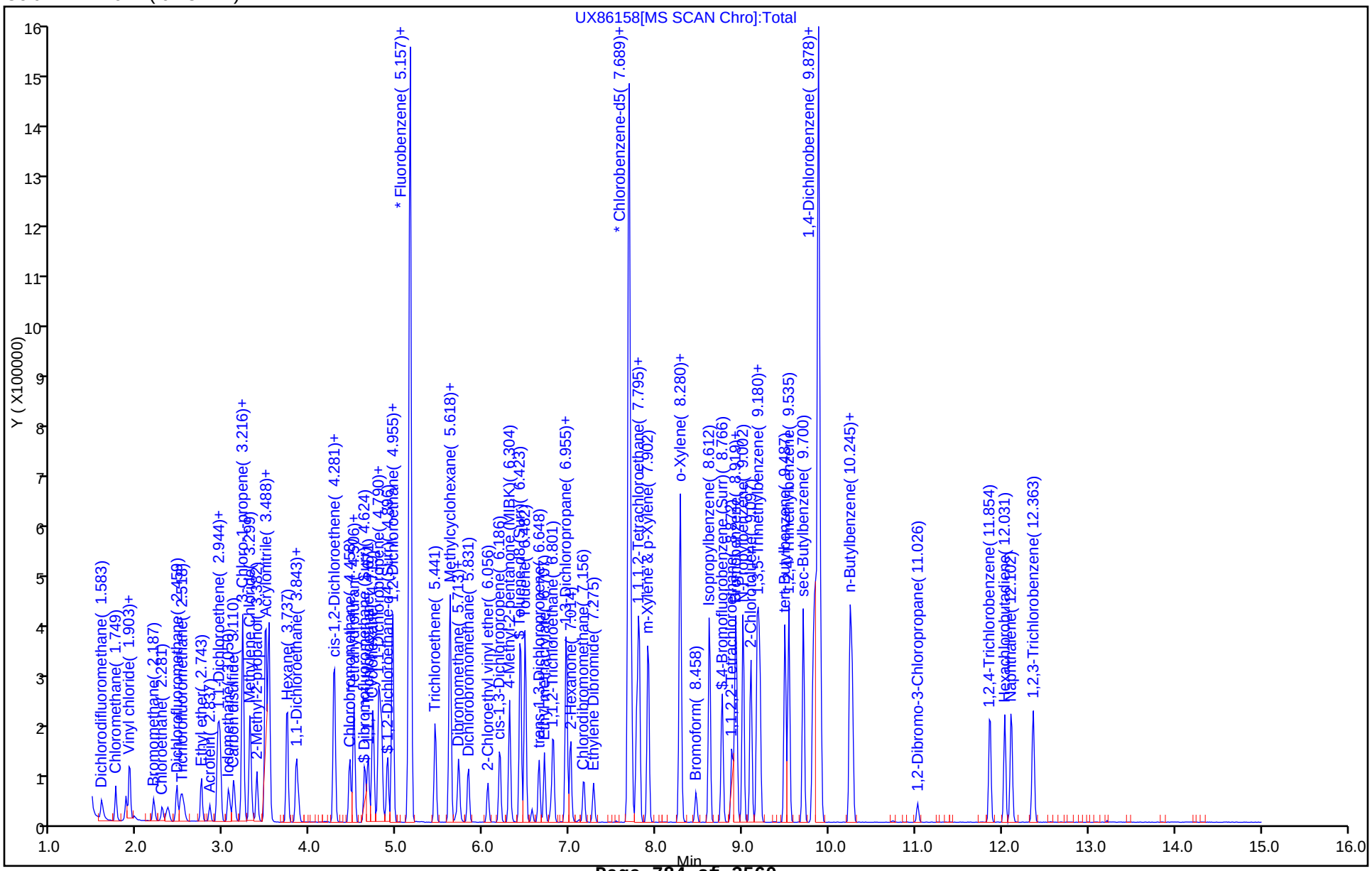
Report Date: 03-Mar-2015 23:34:43 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86158.D

Injection Date:	03-Mar-2015 01:56:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L4			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86159.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Mar-2015 02:17:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0040994-008
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub32

Method: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 03-Mar-2015 23:34:45 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: latat Date: 03-Mar-2015 04:22:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.159	-0.002	99	1248570	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.691	-0.002	95	956826	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.878	9.880	-0.002	99	496607	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	4.636	4.626	0.010	94	41323	5.00	5.50	
$ 6 1,2-Dichloroethane-d4 (Sur	65	4.896	4.886	0.010	95	49683	5.00	5.41	
$ 7 Toluene-d8 (Surr)	98	6.435	6.425	0.010	93	170823	5.00	5.45	
$ 8 4-Bromofluorobenzene (Surr	95	8.766	8.768	-0.002	94	68128	5.00	5.54	
19 Dichlorodifluoromethane	85	1.583	1.585	-0.002	98	24299	5.00	5.24	
20 Chloromethane	50	1.749	1.751	-0.002	99	29111	5.00	5.28	
21 Vinyl chloride	62	1.867	1.869	-0.002	98	20932	5.00	5.12	
152 Butadiene	54	1.915	1.905	0.010	0	20131	NC	NC	
22 Bromomethane	94	2.187	2.177	0.010	88	13568	5.00	4.82	
23 Chloroethane	64	2.281	2.283	-0.002	96	11139	5.00	4.43	
24 Dichlorofluoromethane	67	2.459	2.449	0.010	98	30165	5.00	5.22	
25 Trichlorofluoromethane	101	2.506	2.508	-0.002	96	27122	5.00	4.75	
26 Ethyl ether	59	2.743	2.733	0.010	94	24685	5.00	6.08	
27 Acrolein	56	2.838	2.839	-0.001	99	14486	25.0	27.0	
28 1,1-Dichloroethene	96	2.932	2.922	0.010	97	24153	5.00	4.97	
29 1,1,2-Trichloro-1,2,2-trif	151	2.956	2.946	0.010	93	18407	5.00	4.67	
30 Acetone	43	2.968	2.958	0.010	100	54156	10.0	7.38	
32 Iodomethane	142	3.062	3.052	0.010	96	38096	5.00	4.96	
33 Carbon disulfide	76	3.122	3.112	0.010	99	55412	5.00	4.66	
35 3-Chloro-1-propene	76	3.216	3.206	0.010	92	13990	5.00	5.10	
36 Methyl acetate	43	3.228	3.218	0.010	99	143103	25.0	23.8	
37 Methylene Chloride	84	3.311	3.301	0.010	95	56270	5.00	4.55	
38 2-Methyl-2-propanol	59	3.382	3.384	-0.002	95	31227	50.0	44.9	
39 Acrylonitrile	53	3.488	3.478	0.010	98	125851	50.0	47.7	
40 trans-1,2-Dichloroethene	96	3.524	3.526	-0.002	67	30023	5.00	5.25	
41 Methyl tert-butyl ether	73	3.524	3.526	-0.002	97	79334	5.00	4.82	
42 Hexane	86	3.737	3.727	0.010	94	7730	5.00	4.66	
43 1,1-Dichloroethane	63	3.843	3.833	0.010	96	51089	5.00	5.06	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	3.867	3.857	0.010	96	24206	4.80	4.48	
49 2-Butanone (MEK)	43	4.281	4.271	0.010	89	39075	10.0	9.95	
48 cis-1,2-Dichloroethene	96	4.281	4.271	0.010	81	32045	5.00	5.09	
50 2,2-Dichloropropane	77	4.281	4.283	-0.002	91	21235	5.00	4.77	
54 Chlorobromomethane	128	4.459	4.461	-0.001	96	16071	5.00	4.96	
55 Tetrahydrofuran	42	4.506	4.496	0.010	93	20234	10.0	9.27	
56 Chloroform	83	4.506	4.508	-0.002	93	49212	5.00	5.03	
57 1,1,1-Trichloroethane	97	4.672	4.673	-0.001	97	33182	5.00	4.53	
58 Cyclohexane	56	4.719	4.721	-0.002	92	44419	5.00	4.82	
59 1,1-Dichloropropene	75	4.790	4.792	-0.002	98	33148	5.00	4.83	
60 Carbon tetrachloride	117	4.802	4.804	-0.002	96	30921	5.00	4.79	
61 Isobutyl alcohol	41	4.825	4.827	-0.002	91	30197	125.0	112.1	
63 1,2-Dichloroethane	62	4.956	4.946	0.010	57	37460	5.00	4.82	
62 Benzene	78	4.956	4.946	0.010	96	123667	5.00	5.17	
65 n-Heptane	100	5.145	5.135	0.010	93	7757	5.00	4.32	
67 Trichloroethene	130	5.441	5.443	-0.002	96	31821	5.00	5.00	
69 Methylcyclohexane	83	5.618	5.608	0.010	90	44839	5.00	4.65	
70 1,2-Dichloropropane	63	5.618	5.620	-0.002	94	29941	5.00	5.05	
73 Dibromomethane	93	5.713	5.715	-0.002	89	15977	5.00	4.87	
72 1,4-Dioxane	88	5.713	5.715	-0.002	46	6709	100.0	104.6	
74 Dichlorobromomethane	83	5.831	5.821	0.010	98	29804	5.00	4.68	
76 2-Chloroethyl vinyl ether	63	6.056	6.058	-0.002	93	12955	10.0	8.61	
77 cis-1,3-Dichloropropene	75	6.186	6.188	-0.002	94	35106	5.00	4.63	
78 4-Methyl-2-pentanone (MIBK	43	6.305	6.306	-0.001	98	62565	10.0	9.46	
79 Toluene	91	6.482	6.484	-0.002	99	127552	5.00	4.85	
80 trans-1,3-Dichloropropene	75	6.648	6.650	-0.002	95	26778	5.00	3.91	
81 Ethyl methacrylate	69	6.707	6.709	-0.002	91	27885	5.00	4.21	
82 1,1,2-Trichloroethane	97	6.813	6.803	0.010	88	28098	5.00	5.10	
83 1,3-Dichloropropane	76	6.955	6.957	-0.002	91	45024	5.00	4.97	
84 Tetrachloroethene	164	6.967	6.969	-0.002	94	26683	5.00	5.00	
85 2-Hexanone	43	7.015	7.005	0.010	98	44518	10.0	8.83	
87 Chlorodibromomethane	129	7.157	7.158	-0.001	91	20567	5.00	4.06	
89 Ethylene Dibromide	107	7.275	7.277	-0.002	71	26465	5.00	5.13	
91 Chlorobenzene	112	7.713	7.715	-0.002	95	91278	5.00	5.13	
92 1,1,1,2-Tetrachloroethane	131	7.772	7.774	-0.002	89	24739	5.00	4.60	
93 Ethylbenzene	106	7.807	7.797	0.010	98	47792	5.00	5.16	
94 m-Xylene & p-Xylene	106	7.902	7.904	-0.002	99	53687	5.00	4.91	
95 o-Xylene	106	8.281	8.271	0.010	94	51532	5.00	4.94	
96 Styrene	104	8.281	8.282	-0.001	87	73930	5.00	4.66	
97 Bromoform	173	8.458	8.460	-0.002	96	12042	5.00	4.04	
98 Isopropylbenzene	105	8.612	8.614	-0.002	95	124437	5.00	4.73	
101 1,1,2,2-Tetrachloroethane	83	8.872	8.874	-0.002	96	30022	5.00	4.48	
102 Bromobenzene	156	8.920	8.921	-0.001	92	38290	5.00	5.13	
104 1,2,3-Trichloropropane	110	8.931	8.933	-0.002	85	11621	5.00	4.98	
103 trans-1,4-Dichloro-2-buten	53	8.931	8.933	-0.002	67	8402	5.00	4.38	
105 N-Propylbenzene	120	9.002	9.004	-0.002	99	36791	5.00	4.99	
106 2-Chlorotoluene	126	9.097	9.099	-0.002	97	32177	5.00	5.00	
107 1,3,5-Trimethylbenzene	105	9.168	9.170	-0.002	94	104451	5.00	4.81	
108 4-Chlorotoluene	126	9.204	9.194	0.010	96	35359	5.00	5.19	
109 tert-Butylbenzene	119	9.488	9.489	-0.001	91	94194	5.00	4.85	
110 1,2,4-Trimethylbenzene	105	9.535	9.537	-0.002	94	112999	5.00	4.98	
111 sec-Butylbenzene	105	9.701	9.702	-0.001	93	137408	5.00	4.92	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 1,3-Dichlorobenzene	146	9.819	9.821	-0.002	97	70475	5.00	5.09	
113 4-Isopropyltoluene	119	9.843	9.844	-0.001	97	114762	5.00	4.68	
114 1,4-Dichlorobenzene	146	9.902	9.904	-0.002	95	73552	5.00	5.04	
117 n-Butylbenzene	91	10.245	10.247	-0.002	97	98548	5.00	4.83	
118 1,2-Dichlorobenzene	146	10.269	10.270	-0.001	98	69400	5.00	5.18	
119 1,2-Dibromo-3-Chloropropan	157	11.026	11.028	-0.002	84	4939	5.00	4.02	
121 1,2,4-Trichlorobenzene	180	11.866	11.868	-0.002	94	40283	5.00	4.66	
122 Hexachlorobutadiene	225	12.032	12.033	-0.001	94	24928	5.00	4.98	
123 Naphthalene	128	12.114	12.104	0.010	96	88270	5.00	4.20	
124 1,2,3-Trichlorobenzene	180	12.363	12.365	-0.002	94	41110	5.00	4.62	
S 127 1,2-Dichloroethene, Total	96				0		10.0	10.3	
S 128 1,3-Dichloropropene, Total	75				0		10.0	8.54	
S 129 Xylenes, Total	106				0		10.0	9.85	
S 126 Trihalomethanes, Total	1				0		20.0	17.8	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

vm50ss_00192	Amount Added:	0.50	Units: uL	
VMRPRIMW_00114	Amount Added:	0.50	Units: uL	
VMRGAS_00092	Amount Added:	0.50	Units: uL	
VMAROLISTDW_00090	Amount Added:	0.50	Units: uL	
vm250-IS_00021	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00044	Amount Added:	0.00	Units:	Run Reagent

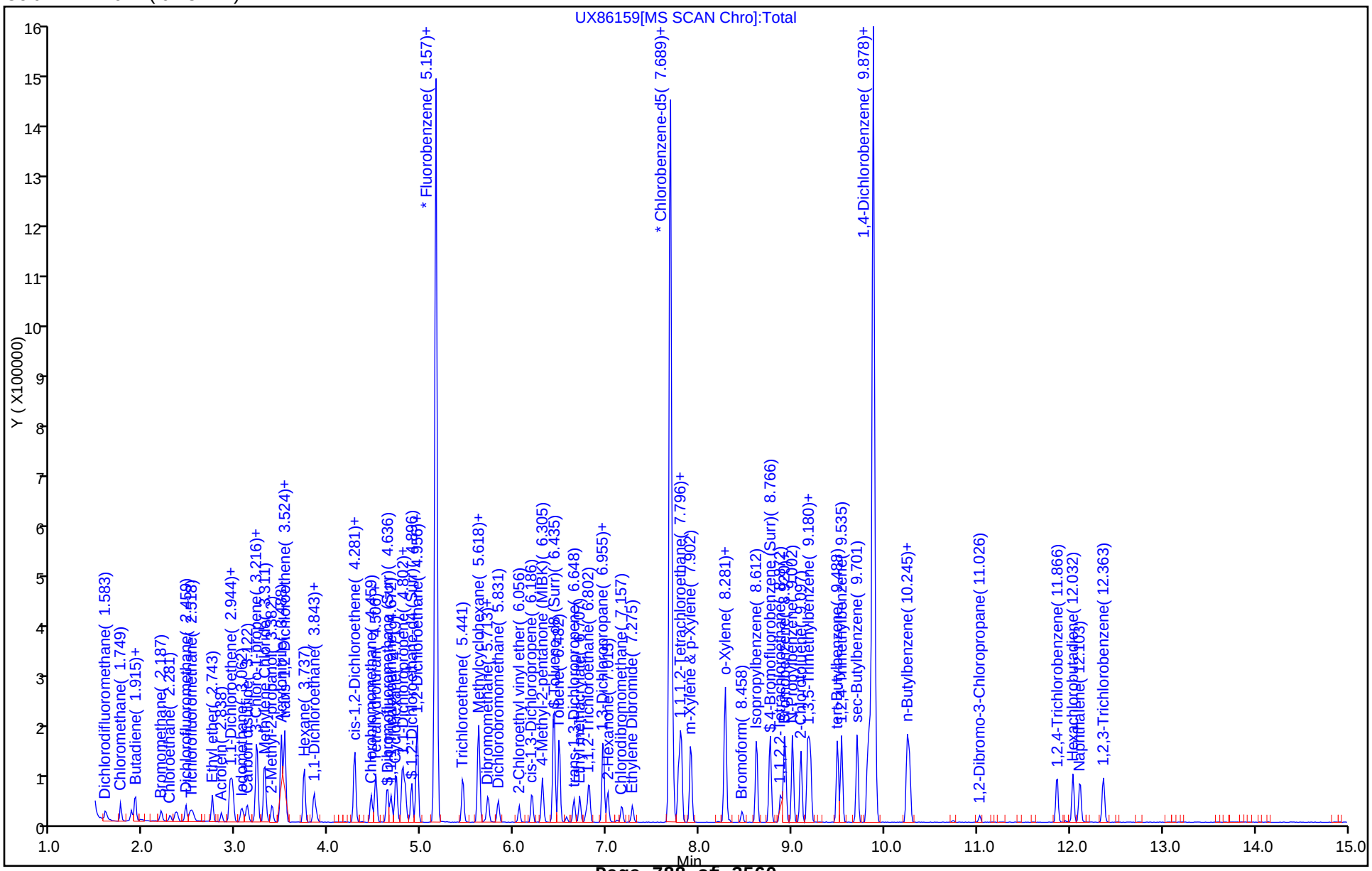
Report Date: 03-Mar-2015 23:34:46 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86159.D

Injection Date:	03-Mar-2015 02:17:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L3			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86160.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Mar-2015 02:38:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0040994-009
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub32

Method: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 03-Mar-2015 23:34:47 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: latat Date: 03-Mar-2015 04:23:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.159	5.159	0.000	99	1221697	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.691	7.691	0.000	95	899266	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.880	9.880	0.000	99	491125	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	4.626	4.626	0.000	94	21813	2.00	1.41	
$ 6 1,2-Dichloroethane-d4 (Sur	65	4.898	4.886	0.012	89	25032	2.00	0.7502	
$ 7 Toluene-d8 (Surr)	98	6.425	6.425	0.000	93	83495	2.00	1.15	
$ 8 4-Bromofluorobenzene (Surr	95	8.756	8.768	-0.012	96	30993	2.00	0.3898	
19 Dichlorodifluoromethane	85	1.585	1.585	0.000	98	8380	2.00	1.85	
20 Chloromethane	50	1.751	1.751	0.000	97	11129	2.00	2.06	
21 Vinyl chloride	62	1.869	1.869	0.000	95	8672	2.00	2.17	
152 Butadiene	54	1.905	1.905	0.000	0	8904	NC	NC	
22 Bromomethane	94	2.189	2.177	0.012	81	5728	2.00	1.65	
23 Chloroethane	64	2.283	2.283	0.000	42	5300	2.00	1.94	
24 Dichlorofluoromethane	67	2.461	2.449	0.012	96	12140	2.00	2.15	
25 Trichlorofluoromethane	101	2.508	2.508	0.000	96	11366	2.00	2.04	
26 Ethyl ether	59	2.745	2.733	0.012	90	8685	2.00	2.19	
27 Acrolein	56	2.839	2.839	0.000	96	3701	10.0	10.8	
28 1,1-Dichloroethene	96	2.922	2.922	0.000	97	9981	2.00	2.10	
29 1,1,2-Trichloro-1,2,2-trif	151	2.946	2.946	0.000	88	7958	2.00	2.06	
30 Acetone	43	2.958	2.958	0.000	100	41362	4.00	2.61	
32 Iodomethane	142	3.052	3.052	0.000	95	16254	2.00	2.16	
33 Carbon disulfide	76	3.112	3.112	0.000	99	22924	2.00	1.97	
35 3-Chloro-1-propene	76	3.218	3.206	0.012	88	4374	2.00	1.63	
36 Methyl acetate	43	3.218	3.218	0.000	99	64483	10.0	11.0	
37 Methylene Chloride	84	3.301	3.301	0.000	97	40801	2.00	1.88	
38 2-Methyl-2-propanol	59	3.384	3.384	0.000	94	13746	20.0	20.2	
39 Acrylonitrile	53	3.478	3.478	0.000	100	55473	20.0	21.5	
40 trans-1,2-Dichloroethene	96	3.526	3.526	0.000	66	11386	2.00	2.04	
41 Methyl tert-butyl ether	73	3.526	3.526	0.000	96	31610	2.00	1.96	
42 Hexane	86	3.739	3.727	0.012	92	3878	2.00	2.39	
43 1,1-Dichloroethane	63	3.833	3.833	0.000	95	20404	2.00	2.07	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	3.857	3.857	0.000	93	10348	1.92	1.96	
49 2-Butanone (MEK)	43	4.271	4.271	0.000	98	17279	4.00	4.50	
48 cis-1,2-Dichloroethene	96	4.271	4.271	0.000	79	12117	2.00	1.97	
50 2,2-Dichloropropane	77	4.283	4.283	0.000	92	8742	2.00	2.01	
54 Chlorobromomethane	128	4.461	4.461	0.000	97	6354	2.00	2.00	
55 Tetrahydrofuran	42	4.496	4.496	0.000	84	8304	4.00	3.89	
56 Chloroform	83	4.508	4.508	0.000	94	19629	2.00	2.05	
57 1,1,1-Trichloroethane	97	4.673	4.673	0.000	96	14040	2.00	1.96	
58 Cyclohexane	56	4.721	4.721	0.000	91	17352	2.00	1.92	
59 1,1-Dichloropropene	75	4.792	4.792	0.000	91	13507	2.00	2.01	
60 Carbon tetrachloride	117	4.804	4.804	0.000	96	11856	2.00	1.88	
61 Isobutyl alcohol	41	4.827	4.827	0.000	87	13740	50.0	52.1	
63 1,2-Dichloroethane	62	4.946	4.946	0.000	60	16273	2.00	2.14	
62 Benzene	78	4.957	4.946	0.011	96	49022	2.00	2.10	
65 n-Heptane	100	5.135	5.135	0.000	89	2178	2.00	1.24	
67 Trichloroethene	130	5.443	5.443	0.000	93	13302	2.00	2.14	
69 Methylcyclohexane	83	5.608	5.608	0.000	93	19343	2.00	2.05	
70 1,2-Dichloropropane	63	5.620	5.620	0.000	86	11668	2.00	2.01	
73 Dibromomethane	93	5.715	5.715	0.000	88	6813	2.00	2.12	
72 1,4-Dioxane	88	5.715	5.715	0.000	44	2366	40.0	37.7	
74 Dichlorobromomethane	83	5.833	5.821	0.012	94	10100	2.00	1.62	
76 2-Chloroethyl vinyl ether	63	6.046	6.058	-0.012	89	4424	4.00	3.01	
77 cis-1,3-Dichloropropene	75	6.188	6.188	0.000	93	12162	2.00	1.64	
78 4-Methyl-2-pentanone (MIBK	43	6.306	6.306	0.000	96	23065	4.00	3.56	
79 Toluene	91	6.484	6.484	0.000	98	49880	2.00	2.02	
80 trans-1,3-Dichloropropene	75	6.650	6.650	0.000	93	8923	2.00	1.39	
81 Ethyl methacrylate	69	6.709	6.709	0.000	87	8713	2.00	1.40	
82 1,1,2-Trichloroethane	97	6.815	6.803	0.012	85	9473	2.00	1.83	
83 1,3-Dichloropropane	76	6.957	6.957	0.000	91	17184	2.00	2.02	
84 Tetrachloroethene	164	6.969	6.969	0.000	83	9932	2.00	1.98	
85 2-Hexanone	43	7.016	7.005	0.011	98	17412	4.00	3.67	
87 Chlorodibromomethane	129	7.158	7.158	0.000	82	7324	2.00	1.54	
89 Ethylene Dibromide	107	7.277	7.277	0.000	39	9579	2.00	1.98	
91 Chlorobenzene	112	7.715	7.715	0.000	97	36441	2.00	2.18	
92 1,1,1,2-Tetrachloroethane	131	7.774	7.774	0.000	70	9186	2.00	1.82	
93 Ethylbenzene	106	7.797	7.797	0.000	97	17538	2.00	2.02	
94 m-Xylene & p-Xylene	106	7.904	7.904	0.000	97	19881	2.00	1.94	
95 o-Xylene	106	8.282	8.271	0.011	96	19423	2.00	1.98	
96 Styrene	104	8.282	8.282	0.000	95	27695	2.00	1.86	
97 Bromoform	173	8.460	8.460	0.000	89	3909	2.00	1.96	
98 Isopropylbenzene	105	8.614	8.614	0.000	95	43935	2.00	1.78	
101 1,1,2,2-Tetrachloroethane	83	8.874	8.874	0.000	93	12906	2.00	1.95	
102 Bromobenzene	156	8.921	8.921	0.000	90	14897	2.00	2.02	
104 1,2,3-Trichloropropane	110	8.933	8.933	0.000	84	3959	2.00	1.72	
103 trans-1,4-Dichloro-2-buten	53	8.933	8.933	0.000	69	3495	2.00	1.84	
105 N-Propylbenzene	120	9.004	9.004	0.000	99	12091	2.00	1.66	
106 2-Chlorotoluene	126	9.099	9.099	0.000	96	11448	2.00	1.80	
107 1,3,5-Trimethylbenzene	105	9.170	9.170	0.000	92	36207	2.00	1.69	
108 4-Chlorotoluene	126	9.205	9.194	0.011	96	11739	2.00	1.74	
109 tert-Butylbenzene	119	9.489	9.489	0.000	93	31344	2.00	1.63	
110 1,2,4-Trimethylbenzene	105	9.537	9.537	0.000	93	39008	2.00	1.74	
111 sec-Butylbenzene	105	9.702	9.702	0.000	93	48980	2.00	1.77	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 1,3-Dichlorobenzene	146	9.821	9.821	0.000	95	27906	2.00	2.04	
113 4-Isopropyltoluene	119	9.844	9.844	0.000	97	39247	2.00	1.62	
114 1,4-Dichlorobenzene	146	9.904	9.904	0.000	92	28279	2.00	1.96	
117 n-Butylbenzene	91	10.247	10.247	0.000	97	35753	2.00	1.77	
118 1,2-Dichlorobenzene	146	10.270	10.270	0.000	97	27378	2.00	2.07	
119 1,2-Dibromo-3-Chloropropan	157	11.028	11.028	0.000	83	2055	2.00	1.69	
121 1,2,4-Trichlorobenzene	180	11.856	11.868	-0.012	90	16856	2.00	1.97	
122 Hexachlorobutadiene	225	12.033	12.033	0.000	92	9916	2.00	2.00	
123 Naphthalene	128	12.104	12.104	0.000	95	33793	2.00	1.63	
124 1,2,3-Trichlorobenzene	180	12.365	12.365	0.000	95	16505	2.00	1.88	
S 127 1,2-Dichloroethene, Total	96				0		4.00	4.00	
S 128 1,3-Dichloropropene, Total	75				0		4.00	3.03	
S 129 Xylenes, Total	106				0		4.00	3.92	
S 126 Trihalomethanes, Total	1				0		8.00	7.17	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

vm50ss_00192	Amount Added:	0.20	Units: uL	
VMRPRIMW_00114	Amount Added:	0.20	Units: uL	
VMRGAS_00092	Amount Added:	0.20	Units: uL	
VMAROLISTDW_00090	Amount Added:	0.20	Units: uL	
vm250-IS_00021	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00044	Amount Added:	0.00	Units:	Run Reagent

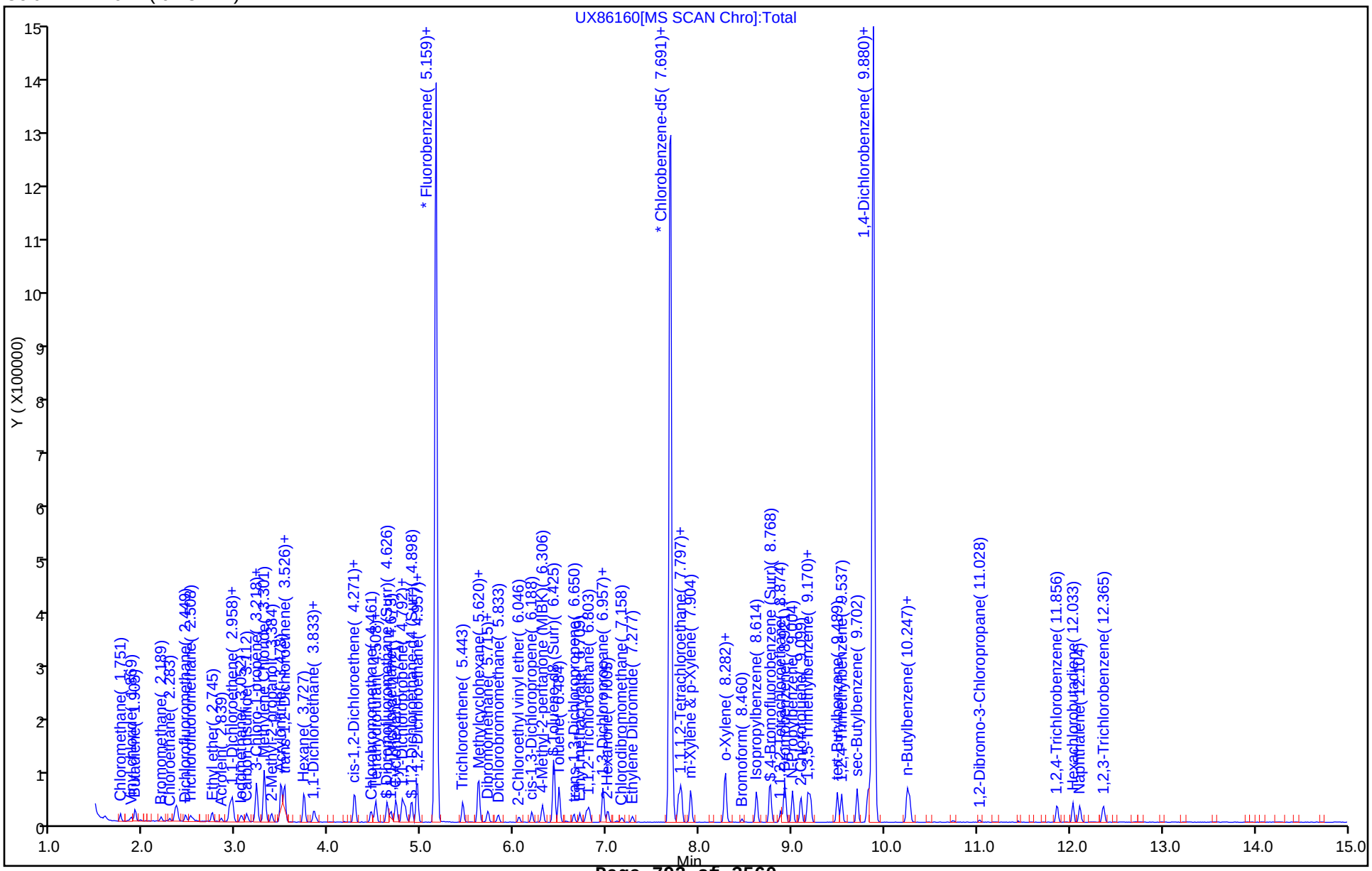
Report Date: 03-Mar-2015 23:34:48 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86160.D

Injection Date:	03-Mar-2015 02:38:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L2			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Mar-2015 03:00:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0040994-010
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub32

Method: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 03-Mar-2015 23:34:49 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: latat Date: 03-Mar-2015 04:44:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.159	-0.002	99	1197605	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.691	-0.002	95	910879	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.878	9.880	-0.002	99	463058	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	4.624	4.626	-0.002	94	19148	1.00	0.9110	
$ 6 1,2-Dichloroethane-d4 (Sur	65	4.896	4.886	0.010	94	22627	1.00	0.3634	
$ 7 Toluene-d8 (Surr)	98	6.435	6.425	0.010	92	75947	1.00	0.6710	
$ 8 4-Bromofluorobenzene (Surr	95		8.768				ND	ND	
19 Dichlorodifluoromethane	85	1.583	1.585	-0.002	94	3746	1.00	0.8427	
20 Chloromethane	50	1.749	1.751	-0.002	96	4906	1.00	0.9271	
21 Vinyl chloride	62	1.867	1.869	-0.002	95	3539	1.00	0.9022	
152 Butadiene	54	1.903	1.905	-0.002	0	3697	NC	NC	
22 Bromomethane	94	2.187	2.177	0.010	80	2565	1.00	0.3538	
23 Chloroethane	64	2.281	2.283	-0.002	8	1622	1.00	0.3344	
24 Dichlorofluoromethane	67	2.459	2.449	0.010	94	6406	1.00	1.15	
25 Trichlorofluoromethane	101	2.506	2.508	-0.002	94	4878	1.00	0.8914	
26 Ethyl ether	59	2.743	2.733	0.010	92	3977	1.00	1.02	
27 Acrolein	56	2.837	2.839	-0.002	75	2547	5.00	9.15	
28 1,1-Dichloroethene	96	2.932	2.922	0.010	94	4809	1.00	1.03	
29 1,1,2-Trichloro-1,2,2-trif	151	2.944	2.946	-0.002	81	3629	1.00	0.9599	
30 Acetone	43	2.968	2.958	0.010	100	30211	2.00	-1.71	
32 Iodomethane	142	3.050	3.052	-0.002	96	7454	1.00	1.01	
33 Carbon disulfide	76	3.121	3.112	0.009	97	9614	1.00	0.8431	
35 3-Chloro-1-propene	76	3.216	3.206	0.010	89	2058	1.00	0.7821	
36 Methyl acetate	43	3.228	3.218	0.010	99	29290	5.00	5.09	
37 Methylene Chloride	84	3.311	3.301	0.010	95	36606	1.00	1.23	
38 2-Methyl-2-propanol	59	3.382	3.384	-0.002	93	6829	10.0	10.2	
39 Acrylonitrile	53	3.488	3.478	0.010	97	24230	10.0	9.57	
40 trans-1,2-Dichloroethene	96	3.524	3.526	-0.002	67	5142	1.00	0.9382	
41 Methyl tert-butyl ether	73	3.524	3.526	-0.002	95	14586	1.00	0.9243	
42 Hexane	86	3.737	3.727	0.010	91	2807	1.00	1.76	
43 1,1-Dichloroethane	63	3.843	3.833	0.010	93	10117	1.00	1.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	3.867	3.857	0.010	92	3840	0.9600	0.7408	
49 2-Butanone (MEK)	43	4.269	4.271	-0.002	96	7271	2.00	1.93	
48 cis-1,2-Dichloroethene	96	4.269	4.271	-0.002	78	6001	1.00	0.99	
50 2,2-Dichloropropane	77	4.281	4.283	-0.002	15	3723	1.00	0.8712	
54 Chlorobromomethane	128	4.459	4.461	-0.002	89	3273	1.00	1.05	
55 Tetrahydrofuran	42	4.506	4.496	0.010	30	3911	2.00	1.87	
56 Chloroform	83	4.506	4.508	-0.002	91	9806	1.00	1.05	
57 1,1,1-Trichloroethane	97	4.672	4.673	-0.001	90	7087	1.00	1.01	
58 Cyclohexane	56	4.731	4.721	0.010	90	8101	1.00	0.9164	
59 1,1-Dichloropropene	75	4.790	4.792	-0.002	92	5904	1.00	0.8963	
60 Carbon tetrachloride	117	4.802	4.804	-0.002	89	6057	1.00	0.9786	
61 Isobutyl alcohol	41	4.825	4.827	-0.002	88	5552	25.0	21.5	
63 1,2-Dichloroethane	62	4.955	4.946	0.009	57	8174	1.00	1.10	
62 Benzene	78	4.955	4.946	0.009	95	24052	1.00	1.05	
65 n-Heptane	100	5.133	5.135	-0.002	41	1167	1.00	0.6778	
67 Trichloroethene	130	5.452	5.443	0.009	92	6422	1.00	1.05	
69 Methylcyclohexane	83	5.618	5.608	0.010	90	9163	1.00	0.99	
70 1,2-Dichloropropane	63	5.618	5.620	-0.002	86	6113	1.00	1.08	
73 Dibromomethane	93	5.713	5.715	-0.002	85	2704	1.00	0.8601	
72 1,4-Dioxane	88	5.725	5.715	0.010	1	1039	20.0	16.9	
74 Dichlorobromomethane	83	5.831	5.821	0.010	93	5074	1.00	0.8306	
76 2-Chloroethyl vinyl ether	63	6.056	6.058	-0.002	1	2167	2.00	1.50	
77 cis-1,3-Dichloropropene	75	6.198	6.188	0.010	91	6528	1.00	0.8978	
78 4-Methyl-2-pentanone (MIBK	43	6.304	6.306	-0.002	96	10136	2.00	1.60	
79 Toluene	91	6.482	6.484	-0.002	98	27355	1.00	1.09	
80 trans-1,3-Dichloropropene	75	6.648	6.650	-0.002	36	3551	1.00	0.5449	
81 Ethyl methacrylate	69	6.707	6.709	-0.002	12	3104	1.00	0.4923	
82 1,1,2-Trichloroethane	97	6.813	6.803	0.010	77	5765	1.00	1.10	
83 1,3-Dichloropropane	76	6.955	6.957	-0.002	88	7797	1.00	0.9043	
84 Tetrachloroethene	164	6.967	6.969	-0.002	80	5823	1.00	1.15	
85 2-Hexanone	43	7.014	7.005	0.009	94	7544	2.00	1.57	
87 Chlorodibromomethane	129	7.168	7.158	0.010	76	3201	1.00	0.6643	
89 Ethylene Dibromide	107	7.275	7.277	-0.002	37	3432	1.00	0.6990	
91 Chlorobenzene	112	7.713	7.715	-0.002	97	18260	1.00	1.08	
92 1,1,1,2-Tetrachloroethane	131	7.772	7.774	-0.002	49	4564	1.00	0.8907	
93 Ethylbenzene	106	7.807	7.797	0.010	95	8855	1.00	1.01	
94 m-Xylene & p-Xylene	106	7.902	7.904	-0.002	98	9747	1.00	0.9367	
95 o-Xylene	106	8.281	8.271	0.009	96	8090	1.00	0.8149	
96 Styrene	104	8.281	8.282	-0.002	89	11956	1.00	0.7924	
97 Bromoform	173	8.458	8.460	-0.002	0	1782	1.00	1.36	
98 Isopropylbenzene	105	8.612	8.614	-0.002	95	20810	1.00	0.8305	
101 1,1,2,2-Tetrachloroethane	83	8.872	8.874	-0.002	86	6343	1.00	1.02	
102 Bromobenzene	156	8.919	8.921	-0.002	90	6896	1.00	0.9899	
104 1,2,3-Trichloropropane	110	8.931	8.933	-0.002	82	2006	1.00	0.9224	
103 trans-1,4-Dichloro-2-buten	53	8.931	8.933	-0.002	64	1007	1.00	0.5635	
105 N-Propylbenzene	120	9.002	9.004	-0.002	98	5269	1.00	0.7660	
106 2-Chlorotoluene	126	9.097	9.099	-0.002	96	5191	1.00	0.8648	
107 1,3,5-Trimethylbenzene	105	9.168	9.170	-0.002	91	16061	1.00	0.7931	
108 4-Chlorotoluene	126	9.192	9.194	-0.002	95	5674	1.00	0.8933	
109 tert-Butylbenzene	119	9.487	9.489	-0.002	93	13743	1.00	0.7594	
110 1,2,4-Trimethylbenzene	105	9.535	9.537	-0.002	92	15572	1.00	0.7355	
111 sec-Butylbenzene	105	9.700	9.702	-0.002	92	19820	1.00	0.7615	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 1,3-Dichlorobenzene	146	9.819	9.821	-0.002	94	13671	1.00	1.06	
113 4-Isopropyltoluene	119	9.842	9.844	-0.002	95	15506	1.00	0.6778	
114 1,4-Dichlorobenzene	146	9.902	9.904	-0.002	94	16319	1.00	1.20	
117 n-Butylbenzene	91	10.245	10.247	-0.002	95	15673	1.00	0.8245	
118 1,2-Dichlorobenzene	146	10.268	10.270	-0.002	93	12112	1.00	0.9699	
119 1,2-Dibromo-3-Chloropropan	157	11.026	11.028	-0.002	65	805	1.00	0.7022	
121 1,2,4-Trichlorobenzene	180	11.866	11.868	-0.002	86	7799	1.00	0.9678	
122 Hexachlorobutadiene	225	12.032	12.033	-0.001	85	5207	1.00	1.12	
123 Naphthalene	128	12.114	12.104	0.010	93	15910	1.00	0.8120	
124 1,2,3-Trichlorobenzene	180	12.363	12.365	-0.002	93	9077	1.00	1.09	
S 127 1,2-Dichloroethene, Total	96				0		2.00	1.93	
S 128 1,3-Dichloropropene, Total	75				0		2.00	1.44	
S 129 Xylenes, Total	106				0		2.00	1.75	
S 126 Trihalomethanes, Total	1				0		4.00	3.90	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

vm50ss_00192	Amount Added:	0.10	Units: uL		
VMRPRIMW_00114	Amount Added:	0.10	Units: uL		
VMRGAS_00092	Amount Added:	0.10	Units: uL		
VMAROLISTDW_00090	Amount Added:	0.10	Units: uL		
vm250-IS_00021	Amount Added:	1.00	Units: uL	Run Reagent	
vmDist_H2o_00044	Amount Added:	0.00	Units:	Run Reagent	

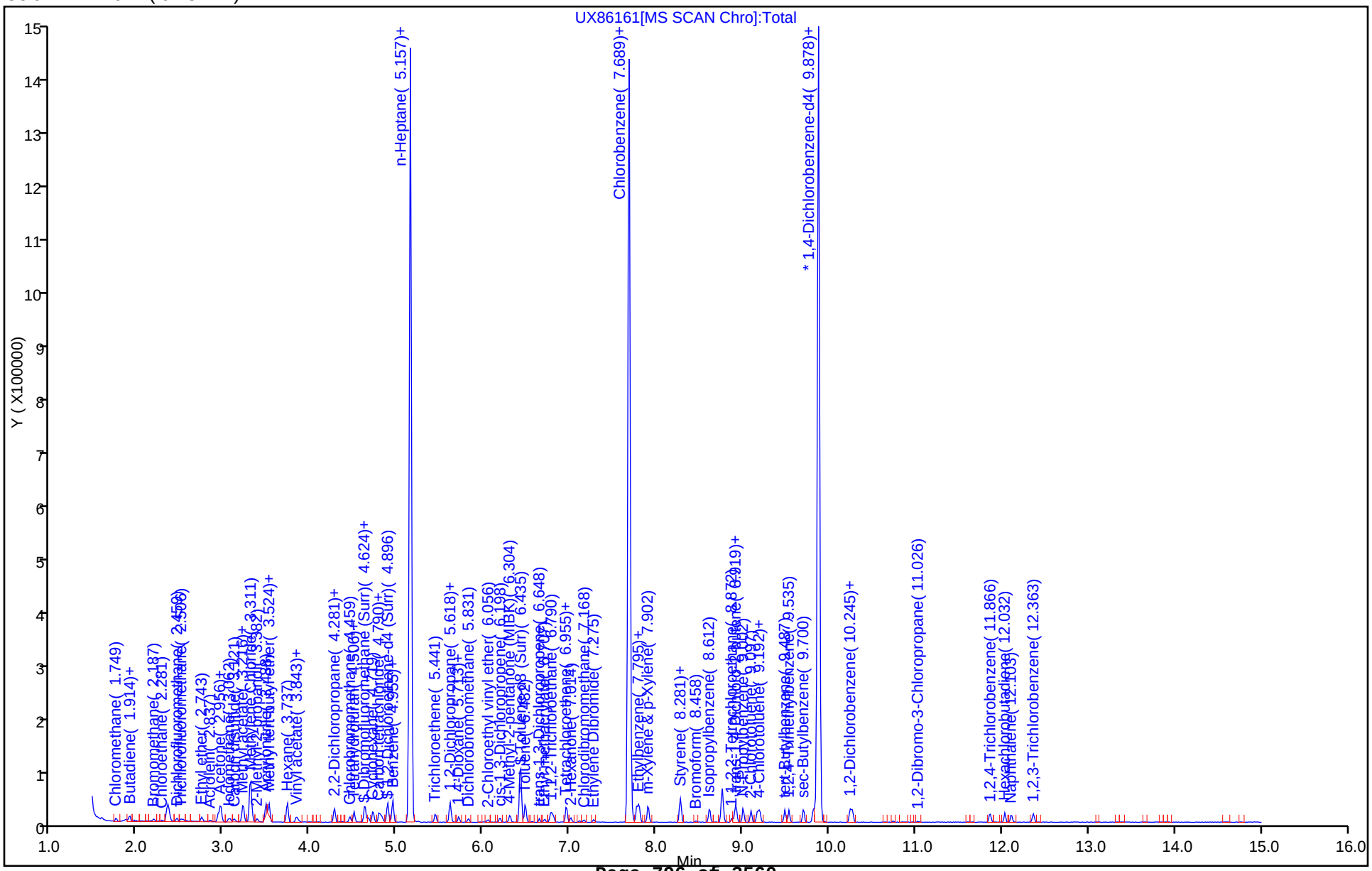
Report Date: 03-Mar-2015 23:34:50 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Injection Date:	03-Mar-2015 03:00:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	STD8260 L1			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-176233/12 Calibration Date: 04/13/2015 18:00

Instrument ID: A3UX14 Calib Start Date: 04/13/2015 14:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/13/2015 17:39

Lab File ID: 142384.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3123	0.3888	0.1000	0.0622	0.0500	24.5*	20.0
Chloromethane	Ave	0.3234	0.3363	0.1000	0.0520	0.0500	4.0	20.0
Vinyl chloride	Ave	0.3226	0.3331	0.1000	0.0516	0.0500	3.3	20.0
Bromomethane	Ave	0.2500	0.2441	0.0500	0.0488	0.0500	-2.4	20.0
Chloroethane	Lin1		0.1565	0.0500	0.0484	0.0500	-3.2	20.0
Dichlorofluoromethane	Ave	0.4942	0.4838		0.0489	0.0500	-2.1	20.0
Trichlorofluoromethane	Ave	0.4596	0.4778	0.1000	0.0520	0.0500	4.0	20.0
1,1-Dichloroethene	Ave	0.2298	0.2414	0.1000	0.0525	0.0500	5.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1786	0.1898	0.0500	0.0531	0.0500	6.3	20.0
Acetone	Lin1		0.0660	0.0500	0.110	0.100	10.5	20.0
Iodomethane	Ave	0.3039	0.3609		0.0594	0.0500	18.8	20.0
Carbon disulfide	Lin1		0.6943	0.1000	0.0544	0.0500	8.8	20.0
Methyl acetate	Ave	0.1658	0.1613	0.1000	0.243	0.250	-2.8	20.0
Methylene Chloride	Lin1		0.2633	0.1000	0.0518	0.0500	3.6	20.0
2-Methyl-2-propanol	Ave	0.0253	0.0240		0.475	0.500	-5.0	20.0
trans-1,2-Dichloroethene	Ave	0.2673	0.2831	0.1000	0.0530	0.0500	5.9	20.0
Methyl tert-butyl ether	Ave	0.7581	0.8082	0.1000	0.0533	0.0500	6.6	20.0
1,1-Dichloroethane	Ave	0.5476	0.5789	0.1000	0.0529	0.0500	5.7	20.0
Vinyl acetate	Ave	0.0175	0.0213		0.0606	0.0500	21.2*	20.0
2,2-Dichloropropane	Ave	0.2285	0.2212		0.0484	0.0500	-3.2	20.0
cis-1,2-Dichloroethene	Ave	0.2878	0.2936	0.1000	0.0510	0.0500	2.0	20.0
2-Butanone (MEK)	Ave	0.0876	0.0853	0.0500	0.0974	0.100	-2.6	20.0
Chlorobromomethane	Ave	0.1195	0.1179		0.0493	0.0500	-1.4	20.0
Chloroform	Ave	0.5154	0.5382	0.2000	0.0522	0.0500	4.4	20.0
1,1,1-Trichloroethane	Ave	0.4123	0.4415	0.1000	0.0535	0.0500	7.1	20.0
Cyclohexane	Ave	0.5068	0.5477	0.1000	0.0540	0.0500	8.1	20.0
Carbon tetrachloride	Ave	0.3807	0.4272	0.1000	0.0561	0.0500	12.2	20.0
1,1-Dichloropropene	Ave	0.3904	0.4393		0.0563	0.0500	12.5	20.0
Benzene	Ave	1.101	1.097	0.5000	0.0499	0.0500	-0.3	20.0
1,2-Dichloroethane	Ave	0.3578	0.3629	0.1000	0.0507	0.0500	1.4	20.0
Trichloroethene	Ave	0.2688	0.2694	0.2000	0.0501	0.0500	0.2	20.0
Methylcyclohexane	Ave	0.5063	0.5274	0.1000	0.0521	0.0500	4.2	20.0
1,2-Dichloropropane	Ave	0.2506	0.2537	0.1000	0.0506	0.0500	1.2	20.0
Dibromomethane	Ave	0.1298	0.1266		0.0488	0.0500	-2.5	20.0
1,4-Dioxane	Ave	0.0019	0.0019		0.997	1.00	-0.3	20.0
Dichlorobromomethane	Ave	0.3213	0.3372	0.1000	0.0525	0.0500	4.9	20.0
cis-1,3-Dichloropropene	Ave	0.3433	0.3662	0.1500	0.0533	0.0500	6.7	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2975	0.3007	0.0500	0.101	0.100	1.1	20.0
Toluene	Ave	1.741	1.700	0.4000	0.0488	0.0500	-2.3	20.0
trans-1,3-Dichloropropene	Ave	0.4325	0.5009	0.1000	0.0579	0.0500	15.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-176233/12 Calibration Date: 04/13/2015 18:00

Instrument ID: A3UX14 Calib Start Date: 04/13/2015 14:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/13/2015 17:39

Lab File ID: 142384.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,2-Trichloroethane	Ave	0.2617	0.2583	0.1000	0.0493	0.0500	-1.3	20.0
Tetrachloroethene	Ave	0.3139	0.3094	0.2000	0.0493	0.0500	-1.4	20.0
1,3-Dichloropropane	Ave	0.4841	0.4731		0.0489	0.0500	-2.3	20.0
2-Hexanone	Ave	0.1763	0.1581	0.0500	0.0897	0.100	-10.3	20.0
Chlorodibromomethane	Ave	0.2824	0.3066		0.0543	0.0500	8.5	20.0
Ethylene Dibromide	Ave	0.2573	0.2450		0.0476	0.0500	-4.8	20.0
Chlorobenzene	Ave	0.9920	0.9558	0.3000	0.0482	0.0500	-3.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3853	0.4062		0.0527	0.0500	5.4	20.0
Ethylbenzene	Ave	0.5699	0.5418		0.0475	0.0500	-4.9	20.0
m-Xylene & p-Xylene	Ave	0.6614	0.6583		0.0498	0.0500	-0.5	20.0
o-Xylene	Ave	0.7088	0.7095		0.0500	0.0500	0.1	20.0
Styrene	Ave	0.9186	0.9425	0.3000	0.0513	0.0500	2.6	20.0
Bromoform	Lin1		0.1549	0.1000	0.0451	0.0500	-9.8	20.0
Isopropylbenzene	Ave	2.017	2.075	0.1000	0.0514	0.0500	2.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6654	0.6515	0.3000	0.0490	0.0500	-2.1	20.0
Bromobenzene	Ave	0.7497	0.7064		0.0471	0.0500	-5.8	20.0
1,2,3-Trichloropropane	Ave	0.2050	0.1935		0.0472	0.0500	-5.6	20.0
N-Propylbenzene	Ave	0.9567	0.9202		0.0481	0.0500	-3.8	20.0
2-Chlorotoluene	Ave	0.8096	0.8001		0.0494	0.0500	-1.2	20.0
1,3,5-Trimethylbenzene	Ave	3.232	3.227		0.0499	0.0500	-0.2	20.0
4-Chlorotoluene	Ave	0.7761	0.7224		0.0465	0.0500	-6.9	20.0
tert-Butylbenzene	Ave	2.919	3.022		0.0518	0.0500	3.5	20.0
1,2,4-Trimethylbenzene	Ave	3.185	3.171		0.0498	0.0500	-0.5	20.0
sec-Butylbenzene	Ave	4.228	4.392		0.0519	0.0500	3.9	20.0
1,3-Dichlorobenzene	Ave	1.546	1.389	0.6000	0.0449	0.0500	-10.2	20.0
4-Isopropyltoluene	Ave	3.478	3.466		0.0498	0.0500	-0.4	20.0
1,4-Dichlorobenzene	Ave	1.550	1.390	0.5000	0.0448	0.0500	-10.4	20.0
n-Butylbenzene	Ave	3.330	3.172		0.0476	0.0500	-4.8	20.0
1,2-Dichlorobenzene	Ave	1.486	1.370	0.4000	0.0461	0.0500	-7.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1130	0.1085	0.0500	0.0480	0.0500	-3.9	20.0
1,2,4-Trichlorobenzene	Ave	1.141	0.9699	0.2000	0.0425	0.0500	-15.0	20.0
Hexachlorobutadiene	Ave	0.6986	0.6298		0.0451	0.0500	-9.9	20.0
Naphthalene	Ave	2.292	2.101		0.0458	0.0500	-8.3	20.0
1,2,3-Trichlorobenzene	Ave	1.037	0.8553		0.0413	0.0500	-17.5	20.0
Dibromofluoromethane (Surr)	Lin1		0.2480		0.0475	0.0500	-5.1	20.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.3001		0.0480	0.0500	-4.0	20.0
Toluene-d8 (Surr)	Lin1		1.451		0.0484	0.0500	-3.1	20.0
4-Bromofluorobenzene (Surr)	Lin1		0.9165		0.0457	0.0500	-8.6	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142384.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 13-Apr-2015 18:00:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 240-0042511-012240-0042511-012
Operator ID: 002808 Instrument ID: A3UX14
Sublist:

Method: \\NCChrom\ChromData\A3UX14\20150413-42511.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:05:48 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 14-Apr-2015 15:08:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.652	6.652	0.000	99	1386313	50.0	50.0	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	95	840125	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	97	435444	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.978	5.978	0.000	92	343769	50.0	47.5	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	94	416080	50.0	48.0	
$ 8 Toluene-d8 (Surr)	98	8.131	8.131	0.000	94	1219188	50.0	48.4	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	84	399066	50.0	45.7	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	99	538949	50.0	62.2	
12 Chloromethane	50	1.481	1.481	0.000	99	466146	50.0	52.0	
13 Vinyl chloride	62	1.600	1.600	0.000	98	461832	50.0	51.6	
14 Butadiene	54	1.623	1.623	0.000	93	445496	50.0	52.6	
15 Bromomethane	94	1.907	1.907	0.000	89	338399	50.0	48.8	
17 Chloroethane	64	2.002	2.002	0.000	99	216937	50.0	48.4	
18 Dichlorofluoromethane	67	2.250	2.262	-0.012	97	670697	50.0	48.9	
19 Trichlorofluoromethane	101	2.286	2.298	-0.012	97	662426	50.0	52.0	
20 Ethyl ether	59	2.641	2.641	0.000	94	299375	50.0	55.3	
21 Acrolein	56	2.818	2.818	0.000	99	149934	250.0	244.4	
23 1,1-Dichloroethene	96	2.889	2.889	0.000	93	334678	50.0	52.5	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	95	263138	50.0	53.1	
26 Acetone	43	3.031	3.031	0.000	98	183042	100.0	110.5	
27 Iodomethane	142	3.079	3.091	-0.012	98	500321	50.0	59.4	
28 Carbon disulfide	76	3.150	3.150	0.000	99	962482	50.0	54.4	
29 3-Chloro-1-propene	76	3.398	3.398	0.000	91	201717	50.0	50.8	
31 Methyl acetate	43	3.481	3.481	0.000	99	1117708	250.0	243.1	
32 Methylene Chloride	84	3.599	3.599	0.000	97	364992	50.0	51.8	
33 2-Methyl-2-propanol	59	3.919	3.919	0.000	98	333282	500.0	474.9	
34 trans-1,2-Dichloroethene	96	3.990	3.990	0.000	94	392515	50.0	53.0	
35 Methyl tert-butyl ether	73	4.025	4.025	0.000	95	1120343	50.0	53.3	
36 Acrylonitrile	53	4.037	4.037	0.000	98	996093	500.0	498.8	
37 Hexane	86	4.404	4.404	0.000	94	99775	50.0	52.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 1,1-Dichloroethane	63	4.641	4.641	0.000	97	802533	50.0	52.9	
41 Vinyl acetate	86	4.771	4.783	-0.012	97	29481	50.0	60.6	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	90	306691	50.0	48.4	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	84	407053	50.0	51.0	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	100	236505	100.0	97.4	
48 Chlorobromomethane	128	5.694	5.694	0.000	95	163379	50.0	49.3	
50 Tetrahydrofuran	42	5.741	5.741	0.000	89	166350	100.0	97.6	
51 Chloroform	83	5.800	5.800	0.000	94	746038	50.0	52.2	
52 1,1,1-Trichloroethane	97	5.954	5.954	0.000	97	612109	50.0	53.5	
53 Cyclohexane	56	5.990	5.990	0.000	94	759315	50.0	54.0	
54 Carbon tetrachloride	117	6.120	6.120	0.000	97	592183	50.0	56.1	
55 1,1-Dichloropropene	75	6.132	6.132	0.000	95	609032	50.0	56.3	
56 Benzene	78	6.356	6.356	0.000	97	1521465	50.0	49.9	
57 Isobutyl alcohol	41	6.392	6.392	0.000	96	245721	1250.0	1212.5	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	98	503126	50.0	50.7	
60 n-Heptane	100	6.640	6.640	0.000	95	97896	50.0	56.5	
61 Trichloroethene	130	7.007	7.007	0.000	96	373427	50.0	50.1	
64 Methylcyclohexane	83	7.161	7.161	0.000	94	731198	50.0	52.1	
65 1,2-Dichloropropane	63	7.232	7.232	0.000	93	351707	50.0	50.6	
67 Dibromomethane	93	7.350	7.350	0.000	95	175501	50.0	48.8	
69 1,4-Dioxane	88	7.386	7.386	0.000	96	52306	1000.0	996.8	
70 Dichlorobromomethane	83	7.504	7.504	0.000	99	467398	50.0	52.5	
72 2-Chloroethyl vinyl ether	63	7.788	7.788	0.000	92	169518	60.0	61.8	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.001	94	507625	50.0	53.3	
75 4-Methyl-2-pentanone (MIBK	43	8.060	8.060	0.000	98	505294	100.0	101.1	
76 Toluene	91	8.191	8.191	0.001	97	1428093	50.0	48.8	
77 trans-1,3-Dichloropropene	75	8.404	8.403	0.001	94	420855	50.0	57.9	
78 Ethyl methacrylate	69	8.486	8.486	0.000	91	264861	50.0	56.5	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	91	216975	50.0	49.3	
80 Tetrachloroethene	164	8.664	8.664	0.000	95	259970	50.0	49.3	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	93	397440	50.0	48.9	
82 2-Hexanone	43	8.782	8.782	0.000	99	265678	100.0	89.7	
84 Chlorodibromomethane	129	8.901	8.900	0.001	93	257538	50.0	54.3	
85 Ethylene Dibromide	107	8.995	8.995	0.000	98	205848	50.0	47.6	
87 Chlorobenzene	112	9.409	9.409	0.000	92	802987	50.0	48.2	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	93	341271	50.0	52.7	
89 Ethylbenzene	106	9.492	9.492	0.000	99	455169	50.0	47.5	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	99	553040	50.0	49.8	
91 o-Xylene	106	9.930	9.930	0.000	98	596057	50.0	50.0	
92 Styrene	104	9.954	9.954	0.000	94	791849	50.0	51.3	
93 Bromoform	173	10.119	10.119	0.000	95	130132	50.0	45.1	
94 Isopropylbenzene	105	10.238	10.238	0.000	97	1743223	50.0	51.4	
97 Bromobenzene	156	10.510	10.510	0.000	96	307577	50.0	47.1	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.510	0.000	93	283690	50.0	49.0	
98 1,2,3-Trichloropropane	110	10.557	10.557	0.000	84	84242	50.0	47.2	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	78	82948	50.0	52.9	
100 N-Propylbenzene	120	10.593	10.593	0.000	99	400677	50.0	48.1	
101 2-Chlorotoluene	126	10.664	10.664	0.000	95	348402	50.0	49.4	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	93	1405222	50.0	49.9	
103 4-Chlorotoluene	126	10.758	10.758	0.000	99	314584	50.0	46.5	
105 tert-Butylbenzene	119	11.007	11.007	0.000	92	1315859	50.0	51.8	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	95	1380635	50.0	49.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 sec-Butylbenzene	105	11.196	11.196	0.000	95	1912562	50.0	51.9	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	97	604745	50.0	44.9	
111 4-Isopropyltoluene	119	11.314	11.314	0.000	97	1509290	50.0	49.8	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	94	605053	50.0	44.8	
115 n-Butylbenzene	91	11.658	11.658	0.000	98	1381070	50.0	47.6	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	96	596720	50.0	46.1	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	78	47261	50.0	48.0	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	93	422350	50.0	42.5	
120 Hexachlorobutadiene	225	13.160	13.160	0.000	98	274230	50.0	45.1	
121 Naphthalene	128	13.231	13.231	0.000	98	914816	50.0	45.8	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	94	372419	50.0	41.3	
S 136 Xylenes, Total	106				0		100.0	99.8	
S 137 Trihalomethanes, Total	1				0		200.0	204.1	

Reagents:

VMFASAW_00077	Amount Added:	5.00	Units: uL	
VMFASPW_00094	Amount Added:	5.00	Units: uL	
VMFASGW_00090	Amount Added:	5.00	Units: uL	
vmDist_H2o_00046	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VM250SS_00030	Amount Added:	1.00	Units: uL	Run Reagent

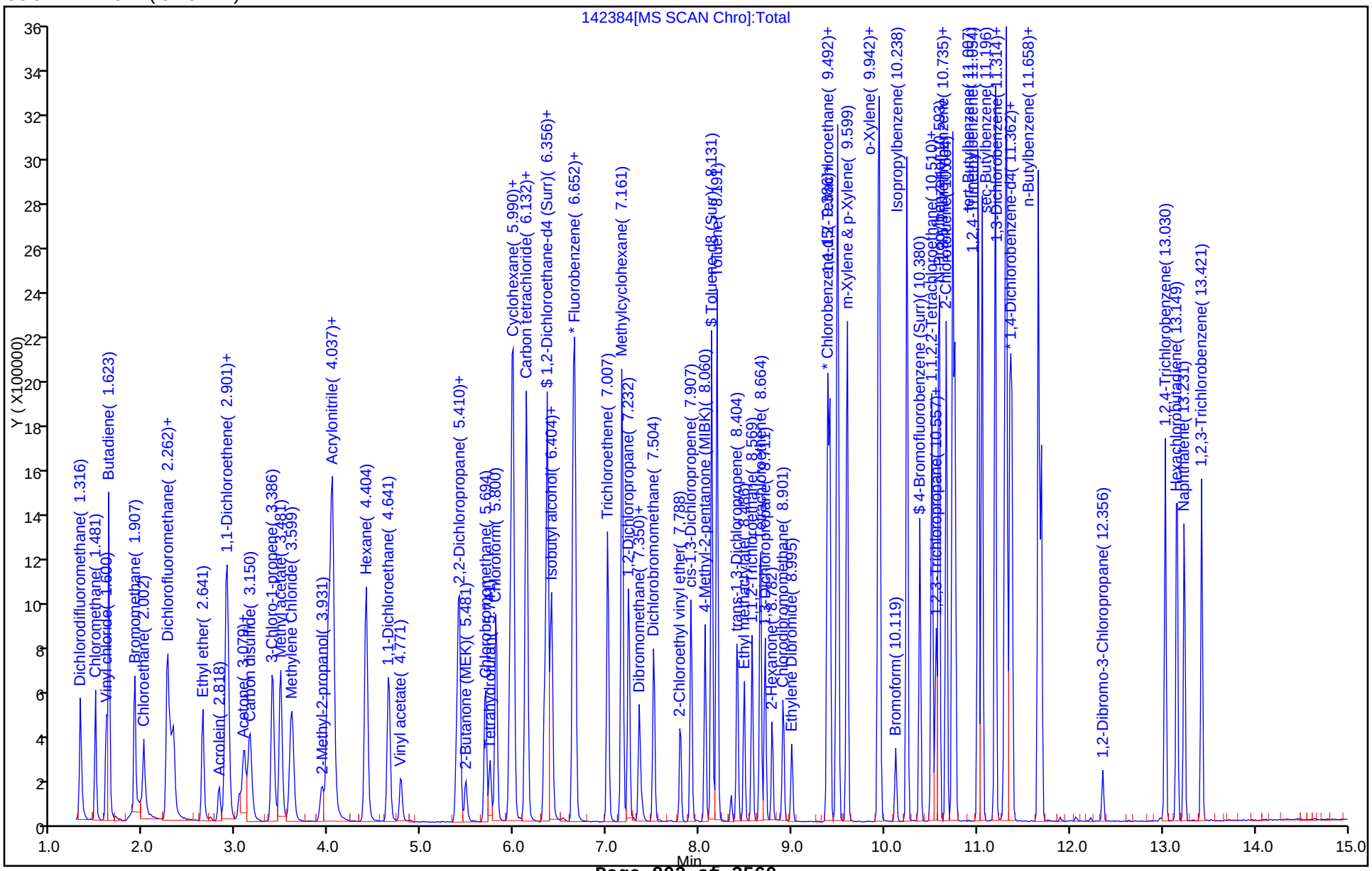
Report Date: 15-Apr-2015 13:05:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142384.D

Injection Date:	13-Apr-2015 18:00:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176387/3 Calibration Date: 04/14/2015 12:58

Instrument ID: A3UX14 Calib Start Date: 04/13/2015 14:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/13/2015 17:39

Lab File ID: 142398.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3123	0.3456	0.1000	0.0553	0.0500	10.6	20.0
Chloromethane	Ave	0.3234	0.3484	0.1000	0.0539	0.0500	7.7	20.0
Vinyl chloride	Ave	0.3226	0.3500	0.1000	0.0542	0.0500	8.5	20.0
Bromomethane	Ave	0.2500	0.2776	0.0500	0.0555	0.0500	11.0	20.0
Chloroethane	Lin1		0.1771	0.0500	0.0548	0.0500	9.6	20.0
Dichlorofluoromethane	Ave	0.4942	0.5901		0.0597	0.0500	19.4	20.0
Trichlorofluoromethane	Ave	0.4596	0.5352	0.1000	0.0582	0.0500	16.4	20.0
1,1-Dichloroethene	Ave	0.2298	0.2503	0.1000	0.0545	0.0500	8.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1786	0.1914	0.0500	0.0536	0.0500	7.2	20.0
Acetone	Lin1		0.0645	0.0500	0.108	0.100	7.8	20.0
Iodomethane	Ave	0.3039	0.3364		0.0553	0.0500	10.7	20.0
Carbon disulfide	Lin1		0.6565	0.1000	0.0515	0.0500	3.0	20.0
Methyl acetate	Ave	0.1658	0.1692	0.1000	0.255	0.250	2.0	20.0
Methylene Chloride	Lin1		0.2880	0.1000	0.0570	0.0500	13.9	20.0
2-Methyl-2-propanol	Ave	0.0253	0.0243		0.479	0.500	-4.2	20.0
trans-1,2-Dichloroethene	Ave	0.2673	0.2900	0.1000	0.0542	0.0500	8.5	20.0
Methyl tert-butyl ether	Ave	0.7581	0.8372	0.1000	0.0552	0.0500	10.4	20.0
1,1-Dichloroethane	Ave	0.5476	0.6138	0.1000	0.0560	0.0500	12.1	20.0
Vinyl acetate	Ave	0.0175	0.0165		0.0452	0.0480	-5.8	20.0
2,2-Dichloropropane	Ave	0.2285	0.2912		0.0637	0.0500	27.4*	20.0
cis-1,2-Dichloroethene	Ave	0.2878	0.3125	0.1000	0.0543	0.0500	8.6	20.0
2-Butanone (MEK)	Ave	0.0876	0.0882	0.0500	0.101	0.100	0.7	20.0
Chlorobromomethane	Ave	0.1195	0.1196		0.0501	0.0500	0.1	20.0
Chloroform	Ave	0.5154	0.5735	0.2000	0.0556	0.0500	11.3	20.0
1,1,1-Trichloroethane	Ave	0.4123	0.4928	0.1000	0.0598	0.0500	19.5	20.0
Cyclohexane	Ave	0.5068	0.5885	0.1000	0.0581	0.0500	16.1	20.0
Carbon tetrachloride	Ave	0.3807	0.4556	0.1000	0.0598	0.0500	19.7	20.0
1,1-Dichloropropene	Ave	0.3904	0.4283		0.0549	0.0500	9.7	20.0
Benzene	Ave	1.101	1.186	0.5000	0.0539	0.0500	7.7	20.0
1,2-Dichloroethane	Ave	0.3578	0.3915	0.1000	0.0547	0.0500	9.4	20.0
Trichloroethene	Ave	0.2688	0.2851	0.2000	0.0530	0.0500	6.1	20.0
Methylcyclohexane	Ave	0.5063	0.5822	0.1000	0.0575	0.0500	15.0	20.0
1,2-Dichloropropane	Ave	0.2506	0.2723	0.1000	0.0543	0.0500	8.6	20.0
Dibromomethane	Ave	0.1298	0.1359		0.0524	0.0500	4.7	20.0
1,4-Dioxane	Ave	0.0019	0.0019		0.981	1.00	-1.9	20.0
Dichlorobromomethane	Ave	0.3213	0.3576	0.1000	0.0556	0.0500	11.3	20.0
cis-1,3-Dichloropropene	Ave	0.3433	0.3818	0.1500	0.0556	0.0500	11.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2975	0.3228	0.0500	0.108	0.100	8.5	20.0
Toluene	Ave	1.741	1.841	0.4000	0.0529	0.0500	5.7	20.0
trans-1,3-Dichloropropene	Ave	0.4325	0.4951	0.1000	0.0572	0.0500	14.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176387/3 Calibration Date: 04/14/2015 12:58

Instrument ID: A3UX14 Calib Start Date: 04/13/2015 14:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/13/2015 17:39

Lab File ID: 142398.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,2-Trichloroethane	Ave	0.2617	0.2693	0.1000	0.0514	0.0500	2.9	20.0
Tetrachloroethene	Ave	0.3139	0.3465	0.2000	0.0552	0.0500	10.4	20.0
1,3-Dichloropropane	Ave	0.4841	0.5089		0.0526	0.0500	5.1	20.0
2-Hexanone	Ave	0.1763	0.1715	0.0500	0.0973	0.100	-2.7	20.0
Chlorodibromomethane	Ave	0.2824	0.3188		0.0564	0.0500	12.9	20.0
Ethylene Dibromide	Ave	0.2573	0.2501		0.0486	0.0500	-2.8	20.0
Chlorobenzene	Ave	0.9920	1.025	0.3000	0.0517	0.0500	3.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3853	0.4327		0.0561	0.0500	12.3	20.0
Ethylbenzene	Ave	0.5699	0.6148		0.0539	0.0500	7.9	20.0
m-Xylene & p-Xylene	Ave	0.6614	0.7525		0.0569	0.0500	13.8	20.0
o-Xylene	Ave	0.7088	0.7980		0.0563	0.0500	12.6	20.0
Styrene	Ave	0.9186	1.020	0.3000	0.0555	0.0500	11.1	20.0
Bromoform	Lin1		0.1598	0.1000	0.0465	0.0500	-7.0	20.0
Isopropylbenzene	Ave	2.017	2.286	0.1000	0.0567	0.0500	13.3	20.0
Bromobenzene	Ave	0.7497	0.7763		0.0518	0.0500	3.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6654	0.6825	0.3000	0.0513	0.0500	2.6	20.0
1,2,3-Trichloropropane	Ave	0.2050	0.2207		0.0538	0.0500	7.6	20.0
N-Propylbenzene	Ave	0.9567	1.079		0.0564	0.0500	12.8	20.0
2-Chlorotoluene	Ave	0.8096	0.9075		0.0560	0.0500	12.1	20.0
1,3,5-Trimethylbenzene	Ave	3.232	3.769		0.0583	0.0500	16.6	20.0
4-Chlorotoluene	Ave	0.7761	0.8432		0.0543	0.0500	8.6	20.0
tert-Butylbenzene	Ave	2.919	3.390		0.0581	0.0500	16.1	20.0
1,2,4-Trimethylbenzene	Ave	3.185	3.697		0.0580	0.0500	16.1	20.0
sec-Butylbenzene	Ave	4.228	5.067		0.0599	0.0500	19.8	20.0
1,3-Dichlorobenzene	Ave	1.546	1.622	0.6000	0.0524	0.0500	4.9	20.0
4-Isopropyltoluene	Ave	3.478	4.050		0.0582	0.0500	16.4	20.0
1,4-Dichlorobenzene	Ave	1.550	1.579	0.5000	0.0509	0.0500	1.9	20.0
n-Butylbenzene	Ave	3.330	3.929		0.0590	0.0500	18.0	20.0
1,2-Dichlorobenzene	Ave	1.486	1.555	0.4000	0.0523	0.0500	4.6	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1130	0.1126	0.0500	0.0498	0.0500	-0.4	20.0
1,2,4-Trichlorobenzene	Ave	1.141	1.138	0.2000	0.0499	0.0500	-0.2	20.0
Hexachlorobutadiene	Ave	0.6986	0.7397		0.0529	0.0500	5.9	20.0
Naphthalene	Ave	2.292	2.250		0.0491	0.0500	-1.8	20.0
1,2,3-Trichlorobenzene	Ave	1.037	1.004		0.0484	0.0500	-3.2	20.0
Dibromofluoromethane (Surr)	Lin1		0.2675		0.0513	0.0500	2.7	20.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.3302		0.0530	0.0500	6.0	20.0
Toluene-d8 (Surr)	Lin1		1.596		0.0536	0.0500	7.1	20.0
4-Bromofluorobenzene (Surr)	Lin1		1.047		0.0526	0.0500	5.1	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142398.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 14-Apr-2015 12:58:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ccvis
Misc. Info.: 240-0042552-003240-0042552-003
Operator ID: 002808 Instrument ID: A3UX14
Sublist: chrom-8260_14*sub40

Method: \\NCChrom\ChromData\A3UX14\20150414-42552.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:28:46 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 14-Apr-2015 13:22:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.652	6.652	0.000	97	1221051	50.0	50.0	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	96	749206	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	87	384224	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.990	5.990	0.000	45	326684	50.0	51.3	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	93	403205	50.0	53.0	
$ 8 Toluene-d8 (Surr)	98	8.131	8.131	0.000	83	1195847	50.0	53.6	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	80	402196	50.0	52.6	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	87	421937	50.0	55.3	
12 Chloromethane	50	1.481	1.481	0.000	88	425367	50.0	53.9	
13 Vinyl chloride	62	1.600	1.600	0.000	83	427318	50.0	54.2	
14 Butadiene	54	1.623	1.623	0.000	93	435610	50.0	58.4	
15 Bromomethane	94	1.907	1.907	0.000	88	338932	50.0	55.5	
17 Chloroethane	64	2.002	2.002	0.000	99	216183	50.0	54.8	
18 Dichlorofluoromethane	67	2.262	2.262	0.000	83	720568	50.0	59.7	
19 Trichlorofluoromethane	101	2.298	2.298	0.000	88	653458	50.0	58.2	
20 Ethyl ether	59	2.641	2.641	0.000	92	251478	50.0	52.7	
21 Acrolein	56	2.818	2.818	0.000	92	135974	250.0	251.7	
23 1,1-Dichloroethene	96	2.889	2.889	0.000	95	305651	50.0	54.5	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	86	233760	50.0	53.6	
26 Acetone	43	3.031	3.031	0.000	94	157588	100.0	107.8	
27 Iodomethane	142	3.079	3.079	0.000	98	410724	50.0	55.3	
28 Carbon disulfide	76	3.150	3.150	0.000	100	801563	50.0	51.5	
29 3-Chloro-1-propene	76	3.386	3.386	0.000	88	201332	50.0	57.6	
31 Methyl acetate	43	3.469	3.469	0.000	97	1033044	250.0	255.1	
32 Methylene Chloride	84	3.588	3.588	0.000	93	351622	50.0	57.0	
33 2-Methyl-2-propanol	59	3.919	3.919	0.000	96	296121	500.0	479.1	
34 trans-1,2-Dichloroethene	96	3.990	3.990	0.000	90	354041	50.0	54.2	
35 Methyl tert-butyl ether	73	4.025	4.025	0.000	87	1022227	50.0	55.2	
36 Acrylonitrile	53	4.037	4.037	0.000	99	917096	500.0	521.4	
37 Hexane	86	4.404	4.404	0.000	95	83612	50.0	49.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 1,1-Dichloroethane	63	4.641	4.641	0.000	85	749442	50.0	56.0	
41 Vinyl acetate	86	4.783	4.783	0.000	96	19367	48.0	45.2	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	85	355504	50.0	63.7	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	72	381586	50.0	54.3	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	97	215421	100.0	100.7	
48 Chlorobromomethane	128	5.694	5.694	0.000	92	146075	50.0	50.1	
50 Tetrahydrofuran	42	5.741	5.741	0.000	89	155652	100.0	103.7	
51 Chloroform	83	5.800	5.800	0.000	80	700275	50.0	55.6	
52 1,1,1-Trichloroethane	97	5.954	5.954	0.000	91	601673	50.0	59.8	
53 Cyclohexane	56	5.990	5.990	0.000	94	718575	50.0	58.1	
54 Carbon tetrachloride	117	6.120	6.120	0.000	81	556262	50.0	59.8	
55 1,1-Dichloropropene	75	6.143	6.143	0.000	93	523003	50.0	54.9	
56 Benzene	78	6.356	6.356	0.000	97	1447867	50.0	53.9	
57 Isobutyl alcohol	41	6.392	6.392	0.000	92	223907	1250.0	1254.4	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	78	478024	50.0	54.7	
60 n-Heptane	100	6.640	6.640	0.000	92	90526	50.0	59.3	
61 Trichloroethene	130	7.007	7.007	0.000	89	348175	50.0	53.0	
64 Methylcyclohexane	83	7.161	7.161	0.000	88	710936	50.0	57.5	
65 1,2-Dichloropropane	63	7.232	7.232	0.000	91	332430	50.0	54.3	
67 Dibromomethane	93	7.350	7.350	0.000	87	165955	50.0	52.4	
69 1,4-Dioxane	88	7.386	7.386	0.000	87	45329	1000.0	980.7	
70 Dichlorobromomethane	83	7.504	7.504	0.000	93	436629	50.0	55.6	
72 2-Chloroethyl vinyl ether	63	7.800	7.800	0.000	91	268855	100.0	111.2	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.000	90	466131	50.0	55.6	
75 4-Methyl-2-pentanone (MIBK	43	8.060	8.060	0.000	74	483641	100.0	108.5	
76 Toluene	91	8.191	8.191	0.000	96	1379006	50.0	52.9	
77 trans-1,3-Dichloropropene	75	8.404	8.404	0.000	94	370910	50.0	57.2	
78 Ethyl methacrylate	69	8.486	8.486	0.000	92	240331	50.0	57.4	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	89	201758	50.0	51.4	
80 Tetrachloroethene	164	8.664	8.664	0.000	86	259561	50.0	55.2	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	89	381278	50.0	52.6	
82 2-Hexanone	43	8.782	8.782	0.000	99	256945	100.0	97.3	
84 Chlorodibromomethane	129	8.901	8.901	0.000	90	238842	50.0	56.4	
85 Ethylene Dibromide	107	8.995	8.995	0.000	99	187356	50.0	48.6	
87 Chlorobenzene	112	9.409	9.409	0.000	90	767913	50.0	51.7	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	87	324143	50.0	56.1	
89 Ethylbenzene	106	9.504	9.504	0.000	98	460622	50.0	53.9	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	99	563754	50.0	56.9	
91 o-Xylene	106	9.930	9.930	0.000	99	597879	50.0	56.3	
92 Styrene	104	9.954	9.954	0.000	94	764345	50.0	55.5	
93 Bromoform	173	10.119	10.119	0.000	89	119697	50.0	46.5	
94 Isopropylbenzene	105	10.238	10.238	0.000	97	1712694	50.0	56.7	
97 Bromobenzene	156	10.510	10.510	0.000	80	298256	50.0	51.8	
96 1,1,2,2-Tetrachloroethane	83	10.522	10.522	0.000	83	262233	50.0	51.3	
98 1,2,3-Trichloropropane	110	10.557	10.557	0.000	40	84802	50.0	53.8	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	15	79971	50.0	57.8	
100 N-Propylbenzene	120	10.593	10.593	0.000	96	414726	50.0	56.4	
101 2-Chlorotoluene	126	10.664	10.664	0.000	93	348666	50.0	56.0	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	92	1448234	50.0	58.3	
103 4-Chlorotoluene	126	10.758	10.758	0.000	98	323964	50.0	54.3	
105 tert-Butylbenzene	119	11.007	11.007	0.000	80	1302635	50.0	58.1	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	68	1420298	50.0	58.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 sec-Butylbenzene	105	11.196	11.196	0.000	95	1946930	50.0	59.9	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	84	623087	50.0	52.4	
111 4-Isopropyltoluene	119	11.314	11.314	0.000	84	1556204	50.0	58.2	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	90	606867	50.0	50.9	
115 n-Butylbenzene	91	11.658	11.658	0.000	97	1509589	50.0	59.0	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	96	597469	50.0	52.3	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	70	43245	50.0	49.8	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	90	437275	50.0	49.9	
120 Hexachlorobutadiene	225	13.160	13.160	0.000	93	284210	50.0	52.9	
121 Naphthalene	128	13.231	13.231	0.000	98	864562	50.0	49.1	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	90	385597	50.0	48.4	
S 134 1,2-Dichloroethene, Total	96				0		100.0	108.5	
S 135 1,3-Dichloropropene, Total	75				0		100.0	112.8	
S 136 Xylenes, Total	106				0		100.0	113.2	
S 137 Trihalomethanes, Total	1				0		200.0	214.2	

Reagents:

vm50ss_00197	Amount Added:	5.00	Units: uL
VMRGAS_00097	Amount Added:	5.00	Units: uL
VMAROLISTDW_00095	Amount Added:	5.00	Units: uL
VMRPRIMW_00121	Amount Added:	5.00	Units: uL
VM250-IS_00028	Amount Added:	1.00	Units: uL

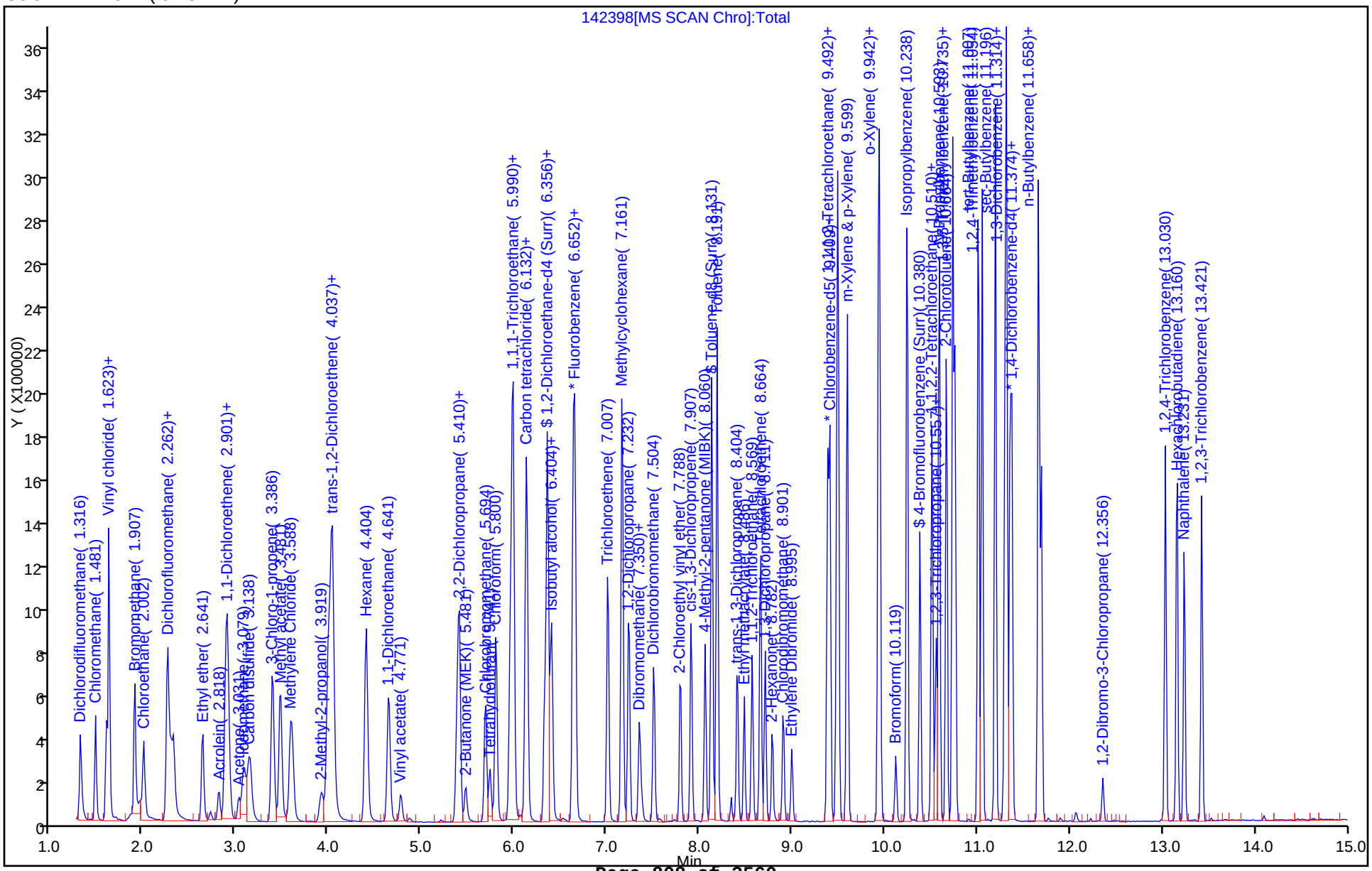
Report Date: 15-Apr-2015 13:28:47 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142398.D

Injection Date:	14-Apr-2015 12:58:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-175604/8 Calibration Date: 04/08/2015 15:15

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 12:59

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 14:53

Lab File ID: UXM7072.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1843	0.1350	0.1000	0.00732	0.0100	-26.8*	20.0
Chloromethane	Ave	0.2536	0.2176	0.1000	0.00858	0.0100	-14.2	20.0
Vinyl chloride	Ave	0.2786	0.2390	0.1000	0.00858	0.0100	-14.2	20.0
Bromomethane	Ave	0.1343	0.1103	0.0500	0.00821	0.0100	-17.9	20.0
Chloroethane	Ave	0.1634	0.1452	0.0500	0.00888	0.0100	-11.2	20.0
Dichlorofluoromethane	Ave	0.3657	0.3367		0.00921	0.0100	-7.9	20.0
Trichlorofluoromethane	Ave	0.2428	0.2383	0.1000	0.00981	0.0100	-1.9	20.0
Ethyl ether	Ave	0.1803	0.1843		0.0102	0.0100	2.2	20.0
Acrolein	Ave	0.0233	0.0234		0.0502	0.0500	0.4	20.0
1,1-Dichloroethene	Ave	0.2023	0.2097	0.1000	0.0104	0.0100	3.7	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.1572	0.1622	0.0500	0.0103	0.0100	3.2	20.0
Acetone	Ave	0.0604	0.0585	0.0500	0.0194	0.0200	-3.2	20.0
Iodomethane	Ave	0.3182	0.3423		0.0108	0.0100	7.6	20.0
Carbon disulfide	Ave	0.6221	0.6706	0.1000	0.0108	0.0100	7.8	20.0
3-Chloro-1-propene	Ave	0.1377	0.1290		0.00937	0.0100	-6.3	20.0
Methyl acetate	Ave	0.1332	0.1374	0.1000	0.0516	0.0500	3.2	20.0
Methylene Chloride	Lin1		0.2585	0.1000	0.0105	0.0100	4.7	20.0
2-Methyl-2-propanol	Ave	0.0128	0.0123		0.0964	0.100	-3.6	20.0
Acrylonitrile	Ave	0.0691	0.0686		0.0993	0.100	-0.7	20.0
Methyl tert-butyl ether	Ave	0.5917	0.6062	0.1000	0.0102	0.0100	2.4	20.0
trans-1,2-Dichloroethene	Ave	0.2427	0.2420	0.1000	0.00997	0.0100	-0.3	20.0
Hexane	Ave	0.0585	0.0671		0.0115	0.0100	14.6	20.0
1,1-Dichloroethane	Ave	0.3969	0.4158	0.1000	0.0105	0.0100	4.8	20.0
Vinyl acetate	Ave	0.1675	0.1183		0.00706	0.0100	-29.4*	20.0
2-Butanone (MEK)	Ave	0.0752	0.0759	0.0500	0.0202	0.0200	0.9	20.0
cis-1,2-Dichloroethene	Ave	0.2590	0.2616	0.1000	0.0101	0.0100	1.0	20.0
2,2-Dichloropropane	Ave	0.2543	0.2481		0.00976	0.0100	-2.4	20.0
Bromochloromethane	Ave	0.1215	0.1212		0.00998	0.0100	-0.2	20.0
Chloroform	Ave	0.3887	0.3881	0.2000	0.00999	0.0100	-0.1	20.0
1,1,1-Trichloroethane	Ave	0.2957	0.3004	0.1000	0.0102	0.0100	1.6	20.0
Cyclohexane	Ave	0.3656	0.3762	0.1000	0.0103	0.0100	2.9	20.0
1,1-Dichloropropene	Ave	0.2996	0.3204		0.0107	0.0100	6.9	20.0
Carbon tetrachloride	Ave	0.2428	0.2510	0.1000	0.0103	0.0100	3.4	20.0
Isobutyl alcohol	Ave	0.0044	0.0040		0.223	0.250	-10.9	20.0
1,2-Dichloroethane	Ave	0.2704	0.2706	0.1000	0.0100	0.0100	0.0	20.0
Benzene	Ave	1.002	0.9932	0.5000	0.00991	0.0100	-0.9	20.0
Trichloroethene	Ave	0.2546	0.2585	0.2000	0.0102	0.0100	1.5	20.0
Methylcyclohexane	Ave	0.3877	0.3879	0.1000	0.0100	0.0100	0.0	20.0
1,2-Dichloropropane	Ave	0.2267	0.2249	0.1000	0.00992	0.0100	-0.8	20.0
Dibromomethane	Ave	0.1203	0.1212		0.0101	0.0100	0.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-175604/8 Calibration Date: 04/08/2015 15:15

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 12:59

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 14:53

Lab File ID: UXM7072.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.0017	0.0016		0.193	0.200	-3.3	20.0
Bromodichloromethane	Ave	0.2785	0.2746	0.1000	0.00986	0.0100	-1.4	20.0
2-Chloroethyl vinyl ether	Ave	0.1194	0.1182		0.0119	0.0120	-1.0	20.0
cis-1,3-Dichloropropene	Ave	0.3280	0.3388	0.1500	0.0103	0.0100	3.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1486	0.1470	0.0500	0.0198	0.0200	-1.0	20.0
Toluene	Ave	1.481	1.477	0.4000	0.00998	0.0100	-0.2	20.0
trans-1,3-Dichloropropene	Ave	0.3760	0.4124	0.1000	0.0110	0.0100	9.7	20.0
Ethyl methacrylate	Ave	0.3039	0.3135		0.0103	0.0100	3.1	20.0
1,1,2-Trichloroethane	Ave	0.2656	0.2559	0.1000	0.00964	0.0100	-3.6	20.0
1,3-Dichloropropane	Ave	0.4708	0.4586		0.00974	0.0100	-2.6	20.0
Tetrachloroethene	Ave	0.2804	0.2884	0.2000	0.0103	0.0100	2.8	20.0
2-Hexanone	Ave	0.1447	0.1415	0.0500	0.0196	0.0200	-2.2	20.0
Dibromochloromethane	Ave	0.2720	0.2725		0.0100	0.0100	0.2	20.0
1,2-Dibromoethane	Ave	0.2521	0.2526		0.0100	0.0100	0.2	20.0
Chlorobenzene	Ave	0.9491	0.9260	0.3000	0.00976	0.0100	-2.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3021	0.2978		0.00986	0.0100	-1.4	20.0
Ethylbenzene	Ave	0.5076	0.5078		0.0100	0.0100	0.0	20.0
m-Xylene & p-Xylene	Ave	0.6356	0.6337		0.00997	0.0100	-0.3	20.0
o-Xylene	Ave	0.6141	0.6176		0.0101	0.0100	0.6	20.0
Styrene	Ave	0.9843	0.9112	0.3000	0.00926	0.0100	-7.4	20.0
Bromoform	Ave	0.1657	0.1625	0.1000	0.00980	0.0100	-2.0	20.0
Isopropylbenzene	Ave	1.625	1.596	0.1000	0.00982	0.0100	-1.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5868	0.5613	0.3000	0.00957	0.0100	-4.3	20.0
Bromobenzene	Ave	0.7228	0.7188		0.00994	0.0100	-0.6	20.0
1,2,3-Trichloropropane	Ave	0.1823	0.1767		0.00969	0.0100	-3.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1434	0.1424		0.00993	0.0100	-0.7	20.0
N-Propylbenzene	Ave	0.7916	0.7835		0.00990	0.0100	-1.0	20.0
2-Chlorotoluene	Ave	0.6834	0.6608		0.00967	0.0100	-3.3	20.0
1,3,5-Trimethylbenzene	Ave	2.398	2.370		0.00988	0.0100	-1.2	20.0
4-Chlorotoluene	Ave	0.7270	0.7015		0.00965	0.0100	-3.5	20.0
tert-Butylbenzene	Ave	2.090	2.047		0.00979	0.0100	-2.1	20.0
1,2,4-Trimethylbenzene	Ave	2.508	2.394		0.00955	0.0100	-4.5	20.0
sec-Butylbenzene	Ave	3.014	2.877		0.00955	0.0100	-4.5	20.0
1,3-Dichlorobenzene	Ave	1.414	1.377	0.6000	0.00973	0.0100	-2.7	20.0
4-Isopropyltoluene	Ave	2.630	2.507		0.00953	0.0100	-4.7	20.0
1,4-Dichlorobenzene	Ave	1.449	1.383	0.5000	0.00955	0.0100	-4.5	20.0
n-Butylbenzene	Ave	2.195	2.110		0.00961	0.0100	-3.9	20.0
1,2-Dichlorobenzene	Ave	1.338	1.298	0.4000	0.00970	0.0100	-3.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0983	0.0971	0.0500	0.00988	0.0100	-1.2	20.0
1,2,4-Trichlorobenzene	Ave	0.8313	0.7795	0.2000	0.00938	0.0100	-6.2	20.0
Hexachlorobutadiene	Ave	0.3447	0.3112		0.00903	0.0100	-9.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-175604/8 Calibration Date: 04/08/2015 15:15

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 12:59

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 14:53

Lab File ID: UXM7072.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.798	1.712		0.00952	0.0100	-4.8	20.0
1,2,3-Trichlorobenzene	Ave	0.7434	0.6967		0.00937	0.0100	-6.3	20.0
Dibromofluoromethane (Surr)	Ave	0.1999	0.1881		0.0107	0.0114	-5.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2198	0.2021		0.0105	0.0114	-8.0	20.0
Toluene-d8 (Surr)	Ave	1.194	1.143		0.0109	0.0114	-4.2	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4286	0.4226		0.0112	0.0114	-1.4	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7072.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 08-Apr-2015 15:15:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042365-008
Operator ID: 1904 Instrument ID: A3UX16
Sublist:

Method: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 09-Apr-2015 07:46:44 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: quayler Date: 09-Apr-2015 07:45:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.587	5.588	-0.001	99	1626133	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.279	8.280	-0.001	85	1148226	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	91	645335	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.006	5.007	-0.001	94	348732	11.4	10.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	374638	11.4	10.5	
$ 6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	92	1496494	11.4	10.9	
$ 7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	92	553203	11.4	11.2	
9 Dichlorodifluoromethane	85	1.615	1.615	0.000	98	219462	10.0	7.32	
10 Chloromethane	50	1.769	1.769	0.000	99	353914	10.0	8.58	
11 Vinyl chloride	62	1.888	1.888	0.000	97	388595	10.0	8.58	
12 Butadiene	54	1.935	1.923	0.012	0	354041	10.0	8.68	
13 Bromomethane	94	2.232	2.220	0.012	89	179293	10.0	8.21	
14 Chloroethane	64	2.326	2.327	-0.001	99	236140	10.0	8.88	
15 Dichlorofluoromethane	67	2.516	2.516	0.000	96	547561	10.0	9.21	
16 Trichlorofluoromethane	101	2.575	2.564	0.011	96	387453	10.0	9.81	
17 Ethyl ether	59	2.836	2.837	0.000	89	299692	10.0	10.2	
18 Acrolein	56	2.943	2.943	0.000	99	190208	50.0	50.2	
19 1,1-Dichloroethene	96	3.050	3.050	0.000	97	340995	10.0	10.4	
20 1,1,2-Trichloro-1,2,2-trif	151	3.085	3.086	-0.001	91	263688	10.0	10.3	
21 Acetone	43	3.085	3.086	-0.001	77	190279	20.0	19.4	
23 Iodomethane	142	3.192	3.192	0.000	96	556646	10.0	10.8	
24 Carbon disulfide	76	3.263	3.263	0.000	98	1090420	10.0	10.8	
26 3-Chloro-1-propene	76	3.382	3.382	0.000	94	209832	10.0	9.37	
27 Methyl acetate	43	3.394	3.394	0.000	97	1117288	50.0	51.6	
28 Methylene Chloride	84	3.489	3.489	-0.001	88	420371	10.0	10.5	
29 2-Methyl-2-propanol	59	3.572	3.572	0.000	100	200690	100.0	96.4	
30 Acrylonitrile	53	3.690	3.690	0.000	99	1116240	100.0	99.3	
32 trans-1,2-Dichloroethene	96	3.738	3.738	0.000	69	393547	10.0	9.97	
31 Methyl tert-butyl ether	73	3.738	3.738	0.000	94	985741	10.0	10.2	
33 Hexane	86	3.987	3.999	-0.012	90	109051	10.0	11.5	
34 1,1-Dichloroethane	63	4.105	4.105	0.000	95	676066	10.0	10.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.141	4.141	0.000	97	192322	10.0	7.06	
39 cis-1,2-Dichloroethene	96	4.603	4.603	0.000	80	425325	10.0	10.1	
40 2-Butanone (MEK)	43	4.603	4.603	0.000	56	246703	20.0	20.2	
41 2,2-Dichloropropane	77	4.615	4.610	0.005	87	403410	10.0	9.76	
45 Chlorobromomethane	128	4.805	4.805	0.000	90	197133	10.0	9.98	
46 Tetrahydrofuran	42	4.852	4.852	0.000	90	145562	20.0	18.7	
47 Chloroform	83	4.864	4.864	0.000	92	631169	10.0	9.99	
48 1,1,1-Trichloroethane	97	5.042	5.042	0.000	98	488431	10.0	10.2	
49 Cyclohexane	56	5.113	5.113	0.000	87	611662	10.0	10.3	
50 1,1-Dichloropropene	75	5.184	5.184	0.000	99	521061	10.0	10.7	
51 Carbon tetrachloride	117	5.196	5.196	0.000	97	408136	10.0	10.3	
52 Isobutyl alcohol	41	5.232	5.232	0.000	91	160836	250.0	222.6	
54 Benzene	78	5.362	5.362	0.000	94	1615127	10.0	9.91	
53 1,2-Dichloroethane	62	5.362	5.362	0.000	55	439984	10.0	10.0	
56 n-Heptane	57	5.587	5.588	-0.001	86	281735	10.0	9.94	
58 Trichloroethene	130	5.908	5.908	0.000	96	420376	10.0	10.2	
60 Methylcyclohexane	83	6.086	6.086	0.000	89	630828	10.0	10.0	
61 1,2-Dichloropropane	63	6.097	6.098	-0.001	78	365714	10.0	9.92	
63 Dibromomethane	93	6.192	6.192	0.000	93	197018	10.0	10.1	
64 1,4-Dioxane	88	6.204	6.204	0.000	40	52272	200.0	193.4	
65 Dichlorobromomethane	83	6.323	6.323	0.000	99	446530	10.0	9.86	
67 2-Chloroethyl vinyl ether	63	6.572	6.572	0.000	92	230600	12.0	11.9	
68 cis-1,3-Dichloropropene	75	6.714	6.714	0.000	97	550863	10.0	10.3	
69 4-Methyl-2-pentanone (MIBK	43	6.833	6.833	0.000	94	478138	20.0	19.8	
70 Toluene	91	7.022	7.023	-0.001	98	1696373	10.0	9.98	
71 trans-1,3-Dichloropropene	75	7.200	7.200	0.000	91	473524	10.0	11.0	
72 Ethyl methacrylate	69	7.271	7.272	-0.001	88	359956	10.0	10.3	
73 1,1,2-Trichloroethane	97	7.366	7.366	0.000	90	293880	10.0	9.64	
74 1,3-Dichloropropane	76	7.520	7.521	-0.001	88	526514	10.0	9.74	
75 Tetrachloroethene	164	7.532	7.532	0.000	96	331143	10.0	10.3	
76 2-Hexanone	43	7.580	7.580	0.000	94	325027	20.0	19.6	
78 Chlorodibromomethane	129	7.734	7.734	0.000	90	312912	10.0	10.0	
80 Ethylene Dibromide	107	7.852	7.853	-0.001	98	290083	10.0	10.0	
82 Chlorobenzene	112	8.303	8.303	0.000	96	1063221	10.0	9.76	
83 1,1,1,2-Tetrachloroethane	131	8.374	8.374	0.000	96	341952	10.0	9.86	
84 Ethylbenzene	106	8.398	8.398	0.000	98	583070	10.0	10.0	
85 m-Xylene & p-Xylene	106	8.505	8.505	0.000	97	727593	10.0	9.97	
86 o-Xylene	106	8.884	8.884	0.000	95	709148	10.0	10.1	
87 Styrene	104	8.896	8.896	0.000	92	1046242	10.0	9.26	
88 Bromoform	173	9.074	9.074	0.000	98	186547	10.0	9.80	
89 Isopropylbenzene	105	9.240	9.240	0.000	95	1832423	10.0	9.82	
92 1,1,2,2-Tetrachloroethane	83	9.501	9.501	0.000	94	362253	10.0	9.57	
93 Bromobenzene	156	9.536	9.537	-0.001	92	463862	10.0	9.94	
95 1,2,3-Trichloropropane	110	9.548	9.548	0.000	81	114002	10.0	9.69	
94 trans-1,4-Dichloro-2-buten	53	9.560	9.560	0.000	73	91916	10.0	9.93	
96 N-Propylbenzene	120	9.631	9.631	0.000	99	505635	10.0	9.90	
97 2-Chlorotoluene	126	9.726	9.726	0.000	97	426463	10.0	9.67	
99 1,3,5-Trimethylbenzene	105	9.797	9.797	0.000	95	1529277	10.0	9.88	
100 4-Chlorotoluene	126	9.821	9.821	0.000	98	452678	10.0	9.65	
102 tert-Butylbenzene	119	10.129	10.129	0.000	90	1320794	10.0	9.79	
104 1,2,4-Trimethylbenzene	105	10.165	10.165	0.000	94	1545055	10.0	9.55	
105 sec-Butylbenzene	105	10.343	10.343	0.000	93	1856905	10.0	9.55	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.449	10.450	-0.001	97	888328	10.0	9.73	
107 4-Isopropyltoluene	119	10.473	10.485	-0.012	97	1617728	10.0	9.53	
108 1,4-Dichlorobenzene	146	10.532	10.533	-0.001	95	892728	10.0	9.55	
111 n-Butylbenzene	91	10.888	10.888	0.000	97	1361343	10.0	9.61	
112 1,2-Dichlorobenzene	146	10.912	10.900	0.012	99	837874	10.0	9.70	
113 1,2-Dibromo-3-Chloropropan	157	11.671	11.671	0.000	89	62663	10.0	9.88	
115 1,2,4-Trichlorobenzene	180	12.513	12.513	0.000	94	503026	10.0	9.38	
116 Hexachlorobutadiene	225	12.679	12.679	0.000	94	200844	10.0	9.03	
117 Naphthalene	128	12.750	12.750	0.000	96	1104641	10.0	9.52	
118 1,2,3-Trichlorobenzene	180	13.011	13.011	0.000	95	449585	10.0	9.37	
S 133 Xylenes, Total	106				0		20.0	20.0	
S 134 Trihalomethanes, Total	1				0		40.0	39.7	

Reagents:

VM50IS_00048	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00065	Amount Added:	1.14	Units: uL	Run Reagent
vmDist_H2o_00045	Amount Added:	0.00	Units:	Run Reagent
VMFASPW_00093	Amount Added:	8.00	Units: uL	
VMFASGW_00089	Amount Added:	8.00	Units: uL	
VMFASAW_00077	Amount Added:	8.00	Units: uL	

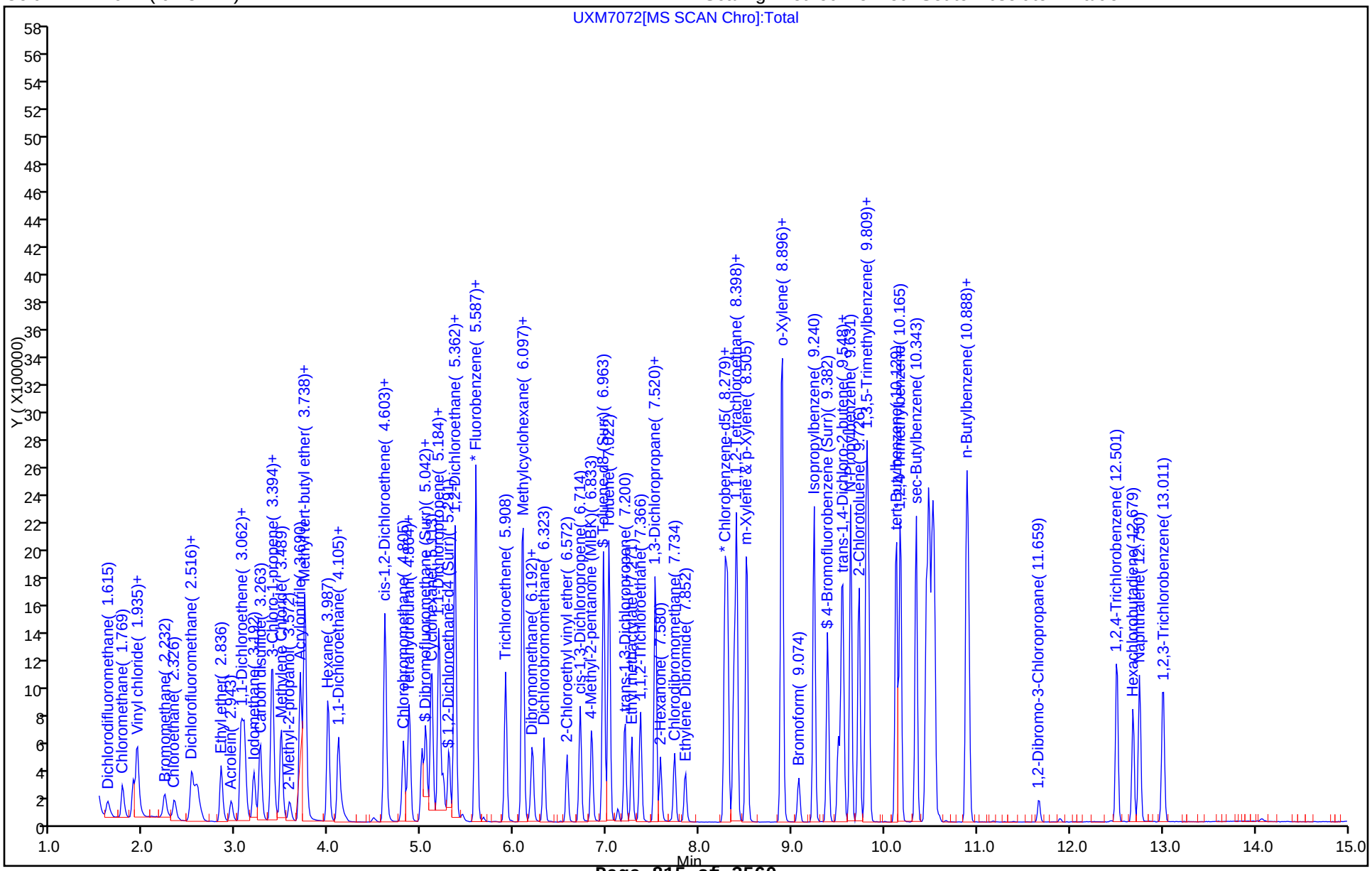
Report Date: 09-Apr-2015 07:46:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7072.D

Injection Date:	08-Apr-2015 15:15:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	ICV			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176298/2 Calibration Date: 04/14/2015 08:07

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 12:59

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 14:53

Lab File ID: UXM7134.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1843	0.2351	0.1000	0.0128	0.0100	27.6*	20.0
Chloromethane	Ave	0.2536	0.2776	0.1000	0.0109	0.0100	9.4	20.0
Vinyl chloride	Ave	0.2786	0.2976	0.1000	0.0107	0.0100	6.8	20.0
Bromomethane	Ave	0.1343	0.1532	0.0500	0.0114	0.0100	14.0	20.0
Chloroethane	Ave	0.1634	0.1726	0.0500	0.0106	0.0100	5.6	20.0
Dichlorofluoromethane	Ave	0.3657	0.3782		0.0103	0.0100	3.4	20.0
Trichlorofluoromethane	Ave	0.2428	0.2756	0.1000	0.0114	0.0100	13.5	20.0
Ethyl ether	Ave	0.1803	0.1809		0.0100	0.0100	0.3	20.0
Acrolein	Ave	0.0233	0.0216		0.0464	0.0500	-7.2	20.0
1,1-Dichloroethene	Ave	0.2023	0.2046	0.1000	0.0101	0.0100	1.1	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.1572	0.1718	0.0500	0.0109	0.0100	9.3	20.0
Acetone	Ave	0.0604	0.0624	0.0500	0.0207	0.0200	3.3	20.0
Iodomethane	Ave	0.3182	0.3242		0.0102	0.0100	1.9	20.0
Carbon disulfide	Ave	0.6221	0.6050	0.1000	0.00972	0.0100	-2.8	20.0
3-Chloro-1-propene	Ave	0.1377	0.1404		0.0102	0.0100	1.9	20.0
Methyl acetate	Ave	0.1332	0.1374	0.1000	0.0516	0.0500	3.1	20.0
Methylene Chloride	Lin1		0.2459	0.1000	0.00994	0.0100	-0.6	20.0
2-Methyl-2-propanol	Ave	0.0128	0.0134		0.104	0.100	4.3	20.0
Acrylonitrile	Ave	0.0691	0.0718		0.104	0.100	3.8	20.0
Methyl tert-butyl ether	Ave	0.5917	0.6284	0.1000	0.0106	0.0100	6.2	20.0
trans-1,2-Dichloroethene	Ave	0.2427	0.2450	0.1000	0.0101	0.0100	0.9	20.0
Hexane	Ave	0.0585	0.0631		0.0108	0.0100	7.7	20.0
1,1-Dichloroethane	Ave	0.3969	0.4220	0.1000	0.0106	0.0100	6.3	20.0
Vinyl acetate	Ave	0.1675	0.1753		0.0100	0.00960	4.7	20.0
2-Butanone (MEK)	Ave	0.0752	0.0832	0.0500	0.0221	0.0200	10.7	20.0
cis-1,2-Dichloroethene	Ave	0.2590	0.2617	0.1000	0.0101	0.0100	1.0	20.0
2,2-Dichloropropane	Ave	0.2543	0.2703		0.0106	0.0100	6.3	20.0
Bromochloromethane	Ave	0.1215	0.1286		0.0106	0.0100	5.8	20.0
Chloroform	Ave	0.3887	0.3942	0.2000	0.0101	0.0100	1.4	20.0
1,1,1-Trichloroethane	Ave	0.2957	0.3174	0.1000	0.0107	0.0100	7.3	20.0
Cyclohexane	Ave	0.3656	0.3870	0.1000	0.0106	0.0100	5.8	20.0
1,1-Dichloropropene	Ave	0.2996	0.3089		0.0103	0.0100	3.1	20.0
Carbon tetrachloride	Ave	0.2428	0.2719	0.1000	0.0112	0.0100	12.0	20.0
Isobutyl alcohol	Ave	0.0044	0.0047		0.265	0.250	5.9	20.0
1,2-Dichloroethane	Ave	0.2704	0.2899	0.1000	0.0107	0.0100	7.2	20.0
Benzene	Ave	1.002	0.996	0.5000	0.00994	0.0100	-0.6	20.0
Trichloroethene	Ave	0.2546	0.2715	0.2000	0.0107	0.0100	6.6	20.0
Methylcyclohexane	Ave	0.3877	0.4029	0.1000	0.0104	0.0100	3.9	20.0
1,2-Dichloropropane	Ave	0.2267	0.2329	0.1000	0.0103	0.0100	2.7	20.0
1,4-Dioxane	Ave	0.0017	0.0019		0.229	0.200	14.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176298/2 Calibration Date: 04/14/2015 08:07

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 12:59

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 14:53

Lab File ID: UXM7134.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromomethane	Ave	0.1203	0.1256		0.0104	0.0100	4.4	20.0
Bromodichloromethane	Ave	0.2785	0.2935	0.1000	0.0105	0.0100	5.4	20.0
2-Chloroethyl vinyl ether	Ave	0.1194	0.1217		0.0204	0.0200	2.0	20.0
cis-1,3-Dichloropropene	Ave	0.3280	0.3420	0.1500	0.0104	0.0100	4.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1486	0.1586	0.0500	0.0214	0.0200	6.8	20.0
Toluene	Ave	1.481	1.476	0.4000	0.00997	0.0100	-0.3	20.0
trans-1,3-Dichloropropene	Ave	0.3760	0.3912	0.1000	0.0104	0.0100	4.0	20.0
Ethyl methacrylate	Ave	0.3039	0.3139		0.0103	0.0100	3.3	20.0
1,1,2-Trichloroethane	Ave	0.2656	0.2686	0.1000	0.0101	0.0100	1.1	20.0
1,3-Dichloropropane	Ave	0.4708	0.4849		0.0103	0.0100	3.0	20.0
Tetrachloroethene	Ave	0.2804	0.2908	0.2000	0.0104	0.0100	3.7	20.0
2-Hexanone	Ave	0.1447	0.1552	0.0500	0.0215	0.0200	7.3	20.0
Dibromochloromethane	Ave	0.2720	0.2894		0.0106	0.0100	6.4	20.0
1,2-Dibromoethane	Ave	0.2521	0.2613		0.0104	0.0100	3.6	20.0
Chlorobenzene	Ave	0.9491	0.9610	0.3000	0.0101	0.0100	1.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3021	0.3204		0.0106	0.0100	6.0	20.0
Ethylbenzene	Ave	0.5076	0.5163		0.0102	0.0100	1.7	20.0
m-Xylene & p-Xylene	Ave	0.6356	0.6536		0.0103	0.0100	2.8	20.0
o-Xylene	Ave	0.6141	0.6452		0.0105	0.0100	5.1	20.0
Styrene	Ave	0.9843	0.996	0.3000	0.0101	0.0100	1.2	20.0
Bromoform	Ave	0.1657	0.1768	0.1000	0.0107	0.0100	6.7	20.0
Isopropylbenzene	Ave	1.625	1.663	0.1000	0.0102	0.0100	2.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5868	0.5620	0.3000	0.00958	0.0100	-4.2	20.0
Bromobenzene	Ave	0.7228	0.6901		0.00955	0.0100	-4.5	20.0
1,2,3-Trichloropropane	Ave	0.1823	0.1773		0.00972	0.0100	-2.8	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1434	0.1334		0.00930	0.0100	-7.0	20.0
N-Propylbenzene	Ave	0.7916	0.7999		0.0101	0.0100	1.0	20.0
2-Chlorotoluene	Ave	0.6834	0.6773		0.00991	0.0100	-0.9	20.0
1,3,5-Trimethylbenzene	Ave	2.398	2.365		0.00986	0.0100	-1.4	20.0
4-Chlorotoluene	Ave	0.7270	0.7039		0.00968	0.0100	-3.2	20.0
tert-Butylbenzene	Ave	2.090	2.070		0.00991	0.0100	-0.9	20.0
1,2,4-Trimethylbenzene	Ave	2.508	2.439		0.00973	0.0100	-2.7	20.0
sec-Butylbenzene	Ave	3.014	2.938		0.00975	0.0100	-2.5	20.0
1,3-Dichlorobenzene	Ave	1.414	1.373	0.6000	0.00971	0.0100	-2.9	20.0
4-Isopropyltoluene	Ave	2.630	2.596		0.00987	0.0100	-1.3	20.0
1,4-Dichlorobenzene	Ave	1.449	1.414	0.5000	0.00976	0.0100	-2.4	20.0
n-Butylbenzene	Ave	2.195	2.129		0.00970	0.0100	-3.0	20.0
1,2-Dichlorobenzene	Ave	1.338	1.306	0.4000	0.00976	0.0100	-2.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0983	0.1008	0.0500	0.0103	0.0100	2.5	20.0
1,2,4-Trichlorobenzene	Ave	0.8313	0.7985	0.2000	0.00961	0.0100	-3.9	20.0
Hexachlorobutadiene	Ave	0.3447	0.3160		0.00917	0.0100	-8.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176298/2 Calibration Date: 04/14/2015 08:07

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 12:59

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 14:53

Lab File ID: UXM7134.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.798	1.695		0.00943	0.0100	-5.7	20.0
1,2,3-Trichlorobenzene	Ave	0.7434	0.7137		0.00960	0.0100	-4.0	20.0
Dibromofluoromethane (Surr)	Ave	0.1999	0.2015		0.0115	0.0114	0.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2198	0.2221		0.0115	0.0114	1.1	20.0
Toluene-d8 (Surr)	Ave	1.194	1.194		0.0114	0.0114	-0.0	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4286	0.4261		0.0113	0.0114	-0.6	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7134.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 14-Apr-2015 08:07:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042532-002
Operator ID: 1904 Instrument ID: A3UX16
Sublist: chrom-8260_16*sub29

Method: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 14-Apr-2015 13:40:54 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: quayler Date: 14-Apr-2015 08:26:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.588	5.588	0.000	97	1564934	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.279	8.279	0.000	82	1124476	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	78	663043	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.007	5.007	0.000	60	359411	11.4	11.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	396199	11.4	11.5	
$ 6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	91	1530212	11.4	11.4	
$ 7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	93	546270	11.4	11.3	
9 Dichlorodifluoromethane	85	1.615	1.615	0.000	70	367978	10.0	12.8	
10 Chloromethane	50	1.769	1.769	0.000	88	434439	10.0	10.9	
11 Vinyl chloride	62	1.888	1.888	0.000	83	465755	10.0	10.7	
12 Butadiene	54	1.935	1.935	0.000	0	429108	10.0	10.9	
13 Bromomethane	94	2.232	2.232	0.000	87	239746	10.0	11.4	
14 Chloroethane	64	2.327	2.327	0.000	94	270136	10.0	10.6	
15 Dichlorofluoromethane	67	2.516	2.516	0.000	82	591889	10.0	10.3	
16 Trichlorofluoromethane	101	2.576	2.576	0.000	86	431319	10.0	11.4	
17 Ethyl ether	59	2.836	2.836	0.000	89	283101	10.0	10.0	
18 Acrolein	56	2.943	2.943	0.000	89	169271	50.0	46.4	
19 1,1-Dichloroethene	96	3.050	3.050	0.000	98	320122	10.0	10.1	
20 1,1,2-Trichloro-1,2,2-trif	151	3.085	3.085	0.000	83	268808	10.0	10.9	
21 Acetone	43	3.085	3.085	0.000	75	195337	20.0	20.7	
23 Iodomethane	142	3.192	3.192	0.000	96	507288	10.0	10.2	
24 Carbon disulfide	76	3.263	3.263	0.000	98	946788	10.0	9.72	
26 3-Chloro-1-propene	76	3.382	3.382	0.000	69	219711	10.0	10.2	
27 Methyl acetate	43	3.394	3.394	0.000	96	1074744	50.0	51.6	
28 Methylene Chloride	84	3.489	3.489	0.000	77	384819	10.0	9.94	
29 2-Methyl-2-propanol	59	3.572	3.572	0.000	99	208876	100.0	104.3	
30 Acrylonitrile	53	3.690	3.690	0.000	99	1123584	100.0	103.8	
31 Methyl tert-butyl ether	73	3.738	3.738	0.000	83	983461	10.0	10.6	
32 trans-1,2-Dichloroethene	96	3.738	3.738	0.000	63	383355	10.0	10.1	
33 Hexane	86	3.987	3.987	0.000	90	98704	10.0	10.8	
34 1,1-Dichloroethane	63	4.105	4.105	0.000	85	660347	10.0	10.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	4.141	4.141	0.000	97	263297	9.60	10.0	
40 2-Butanone (MEK)	43	4.603	4.603	0.000	56	260436	20.0	22.1	
39 cis-1,2-Dichloroethene	96	4.603	4.603	0.000	69	409555	10.0	10.1	
41 2,2-Dichloropropane	77	4.615	4.610	0.005	79	422934	10.0	10.6	
45 Chlorobromomethane	128	4.805	4.805	0.000	91	201179	10.0	10.6	
46 Tetrahydrofuran	42	4.852	4.852	0.000	70	155100	20.0	20.7	
47 Chloroform	83	4.864	4.864	0.000	70	616852	10.0	10.1	
48 1,1,1-Trichloroethane	97	5.042	5.042	0.000	88	496738	10.0	10.7	
49 Cyclohexane	56	5.101	5.101	0.000	87	605548	10.0	10.6	
50 1,1-Dichloropropene	75	5.184	5.184	0.000	88	483404	10.0	10.3	
51 Carbon tetrachloride	117	5.196	5.196	0.000	70	425460	10.0	11.2	
52 Isobutyl alcohol	41	5.232	5.232	0.000	70	184018	250.0	264.7	
53 1,2-Dichloroethane	62	5.362	5.362	0.000	50	453679	10.0	10.7	
54 Benzene	78	5.362	5.362	0.000	93	1558057	10.0	9.94	
56 n-Heptane	57	5.588	5.588	0.000	53	268865	10.0	9.85	
58 Trichloroethene	130	5.908	5.908	0.000	91	424874	10.0	10.7	
60 Methylcyclohexane	83	6.086	6.086	0.000	89	630555	10.0	10.4	
61 1,2-Dichloropropane	63	6.098	6.098	0.000	78	364411	10.0	10.3	
63 Dibromomethane	93	6.192	6.192	0.000	88	196517	10.0	10.4	
64 1,4-Dioxane	88	6.192	6.192	0.000	30	59463	200.0	228.6	
65 Dichlorobromomethane	83	6.323	6.323	0.000	94	459228	10.0	10.5	
67 2-Chloroethyl vinyl ether	63	6.572	6.572	0.000	90	381015	20.0	20.4	
68 cis-1,3-Dichloropropene	75	6.714	6.714	0.000	91	535185	10.0	10.4	
69 4-Methyl-2-pentanone (MIBK	43	6.833	6.833	0.000	93	496366	20.0	21.4	
70 Toluene	91	7.022	7.022	0.000	95	1659460	10.0	9.97	
71 trans-1,3-Dichloropropene	75	7.188	7.188	0.000	89	439895	10.0	10.4	
72 Ethyl methacrylate	69	7.272	7.272	0.000	68	352933	10.0	10.3	
73 1,1,2-Trichloroethane	97	7.366	7.366	0.000	85	302005	10.0	10.1	
75 Tetrachloroethene	164	7.521	7.521	0.000	75	327014	10.0	10.4	
74 1,3-Dichloropropane	76	7.521	7.521	0.000	87	545284	10.0	10.3	
76 2-Hexanone	43	7.580	7.580	0.000	66	349071	20.0	21.5	
78 Chlorodibromomethane	129	7.734	7.734	0.000	88	325463	10.0	10.6	
80 Ethylene Dibromide	107	7.841	7.841	0.000	99	293767	10.0	10.4	
82 Chlorobenzene	112	8.303	8.303	0.000	96	1080627	10.0	10.1	
83 1,1,1,2-Tetrachloroethane	131	8.374	8.374	0.000	86	360267	10.0	10.6	
84 Ethylbenzene	106	8.398	8.398	0.000	98	580533	10.0	10.2	
85 m-Xylene & p-Xylene	106	8.505	8.505	0.000	97	734934	10.0	10.3	
86 o-Xylene	106	8.884	8.884	0.000	91	725478	10.0	10.5	
87 Styrene	104	8.896	8.896	0.000	92	1120490	10.0	10.1	
88 Bromoform	173	9.074	9.074	0.000	97	198759	10.0	10.7	
89 Isopropylbenzene	105	9.240	9.240	0.000	94	1869859	10.0	10.2	
92 1,1,2,2-Tetrachloroethane	83	9.501	9.501	0.000	88	372614	10.0	9.58	
93 Bromobenzene	156	9.536	9.536	0.000	88	457544	10.0	9.55	
95 1,2,3-Trichloropropane	110	9.548	9.548	0.000	54	117563	10.0	9.72	
94 trans-1,4-Dichloro-2-buten	53	9.560	9.560	0.000	60	88415	10.0	9.30	
96 N-Propylbenzene	120	9.631	9.631	0.000	83	530369	10.0	10.1	
97 2-Chlorotoluene	126	9.726	9.726	0.000	91	449055	10.0	9.91	
99 1,3,5-Trimethylbenzene	105	9.797	9.797	0.000	91	1568271	10.0	9.86	
100 4-Chlorotoluene	126	9.821	9.821	0.000	98	466714	10.0	9.68	
102 tert-Butylbenzene	119	10.118	10.118	0.000	77	1372671	10.0	9.91	
104 1,2,4-Trimethylbenzene	105	10.165	10.165	0.000	73	1617431	10.0	9.73	
105 sec-Butylbenzene	105	10.343	10.343	0.000	92	1947992	10.0	9.75	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.450	10.450	0.000	83	910399	10.0	9.71	
107 4-Isopropyltoluene	119	10.473	10.473	0.000	92	1721084	10.0	9.87	
108 1,4-Dichlorobenzene	146	10.533	10.533	0.000	92	937792	10.0	9.76	
111 n-Butylbenzene	91	10.888	10.888	0.000	96	1411302	10.0	9.70	
112 1,2-Dichlorobenzene	146	10.900	10.900	0.000	97	865676	10.0	9.76	
113 1,2-Dibromo-3-Chloropropan	157	11.671	11.671	0.000	74	66836	10.0	10.3	
115 1,2,4-Trichlorobenzene	180	12.501	12.501	0.000	93	529425	10.0	9.61	
116 Hexachlorobutadiene	225	12.679	12.679	0.000	90	209542	10.0	9.17	
117 Naphthalene	128	12.750	12.750	0.000	96	1124005	10.0	9.43	
118 1,2,3-Trichlorobenzene	180	13.011	13.011	0.000	94	473184	10.0	9.60	
S 131 1,2-Dichloroethene, Total	96				0		20.0	20.2	
S 132 1,3-Dichloropropene, Total	75				0		20.0	20.8	
S 133 Xylenes, Total	106				0		20.0	20.8	
S 134 Trihalomethanes, Total	1				0		40.0	42.0	

Reagents:

VMAROLISTDW_00095	Amount Added:	8.00	Units: uL	
VMRPRIMW_00120	Amount Added:	8.00	Units: uL	
VMRGAS_00097	Amount Added:	8.00	Units: uL	
VM50IS_00045	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00063	Amount Added:	1.14	Units: uL	Run Reagent
vmDist_H2o_00042	Amount Added:	0.00	Units:	Run Reagent

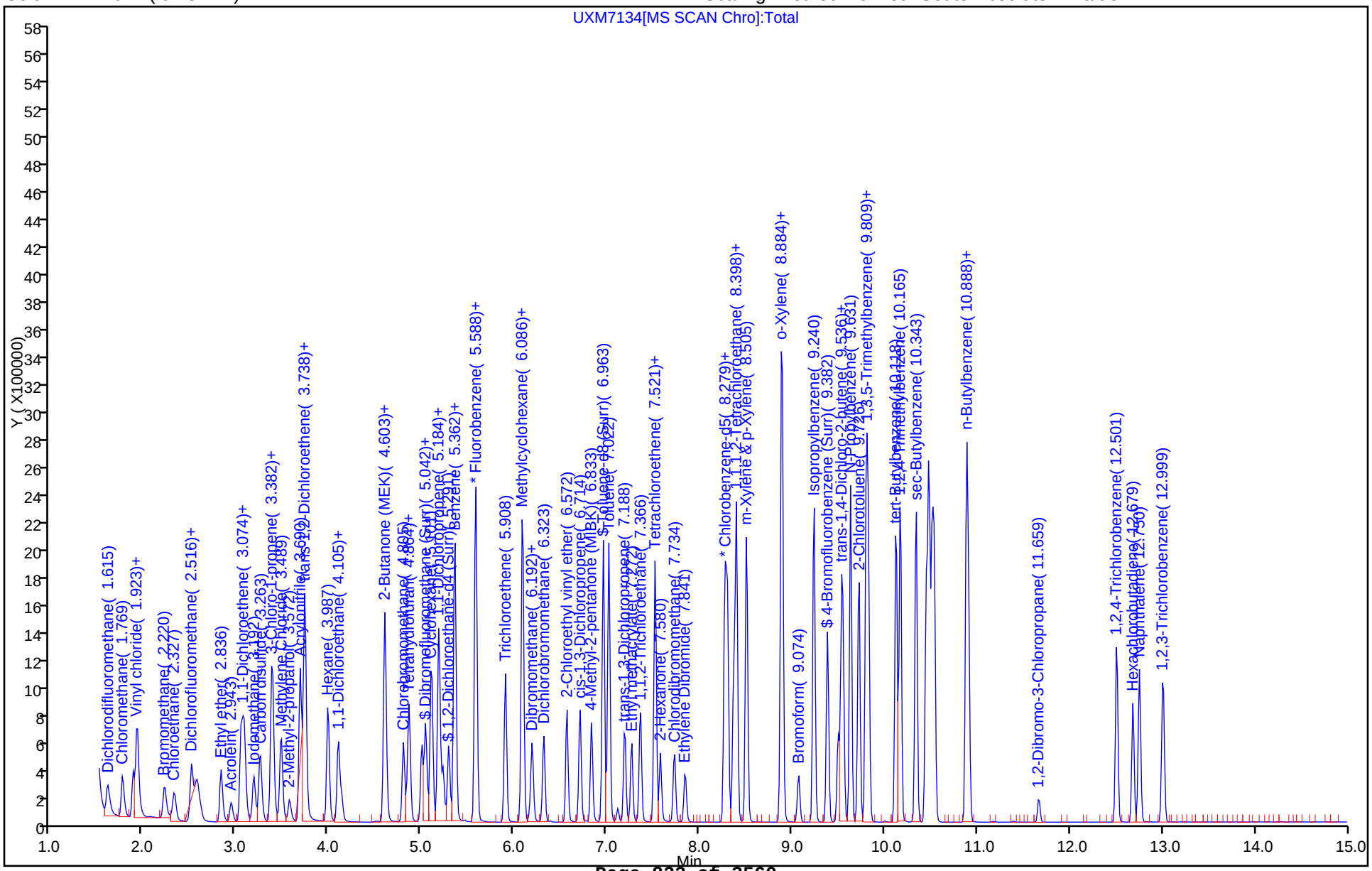
Report Date: 14-Apr-2015 13:40:55 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7134.D

Injection Date:	14-Apr-2015 08:07:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-170352/11 Calibration Date: 03/03/2015 03:21

Instrument ID: A3UX8 Calib Start Date: 03/03/2015 00:12

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 03:00

Lab File ID: UX86162.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1856	0.2072	0.1000	0.0279	0.0250	11.7	20.0
Chloromethane	Ave	0.2209	0.2193	0.1000	0.0248	0.0250	-0.7	20.0
Vinyl chloride	Ave	0.1638	0.1679	0.1000	0.0256	0.0250	2.5	20.0
Bromomethane	Qua		0.1008	0.0500	0.0261	0.0250	4.3	20.0
Chloroethane	Qua		0.0953	0.0500	0.0263	0.0250	5.3	20.0
Dichlorofluoromethane	Ave	0.2316	0.2353		0.0254	0.0250	1.6	20.0
Trichlorofluoromethane	Ave	0.2285	0.2412	0.1000	0.0264	0.0250	5.6	20.0
1,1-Dichloroethene	Ave	0.1945	0.1861	0.1000	0.0239	0.0250	-4.3	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1578	0.1608	0.0500	0.0255	0.0250	1.9	20.0
Acetone	Lin1	0.1458	0.1130	0.0500	0.0423	0.0500	-15.5	20.0
Iodomethane	Ave	0.3078	0.3406		0.0277	0.0250	10.6	20.0
Carbon disulfide	Ave	0.4761	0.5415	0.1000	0.0284	0.0250	13.7	20.0
Methyl acetate	Ave	0.2404	0.2314	0.1000	0.120	0.125	-3.7	20.0
Methylene Chloride	Lin1	0.2993	0.2795	0.1000	0.0262	0.0250	4.8	20.0
2-Methyl-2-propanol	Ave	0.0279	0.0277		0.248	0.250	-0.7	20.0
Methyl tert-butyl ether	Ave	0.6588	0.6725	0.1000	0.0255	0.0250	2.1	20.0
trans-1,2-Dichloroethene	Ave	0.2288	0.2391	0.1000	0.0261	0.0250	4.5	20.0
1,1-Dichloroethane	Ave	0.4039	0.4126	0.1000	0.0255	0.0250	2.1	20.0
Vinyl acetate	Ave	0.2164	0.3626		0.0419	0.0250	67.5*	20.0
2-Butanone (MEK)	Ave	0.1572	0.1462	0.0500	0.0465	0.0500	-7.0	20.0
2,2-Dichloropropane	Ave	0.1784	0.1859		0.0261	0.0250	4.2	20.0
cis-1,2-Dichloroethene	Ave	0.2521	0.2621	0.1000	0.0260	0.0250	4.0	20.0
Bromochloromethane	Ave	0.1298	0.1325		0.0255	0.0250	2.0	20.0
Chloroform	Ave	0.3917	0.3916	0.2000	0.0250	0.0250	-0.0	20.0
1,1,1-Trichloroethane	Ave	0.2932	0.3042	0.1000	0.0259	0.0250	3.8	20.0
Cyclohexane	Ave	0.3691	0.3878	0.1000	0.0263	0.0250	5.1	20.0
1,1-Dichloropropene	Ave	0.2750	0.2997		0.0272	0.0250	9.0	20.0
Carbon tetrachloride	Ave	0.2584	0.2681	0.1000	0.0259	0.0250	3.8	20.0
1,2-Dichloroethane	Ave	0.3115	0.3129	0.1000	0.0251	0.0250	0.5	20.0
Benzene	Ave	0.9576	0.9522	0.5000	0.0249	0.0250	-0.6	20.0
Trichloroethene	Ave	0.2549	0.2501	0.2000	0.0245	0.0250	-1.9	20.0
1,2-Dichloropropane	Ave	0.2373	0.2421	0.1000	0.0255	0.0250	2.0	20.0
Methylcyclohexane	Ave	0.3863	0.3877	0.1000	0.0251	0.0250	0.3	20.0
1,4-Dioxane	Ave	0.0026	0.0027		0.528	0.500	5.5	20.0
Dibromomethane	Ave	0.1313	0.1373		0.0261	0.0250	4.6	20.0
Bromodichloromethane	Ave	0.2550	0.2727	0.1000	0.0267	0.0250	6.9	20.0
cis-1,3-Dichloropropene	Ave	0.3036	0.3344	0.1500	0.0275	0.0250	10.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2649	0.2868	0.0500	0.0541	0.0500	8.3	20.0
Toluene	Ave	1.375	1.408	0.4000	0.0256	0.0250	2.4	20.0
trans-1,3-Dichloropropene	Ave	0.3577	0.4100	0.1000	0.0287	0.0250	14.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-170352/11 Calibration Date: 03/03/2015 03:21

Instrument ID: A3UX8 Calib Start Date: 03/03/2015 00:12

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 03:00

Lab File ID: UX86162.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,2-Trichloroethane	Ave	0.2876	0.2998	0.1000	0.0261	0.0250	4.2	20.0
1,3-Dichloropropane	Ave	0.4733	0.4994		0.0264	0.0250	5.5	20.0
Tetrachloroethene	Ave	0.2787	0.2715	0.2000	0.0244	0.0250	-2.6	20.0
2-Hexanone	Ave	0.2635	0.2678	0.0500	0.0508	0.0500	1.6	20.0
Dibromochloromethane	Ave	0.2645	0.2919		0.0276	0.0250	10.3	20.0
1,2-Dibromoethane	Ave	0.2695	0.2939		0.0273	0.0250	9.1	20.0
Chlorobenzene	Ave	0.9295	0.9385	0.3000	0.0252	0.0250	1.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.2813	0.3071		0.0273	0.0250	9.2	20.0
Ethylbenzene	Ave	0.4836	0.5001		0.0259	0.0250	3.4	20.0
m-Xylene & p-Xylene	Ave	0.5712	0.6002		0.0263	0.0250	5.1	20.0
o-Xylene	Ave	0.5449	0.5927		0.0272	0.0250	8.8	20.0
Styrene	Ave	0.8283	0.9497	0.3000	0.0287	0.0250	14.7	20.0
Bromoform	Lin1		0.1822	0.1000	0.0239	0.0250	-4.5	20.0
Isopropylbenzene	Ave	1.375	1.498	0.1000	0.0272	0.0250	8.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6741	0.6990	0.3000	0.0259	0.0250	3.7	20.0
Bromobenzene	Ave	0.7522	0.7540		0.0251	0.0250	0.2	20.0
1,2,3-Trichloropropane	Ave	0.2348	0.2548		0.0271	0.0250	8.5	20.0
N-Propylbenzene	Ave	0.7428	0.7761		0.0261	0.0250	4.5	20.0
2-Chlorotoluene	Ave	0.6481	0.6750		0.0260	0.0250	4.1	20.0
1,3,5-Trimethylbenzene	Ave	2.187	2.288		0.0262	0.0250	4.6	20.0
4-Chlorotoluene	Ave	0.6858	0.7109		0.0259	0.0250	3.7	20.0
tert-Butylbenzene	Ave	1.954	2.037		0.0261	0.0250	4.3	20.0
1,2,4-Trimethylbenzene	Ave	2.286	2.319		0.0254	0.0250	1.4	20.0
sec-Butylbenzene	Ave	2.810	2.884		0.0257	0.0250	2.6	20.0
1,3-Dichlorobenzene	Ave	1.395	1.365	0.6000	0.0245	0.0250	-2.1	20.0
4-Isopropyltoluene	Ave	2.470	2.461		0.0249	0.0250	-0.3	20.0
1,4-Dichlorobenzene	Ave	1.468	1.385	0.5000	0.0236	0.0250	-5.7	20.0
n-Butylbenzene	Ave	2.053	2.041		0.0249	0.0250	-0.6	20.0
1,2-Dichlorobenzene	Ave	1.348	1.335	0.4000	0.0247	0.0250	-1.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1238	0.1184	0.0500	0.0239	0.0250	-4.4	20.0
1,2,4-Trichlorobenzene	Ave	0.8701	0.7720	0.2000	0.0222	0.0250	-11.3	20.0
Hexachlorobutadiene	Ave	0.5037	0.4355		0.0216	0.0250	-13.5	20.0
Naphthalene	Ave	2.116	1.933		0.0228	0.0250	-8.6	20.0
1,2,3-Trichlorobenzene	Ave	0.8960	0.7646		0.0213	0.0250	-14.7	20.0
Dibromofluoromethane (Surr)	Qua	0.2654	0.2135		0.0528	0.0500	5.6	20.0
1,2-Dichloroethane-d4 (Surr)	Qua	0.3102	0.2338		0.0510	0.0500	1.9	20.0
Toluene-d8 (Surr)	Qua	1.426	1.185		0.0544	0.0500	8.8	20.0
4-Bromofluorobenzene (Surr)	Qua	0.5303	0.4019		0.0512	0.0500	2.5	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86162.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 03-Mar-2015 03:21:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0040994-011
Operator ID: 402279 Instrument ID: A3UX8
Sublist:

Method: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 03-Mar-2015 23:34:49 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: latat Date: 03-Mar-2015 05:04:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.156	5.159	-0.003	99	1272907	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.688	7.691	-0.003	96	926219	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.877	9.880	-0.003	99	502598	50.0	50.0	
$ 5 Dibromofluoromethane (Surr	113	4.624	4.626	-0.002	95	271743	50.0	52.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	4.896	4.886	0.010	95	297564	50.0	51.0	
$ 7 Toluene-d8 (Surr)	98	6.434	6.425	0.009	93	1097912	50.0	54.4	
$ 8 4-Bromofluorobenzene (Surr	95	8.765	8.768	-0.003	94	372220	50.0	51.2	
19 Dichlorodifluoromethane	85	1.583	1.585	-0.002	100	131896	25.0	27.9	
20 Chloromethane	50	1.748	1.751	-0.003	100	139595	25.0	24.8	
21 Vinyl chloride	62	1.867	1.869	-0.003	98	106842	25.0	25.6	
152 Butadiene	54	1.902	1.905	-0.003	0	111694	NC	NC	
22 Bromomethane	94	2.186	2.177	0.009	90	64158	25.0	26.1	
23 Chloroethane	64	2.281	2.283	-0.002	99	60668	25.0	26.3	
24 Dichlorofluoromethane	67	2.458	2.449	0.009	98	149758	25.0	25.4	
25 Trichlorofluoromethane	101	2.505	2.508	-0.003	98	153519	25.0	26.4	
26 Ethyl ether	59	2.742	2.733	0.009	94	103199	25.0	24.9	
27 Acrolein	56	2.837	2.839	-0.002	99	53000	125.0	88.6	
28 1,1-Dichloroethene	96	2.931	2.922	0.009	98	118454	25.0	23.9	
29 1,1,2-Trichloro-1,2,2-trif	151	2.943	2.946	-0.003	92	102364	25.0	25.5	
30 Acetone	43	2.955	2.958	-0.003	100	143865	50.0	42.3	
32 Iodomethane	142	3.050	3.052	-0.002	97	216772	25.0	27.7	
33 Carbon disulfide	76	3.109	3.112	-0.003	99	344611	25.0	28.4	
35 3-Chloro-1-propene	76	3.215	3.206	0.009	92	72585	25.0	26.0	
36 Methyl acetate	43	3.215	3.218	-0.003	99	736390	125.0	120.3	
37 Methylene Chloride	84	3.298	3.301	-0.003	96	177897	25.0	26.2	
38 2-Methyl-2-propanol	59	3.381	3.384	-0.003	96	176081	250.0	248.2	
39 Acrylonitrile	53	3.488	3.478	0.010	99	684896	250.0	254.6	
40 trans-1,2-Dichloroethene	96	3.523	3.526	-0.003	65	152150	25.0	26.1	
41 Methyl tert-butyl ether	73	3.523	3.526	-0.003	97	428024	25.0	25.5	
42 Hexane	86	3.736	3.727	0.009	94	42555	25.0	25.2	
43 1,1-Dichloroethane	63	3.843	3.833	0.010	97	262596	25.0	25.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Vinyl acetate	43	3.866	3.857	0.009	97	230754	25.0	41.9	
49 2-Butanone (MEK)	43	4.269	4.271	-0.002	93	186108	50.0	46.5	
48 cis-1,2-Dichloroethene	96	4.280	4.271	0.009	80	166831	25.0	26.0	
50 2,2-Dichloropropane	77	4.280	4.283	-0.003	93	118338	25.0	26.1	
54 Chlorobromomethane	128	4.458	4.461	-0.002	95	84313	25.0	25.5	
55 Tetrahydrofuran	42	4.493	4.496	-0.003	92	113233	50.0	50.9	
56 Chloroform	83	4.505	4.508	-0.003	95	249210	25.0	25.0	
57 1,1,1-Trichloroethane	97	4.671	4.673	-0.002	98	193621	25.0	25.9	
58 Cyclohexane	56	4.718	4.721	-0.003	91	246830	25.0	26.3	
59 1,1-Dichloropropene	75	4.789	4.792	-0.003	96	190728	25.0	27.2	
60 Carbon tetrachloride	117	4.801	4.804	-0.003	98	170656	25.0	25.9	
61 Isobutyl alcohol	41	4.825	4.827	-0.002	96	178230	625.0	648.8	
63 1,2-Dichloroethane	62	4.955	4.946	0.009	58	199171	25.0	25.1	
62 Benzene	78	4.955	4.946	0.009	96	606059	25.0	24.9	
65 n-Heptane	100	5.144	5.135	0.009	94	45655	25.0	24.9	
67 Trichloroethene	130	5.440	5.443	-0.003	97	159148	25.0	24.5	
69 Methylcyclohexane	83	5.618	5.608	0.010	93	246739	25.0	25.1	
70 1,2-Dichloropropane	63	5.618	5.620	-0.002	94	154104	25.0	25.5	
73 Dibromomethane	93	5.712	5.715	-0.003	92	87379	25.0	26.1	
72 1,4-Dioxane	88	5.712	5.715	-0.003	45	34502	500.0	527.6	
74 Dichlorobromomethane	83	5.830	5.821	0.009	100	173558	25.0	26.7	
76 2-Chloroethyl vinyl ether	63	6.055	6.058	-0.003	93	45449	30.0	29.6	
77 cis-1,3-Dichloropropene	75	6.185	6.188	-0.003	95	212847	25.0	27.5	
78 4-Methyl-2-pentanone (MIBK	43	6.304	6.306	-0.002	97	365073	50.0	54.1	
79 Toluene	91	6.481	6.484	-0.003	98	651857	25.0	25.6	
80 trans-1,3-Dichloropropene	75	6.647	6.650	-0.003	94	189873	25.0	28.7	
81 Ethyl methacrylate	69	6.706	6.709	-0.003	92	188015	25.0	29.3	
82 1,1,2-Trichloroethane	97	6.813	6.803	0.010	89	138833	25.0	26.1	
83 1,3-Dichloropropane	76	6.955	6.957	-0.002	95	231280	25.0	26.4	
84 Tetrachloroethene	164	6.966	6.969	-0.003	94	125747	25.0	24.4	
85 2-Hexanone	43	7.014	7.005	0.009	97	248071	50.0	50.8	
87 Chlorodibromomethane	129	7.168	7.158	0.010	90	135171	25.0	27.6	
89 Ethylene Dibromide	107	7.274	7.277	-0.003	98	136125	25.0	27.3	
91 Chlorobenzene	112	7.712	7.715	-0.003	95	434604	25.0	25.2	
92 1,1,1,2-Tetrachloroethane	131	7.771	7.774	-0.003	96	142241	25.0	27.3	
93 Ethylbenzene	106	7.807	7.797	0.010	98	231603	25.0	25.9	
94 m-Xylene & p-Xylene	106	7.913	7.904	0.009	99	277963	25.0	26.3	
95 o-Xylene	106	8.280	8.271	0.009	88	274492	25.0	27.2	
96 Styrene	104	8.280	8.282	-0.002	89	439821	25.0	28.7	
97 Bromoform	173	8.457	8.460	-0.003	99	84382	25.0	23.9	
98 Isopropylbenzene	105	8.611	8.614	-0.003	95	693747	25.0	27.2	
101 1,1,2,2-Tetrachloroethane	83	8.872	8.874	-0.002	96	175648	25.0	25.9	
102 Bromobenzene	156	8.919	8.921	-0.002	92	189474	25.0	25.1	
104 1,2,3-Trichloropropane	110	8.931	8.933	-0.002	84	64028	25.0	27.1	
103 trans-1,4-Dichloro-2-buten	53	8.931	8.933	-0.002	70	51476	25.0	26.5	
105 N-Propylbenzene	120	9.002	9.004	-0.002	99	195033	25.0	26.1	
106 2-Chlorotoluene	126	9.096	9.099	-0.003	97	169623	25.0	26.0	
107 1,3,5-Trimethylbenzene	105	9.167	9.170	-0.003	94	574974	25.0	26.2	
108 4-Chlorotoluene	126	9.203	9.194	0.009	96	178651	25.0	25.9	
109 tert-Butylbenzene	119	9.487	9.489	-0.002	93	511997	25.0	26.1	
110 1,2,4-Trimethylbenzene	105	9.534	9.537	-0.003	94	582703	25.0	25.4	
111 sec-Butylbenzene	105	9.700	9.702	-0.002	94	724731	25.0	25.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 1,3-Dichlorobenzene	146	9.818	9.821	-0.003	97	343103	25.0	24.5	
113 4-Isopropyltoluene	119	9.842	9.844	-0.002	97	618561	25.0	24.9	
114 1,4-Dichlorobenzene	146	9.901	9.904	-0.003	96	348025	25.0	23.6	
117 n-Butylbenzene	91	10.244	10.247	-0.003	98	512943	25.0	24.9	
118 1,2-Dichlorobenzene	146	10.268	10.270	-0.002	99	335470	25.0	24.7	
119 1,2-Dibromo-3-Chloropropan	157	11.025	11.028	-0.003	92	29747	25.0	23.9	
121 1,2,4-Trichlorobenzene	180	11.865	11.868	-0.003	94	193993	25.0	22.2	
122 Hexachlorobutadiene	225	12.031	12.033	-0.002	96	109447	25.0	21.6	
123 Naphthalene	128	12.114	12.104	0.010	96	485731	25.0	22.8	
124 1,2,3-Trichlorobenzene	180	12.362	12.365	-0.003	97	192140	25.0	21.3	
S 129 Xylenes, Total	106				0		50.0	53.5	
S 126 Trihalomethanes, Total	1				0		100.0	103.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VMFASPW_00087	Amount Added:	2.50	Units: uL	
VMFASAW_00072	Amount Added:	2.50	Units: uL	
VMFASGW_00084	Amount Added:	2.50	Units: uL	
VMUX8SS_00017	Amount Added:	1.15	Units: uL	
vm250-IS_00021	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00044	Amount Added:	0.00	Units:	Run Reagent

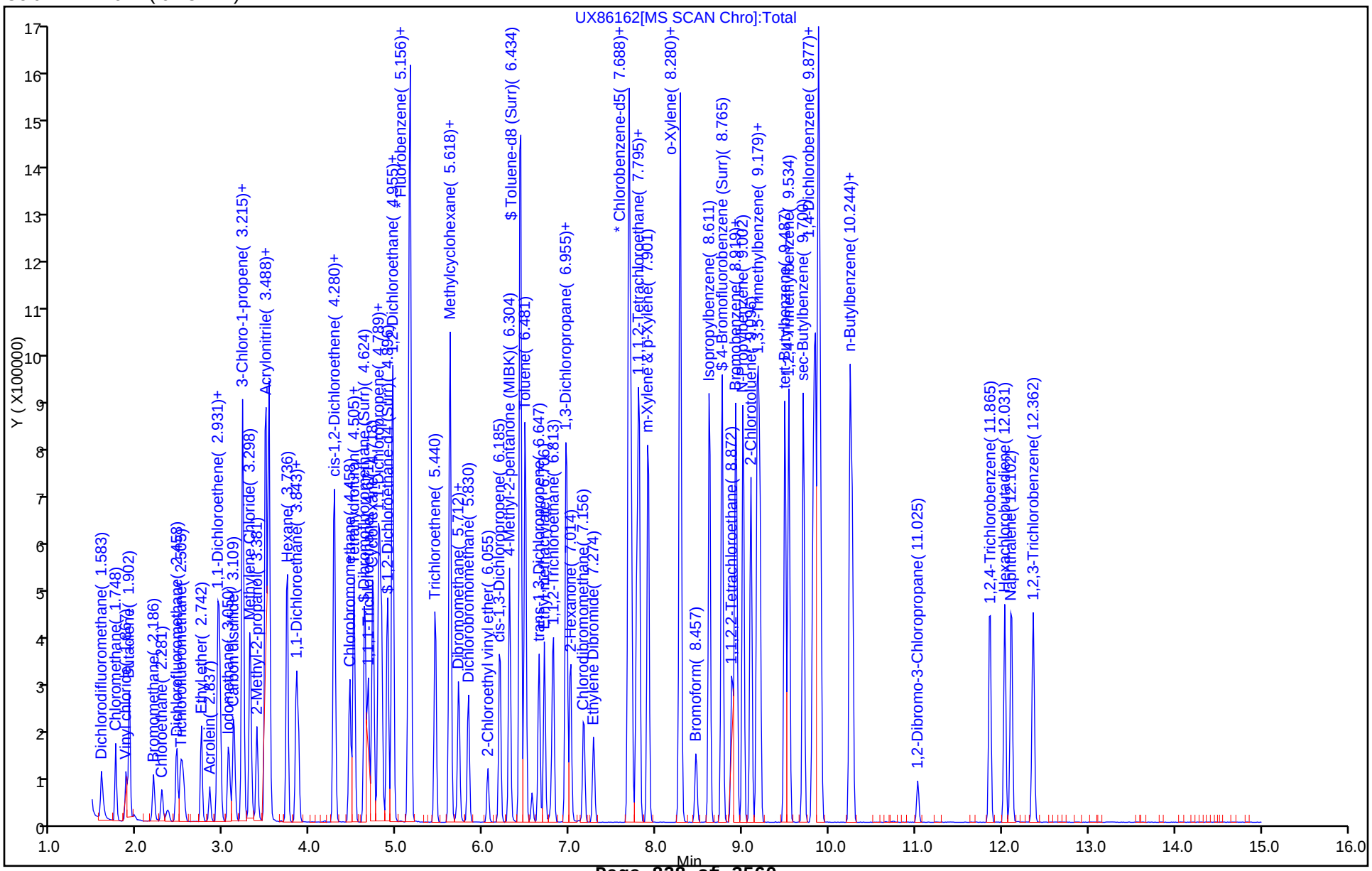
Report Date: 03-Mar-2015 23:34:51 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86162.D

Injection Date:	03-Mar-2015 03:21:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	ICV			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176276/4 Calibration Date: 04/14/2015 02:56

Instrument ID: A3UX8 Calib Start Date: 03/03/2015 00:12

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 03:00

Lab File ID: UX86971.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloromethane	Ave	0.2209	0.1803	0.1000	0.0163	0.0200	-18.4	20.0
Vinyl chloride	Ave	0.1638	0.1412	0.1000	0.0172	0.0200	-13.8	20.0
Bromomethane	Qua		0.0968	0.0500	0.0196	0.0200	-1.9	20.0
Chloroethane	Qua		0.0856	0.0500	0.0186	0.0200	-7.2	20.0
Dichlorofluoromethane	Ave	0.2316	0.2183		0.0188	0.0200	-5.8	20.0
Trichlorofluoromethane	Ave	0.2285	0.2317	0.1000	0.0203	0.0200	1.4	20.0
1,1-Dichloroethene	Ave	0.1945	0.1787	0.1000	0.0184	0.0200	-8.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1578	0.1437	0.0500	0.0182	0.0200	-9.0	20.0
Iodomethane	Ave	0.3078	0.2801		0.0182	0.0200	-9.0	20.0
Carbon disulfide	Ave	0.4761	0.4433	0.1000	0.0186	0.0200	-6.9	20.0
Methyl acetate	Ave	0.2404	0.2184	0.1000	0.0908	0.100	-9.2	20.0
Methylene Chloride	Lin1	0.2993	0.2691	0.1000	0.0189	0.0200	-5.7	20.0
2-Methyl-2-propanol	Ave	0.0279	0.0252		0.181	0.200	-9.5	20.0
Methyl tert-butyl ether	Ave	0.6588	0.6108	0.1000	0.0185	0.0200	-7.3	20.0
trans-1,2-Dichloroethene	Ave	0.2288	0.2354	0.1000	0.0206	0.0200	2.9	20.0
1,1-Dichloroethane	Ave	0.4039	0.3786	0.1000	0.0187	0.0200	-6.3	20.0
Vinyl acetate	Ave	0.2164	0.2054		0.0182	0.0192	-5.1	20.0
2-Butanone (MEK)	Ave	0.1572	0.1427	0.0500	0.0363	0.0400	-9.2	20.0
2,2-Dichloropropane	Ave	0.1784	0.1552		0.0174	0.0200	-13.0	20.0
cis-1,2-Dichloroethene	Ave	0.2521	0.2604	0.1000	0.0207	0.0200	3.3	20.0
Bromochloromethane	Ave	0.1298	0.1325		0.0204	0.0200	2.0	20.0
Chloroform	Ave	0.3917	0.3750	0.2000	0.0191	0.0200	-4.3	20.0
1,1,1-Trichloroethane	Ave	0.2932	0.2802	0.1000	0.0191	0.0200	-4.4	20.0
Cyclohexane	Ave	0.3691	0.3434	0.1000	0.0186	0.0200	-6.9	20.0
1,1-Dichloropropene	Ave	0.2750	0.2716		0.0198	0.0200	-1.2	20.0
Carbon tetrachloride	Ave	0.2584	0.2495	0.1000	0.0193	0.0200	-3.5	20.0
1,2-Dichloroethane	Ave	0.3115	0.2817	0.1000	0.0181	0.0200	-9.6	20.0
Benzene	Ave	0.9576	0.9507	0.5000	0.0199	0.0200	-0.7	20.0
Trichloroethene	Ave	0.2549	0.2586	0.2000	0.0203	0.0200	1.4	20.0
1,2-Dichloropropane	Ave	0.2373	0.2211	0.1000	0.0186	0.0200	-6.8	20.0
Methylcyclohexane	Ave	0.3863	0.3798	0.1000	0.0197	0.0200	-1.7	20.0
1,4-Dioxane	Ave	0.0026	0.0029		0.446	0.400	11.6	20.0
Dibromomethane	Ave	0.1313	0.1309		0.0200	0.0200	-0.2	20.0
Bromodichloromethane	Ave	0.2550	0.2583	0.1000	0.0203	0.0200	1.3	20.0
cis-1,3-Dichloropropene	Ave	0.3036	0.3022	0.1500	0.0199	0.0200	-0.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2649	0.2666	0.0500	0.0403	0.0400	0.7	20.0
Toluene	Ave	1.375	1.380	0.4000	0.0201	0.0200	0.4	20.0
trans-1,3-Dichloropropene	Ave	0.3577	0.3368	0.1000	0.0188	0.0200	-5.8	20.0
1,1,2-Trichloroethane	Ave	0.2876	0.2969	0.1000	0.0206	0.0200	3.2	20.0
1,3-Dichloropropane	Ave	0.4733	0.4742		0.0200	0.0200	0.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176276/4 Calibration Date: 04/14/2015 02:56

Instrument ID: A3UX8 Calib Start Date: 03/03/2015 00:12

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 03:00

Lab File ID: UX86971.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrachloroethene	Ave	0.2787	0.2777	0.2000	0.0199	0.0200	-0.4	20.0
2-Hexanone	Ave	0.2635	0.2691	0.0500	0.0409	0.0400	2.1	20.0
Dibromochloromethane	Ave	0.2645	0.2854		0.0216	0.0200	7.9	20.0
1,2-Dibromoethane	Ave	0.2695	0.2837		0.0211	0.0200	5.3	20.0
Chlorobenzene	Ave	0.9295	0.9267	0.3000	0.0199	0.0200	-0.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.2813	0.2880		0.0205	0.0200	2.4	20.0
Ethylbenzene	Ave	0.4836	0.4934		0.0204	0.0200	2.0	20.0
m-Xylene & p-Xylene	Ave	0.5712	0.6013		0.0211	0.0200	5.3	20.0
o-Xylene	Ave	0.5449	0.5894		0.0216	0.0200	8.2	20.0
Styrene	Ave	0.8283	0.8965	0.3000	0.0216	0.0200	8.2	20.0
Bromoform	Lin1		0.1705	0.1000	0.0181	0.0200	-9.6	20.0
Isopropylbenzene	Ave	1.375	1.483	0.1000	0.0216	0.0200	7.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6741	0.7005	0.3000	0.0208	0.0200	3.9	20.0
Bromobenzene	Ave	0.7522	0.7641		0.0203	0.0200	1.6	20.0
1,2,3-Trichloropropane	Ave	0.2348	0.2394		0.0204	0.0200	2.0	20.0
N-Propylbenzene	Ave	0.7428	0.8361		0.0225	0.0200	12.6	20.0
2-Chlorotoluene	Ave	0.6481	0.6856		0.0212	0.0200	5.8	20.0
1,3,5-Trimethylbenzene	Ave	2.187	2.379		0.0218	0.0200	8.8	20.0
4-Chlorotoluene	Ave	0.6858	0.7352		0.0214	0.0200	7.2	20.0
tert-Butylbenzene	Ave	1.954	2.345		0.0240	0.0200	20.0	20.0
1,2,4-Trimethylbenzene	Ave	2.286	2.466		0.0216	0.0200	7.9	20.0
sec-Butylbenzene	Ave	2.810	3.052		0.0217	0.0200	8.6	20.0
1,3-Dichlorobenzene	Ave	1.395	1.421	0.6000	0.0204	0.0200	1.9	20.0
4-Isopropyltoluene	Ave	2.470	2.634		0.0213	0.0200	6.6	20.0
1,4-Dichlorobenzene	Ave	1.468	1.430	0.5000	0.0195	0.0200	-2.6	20.0
n-Butylbenzene	Ave	2.053	2.178		0.0212	0.0200	6.1	20.0
1,2-Dichlorobenzene	Ave	1.348	1.367	0.4000	0.0203	0.0200	1.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1238	0.1132	0.0500	0.0183	0.0200	-8.5	20.0
1,2,4-Trichlorobenzene	Ave	0.8701	0.7330	0.2000	0.0168	0.0200	-15.8	20.0
Hexachlorobutadiene	Ave	0.5037	0.4512		0.0179	0.0200	-10.4	20.0
Naphthalene	Ave	2.116	1.718		0.0162	0.0200	-18.8	20.0
1,2,3-Trichlorobenzene	Ave	0.8960	0.7426		0.0166	0.0200	-17.1	20.0
Dibromofluoromethane (Surr)	Qua	0.2654	0.2077		0.0513	0.0500	2.6	20.0
1,2-Dichloroethane-d4 (Surr)	Qua	0.3102	0.2089		0.0453	0.0500	-9.5	20.0
Toluene-d8 (Surr)	Qua	1.426	1.196		0.0549	0.0500	9.8	20.0
4-Bromofluorobenzene (Surr)	Qua	0.5303	0.3902		0.0496	0.0500	-0.7	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86971.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 14-Apr-2015 02:56:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042522-004
Operator ID: 402279 Instrument ID: A3UX8
Sublist: chrom-8260_8*sub32

Method: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 00:48:05 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: latat Date: 14-Apr-2015 03:54:13

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.156	5.156	0.000	99	1307982	50.0	50.0	
*	2 Chlorobenzene-d5	117	7.688	7.688	0.000	94	963984	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.877	9.877	0.000	98	498368	50.0	50.0	
$	4 Dibromofluoromethane (Surr	113	4.624	4.624	0.000	95	271668	50.0	51.3	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.896	4.896	0.000	90	273278	50.0	45.3	
$	6 Toluene-d8 (Surr)	98	6.422	6.422	0.000	92	1152778	50.0	54.9	
$	7 4-Bromofluorobenzene (Surr	95	8.765	8.765	0.000	97	376132	50.0	49.6	
	9 Dichlorodifluoromethane	85	1.582	1.582	0.000	99	73062	20.0	15.0	
	10 Chloromethane	50	1.748	1.748	0.000	100	94312	20.0	16.3	
	11 Vinyl chloride	62	1.866	1.866	0.000	99	73890	20.0	17.2	
	12 Butadiene	54	1.914	1.914	0.000	0	75539	NC	NC	
	13 Bromomethane	94	2.186	2.186	0.000	91	50644	20.0	19.6	
	14 Chloroethane	64	2.281	2.281	0.000	97	44798	20.0	18.6	
	15 Dichlorofluoromethane	67	2.458	2.458	0.000	97	114196	20.0	18.8	
	16 Trichlorofluoromethane	101	2.505	2.505	0.000	97	121236	20.0	20.3	
	17 Ethyl ether	59	2.742	2.742	0.000	93	76422	20.0	18.0	
	18 Acrolein	56	2.837	2.837	0.000	98	69292	100.0	114.3	
	19 1,1-Dichloroethene	96	2.931	2.931	0.000	95	93484	20.0	18.4	
	20 1,1,2-Trichloro-1,2,2-trif	151	2.943	2.943	0.000	91	75158	20.0	18.2	
	21 Acetone	43	2.955	2.955	0.000	100	120257	40.0	31.7	
	23 Iodomethane	142	3.062	3.062	0.000	97	146531	20.0	18.2	
	24 Carbon disulfide	76	3.121	3.121	0.000	99	231922	20.0	18.6	
	26 3-Chloro-1-propene	76	3.215	3.215	0.000	93	58392	20.0	20.3	
	27 Methyl acetate	43	3.227	3.227	0.000	98	571211	100.0	90.8	
	28 Methylene Chloride	84	3.298	3.298	0.000	93	140789	20.0	18.9	
	29 2-Methyl-2-propanol	59	3.381	3.381	0.000	95	131917	200.0	181.0	
	30 Acrylonitrile	53	3.488	3.488	0.000	100	535168	200.0	193.6	
	31 trans-1,2-Dichloroethene	96	3.523	3.523	0.000	66	123159	20.0	20.6	
	32 Methyl tert-butyl ether	73	3.523	3.523	0.000	96	319571	20.0	18.5	
	33 Hexane	86	3.736	3.736	0.000	92	32024	20.0	18.4	
	34 1,1-Dichloroethane	63	3.843	3.843	0.000	96	198095	20.0	18.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.866	3.866	0.000	97	103154	19.2	18.2	
40 2-Butanone (MEK)	43	4.269	4.269	0.000	99	149334	40.0	36.3	
39 cis-1,2-Dichloroethene	96	4.280	4.280	0.000	79	136243	20.0	20.7	
41 2,2-Dichloropropane	77	4.280	4.280	0.000	92	81181	20.0	17.4	
45 Chlorobromomethane	128	4.458	4.458	0.000	94	69316	20.0	20.4	
46 Tetrahydrofuran	42	4.493	4.493	0.000	88	85397	40.0	37.3	
47 Chloroform	83	4.505	4.505	0.000	94	196216	20.0	19.1	
48 1,1,1-Trichloroethane	97	4.671	4.671	0.000	98	146599	20.0	19.1	
49 Cyclohexane	56	4.718	4.718	0.000	90	179681	20.0	18.6	
50 1,1-Dichloropropene	75	4.789	4.789	0.000	95	142117	20.0	19.8	
51 Carbon tetrachloride	117	4.801	4.801	0.000	98	130522	20.0	19.3	
52 Isobutyl alcohol	41	4.825	4.825	0.000	96	134985	500.0	478.2	
53 1,2-Dichloroethane	62	4.955	4.955	0.000	56	147373	20.0	18.1	
54 Benzene	78	4.955	4.955	0.000	95	497396	20.0	19.9	
56 n-Heptane	100	5.132	5.132	0.000	91	37436	20.0	19.9	
58 Trichloroethene	130	5.440	5.440	0.000	95	135273	20.0	20.3	
60 Methylcyclohexane	83	5.617	5.617	0.000	90	198724	20.0	19.7	
61 1,2-Dichloropropane	63	5.617	5.617	0.000	95	115681	20.0	18.6	
63 Dibromomethane	93	5.712	5.712	0.000	91	68509	20.0	20.0	
64 1,4-Dioxane	88	5.712	5.712	0.000	48	29983	400.0	446.2	
65 Dichlorobromomethane	83	5.830	5.830	0.000	99	135137	20.0	20.3	
67 2-Chloroethyl vinyl ether	63	6.055	6.055	0.000	91	91104	40.0	57.8	
68 cis-1,3-Dichloropropene	75	6.185	6.185	0.000	96	158085	20.0	19.9	
69 4-Methyl-2-pentanone (MIBK	43	6.304	6.304	0.000	96	279011	40.0	40.3	
70 Toluene	91	6.481	6.481	0.000	99	532239	20.0	20.1	
71 trans-1,3-Dichloropropene	75	6.647	6.647	0.000	92	129875	20.0	18.8	
72 Ethyl methacrylate	69	6.706	6.706	0.000	89	136529	20.0	20.5	
73 1,1,2-Trichloroethane	97	6.813	6.813	0.000	88	114496	20.0	20.6	
74 1,3-Dichloropropane	76	6.955	6.955	0.000	92	182844	20.0	20.0	
75 Tetrachloroethene	164	6.966	6.966	0.000	92	107067	20.0	19.9	
76 2-Hexanone	43	7.002	7.002	0.000	97	207561	40.0	40.9	
78 Chlorodibromomethane	129	7.168	7.168	0.000	90	110058	20.0	21.6	
80 Ethylene Dibromide	107	7.274	7.274	0.000	98	109383	20.0	21.1	
82 Chlorobenzene	112	7.712	7.712	0.000	97	357324	20.0	19.9	
83 1,1,1,2-Tetrachloroethane	131	7.771	7.771	0.000	96	111056	20.0	20.5	
84 Ethylbenzene	106	7.807	7.807	0.000	97	190252	20.0	20.4	
85 m-Xylene & p-Xylene	106	7.901	7.901	0.000	99	231862	20.0	21.1	
87 Styrene	104	8.280	8.280	0.000	92	345675	20.0	21.6	
86 o-Xylene	106	8.280	8.280	0.000	94	227285	20.0	21.6	
88 Bromoform	173	8.457	8.457	0.000	97	65739	20.0	18.1	
89 Isopropylbenzene	105	8.611	8.611	0.000	96	571965	20.0	21.6	
92 1,1,2,2-Tetrachloroethane	83	8.871	8.871	0.000	95	139639	20.0	20.8	
93 Bromobenzene	156	8.919	8.919	0.000	94	152315	20.0	20.3	
94 1,2,3-Trichloropropane	110	8.931	8.931	0.000	83	47728	20.0	20.4	
95 trans-1,4-Dichloro-2-buten	53	8.931	8.931	0.000	73	37531	20.0	19.5	
96 N-Propylbenzene	120	9.002	9.002	0.000	98	166664	20.0	22.5	
97 2-Chlorotoluene	126	9.096	9.096	0.000	97	136666	20.0	21.2	
98 1,3,5-Trimethylbenzene	105	9.167	9.167	0.000	95	474157	20.0	21.8	
99 4-Chlorotoluene	126	9.203	9.203	0.000	96	146561	20.0	21.4	
100 tert-Butylbenzene	119	9.487	9.487	0.000	91	467377	20.0	24.0	
102 1,2,4-Trimethylbenzene	105	9.534	9.534	0.000	94	491569	20.0	21.6	
103 sec-Butylbenzene	105	9.700	9.700	0.000	93	608442	20.0	21.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.818	9.818	0.000	97	283341	20.0	20.4	
105 4-Isopropyltoluene	119	9.842	9.842	0.000	97	525019	20.0	21.3	
106 1,4-Dichlorobenzene	146	9.901	9.901	0.000	97	285142	20.0	19.5	
109 n-Butylbenzene	91	10.244	10.244	0.000	97	434236	20.0	21.2	
110 1,2-Dichlorobenzene	146	10.268	10.268	0.000	99	272520	20.0	20.3	
111 1,2-Dibromo-3-Chloropropan	157	11.025	11.025	0.000	89	22571	20.0	18.3	
113 1,2,4-Trichlorobenzene	180	11.865	11.865	0.000	94	146129	20.0	16.8	
114 Hexachlorobutadiene	225	12.031	12.031	0.000	95	89938	20.0	17.9	
115 Naphthalene	128	12.102	12.102	0.000	96	342399	20.0	16.2	
116 1,2,3-Trichlorobenzene	180	12.362	12.362	0.000	96	148041	20.0	16.6	
S 126 1,2-Dichloroethene, Total	96				0		40.0	41.2	
S 127 1,3-Dichloropropene, Total	75				0		40.0	38.7	
S 128 Xylenes, Total	106				0		40.0	42.7	
S 129 Trihalomethanes, Total	1				0		80.0	79.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VMRPRIMW_00121	Amount Added:	2.00	Units: uL	
VMAROLISTDW_00095	Amount Added:	2.00	Units: uL	
VMRGAS_00097	Amount Added:	2.00	Units: uL	
VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00018	Amount Added:	1.15	Units: uL	Run Reagent
vmDist_H2o_00045	Amount Added:	0.00	Units:	Run Reagent

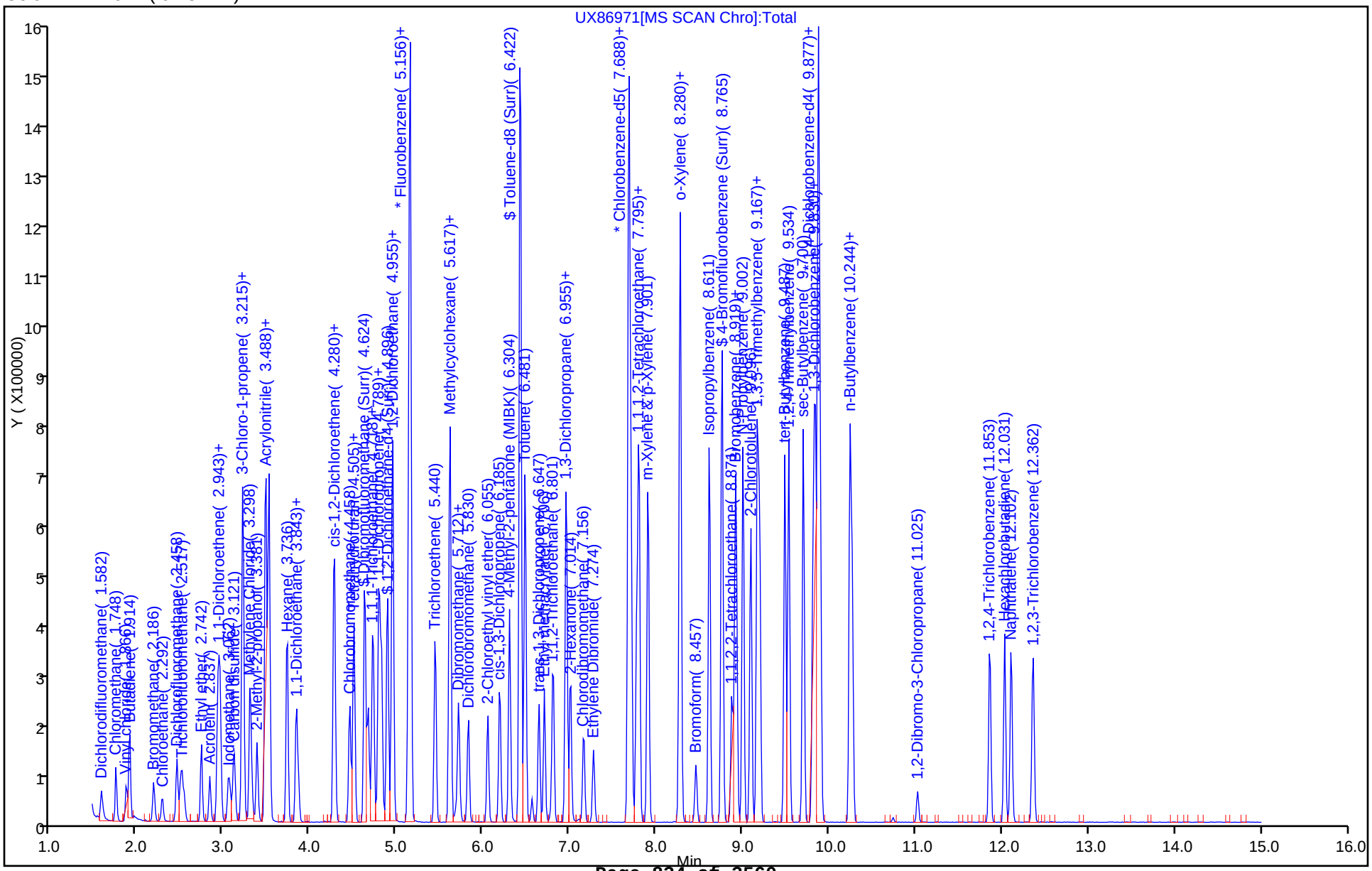
Report Date: 15-Apr-2015 00:48:06 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86971.D

Injection Date:	14-Apr-2015 02:56:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	CCVIS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\BFB14922.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 13-Apr-2015 14:04:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: bfb
Misc. Info.: 240-0042511-001240-0042511-001
Operator ID: 002808 Instrument ID: A3UX14

Method: \\NCChrom\ChromData\A3UX14\20150413-42511.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:05:33 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 10 BFB	95	4.253	4.253	0.000	0	1897368	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

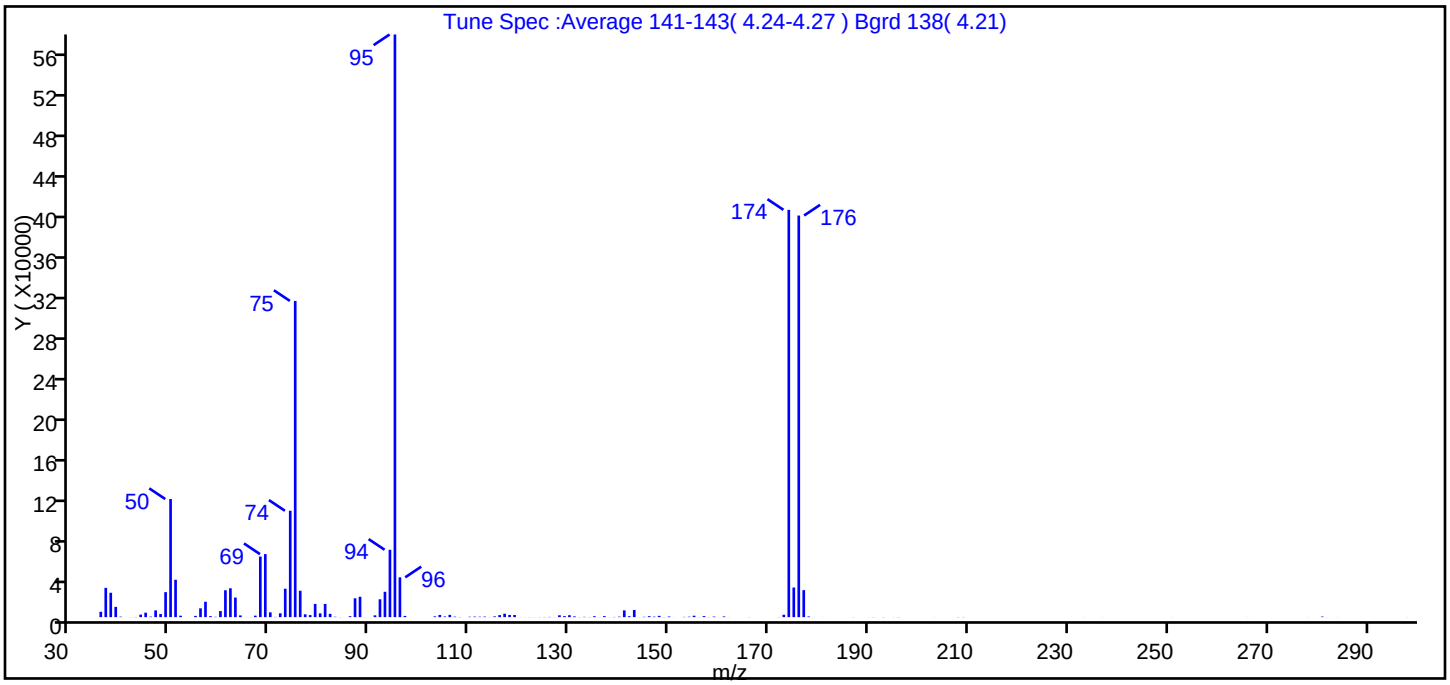
vmbfb_00013 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\BFB14922.D
Injection Date: 13-Apr-2015 14:04:30 Instrument ID: A3UX14
Lims ID: bfb
Client ID:
Operator ID: 002808 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_14 Limit Group: MSV 8260DOD ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.3
75	30 to 60% of m/z 95	54.3
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.4 (0.6)
174	50 to 120% of m/z 95	69.9
175	5 to 9% of m/z 174	5.1 (7.3)
176	Greater than 95% but less than 101% of m/z 174	68.9 (98.6)
177	5 to 9% of m/z 176	4.6 (6.7)

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\BFB14922.D\8260_14.rslt\spectra.d
Injection Date: 13-Apr-2015 14:04:30
Spectrum: Tune Spec :Average 141-143(4.24-4.27) Bgrd 138(4.21)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 143

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5298	76.00	25936	119.00	2113	156.00	83
37.00	28760	77.00	2805	120.00	60	157.00	1014
38.00	23944	78.00	1996	121.00	58	158.00	123
39.00	10100	79.00	12984	122.00	106	159.00	543
40.00	461	80.00	3730	123.00	55	160.00	55
42.00	75	81.00	12970	124.00	100	161.00	661
43.00	153	82.00	3246	125.00	162	162.00	55
44.00	2488	83.00	368	126.00	230	166.00	97
45.00	4394	84.00	97	127.00	80	172.00	125
46.00	511	86.00	894	128.00	1845	173.00	2342
47.00	6640	87.00	18520	129.00	1018	174.00	400128
48.00	3034	88.00	20008	130.00	1921	175.00	29088
49.00	24560	89.00	71	131.00	739	176.00	394560
50.00	116032	90.00	60	132.00	134	177.00	26544
51.00	36744	91.00	1795	133.00	288	178.00	632
52.00	1424	92.00	17552	134.00	154	179.00	69
55.00	1229	93.00	24912	135.00	882	181.00	52
56.00	8648	94.00	66184	136.00	113	187.00	94
57.00	15131	95.00	572416	137.00	980	190.00	53
58.00	981	96.00	39128	138.00	54	191.00	123
59.00	299	97.00	1200	139.00	191	193.00	115
60.00	5992	103.00	759	140.00	483	195.00	65
61.00	26408	104.00	2155	141.00	6634	196.00	146
62.00	28368	105.00	627	142.00	902	203.00	56
63.00	19240	106.00	2216	143.00	7073	208.00	148
64.00	1691	107.00	472	144.00	110	209.00	152
66.00	101	108.00	155	145.00	321	233.00	52
67.00	1471	110.00	369	146.00	935	237.00	56
68.00	59496	111.00	520	147.00	475	251.00	64
69.00	61920	112.00	404	148.00	1275	266.00	54
70.00	4725	113.00	512	149.00	117	278.00	64
71.00	216	114.00	77	150.00	622	281.00	546
72.00	3775	115.00	714	151.00	70	282.00	68

Report Date: 15-Apr-2015 13:05:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44
Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\BFB14922.D\8260_14.rslt\spectra.d
Injection Date: 13-Apr-2015 14:04:30
Spectrum: Tune Spec :Average 141-143(4.24-4.27) Bgrd 138(4.21)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 143

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	27936	116.00	2018	153.00	235	284.00	51
74.00	104528	117.00	3367	154.00	432	298.00	72
75.00	310656	118.00	2168	155.00	1413		

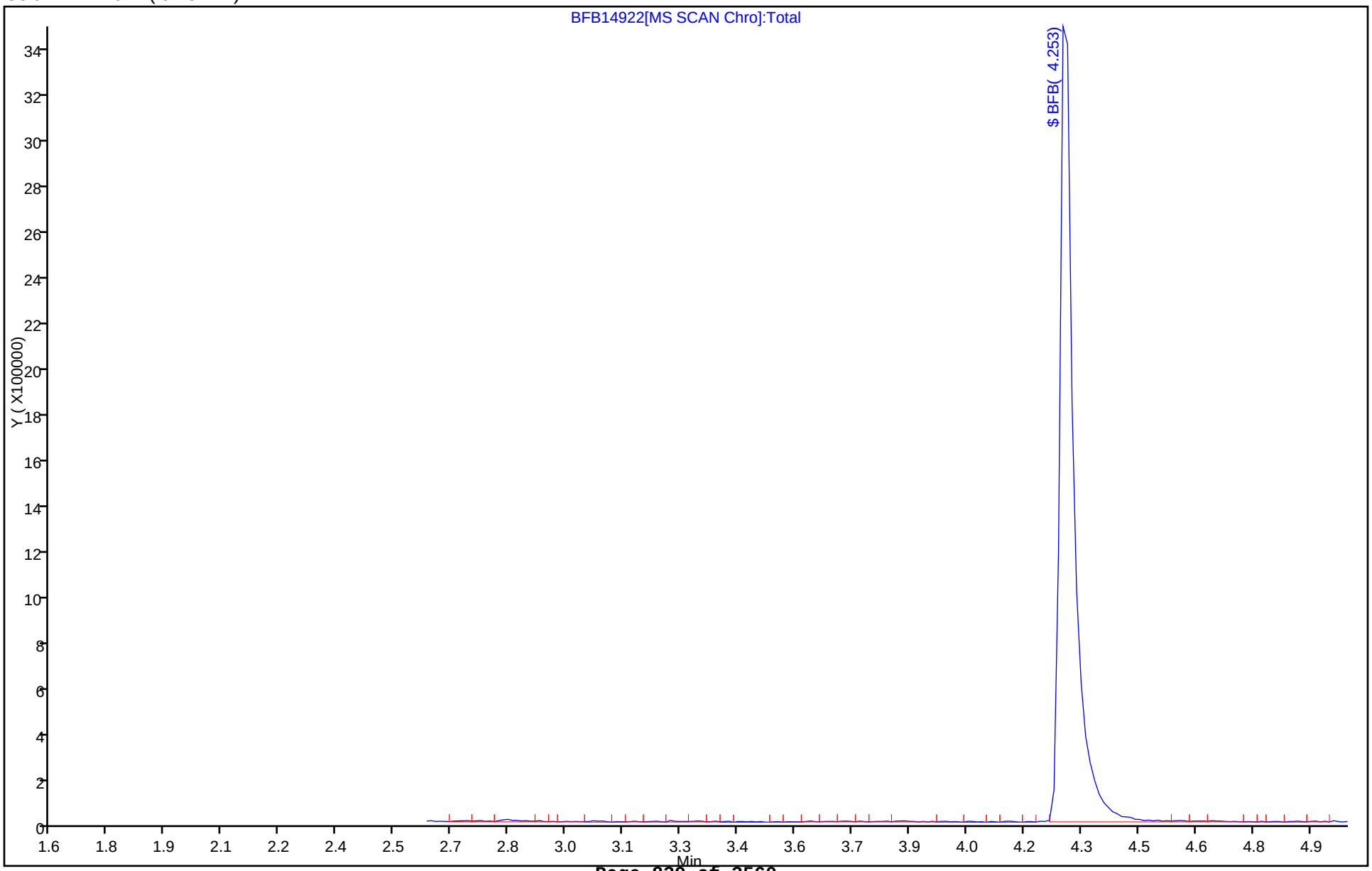
Report Date: 15-Apr-2015 13:05:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\BFB14922.D

Injection Date:	13-Apr-2015 14:04:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\BFB14924.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 14-Apr-2015 12:15:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 240-0042552-001
Operator ID: 002808 Instrument ID: A3UX14

Method: \\NCChrom\ChromData\A3UX14\20150414-42552.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:28:45 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 10 BFB	95	4.254	4.254	0.000	0	1451315	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

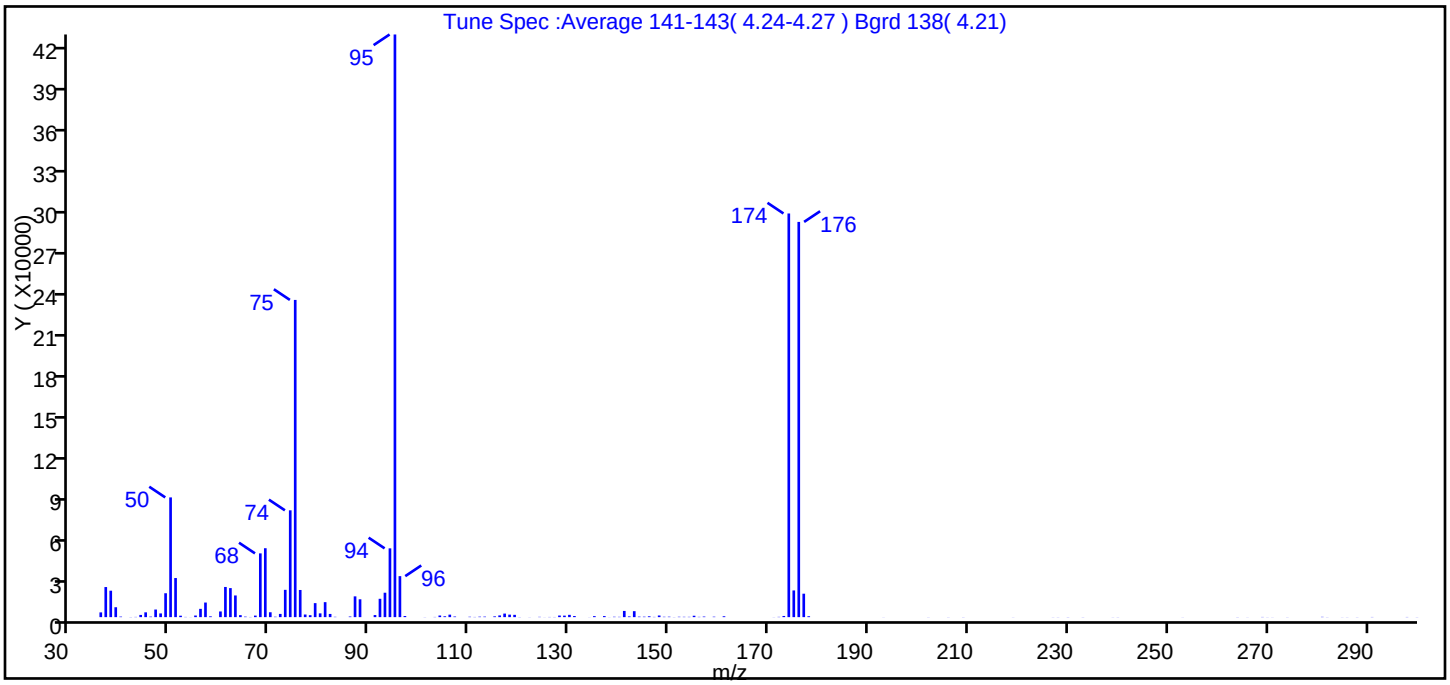
vmbfb_00013 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\BFB14924.D
Injection Date: 14-Apr-2015 12:15:30 Instrument ID: A3UX14
Lims ID: bfb
Client ID:
Operator ID: 002808 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_14 Limit Group: MSV 8260DOD ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.6
75	30 to 60% of m/z 95	54.4
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	69.3
175	5 to 9% of m/z 174	4.6 (6.6)
176	Greater than 95% but less than 101% of m/z 174	67.8 (97.9)
177	5 to 9% of m/z 176	4.0 (5.9)

Report Date: 15-Apr-2015 13:28:45 Chrom Revision: 2.2 13-Mar-2015 11:20:44

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\BFB14924.D\8260_14.rslt\spectra.d
Injection Date: 14-Apr-2015 12:15:30
Spectrum: Tune Spec :Average 141-143(4.24-4.27) Bgrd 138(4.21)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 140

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3431	73.00	19712	119.00	1659	161.00	625
37.00	21728	74.00	77112	120.00	104	171.00	67
38.00	19088	75.00	228992	122.00	67	172.00	196
39.00	7152	76.00	19608	124.00	210	173.00	841
40.00	383	77.00	1903	125.00	53	174.00	291392
42.00	105	78.00	1399	126.00	138	175.00	19288
43.00	161	79.00	10115	127.00	117	176.00	285312
44.00	1594	80.00	2730	128.00	1169	177.00	16928
45.00	3469	81.00	10820	129.00	1097	178.00	639
46.00	371	82.00	2311	130.00	1659	193.00	53
47.00	5492	83.00	230	131.00	799	202.00	66
48.00	2691	86.00	452	134.00	60	206.00	67
49.00	17256	87.00	15002	135.00	720	209.00	78
50.00	86440	88.00	12891	137.00	760	219.00	58
51.00	28232	91.00	1509	138.00	59	227.00	64
52.00	1042	92.00	13246	139.00	277	228.00	67
53.00	149	93.00	17632	140.00	216	230.00	92
54.00	54	94.00	49656	141.00	4482	233.00	77
55.00	1168	95.00	420608	142.00	499	239.00	63
56.00	5984	96.00	29600	143.00	4314	240.00	71
57.00	10536	97.00	808	144.00	363	253.00	55
58.00	569	101.00	76	145.00	328	264.00	88
60.00	4104	103.00	144	146.00	602	266.00	52
61.00	21784	104.00	1175	147.00	170	269.00	141
62.00	20960	105.00	627	148.00	1184	270.00	65
63.00	15652	106.00	1801	149.00	266	271.00	55
64.00	1433	107.00	445	150.00	325	274.00	70
65.00	357	110.00	284	151.00	87	281.00	211
66.00	122	111.00	139	152.00	271	282.00	73
67.00	1120	112.00	342	153.00	240	285.00	57
68.00	46032	113.00	368	154.00	212	286.00	64
69.00	49752	115.00	555	155.00	1007	288.00	71
70.00	3526	116.00	1239	156.00	200	291.00	130

Report Date: 15-Apr-2015 13:28:45 Chrom Revision: 2.2 13-Mar-2015 11:20:44
Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\BFB14924.D\8260_14.rslt\spectra.d
Injection Date: 14-Apr-2015 12:15:30
Spectrum: Tune Spec :Average 141-143(4.24-4.27) Bgrd 138(4.21)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 140

m/z	Y	m/z	Y	m/z	Y	m/z	Y
71.00	283	117.00	2568	157.00	417	298.00	129
72.00	2332	118.00	1807	159.00	324	300.00	73

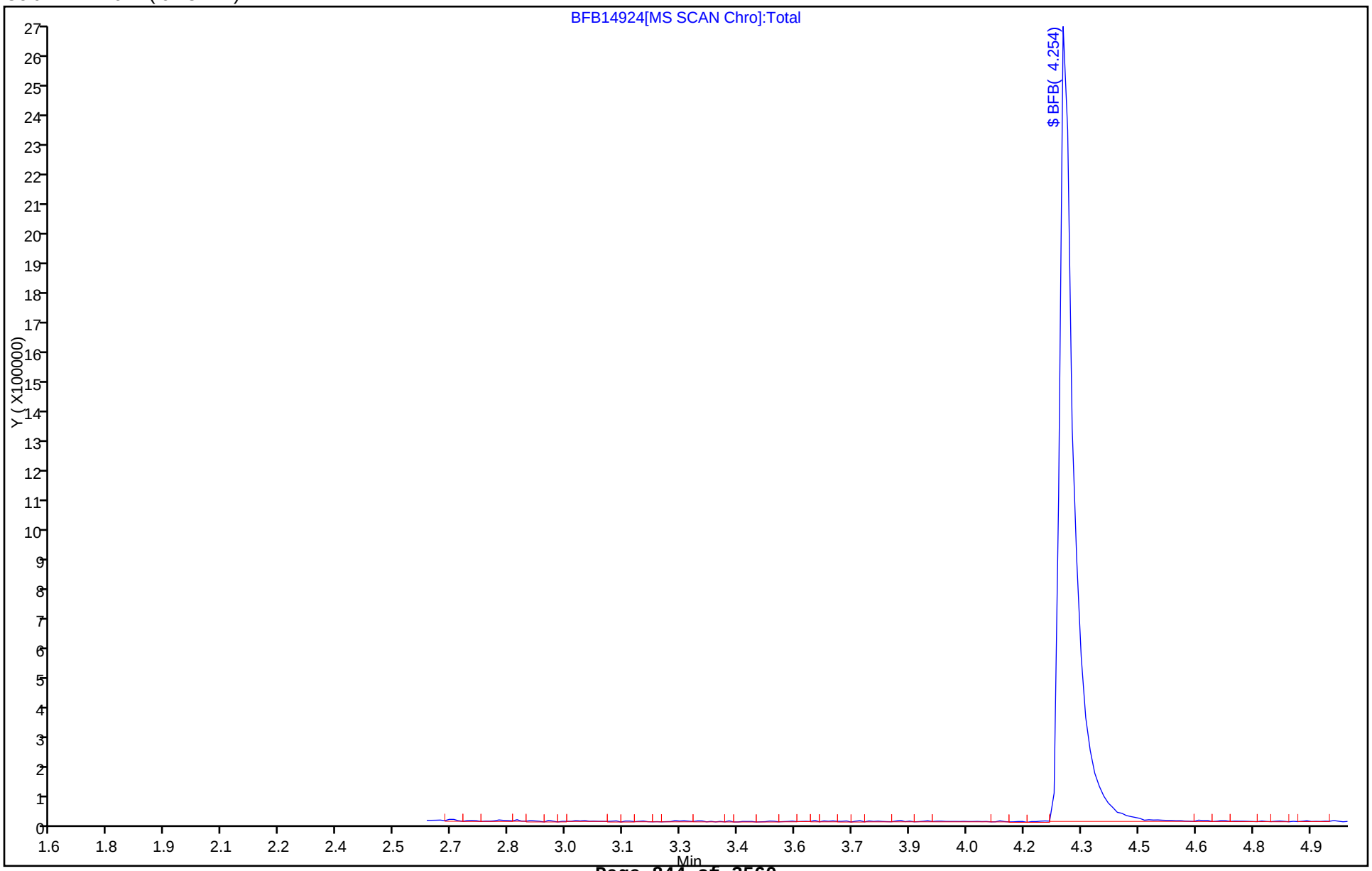
Report Date: 15-Apr-2015 13:28:45 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\BFB14924.D

Injection Date:	14-Apr-2015 12:15:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\BFB4271.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 08-Apr-2015 12:22:30 ALS Bottle#: 11 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: A3UX16

Method: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 09-Apr-2015 07:46:35 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.774	3.775	-0.001	0	505669	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

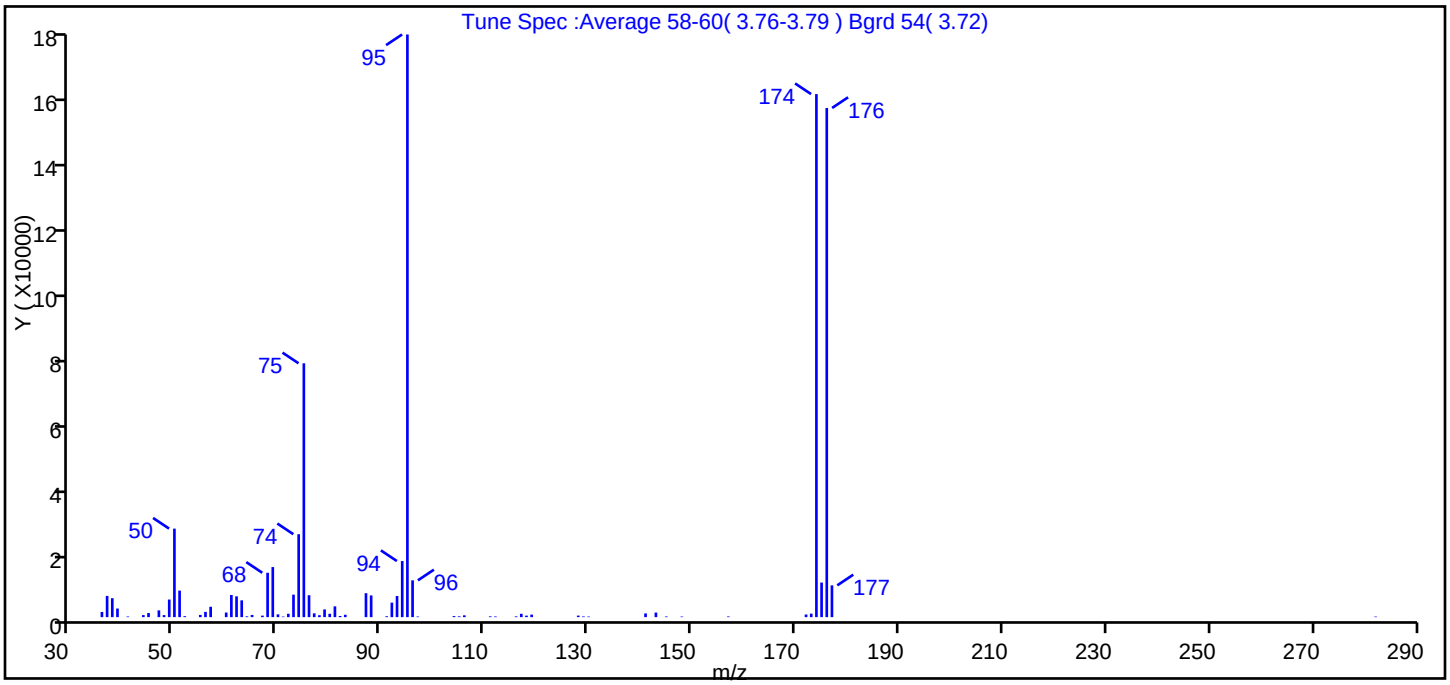
vmbfb_00013 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\BFB4271.D
Injection Date: 08-Apr-2015 12:22:30 Instrument ID: A3UX16
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 11 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_16 Limit Group: MSV 8260DOD ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.2
75	30 to 60% of m/z 95	43.6
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	89.8
175	5 to 9% of m/z 174	5.9 (6.6)
176	Greater than 95% but less than 101% of m/z 174	87.4 (97.3)
177	5 to 9% of m/z 176	5.5 (6.2)

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\BFB4271.D\8260_16.rslt\spectra.d
Injection Date: 08-Apr-2015 12:22:30
Spectrum: Tune Spec :Average 58-60(3.76-3.79) Bgrd 54(3.72)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 72

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1535	62.00	6150	81.00	3181	117.00	987
37.00	6267	63.00	4963	82.00	341	118.00	450
38.00	5599	64.00	236	83.00	704	119.00	752
39.00	2544	65.00	647	87.00	7075	128.00	456
41.00	187	67.00	450	88.00	6414	129.00	203
44.00	600	68.00	13099	91.00	260	130.00	172
45.00	1210	69.00	14781	92.00	4283	141.00	1099
47.00	2002	70.00	831	93.00	6244	143.00	1354
48.00	603	71.00	174	94.00	16560	145.00	198
49.00	5200	72.00	995	95.00	172032	148.00	173
50.00	26136	73.00	6637	96.00	10866	157.00	200
51.00	7846	74.00	24488	97.00	183	172.00	787
52.00	284	75.00	74952	104.00	310	173.00	1034
55.00	652	76.00	6469	105.00	234	174.00	154432
56.00	1549	77.00	1125	106.00	530	175.00	10214
57.00	3060	78.00	570	111.00	234	176.00	150336
60.00	1361	79.00	2281	112.00	196	177.00	9390
61.00	6538	80.00	991	116.00	229	282.00	168

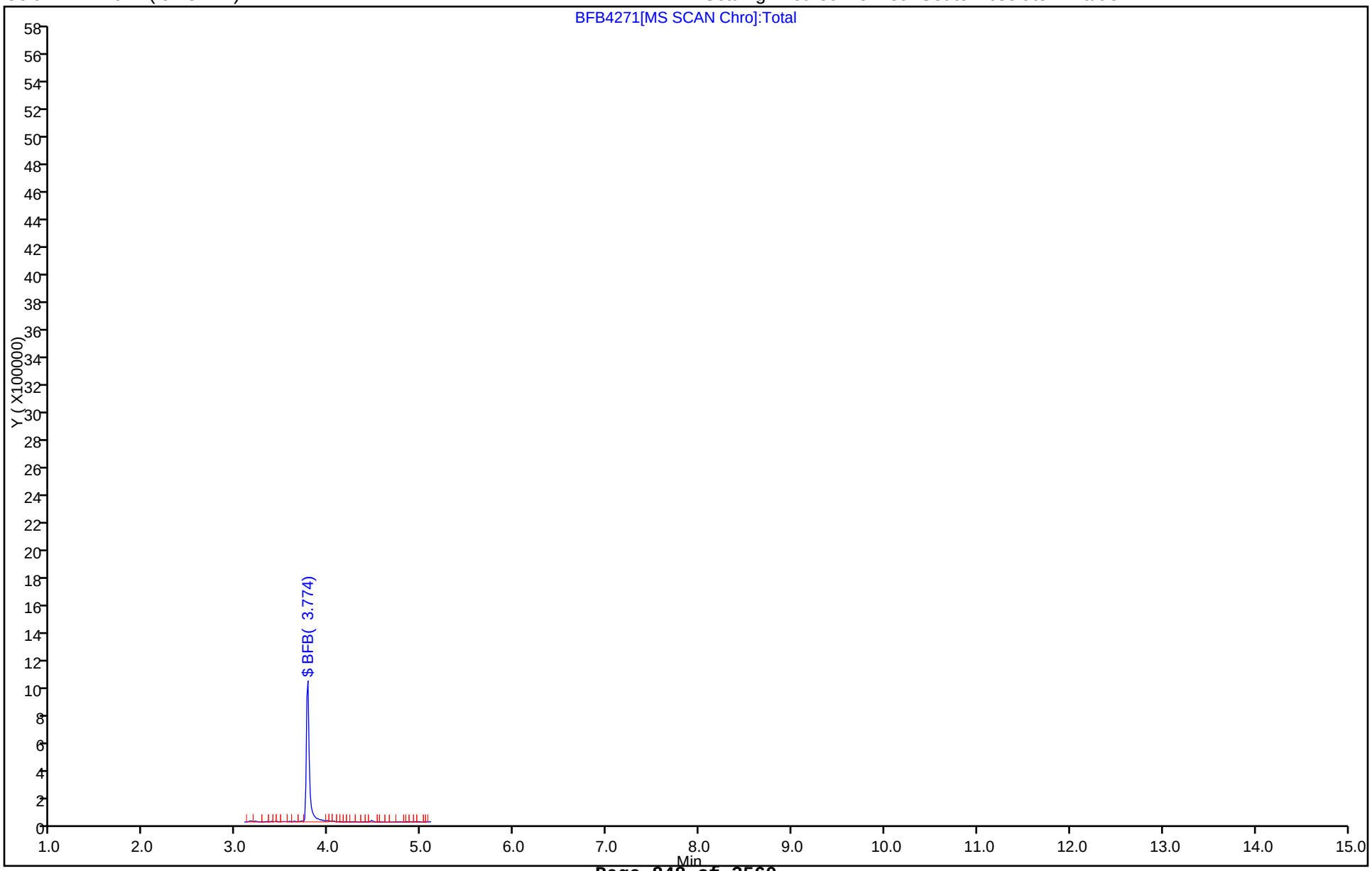
Report Date: 09-Apr-2015 07:46:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\BFB4271.D

Injection Date:	08-Apr-2015 12:22:30	Instrument ID:	A3UX16	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\BFB4274.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 14-Apr-2015 07:39:30 ALS Bottle#: 24 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0042532-001
Operator ID: Instrument ID: A3UX16

Method: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 14-Apr-2015 13:40:52 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.763	3.775	-0.012	0	538556	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

vmbfb_00013 Amount Added: 1.00 Units: uL

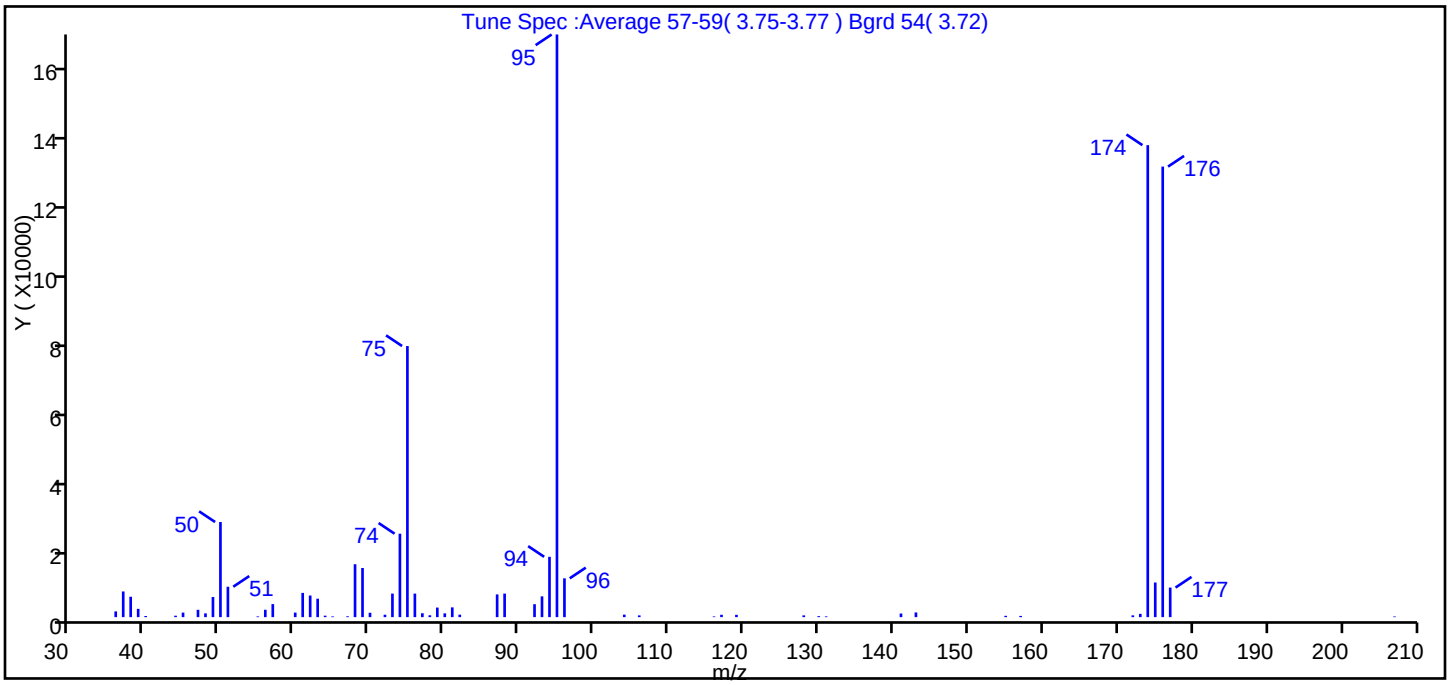
Report Date: 14-Apr-2015 13:40:53 Chrom Revision: 2.2 13-Mar-2015 11:20:44

MS Tune Report

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\BFB4274.D
Injection Date: 14-Apr-2015 07:39:30 Instrument ID: A3UX16
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 24 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_16 Limit Group: MSV 8260DOD ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.3
75	30 to 60% of m/z 95	46.5
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	81.0
175	5 to 9% of m/z 174	5.9 (7.3)
176	Greater than 95% but less than 101% of m/z 174	77.3 (95.5)
177	5 to 9% of m/z 176	5.1 (6.6)

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\BFB4274.D\8260_16.rslt\spectra.d
Injection Date: 14-Apr-2015 07:39:30
Spectrum: Tune Spec :Average 57-59(3.75-3.77) Bgrd 54(3.72)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 62

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1661	61.00	6998	79.00	2761	128.00	509
37.00	7410	62.00	6240	80.00	1095	130.00	284
38.00	5892	63.00	5322	81.00	2819	131.00	212
39.00	2395	64.00	423	82.00	717	141.00	1044
40.00	327	65.00	204	87.00	6556	143.00	1356
44.00	417	67.00	241	88.00	6791	155.00	381
45.00	1313	68.00	15268	92.00	3739	157.00	353
47.00	2113	69.00	14178	93.00	5995	172.00	515
48.00	1088	70.00	1264	94.00	17408	173.00	948
49.00	5814	72.00	697	95.00	168128	174.00	136192
50.00	27448	73.00	6793	96.00	11204	175.00	9997
51.00	8771	74.00	24080	104.00	725	176.00	130008
55.00	207	75.00	78232	106.00	507	177.00	8535
56.00	2127	76.00	6793	116.00	199	207.00	189
57.00	3762	77.00	1124	117.00	687		
60.00	1315	78.00	538	119.00	671		

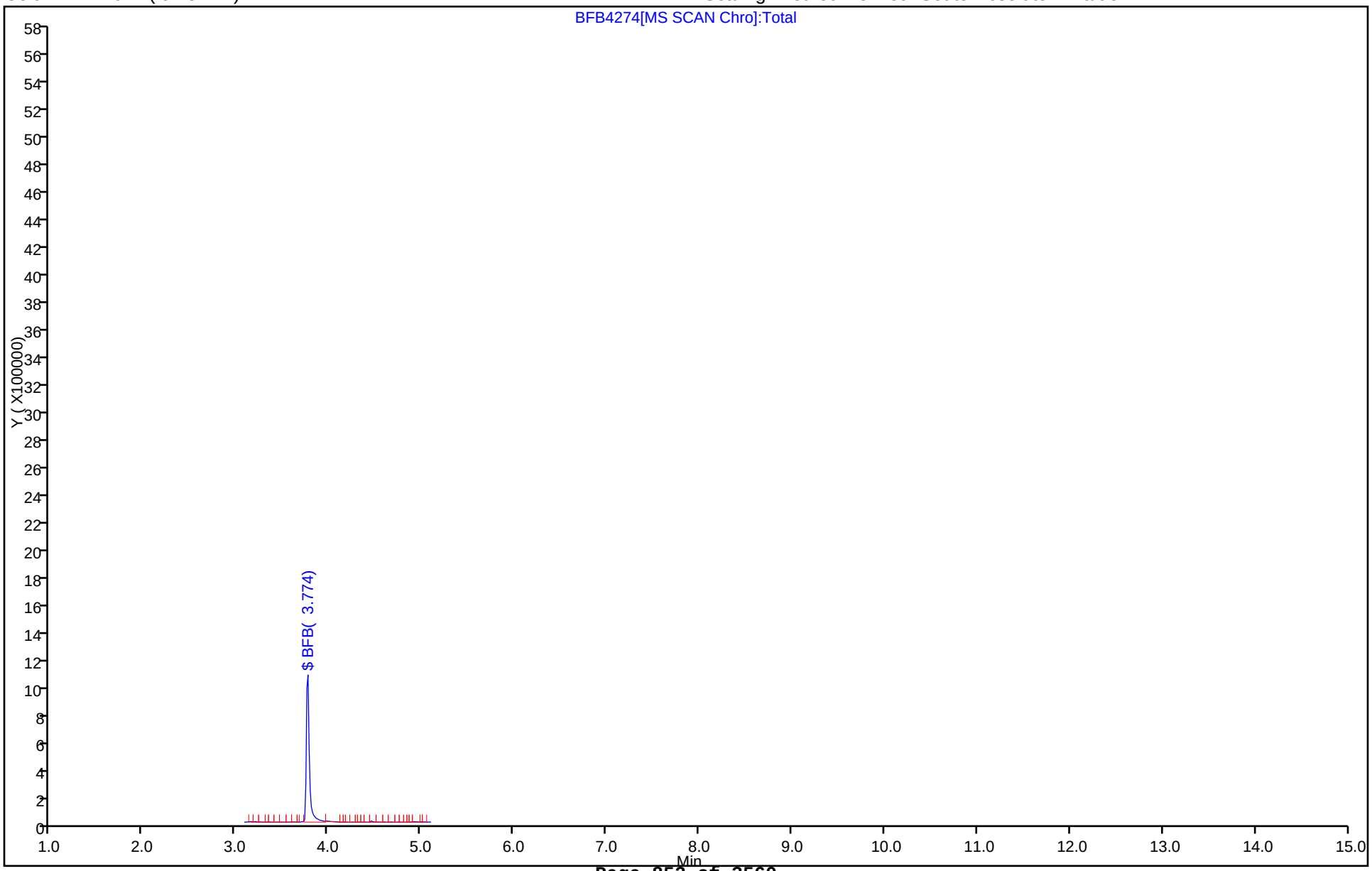
Report Date: 14-Apr-2015 13:40:53 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\BFB4274.D

Injection Date:	14-Apr-2015 07:39:30	Instrument ID:	A3UX16	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\BFB8752.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 02-Mar-2015 23:39:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0040994-001
Misc. Info.: BFB
Operator ID: 402279 Instrument ID: A3UX8

Method: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 03-Mar-2015 23:34:32 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: latat Date: 03-Mar-2015 05:12:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 4 BFB	95	3.742	3.742	0.000	0	872875	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

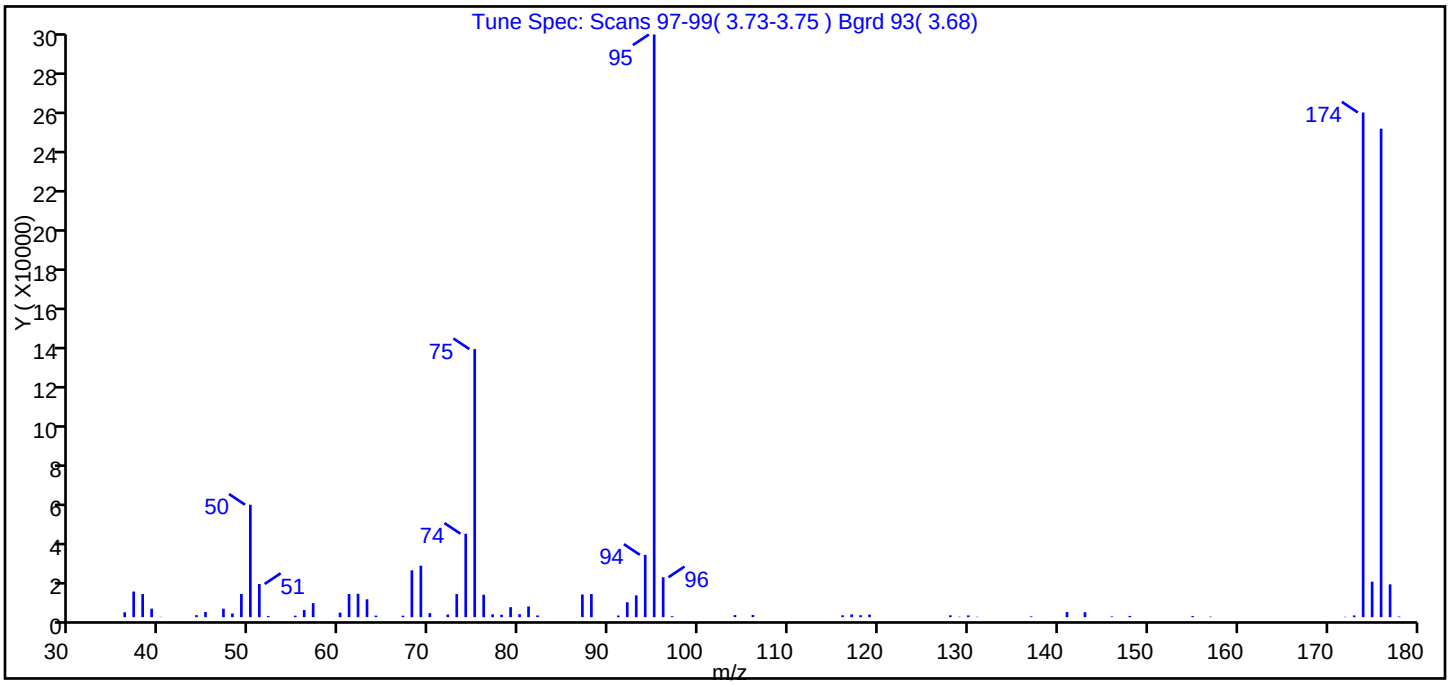
vmbfb_00013 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\BFB8752.D
Injection Date: 02-Mar-2015 23:39:30 Instrument ID: A3UX8
Lims ID: BFB
Client ID:
Operator ID: 402279 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_8 Limit Group: MSV 8260DOD ICAL
Tune Method: BFB Method 8260

$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.3
75	30 to 60% of m/z 95	46.0
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.3 (0.3)
174	50 to 120% of m/z 95	86.6
175	5 to 9% of m/z 174	6.1 (7.0)
176	Greater than 95% but less than 101% of m/z 174	83.8 (96.8)
177	5 to 9% of m/z 176	5.6 (6.7)

Report Date: 03-Mar-2015 23:34:34 Chrom Revision: 2.2 15-Jan-2015 13:05:58

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\BFB8752.D\8260_8.rslt\spectra.d
Injection Date: 02-Mar-2015 23:39:30
Spectrum: Tune Spec: Scans 97-99(3.73-3.75) Bgrd 93(3.68)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2455	62.00	11802	87.00	11465	131.00	186
37.00	12947	63.00	9026	88.00	11675	137.00	377
38.00	11674	64.00	770	91.00	820	141.00	2562
39.00	4277	67.00	729	92.00	7513	143.00	2495
40.00	139	68.00	23656	93.00	11013	146.00	347
44.00	1012	69.00	26024	94.00	31488	148.00	609
45.00	2571	70.00	2027	95.00	294528	155.00	541
47.00	4279	72.00	1310	96.00	20176	157.00	242
48.00	1837	73.00	11657	97.00	468	172.00	181
49.00	11715	74.00	42168	104.00	1030	173.00	860
50.00	56840	75.00	135488	106.00	1118	174.00	255104
51.00	16776	76.00	11317	116.00	916	175.00	17912
52.00	557	77.00	1406	117.00	1353	176.00	246912
55.00	738	78.00	1198	118.00	968	177.00	16592
56.00	3630	79.00	5033	119.00	1267	178.00	298
57.00	7078	80.00	1468	128.00	917		
60.00	2305	81.00	5410	129.00	208		
61.00	11683	82.00	873	130.00	884		

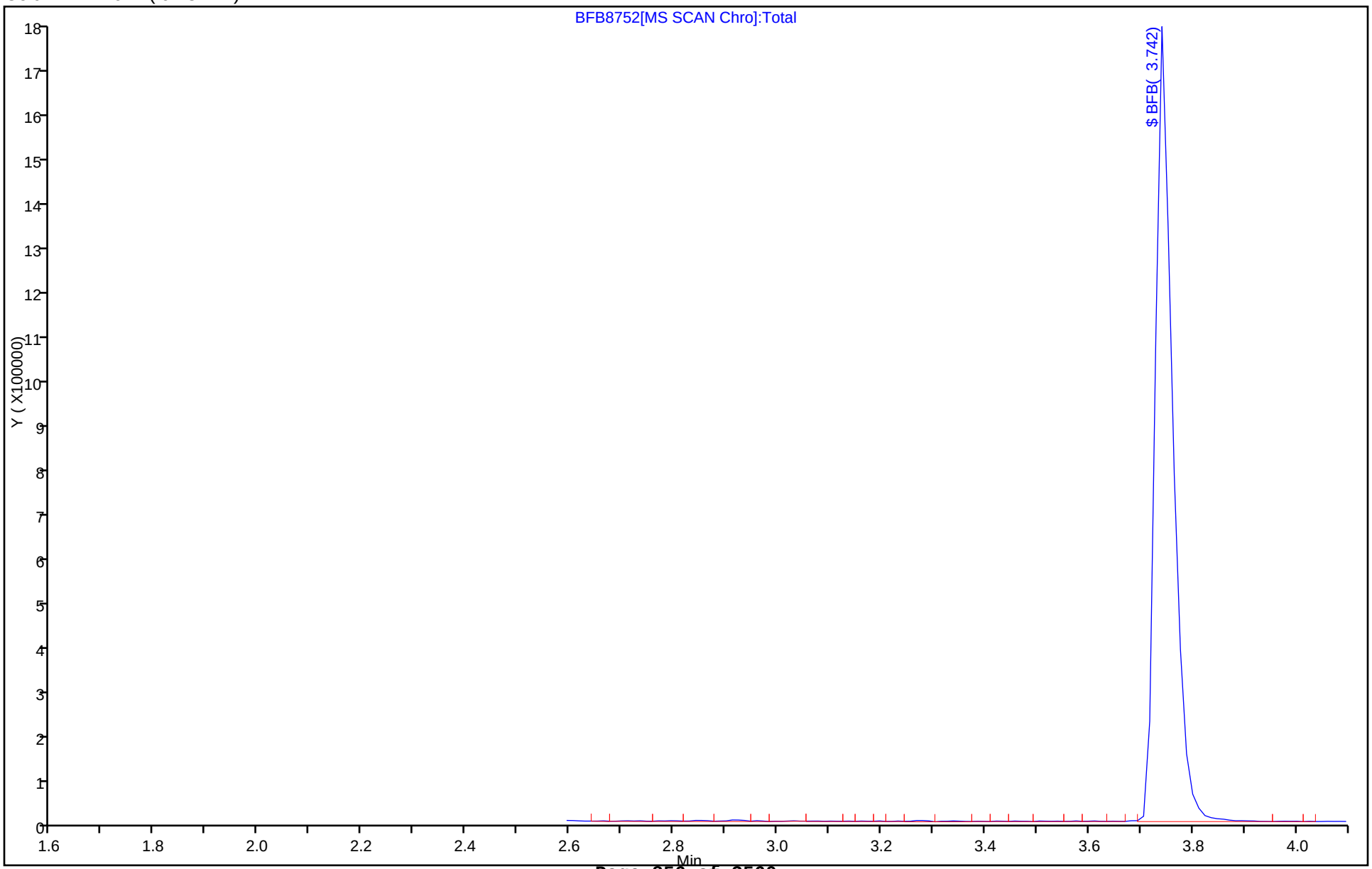
Report Date: 03-Mar-2015 23:34:34 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\BFB8752.D

Injection Date:	02-Mar-2015 23:39:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\BFB8785.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 14-Apr-2015 02:25:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0042522-001
Misc. Info.: BFB
Operator ID: 402279 Instrument ID: A3UX8

Method: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 00:48:04 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: latat Date: 14-Apr-2015 05:37:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.743	3.743	0.000	0	858516	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

vmbfb_00013 Amount Added: 1.00 Units: uL

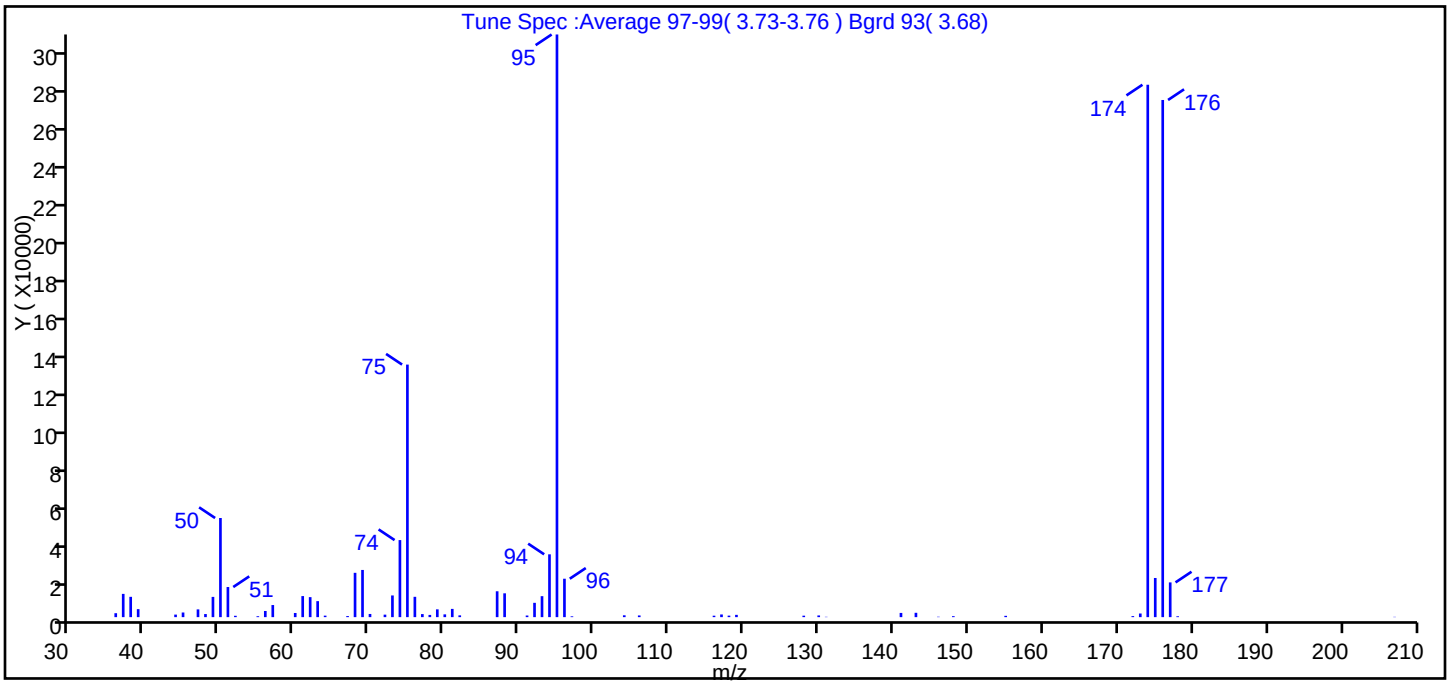
Report Date: 15-Apr-2015 00:48:05 Chrom Revision: 2.2 13-Mar-2015 11:20:44

MS Tune Report

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\BFB8785.D
Injection Date: 14-Apr-2015 02:25:30 Instrument ID: A3UX8
Lims ID: BFB
Client ID:
Operator ID: 402279 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_8 Limit Group: MSV 8260DOD ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.0
75	30 to 60% of m/z 95	43.3
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	91.4
175	5 to 9% of m/z 174	6.7 (7.4)
176	Greater than 95% but less than 101% of m/z 174	88.8 (97.1)
177	5 to 9% of m/z 176	6.0 (6.7)

Report Date: 15-Apr-2015 00:48:05 Chrom Revision: 2.2 13-Mar-2015 11:20:44

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\BFB8785.D\8260_8.rslt\spectra.d
Injection Date: 14-Apr-2015 02:25:30
Spectrum: Tune Spec :Average 97-99(3.73-3.76) Bgrd 93(3.68)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 66

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2053	62.00	10421	82.00	931	130.00	882
37.00	12115	63.00	8332	87.00	13474	131.00	170
38.00	10577	64.00	779	88.00	12406	141.00	2194
39.00	4165	67.00	562	91.00	846	143.00	2262
44.00	1327	68.00	23080	92.00	7456	146.00	207
45.00	2420	69.00	24576	93.00	10924	148.00	496
47.00	4037	70.00	1654	94.00	32712	155.00	684
48.00	1610	72.00	1300	95.00	303424	172.00	535
49.00	10547	73.00	11297	96.00	20008	173.00	1893
50.00	51624	74.00	40128	97.00	415	174.00	277248
51.00	15684	75.00	131520	104.00	963	175.00	20392
52.00	710	76.00	10586	106.00	881	176.00	269312
55.00	474	77.00	1594	116.00	751	177.00	18096
56.00	3206	78.00	1160	117.00	1396	178.00	447
57.00	6303	79.00	4061	118.00	791	207.00	149
60.00	2164	80.00	1448	119.00	1192		
61.00	10966	81.00	4293	128.00	760		

Report Date: 15-Apr-2015 00:48:05 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\BFB8785.D

Injection Date:	14-Apr-2015 02:25:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-176277/1-A

Matrix: Solid | Lab File ID: UX86993.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/14/2015 10:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176276 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	1.0	U	5.0	1.0	0.56
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	5.0	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	5.0	1.0	0.39
75-34-3	1,1-Dichloroethane	1.0	U	5.0	1.0	0.36
75-35-4	1,1-Dichloroethene	1.0	U	5.0	1.0	0.52
107-06-2	1,2-Dichloroethane	1.0	U	5.0	1.0	0.34
540-59-0	1,2-Dichloroethene, Total	2.0	U	10	2.0	0.36
78-87-5	1,2-Dichloropropane	2.0	U	5.0	2.0	0.69
78-93-3	2-Butanone (MEK)	4.0	U	20	4.0	1.4
591-78-6	2-Hexanone	1.0	U	20	1.0	0.63
108-10-1	4-Methyl-2-pentanone (MIBK)	0.653	J	20	1.0	0.54
71-43-2	Benzene	0.50	U	5.0	0.50	0.23
75-25-2	Bromoform	1.0	U	5.0	1.0	0.33
74-83-9	Bromomethane	1.0	U	5.0	1.0	0.54
75-15-0	Carbon disulfide	1.0	U	5.0	1.0	0.44
56-23-5	Carbon tetrachloride	1.0	U	5.0	1.0	0.37
108-90-7	Chlorobenzene	1.0	U	5.0	1.0	0.33
75-27-4	Bromodichloromethane	0.50	U	5.0	0.50	0.28
74-87-3	Chloromethane	0.50	U	5.0	0.50	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	5.0	1.0	0.34
124-48-1	Dibromochloromethane	1.0	U	5.0	1.0	0.55
100-41-4	Ethylbenzene	0.50	U	5.0	0.50	0.26
1634-04-4	Methyl tert-butyl ether	1.0	U	5.0	1.0	0.43
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.67
100-42-5	Styrene	0.50	U	5.0	0.50	0.15
127-18-4	Tetrachloroethene	1.0	U	5.0	1.0	0.52
108-88-3	Toluene	0.50	U	5.0	0.50	0.27
67-66-3	Chloroform	0.50	U	5.0	0.50	0.29
74-97-5	Bromochloromethane	2.0	U	5.0	2.0	0.71
106-93-4	1,2-Dibromoethane	1.0	U	5.0	1.0	0.50
10061-02-6	trans-1,3-Dichloropropene	1.0	U	5.0	1.0	0.54
79-01-6	Trichloroethene	1.0	U	5.0	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	5.0	1.0	0.39
75-00-3	Chloroethane	1.0	U	5.0	1.0	0.86
1330-20-7	Xylenes, Total	2.0	U	10	2.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-176277/1-A

Matrix: Solid Lab File ID: UX86993.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/14/2015 10:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176276 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		61-130
2037-26-5	Toluene-d8 (Surr)	108		85-115
460-00-4	4-Bromofluorobenzene (Surr)	94		85-120
1868-53-7	Dibromofluoromethane (Surr)	99		59-138

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86993.D
Lims ID: MB 240-176277/1-A
Client ID:
Sample Type: MB
Inject. Date: 14-Apr-2015 10:43:30 ALS Bottle#: 24 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042522-026
Operator ID: 402279 Instrument ID: A3UX8

Method: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 00:48:07 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: latat Date: 15-Apr-2015 00:25:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.160	5.157	0.003	99	1281078	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.680	7.689	-0.009	94	973617	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.881	9.878	0.003	98	467084	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.627	4.624	0.003	94	256552	50.0	49.4	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.887	4.896	-0.009	90	287675	50.0	48.8	
$ 6 Toluene-d8 (Surr)	98	6.426	6.422	0.004	93	1143740	50.0	53.9	
$ 7 4-Bromofluorobenzene (Surr	95	8.757	8.765	-0.008	97	361981	50.0	47.1	
9 Dichlorodifluoromethane	85		1.582					ND	
10 Chloromethane	50		1.748					ND	
11 Vinyl chloride	62		1.866					ND	
12 Butadiene	54		1.914					ND	
13 Bromomethane	94		2.186					ND	
14 Chloroethane	64		2.281					ND	
15 Dichlorofluoromethane	67		2.458					ND	
16 Trichlorofluoromethane	101		2.505					ND	
17 Ethyl ether	59	2.734	2.742	-0.008	78	2750		0.6602	
18 Acrolein	56		2.837					ND	
19 1,1-Dichloroethene	96		2.931					ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.943					ND	
21 Acetone	43		2.955					ND	
22 Methylal	45		2.980					ND	
23 Iodomethane	142		3.062					ND	
24 Carbon disulfide	76		3.121					ND	
25 Acetonitrile	41		3.181					ND	
26 3-Chloro-1-propene	76		3.215					ND	
27 Methyl acetate	43		3.227					ND	
28 Methylene Chloride	84		3.298					ND	
29 2-Methyl-2-propanol	59		3.381					ND	
30 Acrylonitrile	53		3.488					ND	
31 trans-1,2-Dichloroethene	96		3.523					ND	
32 Methyl tert-butyl ether	73		3.523					ND	
33 Hexane	86		3.736					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63		3.843					ND	
35 Vinyl acetate	43		3.866					ND	
36 Isopropyl ether	87		3.890					ND	
37 2-Chloro-1,3-butadiene	53		3.914					ND	
38 Tert-butyl ethyl ether	59		4.151					ND	
40 2-Butanone (MEK)	43	4.272	4.269	0.003	52	2250		0.5585	
39 cis-1,2-Dichloroethene	96		4.280					ND	
41 2,2-Dichloropropane	77		4.280					ND	
43 Propionitrile	54		4.316					ND	
42 Ethyl acetate	43		4.316					ND	
44 Methacrylonitrile	41		4.435					ND	
45 Chlorobromomethane	128		4.458					ND	
46 Tetrahydrofuran	42		4.493					ND	
47 Chloroform	83		4.505					ND	
48 1,1,1-Trichloroethane	97		4.671					ND	
49 Cyclohexane	56		4.718					ND	
50 1,1-Dichloropropene	75		4.789					ND	
51 Carbon tetrachloride	117		4.801					ND	
52 Isobutyl alcohol	41		4.825					ND	
53 1,2-Dichloroethane	62		4.955					ND	
54 Benzene	78		4.955					ND	
55 Tert-amyl methyl ether	73		5.015					ND	
56 n-Heptane	100		5.132					ND	
57 n-Butanol	56		5.334					ND	
58 Trichloroethene	130		5.440					ND	
59 Ethyl acrylate	55		5.488					ND	
60 Methylcyclohexane	83		5.617					ND	
61 1,2-Dichloropropane	63		5.617					ND	
62 Methyl methacrylate	41		5.677					ND	
63 Dibromomethane	93		5.712					ND	
64 1,4-Dioxane	88		5.712					ND	
65 Dichlorobromomethane	83		5.830					ND	
66 2-Nitropropane	41		5.997					ND	
67 2-Chloroethyl vinyl ether	63		6.055					ND	
68 cis-1,3-Dichloropropene	75		6.185					ND	
69 4-Methyl-2-pentanone (MIBK	43	6.296	6.304	-0.008	90	4431		0.6529	
70 Toluene	91		6.481					ND	
71 trans-1,3-Dichloropropene	75		6.647					ND	
72 Ethyl methacrylate	69		6.706					ND	
73 1,1,2-Trichloroethane	97		6.813					ND	
74 1,3-Dichloropropane	76		6.955					ND	
75 Tetrachloroethene	164		6.966					ND	
76 2-Hexanone	43		7.002					ND	
77 n-Butyl acetate	43		7.109					ND	
78 Chlorodibromomethane	129		7.168					ND	
79 Tetrahydrothiophene	60		7.168					ND	
80 Ethylene Dibromide	107		7.274					ND	
81 1-Chlorohexane	91		7.665					ND	
82 Chlorobenzene	112		7.712					ND	
83 1,1,1,2-Tetrachloroethane	131		7.771					ND	
84 Ethylbenzene	106		7.807					ND	
85 m-Xylene & p-Xylene	106		7.901					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 Styrene	104		8.280					ND	
86 o-Xylene	106		8.280					ND	
88 Bromoform	173		8.457					ND	
89 Isopropylbenzene	105		8.611					ND	
90 1,4-Dichlorobutane	90		8.697					ND	
91 Cyclohexanone	55		8.695					ND	
92 1,1,2,2-Tetrachloroethane	83		8.871					ND	
93 Bromobenzene	156		8.919					ND	
94 1,2,3-Trichloropropane	110		8.931					ND	
95 trans-1,4-Dichloro-2-buten	53		8.931					ND	
96 N-Propylbenzene	120		9.002					ND	
97 2-Chlorotoluene	126		9.096					ND	
98 1,3,5-Trimethylbenzene	105		9.167					ND	
99 4-Chlorotoluene	126		9.203					ND	
100 tert-Butylbenzene	119		9.487					ND	
101 Pentachloroethane	167		9.511					ND	
102 1,2,4-Trimethylbenzene	105		9.534					ND	
103 sec-Butylbenzene	105		9.700					ND	
104 1,3-Dichlorobenzene	146		9.818					ND	
105 4-Isopropyltoluene	119		9.842					ND	
106 1,4-Dichlorobenzene	146		9.901					ND	
107 1,2,3-Trimethylbenzene	105		9.949					ND	
108 Benzyl chloride	126		10.032					ND	
109 n-Butylbenzene	91		10.244					ND	
110 1,2-Dichlorobenzene	146		10.268					ND	
111 1,2-Dibromo-3-Chloropropan	157		11.025					ND	
112 1,3,5-Trichlorobenzene	180		11.250					ND	
113 1,2,4-Trichlorobenzene	180		11.865					ND	
114 Hexachlorobutadiene	225		12.031					ND	
115 Naphthalene	128		12.102					ND	
116 1,2,3-Trichlorobenzene	180		12.362					ND	
117 2-Methylnaphthalene	142		13.428					ND	
119 Epichlorohydrin	1		0.000					ND	
118 2-Ethyltoluene	1		0.000					ND	
120 3-Ethyltoluene	1		0.000					ND	
121 Ethylene oxide	1		0.000					ND	
122 1,3-Butadiene TIC	1		0.000					ND	
124 Propene oxide	1		0.000					ND	
123 1,3-Diethylbenzene TIC	1		0.000					ND	
125 Isobutylene TIC	1		0.000					ND	
S 126 1,2-Dichloroethene, Total	96		1.140					ND	
S 127 1,3-Dichloropropene, Total	75		6.760					ND	
S 128 Xylenes, Total	106		16.530					ND	
S 129 Trihalomethanes, Total	1		0.000					ND	
T 130 Butyl Methacrylate TIC	69		9.231					ND	
T 131 Hexachloroethane TIC	166		10.500					ND	
T 132 Chlorodifluoromethane TIC	51		1.590					ND	
T 133 Pentachloroethane TIC	167		9.514					ND	

Reagents:

VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00018	Amount Added:	1.15	Units: uL	Run Reagent
vmDist_H2o_00045	Amount Added:	0.00	Units:	Run Reagent

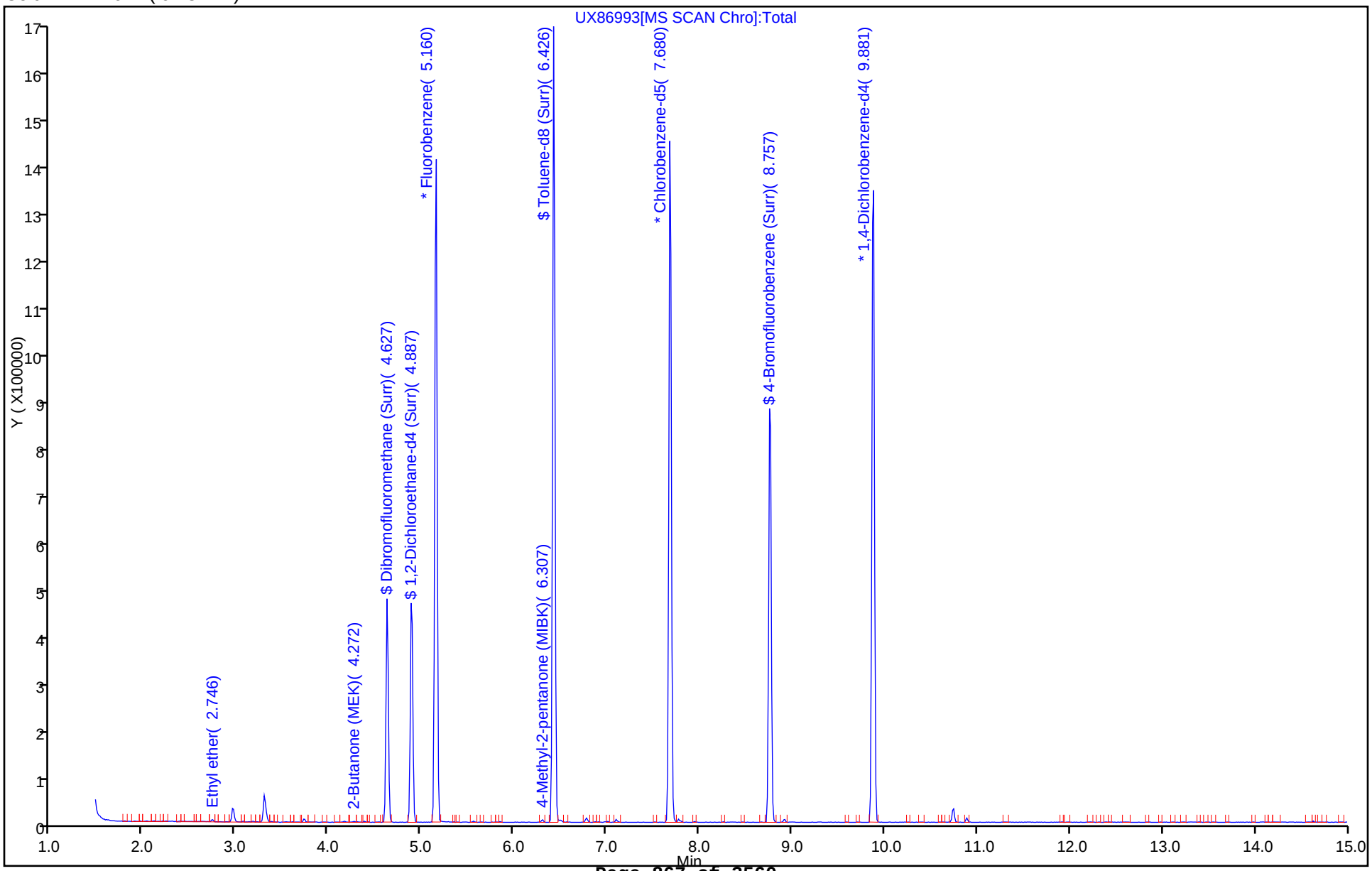
Report Date: 15-Apr-2015 00:48:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86993.D

Injection Date:	14-Apr-2015 10:43:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	MB 240-176277/1-A			Worklist Smp#:	26
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



Report Date: 15-Apr-2015 00:48:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86993.D

Injection Date: 14-Apr-2015 10:43:30 Instrument ID: A3UX8

Lims ID: MB 240-176277/1-A

Client ID:

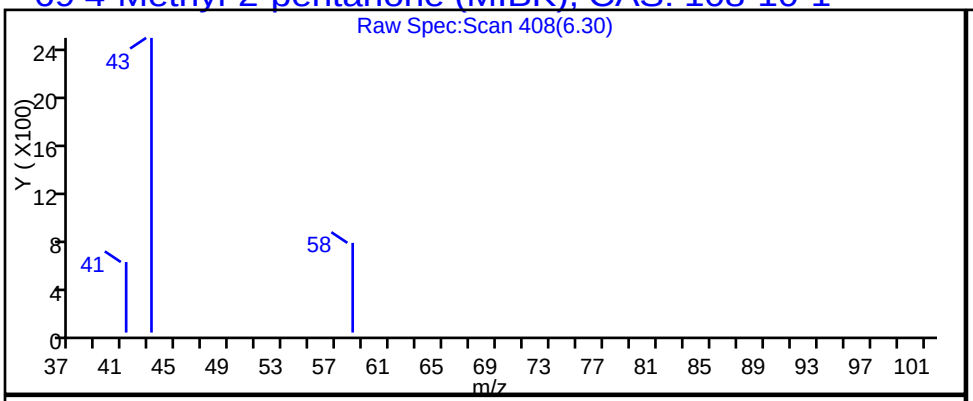
Operator ID: 402279 ALS Bottle#: 24 Worklist Smp#: 26

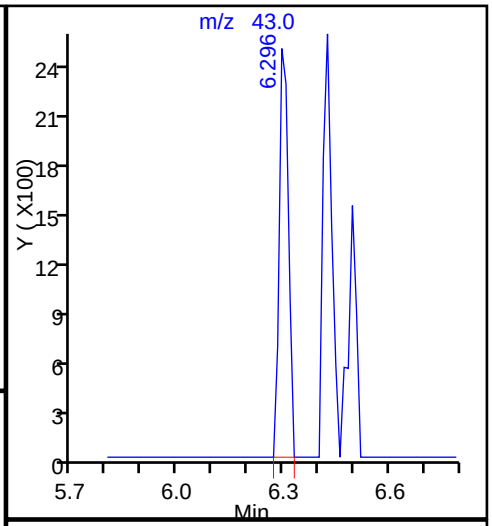
Purge Vol: 5.000 mL Dil. Factor: 1.0000

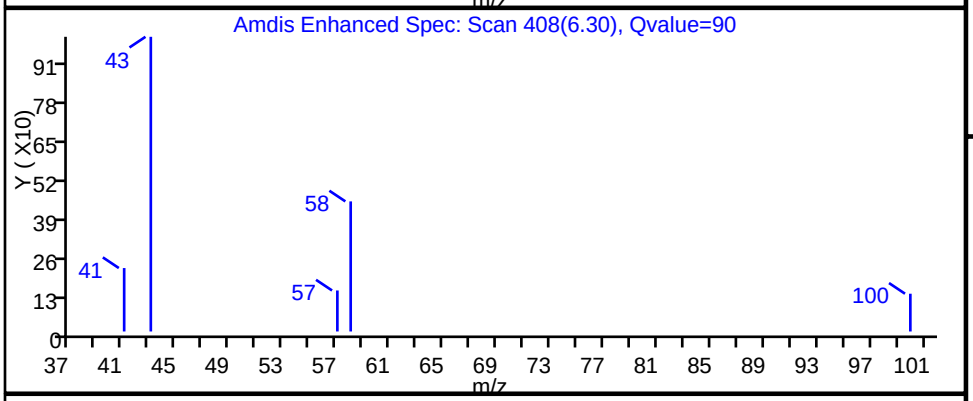
Method: 8260_8 Limit Group: MSV 8260DOD ICAL

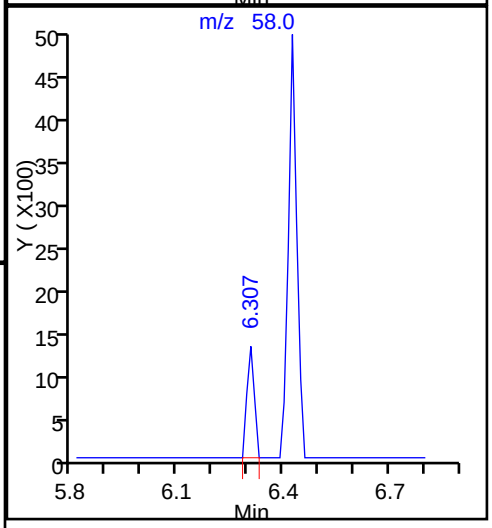
Column: DB-624 (0.18 mm) Detector MS SCAN

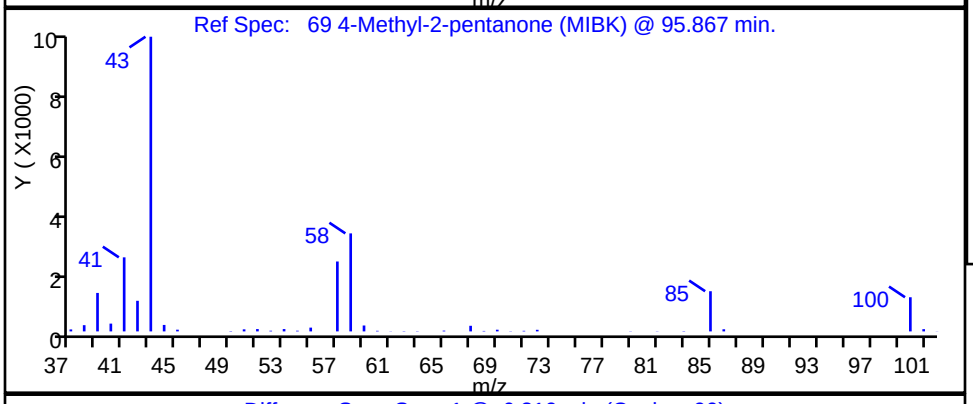
69 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

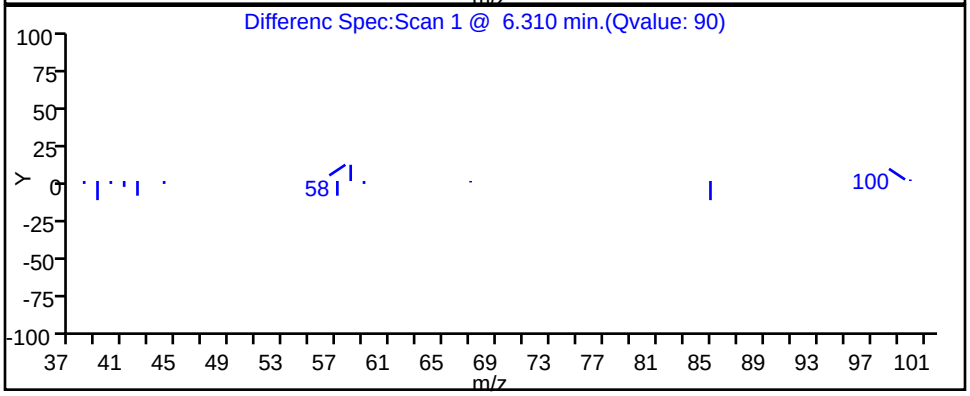












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-176298/6

Matrix: Water | Lab File ID: UXM7138.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/14/2015 09:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176298 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	0.22
79-00-5	1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.24
75-34-3	1,1-Dichloroethane	1.0	U	1.0	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	1.0	0.45
107-06-2	1,2-Dichloroethane	1.0	U	1.0	1.0	0.23
540-59-0	1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0	U	1.0	1.0	0.25
78-93-3	2-Butanone (MEK)	2.0	U	10	2.0	0.53
591-78-6	2-Hexanone	2.0	U	10	2.0	0.48
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0	U	10	2.0	0.99
67-64-1	Acetone	2.0	U	10	2.0	0.94
71-43-2	Benzene	1.0	U	1.0	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	1.0	0.25
75-27-4	Bromodichloromethane	1.0	U	1.0	1.0	0.29
74-87-3	Chloromethane	1.0	U	1.0	1.0	0.44
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.46
124-48-1	Dibromochloromethane	1.0	U	1.0	1.0	0.43
100-41-4	Ethylbenzene	1.0	U	1.0	1.0	0.25
1634-04-4	Methyl tert-butyl ether	0.50	U	1.0	0.50	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	1.0	0.33
100-42-5	Styrene	0.50	U	1.0	0.50	0.45
127-18-4	Tetrachloroethene	1.0	U	1.0	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	1.0	0.23
67-66-3	Chloroform	1.0	U	1.0	1.0	0.25
74-97-5	Bromochloromethane	1.0	U	1.0	1.0	0.50
106-93-4	1,2-Dibromoethane	1.0	U	1.0	1.0	0.32
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.56
79-01-6	Trichloroethene	1.0	U	1.0	1.0	0.22
75-01-4	Vinyl chloride	1.0	U	1.0	1.0	0.29
75-00-3	Chloroethane	1.0	U	1.0	1.0	0.32
1330-20-7	Xylenes, Total	2.0	U	2.0	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-176298/6

Matrix: Water Lab File ID: UXM7138.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/14/2015 09:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176298 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-120
2037-26-5	Toluene-d8 (Surr)	95		85-120
460-00-4	4-Bromofluorobenzene (Surr)	95		75-120
1868-53-7	Dibromofluoromethane (Surr)	95		85-115

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7138.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 14-Apr-2015 09:38:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042532-006
Operator ID: 1904 Instrument ID: A3UX16

Method: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 14-Apr-2015 13:40:55 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: quayler Date: 14-Apr-2015 10:15:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.587	5.588	-0.001	99	1520465	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.279	8.279	0.000	84	1113789	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	94	583965	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.006	5.007	-0.001	94	330707	11.4	10.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	379017	11.4	11.3	
$ 6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	92	1442564	11.4	10.8	
$ 7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	93	519536	11.4	10.9	
9 Dichlorodifluoromethane	85		1.615					ND	
10 Chloromethane	50		1.769					ND	
11 Vinyl chloride	62		1.888					ND	
12 Butadiene	54		1.935					ND	
13 Bromomethane	94		2.232					ND	
14 Chloroethane	64		2.327					ND	
15 Dichlorofluoromethane	67		2.516					ND	
16 Trichlorofluoromethane	101		2.576					ND	
17 Ethyl ether	59		2.836					ND	
18 Acrolein	56		2.943					ND	
19 1,1-Dichloroethene	96		3.050					ND	
20 1,1,2-Trichloro-1,2,2-trif	151		3.085					ND	
21 Acetone	43	3.085	3.085	0.000	98	6879		0.7486	
22 Methylal	45		3.109					ND	
23 Iodomethane	142		3.192					ND	
24 Carbon disulfide	76		3.263					ND	
25 Acetonitrile	41		3.334					ND	
26 3-Chloro-1-propene	76		3.382					ND	
27 Methyl acetate	43		3.394					ND	
28 Methylene Chloride	84		3.489					ND	
29 2-Methyl-2-propanol	59		3.572					ND	
30 Acrylonitrile	53		3.690					ND	
31 Methyl tert-butyl ether	73		3.738					ND	
32 trans-1,2-Dichloroethene	96		3.738					ND	
33 Hexane	86		3.987					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63		4.105					ND	
35 Vinyl acetate	43		4.141					ND	
36 Isopropyl ether	87		4.165					ND	
37 2-Chloro-1,3-butadiene	53		4.188					ND	
38 Tert-butyl ethyl ether	59		4.485					ND	
40 2-Butanone (MEK)	43		4.603					ND	
39 cis-1,2-Dichloroethene	96		4.603					ND	
41 2,2-Dichloropropane	77		4.610					ND	
42 Propionitrile	54		4.651					ND	
43 Ethyl acetate	43		4.651					ND	
44 Methacrylonitrile	41		4.781					ND	
45 Chlorobromomethane	128		4.805					ND	
46 Tetrahydrofuran	42		4.852					ND	
47 Chloroform	83		4.864					ND	
48 1,1,1-Trichloroethane	97		5.042					ND	
49 Cyclohexane	56		5.101					ND	
50 1,1-Dichloropropene	75		5.184					ND	
51 Carbon tetrachloride	117		5.196					ND	
52 Isobutyl alcohol	41		5.232					ND	
53 1,2-Dichloroethane	62		5.362					ND	
54 Benzene	78		5.362					ND	
55 Tert-amyl methyl ether	73		5.445					ND	
56 n-Heptane	57		5.588					ND	
57 n-Butanol	56		5.801					ND	
58 Trichloroethene	130		5.908					ND	
59 Ethyl acrylate	55		5.967					ND	
60 Methylcyclohexane	83		6.086					ND	
61 1,2-Dichloropropane	63		6.098					ND	
62 Methyl methacrylate	41		6.169					ND	
63 Dibromomethane	93		6.192					ND	
64 1,4-Dioxane	88		6.192					ND	
65 Dichlorobromomethane	83		6.323					ND	
66 2-Nitropropane	41		6.501					ND	
67 2-Chloroethyl vinyl ether	63		6.572					ND	
68 cis-1,3-Dichloropropene	75		6.714					ND	
69 4-Methyl-2-pentanone (MIBK	43		6.833					ND	
70 Toluene	91		7.022					ND	
71 trans-1,3-Dichloropropene	75		7.188					ND	
72 Ethyl methacrylate	69		7.272					ND	
73 1,1,2-Trichloroethane	97		7.366					ND	
75 Tetrachloroethene	164		7.521					ND	
74 1,3-Dichloropropane	76		7.521					ND	
76 2-Hexanone	43		7.580					ND	
77 n-Butyl acetate	43		7.698					ND	
79 Tetrahydrothiophene	60		7.734					ND	
78 Chlorodibromomethane	129		7.734					ND	
80 Ethylene Dibromide	107		7.841					ND	
81 1-Chlorohexane	91		8.268					ND	
82 Chlorobenzene	112		8.303					ND	
83 1,1,1,2-Tetrachloroethane	131		8.374					ND	
84 Ethylbenzene	106		8.398					ND	
85 m-Xylene & p-Xylene	106		8.505					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 o-Xylene	106		8.884					ND	
87 Styrene	104		8.896					ND	
88 Bromoform	173		9.074					ND	
89 Isopropylbenzene	105		9.240					ND	
90 1,4-Dichlorobutane	55		9.323					ND	
91 Cyclohexanone	55		9.330					ND	
92 1,1,2,2-Tetrachloroethane	83		9.501					ND	
93 Bromobenzene	156		9.536					ND	
95 1,2,3-Trichloropropane	110		9.548					ND	
94 trans-1,4-Dichloro-2-buten	53		9.560					ND	
96 N-Propylbenzene	120		9.631					ND	
97 2-Chlorotoluene	126		9.726					ND	
98 3-Ethyltoluene	105		9.733					ND	
99 1,3,5-Trimethylbenzene	105		9.797					ND	
100 4-Chlorotoluene	126		9.821					ND	
101 2-Ethyltoluene	105		10.018					ND	
102 tert-Butylbenzene	119		10.118					ND	
103 Pentachloroethane	167		10.141					ND	
104 1,2,4-Trimethylbenzene	105		10.165					ND	
105 sec-Butylbenzene	105		10.343					ND	
106 1,3-Dichlorobenzene	146		10.450					ND	
107 4-Isopropyltoluene	119		10.473					ND	
108 1,4-Dichlorobenzene	146		10.533					ND	
109 1,2,3-Trimethylbenzene	105		10.580					ND	
110 Benzyl chloride	126		10.663					ND	
111 n-Butylbenzene	91		10.888					ND	
112 1,2-Dichlorobenzene	146		10.900					ND	
113 1,2-Dibromo-3-Chloropropan	157		11.671					ND	
114 1,3,5-Trichlorobenzene	180		11.915					ND	
115 1,2,4-Trichlorobenzene	180		12.501					ND	
116 Hexachlorobutadiene	225		12.679					ND	
117 Naphthalene	128		12.750					ND	
118 1,2,3-Trichlorobenzene	180		13.011					ND	
119 2-Methylnaphthalene	142		14.066					ND	
129 Isobutylene TIC	1		0.000					ND	
126 Butyl Methacrylate TIC	1		0.000					ND	
120 Propene oxide	1		0.000					ND	
128 Pentachloroethane TIC	1		0.000					ND	
124 1,3-Butadiene TIC	1		0.000					ND	
123 Ethylene oxide	1		0.000					ND	
127 1,3-Diethylbenzene TIC	1		0.000					ND	
121 Epichlorohydrin	1		0.000					ND	
S 131 1,2-Dichloroethene, Total	96		1.140					ND	
S 132 1,3-Dichloropropene, Total	75		6.760					ND	
S 133 Xylenes, Total	106		16.530					ND	
S 134 Trihalomethanes, Total	1		0.000					ND	
T 125 Chlorodifluoromethane TIC	51		1.575					ND	
T 135 Hexachloroethane TIC	1		11.350					ND	

Reagents:

VM50IS_00045	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00063	Amount Added:	1.14	Units: uL	Run Reagent
vmDist_H2o_00042	Amount Added:	0.00	Units:	Run Reagent

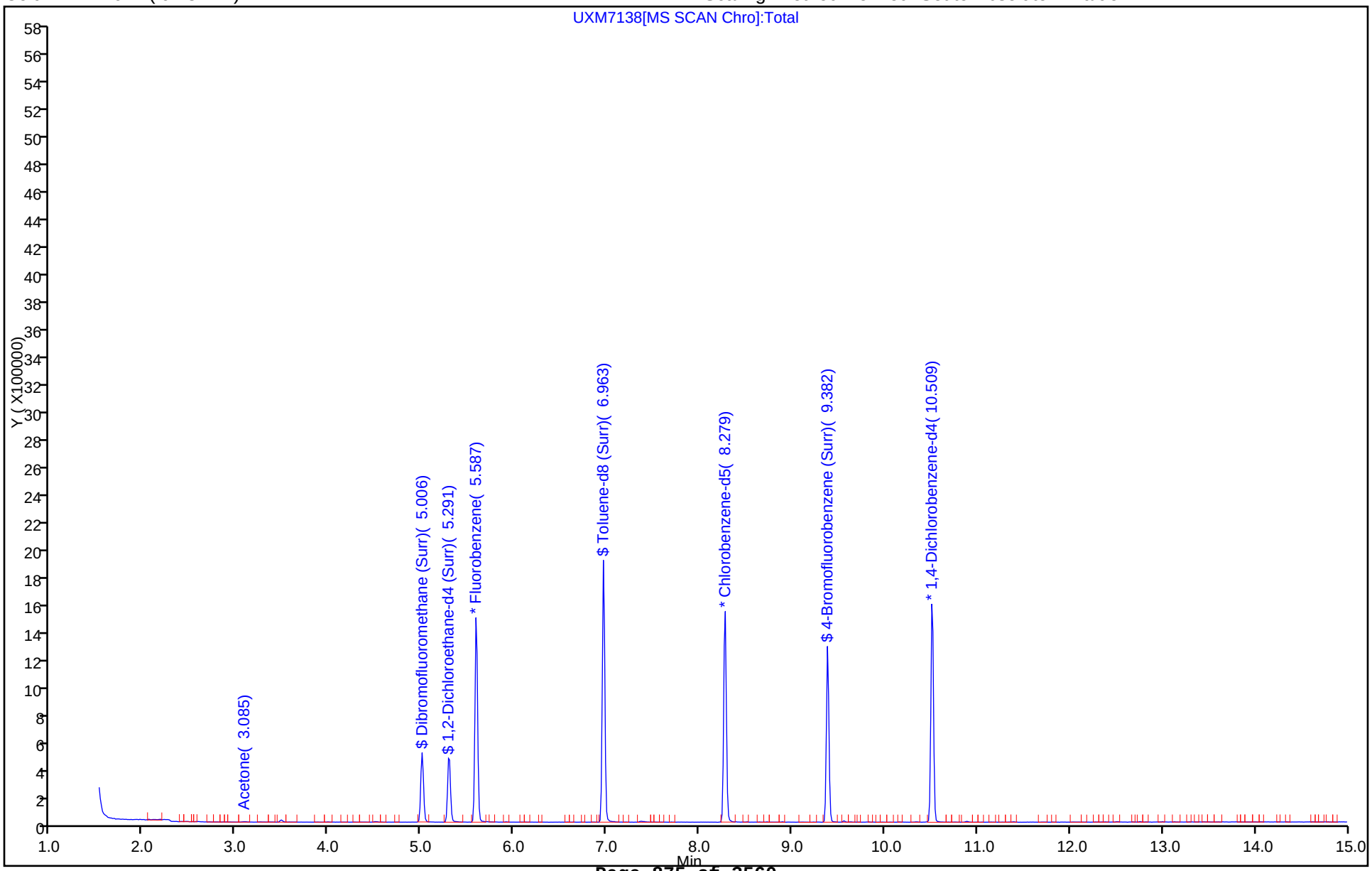
Report Date: 14-Apr-2015 13:40:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7138.D

Injection Date:	14-Apr-2015 09:38:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-176387/33

Matrix: Solid | Lab File ID: 142405.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/14/2015 15:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176387 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	1.0	U	5.0	1.0	0.56
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	5.0	1.0	0.34
79-00-5	1,1,2-Trichloroethane	1.0	U	5.0	1.0	0.39
75-34-3	1,1-Dichloroethane	1.0	U	5.0	1.0	0.36
75-35-4	1,1-Dichloroethene	1.0	U	5.0	1.0	0.52
107-06-2	1,2-Dichloroethane	1.0	U	5.0	1.0	0.34
540-59-0	1,2-Dichloroethene, Total	2.0	U	10	2.0	0.36
78-87-5	1,2-Dichloropropane	2.0	U	5.0	2.0	0.69
78-93-3	2-Butanone (MEK)	4.0	U	20	4.0	1.4
591-78-6	2-Hexanone	1.0	U	20	1.0	0.63
108-10-1	4-Methyl-2-pentanone (MIBK)	1.0	U	20	1.0	0.54
67-64-1	Acetone	8.91	J	20	15	6.3
71-43-2	Benzene	0.50	U	5.0	0.50	0.23
75-25-2	Bromoform	1.0	U	5.0	1.0	0.33
74-83-9	Bromomethane	1.0	U	5.0	1.0	0.54
75-15-0	Carbon disulfide	1.0	U	5.0	1.0	0.44
56-23-5	Carbon tetrachloride	1.0	U	5.0	1.0	0.37
108-90-7	Chlorobenzene	1.0	U	5.0	1.0	0.33
75-27-4	Bromodichloromethane	0.50	U	5.0	0.50	0.28
74-87-3	Chloromethane	0.50	U	5.0	0.50	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	5.0	1.0	0.34
124-48-1	Dibromochloromethane	1.0	U	5.0	1.0	0.55
100-41-4	Ethylbenzene	0.50	U	5.0	0.50	0.26
1634-04-4	Methyl tert-butyl ether	1.0	U	5.0	1.0	0.43
75-09-2	Methylene Chloride	2.50	J	5.0	2.0	0.67
100-42-5	Styrene	0.50	U	5.0	0.50	0.15
127-18-4	Tetrachloroethene	1.0	U	5.0	1.0	0.52
108-88-3	Toluene	0.50	U	5.0	0.50	0.27
67-66-3	Chloroform	0.50	U	5.0	0.50	0.29
74-97-5	Bromochloromethane	2.0	U	5.0	2.0	0.71
106-93-4	1,2-Dibromoethane	1.0	U	5.0	1.0	0.50
10061-02-6	trans-1,3-Dichloropropene	1.0	U	5.0	1.0	0.54
79-01-6	Trichloroethene	1.0	U	5.0	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	5.0	1.0	0.39
75-00-3	Chloroethane	1.0	U	5.0	1.0	0.86
1330-20-7	Xylenes, Total	2.0	U	10	2.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-176387/33

Matrix: Solid Lab File ID: 142405.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/14/2015 15:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176387 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		61-130
2037-26-5	Toluene-d8 (Surr)	103		85-115
460-00-4	4-Bromofluorobenzene (Surr)	96		85-120
1868-53-7	Dibromofluoromethane (Surr)	95		59-138

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142405.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 14-Apr-2015 15:28:30 ALS Bottle#: 9 Worklist Smp#: 33
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 240-0042552-033240-0042552-033
Operator ID: 002808 Instrument ID: A3UX14

Method: \\NCChrom\ChromData\A3UX14\20150414-42552.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:28:47 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 14-Apr-2015 15:48:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.789					ND	
* 1 Fluorobenzene	96	6.652	6.652	0.000	99	1165451	50.0	50.0	
* 4 Dioxane-d8 (IS)	96		7.339					ND	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	95	666484	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	95	346955	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.990	5.990	0.000	92	290614	50.0	47.7	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	94	380205	50.0	52.4	
$ 8 Toluene-d8 (Surr)	98	8.131	8.131	0.000	95	1028766	50.0	51.7	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	85	334146	50.0	48.1	
11 Dichlorodifluoromethane	85		1.316					ND	
12 Chloromethane	50		1.481					ND	
13 Vinyl chloride	62		1.600					ND	
14 Butadiene	54		1.623					ND	
15 Bromomethane	94		1.907					ND	
16 Ethylene oxide	44	1.966	1.955	0.011	20	5356		NC	
17 Chloroethane	64		2.002					ND	
18 Dichlorofluoromethane	67		2.262					ND	
19 Trichlorofluoromethane	101		2.298					ND	
20 Ethyl ether	59	2.641	2.641	0.000	80	1540		0.3382	
21 Acrolein	56		2.818					ND	
22 Propene oxide	58		2.819					ND	
23 1,1-Dichloroethene	96		2.889					ND	
24 1,1,2-Trichloro-1,2,2-trif	151		2.913					ND	
25 Methylal	45		2.932					ND	
26 Acetone	43	3.031	3.031	0.000	99	23708		8.91	
27 Iodomethane	142		3.079					ND	
28 Carbon disulfide	76		3.150					ND	
29 3-Chloro-1-propene	76		3.386					ND	
30 Acetonitrile	41		3.434					ND	
31 Methyl acetate	43		3.469					ND	
32 Methylene Chloride	84	3.599	3.588	0.011	96	31415		2.50	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 2-Methyl-2-propanol	59		3.919					ND	
34 trans-1,2-Dichloroethene	96		3.990					ND	
35 Methyl tert-butyl ether	73		4.025					ND	
36 Acrylonitrile	53		4.037					ND	
37 Hexane	86	4.404	4.404	0.000	78	353		0.2189	
38 1,1-Dichloroethane	63		4.641					ND	
39 2-Chloro-1,3-butadiene	53		4.759					ND	
40 Isopropyl ether	87		4.771					ND	
41 Vinyl acetate	86		4.783					ND	
42 Tert-butyl ethyl ether	59		5.244					ND	
43 2,2-Dichloropropane	77		5.386					ND	
44 cis-1,2-Dichloroethene	96		5.410					ND	
45 2-Butanone (MEK)	43		5.481					ND	
46 Ethyl acetate	43		5.564					ND	
47 Propionitrile	54		5.564					ND	
48 Chlorobromomethane	128		5.694					ND	
49 Methacrylonitrile	41		5.718					ND	
50 Tetrahydrofuran	42		5.741					ND	
51 Chloroform	83		5.800					ND	
52 1,1,1-Trichloroethane	97		5.954					ND	
53 Cyclohexane	56		5.990					ND	
54 Carbon tetrachloride	117		6.120					ND	
55 1,1-Dichloropropene	75		6.143					ND	
56 Benzene	78		6.356					ND	
57 Isobutyl alcohol	41		6.392					ND	
58 1,2-Dichloroethane	62		6.404					ND	
59 Tert-amyl methyl ether	73		6.499					ND	
60 n-Heptane	100		6.640					ND	
61 Trichloroethene	130		7.007					ND	
62 n-Butanol	56	7.055	7.043	0.012	41	2372		29.0	
64 Methylcyclohexane	83		7.161					ND	
63 Ethyl acrylate	55		7.161					ND	
65 1,2-Dichloropropane	63		7.232					ND	
66 Tetrahydrothiophene	60		7.255					ND	
67 Dibromomethane	93		7.350					ND	
68 Methyl methacrylate	41		7.374					ND	
69 1,4-Dioxane	88		7.386					ND	
70 Dichlorobromomethane	83		7.504					ND	
71 2-Nitropropane	41		7.741					ND	
72 2-Chloroethyl vinyl ether	63		7.800					ND	
73 cis-1,3-Dichloropropene	75		7.907					ND	
74 Epichlorohydrin	57		7.919					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.060					ND	
76 Toluene	91		8.191					ND	
77 trans-1,3-Dichloropropene	75		8.404					ND	
78 Ethyl methacrylate	69		8.486					ND	
79 1,1,2-Trichloroethane	97		8.569					ND	
80 Tetrachloroethene	164		8.664					ND	
81 1,3-Dichloropropane	76		8.711					ND	
82 2-Hexanone	43		8.782					ND	
83 n-Butyl acetate	43	8.889	8.889	0.000	62	3238		0.2888	
84 Chlorodibromomethane	129		8.901					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 Ethylene Dibromide	107		8.995					ND	
86 1-Chlorohexane	91		9.386					ND	
87 Chlorobenzene	112		9.409					ND	
88 1,1,1,2-Tetrachloroethane	131		9.480					ND	
89 Ethylbenzene	106		9.504					ND	
90 m-Xylene & p-Xylene	106		9.599					ND	
91 o-Xylene	106		9.930					ND	
92 Styrene	104		9.954					ND	
93 Bromoform	173		10.119					ND	
94 Isopropylbenzene	105		10.238					ND	
95 Cyclohexanone	55		10.344					ND	
97 Bromobenzene	156		10.510					ND	
96 1,1,2,2-Tetrachloroethane	83		10.522					ND	
98 1,2,3-Trichloropropane	110		10.557					ND	
99 trans-1,4-Dichloro-2-buten	53		10.557					ND	
100 N-Propylbenzene	120		10.593					ND	
101 2-Chlorotoluene	126		10.664					ND	
102 1,3,5-Trimethylbenzene	105		10.735					ND	
103 4-Chlorotoluene	126		10.758					ND	
104 3-Ethyltoluene	105		10.920					ND	
105 tert-Butylbenzene	119		11.007					ND	
106 Pentachloroethane	167		11.042					ND	
107 1,2,4-Trimethylbenzene	105		11.054					ND	
108 2-Ethyltoluene	105		11.168					ND	
109 sec-Butylbenzene	105		11.196					ND	
110 1,3-Dichlorobenzene	146		11.303					ND	
111 4-Isopropyltoluene	119		11.314					ND	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	35	1147		0.1066	
113 1,2,3-Trimethylbenzene	105		11.409					ND	
114 Benzyl chloride	126		11.492					ND	
115 n-Butylbenzene	91		11.658					ND	
116 1,2-Dichlorobenzene	146		11.693					ND	
117 1,2-Dibromo-3-Chloropropan	157		12.356					ND	
118 1,3,5-Trichlorobenzene	180	12.521	12.510	0.011	82	3118		0.3199	
119 1,2,4-Trichlorobenzene	180		13.030					ND	
120 Hexachlorobutadiene	225		13.160					ND	
121 Naphthalene	128		13.231					ND	
122 1,2,3-Trichlorobenzene	180		13.421					ND	
123 2-Methylnaphthalene	142	14.095	14.095	0.000	89	20630		1.70	
130 1,4-Dichlorobutane	1		0.000					ND	
131 Hexachloroethane TIC	1		0.000					ND	
125 Isobutylene TIC	1		0.000					ND	
124 Chlorodifluoromethane TIC	1		0.000					ND	
128 1,3-Butadiene TIC	1		0.000					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
129 Pentachloroethane TIC	1		0.000					ND	
127 Butyl Methacrylate TIC	1		0.000					ND	
A 132 C6-C10	1	7.550	(4.240-10.860)		0	716617		NC	
A 133 C6-C12	1	8.508	(4.240-12.775)		0	1304084		NC	
S 134 1,2-Dichloroethene, Total	96		1.140					ND	
S 135 1,3-Dichloropropene, Total	75		6.760					ND	
S 136 Xylenes, Total	106		16.530					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

vmDist_H2o_00046	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VM250SS_00030	Amount Added:	1.00	Units: uL	Run Reagent

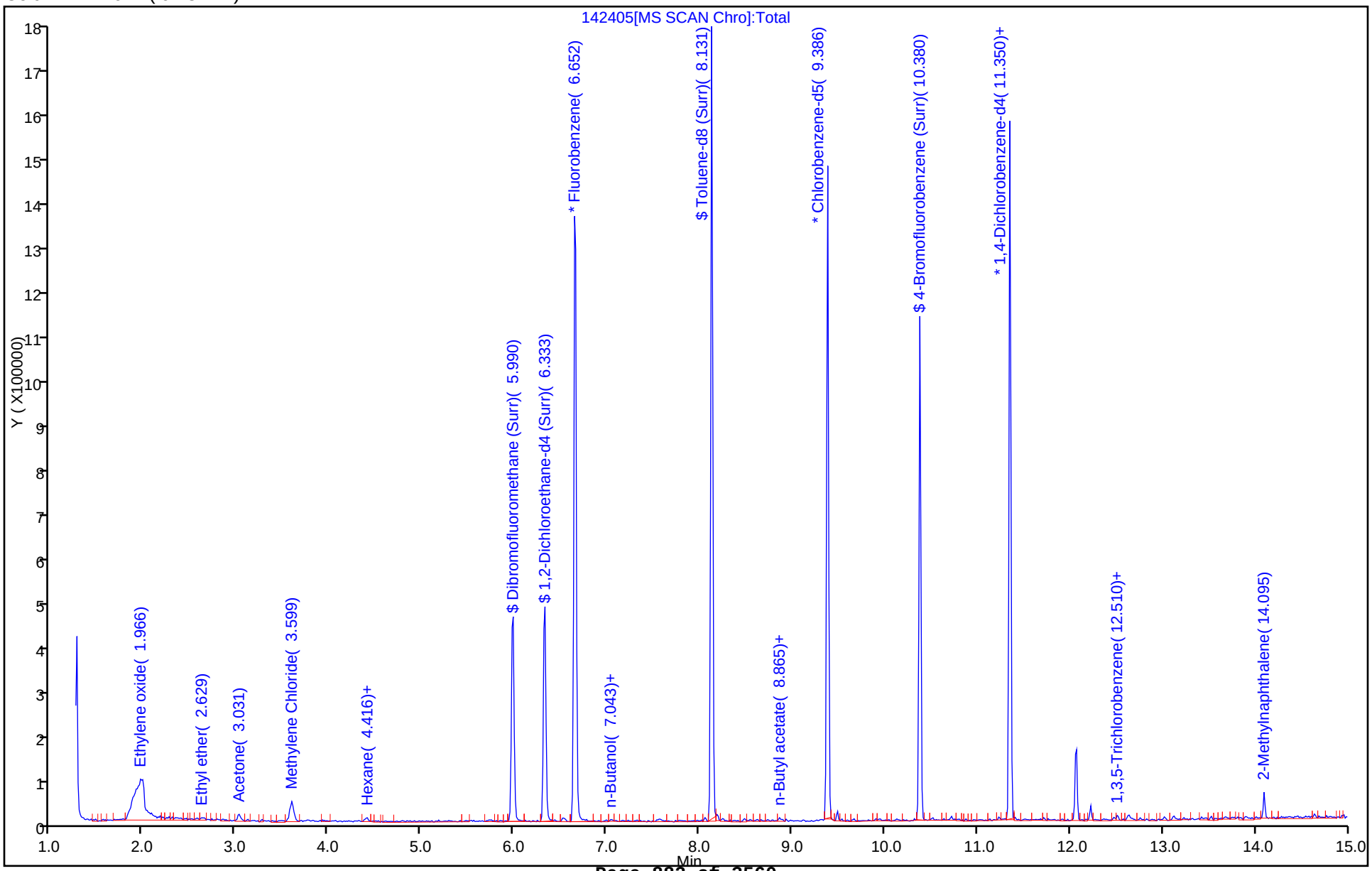
Report Date: 15-Apr-2015 13:28:54 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142405.D

Injection Date:	14-Apr-2015 15:28:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	mb			Worklist Smp#:	33
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



Report Date: 15-Apr-2015 13:28:54 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142405.D

Injection Date: 14-Apr-2015 15:28:30 Instrument ID: A3UX14

Lims ID: mb

Client ID:

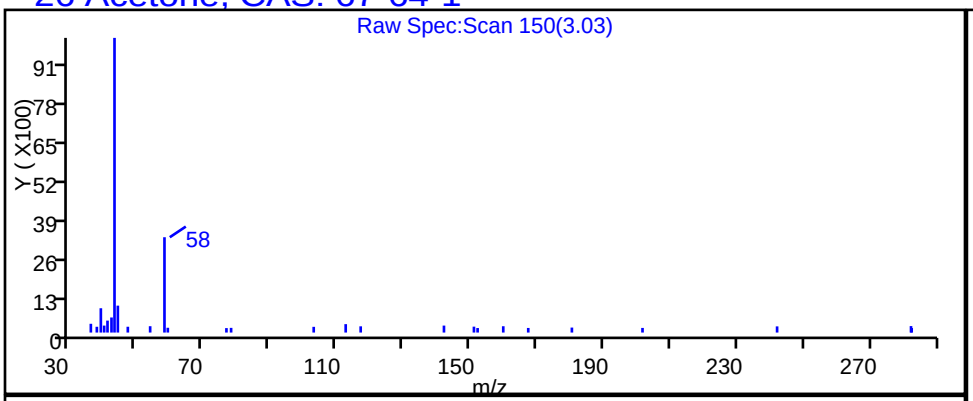
Operator ID: 002808 ALS Bottle#: 9 Worklist Smp#: 33

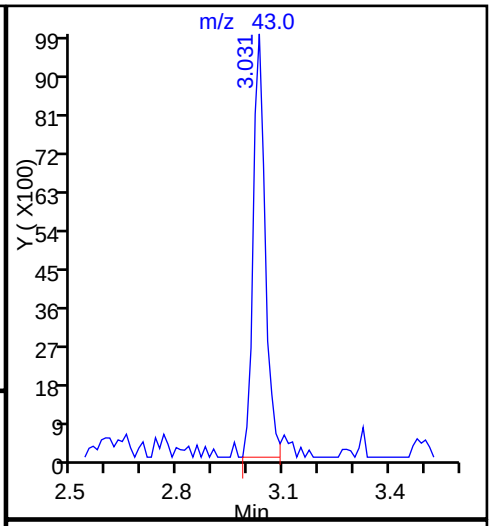
Purge Vol: 5.000 mL Dil. Factor: 1.0000

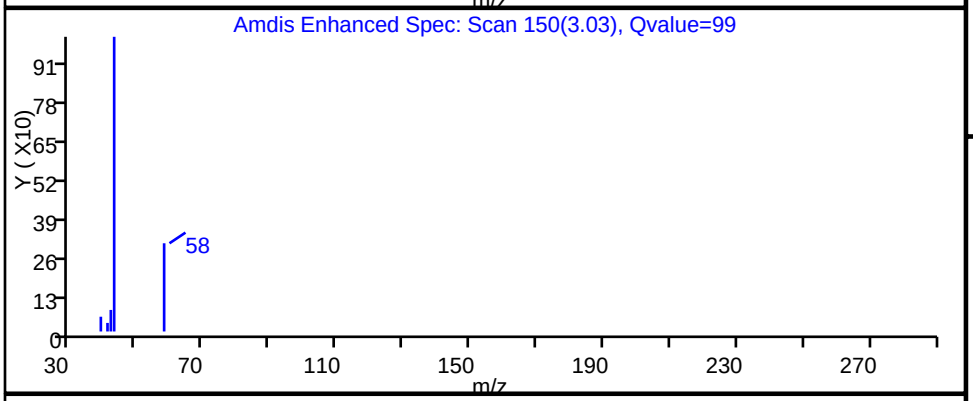
Method: 8260_14 Limit Group: MSV 8260DOD ICAL

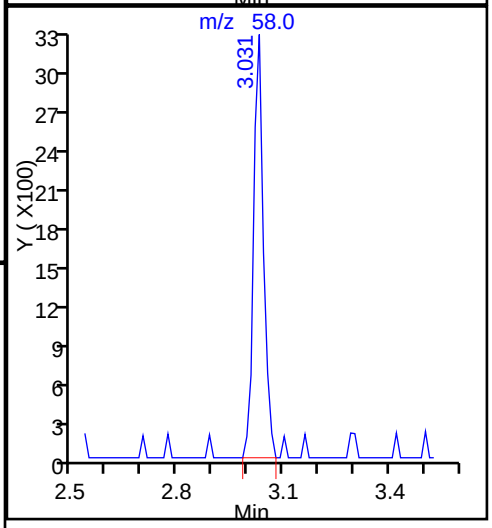
Column: DB-624 (0.18 mm) Detector MS SCAN

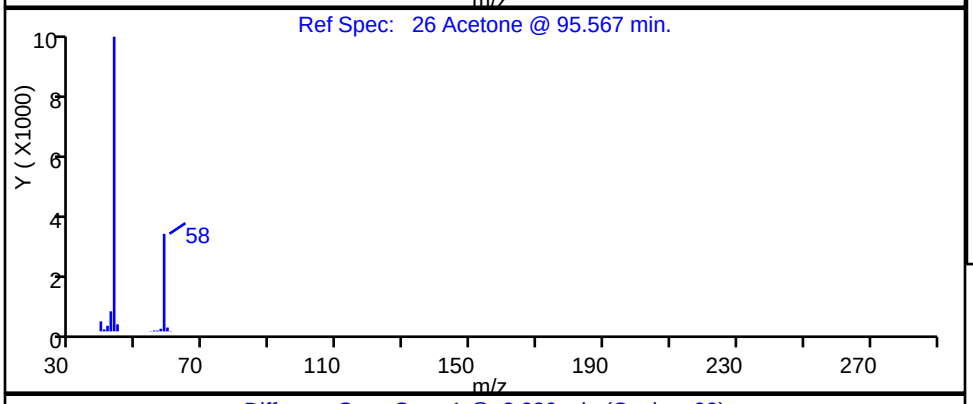
26 Acetone, CAS: 67-64-1

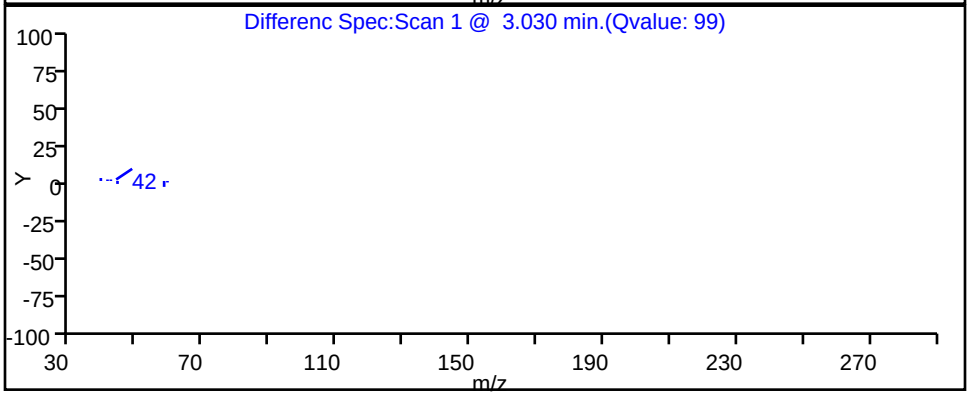












Report Date: 15-Apr-2015 13:28:54 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142405.D

Injection Date: 14-Apr-2015 15:28:30 Instrument ID: A3UX14

Lims ID: mb

Client ID:

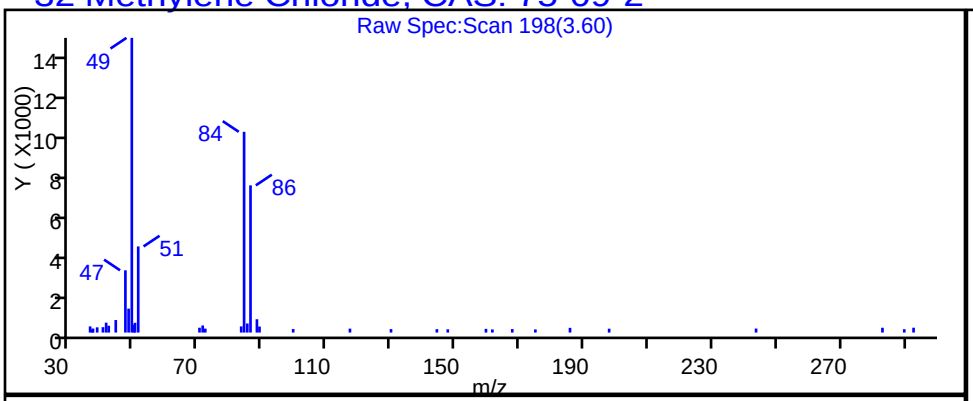
Operator ID: 002808 ALS Bottle#: 9 Worklist Smp#: 33

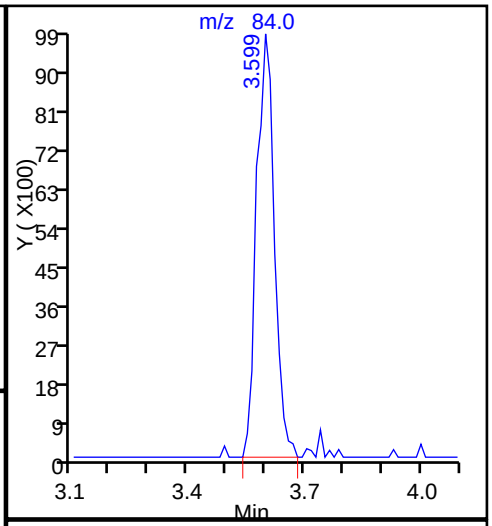
Purge Vol: 5.000 mL Dil. Factor: 1.0000

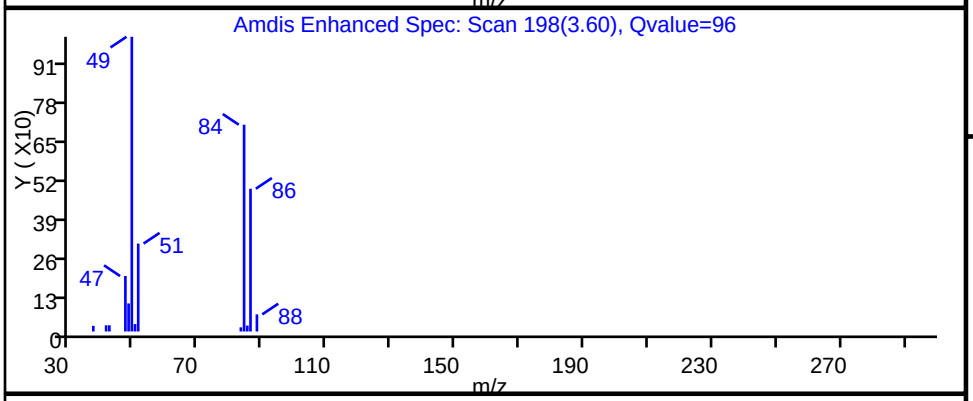
Method: 8260_14 Limit Group: MSV 8260DOD ICAL

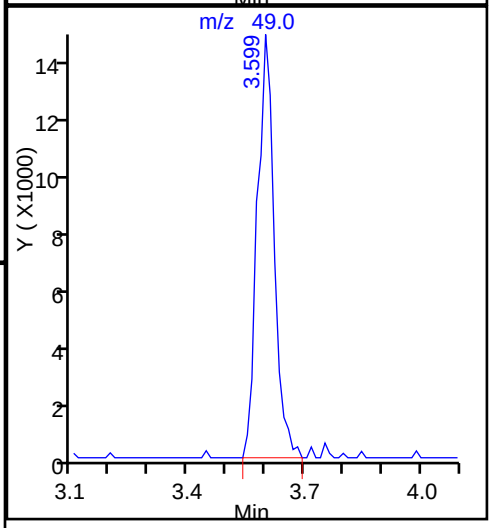
Column: DB-624 (0.18 mm) Detector MS SCAN

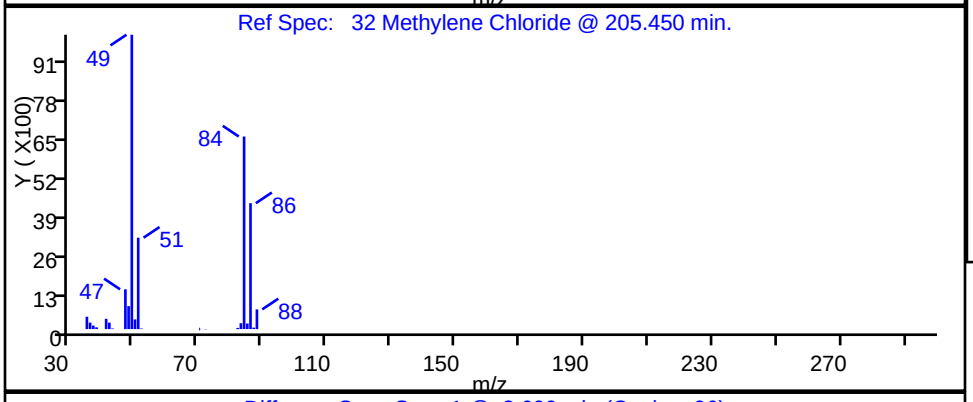
32 Methylene Chloride, CAS: 75-09-2

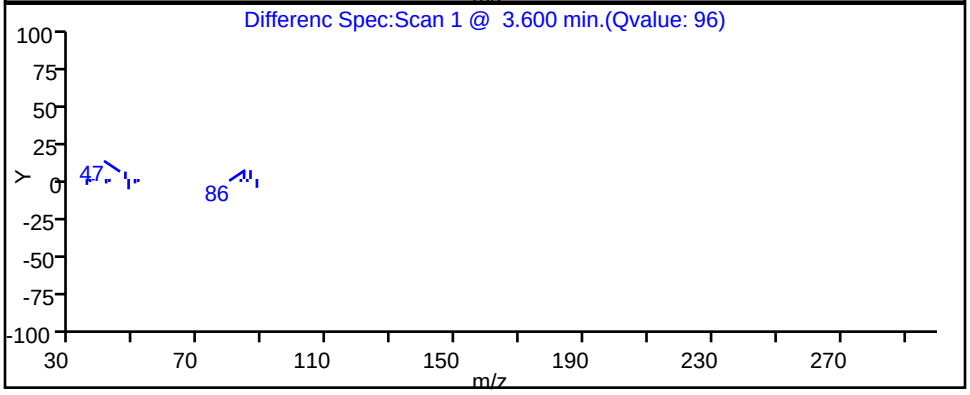












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-176276/6

Matrix: Solid | Lab File ID: UX86973.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/14/2015 03:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176276 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	48.1		5.0	1.0	0.56
79-34-5	1,1,2,2-Tetrachloroethane	51.2		5.0	1.0	0.34
79-00-5	1,1,2-Trichloroethane	49.9		5.0	1.0	0.39
75-34-3	1,1-Dichloroethane	46.6		5.0	1.0	0.36
75-35-4	1,1-Dichloroethene	50.3		5.0	1.0	0.52
107-06-2	1,2-Dichloroethane	43.4		5.0	1.0	0.34
540-59-0	1,2-Dichloroethene, Total	103		10	2.0	0.36
78-87-5	1,2-Dichloropropane	47.3		5.0	2.0	0.69
78-93-3	2-Butanone (MEK)	87.3		20	4.0	1.4
591-78-6	2-Hexanone	101		20	1.0	0.63
108-10-1	4-Methyl-2-pentanone (MIBK)	101		20	1.0	0.54
71-43-2	Benzene	48.7		5.0	0.50	0.23
75-25-2	Bromoform	47.7		5.0	1.0	0.33
74-83-9	Bromomethane	53.8		5.0	1.0	0.54
75-15-0	Carbon disulfide	58.4		5.0	1.0	0.44
56-23-5	Carbon tetrachloride	49.9		5.0	1.0	0.37
108-90-7	Chlorobenzene	48.2		5.0	1.0	0.33
75-27-4	Bromodichloromethane	51.5		5.0	0.50	0.28
74-87-3	Chloromethane	43.0		5.0	0.50	0.41
10061-01-5	cis-1,3-Dichloropropene	52.9		5.0	1.0	0.34
124-48-1	Dibromochloromethane	55.3		5.0	1.0	0.55
100-41-4	Ethylbenzene	50.0		5.0	0.50	0.26
1634-04-4	Methyl tert-butyl ether	47.7		5.0	1.0	0.43
75-09-2	Methylene Chloride	51.5		5.0	2.0	0.67
100-42-5	Styrene	56.4		5.0	0.50	0.15
127-18-4	Tetrachloroethene	49.4		5.0	1.0	0.52
108-88-3	Toluene	49.9		5.0	0.50	0.27
67-66-3	Chloroform	46.9		5.0	0.50	0.29
74-97-5	Bromochloromethane	51.1		5.0	2.0	0.71
106-93-4	1,2-Dibromoethane	53.3		5.0	1.0	0.50
10061-02-6	trans-1,3-Dichloropropene	54.8		5.0	1.0	0.54
79-01-6	Trichloroethene	51.4		5.0	1.0	0.42
75-01-4	Vinyl chloride	44.9		5.0	1.0	0.39
75-00-3	Chloroethane	49.1		5.0	1.0	0.86
1330-20-7	Xylenes, Total	104		10	2.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-176276/6

Matrix: Solid Lab File ID: UX86973.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/14/2015 03:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176276 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		61-130
2037-26-5	Toluene-d8 (Surr)	110		85-115
460-00-4	4-Bromofluorobenzene (Surr)	99		85-120
1868-53-7	Dibromofluoromethane (Surr)	102		59-138

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86973.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 14-Apr-2015 03:38:30 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042522-006
Operator ID: 402279 Instrument ID: A3UX8

Method: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 00:48:07 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK001

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.157	5.157	0.000	99	1314606	50.0	50.0	
*	2 Chlorobenzene-d5	117	7.689	7.689	0.000	94	957722	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.879	9.878	0.000	98	500639	50.0	50.0	
$	4 Dibromofluoromethane (Surr	113	4.625	4.624	0.001	95	270867	50.0	50.9	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.897	4.896	0.001	90	276479	50.0	45.6	
$	6 Toluene-d8 (Surr)	98	6.423	6.422	0.001	92	1145196	50.0	54.9	
$	7 4-Bromofluorobenzene (Surr	95	8.754	8.765	-0.011	95	374193	50.0	49.7	
	9 Dichlorodifluoromethane	85	1.584	1.582	0.002	100	238373	50.0	48.8	
	10 Chloromethane	50	1.749	1.748	0.001	100	249513	50.0	43.0	
	11 Vinyl chloride	62	1.880	1.866	0.014	99	193516	50.0	44.9	
	12 Butadiene	54	1.915	1.914	0.001	0	198140	NC	NC	
	13 Bromomethane	94	2.187	2.186	0.001	90	127611	50.0	53.8	
	14 Chloroethane	64	2.294	2.281	0.013	99	111723	50.0	49.1	
	15 Dichlorofluoromethane	67	2.459	2.458	0.001	98	291853	50.0	47.9	
	16 Trichlorofluoromethane	101	2.507	2.505	0.002	99	302174	50.0	50.3	
	17 Ethyl ether	59	2.743	2.742	0.001	93	202592	50.0	47.4	
	18 Acrolein	56	2.838	2.837	0.001	99	98084	125.0	168.4	
	19 1,1-Dichloroethene	96	2.933	2.931	0.002	96	257190	50.0	50.3	
	20 1,1,2-Trichloro-1,2,2-trif	151	2.944	2.943	0.001	91	198776	50.0	47.9	
	21 Acetone	43	2.956	2.955	0.001	100	252587	100.0	81.9	
	23 Iodomethane	142	3.051	3.062	-0.011	97	433316	50.0	53.5	
	24 Carbon disulfide	76	3.110	3.121	-0.011	99	730748	50.0	58.4	
	26 3-Chloro-1-propene	76	3.217	3.215	0.002	94	148959	50.0	51.6	
	27 Methyl acetate	43	3.217	3.227	-0.010	98	1431181	250.0	226.5	
	28 Methylene Chloride	84	3.299	3.298	0.001	91	329159	50.0	51.5	
	29 2-Methyl-2-propanol	59	3.382	3.381	0.001	96	321903	500.0	439.4	
	30 Acrylonitrile	53	3.489	3.488	0.001	100	1374155	500.0	494.5	
	31 trans-1,2-Dichloroethene	96	3.524	3.523	0.001	66	312488	50.0	51.9	
	32 Methyl tert-butyl ether	73	3.524	3.523	0.001	96	825544	50.0	47.7	
	33 Hexane	86	3.737	3.736	0.001	92	89943	50.0	51.5	
	34 1,1-Dichloroethane	63	3.832	3.843	-0.011	96	494656	50.0	46.6	
	35 Vinyl acetate	43	3.867	3.866	0.001	97	405336	50.0	71.2	
	40 2-Butanone (MEK)	43	4.270	4.269	0.001	98	360945	100.0	87.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.270	4.280	-0.010	80	336794	50.0	50.8	
41 2,2-Dichloropropane	77	4.282	4.280	0.002	94	207341	50.0	44.2	
45 Chlorobromomethane	128	4.459	4.458	0.001	91	174458	50.0	51.1	
46 Tetrahydrofuran	42	4.495	4.493	0.002	89	229199	100.0	99.7	
47 Chloroform	83	4.506	4.505	0.001	94	483194	50.0	46.9	
48 1,1,1-Trichloroethane	97	4.672	4.671	0.001	98	370901	50.0	48.1	
49 Cyclohexane	56	4.719	4.718	0.001	89	477494	50.0	49.2	
50 1,1-Dichloropropene	75	4.790	4.789	0.001	96	381878	50.0	52.8	
51 Carbon tetrachloride	117	4.802	4.801	0.001	98	339125	50.0	49.9	
52 Isobutyl alcohol	41	4.826	4.825	0.001	94	319581	1250.0	1126.5	
53 1,2-Dichloroethane	62	4.956	4.955	0.001	56	355228	50.0	43.4	
54 Benzene	78	4.956	4.955	0.001	95	1226096	50.0	48.7	
56 n-Heptane	100	5.134	5.132	0.002	94	94221	50.0	49.9	
58 Trichloroethene	130	5.441	5.440	0.001	96	344395	50.0	51.4	
60 Methylcyclohexane	83	5.619	5.617	0.002	91	511126	50.0	50.3	
61 1,2-Dichloropropane	63	5.619	5.617	0.002	97	294832	50.0	47.3	
63 Dibromomethane	93	5.713	5.712	0.001	91	171737	50.0	49.8	
64 1,4-Dioxane	88	5.713	5.712	0.001	45	68783	1000.0	1018.5	
65 Dichlorobromomethane	83	5.832	5.830	0.002	99	345057	50.0	51.5	
67 2-Chloroethyl vinyl ether	63	6.057	6.055	0.001	92	136569	60.0	86.2	
68 cis-1,3-Dichloropropene	75	6.187	6.185	0.002	96	422224	50.0	52.9	
69 4-Methyl-2-pentanone (MIBK	43	6.305	6.304	0.001	96	706386	100.0	101.4	
70 Toluene	91	6.482	6.481	0.001	98	1313081	50.0	49.9	
71 trans-1,3-Dichloropropene	75	6.648	6.647	0.001	91	375398	50.0	54.8	
72 Ethyl methacrylate	69	6.707	6.706	0.001	90	403023	50.0	60.8	
73 1,1,2-Trichloroethane	97	6.802	6.813	-0.011	89	274689	50.0	49.9	
74 1,3-Dichloropropane	76	6.956	6.955	0.001	92	457335	50.0	50.4	
75 Tetrachloroethene	164	6.968	6.966	0.002	94	263809	50.0	49.4	
76 2-Hexanone	43	7.003	7.002	0.001	98	510549	100.0	101.2	
78 Chlorodibromomethane	129	7.157	7.168	-0.011	91	279987	50.0	55.3	
80 Ethylene Dibromide	107	7.275	7.274	0.001	98	275407	50.0	53.3	
82 Chlorobenzene	112	7.713	7.712	0.001	97	858112	50.0	48.2	
83 1,1,1,2-Tetrachloroethane	131	7.772	7.771	0.001	95	284969	50.0	52.9	
84 Ethylbenzene	106	7.796	7.807	-0.011	98	462855	50.0	50.0	
85 m-Xylene & p-Xylene	106	7.902	7.901	0.001	99	565837	50.0	51.7	
87 Styrene	104	8.281	8.280	0.001	94	894816	50.0	56.4	
86 o-Xylene	106	8.269	8.280	-0.011	95	547004	50.0	52.4	
88 Bromoform	173	8.459	8.457	0.002	98	177679	50.0	47.7	
89 Isopropylbenzene	105	8.612	8.611	0.001	95	1405674	50.0	53.4	
92 1,1,2,2-Tetrachloroethane	83	8.873	8.871	0.002	96	345425	50.0	51.2	
93 Bromobenzene	156	8.920	8.919	0.001	91	363562	50.0	48.3	
94 1,2,3-Trichloropropane	110	8.932	8.931	0.001	83	124366	50.0	52.9	
95 trans-1,4-Dichloro-2-buten	53	8.932	8.931	0.001	70	100321	50.0	51.9	
96 N-Propylbenzene	120	9.003	9.002	0.001	98	407942	50.0	54.9	
97 2-Chlorotoluene	126	9.098	9.096	0.002	98	334056	50.0	51.5	
98 1,3,5-Trimethylbenzene	105	9.169	9.167	0.002	94	1152095	50.0	52.6	
99 4-Chlorotoluene	126	9.192	9.203	-0.011	97	354217	50.0	51.6	
100 tert-Butylbenzene	119	9.488	9.487	0.001	91	1049039	50.0	53.6	
102 1,2,4-Trimethylbenzene	105	9.535	9.534	0.001	94	1157556	50.0	50.6	
103 sec-Butylbenzene	105	9.701	9.700	0.001	93	1481070	50.0	52.6	
104 1,3-Dichlorobenzene	146	9.819	9.818	0.001	97	650022	50.0	46.5	
105 4-Isopropyltoluene	119	9.843	9.842	0.001	97	1259845	50.0	50.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,4-Dichlorobenzene	146	9.902	9.901	0.001	96	669240	50.0	45.5	
109 n-Butylbenzene	91	10.245	10.244	0.001	98	1059575	50.0	51.6	
110 1,2-Dichlorobenzene	146	10.269	10.268	0.001	99	635396	50.0	47.1	
111 1,2-Dibromo-3-Chloropropan	157	11.026	11.025	0.001	89	64906	50.0	52.4	
113 1,2,4-Trichlorobenzene	180	11.855	11.865	-0.010	95	395918	50.0	45.4	
114 Hexachlorobutadiene	225	12.032	12.031	0.001	95	223219	50.0	44.3	
115 Naphthalene	128	12.103	12.102	0.001	96	1021679	50.0	48.2	
116 1,2,3-Trichlorobenzene	180	12.363	12.362	0.001	96	387230	50.0	43.2	
S 128 Xylenes, Total	106				0		100.0	104.1	
S 129 Trihalomethanes, Total	1				0		200.0	201.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VMFASPW_00094	Amount Added:	5.00	Units: uL	
VMFASAW_00077	Amount Added:	2.50	Units: uL	
VMFASGW_00090	Amount Added:	5.00	Units: uL	
VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00018	Amount Added:	1.15	Units: uL	Run Reagent
vmDist_H2o_00045	Amount Added:	0.00	Units:	Run Reagent

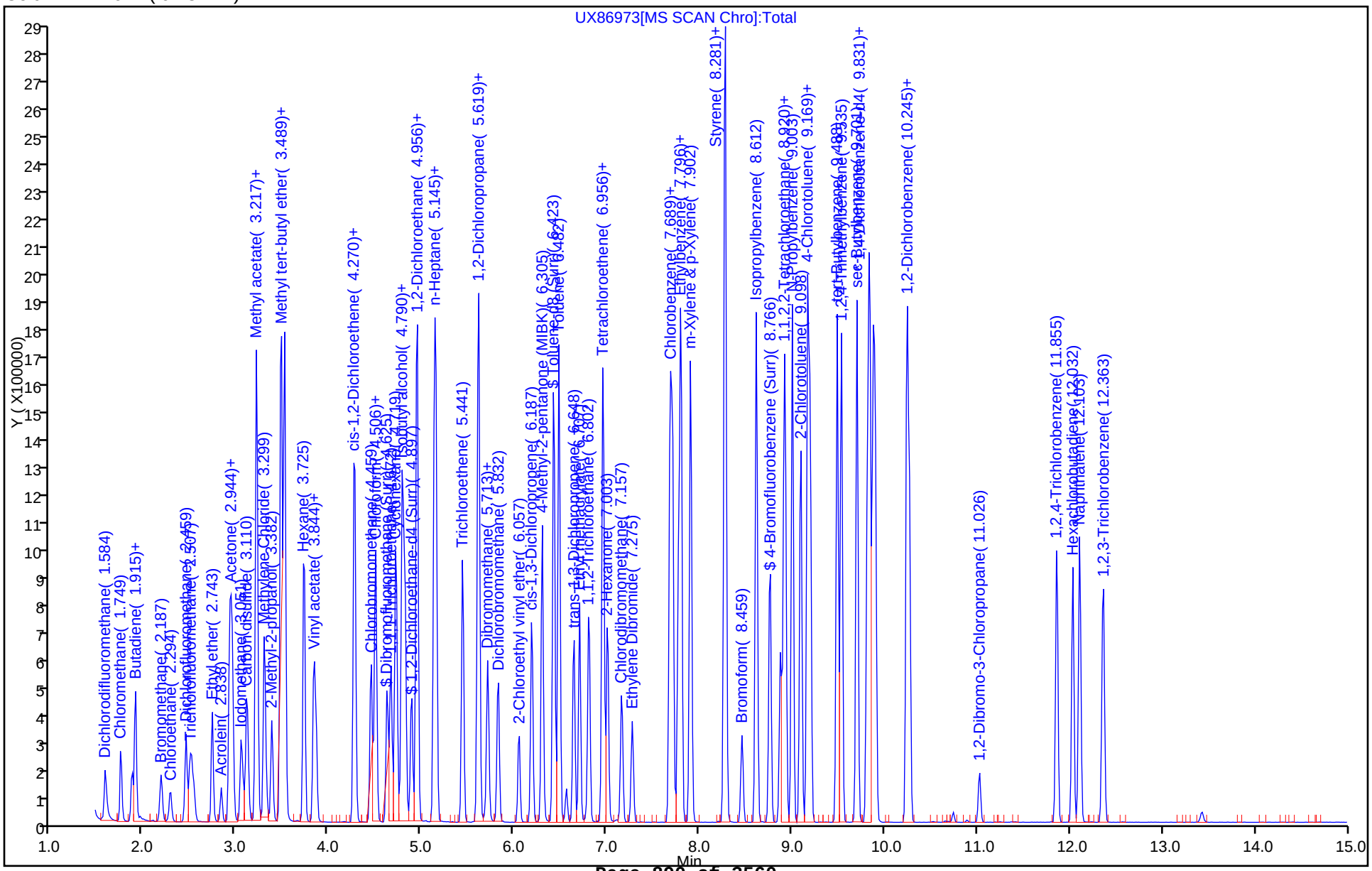
Report Date: 15-Apr-2015 00:48:08 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86973.D

Injection Date:	14-Apr-2015 03:38:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	LCS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-176298/4

Matrix: Water | Lab File ID: UXM7136.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/14/2015 08:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176298 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	10.7		1.0	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	9.22		1.0	0.50	0.22
79-00-5	1,1,2-Trichloroethane	9.39		1.0	0.50	0.24
75-34-3	1,1-Dichloroethane	10.6		1.0	1.0	0.30
75-35-4	1,1-Dichloroethene	10.9		1.0	1.0	0.45
107-06-2	1,2-Dichloroethane	10.5		1.0	1.0	0.23
540-59-0	1,2-Dichloroethene, Total	20.8		2.0	1.0	0.20
78-87-5	1,2-Dichloropropane	10.2		1.0	1.0	0.25
78-93-3	2-Butanone (MEK)	19.4		10	2.0	0.53
591-78-6	2-Hexanone	17.8		10	2.0	0.48
108-10-1	4-Methyl-2-pentanone (MIBK)	19.4		10	2.0	0.99
67-64-1	Acetone	16.4		10	2.0	0.94
71-43-2	Benzene	10.2		1.0	1.0	0.35
75-25-2	Bromoform	9.41		1.0	1.0	0.56
74-83-9	Bromomethane	8.72		1.0	1.0	0.44
75-15-0	Carbon disulfide	11.3		1.0	1.0	0.38
56-23-5	Carbon tetrachloride	11.2		1.0	1.0	0.43
108-90-7	Chlorobenzene	9.48		1.0	1.0	0.25
75-27-4	Bromodichloromethane	9.94		1.0	1.0	0.29
74-87-3	Chloromethane	10.3		1.0	1.0	0.44
10061-01-5	cis-1,3-Dichloropropene	10.6		1.0	1.0	0.46
124-48-1	Dibromochloromethane	9.75		1.0	1.0	0.43
100-41-4	Ethylbenzene	9.93		1.0	1.0	0.25
1634-04-4	Methyl tert-butyl ether	10.2		1.0	0.50	0.20
75-09-2	Methylene Chloride	10.1		1.0	1.0	0.33
100-42-5	Styrene	10.1		1.0	0.50	0.45
127-18-4	Tetrachloroethene	10.0		1.0	1.0	0.31
108-88-3	Toluene	9.79		1.0	1.0	0.23
67-66-3	Chloroform	10.3		1.0	1.0	0.25
74-97-5	Bromochloromethane	10.2		1.0	1.0	0.50
106-93-4	1,2-Dibromoethane	9.65		1.0	1.0	0.32
10061-02-6	trans-1,3-Dichloropropene	10.7		1.0	1.0	0.56
79-01-6	Trichloroethene	10.5		1.0	1.0	0.22
75-01-4	Vinyl chloride	9.95		1.0	1.0	0.29
75-00-3	Chloroethane	9.31		1.0	1.0	0.32
1330-20-7	Xylenes, Total	19.8		2.0	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-176298/4

Matrix: Water Lab File ID: UXM7136.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/14/2015 08:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176298 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-120
2037-26-5	Toluene-d8 (Surr)	97		85-120
460-00-4	4-Bromofluorobenzene (Surr)	98		75-120
1868-53-7	Dibromofluoromethane (Surr)	98		85-115

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7136.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 14-Apr-2015 08:52:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042532-004
Operator ID: 1904 Instrument ID: A3UX16

Method: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 14-Apr-2015 13:40:55 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.587	5.588	-0.001	99	1542337	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.279	8.279	0.000	85	1139963	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	91	636499	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.006	5.007	-0.001	94	344226	11.4	11.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	388229	11.4	11.5	
$ 6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	93	1506212	11.4	11.1	
$ 7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	92	545346	11.4	11.2	
9 Dichlorodifluoromethane	85	1.615	1.615	0.000	99	356077	10.0	12.5	
10 Chloromethane	50	1.781	1.769	0.012	99	401983	10.0	10.3	
11 Vinyl chloride	62	1.888	1.888	0.000	97	427617	10.0	9.95	
12 Butadiene	54	1.935	1.935	0.000	0	390811	10.0	10.1	
13 Bromomethane	94	2.232	2.232	0.000	89	180604	10.0	8.72	
14 Chloroethane	64	2.338	2.327	0.012	99	234709	10.0	9.31	
15 Dichlorofluoromethane	67	2.528	2.516	0.012	96	529670	10.0	9.39	
16 Trichlorofluoromethane	101	2.575	2.576	-0.001	96	407663	10.0	10.9	
17 Ethyl ether	59	2.836	2.836	0.000	87	285431	10.0	10.3	
18 Acrolein	56	2.955	2.943	0.012	97	166174	50.0	46.2	
19 1,1-Dichloroethene	96	3.050	3.050	0.000	96	339776	10.0	10.9	
20 1,1,2-Trichloro-1,2,2-trif	151	3.085	3.085	0.000	90	275116	10.0	11.3	
21 Acetone	43	3.085	3.085	0.000	64	153122	20.0	16.4	
23 Iodomethane	142	3.192	3.192	0.000	96	572808	10.0	11.7	
24 Carbon disulfide	76	3.263	3.263	0.000	98	1082775	10.0	11.3	
26 3-Chloro-1-propene	76	3.382	3.382	0.000	93	202461	10.0	9.53	
27 Methyl acetate	43	3.394	3.394	0.000	97	1005229	50.0	48.9	
28 Methylene Chloride	84	3.489	3.489	0.000	89	386220	10.0	10.1	
29 2-Methyl-2-propanol	59	3.583	3.572	0.011	99	183509	100.0	93.0	
30 Acrylonitrile	53	3.690	3.690	0.000	99	1051464	100.0	98.6	
31 Methyl tert-butyl ether	73	3.749	3.738	0.011	94	928185	10.0	10.2	
32 trans-1,2-Dichloroethene	96	3.738	3.738	0.000	70	388895	10.0	10.4	
33 Hexane	86	3.998	3.987	0.011	90	108723	10.0	12.0	
34 1,1-Dichloroethane	63	4.105	4.105	0.000	96	651516	10.0	10.6	
35 Vinyl acetate	43	4.141	4.141	0.000	97	387723	10.0	15.0	
40 2-Butanone (MEK)	43	4.603	4.603	0.000	52	225315	20.0	19.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.603	4.603	0.000	80	417303	10.0	10.4	
41 2,2-Dichloropropane	77	4.615	4.610	0.005	88	406468	10.0	10.4	
45 Chlorobromomethane	128	4.805	4.805	0.000	93	191636	10.0	10.2	
46 Tetrahydrofuran	42	4.852	4.852	0.000	88	138880	20.0	18.8	
47 Chloroform	83	4.876	4.864	0.012	92	614662	10.0	10.3	
48 1,1,1-Trichloroethane	97	5.042	5.042	0.000	98	488259	10.0	10.7	
49 Cyclohexane	56	5.113	5.101	0.012	87	609282	10.0	10.8	
50 1,1-Dichloropropene	75	5.184	5.184	0.000	98	526588	10.0	11.4	
51 Carbon tetrachloride	117	5.196	5.196	0.000	97	418158	10.0	11.2	
52 Isobutyl alcohol	41	5.232	5.232	0.000	95	151205	250.0	220.7	
53 1,2-Dichloroethane	62	5.362	5.362	0.000	55	438991	10.0	10.5	
54 Benzene	78	5.362	5.362	0.000	95	1576227	10.0	10.2	
56 n-Heptane	57	5.587	5.588	-0.001	87	286557	10.0	10.8	
58 Trichloroethene	130	5.908	5.908	0.000	97	411022	10.0	10.5	
60 Methylcyclohexane	83	6.097	6.086	0.011	88	618617	10.0	10.3	
61 1,2-Dichloropropane	63	6.097	6.098	-0.001	77	356798	10.0	10.2	
63 Dibromomethane	93	6.192	6.192	0.000	91	190654	10.0	10.3	
64 1,4-Dioxane	88	6.204	6.192	0.012	38	44686	200.0	174.3	
65 Dichlorobromomethane	83	6.323	6.323	0.000	100	426954	10.0	9.94	
67 2-Chloroethyl vinyl ether	63	6.572	6.572	0.000	91	219154	12.0	11.9	
68 cis-1,3-Dichloropropene	75	6.714	6.714	0.000	97	533866	10.0	10.6	
69 4-Methyl-2-pentanone (MIBK	43	6.833	6.833	0.000	95	444766	20.0	19.4	
70 Toluene	91	7.022	7.022	0.000	99	1653042	10.0	9.79	
71 trans-1,3-Dichloropropene	75	7.200	7.188	0.012	92	457786	10.0	10.7	
72 Ethyl methacrylate	69	7.271	7.272	-0.001	88	366561	10.0	10.6	
73 1,1,2-Trichloroethane	97	7.366	7.366	0.000	90	284262	10.0	9.39	
75 Tetrachloroethene	164	7.532	7.521	0.011	94	320510	10.0	10.0	
74 1,3-Dichloropropane	76	7.520	7.521	-0.001	92	499708	10.0	9.31	
76 2-Hexanone	43	7.580	7.580	0.000	94	292934	20.0	17.8	
78 Chlorodibromomethane	129	7.734	7.734	0.000	89	302254	10.0	9.75	
80 Ethylene Dibromide	107	7.852	7.841	0.011	98	277265	10.0	9.65	
82 Chlorobenzene	112	8.303	8.303	0.000	95	1025934	10.0	9.48	
83 1,1,1,2-Tetrachloroethane	131	8.374	8.374	0.000	95	337701	10.0	9.81	
84 Ethylbenzene	106	8.398	8.398	0.000	98	574512	10.0	9.93	
85 m-Xylene & p-Xylene	106	8.505	8.505	0.000	97	707414	10.0	9.76	
86 o-Xylene	106	8.884	8.884	0.000	96	700835	10.0	10.0	
87 Styrene	104	8.896	8.896	0.000	92	1128514	10.0	10.1	
88 Bromoform	173	9.074	9.074	0.000	99	177736	10.0	9.41	
89 Isopropylbenzene	105	9.240	9.240	0.000	95	1810796	10.0	9.78	
92 1,1,2,2-Tetrachloroethane	83	9.501	9.501	0.000	94	344518	10.0	9.22	
93 Bromobenzene	156	9.536	9.536	0.000	92	445056	10.0	9.67	
95 1,2,3-Trichloropropane	110	9.548	9.548	0.000	82	110845	10.0	9.55	
94 trans-1,4-Dichloro-2-buten	53	9.548	9.560	-0.012	80	80556	10.0	8.83	
96 N-Propylbenzene	120	9.631	9.631	0.000	99	513770	10.0	10.2	
97 2-Chlorotoluene	126	9.726	9.726	0.000	97	430462	10.0	9.90	
99 1,3,5-Trimethylbenzene	105	9.797	9.797	0.000	95	1511941	10.0	9.91	
100 4-Chlorotoluene	126	9.821	9.821	0.000	98	451832	10.0	9.76	
102 tert-Butylbenzene	119	10.129	10.118	0.011	90	1318192	10.0	9.91	
104 1,2,4-Trimethylbenzene	105	10.165	10.165	0.000	95	1543588	10.0	9.67	
105 sec-Butylbenzene	105	10.343	10.343	0.000	93	1896140	10.0	9.88	
106 1,3-Dichlorobenzene	146	10.449	10.450	-0.001	98	864749	10.0	9.61	
107 4-Isopropyltoluene	119	10.473	10.473	0.000	97	1631640	10.0	9.75	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 1,4-Dichlorobenzene	146	10.532	10.533	-0.001	95	887967	10.0	9.63	
111 n-Butylbenzene	91	10.888	10.888	0.000	97	1342009	10.0	9.60	
112 1,2-Dichlorobenzene	146	10.900	10.900	0.000	99	807209	10.0	9.48	
113 1,2-Dibromo-3-Chloropropan	157	11.671	11.671	0.000	90	57942	10.0	9.26	
115 1,2,4-Trichlorobenzene	180	12.513	12.501	0.012	94	489454	10.0	9.25	
116 Hexachlorobutadiene	225	12.679	12.679	0.000	94	204247	10.0	9.31	
117 Naphthalene	128	12.750	12.750	0.000	96	1024998	10.0	8.96	
118 1,2,3-Trichlorobenzene	180	13.011	13.011	0.000	96	422990	10.0	8.94	
S 133 Xylenes, Total	106				0		20.0	19.8	
S 134 Trihalomethanes, Total	1				0		40.0	39.4	

Reagents:

VMFASAW_00077	Amount Added:	8.00	Units: uL	
VMFASPW_00094	Amount Added:	8.00	Units: uL	
VMFASGW_00090	Amount Added:	8.00	Units: uL	
VM50IS_00045	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00063	Amount Added:	1.14	Units: uL	Run Reagent
vmDist_H2o_00042	Amount Added:	0.00	Units:	Run Reagent

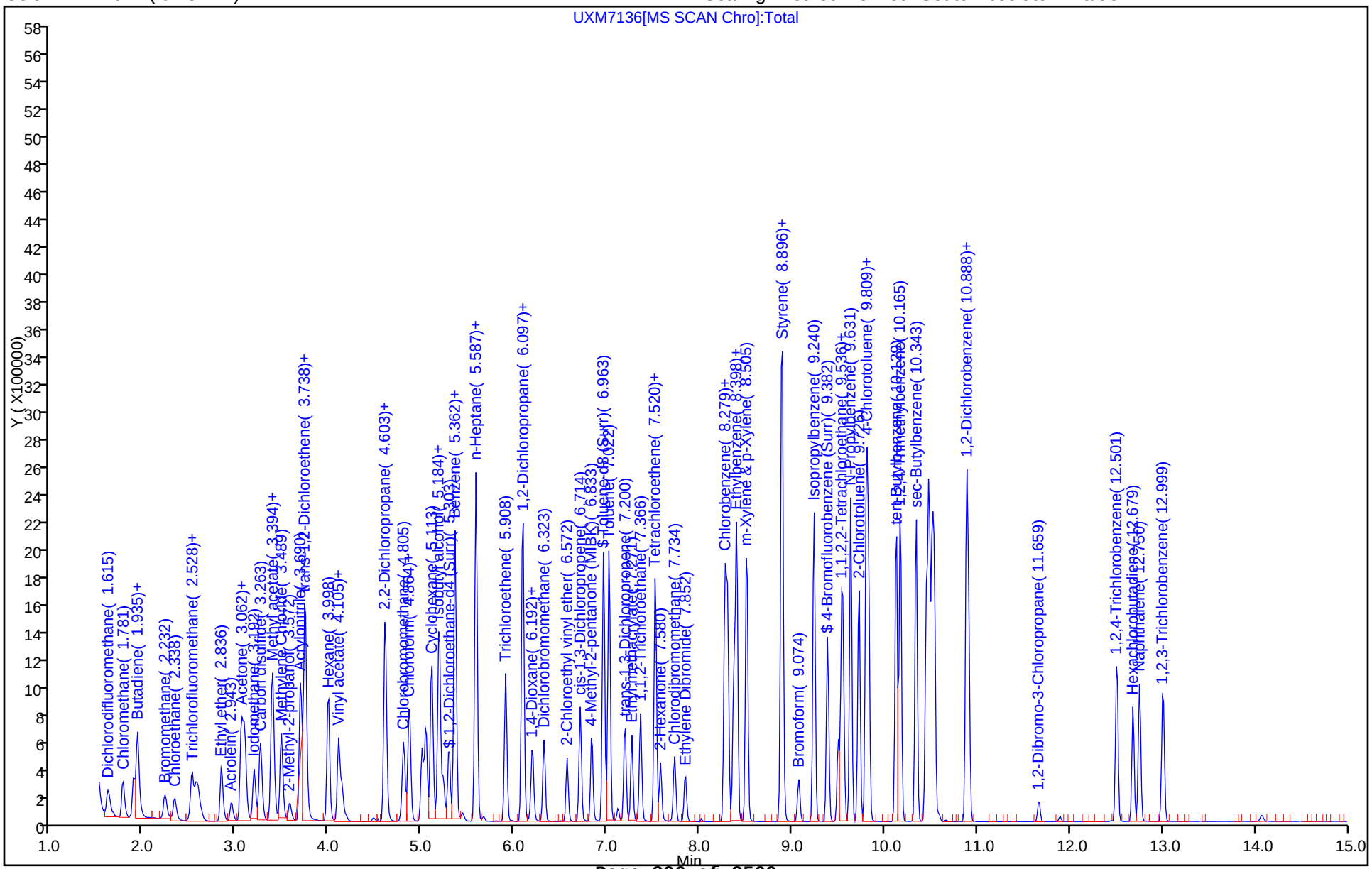
Report Date: 14-Apr-2015 13:40:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7136.D

Injection Date:	14-Apr-2015 08:52:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-176387/5

Matrix: Solid | Lab File ID: 142400.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/14/2015 13:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176387 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	58.3		5.0	1.0	0.56
79-34-5	1,1,2,2-Tetrachloroethane	50.6		5.0	1.0	0.34
79-00-5	1,1,2-Trichloroethane	51.9		5.0	1.0	0.39
75-34-3	1,1-Dichloroethane	55.1		5.0	1.0	0.36
75-35-4	1,1-Dichloroethene	57.2		5.0	1.0	0.52
107-06-2	1,2-Dichloroethane	54.0		5.0	1.0	0.34
540-59-0	1,2-Dichloroethene, Total	109		10	2.0	0.36
78-87-5	1,2-Dichloropropane	53.6		5.0	2.0	0.69
78-93-3	2-Butanone (MEK)	95.2		20	4.0	1.4
591-78-6	2-Hexanone	96.5		20	1.0	0.63
108-10-1	4-Methyl-2-pentanone (MIBK)	106		20	1.0	0.54
67-64-1	Acetone	107		20	15	6.3
71-43-2	Benzene	52.6		5.0	0.50	0.23
75-25-2	Bromoform	44.9		5.0	1.0	0.33
74-83-9	Bromomethane	52.2		5.0	1.0	0.54
75-15-0	Carbon disulfide	58.9		5.0	1.0	0.44
56-23-5	Carbon tetrachloride	59.3		5.0	1.0	0.37
108-90-7	Chlorobenzene	51.4		5.0	1.0	0.33
75-27-4	Bromodichloromethane	54.2		5.0	0.50	0.28
74-87-3	Chloromethane	56.9		5.0	0.50	0.41
10061-01-5	cis-1,3-Dichloropropene	56.7		5.0	1.0	0.34
124-48-1	Dibromochloromethane	56.1		5.0	1.0	0.55
100-41-4	Ethylbenzene	52.1		5.0	0.50	0.26
1634-04-4	Methyl tert-butyl ether	53.6		5.0	1.0	0.43
75-09-2	Methylene Chloride	58.5		5.0	2.0	0.67
100-42-5	Styrene	55.7		5.0	0.50	0.15
127-18-4	Tetrachloroethene	52.8		5.0	1.0	0.52
108-88-3	Toluene	51.0		5.0	0.50	0.27
67-66-3	Chloroform	54.4		5.0	0.50	0.29
74-97-5	Bromochloromethane	52.0		5.0	2.0	0.71
106-93-4	1,2-Dibromoethane	50.1		5.0	1.0	0.50
10061-02-6	trans-1,3-Dichloropropene	60.5		5.0	1.0	0.54
79-01-6	Trichloroethene	52.7		5.0	1.0	0.42
75-01-4	Vinyl chloride	55.0		5.0	1.0	0.39
75-00-3	Chloroethane	56.6		5.0	1.0	0.86
1330-20-7	Xylenes, Total	107		10	2.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-176387/5

Matrix: Solid Lab File ID: 142400.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/14/2015 13:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176387 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		61-130
2037-26-5	Toluene-d8 (Surr)	102		85-115
460-00-4	4-Bromofluorobenzene (Surr)	101		85-120
1868-53-7	Dibromofluoromethane (Surr)	96		59-138

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142400.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 14-Apr-2015 13:41:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Misc. Info.: 240-0042552-005240-0042552-005
Operator ID: 002808 Instrument ID: A3UX14

Method: \\NCChrom\ChromData\A3UX14\20150414-42552.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:28:47 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 14-Apr-2015 14:09:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	6.652	6.652	0.000	98	1290613	50.0	50.0	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	96	786094	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	97	399245	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.990	5.990	0.000	91	323961	50.0	48.1	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	95	398225	50.0	49.4	
$ 8 Toluene-d8 (Surr)	98	8.131	8.131	0.000	94	1193145	50.0	50.8	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	84	403171	50.0	50.6	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	99	535055	50.0	66.4	
12 Chloromethane	50	1.481	1.481	0.000	99	474775	50.0	56.9	
13 Vinyl chloride	62	1.600	1.600	0.000	98	457561	50.0	55.0	
14 Butadiene	54	1.623	1.623	0.000	93	444420	50.0	56.4	
15 Bromomethane	94	1.907	1.907	0.000	89	336633	50.0	52.2	
17 Chloroethane	64	2.002	2.002	0.000	99	235991	50.0	56.6	
18 Dichlorofluoromethane	67	2.262	2.262	0.000	97	701065	50.0	55.0	
19 Trichlorofluoromethane	101	2.298	2.298	0.000	98	663693	50.0	55.9	
20 Ethyl ether	59	2.641	2.641	0.000	93	289620	50.0	57.4	
21 Acrolein	56	2.807	2.818	-0.011	98	134392	250.0	235.3	
23 1,1-Dichloroethene	96	2.890	2.889	0.001	93	339236	50.0	57.2	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	95	255924	50.0	55.5	
26 Acetone	43	3.032	3.031	0.001	99	165716	100.0	107.2	
27 Iodomethane	142	3.091	3.079	0.012	98	485592	50.0	61.9	
28 Carbon disulfide	76	3.150	3.150	0.000	100	970380	50.0	58.9	
29 3-Chloro-1-propene	76	3.398	3.386	0.012	90	198297	50.0	53.7	
31 Methyl acetate	43	3.481	3.469	0.012	99	1061718	250.0	248.0	
32 Methylene Chloride	84	3.599	3.588	0.011	97	381054	50.0	58.5	
33 2-Methyl-2-propanol	59	3.919	3.919	0.000	98	290471	500.0	444.6	
34 trans-1,2-Dichloroethene	96	3.990	3.990	0.000	94	384378	50.0	55.7	
35 Methyl tert-butyl ether	73	4.025	4.025	0.000	95	1049775	50.0	53.6	
36 Acrylonitrile	53	4.037	4.037	0.000	98	945697	500.0	508.7	
37 Hexane	86	4.404	4.404	0.000	95	102441	50.0	57.4	
38 1,1-Dichloroethane	63	4.653	4.641	0.012	97	779409	50.0	55.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 Vinyl acetate	86	4.771	4.783	-0.012	97	27949	50.0	61.7	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	89	343198	50.0	58.2	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	84	393981	50.0	53.0	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	99	215341	100.0	95.2	
48 Chlorobromomethane	128	5.694	5.694	0.000	97	160474	50.0	52.0	
50 Tetrahydrofuran	42	5.741	5.741	0.000	91	159051	100.0	100.3	
51 Chloroform	83	5.800	5.800	0.000	94	724023	50.0	54.4	
52 1,1,1-Trichloroethane	97	5.954	5.954	0.000	98	620039	50.0	58.3	
53 Cyclohexane	56	5.990	5.990	0.000	95	752783	50.0	57.5	
54 Carbon tetrachloride	117	6.132	6.120	0.012	97	582819	50.0	59.3	
55 1,1-Dichloropropene	75	6.144	6.143	0.001	97	584343	50.0	58.0	
56 Benzene	78	6.357	6.356	0.001	97	1494857	50.0	52.6	
57 Isobutyl alcohol	41	6.392	6.392	0.000	95	208462	1250.0	1104.9	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	98	498644	50.0	54.0	
60 n-Heptane	100	6.641	6.640	0.001	95	95978	50.0	59.5	
61 Trichloroethene	130	7.007	7.007	0.000	97	365742	50.0	52.7	
64 Methylcyclohexane	83	7.161	7.161	0.000	93	733588	50.0	56.1	
65 1,2-Dichloropropane	63	7.232	7.232	0.000	93	346569	50.0	53.6	
67 Dibromomethane	93	7.351	7.350	0.001	94	171166	50.0	51.1	
69 1,4-Dioxane	88	7.386	7.386	0.000	94	43339	1000.0	887.1	
70 Dichlorobromomethane	83	7.504	7.504	0.000	99	449532	50.0	54.2	
72 2-Chloroethyl vinyl ether	63	7.788	7.800	-0.012	93	160859	60.0	62.9	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.000	95	502452	50.0	56.7	
75 4-Methyl-2-pentanone (MIBK	43	8.060	8.060	0.000	98	497339	100.0	106.3	
76 Toluene	91	8.191	8.191	0.000	97	1395210	50.0	51.0	
77 trans-1,3-Dichloropropene	75	8.415	8.404	0.011	94	411625	50.0	60.5	
78 Ethyl methacrylate	69	8.486	8.486	0.000	91	273538	50.0	62.3	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	93	213559	50.0	51.9	
80 Tetrachloroethene	164	8.664	8.664	0.000	91	260351	50.0	52.8	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	93	387897	50.0	51.0	
82 2-Hexanone	43	8.782	8.782	0.000	98	267357	100.0	96.5	
84 Chlorodibromomethane	129	8.901	8.901	0.001	90	249117	50.0	56.1	
85 Ethylene Dibromide	107	8.995	8.995	0.000	98	202504	50.0	50.1	
87 Chlorobenzene	112	9.409	9.409	0.000	92	801403	50.0	51.4	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	93	332117	50.0	54.8	
89 Ethylbenzene	106	9.492	9.504	-0.012	99	466976	50.0	52.1	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	99	561371	50.0	54.0	
91 o-Xylene	106	9.930	9.930	0.000	99	588322	50.0	52.8	
92 Styrene	104	9.954	9.954	0.000	94	803753	50.0	55.7	
93 Bromoform	173	10.119	10.119	0.000	95	121105	50.0	44.9	
94 Isopropylbenzene	105	10.238	10.238	0.000	97	1739538	50.0	54.8	
97 Bromobenzene	156	10.510	10.510	0.000	97	304068	50.0	50.8	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.522	-0.012	93	269041	50.0	50.6	
98 1,2,3-Trichloropropane	110	10.557	10.557	0.000	87	84073	50.0	51.4	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	81	87017	50.0	60.5	
100 N-Propylbenzene	120	10.593	10.593	0.000	99	421293	50.0	55.2	
101 2-Chlorotoluene	126	10.664	10.664	0.000	95	361380	50.0	55.9	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	92	1433344	50.0	55.5	
103 4-Chlorotoluene	126	10.758	10.758	0.000	99	331133	50.0	53.4	
105 tert-Butylbenzene	119	11.007	11.007	0.000	92	1343664	50.0	57.6	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	95	1409929	50.0	55.4	
109 sec-Butylbenzene	105	11.196	11.196	0.000	95	1912233	50.0	56.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	96	632547	50.0	51.2	
111 4-Isopropyltoluene	119	11.315	11.314	0.001	97	1548601	50.0	55.8	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	92	611064	50.0	49.4	
115 n-Butylbenzene	91	11.658	11.658	0.000	98	1470350	50.0	55.3	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	96	605759	50.0	51.0	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	78	45519	50.0	50.5	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	93	438358	50.0	48.1	
120 Hexachlorobutadiene	225	13.160	13.160	0.000	97	279361	50.0	50.1	
121 Naphthalene	128	13.231	13.231	0.000	98	897737	50.0	49.1	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	95	378698	50.0	45.8	
S 136 Xylenes, Total	106				0		100.0	106.8	
S 137 Trihalomethanes, Total	1				0		200.0	209.6	

Reagents:

VMFASAW_00077	Amount Added:	5.00	Units: uL	
VMFASGW_00090	Amount Added:	5.00	Units: uL	
VMFASPW_00094	Amount Added:	5.00	Units: uL	
vmDist_H2o_00046	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VM250SS_00030	Amount Added:	1.00	Units: uL	Run Reagent

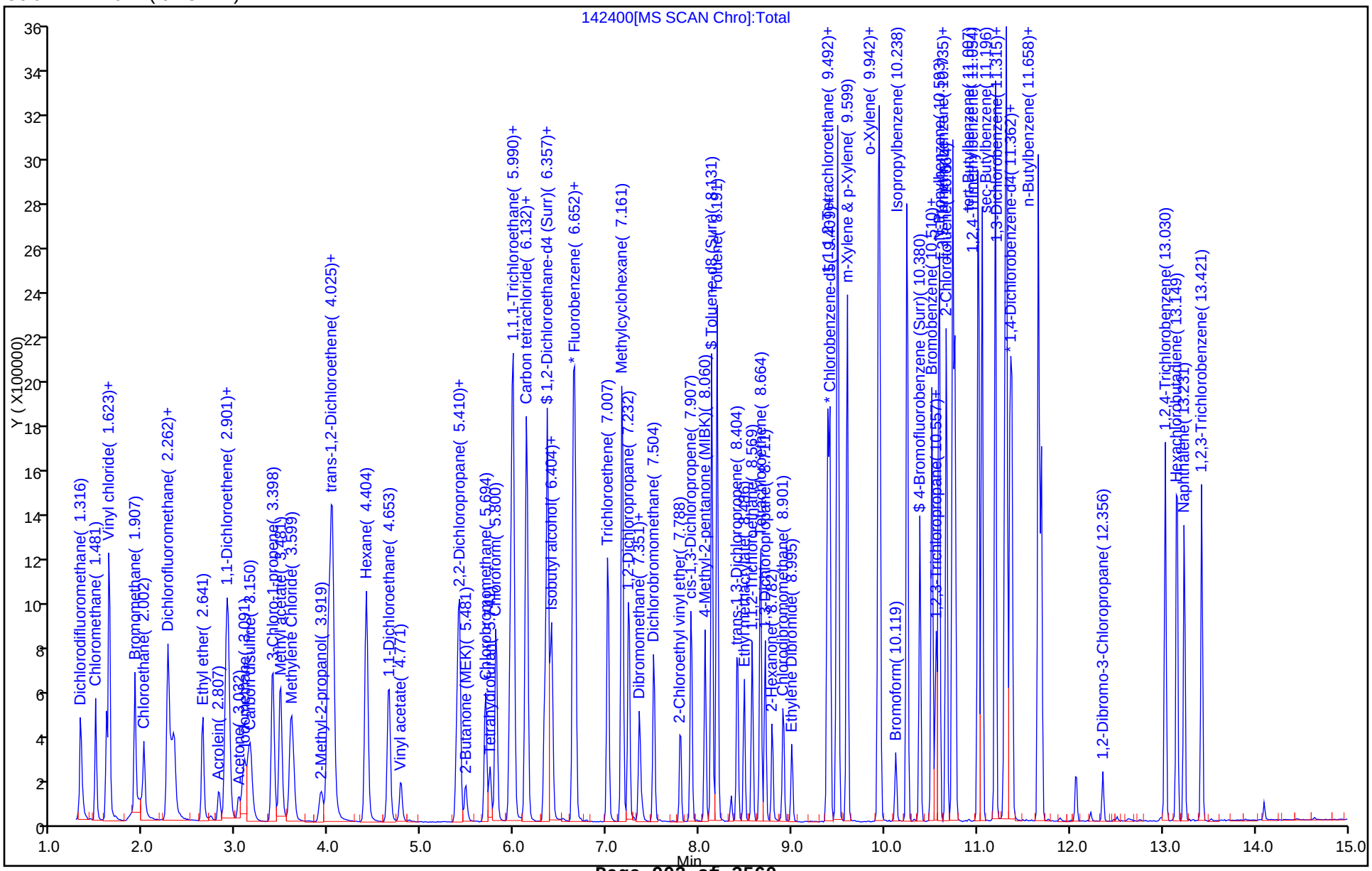
Report Date: 15-Apr-2015 13:28:49 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142400.D

Injection Date:	14-Apr-2015 13:41:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-176276/7

Matrix: Solid | Lab File ID: UX86974.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/14/2015 04:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176276 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.00479		0.0010	0.00025	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00528		0.0010	0.00025	0.00022
79-00-5	1,1,2-Trichloroethane	0.00522		0.0010	0.00050	0.00017
75-34-3	1,1-Dichloroethane	0.00462		0.0010	0.00025	0.00026
75-35-4	1,1-Dichloroethene	0.00484		0.0010	0.00025	0.00045
107-06-2	1,2-Dichloroethane	0.00446		0.0010	0.00025	0.00020
540-59-0	1,2-Dichloroethene, Total	0.0105		0.0020	0.00025	0.00020
78-87-5	1,2-Dichloropropane	0.00473		0.0010	0.00025	0.00022
78-93-3	2-Butanone (MEK)	0.00962	J	0.010	0.00050	0.0041
591-78-6	2-Hexanone	0.0101		0.010	0.00050	0.0039
108-10-1	4-Methyl-2-pentanone (MIBK)	0.00986	J	0.010	0.00050	0.0036
71-43-2	Benzene	0.00508		0.0010	0.00025	0.00024
75-25-2	Bromoform	0.00439		0.0010	0.00050	0.00056
74-83-9	Bromomethane	0.00565		0.0010	0.00050	0.00063
75-15-0	Carbon disulfide	0.00442		0.0010	0.00025	0.00028
56-23-5	Carbon tetrachloride	0.00433		0.0010	0.00025	0.00017
108-90-7	Chlorobenzene	0.00528		0.0010	0.00025	0.00019
75-27-4	Bromodichloromethane	0.00479		0.0010	0.00025	0.00015
74-87-3	Chloromethane	0.00488		0.0010	0.00050	0.00044
10061-01-5	cis-1,3-Dichloropropene	0.00430		0.0010	0.00025	0.00046
124-48-1	Dibromochloromethane	0.00459		0.0010	0.00025	0.00043
100-41-4	Ethylbenzene	0.00506		0.0010	0.00025	0.00023
1634-04-4	Methyl tert-butyl ether	0.00468		0.0010	0.00025	0.00016
75-09-2	Methylene Chloride	0.00486		0.0010	0.00050	0.00028
100-42-5	Styrene	0.00508		0.0010	0.00025	0.00045
127-18-4	Tetrachloroethene	0.00511		0.0010	0.00050	0.00020
108-88-3	Toluene	0.00528		0.0010	0.00025	0.00022
67-66-3	Chloroform	0.00473		0.0010	0.00025	0.00021
74-97-5	Bromochloromethane	0.00500		0.0010	0.00050	0.00025
106-93-4	1,2-Dibromoethane	0.00498		0.0010	0.00025	0.00019
10061-02-6	trans-1,3-Dichloropropene	0.00397		0.0010	0.00025	0.00056
79-01-6	Trichloroethene	0.00518		0.0010	0.00025	0.00015
75-01-4	Vinyl chloride	0.00523		0.0010	0.00025	0.00029
75-00-3	Chloroethane	0.00517		0.0010	0.0050	0.00033
1330-20-7	Xylenes, Total	0.0106		0.0020	0.00025	0.00043

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-176276/7

Matrix: Solid Lab File ID: UX86974.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/14/2015 04:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176276 Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		50-150
2037-26-5	Toluene-d8 (Surr)	112		50-150
460-00-4	4-Bromofluorobenzene (Surr)	100		50-150
1868-53-7	Dibromofluoromethane (Surr)	104		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86974.D
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 14-Apr-2015 04:00:30 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042522-007
Operator ID: 402279 Instrument ID: A3UX8

Method: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 00:48:07 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: latat Date: 14-Apr-2015 04:43:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.159	5.157	0.002	99	1277442	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.679	7.689	-0.010	95	932221	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.880	9.878	0.002	98	485994	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.626	4.624	0.002	95	269170	50.0	52.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.898	4.896	0.002	89	266519	50.0	45.2	
$ 6 Toluene-d8 (Surr)	98	6.425	6.422	0.003	93	1138900	50.0	56.1	
$ 7 4-Bromofluorobenzene (Surr	95	8.756	8.765	-0.009	96	367496	50.0	50.2	
$ 8 BFB	95	4.449	3.743	0.706	0	4529		NR	
9 Dichlorodifluoromethane	85	1.585	1.582	0.003	96	20918	5.00	4.41	
10 Chloromethane	50	1.751	1.748	0.003	99	27549	5.00	4.88	
11 Vinyl chloride	62	1.869	1.866	0.003	97	21888	5.00	5.23	
12 Butadiene	54	1.905	1.914	-0.009	0	21091	NC	NC	
13 Bromomethane	94	2.189	2.186	0.003	89	15911	5.00	5.65	
14 Chloroethane	64	2.283	2.281	0.002	98	13116	5.00	5.17	
15 Dichlorofluoromethane	67	2.449	2.458	-0.009	98	34894	5.00	5.90	
16 Trichlorofluoromethane	101	2.508	2.505	0.003	98	31212	5.00	5.35	
17 Ethyl ether	59	2.745	2.742	0.003	92	20177	5.00	4.86	
18 Acrolein	56	2.839	2.837	0.002	98	14413	25.0	26.4	
19 1,1-Dichloroethene	96	2.934	2.931	0.003	93	24068	5.00	4.84	
20 1,1,2-Trichloro-1,2,2-trif	151	2.946	2.943	0.003	88	20523	5.00	5.09	
21 Acetone	43	2.958	2.955	0.003	99	56867	10.0	7.95	
22 Methylal	45		2.980					ND	
23 Iodomethane	142	3.052	3.062	-0.010	97	38053	5.00	4.84	
24 Carbon disulfide	76	3.112	3.121	-0.009	99	53719	5.00	4.42	
25 Acetonitrile	41		3.181					ND	
26 3-Chloro-1-propene	76	3.206	3.215	-0.009	94	13302	5.00	4.74	
27 Methyl acetate	43	3.218	3.227	-0.009	97	136845	25.0	22.3	
28 Methylene Chloride	84	3.301	3.298	0.003	92	59305	5.00	4.86	
29 2-Methyl-2-propanol	59	3.384	3.381	0.003	94	30092	50.0	42.3	
30 Acrylonitrile	53	3.490	3.488	0.002	100	130250	50.0	48.2	
31 trans-1,2-Dichloroethene	96	3.526	3.523	0.003	68	31798	5.00	5.44	
32 Methyl tert-butyl ether	73	3.526	3.523	0.003	96	78696	5.00	4.68	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Hexane	86	3.739	3.736	0.003	94	8476	5.00	4.99	
34 1,1-Dichloroethane	63	3.833	3.843	-0.010	96	47719	5.00	4.62	
35 Vinyl acetate	43	3.869	3.866	0.003	96	20334	4.80	3.68	
36 Isopropyl ether	87		3.890					ND	
37 2-Chloro-1,3-butadiene	53		3.914					ND	
38 Tert-butyl ethyl ether	59		4.151					ND	
40 2-Butanone (MEK)	43	4.271	4.269	0.002	95	38662	10.0	9.62	
39 cis-1,2-Dichloroethene	96	4.271	4.280	-0.009	77	32340	5.00	5.02	
41 2,2-Dichloropropane	77	4.283	4.280	0.003	89	20000	5.00	4.39	
43 Propionitrile	54		4.316					ND	
42 Ethyl acetate	43		4.316					ND	
44 Methacrylonitrile	41		4.435					ND	
45 Chlorobromomethane	128	4.460	4.458	0.002	89	16600	5.00	5.00	
46 Tetrahydrofuran	42	4.496	4.493	0.003	89	19916	10.0	8.91	
47 Chloroform	83	4.508	4.505	0.003	94	47382	5.00	4.73	
48 1,1,1-Trichloroethane	97	4.673	4.671	0.002	99	35886	5.00	4.79	
49 Cyclohexane	56	4.721	4.718	0.003	89	44217	5.00	4.69	
50 1,1-Dichloropropene	75	4.792	4.789	0.003	99	35700	5.00	5.08	
51 Carbon tetrachloride	117	4.804	4.801	0.003	97	28620	5.00	4.33	
52 Isobutyl alcohol	41	4.827	4.825	0.002	93	29454	125.0	106.8	
53 1,2-Dichloroethane	62	4.946	4.955	-0.009	56	35505	5.00	4.46	
54 Benzene	78	4.957	4.955	0.002	95	124380	5.00	5.08	
55 Tert-amyl methyl ether	73		5.015					ND	
56 n-Heptane	100	5.135	5.132	0.003	93	8327	5.00	4.53	
57 n-Butanol	56		5.334					ND	
58 Trichloroethene	130	5.443	5.440	0.003	95	33721	5.00	5.18	
59 Ethyl acrylate	55		5.488					ND	
60 Methylcyclohexane	83	5.608	5.617	-0.009	90	47540	5.00	4.82	
61 1,2-Dichloropropane	63	5.620	5.617	0.003	92	28683	5.00	4.73	
62 Methyl methacrylate	41		5.677					ND	
63 Dibromomethane	93	5.715	5.712	0.003	90	16253	5.00	4.85	
64 1,4-Dioxane	88	5.715	5.712	0.003	45	6667	100.0	101.6	
65 Dichlorobromomethane	83	5.821	5.830	-0.009	99	31230	5.00	4.79	
66 2-Nitropropane	41		5.997					ND	
67 2-Chloroethyl vinyl ether	63	6.058	6.055	0.003	92	18857	10.0	12.3	
68 cis-1,3-Dichloropropene	75	6.188	6.185	0.003	95	33332	5.00	4.30	
69 4-Methyl-2-pentanone (MIBK	43	6.306	6.304	0.002	97	66725	10.0	9.86	
70 Toluene	91	6.484	6.481	0.003	98	135326	5.00	5.28	
71 trans-1,3-Dichloropropene	75	6.650	6.647	0.003	92	26456	5.00	3.97	
72 Ethyl methacrylate	69	6.709	6.706	0.003	91	29199	5.00	4.53	
73 1,1,2-Trichloroethane	97	6.803	6.813	-0.010	89	27977	5.00	5.22	
74 1,3-Dichloropropane	76	6.957	6.955	0.002	91	45268	5.00	5.13	
75 Tetrachloroethene	164	6.957	6.966	-0.009	82	26548	5.00	5.11	
76 2-Hexanone	43	7.005	7.002	0.002	96	49442	10.0	10.1	
77 n-Butyl acetate	43		7.109					ND	
78 Chlorodibromomethane	129	7.158	7.168	-0.010	90	22619	5.00	4.59	
79 Tetrahydrothiophene	60		7.168					ND	
80 Ethylene Dibromide	107	7.277	7.274	0.003	69	25025	5.00	4.98	
81 1-Chlorohexane	91		7.665					ND	
82 Chlorobenzene	112	7.714	7.712	0.002	97	91506	5.00	5.28	
83 1,1,1,2-Tetrachloroethane	131	7.774	7.771	0.003	93	24856	5.00	4.74	
84 Ethylbenzene	106	7.797	7.807	-0.010	98	45646	5.00	5.06	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 m-Xylene & p-Xylene	106	7.904	7.901	0.003	97	55580	5.00	5.22	
87 Styrene	104	8.282	8.280	0.002	93	78512	5.00	5.08	
86 o-Xylene	106	8.271	8.280	-0.009	97	54439	5.00	5.36	
88 Bromoform	173	8.460	8.457	0.003	95	12996	5.00	4.39	
89 Isopropylbenzene	105	8.614	8.611	0.003	94	131077	5.00	5.11	
90 1,4-Dichlorobutane	90		8.697					ND	
91 Cyclohexanone	55		8.695					ND	
92 1,1,2,2-Tetrachloroethane	83	8.874	8.871	0.003	94	34595	5.00	5.28	
93 Bromobenzene	156	8.921	8.919	0.002	91	37094	5.00	5.07	
94 1,2,3-Trichloropropane	110	8.921	8.931	-0.010	84	12104	5.00	5.30	
95 trans-1,4-Dichloro-2-buten	53	8.933	8.931	0.002	69	7718	5.00	4.11	
96 N-Propylbenzene	120	9.004	9.002	0.002	98	39922	5.00	5.53	
97 2-Chlorotoluene	126	9.099	9.096	0.003	98	35443	5.00	5.63	
98 1,3,5-Trimethylbenzene	105	9.170	9.167	0.003	94	110755	5.00	5.21	
99 4-Chlorotoluene	126	9.194	9.203	-0.009	95	37324	5.00	5.60	
100 tert-Butylbenzene	119	9.489	9.487	0.002	92	100360	5.00	5.28	
101 Pentachloroethane	167		9.511					ND	
102 1,2,4-Trimethylbenzene	105	9.537	9.534	0.003	94	115644	5.00	5.20	
103 sec-Butylbenzene	105	9.702	9.700	0.002	93	148172	5.00	5.42	
104 1,3-Dichlorobenzene	146	9.821	9.818	0.003	95	75411	5.00	5.56	
105 4-Isopropyltoluene	119	9.844	9.842	0.002	97	124157	5.00	5.17	
106 1,4-Dichlorobenzene	146	9.904	9.901	0.003	95	71809	5.00	5.03	
107 1,2,3-Trimethylbenzene	105		9.949					ND	
108 Benzyl chloride	126		10.032					ND	
109 n-Butylbenzene	91	10.235	10.244	-0.009	97	99734	5.00	5.00	
110 1,2-Dichlorobenzene	146	10.270	10.268	0.002	99	69989	5.00	5.34	
111 1,2-Dibromo-3-Chloropropan	157	11.028	11.025	0.003	81	5236	5.00	4.35	
112 1,3,5-Trichlorobenzene	180		11.250					ND	
113 1,2,4-Trichlorobenzene	180	11.856	11.865	-0.009	92	41714	5.00	4.93	
114 Hexachlorobutadiene	225	12.033	12.031	0.002	94	25153	5.00	5.14	
115 Naphthalene	128	12.104	12.102	0.002	96	112002	5.00	5.45	
116 1,2,3-Trichlorobenzene	180	12.365	12.362	0.003	96	45041	5.00	5.17	
117 2-Methylnaphthalene	142	13.418	13.428	-0.010	88	2528		0.1628	
119 Epichlorohydrin	1		0.000					ND	
118 2-Ethyltoluene	1		0.000					ND	
120 3-Ethyltoluene	1		0.000					ND	
121 Ethylene oxide	1		0.000					ND	
122 1,3-Butadiene TIC	1		0.000					ND	
124 Propene oxide	1		0.000					ND	
123 1,3-Diethylbenzene TIC	1		0.000					ND	
125 Isobutylene TIC	1		0.000					ND	
S 126 1,2-Dichloroethene, Total	96				0		10.0	10.5	
S 127 1,3-Dichloropropene, Total	75				0		10.0	8.26	
S 128 Xylenes, Total	106				0		10.0	10.6	
S 129 Trihalomethanes, Total	1				0		20.0	18.5	
T 130 Butyl Methacrylate TIC	69		9.231					ND	
T 131 Hexachloroethane TIC	166		10.500					ND	
T 132 Chlorodifluoromethane TIC	51		1.590					ND	
T 133 Pentachloroethane TIC	167		9.514					ND	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

Reagents:

VMRPRIMW_00121	Amount Added:	0.50	Units: uL	
VMAROLISTDW_00095	Amount Added:	0.50	Units: uL	
VMRGAS_00097	Amount Added:	0.50	Units: uL	
VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00018	Amount Added:	1.15	Units: uL	Run Reagent
vmDist_H2o_00045	Amount Added:	0.00	Units:	Run Reagent

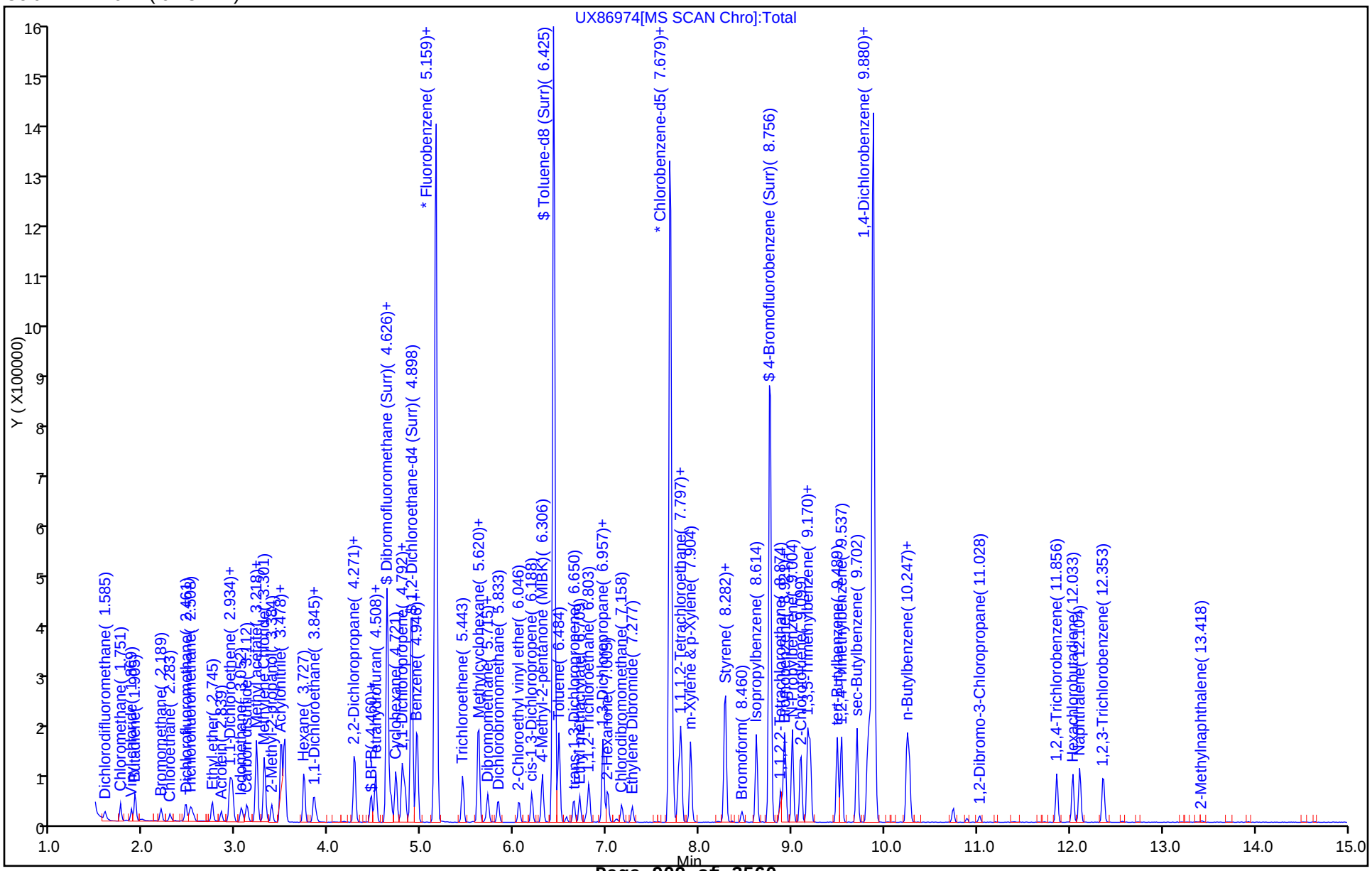
Report Date: 15-Apr-2015 00:48:09 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX86974.D

Injection Date:	14-Apr-2015 04:00:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	MRL			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-176276/33

Matrix: Solid | Lab File ID: UX87000.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/14/2015 13:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176276 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.00501		0.0010	0.00025	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00538		0.0010	0.00025	0.00022
79-00-5	1,1,2-Trichloroethane	0.00588		0.0010	0.00050	0.00017
75-34-3	1,1-Dichloroethane	0.00524		0.0010	0.00025	0.00026
75-35-4	1,1-Dichloroethene	0.00495		0.0010	0.00025	0.00045
107-06-2	1,2-Dichloroethane	0.00520		0.0010	0.00025	0.00020
540-59-0	1,2-Dichloroethene, Total	0.0118		0.0020	0.00025	0.00020
78-87-5	1,2-Dichloropropane	0.00551		0.0010	0.00025	0.00022
78-93-3	2-Butanone (MEK)	0.0101		0.010	0.00050	0.0041
591-78-6	2-Hexanone	0.0105		0.010	0.00050	0.0039
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0106		0.010	0.00050	0.0036
71-43-2	Benzene	0.00561		0.0010	0.00025	0.00024
75-25-2	Bromoform	0.00485		0.0010	0.00050	0.00056
74-83-9	Bromomethane	0.00603		0.0010	0.00050	0.00063
75-15-0	Carbon disulfide	0.00431		0.0010	0.00025	0.00028
56-23-5	Carbon tetrachloride	0.00474		0.0010	0.00025	0.00017
108-90-7	Chlorobenzene	0.00563		0.0010	0.00025	0.00019
75-27-4	Bromodichloromethane	0.00492		0.0010	0.00025	0.00015
74-87-3	Chloromethane	0.00503		0.0010	0.00050	0.00044
10061-01-5	cis-1,3-Dichloropropene	0.00452		0.0010	0.00025	0.00046
124-48-1	Dibromochloromethane	0.00478		0.0010	0.00025	0.00043
100-41-4	Ethylbenzene	0.00524		0.0010	0.00025	0.00023
1634-04-4	Methyl tert-butyl ether	0.00514		0.0010	0.00025	0.00016
75-09-2	Methylene Chloride	0.00486		0.0010	0.00050	0.00028
100-42-5	Styrene	0.00527		0.0010	0.00025	0.00045
127-18-4	Tetrachloroethene	0.00511		0.0010	0.00050	0.00020
108-88-3	Toluene	0.00575		0.0010	0.00025	0.00022
67-66-3	Chloroform	0.00527		0.0010	0.00025	0.00021
74-97-5	Bromochloromethane	0.00574		0.0010	0.00050	0.00025
106-93-4	1,2-Dibromoethane	0.00581		0.0010	0.00025	0.00019
10061-02-6	trans-1,3-Dichloropropene	0.00414		0.0010	0.00025	0.00056
79-01-6	Trichloroethene	0.00531		0.0010	0.00025	0.00015
75-01-4	Vinyl chloride	0.00510		0.0010	0.00025	0.00029
75-00-3	Chloroethane	0.00483		0.0010	0.0050	0.00033
1330-20-7	Xylenes, Total	0.0106		0.0020	0.00025	0.00043

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-176276/33

Matrix: Solid Lab File ID: UX87000.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/14/2015 13:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176276 Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		50-150
2037-26-5	Toluene-d8 (Surr)	115		50-150
460-00-4	4-Bromofluorobenzene (Surr)	102		50-150
1868-53-7	Dibromofluoromethane (Surr)	106		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX87000.D
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 14-Apr-2015 13:12:30 ALS Bottle#: 31 Worklist Smp#: 33
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042522-033
Operator ID: 402279 Instrument ID: A3UX8

Method: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\8260_8.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 00:48:07 Calib Date: 03-Mar-2015 03:00:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20150302-40994.b\UX86161.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: latat Date: 15-Apr-2015 00:34:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.160	5.157	0.003	99	1260521	50.0	50.0	
* 2 Chlorobenzene-d5	117	7.681	7.689	-0.008	95	917231	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.882	9.878	0.004	98	488281	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	4.628	4.624	0.004	95	269524	50.0	52.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.888	4.896	-0.008	90	280922	50.0	48.5	
$ 6 Toluene-d8 (Surr)	98	6.426	6.422	0.004	92	1151702	50.0	57.7	
$ 7 4-Bromofluorobenzene (Surr	95	8.758	8.765	-0.007	96	365786	50.0	50.8	
$ 8 BFB	95	3.527	3.743	-0.216	0	1135		NR	
9 Dichlorodifluoromethane	85	1.587	1.582	0.005	99	24321	5.00	5.20	
10 Chloromethane	50	1.753	1.748	0.005	99	28029	5.00	5.03	
11 Vinyl chloride	62	1.871	1.866	0.005	96	21072	5.00	5.10	
12 Butadiene	54	1.906	1.914	-0.008	0	20038	NC	NC	
13 Bromomethane	94	2.190	2.186	0.004	91	16633	5.00	6.03	
14 Chloroethane	64	2.285	2.281	0.004	97	12173	5.00	4.83	
15 Dichlorofluoromethane	67	2.462	2.458	0.004	96	30438	5.00	5.21	
16 Trichlorofluoromethane	101	2.510	2.505	0.005	98	30139	5.00	5.23	
17 Ethyl ether	59	2.735	2.742	-0.007	93	24230	5.00	5.91	
18 Acrolein	56	2.841	2.837	0.004	97	21597	25.0	37.8	
19 1,1-Dichloroethene	96	2.936	2.931	0.005	94	24291	5.00	4.95	
20 1,1,2-Trichloro-1,2,2-trif	151	2.948	2.943	0.005	89	21227	5.00	5.33	
21 Acetone	43	2.959	2.955	0.004	100	53958	10.0	7.09	
22 Methylal	45		2.980					ND	
23 Iodomethane	142	3.054	3.062	-0.008	95	41120	5.00	5.30	
24 Carbon disulfide	76	3.113	3.121	-0.008	98	51704	5.00	4.31	
25 Acetonitrile	41		3.181					ND	
26 3-Chloro-1-propene	76	3.208	3.215	-0.007	93	13833	5.00	4.99	
27 Methyl acetate	43	3.220	3.227	-0.007	98	153702	25.0	25.4	
28 Methylene Chloride	84	3.303	3.298	0.005	92	58503	5.00	4.86	
29 2-Methyl-2-propanol	59	3.385	3.381	0.004	91	32596	50.0	46.4	
30 Acrylonitrile	53	3.480	3.488	-0.008	98	142569	50.0	53.5	
31 trans-1,2-Dichloroethene	96	3.527	3.523	0.004	66	33506	5.00	5.81	
32 Methyl tert-butyl ether	73	3.527	3.523	0.004	96	85347	5.00	5.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Hexane	86	3.729	3.736	-0.007	93	8327	5.00	4.97	
34 1,1-Dichloroethane	63	3.835	3.843	-0.008	96	53407	5.00	5.24	
35 Vinyl acetate	43	3.859	3.866	-0.007	96	18350	4.80	3.36	
36 Isopropyl ether	87		3.890					ND	
37 2-Chloro-1,3-butadiene	53		3.914					ND	
38 Tert-butyl ethyl ether	59		4.151					ND	
40 2-Butanone (MEK)	43	4.273	4.269	0.004	90	40136	10.0	10.1	
39 cis-1,2-Dichloroethene	96	4.273	4.280	-0.007	81	37836	5.00	5.95	
41 2,2-Dichloropropane	77	4.285	4.280	0.005	89	19886	5.00	4.42	
43 Propionitrile	54		4.316					ND	
42 Ethyl acetate	43		4.316					ND	
44 Methacrylonitrile	41		4.435					ND	
45 Chlorobromomethane	128	4.450	4.458	-0.008	91	18791	5.00	5.74	
46 Tetrahydrofuran	42	4.498	4.493	0.005	90	21938	10.0	9.95	
47 Chloroform	83	4.510	4.505	0.005	94	52006	5.00	5.27	
48 1,1,1-Trichloroethane	97	4.663	4.671	-0.008	98	37037	5.00	5.01	
49 Cyclohexane	56	4.723	4.718	0.005	90	42202	5.00	4.54	
50 1,1-Dichloropropene	75	4.794	4.789	0.005	96	34413	5.00	4.96	
51 Carbon tetrachloride	117	4.805	4.801	0.004	96	30880	5.00	4.74	
52 Isobutyl alcohol	41	4.817	4.825	-0.008	94	34202	125.0	125.7	
53 1,2-Dichloroethane	62	4.947	4.955	-0.008	83	40809	5.00	5.20	
54 Benzene	78	4.947	4.955	-0.008	94	135331	5.00	5.61	
55 Tert-amyl methyl ether	73		5.015					ND	
56 n-Heptane	100	5.137	5.132	0.005	92	9403	5.00	5.19	
57 n-Butanol	56		5.334					ND	
58 Trichloroethene	130	5.444	5.440	0.004	95	34160	5.00	5.31	
59 Ethyl acrylate	55		5.488					ND	
60 Methylcyclohexane	83	5.610	5.617	-0.007	93	45990	5.00	4.72	
61 1,2-Dichloropropane	63	5.622	5.617	0.005	94	32956	5.00	5.51	
62 Methyl methacrylate	41		5.677					ND	
63 Dibromomethane	93	5.717	5.712	0.004	89	18043	5.00	5.45	
64 1,4-Dioxane	88	5.717	5.712	0.004	45	8059	100.0	124.5	
65 Dichlorobromomethane	83	5.823	5.830	-0.007	99	31646	5.00	4.92	
66 2-Nitropropane	41		5.997					ND	
67 2-Chloroethyl vinyl ether	63	6.048	6.055	-0.007	91	19259	10.0	12.7	
68 cis-1,3-Dichloropropene	75	6.190	6.185	0.005	95	34565	5.00	4.52	
69 4-Methyl-2-pentanone (MIBK	43	6.308	6.304	0.004	97	70662	10.0	10.6	
70 Toluene	91	6.486	6.481	0.005	98	144959	5.00	5.75	
71 trans-1,3-Dichloropropene	75	6.639	6.647	-0.008	92	27186	5.00	4.14	
72 Ethyl methacrylate	69	6.710	6.706	0.004	90	32001	5.00	5.04	
73 1,1,2-Trichloroethane	97	6.805	6.813	-0.008	89	31004	5.00	5.88	
74 1,3-Dichloropropane	76	6.959	6.955	0.004	89	50878	5.00	5.86	
75 Tetrachloroethene	164	6.959	6.966	-0.007	75	26151	5.00	5.11	
76 2-Hexanone	43	7.006	7.002	0.004	97	50658	10.0	10.5	
77 n-Butyl acetate	43		7.109					ND	
78 Chlorodibromomethane	129	7.160	7.168	-0.008	89	23210	5.00	4.78	
79 Tetrahydrothiophene	60		7.168					ND	
80 Ethylene Dibromide	107	7.278	7.274	0.004	99	28723	5.00	5.81	
81 1-Chlorohexane	91		7.665					ND	
82 Chlorobenzene	112	7.716	7.712	0.004	97	96026	5.00	5.63	
83 1,1,1,2-Tetrachloroethane	131	7.775	7.771	0.004	92	26969	5.00	5.23	
84 Ethylbenzene	106	7.799	7.807	-0.008	98	46463	5.00	5.24	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 m-Xylene & p-Xylene	106	7.906	7.901	0.005	99	55560	5.00	5.30	
87 Styrene	104	8.284	8.280	0.004	94	80030	5.00	5.27	
86 o-Xylene	106	8.272	8.280	-0.008	95	52710	5.00	5.27	
88 Bromoform	173	8.462	8.457	0.005	97	14488	5.00	4.85	
89 Isopropylbenzene	105	8.616	8.611	0.005	94	132166	5.00	5.24	
90 1,4-Dichlorobutane	90		8.697					ND	
91 Cyclohexanone	55		8.695					ND	
92 1,1,2,2-Tetrachloroethane	83	8.876	8.871	0.005	95	35421	5.00	5.38	
93 Bromobenzene	156	8.911	8.919	-0.008	90	41891	5.00	5.70	
94 1,2,3-Trichloropropane	110	8.923	8.931	-0.008	85	12607	5.00	5.50	
95 trans-1,4-Dichloro-2-buten	53	8.935	8.931	0.004	71	8780	5.00	4.66	
96 N-Propylbenzene	120	9.006	9.002	0.004	99	36429	5.00	5.02	
97 2-Chlorotoluene	126	9.089	9.096	-0.007	98	35424	5.00	5.60	
98 1,3,5-Trimethylbenzene	105	9.172	9.167	0.005	94	108666	5.00	5.09	
99 4-Chlorotoluene	126	9.195	9.203	-0.008	95	38098	5.00	5.69	
100 tert-Butylbenzene	119	9.491	9.487	0.004	90	95887	5.00	5.03	
101 Pentachloroethane	167		9.511					ND	
102 1,2,4-Trimethylbenzene	105	9.539	9.534	0.004	96	114563	5.00	5.13	
103 sec-Butylbenzene	105	9.704	9.700	0.004	93	141169	5.00	5.14	
104 1,3-Dichlorobenzene	146	9.811	9.818	-0.007	96	70526	5.00	5.18	
105 4-Isopropyltoluene	119	9.834	9.842	-0.008	97	116711	5.00	4.84	
106 1,4-Dichlorobenzene	146	9.905	9.901	0.004	95	74153	5.00	5.17	
107 1,2,3-Trimethylbenzene	105		9.949					ND	
108 Benzyl chloride	126		10.032					ND	
109 n-Butylbenzene	91	10.237	10.244	-0.007	97	88340	5.00	4.41	
110 1,2-Dichlorobenzene	146	10.272	10.268	0.004	99	72458	5.00	5.50	
111 1,2-Dibromo-3-Chloropropan	157	11.029	11.025	0.004	80	4887	5.00	4.04	
112 1,3,5-Trichlorobenzene	180		11.250					ND	
113 1,2,4-Trichlorobenzene	180	11.858	11.865	-0.007	93	32937	5.00	3.88	
114 Hexachlorobutadiene	225	12.035	12.031	0.004	92	21485	5.00	4.37	
115 Naphthalene	128	12.106	12.102	0.004	95	73192	5.00	3.54	
116 1,2,3-Trichlorobenzene	180	12.367	12.362	0.005	95	34308	5.00	3.92	
117 2-Methylnaphthalene	142		13.428					ND	
119 Epichlorohydrin	1		0.000					ND	
118 2-Ethyltoluene	1		0.000					ND	
120 3-Ethyltoluene	1		0.000					ND	
121 Ethylene oxide	1		0.000					ND	
122 1,3-Butadiene TIC	1		0.000					ND	
124 Propene oxide	1		0.000					ND	
123 1,3-Diethylbenzene TIC	1		0.000					ND	
125 Isobutylene TIC	1		0.000					ND	
S 126 1,2-Dichloroethene, Total	96				0		10.0	11.8	
S 127 1,3-Dichloropropene, Total	75				0		10.0	8.66	
S 128 Xylenes, Total	106				0		10.0	10.6	
S 129 Trihalomethanes, Total	1				0		20.0	19.8	
T 130 Butyl Methacrylate TIC	69		9.231					ND	
T 131 Hexachloroethane TIC	166		10.500					ND	
T 132 Chlorodifluoromethane TIC	51		1.590					ND	
T 133 Pentachloroethane TIC	167		9.514					ND	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

Reagents:

VMRPRIMW_00121	Amount Added:	0.50	Units: uL	
VMAROLISTDW_00095	Amount Added:	0.50	Units: uL	
VMRGAS_00097	Amount Added:	0.50	Units: uL	
VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VMUX8SS_00018	Amount Added:	1.15	Units: uL	Run Reagent
vmDist_H2o_00045	Amount Added:	0.00	Units:	Run Reagent

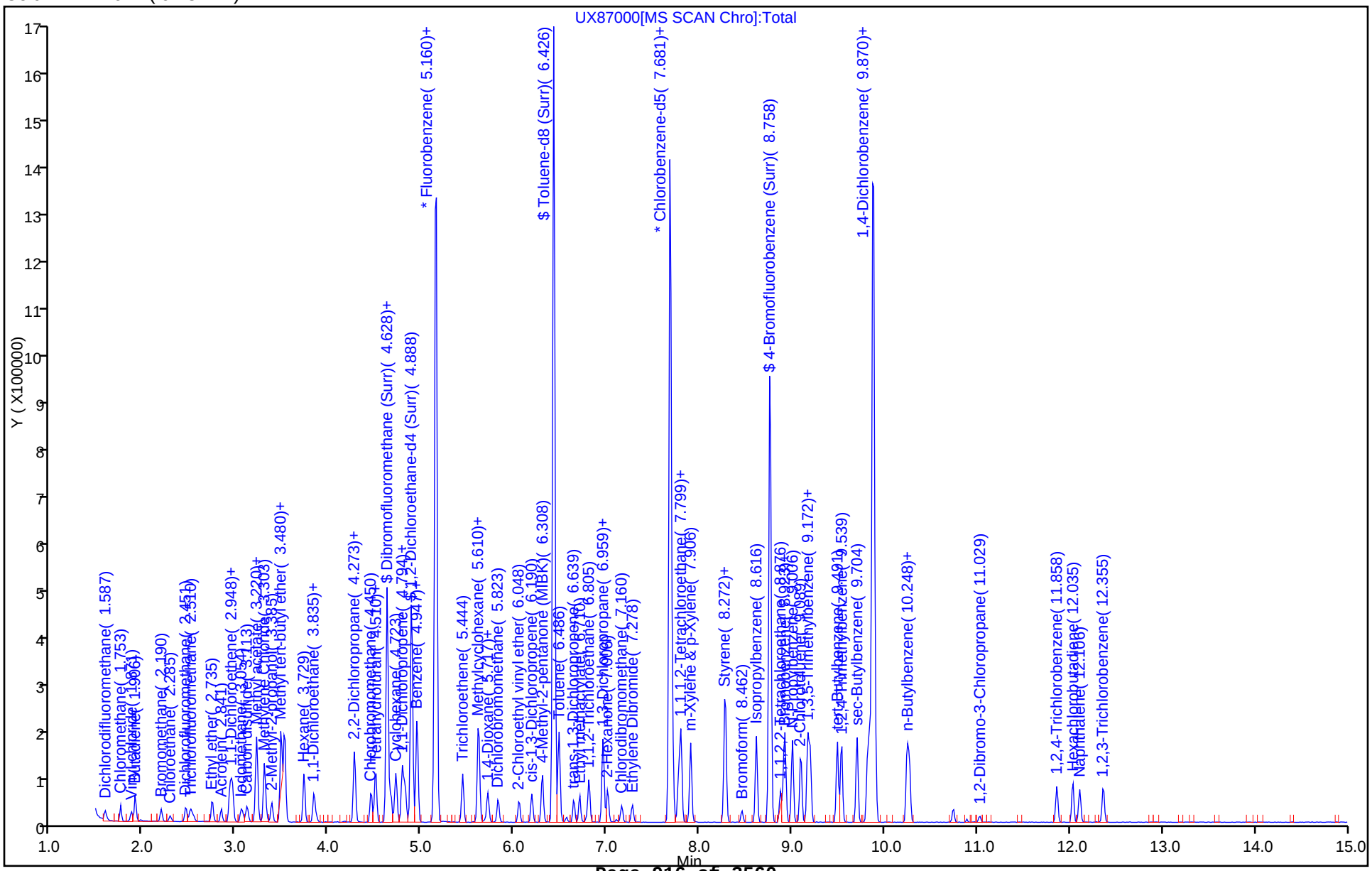
Report Date: 15-Apr-2015 00:48:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX8\20150414-42522.b\UX87000.D

Injection Date:	14-Apr-2015 13:12:30	Instrument ID:	A3UX8	Operator ID:	402279
Lims ID:	MRL			Worklist Smp#:	33
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8260_8	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-176298/5

Matrix: Water | Lab File ID: UXM7137.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/14/2015 09:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176298 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.00109		0.0010	0.00025	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.000903	J	0.0010	0.00025	0.00022
79-00-5	1,1,2-Trichloroethane	0.000924	J	0.0010	0.00050	0.00017
75-34-3	1,1-Dichloroethane	0.00104		0.0010	0.00025	0.00026
75-35-4	1,1-Dichloroethene	0.00100		0.0010	0.00025	0.00045
107-06-2	1,2-Dichloroethane	0.000987	J	0.0010	0.00025	0.00020
540-59-0	1,2-Dichloroethene, Total	0.00203		0.0020	0.00025	0.00020
78-87-5	1,2-Dichloropropane	0.00102		0.0010	0.00025	0.00022
78-93-3	2-Butanone (MEK)	0.00892	J	0.010	0.00050	0.0041
591-78-6	2-Hexanone	0.00881	J	0.010	0.00050	0.0039
108-10-1	4-Methyl-2-pentanone (MIBK)	0.00924	J	0.010	0.00050	0.0036
67-64-1	Acetone	0.00855	J	0.010	0.0010	0.0034
71-43-2	Benzene	0.00102		0.0010	0.00025	0.00024
75-25-2	Bromoform	0.000768	J	0.0010	0.00050	0.00056
74-83-9	Bromomethane	0.00143	^	0.0010	0.00050	0.00063
75-15-0	Carbon disulfide	0.000940	J	0.0010	0.00025	0.00028
56-23-5	Carbon tetrachloride	0.000976	J	0.0010	0.00025	0.00017
108-90-7	Chlorobenzene	0.000987	J	0.0010	0.00025	0.00019
75-27-4	Bromodichloromethane	0.000930	J	0.0010	0.00025	0.00015
74-87-3	Chloromethane	0.00138	^	0.0010	0.00050	0.00044
10061-01-5	cis-1,3-Dichloropropene	0.000980	J	0.0010	0.00025	0.00046
124-48-1	Dibromochloromethane	0.000862	J	0.0010	0.00025	0.00043
100-41-4	Ethylbenzene	0.000988	J	0.0010	0.00025	0.00023
1634-04-4	Methyl tert-butyl ether	0.00101		0.0010	0.00025	0.00016
75-09-2	Methylene Chloride	0.000888	J	0.0010	0.00050	0.00028
100-42-5	Styrene	0.000929	J	0.0010	0.00025	0.00045
127-18-4	Tetrachloroethene	0.00110		0.0010	0.00050	0.00020
108-88-3	Toluene	0.000982	J	0.0010	0.00025	0.00022
67-66-3	Chloroform	0.000987	J	0.0010	0.00025	0.00021
74-97-5	Bromochloromethane	0.00104		0.0010	0.00050	0.00025
106-93-4	1,2-Dibromoethane	0.000984	J	0.0010	0.00025	0.00019
10061-02-6	trans-1,3-Dichloropropene	0.000921	J	0.0010	0.00025	0.00056
79-01-6	Trichloroethene	0.00105		0.0010	0.00025	0.00015
75-01-4	Vinyl chloride	0.00137	^	0.0010	0.00025	0.00029
75-00-3	Chloroethane	0.00133	^	0.0010	0.00050	0.00033
1330-20-7	Xylenes, Total	0.00187	J	0.0020	0.00025	0.00043

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-176298/5

Matrix: Water Lab File ID: UXM7137.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/14/2015 09:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176298 Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		50-150
2037-26-5	Toluene-d8 (Surr)	96		50-150
460-00-4	4-Bromofluorobenzene (Surr)	99		50-150
1868-53-7	Dibromofluoromethane (Surr)	99		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7137.D
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 14-Apr-2015 09:15:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042532-005
Operator ID: 1904 Instrument ID: A3UX16

Method: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 14-Apr-2015 13:40:55 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: quayler Date: 14-Apr-2015 10:05:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.588	5.588	0.000	99	1491885	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.279	8.279	0.000	85	1107792	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	93	606528	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.006	5.007	-0.001	95	335006	11.4	11.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	375161	11.4	11.4	
$ 6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	93	1443255	11.4	10.9	
$ 7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	91	533797	11.4	11.2	
$ 8 BFB	95	3.726	3.775	-0.049	0	2040		NR	
9 Dichlorodifluoromethane	85	1.615	1.615	0.000	99	42692	1.00	1.55	
10 Chloromethane	50	1.769	1.769	0.000	98	52387	1.00	1.38	
11 Vinyl chloride	62	1.888	1.888	0.000	97	56802	1.00	1.37	
12 Butadiene	54	1.935	1.935	0.000	0	52219	1.00	1.40	
13 Bromomethane	94	2.220	2.232	-0.012	89	28680	1.00	1.43	
14 Chloroethane	64	2.326	2.327	0.000	98	32508	1.00	1.33	
15 Dichlorofluoromethane	67	2.516	2.516	0.000	96	69697	1.00	1.28	
16 Trichlorofluoromethane	101	2.575	2.576	-0.001	97	50872	1.00	1.40	
17 Ethyl ether	59	2.836	2.836	0.000	87	26644	1.00	0.99	
18 Acrolein	56	2.955	2.943	0.012	98	16294	5.00	4.69	
19 1,1-Dichloroethene	96	3.050	3.050	0.000	98	30322	1.00	1.00	
20 1,1,2-Trichloro-1,2,2-trif	151	3.085	3.085	0.000	93	25022	1.00	1.07	
21 Acetone	43	3.085	3.085	0.000	100	77065	10.0	8.55	
22 Methylal	45		3.109					ND	
23 Iodomethane	142	3.192	3.192	0.000	96	48813	1.00	1.03	
24 Carbon disulfide	76	3.263	3.263	0.000	98	87264	1.00	0.9402	
25 Acetonitrile	41		3.334					ND	
26 3-Chloro-1-propene	76	3.382	3.382	0.000	90	18084	1.00	0.8800	
27 Methyl acetate	43	3.394	3.394	0.000	97	104379	5.00	5.25	
28 Methylene Chloride	84	3.489	3.489	0.000	88	48581	1.00	0.8878	
29 2-Methyl-2-propanol	59	3.583	3.572	0.011	98	18692	10.0	9.79	
30 Acrylonitrile	53	3.702	3.690	0.012	99	100288	10.0	9.72	
31 Methyl tert-butyl ether	73	3.738	3.738	0.000	95	89465	1.00	1.01	
32 trans-1,2-Dichloroethene	96	3.749	3.738	0.011	68	36532	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Hexane	86	3.999	3.987	0.011	88	7930	1.00	0.9080	
34 1,1-Dichloroethane	63	4.105	4.105	0.000	95	61553	1.00	1.04	
35 Vinyl acetate	43	4.141	4.141	0.000	97	22556	0.9600	0.9028	
36 Isopropyl ether	87		4.165					ND	
37 2-Chloro-1,3-butadiene	53		4.188					ND	
38 Tert-butyl ethyl ether	59		4.485					ND	
40 2-Butanone (MEK)	43	4.603	4.603	0.000	97	100038	10.0	8.92	
39 cis-1,2-Dichloroethene	96	4.603	4.603	0.000	73	39452	1.00	1.02	
41 2,2-Dichloropropane	77	4.615	4.610	0.005	81	40192	1.00	1.06	
42 Propionitrile	54		4.651					ND	
43 Ethyl acetate	43		4.651					ND	
44 Methacrylonitrile	41		4.781					ND	
45 Chlorobromomethane	128	4.805	4.805	0.000	94	18904	1.00	1.04	
46 Tetrahydrofuran	42	4.852	4.852	0.000	64	13780	2.00	1.93	
47 Chloroform	83	4.864	4.864	0.000	92	57244	1.00	0.9872	
48 1,1,1-Trichloroethane	97	5.042	5.042	0.000	97	48002	1.00	1.09	
49 Cyclohexane	56	5.101	5.101	0.000	86	55191	1.00	1.01	
50 1,1-Dichloropropene	75	5.184	5.184	0.000	98	46559	1.00	1.04	
51 Carbon tetrachloride	117	5.196	5.196	0.000	97	35335	1.00	0.9756	
52 Isobutyl alcohol	41	5.244	5.232	0.012	92	14835	25.0	22.4	
53 1,2-Dichloroethane	62	5.362	5.362	0.000	55	39829	1.00	0.9873	
54 Benzene	78	5.362	5.362	0.000	94	152186	1.00	1.02	
55 Tert-amyl methyl ether	73		5.445					ND	
56 n-Heptane	57	5.588	5.588	0.000	38	68277	1.00	1.43	
57 n-Butanol	56		5.801					ND	
58 Trichloroethene	130	5.908	5.908	0.000	96	40061	1.00	1.05	
59 Ethyl acrylate	55		5.967					ND	
60 Methylcyclohexane	83	6.086	6.086	0.000	88	61618	1.00	1.07	
61 1,2-Dichloropropane	63	6.097	6.098	-0.001	77	34336	1.00	1.02	
62 Methyl methacrylate	41	6.097	6.169	-0.072	64	39319		1.93	
63 Dibromomethane	93	6.192	6.192	0.000	92	19049	1.00	1.06	
64 1,4-Dioxane	88	6.204	6.192	0.012	38	4928	20.0	19.9	
65 Dichlorobromomethane	83	6.323	6.323	0.000	97	38634	1.00	0.9299	
66 2-Nitropropane	41		6.501					ND	
67 2-Chloroethyl vinyl ether	63	6.572	6.572	0.000	92	33041	2.00	1.86	
68 cis-1,3-Dichloropropene	75	6.714	6.714	0.000	97	47957	1.00	0.9801	
69 4-Methyl-2-pentanone (MIBK	43	6.833	6.833	0.000	94	204888	10.0	9.24	
70 Toluene	91	7.022	7.022	0.000	98	161083	1.00	0.9821	
71 trans-1,3-Dichloropropene	75	7.200	7.188	0.012	91	38368	1.00	0.9211	
72 Ethyl methacrylate	69	7.271	7.272	-0.001	85	32468	1.00	0.9643	
73 1,1,2-Trichloroethane	97	7.366	7.366	0.000	91	27199	1.00	0.9243	
75 Tetrachloroethene	164	7.532	7.521	0.011	93	34202	1.00	1.10	
74 1,3-Dichloropropane	76	7.520	7.521	-0.001	90	51247	1.00	0.9825	
76 2-Hexanone	43	7.580	7.580	0.000	96	141242	10.0	8.81	
77 n-Butyl acetate	43		7.698					ND	
79 Tetrahydrothiophene	60		7.734					ND	
78 Chlorodibromomethane	129	7.734	7.734	0.000	90	25976	1.00	0.8622	
80 Ethylene Dibromide	107	7.853	7.841	0.012	98	27490	1.00	0.9842	
81 1-Chlorohexane	91		8.268					ND	
82 Chlorobenzene	112	8.303	8.303	0.000	95	103737	1.00	0.9867	
83 1,1,1,2-Tetrachloroethane	131	8.374	8.374	0.000	92	31385	1.00	0.9377	
84 Ethylbenzene	106	8.398	8.398	0.000	98	55569	1.00	0.9882	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 m-Xylene & p-Xylene	106	8.517	8.505	0.012	96	65967	1.00	0.9369	
86 o-Xylene	106	8.884	8.884	0.000	96	63354	1.00	0.9313	
87 Styrene	104	8.896	8.896	0.000	91	101328	1.00	0.9292	
88 Bromoform	173	9.074	9.074	0.000	96	14097	1.00	0.7679	
89 Isopropylbenzene	105	9.240	9.240	0.000	95	170231	1.00	0.9458	
90 1,4-Dichlorobutane	55		9.323					ND	
91 Cyclohexanone	55		9.330					ND	
92 1,1,2,2-Tetrachloroethane	83	9.501	9.501	0.000	94	32132	1.00	0.9029	
93 Bromobenzene	156	9.536	9.536	0.000	93	45371	1.00	1.03	
95 1,2,3-Trichloropropane	110	9.560	9.548	0.012	82	10375	1.00	0.9381	
94 trans-1,4-Dichloro-2-buten	53	9.548	9.560	-0.012	71	8291	1.00	0.9533	
96 N-Propylbenzene	120	9.631	9.631	0.000	99	46218	1.00	0.9626	
97 2-Chlorotoluene	126	9.726	9.726	0.000	97	42360	1.00	1.02	
98 3-Ethyltoluene	105	9.797	9.733	0.064	94	140158		NC	
99 1,3,5-Trimethylbenzene	105	9.797	9.797	0.000	93	140158	1.00	0.9638	
100 4-Chlorotoluene	126	9.833	9.821	0.012	96	45051	1.00	1.02	
101 2-Ethyltoluene	105		10.018					ND	
102 tert-Butylbenzene	119	10.129	10.118	0.011	89	127625	1.00	1.01	
103 Pentachloroethane	167		10.141					ND	
104 1,2,4-Trimethylbenzene	105	10.165	10.165	0.000	96	148126	1.00	0.9737	
105 sec-Butylbenzene	105	10.343	10.343	0.000	93	177226	1.00	0.9696	
106 1,3-Dichlorobenzene	146	10.450	10.450	0.000	97	84482	1.00	0.9848	
107 4-Isopropyltoluene	119	10.473	10.473	0.000	97	150445	1.00	0.9433	
108 1,4-Dichlorobenzene	146	10.533	10.533	0.000	95	91515	1.00	1.04	
109 1,2,3-Trimethylbenzene	105		10.580					ND	
110 Benzyl chloride	126		10.663					ND	
111 n-Butylbenzene	91	10.888	10.888	0.000	97	128431	1.00	0.9645	
112 1,2-Dichlorobenzene	146	10.912	10.900	0.012	98	83300	1.00	1.03	
113 1,2-Dibromo-3-Chloropropan	157	11.671	11.671	0.000	82	5094	1.00	0.8544	
114 1,3,5-Trichlorobenzene	180		11.915					ND	
115 1,2,4-Trichlorobenzene	180	12.501	12.501	0.000	92	48633	1.00	0.9645	
116 Hexachlorobutadiene	225	12.679	12.679	0.000	93	22754	1.00	1.09	
117 Naphthalene	128	12.750	12.750	0.000	97	97034	1.00	0.8900	
118 1,2,3-Trichlorobenzene	180	12.999	13.011	-0.012	94	45807	1.00	1.02	
119 2-Methylnaphthalene	142		14.066					ND	
129 Isobutylene TIC	1		0.000					ND	
126 Butyl Methacrylate TIC	1		0.000					ND	
120 Propene oxide	1		0.000					ND	
128 Pentachloroethane TIC	1		0.000					ND	
124 1,3-Butadiene TIC	1		0.000					ND	
123 Ethylene oxide	1		0.000					ND	
127 1,3-Diethylbenzene TIC	1		0.000					ND	
121 Epichlorohydrin	1		0.000					ND	
S 131 1,2-Dichloroethene, Total	96				0		2.00	2.03	
S 132 1,3-Dichloropropene, Total	75				0		2.00	1.90	
S 133 Xylenes, Total	106				0		2.00	1.87	
S 134 Trihalomethanes, Total	1				0		4.00	3.55	
T 125 Chlorodifluoromethane TIC	51		1.575					ND	
T 135 Hexachloroethane TIC	1		11.350					ND	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

Reagents:

VMRPRIMW_00120	Amount Added:	0.80	Units: uL	
VMAROLISTDW_00095	Amount Added:	0.80	Units: uL	
VMRGAS_00097	Amount Added:	0.80	Units: uL	
VMKETONE_00012	Amount Added:	3.20	Units: uL	
VM50IS_00045	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00063	Amount Added:	1.14	Units: uL	Run Reagent
vmDist_H2o_00042	Amount Added:	0.00	Units:	Run Reagent

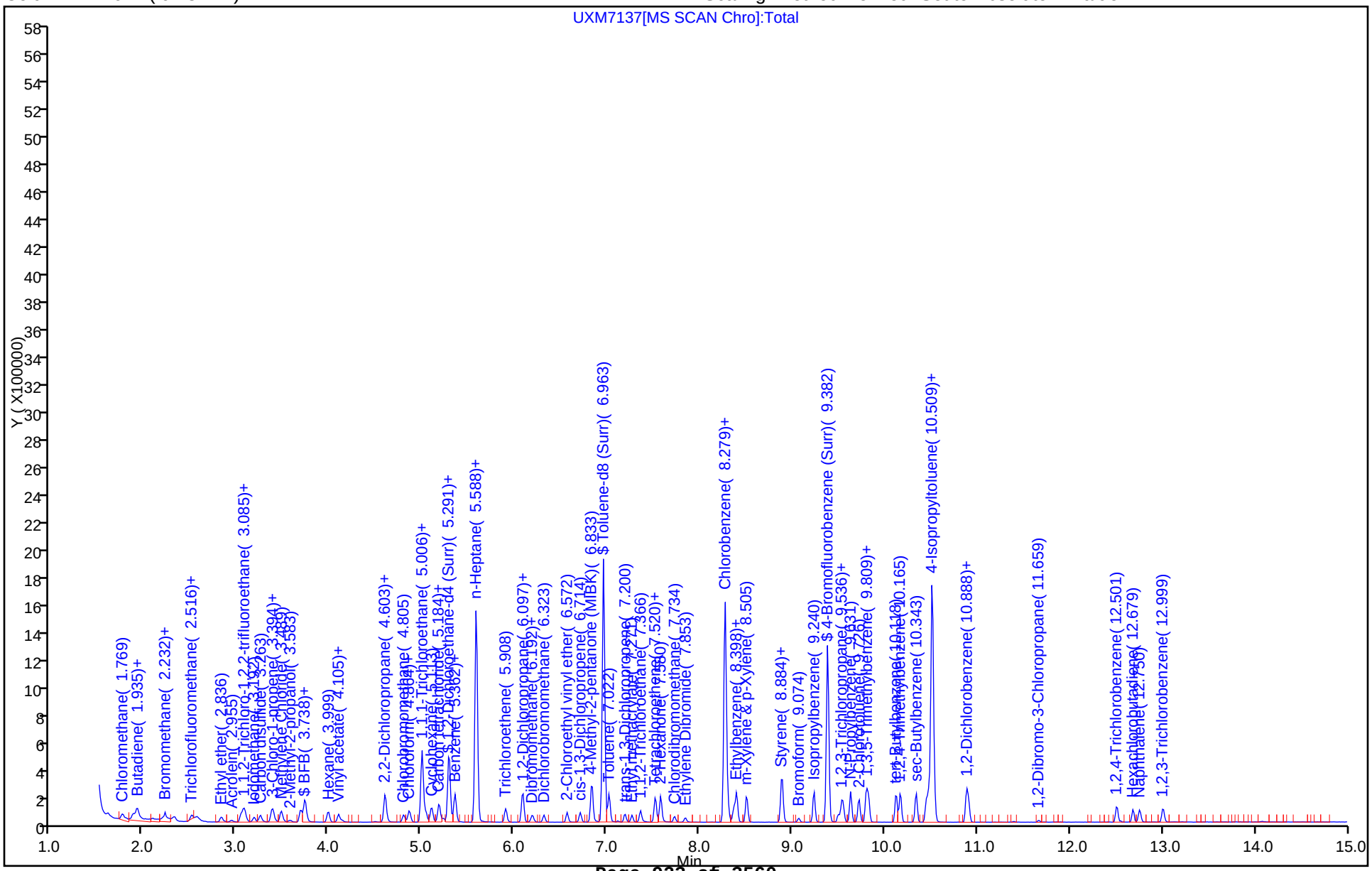
Report Date: 14-Apr-2015 13:40:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7137.D

Injection Date:	14-Apr-2015 09:15:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	MRL			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-176298/15

Matrix: Water | Lab File ID: UXM7147.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/14/2015 13:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176298 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.000982	J	0.0010	0.00025	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.000945	J	0.0010	0.00025	0.00022
79-00-5	1,1,2-Trichloroethane	0.000931	J	0.0010	0.00050	0.00017
75-34-3	1,1-Dichloroethane	0.000968	J	0.0010	0.00025	0.00026
75-35-4	1,1-Dichloroethene	0.000965	J	0.0010	0.00025	0.00045
107-06-2	1,2-Dichloroethane	0.000984	J	0.0010	0.00025	0.00020
540-59-0	1,2-Dichloroethene, Total	0.00189	J	0.0020	0.00025	0.00020
78-87-5	1,2-Dichloropropane	0.000928	J	0.0010	0.00025	0.00022
78-93-3	2-Butanone (MEK)	0.00811	J	0.010	0.00050	0.0041
591-78-6	2-Hexanone	0.00817	J	0.010	0.00050	0.0039
108-10-1	4-Methyl-2-pentanone (MIBK)	0.00909	J	0.010	0.00050	0.0036
67-64-1	Acetone	0.00706	J	0.010	0.0010	0.0034
71-43-2	Benzene	0.000970	J	0.0010	0.00025	0.00024
75-25-2	Bromoform	0.000830	J	0.0010	0.00050	0.00056
74-83-9	Bromomethane	0.00136	^	0.0010	0.00050	0.00063
75-15-0	Carbon disulfide	0.000787	J	0.0010	0.00025	0.00028
56-23-5	Carbon tetrachloride	0.000935	J	0.0010	0.00025	0.00017
108-90-7	Chlorobenzene	0.000960	J	0.0010	0.00025	0.00019
75-27-4	Bromodichloromethane	0.000958	J	0.0010	0.00025	0.00015
74-87-3	Chloromethane	0.00130		0.0010	0.00050	0.00044
10061-01-5	cis-1,3-Dichloropropene	0.000825	J	0.0010	0.00025	0.00046
124-48-1	Dibromochloromethane	0.000768	J	0.0010	0.00025	0.00043
100-41-4	Ethylbenzene	0.00101		0.0010	0.00025	0.00023
1634-04-4	Methyl tert-butyl ether	0.000891	J	0.0010	0.00025	0.00016
75-09-2	Methylene Chloride	0.000972	J	0.0010	0.00050	0.00028
100-42-5	Styrene	0.000846	J	0.0010	0.00025	0.00045
127-18-4	Tetrachloroethene	0.00102		0.0010	0.00050	0.00020
108-88-3	Toluene	0.000947	J	0.0010	0.00025	0.00022
67-66-3	Chloroform	0.000964	J	0.0010	0.00025	0.00021
74-97-5	Bromochloromethane	0.000981	J	0.0010	0.00050	0.00025
106-93-4	1,2-Dibromoethane	0.000904	J	0.0010	0.00025	0.00019
10061-02-6	trans-1,3-Dichloropropene	0.000794	J	0.0010	0.00025	0.00056
79-01-6	Trichloroethene	0.000992	J	0.0010	0.00025	0.00015
75-01-4	Vinyl chloride	0.00130		0.0010	0.00025	0.00029
75-00-3	Chloroethane	0.00131	^	0.0010	0.00050	0.00033
1330-20-7	Xylenes, Total	0.00189	J	0.0020	0.00025	0.00043

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-176298/15

Matrix: Water Lab File ID: UXM7147.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/14/2015 13:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176298 Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		50-150
2037-26-5	Toluene-d8 (Surr)	96		50-150
460-00-4	4-Bromofluorobenzene (Surr)	97		50-150
1868-53-7	Dibromofluoromethane (Surr)	96		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7147.D
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 14-Apr-2015 13:13:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0042532-015
Operator ID: 1904 Instrument ID: A3UX16

Method: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\8260_16.m
Limit Group: MSV 8260DOD ICAL
Last Update: 14-Apr-2015 13:40:55 Calib Date: 08-Apr-2015 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20150408-42365.b\UXM7078.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: quayler Date: 14-Apr-2015 13:37:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.588	5.588	0.000	99	1496350	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.280	8.279	0.001	84	1092798	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.509	10.509	0.000	94	604321	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.007	5.007	0.000	94	327814	11.4	11.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.291	5.291	0.000	0	377996	11.4	11.5	
$ 6 Toluene-d8 (Surr)	98	6.963	6.963	0.000	92	1424599	11.4	10.9	
$ 7 4-Bromofluorobenzene (Surr	95	9.382	9.382	0.000	92	516022	11.4	11.0	
$ 8 BFB	95	3.738	3.775	-0.037	0	1050		NR	
9 Dichlorodifluoromethane	85	1.615	1.615	0.000	98	42002	1.00	1.52	
10 Chloromethane	50	1.769	1.769	0.000	99	49234	1.00	1.30	
11 Vinyl chloride	62	1.888	1.888	0.000	97	54025	1.00	1.30	
12 Butadiene	54	1.923	1.935	-0.012	0	50934	1.00	1.36	
13 Bromomethane	94	2.220	2.232	-0.012	91	27382	1.00	1.36	
14 Chloroethane	64	2.327	2.327	0.001	99	31963	1.00	1.31	
15 Dichlorofluoromethane	67	2.516	2.516	0.000	96	68307	1.00	1.25	
16 Trichlorofluoromethane	101	2.564	2.576	-0.012	98	53008	1.00	1.46	
17 Ethyl ether	59	2.836	2.836	0.000	90	24376	1.00	0.9036	
18 Acrolein	56	2.955	2.943	0.012	98	15131	5.00	4.34	
19 1,1-Dichloroethene	96	3.062	3.050	0.012	96	29223	1.00	0.9655	
20 1,1,2-Trichloro-1,2,2-trif	151	3.074	3.085	-0.011	70	23590	1.00	1.00	
21 Acetone	43	3.086	3.085	0.001	100	63844	10.0	7.06	
22 Methylal	45		3.109					ND	
23 Iodomethane	142	3.192	3.192	0.000	96	45215	1.00	0.9496	
24 Carbon disulfide	76	3.252	3.263	-0.011	100	73251	1.00	0.7868	
25 Acetonitrile	41		3.334					ND	
26 3-Chloro-1-propene	76	3.382	3.382	0.000	92	16734	1.00	0.8119	
27 Methyl acetate	43	3.394	3.394	0.000	97	95193	5.00	4.78	
28 Methylene Chloride	84	3.489	3.489	0.000	88	51692	1.00	0.9719	
29 2-Methyl-2-propanol	59	3.572	3.572	0.000	98	18056	10.0	9.43	
30 Acrylonitrile	53	3.690	3.690	0.000	99	93348	10.0	9.02	
31 Methyl tert-butyl ether	73	3.738	3.738	0.000	96	78852	1.00	0.8905	
32 trans-1,2-Dichloroethene	96	3.738	3.738	0.000	84	34852	1.00	0.9596	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Hexane	86	3.987	3.987	0.000	90	8983	1.00	1.03	
34 1,1-Dichloroethane	63	4.105	4.105	0.000	95	57481	1.00	0.9679	
35 Vinyl acetate	43	4.141	4.141	0.000	95	20621	0.9600	0.8229	
36 Isopropyl ether	87		4.165					ND	
37 2-Chloro-1,3-butadiene	53		4.188					ND	
38 Tert-butyl ethyl ether	59		4.485					ND	
40 2-Butanone (MEK)	43	4.603	4.603	0.000	98	91256	10.0	8.11	
39 cis-1,2-Dichloroethene	96	4.603	4.603	0.000	75	36041	1.00	0.9298	
41 2,2-Dichloropropane	77	4.603	4.610	-0.007	55	35804	1.00	0.9409	
42 Propionitrile	54		4.651					ND	
43 Ethyl acetate	43		4.651					ND	
44 Methacrylonitrile	41		4.781					ND	
45 Chlorobromomethane	128	4.805	4.805	0.000	90	17843	1.00	0.9812	
46 Tetrahydrofuran	42	4.852	4.852	0.000	60	12211	2.00	1.70	
47 Chloroform	83	4.864	4.864	0.000	94	56038	1.00	0.9635	
48 1,1,1-Trichloroethane	97	5.042	5.042	0.000	98	43467	1.00	0.9822	
49 Cyclohexane	56	5.113	5.101	0.012	85	52714	1.00	0.9635	
50 1,1-Dichloropropene	75	5.184	5.184	0.000	95	41894	1.00	0.9344	
51 Carbon tetrachloride	117	5.196	5.196	0.000	97	33980	1.00	0.9354	
52 Isobutyl alcohol	41	5.232	5.232	0.000	90	15273	25.0	23.0	
53 1,2-Dichloroethane	62	5.362	5.362	0.000	55	39822	1.00	0.9842	
54 Benzene	78	5.362	5.362	0.000	94	145473	1.00	0.9704	
55 Tert-amyl methyl ether	73		5.445					ND	
56 n-Heptane	57	5.588	5.588	0.000	38	64753	1.00	1.26	
57 n-Butanol	56		5.801					ND	
58 Trichloroethene	130	5.908	5.908	0.000	92	37777	1.00	0.99	
59 Ethyl acrylate	55		5.967					ND	
60 Methylcyclohexane	83	6.086	6.086	0.000	87	58177	1.00	1.00	
61 1,2-Dichloropropane	63	6.098	6.098	0.000	91	31479	1.00	0.9281	
62 Methyl methacrylate	41	6.086	6.169	-0.083	61	36268		1.77	
63 Dibromomethane	93	6.192	6.192	0.000	92	16978	1.00	0.9432	
64 1,4-Dioxane	88	6.204	6.192	0.012	38	5000	20.0	20.1	
65 Dichlorobromomethane	83	6.323	6.323	0.000	98	39918	1.00	0.9580	
66 2-Nitropropane	41	6.572	6.501	0.071	43	1698		0.3392	
67 2-Chloroethyl vinyl ether	63	6.572	6.572	0.000	91	31070	2.00	1.74	
68 cis-1,3-Dichloropropene	75	6.714	6.714	0.000	96	40493	1.00	0.8251	
69 4-Methyl-2-pentanone (MIBK	43	6.833	6.833	0.000	95	202165	10.0	9.09	
70 Toluene	91	7.023	7.022	0.001	99	153224	1.00	0.9470	
71 trans-1,3-Dichloropropene	75	7.200	7.188	0.012	92	32617	1.00	0.7938	
72 Ethyl methacrylate	69	7.272	7.272	0.000	89	27038	1.00	0.8141	
73 1,1,2-Trichloroethane	97	7.366	7.366	0.000	89	27033	1.00	0.9313	
75 Tetrachloroethene	164	7.532	7.521	0.011	92	31145	1.00	1.02	
74 1,3-Dichloropropane	76	7.521	7.521	0.000	89	51392	1.00	1.00	
76 2-Hexanone	43	7.580	7.580	0.000	95	129240	10.0	8.17	
77 n-Butyl acetate	43		7.698					ND	
79 Tetrahydrothiophene	60		7.734					ND	
78 Chlorodibromomethane	129	7.734	7.734	0.000	91	22832	1.00	0.7682	
80 Ethylene Dibromide	107	7.853	7.841	0.012	97	24918	1.00	0.9044	
81 1-Chlorohexane	91		8.268					ND	
82 Chlorobenzene	112	8.303	8.303	0.000	95	99554	1.00	0.9599	
83 1,1,1,2-Tetrachloroethane	131	8.374	8.374	0.000	91	28657	1.00	0.8680	
84 Ethylbenzene	106	8.398	8.398	0.000	97	55760	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 m-Xylene & p-Xylene	106	8.517	8.505	0.012	99	66330	1.00	0.9550	
86 o-Xylene	106	8.884	8.884	0.000	93	62816	1.00	0.9361	
87 Styrene	104	8.896	8.896	0.000	93	91029	1.00	0.8463	
88 Bromoform	173	9.074	9.074	0.000	95	15028	1.00	0.8298	
89 Isopropylbenzene	105	9.240	9.240	0.000	95	161620	1.00	0.9103	
90 1,4-Dichlorobutane	55		9.323					ND	
91 Cyclohexanone	55		9.330					ND	
92 1,1,2,2-Tetrachloroethane	83	9.501	9.501	0.000	94	33525	1.00	0.9455	
93 Bromobenzene	156	9.537	9.536	0.001	90	43579	1.00	1.00	
95 1,2,3-Trichloropropane	110	9.548	9.548	0.000	82	10104	1.00	0.9169	
94 trans-1,4-Dichloro-2-buten	53	9.560	9.560	0.000	69	5831	1.00	0.6729	
96 N-Propylbenzene	120	9.631	9.631	0.000	99	43436	1.00	0.9079	
97 2-Chlorotoluene	126	9.726	9.726	0.000	97	39499	1.00	0.9564	
98 3-Ethyltoluene	105	9.797	9.733	0.064	92	128499		NC	
99 1,3,5-Trimethylbenzene	105	9.797	9.797	0.000	96	128499	1.00	0.8868	
100 4-Chlorotoluene	126	9.833	9.821	0.012	96	40704	1.00	0.9264	
101 2-Ethyltoluene	105		10.018					ND	
102 tert-Butylbenzene	119	10.129	10.118	0.011	91	116909	1.00	0.9256	
103 Pentachloroethane	167		10.141					ND	
104 1,2,4-Trimethylbenzene	105	10.165	10.165	0.000	94	133482	1.00	0.8807	
105 sec-Butylbenzene	105	10.343	10.343	0.000	93	167238	1.00	0.9183	
106 1,3-Dichlorobenzene	146	10.450	10.450	0.000	97	81538	1.00	0.9540	
107 4-Isopropyltoluene	119	10.485	10.473	0.012	97	137348	1.00	0.8643	
108 1,4-Dichlorobenzene	146	10.545	10.533	0.012	96	83459	1.00	0.9534	
109 1,2,3-Trimethylbenzene	105		10.580					ND	
110 Benzyl chloride	126		10.663					ND	
111 n-Butylbenzene	91	10.888	10.888	0.000	96	116273	1.00	0.8764	
112 1,2-Dichlorobenzene	146	10.900	10.900	0.000	99	76884	1.00	0.9508	
113 1,2-Dibromo-3-Chloropropan	157	11.671	11.671	0.000	78	4769	1.00	0.8028	
114 1,3,5-Trichlorobenzene	180		11.915					ND	
115 1,2,4-Trichlorobenzene	180	12.513	12.501	0.012	93	45133	1.00	0.8984	
116 Hexachlorobutadiene	225	12.679	12.679	0.000	93	19258	1.00	0.9246	
117 Naphthalene	128	12.750	12.750	0.000	96	78994	1.00	0.7271	
118 1,2,3-Trichlorobenzene	180	13.011	13.011	0.000	95	38318	1.00	0.8530	
119 2-Methylnaphthalene	142		14.066					ND	
129 Isobutylene TIC	1		0.000					ND	
126 Butyl Methacrylate TIC	1		0.000					ND	
120 Propene oxide	1		0.000					ND	
128 Pentachloroethane TIC	1		0.000					ND	
124 1,3-Butadiene TIC	1		0.000					ND	
123 Ethylene oxide	1		0.000					ND	
127 1,3-Diethylbenzene TIC	1		0.000					ND	
121 Epichlorohydrin	1		0.000					ND	
S 131 1,2-Dichloroethene, Total	96				0		2.00	1.89	
S 132 1,3-Dichloropropene, Total	75				0		2.00	1.62	
S 133 Xylenes, Total	106				0		2.00	1.89	
S 134 Trihalomethanes, Total	1				0		4.00	3.52	
T 125 Chlorodifluoromethane TIC	51		1.575					ND	
T 135 Hexachloroethane TIC	1		11.350					ND	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

Reagents:

VMAROLISTDW_00095	Amount Added:	0.80	Units: uL	
VMRPRIMW_00120	Amount Added:	0.80	Units: uL	
VMRGAS_00097	Amount Added:	0.80	Units: uL	
VMKETONE_00012	Amount Added:	3.20	Units: uL	
VM50IS_00045	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00063	Amount Added:	1.14	Units: uL	Run Reagent
vmDist_H2o_00042	Amount Added:	0.00	Units:	Run Reagent

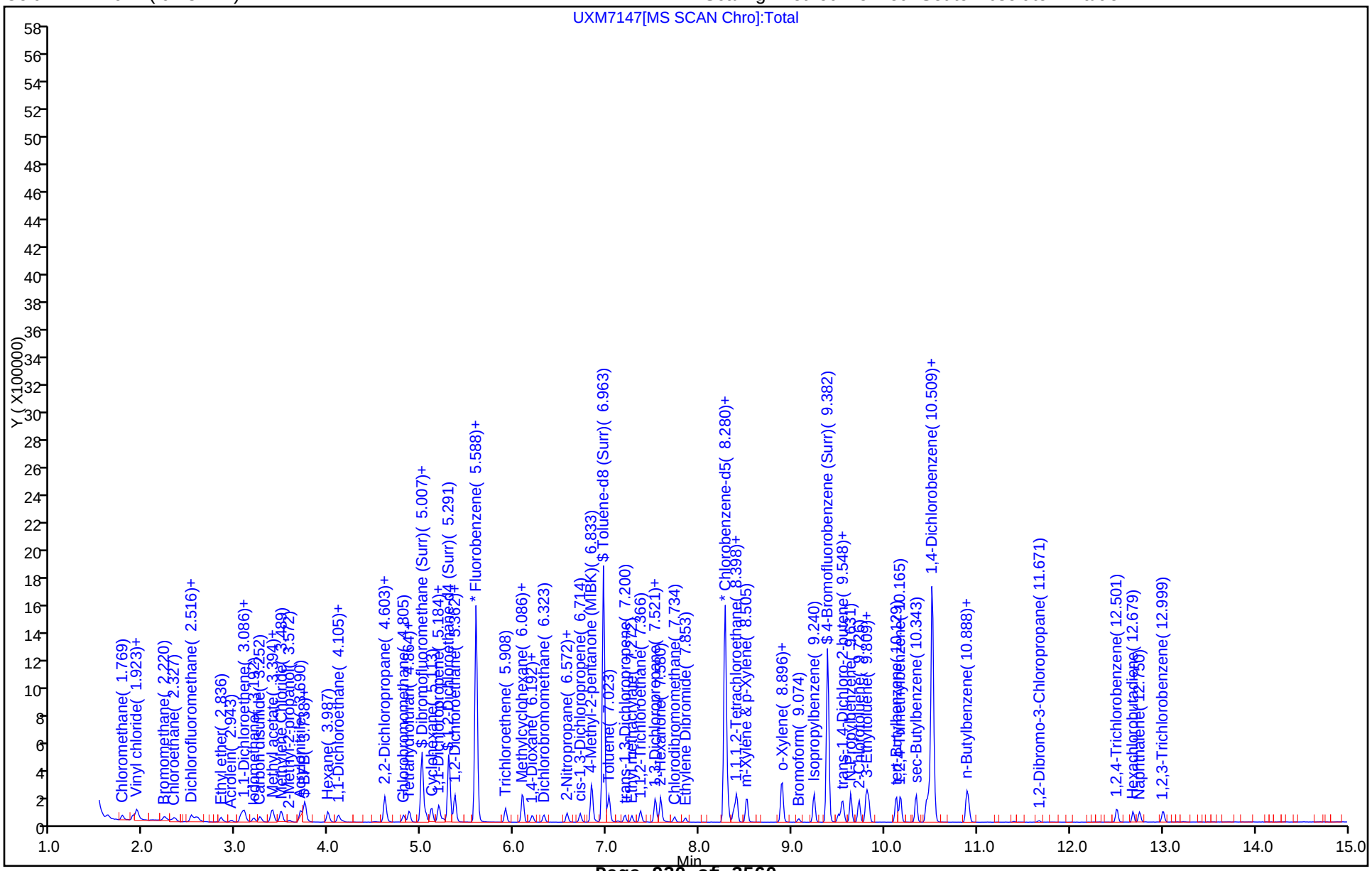
Report Date: 14-Apr-2015 13:41:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A3UX16\20150414-42532.b\UXM7147.D

Injection Date:	14-Apr-2015 13:13:30	Instrument ID:	A3UX16	Operator ID:	1904
Lims ID:	MRL			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_16	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-176387/6

Matrix: Solid | Lab File ID: 142401.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/14/2015 14:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176387 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.00642		0.0010	0.00025	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00555		0.0010	0.00025	0.00022
79-00-5	1,1,2-Trichloroethane	0.00526		0.0010	0.00050	0.00017
75-34-3	1,1-Dichloroethane	0.00609		0.0010	0.00025	0.00026
75-35-4	1,1-Dichloroethene	0.00658	^	0.0010	0.00025	0.00045
107-06-2	1,2-Dichloroethane	0.00630		0.0010	0.00025	0.00020
540-59-0	1,2-Dichloroethene, Total	0.0122		0.0020	0.00025	0.00020
78-87-5	1,2-Dichloropropane	0.00627		0.0010	0.00025	0.00022
78-93-3	2-Butanone (MEK)	0.0109		0.010	0.00050	0.0041
591-78-6	2-Hexanone	0.0111		0.010	0.00050	0.0039
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0110		0.010	0.00050	0.0036
67-64-1	Acetone	0.0174	^	0.010	0.0010	0.0034
71-43-2	Benzene	0.00612		0.0010	0.00025	0.00024
75-25-2	Bromoform	0.00512		0.0010	0.00050	0.00056
74-83-9	Bromomethane	0.00638		0.0010	0.00050	0.00063
75-15-0	Carbon disulfide	0.00563		0.0010	0.00025	0.00028
56-23-5	Carbon tetrachloride	0.00638		0.0010	0.00025	0.00017
108-90-7	Chlorobenzene	0.00635		0.0010	0.00025	0.00019
75-27-4	Bromodichloromethane	0.00515		0.0010	0.00025	0.00015
74-87-3	Chloromethane	0.00659	^	0.0010	0.00050	0.00044
10061-01-5	cis-1,3-Dichloropropene	0.00484		0.0010	0.00025	0.00046
124-48-1	Dibromochloromethane	0.00496		0.0010	0.00025	0.00043
100-41-4	Ethylbenzene	0.00576		0.0010	0.00025	0.00023
1634-04-4	Methyl tert-butyl ether	0.00575		0.0010	0.00025	0.00016
75-09-2	Methylene Chloride	0.00803	^	0.0010	0.00050	0.00028
100-42-5	Styrene	0.00542		0.0010	0.00025	0.00045
127-18-4	Tetrachloroethene	0.00550		0.0010	0.00050	0.00020
108-88-3	Toluene	0.00583		0.0010	0.00025	0.00022
67-66-3	Chloroform	0.00618		0.0010	0.00025	0.00021
74-97-5	Bromochloromethane	0.00580		0.0010	0.00050	0.00025
106-93-4	1,2-Dibromoethane	0.00577		0.0010	0.00025	0.00019
10061-02-6	trans-1,3-Dichloropropene	0.00529		0.0010	0.00025	0.00056
79-01-6	Trichloroethene	0.00579		0.0010	0.00025	0.00015
75-01-4	Vinyl chloride	0.00636		0.0010	0.00025	0.00029
75-00-3	Chloroethane	0.00772	^	0.0010	0.0050	0.00033
1330-20-7	Xylenes, Total	0.0116		0.0020	0.00025	0.00043

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-176387/6

Matrix: Solid Lab File ID: 142401.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/14/2015 14:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176387 Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		50-150
2037-26-5	Toluene-d8 (Surr)	108		50-150
460-00-4	4-Bromofluorobenzene (Surr)	100		50-150
1868-53-7	Dibromofluoromethane (Surr)	101		50-150

Report Date: 15-Apr-2015 13:28:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142401.D
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 14-Apr-2015 14:02:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mrl
Misc. Info.: 240-0042552-006240-0042552-006
Operator ID: 002808 Instrument ID: A3UX14

Method: \\NCChrom\ChromData\A3UX14\20150414-42552.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:28:47 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 14-Apr-2015 14:30:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65	3.789	3.789	0.000	64	2489		1000.0	
* 1 Fluorobenzene	96	6.652	6.652	0.000	98	1161774	50.0	50.0	
* 4 Dioxane-d8 (IS)	96	7.327	7.339	-0.012	1	133		1000.0	s
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	95	659372	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	94	345282	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.990	5.990	0.000	82	304639	50.0	50.3	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	93	377403	50.0	52.1	
$ 8 Toluene-d8 (Surr)	98	8.131	8.131	0.000	95	1056321	50.0	53.8	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	81	344905	50.0	50.0	
$ 10 BFB	95	4.203	4.254	-0.051	0	349		NR	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	86	42984	5.00	5.92	
12 Chloromethane	50	1.481	1.481	0.000	89	49484	5.00	6.59	
13 Vinyl chloride	62	1.600	1.600	0.000	94	47679	5.00	6.36	
14 Butadiene	54	1.623	1.623	0.000	94	46066	5.00	6.49	
15 Bromomethane	94	1.907	1.907	0.000	87	37083	5.00	6.38	
16 Ethylene oxide	44	2.049	1.955	0.094	77	6986		NC	
17 Chloroethane	64	2.002	2.002	0.000	89	29812	5.00	7.72	
18 Dichlorofluoromethane	67	2.262	2.262	0.000	80	82631	5.00	7.20	
19 Trichlorofluoromethane	101	2.298	2.298	0.000	96	65703	5.00	6.15	
20 Ethyl ether	59	2.641	2.641	0.000	93	29334	5.00	6.46	
21 Acrolein	56	2.818	2.818	0.000	79	14015	25.0	27.3	
22 Propene oxide	58		2.819					ND	
23 1,1-Dichloroethene	96	2.889	2.889	0.000	92	35159	5.00	6.58	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	82	24766	5.00	5.97	
25 Methylal	45		2.932					ND	
26 Acetone	43	3.031	3.031	0.000	88	34482	10.0	17.4	
27 Iodomethane	142	3.091	3.079	0.012	98	45656	5.00	6.47	
28 Carbon disulfide	76	3.150	3.150	0.000	98	73837	5.00	5.63	
29 3-Chloro-1-propene	76	3.398	3.386	0.012	81	20098	5.00	6.04	
30 Acetonitrile	41		3.434					ND	
31 Methyl acetate	43	3.481	3.469	0.012	96	107994	25.0	28.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Methylene Chloride	84	3.599	3.588	0.011	96	62145	5.00	8.03	
33 2-Methyl-2-propanol	59	3.919	3.919	0.000	32	24816	50.0	42.2	
34 trans-1,2-Dichloroethene	96	3.990	3.990	0.000	88	38782	5.00	6.24	
35 Methyl tert-butyl ether	73	4.025	4.025	0.000	93	101314	5.00	5.75	
36 Acrylonitrile	53	4.049	4.037	0.012	96	91564	50.0	54.7	
37 Hexane	86	4.404	4.404	0.000	94	8828	5.00	5.49	
38 1,1-Dichloroethane	63	4.653	4.641	0.012	85	77501	5.00	6.09	
39 2-Chloro-1,3-butadiene	53		4.759					ND	
40 Isopropyl ether	87		4.771					ND	
41 Vinyl acetate	86	4.783	4.783	0.000	89	1262	4.80	3.10	
42 Tert-butyl ethyl ether	59		5.244					ND	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	85	34920	5.00	6.58	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	70	40107	5.00	6.00	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	89	22220	10.0	10.9	
46 Ethyl acetate	43		5.564					ND	
47 Propionitrile	54		5.564					ND	
48 Chlorobromomethane	128	5.694	5.694	0.000	88	16091	5.00	5.80	
49 Methacrylonitrile	41		5.718					ND	
50 Tetrahydrofuran	42	5.741	5.741	0.000	88	16311	10.0	11.4	
51 Chloroform	83	5.800	5.800	0.000	91	73946	5.00	6.18	
52 1,1,1-Trichloroethane	97	5.954	5.954	0.000	90	61550	5.00	6.42	
53 Cyclohexane	56	5.990	5.990	0.000	45	73867	5.00	6.27	
54 Carbon tetrachloride	117	6.132	6.120	0.012	76	56399	5.00	6.38	
55 1,1-Dichloropropene	75	6.143	6.143	0.000	94	55718	5.00	6.14	
56 Benzene	78	6.356	6.356	0.000	97	156632	5.00	6.12	
57 Isobutyl alcohol	41	6.392	6.392	0.000	90	19500	125.0	114.8	
58 1,2-Dichloroethane	62	6.416	6.404	0.012	71	52361	5.00	6.30	
59 Tert-amyl methyl ether	73		6.499					ND	
60 n-Heptane	100	6.640	6.640	0.000	49	7875	5.00	5.42	
61 Trichloroethene	130	7.007	7.007	0.000	90	36130	5.00	5.79	
62 n-Butanol	56	7.055	7.043	0.012	44	1959		24.2	
64 Methylcyclohexane	83	7.161	7.161	0.000	90	73013	5.00	6.21	
63 Ethyl acrylate	55		7.161					ND	
65 1,2-Dichloropropane	63	7.244	7.232	0.012	91	36525	5.00	6.27	
66 Tetrahydrothiophene	60		7.255					ND	
67 Dibromomethane	93	7.350	7.350	0.000	80	17135	5.00	5.68	
68 Methyl methacrylate	41		7.374					ND	
69 1,4-Dioxane	88	7.386	7.386	0.000	65	5282	100.0	120.1	
70 Dichlorobromomethane	83	7.504	7.504	0.000	92	38449	5.00	5.15	
71 2-Nitropropane	41		7.741					ND	
72 2-Chloroethyl vinyl ether	63	7.800	7.800	0.000	87	21103	10.0	9.17	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.000	85	38565	5.00	4.84	
74 Epichlorohydrin	57		7.919					ND	
75 4-Methyl-2-pentanone (MIBK	43	8.060	8.060	0.000	70	43197	10.0	11.0	
76 Toluene	91	8.191	8.191	0.000	90	133889	5.00	5.83	
77 trans-1,3-Dichloropropene	75	8.415	8.404	0.011	89	30198	5.00	5.29	
78 Ethyl methacrylate	69	8.486	8.486	0.000	87	19547	5.00	5.31	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	93	18142	5.00	5.26	
80 Tetrachloroethene	164	8.664	8.664	0.000	79	22773	5.00	5.50	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	89	34568	5.00	5.41	
82 2-Hexanone	43	8.782	8.782	0.000	90	25837	10.0	11.1	
83 n-Butyl acetate	43		8.889					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorodibromomethane	129	8.901	8.901	0.001	79	18454	5.00	4.96	
85 Ethylene Dibromide	107	8.995	8.995	0.000	89	19596	5.00	5.77	
86 1-Chlorohexane	91		9.386					ND	
87 Chlorobenzene	112	9.409	9.409	0.000	90	83016	5.00	6.35	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	85	27843	5.00	5.48	
89 Ethylbenzene	106	9.504	9.504	0.000	98	43320	5.00	5.76	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	98	50335	5.00	5.77	
91 o-Xylene	106	9.930	9.930	0.000	98	54537	5.00	5.83	
92 Styrene	104	9.954	9.954	0.000	92	65646	5.00	5.42	
93 Bromoform	173	10.119	10.119	0.000	85	9932	5.00	5.12	
94 Isopropylbenzene	105	10.238	10.238	0.000	97	162680	5.00	6.12	
95 Cyclohexanone	55		10.344					ND	
97 Bromobenzene	156	10.510	10.510	0.000	87	28957	5.00	5.59	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.522	-0.012	58	25526	5.00	5.55	
98 1,2,3-Trichloropropane	110	10.545	10.557	-0.012	43	7136	5.00	5.04	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	44	8519	5.00	6.85	
100 N-Propylbenzene	120	10.593	10.593	0.000	96	39347	5.00	5.96	
101 2-Chlorotoluene	126	10.664	10.664	0.000	92	34047	5.00	6.09	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	94	133075	5.00	5.96	
103 4-Chlorotoluene	126	10.758	10.758	0.000	97	31608	5.00	5.90	
104 3-Ethyltoluene	105	11.007	10.920	0.087	23	873		NC	
105 tert-Butylbenzene	119	11.007	11.007	0.000	75	124470	5.00	6.17	
106 Pentachloroethane	167		11.042					ND	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	67	132588	5.00	6.03	
108 2-Ethyltoluene	105	11.196	11.168	0.028	88	177726		NC	
109 sec-Butylbenzene	105	11.196	11.196	0.000	94	177726	5.00	6.09	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	35	61475	5.00	5.76	
111 4-Isopropyltoluene	119	11.314	11.314	0.000	73	146903	5.00	6.12	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	84	64484	5.00	6.02	
113 1,2,3-Trimethylbenzene	105		11.409					ND	
114 Benzyl chloride	126		11.492					ND	
115 n-Butylbenzene	91	11.658	11.658	0.000	97	140614	5.00	6.11	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	95	63294	5.00	6.17	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	54	4171	5.00	5.35	
118 1,3,5-Trichlorobenzene	180		12.510					ND	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	92	51582	5.00	6.55	
120 Hexachlorobutadiene	225	13.160	13.160	0.000	92	33163	5.00	6.87	
121 Naphthalene	128	13.231	13.231	0.000	98	97854	5.00	6.18	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	93	45862	5.00	6.41	
123 2-Methylnaphthalene	142	14.095	14.095	0.000	83	10421		0.8628	
130 1,4-Dichlorobutane	1		0.000					ND	
131 Hexachloroethane TIC	1		0.000					ND	
125 Isobutylene TIC	1		0.000					ND	
124 Chlorodifluoromethane TIC	1		0.000					ND	
128 1,3-Butadiene TIC	1		0.000					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
129 Pentachloroethane TIC	1		0.000					ND	
127 Butyl Methacrylate TIC	1		0.000					ND	
A 132 C6-C10	1	7.550	(4.240-10.860)		0	8184054		NC	
A 133 C6-C12	1	8.508	(4.240-12.775)		0	11287257		NC	
S 134 1,2-Dichloroethene, Total	96				0		10.0	12.2	
S 135 1,3-Dichloropropene, Total	75				0		10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 136 Xylenes, Total	106				0		10.0	11.6	
S 137 Trihalomethanes, Total	1				0		20.0	21.4	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
s - Failed ISTD Recovery Test

Reagents:

VMRPRIMW_00121	Amount Added:	0.50	Units: uL	
VMAROLISTDW_00095	Amount Added:	0.50	Units: uL	
VMRGAS_00097	Amount Added:	0.50	Units: uL	
vmDist_H2o_00046	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VM250SS_00030	Amount Added:	1.00	Units: uL	Run Reagent

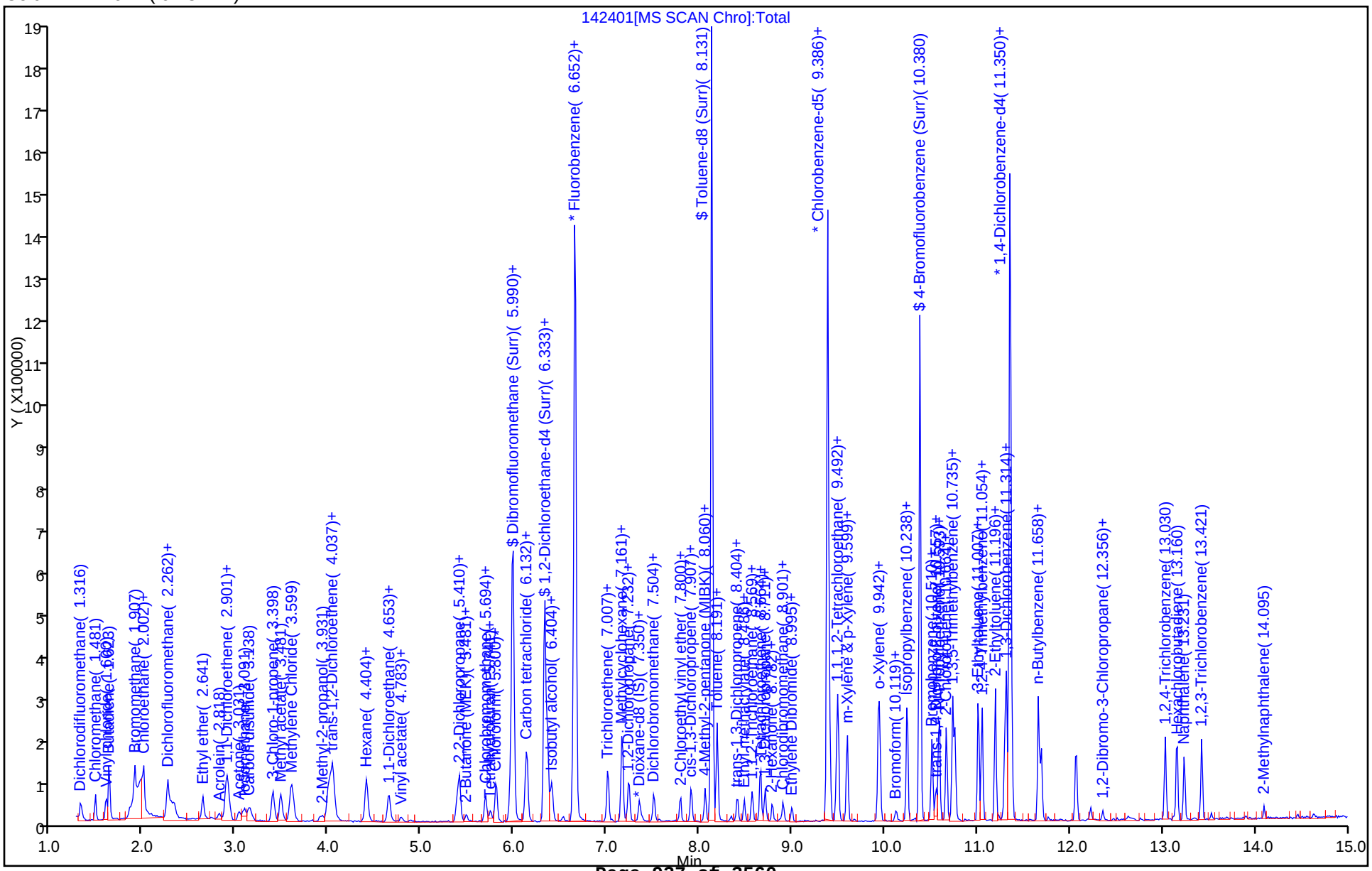
Report Date: 15-Apr-2015 13:28:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142401.D

Injection Date:	14-Apr-2015 14:02:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	MRL			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-176387/30

Matrix: Solid | Lab File ID: 142426.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/14/2015 23:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 176387 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.00614		0.0010	0.00025	0.00022
79-34-5	1,1,2,2-Tetrachloroethane	0.00551		0.0010	0.00025	0.00022
79-00-5	1,1,2-Trichloroethane	0.00568		0.0010	0.00050	0.00017
75-34-3	1,1-Dichloroethane	0.00646		0.0010	0.00025	0.00026
75-35-4	1,1-Dichloroethene	0.00573		0.0010	0.00025	0.00045
107-06-2	1,2-Dichloroethane	0.00676	^	0.0010	0.00025	0.00020
540-59-0	1,2-Dichloroethene, Total	0.0116		0.0020	0.00025	0.00020
78-87-5	1,2-Dichloropropane	0.00584		0.0010	0.00025	0.00022
78-93-3	2-Butanone (MEK)	0.0125		0.010	0.00050	0.0041
591-78-6	2-Hexanone	0.0114		0.010	0.00050	0.0039
108-10-1	4-Methyl-2-pentanone (MIBK)	0.0132	^	0.010	0.00050	0.0036
67-64-1	Acetone	0.0248	^	0.010	0.0010	0.0034
71-43-2	Benzene	0.00601		0.0010	0.00025	0.00024
75-25-2	Bromoform	0.00532		0.0010	0.00050	0.00056
74-83-9	Bromomethane	0.00634		0.0010	0.00050	0.00063
75-15-0	Carbon disulfide	0.00465		0.0010	0.00025	0.00028
56-23-5	Carbon tetrachloride	0.00575		0.0010	0.00025	0.00017
108-90-7	Chlorobenzene	0.00557		0.0010	0.00025	0.00019
75-27-4	Bromodichloromethane	0.00496		0.0010	0.00025	0.00015
74-87-3	Chloromethane	0.00580		0.0010	0.00050	0.00044
10061-01-5	cis-1,3-Dichloropropene	0.00459		0.0010	0.00025	0.00046
124-48-1	Dibromochloromethane	0.00463		0.0010	0.00025	0.00043
100-41-4	Ethylbenzene	0.00583		0.0010	0.00025	0.00023
1634-04-4	Methyl tert-butyl ether	0.00590		0.0010	0.00025	0.00016
75-09-2	Methylene Chloride	0.00857	^	0.0010	0.00050	0.00028
100-42-5	Styrene	0.00523		0.0010	0.00025	0.00045
127-18-4	Tetrachloroethene	0.00555		0.0010	0.00050	0.00020
108-88-3	Toluene	0.00613		0.0010	0.00025	0.00022
67-66-3	Chloroform	0.00653	^	0.0010	0.00025	0.00021
74-97-5	Bromochloromethane	0.00561		0.0010	0.00050	0.00025
106-93-4	1,2-Dibromoethane	0.00523		0.0010	0.00025	0.00019
10061-02-6	trans-1,3-Dichloropropene	0.00503		0.0010	0.00025	0.00056
79-01-6	Trichloroethene	0.00540		0.0010	0.00025	0.00015
75-01-4	Vinyl chloride	0.00570		0.0010	0.00025	0.00029
75-00-3	Chloroethane	0.00666	^	0.0010	0.0050	0.00033
1330-20-7	Xylenes, Total	0.0110		0.0020	0.00025	0.00043

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-176387/30

Matrix: Solid Lab File ID: 142426.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/14/2015 23:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 176387 Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		50-150
2037-26-5	Toluene-d8 (Surr)	107		50-150
460-00-4	4-Bromofluorobenzene (Surr)	102		50-150
1868-53-7	Dibromofluoromethane (Surr)	98		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142426.D
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 14-Apr-2015 23:00:30 ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mrl
Misc. Info.: 240-0042552-030240-0042552-030
Operator ID: 002808 Instrument ID: A3UX14

Method: \\NCChrom\ChromData\A3UX14\20150414-42552.b\8260_14.m
Limit Group: MSV 8260DOD ICAL
Last Update: 15-Apr-2015 13:28:47 Calib Date: 13-Apr-2015 17:39:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX14\20150413-42511.b\142383.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: macenczaks Date: 15-Apr-2015 13:01:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 TBA-d9 (IS)	65		3.789					ND	
* 1 Fluorobenzene	96	6.664	6.652	0.012	99	931186	50.0	50.0	
* 4 Dioxane-d8 (IS)	96		7.339					ND	
* 2 Chlorobenzene-d5	117	9.386	9.386	0.000	96	512870	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.350	11.350	0.000	92	263710	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	113	5.990	5.990	0.000	81	238175	50.0	49.0	
$ 7 1,2-Dichloroethane-d4 (Sur	65	6.333	6.333	0.000	94	318566	50.0	55.0	
$ 8 Toluene-d8 (Surr)	98	8.131	8.131	0.000	95	820786	50.0	53.7	
$ 9 4-Bromofluorobenzene (Surr	95	10.380	10.380	0.000	78	267119	50.0	50.8	
$ 10 BFB	95	3.777	4.254	-0.477	0	324		NR	
11 Dichlorodifluoromethane	85	1.316	1.316	0.000	81	34911	5.00	6.00	
12 Chloromethane	50	1.481	1.481	0.000	88	34951	5.00	5.80	
13 Vinyl chloride	62	1.600	1.600	0.000	97	34233	5.00	5.70	
14 Butadiene	54	1.635	1.623	0.012	85	29661	5.00	5.22	
15 Bromomethane	94	1.907	1.907	0.000	88	29536	5.00	6.34	
16 Ethylene oxide	44	1.990	1.955	0.035	36	11782		NC	
17 Chloroethane	64	2.002	2.002	0.000	77	20735	5.00	6.66	
18 Dichlorofluoromethane	67	2.262	2.262	0.000	80	56260	5.00	6.11	
19 Trichlorofluoromethane	101	2.298	2.298	0.000	89	42596	5.00	4.98	
20 Ethyl ether	59	2.641	2.641	0.000	91	25144	5.00	6.91	
21 Acrolein	56	2.807	2.818	-0.011	72	9008	25.0	21.9	
22 Propene oxide	58		2.819					ND	
23 1,1-Dichloroethene	96	2.901	2.889	0.012	90	24519	5.00	5.73	
24 1,1,2-Trichloro-1,2,2-trif	151	2.913	2.913	0.000	81	19694	5.00	5.92	
25 Methylal	45	2.996	2.932	0.064	77	876		NC	
26 Acetone	43	3.031	3.031	0.000	90	35164	10.0	24.8	
27 Iodomethane	142	3.091	3.079	0.012	95	33354	5.00	5.89	
28 Carbon disulfide	76	3.150	3.150	0.000	98	47471	5.00	4.65	
29 3-Chloro-1-propene	76	3.386	3.386	0.000	75	14027	5.00	5.26	
30 Acetonitrile	41		3.434					ND	
31 Methyl acetate	43	3.481	3.469	0.012	97	95410	25.0	30.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Methylene Chloride	84	3.611	3.588	0.023	88	52205	5.00	8.57	
33 2-Methyl-2-propanol	59	3.907	3.919	-0.012	88	19758	50.0	41.9	
34 trans-1,2-Dichloroethene	96	4.002	3.990	0.012	88	28056	5.00	5.64	
35 Methyl tert-butyl ether	73	4.025	4.025	0.000	89	83296	5.00	5.90	
36 Acrylonitrile	53	4.049	4.037	0.012	92	79754	50.0	59.5	
37 Hexane	86	4.404	4.404	0.000	93	6645	5.00	5.16	
38 1,1-Dichloroethane	63	4.653	4.641	0.012	94	65897	5.00	6.46	
39 2-Chloro-1,3-butadiene	53		4.759					ND	
40 Isopropyl ether	87		4.771					ND	
41 Vinyl acetate	86	4.783	4.783	0.000	88	1052	4.80	3.22	
42 Tert-butyl ethyl ether	59		5.244					ND	
43 2,2-Dichloropropane	77	5.386	5.386	0.000	90	25244	5.00	5.93	
44 cis-1,2-Dichloroethene	96	5.410	5.410	0.000	71	32162	5.00	6.00	
45 2-Butanone (MEK)	43	5.481	5.481	0.000	89	20317	10.0	12.5	
46 Ethyl acetate	43		5.564					ND	
47 Propionitrile	54		5.564					ND	
48 Chlorobromomethane	128	5.694	5.694	0.000	88	12485	5.00	5.61	
49 Methacrylonitrile	41		5.718					ND	
50 Tetrahydrofuran	42	5.741	5.741	0.000	83	12727	10.0	11.1	
51 Chloroform	83	5.812	5.800	0.012	89	62650	5.00	6.53	
52 1,1,1-Trichloroethane	97	5.966	5.954	0.012	61	47109	5.00	6.14	
53 Cyclohexane	56	5.990	5.990	0.000	46	59669	5.00	6.32	
54 Carbon tetrachloride	117	6.120	6.120	0.000	75	40743	5.00	5.75	
55 1,1-Dichloropropene	75	6.132	6.143	-0.011	84	42153	5.00	5.80	
56 Benzene	78	6.357	6.356	0.000	97	123108	5.00	6.01	
57 Isobutyl alcohol	41	6.392	6.392	0.000	71	16131	125.0	118.5	
58 1,2-Dichloroethane	62	6.404	6.404	0.000	73	45069	5.00	6.76	
59 Tert-amyl methyl ether	73		6.499					ND	
60 n-Heptane	100	6.640	6.640	0.000	48	6377	5.00	5.47	
61 Trichloroethene	130	7.019	7.007	0.012	94	27017	5.00	5.40	
62 n-Butanol	56		7.043					ND	
64 Methylcyclohexane	83	7.161	7.161	0.000	87	55161	5.00	5.85	
63 Ethyl acrylate	55		7.161					ND	
65 1,2-Dichloropropane	63	7.244	7.232	0.012	90	27248	5.00	5.84	
66 Tetrahydrothiophene	60		7.255					ND	
67 Dibromomethane	93	7.350	7.350	0.000	81	15218	5.00	6.30	
68 Methyl methacrylate	41		7.374					ND	
69 1,4-Dioxane	88	7.386	7.386	0.000	49	2290	100.0	65.0	
70 Dichlorobromomethane	83	7.504	7.504	0.000	90	29664	5.00	4.96	
71 2-Nitropropane	41		7.741					ND	
72 2-Chloroethyl vinyl ether	63	7.800	7.800	0.000	87	19024	10.0	10.3	
73 cis-1,3-Dichloropropene	75	7.907	7.907	0.000	80	29314	5.00	4.59	
74 Epichlorohydrin	57		7.919					ND	
75 4-Methyl-2-pentanone (MIBK	43	8.060	8.060	0.000	70	40214	10.0	13.2	
76 Toluene	91	8.191	8.191	0.000	89	109423	5.00	6.13	
77 trans-1,3-Dichloropropene	75	8.415	8.404	0.011	84	22301	5.00	5.03	
78 Ethyl methacrylate	69	8.486	8.486	0.000	84	16106	5.00	5.62	
79 1,1,2-Trichloroethane	97	8.569	8.569	0.000	82	15249	5.00	5.68	
80 Tetrachloroethene	164	8.664	8.664	0.000	80	17874	5.00	5.55	
81 1,3-Dichloropropane	76	8.711	8.711	0.000	96	29654	5.00	5.97	
82 2-Hexanone	43	8.782	8.782	0.000	87	20583	10.0	11.4	
83 n-Butyl acetate	43		8.889					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Chlorodibromomethane	129	8.901	8.901	0.001	78	13423	5.00	4.63	
85 Ethylene Dibromide	107	8.995	8.995	0.000	87	13814	5.00	5.23	
86 1-Chlorohexane	91		9.386					ND	
87 Chlorobenzene	112	9.409	9.409	0.000	81	56654	5.00	5.57	
88 1,1,1,2-Tetrachloroethane	131	9.480	9.480	0.000	83	23031	5.00	5.83	
89 Ethylbenzene	106	9.492	9.504	-0.012	99	34102	5.00	5.83	
90 m-Xylene & p-Xylene	106	9.599	9.599	0.000	98	38092	5.00	5.62	
91 o-Xylene	106	9.930	9.930	0.000	97	38854	5.00	5.34	
92 Styrene	104	9.954	9.954	0.000	90	49307	5.00	5.23	
93 Bromoform	173	10.119	10.119	0.000	84	8097	5.00	5.32	
94 Isopropylbenzene	105	10.238	10.238	0.000	97	123103	5.00	5.95	
95 Cyclohexanone	55		10.344					ND	
97 Bromobenzene	156	10.510	10.510	0.000	85	23189	5.00	5.86	
96 1,1,2,2-Tetrachloroethane	83	10.510	10.522	-0.012	54	19353	5.00	5.51	
98 1,2,3-Trichloropropane	110	10.557	10.557	0.000	25	5914	5.00	5.47	
99 trans-1,4-Dichloro-2-buten	53	10.557	10.557	0.000	48	4651	5.00	4.89	
100 N-Propylbenzene	120	10.593	10.593	0.000	96	24922	5.00	4.94	
101 2-Chlorotoluene	126	10.664	10.664	0.000	93	25435	5.00	5.96	
102 1,3,5-Trimethylbenzene	105	10.735	10.735	0.000	94	97994	5.00	5.75	
103 4-Chlorotoluene	126	10.758	10.758	0.000	99	22630	5.00	5.53	
104 3-Ethyltoluene	105		10.920					ND	
105 tert-Butylbenzene	119	11.007	11.007	0.000	79	91142	5.00	5.92	
106 Pentachloroethane	167		11.042					ND	
107 1,2,4-Trimethylbenzene	105	11.054	11.054	0.000	67	95784	5.00	5.70	
108 2-Ethyltoluene	105		11.168					ND	
109 sec-Butylbenzene	105	11.196	11.196	0.000	96	132958	5.00	5.96	
110 1,3-Dichlorobenzene	146	11.303	11.303	0.000	20	45031	5.00	5.52	
111 4-Isopropyltoluene	119	11.314	11.314	0.000	65	100566	5.00	5.48	
112 1,4-Dichlorobenzene	146	11.374	11.374	0.000	81	44874	5.00	5.49	
113 1,2,3-Trimethylbenzene	105		11.409					ND	
114 Benzyl chloride	126		11.492					ND	
115 n-Butylbenzene	91	11.658	11.658	0.000	95	103886	5.00	5.91	
116 1,2-Dichlorobenzene	146	11.693	11.693	0.000	94	45476	5.00	5.80	
117 1,2-Dibromo-3-Chloropropan	157	12.356	12.356	0.000	40	2423	5.00	4.07	
118 1,3,5-Trichlorobenzene	180		12.510					ND	
119 1,2,4-Trichlorobenzene	180	13.030	13.030	0.000	90	26588	5.00	4.42	
120 Hexachlorobutadiene	225	13.160	13.160	0.000	90	20694	5.00	5.62	
121 Naphthalene	128	13.231	13.231	0.000	97	58971	5.00	4.88	
122 1,2,3-Trichlorobenzene	180	13.421	13.421	0.000	86	27437	5.00	5.02	
123 2-Methylnaphthalene	142		14.095					ND	
130 1,4-Dichlorobutane	1		0.000					ND	
131 Hexachloroethane TIC	1		0.000					ND	
125 Isobutylene TIC	1		0.000					ND	
124 Chlorodifluoromethane TIC	1		0.000					ND	
128 1,3-Butadiene TIC	1		0.000					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
129 Pentachloroethane TIC	1		0.000					ND	
127 Butyl Methacrylate TIC	1		0.000					ND	
A 132 C6-C10	1	7.550	(4.240-10.860)		0	6734575			NC
A 133 C6-C12	1	8.508	(4.240-12.775)		0	9047979			NC
S 134 1,2-Dichloroethene, Total	96				0		10.0	11.6	
S 135 1,3-Dichloropropene, Total	75				0		10.0	9.61	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 136 Xylenes, Total	106				0		10.0	11.0	
S 137 Trihalomethanes, Total	1				0		20.0	21.4	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

Reagents:

VMRGAS_00097	Amount Added:	0.50	Units: uL	
VMAROLISTDW_00095	Amount Added:	0.50	Units: uL	
VMRPRIMW_00121	Amount Added:	0.50	Units: uL	
vmDist_H2o_00046	Amount Added:	0.00	Units:	Run Reagent
VM250-IS_00028	Amount Added:	1.00	Units: uL	Run Reagent
VM250SS_00030	Amount Added:	1.00	Units: uL	Run Reagent

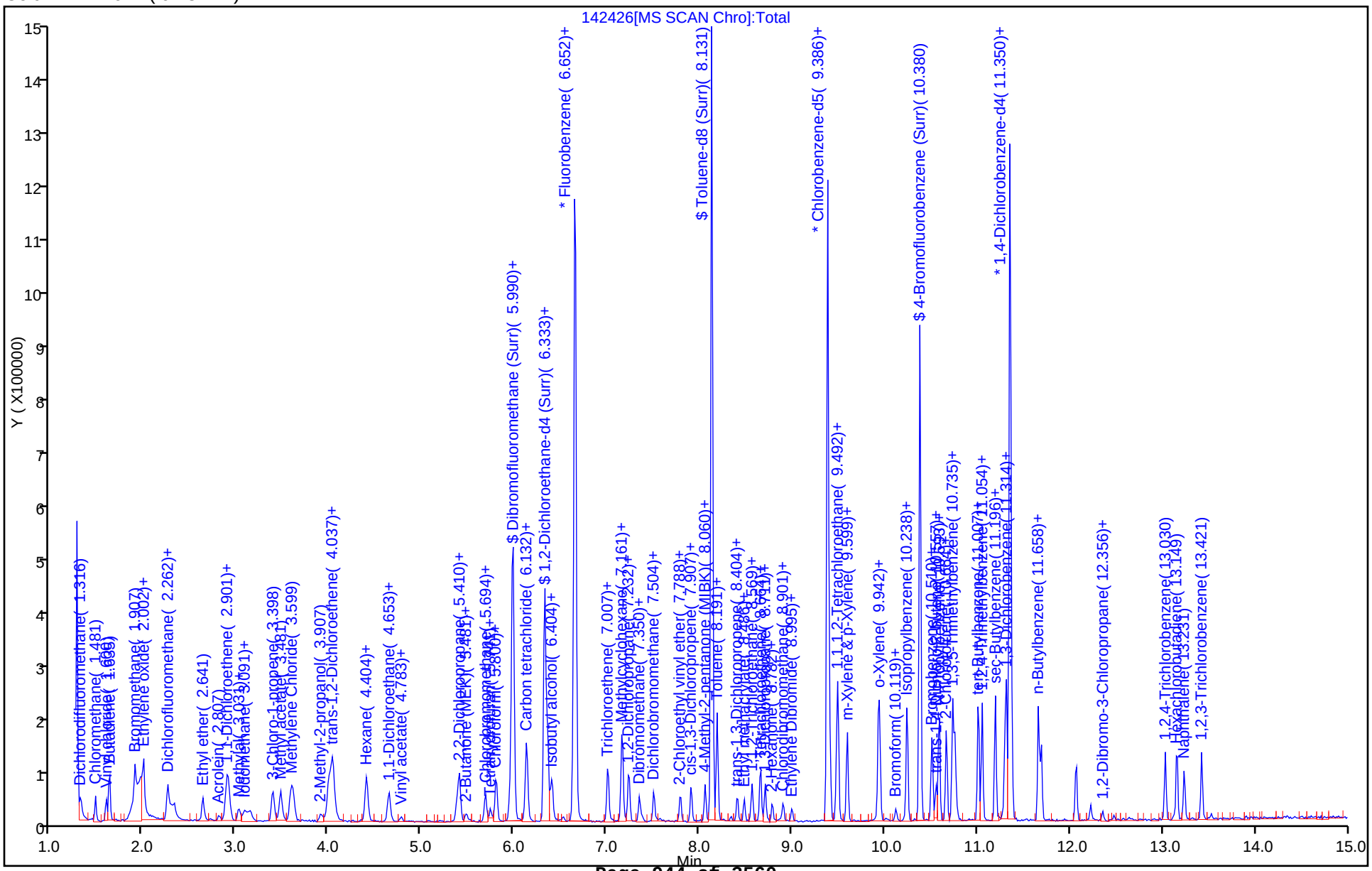
Report Date: 15-Apr-2015 13:29:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A3UX14\20150414-42552.b\142426.D

Injection Date:	14-Apr-2015 23:00:30	Instrument ID:	A3UX14	Operator ID:	002808
Lims ID:	mrl			Worklist Smp#:	30
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8260_14	Limit Group:	MSV 8260DOD ICAL		

Column: DB-624 (0.18 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A3UX8 Start Date: 03/02/2015 23:39

Analysis Batch Number: 170352 End Date: 03/03/2015 04:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-170352/1		03/02/2015 23:39	1	BFB8752.D	DB-624 0.18(mm)
STD8260 240-170352/3 IC		03/03/2015 00:12	1	UX86154.D	DB-624 0.18(mm)
STD8260 240-170352/4 IC		03/03/2015 00:34	1	UX86155.D	DB-624 0.18(mm)
STD8260 240-170352/5 IC		03/03/2015 00:55	1	UX86156.D	DB-624 0.18(mm)
ICIS 240-170352/6		03/03/2015 01:34	1	UX86157.D	DB-624 0.18(mm)
STD8260 240-170352/7 IC		03/03/2015 01:56	1	UX86158.D	DB-624 0.18(mm)
STD8260 240-170352/8 IC		03/03/2015 02:17	1	UX86159.D	DB-624 0.18(mm)
STD8260 240-170352/9 IC		03/03/2015 02:38	1	UX86160.D	DB-624 0.18(mm)
STD8260 240-170352/10 IC		03/03/2015 03:00	1	UX86161.D	DB-624 0.18(mm)
ICV 240-170352/11		03/03/2015 03:21	1	UX86162.D	DB-624 0.18(mm)
ZZZZZ		03/03/2015 03:43	1		DB-624 0.18(mm)
ZZZZZ		03/03/2015 04:04	1		DB-624 0.18(mm)
ZZZZZ		03/03/2015 04:25	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A3UX16 Start Date: 04/08/2015 12:22

Analysis Batch Number: 175604 End Date: 04/08/2015 17:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-175604/1		04/08/2015 12:22	1	BFB4271.D	DB-624 0.18(mm)
STD8260 240-175604/2 IC		04/08/2015 12:59	1	UXM7066.D	DB-624 0.18(mm)
STD8260 240-175604/3 IC		04/08/2015 13:22	1	UXM7067.D	DB-624 0.18(mm)
STD8260 240-175604/4 ICIS		04/08/2015 13:44	1	UXM7068.D	DB-624 0.18(mm)
STD8260 240-175604/5 IC		04/08/2015 14:07	1	UXM7069.D	DB-624 0.18(mm)
STD8260 240-175604/6 IC		04/08/2015 14:30	1	UXM7070.D	DB-624 0.18(mm)
STD8260 240-175604/7 IC		04/08/2015 14:53	1	UXM7071.D	DB-624 0.18(mm)
ICV 240-175604/8		04/08/2015 15:15	1	UXM7072.D	DB-624 0.18(mm)
STDA9 240-175604/9 IC		04/08/2015 15:38	1		DB-624 0.18(mm)
STDA9 240-175604/10 IC		04/08/2015 16:01	1		DB-624 0.18(mm)
STDA9 240-175604/11 IC		04/08/2015 16:24	1		DB-624 0.18(mm)
STDA9 240-175604/12 IC		04/08/2015 16:46	1		DB-624 0.18(mm)
STDA9 240-175604/13 IC		04/08/2015 17:09	1		DB-624 0.18(mm)
STDA9 240-175604/14 IC		04/08/2015 17:32	1		DB-624 0.18(mm)
ICV 240-175604/15		04/08/2015 17:55	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A3UX14 Start Date: 04/13/2015 14:04

Analysis Batch Number: 176233 End Date: 04/13/2015 21:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-176233/1		04/13/2015 14:04	1	BFB14922.D	DB-624 0.18(mm)
IC 240-176233/3		04/13/2015 14:47	1	142375.D	DB-624 0.18(mm)
IC 240-176233/4		04/13/2015 15:08	1	142376.D	DB-624 0.18(mm)
IC 240-176233/5		04/13/2015 15:30	1	142377.D	DB-624 0.18(mm)
ICIS 240-176233/6		04/13/2015 15:52	1	142378.D	DB-624 0.18(mm)
IC 240-176233/7		04/13/2015 16:13	1	142379.D	DB-624 0.18(mm)
IC 240-176233/8		04/13/2015 16:34	1	142380.D	DB-624 0.18(mm)
IC 240-176233/9		04/13/2015 16:56	1	142381.D	DB-624 0.18(mm)
IC 240-176233/10		04/13/2015 17:17	1	142382.D	DB-624 0.18(mm)
IC 240-176233/11		04/13/2015 17:39	1	142383.D	DB-624 0.18(mm)
ICV 240-176233/12		04/13/2015 18:00	1	142384.D	DB-624 0.18(mm)
CCV 240-176233/13		04/13/2015 18:22	1		DB-624 0.18(mm)
ZZZZZ		04/13/2015 19:26	1		DB-624 0.18(mm)
ZZZZZ		04/13/2015 19:48	1		DB-624 0.18(mm)
ZZZZZ		04/13/2015 20:09	1		DB-624 0.18(mm)
ZZZZZ		04/13/2015 20:52	1		DB-624 0.18(mm)
ZZZZZ		04/13/2015 21:14	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A3UX8 Start Date: 04/14/2015 02:25

Analysis Batch Number: 176276 End Date: 04/14/2015 13:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-176276/1		04/14/2015 02:25	1	BFB8785.D	DB-624 0.18(mm)
CCV 240-176276/4		04/14/2015 02:56	1	UX86971.D	DB-624 0.18(mm)
CCV 240-176276/5		04/14/2015 03:17	1	UX86972.D	DB-624 0.18(mm)
LCS 240-176276/6		04/14/2015 03:38	1	UX86973.D	DB-624 0.18(mm)
MRL 240-176276/7		04/14/2015 04:00	1	UX86974.D	DB-624 0.18(mm)
ZZZZZ		04/14/2015 04:21	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 04:42	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 05:03	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 05:25	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 05:46	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 06:07	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 06:28	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 06:50	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 07:11	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 07:32	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 07:53	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 08:15	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 08:36	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 08:57	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 09:18	2		DB-624 0.18(mm)
ZZZZZ		04/14/2015 09:40	3.333		DB-624 0.18(mm)
ZZZZZ		04/14/2015 10:01	3.333		DB-624 0.18(mm)
ZZZZZ		04/14/2015 10:22	1		DB-624 0.18(mm)
MB 240-176277/1-A		04/14/2015 10:43	1	UX86993.D	DB-624 0.18(mm)
240-49171-5	079SB-0352M-0001-SO	04/14/2015 11:05	1	UX86994.D	DB-624 0.18(mm)
240-49171-7	079SB-0353M-0001-SO	04/14/2015 11:26	1	UX86995.D	DB-624 0.18(mm)
240-49171-9	079SB-0354M-0001-SO	04/14/2015 11:47	1	UX86996.D	DB-624 0.18(mm)
ZZZZZ		04/14/2015 12:08	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 12:30	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 12:51	1		DB-624 0.18(mm)
MRL 240-176276/33		04/14/2015 13:12	1	UX87000.D	DB-624 0.18(mm)
MDLV 240-176276/34		04/14/2015 13:33	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A3UX16 Start Date: 04/14/2015 07:39

Analysis Batch Number: 176298 End Date: 04/14/2015 13:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-176298/1		04/14/2015 07:39	1	BFB4274.D	DB-624 0.18(mm)
CCV 240-176298/2		04/14/2015 08:07	1	UXM7134.D	DB-624 0.18(mm)
CCV 240-176298/3		04/14/2015 08:30	1	UXM7135.D	DB-624 0.18(mm)
LCS 240-176298/4		04/14/2015 08:52	1	UXM7136.D	DB-624 0.18(mm)
MRL 240-176298/5		04/14/2015 09:15	1	UXM7137.D	DB-624 0.18(mm)
MB 240-176298/6		04/14/2015 09:38	1	UXM7138.D	DB-624 0.18(mm)
240-49171-12	079SB-0380M-0001-TB	04/14/2015 10:47	1	UXM7141.D	DB-624 0.18(mm)
ZZZZZ		04/14/2015 11:42	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 12:04	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 12:27	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 12:50	1		DB-624 0.18(mm)
MRL 240-176298/15		04/14/2015 13:13	1	UXM7147.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A3UX14 Start Date: 04/14/2015 12:15

Analysis Batch Number: 176387 End Date: 04/14/2015 23:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-176387/1		04/14/2015 12:15	1	BFB14924.D	DB-624 0.18(mm)
CCV 240-176387/3		04/14/2015 12:58	1	142398.D	DB-624 0.18(mm)
CCV 240-176387/4		04/14/2015 13:19	1	142399.D	DB-624 0.18(mm)
LCS 240-176387/5		04/14/2015 13:41	1	142400.D	DB-624 0.18(mm)
MRL 240-176387/6		04/14/2015 14:02	1	142401.D	DB-624 0.18(mm)
MDLV 240-176387/7		04/14/2015 14:24	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 15:07	1		DB-624 0.18(mm)
MB 240-176387/33		04/14/2015 15:28	1	142405.D	DB-624 0.18(mm)
ZZZZZ		04/14/2015 15:50	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 16:12	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 16:33	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 16:55	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 17:16	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 17:38	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 17:59	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 18:20	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 18:42	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 19:03	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 19:25	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 19:46	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 20:08	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 20:29	1		DB-624 0.18(mm)
240-49171-5	079SB-0352M-0001-SO	04/14/2015 20:51	1	142420.D	DB-624 0.18(mm)
240-49171-7	079SB-0353M-0001-SO	04/14/2015 21:12	1	142421.D	DB-624 0.18(mm)
240-49171-9	079SB-0354M-0001-SO	04/14/2015 21:34	1	142422.D	DB-624 0.18(mm)
ZZZZZ		04/14/2015 21:55	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 22:17	1		DB-624 0.18(mm)
ZZZZZ		04/14/2015 22:38	1		DB-624 0.18(mm)
MRL 240-176387/30		04/14/2015 23:00	1	142426.D	DB-624 0.18(mm)
MDLV 240-176387/31		04/14/2015 23:21	1		DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176277 Batch Start Date: 04/14/15 05:11 Batch Analyst: Lata, Todd

Batch Method: 5035 Batch End Date: 04/14/15 05:29

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
MB 240-176277/1		5035, 8260B		0 g	5 g	5 g	5 mL		
240-49171-B-5	079SB-0352M-0001-SO	5035, 8260B	T	+029.753 g	34.95 g	5.197 g	5 mL		
240-49171-C-5	079SB-0352M-0001-SO	5035, 8260B	T	+029.566 g	35.49 g	5.924 g	5 mL		
240-49171-B-7	079SB-0353M-0001-SO	5035, 8260B	T	+030.269 g	36.34 g	6.071 g	5 mL		
240-49171-C-7	079SB-0353M-0001-SO	5035, 8260B	T	+030.417 g	36.51 g	6.093 g	5 mL		
240-49171-B-9	079SB-0354M-0001-SO	5035, 8260B	T	+030.746 g	37.24 g	6.494 g	5 mL		
240-49171-C-9	079SB-0354M-0001-SO	5035, 8260B	T	+030.280 g	37.28 g	7 g	5 mL		

Batch Notes	
Balance ID	B050
Blank Sand Lot #	144816

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8270C DOD

Semivolatile Compounds (GC/MS) by Method 8270/DOD

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
079SB-0352M-0001-SO	240-49171-6	80	79	66	78	73	78
079SB-0353M-0001-SO	240-49171-8	80	78	65	77	63	76
079SB-0354M-0001-SO	240-49171-10	84	78 M	70	93	98	87
	MB 240-176319/23-A	67	76	68	75	36	75
	LCS 240-176319/24-A	81	81	74	76	63	83

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	35-105
PHL = Phenol-d5 (Surr)	40-100
NBZ = Nitrobenzene-d5 (Surr)	35-100
FBP = 2-Fluorobiphenyl (Surr)	45-105
TBP = 2,4,6-Tribromophenol (Surr)	35-125
TPH = Terphenyl-d14 (Surr)	30-125

Column to be used to flag recovery values

FORM II 8270C

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
	MRL 240-177355/3	106	100	93	99	103	95
	MRL 240-177355/18	104	101	95	99	106	95

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	50-150
PHL = Phenol-d5 (Surr)	50-150
NBZ = Nitrobenzene-d5 (Surr)	50-150
FBP = 2-Fluorobiphenyl (Surr)	50-150
TBP = 2,4,6-Tribromophenol (Surr)	50-150
TPH = Terphenyl-d14 (Surr)	50-150

Column to be used to flag recovery values

FORM II 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50422007.D

Lab ID: LCS 240-176319/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Acenaphthene	667	540	81	45-110	
Acenaphthylene	667	526	79	45-105	
Anthracene	667	584	88	55-105	
Benzo[a]anthracene	667	580	87	50-110	
Benzo[a]pyrene	667	592	89	50-110	
Benzo[b]fluoranthene	667	588	88	45-115	
Benzo[g,h,i]perylene	667	586	88	40-125	
Benzoic acid	1330	172 J	13	0-110	
Benzo[k]fluoranthene	667	600	90	45-125	
Benzyl alcohol	667	518	78	20-125	
Bis(2-chloroethoxy)methane	667	562	84	45-110	
Bis(2-chloroethyl)ether	667	525	79	40-105	
bis (2-chloroisopropyl) ether	667	612	92	20-115	
Bis(2-ethylhexyl) phthalate	667	610	92	45-125	
4-Bromophenyl phenyl ether	667	613	92	45-115	
Butyl benzyl phthalate	667	577	86	50-125	
Carbazole	667	625	94	45-115	
4-Chloroaniline	667	439	66	10-110	
4-Chloro-3-methylphenol	667	566	85	45-115	
2-Chloronaphthalene	667	526	79	45-105	
2-Chlorophenol	667	529	79	45-105	
4-Chlorophenyl phenyl ether	667	548	82	45-110	
Chrysene	667	613	92	55-110	
Dibenz(a,h)anthracene	667	587	88	40-125	
Dibenzofuran	667	550	82	50-105	
1,2-Dichlorobenzene	667	503	75	45-110	
1,3-Dichlorobenzene	667	492	74	40-100	
1,4-Dichlorobenzene	667	477	72	35-105	
3,3'-Dichlorobenzidine	1330	976	73	10-130	
2,4-Dichlorophenol	667	537	81	45-110	
Diethyl phthalate	667	550	82	50-115	
2,4-Dimethylphenol	667	375	56	30-105	
Dimethyl phthalate	667	574	86	50-110	
Di-n-butyl phthalate	667	650	98	55-110	
4,6-Dinitro-2-methylphenol	1330	798	60	30-135	
2,4-Dinitrophenol	1330	472	35	15-130	
2,4-Dinitrotoluene	667	572	86	50-115	
2,6-Dinitrotoluene	667	563	85	50-110	
Di-n-octyl phthalate	667	588	88	40-130	
Fluoranthene	667	633	95	55-115	
Fluorene	667	539	81	50-110	
Hexachlorobenzene	667	567	85	45-120	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50422007.D

Lab ID: LCS 240-176319/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Hexachlorobutadiene	667	465	70	40-115	
Hexachlorocyclopentadiene	667	296 J	44	12-110	
Hexachloroethane	667	483	72	35-110	
Indeno[1,2,3-cd]pyrene	667	602	90	40-120	
Isophorone	667	526	79	45-110	
2-Methylnaphthalene	667	500	75	45-105	
2-Methylphenol	667	531	80	40-105	
3 & 4 Methylphenol	667	549	82	40-105	
Naphthalene	667	514	77	40-105	
2-Nitroaniline	667	587	88	45-120	
3-Nitroaniline	667	572	86	25-110	
4-Nitroaniline	667	575	86	35-115	
Nitrobenzene	667	515	77	40-115	
2-Nitrophenol	667	497	75	40-110	
4-Nitrophenol	1330	1040	78	15-140	
N-Nitrosodi-n-propylamine	667	539	81	40-115	
N-Nitrosodiphenylamine	1330	1230	92	50-115	
Pentachlorophenol	1330	770	58	25-120	
Phenanthrene	667	568	85	50-110	
Phenol	667	551	83	40-100	
Pyrene	667	592	89	45-125	
1,2,4-Trichlorobenzene	667	497	74	45-110	
2,4,5-Trichlorophenol	667	497	74	50-110	
2,4,6-Trichlorophenol	667	442	66	45-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50422003.D

Lab ID: MRL 240-177355/3 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Acenaphthene	5.00	4.98	100	70-130	
Acenaphthylene	5.00	5.15	103	70-130	
Anthracene	5.00	4.89	98	70-130	
Benzo[a]anthracene	5.00	4.77	95	70-130	
Benzo[a]pyrene	5.00	4.86	97	70-130	
Benzo[b]fluoranthene	5.00	4.86	97	70-130	
Benzo[g,h,i]perylene	5.00	4.98	100	70-130	
Benzoic acid	10.0	9.19	92	70-130	M
Benzo[k]fluoranthene	5.00	4.88	98	70-130	
Benzyl alcohol	5.00	4.79	96	70-130	
Bis(2-chloroethoxy)methane	5.00	5.15	103	70-130	
Bis(2-chloroethyl)ether	5.00	5.13	103	70-130	
bis (2-chloroisopropyl) ether	5.00	5.31	106	70-130	
Bis(2-ethylhexyl) phthalate	5.00	5.03	101	70-130	
4-Bromophenyl phenyl ether	5.00	5.11	102	70-130	
Butyl benzyl phthalate	5.00	4.88	98	70-130	
Carbazole	5.00	4.78	96	70-130	
4-Chloroaniline	5.00	4.97	99	70-130	
4-Chloro-3-methylphenol	5.00	4.99	100	70-130	
2-Chloronaphthalene	5.00	4.96	99	70-130	
2-Chlorophenol	5.00	4.86	97	70-130	
4-Chlorophenyl phenyl ether	5.00	4.94	99	70-130	
Chrysene	5.00	4.97	99	70-130	
Dibenz(a,h)anthracene	5.00	4.94	99	70-130	
Dibenzofuran	5.00	5.05	101	70-130	
1,2-Dichlorobenzene	5.00	4.99	100	70-130	
1,3-Dichlorobenzene	5.00	4.96	99	70-130	
1,4-Dichlorobenzene	5.00	5.09	102	70-130	
3,3'-Dichlorobenzidine	10.0	9.89	99	70-130	
2,4-Dichlorophenol	5.00	4.77	95	70-130	
Diethyl phthalate	5.00	5.07	101	70-130	
2,4-Dimethylphenol	5.00	4.99	100	70-130	
Dimethyl phthalate	5.00	5.02	100	70-130	
Di-n-butyl phthalate	5.00	4.93	99	70-130	
4,6-Dinitro-2-methylphenol	10.0	8.81	88	70-130	
2,4-Dinitrophenol	10.0	8.42	84	70-130	
2,4-Dinitrotoluene	5.00	4.95	99	70-130	
2,6-Dinitrotoluene	5.00	5.04	101	70-130	
Di-n-octyl phthalate	5.00	4.79	96	70-130	
Fluoranthene	5.00	4.86	97	70-130	
Fluorene	5.00	5.12	102	70-130	
Hexachlorobenzene	5.00	4.79	96	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50422003.D

Lab ID: MRL 240-177355/3 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Hexachlorobutadiene	5.00	4.57	91	70-130	
Hexachlorocyclopentadiene	5.00	4.42	88	70-130	
Hexachloroethane	5.00	5.00	100	70-130	
Indeno[1,2,3-cd]pyrene	5.00	4.98	100	70-130	
Isophorone	5.00	4.90	98	70-130	
2-Methylnaphthalene	5.00	4.69	94	70-130	
2-Methylphenol	5.00	5.26	105	70-130	
3 & 4 Methylphenol	5.00	5.08	102	70-130	
Naphthalene	5.00	4.83	97	70-130	
2-Nitroaniline	5.00	5.27	105	70-130	
3-Nitroaniline	5.00	5.51	110	70-130	
4-Nitroaniline	5.00	5.03	101	70-130	
Nitrobenzene	5.00	4.76	95	70-130	
2-Nitrophenol	5.00	4.75	95	70-130	
4-Nitrophenol	10.0	9.44	94	70-130	
N-Nitrosodi-n-propylamine	5.00	5.03	101	70-130	
N-Nitrosodiphenylamine	10.0	10.6	106	70-130	
Pentachlorophenol	10.0	8.73	87	70-130	
Phenanthrene	5.00	4.90	98	70-130	
Phenol	5.00	5.20	104	70-130	
Pyrene	5.00	4.76	95	70-130	
1,2,4-Trichlorobenzene	5.00	4.85	97	70-130	
2,4,5-Trichlorophenol	5.00	5.11	102	70-130	
2,4,6-Trichlorophenol	5.00	4.92	98	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50422018.D

Lab ID: MRL 240-177355/18 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Acenaphthene	5.00	5.11	102	70-130	
Acenaphthylene	5.00	5.13	103	70-130	
Anthracene	5.00	5.06	101	70-130	
Benzo[a]anthracene	5.00	4.78	96	70-130	
Benzo[a]pyrene	5.00	4.88	98	70-130	
Benzo[b]fluoranthene	5.00	4.96	99	70-130	
Benzo[g,h,i]perylene	5.00	4.78	96	70-130	
Benzoic acid	10.0	7.20	72	70-130	M
Benzo[k]fluoranthene	5.00	4.71	94	70-130	
Benzyl alcohol	5.00	4.60	92	70-130	
Bis(2-chloroethoxy)methane	5.00	5.34	107	70-130	
Bis(2-chloroethyl)ether	5.00	4.94	99	70-130	
bis (2-chloroisopropyl) ether	5.00	5.57	111	70-130	
Bis(2-ethylhexyl) phthalate	5.00	4.97	99	70-130	
4-Bromophenyl phenyl ether	5.00	4.99	100	70-130	
Butyl benzyl phthalate	5.00	4.81	96	70-130	
Carbazole	5.00	4.87	97	70-130	
4-Chloroaniline	5.00	5.14	103	70-130	
4-Chloro-3-methylphenol	5.00	4.83	97	70-130	
2-Chloronaphthalene	5.00	4.99	100	70-130	
2-Chlorophenol	5.00	4.92	98	70-130	
4-Chlorophenyl phenyl ether	5.00	5.04	101	70-130	
Chrysene	5.00	5.07	101	70-130	
Dibenz(a,h)anthracene	5.00	4.81	96	70-130	
Dibenzofuran	5.00	5.14	103	70-130	
1,2-Dichlorobenzene	5.00	5.01	100	70-130	
1,3-Dichlorobenzene	5.00	4.88	98	70-130	
1,4-Dichlorobenzene	5.00	4.98	100	70-130	
3,3'-Dichlorobenzidine	10.0	9.70	97	70-130	
2,4-Dichlorophenol	5.00	4.95	99	70-130	
Diethyl phthalate	5.00	5.30	106	70-130	
2,4-Dimethylphenol	5.00	4.93	99	70-130	
Dimethyl phthalate	5.00	5.18	104	70-130	
Di-n-butyl phthalate	5.00	4.81	96	70-130	
4,6-Dinitro-2-methylphenol	10.0	4.67	47	70-130	^
2,4-Dinitrophenol	10.0	3.89	39	70-130	^
2,4-Dinitrotoluene	5.00	5.09	102	70-130	
2,6-Dinitrotoluene	5.00	4.95	99	70-130	
Di-n-octyl phthalate	5.00	4.81	96	70-130	
Fluoranthene	5.00	4.76	95	70-130	
Fluorene	5.00	5.18	104	70-130	
Hexachlorobenzene	5.00	4.64	93	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50422018.D

Lab ID: MRL 240-177355/18 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Hexachlorobutadiene	5.00	4.73	95	70-130	
Hexachlorocyclopentadiene	5.00	3.15	63	70-130	^
Hexachloroethane	5.00	5.10	102	70-130	
Indeno[1,2,3-cd]pyrene	5.00	4.82	96	70-130	
Isophorone	5.00	5.00	100	70-130	
2-Methylnaphthalene	5.00	4.81	96	70-130	
2-Methylphenol	5.00	5.22	104	70-130	
3 & 4 Methylphenol	5.00	5.13	103	70-130	
Naphthalene	5.00	4.81	96	70-130	
2-Nitroaniline	5.00	5.25	105	70-130	
3-Nitroaniline	5.00	5.78	116	70-130	
4-Nitroaniline	5.00	5.23	105	70-130	
Nitrobenzene	5.00	4.91	98	70-130	
2-Nitrophenol	5.00	4.71	94	70-130	
4-Nitrophenol	10.0	9.26	93	70-130	
N-Nitrosodi-n-propylamine	5.00	5.17	103	70-130	
N-Nitrosodiphenylamine	10.0	10.2	102	70-130	
Pentachlorophenol	10.0	6.27	63	70-130	^
Phenanthrene	5.00	4.95	99	70-130	
Phenol	5.00	5.15	103	70-130	
Pyrene	5.00	4.82	96	70-130	
1,2,4-Trichlorobenzene	5.00	4.81	96	70-130	
2,4,5-Trichlorophenol	5.00	5.09	102	70-130	
2,4,6-Trichlorophenol	5.00	5.01	100	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab File ID: 50422006.D Lab Sample ID: MB 240-176319/23-A

Matrix: Solid Date Extracted: 04/14/2015 08:47

Instrument ID: A4HP9 Date Analyzed: 04/22/2015 09:19

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-176319/24-A	50422007.D	04/22/2015 09:44
079SB-0354M-0001-SO	240-49171-10	50422014.D	04/22/2015 12:39
079SB-0353M-0001-SO	240-49171-8	50422015.D	04/22/2015 13:04
079SB-0352M-0001-SO	240-49171-6	50422016.D	04/22/2015 13:29

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab File ID: 50420001.D DFTPP Injection Date: 04/20/2015

Instrument ID: A4HP9 DFTPP Injection Time: 08:28

Analysis Batch No.: 177011

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	42.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	67.0	
70	Less than 2.0% of mass 69	0.3	(0.5)1
127	25.0 - 75.0% of mass 198	51.8	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	7.3	
275	10.0- 30.0% of mass 198	22.7	
365	Greater than 0.75% of mass 198	2.5	
441	Present, but less than mass 443	9.7	
442	40.0 - 110.0% of mass 198	55.2	
443	15.0 - 24.0% of mass 442	10.7	(19.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-177011/2	50420002.D	04/20/2015	08:49
	STD4 240-177011/3	50420003.D	04/20/2015	09:14
	STD3 240-177011/4	50420004.D	04/20/2015	09:40
	STD2 240-177011/5	50420005.D	04/20/2015	10:05
	STD1 240-177011/6	50420006.D	04/20/2015	10:31
	STD9 240-177011/7	50420007.D	04/20/2015	10:56
	STD8 240-177011/8	50420008.D	04/20/2015	11:22
	STD7 240-177011/9	50420009.D	04/20/2015	11:47
	STD6 240-177011/10	50420010.D	04/20/2015	12:41
	ICV 240-177011/11	50420011.D	04/20/2015	13:07

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab File ID: 50422001.D DFTPP Injection Date: 04/22/2015

Instrument ID: A4HP9 DFTPP Injection Time: 07:14

Analysis Batch No.: 177355

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	43.0	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	65.4	
70	Less than 2.0% of mass 69	0.3	(0.5)1
127	25.0 - 75.0% of mass 198	49.9	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.5	
275	10.0- 30.0% of mass 198	21.4	
365	Greater than 0.75% of mass 198	2.3	
441	Present, but less than mass 443	9.5	
442	40.0 - 110.0% of mass 198	58.6	
443	15.0 - 24.0% of mass 442	11.2	(19.1)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-177355/2	50422002.D	04/22/2015	07:35
	MRL 240-177355/3	50422003.D	04/22/2015	08:04
	MB 240-176319/23-A	50422006.D	04/22/2015	09:19
	LCS 240-176319/24-A	50422007.D	04/22/2015	09:44
079SB-0354M-0001-SO	240-49171-10	50422014.D	04/22/2015	12:39
079SB-0353M-0001-SO	240-49171-8	50422015.D	04/22/2015	13:04
079SB-0352M-0001-SO	240-49171-6	50422016.D	04/22/2015	13:29
	MRL 240-177355/18	50422018.D	04/22/2015	14:44
	LODV 240-177355/19	50422019.D	04/22/2015	15:09
	LODV 240-177355/20	50422020.D	04/22/2015	15:34
	LODV 240-177355/21	50422021.D	04/22/2015	15:59
	LODV 240-177355/48	50422048.D	04/22/2015	16:24

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: STD6 240-177011/10 Date Analyzed: 04/20/2015 12:41

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50420010.D Heated Purge: (Y/N) N

Calibration ID: 28003

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		121080	6.38	389871	7.50	235173	9.00
UPPER LIMIT		242160	6.88	779742	8.00	470346	9.50
LOWER LIMIT		60540	5.88	194936	7.00	117587	8.50
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-177011/11		139492	6.38	581350	7.49	360913	9.00
CCV 240-177355/2		166687	6.36	637603	7.48	378863	8.98
MRL 240-177355/3		169748	6.36	645991	7.48	374768	8.98
MB 240-176319/23-A		143068	6.36	572933	7.48	341331	8.98
LCS 240-176319/24-A		140444	6.36	538696	7.47	324458	8.98
240-49171-10	079SB-0354M-0001-SO	134150	6.36	519212	7.47	217496	8.98
240-49171-8	079SB-0353M-0001-SO	130368	6.36	527326	7.47	293437	8.98
240-49171-6	079SB-0352M-0001-SO	135705	6.36	545545	7.47	304157	8.98
MRL 240-177355/18		137008	6.36	518106	7.47	303962	8.98
LODV 240-177355/19		132477	6.36	498903	7.47	270237	8.98
LODV 240-177355/20		132087	6.36	501206	7.48	281968	8.98
LODV 240-177355/21		150345	6.36	584537	7.47	332031	8.98
LODV 240-177355/48		135018	6.36	489715	7.47	295228	8.98

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: STD6 240-177011/10 Date Analyzed: 04/20/2015 12:41

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50420010.D Heated Purge: (Y/N) N

Calibration ID: 28003

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		355837	10.27	468196	12.58	382118	14.37
UPPER LIMIT		711674	10.77	936392	13.08	764236	14.87
LOWER LIMIT		177919	9.77	234098	12.08	191059	13.87
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-177011/11		530764	10.27	647642	12.58	536696	14.36
CCV 240-177355/2		618691	10.25	757208	12.55	649458	14.32
MRL 240-177355/3		655408	10.25	781051	12.55	679417	14.32
MB 240-176319/23-A		623285	10.25	714118	12.55	592034	14.32
LCS 240-176319/24-A		527692	10.25	660843	12.55	555076	14.32
240-49171-10	079SB-0354M-0001-SO	510717	10.25	627910	12.54	547240	14.31
240-49171-8	079SB-0353M-0001-SO	499153	10.25	649527	12.55	575195	14.32
240-49171-6	079SB-0352M-0001-SO	515892	10.25	676998	12.55	578974	14.31
MRL 240-177355/18		556122	10.25	650429	12.55	549646	14.32
LODV 240-177355/19		522151	10.25	619002	12.55	528111	14.32
LODV 240-177355/20		538368	10.25	640827	12.54	542671	14.31
LODV 240-177355/21		625991	10.25	721191	12.55	595437	14.31
LODV 240-177355/48		525307	10.25	593392	12.55	493690	14.32

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO | Lab Sample ID: 240-49171-6

Matrix: Solid | Lab File ID: 50422016.D

Analysis Method: 8270C | Date Collected: 04/08/2015 10:27

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 30.43(g) | Date Analyzed: 04/22/2015 13:29

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.3	U	6.7	3.3	0.77
208-96-8	Acenaphthylene	1.7	U	6.7	1.7	0.35
120-12-7	Anthracene	3.3	U	6.7	3.3	0.79
56-55-3	Benzo[a]anthracene	3.3	U	6.7	3.3	0.64
50-32-8	Benzo[a]pyrene	3.4	J	6.7	3.3	0.65
205-99-2	Benzo[b]fluoranthene	7.1		6.7	3.3	0.59
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.7	1.7	0.35
65-85-0	Benzoic acid	150	J	670	130	36
207-08-9	Benzo[k]fluoranthene	3.3	U	6.7	3.3	0.69
100-51-6	Benzyl alcohol	67	U	330	67	21
111-91-1	Bis(2-chloroethoxy)methane	67	U	100	67	22
111-44-4	Bis(2-chloroethyl)ether	3.3	U	100	3.3	2.0
108-60-1	bis (2-chloroisopropyl) ether	34	U	100	34	9.6
117-81-7	Bis(2-ethylhexyl) phthalate	20	J	71	34	19
101-55-3	4-Bromophenyl phenyl ether	34	U	50	34	13
85-68-7	Butyl benzyl phthalate	34	U	71	34	10
86-74-8	Carbazole	34	U	50	34	27
106-47-8	4-Chloroaniline	67	U	150	67	17
59-50-7	4-Chloro-3-methylphenol	67	U	150	67	21
91-58-7	2-Chloronaphthalene	1.7	U	50	1.7	0.45
95-57-8	2-Chlorophenol	34	U	50	34	8.3
7005-72-3	4-Chlorophenyl phenyl ether	34	U	50	34	13
218-01-9	Chrysene	6.1	J	6.7	3.3	1.1
53-70-3	Dibenz(a,h)anthracene	3.3	U	6.7	3.3	0.67
132-64-9	Dibenzofuran	3.3	U	50	3.3	0.67
95-50-1	1,2-Dichlorobenzene	34	U	50	34	9.8
541-73-1	1,3-Dichlorobenzene	34	U	50	34	11
106-46-7	1,4-Dichlorobenzene	34	U	50	34	20
91-94-1	3,3'-Dichlorobenzidine	67	U	100	67	18
120-83-2	2,4-Dichlorophenol	67	U	150	67	20
84-66-2	Diethyl phthalate	34	U	71	34	16
105-67-9	2,4-Dimethylphenol	67	U	150	67	20
131-11-3	Dimethyl phthalate	34	U	71	34	17
84-74-2	Di-n-butyl phthalate	34	U	71	34	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO | Lab Sample ID: 240-49171-6

Matrix: Solid | Lab File ID: 50422016.D

Analysis Method: 8270C | Date Collected: 04/08/2015 10:27

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 30.43(g) | Date Analyzed: 04/22/2015 13:29

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	34	U	150	34	9.3
51-28-5	2,4-Dinitrophenol	67	U	330	67	21
121-14-2	2,4-Dinitrotoluene	67	U	200	67	17
606-20-2	2,6-Dinitrotoluene	67	U	200	67	21
117-84-0	Di-n-octyl phthalate	34	U	71	34	8.0
206-44-0	Fluoranthene	12		6.7	3.3	0.55
86-73-7	Fluorene	3.3	U	6.7	3.3	0.53
118-74-1	Hexachlorobenzene	3.3	U	6.7	3.3	2.1
87-68-3	Hexachlorobutadiene	34	U	50	34	5.6
77-47-4	Hexachlorocyclopentadiene	34	U	330	34	8.2
67-72-1	Hexachloroethane	34	U	50	34	9.1
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.7	1.7	0.35
78-59-1	Isophorone	60		50	34	13
91-57-6	2-Methylnaphthalene	11		6.7	3.3	0.50
95-48-7	2-Methylphenol	67	U	200	67	11
15831-10-4	3 & 4 Methylphenol	67	U	400	67	20
91-20-3	Naphthalene	11		6.7	3.3	0.83
88-74-4	2-Nitroaniline	34	U	200	34	9.2
99-09-2	3-Nitroaniline	67	U	200	67	16
100-01-6	4-Nitroaniline	67	U	200	67	26
98-95-3	Nitrobenzene	3.3	U	100	3.3	2.2
88-75-5	2-Nitrophenol	34	U	50	34	8.4
100-02-7	4-Nitrophenol	67	U	330	67	17
621-64-7	N-Nitrosodi-n-propylamine	34	U	50	34	6.4
86-30-6	N-Nitrosodiphenylamine	34	U	50	34	21
87-86-5	Pentachlorophenol	34	U	150	34	9.2
85-01-8	Phenanthrene	8.8		6.7	3.3	0.74
108-95-2	Phenol	34	U	50	34	7.4
129-00-0	Pyrene	6.5	J	6.7	1.7	0.44
120-82-1	1,2,4-Trichlorobenzene	17	U	50	17	3.5
95-95-4	2,4,5-Trichlorophenol	67	U	150	67	25
88-06-2	2,4,6-Trichlorophenol	34	U	150	34	9.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO Lab Sample ID: 240-49171-6

Matrix: Solid Lab File ID: 50422016.D

Analysis Method: 8270C Date Collected: 04/08/2015 10:27

Extract. Method: 3540C Date Extracted: 04/14/2015 08:47

Sample wt/vol: 30.43(g) Date Analyzed: 04/22/2015 13:29

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 2.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	78		45-105
367-12-4	2-Fluorophenol (Surr)	80		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	66		35-100
4165-62-2	Phenol-d5 (Surr)	79		40-100
1718-51-0	Terphenyl-d14 (Surr)	78		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	73		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D
Lims ID: 240-49171-A-6-G Lab Sample ID: 240-49171-6
Client ID: 079SB-0352M-0001-SO
Sample Type: Client
Inject. Date: 22-Apr-2015 13:29:30 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-016
Misc. Info.: 240-49171-A-6-G240-49171-A-6-G
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 09:37:02 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 22-Apr-2015 14:02:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.358	6.359	-0.001	94	135705	4.00	
* 2 Naphthalene-d8	136	7.474	7.475	-0.001	98	545545	4.00	
* 3 Acenaphthene-d10	164	8.979	8.980	-0.001	78	304157	4.00	
* 4 Phenanthrene-d10	188	10.248	10.254	-0.006	75	515892	4.00	
* 5 Chrysene-d12	240	12.547	12.548	-0.001	80	676998	4.00	
* 6 Perylene-d12	264	14.312	14.318	-0.006	94	578974	4.00	
$ 7 2-Fluorophenol	112	5.166	5.133	0.033	92	401375	8.03	
$ 8 Phenol-d5	99	6.002	5.994	0.008	91	589222	7.89	
$ 9 Nitrobenzene-d5	82	6.834	6.835	-0.001	82	656787	6.61	
$ 10 2-Fluorobiphenyl (Surr)	172	8.378	8.379	-0.001	99	794806	7.77	
$ 11 2,4,6-Tribromophenol	330	9.647	9.653	-0.006	78	82650	7.34	
$ 12 Terphenyl-d14	244	11.576	11.577	-0.001	98	1070214	7.77	
43 Phenol	94		6.003				ND	
69 Bis(2-chloroethyl)ether	93		6.095				ND	
46 2-Chlorophenol	128		6.172				ND	
47 1,3-Dichlorobenzene	146		6.311				ND	
48 1,4-Dichlorobenzene	146		6.374				ND	
49 Benzyl alcohol	108		6.455				ND	
50 1,2-Dichlorobenzene	146		6.513				ND	
51 2-Methylphenol	108		6.542				ND	
53 2,2'-oxybis[1-chloropropan	45		6.576				ND	
21 3 & 4 Methylphenol	108		6.672				ND	
57 N-Nitrosodi-n-propylamine	70		6.686				ND	
61 Hexachloroethane	117		6.821				ND	
62 Nitrobenzene	77		6.850				ND	
64 Isophorone	82	7.051	7.052	-0.001	95	138842	0.8960	
66 2-Nitrophenol	139		7.129				ND	
65 2,4-Dimethylphenol	107		7.138				ND	
71 Benzoic acid	122	7.161	7.196	-0.035	76	25249	2.21	
70 Bis(2-chloroethoxy)methane	93		7.215				ND	
73 2,4-Dichlorophenol	162		7.335				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.417				ND	
75 Naphthalene	128	7.493	7.494	-0.001	37	23441	0.1608	
76 4-Chloroaniline	127		7.513				ND	
79 Hexachlorobutadiene	225		7.595				ND	
86 4-Chloro-3-methylphenol	107		7.908				ND	
87 2-Methylnaphthalene	142	8.080	8.081	-0.001	59	16296	0.1702	
89 Hexachlorocyclopentadiene	237		8.225				ND	
92 2,4,6-Trichlorophenol	196		8.312				ND	
93 2,4,5-Trichlorophenol	196		8.345				ND	
100 2-Chloronaphthalene	162		8.504				ND	
102 2-Nitroaniline	65		8.562				ND	
105 Dimethyl phthalate	163		8.696				ND	
107 2,6-Dinitrotoluene	165		8.754				ND	
109 Acenaphthylene	152		8.865				ND	
110 3-Nitroaniline	138		8.908				ND	
111 2,4-Dinitrophenol	184		8.994				ND	
112 Acenaphthene	153		9.009				ND	
113 4-Nitrophenol	109		9.018				ND	
114 2,4-Dinitrotoluene	165		9.105				ND	
116 Dibenzofuran	168		9.153				ND	
121 Diethyl phthalate	149		9.293				ND	
123 4-Chlorophenyl phenyl ethe	204		9.422				ND	
125 4-Nitroaniline	138		9.432				ND	
126 Fluorene	166		9.446				ND	
128 4,6-Dinitro-2-methylphenol	198		9.461				ND	
131 N-Nitrosodiphenylamine	169		9.514				ND	
139 4-Bromophenyl phenyl ether	248		9.841				ND	
141 Hexachlorobenzene	284		9.932				ND	
143 Pentachlorophenol	266		10.081				ND	
148 Phenanthrene	178	10.273	10.274	-0.001	47	17720	0.1308	
149 Anthracene	178		10.317				ND	
151 Carbazole	167		10.432				ND	
154 Di-n-butyl phthalate	149	10.672	10.673	-0.001	64	30432	0.2009	
159 Fluoranthene	202	11.292	11.293	-0.001	52	27308	0.1746	
161 Pyrene	202	11.494	11.495	-0.001	94	17852	0.0963	
168 Butyl benzyl phthalate	149		11.957				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.437	12.438	-0.002	51	34780	0.3039	
175 3,3'-Dichlorobenzidine	252		12.471				ND	
177 Benzo[a]anthracene	228		12.539				ND	
178 Chrysene	228	12.571	12.577	-0.006	17	15701	0.0903	
180 Di-n-octyl phthalate	149		13.096				ND	
182 Benzo[b]fluoranthene	252	13.759	13.765	-0.006	18	18355	0.1052	
183 Benzo[k]fluoranthene	252		13.803				ND	
184 Benzo[a]pyrene	252	14.235	14.241	-0.006	7	8473	0.0509	
188 Indeno[1,2,3-cd]pyrene	276		16.246				ND	
189 Dibenz(a,h)anthracene	278		16.261				ND	
190 Benzo[g,h,i]perylene	276		16.847				ND	

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

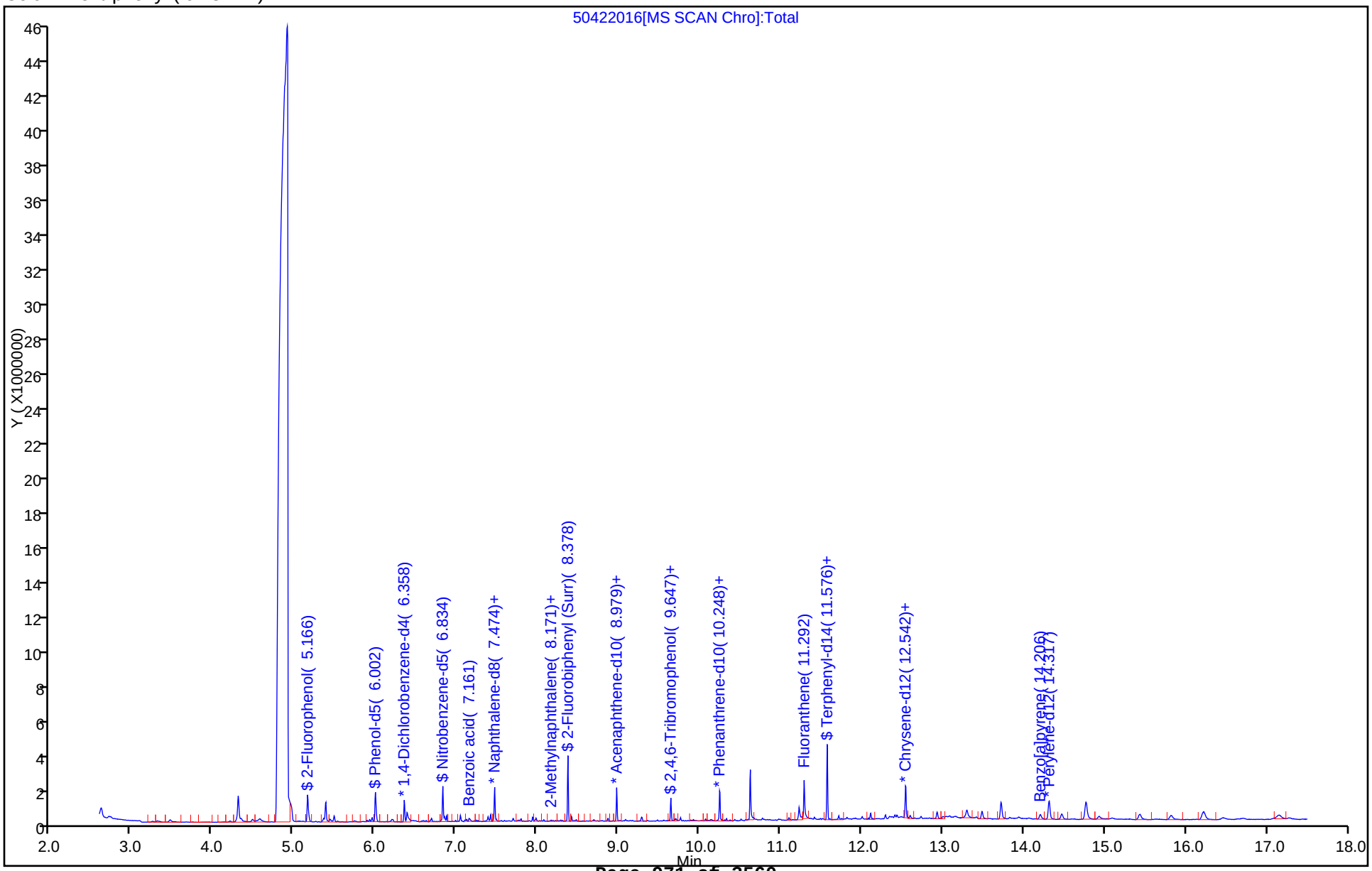
Report Date: 23-Apr-2015 09:37:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D

Injection Date:	22-Apr-2015 13:29:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-49171-A-6-G	Lab Sample ID:	240-49171-6	Worklist Smp#:	16
Client ID:	079SB-0352M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



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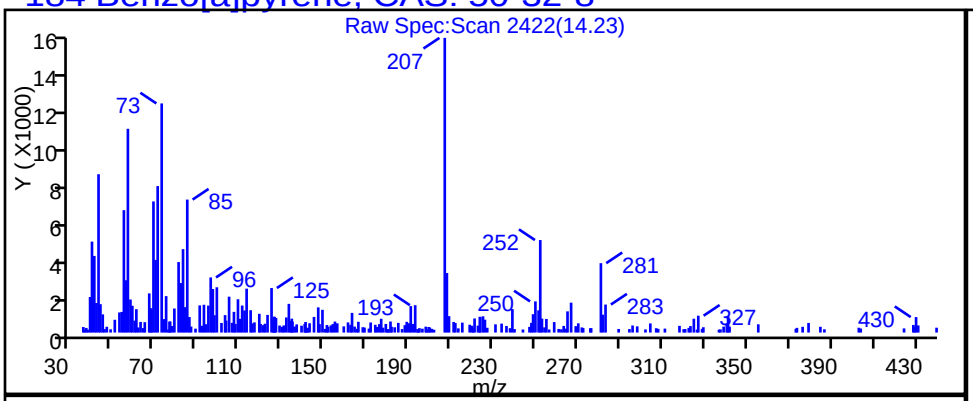
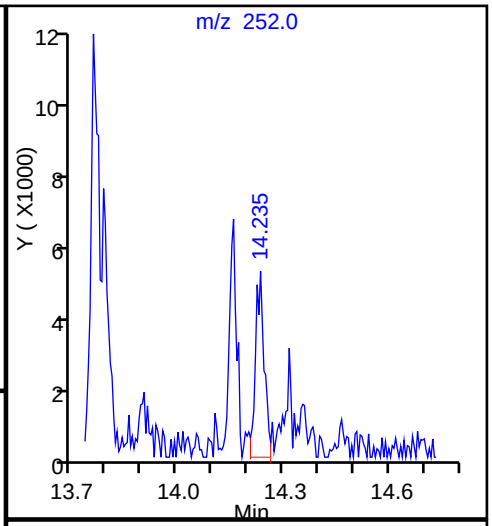
TestAmerica Canton

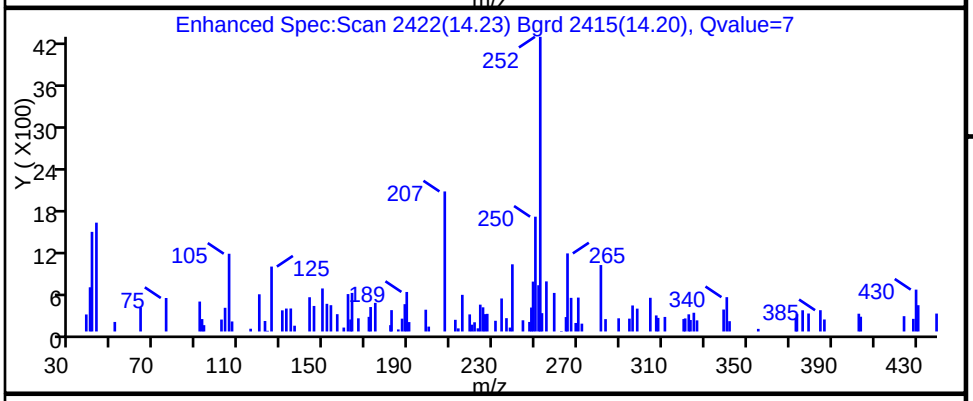
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D

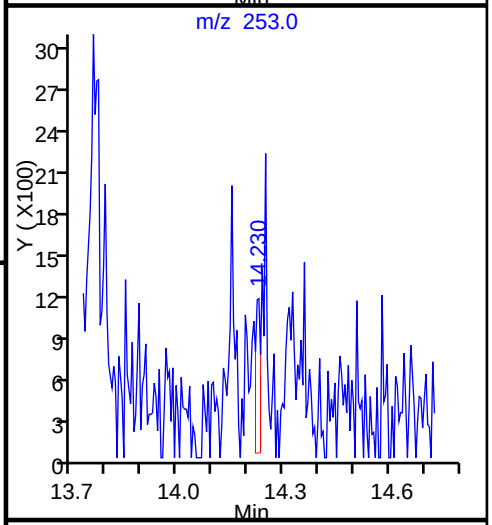
Injection Date:	22-Apr-2015 13:29:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-6-G	Lab Sample ID:	240-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

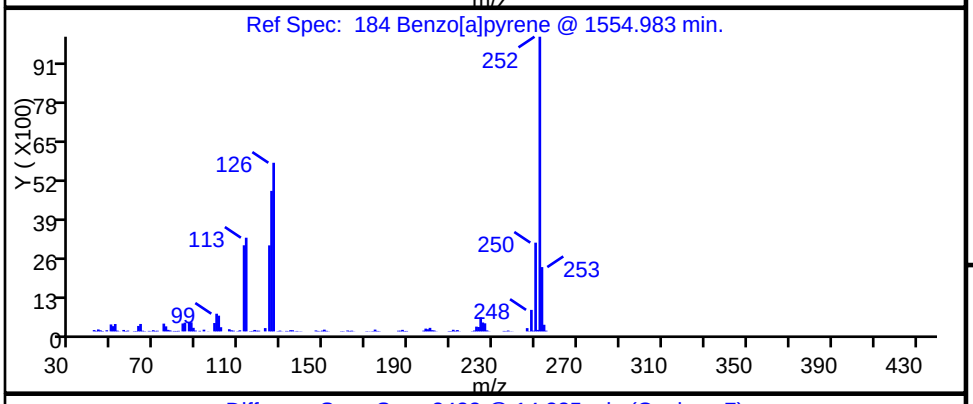
184 Benzo[a]pyrene, CAS: 50-32-8

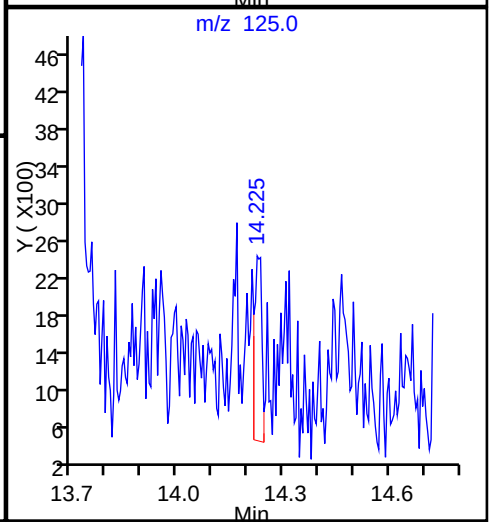


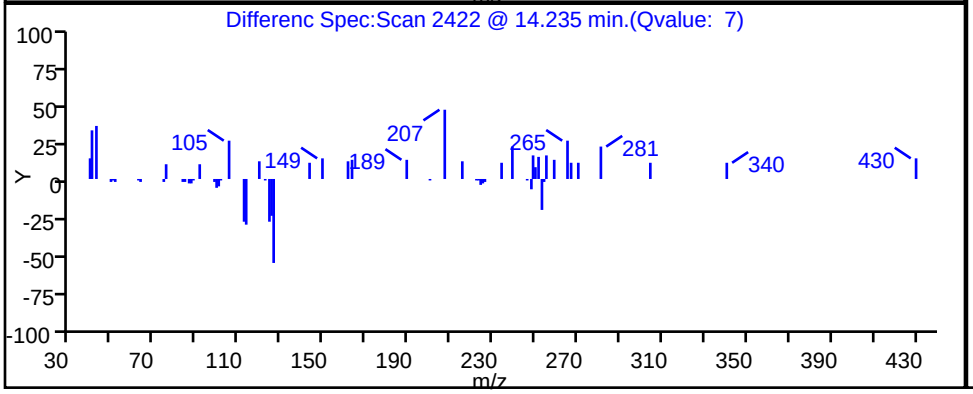












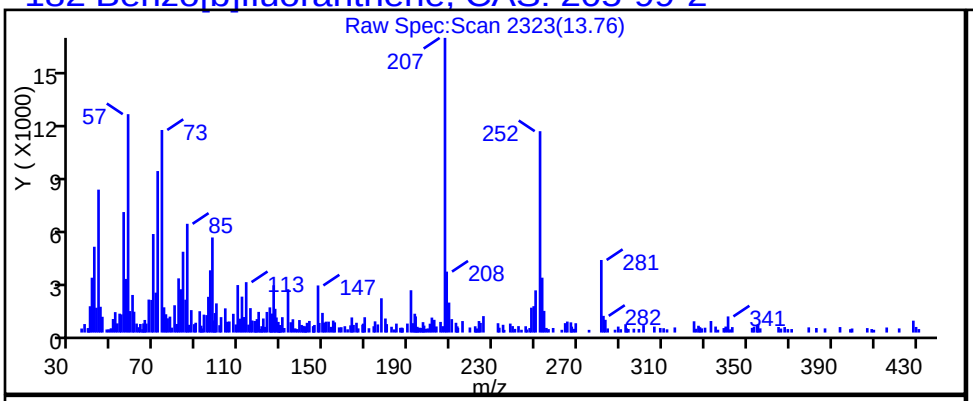
Report Date: 23-Apr-2015 09:37:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

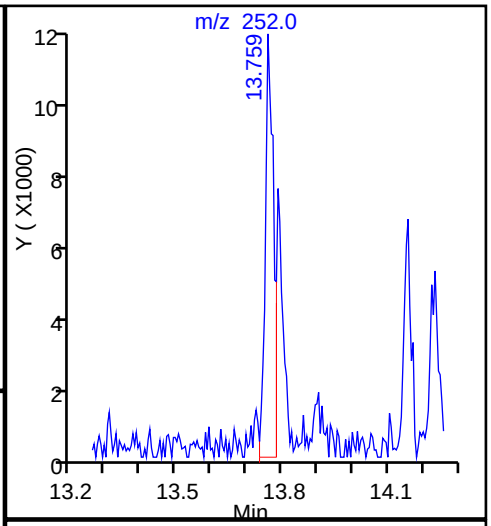
TestAmerica Canton

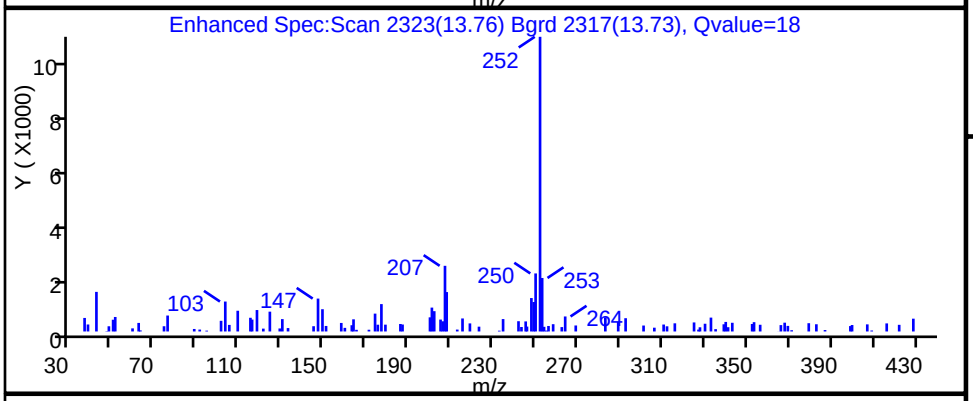
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D

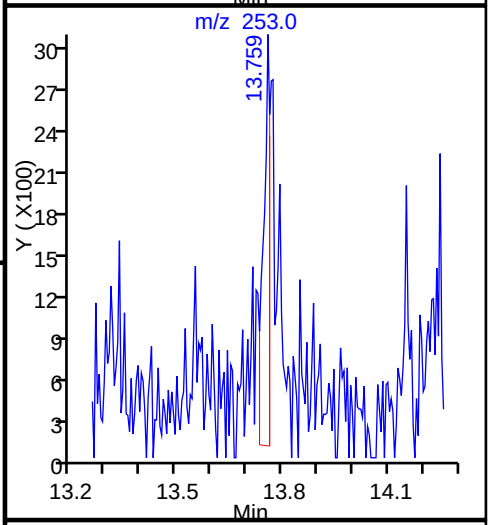
Injection Date:	22-Apr-2015 13:29:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-6-G	Lab Sample ID:	240-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

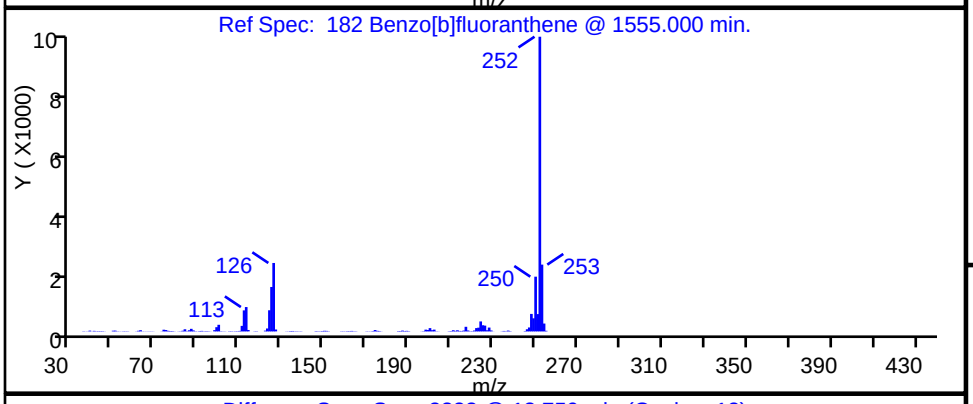
182 Benzo[b]fluoranthene, CAS: 205-99-2

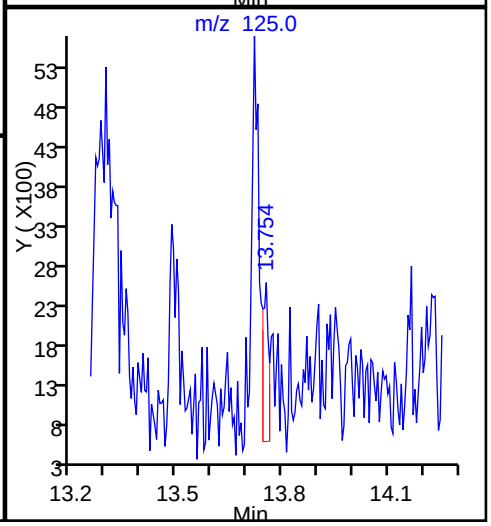


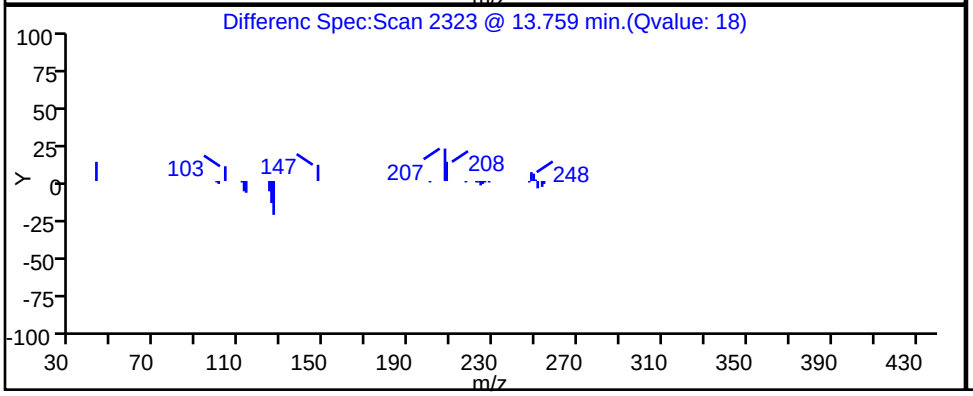












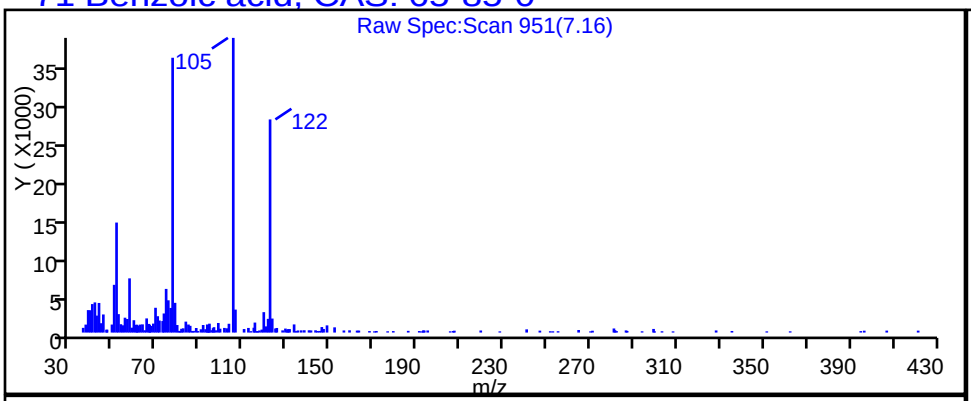
Report Date: 23-Apr-2015 09:37:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

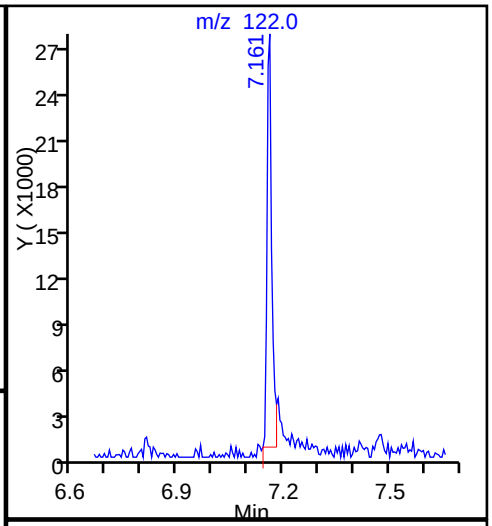
TestAmerica Canton

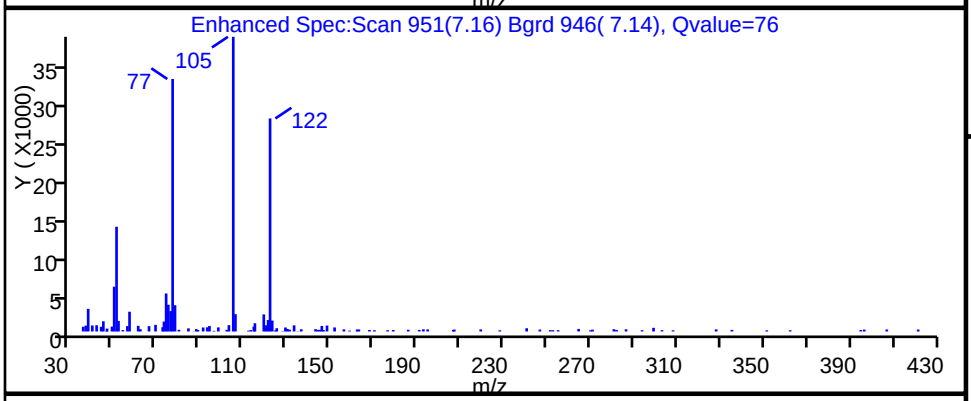
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D

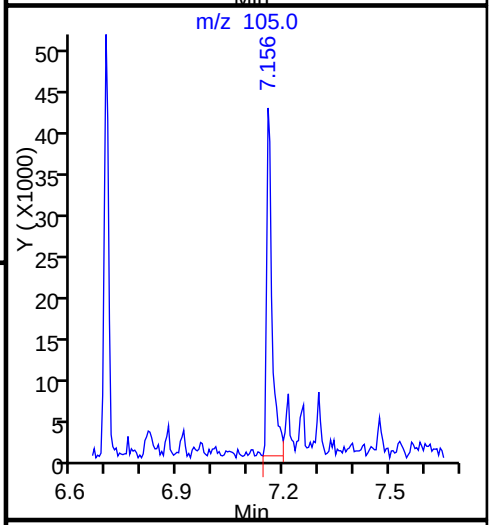
Injection Date:	22-Apr-2015 13:29:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-6-G	Lab Sample ID:	240-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

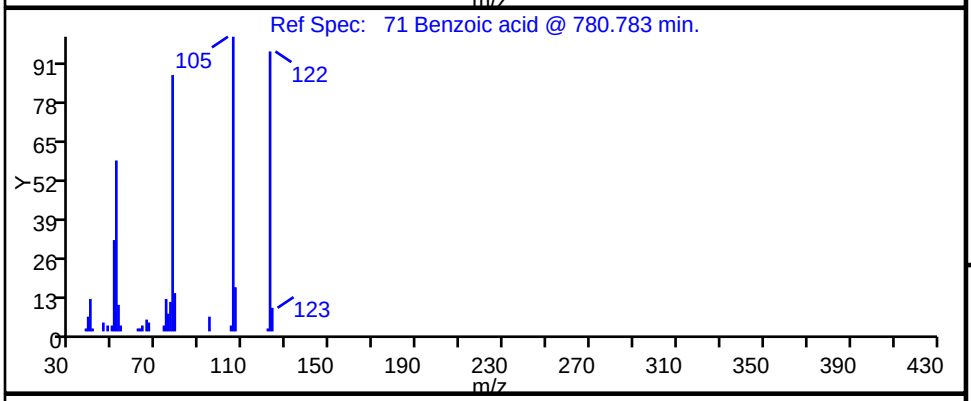
71 Benzoic acid, CAS: 65-85-0

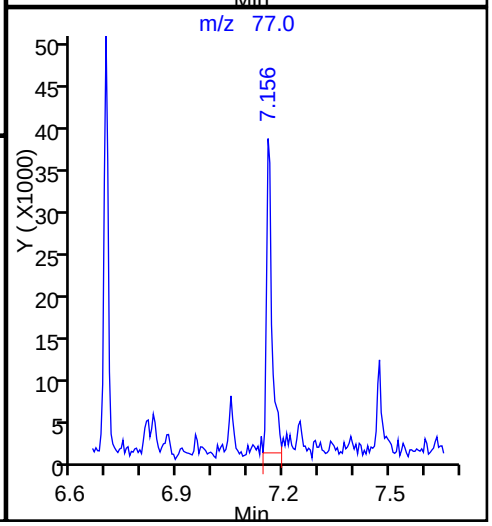


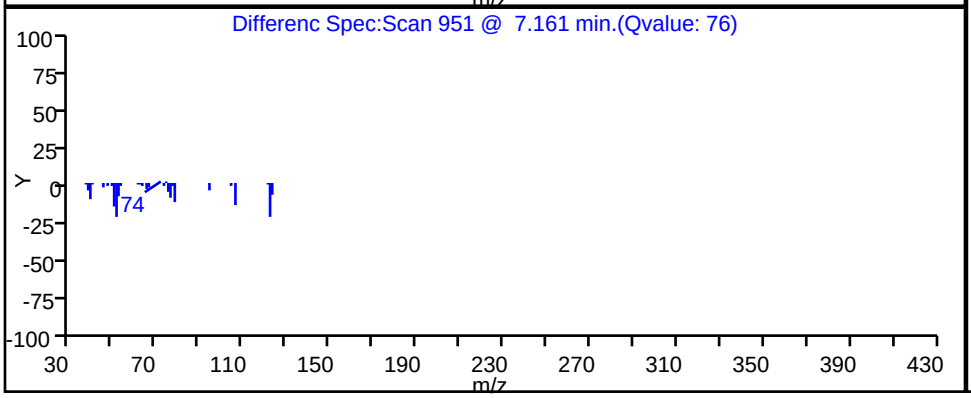












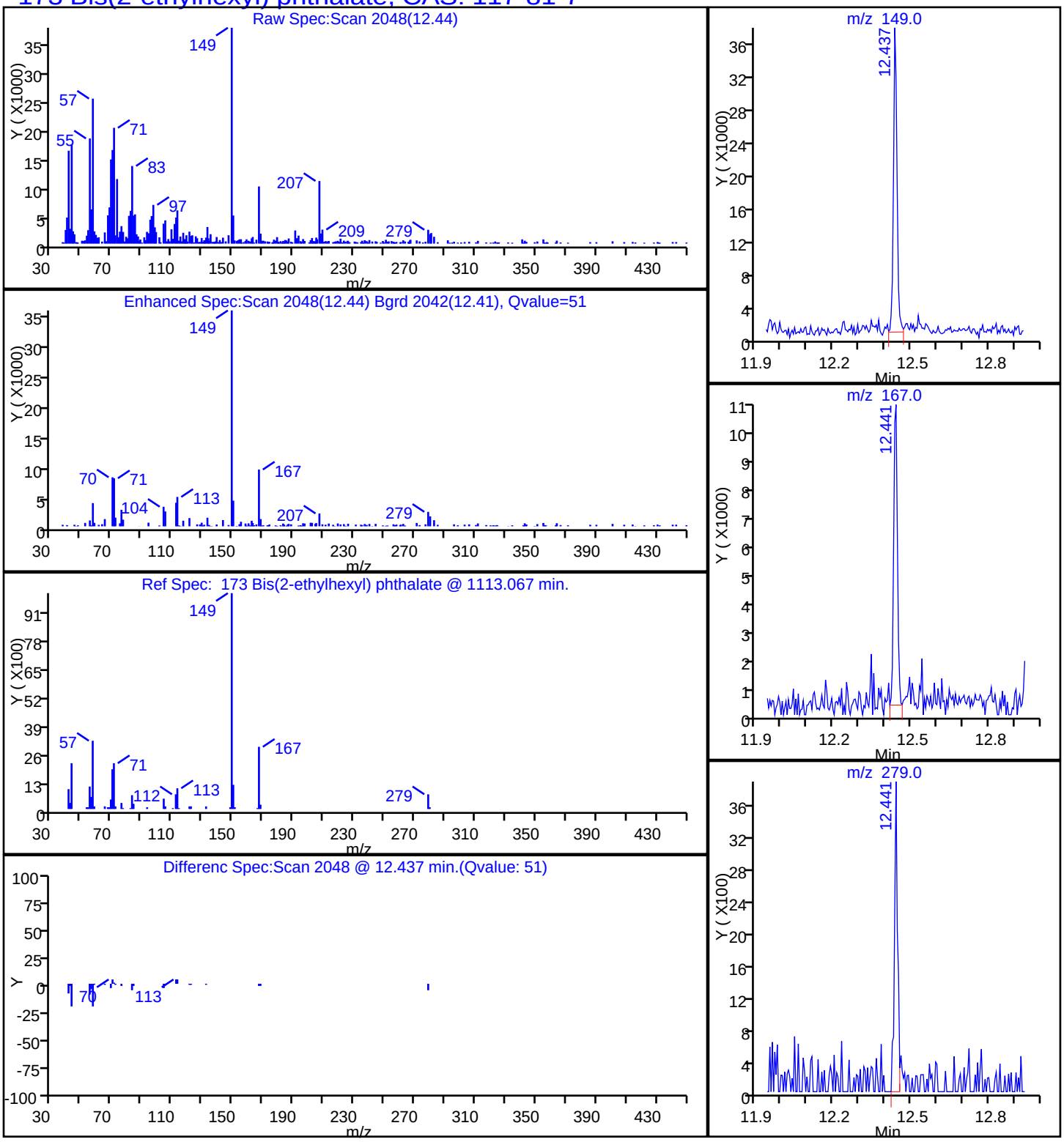
Report Date: 23-Apr-2015 09:37:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D

Injection Date:	22-Apr-2015 13:29:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-6-G	Lab Sample ID:	240-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

173 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7



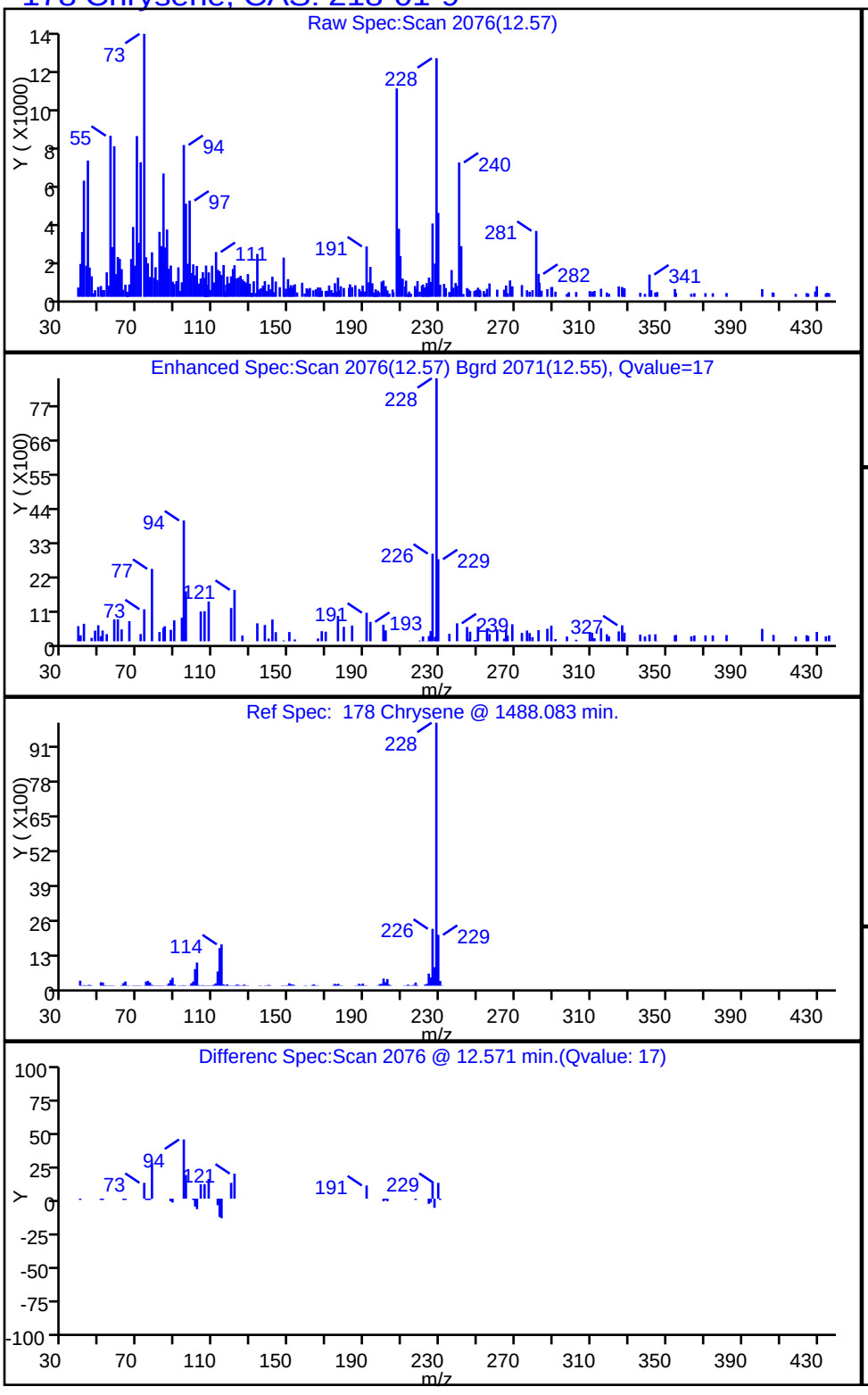
Report Date: 23-Apr-2015 09:37:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

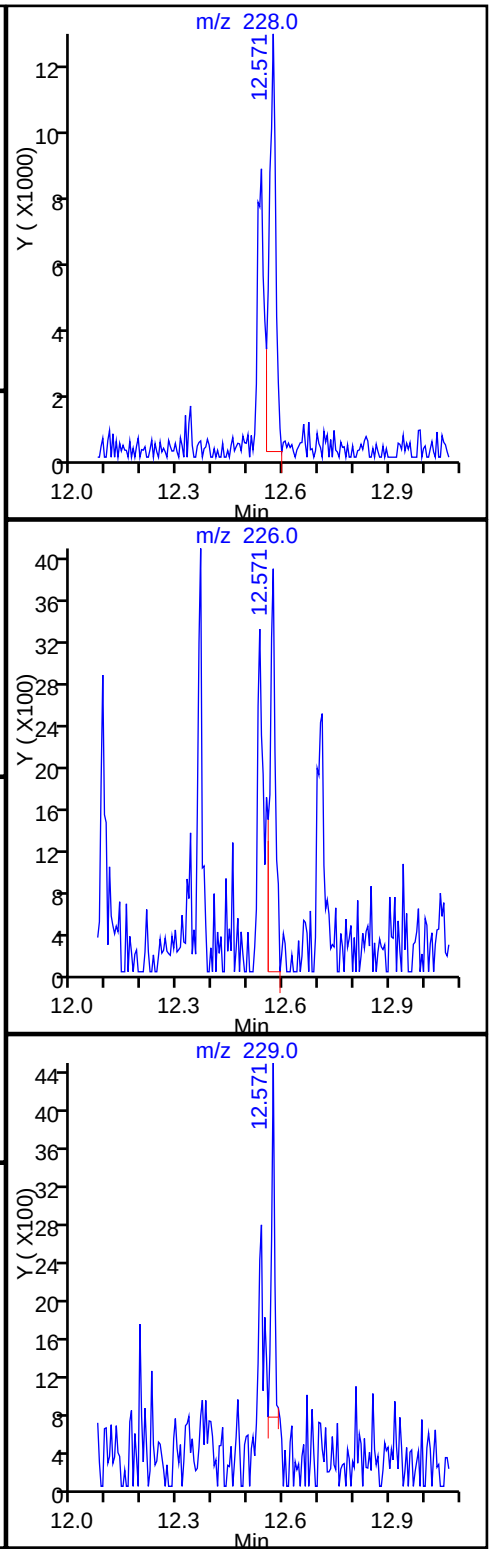
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D

Injection Date:	22-Apr-2015 13:29:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-6-G	Lab Sample ID:	240-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

178 Chrysene, CAS: 218-01-9





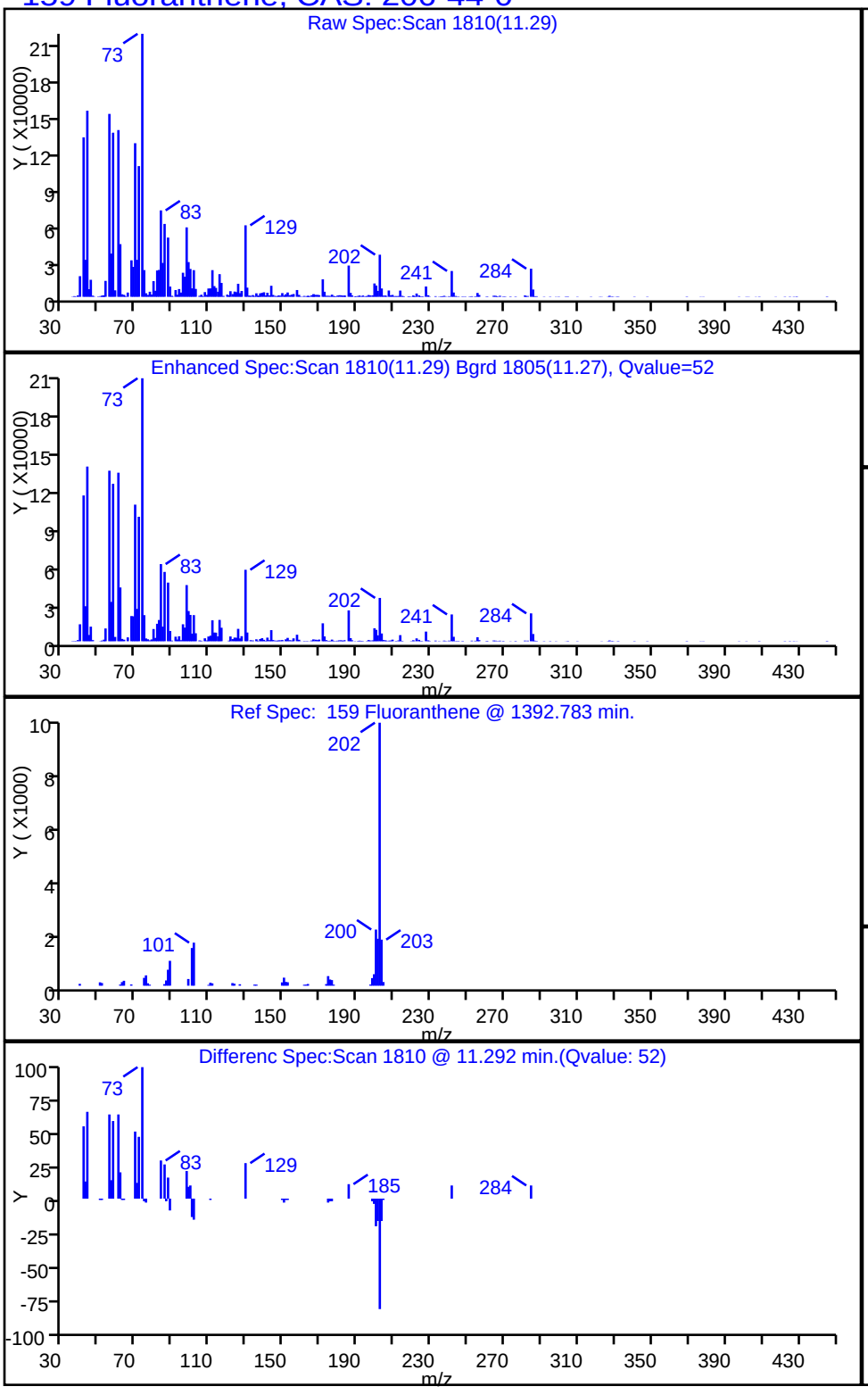
Report Date: 23-Apr-2015 09:37:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

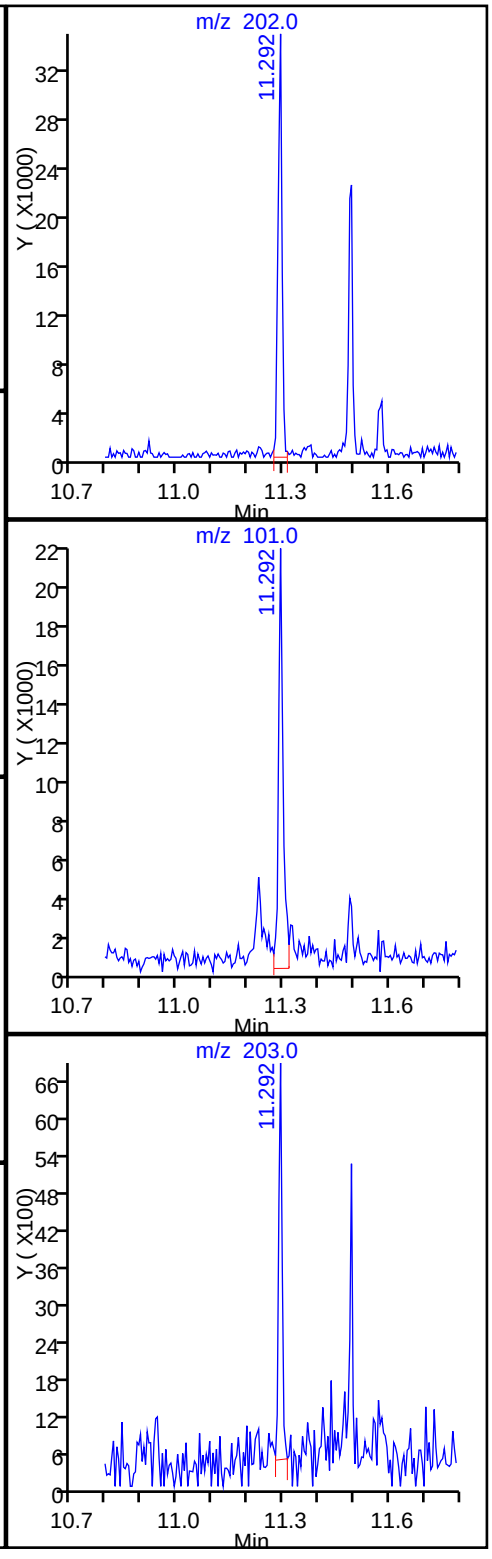
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D

Injection Date:	22-Apr-2015 13:29:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-6-G	Lab Sample ID:	240-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

159 Fluoranthene, CAS: 206-44-0





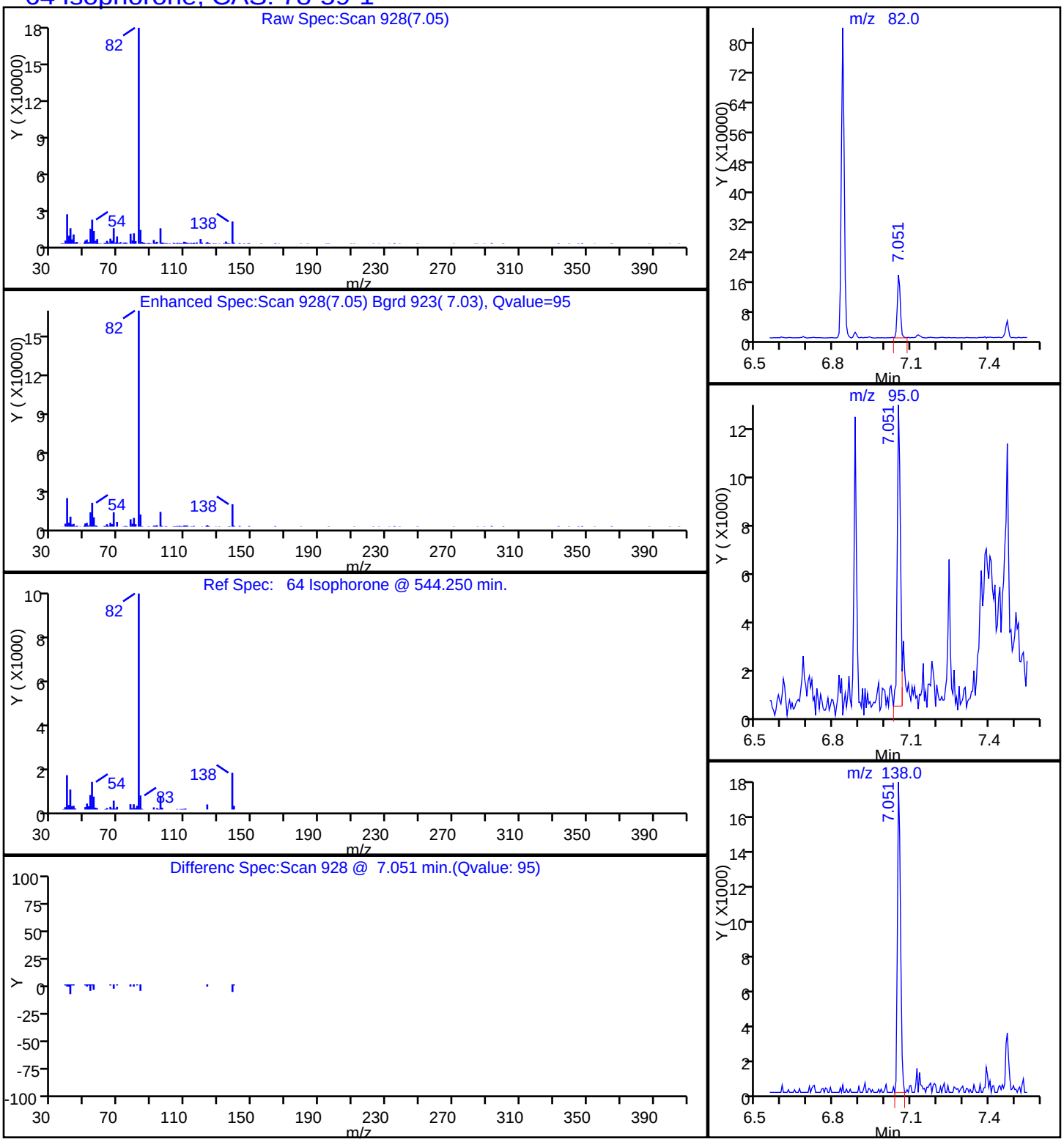
Report Date: 23-Apr-2015 09:37:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D

Injection Date:	22-Apr-2015 13:29:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-6-G	Lab Sample ID:	240-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

64 Isophorone, CAS: 78-59-1



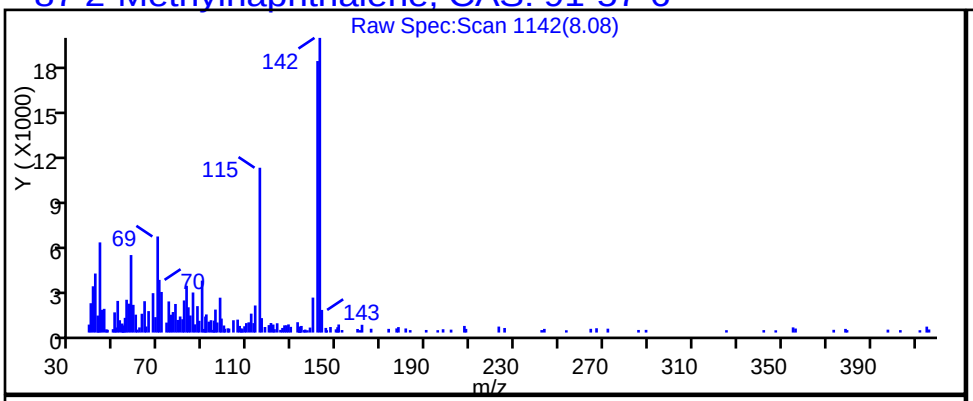
Report Date: 23-Apr-2015 09:37:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

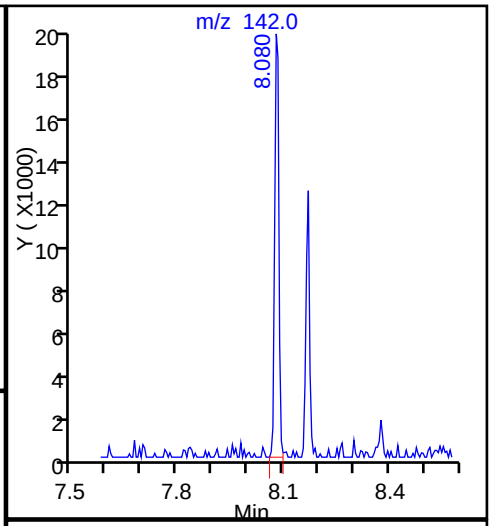
TestAmerica Canton

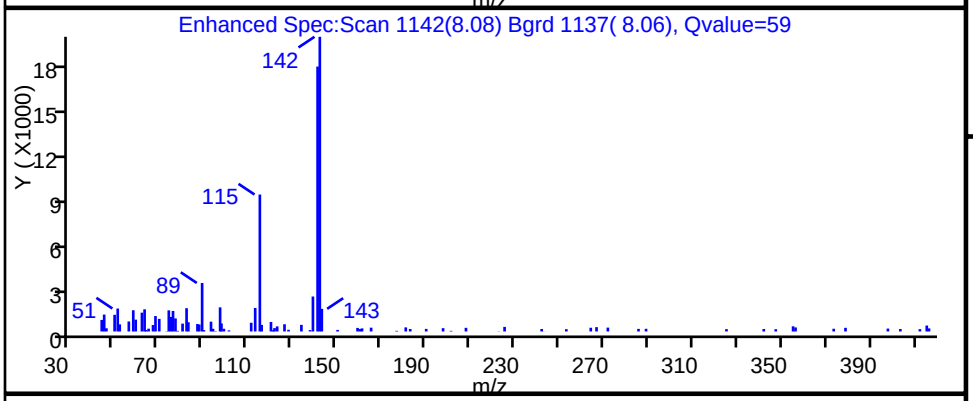
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D

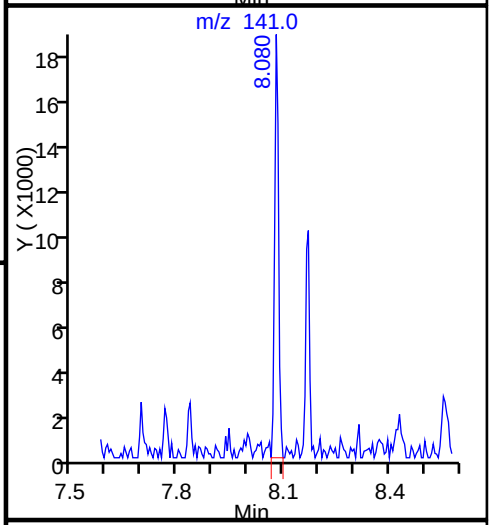
Injection Date:	22-Apr-2015 13:29:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-6-G	Lab Sample ID:	240-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

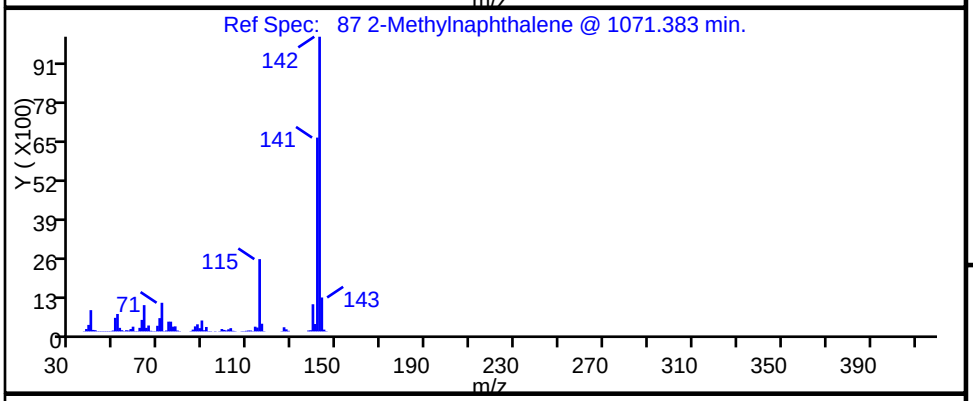
87 2-Methylnaphthalene, CAS: 91-57-6

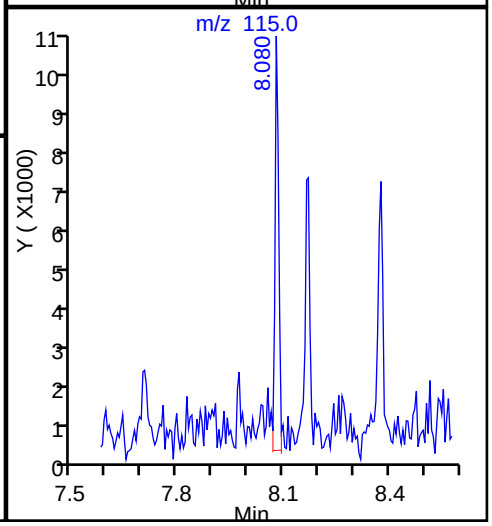


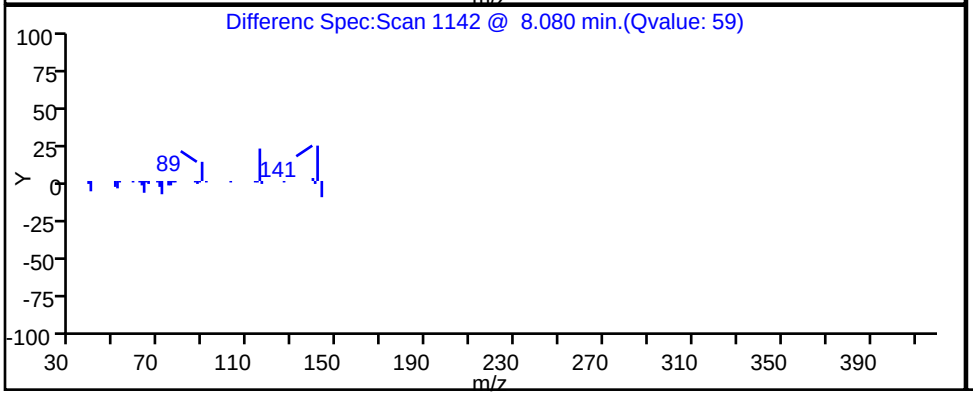












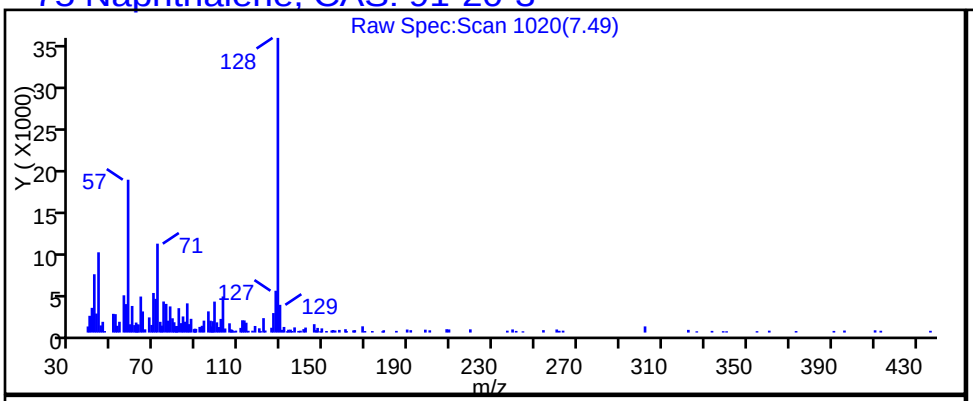
Report Date: 23-Apr-2015 09:37:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

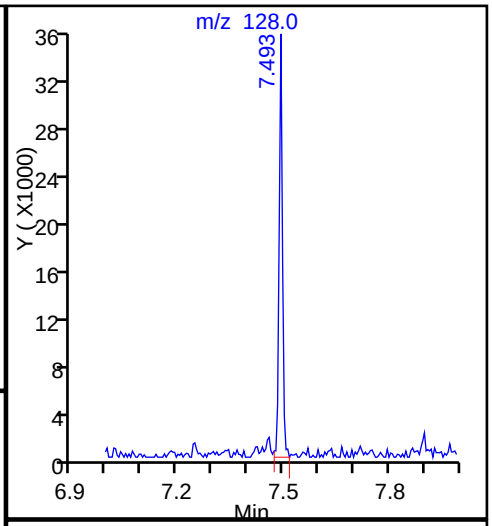
TestAmerica Canton

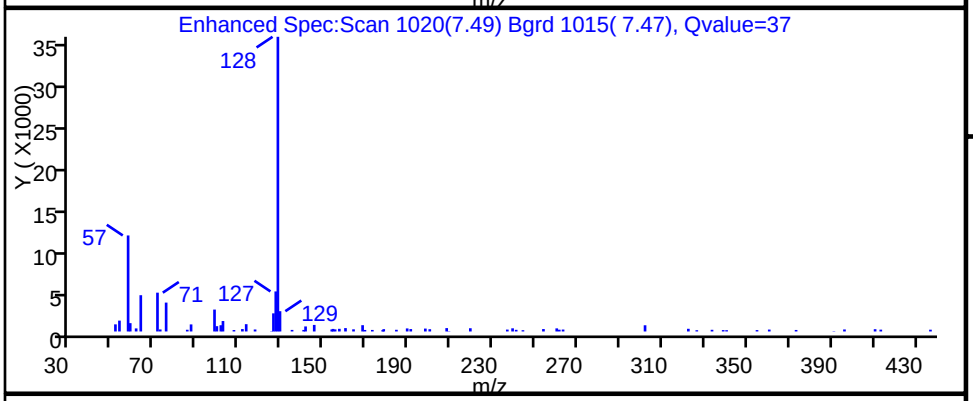
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D

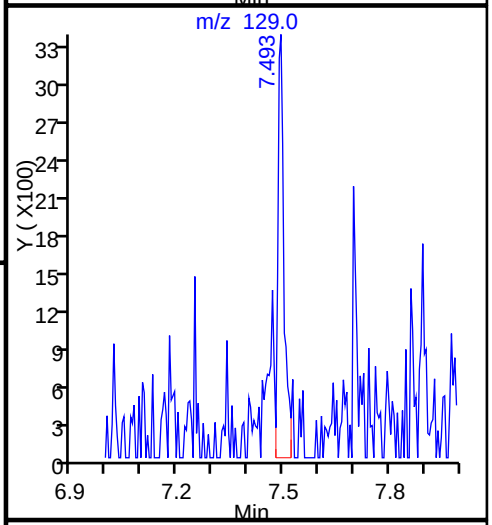
Injection Date:	22-Apr-2015 13:29:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-6-G	Lab Sample ID:	240-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

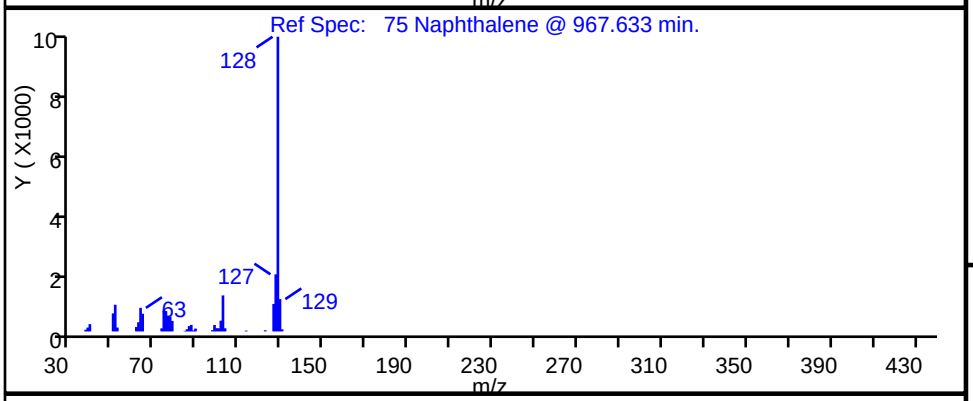
75 Naphthalene, CAS: 91-20-3

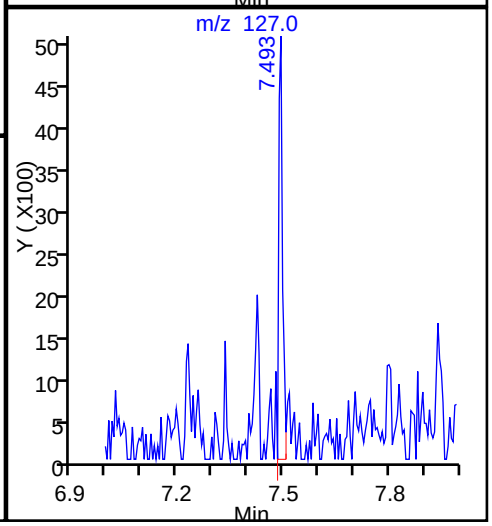


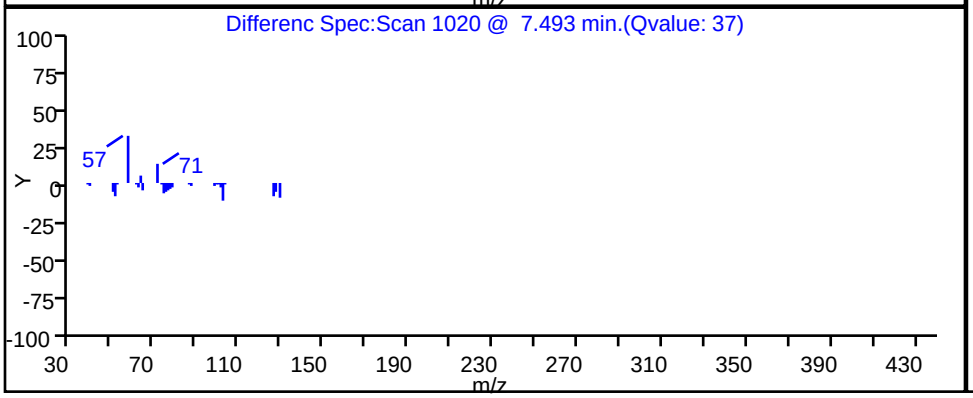












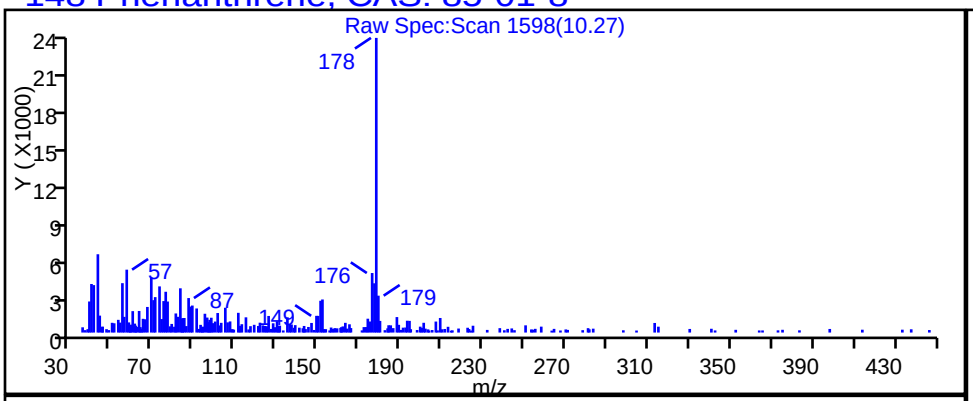
Report Date: 23-Apr-2015 09:37:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

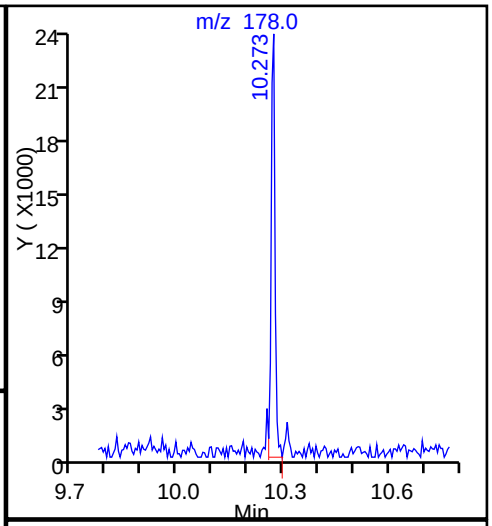
TestAmerica Canton

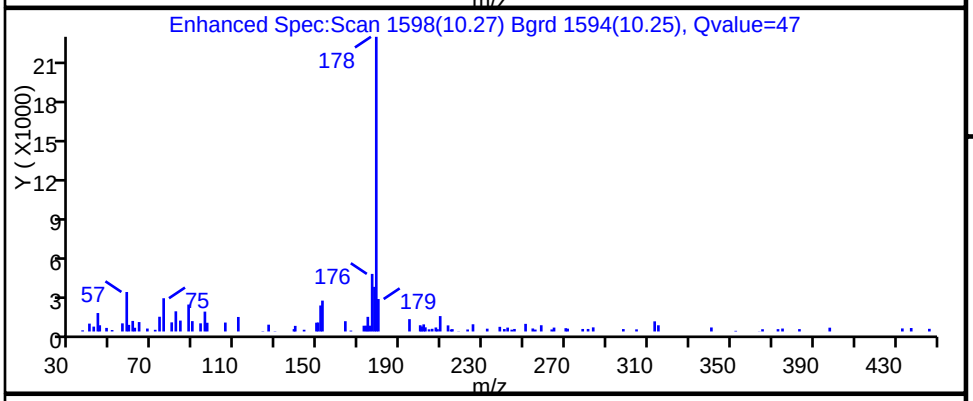
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D

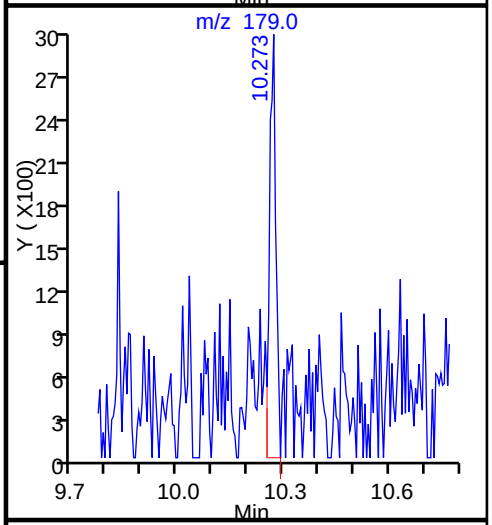
Injection Date:	22-Apr-2015 13:29:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-6-G	Lab Sample ID:	240-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

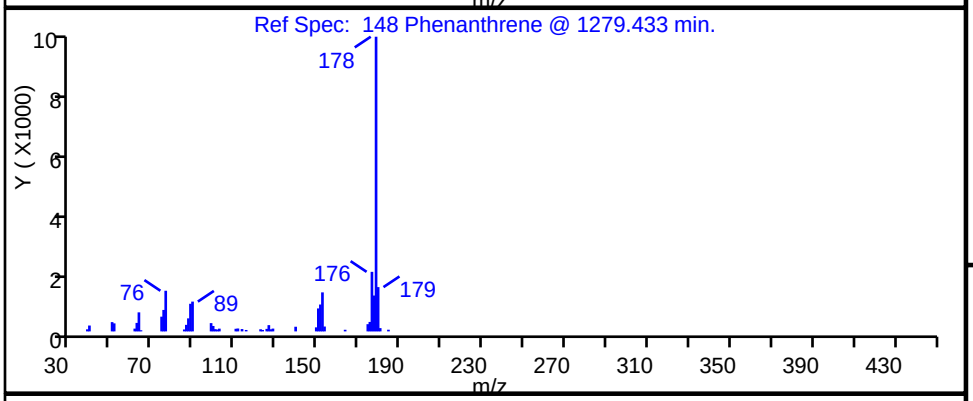
148 Phenanthrene, CAS: 85-01-8

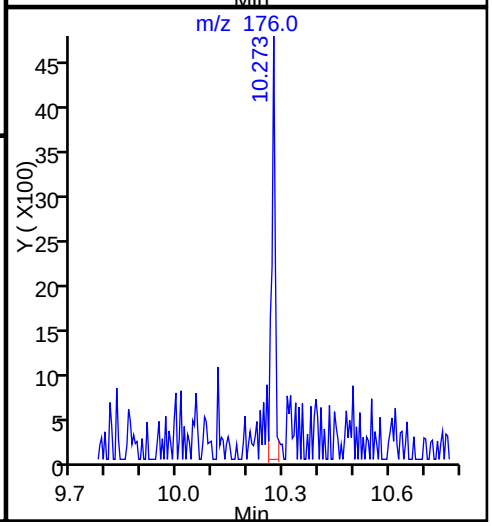


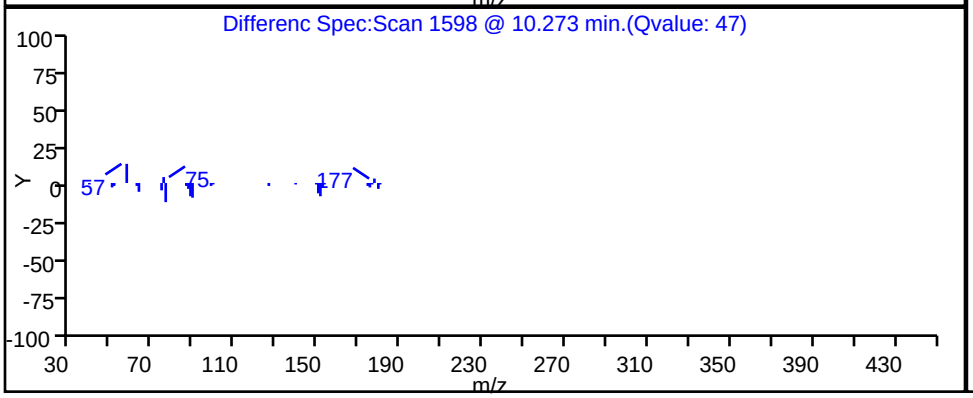












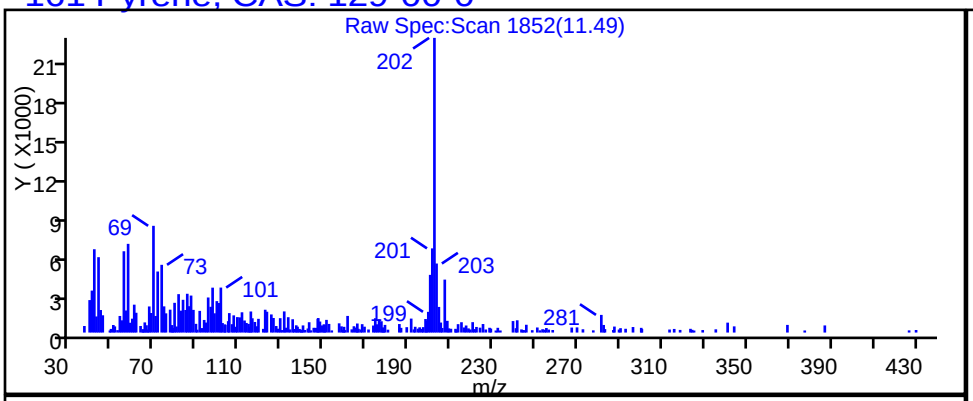
Report Date: 23-Apr-2015 09:37:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

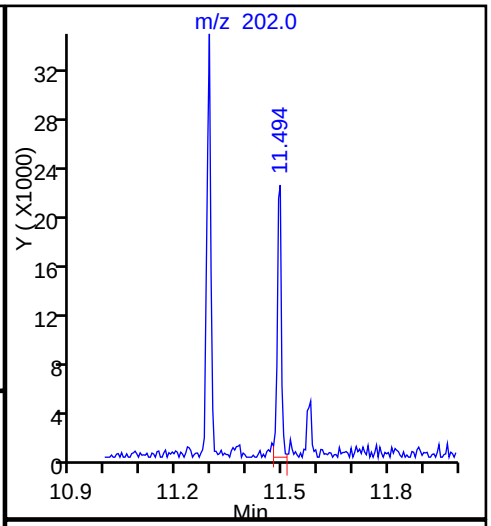
TestAmerica Canton

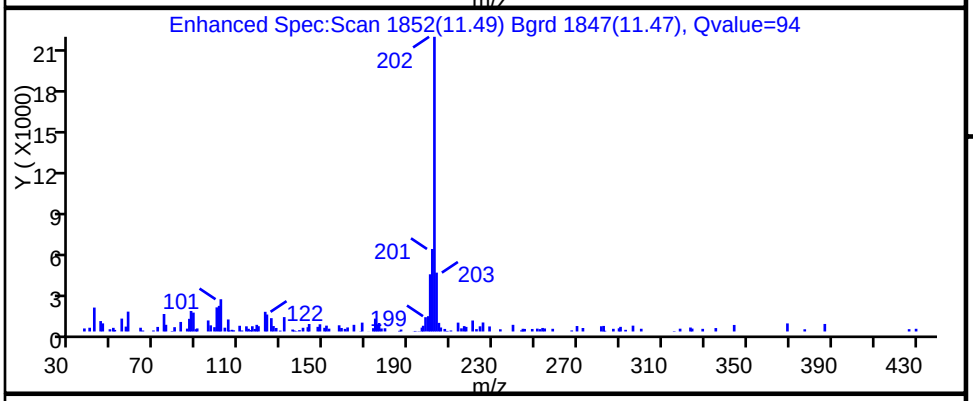
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422016.D

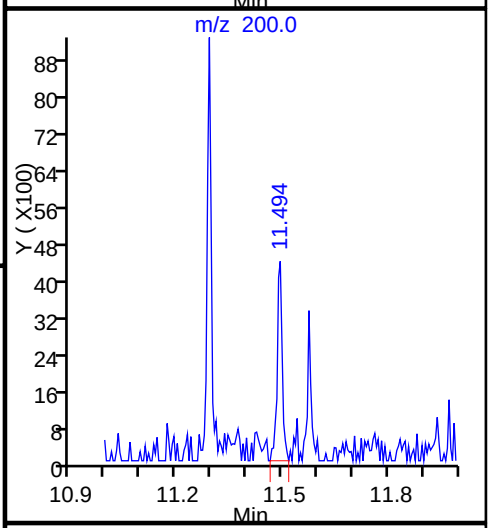
Injection Date:	22-Apr-2015 13:29:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-6-G	Lab Sample ID:	240-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

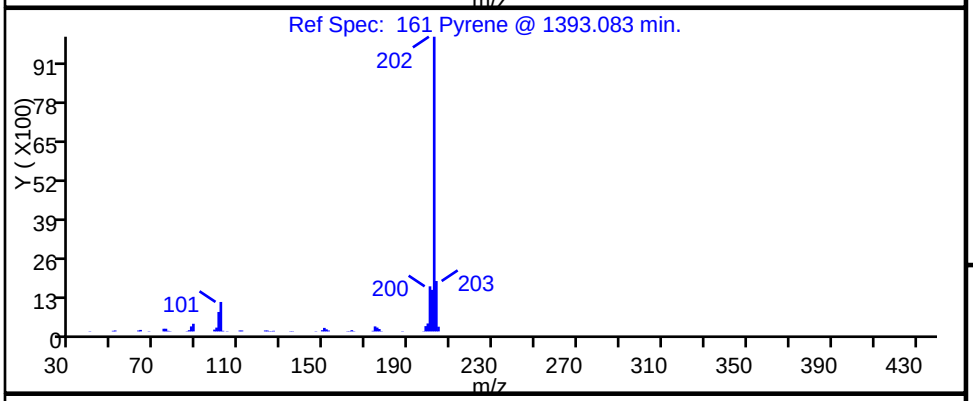
161 Pyrene, CAS: 129-00-0

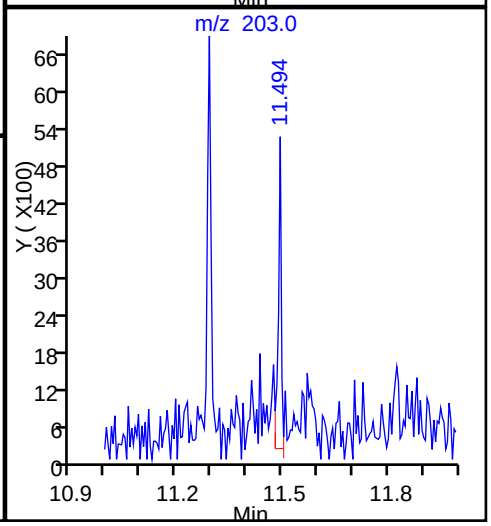


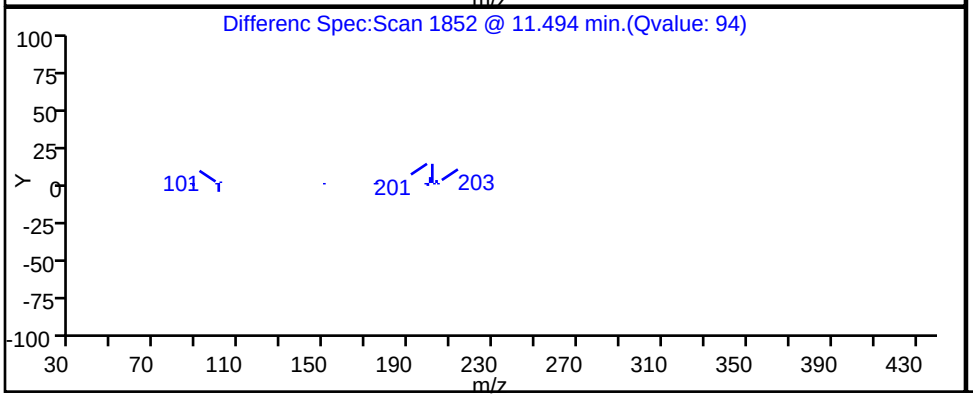












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO | Lab Sample ID: 240-49171-8

Matrix: Solid | Lab File ID: 50422015.D

Analysis Method: 8270C | Date Collected: 04/08/2015 09:57

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 29.60(g) | Date Analyzed: 04/22/2015 13:04

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.4	U	6.9	3.4	0.79
208-96-8	Acenaphthylene	1.7	U	6.9	1.7	0.36
120-12-7	Anthracene	3.4	U	6.9	3.4	0.81
56-55-3	Benzo[a]anthracene	3.4	U	6.9	3.4	0.65
50-32-8	Benzo[a]pyrene	3.4	U	6.9	3.4	0.66
205-99-2	Benzo[b]fluoranthene	3.4	U	6.9	3.4	0.61
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.9	1.7	0.36
65-85-0	Benzoic acid	170	J	690	140	37
207-08-9	Benzo[k]fluoranthene	3.4	U	6.9	3.4	0.71
100-51-6	Benzyl alcohol	69	U	340	69	22
111-91-1	Bis(2-chloroethoxy)methane	69	U	100	69	23
111-44-4	Bis(2-chloroethyl)ether	3.4	U	100	3.4	2.1
108-60-1	bis (2-chloroisopropyl) ether	35	U	100	35	9.9
117-81-7	Bis(2-ethylhexyl) phthalate	31	J	73	35	20
101-55-3	4-Bromophenyl phenyl ether	35	U	52	35	13
85-68-7	Butyl benzyl phthalate	35	U	73	35	10
86-74-8	Carbazole	35	U	52	35	28
106-47-8	4-Chloroaniline	69	U	160	69	18
59-50-7	4-Chloro-3-methylphenol	69	U	160	69	22
91-58-7	2-Chloronaphthalene	1.7	U	52	1.7	0.47
95-57-8	2-Chlorophenol	35	U	52	35	8.5
7005-72-3	4-Chlorophenyl phenyl ether	35	U	52	35	13
218-01-9	Chrysene	3.4	U	6.9	3.4	1.1
53-70-3	Dibenz(a,h)anthracene	3.4	U	6.9	3.4	0.69
132-64-9	Dibenzofuran	3.4	U	52	3.4	0.69
95-50-1	1,2-Dichlorobenzene	35	U	52	35	10
541-73-1	1,3-Dichlorobenzene	35	U	52	35	11
106-46-7	1,4-Dichlorobenzene	35	U	52	35	21
91-94-1	3,3'-Dichlorobenzidine	69	U	100	69	19
120-83-2	2,4-Dichlorophenol	69	U	160	69	21
84-66-2	Diethyl phthalate	35	U	73	35	17
105-67-9	2,4-Dimethylphenol	69	U	160	69	21
131-11-3	Dimethyl phthalate	35	U	73	35	18
84-74-2	Di-n-butyl phthalate	35	U	73	35	16

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO | Lab Sample ID: 240-49171-8

Matrix: Solid | Lab File ID: 50422015.D

Analysis Method: 8270C | Date Collected: 04/08/2015 09:57

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 29.60(g) | Date Analyzed: 04/22/2015 13:04

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	35	U	160	35	9.6
51-28-5	2,4-Dinitrophenol	69	U	340	69	22
121-14-2	2,4-Dinitrotoluene	69	U	210	69	18
606-20-2	2,6-Dinitrotoluene	69	U	210	69	22
117-84-0	Di-n-octyl phthalate	35	U	73	35	8.2
206-44-0	Fluoranthene	3.4	U	6.9	3.4	0.57
86-73-7	Fluorene	3.4	U	6.9	3.4	0.55
118-74-1	Hexachlorobenzene	3.4	U	6.9	3.4	2.2
87-68-3	Hexachlorobutadiene	35	U	52	35	5.8
77-47-4	Hexachlorocyclopentadiene	35	U	340	35	8.4
67-72-1	Hexachloroethane	35	U	52	35	9.3
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.9	1.7	0.36
78-59-1	Isophorone	36	J	52	35	13
91-57-6	2-Methylnaphthalene	7.4		6.9	3.4	0.52
95-48-7	2-Methylphenol	69	U	210	69	11
15831-10-4	3 & 4 Methylphenol	69	U	420	69	21
91-20-3	Naphthalene	7.1		6.9	3.4	0.85
88-74-4	2-Nitroaniline	35	U	210	35	9.4
99-09-2	3-Nitroaniline	69	U	210	69	17
100-01-6	4-Nitroaniline	69	U	210	69	27
98-95-3	Nitrobenzene	3.4	U	100	3.4	2.3
88-75-5	2-Nitrophenol	35	U	52	35	8.6
100-02-7	4-Nitrophenol	69	U	340	69	18
621-64-7	N-Nitrosodi-n-propylamine	35	U	52	35	6.5
86-30-6	N-Nitrosodiphenylamine	35	U	52	35	22
87-86-5	Pentachlorophenol	35	U	160	35	9.4
85-01-8	Phenanthrene	3.4	U	6.9	3.4	0.76
108-95-2	Phenol	35	U	52	35	7.6
129-00-0	Pyrene	1.7	U	6.9	1.7	0.46
120-82-1	1,2,4-Trichlorobenzene	17	U	52	17	3.6
95-95-4	2,4,5-Trichlorophenol	69	U	160	69	26
88-06-2	2,4,6-Trichlorophenol	35	U	160	35	9.2

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO | Lab Sample ID: 240-49171-8

Matrix: Solid | Lab File ID: 50422015.D

Analysis Method: 8270C | Date Collected: 04/08/2015 09:57

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 29.60(g) | Date Analyzed: 04/22/2015 13:04

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	77		45-105
367-12-4	2-Fluorophenol (Surr)	80		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	65		35-100
4165-62-2	Phenol-d5 (Surr)	78		40-100
1718-51-0	Terphenyl-d14 (Surr)	76		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	63		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422015.D
Lims ID: 240-49171-A-8-E Lab Sample ID: 240-49171-8
Client ID: 079SB-0353M-0001-SO
Sample Type: Client
Inject. Date: 22-Apr-2015 13:04:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-015
Misc. Info.: 240-49171-A-8-E240-49171-A-8-E
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 09:37:02 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 22-Apr-2015 13:30:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.357	6.359	-0.002	90	130368	4.00	
* 2 Naphthalene-d8	136	7.473	7.475	-0.002	98	527326	4.00	
* 3 Acenaphthene-d10	164	8.978	8.980	-0.002	78	293437	4.00	
* 4 Phenanthrene-d10	188	10.252	10.254	-0.002	96	499153	4.00	
* 5 Chrysene-d12	240	12.546	12.548	-0.002	79	649527	4.00	
* 6 Perylene-d12	264	14.316	14.318	-0.002	95	575195	4.00	
$ 7 2-Fluorophenol	112	5.169	5.133	0.036	91	383780	8.00	
$ 8 Phenol-d5	99	6.001	5.994	0.007	88	563105	7.84	
$ 9 Nitrobenzene-d5	82	6.833	6.835	-0.002	84	622088	6.48	
$ 10 2-Fluorobiphenyl (Surr)	172	8.377	8.379	-0.002	99	757125	7.67	
$ 11 2,4,6-Tribromophenol	330	9.646	9.653	-0.007	76	68984	6.35	
$ 12 Terphenyl-d14	244	11.575	11.577	-0.002	96	1001341	7.58	
43 Phenol	94		6.003				ND	
69 Bis(2-chloroethyl)ether	93		6.095				ND	
46 2-Chlorophenol	128		6.172				ND	
47 1,3-Dichlorobenzene	146		6.311				ND	
48 1,4-Dichlorobenzene	146		6.374				ND	
49 Benzyl alcohol	108		6.455				ND	
50 1,2-Dichlorobenzene	146		6.513				ND	
51 2-Methylphenol	108		6.542				ND	
53 2,2'-oxybis[1-chloropropan	45		6.576				ND	
21 3 & 4 Methylphenol	108		6.672				ND	
57 N-Nitrosodi-n-propylamine	70		6.686				ND	
61 Hexachloroethane	117		6.821				ND	
62 Nitrobenzene	77		6.850				ND	
64 Isophorone	82	7.055	7.052	0.003	88	77788	0.5193	
66 2-Nitrophenol	139		7.129				ND	
65 2,4-Dimethylphenol	107		7.138				ND	
71 Benzoic acid	122	7.160	7.196	-0.036	79	32971	2.48	
70 Bis(2-chloroethoxy)methane	93		7.215				ND	
73 2,4-Dichlorophenol	162		7.335				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.417				ND	
75 Naphthalene	128	7.492	7.494	-0.002	13	14527	0.1031	
76 4-Chloroaniline	127		7.513				ND	
79 Hexachlorobutadiene	225		7.595				ND	
86 4-Chloro-3-methylphenol	107		7.908				ND	
87 2-Methylnaphthalene	142	8.084	8.081	0.003	64	9912	0.1071	
89 Hexachlorocyclopentadiene	237		8.225				ND	
92 2,4,6-Trichlorophenol	196		8.312				ND	
93 2,4,5-Trichlorophenol	196		8.345				ND	
100 2-Chloronaphthalene	162		8.504				ND	
102 2-Nitroaniline	65		8.562				ND	
105 Dimethyl phthalate	163		8.696				ND	
107 2,6-Dinitrotoluene	165		8.754				ND	
109 Acenaphthylene	152		8.865				ND	
110 3-Nitroaniline	138		8.908				ND	
111 2,4-Dinitrophenol	184		8.994				ND	
112 Acenaphthene	153		9.009				ND	
113 4-Nitrophenol	109		9.018				ND	
114 2,4-Dinitrotoluene	165		9.105				ND	
116 Dibenzofuran	168		9.153				ND	
121 Diethyl phthalate	149		9.293				ND	
123 4-Chlorophenyl phenyl ethe	204		9.422				ND	
125 4-Nitroaniline	138		9.432				ND	
126 Fluorene	166		9.446				ND	
128 4,6-Dinitro-2-methylphenol	198		9.461				ND	
131 N-Nitrosodiphenylamine	169		9.514				ND	
139 4-Bromophenyl phenyl ether	248		9.841				ND	
141 Hexachlorobenzene	284		9.932				ND	
143 Pentachlorophenol	266		10.081				ND	
148 Phenanthrene	178		10.274				ND	
149 Anthracene	178		10.317				ND	
151 Carbazole	167		10.432				ND	
154 Di-n-butyl phthalate	149	10.671	10.673	-0.002	62	25015	0.1706	
159 Fluoranthene	202		11.293				ND	
161 Pyrene	202		11.495				ND	
168 Butyl benzyl phthalate	149		11.957				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.440	12.438	0.002	91	48966	0.4460	
175 3,3'-Dichlorobenzidine	252		12.471				ND	
177 Benzo[a]anthracene	228		12.539				ND	
178 Chrysene	228		12.577				ND	
180 Di-n-octyl phthalate	149		13.096				ND	
182 Benzo[b]fluoranthene	252		13.765				ND	
183 Benzo[k]fluoranthene	252		13.803				ND	
184 Benzo[a]pyrene	252		14.241				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.246				ND	
189 Dibenz(a,h)anthracene	278		16.261				ND	
190 Benzo[g,h,i]perylene	276		16.847				ND	

Reagents:

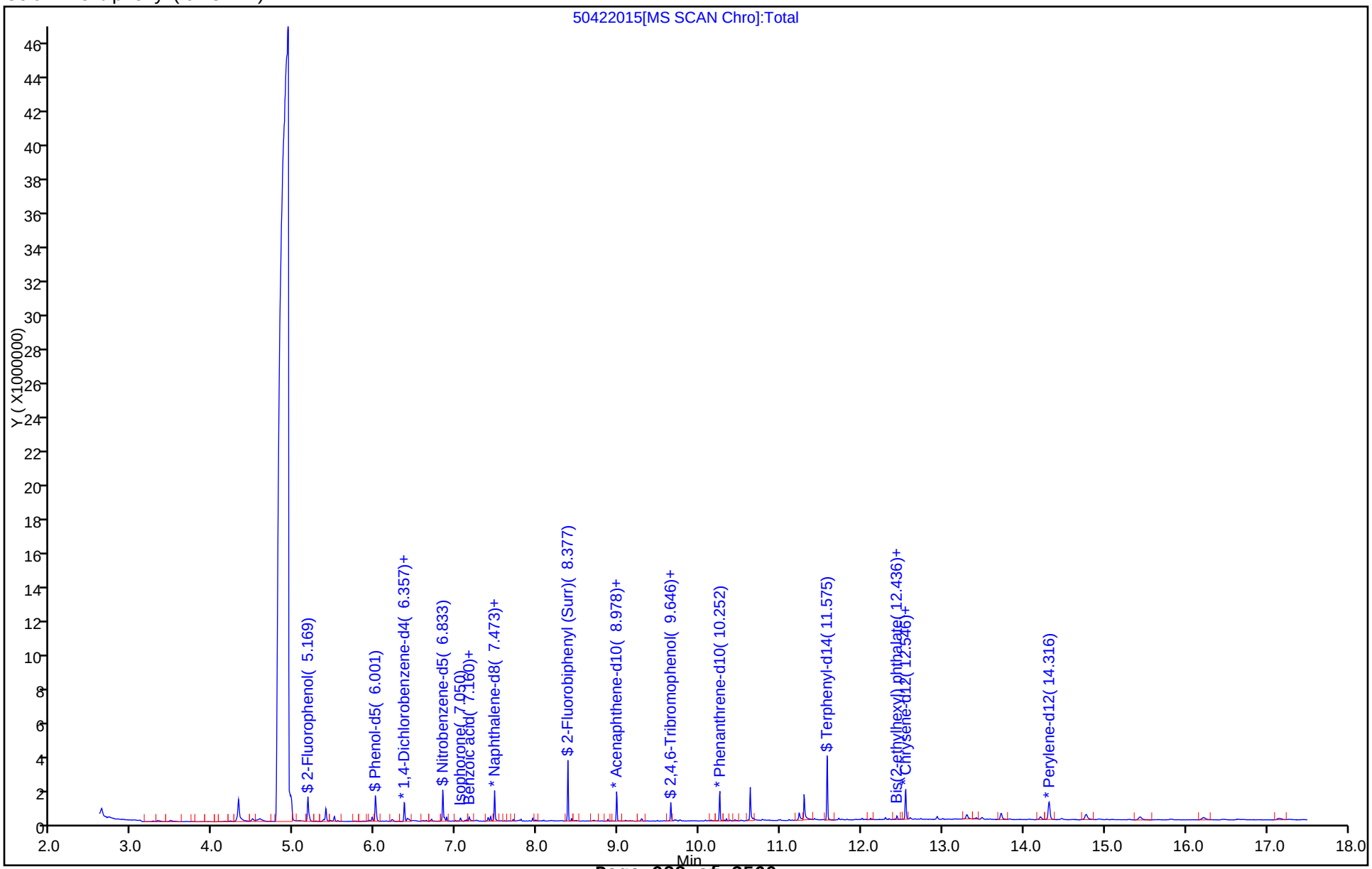
SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 23-Apr-2015 09:37:21 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422015.D				
Injection Date:	22-Apr-2015 13:04:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-49171-A-8-E	Lab Sample ID:	240-49171-8	Worklist Smp#:	15
Client ID:	079SB-0353M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



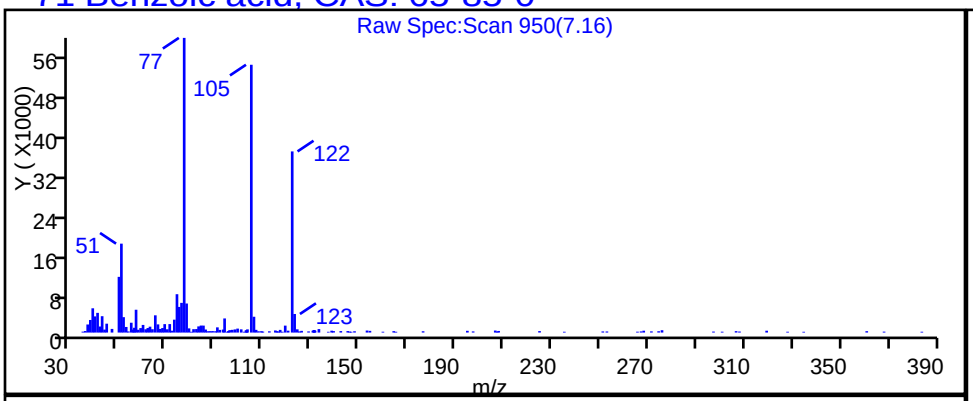
Report Date: 23-Apr-2015 09:37:21 Chrom Revision: 2.2 09-Apr-2015 10:05:40

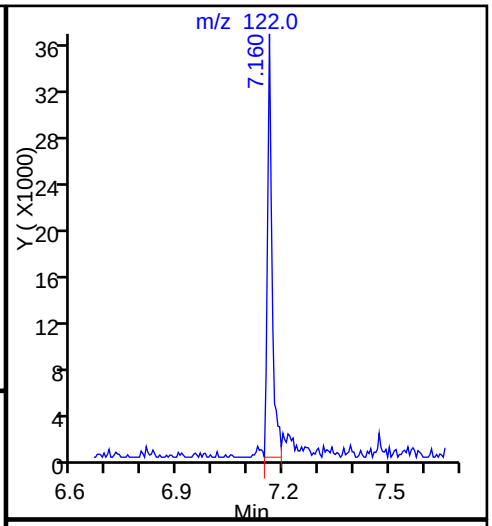
TestAmerica Canton

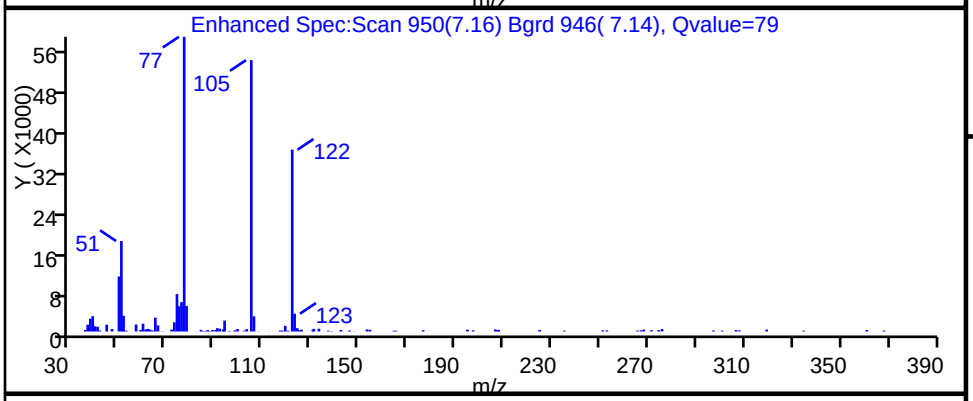
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422015.D

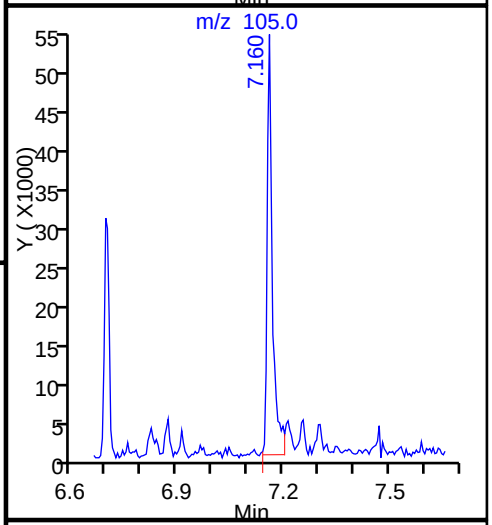
Injection Date:	22-Apr-2015 13:04:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-8-E	Lab Sample ID:	240-49171-8		
Client ID:	079SB-0353M-0001-SO				
Operator ID:	001574	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

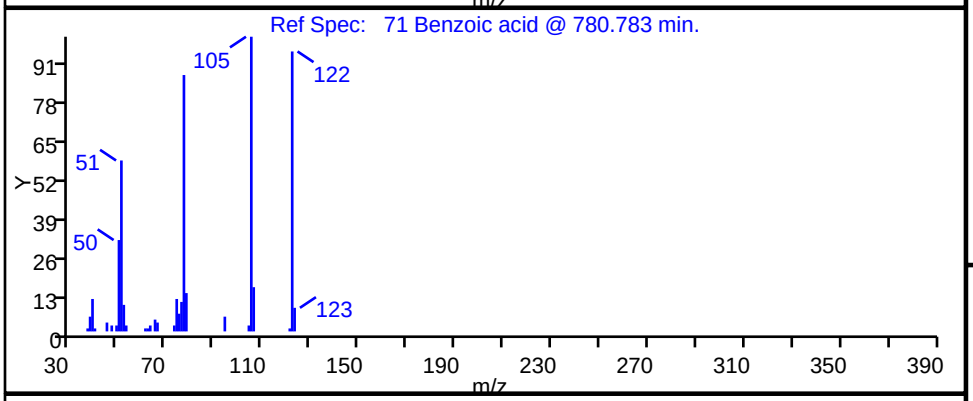
71 Benzoic acid, CAS: 65-85-0

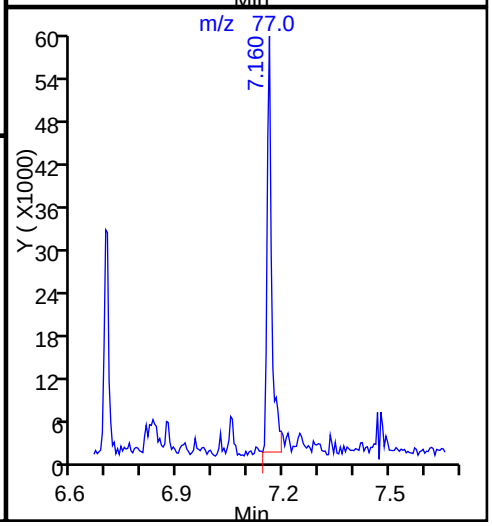


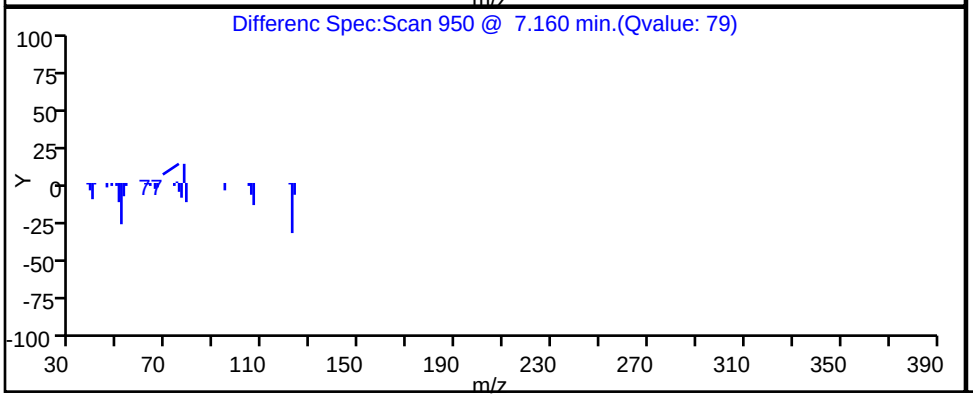












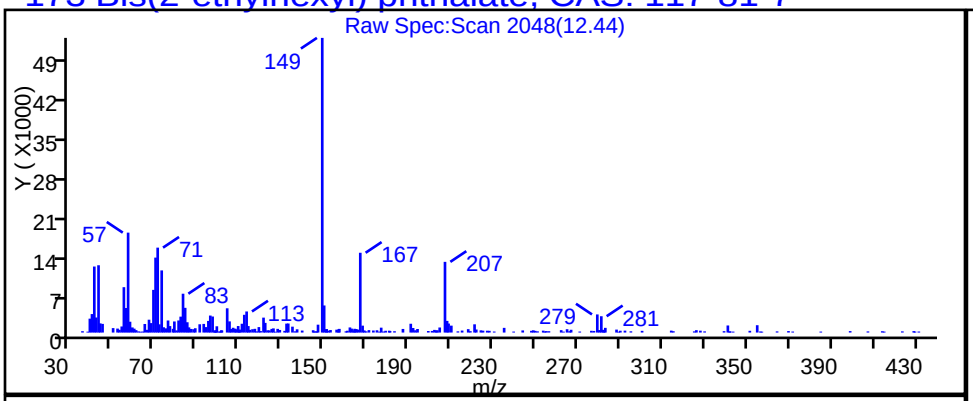
Report Date: 23-Apr-2015 09:37:21 Chrom Revision: 2.2 09-Apr-2015 10:05:40

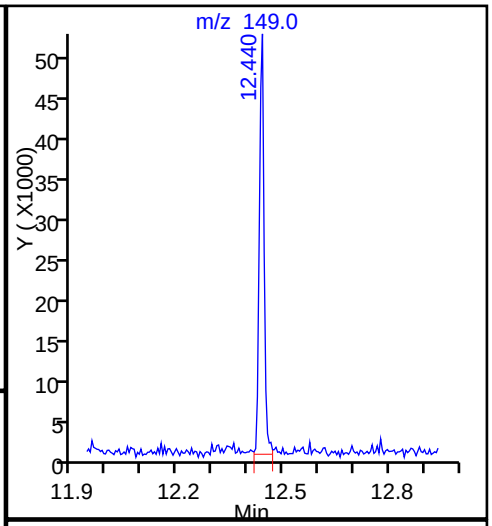
TestAmerica Canton

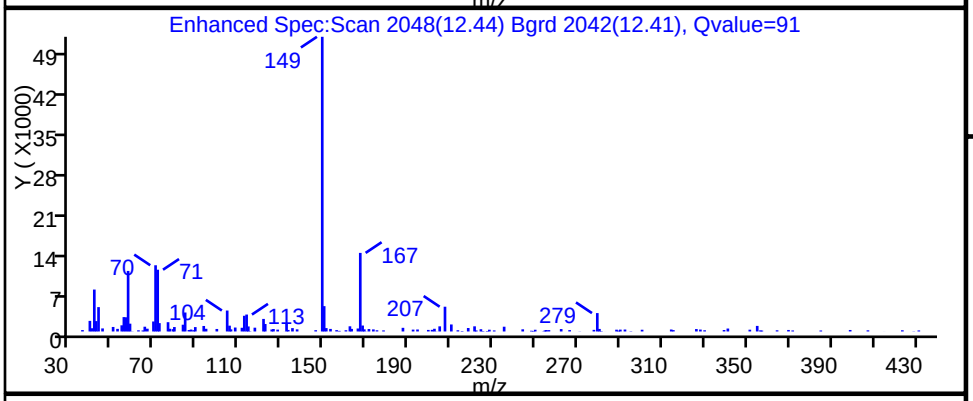
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422015.D

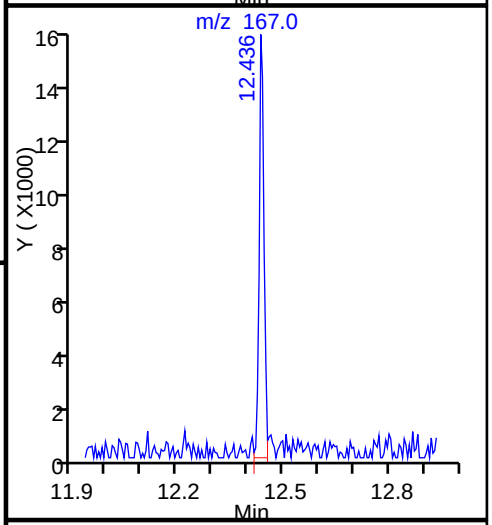
Injection Date:	22-Apr-2015 13:04:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-8-E	Lab Sample ID:	240-49171-8		
Client ID:	079SB-0353M-0001-SO				
Operator ID:	001574	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

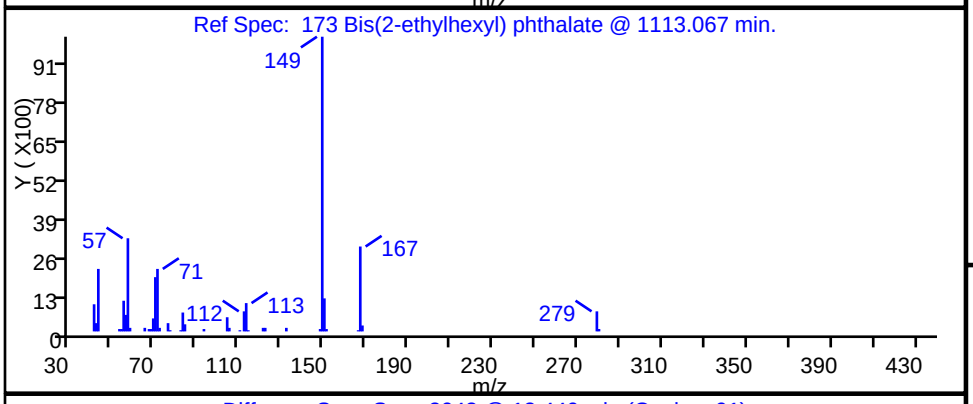
173 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

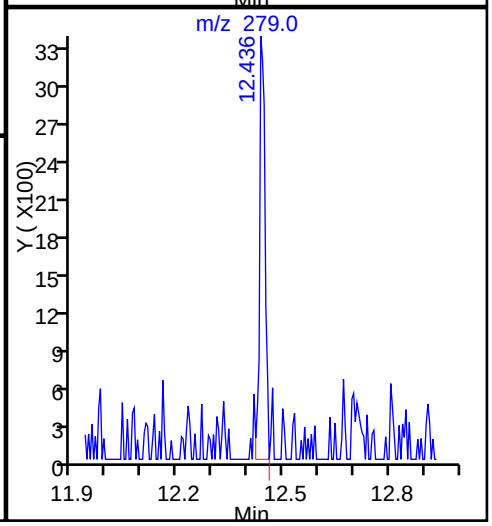


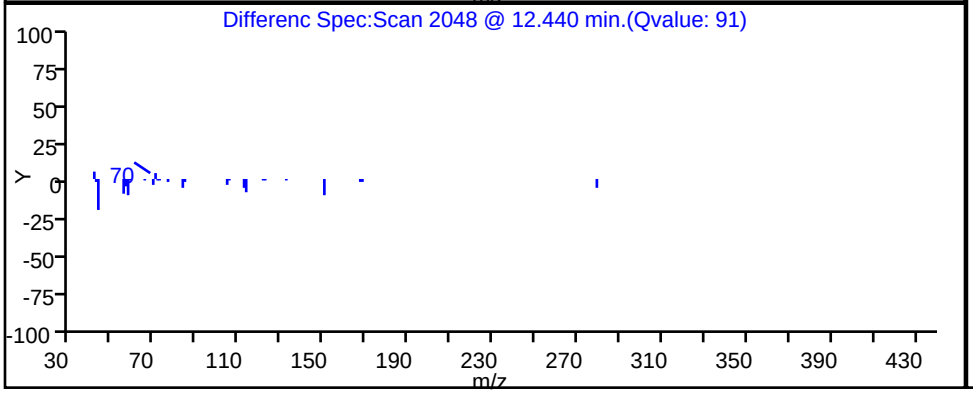












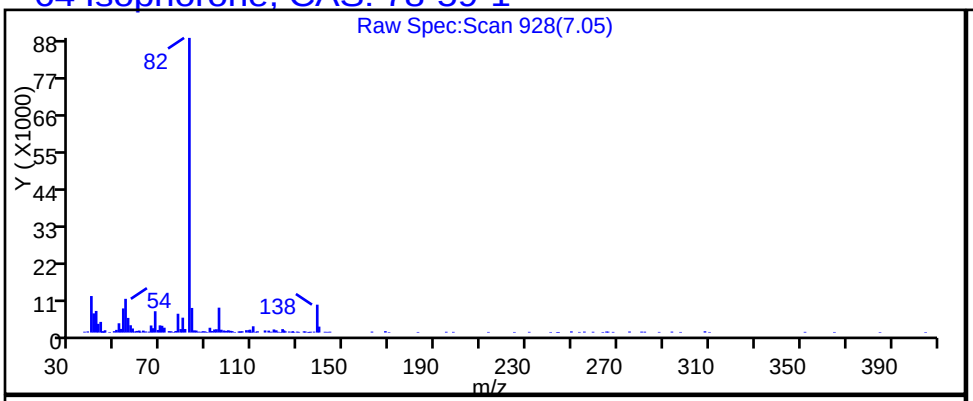
Report Date: 23-Apr-2015 09:37:21 Chrom Revision: 2.2 09-Apr-2015 10:05:40

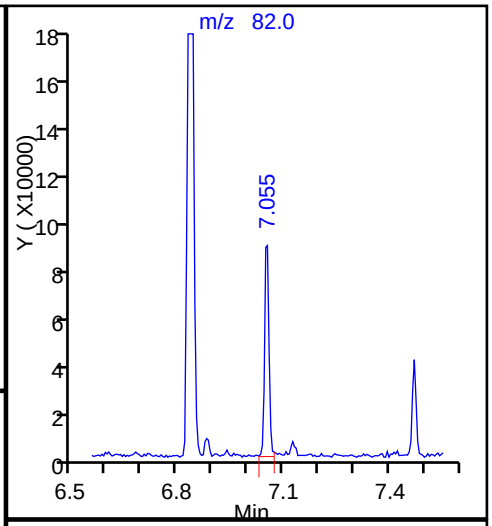
TestAmerica Canton

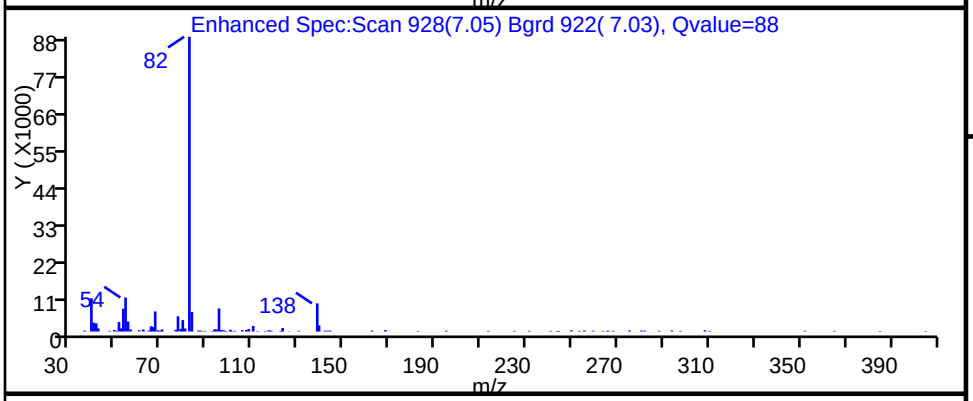
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422015.D

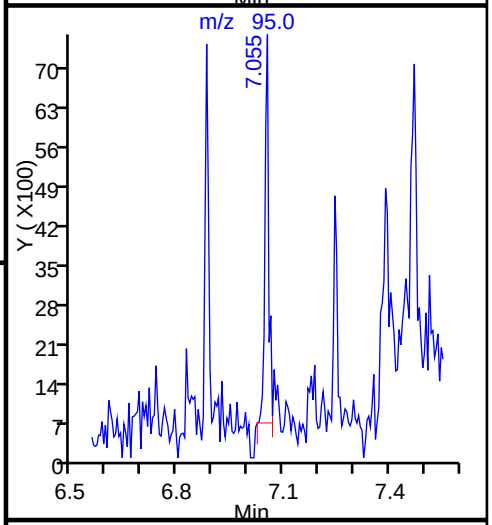
Injection Date:	22-Apr-2015 13:04:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-8-E	Lab Sample ID:	240-49171-8		
Client ID:	079SB-0353M-0001-SO				
Operator ID:	001574	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

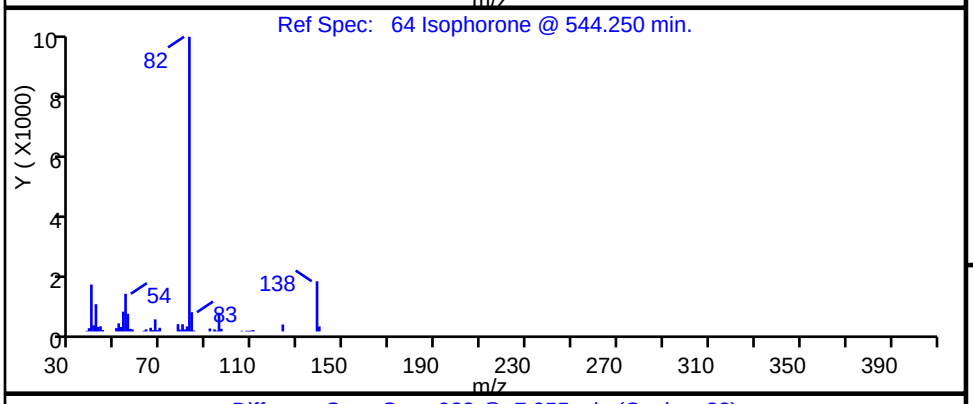
64 Isophorone, CAS: 78-59-1

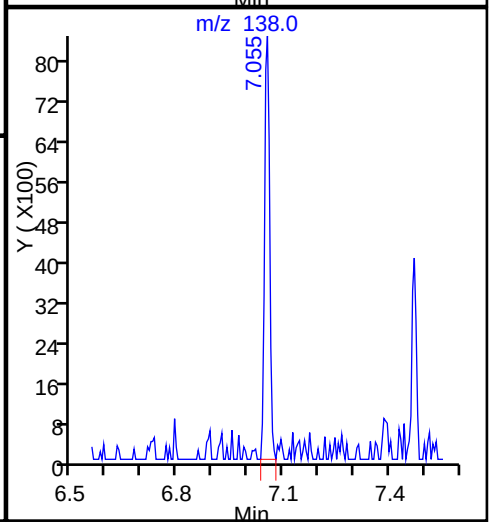


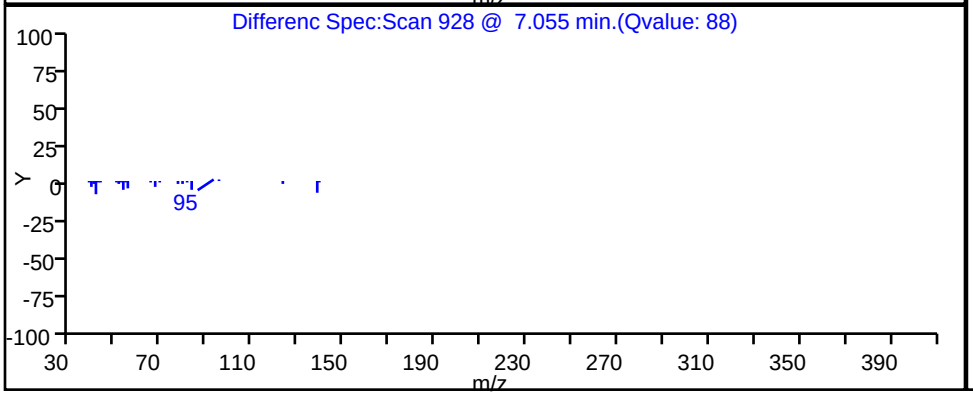












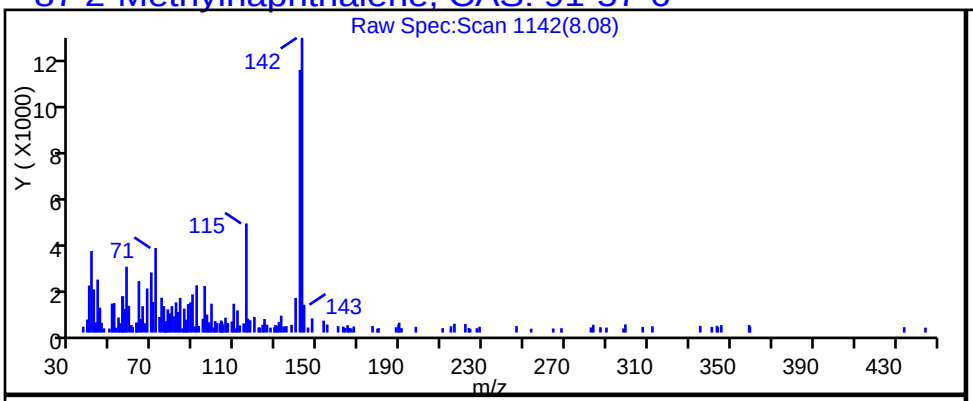
Report Date: 23-Apr-2015 09:37:21 Chrom Revision: 2.2 09-Apr-2015 10:05:40

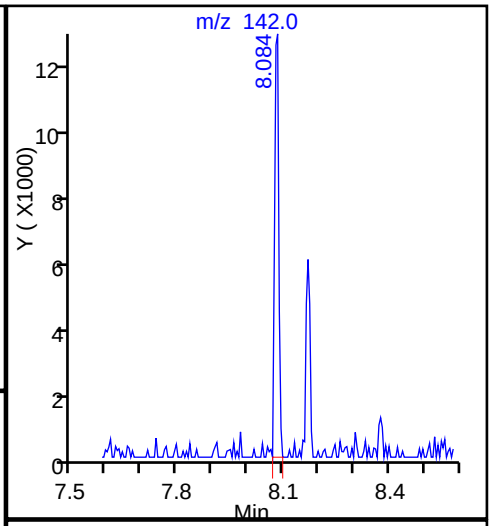
TestAmerica Canton

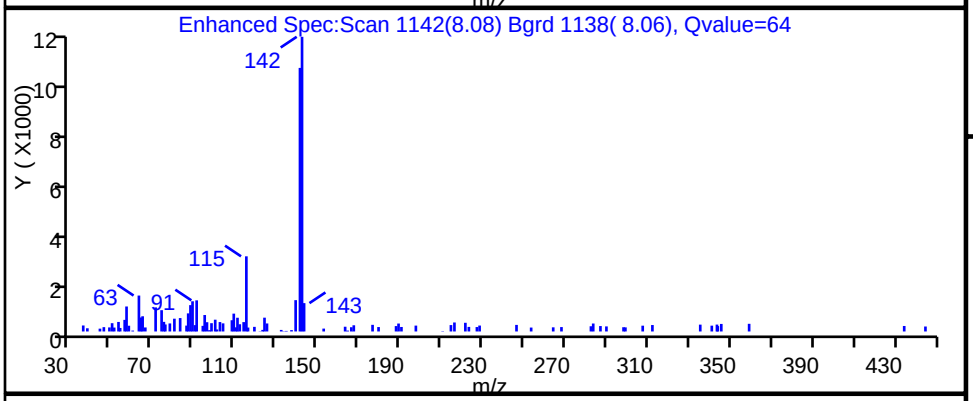
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422015.D

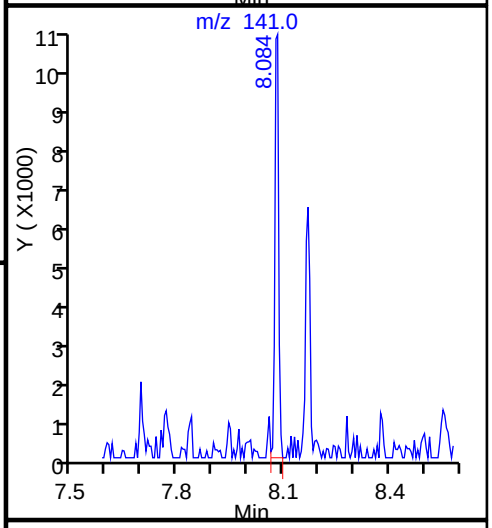
Injection Date:	22-Apr-2015 13:04:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-8-E	Lab Sample ID:	240-49171-8		
Client ID:	079SB-0353M-0001-SO				
Operator ID:	001574	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

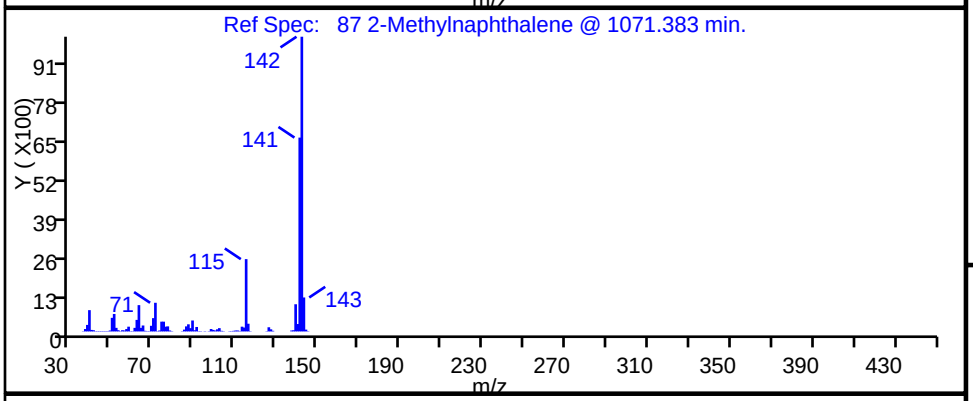
87 2-Methylnaphthalene, CAS: 91-57-6

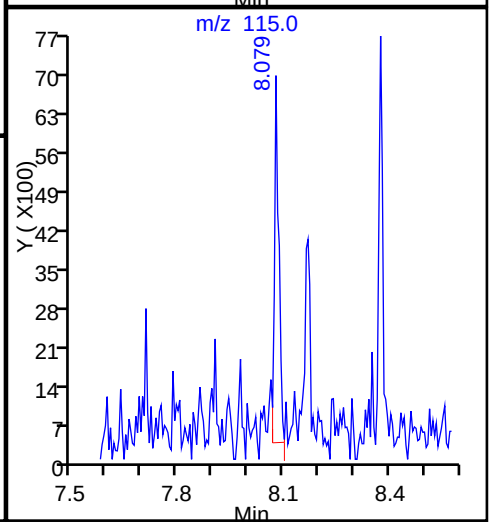


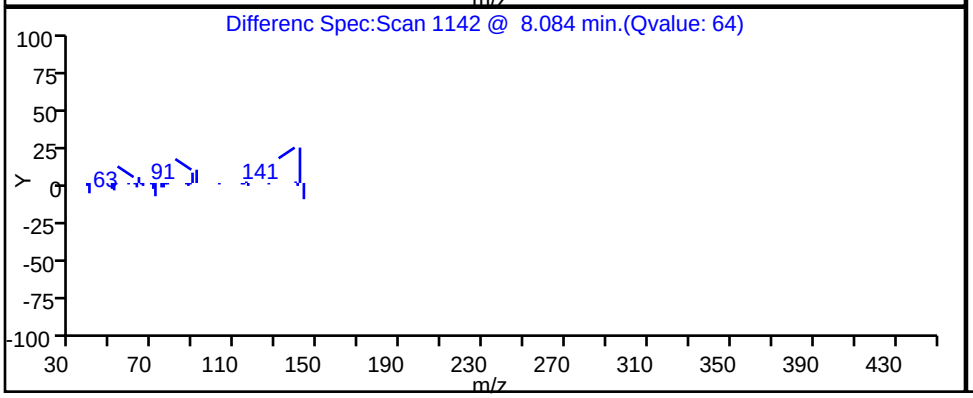












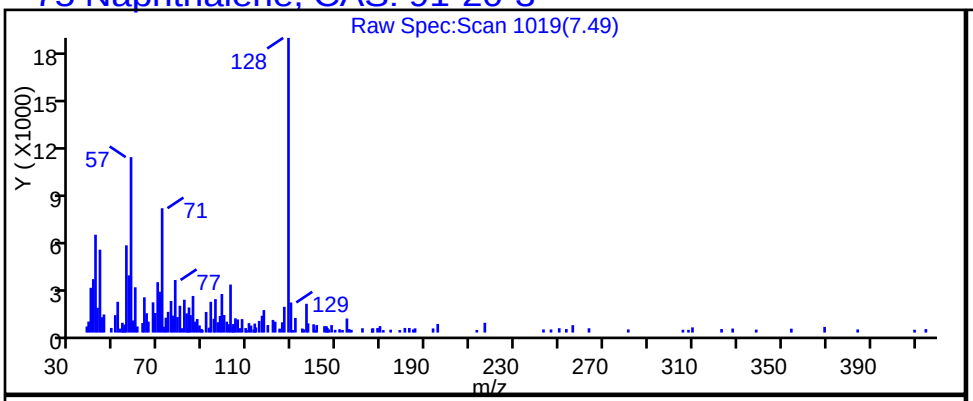
Report Date: 23-Apr-2015 09:37:21 Chrom Revision: 2.2 09-Apr-2015 10:05:40

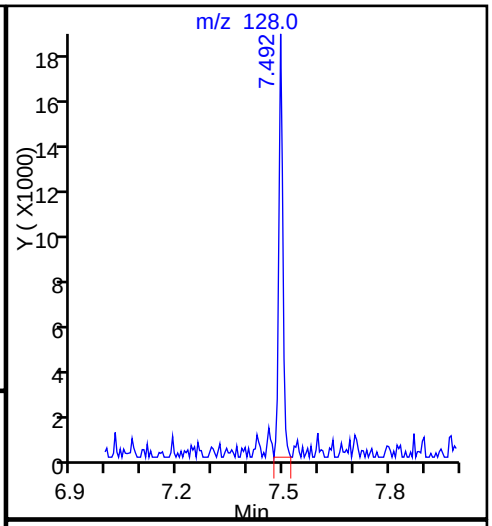
TestAmerica Canton

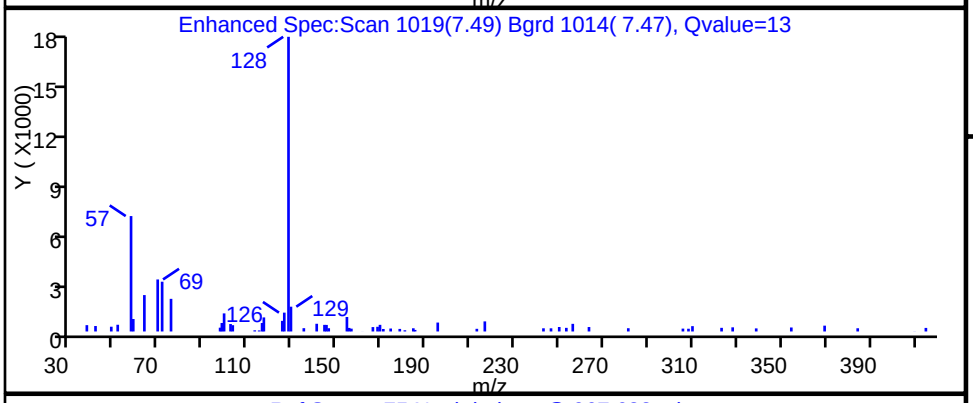
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422015.D

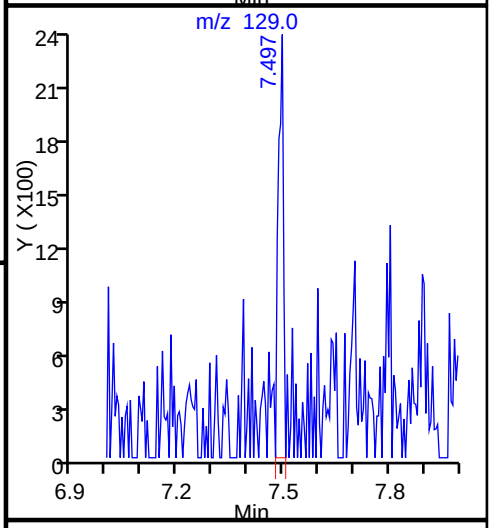
Injection Date:	22-Apr-2015 13:04:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-8-E	Lab Sample ID:	240-49171-8		
Client ID:	079SB-0353M-0001-SO				
Operator ID:	001574	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

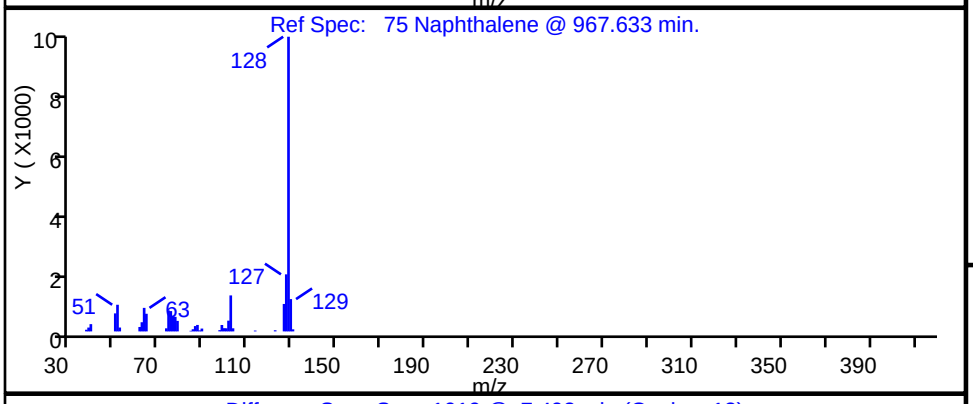
75 Naphthalene, CAS: 91-20-3

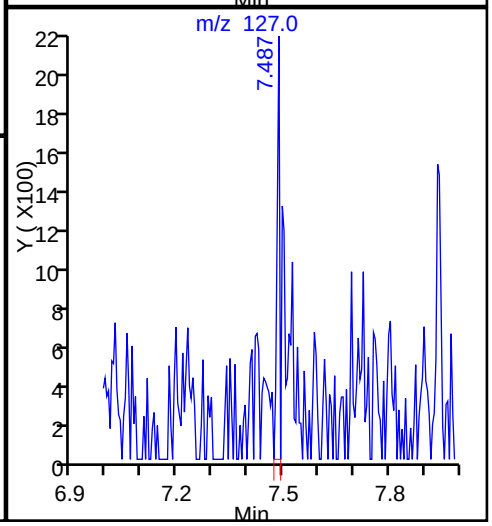


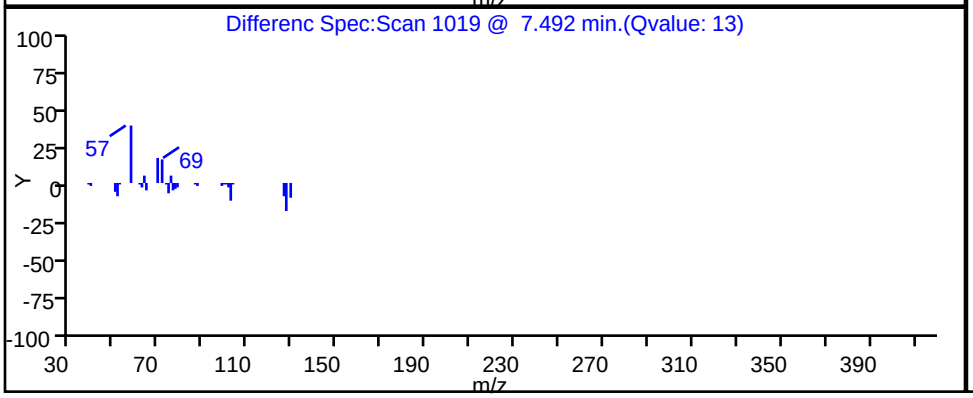












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0354M-0001-SO | Lab Sample ID: 240-49171-10

Matrix: Solid | Lab File ID: 50422014.D

Analysis Method: 8270C | Date Collected: 04/08/2015 11:30

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 30.04(g) | Date Analyzed: 04/22/2015 12:39

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 1.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.3	U	6.7	3.3	0.77
208-96-8	Acenaphthylene	1.7	U	6.7	1.7	0.35
120-12-7	Anthracene	3.3	U	6.7	3.3	0.79
56-55-3	Benzo[a]anthracene	3.3	U	6.7	3.3	0.64
50-32-8	Benzo[a]pyrene	3.3	U	6.7	3.3	0.65
205-99-2	Benzo[b]fluoranthene	3.3	U	6.7	3.3	0.60
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.7	1.7	0.35
65-85-0	Benzoic acid	110	J M	670	130	36
207-08-9	Benzo[k]fluoranthene	3.3	U	6.7	3.3	0.69
100-51-6	Benzyl alcohol	67	U	330	67	21
111-91-1	Bis(2-chloroethoxy)methane	67	U	100	67	22
111-44-4	Bis(2-chloroethyl)ether	3.3	U	100	3.3	2.0
108-60-1	bis (2-chloroisopropyl) ether	34	U	100	34	9.6
117-81-7	Bis(2-ethylhexyl) phthalate	19	J	71	34	19
101-55-3	4-Bromophenyl phenyl ether	34	U	50	34	13
85-68-7	Butyl benzyl phthalate	34	U	71	34	10
86-74-8	Carbazole	34	U	50	34	27
106-47-8	4-Chloroaniline	67	U	150	67	17
59-50-7	4-Chloro-3-methylphenol	67	U	150	67	21
91-58-7	2-Chloronaphthalene	1.7	U	50	1.7	0.45
95-57-8	2-Chlorophenol	34	U	50	34	8.3
7005-72-3	4-Chlorophenyl phenyl ether	34	U	50	34	13
218-01-9	Chrysene	3.3	U	6.7	3.3	1.1
53-70-3	Dibenz(a,h)anthracene	3.3	U	6.7	3.3	0.67
132-64-9	Dibenzofuran	3.3	U	50	3.3	0.67
95-50-1	1,2-Dichlorobenzene	34	U	50	34	9.8
541-73-1	1,3-Dichlorobenzene	34	U	50	34	11
106-46-7	1,4-Dichlorobenzene	34	U	50	34	20
91-94-1	3,3'-Dichlorobenzidine	67	U	100	67	18
120-83-2	2,4-Dichlorophenol	67	U	150	67	20
84-66-2	Diethyl phthalate	34	U	71	34	16
105-67-9	2,4-Dimethylphenol	67	U	150	67	20
131-11-3	Dimethyl phthalate	34	U	71	34	17
84-74-2	Di-n-butyl phthalate	34	U	71	34	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0354M-0001-SO | Lab Sample ID: 240-49171-10

Matrix: Solid | Lab File ID: 50422014.D

Analysis Method: 8270C | Date Collected: 04/08/2015 11:30

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 30.04(g) | Date Analyzed: 04/22/2015 12:39

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 1.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	34	U	150	34	9.3
51-28-5	2,4-Dinitrophenol	67	U	330	67	21
121-14-2	2,4-Dinitrotoluene	67	U	200	67	17
606-20-2	2,6-Dinitrotoluene	67	U	200	67	21
117-84-0	Di-n-octyl phthalate	34	U	71	34	8.0
206-44-0	Fluoranthene	3.3	U	6.7	3.3	0.56
86-73-7	Fluorene	3.3	U	6.7	3.3	0.54
118-74-1	Hexachlorobenzene	3.3	U	6.7	3.3	2.1
87-68-3	Hexachlorobutadiene	34	U	50	34	5.7
77-47-4	Hexachlorocyclopentadiene	34	U	330	34	8.2
67-72-1	Hexachloroethane	34	U	50	34	9.1
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.7	1.7	0.35
78-59-1	Isophorone	25	J	50	34	13
91-57-6	2-Methylnaphthalene	3.7	J	6.7	3.3	0.50
95-48-7	2-Methylphenol	67	U	200	67	11
15831-10-4	3 & 4 Methylphenol	67	U	400	67	20
91-20-3	Naphthalene	3.3	U	6.7	3.3	0.83
88-74-4	2-Nitroaniline	34	U	200	34	9.2
99-09-2	3-Nitroaniline	67	U	200	67	16
100-01-6	4-Nitroaniline	67	U	200	67	26
98-95-3	Nitrobenzene	3.3	U	100	3.3	2.2
88-75-5	2-Nitrophenol	34	U	50	34	8.4
100-02-7	4-Nitrophenol	67	U	330	67	17
621-64-7	N-Nitrosodi-n-propylamine	34	U	50	34	6.4
86-30-6	N-Nitrosodiphenylamine	34	U	50	34	21
87-86-5	Pentachlorophenol	34	U	150	34	9.2
85-01-8	Phenanthrene	3.3	U	6.7	3.3	0.74
108-95-2	Phenol	34	U	50	34	7.4
129-00-0	Pyrene	1.7	U	6.7	1.7	0.44
120-82-1	1,2,4-Trichlorobenzene	17	U	50	17	3.5
95-95-4	2,4,5-Trichlorophenol	67	U	150	67	25
88-06-2	2,4,6-Trichlorophenol	34	U	150	34	9.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0354M-0001-SO | Lab Sample ID: 240-49171-10

Matrix: Solid | Lab File ID: 50422014.D

Analysis Method: 8270C | Date Collected: 04/08/2015 11:30

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 30.04(g) | Date Analyzed: 04/22/2015 12:39

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 1.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	93		45-105
367-12-4	2-Fluorophenol (Surr)	84		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	70		35-100
4165-62-2	Phenol-d5 (Surr)	78	M	40-100
1718-51-0	Terphenyl-d14 (Surr)	87		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	98		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422014.D
Lims ID: 240-49171-A-10-G Lab Sample ID: 240-49171-10
Client ID: 079SB-0354M-0001-SO
Sample Type: Client
Inject. Date: 22-Apr-2015 12:39:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-014
Misc. Info.: 240-49171-A-10-G240-49171-A-10-G
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 09:37:02 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 22-Apr-2015 13:15:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.363	6.359	0.004	93	134150	4.00	
* 2 Naphthalene-d8	136	7.474	7.475	-0.001	98	519212	4.00	
* 3 Acenaphthene-d10	164	8.979	8.980	-0.001	92	217496	4.00	
* 4 Phenanthrene-d10	188	10.249	10.254	-0.005	95	510717	4.00	
* 5 Chrysene-d12	240	12.543	12.548	-0.005	97	627910	4.00	
* 6 Perylene-d12	264	14.312	14.318	-0.006	99	547240	4.00	
$ 7 2-Fluorophenol	112	5.200	5.133	0.067	95	415037	8.40	
$ 8 Phenol-d5	99	6.008	5.994	0.014	96	575315	7.79	M
$ 9 Nitrobenzene-d5	82	6.835	6.835	0.000	84	663127	7.02	
$ 10 2-Fluorobiphenyl (Surr)	172	8.378	8.379	-0.001	99	679331	9.29	
$ 11 2,4,6-Tribromophenol	330	9.648	9.653	-0.005	81	78871	9.79	
$ 12 Terphenyl-d14	244	11.576	11.577	-0.001	99	1109121	8.68	
43 Phenol	94		6.003				ND	
69 Bis(2-chloroethyl)ether	93		6.095				ND	
46 2-Chlorophenol	128		6.172				ND	
47 1,3-Dichlorobenzene	146		6.311				ND	
48 1,4-Dichlorobenzene	146		6.374				ND	
49 Benzyl alcohol	108		6.455				ND	
50 1,2-Dichlorobenzene	146		6.513				ND	
51 2-Methylphenol	108		6.542				ND	
53 2,2'-oxybis[1-chloropropan	45		6.576				ND	
21 3 & 4 Methylphenol	108		6.672				ND	
57 N-Nitrosodi-n-propylamine	70		6.686				ND	
61 Hexachloroethane	117		6.821				ND	
62 Nitrobenzene	77		6.850				ND	
64 Isophorone	82	7.056	7.052	0.004	97	54358	0.3686	
66 2-Nitrophenol	139		7.129				ND	
65 2,4-Dimethylphenol	107		7.138				ND	
71 Benzoic acid	122	7.162	7.196	-0.034	43	5640	1.62	M
70 Bis(2-chloroethoxy)methane	93		7.215				ND	
73 2,4-Dichlorophenol	162		7.335				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.417				ND	
75 Naphthalene	128		7.494				ND	
76 4-Chloroaniline	127		7.513				ND	
79 Hexachlorobutadiene	225		7.595				ND	
86 4-Chloro-3-methylphenol	107		7.908				ND	
87 2-Methylnaphthalene	142	8.080	8.081	-0.001	84	4941	0.0542	
89 Hexachlorocyclopentadiene	237		8.225				ND	
92 2,4,6-Trichlorophenol	196		8.312				ND	
93 2,4,5-Trichlorophenol	196		8.345				ND	
100 2-Chloronaphthalene	162		8.504				ND	
102 2-Nitroaniline	65		8.562				ND	
105 Dimethyl phthalate	163		8.696				ND	
107 2,6-Dinitrotoluene	165		8.754				ND	
109 Acenaphthylene	152		8.865				ND	
110 3-Nitroaniline	138		8.908				ND	
111 2,4-Dinitrophenol	184		8.994				ND	
112 Acenaphthene	153		9.009				ND	
113 4-Nitrophenol	109		9.018				ND	
114 2,4-Dinitrotoluene	165		9.105				ND	
116 Dibenzofuran	168		9.153				ND	
121 Diethyl phthalate	149	9.287	9.293	-0.006	56	7151	0.1044	
123 4-Chlorophenyl phenyl ethe	204		9.422				ND	
125 4-Nitroaniline	138		9.432				ND	
126 Fluorene	166		9.446				ND	
128 4,6-Dinitro-2-methylphenol	198		9.461				ND	
131 N-Nitrosodiphenylamine	169		9.514				ND	
139 4-Bromophenyl phenyl ether	248		9.841				ND	
141 Hexachlorobenzene	284		9.932				ND	
143 Pentachlorophenol	266		10.081				ND	
148 Phenanthrene	178		10.274				ND	
149 Anthracene	178		10.317				ND	
151 Carbazole	167		10.432				ND	
154 Di-n-butyl phthalate	149	10.672	10.673	-0.001	98	23192	0.1546	
159 Fluoranthene	202		11.293				ND	
161 Pyrene	202		11.495				ND	
168 Butyl benzyl phthalate	149		11.957				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.437	12.438	-0.001	92	29246	0.2756	
175 3,3'-Dichlorobenzidine	252		12.471				ND	
177 Benzo[a]anthracene	228		12.539				ND	
178 Chrysene	228		12.577				ND	
180 Di-n-octyl phthalate	149		13.096				ND	
182 Benzo[b]fluoranthene	252		13.765				ND	
183 Benzo[k]fluoranthene	252		13.803				ND	
184 Benzo[a]pyrene	252		14.241				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.246				ND	
189 Dibenz(a,h)anthracene	278		16.261				ND	
190 Benzo[g,h,i]perylene	276		16.847				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

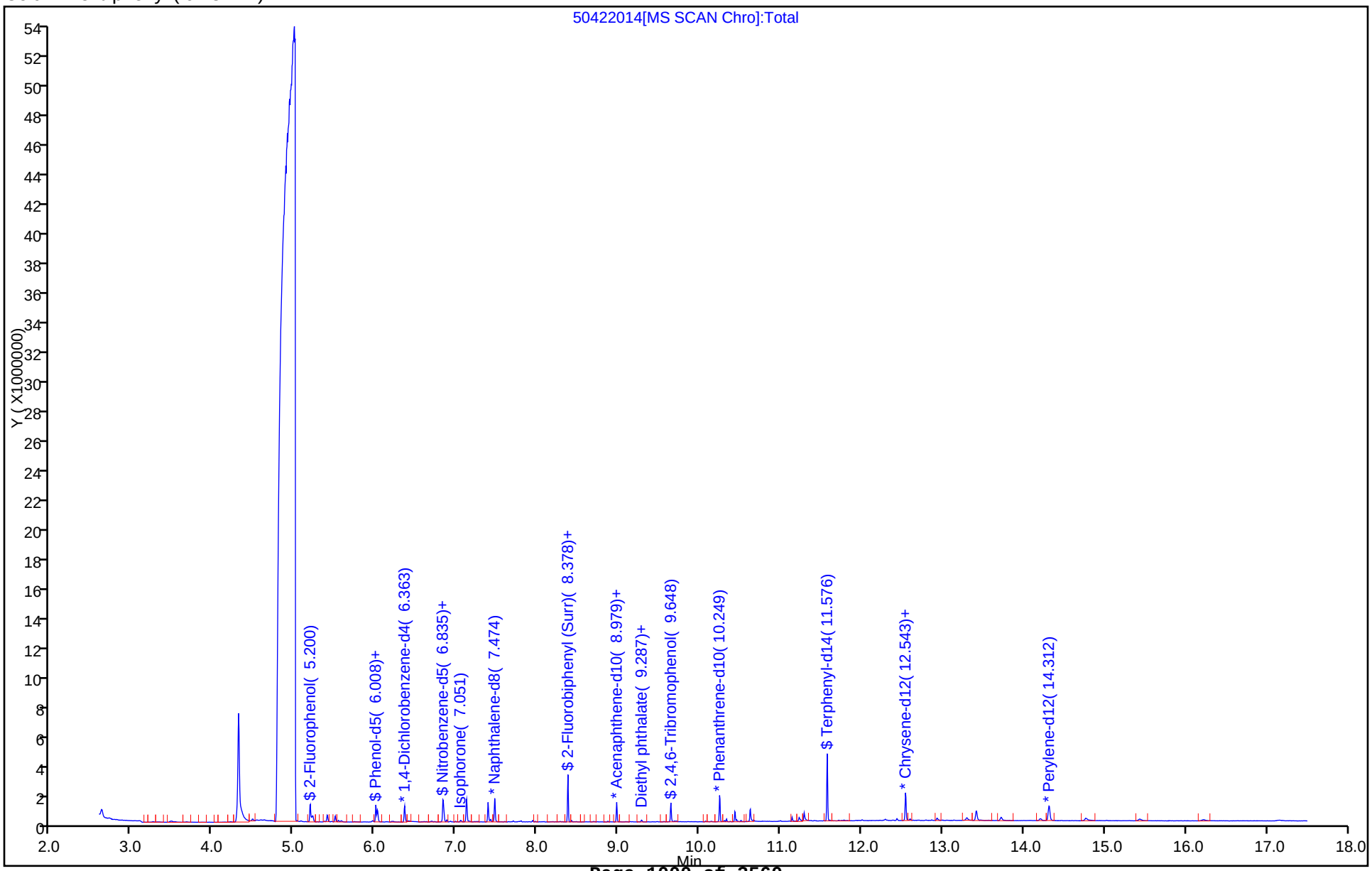
Report Date: 23-Apr-2015 09:37:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422014.D

Injection Date:	22-Apr-2015 12:39:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-49171-A-10-G	Lab Sample ID:	240-49171-10	Worklist Smp#:	14
Client ID:	079SB-0354M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



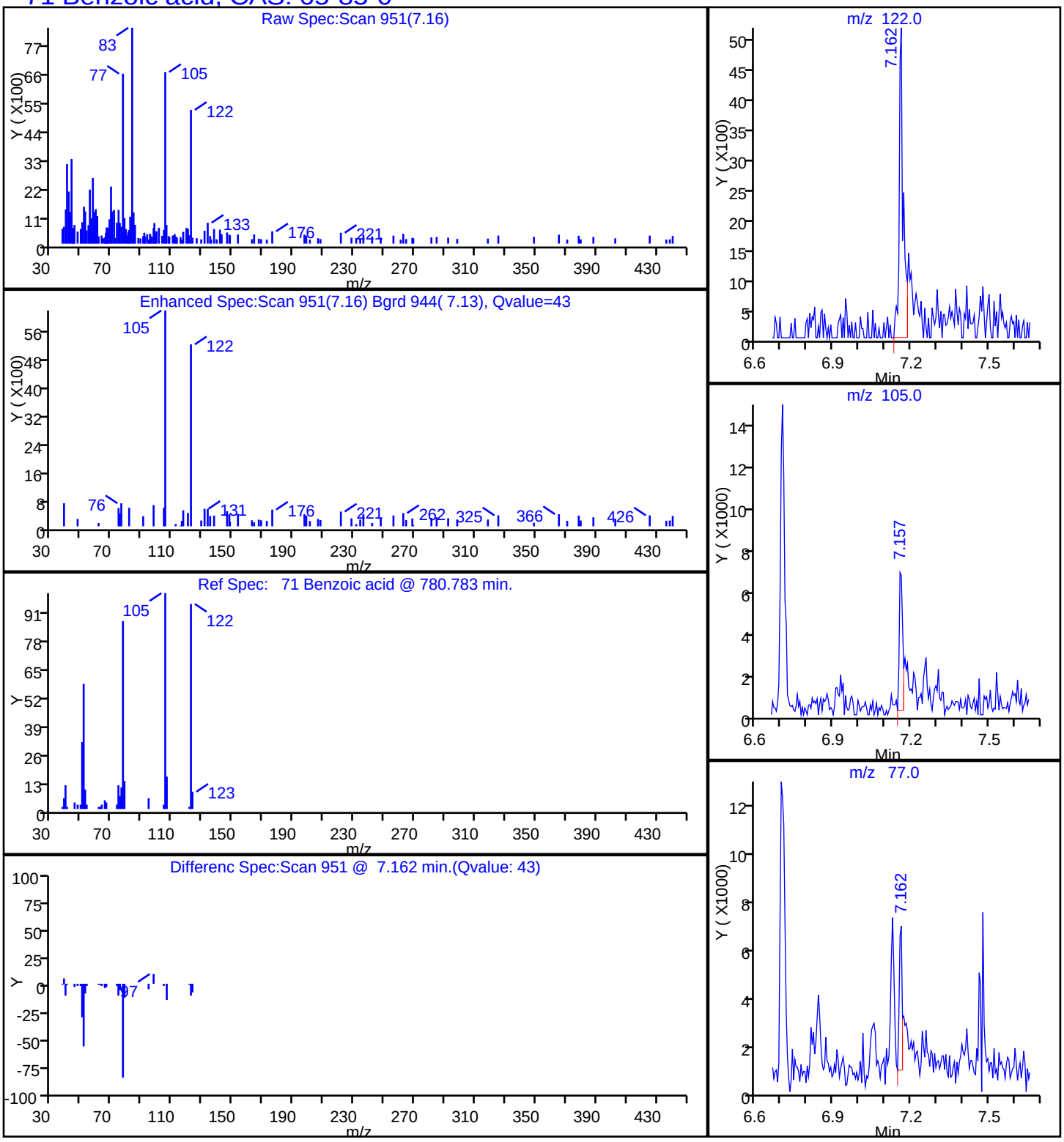
Report Date: 23-Apr-2015 09:37:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422014.D

Injection Date:	22-Apr-2015 12:39:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-10-G	Lab Sample ID:	240-49171-10		
Client ID:	079SB-0354M-0001-SO				
Operator ID:	001574	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

71 Benzoic acid, CAS: 65-85-0



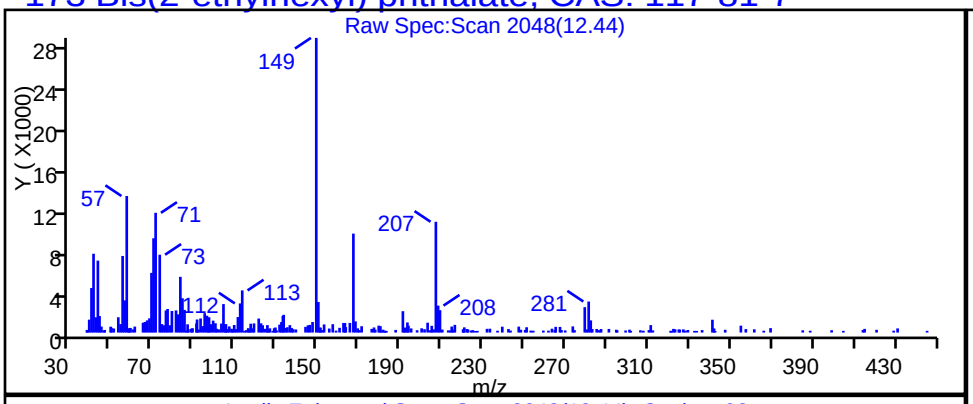
Report Date: 23-Apr-2015 09:37:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

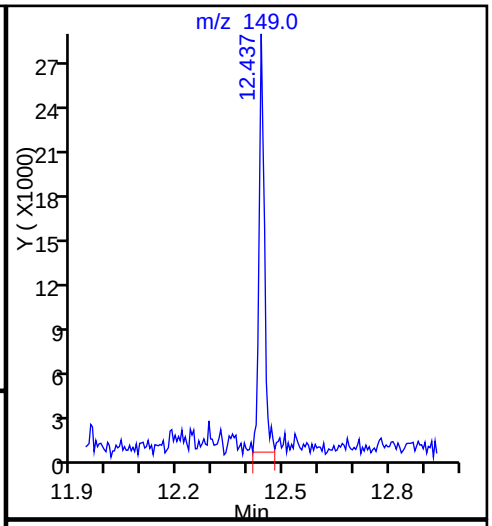
TestAmerica Canton

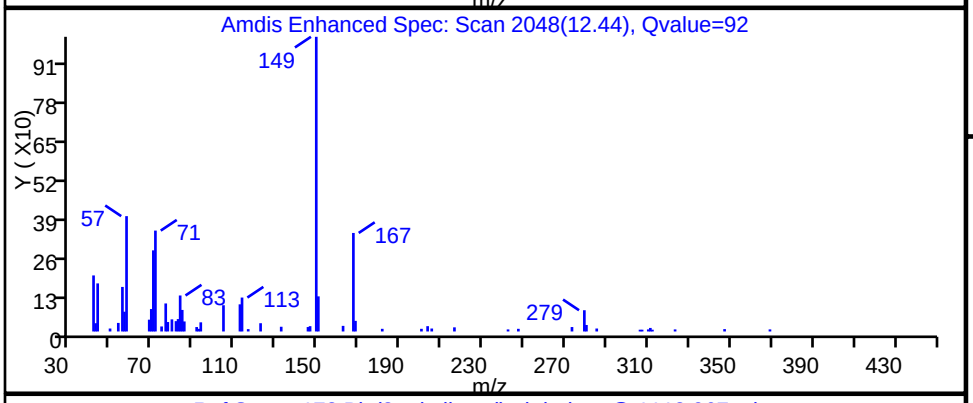
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422014.D

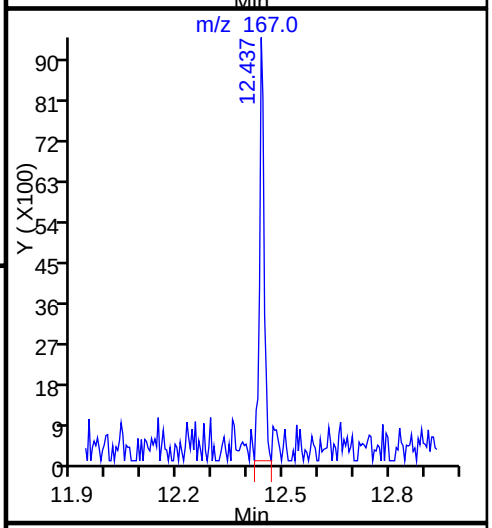
Injection Date:	22-Apr-2015 12:39:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-10-G	Lab Sample ID:	240-49171-10		
Client ID:	079SB-0354M-0001-SO				
Operator ID:	001574	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

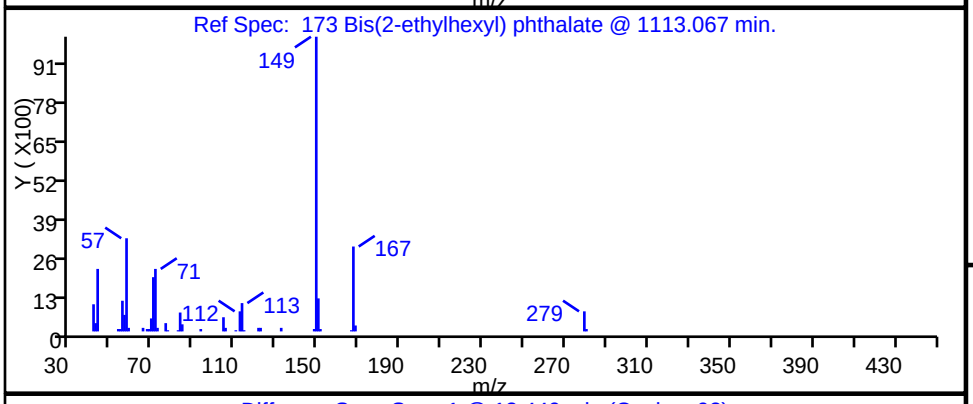
173 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

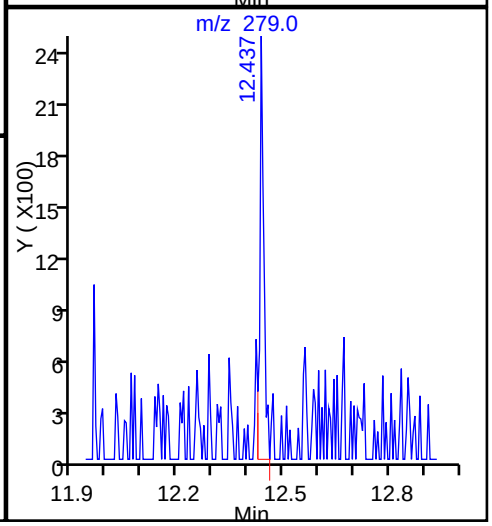


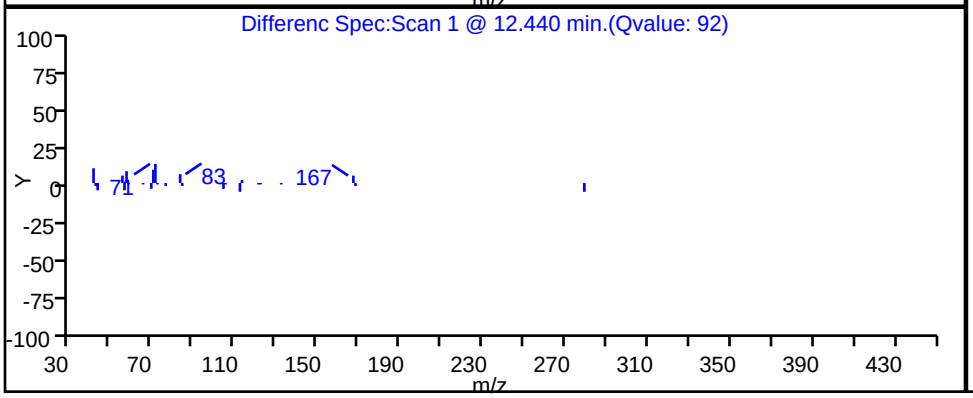










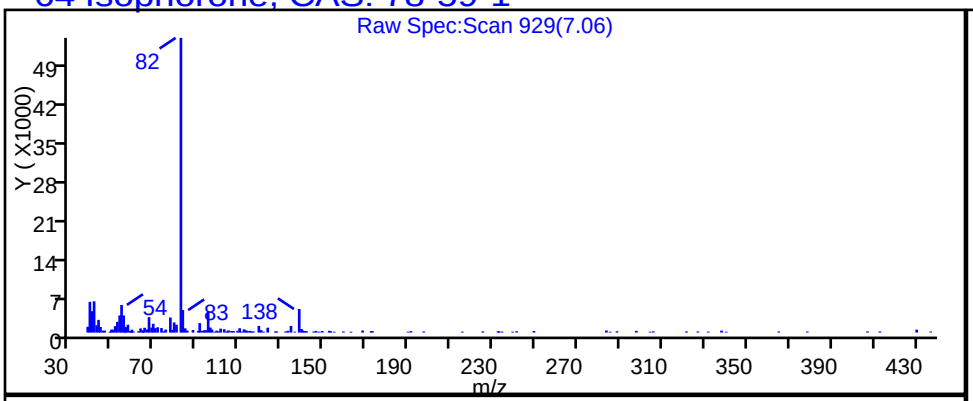


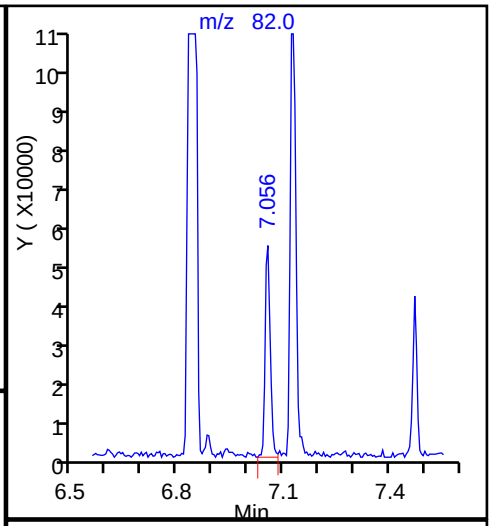
Report Date: 23-Apr-2015 09:37:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

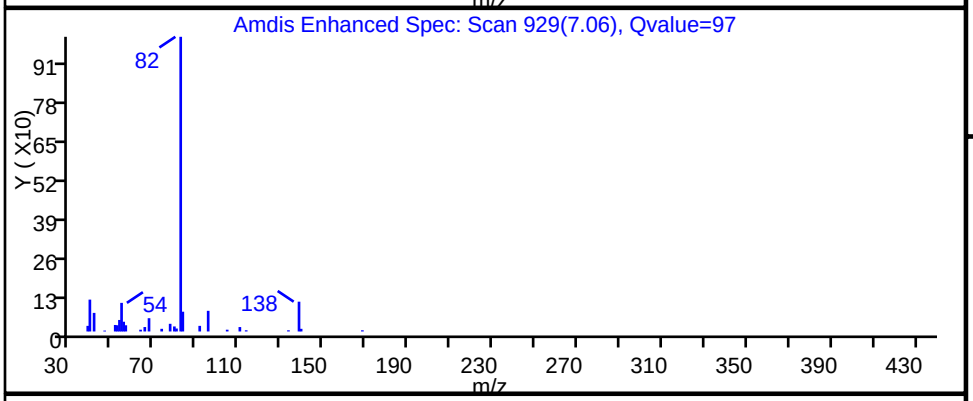
TestAmerica Canton

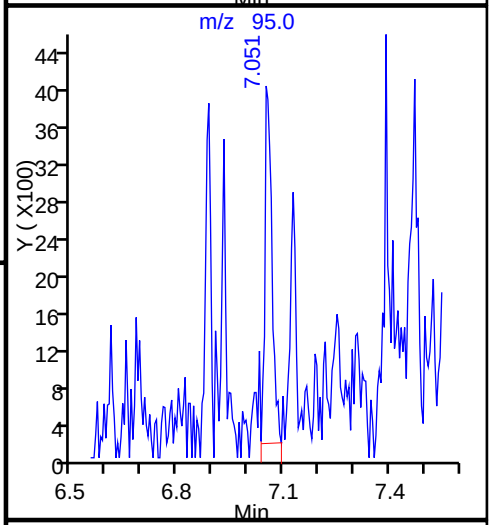
Data File:	\\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422014.D		
Injection Date:	22-Apr-2015 12:39:30	Instrument ID:	A4HP9
Lims ID:	240-49171-A-10-G	Lab Sample ID:	240-49171-10
Client ID:	079SB-0354M-0001-SO		
Operator ID:	001574	ALS Bottle#:	14 Worklist Smp#: 14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN

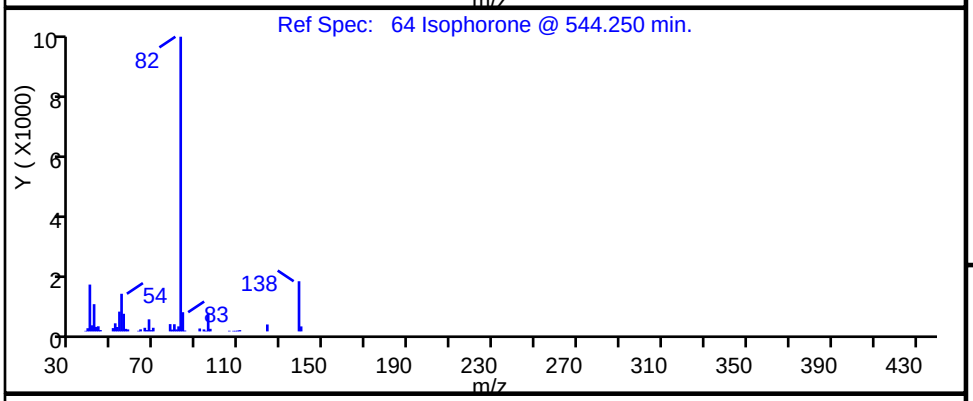
64 Isophorone, CAS: 78-59-1

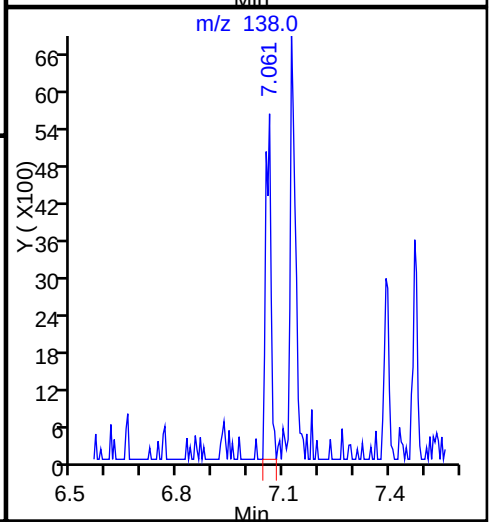


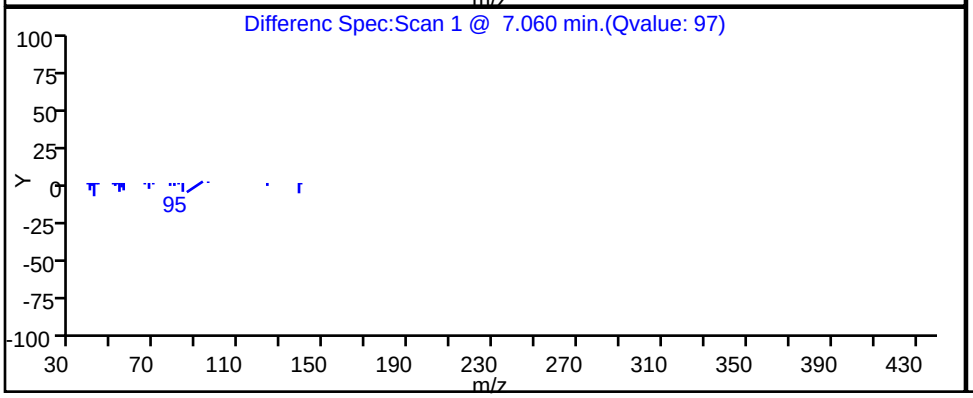












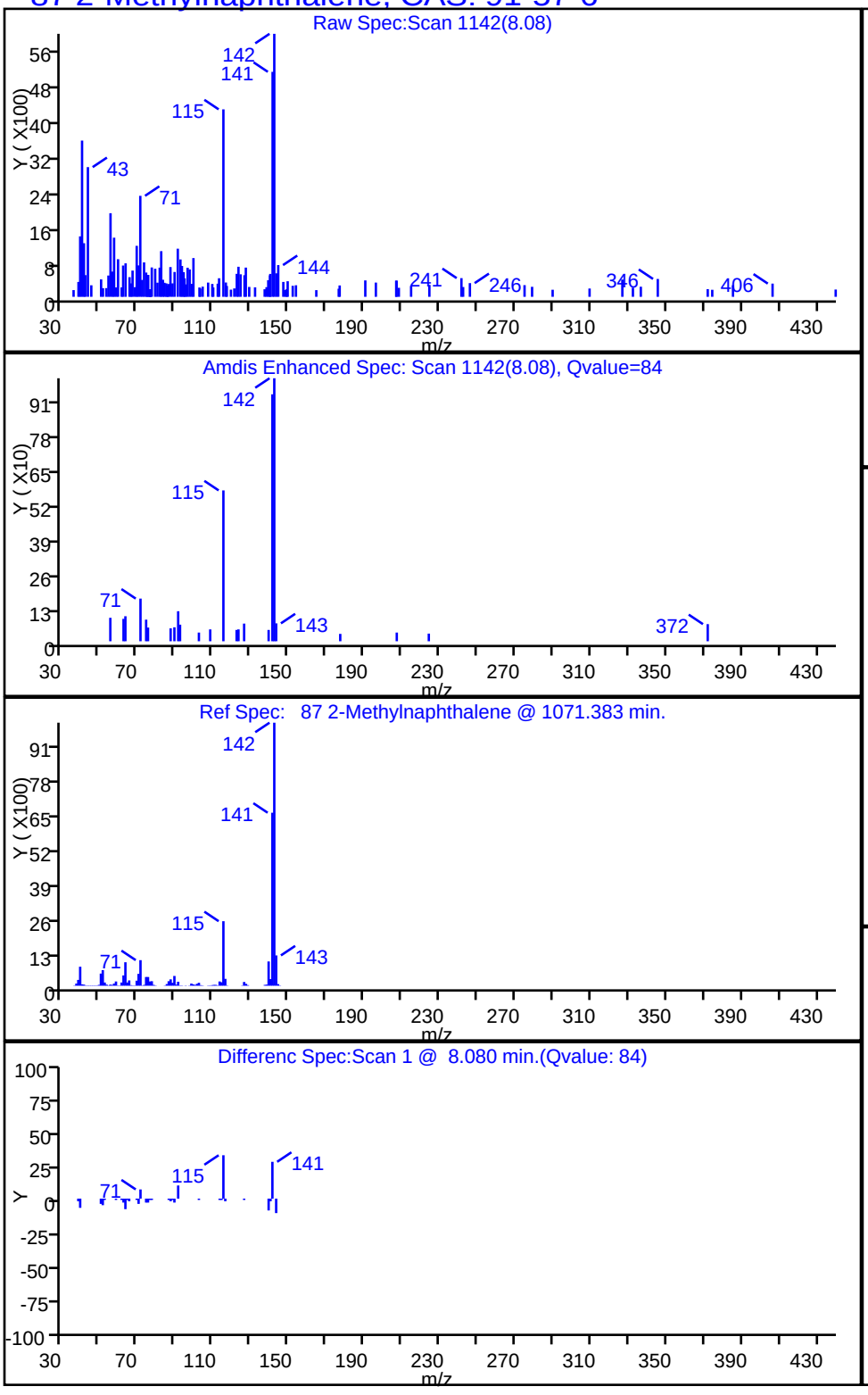
Report Date: 23-Apr-2015 09:37:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

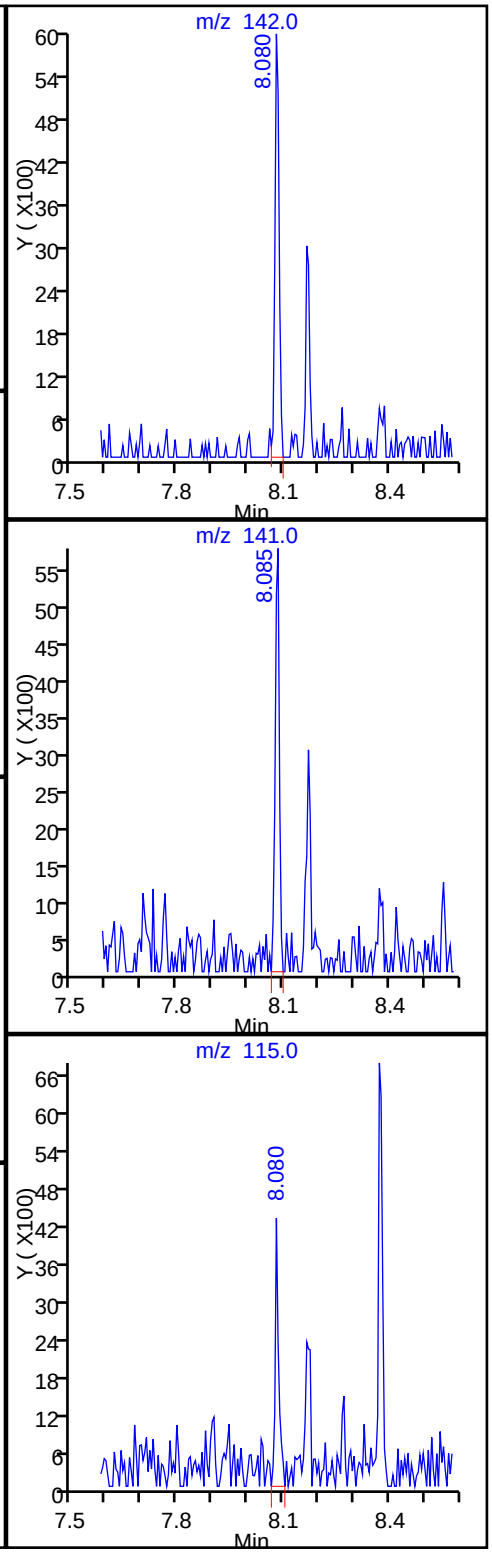
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422014.D

Injection Date:	22-Apr-2015 12:39:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-10-G	Lab Sample ID:	240-49171-10		
Client ID:	079SB-0354M-0001-SO				
Operator ID:	001574	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

87 2-Methylnaphthalene, CAS: 91-57-6





Manual Integration/User Assign Peak Report

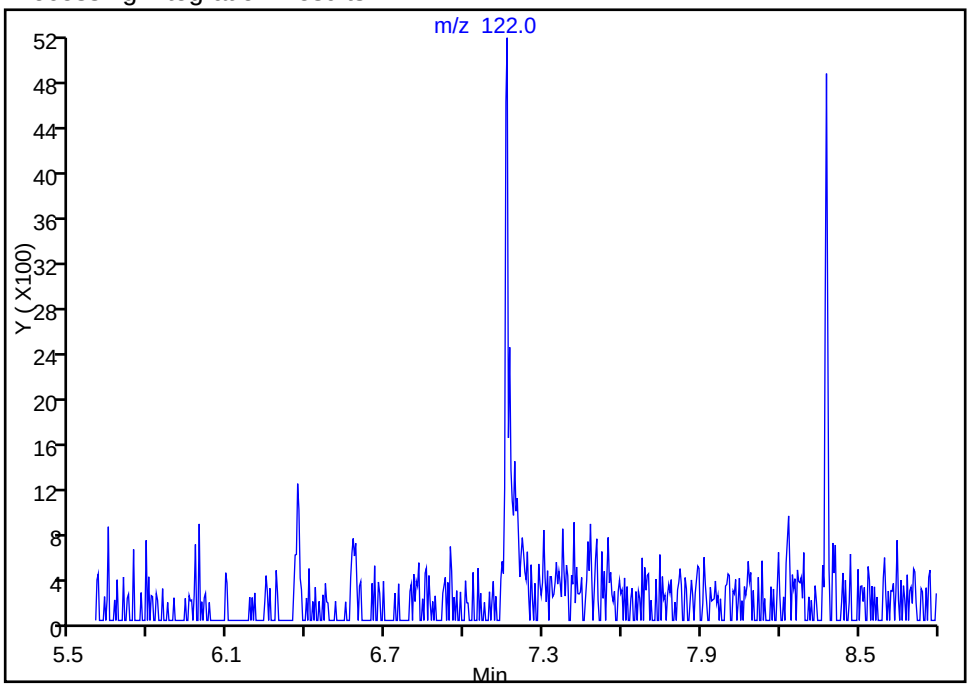
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422014.D				
Injection Date:	22-Apr-2015 12:39:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-10-G	Lab Sample ID:	240-49171-10		
Client ID:	079SB-0354M-0001-SO				
Operator ID:	001574	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

71 Benzoic acid, CAS: 65-85-0

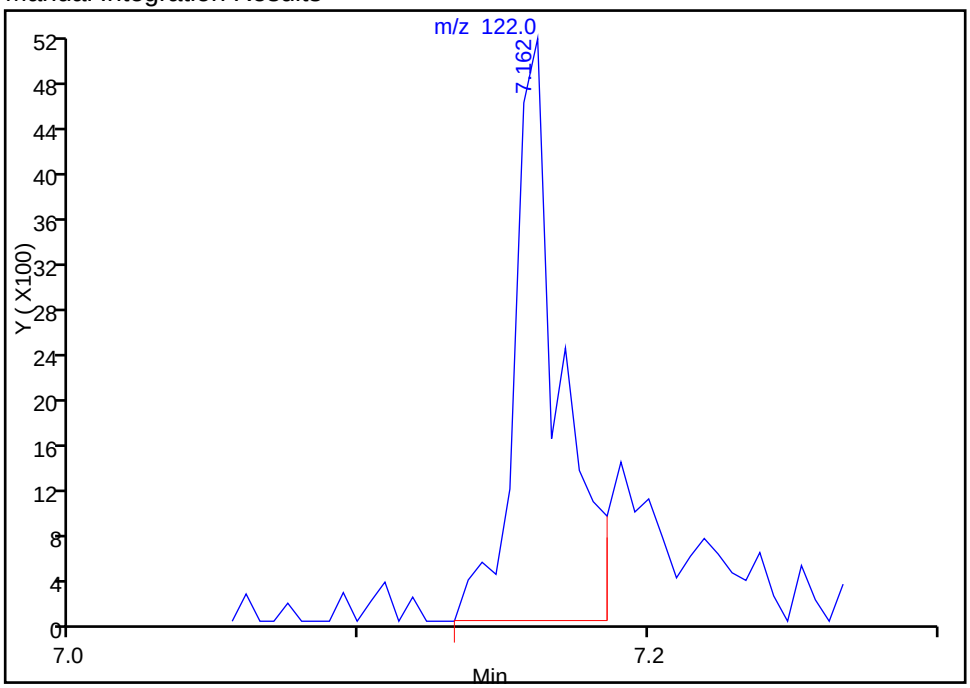
Not Detected
Expected RT: 7.20

Processing Integration Results



Manual Integration Results

RT: 7.16
Area: 5640
Amount: 1.624471
Amount Units: ng/ul



Reviewer: ulmanm, 22-Apr-2015 13:15:05
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

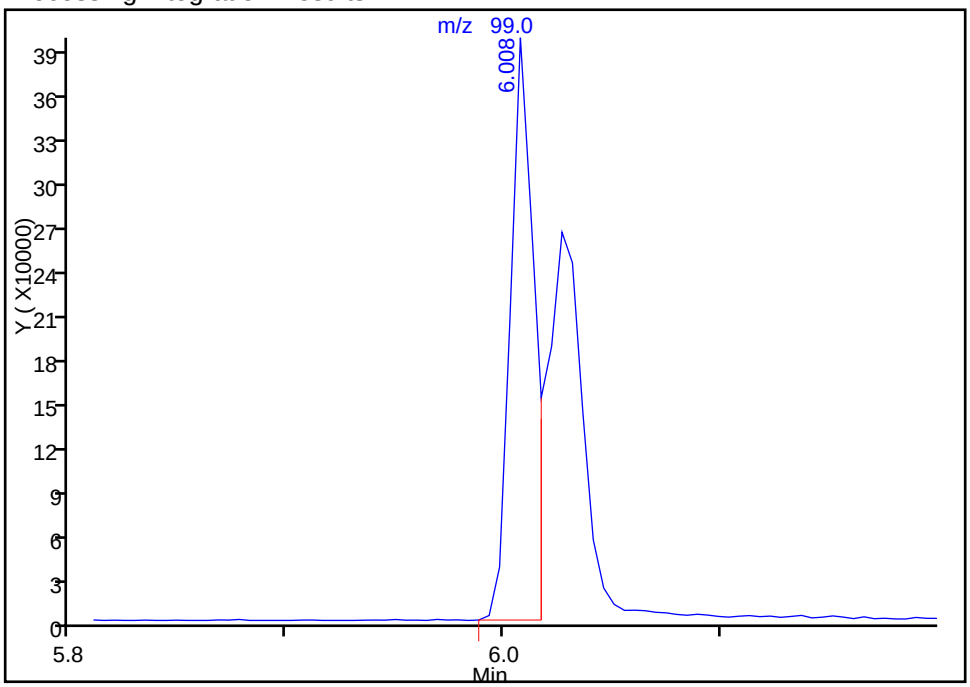
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422014.D				
Injection Date:	22-Apr-2015 12:39:30	Instrument ID:	A4HP9		
Lims ID:	240-49171-A-10-G	Lab Sample ID:	240-49171-10		
Client ID:	079SB-0354M-0001-SO				
Operator ID:	001574	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

$ 8 Phenol-d5, CAS: 4165-62-2

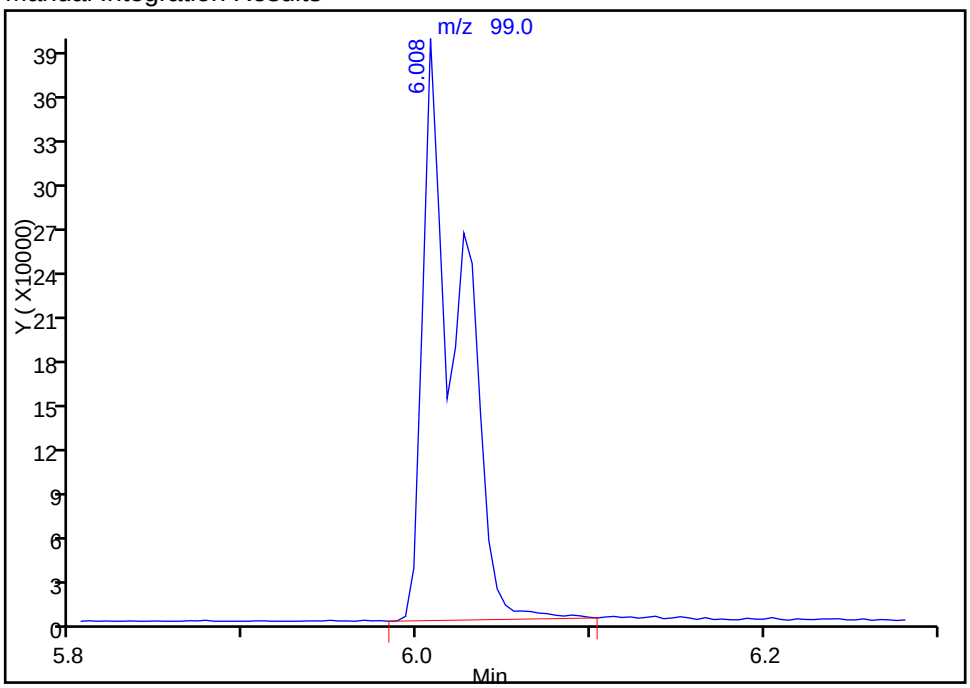
Processing Integration Results

RT: 6.01
Area: 305289
Amount: 4.132792
Amount Units: ng/ul



Manual Integration Results

RT: 6.01
Area: 575315
Amount: 7.788218
Amount Units: ng/ul



Reviewer: ulmanm, 22-Apr-2015 13:15:05
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 177011

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2015 08:49 Calibration End Date: 04/20/2015 12:41 Calibration ID: 28003

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-177011/6	50420006.D
Level 2	STD2 240-177011/5	50420005.D
Level 3	STD3 240-177011/4	50420004.D
Level 4	STD4 240-177011/3	50420003.D
Level 5	STD5 240-177011/2	50420002.D
Level 6	STD6 240-177011/10	50420010.D
Level 7	STD7 240-177011/9	50420009.D
Level 8	STD8 240-177011/8	50420008.D
Level 9	STD9 240-177011/7	50420007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.8274	0.7676 0.9104	0.8138 0.9534	0.7503 1.0129	0.7558	Ave		0.8489			0.0500	11.6		15.0			
N-Nitrosodimethylamine	1.3612	1.4118 1.6333	1.4336 1.5442	1.1662 1.5510	1.2315	Ave		1.4166			0.0500	11.4		15.0			
Pyridine	2.2803	1.9393 2.8252	2.2662 2.4382	1.9858 2.5214	1.9799	Ave		2.2796			0.0500	13.6		15.0			
Benzaldehyde	1.7690	1.8216 1.6532	1.9432 1.4927	1.7585 1.5296	1.3886	Ave		1.6696			0.0500	11.2		15.0			
Phenol	2.3945	2.3856 2.4993	2.5659 2.3601	2.3504 2.5230	2.0248	Ave		2.3879			0.0500	7.0		15.0			
Aniline	3.0040	3.2450 3.0899	3.1887 2.9150	2.8464 2.9473	2.4995	Ave		2.9670			0.0500	7.8		15.0			
Bis(2-chloroethyl)ether	2.0817	2.2358 2.0693	2.0720 1.9548	1.8349 2.0339	1.7291	Ave		2.0015			0.0500	7.9		15.0			
2-Chlorophenol	1.4140	1.4932 1.4382	1.4228 1.3510	1.3093 1.3948	1.3577	Ave		1.3976			0.0500	4.1		15.0			
1,3-Dichlorobenzene	1.4859	1.5538 1.5568	1.5384 1.4812	1.4143 1.5432	1.5197	Ave		1.5116			0.0500	3.2		15.0			
1,4-Dichlorobenzene	1.5384	1.5241 1.6366	1.5876 1.5437	1.3749 1.5766	1.4852	Ave		1.5334			0.0500	5.1		15.0			
Benzyl alcohol	1.1245	1.0704 1.1592	1.1509 1.1051	1.0679 1.1856	1.1475	Ave		1.1264			0.0500	3.8		15.0			
1,2-Dichlorobenzene	1.4264	1.3919 1.5171	1.4561 1.4379	1.2715 1.4802	1.4639	Ave		1.4306			0.0500	5.2		15.0			
2-Methylphenol	1.5444	1.4227 1.6600	1.6102 1.5769	1.3723 1.5956	1.6484	Ave		1.5538			0.0500	6.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 177011

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2015 08:49 Calibration End Date: 04/20/2015 12:41 Calibration ID: 28003

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
bis (2-chloroisopropyl) ether	1.7431	1.5741 1.6906	1.8606 1.5887	1.2722 1.7238	1.6567	Ave		1.6387			0.0500	10.6		15.0			
Indene	2.7722	2.7285 3.0086	2.9375 2.8598	2.4018 3.0031	2.8301	Ave		2.8177			0.0500	7.0		15.0			
3 & 4 Methylphenol	1.6214	1.6179 1.7389	1.7526 1.6616	1.3945 1.7552	1.6203	Ave		1.6453			0.0500	7.2		15.0			
N-Nitrosodi-n-propylamine	1.7200	1.5989 1.8215	1.8775 1.7120	1.5008 1.8230	1.7084	Ave		1.7203			0.0500	7.2		15.0			
Acetophenone	2.3629	2.2750 2.5703	2.4942 2.4032	2.0506 2.5630	2.3421	Ave		2.3827			0.0500	7.2		15.0			
Hexachloroethane	0.6695	0.6889 0.7884	0.7125 0.7520	0.6352 0.7794	0.7989	Ave		0.7281			0.0500	8.3		15.0			
Nitrobenzene	0.6420	0.6727 0.6490	0.7923 0.6439	0.6184 0.6705	0.6891	Ave		0.6722			0.0500	7.9		15.0			
Isophorone	1.1040	1.0665 1.1338	1.1790 1.1344	1.0819 1.1772	1.2126	Ave		1.1362			0.0500	4.5		15.0			
2-Nitrophenol	0.1781	0.1850 0.1904	0.1811 0.1904	0.1682 0.2004	0.1921	Ave		0.1857			0.0500	5.3		15.0			
2,4-Dimethylphenol	0.4800	0.4712 0.4913	0.5137 0.4837	0.4750 0.5130	0.5133	Ave		0.4926			0.0500	3.7		15.0			
Benzoic acid	0.1995	+++++ 0.2358	0.1028 0.2345	0.1349 0.2415	0.2022	Lin1	-0.349	0.2419			0.0500				0.9970		0.9950
Bis(2-chloroethoxy)methane	0.5702	0.5331 0.5812	0.5618 0.5791	0.5247 0.6053	0.6177	Ave		0.5716			0.0500	5.6		15.0			
2,4-Dichlorophenol	0.2902	0.2948 0.3047	0.2884 0.3075	0.2822 0.3116	0.2951	Ave		0.2968			0.0500	3.4		15.0			
1,2,4-Trichlorobenzene	0.3343	0.3302 0.3276	0.3315 0.3294	0.3063 0.3433	0.3149	Ave		0.3272			0.0500	3.5		15.0			
Naphthalene	1.2289 1.0156	1.0718 1.0465	1.0852 1.0599	0.9615 1.0866	1.0631	Ave		1.0688			0.0500	6.7		15.0			
4-Chloroaniline	0.4610	0.4463 0.4724	0.4490 0.4946	0.4353 0.4786	0.4961	Ave		0.4667			0.0500	4.8		15.0			
2,6-Dichlorophenol	0.2855	0.2885 0.2956	0.2938 0.2947	0.2780 0.3053	0.2928	Ave		0.2918			0.0500	2.7		15.0			
Hexachlorobutadiene	0.2211	0.2132 0.2203	0.2359 0.2193	0.2092 0.2292	0.2127	Ave		0.2201			0.0500	4.0		15.0			
Caprolactam	0.1192	0.1199 0.1302	0.1212 0.1288	0.1157 0.1339	0.1326	Ave		0.1252			0.0500	5.6		15.0			
4-Chloro-3-methylphenol	0.4108	0.4074 0.4299	0.3827 0.4328	0.3981 0.4461	0.4328	Ave		0.4176			0.0500	5.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 177011

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2015 08:49 Calibration End Date: 04/20/2015 12:41 Calibration ID: 28003

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylnaphthalene	0.8351 0.6775	0.6562 0.7146	0.6903 0.7062	0.6380 0.7325	0.6665	Ave		0.7019			0.0500	8.3		15.0			
1-Methylnaphthalene	0.6723 0.5733	0.5702 0.6008	0.5531 0.6093	0.5505 0.6347	0.5908	Ave		0.5950			0.0500	6.7		15.0			
Hexachlorocyclopentadiene	 0.3784	0.3525 0.3926	0.3802 0.3932	0.3349 0.3928	0.3666	Ave		0.3739			0.0500	5.7		15.0			
1,2,4,5-Tetrachlorobenzene	 0.5843	0.5883 0.5887	0.5811 0.5766	0.5601 0.5772	0.5554	Ave		0.5765			0.0500	2.2		15.0			
2,4,6-Trichlorophenol	 0.3830	0.3700 0.4009	0.3764 0.3974	0.3609 0.4102	0.3772	Ave		0.3845			0.0500	4.4		15.0			
2,4,5-Trichlorophenol	 0.3922	0.4094 0.4128	0.3849 0.4070	0.3853 0.4136	0.4060	Ave		0.4014			0.0500	3.0		15.0			
1,1'-Biphenyl	1.7681 1.3332	1.3588 1.4155	1.3748 1.3825	1.2370 1.3946	1.3679	Ave		1.4036			0.0500	10.4		15.0			
2-Chloronaphthalene	1.3999 1.0796	1.0820 1.1053	1.0291 1.0847	1.0152 1.1262	1.0724	Ave		1.1105			0.0500	10.2		15.0			
2-Nitroaniline	 0.5578	0.5352 0.5861	0.5437 0.5635	0.5280 0.5652	0.6234	Ave		0.5629			0.0500	5.4		15.0			
Dimethyl phthalate	 1.2330	1.2424 1.2778	1.2585 1.2541	1.1874 1.2429	1.2916	Ave		1.2485			0.0500	2.5		15.0			
1,3-Dinitrobenzene	 0.2046	0.1901 0.2115	0.1623 0.2102	0.1964 0.2133	0.2134	Ave		0.2002			0.0500	8.8		15.0			
2,6-Dinitrotoluene	 0.2898	0.3101 0.3050	0.2844 0.2894	0.2726 0.2906	0.2970	Ave		0.2924			0.0500	4.0		15.0			
Acenaphthylene	1.8456 1.6814	1.6488 1.7816	1.6312 1.7309	1.5942 1.7790	1.7431	Ave		1.7151			0.0500	4.8		15.0			
3-Nitroaniline	 0.2812	0.2856 0.2968	0.2980 0.2875	0.2828 0.2965	0.3035	Ave		0.2915			0.0500	2.8		15.0			
2,4-Dinitrophenol	 0.1700	+++++ 0.2032	0.1107 0.2076	0.1232 0.2163	0.1684	Lin	-0.498	0.2211			0.0500				0.9960		0.9950
Acenaphthene	1.3037 1.0727	1.0699 1.1082	1.0937 1.1174	1.0568 1.1280	1.0923	Ave		1.1159			0.0500	6.6		15.0			
4-Nitrophenol	 0.2689	0.2408 0.3028	0.2835 0.2850	0.2669 0.2847	0.2806	Ave		0.2767			0.0500	6.6		15.0			
2,4-Dinitrotoluene	 0.3677	0.3498 0.4012	0.3797 0.3971	0.3639 0.4042	0.3914	Ave		0.3819			0.0500	5.2		15.0			
Dibenzofuran	1.5993 1.4875	1.4652 1.5932	1.5116 1.5433	1.4256 1.5714	1.4703	Ave		1.5186			0.0500	4.1		15.0			
2,3,4,6-Tetrachlorophenol	 0.3259	0.3219 0.3383	0.3004 0.3322	0.3094 0.3366	0.3210	Ave		0.3232			0.0500	4.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 177011

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2015 08:49 Calibration End Date: 04/20/2015 12:41 Calibration ID: 28003

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Diethyl phthalate	1.1650	1.3756 1.2425	1.3455 1.2299	1.2327 1.2874	1.2000	Ave		1.2598			0.0500	5.7		15.0			
4-Chlorophenyl phenyl ether	0.6374	0.6737 0.6755	0.6929 0.6488	0.6238 0.6529	0.5725	Ave		0.6472			0.0500	5.8		15.0			
4-Nitroaniline	0.2854	0.2800 0.3163	0.2697 0.3035	0.2632 0.3057	0.2347	Ave		0.2823			0.0500	9.4		15.0			
Fluorene	1.3697 1.2381	1.3615 1.3323	1.2757 1.2839	1.2132 1.3001	1.0977	Ave		1.2747			0.0500	6.6		15.0			
4,6-Dinitro-2-methylphenol	0.1467	0.0592 0.1469	0.0965 0.1343	0.1068 0.1534	0.1370	Lin1	-0.103	0.1481			0.0500				0.9970		0.9950
N-Nitrosodiphenylamine	0.6212	0.4738 0.5312	0.5336 0.4830	0.5143 0.5519	0.5926	Ave		0.5377			0.0500	9.4		15.0			
1,2-Diphenylhydrazine(as Azobenzene)	1.3306	0.9523 1.1418	1.1141 0.9943	1.0630 1.0965	1.2530	Ave		1.1174			0.0500	11.4		15.0			
Azobenzene	1.3307	0.9443 1.1418	1.1161 0.9942	1.0624 1.0965	1.2534	Ave		1.1174			0.0500	11.4		15.0			
4-Bromophenyl phenyl ether	0.2473	0.1813 0.2152	0.1993 0.1812	0.1862 0.2071	0.2213	Ave		0.2049			0.0500	11.2		15.0			
Hexachlorobenzene	0.2340 0.2277	0.1862 0.1951	0.2106 0.1758	0.1796 0.1945	0.2123	Ave		0.2018			0.0500	10.2		15.0			
Atrazine	0.2409	0.1824 0.2153	0.2033 0.1887	0.1774 0.2184	0.2223	Ave		0.2061			0.0500	10.7		15.0			
Pentachlorophenol	0.1521	0.0836 0.1479	0.1142 0.1385	0.1128 0.1442	0.1399	Lin1	-0.069	0.1461			0.0500				0.9980		0.9950
Phenanthrene	1.1874 1.0779	1.0935 1.0404	1.0534 0.9895	0.9313 1.0808	0.9982	Ave		1.0503			0.0500	7.0		15.0			
Anthracene	1.1108 1.0803	1.0500 1.0551	1.0414 1.0188	0.9615 1.1049	1.0250	Ave		1.0498			0.0500	4.4		15.0			
Carbazole	1.0216	0.9300 1.0110	0.9060 0.9526	0.8023 0.9429	0.9367	Ave		0.9379			0.0500	7.2		15.0			
Di-n-butyl phthalate	1.3370	1.1699 1.3093	0.9975 1.2310	0.9217 1.2303	1.2010	Ave		1.1747			0.0500	12.3		15.0			
Fluoranthene	1.0902 1.3564	1.1516 1.3430	1.2793 1.1693	1.0115 1.2653	1.2459	Ave		1.2125			0.0500	9.5		15.0			
Benzidine	0.6447	0.4344 0.6789	0.5425 0.6490	0.5206 0.5945	0.5765	Ave		0.5801			0.0500	13.8		15.0			
Pyrene	1.0397 1.1000	1.0764 1.1311	1.1883 1.1228	0.9676 1.1378	1.0971	Ave		1.0956			0.0500	5.8		15.0			
Butyl benzyl phthalate	0.5017	0.4580 0.5142	0.5591 0.5009	0.5195 0.5155	0.5055	Ave		0.5093			0.0500	5.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 177011

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2015 08:49 Calibration End Date: 04/20/2015 12:41 Calibration ID: 28003

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Bis(2-ethylhexyl) phthalate	0.6600	0.6531 0.6790	0.6680 0.6860	0.6667 0.6946	0.7013	Ave		0.6761			0.0500	2.5		15.0			
3,3'-Dichlorobenzidine	0.3627	0.3325 0.3793	0.3630 0.3785	0.3586 0.3874	0.3541	Ave		0.3645			0.0500	4.8		15.0			
Benzo[a]anthracene	1.3040 1.1016	1.0922 1.1193	1.1434 1.1111	1.0262 1.1355	1.0821	Ave		1.1239			0.0500	6.7		15.0			
Chrysene	1.1271 1.0186	1.0190 1.0356	1.0391 1.0249	0.9270 1.0548	0.9990	Ave		1.0272			0.0500	5.1		15.0			
Di-n-octyl phthalate	1.4062	1.3013 1.4613	1.4038 1.3817	1.3461 1.5026	1.4631	Ave		1.4083			0.0500	4.7		15.0			
Benzo[b]fluoranthene	1.3889 1.2245	1.1952 1.2273	1.1763 1.1601	1.1022 1.2301	1.1434	Ave		1.2053			0.0500	6.7		15.0			
Benzo[k]fluoranthene	1.2849 1.2268	1.1423 1.2299	1.2183 1.2687	1.1439 1.2170	1.1941	Ave		1.2140			0.0500	4.0		15.0			
Benzo[a]pyrene	1.1605 1.1620	1.1566 1.1723	1.1252 1.1646	1.0489 1.2465	1.1208	Ave		1.1508			0.0500	4.6		15.0			
Indeno[1,2,3-cd]pyrene	1.2320 1.2555	1.0666 1.2766	1.1171 1.1798	1.1098 1.0909	1.1582	Ave		1.1652			0.0500	6.5		15.0			
Dibenz(a,h)anthracene	1.0367 1.0392	0.8693 1.0359	0.9392 0.9809	0.8878 0.9113	0.9517	Ave		0.9613			0.0500	6.8		15.0			
Benzo[g,h,i]perylene	1.1532 0.9492	0.9669 0.9483	0.9744 0.9256	0.9570 0.8385	0.9824	Ave		0.9662			0.0500	8.5		15.0			
2-Fluorophenol (Surr)	1.5927	1.3820 1.6570	1.2962 1.7318	1.3845 +++++	1.2627	Ave		1.4724			0.0500	12.6		15.0			
Phenol-d5 (Surr)	2.2418	2.2839 2.2638	2.3549 2.1349	2.1700 2.3096	1.8618	Ave		2.2026			0.0500	7.0		15.0			
Nitrobenzene-d5 (Surr)	0.6936 0.7097	0.6931 0.7037	0.8904 0.7067	0.6589 0.7375	0.7589	Ave		0.7281			0.0500	9.2		15.0			
2-Fluorobiphenyl (Surr)	1.6811 1.2861	1.3263 1.3440	1.3180 1.3107	1.2046 1.3274	1.3057	Ave		1.3449			0.0500	9.8		15.0			
2,4,6-Tribromophenol (Surr)	0.1434	0.1649 0.1543	0.1489 0.1457	0.1472 0.1523	0.1281	Ave		0.1481			0.0500	7.1		15.0			
Terphenyl-d14 (Surr)	0.9402 0.8081	0.7228 0.8301	0.8645 0.8080	0.7385 0.8308	0.7821	Ave		0.8139			0.0500	8.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 177011

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2015 08:49 Calibration End Date: 04/20/2015 12:41 Calibration ID: 28003

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-177011/6	50420006.D
Level 2	STD2 240-177011/5	50420005.D
Level 3	STD3 240-177011/4	50420004.D
Level 4	STD4 240-177011/3	50420003.D
Level 5	STD5 240-177011/2	50420002.D
Level 6	STD6 240-177011/10	50420010.D
Level 7	STD7 240-177011/9	50420009.D
Level 8	STD8 240-177011/8	50420008.D
Level 9	STD9 240-177011/7	50420007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCB	Ave	250452	12415 432945	28154 651861	46428 796449	113568	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCB	Ave	412035	22836 776721	49598 1055854	72164 1219548	185034	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCB	Ave	690245	31368 1343545	78404 1667107	122879 1982612	297494	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzaldehyde	DCB	Ave	1070982	58929 1572425	134461 2041192	217627 2405523	417301	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenol	DCB	Ave	724815	38586 1188566	88772 1613653	145439 1983859	304234	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCB	Ave	909306	52486 1469438	110321 1993104	176128 2317533	375559	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCB	Ave	630143	36164 984085	71684 1336553	113541 1599325	259808	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCB	Ave	428031	24152 683952	49226 923734	81014 1096775	204000	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCB	Ave	449776	25132 740346	53223 1012760	87512 1213423	228339	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCB	Ave	465688	24652 778292	54926 1055490	85074 1239675	223162	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzyl alcohol	DCB	Ave	340396	17314 551283	39819 755608	66079 932286	172419	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Dichlorobenzene	DCB	Ave	431764	22513 721454	50376 983121	78676 1163941	219958	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylphenol	DCB	Ave	467486	23011 789417	55709 1078178	84913 1254684	247678	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
bis (2-chloroisopropyl) ether	DCB	Ave	527630	25460 803960	64371 1086251	78723 1355437	248931	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 177011

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2015 08:49 Calibration End Date: 04/20/2015 12:41 Calibration ID: 28003

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Indene	DCB	Ave	1678273	88266 2861485	203257 3910748	297237 4722832	850468	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
3 & 4 Methylphenol	DCB	Ave	490810	26169 826942	60636 1136122	86287 1380158	243462	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodi-n-propylamine	DCB	Ave	520644	25861 866229	64956 1170582	92866 1433453	256699	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acetophenone	DCB	Ave	715238	36798 1222345	86292 1643167	126883 2015330	351915	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachloroethane	DCB	Ave	202668	11143 374905	24650 514178	39306 612821	120045	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene	NPT	Ave	625710	38625 1228211	89165 1652384	127650 1967292	402489	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Isophorone	NPT	Ave	1076036	61236 2145665	132684 2910921	223337 3453992	708267	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitrophenol	NPT	Ave	173620	10624 360286	20385 488712	34713 587986	112221	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dimethylphenol	NPT	Ave	467864	27053 929670	57805 1241302	98044 1505005	299810	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzoic acid	NPT	Lin1	388824	+++++ 892363	23148 1203448	55684 1417052	236210	20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
Bis(2-chloroethoxy)methane	NPT	Ave	555739	30610 1099899	63225 1486134	108313 1775944	360808	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dichlorophenol	NPT	Ave	282843	16926 576680	32457 788964	58252 914165	172392	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4-Trichlorobenzene	NPT	Ave	325786	18960 620048	37301 845301	63229 1007107	183941	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Naphthalene	NPT	Ave	15960 989882	61542 1980465	122125 2719900	198476 3188013	620980	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chloroaniline	NPT	Ave	449363	25628 894045	50525 1269310	89852 1404257	289781	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dichlorophenol	NPT	Ave	278271	16565 559350	33065 756155	57397 895770	171027	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobutadiene	NPT	Ave	215473	12242 416879	26546 562810	43195 672471	124258	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Caprolactam	NPT	Ave	232280	13773 492788	27278 661152	47758 785426	154883	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
4-Chloro-3-methylphenol	NPT	Ave	400395	23393 813536	43072 1110751	82187 1308872	252818	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylnaphthalene	NPT	Ave	10845 660361	37676 1352305	77680 1812135	131706 2149188	389317	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1-Methylnaphthalene	NPT	Ave	8731 558738	32739 1136983	62239 1563474	113631 1862085	345075	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 177011

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2015 08:49 Calibration End Date: 04/20/2015 12:41 Calibration ID: 28003

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Hexachlorocyclopentadiene	ANT	Ave	222471	11701 444101	25705 627336	41670 734839	126881	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4,5-Tetrachlorobenzene	ANT	Ave	343522	19527 665913	39289 919927	69690 1079990	192205	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Trichlorophenol	ANT	Ave	225159	12282 453458	25449 633938	44903 767417	130537	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,5-Trichlorophenol	ANT	Ave	230561	13589 466898	26021 649252	47946 773840	140499	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,1'-Biphenyl	ANT	Ave	12497 783827	45100 1601199	92958 2205577	153907 2609206	473395	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chloronaphthalene	ANT	Ave	9895 634735	35914 1250248	69583 1730417	126318 2107044	371151	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitroaniline	ANT	Ave	327945	17765 662998	36760 898959	65699 1057455	215737	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dimethyl phthalate	ANT	Ave	724944	41236 1445412	85088 2000756	147743 2325490	446994	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dinitrobenzene	ANT	Ave	120299	6308 239221	10972 335275	24433 399169	73857	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dinitrotoluene	ANT	Ave	170395	10291 345048	19230 461665	33917 543717	102783	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acenaphthylene	ANT	Ave	13045 988563	54725 2015345	110288 2761388	198356 3328512	603245	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3-Nitroaniline	ANT	Ave	165332	9479 335723	20148 458690	35188 554662	105023	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dinitrophenol	ANT	Lin	199890	+++++ 459799	14970 662271	30662 809332	116570	20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
Acenaphthene	ANT	Ave	9215 630690	35510 1253565	73947 1782594	131490 2110449	378038	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitrophenol	ANT	Ave	316160	15982 684980	38334 909471	66426 1065502	194251	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
2,4-Dinitrotoluene	ANT	Ave	216205	11611 453778	25674 633526	45284 756173	135453	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzofuran	ANT	Ave	11304 874539	48630 1802230	102207 2462138	177381 2940156	508841	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,3,4,6-Tetrachlorophenol	ANT	Ave	191582	10685 382719	20309 530025	38497 629702	111077	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Diethyl phthalate	ANT	Ave	684970	45657 1405436	90972 1962074	153382 2408629	415298	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chlorophenyl phenyl ether	ANT	Ave	374725	22361 764132	46852 1035111	77614 1221605	198146	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitroaniline	ANT	Ave	167796	9292 357822	18232 484148	32749 571890	81243	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 177011

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2015 08:49 Calibration End Date: 04/20/2015 12:41 Calibration ID: 28003

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Fluorene	ANT	Ave	9681 727918	45190 1507017	86254 2048241	150950 2432427	379911	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4,6-Dinitro-2-methylphenol	PHN	Lin1	 260952	8557 603382	23579 838422	48344 1014166	135939	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
N-Nitrosodiphenylamine	PHN	Ave	 1105278	68536 2181833	130359 3015749	232813 3649375	587851	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	 1183693	68881 2344695	136085 3104162	240611 3625120	621470	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Azobenzene	PHN	Ave	 1183790	68299 2344821	136330 3103823	240473 3624950	621673	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Bromophenyl phenyl ether	PHN	Ave	 220036	13116 441862	24343 565762	42148 684530	109755	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobenzene	PHN	Ave	2911 202550	13471 400652	25722 548893	40661 643091	105274	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Atrazine	PHN	Ave	 428554	26388 884159	49677 1177907	80307 1444150	220543	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Pentachlorophenol	PHN	Lin1	 270585	12090 607473	27906 864536	51075 953443	138761	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenanthrene	PHN	Ave	14773 958907	79088 2136444	128672 3089079	210811 3573119	495077	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Anthracene	PHN	Ave	13820 961032	75943 2166727	127200 3180671	217629 3652900	508399	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Carbazole	PHN	Ave	 908795	67265 2076150	110668 2973846	181612 3117134	464578	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-butyl phthalate	PHN	Ave	 1189386	84614 2688668	121845 3843140	208631 4067476	595667	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluoranthene	PHN	Ave	13563 1206648	83292 2757839	156263 3650270	228948 4183231	617930	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzidine	CRY	Ave	 1509185	64861 3193120	149760 4240526	259502 4548704	701742	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Pyrene	CRY	Ave	14841 1287533	80367 2659722	164008 3668016	241147 4352476	667703	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Butyl benzyl phthalate	CRY	Ave	 587187	34193 1209148	77170 1636215	129472 1972015	307666	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-ethylhexyl) phthalate	CRY	Ave	 772509	48766 1596675	92201 2240970	166156 2657049	426816	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dichlorobenzidine	CRY	Ave	 849183	49655 1783742	100198 2472940	178728 2963930	431003	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Benzo[a]anthracene	CRY	Ave	18614 1289434	81549 2631956	157819 3629694	255751 4343670	658559	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Chrysene	CRY	Ave	16089 1192213	76081 2435297	143418 3348051	231040 4035079	608000	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 177011

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/20/2015 08:49 Calibration End Date: 04/20/2015 12:41 Calibration ID: 28003

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Di-n-octyl phthalate	PRY	Ave	1343351	79206 2860004	159946 3907617	282511 5115692	737254	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[b]fluoranthene	PRY	Ave	16357 1169783	72747 2402031	134018 3280855	231320 4188034	576132	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[k]fluoranthene	PRY	Ave	15132 1171945	69527 2407128	138809 3588251	240080 4143610	601666	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]pyrene	PRY	Ave	13667 1110022	70401 2294348	128202 3293663	220146 4244066	564746	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indeno[1,2,3-cd]pyrene	PRY	Ave	14509 1199340	64921 2498527	127282 3336574	232922 3714112	583590	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenz(a,h)anthracene	PRY	Ave	12210 992770	52913 2027396	107009 2774062	186338 3102596	479534	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[g,h,i]perylene	PRY	Ave	13582 906776	58855 1856012	111014 2617903	200853 2854916	495009	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorophenol (Surr)	DCB	Ave	482119	22354 788012	44846 1184060	85669 +++++	189727	10.0	0.500 15.0	1.00 20.0	2.00 +++++	5.00
Phenol-d5 (Surr)	DCB	Ave	678589	36942 1076581	81474 1459687	134276 1816095	279750	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene-d5 (Surr)	NPT	Ave	9007 691689	39795 1331714	100203 1813424	136022 2163859	443304	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorobiphenyl (Surr)	ANT	Ave	11882 756135	44021 1520261	89117 2091076	149886 2483500	451866	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Tribromophenol (Surr)	ANT	Ave	84325	5472 174572	10068 232521	18319 285003	44343	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Terphenyl-d14 (Surr)	CRY	Ave	13421 945831	53965 1952012	119323 2639723	184049 3178109	475981	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420002.D
Lims ID: std5 lst1
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 20-Apr-2015 08:49:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042708-002
Misc. Info.: STD5 LST1STD5 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-Apr-2015 07:00:49 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: ulmanm Date: 20-Apr-2015 09:18:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.378	6.378	0.000	86	120205	4.00	4.00	
* 2 Naphthalene-d8	136	7.494	7.494	0.000	98	467285	4.00	4.00	
* 3 Acenaphthene-d10	164	9.004	9.004	0.000	79	276868	4.00	4.00	
* 4 Phenanthrene-d10	188	10.273	10.273	0.000	98	396785	4.00	4.00	
* 5 Chrysene-d12	240	12.572	12.572	0.000	79	486868	4.00	4.00	
* 6 Perylene-d12	264	14.361	14.361	0.000	98	403106	4.00	4.00	
$ 7 2-Fluorophenol	112	5.162	5.162	0.000	90	189727	5.00	4.29	
$ 8 Phenol-d5	99	6.013	6.013	0.000	78	279750	5.00	4.23	
$ 9 Nitrobenzene-d5	82	6.854	6.854	0.000	82	443304	5.00	5.21	
$ 10 2-Fluorobiphenyl (Surr)	172	8.398	8.398	0.000	97	451866	5.00	4.85	
$ 11 2,4,6-Tribromophenol	330	9.672	9.672	0.000	83	44343	5.00	4.33	
$ 12 Terphenyl-d14	244	11.601	11.601	0.000	98	475981	5.00	4.80	
25 1,4-Dioxane	88	3.079	3.079	0.000	92	113568	5.00	4.45	
26 N-Nitrosodimethylamine	74	3.560	3.560	0.000	86	185034	5.00	4.35	
27 Pyridine	79	3.618	3.618	0.000	81	297494	5.00	4.34	
41 Benzaldehyde	77	5.984	5.984	0.000	81	417301	10.0	8.32	
43 Phenol	94	6.027	6.027	0.000	84	304234	5.00	4.24	
44 Aniline	93	6.075	6.075	0.000	79	375559	5.00	4.21	
69 Bis(2-chloroethyl)ether	93	6.114	6.114	0.000	93	259808	5.00	4.32	
46 2-Chlorophenol	128	6.196	6.196	0.000	85	204000	5.00	4.86	
243 n-Decane	57	6.224	6.224	0.000	96	272704	NC	NC	
47 1,3-Dichlorobenzene	146	6.335	6.335	0.000	79	228339	5.00	5.03	
48 1,4-Dichlorobenzene	146	6.398	6.398	0.000	66	223162	5.00	4.84	
49 Benzyl alcohol	108	6.474	6.474	0.000	82	172419	5.00	5.09	
50 1,2-Dichlorobenzene	146	6.537	6.537	0.000	77	219958	5.00	5.12	
51 2-Methylphenol	108	6.566	6.566	0.000	78	247678	5.00	5.30	
53 2,2'-oxybis[1-chloropropan	45	6.595	6.595	0.000	97	248931	5.00	5.05	
52 Indene	115	6.614	6.614	0.000	67	850468	10.0	10.0	
21 3 & 4 Methylphenol	108	6.691	6.691	0.000	94	243462	5.00	4.92	
57 N-Nitrosodi-n-propylamine	70	6.705	6.705	0.000	96	256699	5.00	4.97	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.715	6.715	0.000	79	351915	5.00	4.91	
61 Hexachloroethane	117	6.840	6.840	0.000	89	120045	5.00	5.49	
62 Nitrobenzene	77	6.869	6.869	0.000	70	402489	5.00	5.13	
64 Isophorone	82	7.071	7.071	0.000	94	708267	5.00	5.34	
66 2-Nitrophenol	139	7.153	7.153	0.000	78	112221	5.00	5.17	
65 2,4-Dimethylphenol	107	7.157	7.157	0.000	94	299810	5.00	5.21	
71 Benzoic acid	122	7.196	7.196	0.000	79	236210	10.0	9.81	
70 Bis(2-chloroethoxy)methane	93	7.234	7.234	0.000	90	360808	5.00	5.40	
73 2,4-Dichlorophenol	162	7.354	7.354	0.000	90	172392	5.00	4.97	
74 1,2,4-Trichlorobenzene	180	7.441	7.441	0.000	86	183941	5.00	4.81	
75 Naphthalene	128	7.513	7.513	0.000	97	620980	5.00	4.97	
76 4-Chloroaniline	127	7.532	7.532	0.000	40	289781	5.00	5.32	
77 2,6-Dichlorophenol	162	7.552	7.552	0.000	57	171027	5.00	5.02	
79 Hexachlorobutadiene	225	7.619	7.619	0.000	86	124258	5.00	4.83	
84 Caprolactam	113	7.807	7.807	0.000	77	154883	10.0	10.6	
86 4-Chloro-3-methylphenol	107	7.922	7.922	0.000	78	252818	5.00	5.18	
87 2-Methylnaphthalene	142	8.105	8.105	0.000	80	389317	5.00	4.75	
88 1-Methylnaphthalene	142	8.191	8.191	0.000	79	345075	5.00	4.96	
89 Hexachlorocyclopentadiene	237	8.244	8.244	0.000	88	126881	5.00	4.90	
91 1,2,4,5-Tetrachlorobenzene	216	8.249	8.249	0.000	93	192205	5.00	4.82	
92 2,4,6-Trichlorophenol	196	8.331	8.331	0.000	85	130537	5.00	4.91	
93 2,4,5-Trichlorophenol	196	8.364	8.364	0.000	84	140499	5.00	5.06	
98 1,1'-Biphenyl	154	8.489	8.489	0.000	98	473395	5.00	4.87	
100 2-Chloronaphthalene	162	8.523	8.523	0.000	98	371151	5.00	4.83	
102 2-Nitroaniline	65	8.581	8.581	0.000	69	215737	5.00	5.54	
105 Dimethyl phthalate	163	8.715	8.715	0.000	91	446994	5.00	5.17	
106 1,3-Dinitrobenzene	168	8.749	8.749	0.000	80	73857	5.00	5.33	
107 2,6-Dinitrotoluene	165	8.773	8.773	0.000	57	102783	5.00	5.08	
109 Acenaphthylene	152	8.884	8.884	0.000	94	603245	5.00	5.08	
110 3-Nitroaniline	138	8.927	8.927	0.000	74	105023	5.00	5.21	
111 2,4-Dinitrophenol	184	9.014	9.014	0.000	60	116570	10.0	9.87	
112 Acenaphthene	153	9.028	9.028	0.000	89	378038	5.00	4.89	
113 4-Nitrophenol	109	9.038	9.038	0.000	40	194251	10.0	10.1	
114 2,4-Dinitrotoluene	165	9.124	9.124	0.000	79	135453	5.00	5.12	
116 Dibenzofuran	168	9.172	9.172	0.000	85	508841	5.00	4.84	
119 2,3,4,6-Tetrachlorophenol	232	9.268	9.268	0.000	74	111077	5.00	4.97	
121 Diethyl phthalate	149	9.307	9.307	0.000	93	415298	5.00	4.76	
247 Hexadecane	57	9.316	9.316	0.000	96	294474	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.442	9.442	0.000	93	198146	5.00	4.42	
125 4-Nitroaniline	138	9.446	9.446	0.000	72	81243	5.00	4.16	
126 Fluorene	166	9.466	9.466	0.000	46	379911	5.00	4.31	
128 4,6-Dinitro-2-methylphenol	198	9.480	9.480	0.000	91	135939	10.0	9.95	
131 N-Nitrosodiphenylamine	169	9.533	9.533	0.000	96	587851	10.0	11.0	
132 1,2-Diphenylhydrazine	77	9.576	9.576	0.000	99	621470	5.00	5.61	
133 Azobenzene	77	9.576	9.576	0.000	95	621673	5.00	5.61	
139 4-Bromophenyl phenyl ether	248	9.860	9.860	0.000	71	109755	5.00	5.40	
141 Hexachlorobenzene	284	9.951	9.951	0.000	81	105274	5.00	5.26	
142 Atrazine	200	9.956	9.956	0.000	84	220543	10.0	10.8	
244 n-Octadecane	57	10.096	10.096	0.000	88	280916	NC	NC	
143 Pentachlorophenol	266	10.105	10.105	0.000	80	138761	10.0	10.0	
148 Phenanthrene	178	10.293	10.293	0.000	83	495077	5.00	4.75	
149 Anthracene	178	10.336	10.336	0.000	88	508399	5.00	4.88	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.451	10.451	0.000	84	464578	5.00	4.99	
154 Di-n-butyl phthalate	149	10.692	10.692	0.000	99	595667	5.00	5.11	
159 Fluoranthene	202	11.312	11.312	0.000	99	617930	5.00	5.14	
160 Benzidine	184	11.384	11.384	0.000	88	701742	10.0	9.94	
161 Pyrene	202	11.519	11.519	0.000	97	667703	5.00	5.01	
168 Butyl benzyl phthalate	149	11.976	11.976	0.000	89	307666	5.00	4.96	
173 Bis(2-ethylhexyl) phthalat	149	12.461	12.461	0.000	95	426816	5.00	5.19	
175 3,3'-Dichlorobenzidine	252	12.495	12.495	0.000	56	431003	10.0	9.71	
177 Benzo[a]anthracene	228	12.562	12.562	0.000	88	658559	5.00	4.81	
178 Chrysene	228	12.601	12.601	0.000	92	608000	5.00	4.86	
180 Di-n-octyl phthalate	149	13.125	13.125	0.000	99	737254	5.00	5.19	
182 Benzo[b]fluoranthene	252	13.803	13.803	0.000	83	576132	5.00	4.74	
183 Benzo[k]fluoranthene	252	13.837	13.837	0.000	85	601666	5.00	4.92	
184 Benzo[a]pyrene	252	14.279	14.279	0.000	73	564746	5.00	4.87	
188 Indeno[1,2,3-cd]pyrene	276	16.304	16.304	0.000	94	583590	5.00	4.97	
189 Dibenz(a,h)anthracene	278	16.313	16.313	0.000	80	479534	5.00	4.95	
190 Benzo[g,h,i]perylene	276	16.910	16.910	0.000	91	495009	5.00	5.08	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SMLIST1 L5 W_00005 Amount Added: 1.00 Units: mL

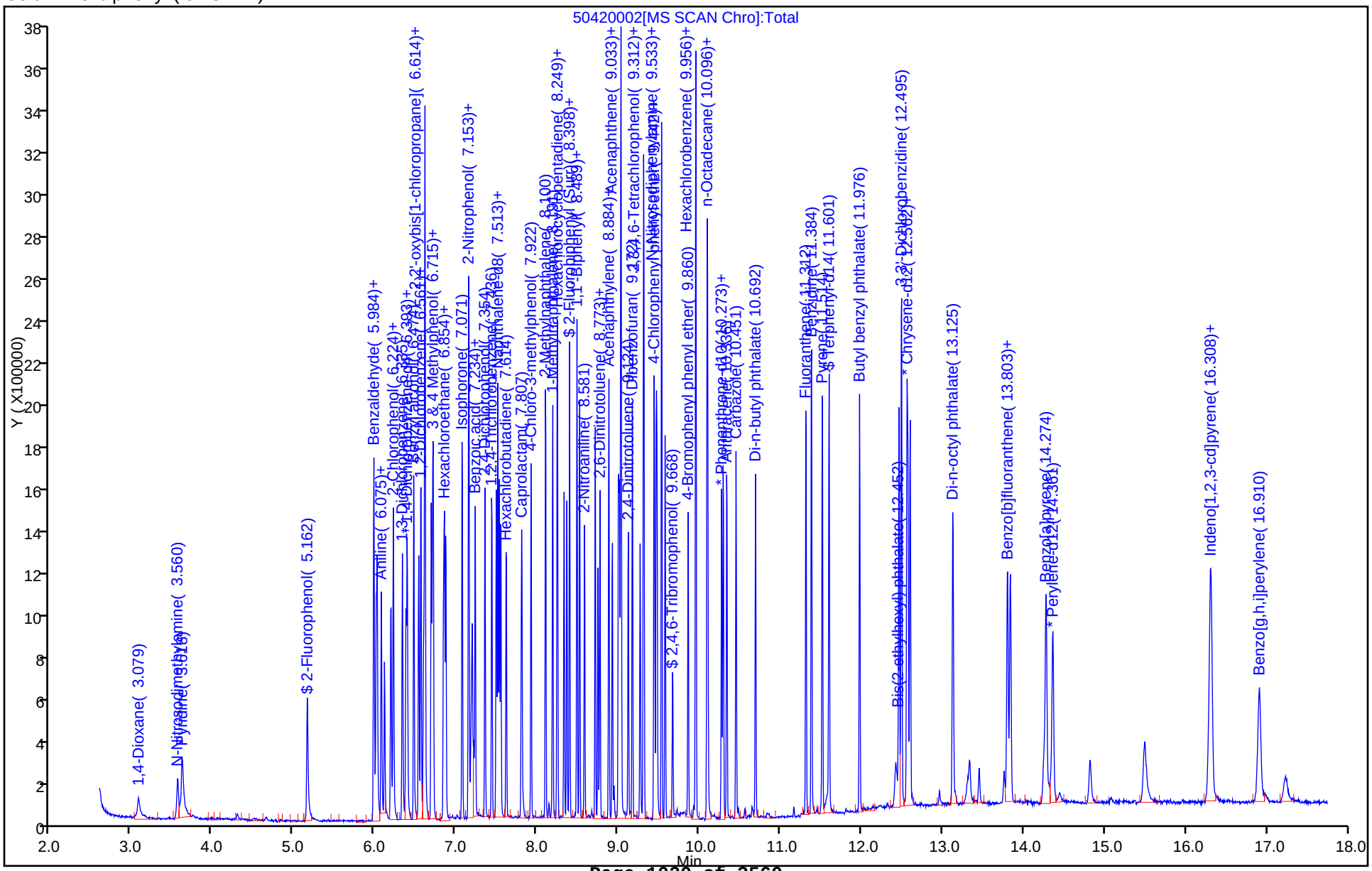
Report Date: 21-Apr-2015 07:00:49 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420002.D

Injection Date:	20-Apr-2015 08:49:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std5 lst1			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420003.D
Lims ID: std4 lst1
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 20-Apr-2015 09:14:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042708-003
Misc. Info.: STD4 LST1STD4 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-Apr-2015 07:00:51 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: ulmanm Date: 20-Apr-2015 09:44:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.382	6.378	0.004	93	123755	4.00	4.00	
* 2 Naphthalene-d8	136	7.493	7.494	-0.001	97	412858	4.00	4.00	
* 3 Acenaphthene-d10	164	9.003	9.004	-0.001	76	248849	4.00	4.00	
* 4 Phenanthrene-d10	188	10.273	10.273	0.000	94	452708	4.00	4.00	
* 5 Chrysene-d12	240	12.571	12.572	-0.001	79	498464	4.00	4.00	
* 6 Perylene-d12	264	14.355	14.361	-0.006	95	419757	4.00	4.00	
$ 7 2-Fluorophenol	112	5.166	5.162	0.004	91	85669	2.00	1.88	
$ 8 Phenol-d5	99	6.012	6.013	-0.001	79	134276	2.00	1.97	
$ 9 Nitrobenzene-d5	82	6.854	6.854	0.000	83	136022	2.00	1.81	
$ 10 2-Fluorobiphenyl (Surr)	172	8.397	8.398	-0.001	98	149886	2.00	1.79	
$ 11 2,4,6-Tribromophenol	330	9.672	9.672	0.000	80	18319	2.00	1.99	
$ 12 Terphenyl-d14	244	11.600	11.601	-0.001	97	184049	2.00	1.81	
25 1,4-Dioxane	88	3.084	3.079	0.005	84	46428	2.00	1.77	M
26 N-Nitrosodimethylamine	74	3.564	3.560	0.004	84	72164	2.00	1.65	
27 Pyridine	79	3.622	3.618	0.004	93	122879	2.00	1.74	M
41 Benzaldehyde	77	5.983	5.984	-0.001	81	217627	4.00	4.21	
43 Phenol	94	6.027	6.027	0.000	87	145439	2.00	1.97	
44 Aniline	93	6.075	6.075	0.000	83	176128	2.00	1.92	
69 Bis(2-chloroethyl)ether	93	6.113	6.114	-0.001	92	113541	2.00	1.83	
46 2-Chlorophenol	128	6.195	6.196	-0.001	84	81014	2.00	1.87	
243 n-Decane	57	6.224	6.224	0.000	97	107156	NC	NC	
47 1,3-Dichlorobenzene	146	6.334	6.335	-0.001	80	87512	2.00	1.87	
48 1,4-Dichlorobenzene	146	6.397	6.398	-0.001	80	85074	2.00	1.79	
49 Benzyl alcohol	108	6.474	6.474	0.000	77	66079	2.00	1.90	
50 1,2-Dichlorobenzene	146	6.536	6.537	-0.001	84	78676	2.00	1.78	
51 2-Methylphenol	108	6.565	6.566	-0.001	74	84913	2.00	1.77	
53 2,2'-oxybis[1-chloropropan	45	6.599	6.595	0.004	95	78723	2.00	1.55	
52 Indene	115	6.613	6.614	-0.001	75	297237	4.00	3.41	
21 3 & 4 Methylphenol	108	6.690	6.691	-0.001	93	86287	2.00	1.70	
57 N-Nitrosodi-n-propylamine	70	6.705	6.705	0.000	98	92866	2.00	1.74	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.714	6.715	-0.001	83	126883	2.00	1.72	
61 Hexachloroethane	117	6.844	6.840	0.004	86	39306	2.00	1.74	
62 Nitrobenzene	77	6.873	6.869	0.004	69	127650	2.00	1.84	
64 Isophorone	82	7.075	7.071	0.004	94	223337	2.00	1.90	
66 2-Nitrophenol	139	7.152	7.153	-0.001	78	34713	2.00	1.81	
65 2,4-Dimethylphenol	107	7.157	7.157	0.000	94	98044	2.00	1.93	
71 Benzoic acid	122	7.181	7.196	-0.015	74	55684	4.00	3.68	M
70 Bis(2-chloroethoxy)methane	93	7.234	7.234	0.000	94	108313	2.00	1.84	
73 2,4-Dichlorophenol	162	7.354	7.354	0.000	90	58252	2.00	1.90	
74 1,2,4-Trichlorobenzene	180	7.440	7.441	-0.001	87	63229	2.00	1.87	
75 Naphthalene	128	7.512	7.513	-0.001	91	198476	2.00	1.80	
76 4-Chloroaniline	127	7.532	7.532	0.000	47	89852	2.00	1.87	
77 2,6-Dichlorophenol	162	7.551	7.552	-0.001	58	57397	2.00	1.91	
79 Hexachlorobutadiene	225	7.618	7.619	-0.001	90	43195	2.00	1.90	
84 Caprolactam	113	7.801	7.807	-0.006	77	47758	4.00	3.70	
86 4-Chloro-3-methylphenol	107	7.921	7.922	-0.001	76	82187	2.00	1.91	
87 2-Methylnaphthalene	142	8.104	8.105	-0.001	85	131706	2.00	1.82	
88 1-Methylnaphthalene	142	8.190	8.191	-0.001	80	113631	2.00	1.85	
89 Hexachlorocyclopentadiene	237	8.243	8.244	-0.001	93	41670	2.00	1.79	
91 1,2,4,5-Tetrachlorobenzene	216	8.248	8.249	-0.001	90	69690	2.00	1.94	
92 2,4,6-Trichlorophenol	196	8.330	8.331	-0.001	86	44903	2.00	1.88	
93 2,4,5-Trichlorophenol	196	8.364	8.364	0.000	90	47946	2.00	1.92	
98 1,1'-Biphenyl	154	8.489	8.489	0.000	98	153907	2.00	1.76	
100 2-Chloronaphthalene	162	8.522	8.523	-0.001	97	126318	2.00	1.83	
102 2-Nitroaniline	65	8.580	8.581	-0.001	68	65699	2.00	1.88	
105 Dimethyl phthalate	163	8.715	8.715	0.000	93	147743	2.00	1.90	
106 1,3-Dinitrobenzene	168	8.748	8.749	-0.001	81	24433	2.00	1.96	
107 2,6-Dinitrotoluene	165	8.772	8.773	-0.001	59	33917	2.00	1.86	
109 Acenaphthylene	152	8.883	8.884	-0.001	93	198356	2.00	1.86	
110 3-Nitroaniline	138	8.926	8.927	-0.001	79	35188	2.00	1.94	
111 2,4-Dinitrophenol	184	9.013	9.014	-0.001	78	30662	4.00	4.48	
112 Acenaphthene	153	9.027	9.028	-0.001	95	131490	2.00	1.89	
113 4-Nitrophenol	109	9.032	9.038	-0.006	62	66426	4.00	3.86	
114 2,4-Dinitrotoluene	165	9.123	9.124	-0.001	75	45284	2.00	1.91	
116 Dibenzofuran	168	9.171	9.172	-0.001	86	177381	2.00	1.88	
119 2,3,4,6-Tetrachlorophenol	232	9.268	9.268	0.000	76	38497	2.00	1.91	
121 Diethyl phthalate	149	9.311	9.307	0.004	94	153382	2.00	1.96	
247 Hexadecane	57	9.316	9.316	0.000	95	102593	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.441	9.442	-0.001	89	77614	2.00	1.93	
125 4-Nitroaniline	138	9.446	9.446	0.000	72	32749	2.00	1.86	
126 Fluorene	166	9.465	9.466	-0.001	98	150950	2.00	1.90	
128 4,6-Dinitro-2-methylphenol	198	9.479	9.480	-0.001	85	48344	4.00	3.58	
131 N-Nitrosodiphenylamine	169	9.532	9.533	-0.001	99	232813	4.00	3.83	
132 1,2-Diphenylhydrazine	77	9.575	9.576	-0.001	99	240611	2.00	1.90	
133 Azobenzene	77	9.575	9.576	-0.001	95	240473	2.00	1.90	
139 4-Bromophenyl phenyl ether	248	9.859	9.860	-0.001	70	42148	2.00	1.82	
141 Hexachlorobenzene	284	9.955	9.951	0.004	63	40661	2.00	1.78	
142 Atrazine	200	9.955	9.956	-0.001	82	80307	4.00	3.44	
244 n-Octadecane	57	10.095	10.096	-0.001	84	110069	NC	NC	
143 Pentachlorophenol	266	10.104	10.105	-0.001	82	51075	4.00	3.56	
148 Phenanthrene	178	10.292	10.293	-0.001	83	210811	2.00	1.77	
149 Anthracene	178	10.335	10.336	-0.001	88	217629	2.00	1.83	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.451	10.451	0.000	84	181612	2.00	1.71	
154 Di-n-butyl phthalate	149	10.691	10.692	-0.001	98	208631	2.00	1.57	
159 Fluoranthene	202	11.311	11.312	-0.001	99	228948	2.00	1.67	
160 Benzidine	184	11.379	11.384	-0.005	86	259502	4.00	3.59	
161 Pyrene	202	11.513	11.519	-0.006	94	241147	2.00	1.77	
168 Butyl benzyl phthalate	149	11.975	11.976	-0.001	90	129472	2.00	2.04	
173 Bis(2-ethylhexyl) phthalat	149	12.466	12.461	0.005	95	166156	2.00	1.97	
175 3,3'-Dichlorobenzidine	252	12.494	12.495	-0.001	55	178728	4.00	3.93	
177 Benzo[a]anthracene	228	12.562	12.562	0.000	88	255751	2.00	1.83	
178 Chrysene	228	12.600	12.601	-0.001	90	231040	2.00	1.80	
180 Di-n-octyl phthalate	149	13.124	13.125	-0.001	98	282511	2.00	1.91	
182 Benzo[b]fluoranthene	252	13.798	13.803	-0.005	83	231320	2.00	1.83	
183 Benzo[k]fluoranthene	252	13.831	13.837	-0.006	97	240080	2.00	1.88	
184 Benzo[a]pyrene	252	14.274	14.279	-0.005	74	220146	2.00	1.82	
188 Indeno[1,2,3-cd]pyrene	276	16.303	16.304	-0.001	94	232922	2.00	1.90	
189 Dibenz(a,h)anthracene	278	16.313	16.313	0.000	73	186338	2.00	1.85	
190 Benzo[g,h,i]perylene	276	16.904	16.910	-0.006	87	200853	2.00	1.98	
S 191 Methyl Phenols,Total	100				0			3.46	
S 245 Total Cresols	100				0			3.46	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L4 W_00005 Amount Added: 1.00 Units: mL

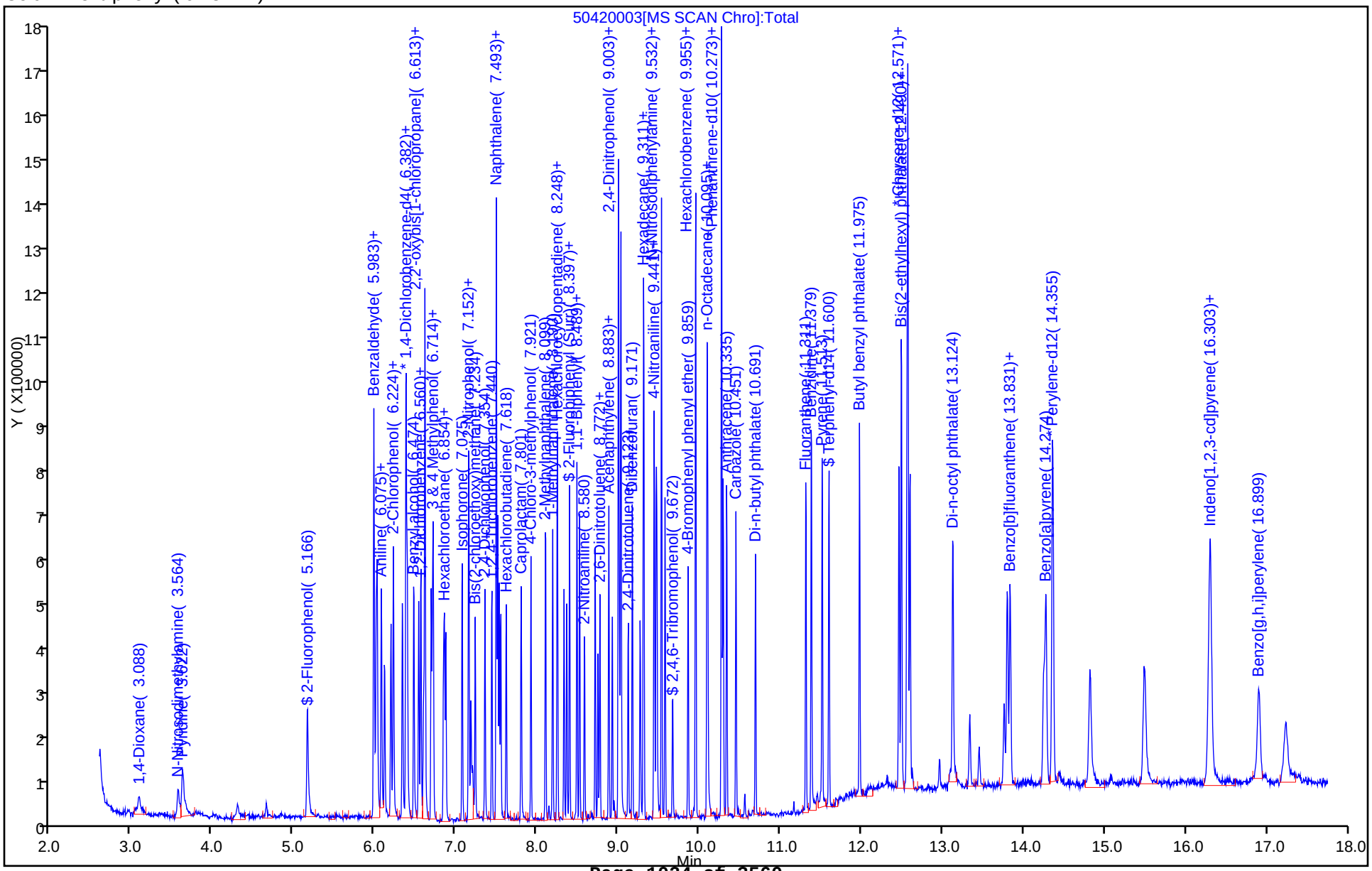
Report Date: 21-Apr-2015 07:00:51 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420003.D

Injection Date:	20-Apr-2015 09:14:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std4 lst1			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

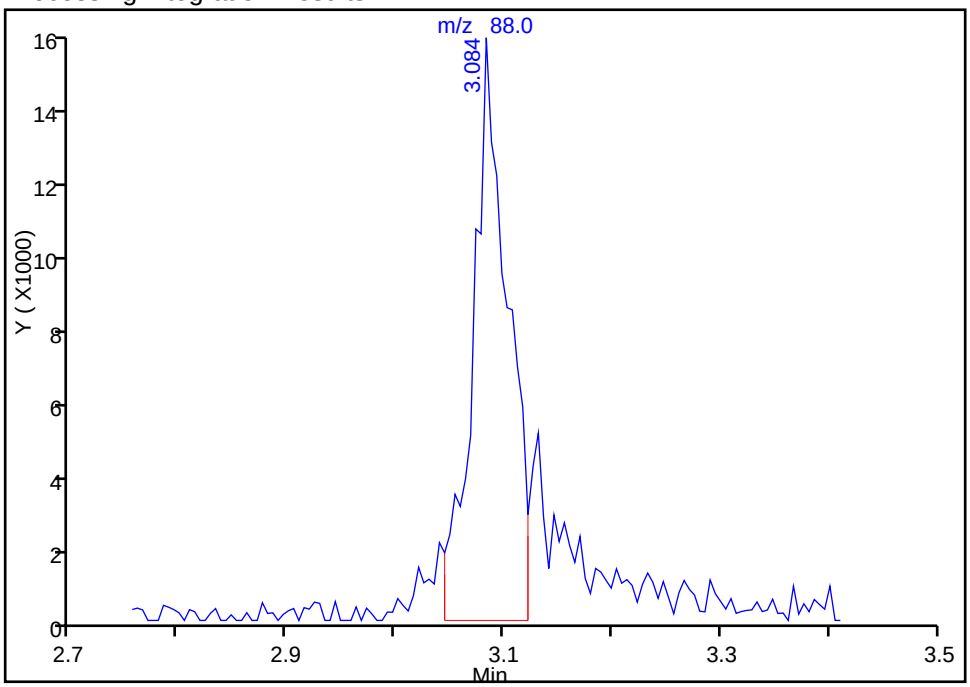
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420003.D				
Injection Date:	20-Apr-2015 09:14:30	Instrument ID:	A4HP9		
Lims ID:	std4 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

25 1,4-Dioxane, CAS: 123-91-1

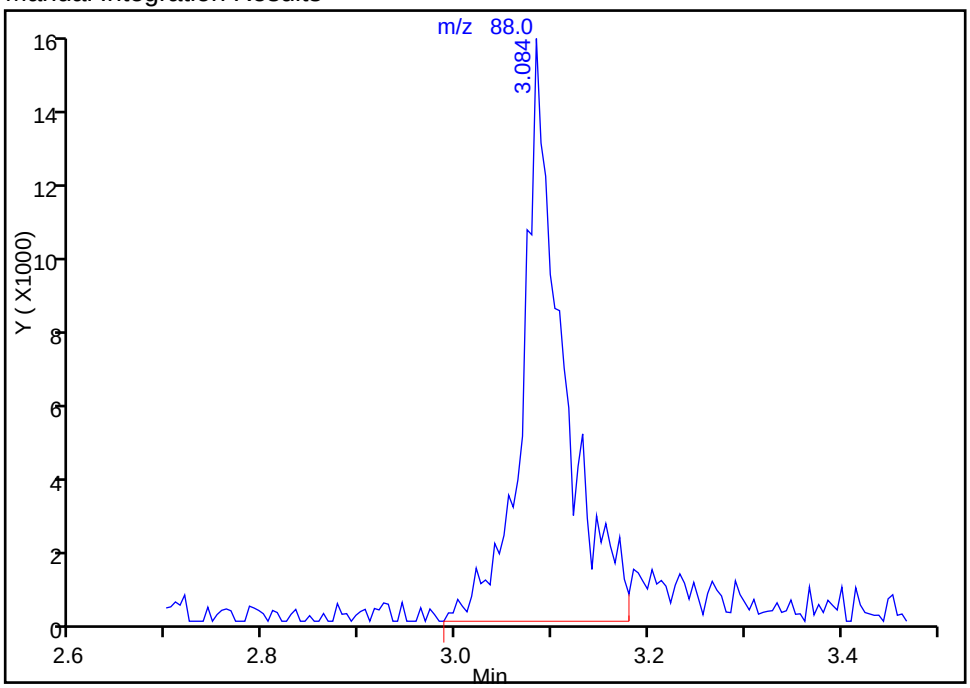
Processing Integration Results

RT: 3.08
Area: 35498
Amount: 1.725994
Amount Units: ng/ul



Manual Integration Results

RT: 3.08
Area: 46428
Amount: 1.767662
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 09:44:39
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

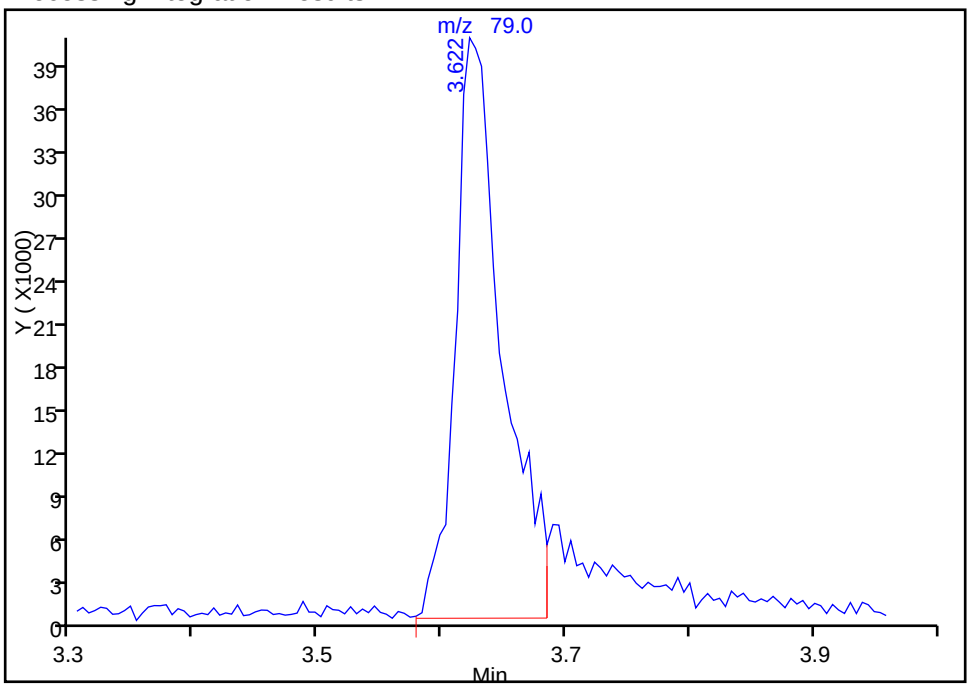
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420003.D
Injection Date: 20-Apr-2015 09:14:30 Instrument ID: A4HP9
Lims ID: std4 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

27 Pyridine, CAS: 110-86-1

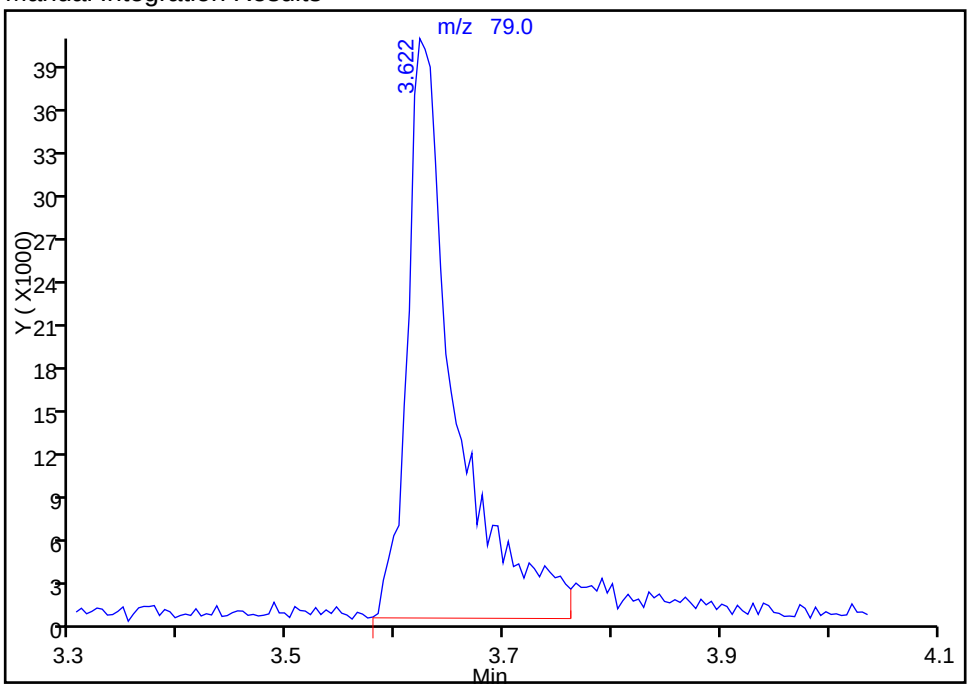
Processing Integration Results

RT: 3.62
Area: 106161
Amount: 1.856993
Amount Units: ng/ul



Manual Integration Results

RT: 3.62
Area: 122879
Amount: 1.742310
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 09:44:39
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

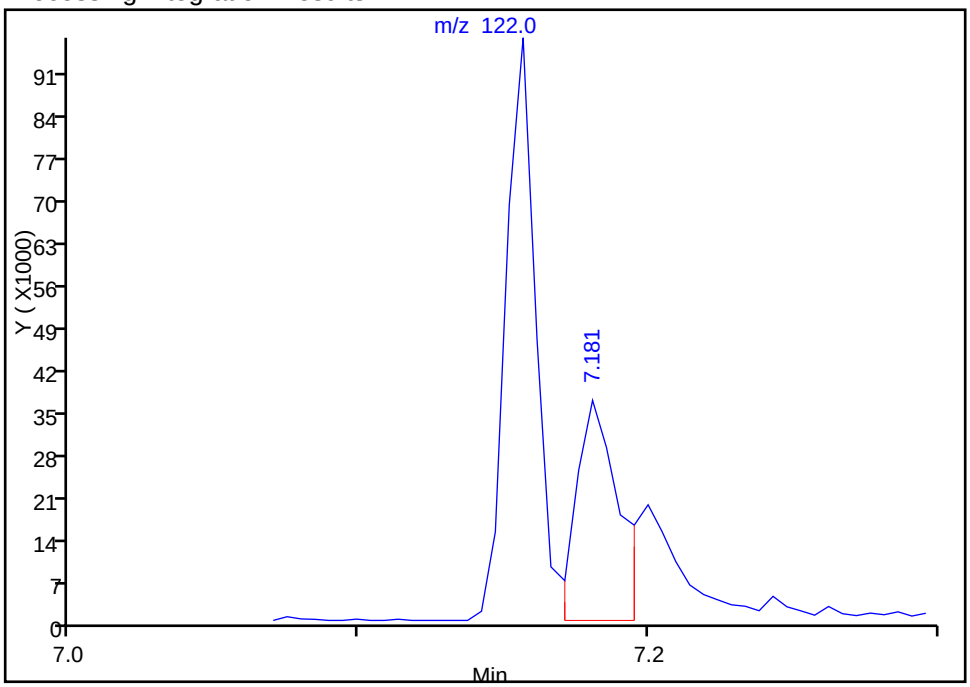
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420003.D				
Injection Date:	20-Apr-2015 09:14:30	Instrument ID:	A4HP9		
Lims ID:	std4 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

71 Benzoic acid, CAS: 65-85-0

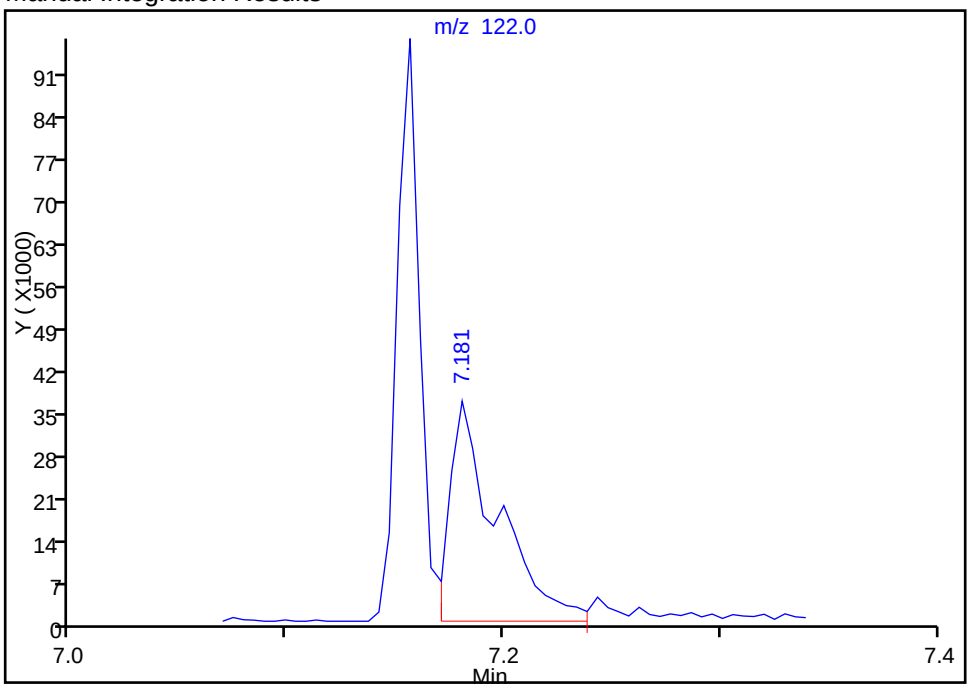
Processing Integration Results

RT: 7.18
Area: 37401
Amount: 2.475249
Amount Units: ng/ul



Manual Integration Results

RT: 7.18
Area: 55684
Amount: 3.675470
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 09:44:39
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Report Date: 21-Apr-2015 07:00:54 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420004.D
Lims ID: std3 lst1
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 20-Apr-2015 09:40:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042708-004
Misc. Info.: STD3 LST1STD3 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-Apr-2015 07:00:53 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: ulmanm Date: 20-Apr-2015 10:06:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.381	6.378	0.003	96	138388	4.00	4.00	
* 2 Naphthalene-d8	136	7.496	7.494	0.002	98	450150	4.00	4.00	
* 3 Acenaphthene-d10	164	9.002	9.004	-0.002	93	270453	4.00	4.00	
* 4 Phenanthrene-d10	188	10.271	10.273	-0.002	96	488588	4.00	4.00	
* 5 Chrysene-d12	240	12.575	12.572	0.002	97	552095	4.00	4.00	
* 6 Perylene-d12	264	14.359	14.361	-0.002	99	455739	4.00	4.00	
$ 7 2-Fluorophenol	112	5.164	5.162	0.002	93	44846	1.00	0.8803	
$ 8 Phenol-d5	99	6.010	6.013	-0.003	95	81474	1.00	1.07	
$ 9 Nitrobenzene-d5	82	6.852	6.854	-0.002	85	100203	1.00	1.22	
$ 10 2-Fluorobiphenyl (Surr)	172	8.400	8.398	0.002	99	89117	1.00	0.9801	
$ 11 2,4,6-Tribromophenol	330	9.670	9.672	-0.002	80	10068	1.00	1.01	
$ 12 Terphenyl-d14	244	11.598	11.601	-0.003	99	119323	1.00	1.06	
25 1,4-Dioxane	88	3.072	3.079	-0.007	91	28154	1.00	0.9586	M
26 N-Nitrosodimethylamine	74	3.558	3.560	-0.002	91	49598	1.00	1.01	
27 Pyridine	79	3.616	3.618	-0.002	93	78404	1.00	0.99	
41 Benzaldehyde	77	5.982	5.984	-0.002	87	134461	2.00	2.33	
43 Phenol	94	6.025	6.027	-0.002	96	88772	1.00	1.07	
44 Aniline	93	6.073	6.075	-0.002	94	110321	1.00	1.07	
69 Bis(2-chloroethyl)ether	93	6.116	6.114	0.002	95	71684	1.00	1.04	
46 2-Chlorophenol	128	6.193	6.196	-0.003	87	49226	1.00	1.02	
243 n-Decane	57	6.222	6.224	-0.002	97	68100	NC	NC	
47 1,3-Dichlorobenzene	146	6.337	6.335	0.002	87	53223	1.00	1.02	
48 1,4-Dichlorobenzene	146	6.395	6.398	-0.003	89	54926	1.00	1.04	
49 Benzyl alcohol	108	6.477	6.474	0.003	86	39819	1.00	1.02	
50 1,2-Dichlorobenzene	146	6.535	6.537	-0.002	85	50376	1.00	1.02	
51 2-Methylphenol	108	6.564	6.566	-0.002	91	55709	1.00	1.04	
53 2,2'-oxybis[1-chloropropan	45	6.597	6.595	0.002	97	64371	1.00	1.14	
52 Indene	115	6.612	6.614	-0.002	88	203257	2.00	2.09	
21 3 & 4 Methylphenol	108	6.689	6.691	-0.002	93	60636	1.00	1.07	
57 N-Nitrosodi-n-propylamine	70	6.708	6.705	0.003	97	64956	1.00	1.09	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.717	6.715	0.002	87	86292	1.00	1.05	
61 Hexachloroethane	117	6.842	6.840	0.002	91	24650	1.00	0.9786	
62 Nitrobenzene	77	6.871	6.869	0.002	82	89165	1.00	1.18	
64 Isophorone	82	7.073	7.071	0.002	97	132684	1.00	1.04	
66 2-Nitrophenol	139	7.150	7.153	-0.003	80	20385	1.00	0.9753	
65 2,4-Dimethylphenol	107	7.155	7.157	-0.002	94	57805	1.00	1.04	
71 Benzoic acid	122	7.179	7.196	-0.017	84	23148	2.00	2.30	
70 Bis(2-chloroethoxy)methane	93	7.232	7.234	-0.002	97	63225	1.00	0.9828	
73 2,4-Dichlorophenol	162	7.352	7.354	-0.002	92	32457	1.00	0.9717	
74 1,2,4-Trichlorobenzene	180	7.439	7.441	-0.002	90	37301	1.00	1.01	
75 Naphthalene	128	7.511	7.513	-0.002	95	122125	1.00	1.02	
76 4-Chloroaniline	127	7.530	7.532	-0.002	88	50525	1.00	0.9620	
77 2,6-Dichlorophenol	162	7.549	7.552	-0.003	89	33065	1.00	1.01	
79 Hexachlorobutadiene	225	7.617	7.619	-0.002	94	26546	1.00	1.07	
84 Caprolactam	113	7.799	7.807	-0.008	83	27278	2.00	1.94	
86 4-Chloro-3-methylphenol	107	7.920	7.922	-0.002	89	43072	1.00	0.9165	
87 2-Methylnaphthalene	142	8.102	8.105	-0.003	88	77680	1.00	0.9835	
88 1-Methylnaphthalene	142	8.189	8.191	-0.002	89	62239	1.00	0.9295	
89 Hexachlorocyclopentadiene	237	8.247	8.244	0.003	95	25705	1.00	1.02	
91 1,2,4,5-Tetrachlorobenzene	216	8.247	8.249	-0.002	97	39289	1.00	1.01	
92 2,4,6-Trichlorophenol	196	8.328	8.331	-0.003	92	25449	1.00	0.9790	
93 2,4,5-Trichlorophenol	196	8.362	8.364	-0.002	89	26021	1.00	0.9588	
98 1,1'-Biphenyl	154	8.492	8.489	0.003	97	92958	1.00	0.9795	
100 2-Chloronaphthalene	162	8.521	8.523	-0.002	98	69583	1.00	0.9267	
102 2-Nitroaniline	65	8.583	8.581	0.002	73	36760	1.00	0.9659	
105 Dimethyl phthalate	163	8.713	8.715	-0.002	93	85088	1.00	1.01	
106 1,3-Dinitrobenzene	168	8.747	8.749	-0.002	79	10972	1.00	0.8105	
107 2,6-Dinitrotoluene	165	8.771	8.773	-0.002	76	19230	1.00	0.9728	
109 Acenaphthylene	152	8.881	8.884	-0.003	97	110288	1.00	0.9511	
110 3-Nitroaniline	138	8.925	8.927	-0.002	84	20148	1.00	1.02	
111 2,4-Dinitrophenol	184	9.016	9.014	0.002	60	14970	2.00	3.25	M
112 Acenaphthene	153	9.030	9.028	0.002	97	73947	1.00	0.9801	
113 4-Nitrophenol	109	9.035	9.038	-0.003	86	38334	2.00	2.05	
114 2,4-Dinitrotoluene	165	9.122	9.124	-0.002	79	25674	1.00	0.99	
116 Dibenzofuran	168	9.175	9.172	0.003	94	102207	1.00	1.00	
119 2,3,4,6-Tetrachlorophenol	232	9.271	9.268	0.003	80	20309	1.00	0.9294	
121 Diethyl phthalate	149	9.309	9.307	0.002	96	90972	1.00	1.07	
247 Hexadecane	57	9.314	9.316	-0.002	96	61680	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.439	9.442	-0.003	94	46852	1.00	1.07	
125 4-Nitroaniline	138	9.444	9.446	-0.002	75	18232	1.00	0.9552	
126 Fluorene	166	9.468	9.466	0.002	99	86254	1.00	1.00	
128 4,6-Dinitro-2-methylphenol	198	9.478	9.480	-0.002	93	23579	2.00	2.00	
131 N-Nitrosodiphenylamine	169	9.531	9.533	-0.002	98	130359	2.00	1.98	
132 1,2-Diphenylhydrazine	77	9.574	9.576	-0.002	99	136085	1.00	1.00	
133 Azobenzene	77	9.574	9.576	-0.002	95	136330	1.00	1.00	
139 4-Bromophenyl phenyl ether	248	9.862	9.860	0.002	74	24343	1.00	0.9728	
141 Hexachlorobenzene	284	9.954	9.951	0.003	74	25722	1.00	1.04	
142 Atrazine	200	9.954	9.956	-0.002	89	49677	2.00	1.97	
244 n-Octadecane	57	10.093	10.096	-0.003	84	64767	NC	NC	
143 Pentachlorophenol	266	10.103	10.105	-0.002	85	27906	2.00	2.03	
148 Phenanthrene	178	10.295	10.293	0.002	97	128672	1.00	1.00	
149 Anthracene	178	10.338	10.336	0.002	98	127200	1.00	0.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.449	10.451	-0.002	97	110668	1.00	0.9660	
154 Di-n-butyl phthalate	149	10.694	10.692	0.002	100	121845	1.00	0.8492	
159 Fluoranthene	202	11.315	11.312	0.003	99	156263	1.00	1.06	
160 Benzidine	184	11.382	11.384	-0.002	99	149760	2.00	1.87	
161 Pyrene	202	11.517	11.519	-0.002	97	164008	1.00	1.08	
168 Butyl benzyl phthalate	149	11.973	11.976	-0.003	91	77170	1.00	1.10	
173 Bis(2-ethylhexyl) phthalat	149	12.464	12.461	0.003	94	92201	1.00	0.9881	
175 3,3'-Dichlorobenzidine	252	12.493	12.495	-0.002	76	100198	2.00	1.99	
177 Benzo[a]anthracene	228	12.560	12.562	-0.002	97	157819	1.00	1.02	
178 Chrysene	228	12.599	12.601	-0.002	95	143418	1.00	1.01	
180 Di-n-octyl phthalate	149	13.128	13.125	0.003	99	159946	1.00	1.00	
182 Benzo[b]fluoranthene	252	13.796	13.803	-0.007	95	134018	1.00	0.9759	
183 Benzo[k]fluoranthene	252	13.830	13.837	-0.007	96	138809	1.00	1.00	
184 Benzo[a]pyrene	252	14.277	14.279	-0.002	77	128202	1.00	0.9778	
188 Indeno[1,2,3-cd]pyrene	276	16.297	16.304	-0.007	94	127282	1.00	0.9588	
189 Dibenz(a,h)anthracene	278	16.311	16.313	-0.002	89	107009	1.00	0.9770	M
190 Benzo[g,h,i]perylene	276	16.902	16.910	-0.008	97	111014	1.00	1.01	
S 191 Methyl Phenols,Total	100				0			2.10	
S 245 Total Cresols	100				0			2.10	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L3 W_00005 Amount Added: 1.00 Units: mL

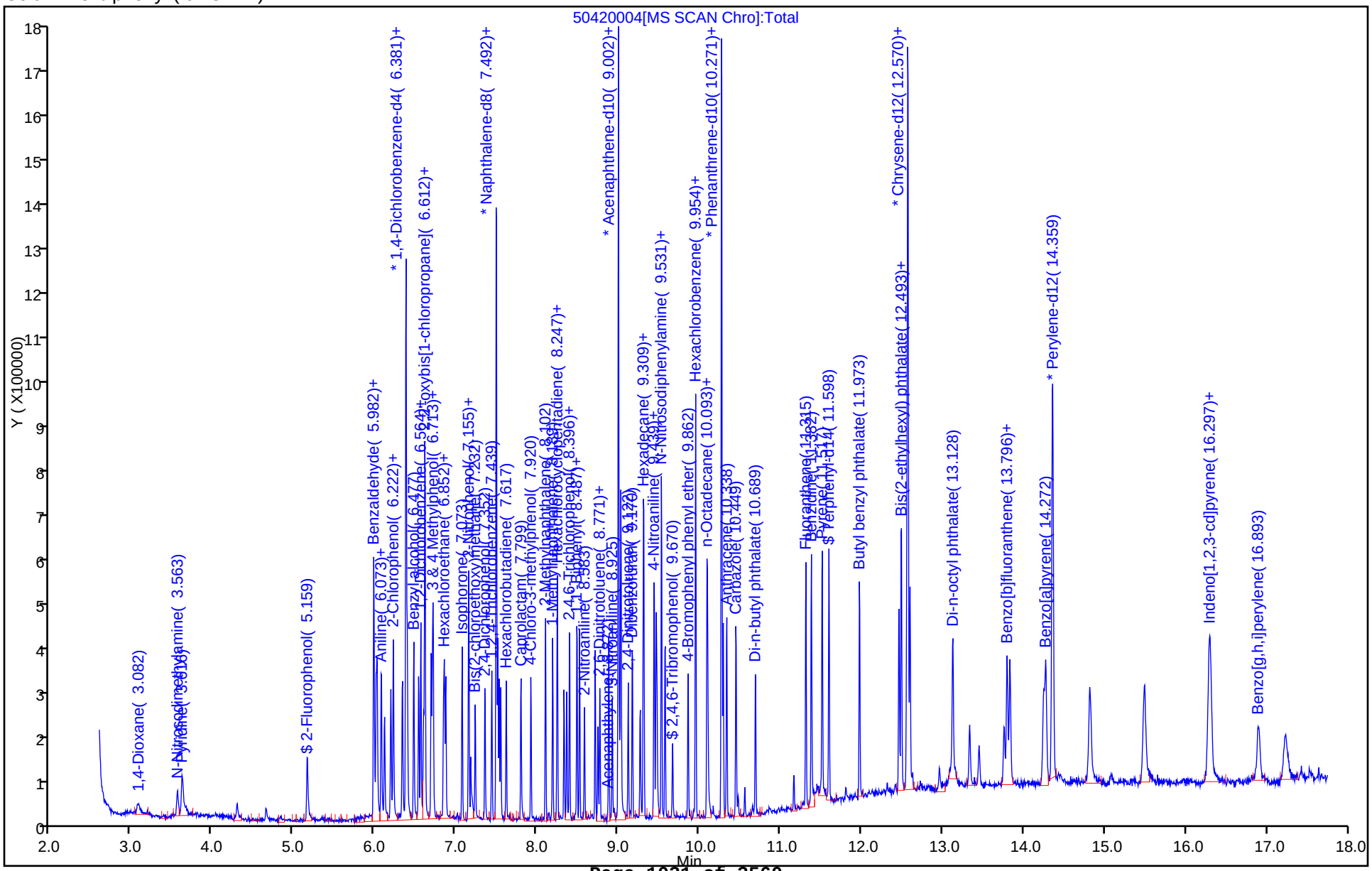
Report Date: 21-Apr-2015 07:00:54 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420004.D

Injection Date:	20-Apr-2015 09:40:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std3 lst1			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

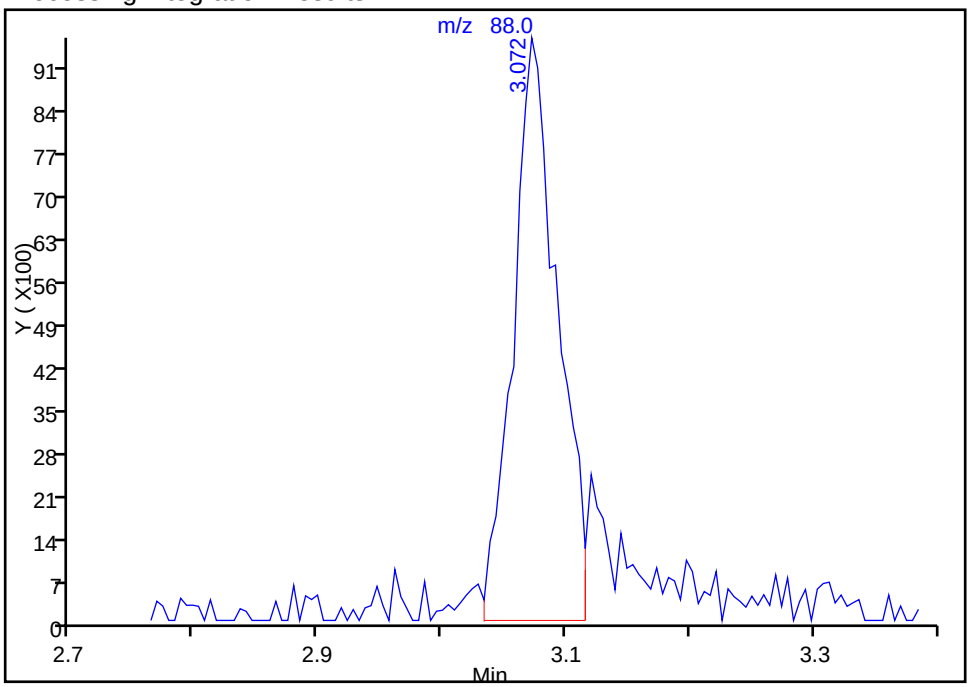
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420004.D				
Injection Date:	20-Apr-2015 09:40:30	Instrument ID:	A4HP9		
Lims ID:	std3 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

25 1,4-Dioxane, CAS: 123-91-1

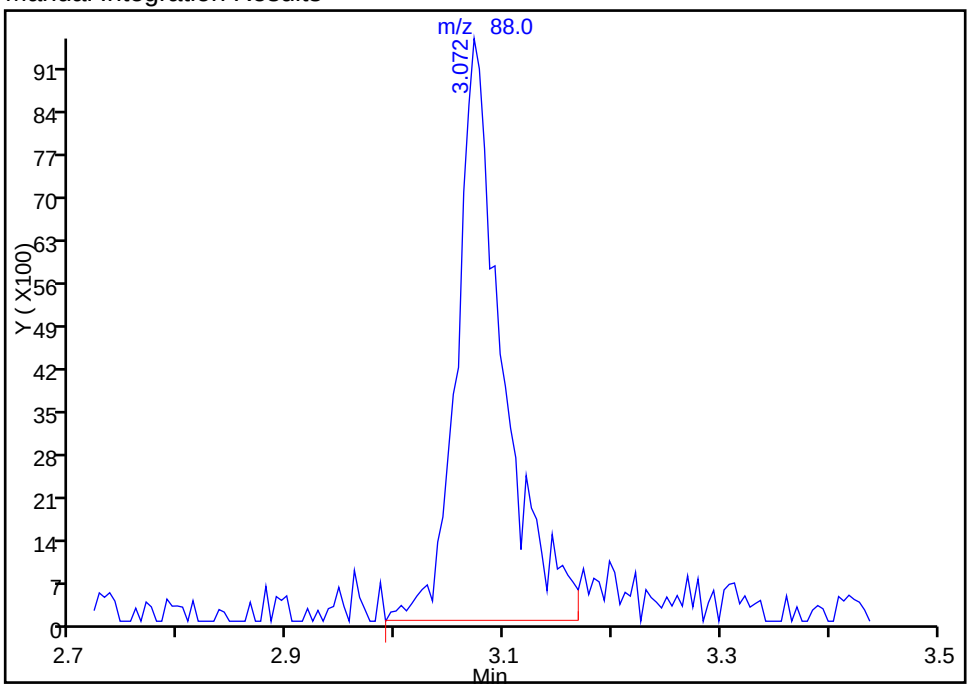
Processing Integration Results

RT: 3.07
Area: 23919
Amount: 0.943832
Amount Units: ng/ul



Manual Integration Results

RT: 3.07
Area: 28154
Amount: 0.958570
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 10:06:37
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

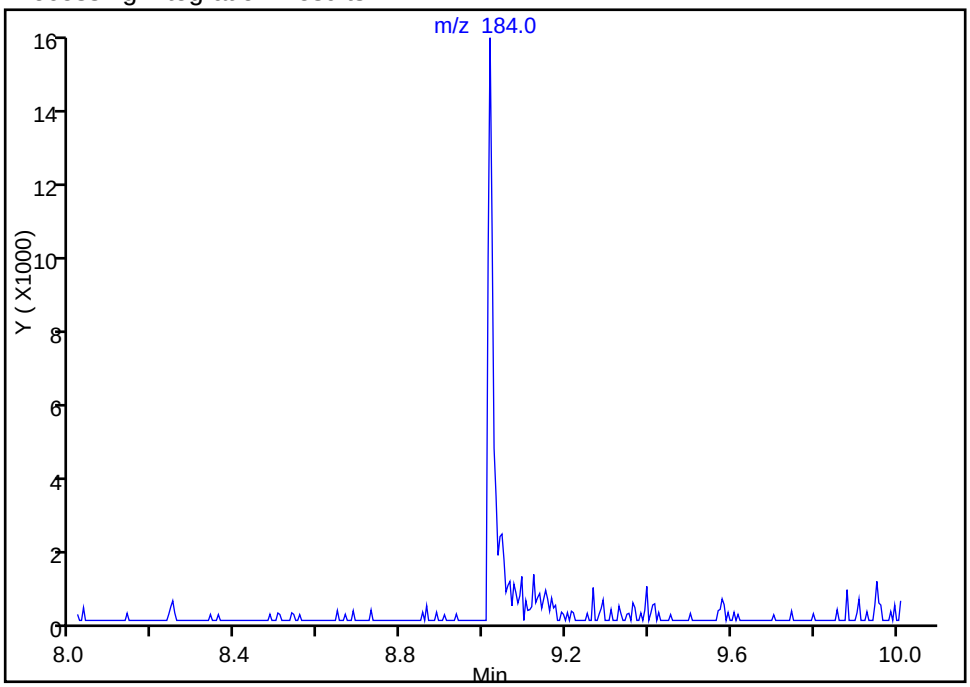
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420004.D
Injection Date: 20-Apr-2015 09:40:30 Instrument ID: A4HP9
Lims ID: std3 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

111 2,4-Dinitrophenol, CAS: 51-28-5

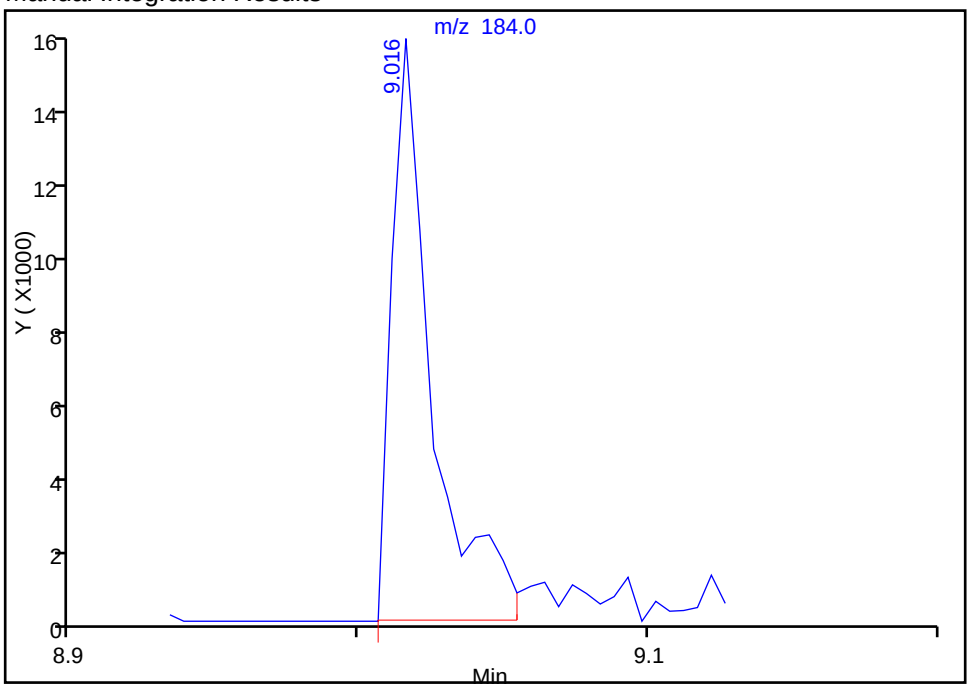
Not Detected
Expected RT: 9.01

Processing Integration Results



Manual Integration Results

RT: 9.02
Area: 14970
Amount: 3.251581
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 10:06:37
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

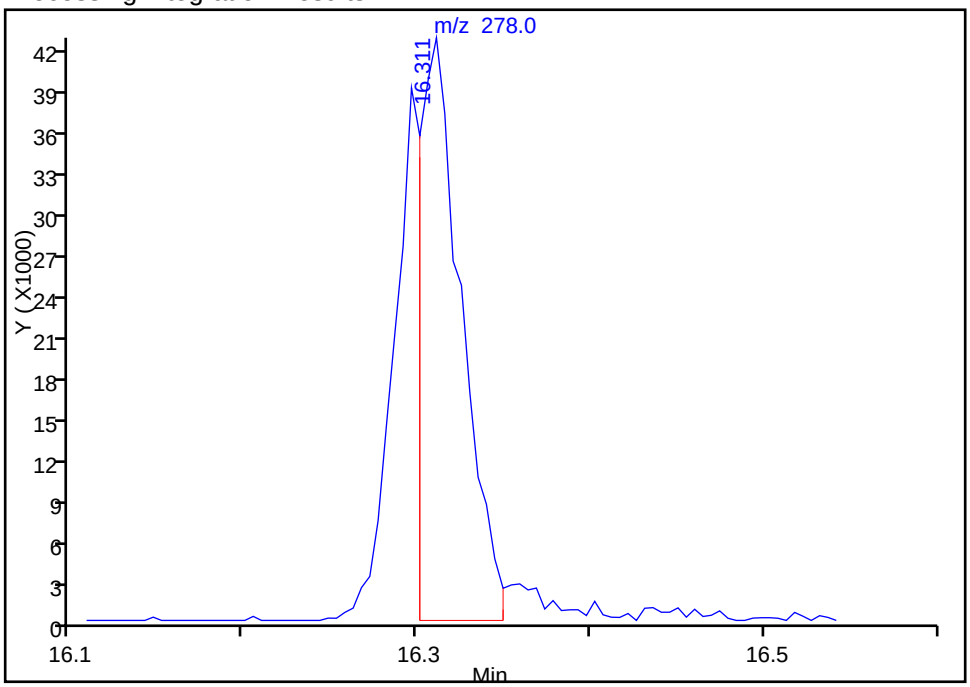
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420004.D				
Injection Date:	20-Apr-2015 09:40:30	Instrument ID:	A4HP9		
Lims ID:	std3 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

189 Dibenz(a,h)anthracene, CAS: 53-70-3

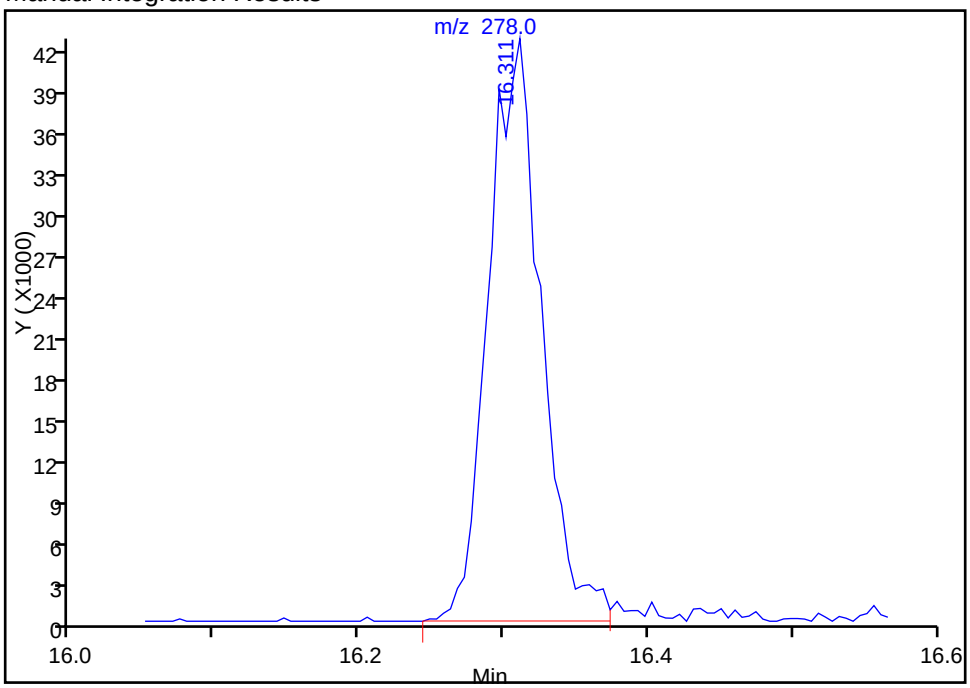
Processing Integration Results

RT: 16.31
Area: 70861
Amount: 0.758018
Amount Units: ng/ul



Manual Integration Results

RT: 16.31
Area: 107009
Amount: 0.976983
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 10:06:37
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Report Date: 21-Apr-2015 07:00:56 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420005.D
Lims ID: std2 lst1
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 20-Apr-2015 10:05:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042708-005
Misc. Info.: STD2 LST1STD2 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-Apr-2015 07:00:56 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: ulmanm Date: 20-Apr-2015 11:55:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.382	6.378	0.004	85	129397	4.00	4.00	
* 2 Naphthalene-d8	136	7.493	7.494	-0.001	98	459343	4.00	4.00	
* 3 Acenaphthene-d10	164	9.003	9.004	-0.001	76	265529	4.00	4.00	
* 4 Phenanthrene-d10	188	10.272	10.273	-0.001	94	578628	4.00	4.00	
* 5 Chrysene-d12	240	12.571	12.572	-0.001	79	597306	4.00	4.00	
* 6 Perylene-d12	264	14.355	14.361	-0.006	98	486942	4.00	4.00	
$ 7 2-Fluorophenol	112	5.166	5.162	0.004	82	22354	0.5000	0.4693	
$ 8 Phenol-d5	99	6.012	6.013	-0.001	71	36942	0.5000	0.5185	
$ 9 Nitrobenzene-d5	82	6.853	6.854	-0.001	84	39795	0.5000	0.4760	
$ 10 2-Fluorobiphenyl (Surr)	172	8.397	8.398	-0.001	94	44021	0.5000	0.4931	
$ 11 2,4,6-Tribromophenol	330	9.671	9.672	-0.001	63	5472	0.5000	0.5565	
$ 12 Terphenyl-d14	244	11.600	11.601	-0.001	96	53965	0.5000	0.4440	
25 1,4-Dioxane	88	3.078	3.079	-0.001	53	12415	0.5000	0.4521	
26 N-Nitrosodimethylamine	74	3.569	3.560	0.009	74	22836	0.5000	0.4983	M
27 Pyridine	79	3.632	3.618	0.014	82	31368	0.5000	0.4254	M
41 Benzaldehyde	77	5.983	5.984	-0.001	82	58929	1.00	1.09	
43 Phenol	94	6.026	6.027	-0.001	75	38586	0.5000	0.4995	
44 Aniline	93	6.074	6.075	-0.001	80	52486	0.5000	0.5468	
69 Bis(2-chloroethyl)ether	93	6.113	6.114	-0.001	86	36164	0.5000	0.5586	
46 2-Chlorophenol	128	6.195	6.196	-0.001	80	24152	0.5000	0.5342	
243 n-Decane	57	6.223	6.224	-0.001	97	33453	NC	NC	
47 1,3-Dichlorobenzene	146	6.334	6.335	-0.001	84	25132	0.5000	0.5139	
48 1,4-Dichlorobenzene	146	6.392	6.398	-0.006	58	24652	0.5000	0.4970	
49 Benzyl alcohol	108	6.474	6.474	0.000	80	17314	0.5000	0.4752	
50 1,2-Dichlorobenzene	146	6.536	6.537	-0.001	80	22513	0.5000	0.4865	
51 2-Methylphenol	108	6.565	6.566	-0.001	77	23011	0.5000	0.4578	
53 2,2'-oxybis[1-chloropropan	45	6.599	6.595	0.004	94	25460	0.5000	0.4803	
52 Indene	115	6.613	6.614	-0.001	69	88266	1.00	0.9684	
21 3 & 4 Methylphenol	108	6.690	6.691	-0.001	87	26169	0.5000	0.4917	
57 N-Nitrosodi-n-propylamine	70	6.704	6.705	-0.001	94	25861	0.5000	0.4647	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.714	6.715	-0.001	77	36798	0.5000	0.4774	
61 Hexachloroethane	117	6.844	6.840	0.004	85	11143	0.5000	0.4731	
62 Nitrobenzene	77	6.868	6.869	-0.001	69	38625	0.5000	0.5003	
64 Isophorone	82	7.070	7.071	-0.001	94	61236	0.5000	0.4693	
66 2-Nitrophenol	139	7.152	7.153	-0.001	80	10624	0.5000	0.4981	
65 2,4-Dimethylphenol	107	7.156	7.157	-0.001	93	27053	0.5000	0.4782	
71 Benzoic acid	122		7.196				ND	ND	
70 Bis(2-chloroethoxy)methane	93	7.233	7.234	-0.001	91	30610	0.5000	0.4663	
73 2,4-Dichlorophenol	162	7.354	7.354	0.000	89	16926	0.5000	0.4966	
74 1,2,4-Trichlorobenzene	180	7.440	7.441	-0.001	88	18960	0.5000	0.5046	
75 Naphthalene	128	7.512	7.513	-0.001	52	61542	0.5000	0.5014	
76 4-Chloroaniline	127	7.531	7.532	-0.001	38	25628	0.5000	0.4782	M
77 2,6-Dichlorophenol	162	7.551	7.552	-0.001	47	16565	0.5000	0.4944	
79 Hexachlorobutadiene	225	7.618	7.619	-0.001	88	12242	0.5000	0.4843	
84 Caprolactam	113	7.796	7.807	-0.011	80	13773	1.00	0.9581	
86 4-Chloro-3-methylphenol	107	7.921	7.922	-0.001	82	23393	0.5000	0.4878	
87 2-Methylnaphthalene	142	8.104	8.105	-0.001	84	37676	0.5000	0.4674	
88 1-Methylnaphthalene	142	8.190	8.191	-0.001	78	32739	0.5000	0.4792	
89 Hexachlorocyclopentadiene	237	8.243	8.244	-0.001	83	11701	0.5000	0.4714	
91 1,2,4,5-Tetrachlorobenzene	216	8.248	8.249	-0.001	91	19527	0.5000	0.5103	
92 2,4,6-Trichlorophenol	196	8.330	8.331	-0.001	82	12282	0.5000	0.4812	
93 2,4,5-Trichlorophenol	196	8.363	8.364	-0.001	85	13589	0.5000	0.5100	
98 1,1'-Biphenyl	154	8.488	8.489	-0.001	97	45100	0.5000	0.4840	
100 2-Chloronaphthalene	162	8.522	8.523	-0.001	97	35914	0.5000	0.4872	
102 2-Nitroaniline	65	8.580	8.581	-0.001	60	17765	0.5000	0.4755	
105 Dimethyl phthalate	163	8.714	8.715	-0.001	92	41236	0.5000	0.4976	
106 1,3-Dinitrobenzene	168	8.748	8.749	-0.001	73	6308	0.5000	0.4746	
107 2,6-Dinitrotoluene	165	8.772	8.773	-0.001	62	10291	0.5000	0.5303	
109 Acenaphthylene	152	8.883	8.884	-0.001	94	54725	0.5000	0.4807	
110 3-Nitroaniline	138	8.926	8.927	-0.001	84	9479	0.5000	0.4899	
111 2,4-Dinitrophenol	184		9.014				ND	ND	
112 Acenaphthene	153	9.027	9.028	-0.001	86	35510	0.5000	0.4794	
113 4-Nitrophenol	109	9.037	9.038	-0.001	83	15982	1.00	0.8702	
114 2,4-Dinitrotoluene	165	9.123	9.124	-0.001	70	11611	0.5000	0.4580	
116 Dibenzofuran	168	9.171	9.172	-0.001	86	48630	0.5000	0.4824	
119 2,3,4,6-Tetrachlorophenol	232	9.267	9.268	-0.001	70	10685	0.5000	0.4980	
121 Diethyl phthalate	149	9.306	9.307	-0.001	92	45657	0.5000	0.5459	
247 Hexadecane	57	9.316	9.316	0.000	93	32331	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.441	9.442	-0.001	87	22361	0.5000	0.5205	
125 4-Nitroaniline	138	9.445	9.446	-0.001	64	9292	0.5000	0.4958	
126 Fluorene	166	9.465	9.466	-0.001	96	45190	0.5000	0.5341	
128 4,6-Dinitro-2-methylphenol	198	9.479	9.480	-0.001	81	8557	1.00	1.10	
131 N-Nitrosodiphenylamine	169	9.532	9.533	-0.001	96	68536	1.00	0.8811	
132 1,2-Diphenylhydrazine	77	9.575	9.576	-0.001	98	68881	0.5000	0.4261	
133 Azobenzene	77	9.575	9.576	-0.001	95	68299	0.5000	0.4225	
139 4-Bromophenyl phenyl ether	248	9.859	9.860	-0.001	72	13116	0.5000	0.4426	
141 Hexachlorobenzene	284	9.950	9.951	-0.001	71	13471	0.5000	0.4616	
142 Atrazine	200	9.955	9.956	-0.001	87	26388	1.00	0.8851	
244 n-Octadecane	57	10.095	10.096	-0.001	67	41682	NC	NC	
143 Pentachlorophenol	266	10.104	10.105	-0.001	61	12090	1.00	1.04	
148 Phenanthrene	178	10.292	10.293	-0.001	61	79088	0.5000	0.5206	
149 Anthracene	178	10.335	10.336	-0.001	98	75943	0.5000	0.5001	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.450	10.451	-0.001	87	67265	0.5000	0.4958	
154 Di-n-butyl phthalate	149	10.691	10.692	-0.001	99	84614	0.5000	0.4979	
159 Fluoranthene	202	11.311	11.312	-0.001	98	83292	0.5000	0.4749	
160 Benzidine	184	11.383	11.384	-0.001	86	64861	1.00	0.7487	
161 Pyrene	202	11.513	11.519	-0.006	96	80367	0.5000	0.4912	
168 Butyl benzyl phthalate	149	11.975	11.976	-0.001	88	34193	0.5000	0.4496	
173 Bis(2-ethylhexyl) phthalat	149	12.460	12.461	-0.001	92	48766	0.5000	0.4830	
175 3,3'-Dichlorobenzidine	252	12.494	12.495	-0.001	47	49655	1.00	0.9123	
177 Benzo[a]anthracene	228	12.557	12.562	-0.005	98	81549	0.5000	0.4859	
178 Chrysene	228	12.600	12.601	-0.001	64	76081	0.5000	0.4960	
180 Di-n-octyl phthalate	149	13.124	13.125	-0.001	97	79206	0.5000	0.4620	
182 Benzo[b]fluoranthene	252	13.793	13.803	-0.011	70	72747	0.5000	0.4958	
183 Benzo[k]fluoranthene	252	13.836	13.837	-0.001	93	69527	0.5000	0.4705	
184 Benzo[a]pyrene	252	14.273	14.279	-0.006	45	70401	0.5000	0.5025	
188 Indeno[1,2,3-cd]pyrene	276	16.303	16.304	-0.001	92	64921	0.5000	0.4577	M
189 Dibenz(a,h)anthracene	278	16.307	16.313	-0.006	70	52913	0.5000	0.4521	M
190 Benzo[g,h,i]perylene	276	16.899	16.910	-0.011	88	58855	0.5000	0.5004	
S 191 Methyl Phenols,Total	100				0			0.9495	
S 245 Total Cresols	100				0			0.9495	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L2 W_00005 Amount Added: 1.00 Units: mL

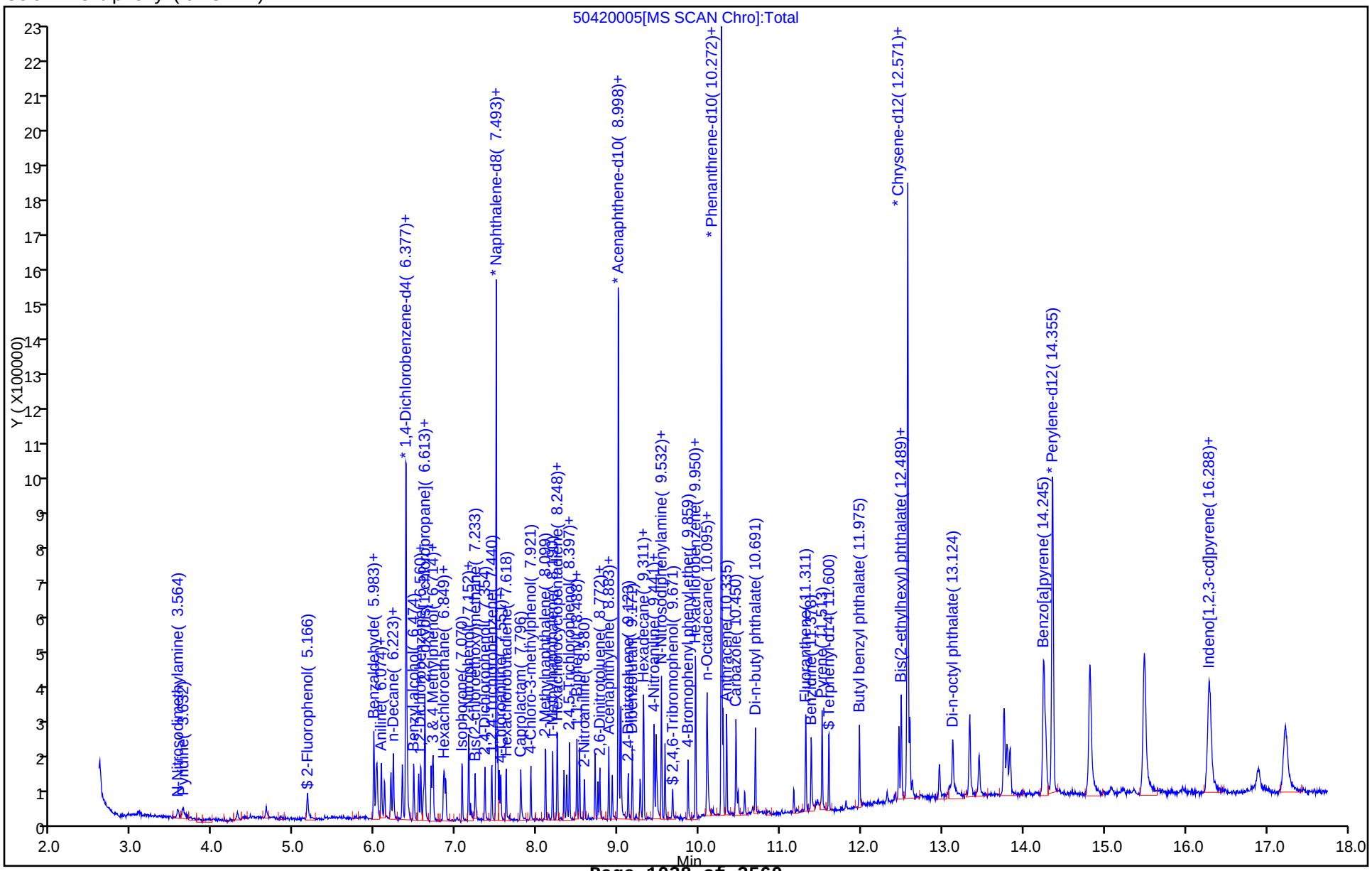
Report Date: 21-Apr-2015 07:00:56 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420005.D

Injection Date:	20-Apr-2015 10:05:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std2 lst1			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

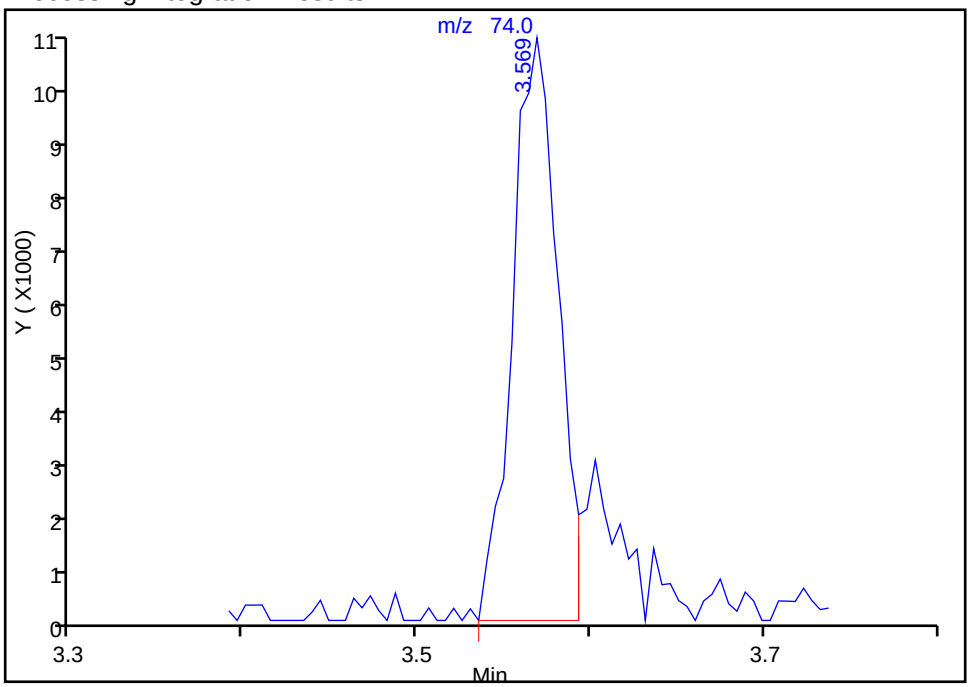
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420005.D				
Injection Date:	20-Apr-2015 10:05:30	Instrument ID:	A4HP9		
Lims ID:	std2 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

26 N-Nitrosodimethylamine, CAS: 62-75-9

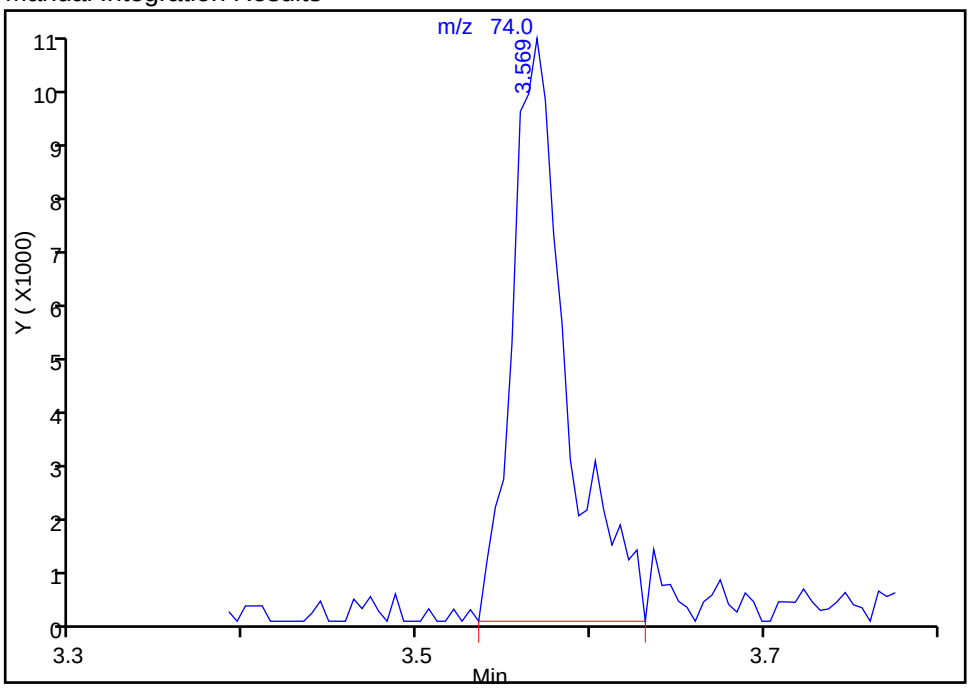
Processing Integration Results

RT: 3.57
Area: 19246
Amount: 0.439810
Amount Units: ng/ul



Manual Integration Results

RT: 3.57
Area: 22836
Amount: 0.498319
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 11:55:28
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

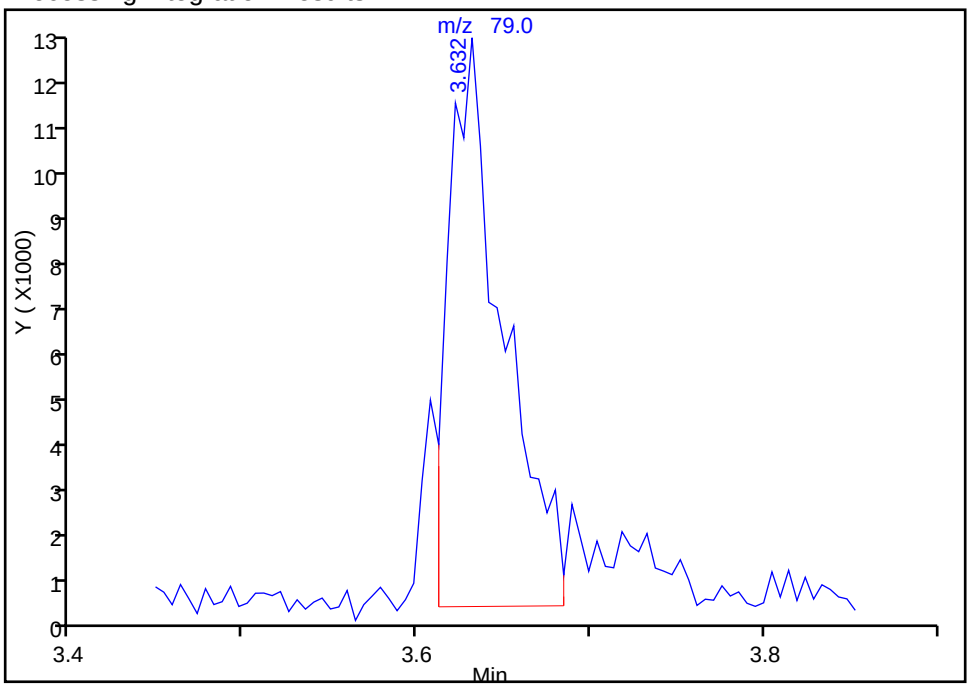
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420005.D
Injection Date: 20-Apr-2015 10:05:30 Instrument ID: A4HP9
Lims ID: std2 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

27 Pyridine, CAS: 110-86-1

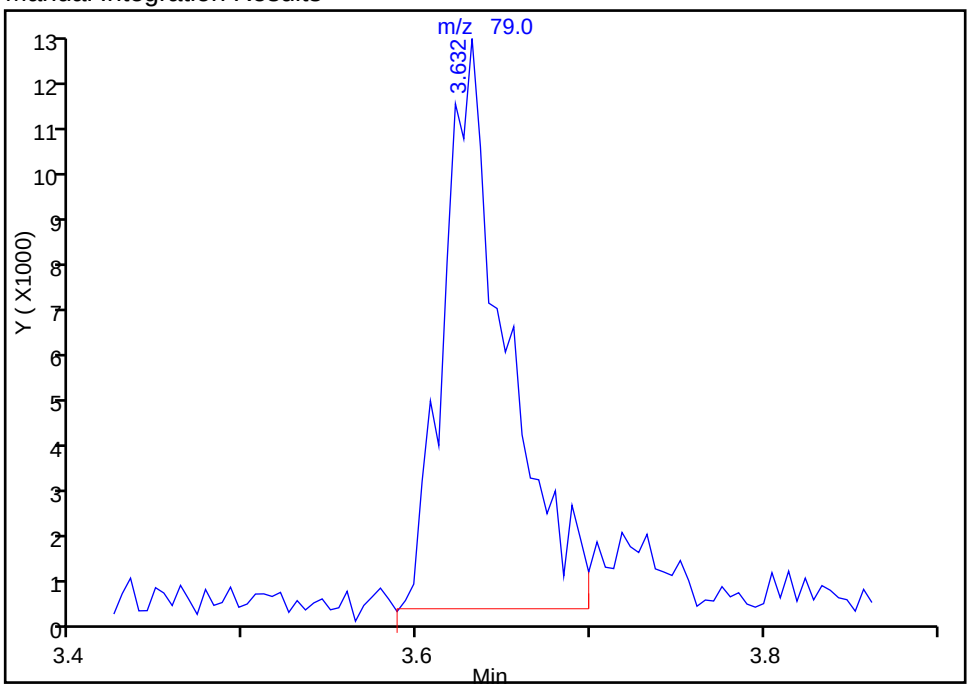
Processing Integration Results

RT: 3.63
Area: 27527
Amount: 0.395983
Amount Units: ng/ul



Manual Integration Results

RT: 3.63
Area: 31368
Amount: 0.425376
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 11:55:28
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

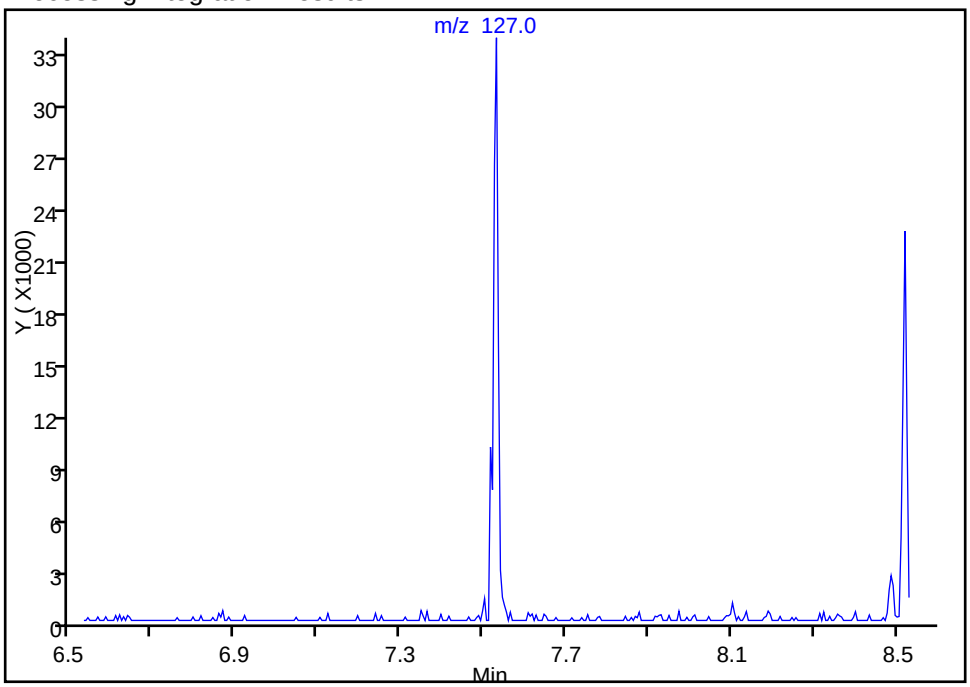
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420005.D				
Injection Date:	20-Apr-2015 10:05:30	Instrument ID:	A4HP9		
Lims ID:	std2 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

76 4-Chloroaniline, CAS: 106-47-8

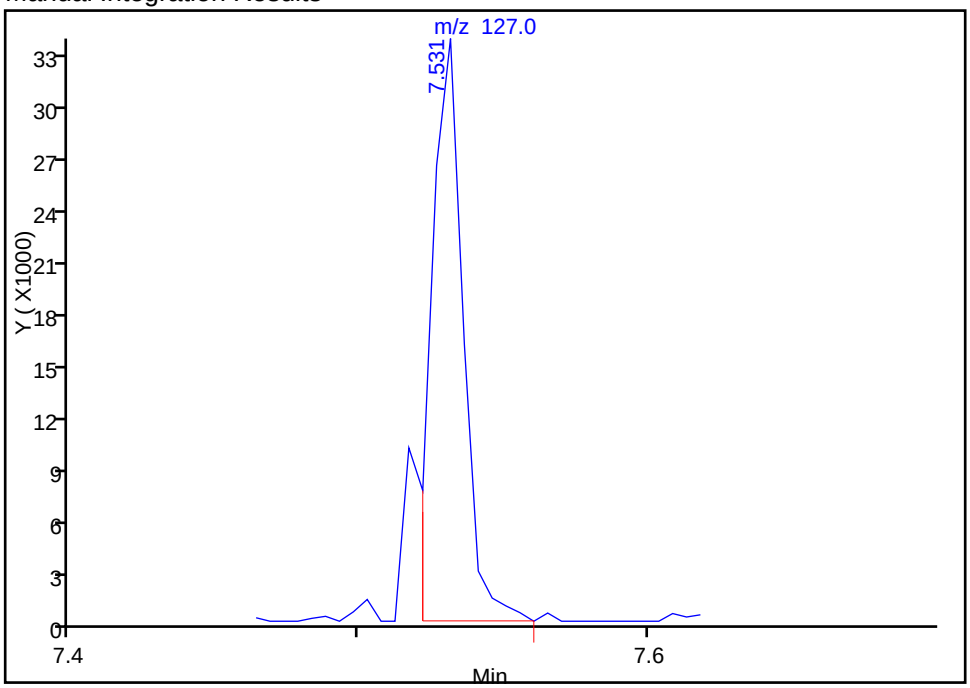
Not Detected
Expected RT: 7.53

Processing Integration Results



Manual Integration Results

RT: 7.53
Area: 25628
Amount: 0.478214
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 11:55:28
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

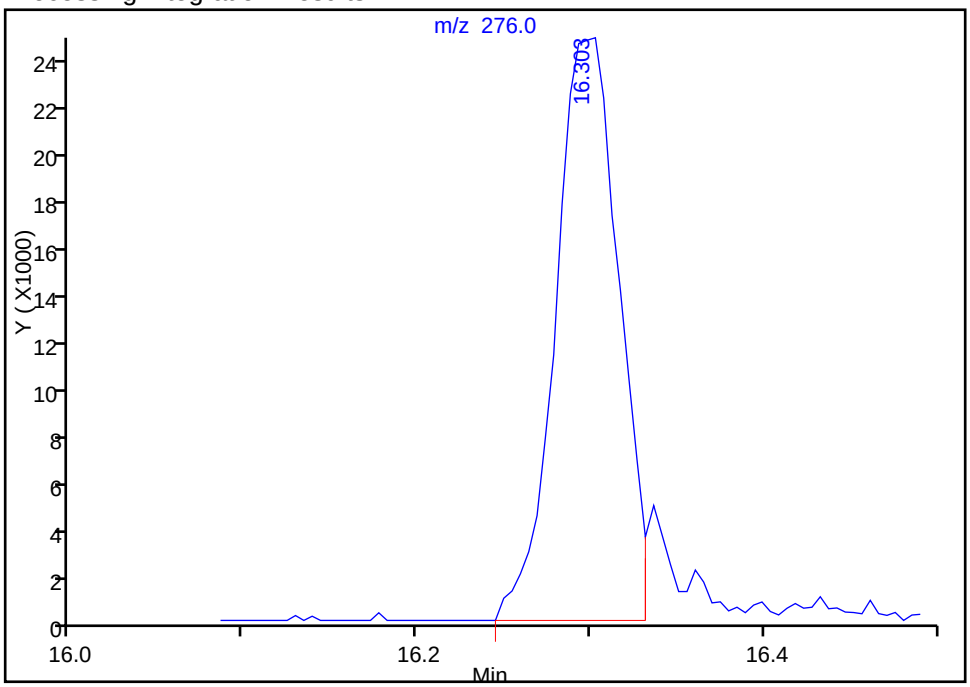
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420005.D				
Injection Date:	20-Apr-2015 10:05:30	Instrument ID:	A4HP9		
Lims ID:	std2 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

188 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

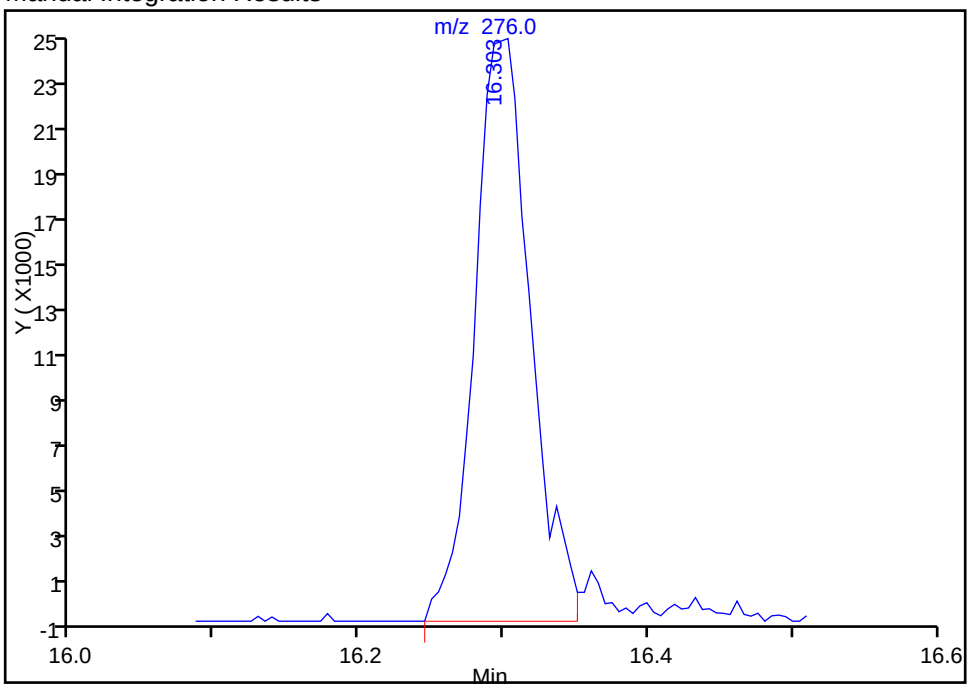
Processing Integration Results

RT: 16.30
Area: 61502
Amount: 0.454721
Amount Units: ng/ul



Manual Integration Results

RT: 16.30
Area: 64921
Amount: 0.457702
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 11:55:28
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

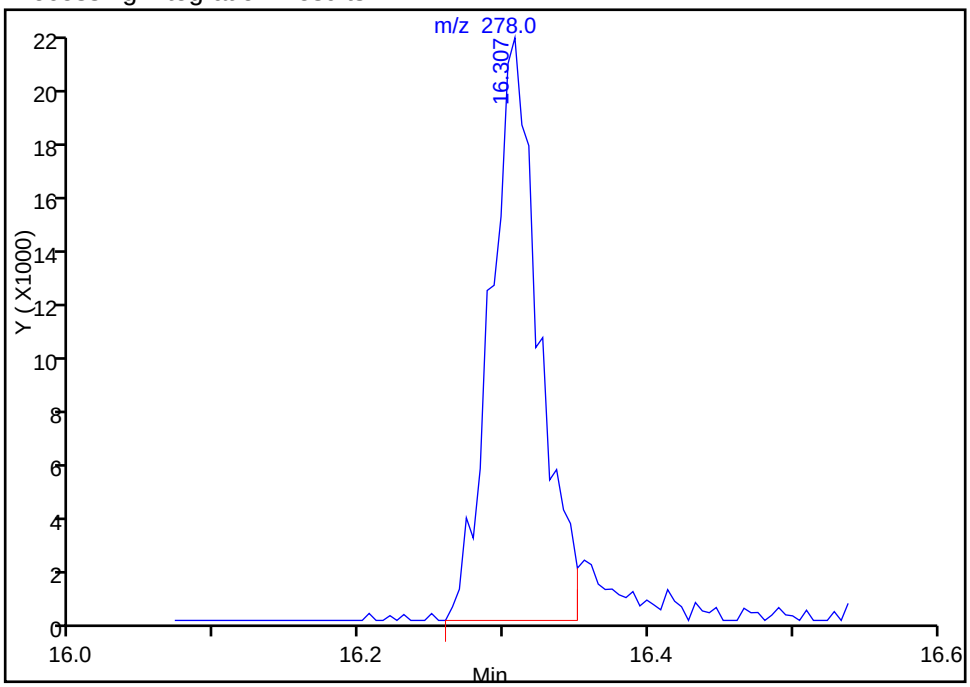
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420005.D				
Injection Date:	20-Apr-2015 10:05:30	Instrument ID:	A4HP9		
Lims ID:	std2 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

189 Dibenz(a,h)anthracene, CAS: 53-70-3

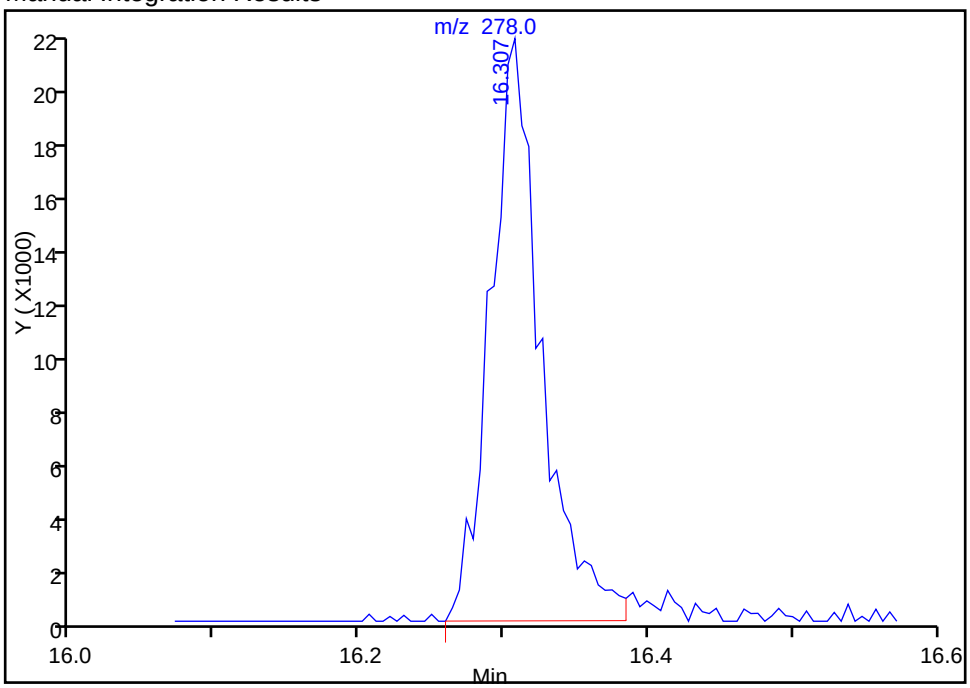
Processing Integration Results

RT: 16.31
Area: 50195
Amount: 0.450179
Amount Units: ng/ul



Manual Integration Results

RT: 16.31
Area: 52913
Amount: 0.452135
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 11:55:28
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Report Date: 21-Apr-2015 07:00:59 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420006.D
Lims ID: std1 lst1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 20-Apr-2015 10:31:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042708-006
Misc. Info.: STD1 LST1STD1 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-Apr-2015 07:00:58 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: ulmanm Date: 20-Apr-2015 11:57:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.378	6.378	0.000	93	131933	4.00	4.00	
* 2 Naphthalene-d8	136	7.494	7.494	0.000	98	519472	4.00	4.00	
* 3 Acenaphthene-d10	164	8.999	9.004	-0.005	92	282727	4.00	4.00	
* 4 Phenanthrene-d10	188	10.273	10.273	0.000	99	497649	4.00	4.00	
* 5 Chrysene-d12	240	12.572	12.572	0.000	97	570972	4.00	4.00	
* 6 Perylene-d12	264	14.356	14.361	-0.005	99	471088	4.00	4.00	
$ 9 Nitrobenzene-d5	82	6.854	6.854	0.000	83	9007	0.1000	0.0953	
$ 10 2-Fluorobiphenyl (Surr)	172	8.398	8.398	0.000	98	11882	0.1000	0.1250	
$ 12 Terphenyl-d14	244	11.601	11.601	0.000	97	13421	0.1000	0.1155	
75 Naphthalene	128	7.513	7.513	0.000	95	15960	0.1000	0.1150	
87 2-Methylnaphthalene	142	8.100	8.105	-0.005	95	10845	0.1000	0.1190	
88 1-Methylnaphthalene	142	8.191	8.191	0.000	83	8731	0.1000	0.1130	
98 1,1'-Biphenyl	154	8.489	8.489	0.000	95	12497	0.1000	0.1260	
100 2-Chloronaphthalene	162	8.523	8.523	0.000	97	9895	0.1000	0.1261	
109 Acenaphthylene	152	8.884	8.884	0.000	93	13045	0.1000	0.1076	
112 Acenaphthene	153	9.028	9.028	0.000	95	9215	0.1000	0.1168	
116 Dibenzofuran	168	9.172	9.172	0.000	94	11304	0.1000	0.1053	
126 Fluorene	166	9.465	9.466	-0.001	94	9681	0.1000	0.1075	
141 Hexachlorobenzene	284	9.951	9.951	0.000	74	2911	0.1000	0.1160	
148 Phenanthrene	178	10.293	10.293	0.000	97	14773	0.1000	0.1131	
149 Anthracene	178	10.336	10.336	0.000	97	13820	0.1000	0.1058	
159 Fluoranthene	202	11.312	11.312	0.000	96	13563	0.1000	0.0899	
161 Pyrene	202	11.514	11.519	-0.005	93	14841	0.1000	0.0949	
177 Benzo[a]anthracene	228	12.562	12.562	0.000	85	18614	0.1000	0.1160	
178 Chrysene	228	12.596	12.601	-0.005	93	16089	0.1000	0.1097	
182 Benzo[b]fluoranthene	252	13.798	13.803	-0.005	55	16357	0.1000	0.1152	
183 Benzo[k]fluoranthene	252	13.832	13.837	-0.005	92	15132	0.1000	0.1058	
184 Benzo[a]pyrene	252	14.269	14.279	-0.010	67	13667	0.1000	0.1008	
188 Indeno[1,2,3-cd]pyrene	276	16.299	16.304	-0.005	48	14509	0.1000	0.1057	M
189 Dibenz(a,h)anthracene	278	16.313	16.313	0.000	43	12210	0.1000	0.1078	M

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
190 Benzo[g,h,i]perylene	276	16.895	16.910	-0.015	65	13582	0.1000	0.1194	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L1 W_00005 Amount Added: 1.00 Units: mL

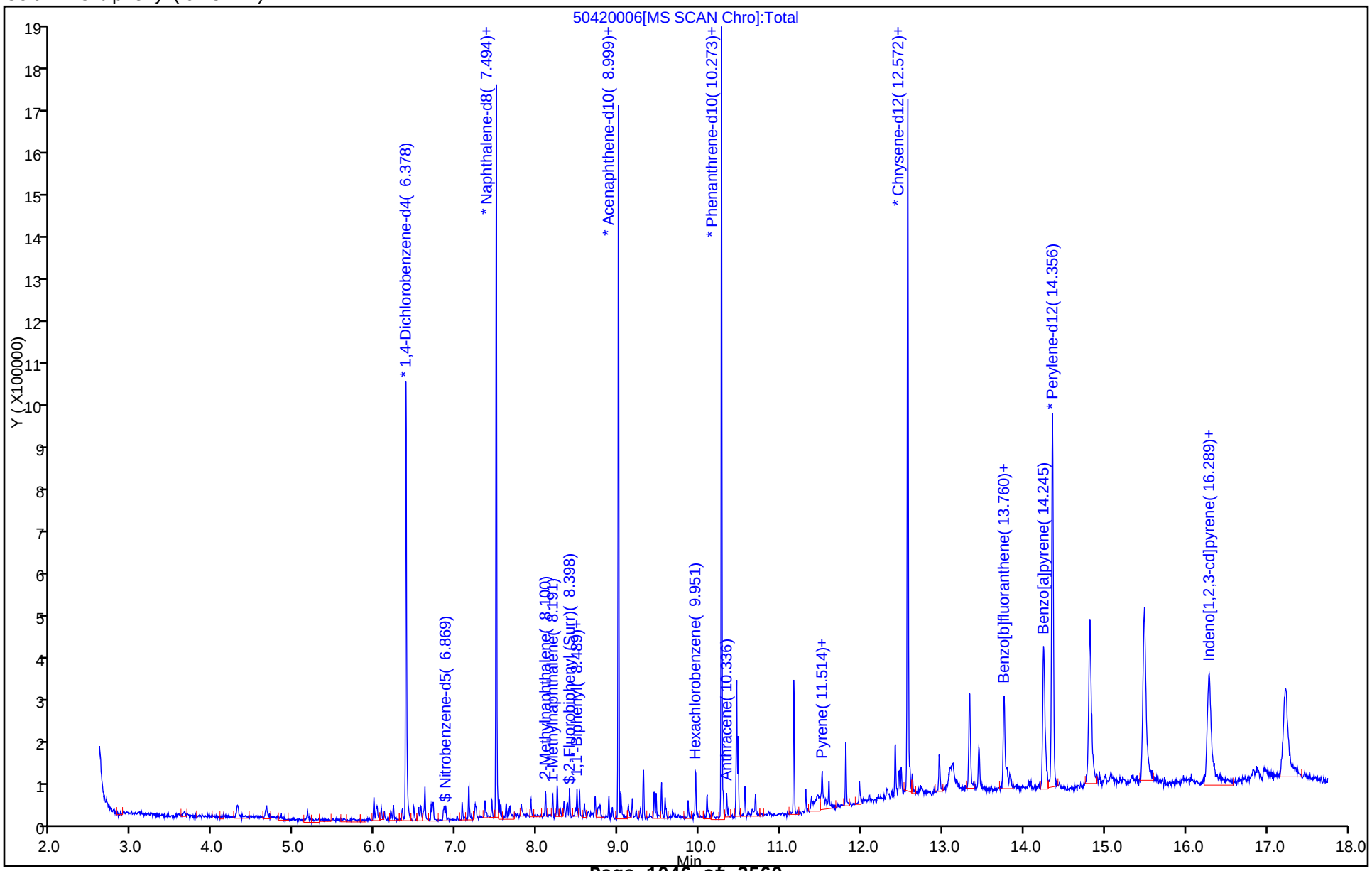
Report Date: 21-Apr-2015 07:00:59 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420006.D

Injection Date:	20-Apr-2015 10:31:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std1 lst1			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



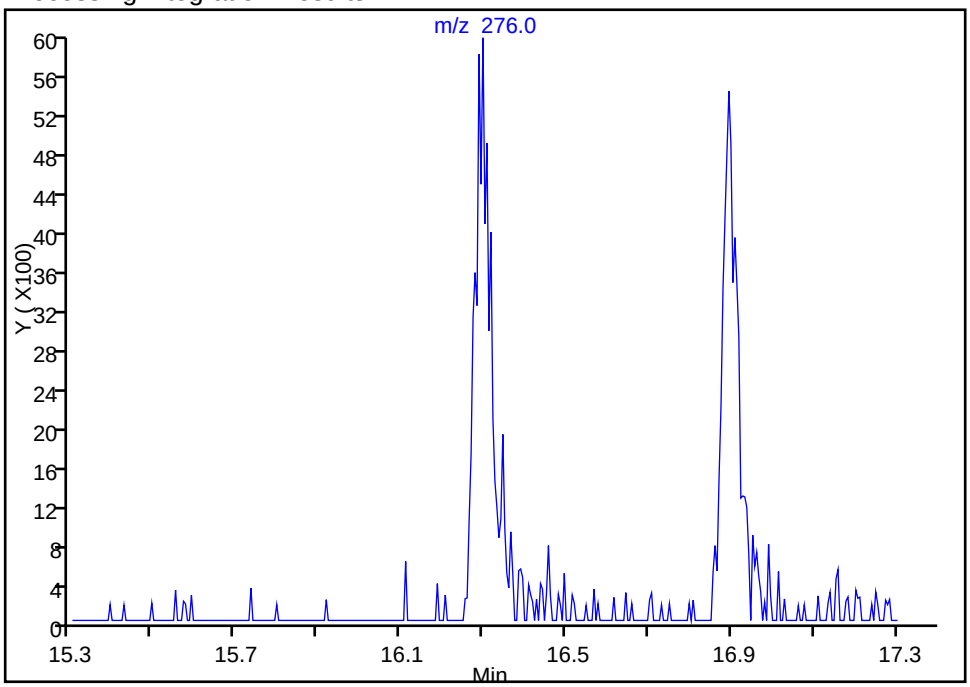
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420006.D
Injection Date: 20-Apr-2015 10:31:30 Instrument ID: A4HP9
Lims ID: std1 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

188 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

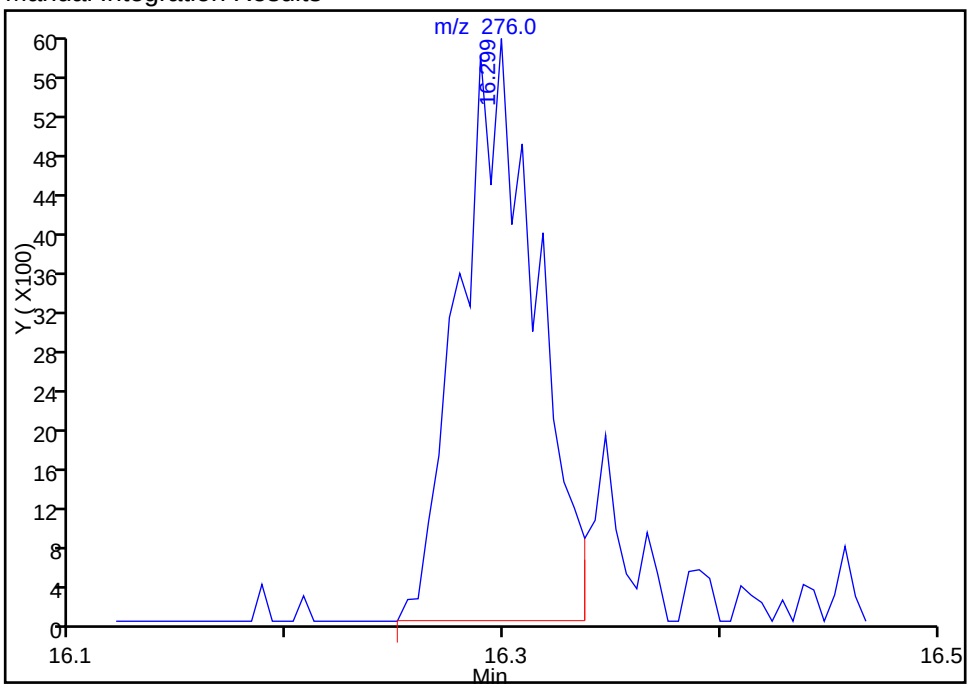
Not Detected
Expected RT: 16.30

Processing Integration Results



Manual Integration Results

RT: 16.30
Area: 14509
Amount: 0.105733
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 11:57:22
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

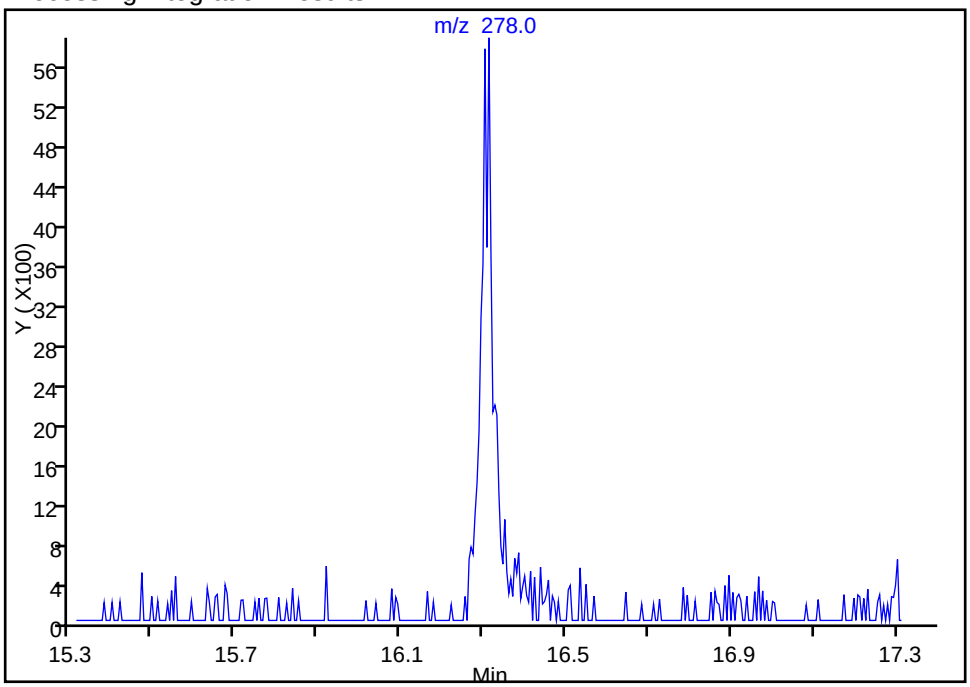
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420006.D				
Injection Date:	20-Apr-2015 10:31:30	Instrument ID:	A4HP9		
Lims ID:	std1 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

189 Dibenz(a,h)anthracene, CAS: 53-70-3

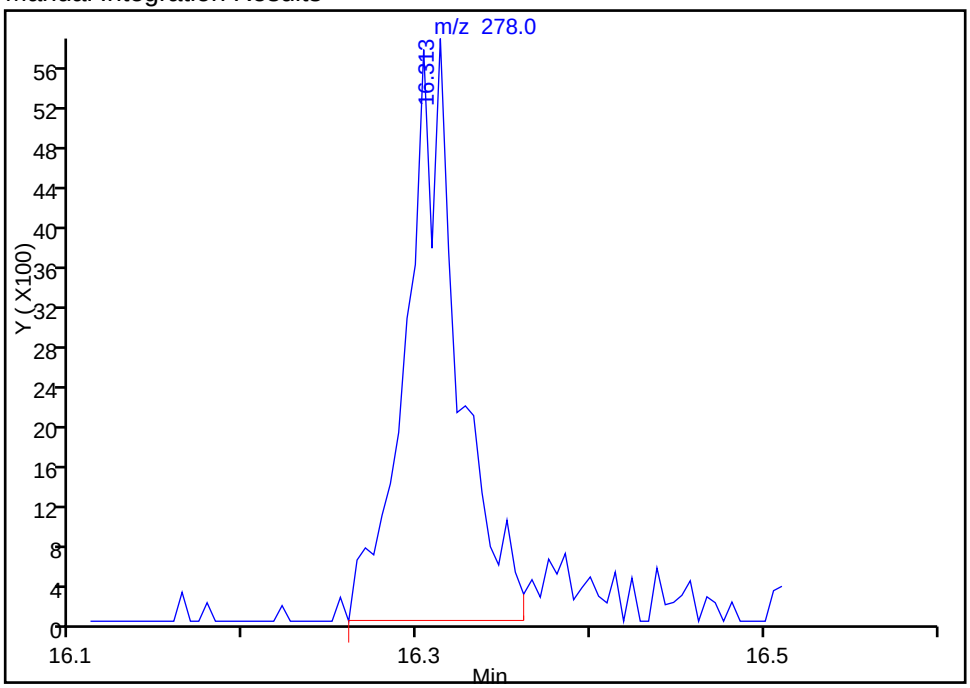
Not Detected
Expected RT: 16.31

Processing Integration Results



Manual Integration Results

RT: 16.31
Area: 12210
Amount: 0.107844
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 11:57:22
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

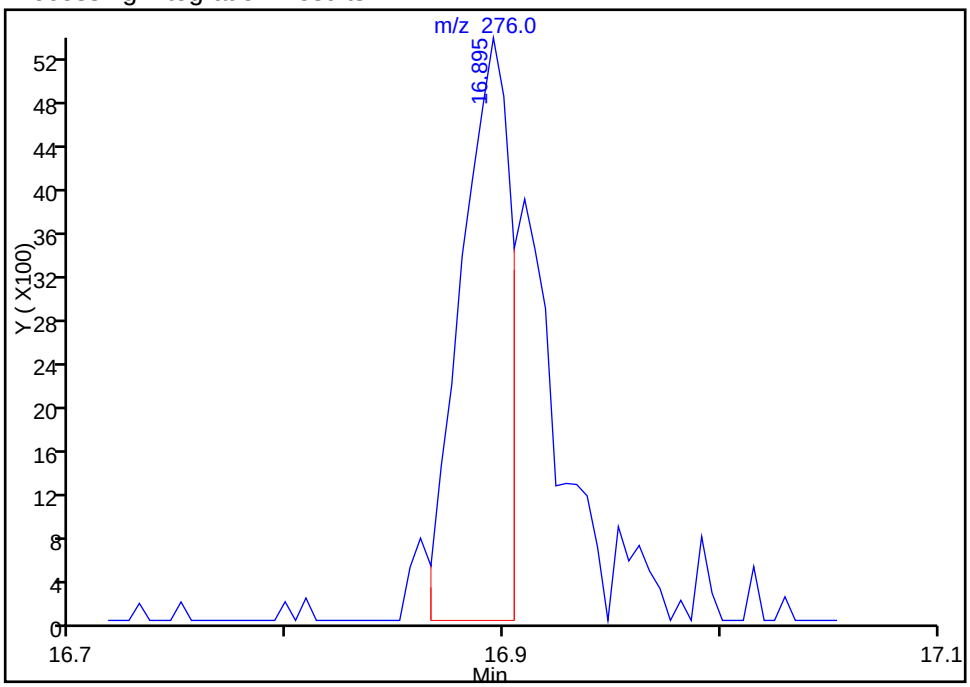
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420006.D
Injection Date: 20-Apr-2015 10:31:30 Instrument ID: A4HP9
Lims ID: std1 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

190 Benzo[g,h,i]perylene, CAS: 191-24-2

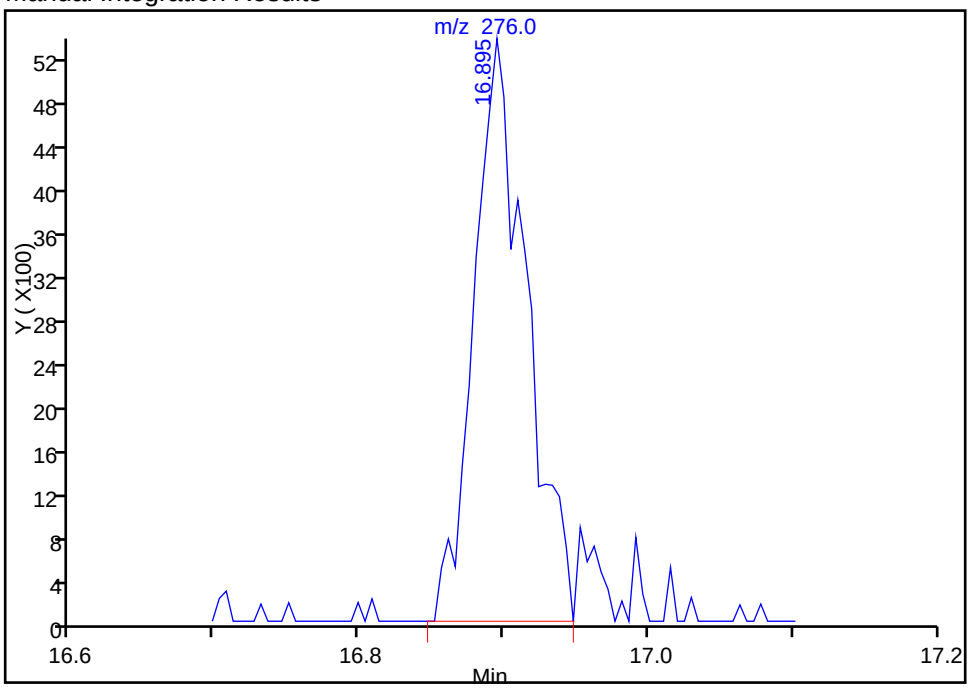
Processing Integration Results

RT: 16.90
Area: 8657
Amount: 0.080651
Amount Units: ng/ul



Manual Integration Results

RT: 16.90
Area: 13582
Amount: 0.119361
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 11:57:22
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Report Date: 21-Apr-2015 07:01:01 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420007.D
Lims ID: std9 lst1
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 20-Apr-2015 10:56:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042708-007
Misc. Info.: STD9 LST1STD9 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-Apr-2015 07:01:00 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: ulmanm Date: 20-Apr-2015 11:59:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.381	6.378	0.003	85	125811	4.00	4.00	
* 2 Naphthalene-d8	136	7.496	7.494	0.002	98	469432	4.00	4.00	
* 3 Acenaphthene-d10	164	9.001	9.004	-0.003	78	299359	4.00	4.00	
* 4 Phenanthrene-d10	188	10.276	10.273	0.003	98	528965	4.00	4.00	
* 5 Chrysene-d12	240	12.579	12.572	0.007	80	612076	4.00	4.00	
* 6 Perylene-d12	264	14.363	14.361	0.002	96	544747	4.00	4.00	
$ 7 2-Fluorophenol	112		5.162				ND	ND	
$ 8 Phenol-d5	99	6.020	6.013	0.007	80	1816095	25.0	26.2	
$ 9 Nitrobenzene-d5	82	6.857	6.854	0.003	83	2163859	25.0	25.3	
$ 10 2-Fluorobiphenyl (Surr)	172	8.400	8.398	0.002	97	2483500	25.0	24.7	
$ 11 2,4,6-Tribromophenol	330	9.675	9.672	0.003	83	285003	25.0	25.7	
$ 12 Terphenyl-d14	244	11.603	11.601	0.002	98	3178109	25.0	25.5	
25 1,4-Dioxane	88	3.091	3.079	0.012	80	796449	25.0	29.8	M
26 N-Nitrosodimethylamine	74	3.577	3.560	0.017	90	1219548	25.0	27.4	
27 Pyridine	79	3.625	3.618	0.007	92	1982612	25.0	27.7	
41 Benzaldehyde	77	5.986	5.984	0.002	82	2405523	50.0	45.8	
43 Phenol	94	6.030	6.027	0.003	78	1983859	25.0	26.4	
44 Aniline	93	6.083	6.075	0.008	93	2317533	25.0	24.8	
69 Bis(2-chloroethyl)ether	93	6.121	6.114	0.007	91	1599325	25.0	25.4	
46 2-Chlorophenol	128	6.198	6.196	0.002	90	1096775	25.0	24.9	
243 n-Decane	57	6.227	6.224	0.003	97	1419482	NC	NC	
47 1,3-Dichlorobenzene	146	6.337	6.335	0.002	80	1213423	25.0	25.5	
48 1,4-Dichlorobenzene	146	6.395	6.398	-0.003	77	1239675	25.0	25.7	
49 Benzyl alcohol	108	6.482	6.474	0.008	84	932286	25.0	26.3	
50 1,2-Dichlorobenzene	146	6.539	6.537	0.002	84	1163941	25.0	25.9	
51 2-Methylphenol	108	6.568	6.566	0.002	77	1254684	25.0	25.7	
53 2,2'-oxybis[1-chloropropan	45	6.602	6.595	0.007	98	1355437	25.0	26.3	
52 Indene	115	6.616	6.614	0.002	68	4722832	50.0	53.3	
21 3 & 4 Methylphenol	108	6.698	6.691	0.007	95	1380158	25.0	26.7	
57 N-Nitrosodi-n-propylamine	70	6.712	6.705	0.007	95	1433453	25.0	26.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.722	6.715	0.007	75	2015330	25.0	26.9	
61 Hexachloroethane	117	6.842	6.840	0.002	92	612821	25.0	26.8	
62 Nitrobenzene	77	6.876	6.869	0.007	70	1967292	25.0	24.9	
64 Isophorone	82	7.078	7.071	0.007	94	3453992	25.0	25.9	
66 2-Nitrophenol	139	7.155	7.153	0.002	82	587986	25.0	27.0	
65 2,4-Dimethylphenol	107	7.160	7.157	0.003	96	1505005	25.0	26.0	
71 Benzoic acid	122	7.256	7.196	0.060	83	1417052	50.0	51.4	M
70 Bis(2-chloroethoxy)methane	93	7.237	7.234	0.003	98	1775944	25.0	26.5	
73 2,4-Dichlorophenol	162	7.357	7.354	0.003	87	914165	25.0	26.2	
74 1,2,4-Trichlorobenzene	180	7.439	7.441	-0.002	85	1007107	25.0	26.2	
75 Naphthalene	128	7.516	7.513	0.003	98	3188013	25.0	25.4	
76 4-Chloroaniline	127	7.535	7.532	0.003	54	1404257	25.0	25.6	
77 2,6-Dichlorophenol	162	7.554	7.552	0.002	63	895770	25.0	26.2	
79 Hexachlorobutadiene	225	7.617	7.619	-0.002	90	672471	25.0	26.0	
84 Caprolactam	113	7.843	7.807	0.036	79	785426	50.0	53.5	M
86 4-Chloro-3-methylphenol	107	7.929	7.922	0.007	78	1308872	25.0	26.7	
87 2-Methylnaphthalene	142	8.102	8.105	-0.003	80	2149188	25.0	26.1	
88 1-Methylnaphthalene	142	8.194	8.191	0.003	80	1862085	25.0	26.7	
89 Hexachlorocyclopentadiene	237	8.246	8.244	0.002	86	734839	25.0	26.3	
91 1,2,4,5-Tetrachlorobenzene	216	8.251	8.249	0.002	95	1079990	25.0	25.0	
92 2,4,6-Trichlorophenol	196	8.333	8.331	0.002	91	767417	25.0	26.7	
93 2,4,5-Trichlorophenol	196	8.372	8.364	0.008	91	773840	25.0	25.8	
98 1,1'-Biphenyl	154	8.492	8.489	0.003	97	2609206	25.0	24.8	
100 2-Chloronaphthalene	162	8.525	8.523	0.002	98	2107044	25.0	25.4	
102 2-Nitroaniline	65	8.588	8.581	0.007	70	1057455	25.0	25.1	
105 Dimethyl phthalate	163	8.723	8.715	0.008	93	2325490	25.0	24.9	
106 1,3-Dinitrobenzene	168	8.756	8.749	0.007	80	399169	25.0	26.6	
107 2,6-Dinitrotoluene	165	8.780	8.773	0.007	61	543717	25.0	24.8	
109 Acenaphthylene	152	8.886	8.884	0.002	90	3328512	25.0	25.9	
110 3-Nitroaniline	138	8.934	8.927	0.007	81	554662	25.0	25.4	
111 2,4-Dinitrophenol	184	9.021	9.014	0.007	93	809332	50.0	51.2	
112 Acenaphthene	153	9.030	9.028	0.002	91	2110449	25.0	25.3	
113 4-Nitrophenol	109	9.050	9.038	0.012	40	1065502	50.0	51.5	
114 2,4-Dinitrotoluene	165	9.131	9.124	0.007	80	756173	25.0	26.5	
116 Dibenzofuran	168	9.175	9.172	0.003	85	2940156	25.0	25.9	
119 2,3,4,6-Tetrachlorophenol	232	9.271	9.268	0.003	73	629702	25.0	26.0	
121 Diethyl phthalate	149	9.314	9.307	0.007	95	2408629	25.0	25.5	
247 Hexadecane	57	9.319	9.316	0.003	92	1733598	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.444	9.442	0.002	89	1221605	25.0	25.2	
125 4-Nitroaniline	138	9.458	9.446	0.012	65	571890	25.0	27.1	
126 Fluorene	166	9.473	9.466	0.007	100	2432427	25.0	25.5	
128 4,6-Dinitro-2-methylphenol	198	9.487	9.480	0.007	90	1014166	50.0	52.5	
131 N-Nitrosodiphenylamine	169	9.540	9.533	0.007	98	3649375	50.0	51.3	
132 1,2-Diphenylhydrazine	77	9.579	9.576	0.002	98	3625120	25.0	24.5	
133 Azobenzene	77	9.579	9.576	0.002	95	3624950	25.0	24.5	
139 4-Bromophenyl phenyl ether	248	9.862	9.860	0.002	69	684530	25.0	25.3	
141 Hexachlorobenzene	284	9.954	9.951	0.003	84	643091	25.0	24.1	
142 Atrazine	200	9.968	9.956	0.012	85	1444150	50.0	53.0	
244 n-Octadecane	57	10.093	10.096	-0.003	83	1483813	NC	NC	
143 Pentachlorophenol	266	10.107	10.105	0.002	81	953443	50.0	49.8	
148 Phenanthrene	178	10.300	10.293	0.007	87	3573119	25.0	25.7	
149 Anthracene	178	10.343	10.336	0.007	87	3652900	25.0	26.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.454	10.451	0.003	84	3117134	25.0	25.1	
154 Di-n-butyl phthalate	149	10.694	10.692	0.002	100	4067476	25.0	26.2	
159 Fluoranthene	202	11.319	11.312	0.007	98	4183231	25.0	26.1	
160 Benzidine	184	11.387	11.384	0.003	88	4548704	50.0	51.2	
161 Pyrene	202	11.521	11.519	0.002	95	4352476	25.0	26.0	
168 Butyl benzyl phthalate	149	11.978	11.976	0.002	91	1972015	25.0	25.3	
173 Bis(2-ethylhexyl) phthalat	149	12.464	12.461	0.003	95	2657049	25.0	25.7	
175 3,3'-Dichlorobenzidine	252	12.502	12.495	0.007	59	2963930	50.0	53.1	
177 Benzo[a]anthracene	228	12.565	12.562	0.003	89	4343670	25.0	25.3	
178 Chrysene	228	12.608	12.601	0.007	92	4035079	25.0	25.7	
180 Di-n-octyl phthalate	149	13.127	13.125	0.002	98	5115692	25.0	26.7	
182 Benzo[b]fluoranthene	252	13.810	13.803	0.007	84	4188034	25.0	25.5	
183 Benzo[k]fluoranthene	252	13.849	13.837	0.012	86	4143610	25.0	25.1	
184 Benzo[a]pyrene	252	14.291	14.279	0.012	74	4244066	25.0	27.1	
188 Indeno[1,2,3-cd]pyrene	276	16.335	16.304	0.031	83	3714112	25.0	23.4	
189 Dibenz(a,h)anthracene	278	16.340	16.313	0.027	76	3102596	25.0	23.7	
190 Benzo[g,h,i]perylene	276	16.936	16.910	0.026	94	2854916	25.0	21.7	
S 191 Methyl Phenols,Total	100				0			52.3	
S 245 Total Cresols	100				0			52.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L9 W_00005 Amount Added: 1.00 Units: mL

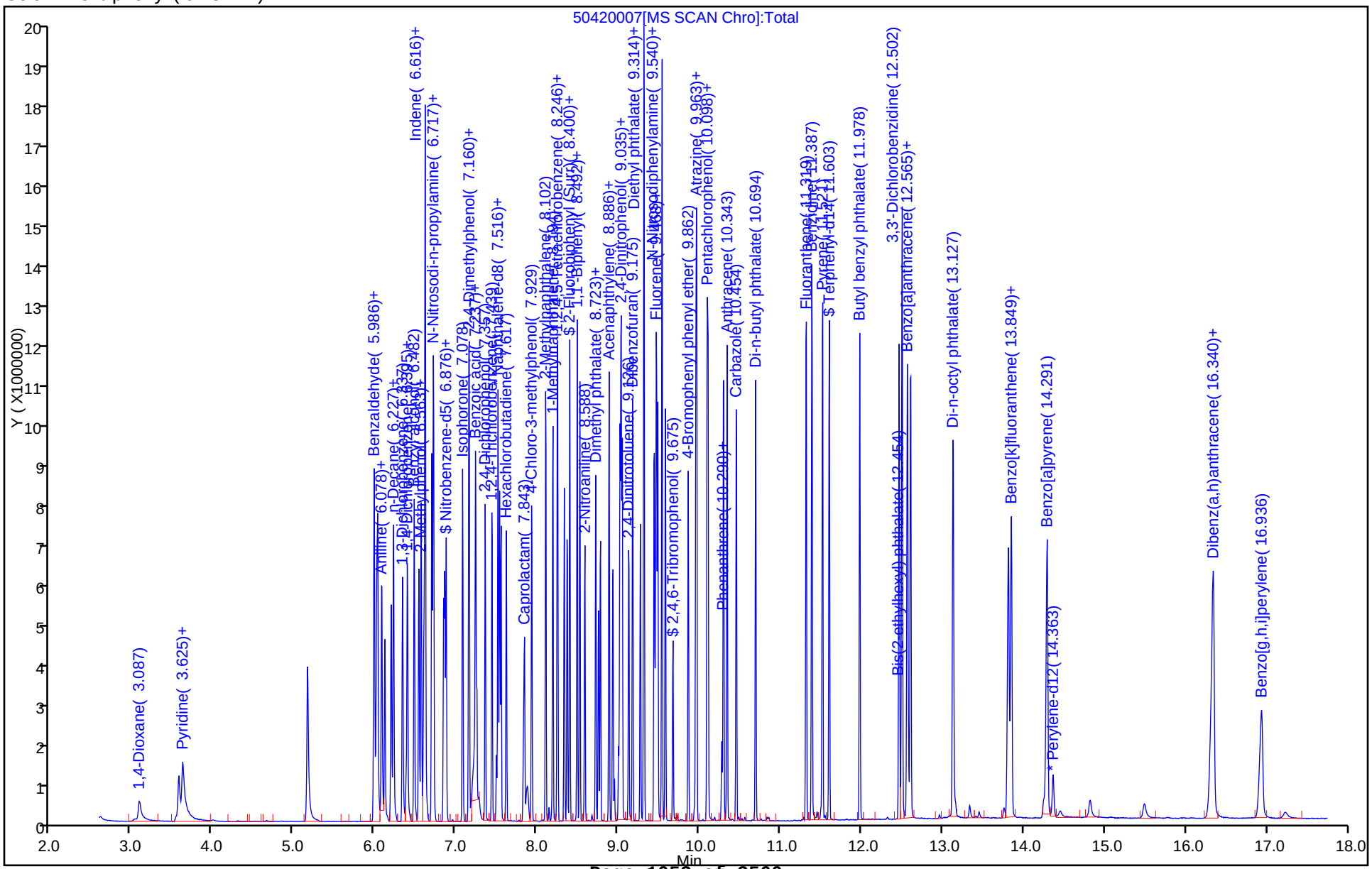
Report Date: 21-Apr-2015 07:01:01 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420007.D

Injection Date:	20-Apr-2015 10:56:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std9 lst1			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

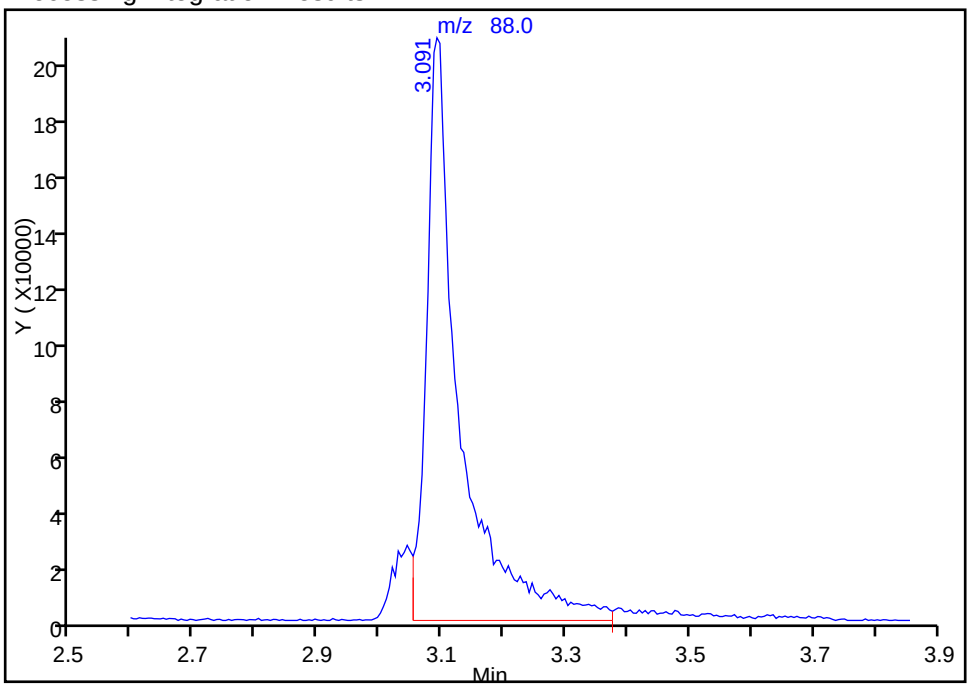
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420007.D
Injection Date: 20-Apr-2015 10:56:30 Instrument ID: A4HP9
Lims ID: std9 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

25 1,4-Dioxane, CAS: 123-91-1

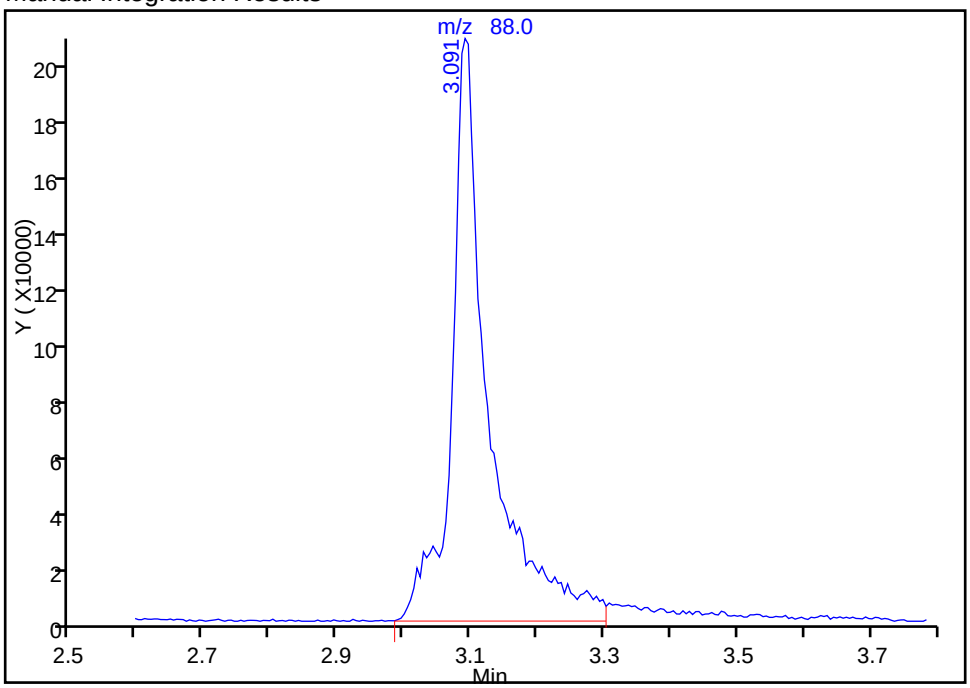
Processing Integration Results

RT: 3.09
Area: 766297
Amount: 29.146349
Amount Units: ng/ul



Manual Integration Results

RT: 3.09
Area: 796449
Amount: 29.827805
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 11:59:29
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

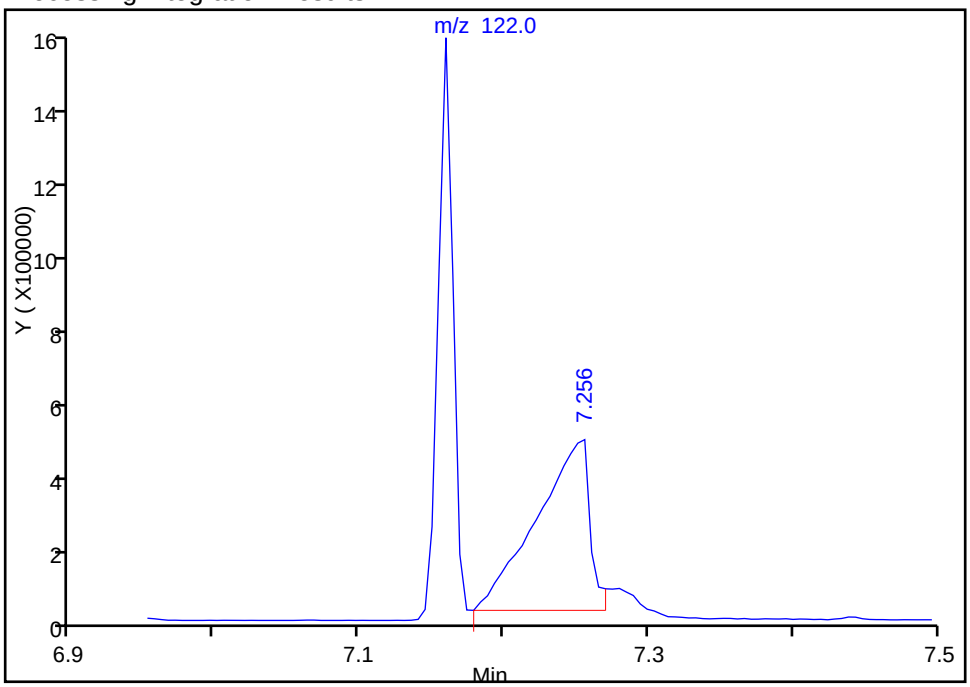
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420007.D
Injection Date: 20-Apr-2015 10:56:30 Instrument ID: A4HP9
Lims ID: std9 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

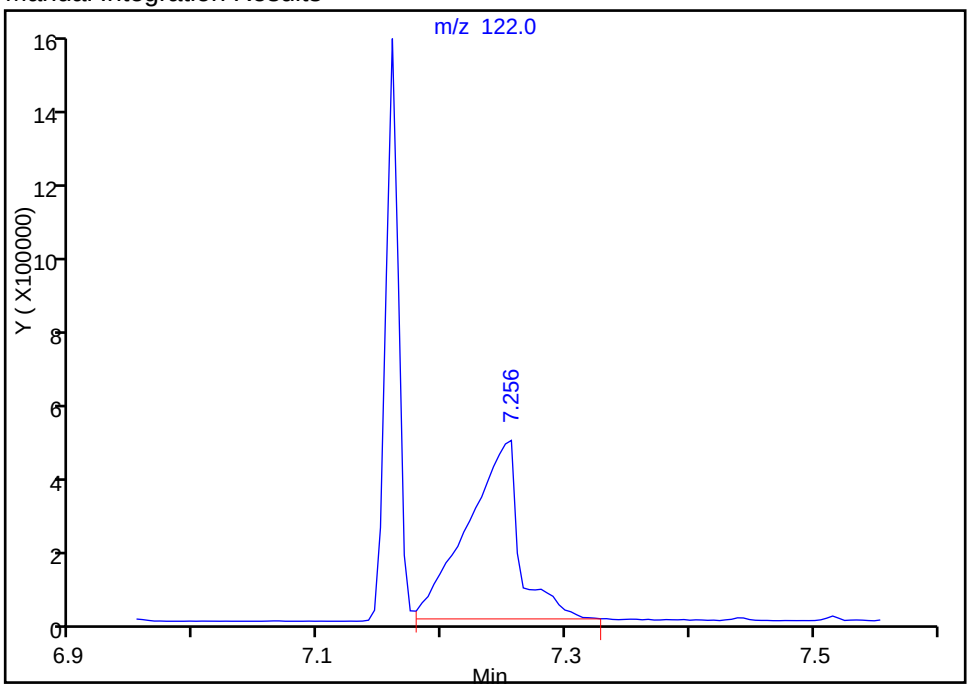
Processing Integration Results

RT: 7.26
Area: 1182736
Amount: 49.576173
Amount Units: ng/ul



Manual Integration Results

RT: 7.26
Area: 1417052
Amount: 51.369488
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 11:59:29
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

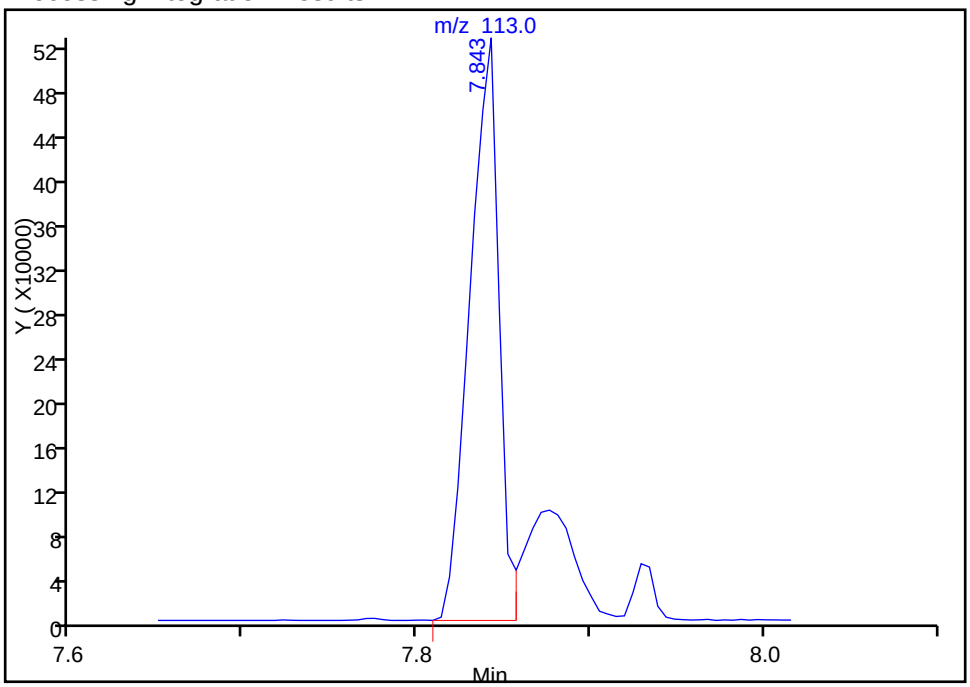
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420007.D				
Injection Date:	20-Apr-2015 10:56:30	Instrument ID:	A4HP9		
Lims ID:	std9 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

84 Caprolactam, CAS: 105-60-2

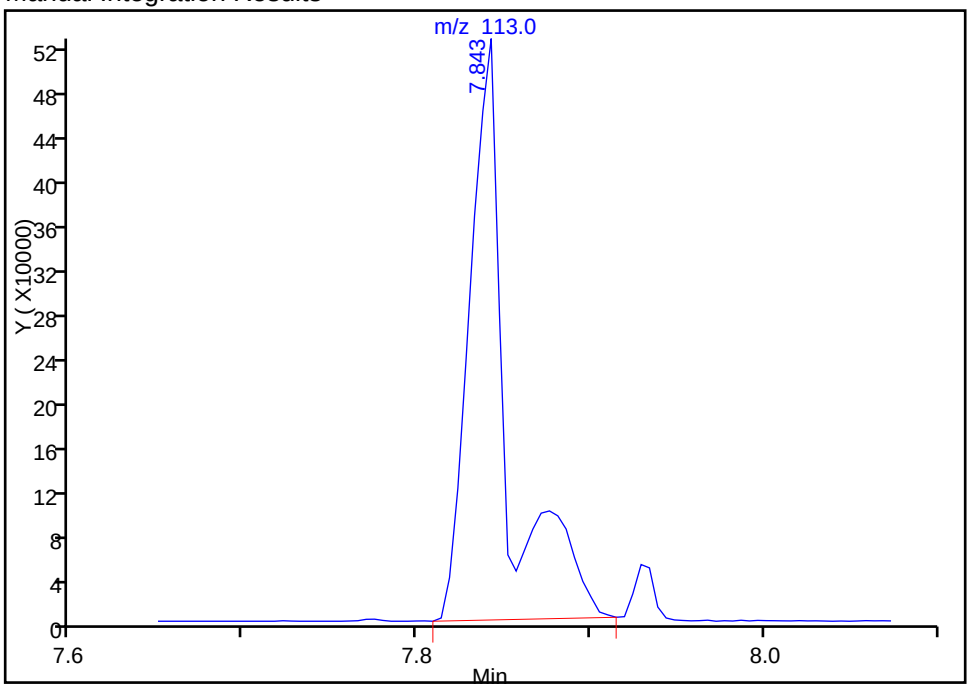
Processing Integration Results

RT: 7.84
Area: 609766
Amount: 45.147152
Amount Units: ng/ul



Manual Integration Results

RT: 7.84
Area: 785426
Amount: 53.464657
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 11:59:29
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420008.D
Lims ID: std8 lst1
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 20-Apr-2015 11:22:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042708-008
Misc. Info.: STD8 LST1STD8 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-Apr-2015 07:01:04 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: ulmanm Date: 20-Apr-2015 12:02:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.381	6.378	0.003	93	136747	4.00	4.00	
* 2 Naphthalene-d8	136	7.496	7.494	0.002	98	513229	4.00	4.00	
* 3 Acenaphthene-d10	164	9.002	9.004	-0.002	78	319069	4.00	4.00	
* 4 Phenanthrene-d10	188	10.276	10.273	0.003	95	624371	4.00	4.00	
* 5 Chrysene-d12	240	12.579	12.572	0.007	76	653369	4.00	4.00	
* 6 Perylene-d12	264	14.363	14.361	0.002	94	565638	4.00	4.00	
$ 7 2-Fluorophenol	112	5.164	5.162	0.002	94	1184060	20.0	23.5	
$ 8 Phenol-d5	99	6.015	6.013	0.002	75	1459687	20.0	19.4	
$ 9 Nitrobenzene-d5	82	6.857	6.854	0.003	83	1813424	20.0	19.4	
$ 10 2-Fluorobiphenyl (Surr)	172	8.401	8.398	0.002	98	2091076	20.0	19.5	
$ 11 2,4,6-Tribromophenol	330	9.675	9.672	0.003	86	232521	20.0	19.7	
$ 12 Terphenyl-d14	244	11.603	11.601	0.002	98	2639723	20.0	19.9	
25 1,4-Dioxane	88	3.077	3.079	-0.002	80	651861	20.0	22.5	
26 N-Nitrosodimethylamine	74	3.563	3.560	0.003	86	1055854	20.0	21.8	
27 Pyridine	79	3.616	3.618	-0.002	92	1667107	20.0	21.4	
41 Benzaldehyde	77	5.986	5.984	0.002	84	2041192	40.0	35.8	
43 Phenol	94	6.030	6.027	0.003	91	1613653	20.0	19.8	
44 Aniline	93	6.078	6.075	0.003	93	1993104	20.0	19.6	
69 Bis(2-chloroethyl)ether	93	6.116	6.114	0.002	93	1336553	20.0	19.5	
46 2-Chlorophenol	128	6.198	6.196	0.002	90	923734	20.0	19.3	
243 n-Decane	57	6.222	6.224	-0.002	97	1204864	NC	NC	
47 1,3-Dichlorobenzene	146	6.338	6.335	0.003	79	1012760	20.0	19.6	
48 1,4-Dichlorobenzene	146	6.395	6.398	-0.003	78	1055490	20.0	20.1	
49 Benzyl alcohol	108	6.482	6.474	0.008	83	755608	20.0	19.6	
50 1,2-Dichlorobenzene	146	6.539	6.537	0.002	80	983121	20.0	20.1	
51 2-Methylphenol	108	6.564	6.566	-0.002	86	1078178	20.0	20.3	
53 2,2'-oxybis[1-chloropropan	45	6.597	6.595	0.002	97	1086251	20.0	19.4	
52 Indene	115	6.616	6.614	0.002	69	3910748	40.0	40.6	
21 3 & 4 Methylphenol	108	6.698	6.691	0.007	94	1136122	20.0	20.2	
57 N-Nitrosodi-n-propylamine	70	6.713	6.705	0.008	95	1170582	20.0	19.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.717	6.715	0.002	78	1643167	20.0	20.2	
61 Hexachloroethane	117	6.842	6.840	0.002	89	514178	20.0	20.7	
62 Nitrobenzene	77	6.876	6.869	0.007	72	1652384	20.0	19.2	
64 Isophorone	82	7.078	7.071	0.007	94	2910921	20.0	20.0	
66 2-Nitrophenol	139	7.150	7.153	-0.003	71	488712	20.0	20.5	
65 2,4-Dimethylphenol	107	7.160	7.157	0.003	96	1241302	20.0	19.6	
71 Benzoic acid	122	7.246	7.196	0.050	81	1203448	40.0	40.2	M
70 Bis(2-chloroethoxy)methane	93	7.237	7.234	0.003	98	1486134	20.0	20.3	
73 2,4-Dichlorophenol	162	7.357	7.354	0.003	90	788964	20.0	20.7	
74 1,2,4-Trichlorobenzene	180	7.439	7.441	-0.002	83	845301	20.0	20.1	
75 Naphthalene	128	7.516	7.513	0.003	99	2719900	20.0	19.8	
76 4-Chloroaniline	127	7.535	7.532	0.003	37	1269310	20.0	21.2	M
77 2,6-Dichlorophenol	162	7.554	7.552	0.002	56	756155	20.0	20.2	
79 Hexachlorobutadiene	225	7.617	7.619	-0.002	90	562810	20.0	19.9	
84 Caprolactam	113	7.833	7.807	0.026	80	661152	40.0	41.2	M
86 4-Chloro-3-methylphenol	107	7.929	7.922	0.007	79	1110751	20.0	20.7	
87 2-Methylnaphthalene	142	8.102	8.105	-0.003	83	1812135	20.0	20.1	
88 1-Methylnaphthalene	142	8.194	8.191	0.003	79	1563474	20.0	20.5	
89 Hexachlorocyclopentadiene	237	8.247	8.244	0.003	92	627336	20.0	21.0	
91 1,2,4,5-Tetrachlorobenzene	216	8.251	8.249	0.002	95	919927	20.0	20.0	
92 2,4,6-Trichlorophenol	196	8.333	8.331	0.002	88	633938	20.0	20.7	
93 2,4,5-Trichlorophenol	196	8.367	8.364	0.003	89	649252	20.0	20.3	
98 1,1'-Biphenyl	154	8.492	8.489	0.003	96	2205577	20.0	19.7	
100 2-Chloronaphthalene	162	8.526	8.523	0.003	98	1730417	20.0	19.5	
102 2-Nitroaniline	65	8.588	8.581	0.007	70	898959	20.0	20.0	
105 Dimethyl phthalate	163	8.718	8.715	0.003	92	2000756	20.0	20.1	
106 1,3-Dinitrobenzene	168	8.756	8.749	0.007	76	335275	20.0	21.0	
107 2,6-Dinitrotoluene	165	8.780	8.773	0.007	61	461665	20.0	19.8	
109 Acenaphthylene	152	8.886	8.884	0.002	90	2761388	20.0	20.2	
110 3-Nitroaniline	138	8.929	8.927	0.002	79	458690	20.0	19.7	
111 2,4-Dinitrophenol	184	9.021	9.014	0.007	88	662271	40.0	39.8	
112 Acenaphthene	153	9.030	9.028	0.002	82	1782594	20.0	20.0	
113 4-Nitrophenol	109	9.045	9.038	0.007	38	909471	40.0	41.2	
114 2,4-Dinitrotoluene	165	9.127	9.124	0.003	77	633526	20.0	20.8	
116 Dibenzofuran	168	9.175	9.172	0.003	83	2462138	20.0	20.3	
119 2,3,4,6-Tetrachlorophenol	232	9.271	9.268	0.003	72	530025	20.0	20.6	
121 Diethyl phthalate	149	9.314	9.307	0.007	94	1962074	20.0	19.5	
247 Hexadecane	57	9.314	9.316	-0.002	75	1511457	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.444	9.442	0.002	93	1035111	20.0	20.1	
125 4-Nitroaniline	138	9.458	9.446	0.012	65	484148	20.0	21.5	
126 Fluorene	166	9.468	9.466	0.002	99	2048241	20.0	20.1	
128 4,6-Dinitro-2-methylphenol	198	9.487	9.480	0.007	85	838422	40.0	37.0	
131 N-Nitrosodiphenylamine	169	9.540	9.533	0.007	97	3015749	40.0	35.9	
132 1,2-Diphenylhydrazine	77	9.579	9.576	0.003	99	3104162	20.0	17.8	
133 Azobenzene	77	9.579	9.576	0.003	95	3103823	20.0	17.8	
139 4-Bromophenyl phenyl ether	248	9.862	9.860	0.002	68	565762	20.0	17.7	
141 Hexachlorobenzene	284	9.954	9.951	0.003	77	548893	20.0	17.4	
142 Atrazine	200	9.963	9.956	0.007	84	1177907	40.0	36.6	
244 n-Octadecane	57	10.093	10.096	-0.003	83	1486824	NC	NC	
143 Pentachlorophenol	266	10.108	10.105	0.003	79	864536	40.0	38.4	
148 Phenanthrene	178	10.295	10.293	0.002	99	3089079	20.0	18.8	
149 Anthracene	178	10.343	10.336	0.007	88	3180671	20.0	19.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.454	10.451	0.003	84	2973846	20.0	20.3	
154 Di-n-butyl phthalate	149	10.694	10.692	0.002	100	3843140	20.0	21.0	
159 Fluoranthene	202	11.315	11.312	0.003	99	3650270	20.0	19.3	
160 Benzidine	184	11.387	11.384	0.003	87	4240526	40.0	44.7	
161 Pyrene	202	11.521	11.519	0.002	95	3668016	20.0	20.5	
168 Butyl benzyl phthalate	149	11.978	11.976	0.002	91	1636215	20.0	19.7	
173 Bis(2-ethylhexyl) phthalat	149	12.464	12.461	0.003	95	2240970	20.0	20.3	
175 3,3'-Dichlorobenzidine	252	12.502	12.495	0.007	54	2472940	40.0	41.5	
177 Benzo[a]anthracene	228	12.565	12.562	0.003	89	3629694	20.0	19.8	
178 Chrysene	228	12.603	12.601	0.002	95	3348051	20.0	20.0	
180 Di-n-octyl phthalate	149	13.128	13.125	0.003	100	3907617	20.0	19.6	
182 Benzo[b]fluoranthene	252	13.810	13.803	0.007	84	3280855	20.0	19.2	
183 Benzo[k]fluoranthene	252	13.844	13.837	0.007	86	3588251	20.0	20.9	
184 Benzo[a]pyrene	252	14.286	14.279	0.007	73	3293663	20.0	20.2	
188 Indeno[1,2,3-cd]pyrene	276	16.330	16.304	0.026	87	3336574	20.0	20.3	
189 Dibenz(a,h)anthracene	278	16.335	16.313	0.022	79	2774062	20.0	20.4	
190 Benzo[g,h,i]perylene	276	16.927	16.910	0.016	92	2617903	20.0	19.2	
S 191 Methyl Phenols,Total	100				0			40.5	
S 245 Total Cresols	100				0			40.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L8 W_00005 Amount Added: 1.00 Units: mL

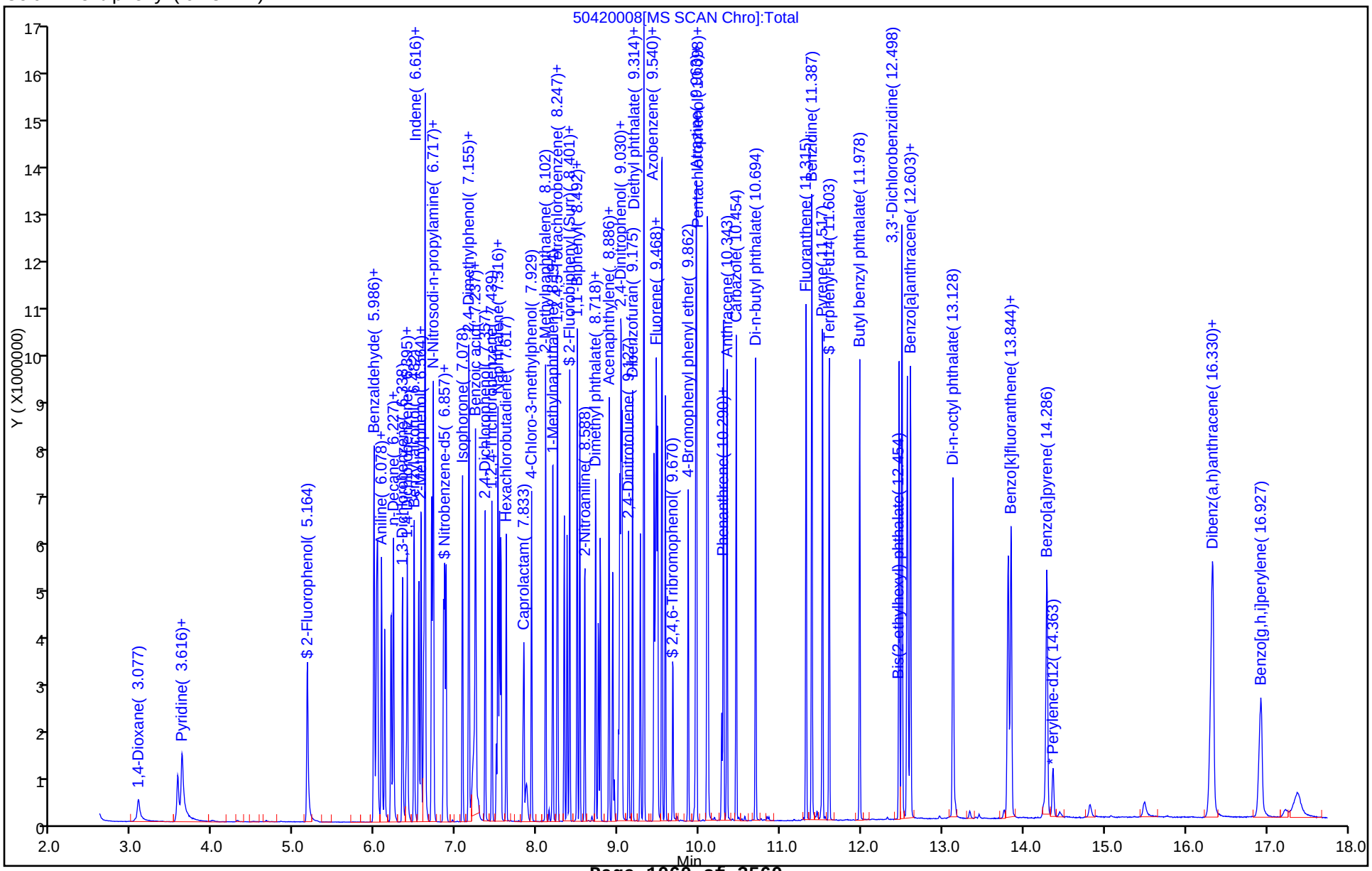
Report Date: 21-Apr-2015 07:01:04 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420008.D

Injection Date:	20-Apr-2015 11:22:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std8 lst1			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

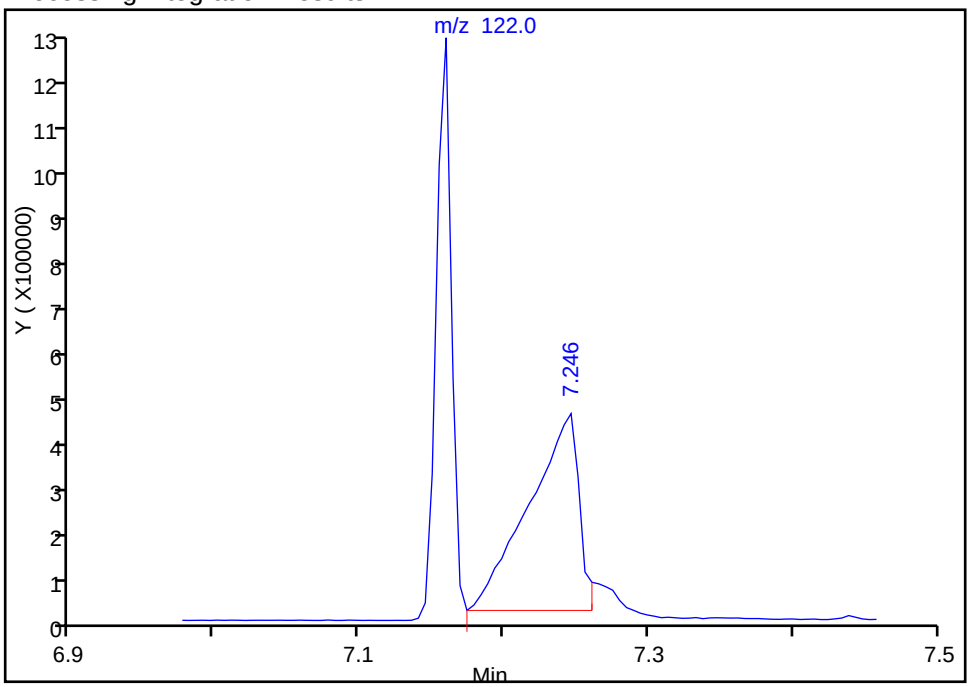
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420008.D				
Injection Date:	20-Apr-2015 11:22:30	Instrument ID:	A4HP9		
Lims ID:	std8 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

71 Benzoic acid, CAS: 65-85-0

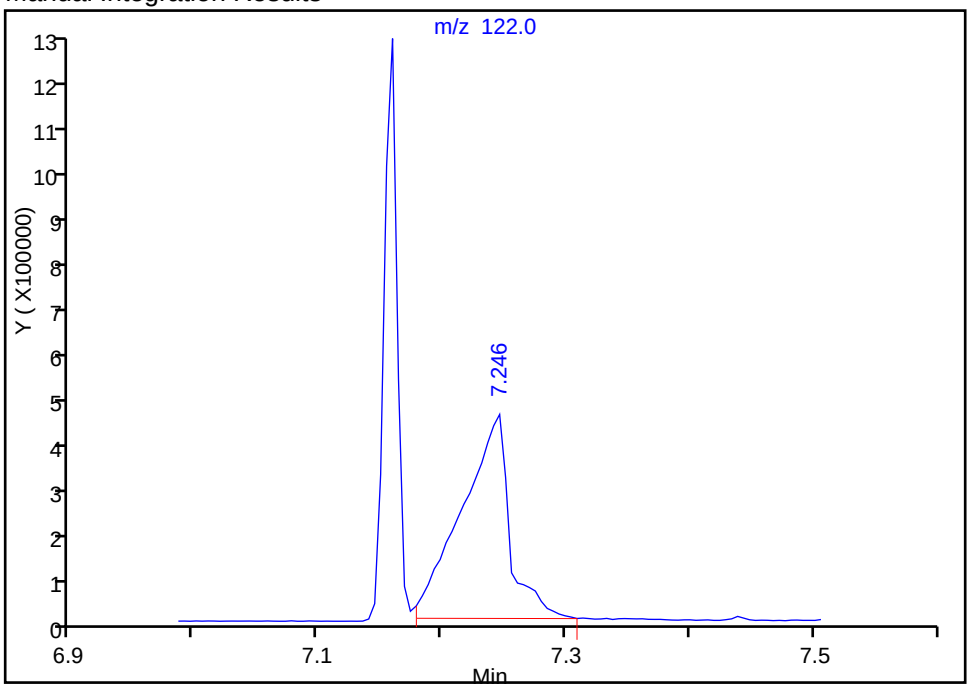
Processing Integration Results

RT: 7.25
Area: 1036672
Amount: 36.371089
Amount Units: ng/ul



Manual Integration Results

RT: 7.25
Area: 1203448
Amount: 40.225751
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 12:02:16
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

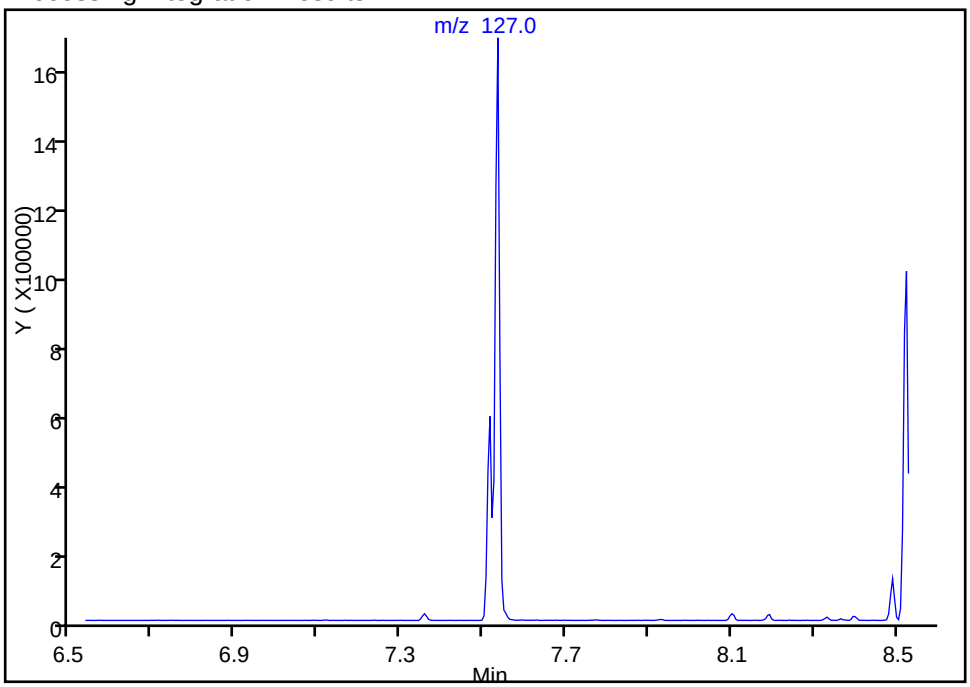
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420008.D				
Injection Date:	20-Apr-2015 11:22:30	Instrument ID:	A4HP9		
Lims ID:	std8 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

76 4-Chloroaniline, CAS: 106-47-8

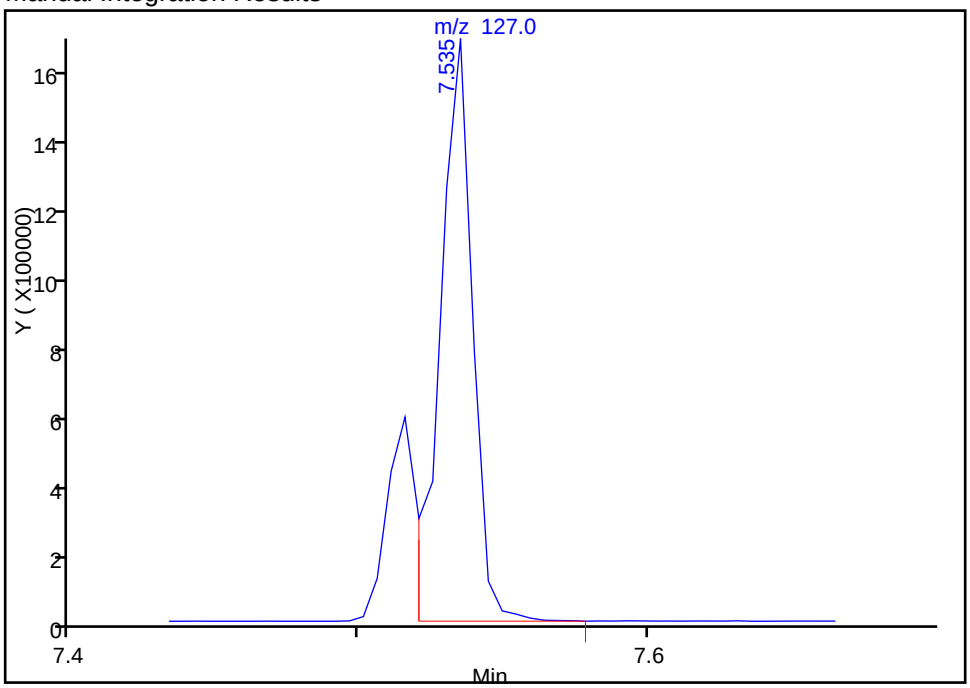
Not Detected
Expected RT: 7.53

Processing Integration Results



Manual Integration Results

RT: 7.53
Area: 1269310
Amount: 21.198300
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 12:02:16
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

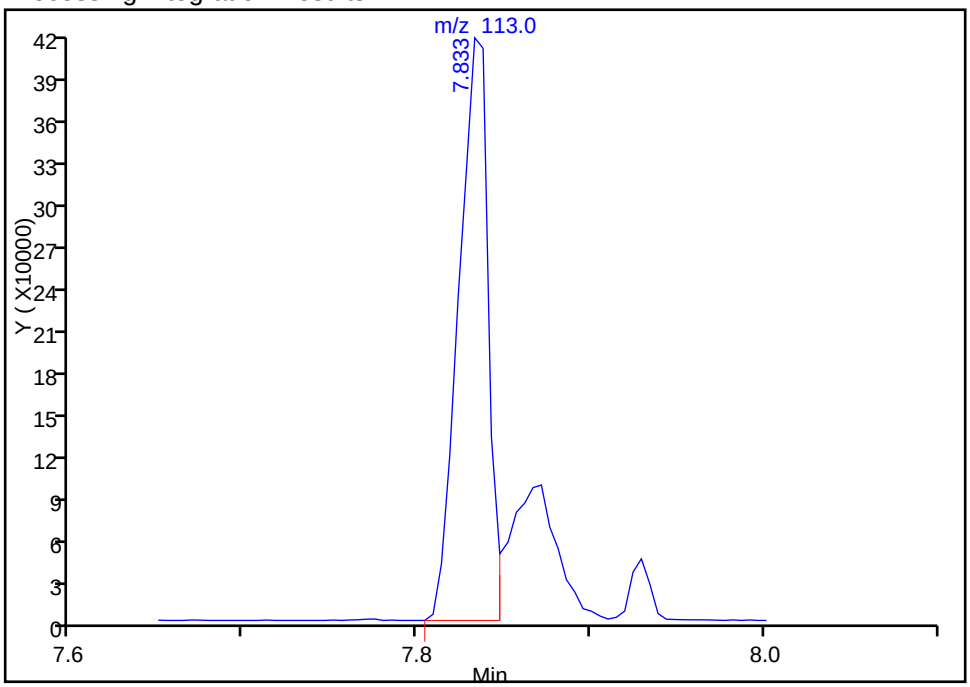
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420008.D
Injection Date: 20-Apr-2015 11:22:30 Instrument ID: A4HP9
Lims ID: std8 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

84 Caprolactam, CAS: 105-60-2

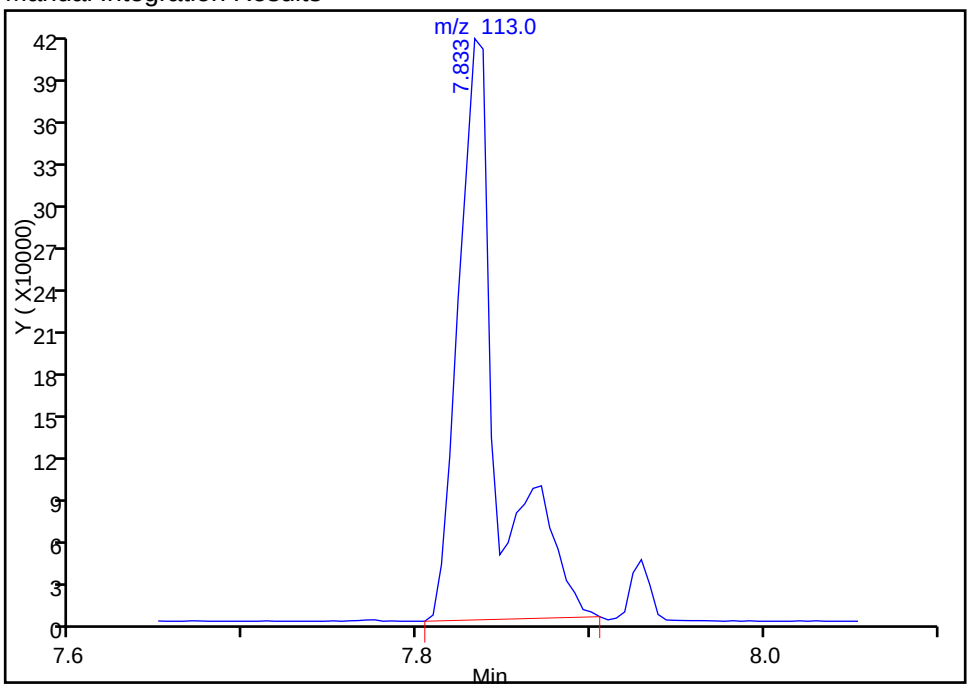
Processing Integration Results

RT: 7.83
Area: 498896
Amount: 32.382280
Amount Units: ng/ul



Manual Integration Results

RT: 7.83
Area: 661152
Amount: 41.164641
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 12:02:16
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420009.D
Lims ID: std7 lst1
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 20-Apr-2015 11:47:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042708-009
Misc. Info.: STD7 LST1STD7 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-Apr-2015 07:01:06 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: ulmanm Date: 20-Apr-2015 12:14:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.382	6.378	0.004	94	126815	4.00	4.00	
* 2 Naphthalene-d8	136	7.493	7.494	-0.001	99	504652	4.00	4.00	
* 3 Acenaphthene-d10	164	9.003	9.004	-0.001	91	301648	4.00	4.00	
* 4 Phenanthrene-d10	188	10.273	10.273	0.000	98	547615	4.00	4.00	
* 5 Chrysene-d12	240	12.576	12.572	0.004	97	627071	4.00	4.00	
* 6 Perylene-d12	264	14.360	14.361	-0.001	98	521898	4.00	4.00	
$ 7 2-Fluorophenol	112	5.166	5.162	0.004	94	788012	15.0	16.9	
$ 8 Phenol-d5	99	6.017	6.013	0.004	94	1076581	15.0	15.4	
$ 9 Nitrobenzene-d5	82	6.858	6.854	0.004	85	1331714	15.0	14.5	
$ 10 2-Fluorobiphenyl (Surr)	172	8.397	8.398	-0.001	99	1520261	15.0	15.0	
$ 11 2,4,6-Tribromophenol	330	9.671	9.672	-0.001	83	174572	15.0	15.6	
$ 12 Terphenyl-d14	244	11.600	11.601	-0.001	99	1952012	15.0	15.3	
25 1,4-Dioxane	88	3.088	3.079	0.009	90	432945	15.0	16.1	M
26 N-Nitrosodimethylamine	74	3.569	3.560	0.009	91	776721	15.0	17.3	
27 Pyridine	79	3.622	3.618	0.004	94	1343545	15.0	18.6	
41 Benzaldehyde	77	5.983	5.984	-0.001	89	1572425	30.0	29.7	
43 Phenol	94	6.026	6.027	-0.001	95	1188566	15.0	15.7	
44 Aniline	93	6.079	6.075	0.004	95	1469438	15.0	15.6	
69 Bis(2-chloroethyl)ether	93	6.118	6.114	0.004	96	984085	15.0	15.5	
46 2-Chlorophenol	128	6.195	6.196	-0.001	88	683952	15.0	15.4	
243 n-Decane	57	6.224	6.224	0.000	98	875095	NC	NC	
47 1,3-Dichlorobenzene	146	6.339	6.335	0.004	88	740346	15.0	15.4	
48 1,4-Dichlorobenzene	146	6.397	6.398	-0.001	85	778292	15.0	16.0	
49 Benzyl alcohol	108	6.478	6.474	0.004	85	551283	15.0	15.4	
50 1,2-Dichlorobenzene	146	6.536	6.537	-0.001	87	721454	15.0	15.9	
51 2-Methylphenol	108	6.565	6.566	-0.001	93	789417	15.0	16.0	
53 2,2'-oxybis[1-chloropropan	45	6.599	6.595	0.004	98	803960	15.0	15.5	
52 Indene	115	6.618	6.614	0.004	89	2861485	30.0	32.0	
21 3 & 4 Methylphenol	108	6.695	6.691	0.004	94	826942	15.0	15.9	
57 N-Nitrosodi-n-propylamine	70	6.709	6.705	0.004	99	866229	15.0	15.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.719	6.715	0.004	90	1222345	15.0	16.2	
61 Hexachloroethane	117	6.844	6.840	0.004	94	374905	15.0	16.2	
62 Nitrobenzene	77	6.873	6.869	0.004	82	1228211	15.0	14.5	
64 Isophorone	82	7.075	7.071	0.004	97	2145665	15.0	15.0	
66 2-Nitrophenol	139	7.152	7.153	-0.001	82	360286	15.0	15.4	
65 2,4-Dimethylphenol	107	7.156	7.157	-0.001	96	929670	15.0	15.0	
71 Benzoic acid	122	7.233	7.196	0.037	86	892363	30.0	30.7	
70 Bis(2-chloroethoxy)methane	93	7.238	7.234	0.004	99	1099899	15.0	15.3	
73 2,4-Dichlorophenol	162	7.358	7.354	0.004	94	576680	15.0	15.4	
74 1,2,4-Trichlorobenzene	180	7.440	7.441	-0.001	90	620048	15.0	15.0	
75 Naphthalene	128	7.512	7.513	-0.001	98	1980465	15.0	14.7	
76 4-Chloroaniline	127	7.532	7.532	0.000	89	894045	15.0	15.2	
77 2,6-Dichlorophenol	162	7.551	7.552	-0.001	89	559350	15.0	15.2	
79 Hexachlorobutadiene	225	7.618	7.619	-0.001	96	416879	15.0	15.0	
84 Caprolactam	113	7.825	7.807	0.018	85	492788	30.0	31.2	M
86 4-Chloro-3-methylphenol	107	7.926	7.922	0.004	88	813536	15.0	15.4	
87 2-Methylnaphthalene	142	8.104	8.105	-0.001	90	1352305	15.0	15.3	
88 1-Methylnaphthalene	142	8.190	8.191	-0.001	90	1136983	15.0	15.1	
89 Hexachlorocyclopentadiene	237	8.248	8.244	0.004	96	444101	15.0	15.8	
91 1,2,4,5-Tetrachlorobenzene	216	8.253	8.249	0.004	96	665913	15.0	15.3	
92 2,4,6-Trichlorophenol	196	8.330	8.331	-0.001	94	453458	15.0	15.6	
93 2,4,5-Trichlorophenol	196	8.368	8.364	0.004	90	466898	15.0	15.4	
98 1,1'-Biphenyl	154	8.489	8.489	-0.001	97	1601199	15.0	15.1	
100 2-Chloronaphthalene	162	8.522	8.523	-0.001	98	1250248	15.0	14.9	
102 2-Nitroaniline	65	8.585	8.581	0.004	71	662998	15.0	15.6	
105 Dimethyl phthalate	163	8.719	8.715	0.004	94	1445412	15.0	15.4	
106 1,3-Dinitrobenzene	168	8.753	8.749	0.004	80	239221	15.0	15.8	
107 2,6-Dinitrotoluene	165	8.777	8.773	0.004	81	345048	15.0	15.7	
109 Acenaphthylene	152	8.883	8.884	-0.001	98	2015345	15.0	15.6	
110 3-Nitroaniline	138	8.931	8.927	0.004	85	335723	15.0	15.3	
111 2,4-Dinitrophenol	184	9.017	9.014	0.003	93	459799	30.0	29.8	
112 Acenaphthene	153	9.032	9.028	0.004	96	1253565	15.0	14.9	
113 4-Nitrophenol	109	9.042	9.038	0.004	87	684980	30.0	32.8	
114 2,4-Dinitrotoluene	165	9.123	9.124	-0.001	81	453778	15.0	15.8	
116 Dibenzofuran	168	9.176	9.172	0.004	95	1802230	15.0	15.7	
119 2,3,4,6-Tetrachlorophenol	232	9.272	9.268	0.004	77	382719	15.0	15.7	
121 Diethyl phthalate	149	9.311	9.307	0.004	96	1405436	15.0	14.8	
247 Hexadecane	57	9.316	9.316	0.000	92	1090102	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.441	9.442	-0.001	93	764132	15.0	15.7	
125 4-Nitroaniline	138	9.455	9.446	0.009	75	357822	15.0	16.8	
126 Fluorene	166	9.470	9.466	0.004	100	1507017	15.0	15.7	
128 4,6-Dinitro-2-methylphenol	198	9.484	9.480	0.004	94	603382	30.0	30.4	
131 N-Nitrosodiphenylamine	169	9.537	9.533	0.004	98	2181833	30.0	29.6	
132 1,2-Diphenylhydrazine	77	9.580	9.576	0.004	99	2344695	15.0	15.3	
133 Azobenzene	77	9.580	9.576	0.004	95	2344821	15.0	15.3	
139 4-Bromophenyl phenyl ether	248	9.864	9.860	0.004	74	441862	15.0	15.8	
141 Hexachlorobenzene	284	9.955	9.951	0.004	88	400652	15.0	14.5	
142 Atrazine	200	9.960	9.956	0.004	89	884159	30.0	31.3	
244 n-Octadecane	57	10.095	10.096	-0.001	97	1150272	NC	NC	
143 Pentachlorophenol	266	10.104	10.105	-0.001	88	607473	30.0	30.8	
148 Phenanthrene	178	10.297	10.293	0.004	98	2136444	15.0	14.9	
149 Anthracene	178	10.340	10.336	0.004	98	2166727	15.0	15.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.455	10.451	0.004	97	2076150	15.0	16.2	
154 Di-n-butyl phthalate	149	10.691	10.692	-0.001	100	2688668	15.0	16.7	
159 Fluoranthene	202	11.316	11.312	0.004	99	2757839	15.0	16.6	
160 Benzidine	184	11.383	11.384	-0.001	99	3193120	30.0	35.1	
161 Pyrene	202	11.518	11.519	-0.001	96	2659722	15.0	15.5	
168 Butyl benzyl phthalate	149	11.975	11.976	-0.001	93	1209148	15.0	15.1	
173 Bis(2-ethylhexyl) phthalat	149	12.465	12.461	0.004	95	1596675	15.0	15.1	
175 3,3'-Dichlorobenzidine	252	12.499	12.495	0.004	75	1783742	30.0	31.2	
177 Benzo[a]anthracene	228	12.566	12.562	0.004	97	2631956	15.0	14.9	
178 Chrysene	228	12.605	12.601	0.004	96	2435297	15.0	15.1	
180 Di-n-octyl phthalate	149	13.129	13.125	0.004	100	2860004	15.0	15.6	
182 Benzo[b]fluoranthene	252	13.807	13.803	0.004	95	2402031	15.0	15.3	
183 Benzo[k]fluoranthene	252	13.846	13.837	0.009	97	2407128	15.0	15.2	
184 Benzo[a]pyrene	252	14.283	14.279	0.004	76	2294348	15.0	15.3	
188 Indeno[1,2,3-cd]pyrene	276	16.317	16.304	0.013	97	2498527	15.0	16.4	
189 Dibenz(a,h)anthracene	278	16.327	16.313	0.014	86	2027396	15.0	16.2	
190 Benzo[g,h,i]perylene	276	16.923	16.910	0.013	98	1856012	15.0	14.7	
S 191 Methyl Phenols,Total	100				0			31.9	
S 245 Total Cresols	100				0			31.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L7 W_00005 Amount Added: 1.00 Units: mL

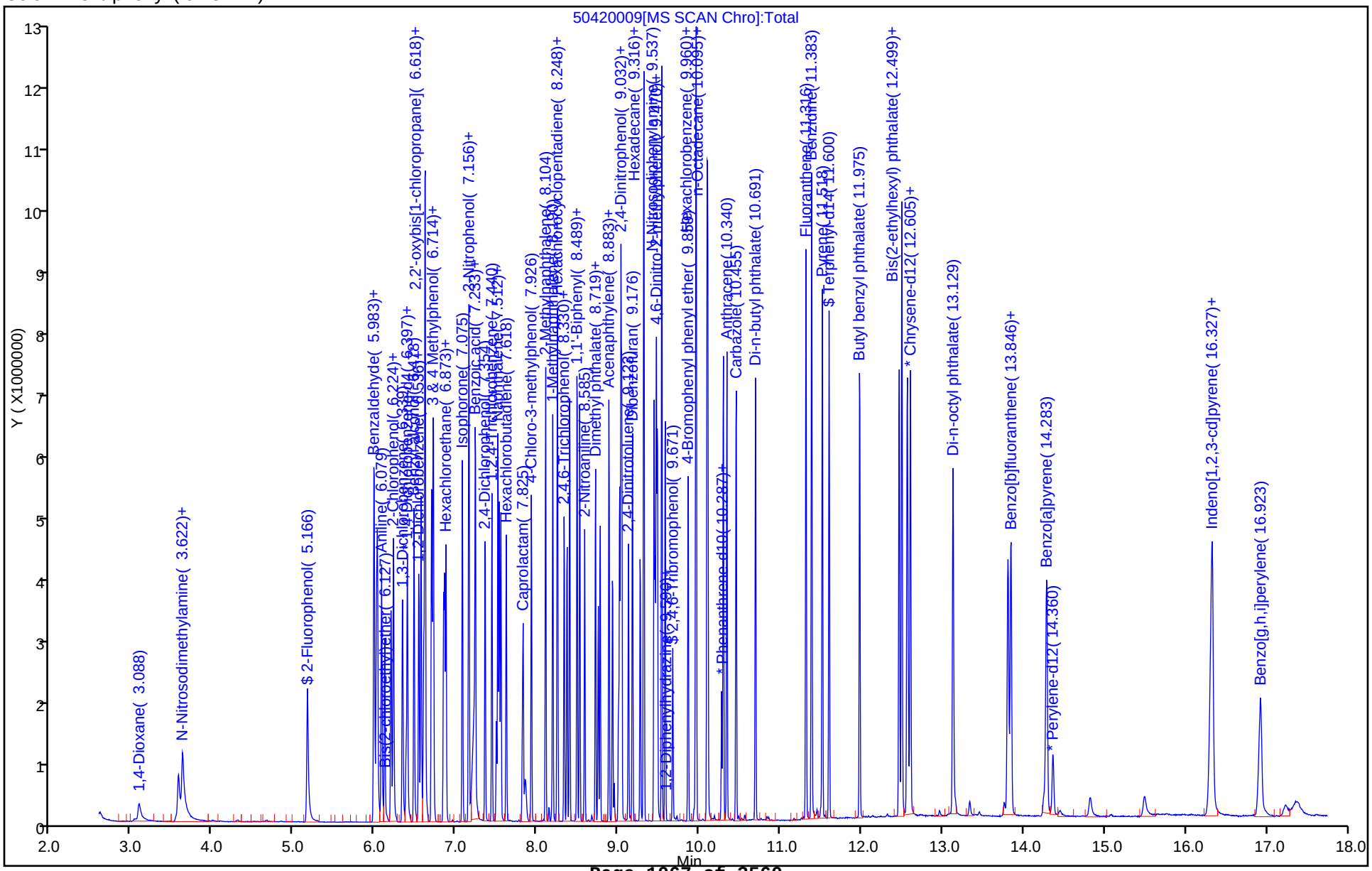
Report Date: 21-Apr-2015 07:01:07 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420009.D

Injection Date:	20-Apr-2015 11:47:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std7 lst1			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

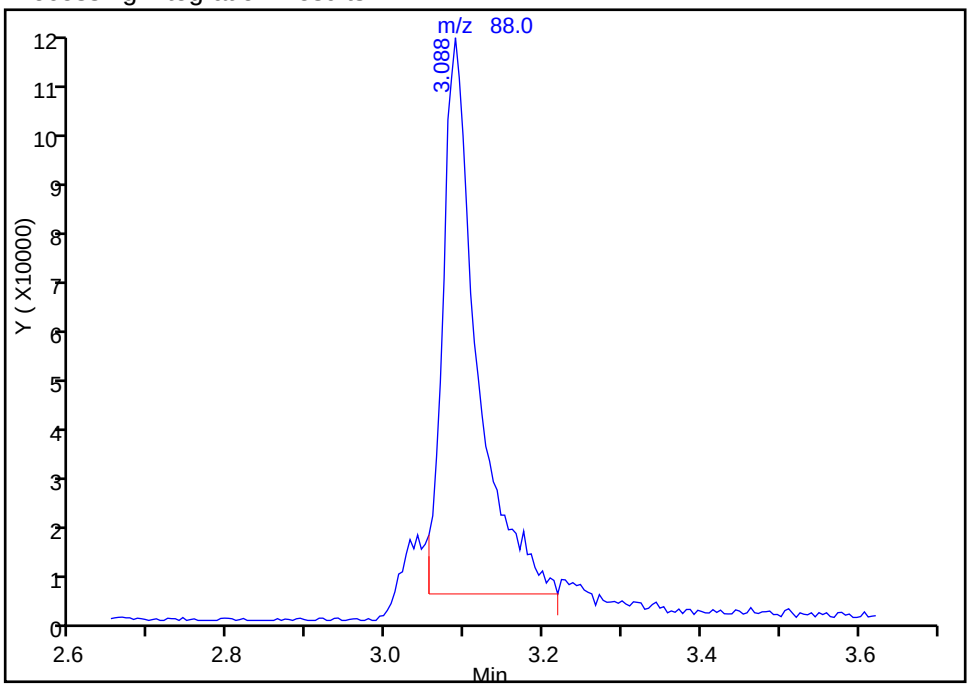
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420009.D				
Injection Date:	20-Apr-2015 11:47:30	Instrument ID:	A4HP9		
Lims ID:	std7 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

25 1,4-Dioxane, CAS: 123-91-1

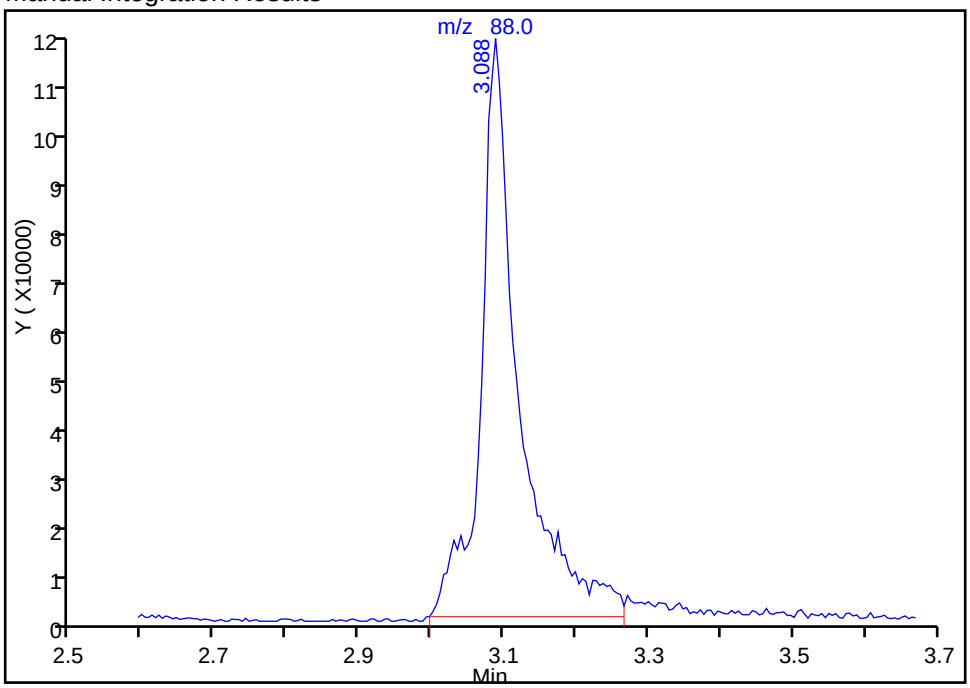
Processing Integration Results

RT: 3.09
Area: 339206
Amount: 12.986701
Amount Units: ng/ul



Manual Integration Results

RT: 3.09
Area: 432945
Amount: 16.085851
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 12:14:33
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

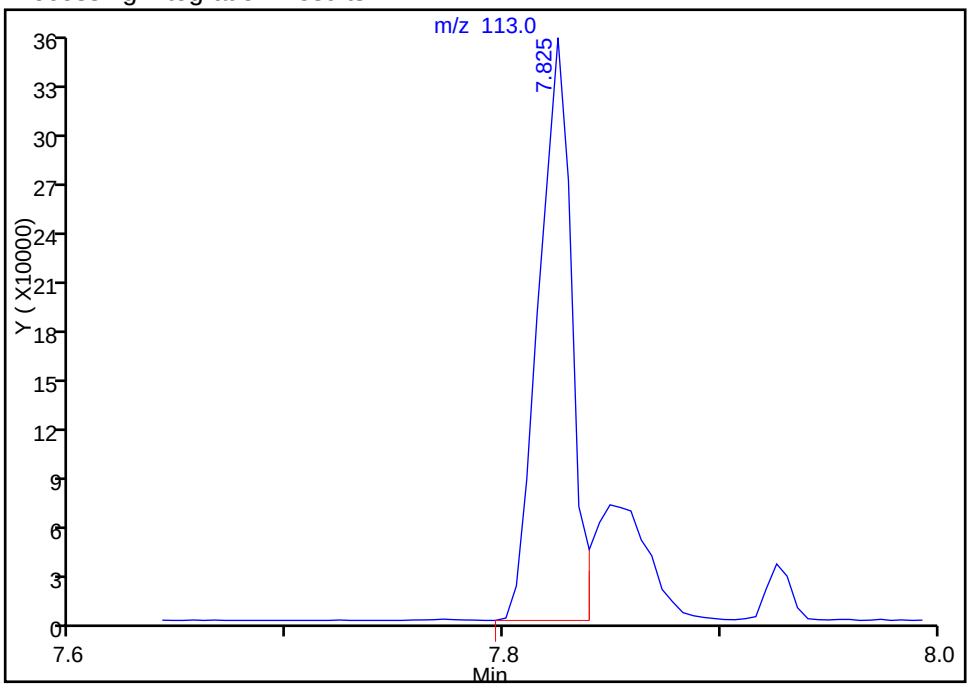
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420009.D				
Injection Date:	20-Apr-2015 11:47:30	Instrument ID:	A4HP9		
Lims ID:	std7 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

84 Caprolactam, CAS: 105-60-2

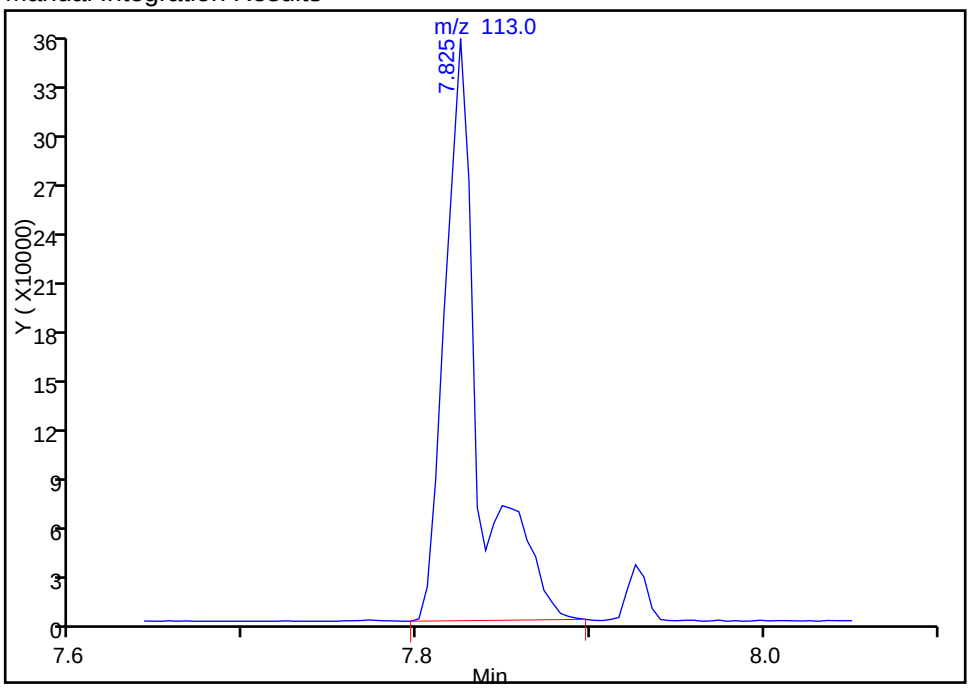
Processing Integration Results

RT: 7.82
Area: 381021
Amount: 24.791484
Amount Units: ng/ul



Manual Integration Results

RT: 7.82
Area: 492788
Amount: 31.203429
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 12:14:33
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420010.D
Lims ID: std6 lst1
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 20-Apr-2015 12:41:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042708-010
Misc. Info.: STD6 LST1STD6 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-Apr-2015 07:01:09 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: ulmanm Date: 20-Apr-2015 13:08:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.382	6.382	0.000	93	121080	4.00	4.00	
* 2 Naphthalene-d8	136	7.498	7.498	0.000	97	389871	4.00	4.00	
* 3 Acenaphthene-d10	164	9.003	9.003	0.000	78	235173	4.00	4.00	
* 4 Phenanthrene-d10	188	10.272	10.272	0.000	91	355837	4.00	4.00	
* 5 Chrysene-d12	240	12.576	12.576	0.000	80	468196	4.00	4.00	
* 6 Perylene-d12	264	14.365	14.365	0.000	94	382118	4.00	4.00	
$ 7 2-Fluorophenol	112	5.165	5.165	0.000	93	482119	10.0	10.8	
$ 8 Phenol-d5	99	6.012	6.012	0.000	75	678589	10.0	10.2	
$ 9 Nitrobenzene-d5	82	6.853	6.853	0.000	82	691689	10.0	9.75	
$ 10 2-Fluorobiphenyl (Surr)	172	8.402	8.402	0.000	97	756135	10.0	9.56	
$ 11 2,4,6-Tribromophenol	330	9.671	9.671	0.000	79	84325	10.0	9.68	
$ 12 Terphenyl-d14	244	11.600	11.600	0.000	97	945831	10.0	9.93	
25 1,4-Dioxane	88	3.083	3.083	0.000	91	250452	10.0	9.75	M
26 N-Nitrosodimethylamine	74	3.564	3.564	0.000	87	412035	10.0	9.61	
27 Pyridine	79	3.617	3.617	0.000	89	690245	10.0	10.0	
41 Benzaldehyde	77	5.983	5.983	0.000	82	1070982	20.0	21.2	
43 Phenol	94	6.026	6.026	0.000	94	724815	10.0	10.0	
44 Aniline	93	6.079	6.079	0.000	94	909306	10.0	10.1	
69 Bis(2-chloroethyl)ether	93	6.118	6.118	0.000	92	630143	10.0	10.4	
46 2-Chlorophenol	128	6.194	6.194	0.000	88	428031	10.0	10.1	
243 n-Decane	57	6.223	6.223	0.000	97	577224	NC	NC	
47 1,3-Dichlorobenzene	146	6.339	6.339	0.000	80	449776	10.0	9.83	
48 1,4-Dichlorobenzene	146	6.396	6.396	0.000	77	465688	10.0	10.0	
49 Benzyl alcohol	108	6.478	6.478	0.000	84	340396	10.0	9.98	
50 1,2-Dichlorobenzene	146	6.536	6.536	0.000	76	431764	10.0	9.97	
51 2-Methylphenol	108	6.565	6.565	0.000	75	467486	10.0	9.94	
53 2,2'-oxybis[1-chloropropan	45	6.598	6.598	0.000	99	527630	10.0	10.6	
52 Indene	115	6.613	6.613	0.000	70	1678273	20.0	19.7	
21 3 & 4 Methylphenol	108	6.695	6.695	0.000	94	490810	10.0	9.85	
57 N-Nitrosodi-n-propylamine	70	6.709	6.709	0.000	98	520644	10.0	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.719	6.719	0.000	76	715238	10.0	9.92	
61 Hexachloroethane	117	6.844	6.844	0.000	93	202668	10.0	9.20	
62 Nitrobenzene	77	6.873	6.873	0.000	72	625710	10.0	9.55	
64 Isophorone	82	7.074	7.074	0.000	94	1076036	10.0	9.72	
66 2-Nitrophenol	139	7.151	7.151	0.000	71	173620	10.0	9.59	
65 2,4-Dimethylphenol	107	7.156	7.156	0.000	91	467864	10.0	9.74	
71 Benzoic acid	122	7.209	7.209	0.000	69	388824	20.0	17.9	
70 Bis(2-chloroethoxy)methane	93	7.238	7.238	0.000	91	555739	10.0	9.97	
73 2,4-Dichlorophenol	162	7.358	7.358	0.000	91	282843	10.0	9.78	
74 1,2,4-Trichlorobenzene	180	7.440	7.440	0.000	83	325786	10.0	10.2	
75 Naphthalene	128	7.512	7.512	0.000	98	989882	10.0	9.50	
76 4-Chloroaniline	127	7.531	7.531	0.000	44	449363	10.0	9.88	
77 2,6-Dichlorophenol	162	7.551	7.551	0.000	72	278271	10.0	9.78	
79 Hexachlorobutadiene	225	7.618	7.618	0.000	91	215473	10.0	10.0	
84 Caprolactam	113	7.815	7.815	0.000	81	232280	20.0	19.0	
86 4-Chloro-3-methylphenol	107	7.926	7.926	0.000	78	400395	10.0	9.84	
87 2-Methylnaphthalene	142	8.104	8.104	0.000	79	660361	10.0	9.65	
88 1-Methylnaphthalene	142	8.190	8.190	0.000	79	558738	10.0	9.63	
89 Hexachlorocyclopentadiene	237	8.248	8.248	0.000	81	222471	10.0	10.1	
91 1,2,4,5-Tetrachlorobenzene	216	8.253	8.253	0.000	94	343522	10.0	10.1	
92 2,4,6-Trichlorophenol	196	8.334	8.334	0.000	89	225159	10.0	9.96	
93 2,4,5-Trichlorophenol	196	8.368	8.368	0.000	90	230561	10.0	9.77	
98 1,1'-Biphenyl	154	8.493	8.493	0.000	97	783827	10.0	9.50	
100 2-Chloronaphthalene	162	8.522	8.522	0.000	97	634735	10.0	9.72	
102 2-Nitroaniline	65	8.584	8.584	0.000	69	327945	10.0	9.91	
105 Dimethyl phthalate	163	8.719	8.719	0.000	93	724944	10.0	9.88	
106 1,3-Dinitrobenzene	168	8.753	8.753	0.000	80	120299	10.0	10.2	
107 2,6-Dinitrotoluene	165	8.777	8.777	0.000	61	170395	10.0	9.91	
109 Acenaphthylene	152	8.883	8.883	0.000	88	988563	10.0	9.80	
110 3-Nitroaniline	138	8.931	8.931	0.000	82	165332	10.0	9.65	
111 2,4-Dinitrophenol	184	9.017	9.017	0.000	92	199890	20.0	17.6	
112 Acenaphthene	153	9.032	9.032	0.000	77	630690	10.0	9.61	
113 4-Nitrophenol	109	9.036	9.036	0.000	51	316160	20.0	19.4	
114 2,4-Dinitrotoluene	165	9.123	9.123	0.000	74	216205	10.0	9.63	
116 Dibenzofuran	168	9.176	9.176	0.000	84	874539	10.0	9.80	
119 2,3,4,6-Tetrachlorophenol	232	9.272	9.272	0.000	71	191582	10.0	10.1	
121 Diethyl phthalate	149	9.311	9.311	0.000	94	684970	10.0	9.25	
247 Hexadecane	57	9.315	9.315	0.000	93	542112	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.440	9.440	0.000	95	374725	10.0	9.85	
125 4-Nitroaniline	138	9.450	9.450	0.000	76	167796	10.0	10.1	
126 Fluorene	166	9.469	9.469	0.000	100	727918	10.0	9.71	
128 4,6-Dinitro-2-methylphenol	198	9.479	9.479	0.000	91	260952	20.0	20.5	
131 N-Nitrosodiphenylamine	169	9.537	9.537	0.000	98	1105278	20.0	23.1	
132 1,2-Diphenylhydrazine	77	9.580	9.580	0.000	98	1183693	10.0	11.9	
133 Azobenzene	77	9.580	9.580	0.000	95	1183790	10.0	11.9	
139 4-Bromophenyl phenyl ether	248	9.864	9.864	0.000	63	220036	10.0	12.1	
141 Hexachlorobenzene	284	9.955	9.955	0.000	82	202550	10.0	11.3	
142 Atrazine	200	9.960	9.960	0.000	84	428554	20.0	23.4	
244 n-Octadecane	57	10.094	10.094	0.000	85	509956	NC	NC	
143 Pentachlorophenol	266	10.104	10.104	0.000	82	270585	20.0	21.3	
148 Phenanthrene	178	10.296	10.296	0.000	98	958907	10.0	10.3	
149 Anthracene	178	10.340	10.340	0.000	87	961032	10.0	10.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.455	10.455	0.000	83	908795	10.0	10.9	
154 Di-n-butyl phthalate	149	10.696	10.696	0.000	100	1189386	10.0	11.4	
159 Fluoranthene	202	11.316	11.316	0.000	98	1206648	10.0	11.2	
160 Benzidine	184	11.383	11.383	0.000	99	1509185	20.0	22.2	
161 Pyrene	202	11.518	11.518	0.000	95	1287533	10.0	10.0	
168 Butyl benzyl phthalate	149	11.979	11.979	0.000	91	587187	10.0	9.85	
173 Bis(2-ethylhexyl) phthalat	149	12.465	12.465	0.000	93	772509	10.0	9.76	
175 3,3'-Dichlorobenzidine	252	12.499	12.499	0.000	54	849183	20.0	19.9	
177 Benzo[a]anthracene	228	12.566	12.566	0.000	88	1289434	10.0	9.80	
178 Chrysene	228	12.605	12.605	0.000	93	1192213	10.0	9.92	
180 Di-n-octyl phthalate	149	13.134	13.134	0.000	99	1343351	10.0	9.99	
182 Benzo[b]fluoranthene	252	13.807	13.807	0.000	86	1169783	10.0	10.2	
183 Benzo[k]fluoranthene	252	13.840	13.840	0.000	89	1171945	10.0	10.1	
184 Benzo[a]pyrene	252	14.283	14.283	0.000	73	1110022	10.0	10.1	
188 Indeno[1,2,3-cd]pyrene	276	16.317	16.317	0.000	86	1199340	10.0	10.8	
189 Dibenz(a,h)anthracene	278	16.322	16.322	0.000	72	992770	10.0	10.8	
190 Benzo[g,h,i]perylene	276	16.918	16.918	0.000	90	906776	10.0	9.82	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L6 W_00005 Amount Added: 1.00 Units: mL

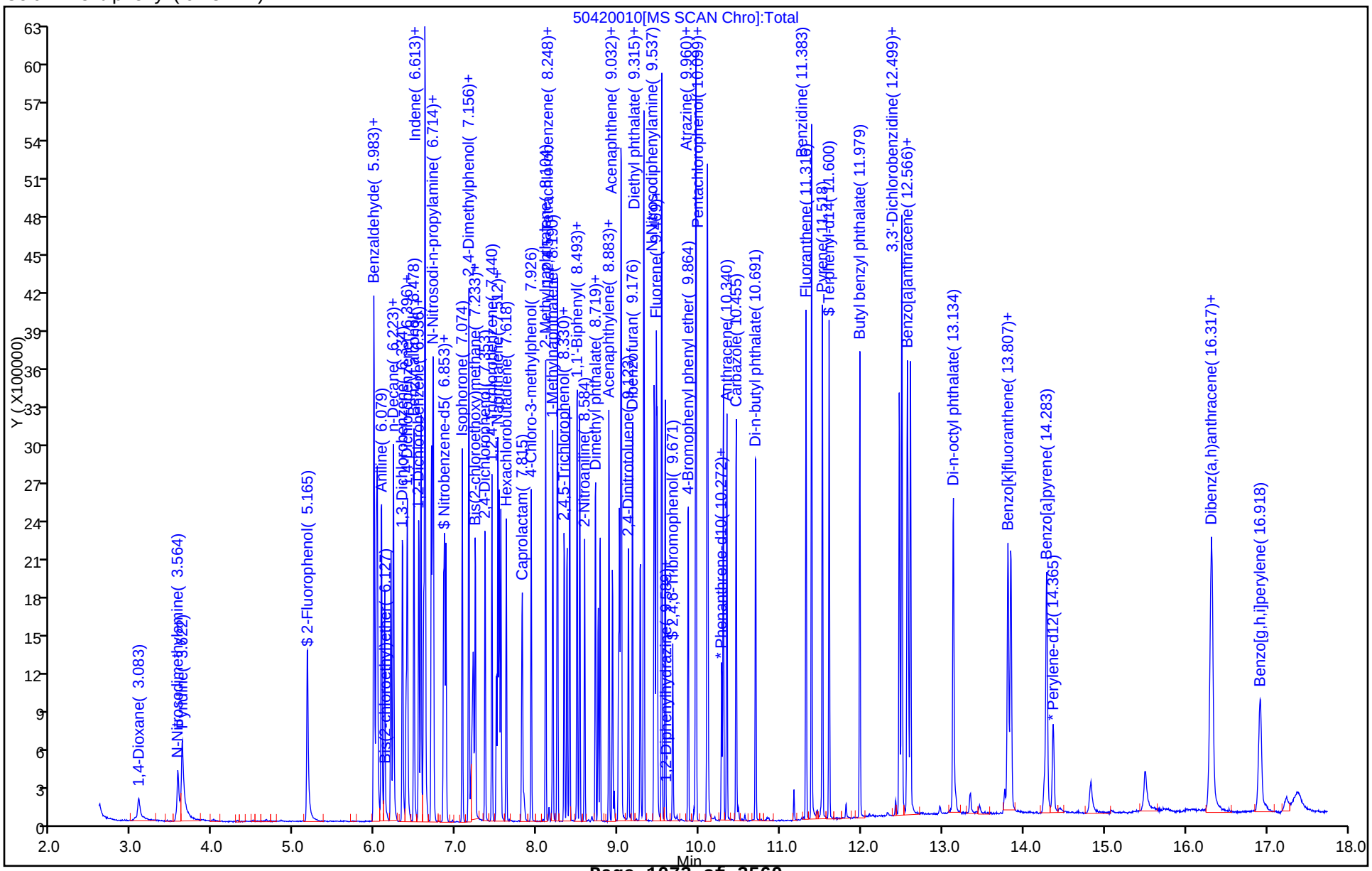
Report Date: 21-Apr-2015 07:01:09 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420010.D

Injection Date:	20-Apr-2015 12:41:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std6 lst1			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

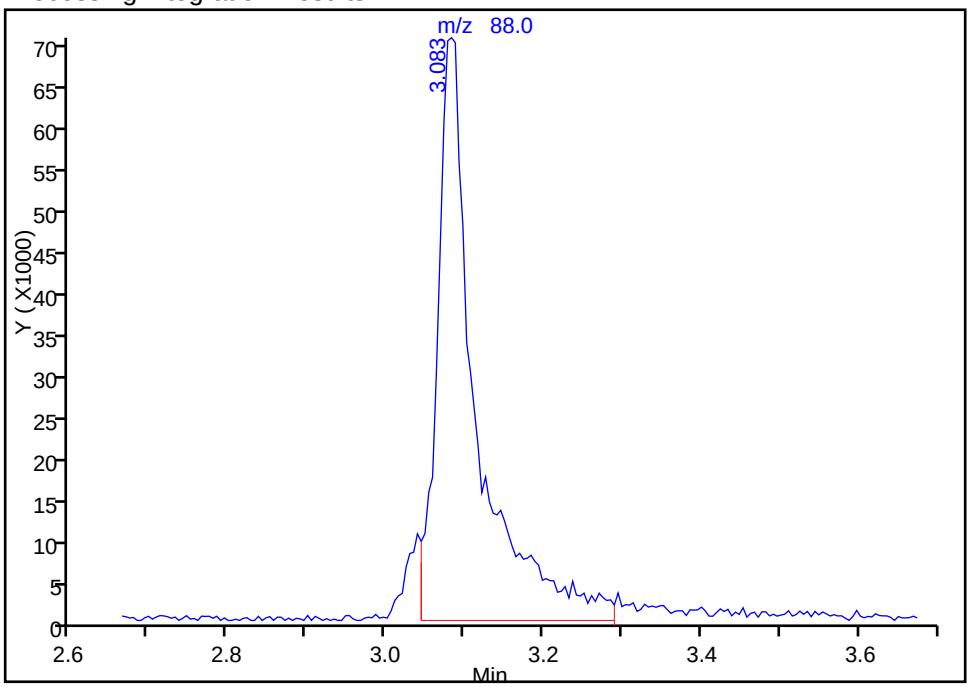
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420010.D				
Injection Date:	20-Apr-2015 12:41:30	Instrument ID:	A4HP9		
Lims ID:	std6 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

25 1,4-Dioxane, CAS: 123-91-1

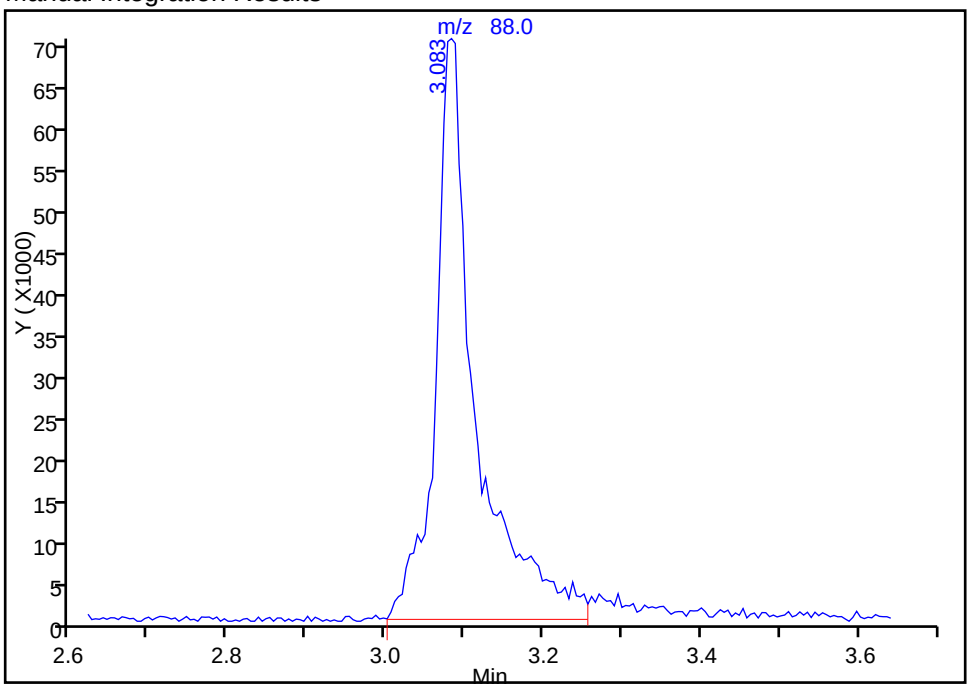
Processing Integration Results

RT: 3.08
Area: 246693
Amount: 9.617478
Amount Units: ng/ul



Manual Integration Results

RT: 3.08
Area: 250452
Amount: 9.746171
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 13:08:10
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID (1): STD6 240-177011/10 ICIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 04/20/2015 12:41

ANALYTE	RT	RESOLUTION (%)
2-Fluorophenol (Surr)	5.17	100.0
Phenol-d5 (Surr)	6.01	100.0
Phenol	6.03	100.0
Bis(2-chloroethyl)ether	6.12	100.0
2-Chlorophenol	6.19	100.0
1,3-Dichlorobenzene	6.34	100.0
1,4-Dichlorobenzene	6.40	100.0
Benzyl alcohol	6.48	100.0
1,2-Dichlorobenzene	6.54	100.0
2-Methylphenol	6.57	100.0
bis (2-chloroisopropyl) ether	6.60	100.0
3 & 4 Methylphenol	6.70	100.0
N-Nitrosodi-n-propylamine	6.71	100.0
Hexachloroethane	6.84	100.0
Nitrobenzene-d5 (Surr)	6.85	100.0
Nitrobenzene	6.87	100.0
Isophorone	7.07	100.0
2-Nitrophenol	7.15	100.0
2,4-Dimethylphenol	7.16	100.0
Benzoic acid	7.21	100.0
Bis(2-chloroethoxy)methane	7.24	100.0
2,4-Dichlorophenol	7.36	100.0
1,2,4-Trichlorobenzene	7.44	100.0
Naphthalene	7.51	100.0
4-Chloroaniline	7.53	100.0
Hexachlorobutadiene	7.62	100.0
4-Chloro-3-methylphenol	7.93	100.0
2-Methylnaphthalene	8.10	100.0
Hexachlorocyclopentadiene	8.25	100.0
2,4,6-Trichlorophenol	8.33	100.0
2,4,5-Trichlorophenol	8.37	100.0
2-Fluorobiphenyl (Surr)	8.40	100.0
2-Chloronaphthalene	8.52	100.0
2-Nitroaniline	8.58	100.0
Dimethyl phthalate	8.72	100.0
2,6-Dinitrotoluene	8.78	100.0
Acenaphthylene	8.88	100.0
3-Nitroaniline	8.93	100.0
2,4-Dinitrophenol	9.02	100.0
Acenaphthene	9.03	100.0
4-Nitrophenol	9.04	100.0
2,4-Dinitrotoluene	9.12	100.0
Dibenzofuran	9.18	100.0
Diethyl phthalate	9.31	100.0
4-Chlorophenyl phenyl ether	9.44	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID (1): STD6 240-177011/10 ICIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 04/20/2015 12:41

ANALYTE	RT	RESOLUTION (%)
4-Nitroaniline	9.45	100.0
Fluorene	9.47	100.0
4,6-Dinitro-2-methylphenol	9.48	100.0
N-Nitrosodiphenylamine	9.54	100.0
2,4,6-Tribromophenol (Surr)	9.67	100.0
4-Bromophenyl phenyl ether	9.86	100.0
Hexachlorobenzene	9.96	100.0
Pentachlorophenol	10.10	100.0
Phenanthrene	10.30	100.0
Anthracene	10.34	100.0
Carbazole	10.46	100.0
Di-n-butyl phthalate	10.70	100.0
Fluoranthene	11.32	100.0
Pyrene	11.52	100.0
Terphenyl-d14 (Surr)	11.60	100.0
Butyl benzyl phthalate	11.98	100.0
Bis(2-ethylhexyl) phthalate	12.47	100.0
3,3'-Dichlorobenzidine	12.50	100.0
Benzo[a]anthracene	12.57	100.0
Chrysene	12.61	100.0
Di-n-octyl phthalate	13.13	100.0
Benzo[b]fluoranthene	13.81	29.20
Benzo[k]fluoranthene	13.84	100.0
Benzo[a]pyrene	14.28	100.0
Indeno[1,2,3-cd]pyrene	16.32	100.0
Dibenz(a,h)anthracene	16.32	100.0

Resolution Report

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420010.D
Injection Date: 20-Apr-2015 12:41:30 Instrument ID: A4HP9
Lims ID: std6 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL

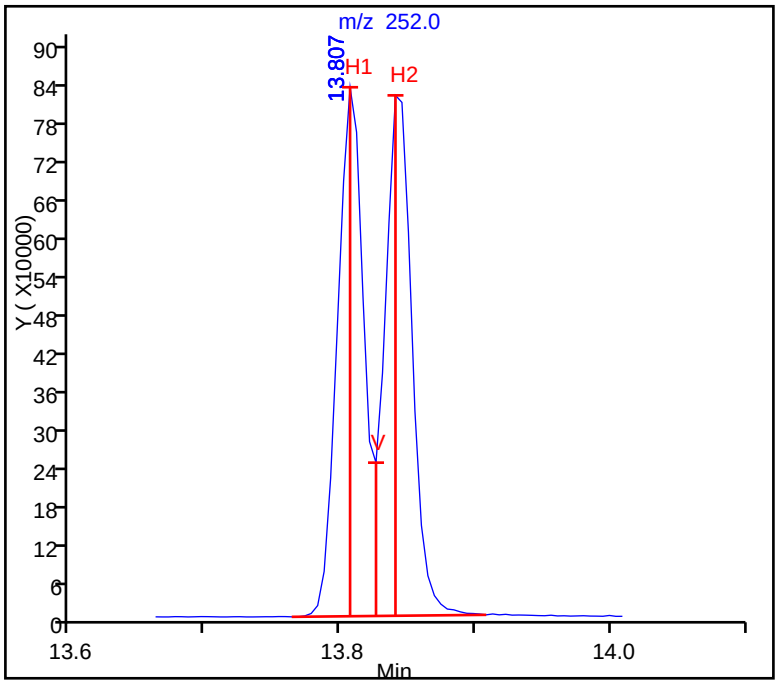
182 Benzo[b]fluoranthene - 183 Benzo[k]fluoranthene

SW-846 Method

Version C: %R = (V / (H1 + H2)) * 100
Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 240653
H1(182 Benzo[b]fluoranthen) = 830319
H2(183 Benzo[k]fluoranthen) = 816852

Version D: %R = 29.2 <= 50.0
Passed



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID (1): CCV 240-177355/2 Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 04/22/2015 07:35

ANALYTE	RT	RESOLUTION (%)
2-Fluorophenol (Surr)	5.13	100.0
Phenol-d5 (Surr)	5.99	100.0
Phenol	6.00	100.0
Bis(2-chloroethyl)ether	6.10	100.0
2-Chlorophenol	6.17	100.0
1,3-Dichlorobenzene	6.31	100.0
1,4-Dichlorobenzene	6.37	100.0
Benzyl alcohol	6.46	100.0
1,2-Dichlorobenzene	6.51	100.0
2-Methylphenol	6.54	100.0
bis (2-chloroisopropyl) ether	6.58	100.0
3 & 4 Methylphenol	6.67	100.0
N-Nitrosodi-n-propylamine	6.69	100.0
Hexachloroethane	6.82	100.0
Nitrobenzene-d5 (Surr)	6.84	100.0
Nitrobenzene	6.85	100.0
Isophorone	7.05	100.0
2-Nitrophenol	7.13	100.0
2,4-Dimethylphenol	7.14	100.0
Benzoic acid	7.20	100.0
Bis(2-chloroethoxy)methane	7.22	100.0
2,4-Dichlorophenol	7.34	100.0
1,2,4-Trichlorobenzene	7.42	100.0
Naphthalene	7.49	100.0
4-Chloroaniline	7.51	100.0
Hexachlorobutadiene	7.60	100.0
4-Chloro-3-methylphenol	7.91	100.0
2-Methylnaphthalene	8.08	100.0
Hexachlorocyclopentadiene	8.23	100.0
2,4,6-Trichlorophenol	8.31	100.0
2,4,5-Trichlorophenol	8.35	100.0
2-Fluorobiphenyl (Surr)	8.38	100.0
2-Chloronaphthalene	8.50	100.0
2-Nitroaniline	8.56	100.0
Dimethyl phthalate	8.70	100.0
2,6-Dinitrotoluene	8.75	100.0
Acenaphthylene	8.87	100.0
3-Nitroaniline	8.91	100.0
2,4-Dinitrophenol	8.99	100.0
Acenaphthene	9.01	100.0
4-Nitrophenol	9.02	100.0
2,4-Dinitrotoluene	9.11	100.0
Dibenzofuran	9.15	100.0
Diethyl phthalate	9.29	100.0
4-Chlorophenyl phenyl ether	9.42	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID (1): CCV 240-177355/2 Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 04/22/2015 07:35

ANALYTE	RT	RESOLUTION (%)
4-Nitroaniline	9.43	100.0
Fluorene	9.45	100.0
4,6-Dinitro-2-methylphenol	9.46	100.0
N-Nitrosodiphenylamine	9.51	100.0
2,4,6-Tribromophenol (Surr)	9.65	100.0
4-Bromophenyl phenyl ether	9.84	100.0
Hexachlorobenzene	9.93	100.0
Pentachlorophenol	10.08	100.0
Phenanthrene	10.27	100.0
Anthracene	10.32	100.0
Carbazole	10.43	100.0
Di-n-butyl phthalate	10.67	100.0
Fluoranthene	11.29	100.0
Pyrene	11.50	100.0
Terphenyl-d14 (Surr)	11.58	100.0
Butyl benzyl phthalate	11.96	100.0
Bis(2-ethylhexyl) phthalate	12.44	100.0
3,3'-Dichlorobenzidine	12.47	100.0
Benzo[a]anthracene	12.54	100.0
Chrysene	12.58	100.0
Di-n-octyl phthalate	13.10	100.0
Benzo[b]fluoranthene	13.77	30.10
Benzo[k]fluoranthene	13.80	100.0
Benzo[a]pyrene	14.24	100.0
Indeno[1,2,3-cd]pyrene	16.25	100.0
Dibenz(a,h)anthracene	16.26	100.0

Report Date: 23-Apr-2015 09:37:04 Chrom Revision: 2.2 09-Apr-2015 10:05:40

Resolution Report

TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422002.D				
Injection Date:	22-Apr-2015 07:35:30	Instrument ID:	A4HP9		
Lims ID:	ccv lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

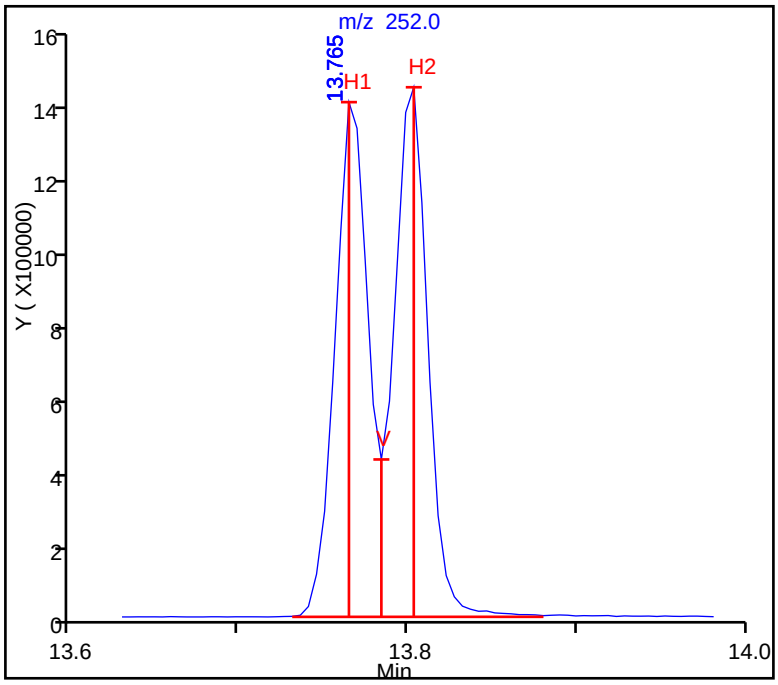
182 Benzo[b]fluoranthene - 183 Benzo[k]fluoranthene

SW-846 Method

Version C: %R = (V / (H1 + H2)) * 100
Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 405917
H1(182 Benzo[b]fluoranthen) = 1327405
H2(183 Benzo[k]fluoranthen) = 1365773

Version D: %R = 30.1 <= 50.0
Passed



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-177011/11 Calibration Date: 04/20/2015 13:07

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50420011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.8489	0.8578	0.0500	10.1	10.0	1.0	20.0
N-Nitrosodimethylamine	Ave	1.417	1.321	0.0500	9.32	10.0	-6.8	20.0
Pyridine	Ave	2.280	2.364	0.0500	10.4	10.0	3.7	20.0
Benzaldehyde	Ave	1.670	1.532	0.0500	18.3	20.0	-8.3	20.0
Phenol	Ave	2.388	2.223	0.0500	9.31	10.0	-6.9	20.0
Aniline	Ave	2.967	2.690	0.0500	9.07	10.0	-9.3	20.0
Bis(2-chloroethyl)ether	Ave	2.001	1.884	0.0500	9.41	10.0	-5.9	20.0
2-Chlorophenol	Ave	1.398	1.300	0.0500	9.30	10.0	-7.0	20.0
1,3-Dichlorobenzene	Ave	1.512	1.435	0.0500	9.49	10.0	-5.1	20.0
1,4-Dichlorobenzene	Ave	1.533	1.464	0.0500	9.54	10.0	-4.6	20.0
Benzyl alcohol	Ave	1.126	1.069	0.0500	9.49	10.0	-5.1	20.0
1,2-Dichlorobenzene	Ave	1.431	1.359	0.0500	9.50	10.0	-5.0	20.0
2-Methylphenol	Ave	1.554	1.531	0.0500	9.85	10.0	-1.5	20.0
bis (2-chloroisopropyl) ether	Ave	1.639	1.502	0.0500	9.16	10.0	-8.4	20.0
Indene	Ave	2.818	2.583	0.0500	18.3	20.0	-8.3	20.0
3 & 4 Methylphenol	Ave	1.645	1.567	0.0500	9.53	10.0	-4.7	20.0
N-Nitrosodi-n-propylamine	Ave	1.720	1.631	0.0500	9.48	10.0	-5.2	20.0
Acetophenone	Ave	2.383	2.310	0.0500	9.69	10.0	-3.1	20.0
Hexachloroethane	Ave	0.7281	0.7105	0.0500	9.76	10.0	-2.4	20.0
Nitrobenzene	Ave	0.6722	0.5544	0.0500	8.25	10.0	-17.5	20.0
Isophorone	Ave	1.136	1.206	0.0500	10.6	10.0	6.2	20.0
2-Nitrophenol	Ave	0.1857	0.1868	0.0500	10.1	10.0	0.6	20.0
2,4-Dimethylphenol	Ave	0.4926	0.4963	0.0500	10.1	10.0	0.7	20.0
Benzoic acid	Lin1		0.2249	0.0500	20.0	20.0	0.2	20.0
Bis(2-chloroethoxy)methane	Ave	0.5716	0.5857	0.0500	10.2	10.0	2.5	20.0
2,4-Dichlorophenol	Ave	0.2968	0.2871	0.0500	9.67	10.0	-3.3	20.0
1,2,4-Trichlorobenzene	Ave	0.3272	0.3148	0.0500	9.62	10.0	-3.8	20.0
Naphthalene	Ave	1.069	1.031	0.0500	9.64	10.0	-3.6	20.0
4-Chloroaniline	Ave	0.4667	0.4340	0.0500	9.30	10.0	-7.0	20.0
2,6-Dichlorophenol	Ave	0.2918	0.2751	0.0500	9.43	10.0	-5.7	20.0
Hexachlorobutadiene	Ave	0.2201	0.1995	0.0500	9.06	10.0	-9.4	20.0
Caprolactam	Ave	0.1252	0.1048	0.0500	16.7	20.0	-16.3	20.0
4-Chloro-3-methylphenol	Ave	0.4176	0.3981	0.0500	9.53	10.0	-4.7	20.0
2-Methylnaphthalene	Ave	0.7019	0.6299	0.0500	8.97	10.0	-10.3	20.0
Hexachlorocyclopentadiene	Ave	0.3739	0.3346	0.0500	8.95	10.0	-10.5	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5765	0.4963	0.0500	8.61	10.0	-13.9	20.0
2,4,6-Trichlorophenol	Ave	0.3845	0.3590	0.0500	9.34	10.0	-6.6	20.0
2,4,5-Trichlorophenol	Ave	0.4014	0.3641	0.0500	9.07	10.0	-9.3	20.0
1,1'-Biphenyl	Ave	1.404	1.186	0.0500	8.45	10.0	-15.5	20.0
2-Chloronaphthalene	Ave	1.110	0.9459	0.0500	8.52	10.0	-14.8	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-177011/11 Calibration Date: 04/20/2015 13:07

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50420011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Ave	0.5629	0.4955	0.0500	8.80	10.0	-12.0	20.0
Dimethyl phthalate	Ave	1.248	1.102	0.0500	8.83	10.0	-11.7	20.0
1,3-Dinitrobenzene	Ave	0.2002	0.1844	0.0500	9.21	10.0	-7.9	20.0
2,6-Dinitrotoluene	Ave	0.2924	0.2678	0.0500	9.16	10.0	-8.4	20.0
Acenaphthylene	Ave	1.715	1.631	0.0500	9.51	10.0	-4.9	20.0
3-Nitroaniline	Ave	0.2915	0.2895	0.0500	9.93	10.0	-0.7	20.0
2,4-Dinitrophenol	Lin		0.1698	0.0500	17.6	20.0	-12.0	20.0
Acenaphthene	Ave	1.116	1.047	0.0500	9.39	10.0	-6.1	20.0
4-Nitrophenol	Ave	0.2767	0.2630	0.0500	19.0	20.0	-4.9	20.0
2,4-Dinitrotoluene	Ave	0.3819	0.3699	0.0500	9.69	10.0	-3.1	20.0
Dibenzofuran	Ave	1.519	1.437	0.0500	9.46	10.0	-5.4	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3232	0.3011	0.0500	9.32	10.0	-6.8	20.0
Diethyl phthalate	Ave	1.260	1.129	0.0500	8.96	10.0	-10.4	20.0
4-Chlorophenyl phenyl ether	Ave	0.6472	0.6091	0.0500	9.41	10.0	-5.9	20.0
4-Nitroaniline	Ave	0.2823	0.2786	0.0500	9.87	10.0	-1.3	20.0
Fluorene	Ave	1.275	1.222	0.0500	9.59	10.0	-4.1	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1524	0.0500	21.3	20.0	6.3	20.0
N-Nitrosodiphenylamine	Ave	0.5377	0.5845	0.0500	21.7	20.0	8.7	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.118	1.468	0.0500	13.1	10.0	31.3*	20.0
Azobenzene	Ave	1.117	1.468	0.0500	13.1	10.0	31.3*	20.0
4-Bromophenyl phenyl ether	Ave	0.2049	0.2350	0.0500	11.5	10.0	14.7	20.0
Hexachlorobenzene	Ave	0.2018	0.2170	0.0500	10.8	10.0	7.6	20.0
Atrazine	Ave	0.2061	0.2252	0.0500	21.9	20.0	9.3	20.0
Pentachlorophenol	Lin1		0.1516	0.0500	21.2	20.0	6.1	20.0
Phenanthrene	Ave	1.050	0.9778	0.0500	9.31	10.0	-6.9	20.0
Anthracene	Ave	1.050	1.019	0.0500	9.70	10.0	-3.0	20.0
Carbazole	Ave	0.9379	0.9371	0.0500	9.99	10.0	-0.0	20.0
Di-n-butyl phthalate	Ave	1.175	1.240	0.0500	10.6	10.0	5.5	20.0
Fluoranthene	Ave	1.212	1.226	0.0500	10.1	10.0	1.1	20.0
Benzidine	Ave	0.5801	0.5521	0.0500	19.0	20.0	-4.8	20.0
Pyrene	Ave	1.096	1.015	0.0500	9.26	10.0	-7.4	20.0
Butyl benzyl phthalate	Ave	0.5093	0.4981	0.0500	9.78	10.0	-2.2	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6761	0.6498	0.0500	9.61	10.0	-3.9	20.0
3,3'-Dichlorobenzidine	Ave	0.3645	0.3542	0.0500	19.4	20.0	-2.8	20.0
Benzo[a]anthracene	Ave	1.124	1.088	0.0500	9.68	10.0	-3.2	20.0
Chrysene	Ave	1.027	1.029	0.0500	10.0	10.0	0.2	20.0
Di-n-octyl phthalate	Ave	1.408	1.401	0.0500	9.95	10.0	-0.5	20.0
Benzo[b]fluoranthene	Ave	1.205	1.157	0.0500	9.60	10.0	-4.0	20.0
Benzo[k]fluoranthene	Ave	1.214	1.195	0.0500	9.84	10.0	-1.6	20.0
Benzo[a]pyrene	Ave	1.151	1.110	0.0500	9.64	10.0	-3.6	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-177011/11 Calibration Date: 04/20/2015 13:07

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50420011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Indeno[1,2,3-cd]pyrene	Ave	1.165	1.083	0.0500	9.29	10.0	-7.1	20.0
Dibenz(a,h)anthracene	Ave	0.9613	0.9111	0.0500	9.48	10.0	-5.2	20.0
Benzo[g,h,i]perylene	Ave	0.9662	0.9182	0.0500	9.50	10.0	-5.0	20.0
2-Fluorophenol (Surr)	Ave	1.472	1.578	0.0500	10.7	10.0	7.1	20.0
Phenol-d5 (Surr)	Ave	2.203	2.264	0.0500	10.3	10.0	2.8	20.0
Nitrobenzene-d5 (Surr)	Ave	0.7281	0.6498	0.0500	8.92	10.0	-10.8	20.0
2-Fluorobiphenyl (Surr)	Ave	1.345	1.245	0.0500	9.25	10.0	-7.5	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1481	0.1424	0.0500	9.61	10.0	-3.9	20.0
Terphenyl-d14 (Surr)	Ave	0.8139	0.8051	0.0500	9.89	10.0	-1.1	20.0

Report Date: 21-Apr-2015 07:01:12 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420011.D
Lims ID: icv lst1
Client ID:
Sample Type: ICV
Inject. Date: 20-Apr-2015 13:07:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042708-011
Misc. Info.: ICV LST1ICV LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist:

Method: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-Apr-2015 07:01:11 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: ulmanm Date: 20-Apr-2015 13:39:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.378	6.378	0.000	84	139492	4.00	4.00	
* 2 Naphthalene-d8	136	7.494	7.494	0.000	97	581350	4.00	4.00	
* 3 Acenaphthene-d10	164	8.999	8.999	0.000	77	360913	4.00	4.00	
* 4 Phenanthrene-d10	188	10.273	10.273	0.000	94	530764	4.00	4.00	
* 5 Chrysene-d12	240	12.577	12.577	0.000	80	647642	4.00	4.00	
* 6 Perylene-d12	264	14.361	14.361	0.000	95	536696	4.00	4.00	
$ 7 2-Fluorophenol	112	5.162	5.162	0.000	94	550154	10.0	10.7	
$ 8 Phenol-d5	99	6.013	6.013	0.000	80	789504	10.0	10.3	
$ 9 Nitrobenzene-d5	82	6.854	6.854	0.000	83	944341	10.0	8.92	
$ 10 2-Fluorobiphenyl (Surr)	172	8.398	8.398	0.000	98	1122925	10.0	9.25	
$ 11 2,4,6-Tribromophenol	330	9.672	9.672	0.000	82	128492	10.0	9.61	
$ 12 Terphenyl-d14	244	11.601	11.601	0.000	97	1303468	10.0	9.89	
25 1,4-Dioxane	88	3.084	3.084	0.000	91	299141	10.0	10.1	M
26 N-Nitrosodimethylamine	74	3.565	3.565	0.000	84	460619	10.0	9.32	
27 Pyridine	79	3.618	3.618	0.000	89	824453	10.0	10.4	
41 Benzaldehyde	77	5.984	5.984	0.000	83	1068192	20.0	18.3	
43 Phenol	94	6.027	6.027	0.000	88	775381	10.0	9.31	
44 Aniline	93	6.075	6.075	0.000	94	938162	10.0	9.07	
69 Bis(2-chloroethyl)ether	93	6.119	6.119	0.000	87	657044	10.0	9.41	
46 2-Chlorophenol	128	6.195	6.195	0.000	89	453504	10.0	9.30	
243 n-Decane	57	6.224	6.224	0.000	96	589881	NC	NC	
47 1,3-Dichlorobenzene	146	6.335	6.335	0.000	79	500467	10.0	9.49	
48 1,4-Dichlorobenzene	146	6.397	6.397	0.000	74	510406	10.0	9.54	
49 Benzyl alcohol	108	6.479	6.479	0.000	84	372807	10.0	9.49	
50 1,2-Dichlorobenzene	146	6.537	6.537	0.000	78	473801	10.0	9.50	
51 2-Methylphenol	108	6.566	6.566	0.000	78	533885	10.0	9.85	
53 2,2'-oxybis[1-chloropropan	45	6.599	6.599	0.000	98	523646	10.0	9.16	
52 Indene	115	6.614	6.614	0.000	77	1801296	20.0	18.3	
21 3 & 4 Methylphenol	108	6.691	6.691	0.000	95	546596	10.0	9.53	
57 N-Nitrosodi-n-propylamine	70	6.710	6.710	0.000	97	568626	10.0	9.48	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.715	6.715	0.000	80	805426	10.0	9.69	
61 Hexachloroethane	117	6.845	6.845	0.000	87	247761	10.0	9.76	
62 Nitrobenzene	77	6.873	6.873	0.000	75	805701	10.0	8.25	
64 Isophorone	82	7.075	7.075	0.000	94	1753225	10.0	10.6	
66 2-Nitrophenol	139	7.152	7.152	0.000	80	271425	10.0	10.1	
65 2,4-Dimethylphenol	107	7.157	7.157	0.000	95	721280	10.0	10.1	
71 Benzoic acid	122	7.220	7.220	0.000	71	653650	20.0	20.0	
70 Bis(2-chloroethoxy)methane	93	7.234	7.234	0.000	91	851258	10.0	10.2	
73 2,4-Dichlorophenol	162	7.354	7.354	0.000	87	417269	10.0	9.67	
74 1,2,4-Trichlorobenzene	180	7.441	7.441	0.000	83	457522	10.0	9.62	
75 Naphthalene	128	7.513	7.513	0.000	97	1497955	10.0	9.64	
76 4-Chloroaniline	127	7.532	7.532	0.000	53	630688	10.0	9.30	
77 2,6-Dichlorophenol	162	7.552	7.552	0.000	60	399745	10.0	9.43	
79 Hexachlorobutadiene	225	7.619	7.619	0.000	88	289877	10.0	9.06	
84 Caprolactam	113	7.816	7.816	0.000	80	304531	20.0	16.7	
86 4-Chloro-3-methylphenol	107	7.927	7.927	0.000	78	578572	10.0	9.53	
87 2-Methylnaphthalene	142	8.100	8.100	0.000	82	915474	10.0	8.97	
88 1-Methylnaphthalene	142	8.191	8.191	0.000	78	837358	10.0	9.68	
89 Hexachlorocyclopentadiene	237	8.244	8.244	0.000	91	301878	10.0	8.95	
91 1,2,4,5-Tetrachlorobenzene	216	8.249	8.249	0.000	92	447812	10.0	8.61	
92 2,4,6-Trichlorophenol	196	8.331	8.331	0.000	86	323904	10.0	9.34	
93 2,4,5-Trichlorophenol	196	8.364	8.364	0.000	88	328488	10.0	9.07	
98 1,1'-Biphenyl	154	8.489	8.489	0.000	97	1070317	10.0	8.45	
100 2-Chloronaphthalene	162	8.523	8.523	0.000	98	853448	10.0	8.52	
102 2-Nitroaniline	65	8.581	8.581	0.000	70	447056	10.0	8.80	
105 Dimethyl phthalate	163	8.715	8.715	0.000	92	994200	10.0	8.83	
106 1,3-Dinitrobenzene	168	8.749	8.749	0.000	75	166417	10.0	9.21	
107 2,6-Dinitrotoluene	165	8.773	8.773	0.000	57	241656	10.0	9.16	
109 Acenaphthylene	152	8.884	8.884	0.000	86	1471296	10.0	9.51	
110 3-Nitroaniline	138	8.927	8.927	0.000	79	261167	10.0	9.93	
111 2,4-Dinitrophenol	184	9.013	9.013	0.000	98	306408	20.0	17.6	
112 Acenaphthene	153	9.028	9.028	0.000	82	945081	10.0	9.39	
113 4-Nitrophenol	109	9.037	9.037	0.000	41	474644	20.0	19.0	
114 2,4-Dinitrotoluene	165	9.124	9.124	0.000	79	333746	10.0	9.69	
116 Dibenzofuran	168	9.172	9.172	0.000	81	1296550	10.0	9.46	
119 2,3,4,6-Tetrachlorophenol	232	9.268	9.268	0.000	76	271709	10.0	9.32	
121 Diethyl phthalate	149	9.312	9.312	0.000	94	1018332	10.0	8.96	
247 Hexadecane	57	9.316	9.316	0.000	97	862851	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.441	9.441	0.000	92	549537	10.0	9.41	
125 4-Nitroaniline	138	9.451	9.451	0.000	75	251369	10.0	9.87	
126 Fluorene	166	9.465	9.465	0.000	100	1102836	10.0	9.59	
128 4,6-Dinitro-2-methylphenol	198	9.480	9.480	0.000	94	404332	20.0	21.3	
131 N-Nitrosodiphenylamine	169	9.533	9.533	0.000	98	1551022	20.0	21.7	
132 1,2-Diphenylhydrazine	77	9.576	9.576	0.000	99	1948483	10.0	13.1	
133 Azobenzene	77	9.576	9.576	0.000	94	1947497	10.0	13.1	
139 4-Bromophenyl phenyl ether	248	9.860	9.860	0.000	71	311764	10.0	11.5	
141 Hexachlorobenzene	284	9.951	9.951	0.000	81	287962	10.0	10.8	
142 Atrazine	200	9.961	9.961	0.000	86	597715	20.0	21.9	
244 n-Octadecane	57	10.095	10.095	0.000	89	773539	NC	NC	
143 Pentachlorophenol	266	10.105	10.105	0.000	82	402198	20.0	21.2	
148 Phenanthrene	178	10.293	10.293	0.000	98	1297423	10.0	9.31	
149 Anthracene	178	10.341	10.341	0.000	87	1351675	10.0	9.70	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.451	10.451	0.000	80	1243382	10.0	10.0	
154 Di-n-butyl phthalate	149	10.692	10.692	0.000	100	1645197	10.0	10.6	
159 Fluoranthene	202	11.317	11.317	0.000	98	1627336	10.0	10.1	
160 Benzidine	184	11.384	11.384	0.000	98	1787699	20.0	19.0	
161 Pyrene	202	11.514	11.514	0.000	94	1643228	10.0	9.26	
168 Butyl benzyl phthalate	149	11.976	11.976	0.000	89	806428	10.0	9.78	
173 Bis(2-ethylhexyl) phthalat	149	12.461	12.461	0.000	93	1052013	10.0	9.61	
175 3,3'-Dichlorobenzidine	252	12.495	12.495	0.000	54	1146798	20.0	19.4	
177 Benzo[a]anthracene	228	12.562	12.562	0.000	98	1761217	10.0	9.68	
178 Chrysene	228	12.601	12.601	0.000	95	1666379	10.0	10.0	
180 Di-n-octyl phthalate	149	13.130	13.130	0.000	99	1880382	10.0	9.95	
182 Benzo[b]fluoranthene	252	13.803	13.803	0.000	85	1551825	10.0	9.60	
183 Benzo[k]fluoranthene	252	13.841	13.841	0.000	85	1603295	10.0	9.84	
184 Benzo[a]pyrene	252	14.279	14.279	0.000	73	1489139	10.0	9.64	
188 Indeno[1,2,3-cd]pyrene	276	16.313	16.313	0.000	75	1452884	10.0	9.29	
189 Dibenz(a,h)anthracene	278	16.318	16.318	0.000	75	1222477	10.0	9.48	
190 Benzo[g,h,i]perylene	276	16.914	16.914	0.000	93	1231942	10.0	9.50	
S 191 Methyl Phenols,Total	100				0			19.4	
S 245 Total Cresols	100				0			19.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 SS W_00004 Amount Added: 1.00 Units: mL

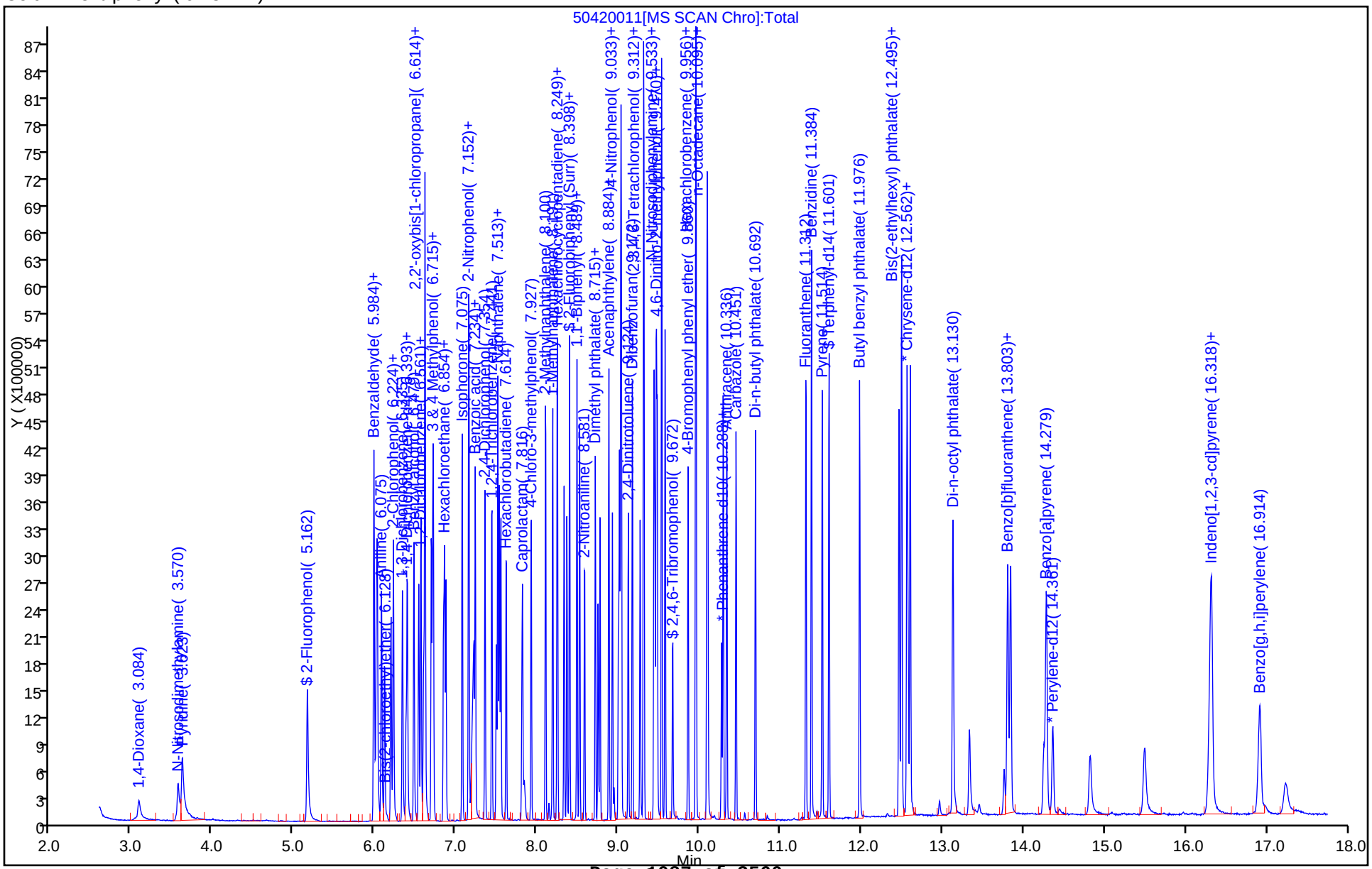
Report Date: 21-Apr-2015 07:01:12 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420011.D

Injection Date:	20-Apr-2015 13:07:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	icv lst1			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

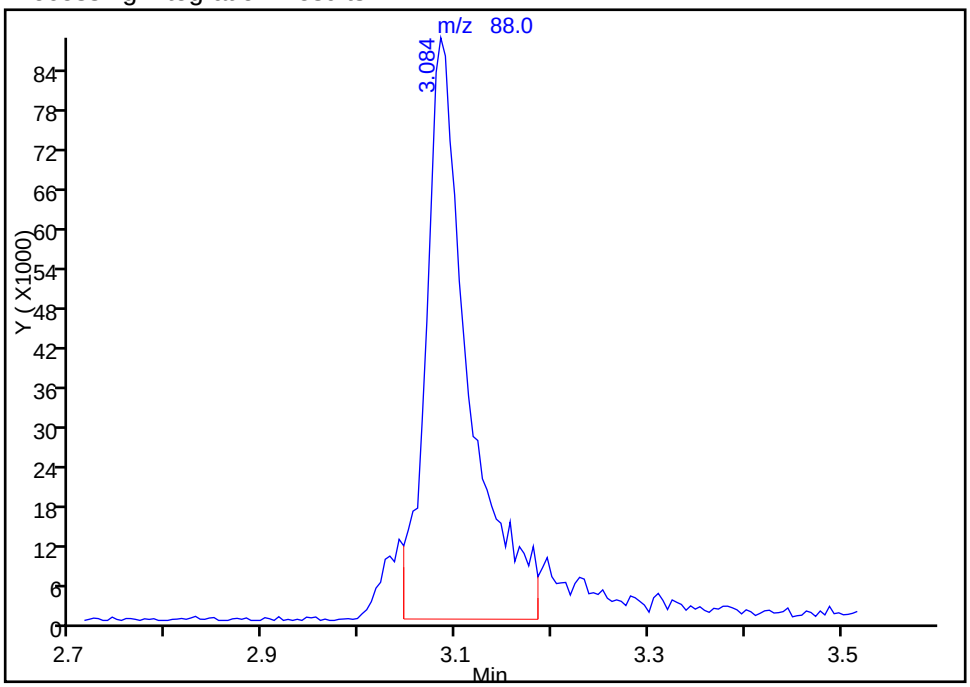
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420011.D				
Injection Date:	20-Apr-2015 13:07:30	Instrument ID:	A4HP9		
Lims ID:	icv lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

25 1,4-Dioxane, CAS: 123-91-1

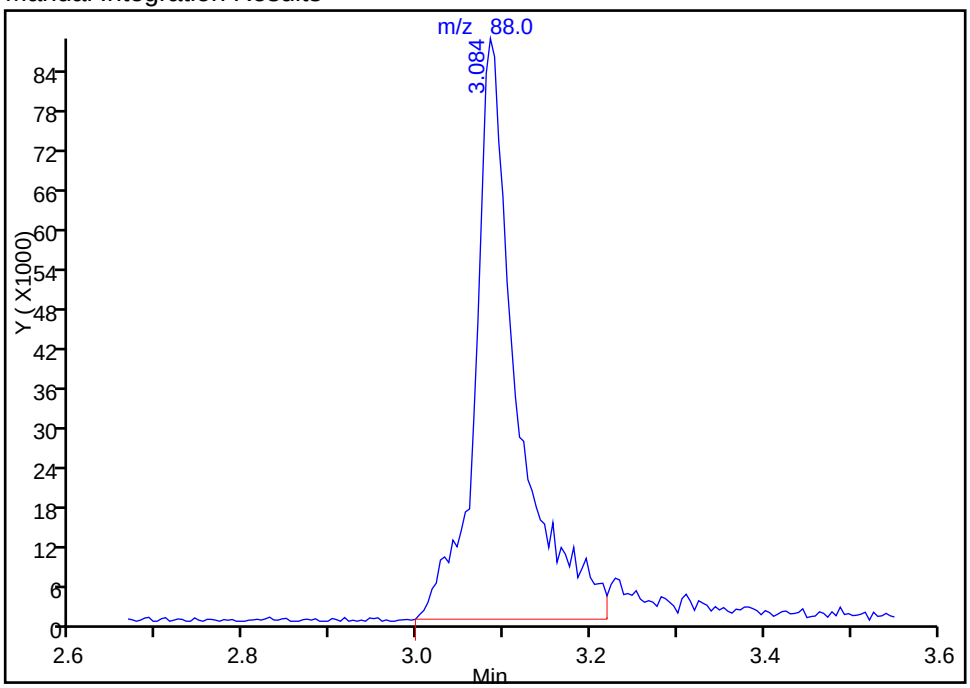
Processing Integration Results

RT: 3.08
Area: 272311
Amount: 9.198094
Amount Units: ng/ul



Manual Integration Results

RT: 3.08
Area: 299141
Amount: 10.104355
Amount Units: ng/ul



Reviewer: ulmanm, 20-Apr-2015 13:39:47
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177355/2 Calibration Date: 04/22/2015 07:35

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.8489	0.8741	0.0500	10.3	10.0	3.0	20.0
N-Nitrosodimethylamine	Ave	1.417	1.418	0.0500	10.0	10.0	0.0	20.0
Pyridine	Ave	2.280	2.472	0.0500	10.8	10.0	8.4	20.0
Benzaldehyde	Ave	1.670	1.748	0.0500	20.9	20.0	4.7	20.0
Phenol	Ave	2.388	2.523	0.0500	10.6	10.0	5.6	20.0
Aniline	Ave	2.967	3.150	0.0500	10.6	10.0	6.2	20.0
Bis(2-chloroethyl)ether	Ave	2.001	2.081	0.0500	10.4	10.0	4.0	20.0
2-Chlorophenol	Ave	1.398	1.442	0.0500	10.3	10.0	3.2	20.0
1,3-Dichlorobenzene	Ave	1.512	1.521	0.0500	10.1	10.0	0.6	20.0
1,4-Dichlorobenzene	Ave	1.533	1.596	0.0500	10.4	10.0	4.1	20.0
Benzyl alcohol	Ave	1.126	1.104	0.0500	9.80	10.0	-2.0	20.0
1,2-Dichlorobenzene	Ave	1.431	1.482	0.0500	10.4	10.0	3.6	20.0
2-Methylphenol	Ave	1.554	1.647	0.0500	10.6	10.0	6.0	20.0
bis (2-chloroisopropyl) ether	Ave	1.639	1.870	0.0500	11.4	10.0	14.1	20.0
Indene	Ave	2.818	2.926	0.0500	20.8	20.0	3.8	20.0
3 & 4 Methylphenol	Ave	1.645	1.692	0.0500	10.3	10.0	2.9	20.0
N-Nitrosodi-n-propylamine	Ave	1.720	1.761	0.0500	10.2	10.0	2.4	20.0
Acetophenone	Ave	2.383	2.492	0.0500	10.5	10.0	4.6	20.0
Hexachloroethane	Ave	0.7281	0.7447	0.0500	10.2	10.0	2.3	20.0
Nitrobenzene	Ave	0.6722	0.6586	0.0500	9.80	10.0	-2.0	20.0
Isophorone	Ave	1.136	1.129	0.0500	9.94	10.0	-0.6	20.0
2-Nitrophenol	Ave	0.1857	0.1831	0.0500	9.86	10.0	-1.4	20.0
2,4-Dimethylphenol	Ave	0.4926	0.4916	0.0500	9.98	10.0	-0.2	20.0
Benzoic acid	Lin1		0.2052	0.0500	18.4	20.0	-7.9	20.0
Bis(2-chloroethoxy)methane	Ave	0.5716	0.5907	0.0500	10.3	10.0	3.3	20.0
2,4-Dichlorophenol	Ave	0.2968	0.2915	0.0500	9.82	10.0	-1.8	20.0
1,2,4-Trichlorobenzene	Ave	0.3272	0.3189	0.0500	9.75	10.0	-2.5	20.0
Naphthalene	Ave	1.069	1.064	0.0500	9.95	10.0	-0.5	20.0
4-Chloroaniline	Ave	0.4667	0.4946	0.0500	10.6	10.0	6.0	20.0
2,6-Dichlorophenol	Ave	0.2918	0.2862	0.0500	9.81	10.0	-1.9	20.0
Hexachlorobutadiene	Ave	0.2201	0.2056	0.0500	9.34	10.0	-6.6	20.0
Caprolactam	Ave	0.1252	0.1292	0.0500	20.6	20.0	3.2	20.0
4-Chloro-3-methylphenol	Ave	0.4176	0.4239	0.0500	10.2	10.0	1.5	20.0
2-Methylnaphthalene	Ave	0.7019	0.6704	0.0500	9.55	10.0	-4.5	20.0
Hexachlorocyclopentadiene	Ave	0.3739	0.3597	0.0500	9.62	10.0	-3.8	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5765	0.5567	0.0500	9.66	10.0	-3.4	20.0
2,4,6-Trichlorophenol	Ave	0.3845	0.3745	0.0500	9.74	10.0	-2.6	20.0
2,4,5-Trichlorophenol	Ave	0.4014	0.3939	0.0500	9.81	10.0	-1.9	20.0
1,1'-Biphenyl	Ave	1.404	1.357	0.0500	9.67	10.0	-3.3	20.0
2-Chloronaphthalene	Ave	1.110	1.076	0.0500	9.69	10.0	-3.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177355/2 Calibration Date: 04/22/2015 07:35

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Ave	0.5629	0.5806	0.0500	10.3	10.0	3.2	20.0
Dimethyl phthalate	Ave	1.248	1.242	0.0500	9.95	10.0	-0.5	20.0
1,3-Dinitrobenzene	Ave	0.2002	0.1983	0.0500	9.90	10.0	-1.0	20.0
2,6-Dinitrotoluene	Ave	0.2924	0.2943	0.0500	10.1	10.0	0.7	20.0
Acenaphthylene	Ave	1.715	1.721	0.0500	10.0	10.0	0.3	20.0
3-Nitroaniline	Ave	0.2915	0.3016	0.0500	10.3	10.0	3.5	20.0
2,4-Dinitrophenol	Lin		0.1696	0.0500	17.6	20.0	-12.0	20.0
Acenaphthene	Ave	1.116	1.096	0.0500	9.82	10.0	-1.8	20.0
4-Nitrophenol	Ave	0.2767	0.2626	0.0500	19.0	20.0	-5.1	20.0
2,4-Dinitrotoluene	Ave	0.3819	0.3827	0.0500	10.0	10.0	0.2	20.0
Dibenzofuran	Ave	1.519	1.514	0.0500	9.97	10.0	-0.3	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3232	0.3257	0.0500	10.1	10.0	0.8	20.0
Diethyl phthalate	Ave	1.260	1.154	0.0500	9.16	10.0	-8.4	20.0
4-Chlorophenyl phenyl ether	Ave	0.6472	0.6328	0.0500	9.78	10.0	-2.2	20.0
4-Nitroaniline	Ave	0.2823	0.2837	0.0500	10.0	10.0	0.5	20.0
Fluorene	Ave	1.275	1.249	0.0500	9.80	10.0	-2.0	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1405	0.0500	19.7	20.0	-1.7	20.0
N-Nitrosodiphenylamine	Ave	0.5377	0.5759	0.0500	21.4	20.0	7.1	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.118	1.285	0.0500	11.5	10.0	15.0	20.0
Azobenzene	Ave	1.117	1.286	0.0500	11.5	10.0	15.1	20.0
4-Bromophenyl phenyl ether	Ave	0.2049	0.2127	0.0500	10.4	10.0	3.8	20.0
Hexachlorobenzene	Ave	0.2018	0.1950	0.0500	9.66	10.0	-3.4	20.0
Atrazine	Ave	0.2061	0.2200	0.0500	21.4	20.0	6.8	20.0
Pentachlorophenol	Lin1		0.1335	0.0500	18.7	20.0	-6.3	20.0
Phenanthrene	Ave	1.050	1.020	0.0500	9.71	10.0	-2.9	20.0
Anthracene	Ave	1.050	1.049	0.0500	9.99	10.0	-0.1	20.0
Carbazole	Ave	0.9379	0.9914	0.0500	10.6	10.0	5.7	20.0
Di-n-butyl phthalate	Ave	1.175	1.274	0.0500	10.8	10.0	8.5	20.0
Fluoranthene	Ave	1.212	1.276	0.0500	10.5	10.0	5.2	20.0
Benzidine	Ave	0.5801	0.6631	0.0500	22.9	20.0	14.3	20.0
Pyrene	Ave	1.096	1.088	0.0500	9.93	10.0	-0.7	20.0
Butyl benzyl phthalate	Ave	0.5093	0.5006	0.0500	9.83	10.0	-1.7	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6761	0.6867	0.0500	10.2	10.0	1.6	20.0
3,3'-Dichlorobenzidine	Ave	0.3645	0.3696	0.0500	20.3	20.0	1.4	20.0
Benzo[a]anthracene	Ave	1.124	1.091	0.0500	9.70	10.0	-3.0	20.0
Chrysene	Ave	1.027	1.014	0.0500	9.87	10.0	-1.3	20.0
Di-n-octyl phthalate	Ave	1.408	1.394	0.0500	9.90	10.0	-1.0	20.0
Benzo[b]fluoranthene	Ave	1.205	1.151	0.0500	9.55	10.0	-4.5	20.0
Benzo[k]fluoranthene	Ave	1.214	1.203	0.0500	9.91	10.0	-0.9	20.0
Benzo[a]pyrene	Ave	1.151	1.124	0.0500	9.77	10.0	-2.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177355/2 Calibration Date: 04/22/2015 07:35

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Indeno[1,2,3-cd]pyrene	Ave	1.165	1.122	0.0500	9.63	10.0	-3.7	20.0
Dibenz(a,h)anthracene	Ave	0.9613	0.9329	0.0500	9.70	10.0	-3.0	20.0
Benzo[g,h,i]perylene	Ave	0.9662	0.9325	0.0500	9.65	10.0	-3.5	20.0
2-Fluorophenol (Surr)	Ave	1.472	1.637	0.0500	11.1	10.0	11.2	20.0
Phenol-d5 (Surr)	Ave	2.203	2.288	0.0500	10.4	10.0	3.9	20.0
Nitrobenzene-d5 (Surr)	Ave	0.7281	0.7039	0.0500	9.67	10.0	-3.3	20.0
2-Fluorobiphenyl (Surr)	Ave	1.345	1.291	0.0500	9.60	10.0	-4.0	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1481	0.1442	0.0500	9.73	10.0	-2.7	20.0
Terphenyl-d14 (Surr)	Ave	0.8139	0.7767	0.0500	9.54	10.0	-4.6	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422002.D
Lims ID: ccv lst1
Client ID:
Sample Type: CCVIS
Inject. Date: 22-Apr-2015 07:35:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-002
Misc. Info.: CCV LST1CCV LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 09:37:02 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 22-Apr-2015 08:08:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.359	6.359	0.000	93	166687	4.00	4.00	
* 2 Naphthalene-d8	136	7.475	7.475	0.000	97	637603	4.00	4.00	
* 3 Acenaphthene-d10	164	8.980	8.980	0.000	78	378863	4.00	4.00	
* 4 Phenanthrene-d10	188	10.254	10.254	0.000	96	618691	4.00	4.00	
* 5 Chrysene-d12	240	12.548	12.548	0.000	85	757208	4.00	4.00	
* 6 Perylene-d12	264	14.318	14.318	0.000	97	649458	4.00	4.00	
$ 7 2-Fluorophenol	112	5.133	5.133	0.000	93	682003	10.0	11.1	
$ 8 Phenol-d5	99	5.994	5.994	0.000	82	953439	10.0	10.4	
$ 9 Nitrobenzene-d5	82	6.835	6.835	0.000	83	1122065	10.0	9.67	
$ 10 2-Fluorobiphenyl (Surr)	172	8.379	8.379	0.000	98	1222538	10.0	9.60	
$ 11 2,4,6-Tribromophenol	330	9.653	9.653	0.000	89	136538	10.0	9.73	
$ 12 Terphenyl-d14	244	11.577	11.577	0.000	97	1470327	10.0	9.54	
25 1,4-Dioxane	88	2.993	2.993	0.000	89	364257	10.0	10.3	
26 N-Nitrosodimethylamine	74	3.493	3.493	0.000	90	590782	10.0	10.0	
27 Pyridine	79	3.556	3.556	0.000	90	1030007	10.0	10.8	
41 Benzaldehyde	77	5.960	5.960	0.000	83	1456954	20.0	20.9	
43 Phenol	94	6.003	6.003	0.000	95	1051274	10.0	10.6	
44 Aniline	93	6.051	6.051	0.000	94	1312826	10.0	10.6	
69 Bis(2-chloroethyl)ether	93	6.095	6.095	0.000	89	867131	10.0	10.4	
46 2-Chlorophenol	128	6.172	6.172	0.000	88	600872	10.0	10.3	
243 n-Decane	57	6.201	6.201	0.000	98	823228	NC	NC	
47 1,3-Dichlorobenzene	146	6.311	6.311	0.000	81	633650	10.0	10.1	
48 1,4-Dichlorobenzene	146	6.374	6.374	0.000	79	665006	10.0	10.4	
49 Benzyl alcohol	108	6.455	6.455	0.000	82	459915	10.0	9.80	
50 1,2-Dichlorobenzene	146	6.513	6.513	0.000	86	617610	10.0	10.4	
51 2-Methylphenol	108	6.542	6.542	0.000	78	686348	10.0	10.6	
53 2,2'-oxybis[1-chloropropan	45	6.576	6.576	0.000	97	779367	10.0	11.4	
52 Indene	115	6.590	6.590	0.000	68	2438541	20.0	20.8	
21 3 & 4 Methylphenol	108	6.672	6.672	0.000	96	705261	10.0	10.3	
57 N-Nitrosodi-n-propylamine	70	6.686	6.686	0.000	95	733936	10.0	10.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.696	6.696	0.000	77	1038508	10.0	10.5	
61 Hexachloroethane	117	6.821	6.821	0.000	92	310313	10.0	10.2	
62 Nitrobenzene	77	6.850	6.850	0.000	72	1049853	10.0	9.80	
64 Isophorone	82	7.052	7.052	0.000	95	1800315	10.0	9.94	
66 2-Nitrophenol	139	7.129	7.129	0.000	73	291801	10.0	9.86	
65 2,4-Dimethylphenol	107	7.138	7.138	0.000	96	783530	10.0	9.98	
71 Benzoic acid	122	7.196	7.196	0.000	81	654086	20.0	18.4	
70 Bis(2-chloroethoxy)methane	93	7.215	7.215	0.000	87	941638	10.0	10.3	
73 2,4-Dichlorophenol	162	7.335	7.335	0.000	90	464595	10.0	9.82	
74 1,2,4-Trichlorobenzene	180	7.417	7.417	0.000	81	508396	10.0	9.75	
75 Naphthalene	128	7.494	7.494	0.000	97	1695946	10.0	9.95	
76 4-Chloroaniline	127	7.513	7.513	0.000	37	788385	10.0	10.6	
77 2,6-Dichlorophenol	162	7.533	7.533	0.000	57	456150	10.0	9.81	
79 Hexachlorobutadiene	225	7.595	7.595	0.000	90	327722	10.0	9.34	
84 Caprolactam	113	7.797	7.797	0.000	82	411763	20.0	20.6	M
86 4-Chloro-3-methylphenol	107	7.908	7.908	0.000	82	675664	10.0	10.2	
87 2-Methylnaphthalene	142	8.081	8.081	0.000	83	1068572	10.0	9.55	
88 1-Methylnaphthalene	142	8.172	8.172	0.000	79	948502	10.0	10.0	
89 Hexachlorocyclopentadiene	237	8.225	8.225	0.000	88	340680	10.0	9.62	
91 1,2,4,5-Tetrachlorobenzene	216	8.230	8.230	0.000	92	527291	10.0	9.66	
92 2,4,6-Trichlorophenol	196	8.312	8.312	0.000	90	354672	10.0	9.74	
93 2,4,5-Trichlorophenol	196	8.345	8.345	0.000	88	373109	10.0	9.81	
98 1,1'-Biphenyl	154	8.470	8.470	0.000	97	1285607	10.0	9.67	
100 2-Chloronaphthalene	162	8.504	8.504	0.000	98	1019240	10.0	9.69	
102 2-Nitroaniline	65	8.562	8.562	0.000	69	549942	10.0	10.3	
105 Dimethyl phthalate	163	8.696	8.696	0.000	91	1176523	10.0	9.95	
106 1,3-Dinitrobenzene	168	8.730	8.730	0.000	75	187792	10.0	9.90	
107 2,6-Dinitrotoluene	165	8.754	8.754	0.000	57	278734	10.0	10.1	
109 Acenaphthylene	152	8.865	8.865	0.000	86	1629797	10.0	10.0	
110 3-Nitroaniline	138	8.908	8.908	0.000	80	285651	10.0	10.3	
111 2,4-Dinitrophenol	184	8.994	8.994	0.000	96	321334	20.0	17.6	
112 Acenaphthene	153	9.009	9.009	0.000	82	1037849	10.0	9.82	
113 4-Nitrophenol	109	9.018	9.018	0.000	46	497398	20.0	19.0	
114 2,4-Dinitrotoluene	165	9.105	9.105	0.000	79	362517	10.0	10.0	
116 Dibenzofuran	168	9.153	9.153	0.000	84	1433783	10.0	9.97	
119 2,3,4,6-Tetrachlorophenol	232	9.249	9.249	0.000	73	308488	10.0	10.1	
121 Diethyl phthalate	149	9.293	9.293	0.000	94	1093416	10.0	9.16	
247 Hexadecane	57	9.297	9.297	0.000	97	942451	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.422	9.422	0.000	94	599348	10.0	9.78	
125 4-Nitroaniline	138	9.432	9.432	0.000	77	268677	10.0	10.0	
126 Fluorene	166	9.446	9.446	0.000	99	1183025	10.0	9.80	
128 4,6-Dinitro-2-methylphenol	198	9.461	9.461	0.000	92	434568	20.0	19.7	
131 N-Nitrosodiphenylamine	169	9.514	9.514	0.000	99	1781485	20.0	21.4	
132 1,2-Diphenylhydrazine	77	9.557	9.557	0.000	99	1988211	10.0	11.5	
133 Azobenzene	77	9.557	9.557	0.000	95	1989382	10.0	11.5	
139 4-Bromophenyl phenyl ether	248	9.841	9.841	0.000	68	329027	10.0	10.4	
141 Hexachlorobenzene	284	9.932	9.932	0.000	84	301570	10.0	9.66	
142 Atrazine	200	9.942	9.942	0.000	87	680573	20.0	21.4	
244 n-Octadecane	57	10.076	10.076	0.000	89	914643	NC	NC	
143 Pentachlorophenol	266	10.081	10.081	0.000	77	412970	20.0	18.7	
148 Phenanthrene	178	10.274	10.274	0.000	98	1576902	10.0	9.71	
149 Anthracene	178	10.317	10.317	0.000	88	1621772	10.0	9.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.432	10.432	0.000	84	1533400	10.0	10.6	
154 Di-n-butyl phthalate	149	10.673	10.673	0.000	100	1970573	10.0	10.8	
159 Fluoranthene	202	11.293	11.293	0.000	99	1973689	10.0	10.5	
160 Benzidine	184	11.365	11.365	0.000	87	2510442	20.0	22.9	
161 Pyrene	202	11.495	11.495	0.000	94	2060493	10.0	9.93	
168 Butyl benzyl phthalate	149	11.957	11.957	0.000	90	947579	10.0	9.83	
173 Bis(2-ethylhexyl) phthalat	149	12.438	12.438	0.000	94	1299926	10.0	10.2	
175 3,3'-Dichlorobenzidine	252	12.471	12.471	0.000	58	1399370	20.0	20.3	
177 Benzo[a]anthracene	228	12.539	12.539	0.000	88	2064621	10.0	9.70	
178 Chrysene	228	12.577	12.577	0.000	94	1919965	10.0	9.87	
180 Di-n-octyl phthalate	149	13.096	13.096	0.000	99	2264048	10.0	9.90	
182 Benzo[b]fluoranthene	252	13.765	13.765	0.000	86	1869280	10.0	9.55	
183 Benzo[k]fluoranthene	252	13.803	13.803	0.000	85	1953452	10.0	9.91	
184 Benzo[a]pyrene	252	14.241	14.241	0.000	75	1824655	10.0	9.77	
188 Indeno[1,2,3-cd]pyrene	276	16.246	16.246	0.000	86	1822024	10.0	9.63	
189 Dibenz(a,h)anthracene	278	16.261	16.261	0.000	70	1514726	10.0	9.70	
190 Benzo[g,h,i]perylene	276	16.847	16.847	0.000	95	1514089	10.0	9.65	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L6 W_00005 Amount Added: 1.00 Units: mL

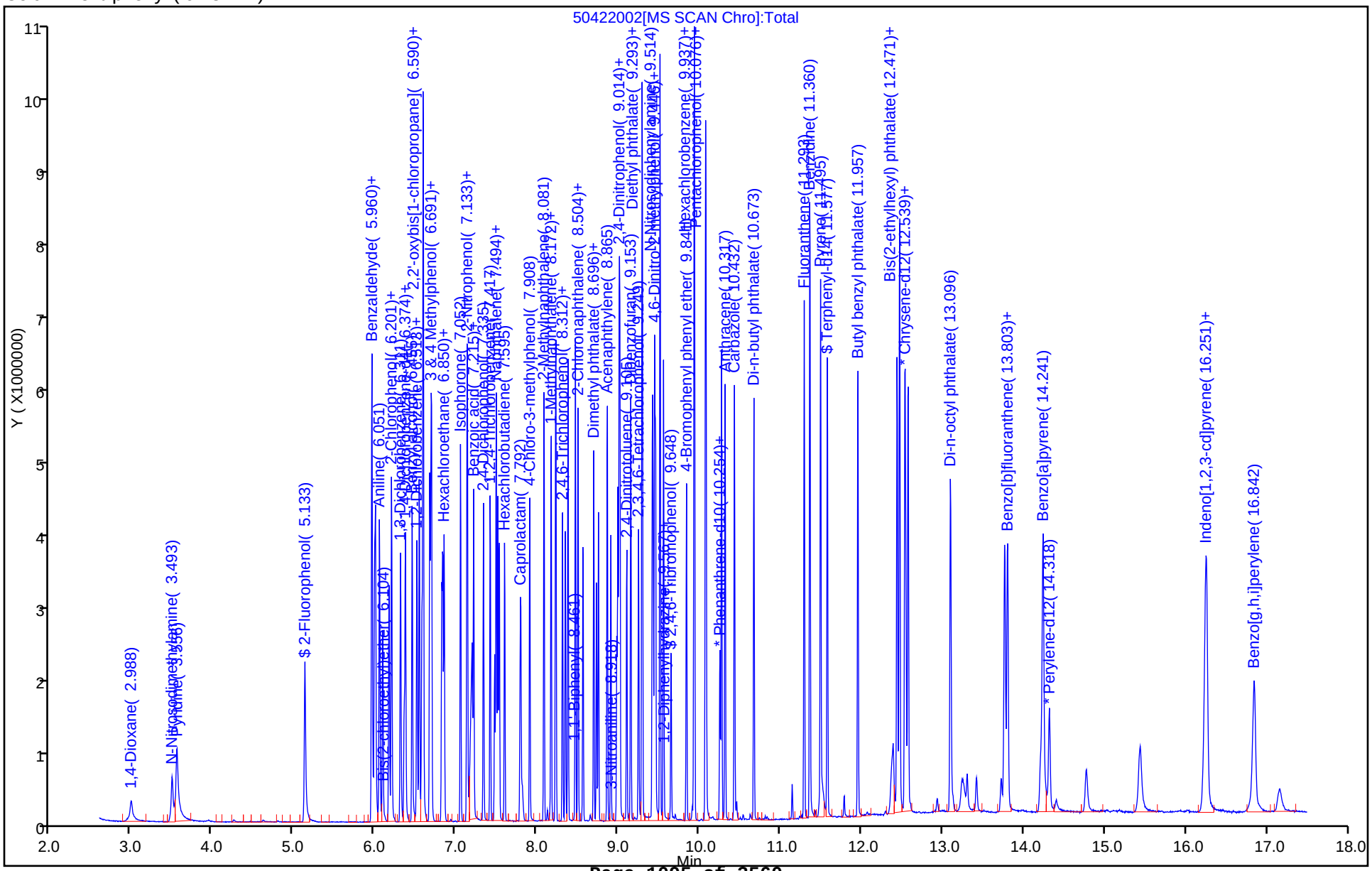
Report Date: 23-Apr-2015 09:37:04 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422002.D

Injection Date:	22-Apr-2015 07:35:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	ccv lst1			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

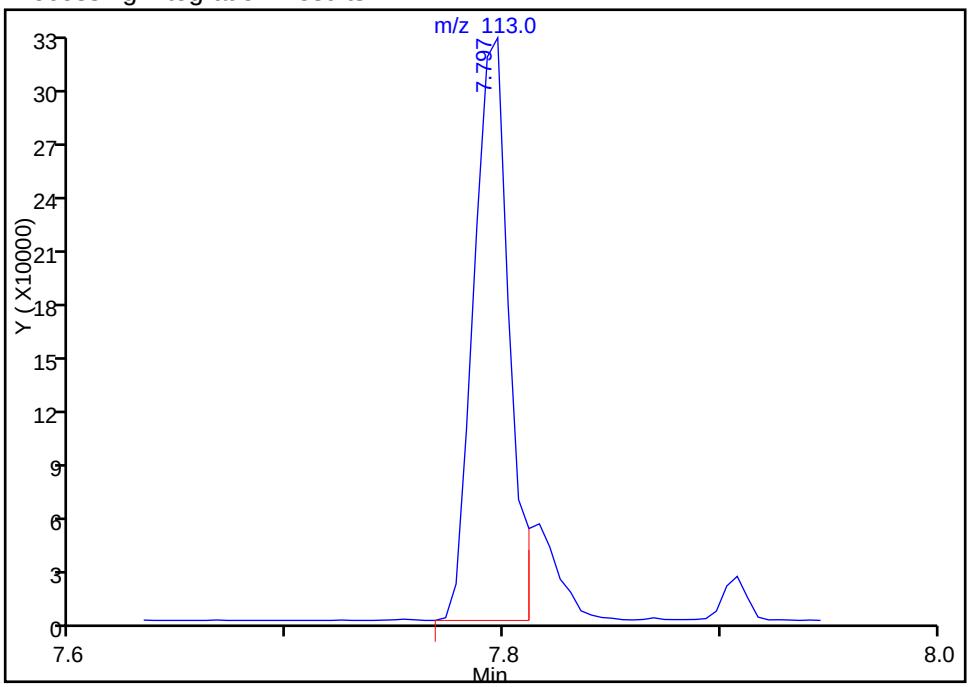
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422002.D
Injection Date: 22-Apr-2015 07:35:30 Instrument ID: A4HP9
Lims ID: ccv lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

84 Caprolactam, CAS: 105-60-2

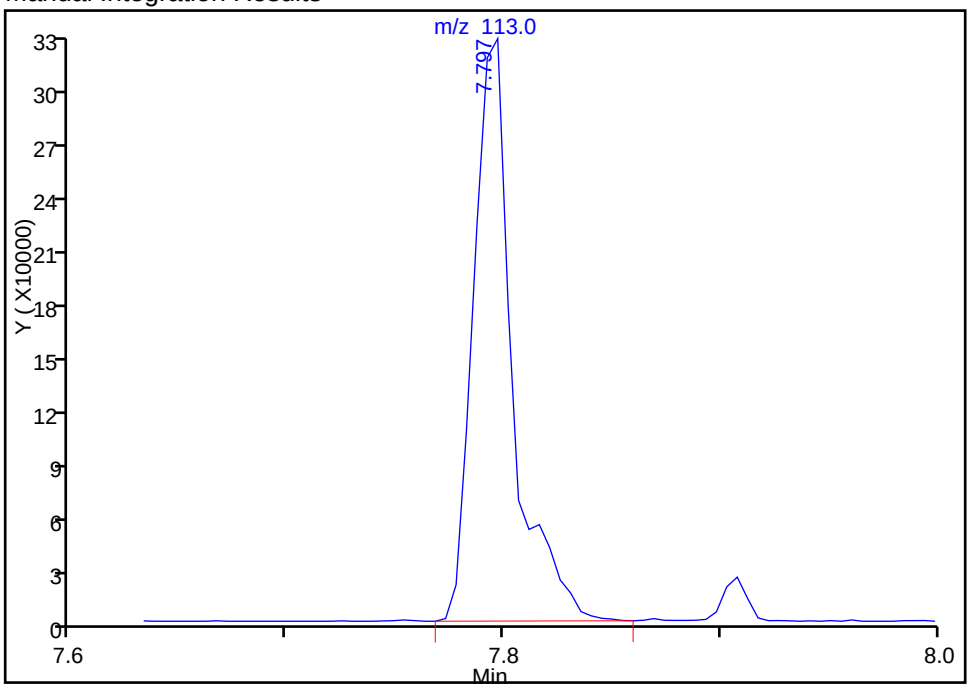
Processing Integration Results

RT: 7.80
Area: 370437
Amount: 18.565139
Amount Units: ng/ul



Manual Integration Results

RT: 7.80
Area: 411763
Amount: 20.636268
Amount Units: ng/ul



Reviewer: ulmanm, 22-Apr-2015 08:08:08
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 240-177355/19 Calibration Date: 04/22/2015 15:09

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422019.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.069			0.106	0.100		
2-Methylnaphthalene	Ave	0.7019			0.114	0.100		
Acenaphthylene	Ave	1.715			0.106	0.100		
Acenaphthene	Ave	1.116			0.112	0.100		
Fluorene	Ave	1.275			0.104	0.100		
Hexachlorobenzene	Ave	0.2018			0.129	0.100		
Phenanthrene	Ave	1.050			0.117	0.100		
Anthracene	Ave	1.050			0.0960	0.100		
Fluoranthene	Ave	1.212			0.106	0.100		
Pyrene	Ave	1.096			0.0894	0.100		
Benzo[a]anthracene	Ave	1.124			0.110	0.100		
Chrysene	Ave	1.027			0.126	0.100		
Benzo[b]fluoranthene	Ave	1.205			0.0965	0.100		
Benzo[k]fluoranthene	Ave	1.214			0.0976	0.100		
Benzo[a]pyrene	Ave	1.151			0.113	0.100		
Indeno[1,2,3-cd]pyrene	Ave	1.165			0.0924	0.100		
Dibenz(a,h)anthracene	Ave	0.9613			0.0985	0.100		
Benzo[g,h,i]perylene	Ave	0.9662			0.0956	0.100		
1,1'-Biphenyl	Ave	1.404			0.000500	0.100		
2-Chloronaphthalene	Ave	1.110			0.000500	0.100		
Dibenzofuran	Ave	1.519			0.000100	0.100		
Nitrobenzene-d5 (Surr)	Ave	0.7281			0.110	0.100	110*	35-100
2-Fluorobiphenyl (Surr)	Ave	1.345			0.125	0.100	125*	45-105
Terphenyl-d14 (Surr)	Ave	0.8139			0.114	0.100	114	30-125
2,4,6-Tribromophenol (Surr)	Ave	0.1481			0.000000	0.100	0*	35-125
2-Fluorophenol (Surr)	Ave	1.472			0.000000	0.100	0*	35-105
Phenol-d5 (Surr)	Ave	2.203			0.000000	0.100	0*	40-100

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422019.D
Lims ID: lodv l1
Client ID:
Sample Type: LODV
Inject. Date: 22-Apr-2015 15:09:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-019
Misc. Info.: LODV L1LODV L1
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 09:37:02 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 22-Apr-2015 15:59:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.358	6.359	-0.001	94	132477	4.00	4.00	
* 2 Naphthalene-d8	136	7.474	7.475	-0.001	99	498903	4.00	4.00	
* 3 Acenaphthene-d10	164	8.979	8.980	-0.001	92	270237	4.00	4.00	
* 4 Phenanthrene-d10	188	10.249	10.254	-0.005	95	522151	4.00	4.00	
* 5 Chrysene-d12	240	12.547	12.548	-0.001	97	619002	4.00	4.00	
* 6 Perylene-d12	264	14.317	14.318	-0.001	98	528111	4.00	4.00	
$ 7 2-Fluorophenol	112		5.133				ND	ND	
$ 8 Phenol-d5	99		5.994				ND	ND	
$ 9 Nitrobenzene-d5	82	6.835	6.835	0.000	86	9981	0.1000	0.1099	
$ 10 2-Fluorobiphenyl (Surr)	172	8.378	8.379	-0.001	95	11354	0.1000	0.1250	
$ 11 2,4,6-Tribromophenol	330		9.653				ND	ND	
$ 12 Terphenyl-d14	244	11.576	11.577	-0.001	97	14315	0.1000	0.1137	
25 1,4-Dioxane	88		2.993					ND	
26 N-Nitrosodimethylamine	74		3.493					ND	
27 Pyridine	79		3.556					ND	
20 Dimethylformamide	73		4.068					ND	
28 Ethyl methacrylate	69		4.173					ND	
31 2-Picoline	93		4.540					ND	
32 N-Nitrosomethylethylamine	88		4.650					ND	
35 Acrylamide	71		4.905					ND	
34 Methyl methanesulfonate	80		4.963					ND	
233 n,n'-Dimethylacetamide	44		5.053					ND	
36 N-Nitrosodiethylamine	102		5.372					ND	
37 Ethyl methanesulfonate	79		5.636					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.866					ND	
39 3-Methylcyclohexanone	69		5.900					ND	
40 4-Methylcyclohexanone	55		5.948					ND	
41 Benzaldehyde	77		5.960					ND	
43 Phenol	94		6.003					ND	
44 Aniline	93		6.051					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
69 Bis(2-chloroethyl)ether	93		6.095					ND	
45 Pentachloroethane	167		6.122					ND	
46 2-Chlorophenol	128		6.172					ND	
243 n-Decane	57		6.201					ND	
47 1,3-Dichlorobenzene	146		6.311					ND	
48 1,4-Dichlorobenzene	146		6.374					ND	
49 Benzyl alcohol	108		6.455					ND	
232 1-Methyl-2-pyrrilidinone	99		6.462					ND	
50 1,2-Dichlorobenzene	146		6.513					ND	
51 2-Methylphenol	108		6.542					ND	
286 4-Methyl-1-cyclohexanemeth	55		6.574					ND	
53 2,2'-oxybis[1-chloropropan	45		6.576					ND	
52 Indene	115		6.590					ND	
21 3 & 4 Methylphenol	108		6.672					ND	
56 N-Nitrosopyrrolidine	100		6.675					ND	
57 N-Nitrosodi-n-propylamine	70		6.686					ND	
58 Acetophenone	105		6.696					ND	
59 N-Nitrosomorpholine	56		6.704					ND	
287 4-Methyl-1-cyclohexanemeth	55		6.708					ND	
60 2-Toluidine	106		6.742					ND	
61 Hexachloroethane	117		6.821					ND	
62 Nitrobenzene	77		6.850					ND	
63 N-Nitrosopiperidine	114		6.987					ND	
64 Isophorone	82		7.052					ND	
66 2-Nitrophenol	139		7.129					ND	
65 2,4-Dimethylphenol	107		7.138					ND	
67 1,3,5-Trichlorobenzene	180		7.160					ND	
71 Benzoic acid	122		7.196					ND	
68 o,o',o''-Triethylphosphoro	198		7.199					ND	
70 Bis(2-chloroethoxy)methane	93		7.215					ND	
72 alpha,alpha-Dimethyl phene	58		7.314					ND	
73 2,4-Dichlorophenol	162		7.335					ND	
74 1,2,4-Trichlorobenzene	180		7.417					ND	
75 Naphthalene	128	7.493	7.494	-0.001	93	14093	0.1000	0.1057	
76 4-Chloroaniline	127		7.513					ND	
77 2,6-Dichlorophenol	162		7.533					ND	
78 Hexachloropropene	213		7.589					ND	
79 Hexachlorobutadiene	225		7.595					ND	
80 1,2,3-Trichlorobenzene	180		7.626					ND	
81 Benzothiazole	135		7.718					ND	
82 Quinoline	129		7.781					ND	
83 N-Nitrosodi-n-butylamine	84		7.795					ND	
84 Caprolactam	113		7.797					ND	
85 p-Phenylene diamine	108		7.815					ND	
86 4-Chloro-3-methylphenol	107		7.908					ND	
94 Safrole, Total	162		7.992					ND	
87 2-Methylnaphthalene	142	8.080	8.081	-0.001	96	10011	0.1000	0.1144	
88 1-Methylnaphthalene	142	8.167	8.172	-0.005	87	7395	0.1000	0.0997	
89 Hexachlorocyclopentadiene	237		8.225					ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.230					ND	
90 1,2,3,5-Tetrachlorobenzene	216		8.232					ND	
225 Isosafrole Peak 1	162		8.243					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
92 2,4,6-Trichlorophenol	196		8.312					ND	
93 2,4,5-Trichlorophenol	196		8.345					ND	
227 Isosafrole Peak 2	162		8.435					ND	
97 2,4-Toluene diamine	121		8.453					ND	
98 1,1'-Biphenyl	154		8.470				ND	ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.487					ND	
100 2-Chloronaphthalene	162		8.504				ND	ND	
96 3,4-Dichloronitrobenzene	109		8.506					ND	
246 1-Chloronaphthalene	162		8.541					ND	
102 2-Nitroaniline	65		8.562					ND	
101 Phenyl ether	170		8.564					ND	
103 1,4-Naphthoquinone	158		8.646					ND	
104 1,4-Dinitrobenzene	168		8.670					ND	
105 Dimethyl phthalate	163		8.696					ND	
106 1,3-Dinitrobenzene	168		8.730					ND	
107 2,6-Dinitrotoluene	165		8.754					ND	
109 Acenaphthylene	152	8.859	8.865	-0.006	98	12329	0.1000	0.1064	
110 3-Nitroaniline	138		8.908					ND	
111 2,4-Dinitrophenol	184		8.994					ND	
112 Acenaphthene	153	9.008	9.009	-0.001	93	8432	0.1000	0.1119	
113 4-Nitrophenol	109		9.018					ND	
114 2,4-Dinitrotoluene	165		9.105					ND	
115 Pentachlorobenzene	250		9.142					ND	
116 Dibenzofuran	168		9.153				ND	ND	
117 1-Naphthylamine	143		9.224					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.224					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.249					ND	
120 2-Naphthylamine	143		9.286					ND	
121 Diethyl phthalate	149		9.293					ND	
247 Hexadecane	57		9.297					ND	
122 Thionazin	97		9.377					ND	
123 4-Chlorophenyl phenyl ethe	204		9.422					ND	
125 4-Nitroaniline	138		9.432					ND	
124 N-Nitro-o-toluidine	152		9.440					ND	
126 Fluorene	166	9.446	9.446	0.000	91	8982	0.1000	0.1043	
127 Tributyl phosphate	99		9.458					ND	
128 4,6-Dinitro-2-methylphenol	198		9.461					ND	
297 Benzophenone	105		9.512					ND	
131 N-Nitrosodiphenylamine	169		9.514					ND	
130 Diphenylamine	169		9.526					ND	
132 1,2-Diphenylhydrazine	77		9.557					ND	
133 Azobenzene	77		9.557					ND	
134 Sulfotepp	202		9.627					ND	
135 1,3,5-Trinitrobenzene	213		9.704					ND	
137 Phenacetin	108		9.757					ND	
228 Diallate Peak 1	86		9.762					ND	
138 Phorate	121		9.772					ND	
139 4-Bromophenyl phenyl ether	248		9.841					ND	
230 Diallate Peak 2	86		9.844					ND	
140 Dimethoate	87		9.916					ND	
141 Hexachlorobenzene	284	9.931	9.932	-0.001	81	3398	0.1000	0.1290	
142 Atrazine	200		9.942					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
129 4-Aminobiphenyl	169		10.070					ND	
244 n-Octadecane	57		10.076					ND	
143 Pentachlorophenol	266		10.081					ND	
144 Pronamide	173		10.099					ND	
145 Pentachloronitrobenzene	237		10.113					ND	
146 Disulfoton	88		10.214					ND	
147 Dinoseb	211		10.224					ND	
148 Phenanthrene	178	10.268	10.274	-0.006	95	16031	0.1000	0.1169	
149 Anthracene	178	10.316	10.317	-0.001	95	13151	0.1000	0.0960	
151 Carbazole	167		10.432					ND	
152 Methyl parathion	109		10.536					ND	
154 Di-n-butyl phthalate	149		10.673					ND	
153 Diphenylsulfone	125		10.718					ND	
155 Ethyl Parathion	97		10.859					ND	
156 4-Nitroquinoline-1-oxide	190		10.921					ND	
157 Methapyrilene	58		10.964					ND	
158 Isodrin	66		11.186					ND	
159 Fluoranthene	202	11.292	11.293	-0.001	96	16736	0.1000	0.1057	
160 Benzidine	184		11.365					ND	
161 Pyrene	202	11.494	11.495	-0.001	93	15153	0.1000	0.0894	
226 Aramite Peak 1	185		11.537					ND	
229 Aramite Peak 2	185		11.599					ND	
163 p-Dimethylamino azobenzene	225		11.705					ND	
164 Chlorobenzilate	139		11.734					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.940					ND	
168 Butyl benzyl phthalate	149		11.957					ND	
169 3,3'-Dimethylbenzidine	212		11.989					ND	
171 2-Acetylaminofluorene	181		12.215					ND	
172 3,3'-Dimethoxybenzidine	244		12.435					ND	
173 Bis(2-ethylhexyl) phthalat	149		12.438					ND	
175 3,3'-Dichlorobenzidine	252		12.471					ND	
174 4,4'-Methylene bis(2-chlor	231		12.474					ND	
177 Benzo[a]anthracene	228	12.533	12.539	-0.006	96	19115	0.1000	0.1099	
178 Chrysene	228	12.571	12.577	-0.006	96	20007	0.1000	0.1259	
176 Hexabromobenzene	232		12.603					ND	
179 6-Methylchrysene	242		13.061					ND	
180 Di-n-octyl phthalate	149		13.096					ND	
281 Hexachlorophene	196		13.628					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.763					ND	
182 Benzo[b]fluoranthene	252	13.759	13.765	-0.006	92	15363	0.1000	0.0965	
183 Benzo[k]fluoranthene	252	13.793	13.803	-0.010	94	15650	0.1000	0.0976	
184 Benzo[a]pyrene	252	14.235	14.241	-0.006	72	17235	0.1000	0.1134	
185 3-Methylcholanthrene	268		14.797					ND	
187 Dibenz[a,h]acridine	279		15.783					ND	
186 Dibenz[a,j]acridine	279		15.878					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.241	16.246	-0.005	52	14220	0.1000	0.0924	M
189 Dibenz(a,h)anthracene	278	16.245	16.261	-0.016	82	12498	0.1000	0.0985	M
190 Benzo[g,h,i]perylene	276	16.837	16.847	-0.010	66	12199	0.1000	0.0956	M
268 Endrin	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
265 Dibenzo[a,h]pyrene	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
258 Aldrin	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.524					ND	
165 4,4'-DDD	235		11.812					ND	
170 4,4'-DDT	235		12.072					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 191 Methyl Phenols,Total	100		0.000					ND	
S 245 Total Cresols	100		0.000					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
T 240 Trimethyl phosphate TIC	110	4.925	4.999	-0.075	0	144			0
T 194 Decane TIC	142	6.200	5.799	0.400	64	7567			0
T 193 Hexamethylphosphoramide TI	135	7.484	6.495	0.984	1	2742			0
T 234 2-Isopropylphenol TIC	121	7.272	7.244	0.022	0	254			0

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.344	7.358	-0.020	0	155		0	
T 236 3-isopropylphenol TIC	121	7.344	7.358	-0.020	0	155		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.700	7.714	-0.020	1	655		0	
T 231 2,3,7,8-TCDD	322	8.296	8.236	0.056	1	147		0	
T 195 Hydroquinone TIC	110	8.989	8.993	-0.011	1	751		0	
T 192 Octadecane (TIC)	254	17.159	9.600	7.559	90	29042		0	
T 196 Kepone TIC	272		12.000					ND	
T 242 Triphenyl Phosphate TIC	326	11.942	11.994	-0.058	0	271		0	
T 280 2,3,7,8-TCDD TIC	198	12.543	12.494	0.043	0	4870		0	
T 241 Tricresyl phosphate TIC	368	12.557	12.494	0.057	0	98		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	13.995	13.994	-0.005	0	259		0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L1 W_00005 Amount Added: 1.00 Units: mL

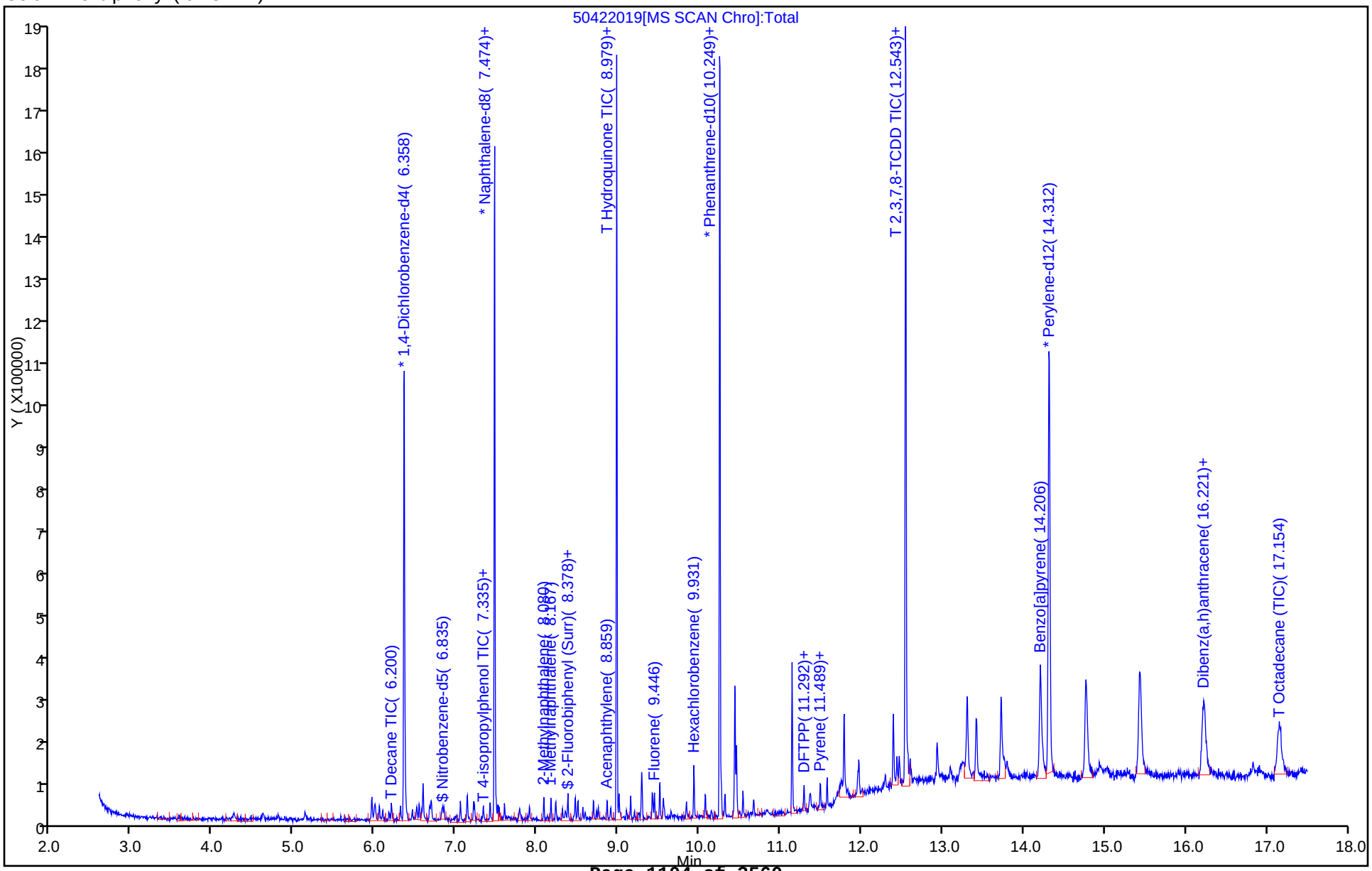
Report Date: 23-Apr-2015 09:37:26 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422019.D

Injection Date:	22-Apr-2015 15:09:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	lodv l1			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

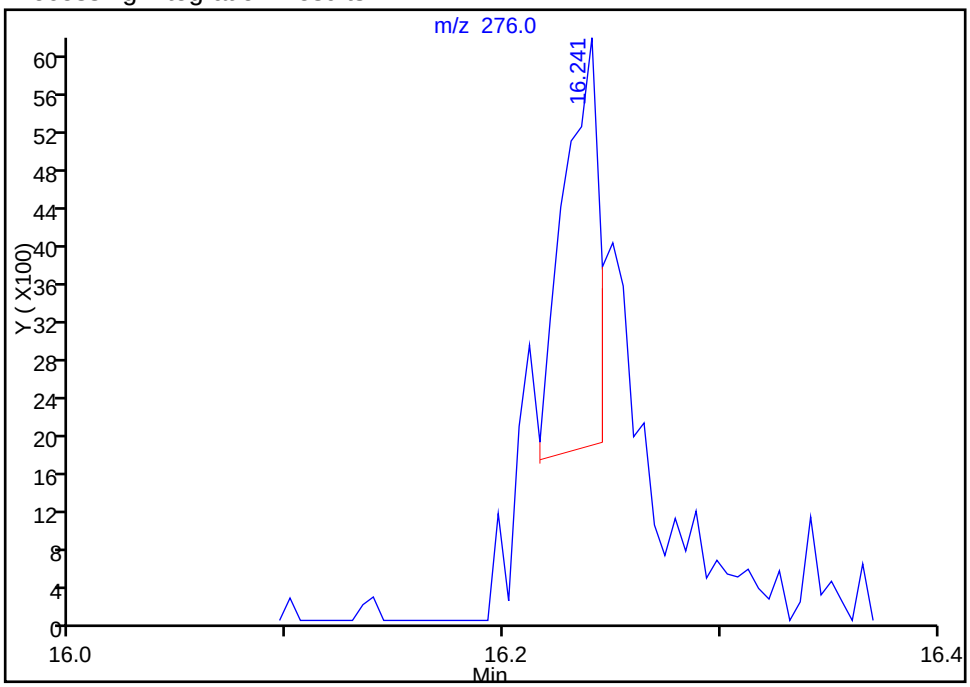
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422019.D
Injection Date: 22-Apr-2015 15:09:30 Instrument ID: A4HP9
Lims ID: lodv l1
Client ID:
Operator ID: 001574 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

188 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

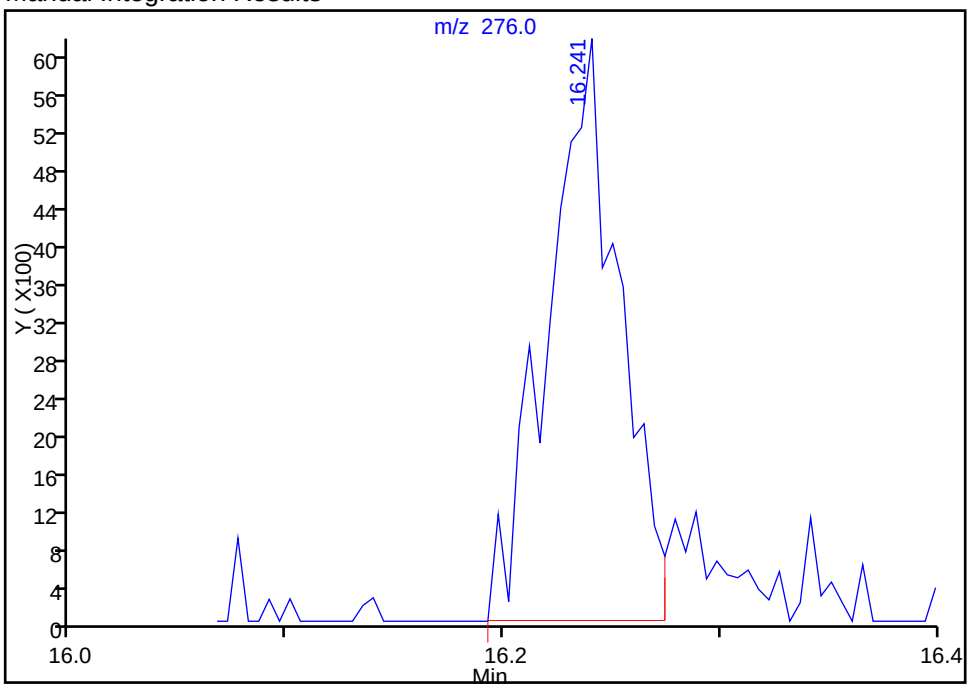
Processing Integration Results

RT: 16.24
Area: 4957
Amount: 0.032223
Amount Units: ng/ul



Manual Integration Results

RT: 16.24
Area: 14220
Amount: 0.092438
Amount Units: ng/ul



Reviewer: ulmanm, 23-Apr-2015 09:11:40
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

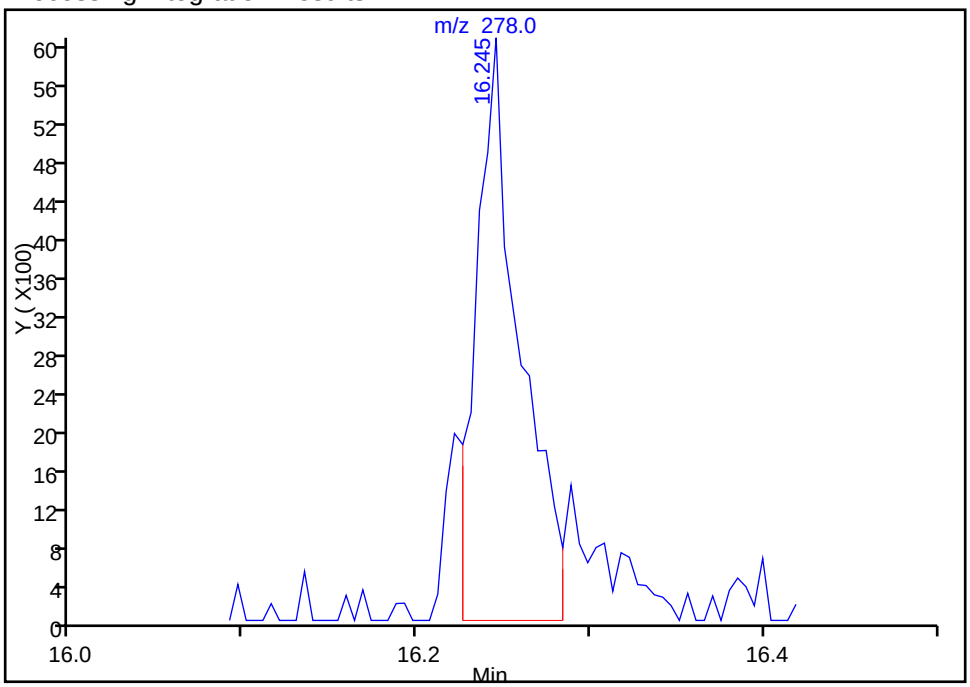
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422019.D				
Injection Date:	22-Apr-2015 15:09:30	Instrument ID:	A4HP9		
Lims ID:	lodv l1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

189 Dibenz(a,h)anthracene, CAS: 53-70-3

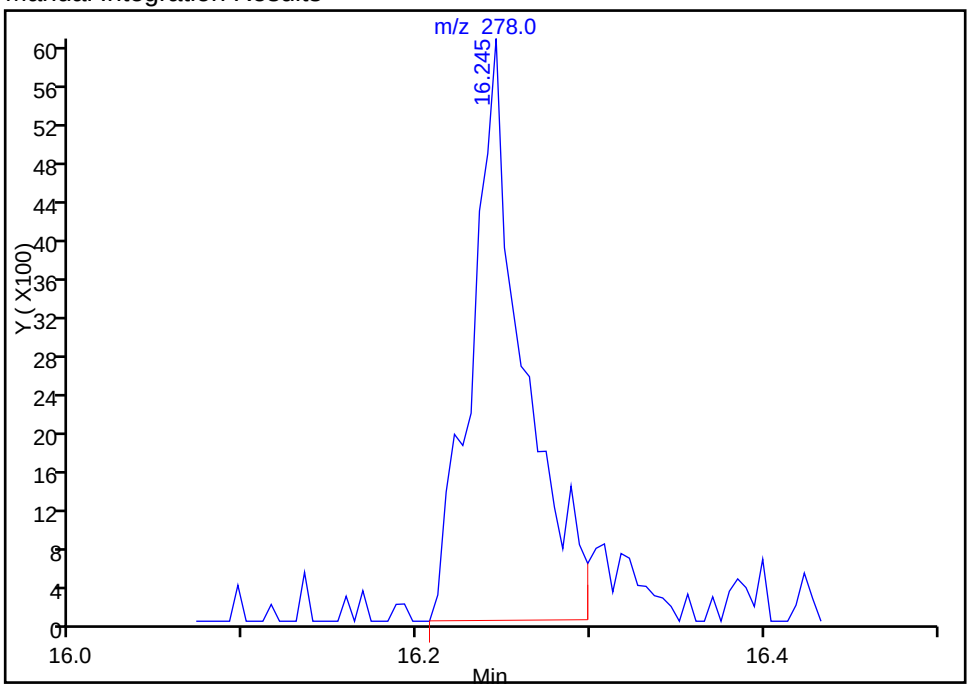
Processing Integration Results

RT: 16.25
Area: 10714
Amount: 0.084413
Amount Units: ng/ul



Manual Integration Results

RT: 16.25
Area: 12498
Amount: 0.098469
Amount Units: ng/ul



Reviewer: ulmanm, 23-Apr-2015 09:11:40
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

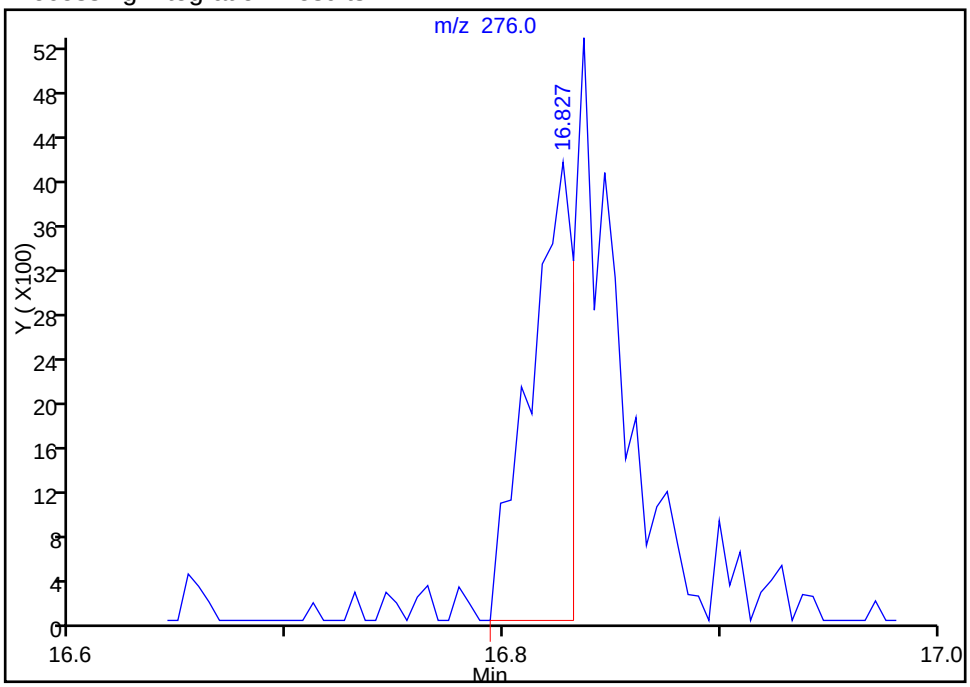
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422019.D				
Injection Date:	22-Apr-2015 15:09:30	Instrument ID:	A4HP9		
Lims ID:	lodv l1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

190 Benzo[g,h,i]perylene, CAS: 191-24-2

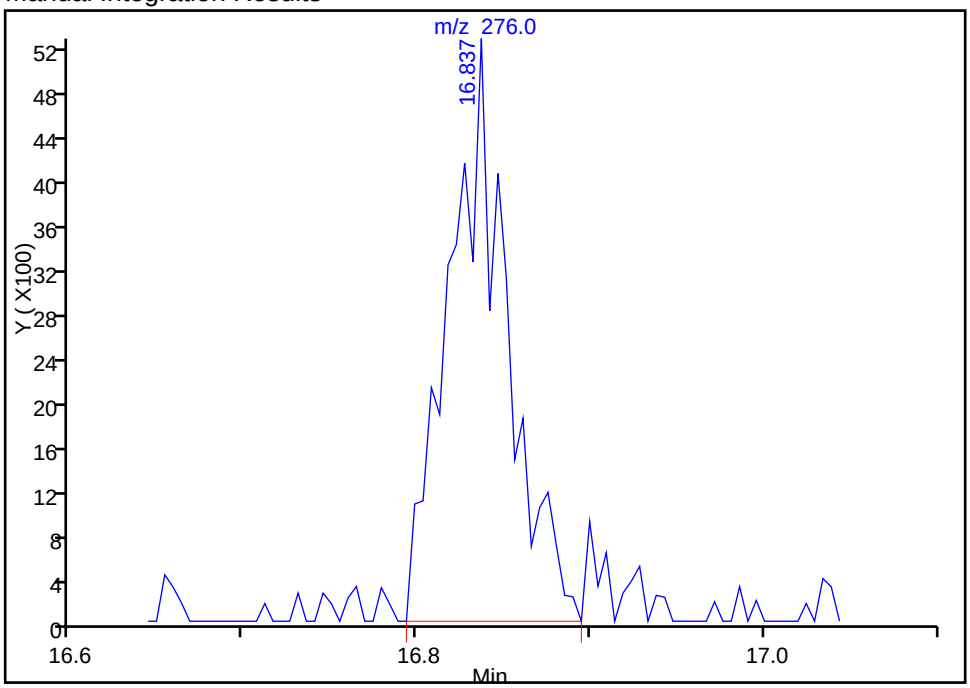
Processing Integration Results

RT: 16.83
Area: 5758
Amount: 0.045138
Amount Units: ng/ul



Manual Integration Results

RT: 16.84
Area: 12199
Amount: 0.095631
Amount Units: ng/ul



Reviewer: ulmanm, 23-Apr-2015 09:11:40
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 240-177355/20 Calibration Date: 04/22/2015 15:34

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422020.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.8489			0.411	0.500		
N-Nitrosodimethylamine	Ave	1.417			0.472	0.500		
Pyridine	Ave	2.280			0.458	0.500		
Benzaldehyde	Ave	1.670			1.14	1.00		
Phenol	Ave	2.388			0.470	0.500		
Aniline	Ave	2.967			0.540	0.500		
Bis(2-chloroethyl)ether	Ave	2.001			0.520	0.500		
2-Chlorophenol	Ave	1.398			0.497	0.500		
1,3-Dichlorobenzene	Ave	1.512			0.514	0.500		
1,4-Dichlorobenzene	Ave	1.533			0.498	0.500		
Benzyl alcohol	Ave	1.126			0.387	0.500		
1,2-Dichlorobenzene	Ave	1.431			0.541	0.500		
2-Methylphenol	Ave	1.554			0.475	0.500		
bis (2-chloroisopropyl) ether	Ave	1.639			0.618	0.500		
Indene	Ave	2.818			1.08	1.00		
3 & 4 Methylphenol	Ave	1.645			0.490	0.500		
N-Nitrosodi-n-propylamine	Ave	1.720			0.488	0.500		
Acetophenone	Ave	2.383			0.503	0.500		
Hexachloroethane	Ave	0.7281			0.517	0.500		
Nitrobenzene	Ave	0.6722			0.495	0.500		
Isophorone	Ave	1.136			0.484	0.500		
2-Nitrophenol	Ave	0.1857			0.324	0.500		
2,4-Dimethylphenol	Ave	0.4926			0.480	0.500		
Bis(2-chloroethoxy)methane	Ave	0.5716			0.513	0.500		
2,4-Dichlorophenol	Ave	0.2968			0.446	0.500		
1,2,4-Trichlorobenzene	Ave	0.3272			0.505	0.500		
4-Chloroaniline	Ave	0.4667			0.477	0.500		
2,6-Dichlorophenol	Ave	0.2918			0.459	0.500		
Hexachlorobutadiene	Ave	0.2201			0.485	0.500		
Caprolactam	Ave	0.1252			0.893	1.00		
4-Chloro-3-methylphenol	Ave	0.4176			0.438	0.500		
Hexachlorocyclopentadiene	Ave	0.3739			0.190	0.500		
1,2,4,5-Tetrachlorobenzene	Ave	0.5765			0.565	0.500		
2,4,6-Trichlorophenol	Ave	0.3845			0.478	0.500		
2,4,5-Trichlorophenol	Ave	0.4014			0.463	0.500		
1,1'-Biphenyl	Ave	1.404			0.532	0.500		
2-Chloronaphthalene	Ave	1.110			0.512	0.500		
2-Nitroaniline	Ave	0.5629			0.479	0.500		
Dimethyl phthalate	Ave	1.248			0.540	0.500		
1,3-Dinitrobenzene	Ave	0.2002			0.439	0.500		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 240-177355/20 Calibration Date: 04/22/2015 15:34

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422020.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-Dinitrotoluene	Ave	0.2924			0.473	0.500		
3-Nitroaniline	Ave	0.2915			0.520	0.500		
2,4-Dinitrotoluene	Ave	0.3819			0.392	0.500		
Dibenzofuran	Ave	1.519			0.540	0.500		
2,3,4,6-Tetrachlorophenol	Ave	0.3232			0.369	0.500		
Diethyl phthalate	Ave	1.260			0.542	0.500		
4-Chlorophenyl phenyl ether	Ave	0.6472			0.532	0.500		
4-Nitroaniline	Ave	0.2823			0.539	0.500		
N-Nitrosodiphenylamine	Ave	0.5377			0.994	1.00		
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.118			0.512	0.500		
Azobenzene	Ave	1.117			0.514	0.500		
4-Bromophenyl phenyl ether	Ave	0.2049			0.522	0.500		
Carbazole	Ave	0.9379			0.489	0.500		
Di-n-butyl phthalate	Ave	1.175			0.451	0.500		
Benzidine	Ave	0.5801			0.503	1.00		
Butyl benzyl phthalate	Ave	0.5093			0.406	0.500		
Bis(2-ethylhexyl) phthalate	Ave	0.6761			0.421	0.500		
3,3'-Dichlorobenzidine	Ave	0.3645			0.847	1.00		
Di-n-octyl phthalate	Ave	1.408			0.364	0.500		
2,4-Dinitrophenol	Lin				0.00100	1.00		
2-Methylnaphthalene	Ave	0.7019			0.000100	0.500		
4,6-Dinitro-2-methylphenol	Lin1				0.00400	1.00		
4-Nitrophenol	Ave	0.2767			0.00400	1.00		
Acenaphthene	Ave	1.116			0.000100	0.500		
Acenaphthylene	Ave	1.715			0.000100	0.500		
Anthracene	Ave	1.050			0.000100	0.500		
Atrazine	Ave	0.2061			0.000500	1.00		
Benzo[a]anthracene	Ave	1.124			0.000100	0.500		
Benzo[a]pyrene	Ave	1.151			0.000100	0.500		
Benzo[b]fluoranthene	Ave	1.205			0.000100	0.500		
Benzo[g,h,i]perylene	Ave	0.9662			0.000100	0.500		
Benzo[k]fluoranthene	Ave	1.214			0.000100	0.500		
Benzoic acid	Lin1				0.0200	1.00		
Chrysene	Ave	1.027			0.000100	0.500		
Dibenz(a,h)anthracene	Ave	0.9613			0.000100	0.500		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 240-177355/20 Calibration Date: 04/22/2015 15:34

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422020.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoranthene	Ave	1.212			0.000100	0.500		
Fluorene	Ave	1.275			0.000100	0.500		
Hexachlorobenzene	Ave	0.2018			0.000100	0.500		
Indeno[1,2,3-cd]pyrene	Ave	1.165			0.000100	0.500		
Naphthalene	Ave	1.069			0.000100	0.500		
Pentachlorophenol	Lin1				0.00100	1.00		
Phenanthrene	Ave	1.050			0.000100	0.500		
Pyrene	Ave	1.096			0.000100	0.500		
Nitrobenzene-d5 (Surr)	Ave	0.7281			0.496	0.500	99	35-100
2-Fluorobiphenyl (Surr)	Ave	1.345			0.500	0.500	100	45-105
Terphenyl-d14 (Surr)	Ave	0.8139			0.449	0.500	90	30-125
2,4,6-Tribromophenol (Surr)	Ave	0.1481			0.000000	0.500	0*	35-125
2-Fluorophenol (Surr)	Ave	1.472			0.000000	0.500	0*	35-105
Phenol-d5 (Surr)	Ave	2.203			0.000000	0.500	0*	40-100

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422020.D
Lims ID: lodv l2
Client ID:
Sample Type: LODV
Inject. Date: 22-Apr-2015 15:34:30 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-020
Misc. Info.: LODV L2LODV L2
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 09:37:02 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 22-Apr-2015 16:23:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.359	6.359	0.000	97	132087	4.00	4.00	
* 2 Naphthalene-d8	136	7.475	7.475	0.000	98	501206	4.00	4.00	
* 3 Acenaphthene-d10	164	8.980	8.980	0.000	69	281968	4.00	4.00	
* 4 Phenanthrene-d10	188	10.250	10.254	-0.004	80	538368	4.00	4.00	
* 5 Chrysene-d12	240	12.543	12.548	-0.005	81	640827	4.00	4.00	
* 6 Perylene-d12	264	14.313	14.318	-0.005	95	542671	4.00	4.00	
$ 7 2-Fluorophenol	112		5.133				ND	ND	
$ 8 Phenol-d5	99		5.994				ND	ND	
$ 9 Nitrobenzene-d5	82	6.830	6.835	-0.005	83	45254	0.5000	0.4961	
$ 10 2-Fluorobiphenyl (Surr)	172	8.379	8.379	0.000	95	47444	0.5000	0.5005	
$ 11 2,4,6-Tribromophenol	330		9.653				ND	ND	
$ 12 Terphenyl-d14	244	11.577	11.577	0.000	93	58579	0.5000	0.4493	
25 1,4-Dioxane	88	2.998	2.993	0.005	14	11516	0.5000	0.4108	M
26 N-Nitrosodimethylamine	74	3.503	3.493	0.010	67	22082	0.5000	0.4721	M
27 Pyridine	79	3.570	3.556	0.014	89	34483	0.5000	0.4581	
20 Dimethylformamide	73		4.068					ND	
28 Ethyl methacrylate	69		4.173					ND	
31 2-Picoline	93		4.540					ND	
32 N-Nitrosomethylethylamine	88		4.650					ND	
35 Acrylamide	71		4.905					ND	
34 Methyl methanesulfonate	80		4.963					ND	
233 n,n'-Dimethylacetamide	44		5.053					ND	
36 N-Nitrosodiethylamine	102		5.372					ND	
37 Ethyl methanesulfonate	79		5.636					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.866					ND	
39 3-Methylcyclohexanone	69		5.900					ND	
40 4-Methylcyclohexanone	55		5.948					ND	
41 Benzaldehyde	77	5.960	5.960	0.000	86	62643	1.00	1.14	
43 Phenol	94	6.003	6.003	0.000	93	37025	0.5000	0.4695	
44 Aniline	93	6.051	6.051	0.000	84	52921	0.5000	0.5401	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
69 Bis(2-chloroethyl)ether	93	6.090	6.095	-0.005	87	34352	0.5000	0.5198	
45 Pentachloroethane	167		6.122					ND	
46 2-Chlorophenol	128	6.172	6.172	0.000	85	22933	0.5000	0.4969	
243 n-Decane	57		6.201				ND	ND	
47 1,3-Dichlorobenzene	146	6.311	6.311	0.000	81	25657	0.5000	0.5140	
48 1,4-Dichlorobenzene	146	6.374	6.374	0.000	63	25202	0.5000	0.4977	
49 Benzyl alcohol	108	6.455	6.455	0.000	72	14396	0.5000	0.3870	M
232 1-Methyl-2-pyrrilidinone	99		6.462					ND	
50 1,2-Dichlorobenzene	146	6.513	6.513	0.000	85	25552	0.5000	0.5409	
51 2-Methylphenol	108	6.542	6.542	0.000	74	24379	0.5000	0.4751	
286 4-Methyl-1-cyclohexanemeth	55		6.574					ND	
53 2,2'-oxybis[1-chloropropan	45	6.576	6.576	0.000	98	33429	0.5000	0.6178	
52 Indene	115	6.590	6.590	0.000	75	100462	1.00	1.08	
21 3 & 4 Methylphenol	108	6.672	6.672	0.000	90	26632	0.5000	0.4902	
56 N-Nitrosopyrrolidine	100		6.675					ND	
57 N-Nitrosodi-n-propylamine	70	6.686	6.686	0.000	95	27743	0.5000	0.4884	
58 Acetophenone	105	6.696	6.696	0.000	78	39612	0.5000	0.5035	
59 N-Nitrosomorpholine	56		6.704					ND	
287 4-Methyl-1-cyclohexanemeth	55		6.708					ND	
60 2-Toluidine	106		6.742					ND	
61 Hexachloroethane	117	6.821	6.821	0.000	84	12424	0.5000	0.5167	
62 Nitrobenzene	77	6.850	6.850	0.000	71	41708	0.5000	0.4952	
63 N-Nitrosopiperidine	114		6.987					ND	
64 Isophorone	82	7.052	7.052	0.000	94	68943	0.5000	0.4843	
66 2-Nitrophenol	139	7.129	7.129	0.000	62	7533	0.5000	0.3237	
65 2,4-Dimethylphenol	107	7.133	7.138	-0.005	90	29625	0.5000	0.4799	
67 1,3,5-Trichlorobenzene	180		7.160					ND	
71 Benzoic acid	122		7.196				ND	ND	
68 o,o',o''-Triethylphosphoro	198		7.199					ND	
70 Bis(2-chloroethoxy)methane	93	7.215	7.215	0.000	90	36723	0.5000	0.5127	
72 alpha,alpha-Dimethyl phene	58		7.314					ND	
73 2,4-Dichlorophenol	162	7.335	7.335	0.000	87	16585	0.5000	0.4459	
74 1,2,4-Trichlorobenzene	180	7.417	7.417	0.000	85	20692	0.5000	0.5047	
75 Naphthalene	128		7.494				ND	ND	
76 4-Chloroaniline	127	7.509	7.513	-0.005	34	27878	0.5000	0.4767	
77 2,6-Dichlorophenol	162	7.528	7.533	-0.005	62	16779	0.5000	0.4589	
78 Hexachloropropene	213		7.589					ND	
79 Hexachlorobutadiene	225	7.595	7.595	0.000	81	13378	0.5000	0.4850	
80 1,2,3-Trichlorobenzene	180		7.626					ND	
81 Benzothiazole	135		7.718					ND	
82 Quinoline	129		7.781					ND	
83 N-Nitrosodi-n-butylamine	84		7.795					ND	
84 Caprolactam	113	7.778	7.797	-0.019	77	14006	1.00	0.8930	
85 p-Phenylene diamine	108		7.815					ND	
86 4-Chloro-3-methylphenol	107	7.903	7.908	-0.005	83	22940	0.5000	0.4384	
94 Safrole, Total	162		7.992					ND	
87 2-Methylnaphthalene	142		8.081				ND	ND	
88 1-Methylnaphthalene	142		8.172				ND	ND	
89 Hexachlorocyclopentadiene	237	8.225	8.225	0.000	48	5013	0.5000	0.1902	
91 1,2,4,5-Tetrachlorobenzene	216	8.230	8.230	0.000	87	22964	0.5000	0.5651	
90 1,2,3,5-Tetrachlorobenzene	216		8.232					ND	
225 Isosafrole Peak 1	162		8.243					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
92 2,4,6-Trichlorophenol	196	8.312	8.312	0.000	86	12966	0.5000	0.4784	
93 2,4,5-Trichlorophenol	196	8.340	8.345	-0.005	74	13098	0.5000	0.4629	
227 Isosafrole Peak 2	162		8.435					ND	
97 2,4-Toluene diamine	121		8.453					ND	
98 1,1'-Biphenyl	154	8.465	8.470	-0.005	95	52645	0.5000	0.5321	
99 1,2,3,4 -Tetrachlorobenzen	216		8.487					ND	
100 2-Chloronaphthalene	162	8.499	8.504	-0.005	97	40092	0.5000	0.5122	
96 3,4-Dichloronitrobenzene	109		8.506					ND	
246 1-Chloronaphthalene	162		8.541					ND	
102 2-Nitroaniline	65	8.562	8.562	0.000	72	19011	0.5000	0.4791	
101 Phenyl ether	170		8.564					ND	
103 1,4-Naphthoquinone	158		8.646					ND	
104 1,4-Dinitrobenzene	168		8.670					ND	
105 Dimethyl phthalate	163	8.691	8.696	-0.005	90	47541	0.5000	0.5402	
106 1,3-Dinitrobenzene	168	8.730	8.730	0.000	77	6192	0.5000	0.4387	
107 2,6-Dinitrotoluene	165	8.749	8.754	-0.005	52	9741	0.5000	0.4727	
109 Acenaphthylene	152		8.865				ND	ND	
110 3-Nitroaniline	138	8.903	8.908	-0.005	76	10693	0.5000	0.5204	
111 2,4-Dinitrophenol	184		8.994				ND	ND	
112 Acenaphthene	153		9.009				ND	ND	
113 4-Nitrophenol	109		9.018				ND	ND	
114 2,4-Dinitrotoluene	165	9.100	9.105	-0.005	63	10559	0.5000	0.3922	
115 Pentachlorobenzene	250		9.142					ND	
116 Dibenzofuran	168	9.148	9.153	-0.005	87	57782	0.5000	0.5398	
117 1-Naphthylamine	143		9.224					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.224					ND	
119 2,3,4,6-Tetrachlorophenol	232	9.249	9.249	0.000	72	8411	0.5000	0.3692	
120 2-Naphthylamine	143		9.286					ND	
121 Diethyl phthalate	149	9.288	9.293	-0.005	94	48177	0.5000	0.5425	
247 Hexadecane	57		9.297				ND	ND	
122 Thionazin	97		9.377					ND	
123 4-Chlorophenyl phenyl ethe	204	9.418	9.422	-0.004	89	24287	0.5000	0.5323	
125 4-Nitroaniline	138	9.427	9.432	-0.005	74	10717	0.5000	0.5385	
124 N-Nitro-o-toluidine	152		9.440					ND	
126 Fluorene	166		9.446				ND	ND	
127 Tributyl phosphate	99		9.458					ND	
128 4,6-Dinitro-2-methylphenol	198		9.461				ND	ND	
297 Benzophenone	105		9.512					ND	
131 N-Nitrosodiphenylamine	169	9.509	9.514	-0.005	94	71940	1.00	0.99	
130 Diphenylamine	169		9.526					ND	
132 1,2-Diphenylhydrazine	77	9.552	9.557	-0.005	98	76984	0.5000	0.5119	
133 Azobenzene	77	9.552	9.557	-0.005	93	77374	0.5000	0.5145	
134 Sulfotepp	202		9.627					ND	
135 1,3,5-Trinitrobenzene	213		9.704					ND	
137 Phenacetin	108		9.757					ND	
228 Diallate Peak 1	86		9.762					ND	
138 Phorate	121		9.772					ND	
139 4-Bromophenyl phenyl ether	248	9.841	9.841	0.000	69	14402	0.5000	0.5223	
230 Diallate Peak 2	86		9.844					ND	
140 Dimethoate	87		9.916					ND	
141 Hexachlorobenzene	284		9.932				ND	ND	
142 Atrazine	200		9.942				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
129 4-Aminobiphenyl	169		10.070					ND	
244 n-Octadecane	57		10.076				ND	ND	
143 Pentachlorophenol	266		10.081				ND	ND	
144 Pronamide	173		10.099					ND	
145 Pentachloronitrobenzene	237		10.113					ND	
146 Disulfoton	88		10.214					ND	
147 Dinoseb	211		10.224					ND	
148 Phenanthrene	178		10.274				ND	ND	
149 Anthracene	178		10.317				ND	ND	
151 Carbazole	167	10.427	10.432	-0.005	83	61729	0.5000	0.4890	
152 Methyl parathion	109		10.536					ND	
154 Di-n-butyl phthalate	149	10.668	10.673	-0.005	98	71315	0.5000	0.4511	
153 Diphenylsulfone	125		10.718					ND	
155 Ethyl Parathion	97		10.859					ND	
156 4-Nitroquinoline-1-oxide	190		10.921					ND	
157 Methapyrilene	58		10.964					ND	
158 Isodrin	66		11.186					ND	
159 Fluoranthene	202		11.293				ND	ND	
160 Benzidine	184	11.360	11.365	-0.005	96	46718	1.00	0.5026	
161 Pyrene	202		11.495				ND	ND	
226 Aramite Peak 1	185		11.537					ND	
229 Aramite Peak 2	185		11.599					ND	
163 p-Dimethylamino azobenzene	225		11.705					ND	
164 Chlorobenzilate	139		11.734					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.940					ND	
168 Butyl benzyl phthalate	149	11.952	11.957	-0.005	85	33115	0.5000	0.4059	
169 3,3'-Dimethylbenzidine	212		11.989					ND	
171 2-Acetylaminofluorene	181		12.215					ND	
172 3,3'-Dimethoxybenzidine	244		12.435					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.438	12.438	0.000	89	45619	0.5000	0.4212	
175 3,3'-Dichlorobenzidine	252	12.466	12.471	-0.005	55	49482	1.00	0.8473	
174 4,4'-Methylene bis(2-chlor	231		12.474					ND	
177 Benzo[a]anthracene	228		12.539				ND	ND	
178 Chrysene	228		12.577				ND	ND	
176 Hexabromobenzene	232		12.603					ND	
179 6-Methylchrysene	242		13.061					ND	
180 Di-n-octyl phthalate	149	13.101	13.096	0.005	94	69455	0.5000	0.3635	
281 Hexachlorophene	196		13.628					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.763					ND	
182 Benzo[b]fluoranthene	252		13.765				ND	ND	
183 Benzo[k]fluoranthene	252		13.803				ND	ND	
184 Benzo[a]pyrene	252		14.241				ND	ND	
185 3-Methylcholanthrene	268		14.797					ND	
187 Dibenz[a,h]acridine	279		15.783					ND	
186 Dibenz[a,j]acridine	279		15.878					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.246				ND	ND	
189 Dibenz(a,h)anthracene	278		16.261				ND	ND	
190 Benzo[g,h,i]perylene	276		16.847				ND	ND	
268 Endrin	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
265 Dibenzo[a,h]pyrene	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
258 Aldrin	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.524					ND	
165 4,4'-DDD	235		11.812					ND	
170 4,4'-DDT	235		12.072					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 191 Methyl Phenols,Total	100				0			0.9653	
S 245 Total Cresols	100				0			0.9653	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
T 240 Trimethyl phosphate TIC	110		5.000					ND	
T 194 Decane TIC	142		5.800					ND	
T 193 Hexamethylphosphoramide TI	135		6.500					ND	
T 234 2-Isopropylphenol TIC	121		7.250					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121		7.364					ND	
T 236 3-isopropylphenol TIC	121		7.364					ND	
T 237 3-(1,1-Dimethylethyl Pheno	135		7.720					ND	
T 231 2,3,7,8-TCDD	322		8.240					ND	
T 195 Hydroquinone TIC	110		9.000					ND	
T 192 Octadecane (TIC)	254		9.600					ND	
T 196 Kepone TIC	272		12.000					ND	
T 242 Triphenyl Phosphate TIC	326		12.000					ND	
T 280 2,3,7,8-TCDD TIC	198		12.500					ND	
T 241 Tricresyl phosphate TIC	368		12.500					ND	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201		14.000					ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L2 W_00005 Amount Added: 1.00 Units: mL

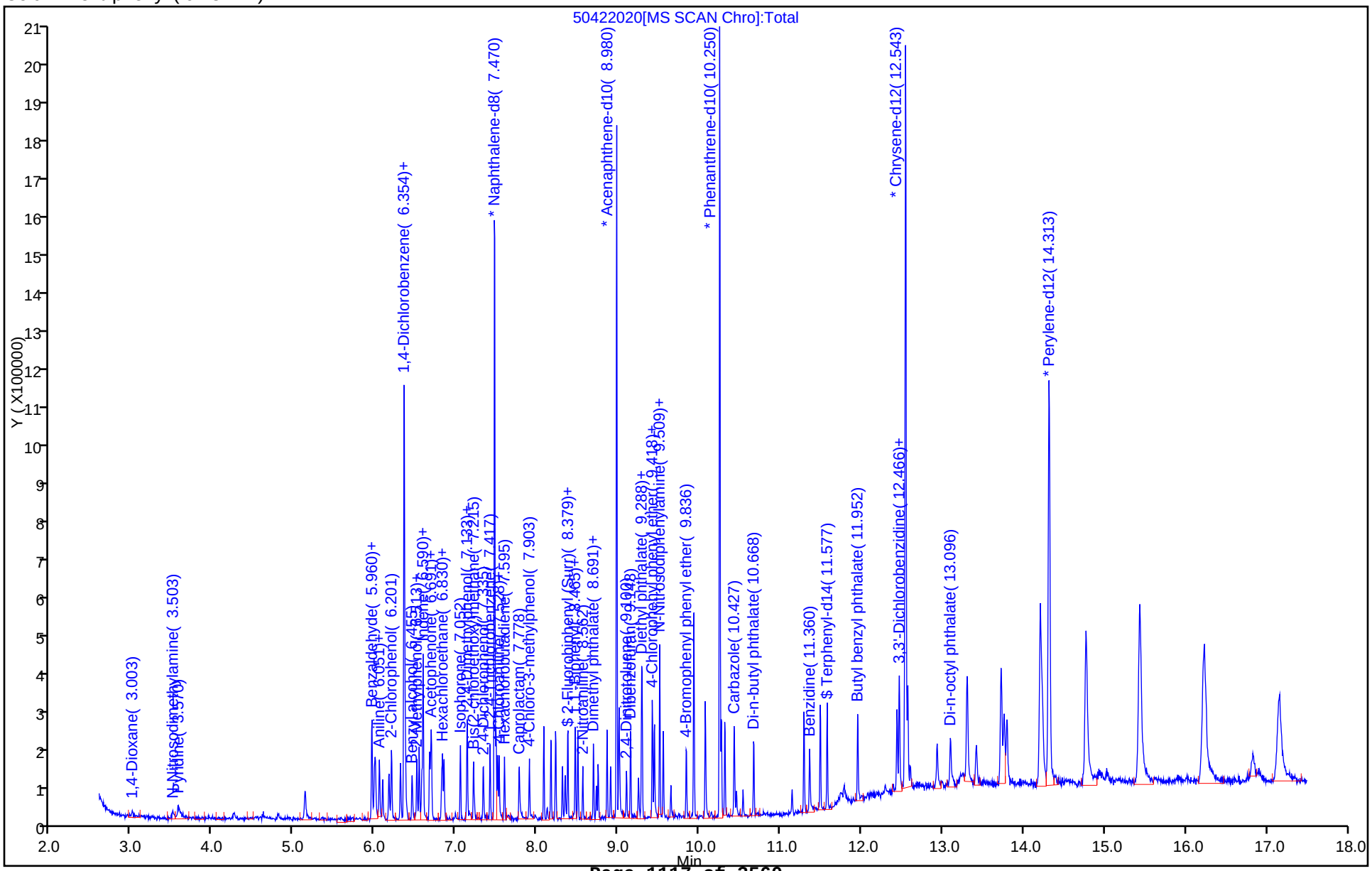
Report Date: 23-Apr-2015 09:37:29 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422020.D

Injection Date:	22-Apr-2015 15:34:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	lodv l2			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

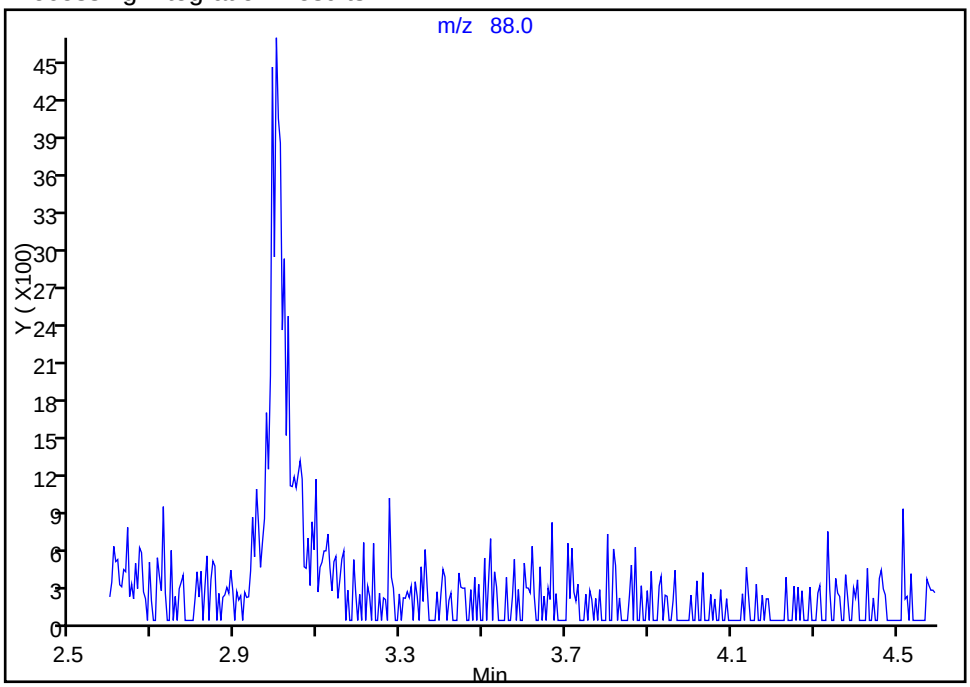
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422020.D				
Injection Date:	22-Apr-2015 15:34:30	Instrument ID:	A4HP9		
Lims ID:	lodv l2				
Client ID:					
Operator ID:	001574	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

25 1,4-Dioxane, CAS: 123-91-1

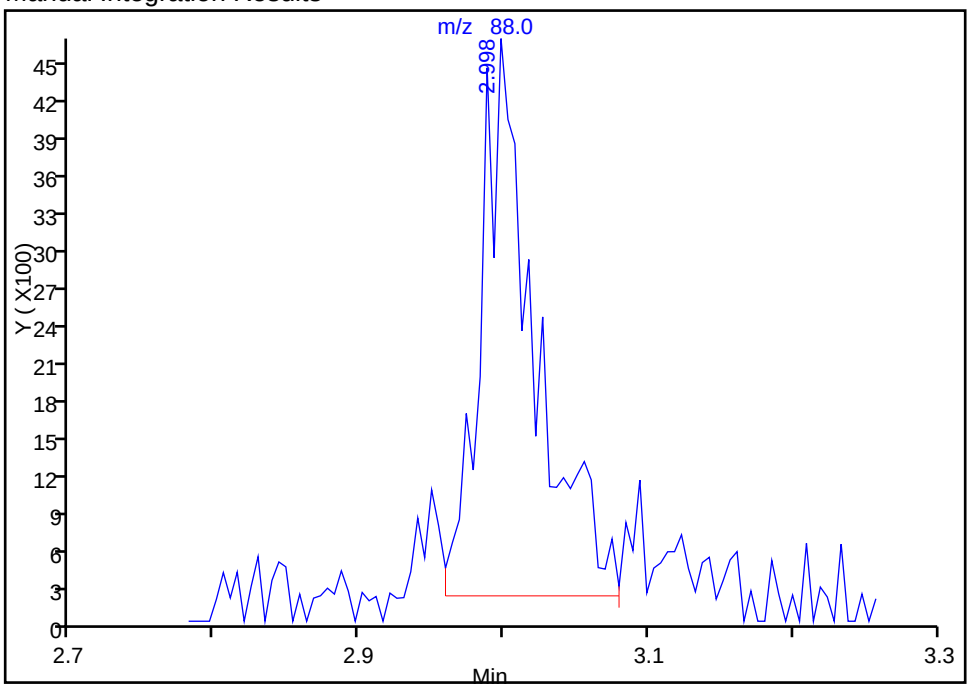
Not Detected
Expected RT: 2.99

Processing Integration Results



Manual Integration Results

RT: 3.00
Area: 11516
Amount: 0.410793
Amount Units: ng/ul



Reviewer: ulmanm, 23-Apr-2015 09:14:01
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

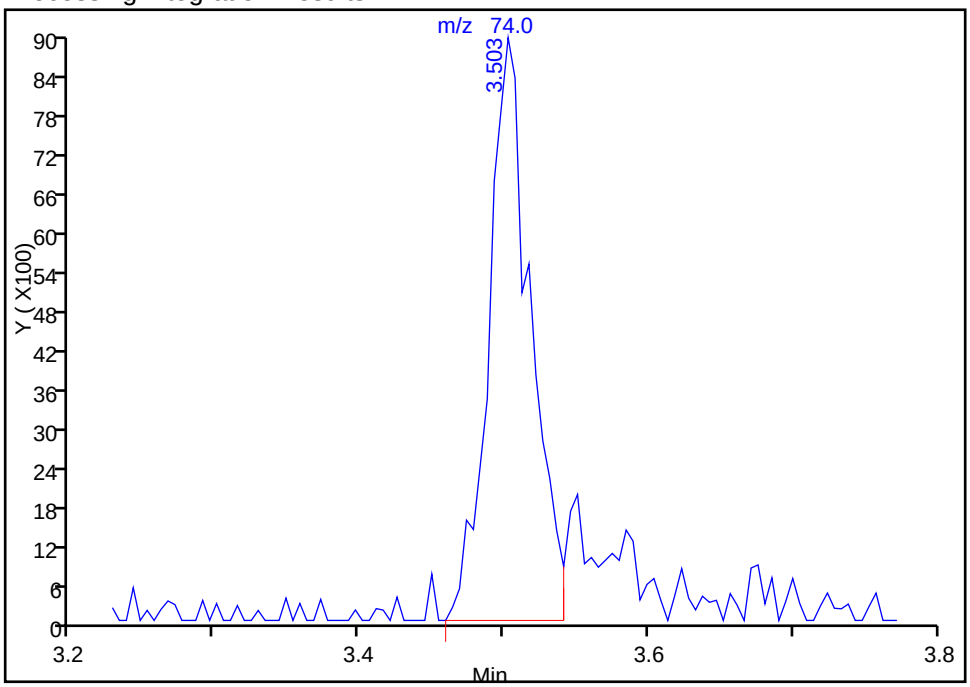
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422020.D				
Injection Date:	22-Apr-2015 15:34:30	Instrument ID:	A4HP9		
Lims ID:	lodv l2				
Client ID:					
Operator ID:	001574	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

26 N-Nitrosodimethylamine, CAS: 62-75-9

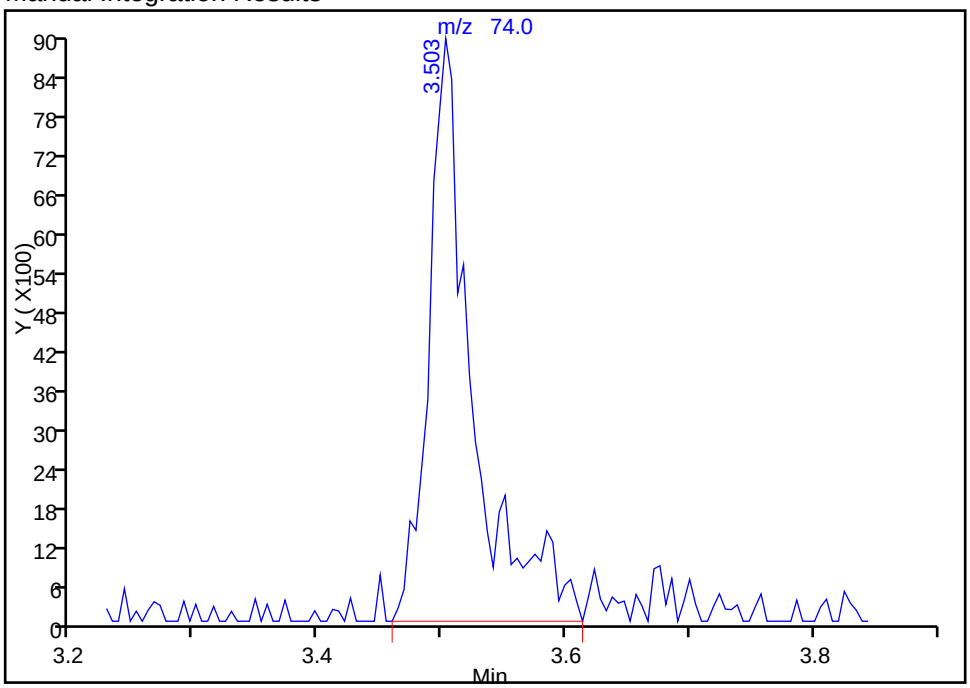
Processing Integration Results

RT: 3.50
Area: 18156
Amount: 0.388125
Amount Units: ng/ul



Manual Integration Results

RT: 3.50
Area: 22082
Amount: 0.472052
Amount Units: ng/ul



Reviewer: ulmanm, 23-Apr-2015 09:14:01
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

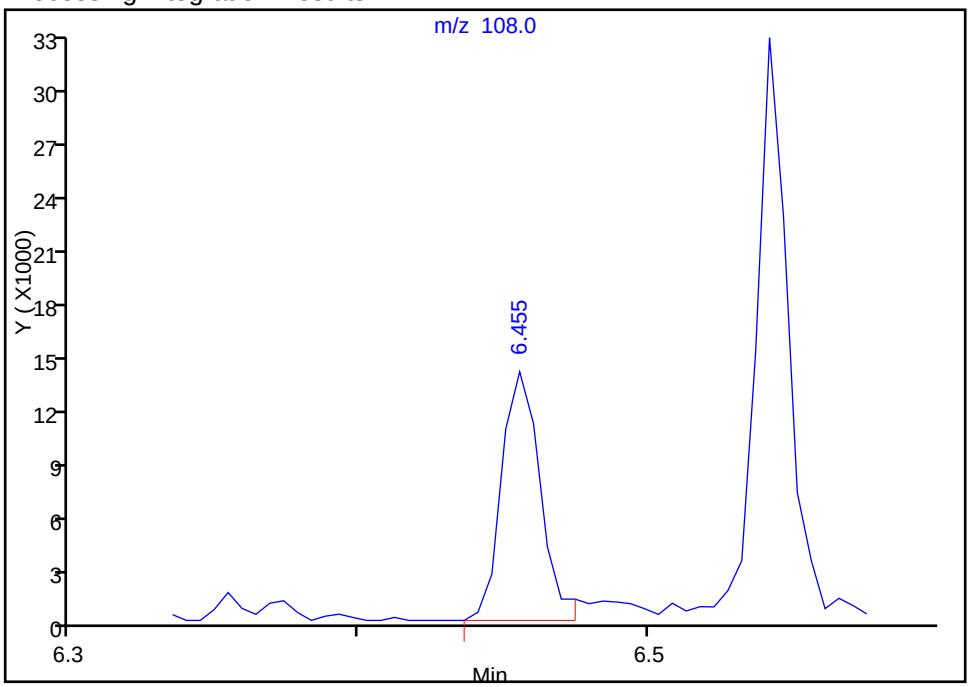
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422020.D
Injection Date: 22-Apr-2015 15:34:30 Instrument ID: A4HP9
Lims ID: lodv l2
Client ID:
Operator ID: 001574 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

49 Benzyl alcohol, CAS: 100-51-6

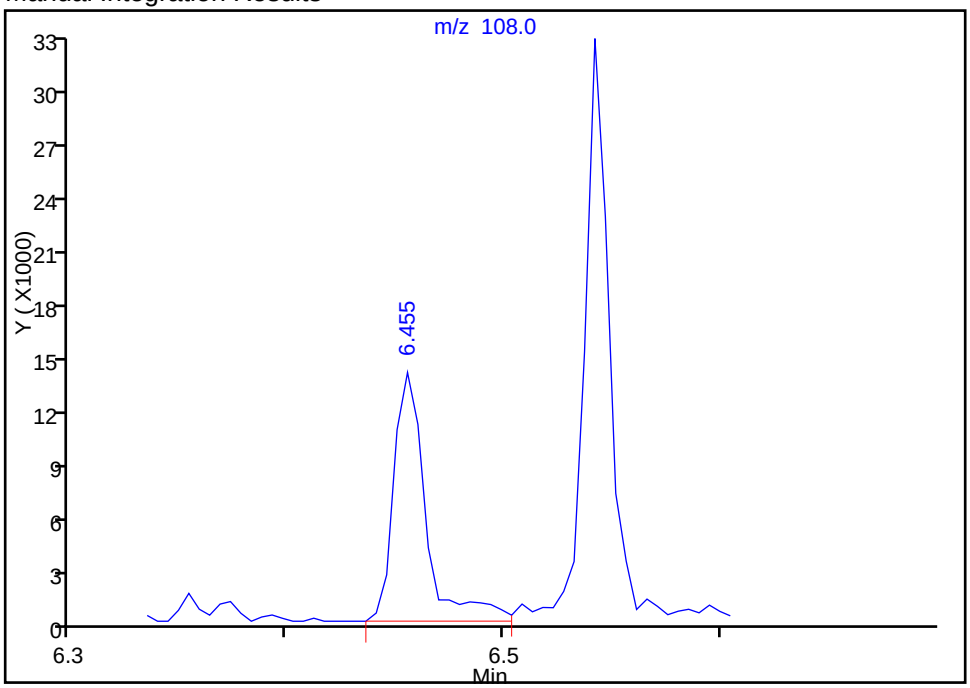
Processing Integration Results

RT: 6.46
Area: 12993
Amount: 0.349311
Amount Units: ng/ul



Manual Integration Results

RT: 6.46
Area: 14396
Amount: 0.387030
Amount Units: ng/ul



Reviewer: ulmanm, 23-Apr-2015 09:14:01
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 240-177355/21 Calibration Date: 04/22/2015 15:59

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422021.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzoic acid	Lin1				1.86	2.00		
4-Nitrophenol	Ave	0.2767			1.35	2.00		
4,6-Dinitro-2-methylphenol	Lin1				1.01	2.00		
Pentachlorophenol	Lin1				0.955	2.00		
1,1'-Biphenyl	Ave	1.404			0.000500	1.00		
1,2,4,5-Tetrachlorobenzene	Ave	0.5765			0.00100	1.00		
1,2,4-Trichlorobenzene	Ave	0.3272			0.000500	1.00		
1,2-Dichlorobenzene	Ave	1.431			0.000500	1.00		
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.118			0.000500	1.00		
1,3-Dichlorobenzene	Ave	1.512			0.000500	1.00		
1,3-Dinitrobenzene	Ave	0.2002			0.00100	1.00		
1,4-Dichlorobenzene	Ave	1.533			0.000500	1.00		
1,4-Dioxane	Ave	0.8489			0.00100	1.00		
2,3,4,6-Tetrachlorophenol	Ave	0.3232			0.00100	1.00		
2,4,5-Trichlorophenol	Ave	0.4014			0.000500	1.00		
2,4,6-Trichlorophenol	Ave	0.3845			0.000500	1.00		
2,4-Dichlorophenol	Ave	0.2968			0.000500	1.00		
2,4-Dimethylphenol	Ave	0.4926			0.000500	1.00		
2,4-Dinitrophenol	Lin				0.00100	2.00		
2,4-Dinitrotoluene	Ave	0.3819			0.000500	1.00		
2,6-Dichlorophenol	Ave	0.2918			0.00200	1.00		
2,6-Dinitrotoluene	Ave	0.2924			0.000500	1.00		
2-Chloronaphthalene	Ave	1.110			0.000500	1.00		
2-Chlorophenol	Ave	1.398			0.000500	1.00		
2-Methylnaphthalene	Ave	0.7019			0.000100	1.00		
2-Methylphenol	Ave	1.554			0.000500	1.00		
2-Nitroaniline	Ave	0.5629			0.000500	1.00		
2-Nitrophenol	Ave	0.1857			0.000500	1.00		
3 & 4 Methylphenol	Ave	1.645			0.00100	1.00		
3,3'-Dichlorobenzidine	Ave	0.3645			0.00100	2.00		
3-Nitroaniline	Ave	0.2915			0.000500	1.00		
4-Bromophenyl phenyl ether	Ave	0.2049			0.000500	1.00		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 240-177355/21 Calibration Date: 04/22/2015 15:59

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422021.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Chloro-3-methylphenol	Ave	0.4176			0.000500	1.00		
4-Chloroaniline	Ave	0.4667			0.000500	1.00		
4-Chlorophenyl phenyl ether	Ave	0.6472			0.000500	1.00		
4-Nitroaniline	Ave	0.2823			0.000500	1.00		
Acenaphthene	Ave	1.116			0.000100	1.00		
Acenaphthylene	Ave	1.715			0.000100	1.00		
Acetophenone	Ave	2.383			0.000500	1.00		
Aniline	Ave	2.967			0.00100	1.00		
Anthracene	Ave	1.050			0.000100	1.00		
Atrazine	Ave	0.2061			0.000500	2.00		
Azobenzene	Ave	1.117			0.000500	1.00		
Benzaldehyde	Ave	1.670			0.000500	2.00		
Benzidine	Ave	0.5801			0.00100	2.00		
Benzo[a]anthracene	Ave	1.124			0.000100	1.00		
Benzo[a]pyrene	Ave	1.151			0.000100	1.00		
Benzo[b]fluoranthene	Ave	1.205			0.000100	1.00		
Benzo[g,h,i]perylene	Ave	0.9662			0.000100	1.00		
Benzo[k]fluoranthene	Ave	1.214			0.000100	1.00		
Benzyl alcohol	Ave	1.126			0.000500	1.00		
bis (2-chloroisopropyl) ether	Ave	1.639			0.000500	1.00		
Bis(2-chloroethoxy)methane	Ave	0.5716			0.000500	1.00		
Bis(2-chloroethyl)ether	Ave	2.001			0.000100	1.00		
Bis(2-ethylhexyl) phthalate	Ave	0.6761			0.000500	1.00		
Butyl benzyl phthalate	Ave	0.5093			0.000500	1.00		
Caprolactam	Ave	0.1252			0.000500	2.00		
Carbazole	Ave	0.9379			0.000500	1.00		
Chrysene	Ave	1.027			0.000100	1.00		
Dibenz(a,h)anthracene	Ave	0.9613			0.000100	1.00		
Dibenzofuran	Ave	1.519			0.000100	1.00		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 240-177355/21 Calibration Date: 04/22/2015 15:59

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422021.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diethyl phthalate	Ave	1.260			0.00100	1.00		
Dimethyl phthalate	Ave	1.248			0.000500	1.00		
Di-n-butyl phthalate	Ave	1.175			0.00100	1.00		
Di-n-octyl phthalate	Ave	1.408			0.000500	1.00		
Fluoranthene	Ave	1.212			0.000100	1.00		
Fluorene	Ave	1.275			0.000100	1.00		
Hexachlorobenzene	Ave	0.2018			0.000100	1.00		
Hexachlorobutadiene	Ave	0.2201			0.000500	1.00		
Hexachlorocyclopentadiene	Ave	0.3739			0.000500	1.00		
Hexachloroethane	Ave	0.7281			0.000500	1.00		
Indene	Ave	2.818			0.00100	2.00		
Indeno[1,2,3-cd]pyrene	Ave	1.165			0.000100	1.00		
Isophorone	Ave	1.136			0.000500	1.00		
Naphthalene	Ave	1.069			0.000100	1.00		
Nitrobenzene	Ave	0.6722			0.000100	1.00		
N-Nitrosodimethylamine	Ave	1.417			0.000500	1.00		
N-Nitrosodi-n-propylamine	Ave	1.720			0.000500	1.00		
N-Nitrosodiphenylamine	Ave	0.5377			0.000500	2.00		
Phenanthrene	Ave	1.050			0.000100	1.00		
Phenol	Ave	2.388			0.00100	1.00		
Pyrene	Ave	1.096			0.000100	1.00		
Pyridine	Ave	2.280			0.000500	1.00		
2,4,6-Tribromophenol (Surr)	Ave	0.1481			0.000000	1.00	0*	35-125
2-Fluorobiphenyl (Surr)	Ave	1.345			0.000000	1.00	0*	45-105
2-Fluorophenol (Surr)	Ave	1.472			0.000000	1.00	0*	35-105
Nitrobenzene-d5 (Surr)	Ave	0.7281			0.000000	1.00	0*	35-100
Phenol-d5 (Surr)	Ave	2.203			0.000000	1.00	0*	40-100
Terphenyl-d14 (Surr)	Ave	0.8139			0.000000	1.00	0*	30-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422021.D
Lims ID: lodv l3
Client ID:
Sample Type: LODV
Inject. Date: 22-Apr-2015 15:59:30 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-021
Misc. Info.: LODV L3LODV L3
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 09:37:02 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 22-Apr-2015 16:26:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.356	6.359	-0.003	94	150345	4.00	4.00	
* 2 Naphthalene-d8	136	7.471	7.475	-0.004	98	584537	4.00	4.00	
* 3 Acenaphthene-d10	164	8.981	8.980	0.001	93	332031	4.00	4.00	
* 4 Phenanthrene-d10	188	10.251	10.254	-0.003	96	625991	4.00	4.00	
* 5 Chrysene-d12	240	12.545	12.548	-0.003	97	721191	4.00	4.00	
* 6 Perylene-d12	264	14.314	14.318	-0.004	98	595437	4.00	4.00	
$ 7 2-Fluorophenol	112		5.133				ND	ND	
$ 8 Phenol-d5	99		5.994				ND	ND	
$ 9 Nitrobenzene-d5	82		6.835				ND	ND	
$ 10 2-Fluorobiphenyl (Surr)	172		8.379				ND	ND	
$ 11 2,4,6-Tribromophenol	330		9.653				ND	ND	
$ 12 Terphenyl-d14	244		11.577				ND	ND	
25 1,4-Dioxane	88		2.993				ND	ND	
26 N-Nitrosodimethylamine	74		3.493				ND	ND	
27 Pyridine	79		3.556				ND	ND	
20 Dimethylformamide	73		4.068					ND	
28 Ethyl methacrylate	69		4.173					ND	
31 2-Picoline	93		4.540					ND	
32 N-Nitrosomethylethylamine	88		4.650					ND	
35 Acrylamide	71		4.905					ND	
34 Methyl methanesulfonate	80		4.963					ND	
233 n,n'-Dimethylacetamide	44		5.053					ND	
36 N-Nitrosodiethylamine	102		5.372					ND	
37 Ethyl methanesulfonate	79		5.636					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.866					ND	
39 3-Methylcyclohexanone	69		5.900					ND	
40 4-Methylcyclohexanone	55		5.948					ND	
41 Benzaldehyde	77		5.960				ND	ND	
43 Phenol	94		6.003				ND	ND	
44 Aniline	93		6.051				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
69 Bis(2-chloroethyl)ether	93		6.095				ND	ND	
45 Pentachloroethane	167		6.122					ND	
46 2-Chlorophenol	128		6.172				ND	ND	
243 n-Decane	57		6.201				ND	ND	
47 1,3-Dichlorobenzene	146		6.311				ND	ND	
48 1,4-Dichlorobenzene	146		6.374				ND	ND	
49 Benzyl alcohol	108		6.455				ND	ND	
232 1-Methyl-2-pyrrilidinone	99		6.462					ND	
50 1,2-Dichlorobenzene	146		6.513				ND	ND	
51 2-Methylphenol	108		6.542				ND	ND	
286 4-Methyl-1-cyclohexanemeth	55		6.574					ND	
53 2,2'-oxybis[1-chloropropan	45		6.576				ND	ND	
52 Indene	115		6.590				ND	ND	
21 3 & 4 Methylphenol	108		6.672				ND	ND	
56 N-Nitrosopyrrolidine	100		6.675					ND	
57 N-Nitrosodi-n-propylamine	70		6.686				ND	ND	
58 Acetophenone	105		6.696				ND	ND	
59 N-Nitrosomorpholine	56		6.704					ND	
287 4-Methyl-1-cyclohexanemeth	55		6.708					ND	
60 2-Toluidine	106		6.742					ND	
61 Hexachloroethane	117		6.821				ND	ND	
62 Nitrobenzene	77		6.850				ND	ND	
63 N-Nitrosopiperidine	114		6.987					ND	
64 Isophorone	82		7.052				ND	ND	
66 2-Nitrophenol	139		7.129				ND	ND	
65 2,4-Dimethylphenol	107		7.138				ND	ND	
67 1,3,5-Trichlorobenzene	180		7.160					ND	
71 Benzoic acid	122	7.159	7.196	-0.037	83	14637	2.00	1.86	M
68 o,o',o''-Triethylphosphoro	198		7.199					ND	
70 Bis(2-chloroethoxy)methane	93		7.215				ND	ND	
72 alpha,alpha-Dimethyl phene	58		7.314					ND	
73 2,4-Dichlorophenol	162		7.335				ND	ND	
74 1,2,4-Trichlorobenzene	180		7.417				ND	ND	
75 Naphthalene	128		7.494				ND	ND	
76 4-Chloroaniline	127		7.513				ND	ND	
77 2,6-Dichlorophenol	162		7.533				ND	ND	
78 Hexachloropropene	213		7.589					ND	
79 Hexachlorobutadiene	225		7.595				ND	ND	
80 1,2,3-Trichlorobenzene	180		7.626					ND	
81 Benzothiazole	135		7.718					ND	
82 Quinoline	129		7.781					ND	
83 N-Nitrosodi-n-butylamine	84		7.795					ND	
84 Caprolactam	113		7.797				ND	ND	
85 p-Phenylene diamine	108		7.815					ND	
86 4-Chloro-3-methylphenol	107		7.908				ND	ND	
94 Safrole, Total	162		7.992					ND	
87 2-Methylnaphthalene	142		8.081				ND	ND	
88 1-Methylnaphthalene	142		8.172				ND	ND	
89 Hexachlorocyclopentadiene	237		8.225				ND	ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.230				ND	ND	
90 1,2,3,5-Tetrachlorobenzene	216		8.232					ND	
225 Isosafrole Peak 1	162		8.243					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
92 2,4,6-Trichlorophenol	196		8.312				ND	ND	
93 2,4,5-Trichlorophenol	196		8.345				ND	ND	
227 Isosafrole Peak 2	162		8.435					ND	
97 2,4-Toluene diamine	121		8.453					ND	
98 1,1'-Biphenyl	154		8.470				ND	ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.487					ND	
100 2-Chloronaphthalene	162		8.504				ND	ND	
96 3,4-Dichloronitrobenzene	109		8.506					ND	
246 1-Chloronaphthalene	162		8.541					ND	
102 2-Nitroaniline	65		8.562				ND	ND	
101 Phenyl ether	170		8.564					ND	
103 1,4-Naphthoquinone	158		8.646					ND	
104 1,4-Dinitrobenzene	168		8.670					ND	
105 Dimethyl phthalate	163		8.696				ND	ND	
106 1,3-Dinitrobenzene	168		8.730				ND	ND	
107 2,6-Dinitrotoluene	165		8.754				ND	ND	
109 Acenaphthylene	152		8.865				ND	ND	
110 3-Nitroaniline	138		8.908				ND	ND	
111 2,4-Dinitrophenol	184		8.994				ND	ND	
112 Acenaphthene	153		9.009				ND	ND	
113 4-Nitrophenol	109	9.015	9.018	-0.003	87	30995	2.00		1.35
114 2,4-Dinitrotoluene	165		9.105				ND	ND	
115 Pentachlorobenzene	250		9.142					ND	
116 Dibenzofuran	168		9.153				ND	ND	
117 1-Naphthylamine	143		9.224					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.224					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.249				ND	ND	
120 2-Naphthylamine	143		9.286					ND	
121 Diethyl phthalate	149		9.293				ND	ND	
247 Hexadecane	57		9.297				ND	ND	
122 Thionazin	97		9.377					ND	
123 4-Chlorophenyl phenyl ethe	204		9.422				ND	ND	
125 4-Nitroaniline	138		9.432				ND	ND	
124 N-Nitro-o-toluidine	152		9.440					ND	
126 Fluorene	166		9.446				ND	ND	
127 Tributyl phosphate	99		9.458					ND	
128 4,6-Dinitro-2-methylphenol	198	9.457	9.461	-0.004	88	7258	2.00		1.01
297 Benzophenone	105		9.512					ND	
131 N-Nitrosodiphenylamine	169		9.514				ND	ND	
130 Diphenylamine	169		9.526					ND	
132 1,2-Diphenylhydrazine	77		9.557				1.00	ND	
133 Azobenzene	77		9.557				ND	ND	
134 Sulfotepp	202		9.627					ND	
135 1,3,5-Trinitrobenzene	213		9.704					ND	
137 Phenacetin	108		9.757					ND	
228 Diallate Peak 1	86		9.762					ND	
138 Phorate	121		9.772					ND	
139 4-Bromophenyl phenyl ether	248		9.841				ND	ND	
230 Diallate Peak 2	86		9.844					ND	
140 Dimethoate	87		9.916					ND	
141 Hexachlorobenzene	284		9.932				ND	ND	
142 Atrazine	200		9.942				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
129 4-Aminobiphenyl	169		10.070					ND	
244 n-Octadecane	57		10.076				ND	ND	
143 Pentachlorophenol	266	10.082	10.081	0.001	81	11104	2.00	0.9550	
144 Pronamide	173		10.099					ND	
145 Pentachloronitrobenzene	237		10.113					ND	
146 Disulfoton	88		10.214					ND	
147 Dinoseb	211		10.224					ND	
148 Phenanthrene	178		10.274				ND	ND	
149 Anthracene	178		10.317				ND	ND	
151 Carbazole	167		10.432				ND	ND	
152 Methyl parathion	109		10.536					ND	
154 Di-n-butyl phthalate	149		10.673				ND	ND	
153 Diphenylsulfone	125		10.718					ND	
155 Ethyl Parathion	97		10.859					ND	
156 4-Nitroquinoline-1-oxide	190		10.921					ND	
157 Methapyrilene	58		10.964					ND	
158 Isodrin	66		11.186					ND	
159 Fluoranthene	202		11.293				ND	ND	
160 Benzidine	184		11.365				ND	ND	
161 Pyrene	202		11.495				ND	ND	
226 Aramite Peak 1	185		11.537					ND	
229 Aramite Peak 2	185		11.599					ND	
163 p-Dimethylamino azobenzene	225		11.705					ND	
164 Chlorobenzilate	139		11.734					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.940					ND	
168 Butyl benzyl phthalate	149		11.957				ND	ND	
169 3,3'-Dimethylbenzidine	212		11.989					ND	
171 2-Acetylaminofluorene	181		12.215					ND	
172 3,3'-Dimethoxybenzidine	244		12.435					ND	
173 Bis(2-ethylhexyl) phthalat	149		12.438				ND	ND	
175 3,3'-Dichlorobenzidine	252		12.471				ND	ND	
174 4,4'-Methylene bis(2-chlor	231		12.474					ND	
177 Benzo[a]anthracene	228		12.539				ND	ND	
178 Chrysene	228		12.577				ND	ND	
176 Hexabromobenzene	232		12.603					ND	
179 6-Methylchrysene	242		13.061					ND	
180 Di-n-octyl phthalate	149		13.096				ND	ND	
281 Hexachlorophene	196		13.628					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.763					ND	
182 Benzo[b]fluoranthene	252		13.765				ND	ND	
183 Benzo[k]fluoranthene	252		13.803				ND	ND	
184 Benzo[a]pyrene	252		14.241				ND	ND	
185 3-Methylcholanthrene	268		14.797					ND	
187 Dibenz[a,h]acridine	279		15.783					ND	
186 Dibenz[a,j]acridine	279		15.878					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.246				ND	ND	
189 Dibenz(a,h)anthracene	278		16.261				ND	ND	
190 Benzo[g,h,i]perylene	276		16.847				ND	ND	
268 Endrin	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
265 Dibenzo[a,h]pyrene	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
258 Aldrin	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.524					ND	
165 4,4'-DDD	235		11.812					ND	
170 4,4'-DDT	235		12.072					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 191 Methyl Phenols,Total	100		0.000					ND	
S 245 Total Cresols	100		0.000					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
T 240 Trimethyl phosphate TIC	110	5.024	4.999	0.024	0	130			0
T 194 Decane TIC	142	6.202	5.799	0.402	91	73966			0
T 193 Hexamethylphosphoramide TI	135	6.207	6.495	-0.293	1	436			0
T 234 2-Isopropylphenol TIC	121	7.279	7.244	0.029	0	159			0

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.370	7.358	0.006	0	135		0	
T 236 3-isopropylphenol TIC	121	7.370	7.358	0.006	0	135		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.707	7.714	-0.013	16	1233		0	
T 231 2,3,7,8-TCDD	322	8.496	8.236	0.256	1	108		0	
T 195 Hydroquinone TIC	110	9.015	8.993	0.015	29	3341		0	
T 192 Octadecane (TIC)	254	15.435	9.600	5.835	83	114965		0	
T 196 Kepone TIC	272		12.000					ND	
T 242 Triphenyl Phosphate TIC	326	12.030	11.994	0.030	0	268		0	
T 280 2,3,7,8-TCDD TIC	198	12.545	12.494	0.045	0	7910		0	
T 241 Tricresyl phosphate TIC	368	12.506	12.494	0.006	0	189		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	13.973	13.994	-0.027	0	202		0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L3 W_00005 Amount Added: 1.00 Units: mL

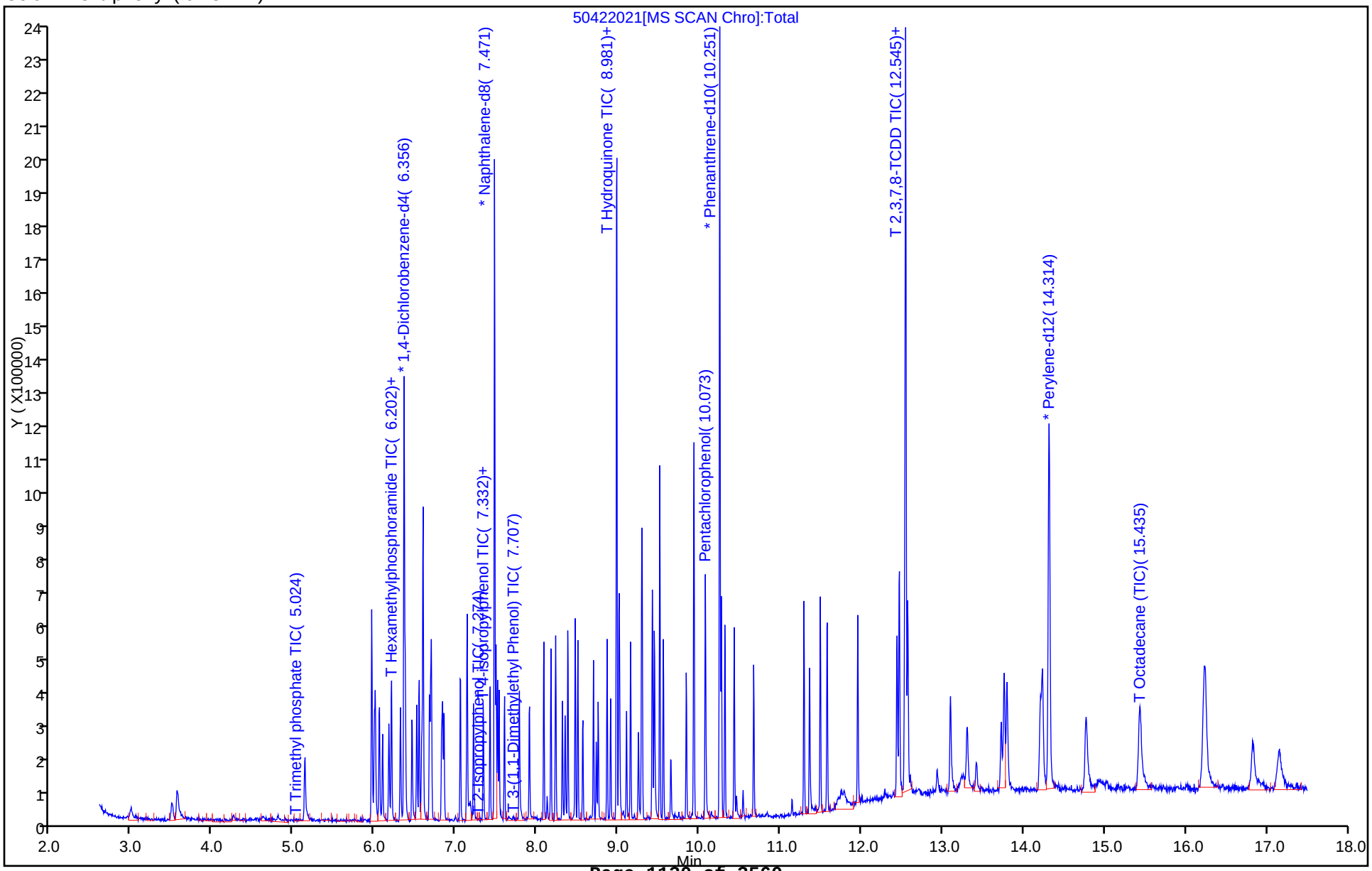
Report Date: 23-Apr-2015 09:37:31 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422021.D

Injection Date:	22-Apr-2015 15:59:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	lodv l3			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

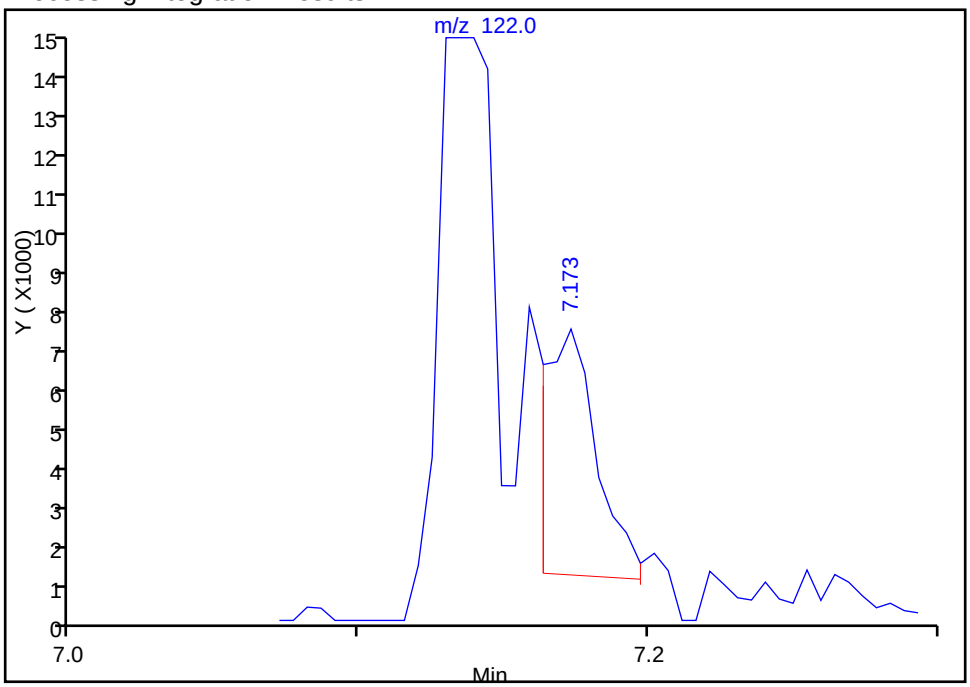
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422021.D
Injection Date: 22-Apr-2015 15:59:30 Instrument ID: A4HP9
Lims ID: lodv l3
Client ID:
Operator ID: 001574 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

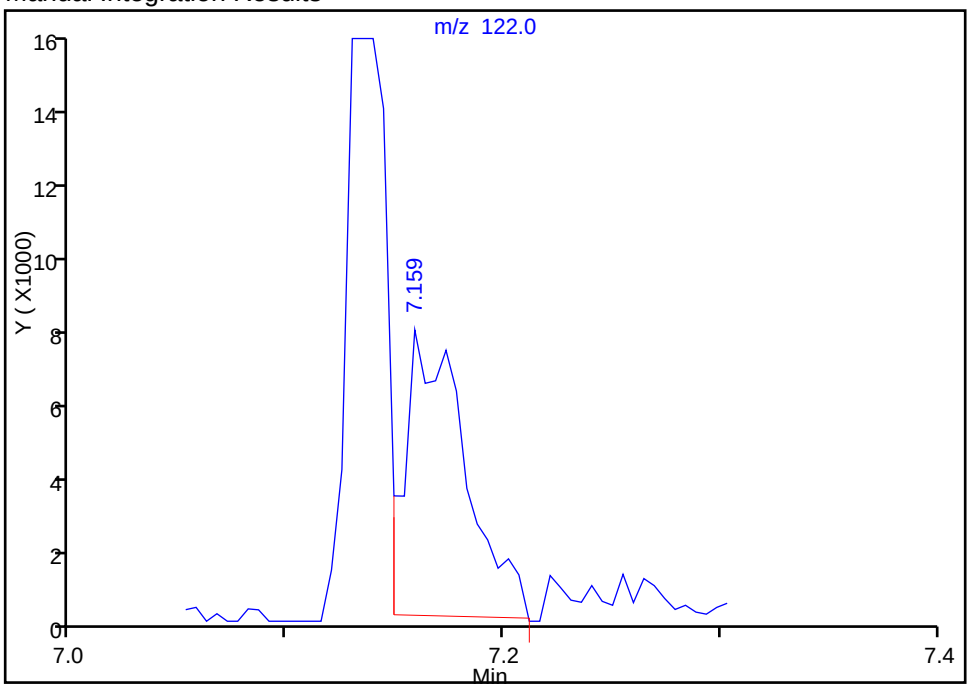
Processing Integration Results

RT: 7.17
Area: 7710
Amount: 1.662962
Amount Units: ng/ul



Manual Integration Results

RT: 7.16
Area: 14637
Amount: 1.858953
Amount Units: ng/ul



Reviewer: ulmanm, 23-Apr-2015 09:31:12
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 240-177355/48 Calibration Date: 04/22/2015 16:24

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422048.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4-Dinitrophenol	Lin				2.33	4.00		
1,1'-Biphenyl	Ave	1.404			0.000500	2.00		
1,2,4,5-Tetrachlorobenzene	Ave	0.5765			0.00100	2.00		
1,2,4-Trichlorobenzene	Ave	0.3272			0.000500	2.00		
1,2-Dichlorobenzene	Ave	1.431			0.000500	2.00		
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.118			0.000500	2.00		
1,3-Dichlorobenzene	Ave	1.512			0.000500	2.00		
1,3-Dinitrobenzene	Ave	0.2002			0.00100	2.00		
1,4-Dichlorobenzene	Ave	1.533			0.000500	2.00		
1,4-Dioxane	Ave	0.8489			0.00100	2.00		
2,3,4,6-Tetrachlorophenol	Ave	0.3232			0.00100	2.00		
2,4,5-Trichlorophenol	Ave	0.4014			0.000500	2.00		
2,4,6-Trichlorophenol	Ave	0.3845			0.000500	2.00		
2,4-Dichlorophenol	Ave	0.2968			0.000500	2.00		
2,4-Dimethylphenol	Ave	0.4926			0.000500	2.00		
2,4-Dinitrotoluene	Ave	0.3819			0.000500	2.00		
2,6-Dichlorophenol	Ave	0.2918			0.00200	2.00		
2,6-Dinitrotoluene	Ave	0.2924			0.000500	2.00		
2-Chloronaphthalene	Ave	1.110			0.000500	2.00		
2-Chlorophenol	Ave	1.398			0.000500	2.00		
2-Methylnaphthalene	Ave	0.7019			0.000100	2.00		
2-Methylphenol	Ave	1.554			0.000500	2.00		
2-Nitroaniline	Ave	0.5629			0.000500	2.00		
2-Nitrophenol	Ave	0.1857			0.000500	2.00		
3 & 4 Methylphenol	Ave	1.645			0.00100	2.00		
3,3'-Dichlorobenzidine	Ave	0.3645			0.00100	4.00		
3-Nitroaniline	Ave	0.2915			0.000500	2.00		
4,6-Dinitro-2-methylphenol	Lin1				0.00400	4.00		
4-Bromophenyl phenyl ether	Ave	0.2049			0.000500	2.00		
4-Chloro-3-methylphenol	Ave	0.4176			0.000500	2.00		
4-Chloroaniline	Ave	0.4667			0.000500	2.00		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 240-177355/48 Calibration Date: 04/22/2015 16:24

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422048.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Chlorophenyl phenyl ether	Ave	0.6472			0.000500	2.00		
4-Nitroaniline	Ave	0.2823			0.000500	2.00		
4-Nitrophenol	Ave	0.2767			0.00400	4.00		
Acenaphthene	Ave	1.116			0.000100	2.00		
Acenaphthylene	Ave	1.715			0.000100	2.00		
Acetophenone	Ave	2.383			0.000500	2.00		
Aniline	Ave	2.967			0.00100	2.00		
Anthracene	Ave	1.050			0.000100	2.00		
Atrazine	Ave	0.2061			0.000500	4.00		
Azobenzene	Ave	1.117			0.000500	2.00		
Benzaldehyde	Ave	1.670			0.000500	4.00		
Benzidine	Ave	0.5801			0.00100	4.00		
Benzo[a]anthracene	Ave	1.124			0.000100	2.00		
Benzo[a]pyrene	Ave	1.151			0.000100	2.00		
Benzo[b]fluoranthene	Ave	1.205			0.000100	2.00		
Benzo[g,h,i]perylene	Ave	0.9662			0.000100	2.00		
Benzo[k]fluoranthene	Ave	1.214			0.000100	2.00		
Benzoic acid	Lin1				0.0200	4.00		
Benzyl alcohol	Ave	1.126			0.000500	2.00		
bis (2-chloroisopropyl) ether	Ave	1.639			0.000500	2.00		
Bis(2-chloroethoxy)methane	Ave	0.5716			0.000500	2.00		
Bis(2-chloroethyl)ether	Ave	2.001			0.000100	2.00		
Bis(2-ethylhexyl) phthalate	Ave	0.6761			0.000500	2.00		
Butyl benzyl phthalate	Ave	0.5093			0.000500	2.00		
Caprolactam	Ave	0.1252			0.000500	4.00		
Carbazole	Ave	0.9379			0.000500	2.00		
Chrysene	Ave	1.027			0.000100	2.00		
Dibenz(a,h)anthracene	Ave	0.9613			0.000100	2.00		
Dibenzofuran	Ave	1.519			0.000100	2.00		
Diethyl phthalate	Ave	1.260			0.00100	2.00		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 240-177355/48 Calibration Date: 04/22/2015 16:24

Instrument ID: A4HP9 Calib Start Date: 04/20/2015 08:49

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/20/2015 12:41

Lab File ID: 50422048.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.248			0.000500	2.00		
Di-n-butyl phthalate	Ave	1.175			0.00100	2.00		
Di-n-octyl phthalate	Ave	1.408			0.000500	2.00		
Fluoranthene	Ave	1.212			0.000100	2.00		
Fluorene	Ave	1.275			0.000100	2.00		
Hexachlorobenzene	Ave	0.2018			0.000100	2.00		
Hexachlorobutadiene	Ave	0.2201			0.000500	2.00		
Hexachlorocyclopentadiene	Ave	0.3739			0.000500	2.00		
Hexachloroethane	Ave	0.7281			0.000500	2.00		
Indene	Ave	2.818			0.00100	4.00		
Indeno[1,2,3-cd]pyrene	Ave	1.165			0.000100	2.00		
Isophorone	Ave	1.136			0.000500	2.00		
Naphthalene	Ave	1.069			0.000100	2.00		
Nitrobenzene	Ave	0.6722			0.000100	2.00		
N-Nitrosodimethylamine	Ave	1.417			0.000500	2.00		
N-Nitrosodi-n-propylamine	Ave	1.720			0.000500	2.00		
N-Nitrosodiphenylamine	Ave	0.5377			0.000500	4.00		
Pentachlorophenol	Lin1				0.00100	4.00		
Phenanthrene	Ave	1.050			0.000100	2.00		
Phenol	Ave	2.388			0.00100	2.00		
Pyrene	Ave	1.096			0.000100	2.00		
Pyridine	Ave	2.280			0.000500	2.00		
2,4,6-Tribromophenol (Surr)	Ave	0.1481			0.000000	2.00	0*	35-125
2-Fluorobiphenyl (Surr)	Ave	1.345			0.000000	2.00	0*	45-105
2-Fluorophenol (Surr)	Ave	1.472			0.000000	2.00	0*	35-105
Nitrobenzene-d5 (Surr)	Ave	0.7281			0.000000	2.00	0*	35-100
Phenol-d5 (Surr)	Ave	2.203			0.000000	2.00	0*	40-100
Terphenyl-d14 (Surr)	Ave	0.8139			0.000000	2.00	0*	30-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422048.D
Lims ID: lodv l4
Client ID:
Sample Type: LODV
Inject. Date: 22-Apr-2015 16:24:30 ALS Bottle#: 48 Worklist Smp#: 48
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-048
Misc. Info.: LODV L4LODV L4
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 09:37:02 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 22-Apr-2015 17:12:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.358	6.359	-0.001	92	135018	4.00	4.00	
* 2 Naphthalene-d8	136	7.473	7.475	-0.002	98	489715	4.00	4.00	
* 3 Acenaphthene-d10	164	8.979	8.980	-0.002	78	295228	4.00	4.00	
* 4 Phenanthrene-d10	188	10.253	10.254	-0.001	94	525307	4.00	4.00	
* 5 Chrysene-d12	240	12.547	12.548	-0.001	76	593392	4.00	4.00	
* 6 Perylene-d12	264	14.316	14.318	-0.002	94	493690	4.00	4.00	
$ 7 2-Fluorophenol	112		5.133				ND	ND	
$ 8 Phenol-d5	99		5.994				ND	ND	
$ 9 Nitrobenzene-d5	82		6.835				ND	ND	
$ 10 2-Fluorobiphenyl (Surr)	172		8.379				ND	ND	
$ 11 2,4,6-Tribromophenol	330		9.653				ND	ND	
$ 12 Terphenyl-d14	244		11.577				ND	ND	
25 1,4-Dioxane	88		2.993				ND	ND	
26 N-Nitrosodimethylamine	74		3.493				ND	ND	
27 Pyridine	79		3.556				ND	ND	
20 Dimethylformamide	73		4.068					ND	
28 Ethyl methacrylate	69		4.173					ND	
31 2-Picoline	93		4.540					ND	
32 N-Nitrosomethylethylamine	88		4.650					ND	
35 Acrylamide	71		4.905					ND	
34 Methyl methanesulfonate	80		4.963					ND	
233 n,n'-Dimethylacetamide	44		5.053					ND	
36 N-Nitrosodiethylamine	102		5.372					ND	
37 Ethyl methanesulfonate	79		5.636					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.866					ND	
39 3-Methylcyclohexanone	69		5.900					ND	
40 4-Methylcyclohexanone	55		5.948					ND	
41 Benzaldehyde	77		5.960				ND	ND	
43 Phenol	94		6.003				ND	ND	
44 Aniline	93		6.051				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
69 Bis(2-chloroethyl)ether	93		6.095				ND	ND	
45 Pentachloroethane	167		6.122					ND	
46 2-Chlorophenol	128		6.172				ND	ND	
243 n-Decane	57		6.201				ND	ND	
47 1,3-Dichlorobenzene	146		6.311				ND	ND	
48 1,4-Dichlorobenzene	146		6.374				ND	ND	
49 Benzyl alcohol	108		6.455				ND	ND	
232 1-Methyl-2-pyrrilidinone	99		6.462					ND	
50 1,2-Dichlorobenzene	146		6.513				ND	ND	
51 2-Methylphenol	108		6.542				ND	ND	
286 4-Methyl-1-cyclohexanemeth	55		6.574					ND	
53 2,2'-oxybis[1-chloropropan	45		6.576				ND	ND	
52 Indene	115		6.590				ND	ND	
21 3 & 4 Methylphenol	108		6.672				ND	ND	
56 N-Nitrosopyrrolidine	100		6.675					ND	
57 N-Nitrosodi-n-propylamine	70		6.686				ND	ND	
58 Acetophenone	105		6.696				ND	ND	
59 N-Nitrosomorpholine	56		6.704					ND	
287 4-Methyl-1-cyclohexanemeth	55		6.708					ND	
60 2-Toluidine	106		6.742					ND	
61 Hexachloroethane	117		6.821				ND	ND	
62 Nitrobenzene	77		6.850				ND	ND	
63 N-Nitrosopiperidine	114		6.987					ND	
64 Isophorone	82		7.052				ND	ND	
66 2-Nitrophenol	139		7.129				ND	ND	
65 2,4-Dimethylphenol	107		7.138				ND	ND	
67 1,3,5-Trichlorobenzene	180		7.160					ND	
71 Benzoic acid	122		7.196				ND	ND	
68 o,o',o''-Triethylphosphoro	198		7.199					ND	
70 Bis(2-chloroethoxy)methane	93		7.215				ND	ND	
72 alpha,alpha-Dimethyl phene	58		7.314					ND	
73 2,4-Dichlorophenol	162		7.335				ND	ND	
74 1,2,4-Trichlorobenzene	180		7.417				ND	ND	
75 Naphthalene	128		7.494				ND	ND	
76 4-Chloroaniline	127		7.513				ND	ND	
77 2,6-Dichlorophenol	162		7.533				ND	ND	
78 Hexachloropropene	213		7.589					ND	
79 Hexachlorobutadiene	225		7.595				ND	ND	
80 1,2,3-Trichlorobenzene	180		7.626					ND	
81 Benzothiazole	135		7.718					ND	
82 Quinoline	129		7.781					ND	
83 N-Nitrosodi-n-butylamine	84		7.795					ND	
84 Caprolactam	113		7.797				ND	ND	
85 p-Phenylene diamine	108		7.815					ND	
86 4-Chloro-3-methylphenol	107		7.908				ND	ND	
94 Safrole, Total	162		7.992					ND	
87 2-Methylnaphthalene	142		8.081				ND	ND	
88 1-Methylnaphthalene	142		8.172				ND	ND	
89 Hexachlorocyclopentadiene	237		8.225				ND	ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.230				ND	ND	
90 1,2,3,5-Tetrachlorobenzene	216		8.232					ND	
225 Isosafrole Peak 1	162		8.243					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
92 2,4,6-Trichlorophenol	196		8.312				ND	ND	
93 2,4,5-Trichlorophenol	196		8.345				ND	ND	
227 Isosafrole Peak 2	162		8.435					ND	
97 2,4-Toluene diamine	121		8.453					ND	
98 1,1'-Biphenyl	154		8.470				ND	ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.487					ND	
100 2-Chloronaphthalene	162		8.504				ND	ND	
96 3,4-Dichloronitrobenzene	109		8.506					ND	
246 1-Chloronaphthalene	162		8.541					ND	
102 2-Nitroaniline	65		8.562				ND	ND	
101 Phenyl ether	170		8.564					ND	
103 1,4-Naphthoquinone	158		8.646					ND	
104 1,4-Dinitrobenzene	168		8.670					ND	
105 Dimethyl phthalate	163		8.696				ND	ND	
106 1,3-Dinitrobenzene	168		8.730				ND	ND	
107 2,6-Dinitrotoluene	165		8.754				ND	ND	
109 Acenaphthylene	152		8.865				ND	ND	
110 3-Nitroaniline	138		8.908				ND	ND	
111 2,4-Dinitrophenol	184	8.998	8.994	0.004	1	1362	4.00	2.33	
112 Acenaphthene	153		9.009				ND	ND	
113 4-Nitrophenol	109		9.018				ND	ND	
114 2,4-Dinitrotoluene	165		9.105				ND	ND	
115 Pentachlorobenzene	250		9.142					ND	
116 Dibenzofuran	168		9.153				ND	ND	
117 1-Naphthylamine	143		9.224					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.224					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.249				ND	ND	
120 2-Naphthylamine	143		9.286					ND	
121 Diethyl phthalate	149		9.293				ND	ND	
247 Hexadecane	57		9.297				ND	ND	
122 Thionazin	97		9.377					ND	
123 4-Chlorophenyl phenyl ethe	204		9.422				ND	ND	
125 4-Nitroaniline	138		9.432				ND	ND	
124 N-Nitro-o-toluidine	152		9.440					ND	
126 Fluorene	166		9.446				ND	ND	
127 Tributyl phosphate	99		9.458					ND	
128 4,6-Dinitro-2-methylphenol	198		9.461				ND	ND	
297 Benzophenone	105		9.512					ND	
131 N-Nitrosodiphenylamine	169		9.514				ND	ND	
130 Diphenylamine	169		9.526					ND	
132 1,2-Diphenylhydrazine	77		9.557				2.00	ND	
133 Azobenzene	77		9.557				ND	ND	
134 Sulfotepp	202		9.627					ND	
135 1,3,5-Trinitrobenzene	213		9.704					ND	
137 Phenacetin	108		9.757					ND	
228 Diallate Peak 1	86		9.762					ND	
138 Phorate	121		9.772					ND	
139 4-Bromophenyl phenyl ether	248		9.841				ND	ND	
230 Diallate Peak 2	86		9.844					ND	
140 Dimethoate	87		9.916					ND	
141 Hexachlorobenzene	284		9.932				ND	ND	
142 Atrazine	200		9.942				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
129 4-Aminobiphenyl	169		10.070					ND	
244 n-Octadecane	57		10.076				ND	ND	
143 Pentachlorophenol	266		10.081				ND	ND	
144 Pronamide	173		10.099					ND	
145 Pentachloronitrobenzene	237		10.113					ND	
146 Disulfoton	88		10.214					ND	
147 Dinoseb	211		10.224					ND	
148 Phenanthrene	178		10.274				ND	ND	
149 Anthracene	178		10.317				ND	ND	
151 Carbazole	167		10.432				ND	ND	
152 Methyl parathion	109		10.536					ND	
154 Di-n-butyl phthalate	149		10.673				ND	ND	
153 Diphenylsulfone	125		10.718					ND	
155 Ethyl Parathion	97		10.859					ND	
156 4-Nitroquinoline-1-oxide	190		10.921					ND	
157 Methapyrilene	58		10.964					ND	
158 Isodrin	66		11.186					ND	
159 Fluoranthene	202		11.293				ND	ND	
160 Benzidine	184		11.365				ND	ND	
161 Pyrene	202		11.495				ND	ND	
226 Aramite Peak 1	185		11.537					ND	
229 Aramite Peak 2	185		11.599					ND	
163 p-Dimethylamino azobenzene	225		11.705					ND	
164 Chlorobenzilate	139		11.734					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.940					ND	
168 Butyl benzyl phthalate	149		11.957				ND	ND	
169 3,3'-Dimethylbenzidine	212		11.989					ND	
171 2-Acetylaminofluorene	181		12.215					ND	
172 3,3'-Dimethoxybenzidine	244		12.435					ND	
173 Bis(2-ethylhexyl) phthalat	149		12.438				ND	ND	
175 3,3'-Dichlorobenzidine	252		12.471				ND	ND	
174 4,4'-Methylene bis(2-chlor	231		12.474					ND	
177 Benzo[a]anthracene	228		12.539				ND	ND	
178 Chrysene	228		12.577				ND	ND	
176 Hexabromobenzene	232		12.603					ND	
179 6-Methylchrysene	242		13.061					ND	
180 Di-n-octyl phthalate	149		13.096				ND	ND	
281 Hexachlorophene	196		13.628					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.763					ND	
182 Benzo[b]fluoranthene	252		13.765				ND	ND	
183 Benzo[k]fluoranthene	252		13.803				ND	ND	
184 Benzo[a]pyrene	252		14.241				ND	ND	
185 3-Methylcholanthrene	268		14.797					ND	
187 Dibenz[a,h]acridine	279		15.783					ND	
186 Dibenz[a,j]acridine	279		15.878					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.246				ND	ND	
189 Dibenz(a,h)anthracene	278		16.261				ND	ND	
190 Benzo[g,h,i]perylene	276		16.847				ND	ND	
268 Endrin	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
265 Dibenzo[a,h]pyrene	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
258 Aldrin	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.524					ND	
165 4,4'-DDD	235		11.812					ND	
170 4,4'-DDT	235		12.072					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 191 Methyl Phenols,Total	100		0.000					ND	
S 245 Total Cresols	100		0.000					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
T 240 Trimethyl phosphate TIC	110	5.006	4.999	0.006	0	175			0
T 194 Decane TIC	142	5.574	5.799	-0.226	1	186			0
T 193 Hexamethylphosphoramide TI	135		6.500					ND	
T 234 2-Isopropylphenol TIC	121	7.252	7.244	0.002	0	257			0

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.416	7.358	0.052	0	691		0	
T 236 3-isopropylphenol TIC	121	7.416	7.358	0.052	0	691		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.704	7.714	-0.016	5	1228		0	
T 231 2,3,7,8-TCDD	322	8.219	8.236	-0.021	1	167		0	
T 195 Hydroquinone TIC	110	9.017	8.993	0.017	12	5543		0	
T 192 Octadecane (TIC)	254	9.267	9.600	-0.333	1	141		0	
T 196 Kepone TIC	272		12.000					ND	
T 242 Triphenyl Phosphate TIC	326	12.022	11.994	0.022	0	181		0	
T 280 2,3,7,8-TCDD TIC	198	12.542	12.494	0.042	0	8034		0	
T 241 Tricresyl phosphate TIC	368	12.393	12.494	-0.107	0	48		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	14.009	13.994	0.008	0	156		0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

SMLIST1 L4 W_00005 Amount Added: 1.00 Units: mL

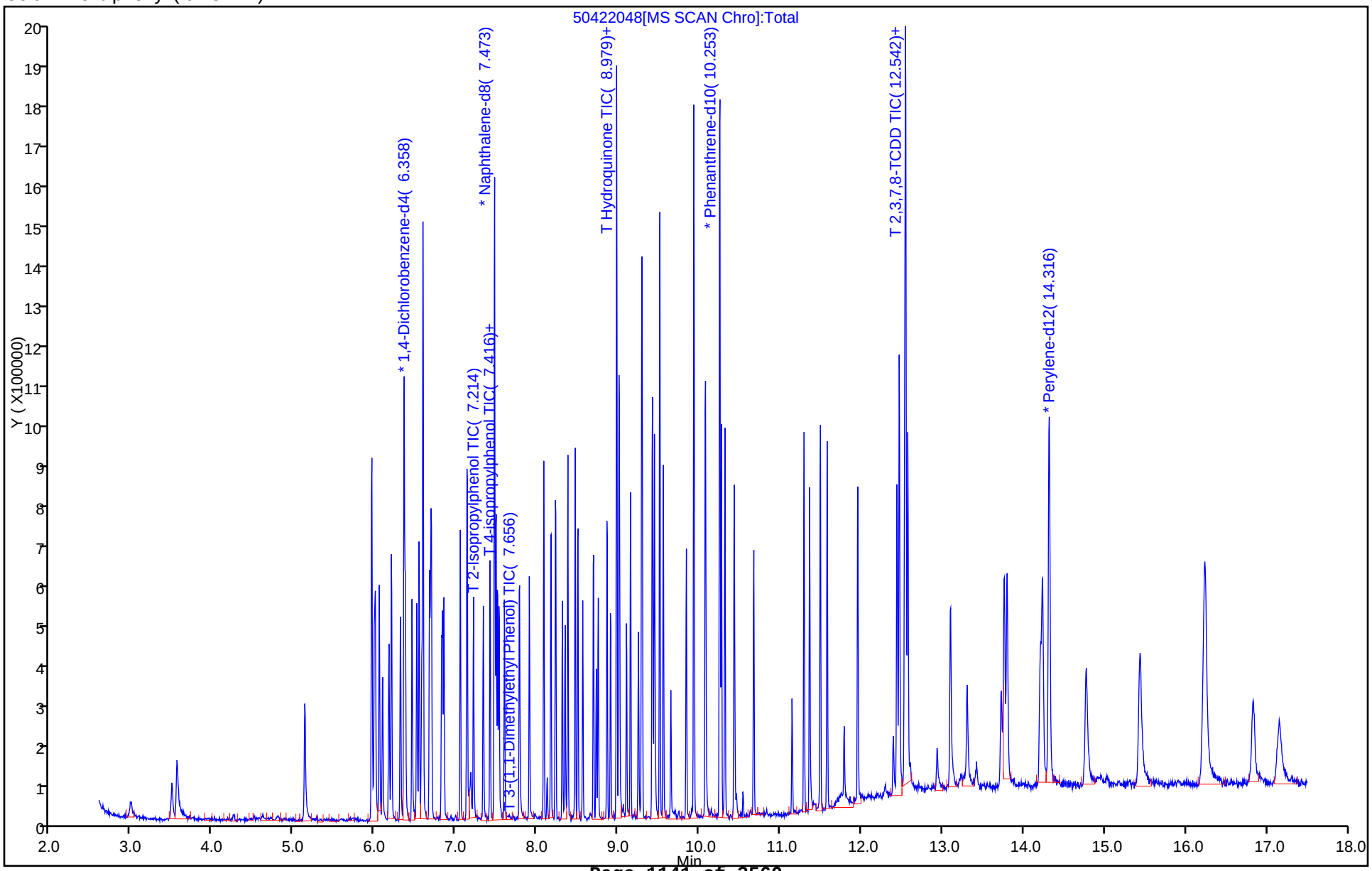
Report Date: 23-Apr-2015 09:37:34 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422048.D

Injection Date:	22-Apr-2015 16:24:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	lodv l4			Worklist Smp#:	48
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	48
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420001.D
Lims ID: dftpp
Client ID:
Sample Type: DFTPP
Inject. Date: 20-Apr-2015 08:28:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: dftpp,50420a.b,dftpp390
Misc. Info.: CCV TCLCCV TCL
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-Apr-2015 07:00:46 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: ulmanm Date: 20-Apr-2015 08:48:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
143 Pentachlorophenol	266	10.105	10.105	0.000	88	377121	NR	NR	7
160 Benzidine	184	11.389	11.389	0.000	98	2410226	NR	NR	7
150 DFTPP									
166 4,4'-DDE	246	11.552	11.552	0.000	15	968		NR	7
165 4,4'-DDD	235	11.836	11.836	0.000	90	9762		NR	7
170 4,4'-DDT	235	12.096	12.096	0.000	97	1198979	NR	NR	7

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
7 - Failed Limit of Detection

Reagents:

SMDFTPPW_00010 Amount Added: 1.00 Units: mL

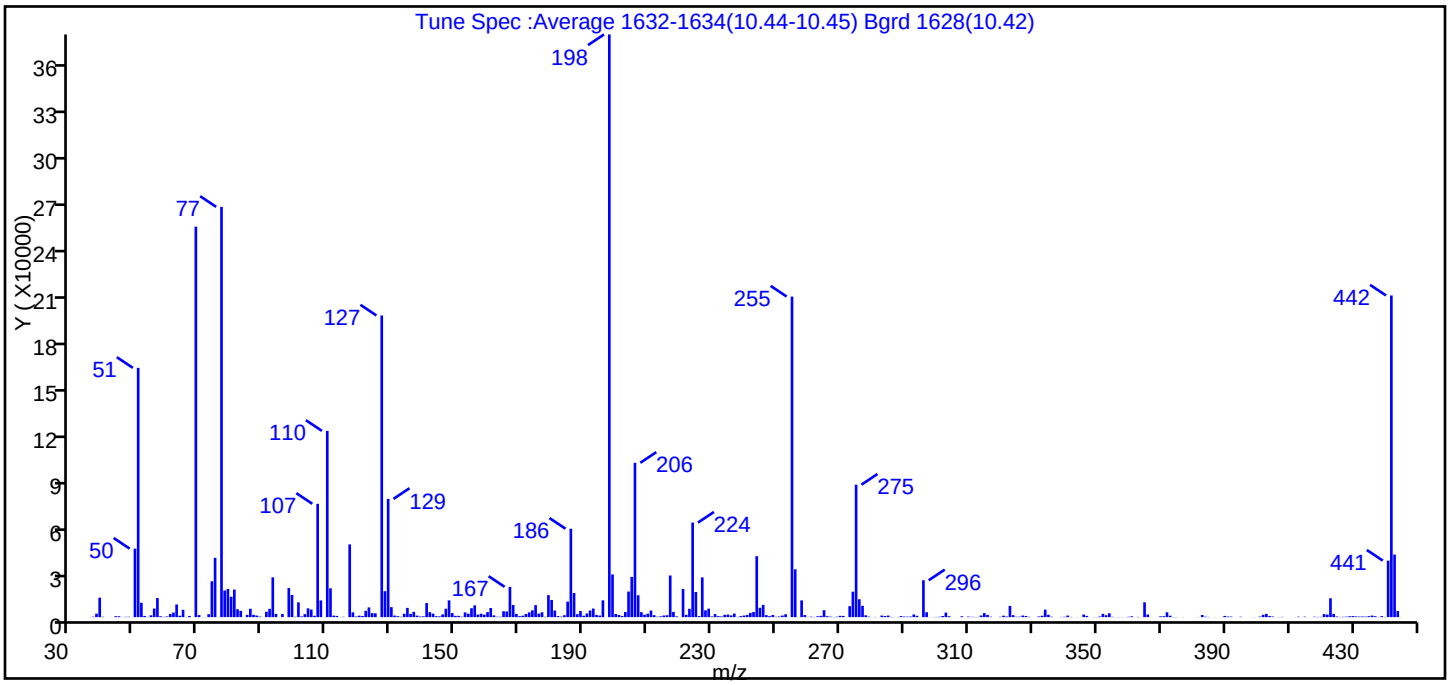
Report Date: 21-Apr-2015 07:00:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40

MS Tune Report

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420001.D
Injection Date: 20-Apr-2015 08:28:30 Instrument ID: A4HP9
Lims ID: dftpp
Client ID:
Operator ID: 001574 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Tune Method: DFTPP Method CLP OLM4.2

150 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100 percent relative abundance	100
51	30.0 - 80.0 percent of mass 198	42.8
68	Less than 2.0 percent of mass 69	0.0 (0.0)
69	Present	67.0
70	Less than 2.0 percent of mass 69	0.3 (0.5)
127	25.0 - 75.0 percent of mass 198	51.8
197	Less than 1.0 percent of mass 198	0.0
199	5.0 - 9.0 percent of mass 198	7.3
275	10.0 - 30.0 percent of mass 198	22.7
365	Greater than 0.75 percent of mass 198	2.5
441	Present but less than mass 443	9.7 (90.4)
442	40.0 - 110.0 percent of mass 198	55.2
443	15.0 - 24.0 percent of mass 442	10.7 (19.4)

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420001.D\8270 _9.rslt\spectra.d
Injection Date: 20-Apr-2015 08:28:30
Spectrum: Tune Spec :Average 1632-1634(10.44-10.45) Bgrd 1628(10.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 355

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	31	137.00	3486	228.00	4428	327.00	1049
37.00	289	138.00	985	229.00	5522	328.00	753
38.00	2285	139.00	446	230.00	462	329.00	205
39.00	12653	140.00	534	231.00	1981	332.00	436
40.00	257	141.00	9155	232.00	653	333.00	923
42.00	29	142.00	3263	233.00	456	334.00	4889
44.00	624	143.00	2254	234.00	1553	335.00	1557
45.00	580	144.00	612	235.00	1665	336.00	281
46.00	81	145.00	521	236.00	1111	339.00	150
47.00	197	146.00	1773	237.00	2329	340.00	224
48.00	248	147.00	5475	238.00	163	341.00	1033
50.00	44528	148.00	10897	239.00	664	342.00	171
51.00	162048	149.00	2610	240.00	1038	344.00	88
52.00	9366	150.00	850	241.00	1413	346.00	1684
53.00	788	151.00	835	242.00	2755	347.00	829
54.00	152	152.00	303	243.00	3350	349.00	83
55.00	1184	153.00	3080	244.00	39640	350.00	96
56.00	5608	154.00	2229	245.00	6080	351.00	418
57.00	12424	155.00	5793	246.00	7985	352.00	2145
58.00	567	156.00	7652	247.00	1300	353.00	1245
59.00	192	157.00	1698	248.00	671	354.00	2510
60.00	450	158.00	2234	249.00	1385	355.00	203
61.00	2104	159.00	1642	250.00	254	356.00	72
62.00	2977	160.00	3266	251.00	413	357.00	79
63.00	8221	161.00	5934	252.00	1050	358.00	65
64.00	924	162.00	1129	253.00	1879	359.00	61
65.00	4776	163.00	270	255.00	208384	360.00	248
66.00	103	164.00	248	256.00	31112	361.00	542
67.00	787	165.00	3851	258.00	10889	363.00	165
69.00	253824	166.00	3693	259.00	1368	365.00	9647
70.00	1314	167.00	19688	260.00	151	366.00	1730
71.00	51	168.00	7880	261.00	295	370.00	530
72.00	69	169.00	2124	262.00	123	371.00	600

Report Date: 21-Apr-2015 07:00:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420001.D\8270 _9.rslt\spectra.d
Injection Date: 20-Apr-2015 08:28:30
Spectrum: Tune Spec :Average 1632-1634(10.44-10.45) Bgrd 1628(10.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 355

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	1893	170.00	643	263.00	567	372.00	3153
74.00	23312	171.00	972	264.00	849	373.00	958
75.00	38536	172.00	2058	265.00	4516	374.00	117
77.00	266688	173.00	3117	266.00	628	375.00	90
78.00	17312	174.00	4448	267.00	322	377.00	71
79.00	18272	175.00	7804	268.00	122	381.00	66
80.00	13263	176.00	2284	269.00	284	382.00	61
81.00	17928	177.00	3177	270.00	861	383.00	1391
82.00	5123	178.00	208	271.00	809	384.00	292
83.00	4111	179.00	14321	273.00	7127	385.00	138
85.00	1483	180.00	11162	274.00	16552	387.00	54
86.00	5464	181.00	4303	275.00	86096	390.00	795
87.00	1525	182.00	669	276.00	11635	391.00	417
88.00	1041	183.00	330	277.00	7378	392.00	349
89.00	372	184.00	1257	278.00	1206	393.00	57
91.00	3516	185.00	10088	279.00	324	395.00	245
92.00	5395	186.00	57472	280.00	65	399.00	80
93.00	25888	187.00	15695	281.00	129	401.00	385
94.00	2129	188.00	1954	283.00	1034	402.00	1533
96.00	1989	189.00	3974	284.00	728	403.00	2115
98.00	18896	190.00	888	285.00	1022	404.00	683
99.00	14426	191.00	2379	286.00	169	405.00	384
100.00	208	192.00	4322	287.00	74	407.00	98
101.00	9629	193.00	5595	288.00	102	408.00	173
102.00	473	194.00	1460	289.00	684	412.00	54
103.00	1945	195.00	1027	290.00	391	413.00	291
104.00	5719	196.00	10926	291.00	326	415.00	312
105.00	4957	198.00	378752	292.00	369	418.00	259
106.00	888	199.00	27752	293.00	1772	419.00	146
107.00	73664	200.00	2030	294.00	893	420.00	183
108.00	10852	201.00	1425	296.00	23976	421.00	1997
110.00	121080	202.00	765	297.00	3200	422.00	1688
111.00	18744	203.00	3333	298.00	59	423.00	12270
112.00	1010	204.00	16648	299.00	54	424.00	2149

Report Date: 21-Apr-2015 07:00:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420001.D\8270 _9.rslt\spectra.d
Injection Date: 20-Apr-2015 08:28:30
Spectrum: Tune Spec :Average 1632-1634(10.44-10.45) Bgrd 1628(10.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 355

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	795	205.00	26144	300.00	165	425.00	411
114.00	19	206.00	100328	301.00	237	426.00	145
115.00	201	207.00	14208	302.00	744	427.00	213
117.00	47296	208.00	3230	303.00	2928	428.00	325
118.00	3119	209.00	1580	304.00	626	429.00	587
119.00	450	210.00	2248	306.00	53	430.00	691
120.00	977	211.00	4298	308.00	597	431.00	478
121.00	749	212.00	1275	310.00	349	432.00	373
122.00	4121	213.00	271	311.00	206	433.00	420
123.00	6334	214.00	535	312.00	143	434.00	370
124.00	2600	215.00	1065	313.00	139	435.00	649
125.00	2486	216.00	1232	314.00	1071	436.00	1020
127.00	196096	217.00	27072	315.00	2645	437.00	588
128.00	16864	218.00	3423	316.00	1470	438.00	120
129.00	76872	219.00	489	317.00	275	439.00	662
130.00	6486	221.00	18352	320.00	208	440.00	107
131.00	1023	222.00	1531	321.00	945	441.00	36736
132.00	636	223.00	5426	322.00	407	442.00	209088
133.00	237	224.00	61464	323.00	7310	443.00	40656
134.00	2212	225.00	16338	324.00	1281	444.00	3980
135.00	6018	226.00	638	325.00	249	445.00	57
136.00	2131	227.00	25848	326.00	286		

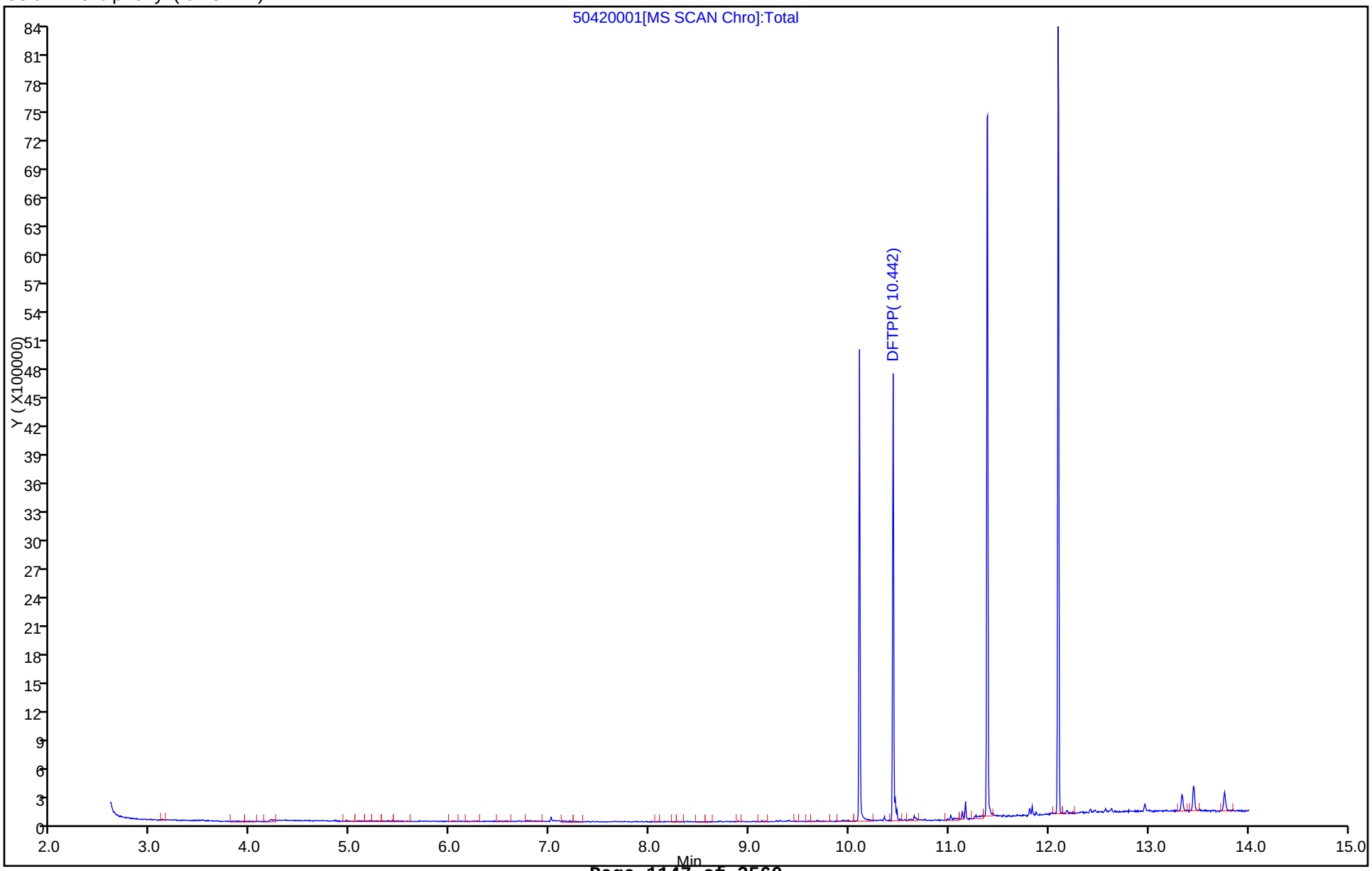
Report Date: 21-Apr-2015 07:00:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420001.D

Injection Date:	20-Apr-2015 08:28:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	dftpp			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)

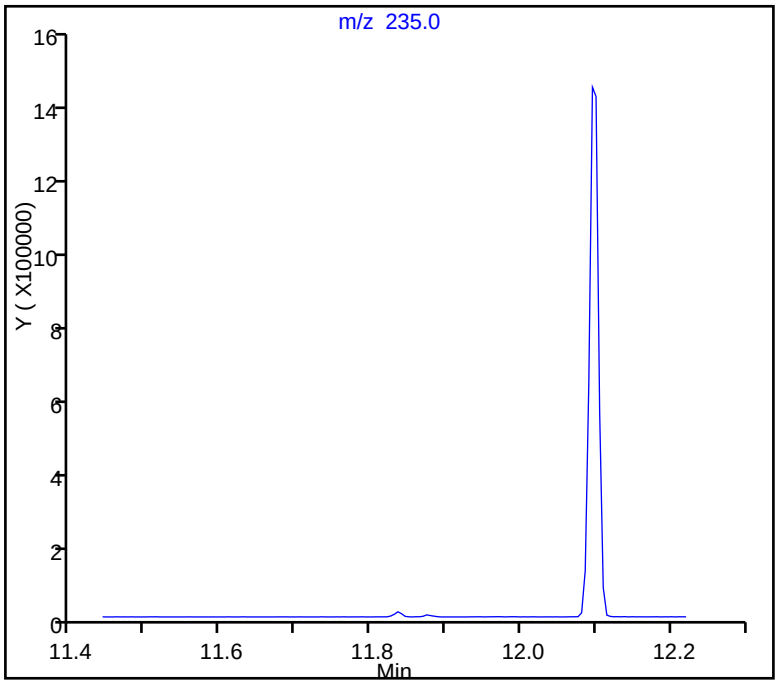


Breakdown Report

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420001.D
Injection Date: 20-Apr-2015 08:28:30 Instrument ID: A4HP9
Lims ID: dftpp
Client ID:
Operator ID: 001574 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL

170 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

170 4,4'-DDT, Area = 1198979
165 4,4'-DDD, Area = 9762
166 4,4'-DDE, Area = 968

%Breakdown: 0.89%, Max Limit: 20.00%
Passed

Report Date: 21-Apr-2015 07:00:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40

Peak Tailing Report

TestAmerica Canton

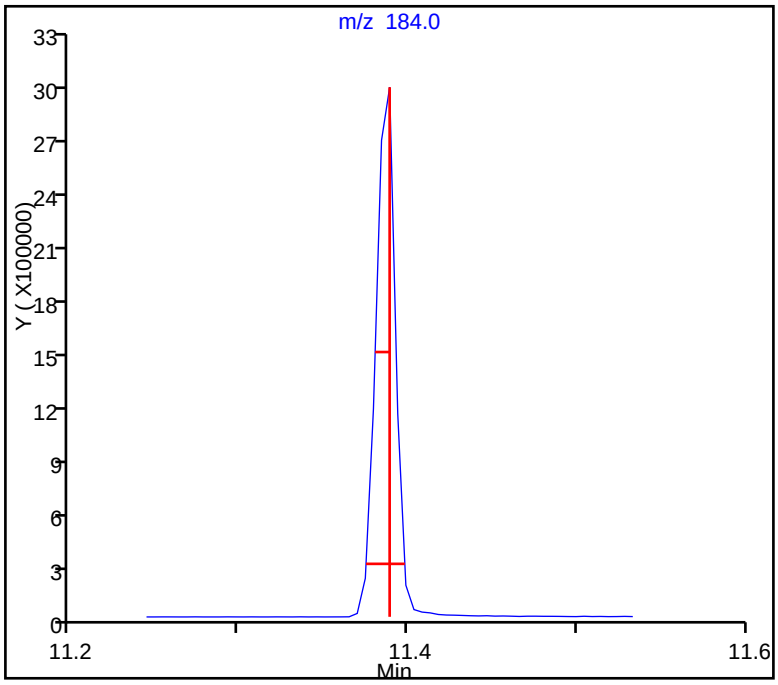
Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420001.D
Injection Date: 20-Apr-2015 08:28:30 Instrument ID: A4HP9
Lims ID: dftpp
Client ID:
Operator ID: 001574 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL

160 Benzidine, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.009 (min.)
Front Width = 0.014 (min.)

Tailing Factor = 0.6, Max. Tailing < 2.00
Passed



Report Date: 21-Apr-2015 07:00:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40

Peak Tailing Report

TestAmerica Canton

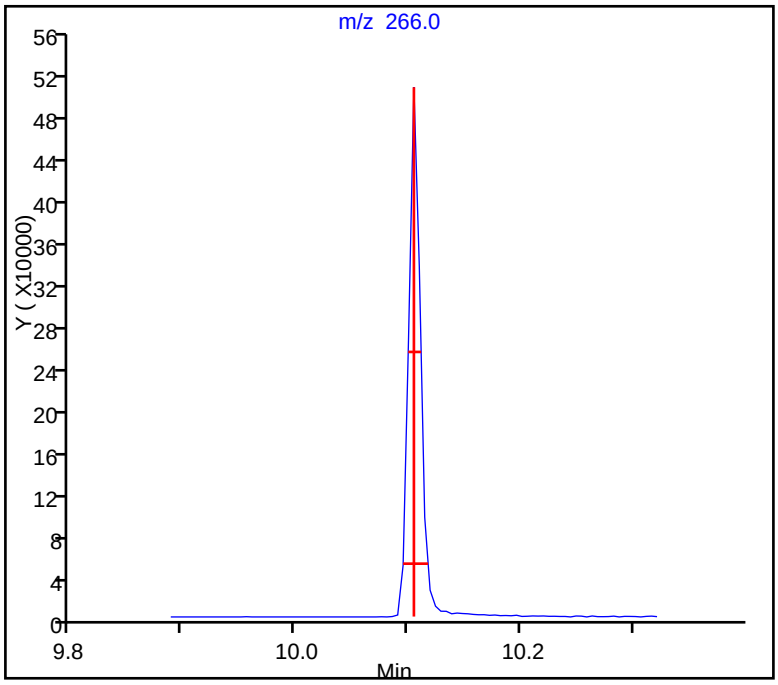
Data File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420001.D
Injection Date: 20-Apr-2015 08:28:30 Instrument ID: A4HP9
Lims ID: dftpp
Client ID:
Operator ID: 001574 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL

143 Pentachlorophenol, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.013 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 1.3, Max. Tailing < 2.00
Passed



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422001.D
Lims ID: dftpp
Client ID:
Sample Type: DFTPP
Inject. Date: 22-Apr-2015 07:14:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-001
Misc. Info.: DFTPPDFTPP
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 09:36:59 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 22-Apr-2015 07:35:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
143 Pentachlorophenol	266	10.081	10.081	0.000	89	707904	NR	NR	7
160 Benzidine	184	11.360	11.360	0.000	99	4085092	NR	NR	7
150 DFTPP									
166 4,4'-DDE	246	11.524	11.524	0.000	38	1419		NR	7
165 4,4'-DDD	235	11.812	11.812	0.000	95	26560		NR	7
170 4,4'-DDT	235	12.072	12.072	0.000	98	2114966	NR	NR	7

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
7 - Failed Limit of Detection

Reagents:

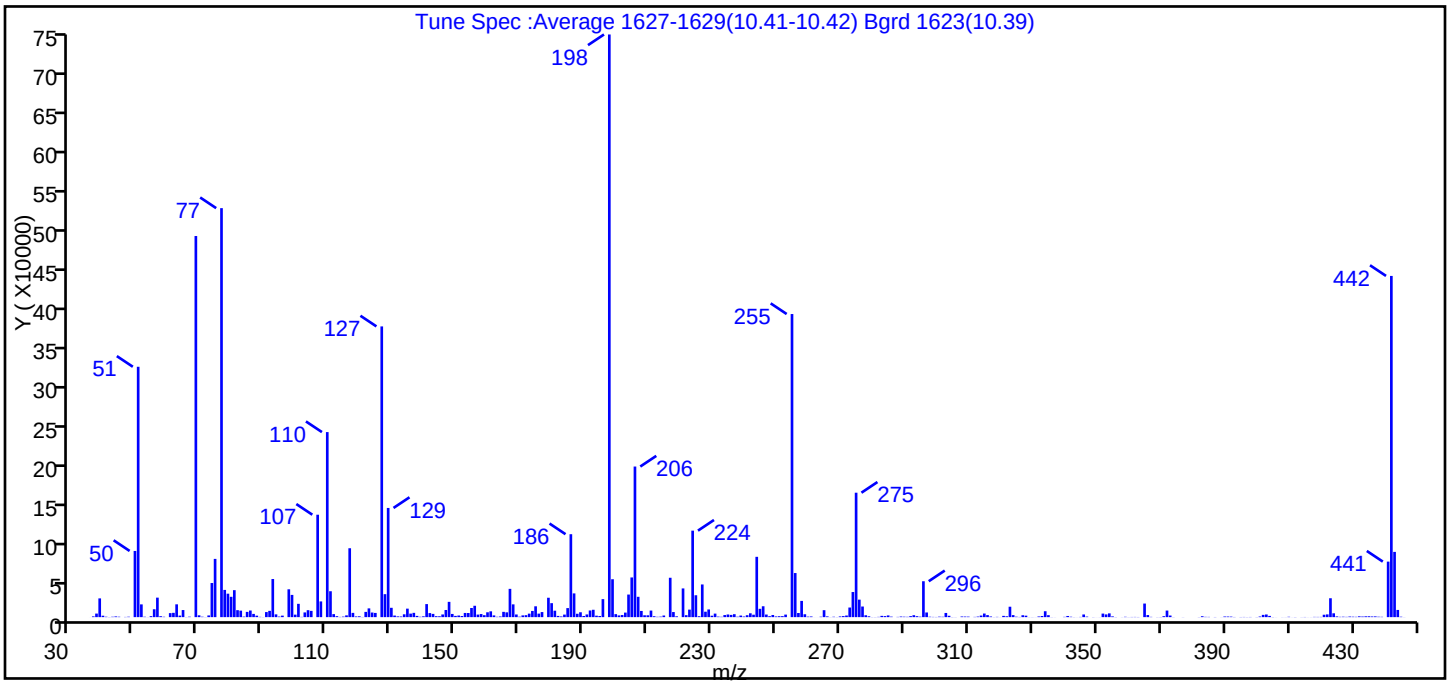
SMDFTPPW_00010 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422001.D
Injection Date: 22-Apr-2015 07:14:30 Instrument ID: A4HP9
Lims ID: dftpp
Client ID:
Operator ID: 001574 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Tune Method: DFTPP Method CLP OLM4.2

150 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100 percent relative abundance	100
51	30.0 - 80.0 percent of mass 198	43.0
68	Less than 2.0 percent of mass 69	0.0 (0.0)
69	Present	65.4
70	Less than 2.0 percent of mass 69	0.3 (0.5)
127	25.0 - 75.0 percent of mass 198	49.9
197	Less than 1.0 percent of mass 198	0.0
199	5.0 - 9.0 percent of mass 198	6.5
275	10.0 - 30.0 percent of mass 198	21.4
365	Greater than 0.75 percent of mass 198	2.3
441	Present but less than mass 443	9.5 (85.1)
442	40.0 - 110.0 percent of mass 198	58.6
443	15.0 - 24.0 percent of mass 442	11.2 (19.1)

Report Date: 23-Apr-2015 09:37:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422001.D\8270 _9.rslt\spectra.d
Injection Date: 22-Apr-2015 07:14:30
Spectrum: Tune Spec :Average 1627-1629(10.41-10.42) Bgrd 1623(10.39)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 376

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	29	138.00	1591	236.00	2853	334.00	7545
37.00	966	139.00	453	237.00	3772	335.00	2501
38.00	4555	140.00	1042	238.00	554	336.00	133
39.00	23944	141.00	16664	239.00	2013	337.00	69
40.00	1821	142.00	5186	240.00	799	340.00	357
41.00	538	143.00	4148	241.00	2455	341.00	1488
42.00	161	144.00	1215	242.00	4923	342.00	522
43.00	508	145.00	1138	243.00	3098	343.00	138
44.00	913	146.00	3428	244.00	77000	344.00	63
45.00	542	147.00	9128	245.00	10629	345.00	288
47.00	269	148.00	19520	246.00	13897	346.00	3410
48.00	539	149.00	4092	247.00	3313	347.00	692
50.00	84488	150.00	1603	248.00	1230	349.00	141
51.00	319616	151.00	2059	249.00	2752	350.00	50
52.00	16292	152.00	1442	250.00	881	351.00	85
53.00	514	153.00	5357	251.00	1184	352.00	4542
54.00	97	154.00	5273	252.00	1282	353.00	3499
55.00	1279	155.00	11671	253.00	3252	354.00	4810
56.00	10069	156.00	14517	255.00	386944	355.00	965
57.00	24896	157.00	3257	256.00	56288	356.00	161
58.00	1210	158.00	3957	257.00	5268	358.00	94
59.00	482	159.00	2481	258.00	20728	359.00	434
60.00	22	160.00	6189	259.00	3693	360.00	124
61.00	5142	161.00	7430	260.00	661	361.00	240
62.00	5496	162.00	2217	261.00	838	362.00	279
63.00	16365	163.00	455	262.00	50	363.00	206
64.00	1975	164.00	836	263.00	32	365.00	17344
65.00	9053	165.00	6748	264.00	538	366.00	2659
66.00	142	166.00	6127	265.00	8875	367.00	358
67.00	585	167.00	36104	266.00	956	369.00	133
69.00	486528	168.00	16320	267.00	103	370.00	191
70.00	2325	169.00	3390	268.00	495	371.00	1209
71.00	550	170.00	583	269.00	137	372.00	8401

Report Date: 23-Apr-2015 09:37:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422001.D\8270 _9.rslt\spectra.d
Injection Date: 22-Apr-2015 07:14:30
Spectrum: Tune Spec :Average 1627-1629(10.41-10.42) Bgrd 1623(10.39)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 376

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	138	171.00	2241	270.00	900	373.00	2036
73.00	2172	172.00	2513	271.00	1333	374.00	141
74.00	43568	173.00	4459	272.00	2060	377.00	102
75.00	74360	174.00	7895	273.00	12278	382.00	156
77.00	522112	175.00	13846	274.00	32056	383.00	1157
78.00	34760	176.00	4480	275.00	158848	384.00	381
79.00	29936	177.00	6478	276.00	22336	385.00	317
80.00	25960	179.00	24760	277.00	13559	387.00	196
81.00	34440	180.00	17848	278.00	2395	389.00	79
82.00	8911	181.00	8215	279.00	1108	390.00	790
83.00	8296	182.00	1568	280.00	154	391.00	763
84.00	692	183.00	859	281.00	157	392.00	677
85.00	6700	184.00	3259	282.00	345	393.00	219
86.00	8459	185.00	11550	283.00	1633	395.00	199
87.00	4141	186.00	105880	284.00	1345	396.00	248
88.00	1888	187.00	30304	285.00	2174	397.00	156
89.00	357	188.00	4312	286.00	648	398.00	233
90.00	130	189.00	6237	288.00	310	400.00	158
91.00	6473	190.00	1473	289.00	782	401.00	799
92.00	8039	191.00	3447	290.00	567	402.00	2892
93.00	48656	192.00	8498	291.00	414	403.00	3406
94.00	3548	193.00	9411	292.00	1288	404.00	1592
95.00	743	194.00	1865	293.00	2475	405.00	178
96.00	1922	195.00	1448	294.00	1216	406.00	56
98.00	35552	196.00	22992	295.00	559	408.00	92
99.00	28384	198.00	743808	296.00	45840	409.00	89
100.00	3187	199.00	48408	297.00	5956	410.00	451
101.00	17000	200.00	3837	298.00	523	411.00	54
102.00	312	201.00	2192	299.00	302	412.00	172
103.00	6032	202.00	2679	300.00	228	414.00	109
104.00	8882	203.00	5802	301.00	625	415.00	215
105.00	8013	204.00	28840	302.00	478	416.00	67
107.00	130752	205.00	50664	303.00	5336	417.00	77
108.00	20072	206.00	192256	304.00	1734	418.00	321

Report Date: 23-Apr-2015 09:37:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422001.D\8270 _9.rslt\spectra.d
Injection Date: 22-Apr-2015 07:14:30
Spectrum: Tune Spec :Average 1627-1629(10.41-10.42) Bgrd 1623(10.39)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 376

m/z	Y	m/z	Y	m/z	Y	m/z	Y
110.00	236224	207.00	25960	305.00	169	419.00	290
111.00	33064	208.00	7929	306.00	121	420.00	306
112.00	3861	209.00	2383	308.00	827	421.00	3078
113.00	1239	210.00	2352	309.00	741	422.00	3495
114.00	293	211.00	8387	310.00	667	423.00	24128
115.00	685	212.00	1158	312.00	317	424.00	4903
116.00	2273	213.00	442	313.00	717	425.00	923
117.00	87960	214.00	641	314.00	2028	426.00	403
118.00	5443	215.00	2073	315.00	4607	427.00	552
119.00	893	217.00	50272	316.00	2600	428.00	348
120.00	1096	218.00	6511	317.00	830	429.00	769
121.00	214	219.00	1057	318.00	133	430.00	571
122.00	6702	221.00	36656	319.00	340	431.00	427
123.00	11194	222.00	2509	320.00	74	432.00	1039
124.00	5875	223.00	9604	321.00	1610	433.00	764
125.00	5380	224.00	110416	322.00	1109	434.00	1041
127.00	371136	225.00	27944	323.00	13306	435.00	1103
128.00	29328	226.00	1185	324.00	2578	436.00	851
129.00	139392	227.00	41728	325.00	569	437.00	947
130.00	11930	228.00	6933	326.00	251	438.00	539
131.00	2023	229.00	9817	327.00	2421	439.00	422
132.00	971	230.00	1834	328.00	1881	441.00	70880
133.00	827	231.00	4510	329.00	111	442.00	435584
134.00	3616	232.00	696	330.00	122	443.00	83296
135.00	10846	233.00	435	331.00	73	444.00	9196
136.00	4501	234.00	2660	332.00	839	445.00	546
137.00	5482	235.00	3382	333.00	1417	446.00	92

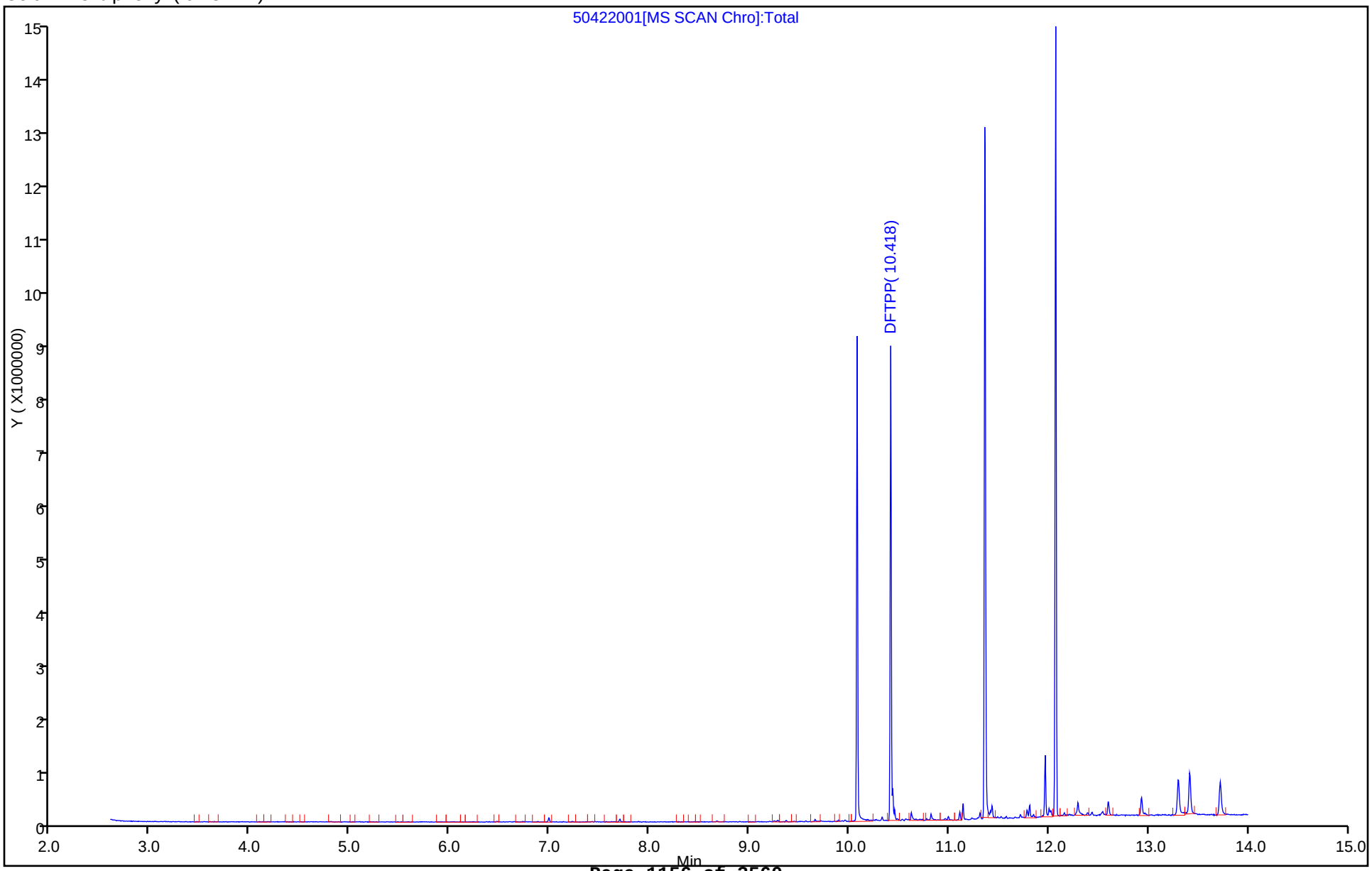
Report Date: 23-Apr-2015 09:37:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422001.D

Injection Date:	22-Apr-2015 07:14:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	dftpp			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



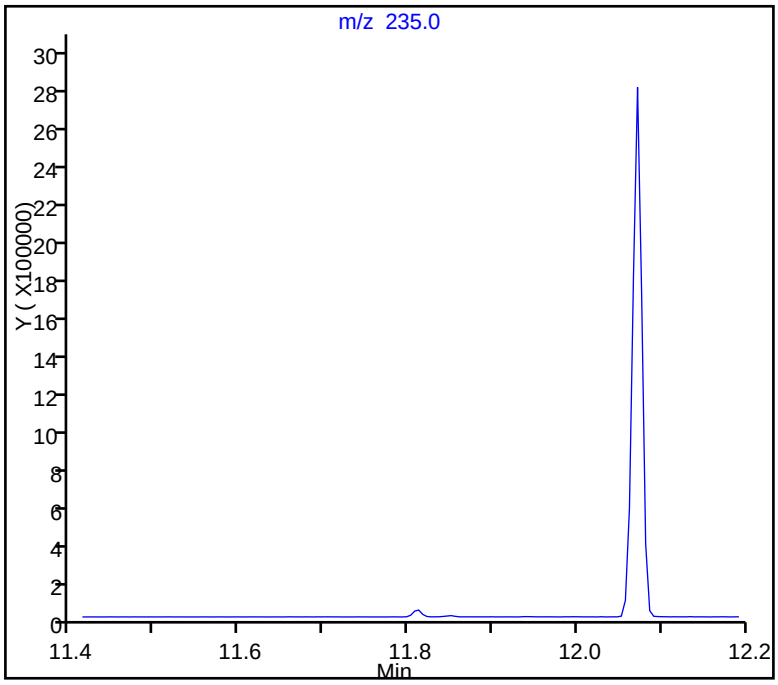
Report Date: 23-Apr-2015 09:37:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

Breakdown Report

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422001.D
Injection Date: 22-Apr-2015 07:14:30 Instrument ID: A4HP9
Lims ID: dftpp
Client ID:
Operator ID: 001574 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL

170 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

170 4,4'-DDT, Area = 2114966
165 4,4'-DDD, Area = 26560
166 4,4'-DDE, Area = 1419

%Breakdown: 1.31%, Max Limit: 20.00%
Passed

Report Date: 23-Apr-2015 09:37:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

Peak Tailing Report

TestAmerica Canton

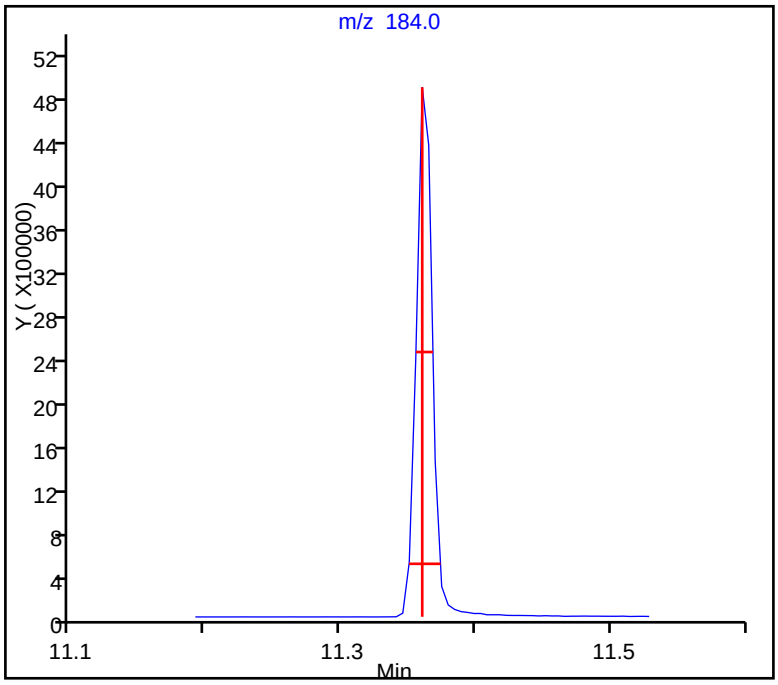
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422001.D
Injection Date: 22-Apr-2015 07:14:30 Instrument ID: A4HP9
Lims ID: dftpp
Client ID:
Operator ID: 001574 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL

160 Benzidine, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.014 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 1.4, Max. Tailing < 2.00
Passed



Report Date: 23-Apr-2015 09:37:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

Peak Tailing Report

TestAmerica Canton

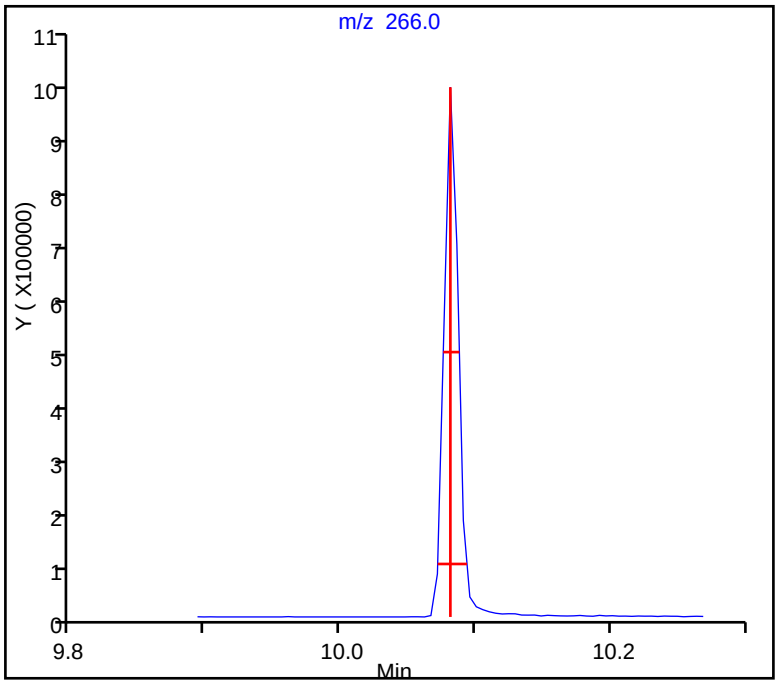
Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422001.D
Injection Date: 22-Apr-2015 07:14:30 Instrument ID: A4HP9
Lims ID: dftpp
Client ID:
Operator ID: 001574 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL

143 Pentachlorophenol, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.012 (min.)
Front Width = 0.009 (min.)

Tailing Factor = 1.3, Max. Tailing < 2.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-176319/23-A

Matrix: Solid | Lab File ID: 50422006.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 30(g) | Date Analyzed: 04/22/2015 09:19

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.3	U	6.7	3.3	0.76
208-96-8	Acenaphthylene	1.7	U	6.7	1.7	0.35
120-12-7	Anthracene	3.3	U	6.7	3.3	0.78
56-55-3	Benzo[a]anthracene	3.3	U	6.7	3.3	0.63
50-32-8	Benzo[a]pyrene	3.3	U	6.7	3.3	0.64
205-99-2	Benzo[b]fluoranthene	3.3	U	6.7	3.3	0.59
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.7	1.7	0.35
65-85-0	Benzoic acid	130	U	660	130	36
207-08-9	Benzo[k]fluoranthene	3.3	U	6.7	3.3	0.68
100-51-6	Benzyl alcohol	67	U	330	67	21
111-91-1	Bis(2-chloroethoxy)methane	67	U	100	67	22
111-44-4	Bis(2-chloroethyl)ether	3.3	U	100	3.3	2.0
108-60-1	bis (2-chloroisopropyl) ether	33	U	100	33	9.5
117-81-7	Bis(2-ethylhexyl) phthalate	33	U	70	33	19
101-55-3	4-Bromophenyl phenyl ether	33	U	50	33	13
85-68-7	Butyl benzyl phthalate	12.3	J	70	33	10
86-74-8	Carbazole	33	U	50	33	27
106-47-8	4-Chloroaniline	67	U	150	67	17
59-50-7	4-Chloro-3-methylphenol	67	U	150	67	21
91-58-7	2-Chloronaphthalene	1.7	U	50	1.7	0.45
95-57-8	2-Chlorophenol	33	U	50	33	8.2
7005-72-3	4-Chlorophenyl phenyl ether	33	U	50	33	13
218-01-9	Chrysene	3.3	U	6.7	3.3	1.1
53-70-3	Dibenz(a,h)anthracene	3.3	U	6.7	3.3	0.66
132-64-9	Dibenzofuran	3.3	U	50	3.3	0.66
95-50-1	1,2-Dichlorobenzene	33	U	50	33	9.7
541-73-1	1,3-Dichlorobenzene	33	U	50	33	11
106-46-7	1,4-Dichlorobenzene	33	U	50	33	20
91-94-1	3,3'-Dichlorobenzidine	67	U	100	67	18
120-83-2	2,4-Dichlorophenol	67	U	150	67	20
84-66-2	Diethyl phthalate	33	U	70	33	16
105-67-9	2,4-Dimethylphenol	67	U	150	67	20
131-11-3	Dimethyl phthalate	33	U	70	33	17
84-74-2	Di-n-butyl phthalate	33	U	70	33	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-176319/23-A

Matrix: Solid | Lab File ID: 50422006.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 30(g) | Date Analyzed: 04/22/2015 09:19

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	33	U	150	33	9.2
51-28-5	2,4-Dinitrophenol	67	U	330	67	21
121-14-2	2,4-Dinitrotoluene	67	U	200	67	17
606-20-2	2,6-Dinitrotoluene	67	U	200	67	21
117-84-0	Di-n-octyl phthalate	33	U	70	33	7.9
206-44-0	Fluoranthene	3.3	U	6.7	3.3	0.55
86-73-7	Fluorene	3.3	U	6.7	3.3	0.53
118-74-1	Hexachlorobenzene	3.3	U	6.7	3.3	2.1
87-68-3	Hexachlorobutadiene	33	U	50	33	5.6
77-47-4	Hexachlorocyclopentadiene	33	U	330	33	8.1
67-72-1	Hexachloroethane	33	U	50	33	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.7	1.7	0.35
78-59-1	Isophorone	33	U	50	33	13
91-57-6	2-Methylnaphthalene	3.3	U	6.7	3.3	0.50
95-48-7	2-Methylphenol	67	U	200	67	11
15831-10-4	3 & 4 Methylphenol	67	U	400	67	20
91-20-3	Naphthalene	3.3	U	6.7	3.3	0.82
88-74-4	2-Nitroaniline	33	U	200	33	9.1
99-09-2	3-Nitroaniline	67	U	200	67	16
100-01-6	4-Nitroaniline	67	U	200	67	26
98-95-3	Nitrobenzene	3.3	U	100	3.3	2.2
88-75-5	2-Nitrophenol	33	U	50	33	8.3
100-02-7	4-Nitrophenol	67	U	330	67	17
621-64-7	N-Nitrosodi-n-propylamine	33	U	50	33	6.3
86-30-6	N-Nitrosodiphenylamine	33	U	50	33	21
87-86-5	Pentachlorophenol	33	U	150	33	9.1
85-01-8	Phenanthrene	3.3	U	6.7	3.3	0.73
108-95-2	Phenol	33	U	50	33	7.3
129-00-0	Pyrene	1.7	U	6.7	1.7	0.44
120-82-1	1,2,4-Trichlorobenzene	17	U	50	17	3.5
95-95-4	2,4,5-Trichlorophenol	67	U	150	67	25
88-06-2	2,4,6-Trichlorophenol	33	U	150	33	8.9

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-176319/23-A

Matrix: Solid | Lab File ID: 50422006.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 30(g) | Date Analyzed: 04/22/2015 09:19

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	75		45-105
367-12-4	2-Fluorophenol (Surr)	67		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	68		35-100
4165-62-2	Phenol-d5 (Surr)	76		40-100
1718-51-0	Terphenyl-d14 (Surr)	75		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	36		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422006.D
Lims ID: MB 240-176319/23-A
Client ID:
Sample Type: MB
Inject. Date: 22-Apr-2015 09:19:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-006
Misc. Info.: MB 240-176319/23-AMB 240-176319/23-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 09:37:02 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 22-Apr-2015 09:45:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.359	6.359	0.000	95	143068	4.00	4.00	
* 2 Naphthalene-d8	136	7.475	7.475	0.000	99	572933	4.00	4.00	
* 3 Acenaphthene-d10	164	8.980	8.980	0.000	93	341331	4.00	4.00	
* 4 Phenanthrene-d10	188	10.249	10.254	-0.005	98	623285	4.00	4.00	
* 5 Chrysene-d12	240	12.548	12.548	0.000	97	714118	4.00	4.00	
* 6 Perylene-d12	264	14.318	14.318	0.000	98	592034	4.00	4.00	
$ 7 2-Fluorophenol	112	5.152	5.133	0.019	95	355270	10.0	6.75	
$ 8 Phenol-d5	99	5.998	5.994	0.004	96	601587	10.0	7.64	
$ 9 Nitrobenzene-d5	82	6.835	6.835	0.000	85	704449	10.0	6.76	
$ 10 2-Fluorobiphenyl (Surr)	172	8.379	8.379	0.000	98	856608	10.0	7.46	
$ 11 2,4,6-Tribromophenol	330	9.648	9.653	-0.005	82	45567	10.0	3.61	
$ 12 Terphenyl-d14	244	11.577	11.577	0.000	99	1089432	10.0	7.50	
25 1,4-Dioxane	88		2.993					ND	
26 N-Nitrosodimethylamine	74		3.493					ND	
27 Pyridine	79		3.556					ND	
20 Dimethylformamide	73		4.068					ND	
28 Ethyl methacrylate	69		4.173					ND	
31 2-Picoline	93		4.540					ND	
32 N-Nitrosomethylethylamine	88		4.650					ND	
35 Acrylamide	71		4.905					ND	
34 Methyl methanesulfonate	80		4.963					ND	
233 n,n'-Dimethylacetamide	44		5.053					ND	
36 N-Nitrosodiethylamine	102		5.372					ND	
37 Ethyl methanesulfonate	79		5.636					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.866					ND	
39 3-Methylcyclohexanone	69		5.900					ND	
40 4-Methylcyclohexanone	55		5.948					ND	
41 Benzaldehyde	77		5.960					ND	
43 Phenol	94		6.003					ND	
44 Aniline	93		6.051					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
69 Bis(2-chloroethyl)ether	93		6.095					ND	
45 Pentachloroethane	167		6.122					ND	
46 2-Chlorophenol	128		6.172					ND	
243 n-Decane	57		6.201					ND	
47 1,3-Dichlorobenzene	146		6.311					ND	
48 1,4-Dichlorobenzene	146		6.374					ND	
49 Benzyl alcohol	108		6.455					ND	
232 1-Methyl-2-pyrrilidinone	99		6.462					ND	
50 1,2-Dichlorobenzene	146		6.513					ND	
51 2-Methylphenol	108		6.542					ND	
286 4-Methyl-1-cyclohexanemeth	55		6.574					ND	
53 2,2'-oxybis[1-chloropropan	45		6.576					ND	
52 Indene	115		6.590					ND	
21 3 & 4 Methylphenol	108		6.672					ND	
56 N-Nitrosopyrrolidine	100		6.675					ND	
57 N-Nitrosodi-n-propylamine	70		6.686					ND	
58 Acetophenone	105		6.696					ND	
59 N-Nitrosomorpholine	56		6.704					ND	
287 4-Methyl-1-cyclohexanemeth	55		6.708					ND	
60 2-Toluidine	106		6.742					ND	
61 Hexachloroethane	117		6.821					ND	
62 Nitrobenzene	77		6.850					ND	
63 N-Nitrosopiperidine	114		6.987					ND	
64 Isophorone	82		7.052					ND	
66 2-Nitrophenol	139		7.129					ND	
65 2,4-Dimethylphenol	107		7.138					ND	
67 1,3,5-Trichlorobenzene	180		7.160					ND	
71 Benzoic acid	122		7.196					ND	
68 o,o',o''-Triethylphosphoro	198		7.199					ND	
70 Bis(2-chloroethoxy)methane	93		7.215					ND	
72 alpha,alpha-Dimethyl phene	58		7.314					ND	
73 2,4-Dichlorophenol	162		7.335					ND	
74 1,2,4-Trichlorobenzene	180		7.417					ND	
75 Naphthalene	128		7.494					ND	
76 4-Chloroaniline	127		7.513					ND	
77 2,6-Dichlorophenol	162		7.533					ND	
78 Hexachloropropene	213		7.589					ND	
79 Hexachlorobutadiene	225		7.595					ND	
80 1,2,3-Trichlorobenzene	180		7.626					ND	
81 Benzothiazole	135		7.718					ND	
82 Quinoline	129		7.781					ND	
83 N-Nitrosodi-n-butylamine	84		7.795					ND	
84 Caprolactam	113	7.782	7.797	-0.015	79	3866		0.2156	
85 p-Phenylene diamine	108		7.815					ND	
86 4-Chloro-3-methylphenol	107		7.908					ND	
94 Safrole, Total	162		7.992					ND	
87 2-Methylnaphthalene	142		8.081					ND	
88 1-Methylnaphthalene	142		8.172					ND	
89 Hexachlorocyclopentadiene	237		8.225					ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.230					ND	
90 1,2,3,5-Tetrachlorobenzene	216		8.232					ND	
225 Isosafrole Peak 1	162		8.243					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
92 2,4,6-Trichlorophenol	196		8.312					ND	
93 2,4,5-Trichlorophenol	196		8.345					ND	
227 Isosafrole Peak 2	162		8.435					ND	
97 2,4-Toluene diamine	121		8.453					ND	
98 1,1'-Biphenyl	154		8.470					ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.487					ND	
100 2-Chloronaphthalene	162		8.504					ND	
96 3,4-Dichloronitrobenzene	109		8.506					ND	
246 1-Chloronaphthalene	162		8.541					ND	
102 2-Nitroaniline	65		8.562					ND	
101 Phenyl ether	170		8.564					ND	
103 1,4-Naphthoquinone	158		8.646					ND	
104 1,4-Dinitrobenzene	168		8.670					ND	
105 Dimethyl phthalate	163		8.696					ND	
106 1,3-Dinitrobenzene	168		8.730					ND	
107 2,6-Dinitrotoluene	165		8.754					ND	
109 Acenaphthylene	152		8.865					ND	
110 3-Nitroaniline	138		8.908					ND	
111 2,4-Dinitrophenol	184		8.994					ND	
112 Acenaphthene	153		9.009					ND	
113 4-Nitrophenol	109		9.018					ND	
114 2,4-Dinitrotoluene	165		9.105					ND	
115 Pentachlorobenzene	250		9.142					ND	
116 Dibenzofuran	168		9.153					ND	
117 1-Naphthylamine	143		9.224					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.224					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.249					ND	
120 2-Naphthylamine	143		9.286					ND	
121 Diethyl phthalate	149		9.293					ND	
247 Hexadecane	57		9.297					ND	
122 Thionazin	97		9.377					ND	
123 4-Chlorophenyl phenyl ethe	204		9.422					ND	
125 4-Nitroaniline	138		9.432					ND	
124 N-Nitro-o-toluidine	152		9.440					ND	
126 Fluorene	166		9.446					ND	
127 Tributyl phosphate	99		9.458					ND	
128 4,6-Dinitro-2-methylphenol	198		9.461					ND	
297 Benzophenone	105		9.512					ND	
131 N-Nitrosodiphenylamine	169		9.514					ND	
130 Diphenylamine	169		9.526					ND	
132 1,2-Diphenylhydrazine	77		9.557					ND	
133 Azobenzene	77		9.557					ND	
134 Sulfotepp	202		9.627					ND	
135 1,3,5-Trinitrobenzene	213		9.704					ND	
137 Phenacetin	108		9.757					ND	
228 Diallate Peak 1	86		9.762					ND	
138 Phorate	121		9.772					ND	
139 4-Bromophenyl phenyl ether	248		9.841					ND	
230 Diallate Peak 2	86		9.844					ND	
140 Dimethoate	87		9.916					ND	
141 Hexachlorobenzene	284		9.932					ND	
142 Atrazine	200		9.942					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
129 4-Aminobiphenyl	169		10.070					ND	
244 n-Octadecane	57		10.076					ND	
143 Pentachlorophenol	266		10.081					ND	
144 Pronamide	173		10.099					ND	
145 Pentachloronitrobenzene	237		10.113					ND	
146 Disulfoton	88		10.214					ND	
147 Dinoseb	211		10.224					ND	
148 Phenanthrene	178		10.274					ND	
149 Anthracene	178		10.317					ND	
151 Carbazole	167		10.432					ND	
152 Methyl parathion	109		10.536					ND	
154 Di-n-butyl phthalate	149	10.672	10.673	-0.001	99	23721		0.1296	
153 Diphenylsulfone	125		10.718					ND	
155 Ethyl Parathion	97		10.859					ND	
156 4-Nitroquinoline-1-oxide	190		10.921					ND	
157 Methapyrilene	58		10.964					ND	
158 Isodrin	66		11.186					ND	
159 Fluoranthene	202		11.293					ND	
160 Benzidine	184		11.365					ND	
161 Pyrene	202		11.495					ND	
226 Aramite Peak 1	185		11.537					ND	
229 Aramite Peak 2	185		11.599					ND	
163 p-Dimethylamino azobenzene	225		11.705					ND	
164 Chlorobenzilate	139		11.734					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.940					ND	
168 Butyl benzyl phthalate	149	11.952	11.957	-0.005	88	16758		0.1843	
169 3,3'-Dimethylbenzidine	212		11.989					ND	
171 2-Acetylaminofluorene	181		12.215					ND	
172 3,3'-Dimethoxybenzidine	244		12.435					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.437	12.438	-0.001	94	33021		0.2736	
175 3,3'-Dichlorobenzidine	252		12.471					ND	
174 4,4'-Methylene bis(2-chlor	231		12.474					ND	
177 Benzo[a]anthracene	228		12.539					ND	
178 Chrysene	228		12.577					ND	
176 Hexabromobenzene	232		12.603					ND	
179 6-Methylchrysene	242		13.061					ND	
180 Di-n-octyl phthalate	149		13.096					ND	
281 Hexachlorophene	196		13.628					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.763					ND	
182 Benzo[b]fluoranthene	252		13.765					ND	
183 Benzo[k]fluoranthene	252		13.803					ND	
184 Benzo[a]pyrene	252		14.241					ND	
185 3-Methylcholanthrene	268		14.797					ND	
187 Dibenz[a,h]acridine	279		15.783					ND	
186 Dibenz[a,j]acridine	279		15.878					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.246					ND	
189 Dibenz(a,h)anthracene	278		16.261					ND	
190 Benzo[g,h,i]perylene	276		16.847					ND	
268 Endrin	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
265 Dibenzo[a,h]pyrene	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
258 Aldrin	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 191 Methyl Phenols,Total	100		0.000					ND	
S 245 Total Cresols	100		0.000					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
T 240 Trimethyl phosphate TIC	110		5.000					ND	
T 194 Decane TIC	142		5.800					ND	
T 193 Hexamethylphosphoramide TI	135		6.500					ND	
T 234 2-Isopropylphenol TIC	121		7.250					ND	
T 235 4-isopropylphenol TIC	121		7.364					ND	
T 236 3-isopropylphenol TIC	121		7.364					ND	
T 237 3-(1,1-Dimethylethyl Pheno	135		7.720					ND	
T 231 2,3,7,8-TCDD	322		8.240					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 195 Hydroquinone TIC	110		9.000					ND	
T 192 Octadecane (TIC)	254		9.600					ND	
T 196 Kepone TIC	272		12.000					ND	
T 242 Triphenyl Phosphate TIC	326		12.000					ND	
T 280 2,3,7,8-TCDD TIC	198		12.500					ND	
T 241 Tricresyl phosphate TIC	368		12.500					ND	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201		14.000					ND	

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

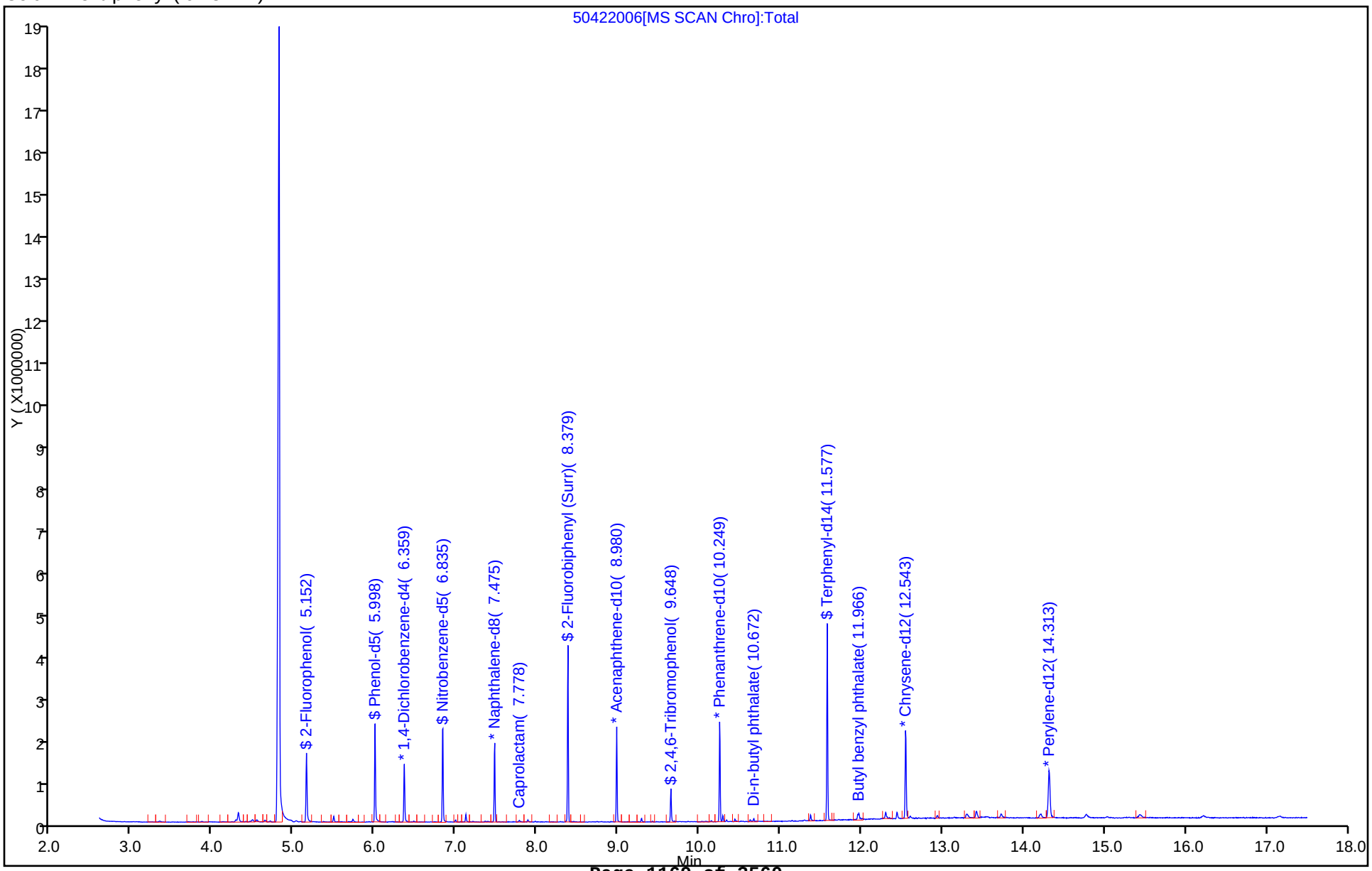
Report Date: 23-Apr-2015 09:37:11 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422006.D

Injection Date:	22-Apr-2015 09:19:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	MB 240-176319/23-A			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Report Date: 23-Apr-2015 09:37:11 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422006.D

Injection Date: 22-Apr-2015 09:19:30 Instrument ID: A4HP9

Lims ID: MB 240-176319/23-A

Client ID:

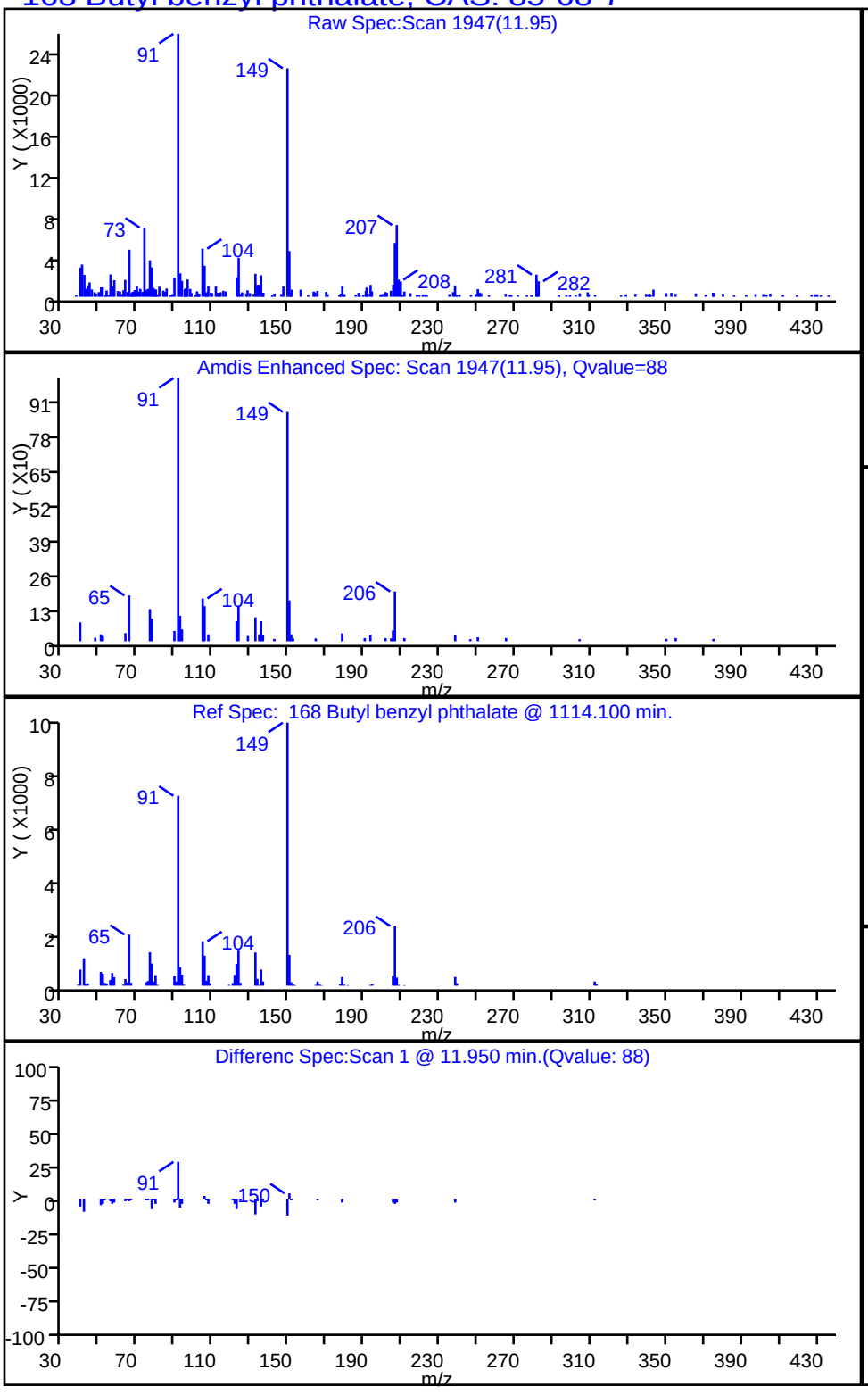
Operator ID: 001574 ALS Bottle#: 6 Worklist Smp#: 6

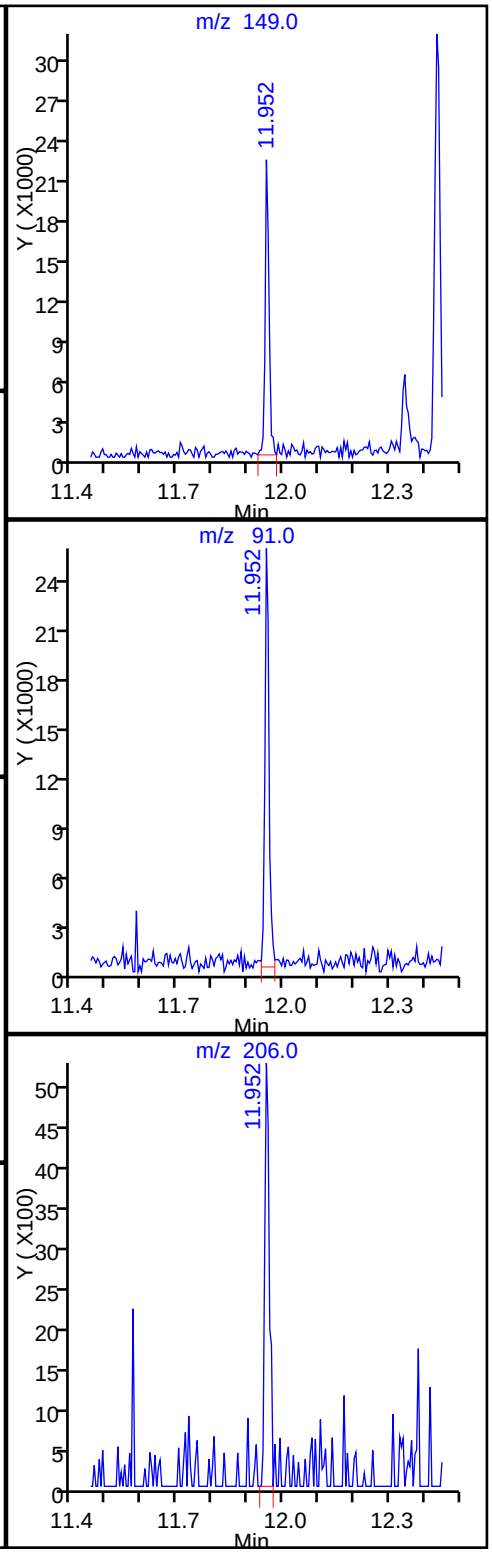
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL

Column: 5% phenyl (0.18 mm) Detector MS SCAN

168 Butyl benzyl phthalate, CAS: 85-68-7





FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-176319/24-A

Matrix: Solid | Lab File ID: 50422007.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 30(g) | Date Analyzed: 04/22/2015 09:44

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	540		6.7	3.3	0.76
208-96-8	Acenaphthylene	526		6.7	1.7	0.35
120-12-7	Anthracene	584		6.7	3.3	0.78
56-55-3	Benzo[a]anthracene	580		6.7	3.3	0.63
50-32-8	Benzo[a]pyrene	592		6.7	3.3	0.64
205-99-2	Benzo[b]fluoranthene	588		6.7	3.3	0.59
191-24-2	Benzo[g,h,i]perylene	586		6.7	1.7	0.35
65-85-0	Benzoic acid	172	J	660	130	36
207-08-9	Benzo[k]fluoranthene	600		6.7	3.3	0.68
100-51-6	Benzyl alcohol	518		330	67	21
111-91-1	Bis(2-chloroethoxy)methane	562		100	67	22
111-44-4	Bis(2-chloroethyl)ether	525		100	3.3	2.0
108-60-1	bis (2-chloroisopropyl) ether	612		100	33	9.5
117-81-7	Bis(2-ethylhexyl) phthalate	610		70	33	19
101-55-3	4-Bromophenyl phenyl ether	613		50	33	13
85-68-7	Butyl benzyl phthalate	577		70	33	10
86-74-8	Carbazole	625		50	33	27
106-47-8	4-Chloroaniline	439		150	67	17
59-50-7	4-Chloro-3-methylphenol	566		150	67	21
91-58-7	2-Chloronaphthalene	526		50	1.7	0.45
95-57-8	2-Chlorophenol	529		50	33	8.2
7005-72-3	4-Chlorophenyl phenyl ether	548		50	33	13
218-01-9	Chrysene	613		6.7	3.3	1.1
53-70-3	Dibenz(a,h)anthracene	587		6.7	3.3	0.66
132-64-9	Dibenzofuran	550		50	3.3	0.66
95-50-1	1,2-Dichlorobenzene	503		50	33	9.7
541-73-1	1,3-Dichlorobenzene	492		50	33	11
106-46-7	1,4-Dichlorobenzene	477		50	33	20
91-94-1	3,3'-Dichlorobenzidine	976		100	67	18
120-83-2	2,4-Dichlorophenol	537		150	67	20
84-66-2	Diethyl phthalate	550		70	33	16
105-67-9	2,4-Dimethylphenol	375		150	67	20
131-11-3	Dimethyl phthalate	574		70	33	17
84-74-2	Di-n-butyl phthalate	650		70	33	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-176319/24-A

Matrix: Solid | Lab File ID: 50422007.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 30(g) | Date Analyzed: 04/22/2015 09:44

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	798		150	33	9.2
51-28-5	2,4-Dinitrophenol	472		330	67	21
121-14-2	2,4-Dinitrotoluene	572		200	67	17
606-20-2	2,6-Dinitrotoluene	563		200	67	21
117-84-0	Di-n-octyl phthalate	588		70	33	7.9
206-44-0	Fluoranthene	633		6.7	3.3	0.55
86-73-7	Fluorene	539		6.7	3.3	0.53
118-74-1	Hexachlorobenzene	567		6.7	3.3	2.1
87-68-3	Hexachlorobutadiene	465		50	33	5.6
77-47-4	Hexachlorocyclopentadiene	296	J	330	33	8.1
67-72-1	Hexachloroethane	483		50	33	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	602		6.7	1.7	0.35
78-59-1	Isophorone	526		50	33	13
91-57-6	2-Methylnaphthalene	500		6.7	3.3	0.50
95-48-7	2-Methylphenol	531		200	67	11
15831-10-4	3 & 4 Methylphenol	549		400	67	20
91-20-3	Naphthalene	514		6.7	3.3	0.82
88-74-4	2-Nitroaniline	587		200	33	9.1
99-09-2	3-Nitroaniline	572		200	67	16
100-01-6	4-Nitroaniline	575		200	67	26
98-95-3	Nitrobenzene	515		100	3.3	2.2
88-75-5	2-Nitrophenol	497		50	33	8.3
100-02-7	4-Nitrophenol	1040		330	67	17
621-64-7	N-Nitrosodi-n-propylamine	539		50	33	6.3
86-30-6	N-Nitrosodiphenylamine	1230		50	33	21
87-86-5	Pentachlorophenol	770		150	33	9.1
85-01-8	Phenanthrene	568		6.7	3.3	0.73
108-95-2	Phenol	551		50	33	7.3
129-00-0	Pyrene	592		6.7	1.7	0.44
120-82-1	1,2,4-Trichlorobenzene	497		50	17	3.5
95-95-4	2,4,5-Trichlorophenol	497		150	67	25
88-06-2	2,4,6-Trichlorophenol	442		150	33	8.9

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-176319/24-A

Matrix: Solid | Lab File ID: 50422007.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 04/14/2015 08:47

Sample wt/vol: 30(g) | Date Analyzed: 04/22/2015 09:44

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	76		45-105
367-12-4	2-Fluorophenol (Surr)	81		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	74		35-100
4165-62-2	Phenol-d5 (Surr)	81		40-100
1718-51-0	Terphenyl-d14 (Surr)	83		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	63		35-125

Report Date: 23-Apr-2015 09:37:13 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422007.D
Lims ID: LCS 240-176319/24-A
Client ID:
Sample Type: LCS
Inject. Date: 22-Apr-2015 09:44:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-007
Misc. Info.: LCS 240-176319/24-ALCS 240-176319/24-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 09:37:02 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 22-Apr-2015 10:09:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.357	6.359	-0.002	87	140444	4.00	4.00	
* 2 Naphthalene-d8	136	7.473	7.475	-0.002	98	538696	4.00	4.00	
* 3 Acenaphthene-d10	164	8.983	8.980	0.003	77	324458	4.00	4.00	
* 4 Phenanthrene-d10	188	10.252	10.254	-0.002	91	527692	4.00	4.00	
* 5 Chrysene-d12	240	12.546	12.548	-0.002	80	660843	4.00	4.00	
* 6 Perylene-d12	264	14.315	14.318	-0.003	94	555076	4.00	4.00	
$ 7 2-Fluorophenol	112	5.150	5.133	0.017	93	421074	10.0	8.14	
$ 8 Phenol-d5	99	6.001	5.994	0.007	88	623391	10.0	8.06	
$ 9 Nitrobenzene-d5	82	6.833	6.835	-0.002	83	727907	10.0	7.42	
$ 10 2-Fluorobiphenyl (Surr)	172	8.377	8.379	-0.002	96	830534	10.0	7.61	
$ 11 2,4,6-Tribromophenol	330	9.651	9.653	-0.002	87	76178	10.0	6.34	
$ 12 Terphenyl-d14	244	11.574	11.577	-0.003	96	1113187	10.0	8.28	
25 1,4-Dioxane	88	2.996	2.993	0.003	91	114460	10.0	3.84	M
26 N-Nitrosodimethylamine	74	3.500	3.493	0.007	90	357726	10.0	7.19	
27 Pyridine	79	3.563	3.556	0.007	88	451735	10.0	5.64	
41 Benzaldehyde	77	5.958	5.960	-0.002	83	987508	20.0	16.8	
43 Phenol	94	6.011	6.003	0.008	92	692432	10.0	8.26	
44 Aniline	93	6.054	6.051	0.003	94	676787	10.0	6.50	
69 Bis(2-chloroethyl)ether	93	6.092	6.095	-0.003	89	553161	10.0	7.87	
46 2-Chlorophenol	128	6.174	6.172	0.002	88	389524	10.0	7.94	
243 n-Decane	57	6.203	6.201	0.002	98	437250	NC	NC	
47 1,3-Dichlorobenzene	146	6.314	6.311	0.003	82	391367	10.0	7.37	
48 1,4-Dichlorobenzene	146	6.376	6.374	0.002	86	385419	10.0	7.16	
49 Benzyl alcohol	108	6.458	6.455	0.003	84	307567	10.0	7.78	
50 1,2-Dichlorobenzene	146	6.516	6.513	0.003	77	378688	10.0	7.54	
51 2-Methylphenol	108	6.549	6.542	0.007	92	434238	10.0	7.96	
53 2,2'-oxybis[1-chloropropan	45	6.578	6.576	0.002	98	528035	10.0	9.18	
52 Indene	115	6.593	6.590	0.003	72	1439284	20.0	14.5	
21 3 & 4 Methylphenol	108	6.674	6.672	0.002	95	475457	10.0	8.23	
57 N-Nitrosodi-n-propylamine	70	6.684	6.686	-0.002	96	488064	10.0	8.08	
58 Acetophenone	105	6.694	6.696	-0.002	83	655028	10.0	7.83	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
61 Hexachloroethane	117	6.823	6.821	0.002	93	185184	10.0	7.24	
62 Nitrobenzene	77	6.852	6.850	0.002	71	699899	10.0	7.73	
64 Isophorone	82	7.049	7.052	-0.003	94	1206843	10.0	7.89	
66 2-Nitrophenol	139	7.131	7.129	0.002	74	186596	10.0	7.46	
65 2,4-Dimethylphenol	107	7.136	7.138	-0.002	92	372758	10.0	5.62	
71 Benzoic acid	122	7.203	7.196	0.007	82	36767	20.0	2.57	
70 Bis(2-chloroethoxy)methane	93	7.213	7.215	-0.002	96	649400	10.0	8.44	
73 2,4-Dichlorophenol	162	7.338	7.335	0.003	90	321906	10.0	8.05	
74 1,2,4-Trichlorobenzene	180	7.420	7.417	0.003	87	328221	10.0	7.45	
75 Naphthalene	128	7.492	7.494	-0.002	97	1109855	10.0	7.71	
76 4-Chloroaniline	127	7.511	7.513	-0.002	33	413738	10.0	6.58	
79 Hexachlorobutadiene	225	7.598	7.595	0.003	90	206666	10.0	6.97	
84 Caprolactam	113	7.785	7.797	-0.012	78	322428	20.0	19.1	
86 4-Chloro-3-methylphenol	107	7.905	7.908	-0.003	78	477353	10.0	8.49	
87 2-Methylnaphthalene	142	8.083	8.081	0.002	83	709374	10.0	7.50	
88 1-Methylnaphthalene	142	8.170	8.172	-0.002	77	661298	10.0	8.25	
89 Hexachlorocyclopentadiene	237	8.223	8.225	-0.002	86	134580	10.0	4.44	
91 1,2,4,5-Tetrachlorobenzene	216	8.228	8.230	-0.002	92	351835	10.0	7.52	
92 2,4,6-Trichlorophenol	196	8.309	8.312	-0.003	86	206552	10.0	6.62	
93 2,4,5-Trichlorophenol	196	8.348	8.345	0.003	91	242537	10.0	7.45	
98 1,1'-Biphenyl	154	8.468	8.470	-0.002	97	873253	10.0	7.67	
100 2-Chloronaphthalene	162	8.502	8.504	-0.002	97	710594	10.0	7.89	
102 2-Nitroaniline	65	8.564	8.562	0.002	70	401917	10.0	8.80	
105 Dimethyl phthalate	163	8.694	8.696	-0.002	92	872060	10.0	8.61	
106 1,3-Dinitrobenzene	168	8.728	8.730	-0.002	78	137666	10.0	8.48	
107 2,6-Dinitrotoluene	165	8.752	8.754	-0.002	57	200401	10.0	8.45	
109 Acenaphthylene	152	8.862	8.865	-0.003	87	1097149	10.0	7.89	
110 3-Nitroaniline	138	8.906	8.908	-0.002	80	202756	10.0	8.58	
111 2,4-Dinitrophenol	184	8.992	8.994	-0.002	97	86665	20.0	7.08	
112 Acenaphthene	153	9.007	9.009	-0.002	95	733411	10.0	8.10	
113 4-Nitrophenol	109	9.016	9.018	-0.002	79	348877	20.0	15.5	
114 2,4-Dinitrotoluene	165	9.103	9.105	-0.002	73	265962	10.0	8.59	
116 Dibenzofuran	168	9.151	9.153	-0.002	82	1015612	10.0	8.24	
119 2,3,4,6-Tetrachlorophenol	232	9.247	9.249	-0.002	75	154350	10.0	5.89	
121 Diethyl phthalate	149	9.290	9.293	-0.003	94	842738	10.0	8.25	
247 Hexadecane	57	9.295	9.297	-0.002	97	673888	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.420	9.422	-0.002	92	431540	10.0	8.22	
125 4-Nitroaniline	138	9.430	9.432	-0.002	76	197387	10.0	8.62	
126 Fluorene	166	9.444	9.446	-0.002	96	836008	10.0	8.09	
128 4,6-Dinitro-2-methylphenol	198	9.459	9.461	-0.002	92	220271	20.0	12.0	
131 N-Nitrosodiphenylamine	169	9.511	9.514	-0.003	98	1306280	20.0	18.4	
132 1,2-Diphenylhydrazine	77	9.555	9.557	-0.002	99	1530139	10.0	10.4	
133 Azobenzene	77	9.555	9.557	-0.002	94	1530478	10.0	10.4	
139 4-Bromophenyl phenyl ether	248	9.838	9.841	-0.003	69	248492	10.0	9.19	
141 Hexachlorobenzene	284	9.930	9.932	-0.002	73	226209	10.0	8.50	
142 Atrazine	200	9.939	9.942	-0.003	86	471051	20.0	17.3	
244 n-Octadecane	57	10.074	10.076	-0.002	86	689495	NC	NC	
143 Pentachlorophenol	266	10.079	10.081	-0.002	73	213456	20.0	11.5	
148 Phenanthrene	178	10.271	10.274	-0.003	87	1179489	10.0	8.51	
149 Anthracene	178	10.315	10.317	-0.002	87	1213822	10.0	8.76	
151 Carbazole	167	10.430	10.432	-0.002	81	1159785	10.0	9.37	
154 Di-n-butyl phthalate	149	10.670	10.673	-0.003	98	1511447	10.0	9.75	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
159 Fluoranthene	202	11.291	11.293	-0.002	99	1518558	10.0	9.49	
160 Benzidine	184	11.358	11.365	-0.007	88	728031	20.0	7.60	
161 Pyrene	202	11.493	11.495	-0.002	96	1606251	10.0	8.87	
168 Butyl benzyl phthalate	149	11.954	11.957	-0.003	89	727631	10.0	8.65	
173 Bis(2-ethylhexyl) phthalat	149	12.440	12.438	0.002	94	1022722	10.0	9.16	
175 3,3'-Dichlorobenzidine	252	12.469	12.471	-0.002	55	881357	20.0	14.6	
177 Benzo[a]anthracene	228	12.536	12.539	-0.003	89	1616602	10.0	8.71	
178 Chrysene	228	12.575	12.577	-0.002	93	1560432	10.0	9.19	
180 Di-n-octyl phthalate	149	13.099	13.096	0.003	100	1724256	10.0	8.82	
182 Benzo[b]fluoranthene	252	13.762	13.765	-0.003	87	1475871	10.0	8.82	
183 Benzo[k]fluoranthene	252	13.801	13.803	-0.002	75	1516225	10.0	9.00	
184 Benzo[a]pyrene	252	14.239	14.241	-0.002	76	1417242	10.0	8.87	
188 Indeno[1,2,3-cd]pyrene	276	16.244	16.246	-0.002	87	1459105	10.0	9.02	
189 Dibenz(a,h)anthracene	278	16.249	16.261	-0.012	75	1175182	10.0	8.81	
190 Benzo[g,h,i]perylene	276	16.840	16.847	-0.007	96	1179518	10.0	8.80	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

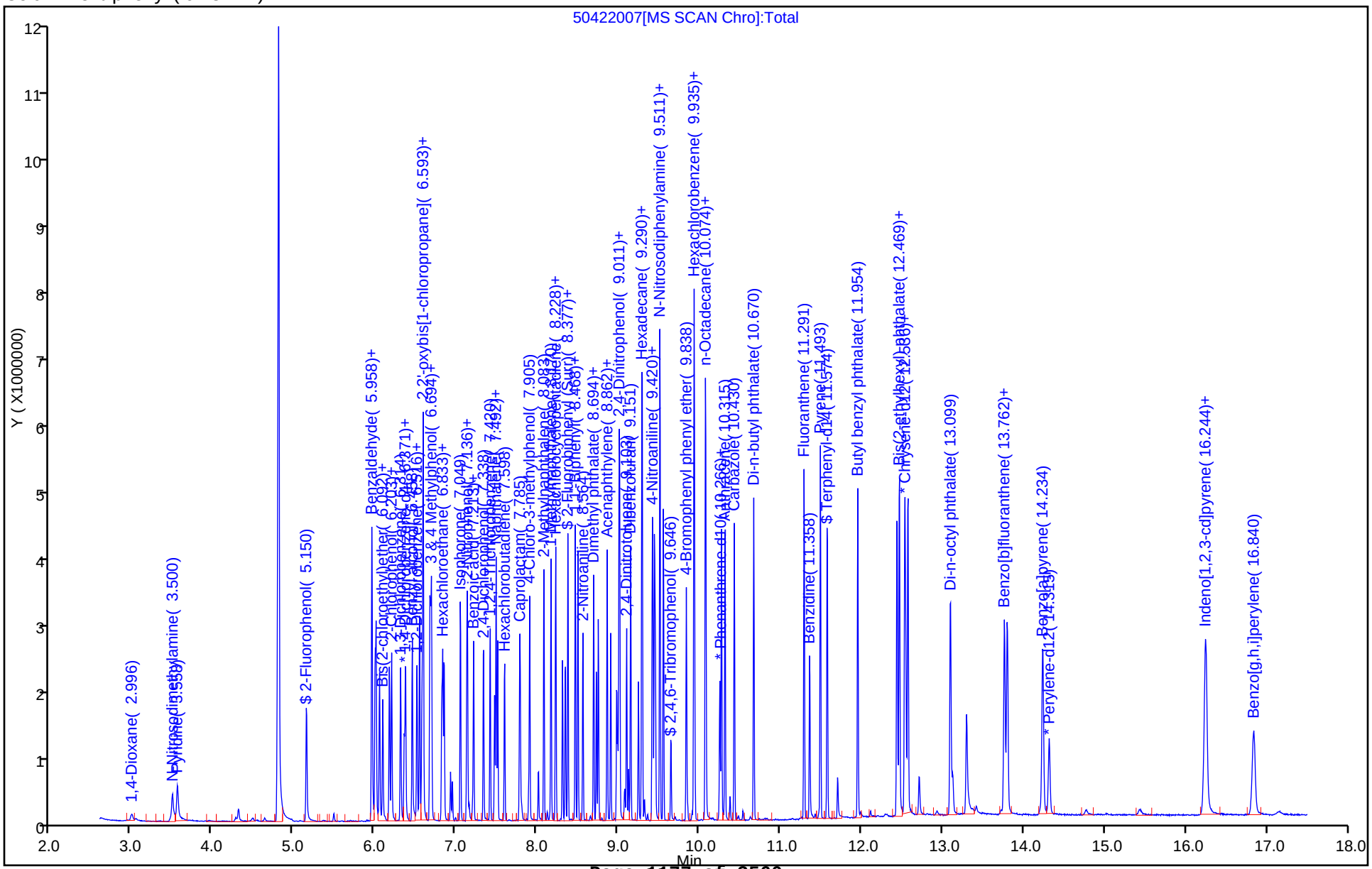
Report Date: 23-Apr-2015 09:37:13 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422007.D

Injection Date:	22-Apr-2015 09:44:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	LCS 240-176319/24-A			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177355/3

Matrix: Solid | Lab File ID: 50422003.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 08:04

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	4.98		0.00020	0.00010	0.000044
208-96-8	Acenaphthylene	5.15		0.00020	0.00010	0.000048
120-12-7	Anthracene	4.89		0.00020	0.00010	0.000088
56-55-3	Benzo[a]anthracene	4.77		0.00020	0.00010	0.000030
50-32-8	Benzo[a]pyrene	4.86		0.00020	0.00010	0.000051
205-99-2	Benzo[b]fluoranthene	4.86		0.00020	0.00010	0.000039
191-24-2	Benzo[g,h,i]perylene	4.98		0.00020	0.00010	0.000046
65-85-0	Benzoic acid	9.19	M	0.025	0.020	0.010
207-08-9	Benzo[k]fluoranthene	4.88		0.00020	0.00010	0.000045
100-51-6	Benzyl alcohol	4.79		0.0050	0.00050	0.00038
111-91-1	Bis(2-chloroethoxy)methane	5.15		0.0010	0.00050	0.00032
111-44-4	Bis(2-chloroethyl)ether	5.13		0.0010	0.00010	0.00010
108-60-1	bis (2-chloroisopropyl) ether	5.31		1.0	0.00050	0.00040
117-81-7	Bis(2-ethylhexyl) phthalate	5.03		0.0050	0.00050	0.0017
101-55-3	4-Bromophenyl phenyl ether	5.11		0.0020	0.00050	0.00022
85-68-7	Butyl benzyl phthalate	4.88		0.0020	0.00050	0.00026
86-74-8	Carbazole	4.78		0.0010	0.00050	0.00028
106-47-8	4-Chloroaniline	4.97		0.0020	0.00050	0.00021
59-50-7	4-Chloro-3-methylphenol	4.99		0.0020	0.00050	0.00021
91-58-7	2-Chloronaphthalene	4.96		0.0010	0.00050	0.00010
95-57-8	2-Chlorophenol	4.86		0.0010	0.00050	0.00029
7005-72-3	4-Chlorophenyl phenyl ether	4.94		0.0020	0.00050	0.00030
218-01-9	Chrysene	4.97		0.00020	0.00010	0.000050
53-70-3	Dibenz(a,h)anthracene	4.94		0.00020	0.00010	0.000045
132-64-9	Dibenzofuran	5.05		0.0010	0.00010	0.000020
95-50-1	1,2-Dichlorobenzene	4.99		0.0010	0.00050	0.00029
541-73-1	1,3-Dichlorobenzene	4.96		0.0010	0.00050	0.00023
106-46-7	1,4-Dichlorobenzene	5.09		0.0010	0.00050	0.00034
91-94-1	3,3'-Dichlorobenzidine	9.89		0.0050	0.0010	0.00037
120-83-2	2,4-Dichlorophenol	4.77		0.0020	0.00050	0.00019
84-66-2	Diethyl phthalate	5.07		0.0020	0.0010	0.00060
105-67-9	2,4-Dimethylphenol	4.99		0.0020	0.00050	0.00025
131-11-3	Dimethyl phthalate	5.02		0.0020	0.00050	0.00029
84-74-2	Di-n-butyl phthalate	4.93		0.0050	0.0010	0.0017

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177355/3

Matrix: Solid | Lab File ID: 50422003.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 08:04

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	8.81		0.0050	0.0040	0.0024
51-28-5	2,4-Dinitrophenol	8.42		0.0050	0.0010	0.00032
121-14-2	2,4-Dinitrotoluene	4.95		0.0050	0.00050	0.00025
606-20-2	2,6-Dinitrotoluene	5.04		0.0050	0.00050	0.00080
117-84-0	Di-n-octyl phthalate	4.79		0.0020	0.00050	0.00023
206-44-0	Fluoranthene	4.86		0.00020	0.00010	0.000045
86-73-7	Fluorene	5.12		0.00020	0.00010	0.000041
118-74-1	Hexachlorobenzene	4.79		0.00020	0.00010	0.000085
87-68-3	Hexachlorobutadiene	4.57		0.0010	0.00050	0.00027
77-47-4	Hexachlorocyclopentadiene	4.42		0.010	0.00050	0.00024
67-72-1	Hexachloroethane	5.00		0.0010	0.00050	0.00019
193-39-5	Indeno[1,2,3-cd]pyrene	4.98		0.00020	0.00010	0.000043
78-59-1	Isophorone	4.90		0.0010	0.00050	0.00027
91-57-6	2-Methylnaphthalene	4.69		0.00020	0.00010	0.000090
95-48-7	2-Methylphenol	5.26		0.0010	0.00050	0.00017
15831-10-4	3 & 4 Methylphenol	5.08		0.0020	0.0010	0.00080
91-20-3	Naphthalene	4.83		0.00020	0.00010	0.000063
88-74-4	2-Nitroaniline	5.27		0.0020	0.00050	0.00021
99-09-2	3-Nitroaniline	5.51		0.0020	0.00050	0.00028
100-01-6	4-Nitroaniline	5.03		0.0020	0.00050	0.00022
98-95-3	Nitrobenzene	4.76		0.0010	0.00010	0.000040
88-75-5	2-Nitrophenol	4.75		0.0020	0.00050	0.00028
100-02-7	4-Nitrophenol	9.44		0.0050	0.0040	0.00029
621-64-7	N-Nitrosodi-n-propylamine	5.03		0.0010	0.00050	0.00024
86-30-6	N-Nitrosodiphenylamine	10.6		0.0010	0.00050	0.00031
87-86-5	Pentachlorophenol	8.73		0.0050	0.0010	0.00027
85-01-8	Phenanthrene	4.90		0.00020	0.00010	0.000062
108-95-2	Phenol	5.20		0.0010	0.0010	0.00060
129-00-0	Pyrene	4.76		0.00020	0.00010	0.000042
120-82-1	1,2,4-Trichlorobenzene	4.85		0.0010	0.00050	0.00028
95-95-4	2,4,5-Trichlorophenol	5.11		0.0050	0.00050	0.00030
88-06-2	2,4,6-Trichlorophenol	4.92		0.0050	0.00050	0.00024

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177355/3

Matrix: Solid | Lab File ID: 50422003.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 08:04

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	99		50-150
367-12-4	2-Fluorophenol (Surr)	106		50-150
4165-60-0	Nitrobenzene-d5 (Surr)	93		50-150
4165-62-2	Phenol-d5 (Surr)	100		50-150
1718-51-0	Terphenyl-d14 (Surr)	95		50-150
118-79-6	2,4,6-Tribromophenol (Surr)	103		50-150

Report Date: 23-Apr-2015 12:52:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422003.D
Lims ID: mrl qc
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 08:04:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-003
Misc. Info.: MRL QCMRL QC
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 12:52:16 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK037

First Level Reviewer: gurneyk Date: 23-Apr-2015 12:52:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.361	6.359	0.002	88	169748	4.00	4.00	
* 2 Naphthalene-d8	136	7.476	7.475	0.001	99	645991	4.00	4.00	
* 3 Acenaphthene-d10	164	8.982	8.980	0.002	74	374768	4.00	4.00	
* 4 Phenanthrene-d10	188	10.251	10.254	-0.003	77	655408	4.00	4.00	
* 5 Chrysene-d12	240	12.550	12.548	0.002	80	781051	4.00	4.00	
* 6 Perylene-d12	264	14.319	14.318	0.001	98	679417	4.00	4.00	
$ 7 2-Fluorophenol	112	5.135	5.133	0.002	94	329866	5.00	5.28	
$ 8 Phenol-d5	99	5.991	5.994	-0.003	76	467991	5.00	5.01	
$ 9 Nitrobenzene-d5	82	6.832	6.835	-0.003	83	547968	5.00	4.66	
$ 10 2-Fluorobiphenyl (Surr)	172	8.381	8.379	0.001	99	624139	5.00	4.95	
$ 11 2,4,6-Tribromophenol	330	9.650	9.653	-0.003	79	71217	5.00	5.13	
$ 12 Terphenyl-d14	244	11.578	11.577	0.001	97	755262	5.00	4.75	
25 1,4-Dioxane	88	3.009	2.993	0.016	66	167156	5.00	4.64	M
26 N-Nitrosodimethylamine	74	3.514	3.493	0.021	85	286649	5.00	4.77	M
27 Pyridine	79	3.572	3.556	0.016	95	480882	5.00	4.97	M
20 Dimethylformamide	73		4.068					ND	
28 Ethyl methacrylate	69		4.173					ND	
31 2-Picoline	93		4.540					ND	
32 N-Nitrosomethylethylamine	88		4.650					ND	
35 Acrylamide	71		4.905					ND	
34 Methyl methanesulfonate	80		4.963					ND	
233 n,n'-Dimethylacetamide	44		5.053					ND	
36 N-Nitrosodiethylamine	102		5.372					ND	
37 Ethyl methanesulfonate	79		5.636					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.866					ND	
39 3-Methylcyclohexanone	69		5.900					ND	
40 4-Methylcyclohexanone	55		5.948					ND	
41 Benzaldehyde	77	5.962	5.960	0.002	82	681144	10.0	9.61	
43 Phenol	94	6.005	6.003	0.002	83	527055	5.00	5.20	
44 Aniline	93	6.053	6.051	0.002	83	645178	5.00	5.12	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
69 Bis(2-chloroethyl)ether	93	6.092	6.095	-0.003	90	435979	5.00	5.13	
45 Pentachloroethane	167		6.122					ND	
46 2-Chlorophenol	128	6.173	6.172	0.001	90	288224	5.00	4.86	
243 n-Decane	57		6.201				ND	ND	
47 1,3-Dichlorobenzene	146	6.313	6.311	0.002	86	318467	5.00	4.96	
48 1,4-Dichlorobenzene	146	6.375	6.374	0.001	78	331189	5.00	5.09	
49 Benzyl alcohol	108	6.457	6.455	0.002	84	229198	5.00	4.79	
232 1-Methyl-2-pyrrilidinone	99		6.462					ND	
50 1,2-Dichlorobenzene	146	6.515	6.513	0.002	82	302955	5.00	4.99	
51 2-Methylphenol	108	6.544	6.542	0.002	77	347104	5.00	5.26	
286 4-Methyl-1-cyclohexanemeth	55		6.574					ND	
53 2,2'-oxybis[1-chloropropan	45	6.577	6.576	0.001	98	369437	5.00	5.31	
52 Indene	115	6.592	6.590	0.002	77	1207805	10.0	10.1	
21 3 & 4 Methylphenol	108	6.673	6.672	0.001	94	354838	5.00	5.08	
56 N-Nitrosopyrrolidine	100		6.675					ND	
57 N-Nitrosodi-n-propylamine	70	6.688	6.686	0.002	98	367076	5.00	5.03	
58 Acetophenone	105	6.697	6.696	0.001	75	517360	5.00	5.12	
59 N-Nitrosomorpholine	56		6.704					ND	
287 4-Methyl-1-cyclohexanemeth	55		6.708					ND	
60 2-Toluidine	106		6.742					ND	
61 Hexachloroethane	117	6.822	6.821	0.001	93	154509	5.00	5.00	
62 Nitrobenzene	77	6.851	6.850	0.001	74	516847	5.00	4.76	
63 N-Nitrosopiperidine	114		6.987					ND	
64 Isophorone	82	7.053	7.052	0.001	94	898475	5.00	4.90	
66 2-Nitrophenol	139	7.130	7.129	0.001	68	142390	5.00	4.75	
65 2,4-Dimethylphenol	107	7.140	7.138	0.002	96	397042	5.00	4.99	
67 1,3,5-Trichlorobenzene	180		7.160					ND	
71 Benzoic acid	122	7.178	7.196	-0.018	82	302595	10.0	9.19	M
68 o,o',o''-Triethylphosphoro	198		7.199					ND	
70 Bis(2-chloroethoxy)methane	93	7.217	7.215	0.002	93	475181	5.00	5.15	
72 alpha,alpha-Dimethyl phene	58		7.314					ND	
73 2,4-Dichlorophenol	162	7.337	7.335	0.002	92	228566	5.00	4.77	
74 1,2,4-Trichlorobenzene	180	7.419	7.417	0.002	85	256509	5.00	4.85	
75 Naphthalene	128	7.491	7.494	-0.003	91	833708	5.00	4.83	
76 4-Chloroaniline	127	7.510	7.513	-0.003	47	374670	5.00	4.97	
77 2,6-Dichlorophenol	162	7.529	7.533	-0.004	70	231544	5.00	4.91	
78 Hexachloropropene	213		7.589					ND	
79 Hexachlorobutadiene	225	7.597	7.595	0.002	89	162296	5.00	4.57	
80 1,2,3-Trichlorobenzene	180		7.626					ND	
81 Benzothiazole	135		7.718					ND	
82 Quinoline	129		7.781					ND	
83 N-Nitrosodi-n-butylamine	84		7.795					ND	
84 Caprolactam	113	7.789	7.797	-0.008	84	205399	10.0	10.2	
85 p-Phenylene diamine	108		7.815					ND	
86 4-Chloro-3-methylphenol	107	7.904	7.908	-0.004	78	336821	5.00	4.99	
94 Safrole, Total	162		7.992					ND	
87 2-Methylnaphthalene	142	8.082	8.081	0.001	83	531831	5.00	4.69	
88 1-Methylnaphthalene	142	8.169	8.172	-0.003	78	465396	5.00	4.84	
89 Hexachlorocyclopentadiene	237	8.227	8.225	0.002	80	154955	5.00	4.42	
91 1,2,4,5-Tetrachlorobenzene	216	8.231	8.230	0.001	94	270285	5.00	5.00	
90 1,2,3,5-Tetrachlorobenzene	216		8.232					ND	
225 Isosafrole Peak 1	162		8.243					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
92 2,4,6-Trichlorophenol	196	8.313	8.312	0.001	91	177092	5.00	4.92	
93 2,4,5-Trichlorophenol	196	8.347	8.345	0.002	90	192172	5.00	5.11	
227 Isosafrole Peak 2	162		8.435					ND	
97 2,4-Toluene diamine	121		8.453					ND	
98 1,1'-Biphenyl	154	8.472	8.470	0.002	96	640162	5.00	4.87	
99 1,2,3,4 -Tetrachlorobenzen	216		8.487					ND	
100 2-Chloronaphthalene	162	8.501	8.504	-0.003	91	516236	5.00	4.96	
96 3,4-Dichloronitrobenzene	109		8.506					ND	
246 1-Chloronaphthalene	162		8.541					ND	
102 2-Nitroaniline	65	8.563	8.562	0.001	69	277900	5.00	5.27	
101 Phenyl ether	170		8.564					ND	
103 1,4-Naphthoquinone	158		8.646					ND	
104 1,4-Dinitrobenzene	168		8.670					ND	
105 Dimethyl phthalate	163	8.698	8.696	0.002	94	587127	5.00	5.02	
106 1,3-Dinitrobenzene	168	8.732	8.730	0.002	79	98391	5.00	5.25	
107 2,6-Dinitrotoluene	165	8.756	8.754	0.002	62	138163	5.00	5.04	
109 Acenaphthylene	152	8.861	8.865	-0.004	86	827991	5.00	5.15	
110 3-Nitroaniline	138	8.905	8.908	-0.003	84	150446	5.00	5.51	
111 2,4-Dinitrophenol	184	8.996	8.994	0.002	96	127884	10.0	8.42	
112 Acenaphthene	153	9.010	9.009	0.001	79	520469	5.00	4.98	
113 4-Nitrophenol	109	9.020	9.018	0.002	58	244751	10.0	9.44	
114 2,4-Dinitrotoluene	165	9.102	9.105	-0.003	75	177277	5.00	4.95	
115 Pentachlorobenzene	250		9.142					ND	
116 Dibenzofuran	168	9.155	9.153	0.002	84	718360	5.00	5.05	
117 1-Naphthylamine	143		9.224					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.224					ND	
119 2,3,4,6-Tetrachlorophenol	232	9.251	9.249	0.002	71	159600	5.00	5.27	
120 2-Naphthylamine	143		9.286					ND	
121 Diethyl phthalate	149	9.289	9.293	-0.004	94	598065	5.00	5.07	
247 Hexadecane	57		9.297				ND	ND	
122 Thionazin	97		9.377					ND	
123 4-Chlorophenyl phenyl ethe	204	9.419	9.422	-0.003	93	299799	5.00	4.94	
125 4-Nitroaniline	138	9.429	9.432	-0.003	77	133084	5.00	5.03	
124 N-Nitro-o-toluidine	152		9.440					ND	
126 Fluorene	166	9.448	9.446	0.002	99	611456	5.00	5.12	
127 Tributyl phosphate	99		9.458					ND	
128 4,6-Dinitro-2-methylphenol	198	9.458	9.461	-0.003	89	197017	10.0	8.81	
297 Benzophenone	105		9.512					ND	
131 N-Nitrosodiphenylamine	169	9.515	9.514	0.001	96	934440	10.0	10.6	
130 Diphenylamine	169		9.526					ND	
132 1,2-Diphenylhydrazine	77	9.559	9.557	0.002	99	997350	5.00	5.45	
133 Azobenzene	77	9.559	9.557	0.002	95	997711	5.00	5.45	
134 Sulfotepp	202		9.627					ND	
135 1,3,5-Trinitrobenzene	213		9.704					ND	
137 Phenacetin	108		9.757					ND	
228 Diallate Peak 1	86		9.762					ND	
138 Phorate	121		9.772					ND	
139 4-Bromophenyl phenyl ether	248	9.842	9.841	0.001	67	171437	5.00	5.11	
230 Diallate Peak 2	86		9.844					ND	
140 Dimethoate	87		9.916					ND	
141 Hexachlorobenzene	284	9.934	9.932	0.002	81	158382	5.00	4.79	
142 Atrazine	200	9.939	9.942	-0.003	84	342388	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
129 4-Aminobiphenyl	169		10.070					ND	
244 n-Octadecane	57		10.076				ND	ND	
143 Pentachlorophenol	266	10.083	10.081	0.002	78	197746	10.0	8.73	
144 Pronamide	173		10.099					ND	
145 Pentachloronitrobenzene	237		10.113					ND	
146 Disulfoton	88		10.214					ND	
147 Dinoseb	211		10.224					ND	
148 Phenanthrene	178	10.275	10.274	0.001	95	842504	5.00	4.90	
149 Anthracene	178	10.318	10.317	0.001	85	841517	5.00	4.89	
151 Carbazole	167	10.434	10.432	0.002	83	735284	5.00	4.78	
152 Methyl parathion	109		10.536					ND	
154 Di-n-butyl phthalate	149	10.674	10.673	0.001	100	949014	5.00	4.93	
153 Diphenylsulfone	125		10.718					ND	
155 Ethyl Parathion	97		10.859					ND	
156 4-Nitroquinoline-1-oxide	190		10.921					ND	
157 Methapyrilene	58		10.964					ND	
158 Isodrin	66		11.186					ND	
159 Fluoranthene	202	11.295	11.293	0.002	99	965960	5.00	4.86	
160 Benzidine	184	11.362	11.365	-0.003	98	1109766	10.0	9.80	
161 Pyrene	202	11.497	11.495	0.002	96	1017949	5.00	4.76	
226 Aramite Peak 1	185		11.537					ND	
229 Aramite Peak 2	185		11.599					ND	
163 p-Dimethylamino azobenzene	225		11.705					ND	
164 Chlorobenzilate	139		11.734					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.940					ND	
168 Butyl benzyl phthalate	149	11.958	11.957	0.001	92	484894	5.00	4.88	
169 3,3'-Dimethylbenzidine	212		11.989					ND	
171 2-Acetylaminofluorene	181		12.215					ND	
172 3,3'-Dimethoxybenzidine	244		12.435					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.439	12.438	0.001	93	663412	5.00	5.03	
175 3,3'-Dichlorobenzidine	252	12.473	12.471	0.002	52	703914	10.0	9.89	
174 4,4'-Methylene bis(2-chlor	231		12.474					ND	
177 Benzo[a]anthracene	228	12.535	12.539	-0.004	98	1046963	5.00	4.77	
178 Chrysene	228	12.574	12.577	-0.003	91	996364	5.00	4.97	
176 Hexabromobenzene	232		12.603					ND	
179 6-Methylchrysene	242		13.061					ND	
180 Di-n-octyl phthalate	149	13.098	13.096	0.002	99	1146237	5.00	4.79	
281 Hexachlorophene	196		13.628					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.763					ND	
182 Benzo[b]fluoranthene	252	13.766	13.765	0.001	84	995774	5.00	4.86	
183 Benzo[k]fluoranthene	252	13.800	13.803	-0.003	90	1006456	5.00	4.88	
184 Benzo[a]pyrene	252	14.238	14.241	-0.003	75	949792	5.00	4.86	
185 3-Methylcholanthrene	268		14.797					ND	
187 Dibenz[a,h]acridine	279		15.783					ND	
186 Dibenz[a,j]acridine	279		15.878					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.248	16.246	0.002	91	986371	5.00	4.98	
189 Dibenz(a,h)anthracene	278	16.257	16.261	-0.004	78	807069	5.00	4.94	
190 Benzo[g,h,i]perylene	276	16.849	16.847	0.002	96	818019	5.00	4.98	
276 Chlordane (technical)	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
285 Chlorobenzene TIC	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
268 Endrin	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
258 Aldrin	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.524					ND	
165 4,4'-DDD	235		11.812					ND	
170 4,4'-DDT	235		12.072					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 191 Methyl Phenols,Total	100				0			10.3	
S 245 Total Cresols	100				0			10.3	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
T 240 Trimethyl phosphate TIC	110	5.115	4.999	0.115	0	149		0	
T 194 Decane TIC	142	6.096	5.799	0.296	1	1859		0	
T 193 Hexamethylphosphoramide TI	135		6.500					ND	
T 234 2-Isopropylphenol TIC	121	7.250	7.244	0.000	0	388		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.366	7.358	0.002	0	347		0	
T 236 3-isopropylphenol TIC	121	7.366	7.358	0.002	0	347		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.712	7.714	-0.008	1	961		0	
T 231 2,3,7,8-TCDD	322	8.361	8.236	0.121	1	113		0	
T 195 Hydroquinone TIC	110	9.015	8.993	0.015	20	22416		0	
T 192 Octadecane (TIC)	254	9.650	9.600	0.050	1	567		0	
T 196 Kepone TIC	272	10.083	11.994	-1.917	4	6548		0.0335	
T 242 Triphenyl Phosphate TIC	326	12.040	11.994	0.040	0	207		0	
T 280 2,3,7,8-TCDD TIC	198	12.468	12.494	-0.032	0	3088		0	
T 241 Tricresyl phosphate TIC	368	12.579	12.494	0.079	0	136		0	
T 248 2,3,7,8 TCDF TIC	304	13.098	12.994	0.098	0	167		0	
T 197 Hexachlorophene TIC	198	13.766	13.594	0.166	1	9803		0.0577	
T 239 Tris(2,3-dibromopropyl)pho	201	14.021	13.994	0.021	0	224		0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L5 W_00005 Amount Added: 1.00 Units: mL

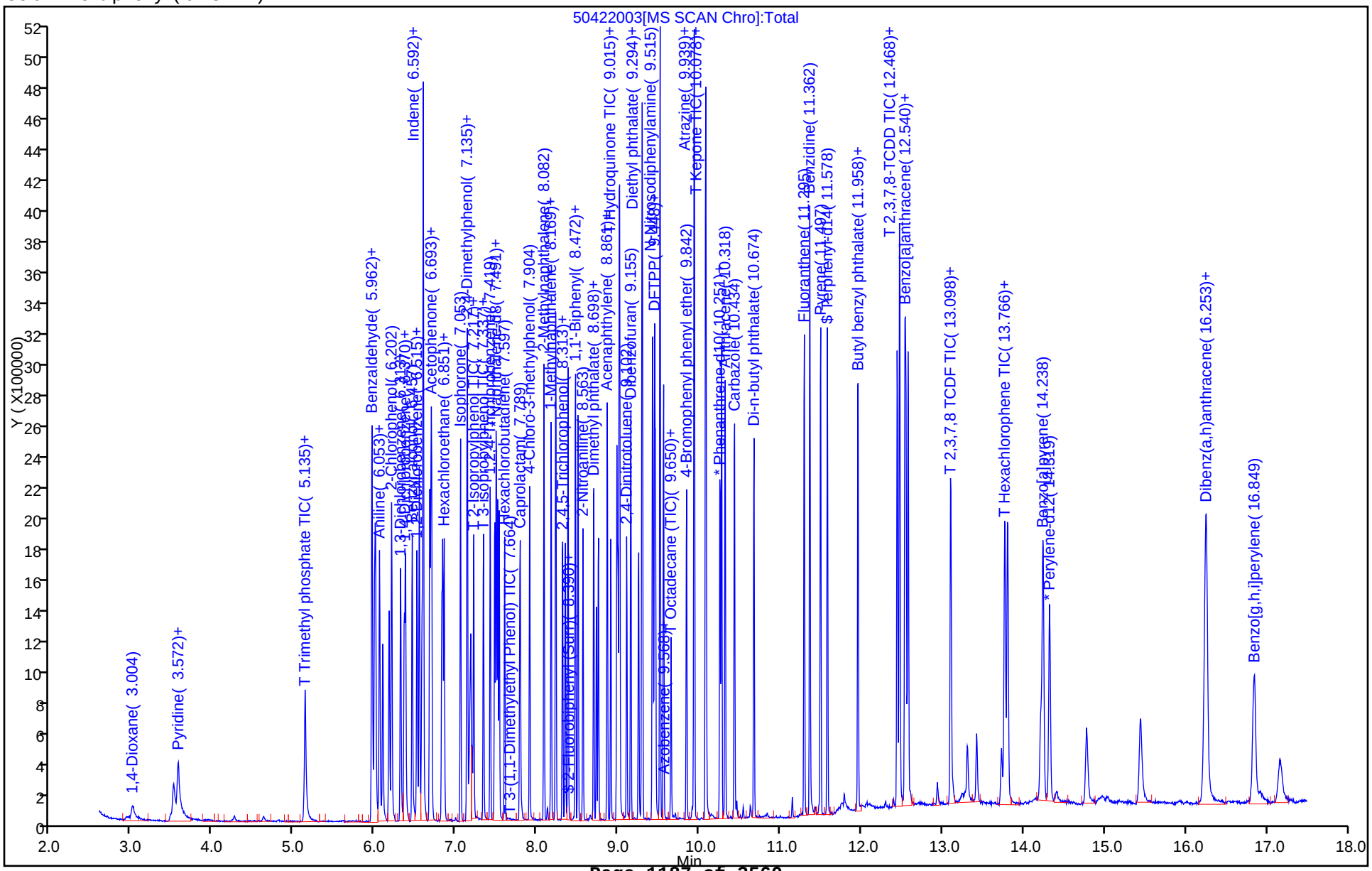
Report Date: 23-Apr-2015 12:52:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422003.D

Injection Date:	22-Apr-2015 08:04:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	mrl qc			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

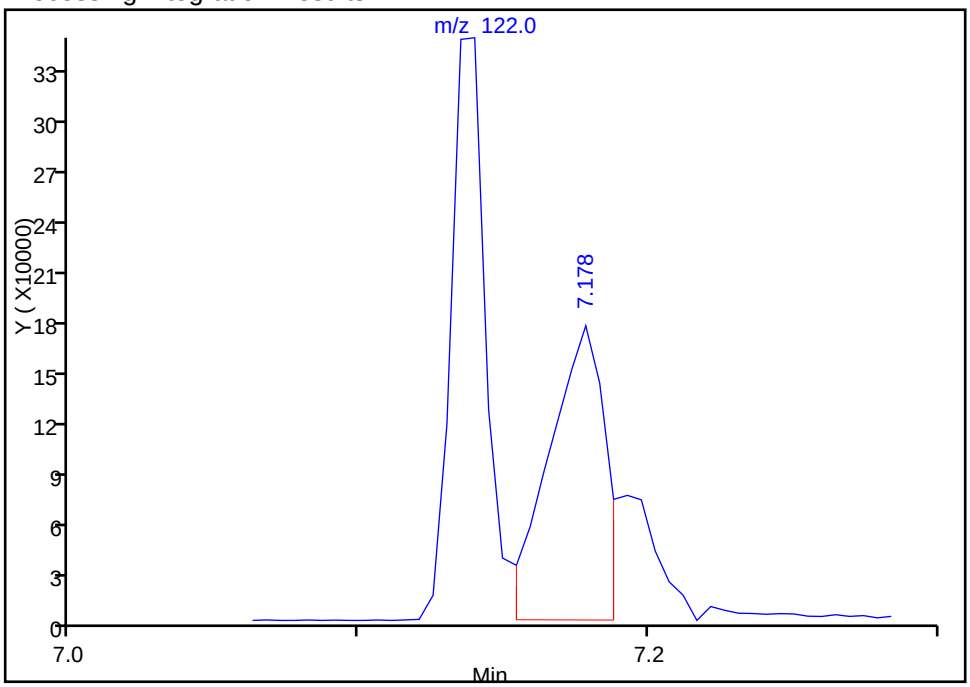
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422003.D
Injection Date: 22-Apr-2015 08:04:30 Instrument ID: A4HP9
Lims ID: mrl qc
Client ID:
Operator ID: 001574 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

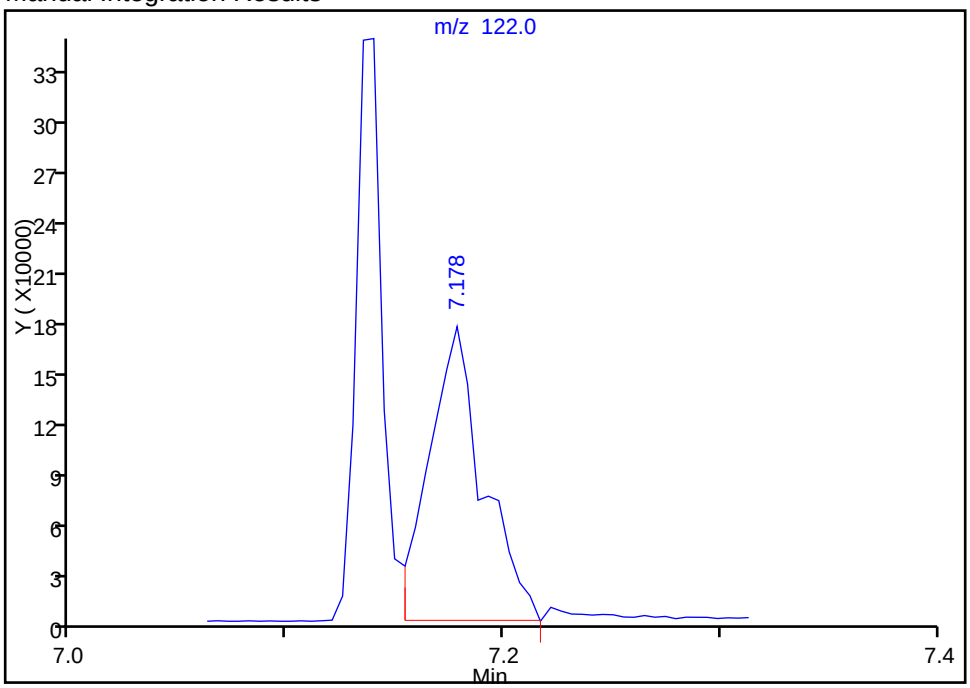
Processing Integration Results

RT: 7.18
Area: 239278
Amount: 7.570838
Amount Units: ng/ul



Manual Integration Results

RT: 7.18
Area: 302595
Amount: 9.191886
Amount Units: ng/ul



Reviewer: ulmanm, 22-Apr-2015 08:30:19
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177355/18

Matrix: Solid | Lab File ID: 50422018.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 14:44

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	5.11		0.00020	0.00010	0.000044
208-96-8	Acenaphthylene	5.13		0.00020	0.00010	0.000048
120-12-7	Anthracene	5.06		0.00020	0.00010	0.000088
56-55-3	Benzo[a]anthracene	4.78		0.00020	0.00010	0.000030
50-32-8	Benzo[a]pyrene	4.88		0.00020	0.00010	0.000051
205-99-2	Benzo[b]fluoranthene	4.96		0.00020	0.00010	0.000039
191-24-2	Benzo[g,h,i]perylene	4.78		0.00020	0.00010	0.000046
65-85-0	Benzoic acid	7.20	M	0.025	0.020	0.010
207-08-9	Benzo[k]fluoranthene	4.71		0.00020	0.00010	0.000045
100-51-6	Benzyl alcohol	4.60		0.0050	0.00050	0.00038
111-91-1	Bis(2-chloroethoxy)methane	5.34		0.0010	0.00050	0.00032
111-44-4	Bis(2-chloroethyl)ether	4.94		0.0010	0.00010	0.00010
108-60-1	bis (2-chloroisopropyl) ether	5.57		1.0	0.00050	0.00040
117-81-7	Bis(2-ethylhexyl) phthalate	4.97		0.0050	0.00050	0.0017
101-55-3	4-Bromophenyl phenyl ether	4.99		0.0020	0.00050	0.00022
85-68-7	Butyl benzyl phthalate	4.81		0.0020	0.00050	0.00026
86-74-8	Carbazole	4.87		0.0010	0.00050	0.00028
106-47-8	4-Chloroaniline	5.14		0.0020	0.00050	0.00021
59-50-7	4-Chloro-3-methylphenol	4.83		0.0020	0.00050	0.00021
91-58-7	2-Chloronaphthalene	4.99		0.0010	0.00050	0.00010
95-57-8	2-Chlorophenol	4.92		0.0010	0.00050	0.00029
7005-72-3	4-Chlorophenyl phenyl ether	5.04		0.0020	0.00050	0.00030
218-01-9	Chrysene	5.07		0.00020	0.00010	0.000050
53-70-3	Dibenz(a,h)anthracene	4.81		0.00020	0.00010	0.000045
132-64-9	Dibenzofuran	5.14		0.0010	0.00010	0.000020
95-50-1	1,2-Dichlorobenzene	5.01		0.0010	0.00050	0.00029
541-73-1	1,3-Dichlorobenzene	4.88		0.0010	0.00050	0.00023
106-46-7	1,4-Dichlorobenzene	4.98		0.0010	0.00050	0.00034
91-94-1	3,3'-Dichlorobenzidine	9.70		0.0050	0.0010	0.00037
120-83-2	2,4-Dichlorophenol	4.95		0.0020	0.00050	0.00019
84-66-2	Diethyl phthalate	5.30		0.0020	0.0010	0.00060
105-67-9	2,4-Dimethylphenol	4.93		0.0020	0.00050	0.00025
131-11-3	Dimethyl phthalate	5.18		0.0020	0.00050	0.00029
84-74-2	Di-n-butyl phthalate	4.81		0.0050	0.0010	0.0017

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177355/18

Matrix: Solid | Lab File ID: 50422018.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 14:44

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	4.67	^	0.0050	0.0040	0.0024
51-28-5	2,4-Dinitrophenol	3.89	^	0.0050	0.0010	0.00032
121-14-2	2,4-Dinitrotoluene	5.09		0.0050	0.00050	0.00025
606-20-2	2,6-Dinitrotoluene	4.95		0.0050	0.00050	0.00080
117-84-0	Di-n-octyl phthalate	4.81		0.0020	0.00050	0.00023
206-44-0	Fluoranthene	4.76		0.00020	0.00010	0.000045
86-73-7	Fluorene	5.18		0.00020	0.00010	0.000041
118-74-1	Hexachlorobenzene	4.64		0.00020	0.00010	0.000085
87-68-3	Hexachlorobutadiene	4.73		0.0010	0.00050	0.00027
77-47-4	Hexachlorocyclopentadiene	3.15	^	0.010	0.00050	0.00024
67-72-1	Hexachloroethane	5.10		0.0010	0.00050	0.00019
193-39-5	Indeno[1,2,3-cd]pyrene	4.82		0.00020	0.00010	0.000043
78-59-1	Isophorone	5.00		0.0010	0.00050	0.00027
91-57-6	2-Methylnaphthalene	4.81		0.00020	0.00010	0.000090
95-48-7	2-Methylphenol	5.22		0.0010	0.00050	0.00017
15831-10-4	3 & 4 Methylphenol	5.13		0.0020	0.0010	0.00080
91-20-3	Naphthalene	4.81		0.00020	0.00010	0.000063
88-74-4	2-Nitroaniline	5.25		0.0020	0.00050	0.00021
99-09-2	3-Nitroaniline	5.78		0.0020	0.00050	0.00028
100-01-6	4-Nitroaniline	5.23		0.0020	0.00050	0.00022
98-95-3	Nitrobenzene	4.91		0.0010	0.00010	0.000040
88-75-5	2-Nitrophenol	4.71		0.0020	0.00050	0.00028
100-02-7	4-Nitrophenol	9.26		0.0050	0.0040	0.00029
621-64-7	N-Nitrosodi-n-propylamine	5.17		0.0010	0.00050	0.00024
86-30-6	N-Nitrosodiphenylamine	10.2		0.0010	0.00050	0.00031
87-86-5	Pentachlorophenol	6.27	^	0.0050	0.0010	0.00027
85-01-8	Phenanthrene	4.95		0.00020	0.00010	0.000062
108-95-2	Phenol	5.15		0.0010	0.0010	0.00060
129-00-0	Pyrene	4.82		0.00020	0.00010	0.000042
120-82-1	1,2,4-Trichlorobenzene	4.81		0.0010	0.00050	0.00028
95-95-4	2,4,5-Trichlorophenol	5.09		0.0050	0.00050	0.00030
88-06-2	2,4,6-Trichlorophenol	5.01		0.0050	0.00050	0.00024

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177355/18

Matrix: Solid | Lab File ID: 50422018.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 14:44

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177355 | Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	99		50-150
367-12-4	2-Fluorophenol (Surr)	104		50-150
4165-60-0	Nitrobenzene-d5 (Surr)	95		50-150
4165-62-2	Phenol-d5 (Surr)	101		50-150
1718-51-0	Terphenyl-d14 (Surr)	95		50-150
118-79-6	2,4,6-Tribromophenol (Surr)	106		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422018.D
Lims ID: mrl qccl
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 14:44:30 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042803-018
Misc. Info.: MRL QCCLMRL QCCL
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 23-Apr-2015 10:53:08 Calib Date: 20-Apr-2015 20:08:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150420-42708.b\50420028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 23-Apr-2015 11:00:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.358	6.359	-0.001	87	137008	4.00	4.00	
* 2 Naphthalene-d8	136	7.474	7.475	-0.001	98	518106	4.00	4.00	
* 3 Acenaphthene-d10	164	8.979	8.980	-0.001	78	303962	4.00	4.00	
* 4 Phenanthrene-d10	188	10.248	10.254	-0.006	77	556122	4.00	4.00	
* 5 Chrysene-d12	240	12.547	12.548	-0.001	80	650429	4.00	4.00	
* 6 Perylene-d12	264	14.317	14.318	-0.001	95	549646	4.00	4.00	
$ 7 2-Fluorophenol	112	5.132	5.133	-0.001	92	263006	5.00	5.21	
$ 8 Phenol-d5	99	5.988	5.994	-0.006	80	380543	5.00	5.04	
$ 9 Nitrobenzene-d5	82	6.834	6.835	-0.001	83	446645	5.00	4.74	
$ 10 2-Fluorobiphenyl (Surr)	172	8.378	8.379	-0.001	98	505201	5.00	4.94	
$ 11 2,4,6-Tribromophenol	330	9.647	9.653	-0.006	78	59859	5.00	5.32	
$ 12 Terphenyl-d14	244	11.576	11.577	-0.001	95	627117	5.00	4.74	
25 1,4-Dioxane	88	2.992	2.993	-0.001	91	132106	5.00	4.54	
26 N-Nitrosodimethylamine	74	3.497	3.493	0.004	86	220666	5.00	4.55	
27 Pyridine	79	3.555	3.556	-0.001	92	368612	5.00	4.72	
20 Dimethylformamide	73		4.068					ND	
28 Ethyl methacrylate	69		4.173					ND	
31 2-Picoline	93		4.540					ND	
32 N-Nitrosomethylethylamine	88		4.650					ND	
35 Acrylamide	71		4.905					ND	
34 Methyl methanesulfonate	80		4.963					ND	
233 n,n'-Dimethylacetamide	44		5.053					ND	
36 N-Nitrosodiethylamine	102		5.372					ND	
37 Ethyl methanesulfonate	79		5.636					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.866					ND	
39 3-Methylcyclohexanone	69		5.900					ND	
40 4-Methylcyclohexanone	55		5.948					ND	
41 Benzaldehyde	77	5.959	5.960	-0.001	83	555052	10.0	9.71	
43 Phenol	94	6.002	6.003	-0.001	92	420895	5.00	5.15	
44 Aniline	93	6.050	6.051	-0.001	82	520657	5.00	5.12	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
69 Bis(2-chloroethyl)ether	93	6.094	6.095	-0.001	92	338929	5.00	4.94	
45 Pentachloroethane	167		6.122					ND	
46 2-Chlorophenol	128	6.171	6.172	-0.001	87	235478	5.00	4.92	
243 n-Decane	57		6.201				ND	ND	
47 1,3-Dichlorobenzene	146	6.310	6.311	-0.001	79	252726	5.00	4.88	
48 1,4-Dichlorobenzene	146	6.373	6.374	-0.002	72	261374	5.00	4.98	
49 Benzyl alcohol	108	6.454	6.455	-0.001	84	177567	5.00	4.60	
232 1-Methyl-2-pyrrilidinone	99		6.462					ND	
50 1,2-Dichlorobenzene	146	6.512	6.513	-0.001	79	245545	5.00	5.01	
51 2-Methylphenol	108	6.541	6.542	-0.001	89	277584	5.00	5.22	
286 4-Methyl-1-cyclohexanemeth	55		6.574					ND	
53 2,2'-oxybis[1-chloropropan	45	6.574	6.576	-0.002	99	312514	5.00	5.57	
52 Indene	115	6.589	6.590	-0.001	67	961978	10.0	9.97	
21 3 & 4 Methylphenol	108	6.671	6.672	-0.001	94	289168	5.00	5.13	
56 N-Nitrosopyrrolidine	100		6.675					ND	
57 N-Nitrosodi-n-propylamine	70	6.685	6.686	-0.001	97	304913	5.00	5.17	
58 Acetophenone	105	6.695	6.696	-0.001	78	414090	5.00	5.07	
59 N-Nitrosomorpholine	56		6.704					ND	
287 4-Methyl-1-cyclohexanemeth	55		6.708					ND	
60 2-Toluidine	106		6.742					ND	
61 Hexachloroethane	117	6.820	6.821	-0.001	87	127296	5.00	5.10	
62 Nitrobenzene	77	6.849	6.850	-0.001	72	427568	5.00	4.91	
63 N-Nitrosopiperidine	114		6.987					ND	
64 Isophorone	82	7.051	7.052	-0.001	94	735728	5.00	5.00	
66 2-Nitrophenol	139	7.127	7.129	-0.002	71	113374	5.00	4.71	
65 2,4-Dimethylphenol	107	7.137	7.138	-0.001	96	314403	5.00	4.93	
67 1,3,5-Trichlorobenzene	180		7.160					ND	
71 Benzoic acid	122	7.195	7.196	-0.001	73	180426	10.0	7.20	M
68 o,o',o''-Triethylphosphoro	198		7.199					ND	
70 Bis(2-chloroethoxy)methane	93	7.214	7.215	-0.001	94	395396	5.00	5.34	
72 alpha,alpha-Dimethyl phene	58		7.314					ND	
73 2,4-Dichlorophenol	162	7.334	7.335	-0.001	87	190369	5.00	4.95	
74 1,2,4-Trichlorobenzene	180	7.416	7.417	-0.001	82	203728	5.00	4.81	
75 Naphthalene	128	7.493	7.494	-0.001	92	666418	5.00	4.81	
76 4-Chloroaniline	127	7.512	7.513	-0.001	36	310790	5.00	5.14	
77 2,6-Dichlorophenol	162	7.531	7.533	-0.002	54	186750	5.00	4.94	
78 Hexachloropropene	213		7.589					ND	
79 Hexachlorobutadiene	225	7.594	7.595	-0.001	90	134787	5.00	4.73	
80 1,2,3-Trichlorobenzene	180		7.626					ND	
81 Benzothiazole	135		7.718					ND	
82 Quinoline	129		7.781					ND	
83 N-Nitrosodi-n-butylamine	84		7.795					ND	
84 Caprolactam	113	7.786	7.797	-0.011	82	177009	10.0	10.9	
85 p-Phenylene diamine	108		7.815					ND	
86 4-Chloro-3-methylphenol	107	7.902	7.908	-0.006	78	261215	5.00	4.83	
94 Safrole, Total	162		7.992					ND	
87 2-Methylnaphthalene	142	8.080	8.081	-0.001	81	437564	5.00	4.81	
88 1-Methylnaphthalene	142	8.166	8.172	-0.006	77	372443	5.00	4.83	
89 Hexachlorocyclopentadiene	237	8.224	8.225	-0.001	77	89484	5.00	3.15	
91 1,2,4,5-Tetrachlorobenzene	216	8.229	8.230	-0.001	91	215683	5.00	4.92	
90 1,2,3,5-Tetrachlorobenzene	216		8.232					ND	
225 Isosafrole Peak 1	162		8.243					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
92 2,4,6-Trichlorophenol	196	8.310	8.312	-0.002	89	146384	5.00	5.01	
93 2,4,5-Trichlorophenol	196	8.344	8.345	-0.001	89	155137	5.00	5.09	
227 Isosafrole Peak 2	162		8.435					ND	
97 2,4-Toluene diamine	121		8.453					ND	
98 1,1'-Biphenyl	154	8.469	8.470	-0.001	97	527820	5.00	4.95	
99 1,2,3,4 -Tetrachlorobenzen	216		8.487					ND	
100 2-Chloronaphthalene	162	8.503	8.504	-0.001	98	421343	5.00	4.99	
96 3,4-Dichloronitrobenzene	109		8.506					ND	
246 1-Chloronaphthalene	162		8.541					ND	
102 2-Nitroaniline	65	8.561	8.562	-0.001	71	224716	5.00	5.25	
101 Phenyl ether	170		8.564					ND	
103 1,4-Naphthoquinone	158		8.646					ND	
104 1,4-Dinitrobenzene	168		8.670					ND	
105 Dimethyl phthalate	163	8.695	8.696	-0.001	93	491686	5.00	5.18	
106 1,3-Dinitrobenzene	168	8.729	8.730	-0.001	79	76887	5.00	5.05	
107 2,6-Dinitrotoluene	165	8.753	8.754	-0.001	58	109862	5.00	4.95	
109 Acenaphthylene	152	8.863	8.865	-0.002	90	668622	5.00	5.13	
110 3-Nitroaniline	138	8.907	8.908	-0.001	81	128057	5.00	5.78	
111 2,4-Dinitrophenol	184	8.993	8.994	-0.001	75	27579	10.0	3.89	
112 Acenaphthene	153	9.008	9.009	-0.001	94	433320	5.00	5.11	
113 4-Nitrophenol	109	9.017	9.018	-0.001	83	194572	10.0	9.26	
114 2,4-Dinitrotoluene	165	9.099	9.105	-0.006	71	147800	5.00	5.09	
115 Pentachlorobenzene	250		9.142					ND	
116 Dibenzofuran	168	9.152	9.153	-0.001	84	593186	5.00	5.14	
117 1-Naphthylamine	143		9.224					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.224					ND	
119 2,3,4,6-Tetrachlorophenol	232	9.248	9.249	-0.001	70	125553	5.00	5.11	
120 2-Naphthylamine	143		9.286					ND	
121 Diethyl phthalate	149	9.287	9.293	-0.006	94	507022	5.00	5.30	
247 Hexadecane	57		9.297				ND	ND	
122 Thionazin	97		9.377					ND	
123 4-Chlorophenyl phenyl ethe	204	9.416	9.422	-0.006	92	247632	5.00	5.04	
125 4-Nitroaniline	138	9.426	9.432	-0.006	76	112284	5.00	5.23	
124 N-Nitro-o-toluidine	152		9.440					ND	
126 Fluorene	166	9.445	9.446	-0.001	99	501303	5.00	5.18	
127 Tributyl phosphate	99		9.458					ND	
128 4,6-Dinitro-2-methylphenol	198	9.455	9.461	-0.006	92	81916	10.0	4.67	
297 Benzophenone	105		9.512					ND	
131 N-Nitrosodiphenylamine	169	9.513	9.514	-0.001	99	762443	10.0	10.2	
130 Diphenylamine	169		9.526					ND	
132 1,2-Diphenylhydrazine	77	9.556	9.557	-0.001	98	825681	5.00	5.31	
133 Azobenzene	77	9.556	9.557	-0.001	95	825850	5.00	5.32	
134 Sulfotepp	202		9.627					ND	
135 1,3,5-Trinitrobenzene	213		9.704					ND	
137 Phenacetin	108		9.757					ND	
228 Diallate Peak 1	86		9.762					ND	
138 Phorate	121		9.772					ND	
139 4-Bromophenyl phenyl ether	248	9.840	9.841	-0.001	68	142038	5.00	4.99	
230 Diallate Peak 2	86		9.844					ND	
140 Dimethoate	87		9.916					ND	
141 Hexachlorobenzene	284	9.931	9.932	-0.001	74	130043	5.00	4.64	
142 Atrazine	200	9.936	9.942	-0.006	85	276305	10.0	9.64	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
129 4-Aminobiphenyl	169		10.070					ND	
244 n-Octadecane	57		10.076				ND	ND	
143 Pentachlorophenol	266	10.080	10.081	-0.001	77	117750	10.0	6.27	
144 Pronamide	173		10.099					ND	
145 Pentachloronitrobenzene	237		10.113					ND	
146 Disulfoton	88		10.214					ND	
147 Dinoseb	211		10.224					ND	
148 Phenanthrene	178	10.272	10.274	-0.002	84	722258	5.00	4.95	
149 Anthracene	178	10.316	10.317	-0.001	88	738694	5.00	5.06	
151 Carbazole	167	10.431	10.432	-0.001	83	634992	5.00	4.87	
152 Methyl parathion	109		10.536					ND	
154 Di-n-butyl phthalate	149	10.672	10.673	-0.001	100	784936	5.00	4.81	
153 Diphenylsulfone	125		10.718					ND	
155 Ethyl Parathion	97		10.859					ND	
156 4-Nitroquinoline-1-oxide	190		10.921					ND	
157 Methapyrilene	58		10.964					ND	
158 Isodrin	66		11.186					ND	
159 Fluoranthene	202	11.292	11.293	-0.001	99	802085	5.00	4.76	
160 Benzidine	184	11.359	11.365	-0.006	88	884414	10.0	9.38	
161 Pyrene	202	11.494	11.495	-0.001	96	858508	5.00	4.82	
226 Aramite Peak 1	185		11.537					ND	
229 Aramite Peak 2	185		11.599					ND	
163 p-Dimethylamino azobenzene	225		11.705					ND	
164 Chlorobenzilate	139		11.734					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.940					ND	
168 Butyl benzyl phthalate	149	11.956	11.957	-0.001	90	397982	5.00	4.81	
169 3,3'-Dimethylbenzidine	212		11.989					ND	
171 2-Acetylaminofluorene	181		12.215					ND	
172 3,3'-Dimethoxybenzidine	244		12.435					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.436	12.438	-0.002	94	546304	5.00	4.97	
175 3,3'-Dichlorobenzidine	252	12.470	12.471	-0.001	52	575144	10.0	9.70	
174 4,4'-Methylene bis(2-chlor	231		12.474					ND	
177 Benzo[a]anthracene	228	12.533	12.539	-0.006	88	873313	5.00	4.78	
178 Chrysene	228	12.571	12.577	-0.006	93	846806	5.00	5.07	
176 Hexabromobenzene	232		12.603					ND	
179 6-Methylchrysene	242		13.061					ND	
180 Di-n-octyl phthalate	149	13.100	13.096	0.004	99	931178	5.00	4.81	
281 Hexachlorophene	196		13.628					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.763					ND	
182 Benzo[b]fluoranthene	252	13.764	13.765	-0.001	84	821781	5.00	4.96	
183 Benzo[k]fluoranthene	252	13.797	13.803	-0.006	98	785869	5.00	4.71	
184 Benzo[a]pyrene	252	14.235	14.241	-0.006	74	771877	5.00	4.88	
185 3-Methylcholanthrene	268		14.797					ND	
187 Dibenz[a,h]acridine	279		15.783					ND	
186 Dibenz[a,j]acridine	279		15.878					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.245	16.246	-0.001	94	771937	5.00	4.82	
189 Dibenz(a,h)anthracene	278	16.245	16.261	-0.016	69	635953	5.00	4.81	
190 Benzo[g,h,i]perylene	276	16.836	16.847	-0.011	94	634427	5.00	4.78	
292 Dowanol Peak 2	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
270 Toxaphene	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
271 3 & 4 Phenoxyphenol	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
268 Endrin	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
258 Aldrin	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.524					ND	
165 4,4'-DDD	235		11.812					ND	
170 4,4'-DDT	235		12.072					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 191 Methyl Phenols,Total	100				0				10.3
S 245 Total Cresols	100				0				10.3
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
T 240 Trimethyl phosphate TIC	110	5.012	4.999	0.012	0	152			0
T 194 Decane TIC	142	6.094	5.799	0.294	1	1838			0
T 193 Hexamethylphosphoramide TI	135	6.820	6.495	0.320	1	593			0
T 234 2-Isopropylphenol TIC	121	7.243	7.244	-0.007	0	390			0

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.363	7.358	-0.001	0	264		0	
T 236 3-isopropylphenol TIC	121	7.363	7.358	-0.001	0	264		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.729	7.714	0.009	1	142		0	
T 231 2,3,7,8-TCDD	322	8.383	8.236	0.143	1	142		0	
T 195 Hydroquinone TIC	110	9.013	8.993	0.013	29	17441		0	
T 192 Octadecane (TIC)	254	9.647	9.600	0.047	1	221		0	
T 196 Kepone TIC	272	10.080	11.994	-1.920	3	4204		0.0259	
T 242 Triphenyl Phosphate TIC	326	12.028	11.994	0.028	0	230		0	
T 280 2,3,7,8-TCDD TIC	198	12.533	12.494	0.033	0	9622		0	
T 241 Tricresyl phosphate TIC	368	12.494	12.494	-0.006	0	45		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	14.057	13.994	0.057	0	222		0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L5 W_00005 Amount Added: 1.00 Units: mL

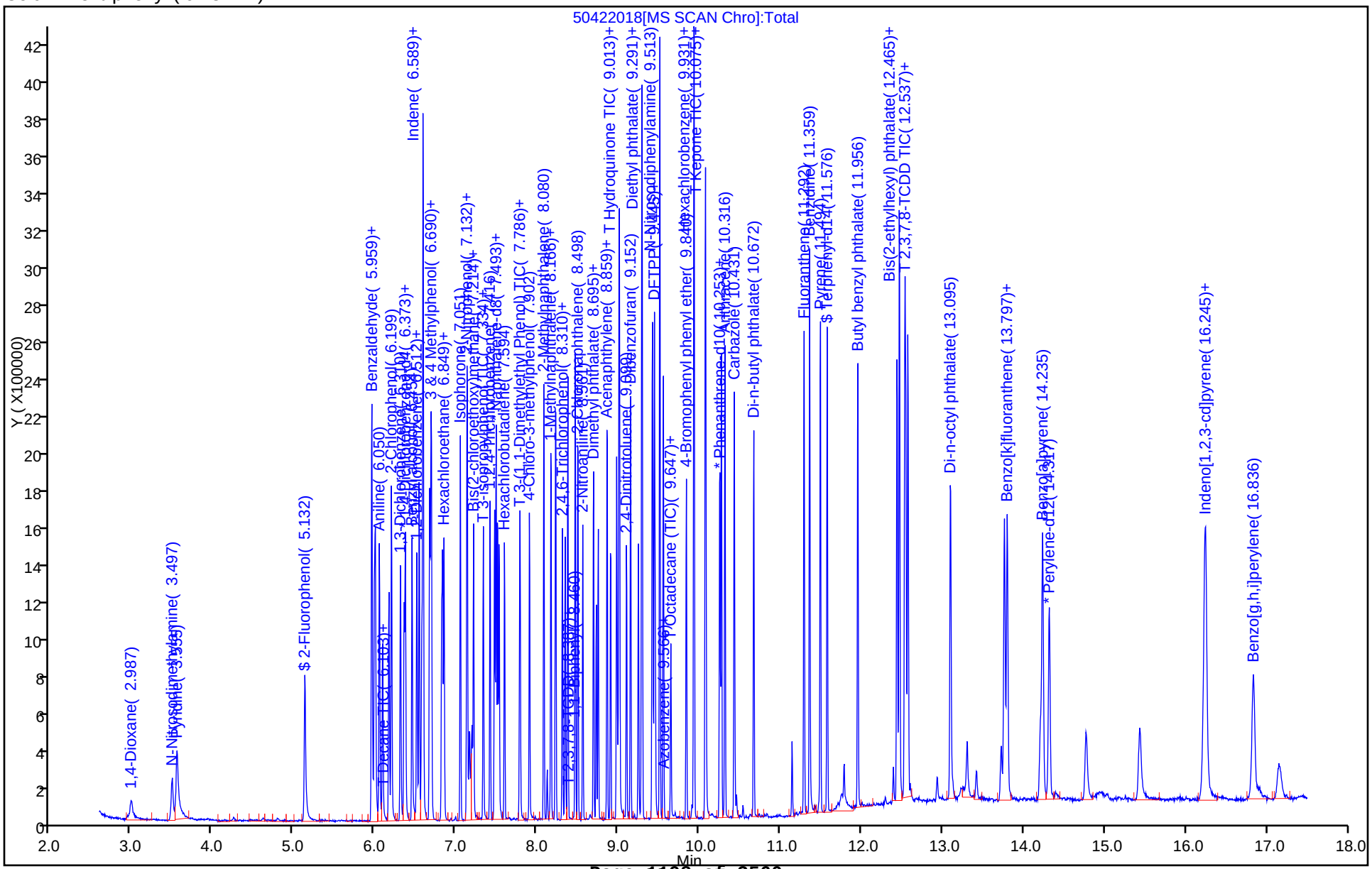
Report Date: 23-Apr-2015 11:00:55 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422018.D

Injection Date:	22-Apr-2015 14:44:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	mrl qccl			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

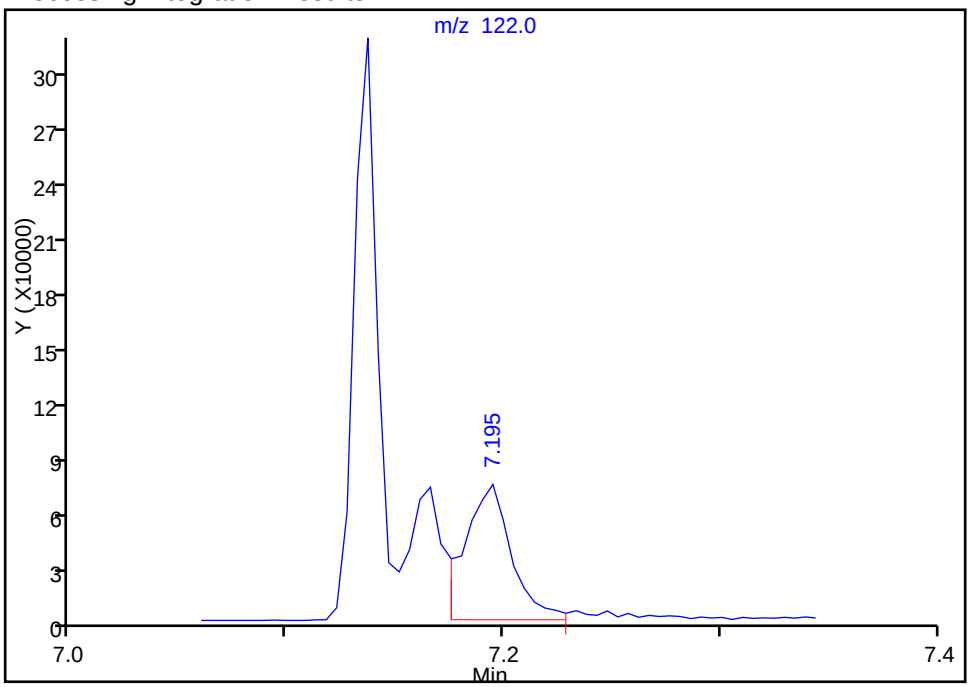
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150422-42803.b\50422018.D				
Injection Date:	22-Apr-2015 14:44:30	Instrument ID:	A4HP9		
Lims ID:	mrl qccl				
Client ID:					
Operator ID:	001574	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

71 Benzoic acid, CAS: 65-85-0

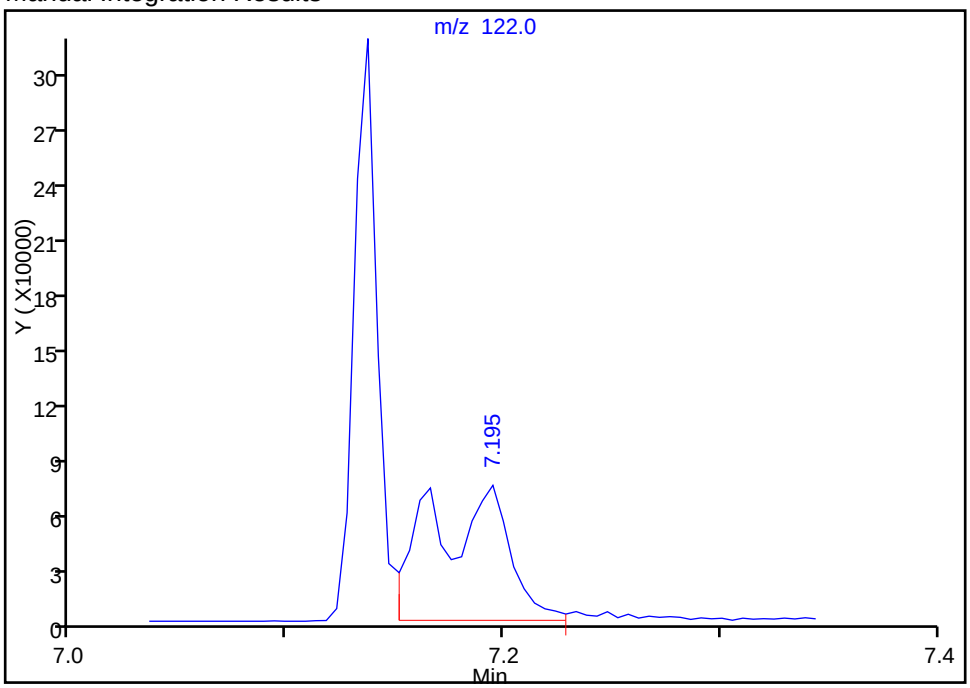
Processing Integration Results

RT: 7.19
Area: 111095
Amount: 4.991138
Amount Units: ng/ul



Manual Integration Results

RT: 7.19
Area: 180426
Amount: 7.204289
Amount Units: ng/ul



Reviewer: ulmanm, 22-Apr-2015 15:14:26
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A4HP9 Start Date: 04/20/2015 08:28

Analysis Batch Number: 177011 End Date: 04/20/2015 20:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-177011/1		04/20/2015 08:28	1	50420001.D	RXI-5SILMS 0.45(mm)
STD5 240-177011/2 IC		04/20/2015 08:49	1	50420002.D	RXI-5SILMS 0.45(mm)
STD4 240-177011/3 IC		04/20/2015 09:14	1	50420003.D	RXI-5SILMS 0.45(mm)
STD3 240-177011/4 IC		04/20/2015 09:40	1	50420004.D	RXI-5SILMS 0.45(mm)
STD2 240-177011/5 IC		04/20/2015 10:05	1	50420005.D	RXI-5SILMS 0.45(mm)
STD1 240-177011/6 IC		04/20/2015 10:31	1	50420006.D	RXI-5SILMS 0.45(mm)
STD9 240-177011/7 IC		04/20/2015 10:56	1	50420007.D	RXI-5SILMS 0.45(mm)
STD8 240-177011/8 IC		04/20/2015 11:22	1	50420008.D	RXI-5SILMS 0.45(mm)
STD7 240-177011/9 IC		04/20/2015 11:47	1	50420009.D	RXI-5SILMS 0.45(mm)
STD6 240-177011/10 ICIS		04/20/2015 12:41	1	50420010.D	RXI-5SILMS 0.45(mm)
ICV 240-177011/11		04/20/2015 13:07	1	50420011.D	RXI-5SILMS 0.45(mm)
STD5 240-177011/12 IC		04/20/2015 13:33	1		RXI-5SILMS 0.45(mm)
STD4 240-177011/13 IC		04/20/2015 13:59	1		RXI-5SILMS 0.45(mm)
STD3 240-177011/14 IC		04/20/2015 14:24	1		RXI-5SILMS 0.45(mm)
STD2 240-177011/15 IC		04/20/2015 14:48	1		RXI-5SILMS 0.45(mm)
STD6 240-177011/16 IC		04/20/2015 15:13	1		RXI-5SILMS 0.45(mm)
STD7 240-177011/17 IC		04/20/2015 15:37	1		RXI-5SILMS 0.45(mm)
STD8 240-177011/18 IC		04/20/2015 16:02	1		RXI-5SILMS 0.45(mm)
STD9 240-177011/19 IC		04/20/2015 16:27	1		RXI-5SILMS 0.45(mm)
ICV 240-177011/20		04/20/2015 16:51	1		RXI-5SILMS 0.45(mm)
STD5 240-177011/21 IC		04/20/2015 17:16	1		RXI-5SILMS 0.45(mm)
STD4 240-177011/22 IC		04/20/2015 17:41	1		RXI-5SILMS 0.45(mm)
STD3 240-177011/23 IC		04/20/2015 18:05	1		RXI-5SILMS 0.45(mm)
STD2 240-177011/24 IC		04/20/2015 18:30	1		RXI-5SILMS 0.45(mm)
STD6 240-177011/25 IC		04/20/2015 18:54	1		RXI-5SILMS 0.45(mm)
STD7 240-177011/26 IC		04/20/2015 19:19	1		RXI-5SILMS 0.45(mm)
STD8 240-177011/27 IC		04/20/2015 19:43	1		RXI-5SILMS 0.45(mm)
STD9 240-177011/28 IC		04/20/2015 20:08	1		RXI-5SILMS 0.45(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A4HP9 Start Date: 04/22/2015 07:14

Analysis Batch Number: 177355 End Date: 04/22/2015 16:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-177355/1		04/22/2015 07:14	1	50422001.D	RXI-5SILMS 0.45(mm)
CCV 240-177355/2		04/22/2015 07:35	1	50422002.D	RXI-5SILMS 0.45(mm)
MRL 240-177355/3		04/22/2015 08:04	1	50422003.D	RXI-5SILMS 0.45(mm)
ZZZZZ		04/22/2015 08:29	1		RXI-5SILMS 0.45(mm)
ZZZZZ		04/22/2015 08:54	1		RXI-5SILMS 0.45(mm)
MB 240-176319/23-A		04/22/2015 09:19	1	50422006.D	RXI-5SILMS 0.45(mm)
LCS 240-176319/24-A		04/22/2015 09:44	1	50422007.D	RXI-5SILMS 0.45(mm)
ZZZZZ		04/22/2015 10:09	1		RXI-5SILMS 0.45(mm)
ZZZZZ		04/22/2015 10:34	1		RXI-5SILMS 0.45(mm)
ZZZZZ		04/22/2015 10:59	1		RXI-5SILMS 0.45(mm)
ZZZZZ		04/22/2015 11:24	1		RXI-5SILMS 0.45(mm)
ZZZZZ		04/22/2015 11:49	1		RXI-5SILMS 0.45(mm)
ZZZZZ		04/22/2015 12:14	1		RXI-5SILMS 0.45(mm)
240-49171-10	079SB-0354M-0001-SO	04/22/2015 12:39	1	50422014.D	RXI-5SILMS 0.45(mm)
240-49171-8	079SB-0353M-0001-SO	04/22/2015 13:04	1	50422015.D	RXI-5SILMS 0.45(mm)
240-49171-6	079SB-0352M-0001-SO	04/22/2015 13:29	1	50422016.D	RXI-5SILMS 0.45(mm)
ZZZZZ		04/22/2015 13:54	1		RXI-5SILMS 0.45(mm)
MRL 240-177355/18		04/22/2015 14:44	1	50422018.D	RXI-5SILMS 0.45(mm)
LODV 240-177355/19		04/22/2015 15:09	1	50422019.D	RXI-5SILMS 0.45(mm)
LODV 240-177355/20		04/22/2015 15:34	1	50422020.D	RXI-5SILMS 0.45(mm)
LODV 240-177355/21		04/22/2015 15:59	1	50422021.D	RXI-5SILMS 0.45(mm)
LODV 240-177355/48		04/22/2015 16:24	1	50422048.D	RXI-5SILMS 0.45(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176319 Batch Start Date: 04/14/15 11:00 Batch Analyst: Earle, Steve

Batch Method: 3540C Batch End Date: 04/15/15 03:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	EXBenzaldehyd 00019	EXBNASPIKE 00038	EXBNASURR W 00021	
240-49171-A-6-A	079SB-0352M-0001 -SO	3540C, 8270C	T	30.43 g	2 mL			1 mL	
240-49171-A-10-A	079SB-0354M-0001 -SO	3540C, 8270C	T	30.04 g	2 mL			1 mL	
240-49171-A-8-A	079SB-0353M-0001 -SO	3540C, 8270C	T	29.60 g	2 mL			1 mL	
MB 240-176319/23		3540C, 8270C		30 g	2 mL			1 mL	
LCS 240-176319/24		3540C, 8270C		30 g	2 mL	1 mL	1 mL	1 mL	

Batch Notes	
Balance ID	1339912
Na2SO4 Lot Number	1942694
Prep Solvent Lot #	1937120

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8081 DOD

Organochlorine Pesticides (GC) by Method 8081/DOD

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-2 ID: 0.53 (mm) GC Column (2): CLP-1 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1	#	TCX2	#	DCB1	#	DCB2	#
079SB-0352M-0001-SO RE	240-49171-6 RE	89		96	Q	89	Q	93	Q
079SB-0353M-0001-SO RE	240-49171-8 RE	65	Q	71	Q	59	Q	57	Q
079SB-0354M-0001-SO RE	240-49171-10 RE	102		100	Q	96	Q	96	Q
	MB 240-177037/7-A	98		100		103		105	
	LCS 240-177037/8-A	84		90		89		95	

	QC LIMITS
TCX = Tetrachloro-m-xylene	70-125
DCB = DCB Decachlorobiphenyl	55-130

Column to be used to flag recovery values

FORM II 8081A

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): CLP-2 ID: 0.53 (mm) GC Column (2): CLP-1 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCB1 #	DCB2 #
	MRL 240-177258/31	120	116	123	123
	MRL 240-177258/49	118	117	117	116
	MRL 240-177463/18	113	108	110	114
	MRL 240-177463/21	117	111	115	114

	QC LIMITS
TCX = Tetrachloro-m-xylene	50-150
DCB = DCB Decachlorobiphenyl	50-150

Column to be used to flag recovery values

FORM II 8081A

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P3042219.D

Lab ID: LCS 240-177037/8-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
4,4'-DDD	33.3	32.6	98	30-135	
4,4'-DDE	33.3	25.9	78	70-125	
4,4'-DDT	33.3	30.8	92	45-140	
Aldrin	33.3	23.1	69	45-140	
alpha-BHC	33.3	28.8	86	60-125	
alpha-Chlordane	33.3	27.7	83	65-120	
beta-BHC	33.3	26.6	80	60-125	
delta-BHC	33.3	28.4	85	55-130	
Dieldrin	33.3	29.1	87	65-125	
Endosulfan I	33.3	16.8	50	15-135	
Endosulfan II	33.3	22.8	68	35-140	
Endosulfan sulfate	33.3	28.4	85	60-135	
Endrin	33.3	30.1	90	60-135	
Endrin aldehyde	33.3	27.8	83	35-145	
Endrin ketone	33.3	27.0	81	65-135	
gamma-BHC (Lindane)	33.3	29.1	87	60-125	
gamma-Chlordane	33.3	28.2	85	65-125	
Heptachlor	33.3	31.5	94	50-140	
Heptachlor epoxide	33.3	28.7	86	65-130	
Methoxychlor	33.3	30.7	92	55-145	

Column to be used to flag recovery and RPD values

FORM III 8081A

FORM III
GC SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P3042131.D

Lab ID: MRL 240-177258/31 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
4,4'-DDD	5.00	5.36	107	70-130	
4,4'-DDD	5.00	5.27	105	70-130	
4,4'-DDE	5.00	5.45	109	70-130	
4,4'-DDE	5.00	5.62	112	70-130	
4,4'-DDT	5.00	4.88	98	70-130	
4,4'-DDT	5.00	4.99	100	70-130	
Aldrin	5.00	5.49	110	70-130	
Aldrin	5.00	5.59	112	70-130	
alpha-BHC	5.00	5.33	107	70-130	
alpha-BHC	5.00	5.41	108	70-130	
alpha-Chlordane	5.00	5.66	113	70-130	
alpha-Chlordane	5.00	5.78	116	70-130	
beta-BHC	5.00	6.10	122	70-130	
beta-BHC	5.00	6.12	122	70-130	
delta-BHC	5.00	5.07	101	70-130	
delta-BHC	5.00	5.22	104	70-130	
Dieldrin	5.00	5.61	112	70-130	
Dieldrin	5.00	5.81	116	70-130	
Endosulfan I	5.00	5.86	117	70-130	
Endosulfan I	5.00	6.00	120	70-130	
Endosulfan II	5.00	6.21	124	70-130	
Endosulfan II	5.00	6.43	129	70-130	
Endosulfan sulfate	5.00	6.06	121	70-130	
Endosulfan sulfate	5.00	6.12	122	70-130	
Endrin	5.00	5.75	115	70-130	
Endrin	5.00	5.81	116	70-130	
Endrin aldehyde	5.00	6.03	121	70-130	
Endrin aldehyde	5.00	6.07	121	70-130	
Endrin ketone	5.00	5.88	118	70-130	
Endrin ketone	5.00	5.82	116	70-130	
gamma-BHC (Lindane)	5.00	5.48	110	70-130	
gamma-BHC (Lindane)	5.00	5.54	111	70-130	
gamma-Chlordane	5.00	5.54	111	70-130	
gamma-Chlordane	5.00	5.77	115	70-130	
Heptachlor	5.00	5.88	118	70-130	
Heptachlor	5.00	6.12	122	70-130	
Heptachlor epoxide	5.00	5.86	117	70-130	
Heptachlor epoxide	5.00	6.00	120	70-130	
Methoxychlor	5.00	5.97	119	70-130	
Methoxychlor	5.00	6.05	121	70-130	

Column to be used to flag recovery and RPD values

FORM III 8081A

FORM III
GC SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P3042149.D

Lab ID: MRL 240-177258/49 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
4,4'-DDD	5.00	5.35	107	70-130	
4,4'-DDD	5.00	5.23	105	70-130	
4,4'-DDE	5.00	5.35	107	70-130	
4,4'-DDE	5.00	5.45	109	70-130	
4,4'-DDT	5.00	3.49	70	70-130	
4,4'-DDT	5.00	3.45	69	70-130	^
Aldrin	5.00	5.43	109	70-130	
Aldrin	5.00	5.55	111	70-130	
alpha-BHC	5.00	5.37	107	70-130	
alpha-BHC	5.00	5.38	108	70-130	
alpha-Chlordane	5.00	5.57	111	70-130	
alpha-Chlordane	5.00	5.64	113	70-130	
beta-BHC	5.00	5.80	116	70-130	
beta-BHC	5.00	6.04	121	70-130	
delta-BHC	5.00	4.82	96	70-130	
delta-BHC	5.00	4.89	98	70-130	
Dieldrin	5.00	5.56	111	70-130	
Dieldrin	5.00	5.67	113	70-130	
Endosulfan I	5.00	5.78	116	70-130	
Endosulfan I	5.00	5.87	117	70-130	
Endosulfan II	5.00	6.16	123	70-130	
Endosulfan II	5.00	6.49	130	70-130	
Endosulfan sulfate	5.00	5.67	113	70-130	
Endosulfan sulfate	5.00	5.64	113	70-130	
Endrin	5.00	5.61	112	70-130	
Endrin	5.00	5.42	108	70-130	
Endrin aldehyde	5.00	5.29	106	70-130	
Endrin aldehyde	5.00	5.21	104	70-130	
Endrin ketone	5.00	5.38	108	70-130	
Endrin ketone	5.00	5.35	107	70-130	
gamma-BHC (Lindane)	5.00	5.36	107	70-130	
gamma-BHC (Lindane)	5.00	5.46	109	70-130	
gamma-Chlordane	5.00	5.45	109	70-130	
gamma-Chlordane	5.00	5.65	113	70-130	
Heptachlor	5.00	5.73	115	70-130	
Heptachlor	5.00	5.96	119	70-130	
Heptachlor epoxide	5.00	5.76	115	70-130	
Heptachlor epoxide	5.00	5.86	117	70-130	
Methoxychlor	5.00	4.23	85	70-130	
Methoxychlor	5.00	3.94	79	70-130	

Column to be used to flag recovery and RPD values

FORM III 8081A

FORM III
GC SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P3042218.D

Lab ID: MRL 240-177463/18 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
4,4'-DDD	5.00	3.82	76	70-130	
4,4'-DDD	5.00	3.99	80	70-130	
4,4'-DDE	5.00	4.48	90	70-130	
4,4'-DDE	5.00	4.80	96	70-130	
4,4'-DDT	5.00	3.60	72	70-130	
4,4'-DDT	5.00	3.63	73	70-130	
Aldrin	5.00	5.08	102	70-130	
Aldrin	5.00	5.27	105	70-130	
alpha-BHC	5.00	4.93	99	70-130	
alpha-BHC	5.00	5.04	101	70-130	
alpha-Chlordane	5.00	5.13	103	70-130	
alpha-Chlordane	5.00	5.27	105	70-130	
beta-BHC	5.00	5.49	110	70-130	
beta-BHC	5.00	5.53	111	70-130	
delta-BHC	5.00	4.34	87	70-130	
delta-BHC	5.00	4.37	87	70-130	
Dieldrin	5.00	5.01	100	70-130	
Dieldrin	5.00	5.30	106	70-130	
Endosulfan I	5.00	5.27	105	70-130	
Endosulfan I	5.00	5.49	110	70-130	
Endosulfan II	5.00	6.00	120	70-130	
Endosulfan II	5.00	6.34	127	70-130	
Endosulfan sulfate	5.00	5.49	110	70-130	
Endosulfan sulfate	5.00	5.32	106	70-130	
Endrin	5.00	5.07	101	70-130	
Endrin	5.00	5.09	102	70-130	
Endrin aldehyde	5.00	4.94	99	70-130	
Endrin aldehyde	5.00	4.95	99	70-130	
Endrin ketone	5.00	5.28	106	70-130	
Endrin ketone	5.00	5.23	105	70-130	
gamma-BHC (Lindane)	5.00	4.99	100	70-130	
gamma-BHC (Lindane)	5.00	5.12	102	70-130	
gamma-Chlordane	5.00	5.04	101	70-130	
gamma-Chlordane	5.00	5.25	105	70-130	
Heptachlor	5.00	5.36	107	70-130	
Heptachlor	5.00	5.78	116	70-130	
Heptachlor epoxide	5.00	5.37	107	70-130	
Heptachlor epoxide	5.00	5.56	111	70-130	
Methoxychlor	5.00	4.76	95	70-130	
Methoxychlor	5.00	4.19	84	70-130	

Column to be used to flag recovery and RPD values

FORM III 8081A

FORM III
GC SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P3042221.D

Lab ID: MRL 240-177463/21 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MRL CONCENTRATION (ug/L)	MRL % REC	QC LIMITS REC	#
4,4'-DDD	5.00	4.20	84	70-130	
4,4'-DDD	5.00	4.33	87	70-130	
4,4'-DDE	5.00	5.09	102	70-130	
4,4'-DDE	5.00	5.20	104	70-130	
4,4'-DDT	5.00	3.95	79	70-130	
4,4'-DDT	5.00	3.94	79	70-130	
Aldrin	5.00	5.25	105	70-130	
Aldrin	5.00	5.43	109	70-130	
alpha-BHC	5.00	5.14	103	70-130	
alpha-BHC	5.00	5.22	104	70-130	
alpha-Chlordane	5.00	5.31	106	70-130	
alpha-Chlordane	5.00	5.60	112	70-130	
beta-BHC	5.00	5.58	112	70-130	
beta-BHC	5.00	5.96	119	70-130	
delta-BHC	5.00	4.62	92	70-130	
delta-BHC	5.00	4.61	92	70-130	
Dieldrin	5.00	5.39	108	70-130	
Dieldrin	5.00	5.65	113	70-130	
Endosulfan I	5.00	5.58	112	70-130	
Endosulfan I	5.00	5.86	117	70-130	
Endosulfan II	5.00	6.01	120	70-130	
Endosulfan II	5.00	6.55	131	70-130	^
Endosulfan sulfate	5.00	5.59	112	70-130	
Endosulfan sulfate	5.00	5.75	115	70-130	
Endrin	5.00	5.44	109	70-130	
Endrin	5.00	5.41	108	70-130	
Endrin aldehyde	5.00	5.04	101	70-130	
Endrin aldehyde	5.00	5.05	101	70-130	
Endrin ketone	5.00	5.43	109	70-130	
Endrin ketone	5.00	5.49	110	70-130	
gamma-BHC (Lindane)	5.00	5.14	103	70-130	
gamma-BHC (Lindane)	5.00	5.37	107	70-130	
gamma-Chlordane	5.00	5.26	105	70-130	
gamma-Chlordane	5.00	5.59	112	70-130	
Heptachlor	5.00	5.60	112	70-130	
Heptachlor	5.00	6.02	120	70-130	
Heptachlor epoxide	5.00	5.57	111	70-130	
Heptachlor epoxide	5.00	5.80	116	70-130	
Methoxychlor	5.00	5.06	101	70-130	
Methoxychlor	5.00	4.61	92	70-130	

Column to be used to flag recovery and RPD values

FORM III 8081A

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: MB 240-177037/7-A

Matrix: Solid Date Extracted: 04/20/2015 09:00

Lab File ID:(1) P3042138.D Lab File ID:(2) P3042138.D

Date Analyzed:(1) 04/22/2015 03:02 Date Analyzed:(2) 04/22/2015 03:02

Instrument ID:(1) A2HP3 Instrument ID:(2) A2HP3

GC Column:(1) CLP-2 ID: 0.53(mm) GC Column:(2) CLP-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
079SB-0352M-0001-SO RE	240-49171-6 RE	04/22/2015 01:54	04/22/2015 01:54
079SB-0353M-0001-SO RE	240-49171-8 RE	04/22/2015 02:17	04/22/2015 02:17
079SB-0354M-0001-SO RE	240-49171-10 RE	04/22/2015 02:39	04/22/2015 02:39
	LCS 240-177037/8-A	04/22/2015 21:41	04/22/2015 21:41

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: STD 240-174448/27 Date Analyzed: 03/31/2015 21:20

Instrument ID: A2HP3 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): P3033127.D Heated Purge: (Y/N) N

Calibration ID: 27642

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
INITIAL CALIBRATION SURROGATE				3.60	13.01	
UPPER LIMIT				3.63	13.04	
LOWER LIMIT				3.57	12.98	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD 240-174448/27 ICRT		03/31/2015 21:20	P3033127.D	3.60	13.01	

Column used to flag values outside QC limits

FORM VIII 8081A

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: STD 240-174448/27 Date Analyzed: 03/31/2015 21:20

Instrument ID: A2HP3 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P3033127.D Heated Purge: (Y/N) N

Calibration ID: 27643

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
INITIAL CALIBRATION SURROGATE				4.29	14.57	
UPPER LIMIT				4.32	14.60	
LOWER LIMIT				4.26	14.54	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD 240-174448/27 ICRT		03/31/2015 21:20	P3033127.D	4.29	14.57	

Column used to flag values outside QC limits

FORM VIII 8081A

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: CCV 240-177258/10 Date Analyzed: 04/21/2015 16:19

Instrument ID: A2HP3 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): P3042110.D Heated Purge: (Y/N) N

Calibration ID: 27642

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				3.56	12.94	
UPPER LIMIT				3.59	12.97	
LOWER LIMIT				3.53	12.91	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-177258/10 CCVRT		04/21/2015 16:19	P3042110.D	3.56	12.94	
PEM 240-177258/27		04/21/2015 22:49	P3042127.D	3.55		
CCV 240-177258/28		04/21/2015 23:12	P3042128.D	3.55	12.94	
240-49171-6 RE	079SB-0352M-0001-SO RE	04/22/2015 01:54	P3042135.D	3.56	12.94	
240-49171-8 RE	079SB-0353M-0001-SO RE	04/22/2015 02:17	P3042136.D	3.55	12.94	
240-49171-10 RE	079SB-0354M-0001-SO RE	04/22/2015 02:39	P3042137.D	3.56	12.94	
MB 240-177037/7-A		04/22/2015 03:02	P3042138.D	3.55	12.94	
CCV 240-177258/40		04/22/2015 03:48	P3042140.D	3.55	12.94	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0 minutes of surrogate RT
DCB RT Limit = ± 0 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8081A

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: CCV 240-177258/10 Date Analyzed: 04/21/2015 16:19

Instrument ID: A2HP3 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P3042110.D Heated Purge: (Y/N) N

Calibration ID: 27643

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				4.23	14.49	
UPPER LIMIT				4.26	14.52	
LOWER LIMIT				4.20	14.46	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-177258/10 CCVRT		04/21/2015 16:19	P3042110.D	4.23	14.49	
PEM 240-177258/27		04/21/2015 22:49	P3042127.D	4.24		
CCV 240-177258/28		04/21/2015 23:12	P3042128.D	4.24	14.49	
240-49171-6 RE	079SB-0352M-0001-SO RE	04/22/2015 01:54	P3042135.D	4.24	14.49	
240-49171-8 RE	079SB-0353M-0001-SO RE	04/22/2015 02:17	P3042136.D	4.24	14.49	
240-49171-10 RE	079SB-0354M-0001-SO RE	04/22/2015 02:39	P3042137.D	4.24	14.49	
MB 240-177037/7-A		04/22/2015 03:02	P3042138.D	4.24	14.49	
CCV 240-177258/40		04/22/2015 03:48	P3042140.D	4.24	14.49	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0 minutes of surrogate RT
DCB RT Limit = ± 0 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8081A

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: CCV 240-177463/8 Date Analyzed: 04/22/2015 17:19

Instrument ID: A2HP3 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): P3042208.D Heated Purge: (Y/N) N

Calibration ID: 27642

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				3.56	12.94	
UPPER LIMIT				3.59	12.97	
LOWER LIMIT				3.53	12.91	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-177463/8 CCVRT		04/22/2015 17:19	P3042208.D	3.56	12.94	
CCV 240-177463/16		04/22/2015 20:29	P3042216.D	3.56	12.94	
LCS 240-177037/8-A		04/22/2015 21:41	P3042219.D	3.56	12.94	
CCV 240-177463/24		04/22/2015 23:37	P3042224.D	3.56	12.94	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0 minutes of surrogate RT
DCB RT Limit = ± 0 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8081A

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: CCV 240-177463/8 Date Analyzed: 04/22/2015 17:19

Instrument ID: A2HP3 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P3042208.D Heated Purge: (Y/N) N

Calibration ID: 27643

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				4.24	14.49	
UPPER LIMIT				4.27	14.52	
LOWER LIMIT				4.21	14.46	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-177463/8 CCVRT		04/22/2015 17:19	P3042208.D	4.24	14.49	
CCV 240-177463/16		04/22/2015 20:29	P3042216.D	4.23	14.49	
LCS 240-177037/8-A		04/22/2015 21:41	P3042219.D	4.24	14.49	
CCV 240-177463/24		04/22/2015 23:37	P3042224.D	4.24	14.49	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0 minutes of surrogate RT
DCB RT Limit = ± 0 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8081A

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO RE Lab Sample ID: 240-49171-6 RE

Instrument ID (1): A2HP3 Instrument ID (2): A2HP3

Date Analyzed (1): 04/22/2015 01:54 Date Analyzed (2): 04/22/2015 01:54

GC Column (1): CLP-2 ID: 0.53(mm) GC Column (2): CLP-1 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		10.01	9.98	10.04	0.34		92.7
	2		8.07	8.03	8.09	0.92		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-177037/8-A

Instrument ID (1): A2HP3 Instrument ID (2): A2HP3

Date Analyzed (1): 04/22/2015 21:41 Date Analyzed (2): 04/22/2015 21:41

GC Column (1): CLP-2 ID: 0.53(mm) GC Column (2): CLP-1 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
alpha-BHC	1		5.13	5.10	5.16	29.9		3.7
	2		4.25	4.22	4.28	28.8		
gamma-BHC (Lindane)	1		5.75	5.72	5.78	29.6		1.8
	2		4.64	4.61	4.67	29.1		
beta-BHC	1		5.95	5.92	5.98	26.8		0.8
	2		4.78	4.75	4.81	26.6		
delta-BHC	1		6.57	6.54	6.60	25.1		12.4
	2		5.00	4.97	5.03	28.4		
Heptachlor	1		6.65	6.62	6.68	29.1		8.0
	2		5.28	5.25	5.31	31.5		
Aldrin	1		7.46	7.43	7.49	28.8		21.7
	2		5.75	5.72	5.78	23.1		
Heptachlor epoxide	1		8.89	8.86	8.92	30.4		5.7
	2		7.02	7.00	7.06	28.7		
gamma-Chlordane	1		9.28	9.25	9.31	27.9		1.1
	2		7.34	7.31	7.37	28.2		
alpha-Chlordane	1		9.58	9.55	9.61	28.3		2.0
	2		7.68	7.65	7.71	27.7		
Endosulfan I	1		9.65	9.62	9.68	21.6		25.3
	2		7.96	7.93	7.99	16.8		
4,4'-DDE	1		10.01	9.98	10.04	29.4		12.7
	2		8.05	8.04	8.10	25.9		
Dieldrin	1		10.17	10.14	10.20	30.2		3.8
	2		8.51	8.48	8.54	29.1		
Endrin	1		10.68	10.65	10.71	30.0		0.2
	2		8.96	8.94	9.00	30.1		
4,4'-DDD	1		11.00	10.98	11.04	31.4		3.8
	2		9.32	9.30	9.36	32.6		
Endosulfan II	1		11.05	11.02	11.08	24.1		5.7
	2		9.41	9.39	9.45	22.8		
4,4'-DDT	1		11.48	11.46	11.52	29.9		2.8
	2		9.84	9.81	9.87	30.8		
Endrin aldehyde	1		11.61	11.58	11.64	28.6		2.9
	2		10.21	10.18	10.24	27.8		
Endosulfan sulfate	1		12.03	12.00	12.06	28.6		0.7
	2		10.93	10.91	10.97	28.4		
Methoxychlor	1		12.55	12.52	12.58	30.6		0.2
	2		10.79	10.77	10.83	30.7		
Endrin ketone	1		12.77	12.74	12.80	27.8		2.8
	2		11.33	11.31	11.37	27.0		

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO RE | Lab Sample ID: 240-49171-6 RE

Matrix: Solid | Lab File ID: P3042135.D

Analysis Method: 8081A | Date Collected: 04/08/2015 10:27

Extraction Method: 3540C | Date Extracted: 04/20/2015 09:00

Sample wt/vol: 30.31(g) | Date Analyzed: 04/22/2015 01:54

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 2.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	0.43	U Q	2.0	0.43	0.20
50-29-3	4,4'-DDT	0.84	U Q	2.0	0.84	0.31
309-00-2	Aldrin	0.84	U	4.0	0.84	0.20
5103-71-9	alpha-Chlordane	0.84	U	3.0	0.84	0.25
319-86-8	delta-BHC	0.84	U	4.0	0.84	0.22
60-57-1	Dieldrin	0.43	U Q	1.7	0.43	0.16
959-98-8	Endosulfan I	0.84	U	1.7	0.84	0.25
33213-65-9	Endosulfan II	0.84	U Q	2.5	0.84	0.38
1031-07-8	Endosulfan sulfate	0.84	U Q	3.0	0.84	0.34
72-20-8	Endrin	0.84	U Q	1.7	0.84	0.21
7421-93-4	Endrin aldehyde	0.84	U	3.0	0.84	0.32
53494-70-5	Endrin ketone	1.7	U	2.0	1.7	0.43
58-89-9	gamma-BHC (Lindane)	1.7	U Q	2.5	1.7	0.47
5103-74-2	gamma-Chlordane	1.7	U	1.7	1.7	0.87
76-44-8	Heptachlor	1.7	U Q	3.5	1.7	0.71
1024-57-3	Heptachlor epoxide	1.7	U Q	2.5	1.7	0.40
72-43-5	Methoxychlor	1.7	U Q	5.1	1.7	0.55
8001-35-2	Toxaphene	17	U	68	17	9.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	93	Q	55-130
877-09-8	Tetrachloro-m-xylene	96	Q	70-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042135.D
Lims ID: 240-49171-A-6-J Lab Sample ID: 240-49171-6
Client ID: 079SB-0352M-0001-SO
Sample Type: Client
Inject. Date: 22-Apr-2015 01:54:12 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-035
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:32:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene						
1	3.555	3.554	0.001	18794409	19.1	
2	4.236	4.235	0.001	20102945	17.8	
					RPD = 6.89	
4 alpha-BHC						
1	4.257	4.250	0.007	3324917	1.92	
2	5.125	5.129	-0.004	1924924	0.9833	
					RPD = 64.52	
5 gamma-BHC (Lindane)						
1		4.639			ND	
2		5.752				
6 beta-BHC						
1	4.768	4.776	-0.008	742061	1.18	
2	5.940	5.951	-0.011	509697	0.6634	
					RPD = 55.91	
7 delta-BHC						
1		4.999			ND	
2		6.574				
9 Heptachlor						
1		5.284			ND	
2		6.654				
10 Aldrin						
1		5.750			ND	
2		7.460				
12 Heptachlor epoxide						
1		7.023			ND	
2		8.891				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
13 gamma-Chlordane						
1		7.339			ND	
2		9.285				
14 alpha-Chlordane						
1		7.684			ND	
2		9.584				
15 Endosulfan I						
1		7.959			ND	
2		9.653				
16 4,4'-DDE						
1	8.072	8.057	0.015	3238468	2.73	
2	10.005	10.012	-0.007	1324022	1.00	
					RPD = 92.65	
17 Dieldrin						
1		8.510			ND	
2		10.168				
18 Endrin						
1		8.963			ND	
2		10.681				
20 4,4'-DDD						
1		9.326			ND	
2		11.006				
21 Endosulfan II						
1		9.413			ND	
2		11.051				
24 Toxaphene						
1		9.622			ND	
1		10.081				
1		10.393				
1		10.735				
1		10.840				
2		11.025				
2		11.195				
2		11.618				
2		12.353				
2		12.444				
23 4,4'-DDT						
1		9.840			ND	
2		11.488				
25 Endrin aldehyde						
1		10.209			ND	
2		11.609				
27 Methoxychlor						
1		10.792			ND	
2		12.555				
28 Endosulfan sulfate						
1		10.933			ND	
2		12.032				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
29 Endrin ketone						
1		11.334			ND	
2		12.776				
$ 30 DCB Decachlorobiphenyl						
1	12.938	12.940	-0.002	17395367	18.6	
2	14.491	14.493	-0.002	18029647	17.7	
					RPD = 4.77	

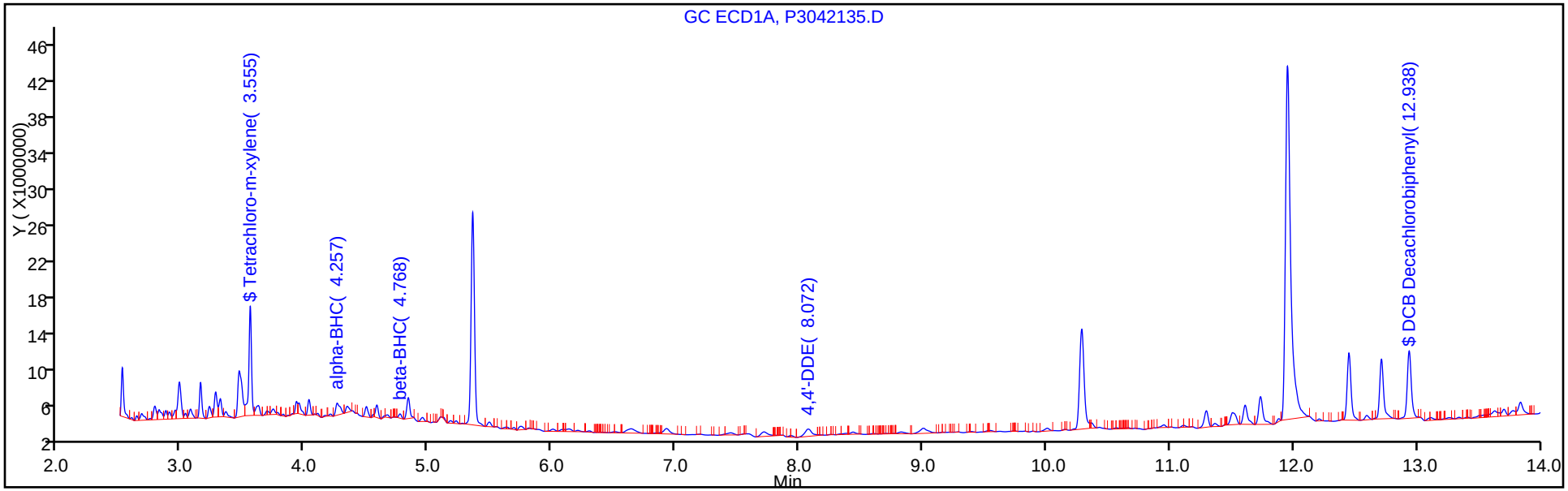
Report Date: 22-Apr-2015 08:58:09 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

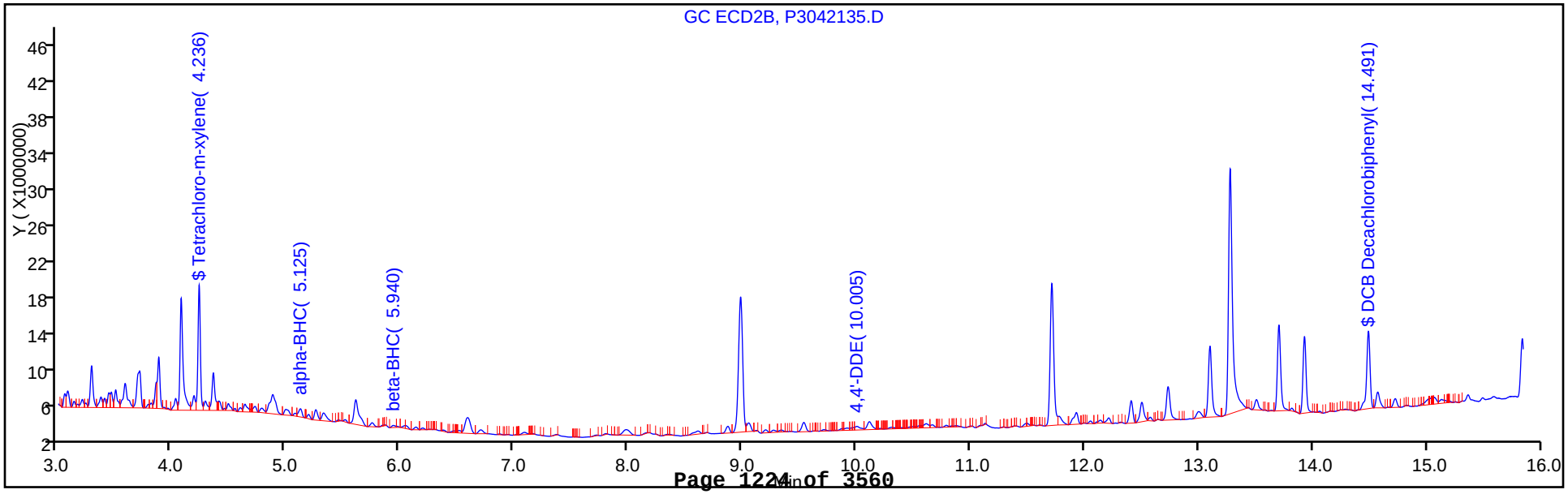
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042135.D

Injection Date:	22-Apr-2015 01:54:12	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	240-49171-A-6-J	Lab Sample ID:	240-49171-6	Worklist Smp#:	35
Client ID:	079SB-0352M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO RE Lab Sample ID: 240-49171-6 RE

Matrix: Solid Lab File ID: P3042135.D

Analysis Method: 8081A Date Collected: 04/08/2015 10:27

Extraction Method: 3540C Date Extracted: 04/20/2015 09:00

Sample wt/vol: 30.31(g) Date Analyzed: 04/22/2015 01:54

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 2.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-55-9	4,4'-DDE	0.34	J	1.7	0.43	0.27
319-84-6	alpha-BHC	1.7	U Q	2.5	1.7	0.61
319-85-7	beta-BHC	0.84	U	3.5	0.84	0.36

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	89	*Q*	55-130
877-09-8	Tetrachloro-m-xylene	89		70-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042135.D
Lims ID: 240-49171-A-6-J Lab Sample ID: 240-49171-6
Client ID: 079SB-0352M-0001-SO
Sample Type: Client
Inject. Date: 22-Apr-2015 01:54:12 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-035
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:32:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene						
1	3.555	3.554	0.001	18794409	19.1	
2	4.236	4.235	0.001	20102945	17.8	
					RPD = 6.89	
4 alpha-BHC						
1	4.257	4.250	0.007	3324917	1.92	
2	5.125	5.129	-0.004	1924924	0.9833	
					RPD = 64.52	
5 gamma-BHC (Lindane)						
1		4.639			ND	
2		5.752				
6 beta-BHC						
1	4.768	4.776	-0.008	742061	1.18	
2	5.940	5.951	-0.011	509697	0.6634	
					RPD = 55.91	
7 delta-BHC						
1		4.999			ND	
2		6.574				
9 Heptachlor						
1		5.284			ND	
2		6.654				
10 Aldrin						
1		5.750			ND	
2		7.460				
12 Heptachlor epoxide						
1		7.023			ND	
2		8.891				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
13 gamma-Chlordane						
1		7.339			ND	
2		9.285				
14 alpha-Chlordane						
1		7.684			ND	
2		9.584				
15 Endosulfan I						
1		7.959			ND	
2		9.653				
16 4,4'-DDE						
1	8.072	8.057	0.015	3238468	2.73	
2	10.005	10.012	-0.007	1324022	1.00	
					RPD = 92.65	
17 Dieldrin						
1		8.510			ND	
2		10.168				
18 Endrin						
1		8.963			ND	
2		10.681				
20 4,4'-DDD						
1		9.326			ND	
2		11.006				
21 Endosulfan II						
1		9.413			ND	
2		11.051				
24 Toxaphene						
1		9.622			ND	
1		10.081				
1		10.393				
1		10.735				
1		10.840				
2		11.025				
2		11.195				
2		11.618				
2		12.353				
2		12.444				
23 4,4'-DDT						
1		9.840			ND	
2		11.488				
25 Endrin aldehyde						
1		10.209			ND	
2		11.609				
27 Methoxychlor						
1		10.792			ND	
2		12.555				
28 Endosulfan sulfate						
1		10.933			ND	
2		12.032				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
29 Endrin ketone						
1		11.334			ND	
2		12.776				
$ 30 DCB Decachlorobiphenyl						
1	12.938	12.940	-0.002	17395367	18.6	
2	14.491	14.493	-0.002	18029647	17.7	
					RPD = 4.77	

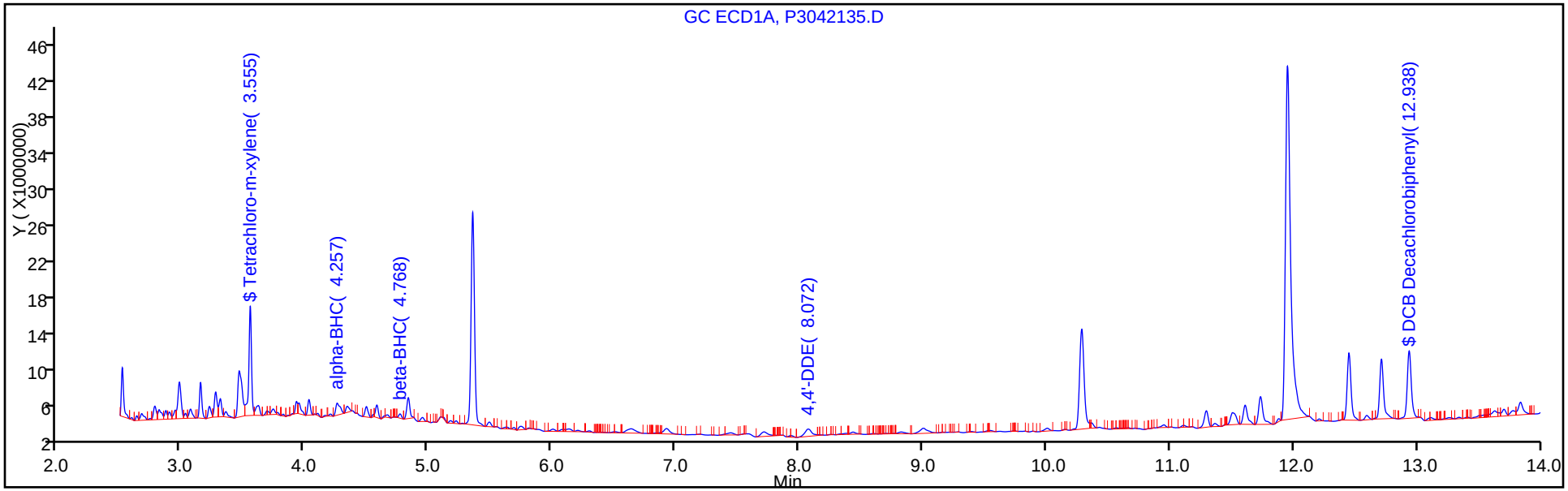
Report Date: 22-Apr-2015 08:58:09 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

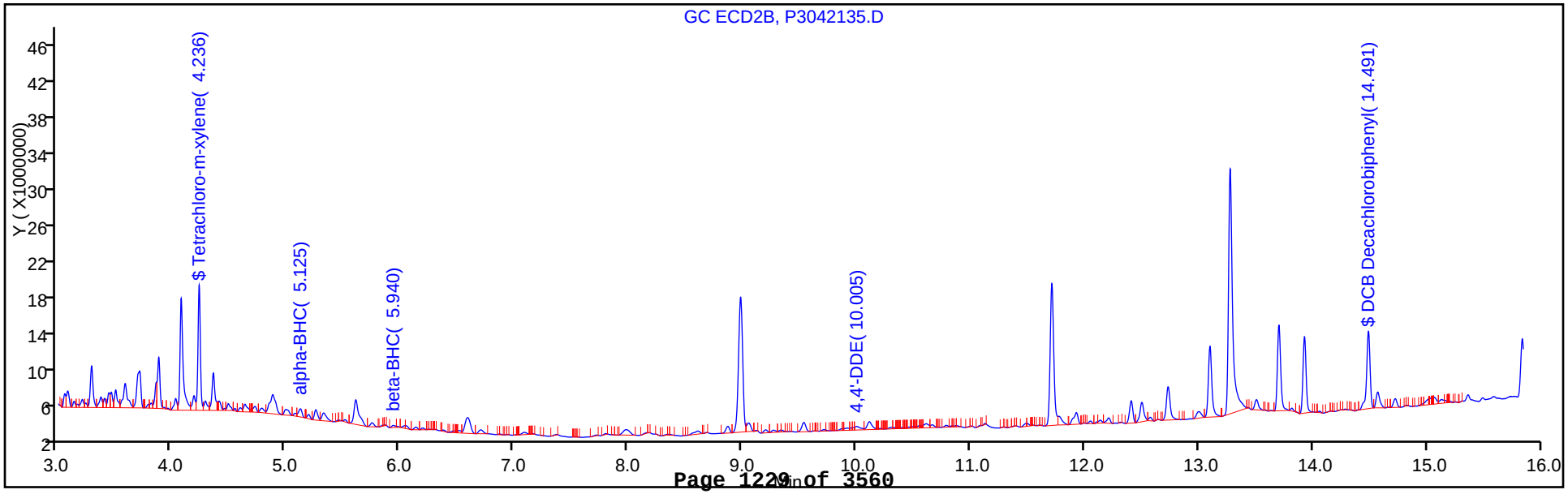
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042135.D

Injection Date:	22-Apr-2015 01:54:12	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	240-49171-A-6-J	Lab Sample ID:	240-49171-6	Worklist Smp#:	35
Client ID:	079SB-0352M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO RE | Lab Sample ID: 240-49171-8 RE

Matrix: Solid | Lab File ID: P3042136.D

Analysis Method: 8081A | Date Collected: 04/08/2015 09:57

Extraction Method: 3540C | Date Extracted: 04/20/2015 09:00

Sample wt/vol: 29.98(g) | Date Analyzed: 04/22/2015 02:17

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 2.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	0.43	U Q	2.1	0.43	0.21
72-55-9	4,4'-DDE	0.43	U Q	1.7	0.43	0.28
50-29-3	4,4'-DDT	0.85	U Q	2.1	0.85	0.32
309-00-2	Aldrin	0.85	U	4.1	0.85	0.21
319-84-6	alpha-BHC	1.7	U Q	2.6	1.7	0.62
5103-71-9	alpha-Chlordane	0.85	U	3.1	0.85	0.26
319-85-7	beta-BHC	0.85	U	3.6	0.85	0.37
319-86-8	delta-BHC	0.85	U	4.1	0.85	0.23
60-57-1	Dieldrin	0.43	U Q	1.7	0.43	0.16
959-98-8	Endosulfan I	0.85	U	1.7	0.85	0.26
33213-65-9	Endosulfan II	0.85	U Q	2.6	0.85	0.39
1031-07-8	Endosulfan sulfate	0.85	U Q	3.1	0.85	0.35
72-20-8	Endrin	0.85	U Q	1.7	0.85	0.22
7421-93-4	Endrin aldehyde	0.85	U	3.1	0.85	0.33
53494-70-5	Endrin ketone	1.7	U	2.1	1.7	0.43
58-89-9	gamma-BHC (Lindane)	1.7	U Q	2.6	1.7	0.47
5103-74-2	gamma-Chlordane	1.7	U	1.7	1.7	0.88
76-44-8	Heptachlor	1.7	U Q	3.6	1.7	0.72
1024-57-3	Heptachlor epoxide	1.7	U Q	2.6	1.7	0.41
72-43-5	Methoxychlor	1.7	U Q	5.1	1.7	0.55
8001-35-2	Toxaphene	17	U	69	17	10

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	57	Q	55-130
877-09-8	Tetrachloro-m-xylene	71	Q	70-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042136.D
Lims ID: 240-49171-A-8-H Lab Sample ID: 240-49171-8
Client ID: 079SB-0353M-0001-SO
Sample Type: Client
Inject. Date: 22-Apr-2015 02:17:04 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-036
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:33:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene						
1	3.554	3.554	0.000	13880795	14.1	
2	4.235	4.235	0.000	14701927	13.0	
					RPD = 7.87	
4 alpha-BHC						
1		4.250			ND	
2		5.129				
5 gamma-BHC (Lindane)						
1		4.639			ND	
2		5.752				
6 beta-BHC						
1	4.774	4.776	-0.002	461159	0.7322	
2	5.937	5.951	-0.014	644078	0.8382	
					RPD = 13.51	
7 delta-BHC						
1		4.999			ND	
2		6.574				
9 Heptachlor						
1		5.284			ND	
2		6.654				
10 Aldrin						
1		5.750			ND	
2		7.460				
12 Heptachlor epoxide						
1		7.023			ND	
2		8.891				
13 gamma-Chlordane						
1		7.339			ND	
2		9.285				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
14 alpha-Chlordane						
1		7.684			ND	
2		9.584				
15 Endosulfan I						
1		7.959			ND	
2		9.653				
16 4,4'-DDE						
1		8.057			ND	
2		10.012				
17 Dieldrin						
1		8.510			ND	
2		10.168				
18 Endrin						
1		8.963			ND	
2		10.681				
20 4,4'-DDD						
1		9.326			ND	
2		11.006				
21 Endosulfan II						
1		9.413			ND	
2		11.051				
24 Toxaphene						
1		9.622			ND	
1		10.081				
1		10.393				
1		10.735				
1		10.840				
2		11.025				
2		11.195				
2		11.618				
2		12.353				
2		12.444				
23 4,4'-DDT						
1		9.840			ND	
2		11.488				
25 Endrin aldehyde						
1		10.209			ND	
2		11.609				
27 Methoxychlor						
1		10.792			ND	
2		12.555				
28 Endosulfan sulfate						
1		10.933			ND	
2		12.032				
29 Endrin ketone						
1		11.334			ND	
2		12.776				
$ 30 DCB Decachlorobiphenyl						
1	12.938	12.940	-0.002	10759541	11.5	
2	14.491	14.493	-0.002	11951306	11.7	

RPD = 2.16

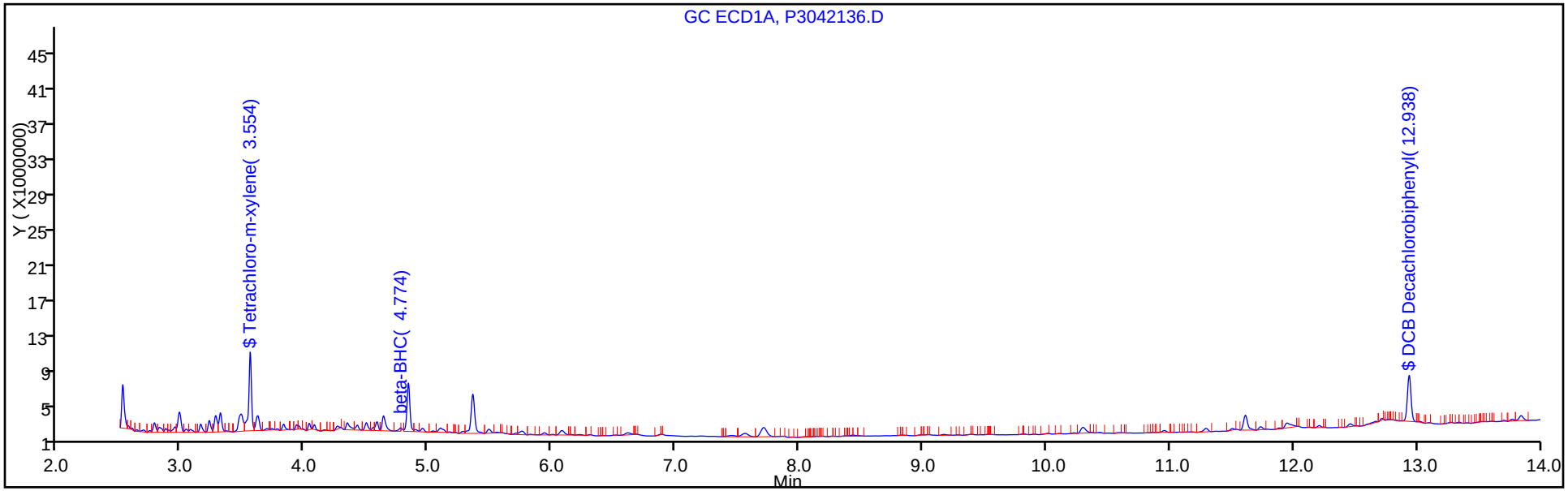
Report Date: 22-Apr-2015 08:58:10 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

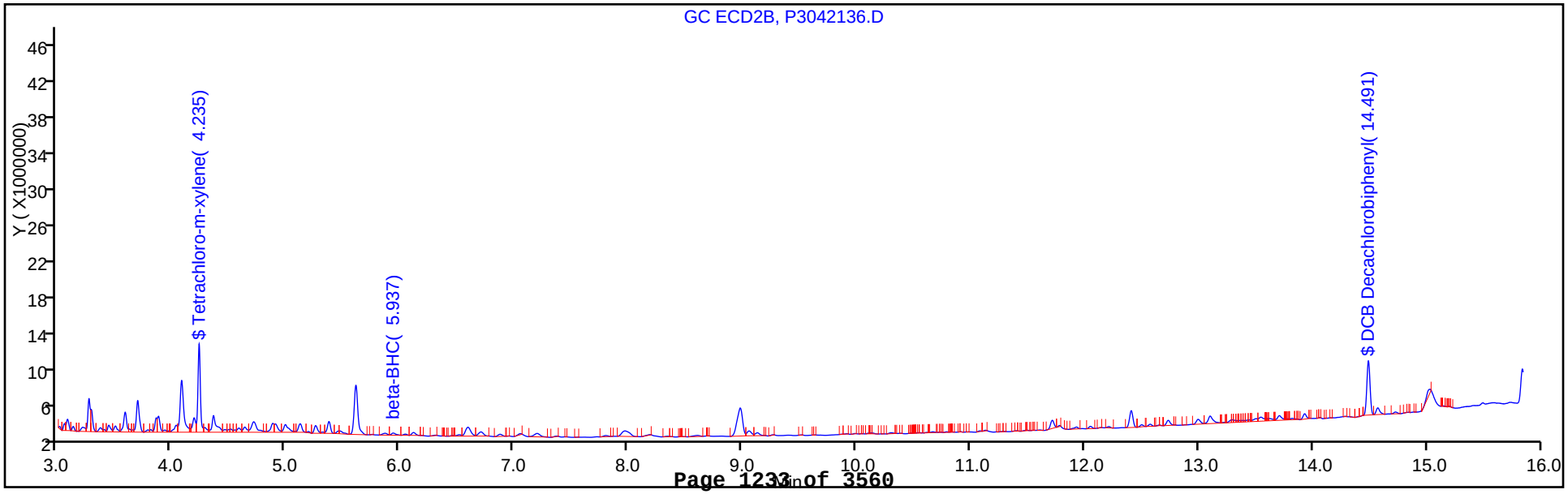
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042136.D

Injection Date:	22-Apr-2015 02:17:04	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	240-49171-A-8-H	Lab Sample ID:	240-49171-8	Worklist Smp#:	36
Client ID:	079SB-0353M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO RE Lab Sample ID: 240-49171-8 RE

Matrix: Solid Lab File ID: P3042136.D

Analysis Method: 8081A Date Collected: 04/08/2015 09:57

Extraction Method: 3540C Date Extracted: 04/20/2015 09:00

Sample wt/vol: 29.98(g) Date Analyzed: 04/22/2015 02:17

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 2.4 GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	59	Q	55-130
877-09-8	Tetrachloro-m-xylene	65	Q	70-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042136.D
Lims ID: 240-49171-A-8-H Lab Sample ID: 240-49171-8
Client ID: 079SB-0353M-0001-SO
Sample Type: Client
Inject. Date: 22-Apr-2015 02:17:04 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-036
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:33:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene						
1	3.554	3.554	0.000	13880795	14.1	
2	4.235	4.235	0.000	14701927	13.0	
					RPD = 7.87	
4 alpha-BHC						
1		4.250			ND	
2		5.129				
5 gamma-BHC (Lindane)						
1		4.639			ND	
2		5.752				
6 beta-BHC						
1	4.774	4.776	-0.002	461159	0.7322	
2	5.937	5.951	-0.014	644078	0.8382	
					RPD = 13.51	
7 delta-BHC						
1		4.999			ND	
2		6.574				
9 Heptachlor						
1		5.284			ND	
2		6.654				
10 Aldrin						
1		5.750			ND	
2		7.460				
12 Heptachlor epoxide						
1		7.023			ND	
2		8.891				
13 gamma-Chlordane						
1		7.339			ND	
2		9.285				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
14 alpha-Chlordane						
1		7.684			ND	
2		9.584				
15 Endosulfan I						
1		7.959			ND	
2		9.653				
16 4,4'-DDE						
1		8.057			ND	
2		10.012				
17 Dieldrin						
1		8.510			ND	
2		10.168				
18 Endrin						
1		8.963			ND	
2		10.681				
20 4,4'-DDD						
1		9.326			ND	
2		11.006				
21 Endosulfan II						
1		9.413			ND	
2		11.051				
24 Toxaphene						
1		9.622			ND	
1		10.081				
1		10.393				
1		10.735				
1		10.840				
2		11.025				
2		11.195				
2		11.618				
2		12.353				
2		12.444				
23 4,4'-DDT						
1		9.840			ND	
2		11.488				
25 Endrin aldehyde						
1		10.209			ND	
2		11.609				
27 Methoxychlor						
1		10.792			ND	
2		12.555				
28 Endosulfan sulfate						
1		10.933			ND	
2		12.032				
29 Endrin ketone						
1		11.334			ND	
2		12.776				
$ 30 DCB Decachlorobiphenyl						
1	12.938	12.940	-0.002	10759541	11.5	
2	14.491	14.493	-0.002	11951306	11.7	

RPD = 2.16

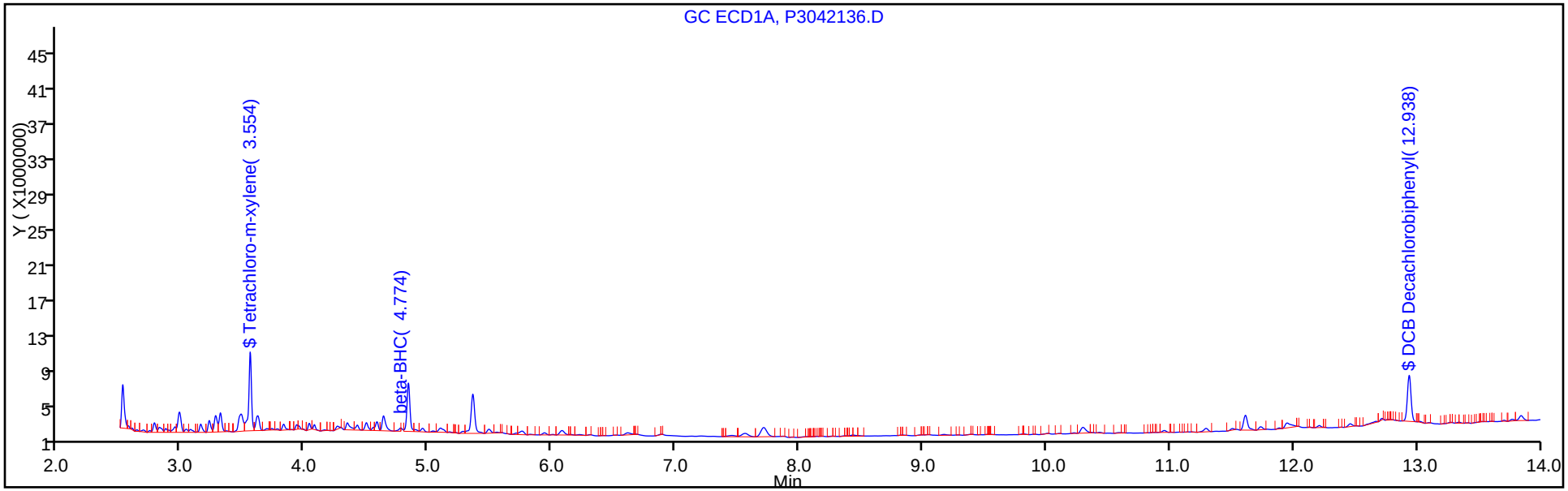
Report Date: 22-Apr-2015 08:58:11 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

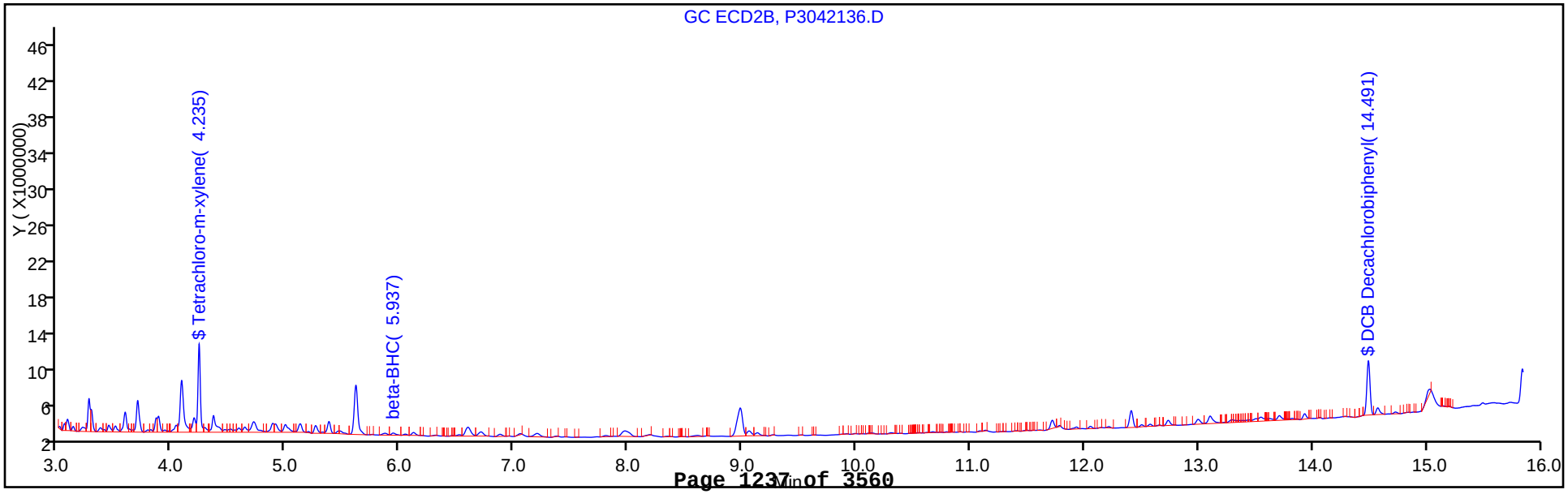
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042136.D

Injection Date:	22-Apr-2015 02:17:04	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	240-49171-A-8-H	Lab Sample ID:	240-49171-8	Worklist Smp#:	36
Client ID:	079SB-0353M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0354M-0001-SO RE | Lab Sample ID: 240-49171-10 RE

Matrix: Solid | Lab File ID: P3042137.D

Analysis Method: 8081A | Date Collected: 04/08/2015 11:30

Extraction Method: 3540C | Date Extracted: 04/20/2015 09:00

Sample wt/vol: 30.08(g) | Date Analyzed: 04/22/2015 02:39

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 1.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	0.42	U Q	2.0	0.42	0.20
72-55-9	4,4'-DDE	0.42	U Q	1.7	0.42	0.27
50-29-3	4,4'-DDT	0.84	U Q	2.0	0.84	0.31
309-00-2	Aldrin	0.84	U	4.0	0.84	0.20
319-84-6	alpha-BHC	1.7	U Q	2.5	1.7	0.61
5103-71-9	alpha-Chlordane	0.84	U	3.0	0.84	0.25
319-86-8	delta-BHC	0.84	U	4.0	0.84	0.22
60-57-1	Dieldrin	0.42	U Q	1.7	0.42	0.16
959-98-8	Endosulfan I	0.84	U	1.7	0.84	0.25
33213-65-9	Endosulfan II	0.84	U Q	2.5	0.84	0.38
72-20-8	Endrin	0.84	U Q	1.7	0.84	0.21
7421-93-4	Endrin aldehyde	0.84	U	3.0	0.84	0.32
53494-70-5	Endrin ketone	1.7	U	2.0	1.7	0.42
58-89-9	gamma-BHC (Lindane)	1.7	U Q	2.5	1.7	0.46
5103-74-2	gamma-Chlordane	1.7	U	1.7	1.7	0.87
76-44-8	Heptachlor	1.7	U Q	3.5	1.7	0.71
1024-57-3	Heptachlor epoxide	1.7	U Q	2.5	1.7	0.40
72-43-5	Methoxychlor	1.7	U Q	5.0	1.7	0.54
8001-35-2	Toxaphene	17	U	68	17	9.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	96	Q	55-130
877-09-8	Tetrachloro-m-xylene	100	Q	70-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042137.D
Lims ID: 240-49171-A-10-J Lab Sample ID: 240-49171-10
Client ID: 079SB-0354M-0001-SO
Sample Type: Client
Inject. Date: 22-Apr-2015 02:39:48 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-037
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene						
1	3.556	3.554	0.002	19737423	20.1	
2	4.236	4.235	0.001	23079417	20.5	
					RPD = 2.02	
4 alpha-BHC						
1		4.250			ND	
2		5.129				
5 gamma-BHC (Lindane)						
1		4.639			ND	
2		5.752				
6 beta-BHC						
1	4.775	4.776	-0.001	1090772	1.73	
2	5.938	5.951	-0.013	802802	1.04	
					RPD = 49.48	
7 delta-BHC						
1		4.999			ND	
2		6.574				
9 Heptachlor						
1		5.284			ND	
2		6.654				
10 Aldrin						
1		5.750			ND	
2		7.460				
12 Heptachlor epoxide						
1		7.023			ND	
2		8.891				
13 gamma-Chlordane						
1		7.339			ND	
2		9.285				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
14 alpha-Chlordane						
1		7.684			ND	
2		9.584				
15 Endosulfan I						
1		7.959			ND	
2		9.653				
16 4,4'-DDE						
1		8.057			ND	
2		10.012				
17 Dieldrin						
1		8.510			ND	
2		10.168				
18 Endrin						
1		8.963			ND	
2		10.681				
20 4,4'-DDD						
1		9.326			ND	
2		11.006				
21 Endosulfan II						
1		9.413			ND	
2		11.051				
24 Toxaphene						
1		9.622			ND	
1		10.081				
1		10.393				
1		10.735				
1		10.840				
2		11.025				
2		11.195				
2		11.618				
2		12.353				
2		12.444				
23 4,4'-DDT						
1		9.840			ND	
2		11.488				
25 Endrin aldehyde						
1		10.209			ND	
2		11.609				
27 Methoxychlor						
1		10.792			ND	
2		12.555				
28 Endosulfan sulfate						
1	10.956	10.933	0.023	1104884	1.11	
2	12.056	12.032	0.024	719003	0.6789	
					RPD = 48.13	
29 Endrin ketone						
1		11.334			ND	
2		12.776				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 30 DCB Decachlorobiphenyl						
1	12.937	12.940	-0.003	18062616	19.3	
2	14.493	14.493	0.000	19467856	19.1	
					RPD = 0.86	

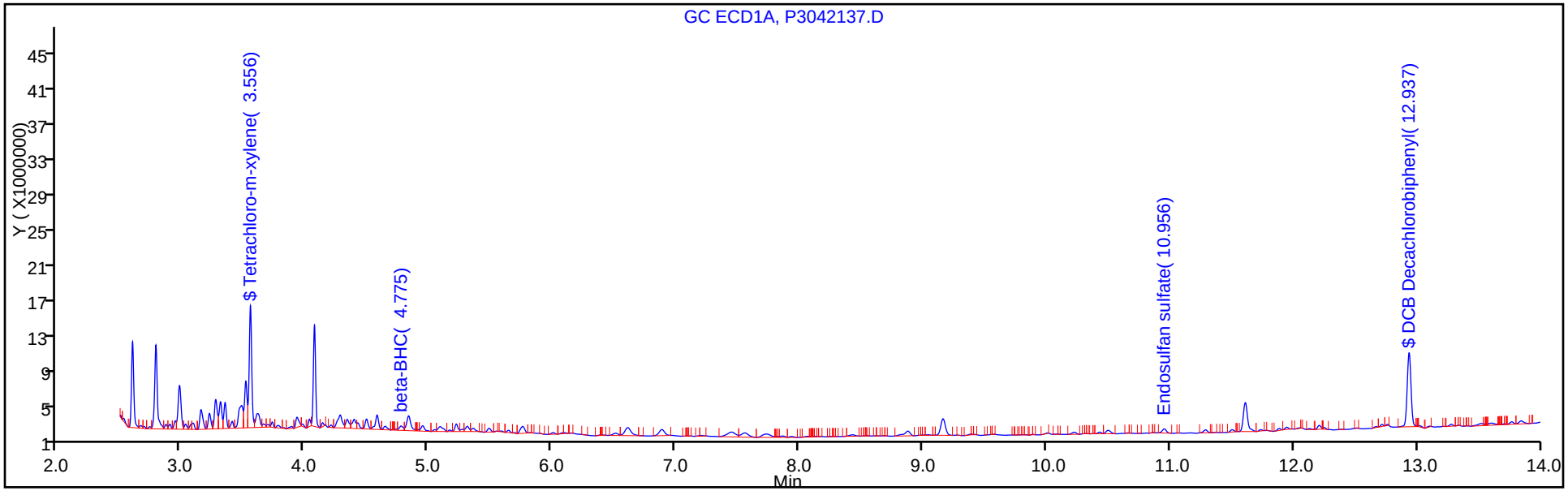
Report Date: 22-Apr-2015 08:58:12 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

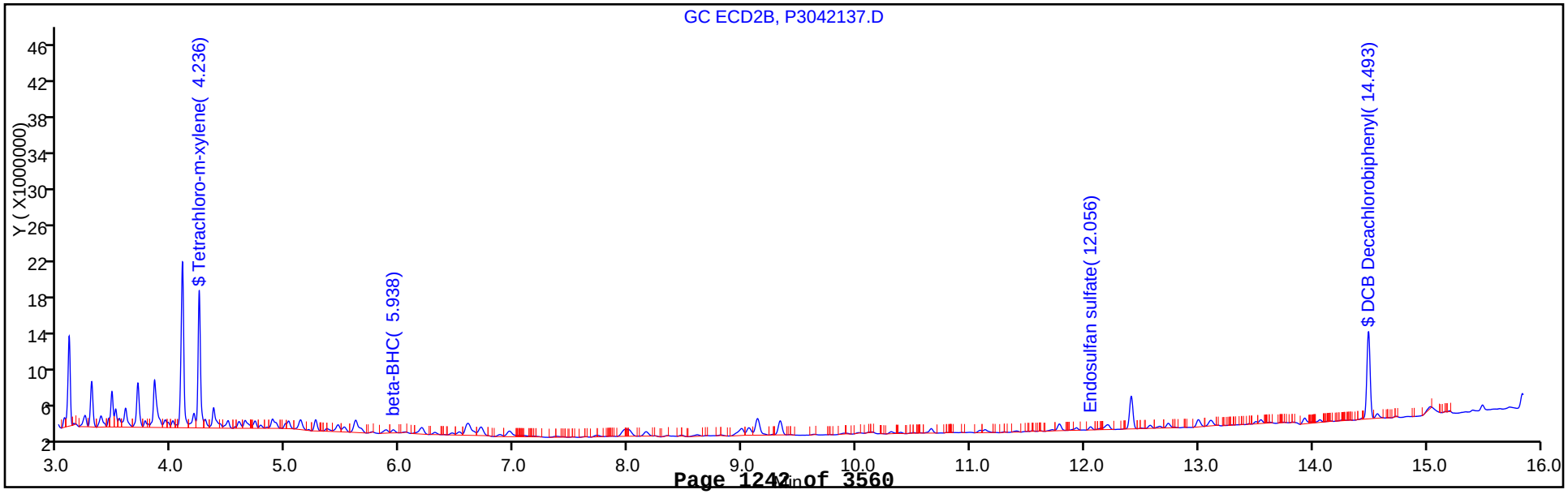
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042137.D

Injection Date:	22-Apr-2015 02:39:48	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	240-49171-A-10-J	Lab Sample ID:	240-49171-10	Worklist Smp#:	37
Client ID:	079SB-0354M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0354M-0001-SO RE Lab Sample ID: 240-49171-10 RE

Matrix: Solid Lab File ID: P3042137.D

Analysis Method: 8081A Date Collected: 04/08/2015 11:30

Extraction Method: 3540C Date Extracted: 04/20/2015 09:00

Sample wt/vol: 30.08(g) Date Analyzed: 04/22/2015 02:39

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 1.1 GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
319-85-7	beta-BHC	0.84	U	3.5	0.84	0.36
1031-07-8	Endosulfan sulfate	0.84	U	3.0	0.84	0.34

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	96	*Q*	55-130
877-09-8	Tetrachloro-m-xylene	102		70-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042137.D
Lims ID: 240-49171-A-10-J Lab Sample ID: 240-49171-10
Client ID: 079SB-0354M-0001-SO
Sample Type: Client
Inject. Date: 22-Apr-2015 02:39:48 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-037
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene						
1	3.556	3.554	0.002	19737423	20.1	
2	4.236	4.235	0.001	23079417	20.5	
					RPD = 2.02	
4 alpha-BHC						
1		4.250			ND	
2		5.129				
5 gamma-BHC (Lindane)						
1		4.639			ND	
2		5.752				
6 beta-BHC						
1	4.775	4.776	-0.001	1090772	1.73	
2	5.938	5.951	-0.013	802802	1.04	
					RPD = 49.48	
7 delta-BHC						
1		4.999			ND	
2		6.574				
9 Heptachlor						
1		5.284			ND	
2		6.654				
10 Aldrin						
1		5.750			ND	
2		7.460				
12 Heptachlor epoxide						
1		7.023			ND	
2		8.891				
13 gamma-Chlordane						
1		7.339			ND	
2		9.285				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
14 alpha-Chlordane						
1		7.684			ND	
2		9.584				
15 Endosulfan I						
1		7.959			ND	
2		9.653				
16 4,4'-DDE						
1		8.057			ND	
2		10.012				
17 Dieldrin						
1		8.510			ND	
2		10.168				
18 Endrin						
1		8.963			ND	
2		10.681				
20 4,4'-DDD						
1		9.326			ND	
2		11.006				
21 Endosulfan II						
1		9.413			ND	
2		11.051				
24 Toxaphene						
1		9.622			ND	
1		10.081				
1		10.393				
1		10.735				
1		10.840				
2		11.025				
2		11.195				
2		11.618				
2		12.353				
2		12.444				
23 4,4'-DDT						
1		9.840			ND	
2		11.488				
25 Endrin aldehyde						
1		10.209			ND	
2		11.609				
27 Methoxychlor						
1		10.792			ND	
2		12.555				
28 Endosulfan sulfate						
1	10.956	10.933	0.023	1104884	1.11	
2	12.056	12.032	0.024	719003	0.6789	
					RPD = 48.13	
29 Endrin ketone						
1		11.334			ND	
2		12.776				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 30 DCB Decachlorobiphenyl						
1	12.937	12.940	-0.003	18062616	19.3	
2	14.493	14.493	0.000	19467856	19.1	
					RPD = 0.86	

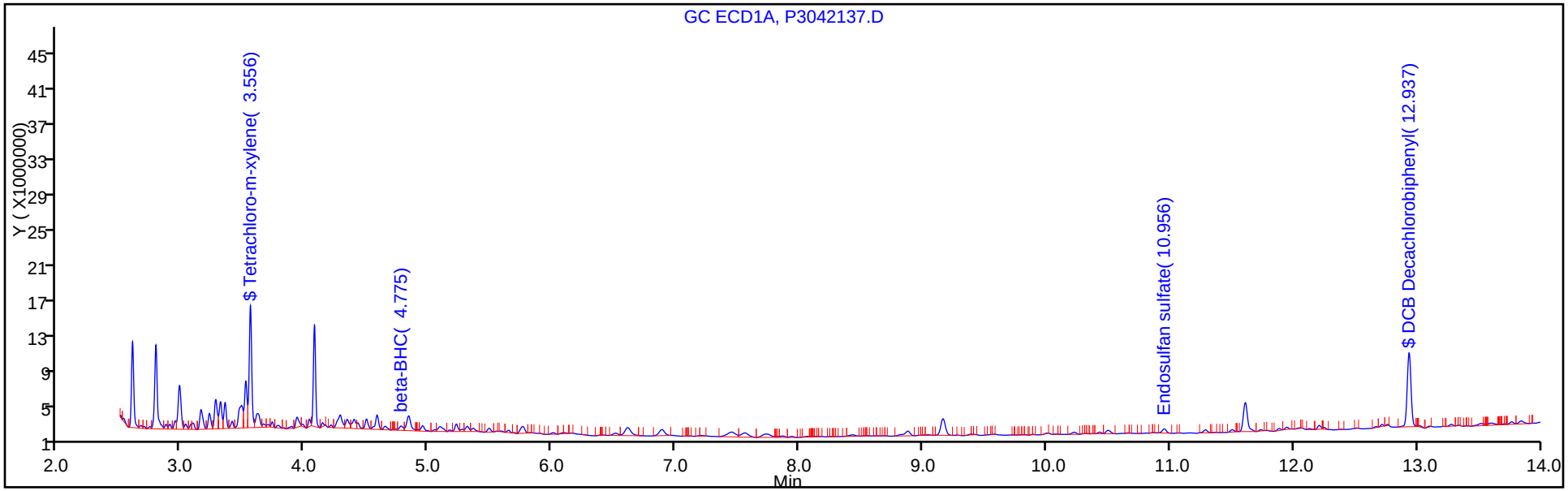
Report Date: 22-Apr-2015 08:58:12 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

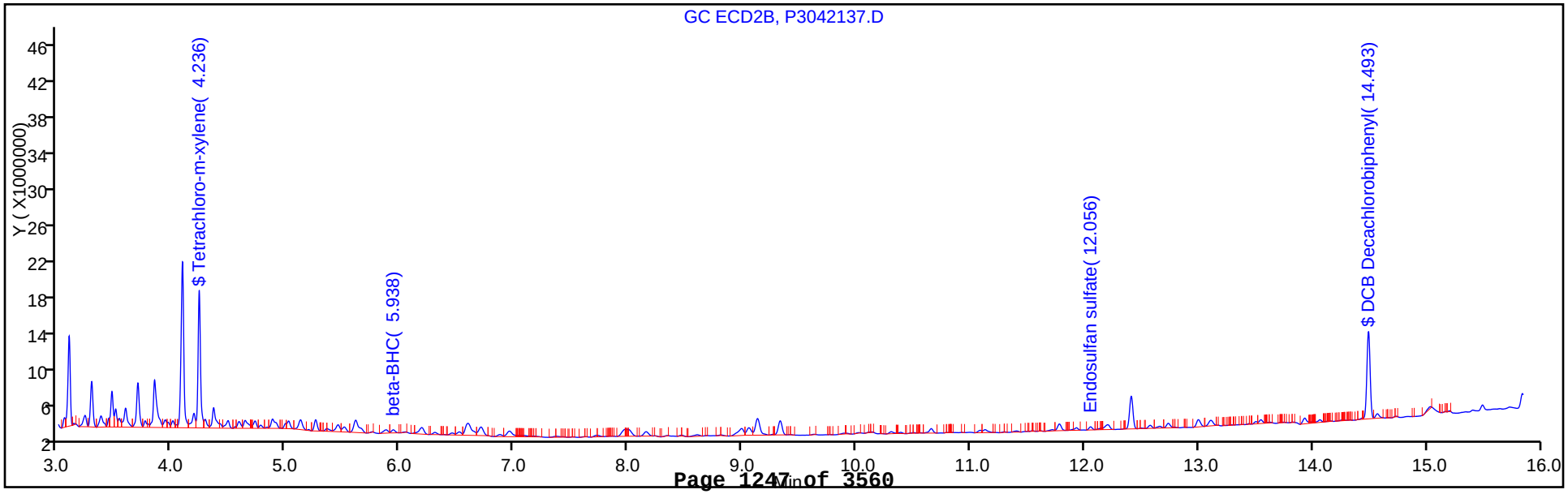
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042137.D

Injection Date:	22-Apr-2015 02:39:48	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	240-49171-A-10-J	Lab Sample ID:	240-49171-10	Worklist Smp#:	37
Client ID:	079SB-0354M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 15:37 Calibration End Date: 03/31/2015 17:11 Calibration ID: 27630

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-174448/12	P3033112.D
Level 2	STD 240-174448/13	P3033113.D
Level 3	STD 240-174448/14	P3033114.D
Level 4	STD 240-174448/15	P3033115.D
Level 5	STD 240-174448/16	P3033116.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Toxaphene Peak 1	9.707	9.709	9.708	9.709	9.707						9.679 - 9.739	9.708
Toxaphene Peak 2	10.168	10.166	10.167	10.167	10.165						10.137 - 10.197	10.167
Toxaphene Peak 3	10.478	10.478	10.478	10.478	10.476						10.448 - 10.508	10.478
Toxaphene Peak 4	10.817	10.817	10.814	10.815	10.814						10.787 - 10.847	10.815
Toxaphene Peak 5	10.922	10.923	10.922	10.924	10.923						10.895 - 10.955	10.923

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 15:37 Calibration End Date: 03/31/2015 17:11 Calibration ID: 27630

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-174448/12	P3033112.D
Level 2	STD 240-174448/13	P3033113.D
Level 3	STD 240-174448/14	P3033114.D
Level 4	STD 240-174448/15	P3033115.D
Level 5	STD 240-174448/16	P3033116.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Toxaphene Peak 1	33404 40248	35287	39031	41193	Ave		37832.5475				8.8		20.0			
Toxaphene Peak 2	33940 37623	34960	37655	39042	Ave		36644.1592				5.8		20.0			
Toxaphene Peak 3	19708 26420	21420	23896	25331	Ave		23354.9331				11.9		20.0			
Toxaphene Peak 4	29918 34558	31534	34529	35340	Ave		33175.8815				7.0		20.0			
Toxaphene Peak 5	25216 37567	29043	33391	36435	Ave		32330.3653				16.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 15:37 Calibration End Date: 03/31/2015 17:11 Calibration ID: 27630

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-174448/12	P3033112.D
Level 2	STD 240-174448/13	P3033113.D
Level 3	STD 240-174448/14	P3033114.D
Level 4	STD 240-174448/15	P3033115.D
Level 5	STD 240-174448/16	P3033116.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Toxaphene Peak 1	Ave	6680791	17643317	39031109	82385228	201242128	200	500	1000	2000	5000
Toxaphene Peak 2	Ave	6788028	17480003	37655028	78084498	188116864	200	500	1000	2000	5000
Toxaphene Peak 3	Ave	3941532	10709959	23896272	50661085	132101364	200	500	1000	2000	5000
Toxaphene Peak 4	Ave	5983653	15767196	34529098	70679302	172790007	200	500	1000	2000	5000
Toxaphene Peak 5	Ave	5043128	14521281	33391038	72870864	187835772	200	500	1000	2000	5000

Curve Type Legend:
Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033112.D
Lims ID: STD TOX1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 31-Mar-2015 15:37:59 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-012
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:57:20 Calib Date: 31-Mar-2015 17:11:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:04:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.707	9.709	-0.002	6680791	200.0	176.6	M
1	10.168	10.167	0.001	6788028	200.0	185.2	M
1	10.478	10.478	0.000	3941532	200.0	168.8	M
1	10.817	10.817	0.000	5983653	200.0	180.4	M
1	10.922	10.925	-0.003	5043128	200.0	156.0	M
		Average of Peak Amounts =				173.4	
2	11.109	11.110	-0.001	9809075	200.0	189.3	M
2	11.275	11.277	-0.002	9537081	200.0	187.1	M
2	11.698	11.700	-0.002	6513590	200.0	182.8	M
2	12.434	12.434	0.000	8469581	200.0	185.6	M
2	12.523	12.523	0.000	2797896	200.0	179.7	M
		Average of Peak Amounts =				184.9	
						RPD = 6.42	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 20.00 Units: uL

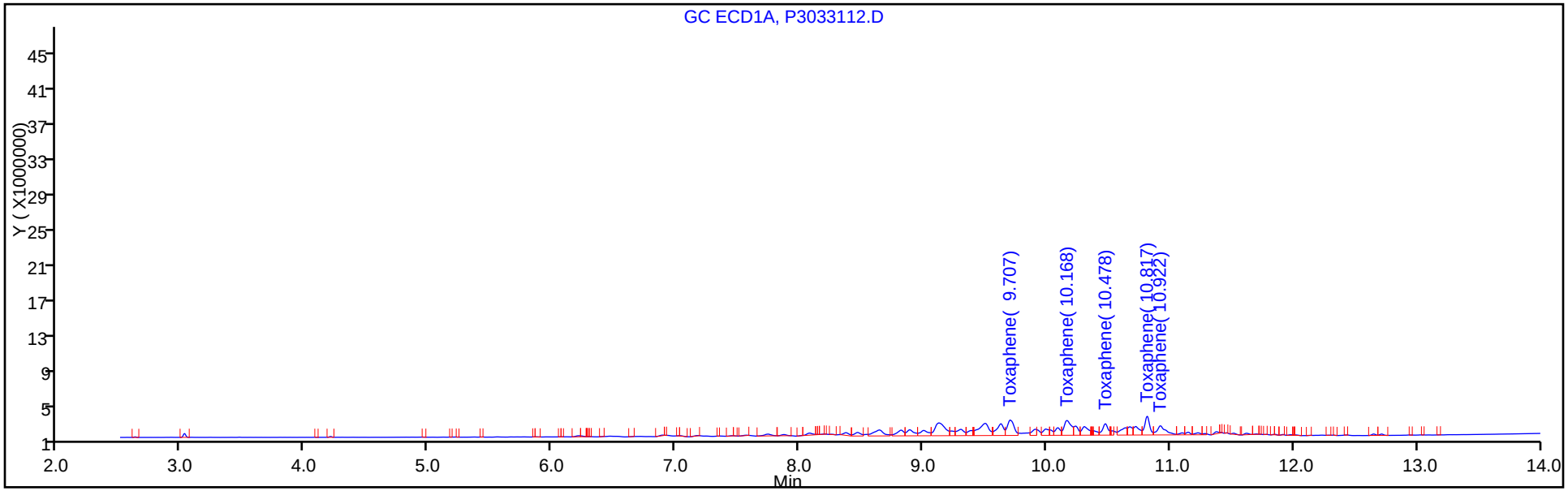
Report Date: 01-Apr-2015 08:57:21 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

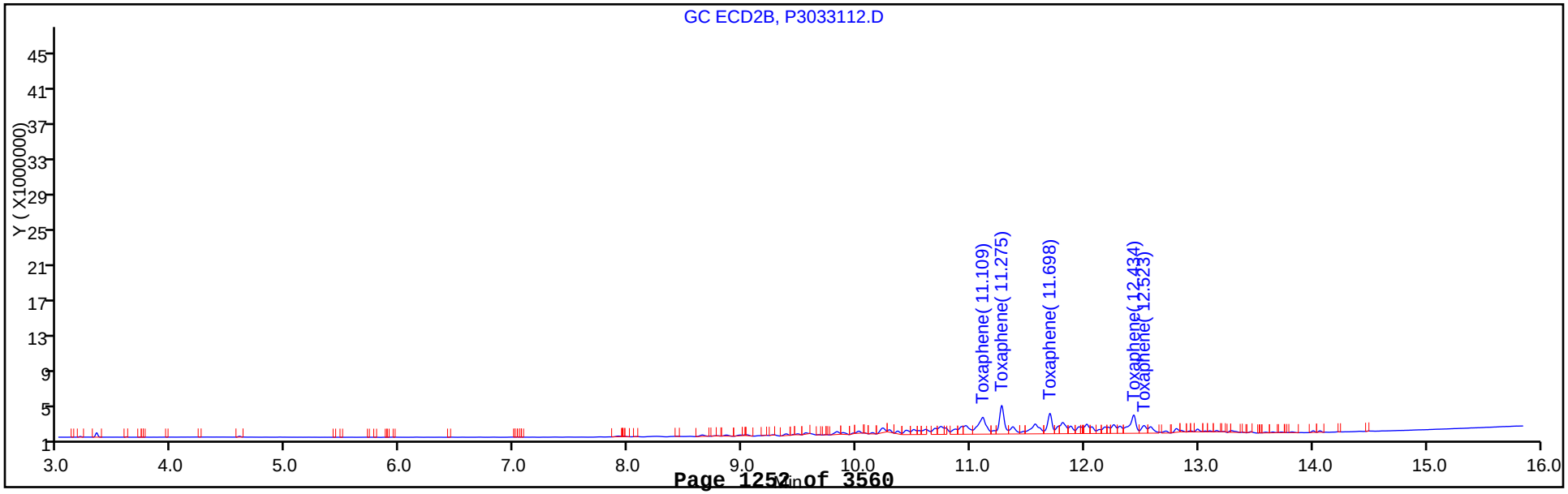
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033112.D

Injection Date:	31-Mar-2015 15:37:59	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD TOX1			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 01-Apr-2015 08:57:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033112.D

Injection Date: 31-Mar-2015 15:37:59 Instrument ID: A2HP3

Lims ID: STD TOX1

Client ID:

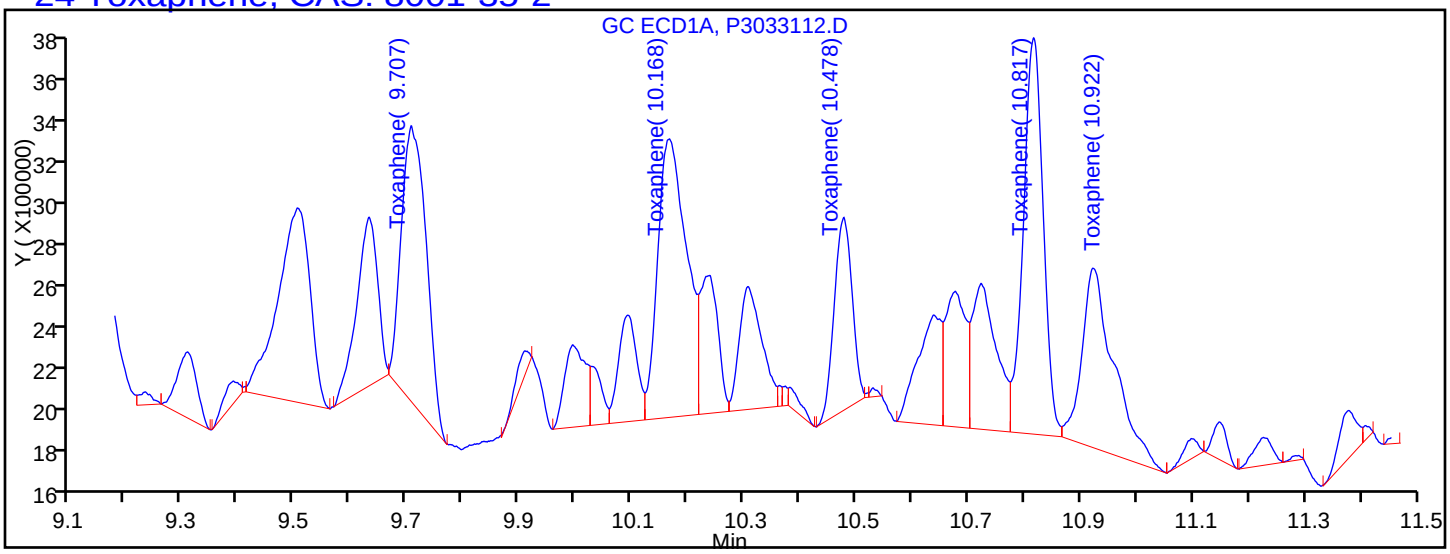
Operator ID: 430893 ALS Bottle#: 12 Worklist Smp#: 12

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

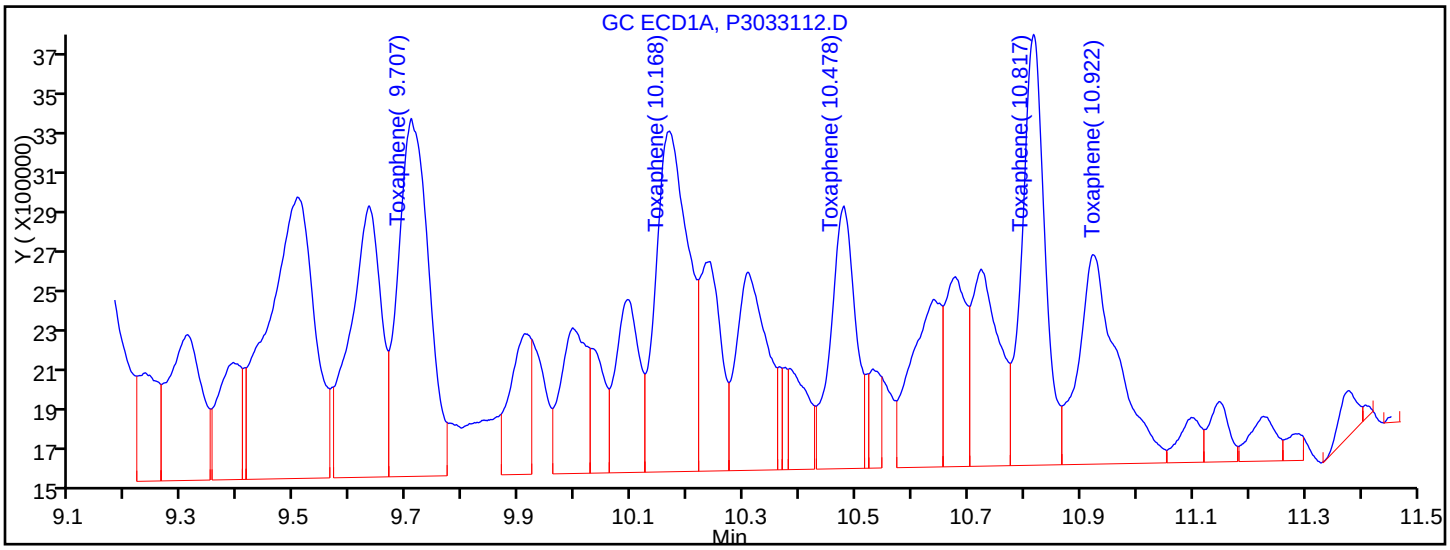
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.707	Response = 4028335	M
RT = 10.168	Response = 4681248	M
RT = 10.478	Response = 2013334	M
RT = 10.817	Response = 4588014	M
RT = 10.922	Response = 3357965	M



Manual Integration Results

RT = 9.707	Response = 6680791	M
RT = 10.168	Response = 6788028	M
RT = 10.478	Response = 3941532	M
RT = 10.817	Response = 5983653	M
RT = 10.922	Response = 5043128	M

Reviewer: matthewsb, 01-Apr-2015 08:31:27

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033113.D
Lims ID: STD TOX2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 31-Mar-2015 16:01:17 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-013
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:57:23 Calib Date: 31-Mar-2015 17:11:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:31:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.709	9.709	0.000	17643317	500.0	466.4	M
1	10.166	10.167	-0.001	17480003	500.0	477.0	M
1	10.478	10.478	0.000	10709959	500.0	458.6	M
1	10.817	10.817	0.000	15767196	500.0	475.3	M
1	10.923	10.925	-0.002	14521281	500.0	449.2	M
		Average of Peak Amounts =				465.3	
2	11.109	11.110	-0.001	24670801	500.0	476.1	M
2	11.275	11.277	-0.002	24796029	500.0	486.5	M
2	11.697	11.700	-0.003	17040990	500.0	478.1	M
2	12.433	12.434	-0.001	21923625	500.0	480.5	M
2	12.520	12.523	-0.003	7281721	500.0	467.7	M
		Average of Peak Amounts =				477.8	
						RPD = 2.65	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 50.00 Units: uL

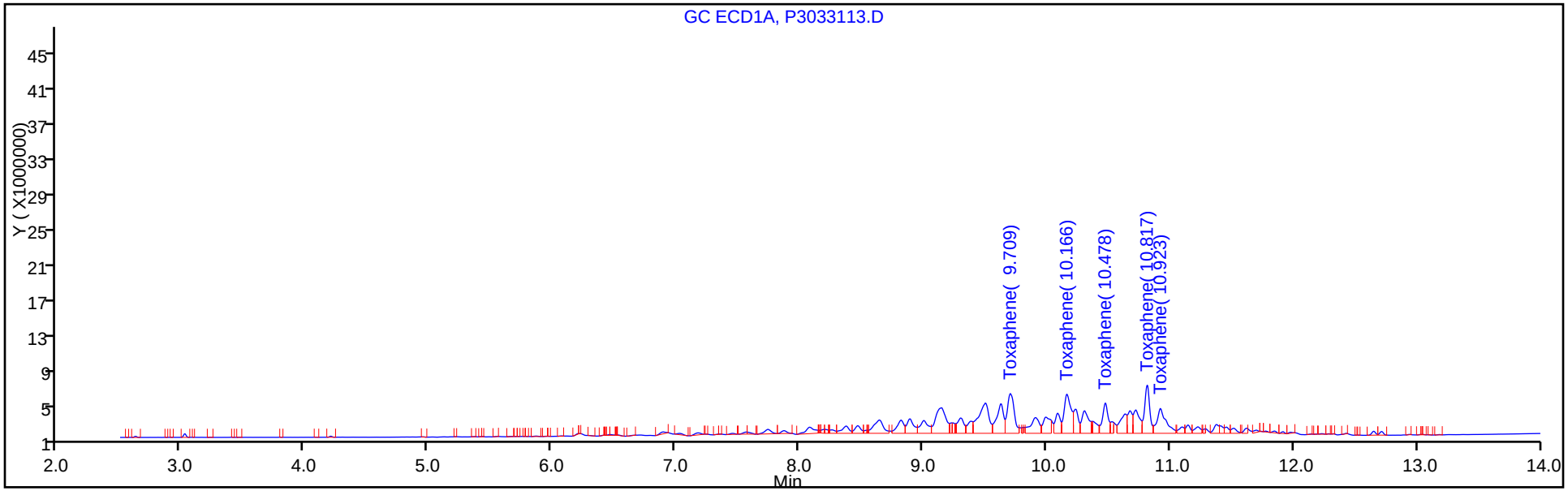
Report Date: 01-Apr-2015 08:57:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

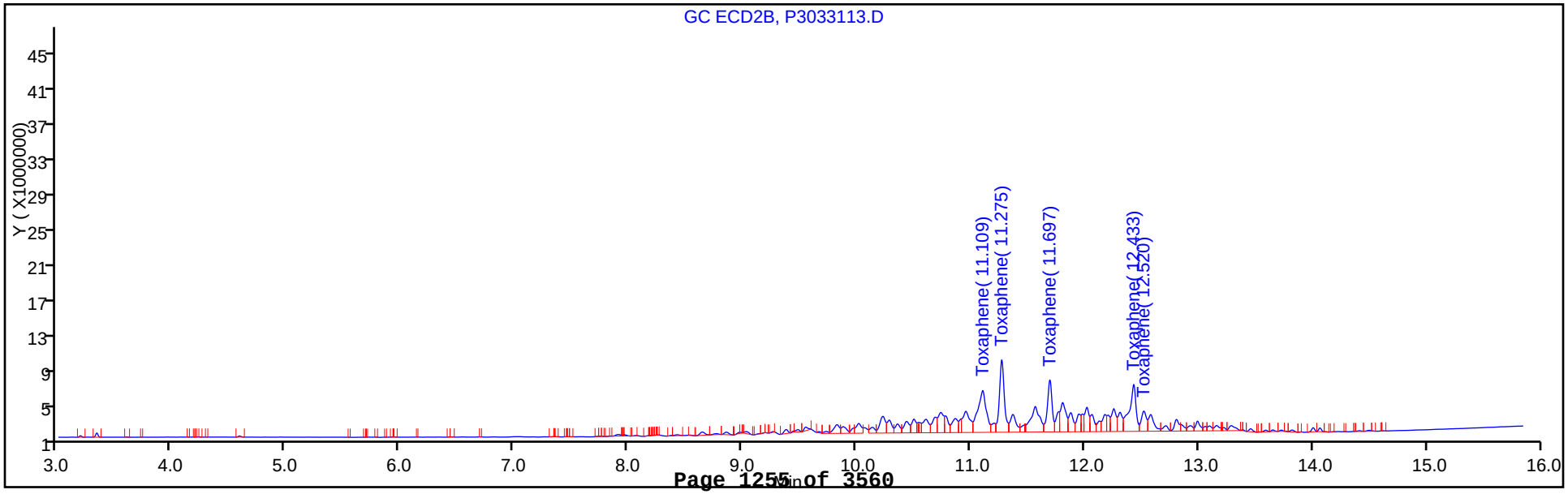
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033113.D

Injection Date:	31-Mar-2015 16:01:17	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD TOX2			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



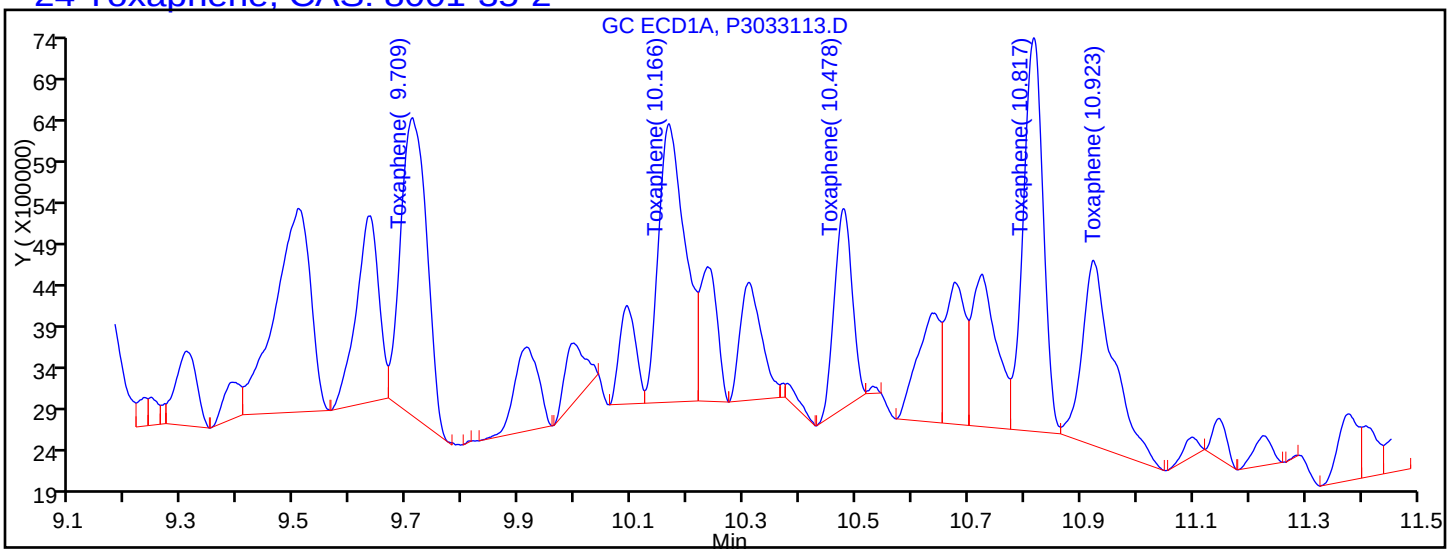
Report Date: 01-Apr-2015 08:57:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033113.D

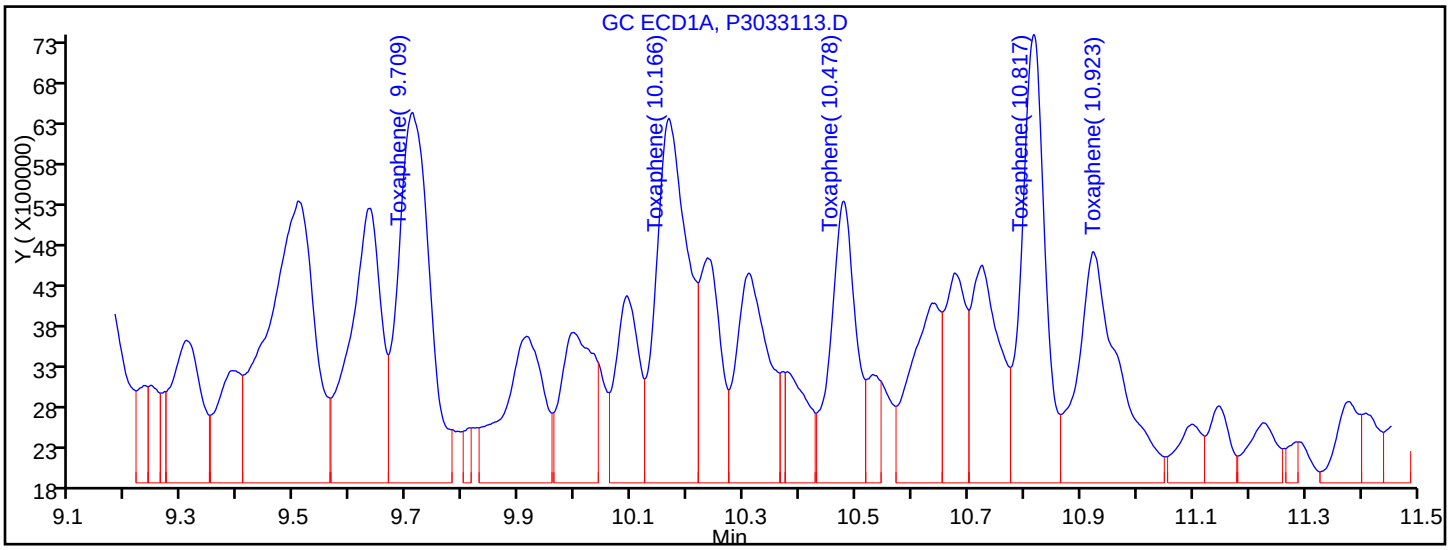
Injection Date:	31-Mar-2015 16:01:17	Instrument ID:	A2HP3		
Lims ID:	STD TOX2				
Client ID:					
Operator ID:	430893	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		
Column:		Detector	GC ECD1A		

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.709	Response = 11532603	M
RT = 10.166	Response = 10985496	M
RT = 10.478	Response = 5260986	M
RT = 10.817	Response = 11594742	M
RT = 10.923	Response = 8591029	M



Manual Integration Results

RT = 9.709	Response = 17643317	M
RT = 10.166	Response = 17480003	M
RT = 10.478	Response = 10709959	M
RT = 10.817	Response = 15767196	M
RT = 10.923	Response = 14521281	M

Reviewer: matthewsb, 01-Apr-2015 08:31:47

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033114.D
Lims ID: STD TOX3
Client ID:
Sample Type: ICRT Calib Level: 3
Inject. Date: 31-Mar-2015 16:24:32 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-014
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:57:26 Calib Date: 31-Mar-2015 17:11:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:32:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.708	9.708	0.000	39031109	1000.0	1031.7	M
1	10.167	10.167	0.000	37655028	1000.0	1027.6	M
1	10.478	10.478	0.000	23896272	1000.0	1023.2	M
1	10.814	10.814	0.000	34529098	1000.0	1040.8	M
1	10.922	10.922	0.000	33391038	1000.0	1032.8	M
		Average of Peak Amounts =				1031.2	
2	11.108	11.108	0.000	51233967	1000.0	988.6	M
2	11.275	11.275	0.000	51076818	1000.0	1002.2	M
2	11.698	11.698	0.000	35702538	1000.0	1001.7	M
2	12.433	12.433	0.000	45291737	1000.0	992.6	M
2	12.523	12.523	0.000	15291056	1000.0	982.1	M
		Average of Peak Amounts =				993.5	
						RPD = 3.73	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 100.00 Units: uL

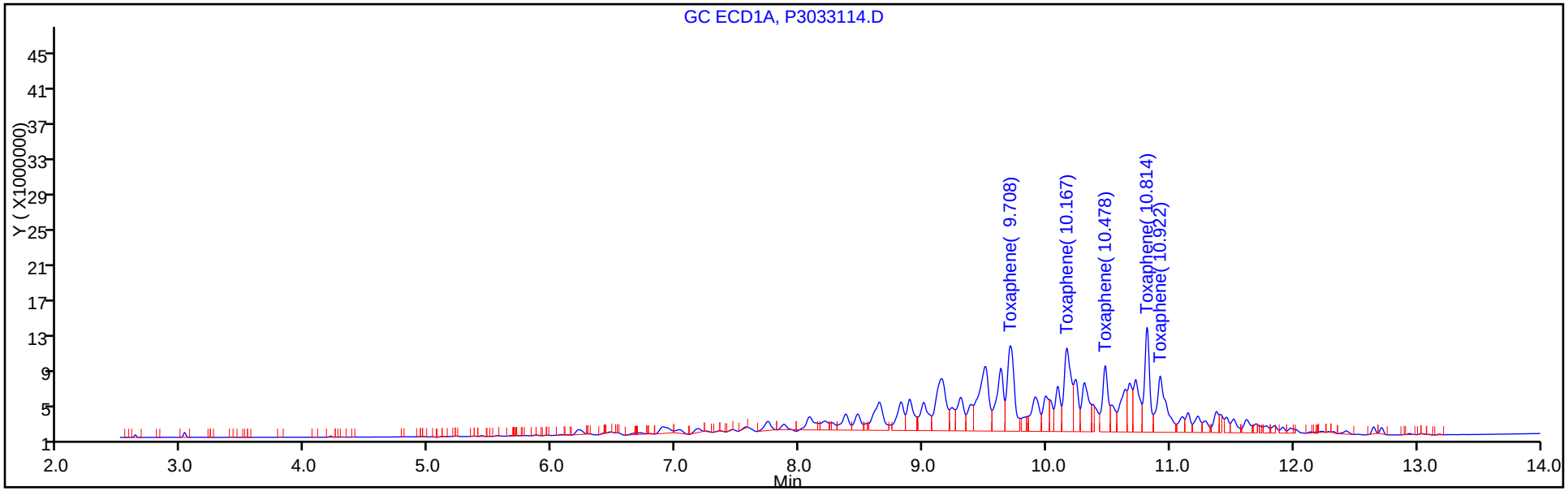
Report Date: 01-Apr-2015 08:57:27 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

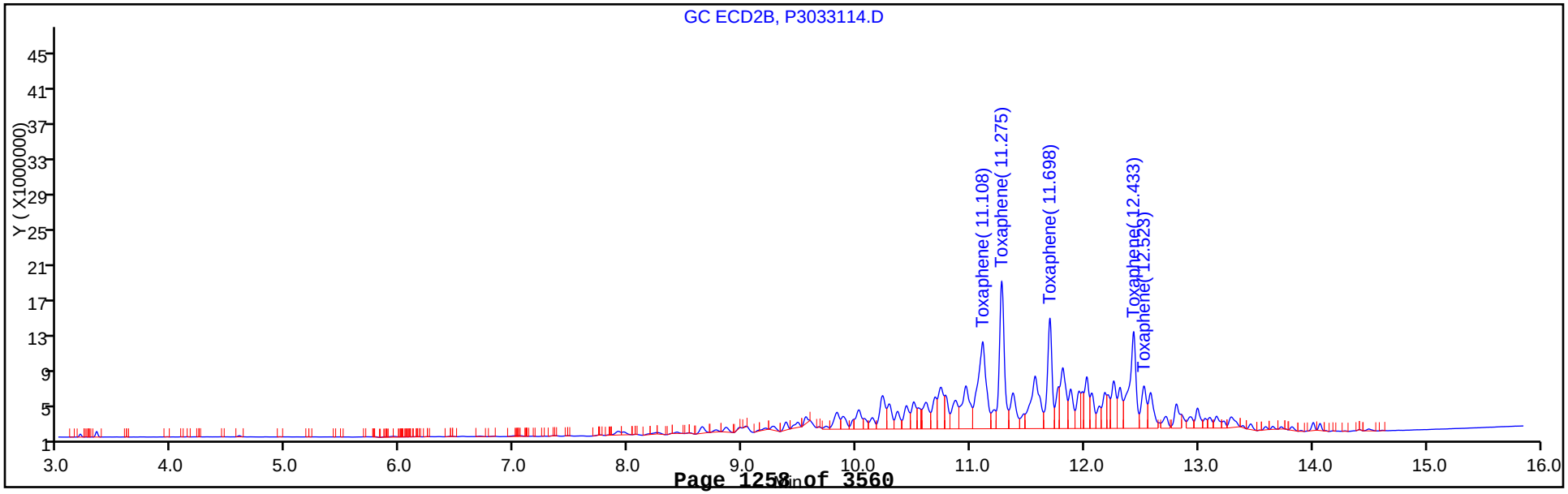
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033114.D

Injection Date:	31-Mar-2015 16:24:32	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD TOX3			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 01-Apr-2015 08:57:27 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033114.D

Injection Date: 31-Mar-2015 16:24:32 Instrument ID: A2HP3

Lims ID: STD TOX3

Client ID:

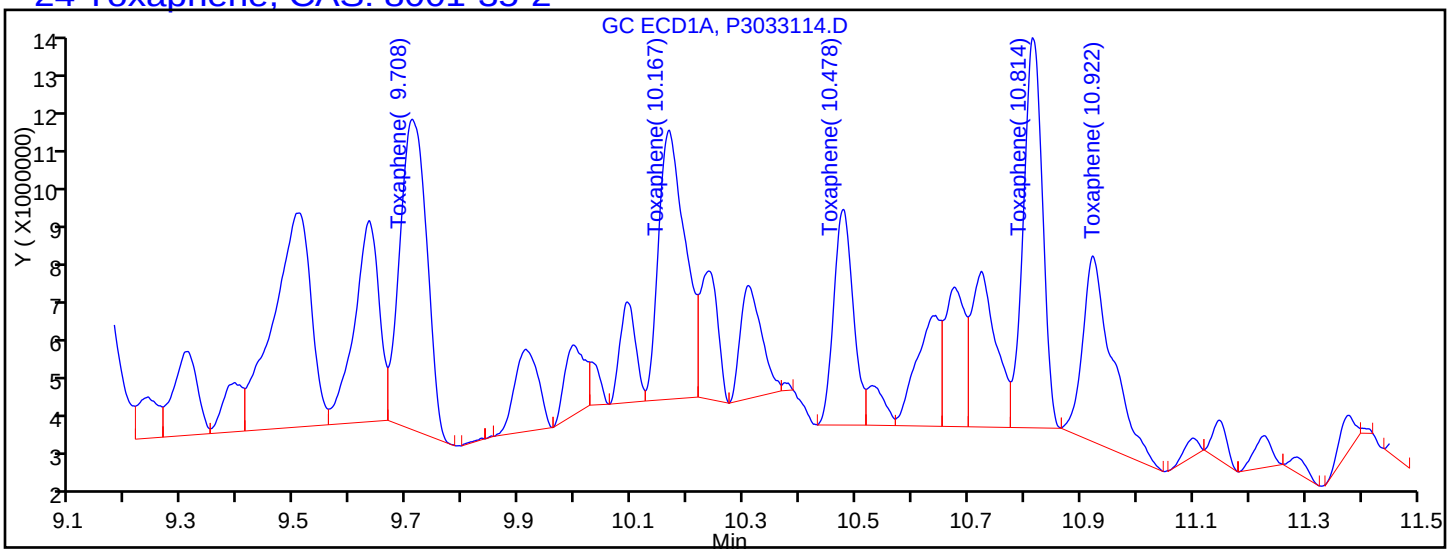
Operator ID: 430893 ALS Bottle#: 14 Worklist Smp#: 14

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

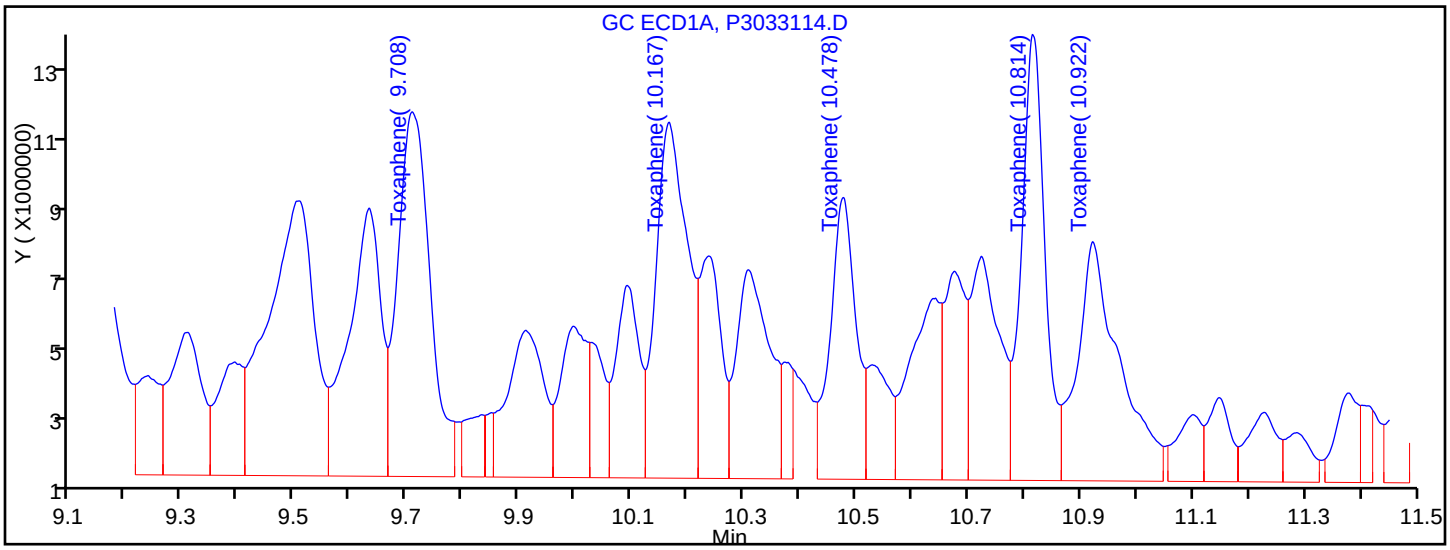
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.708	Response = 26349651	M
RT = 10.167	Response = 22531941	M
RT = 10.478	Response = 13246178	M
RT = 10.814	Response = 23579023	M
RT = 10.922	Response = 17427040	M



Manual Integration Results

RT = 9.708	Response = 39031109	M
RT = 10.167	Response = 37655028	M
RT = 10.478	Response = 23896272	M
RT = 10.814	Response = 34529098	M
RT = 10.922	Response = 33391038	M

Reviewer: matthewsb, 01-Apr-2015 08:32:04

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033115.D
Lims ID: STD TOX4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 31-Mar-2015 16:47:48 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-015
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:57:29 Calib Date: 31-Mar-2015 17:11:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:32:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.709	9.708	0.001	82385228	2000.0	2177.6	M
1	10.167	10.167	0.000	78084498	2000.0	2130.9	M
1	10.478	10.478	0.000	50661085	2000.0	2169.2	M
1	10.815	10.814	0.001	70679302	2000.0	2130.4	M
1	10.924	10.922	0.002	72870864	2000.0	2253.9	M
		Average of Peak Amounts =				2172.4	
2	11.108	11.108	0.000	110160431	2000.0	2125.7	M
2	11.275	11.275	0.000	107527323	2000.0	2109.8	M
2	11.698	11.698	0.000	76152937	2000.0	2136.6	M
2	12.431	12.433	-0.002	97042833	2000.0	2126.8	M
2	12.524	12.523	0.001	34039899	2000.0	2186.3	M
		Average of Peak Amounts =				2137.1	
						RPD = 1.64	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 200.00 Units: uL

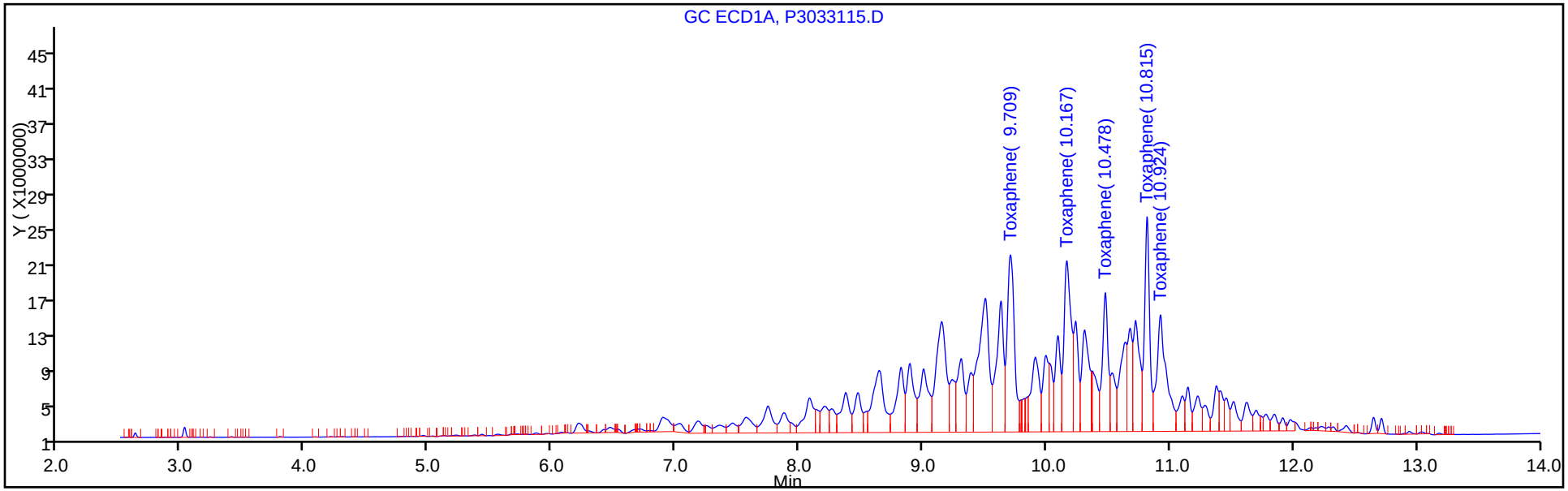
Report Date: 01-Apr-2015 08:57:31 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

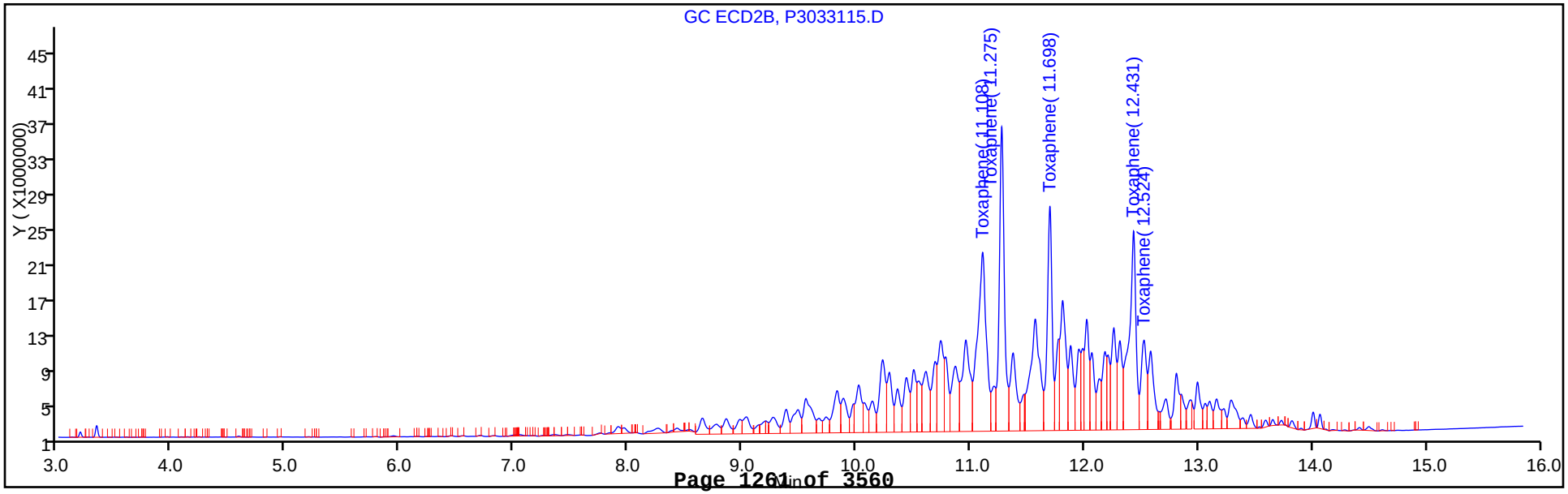
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033115.D

Injection Date:	31-Mar-2015 16:47:48	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD TOX4			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



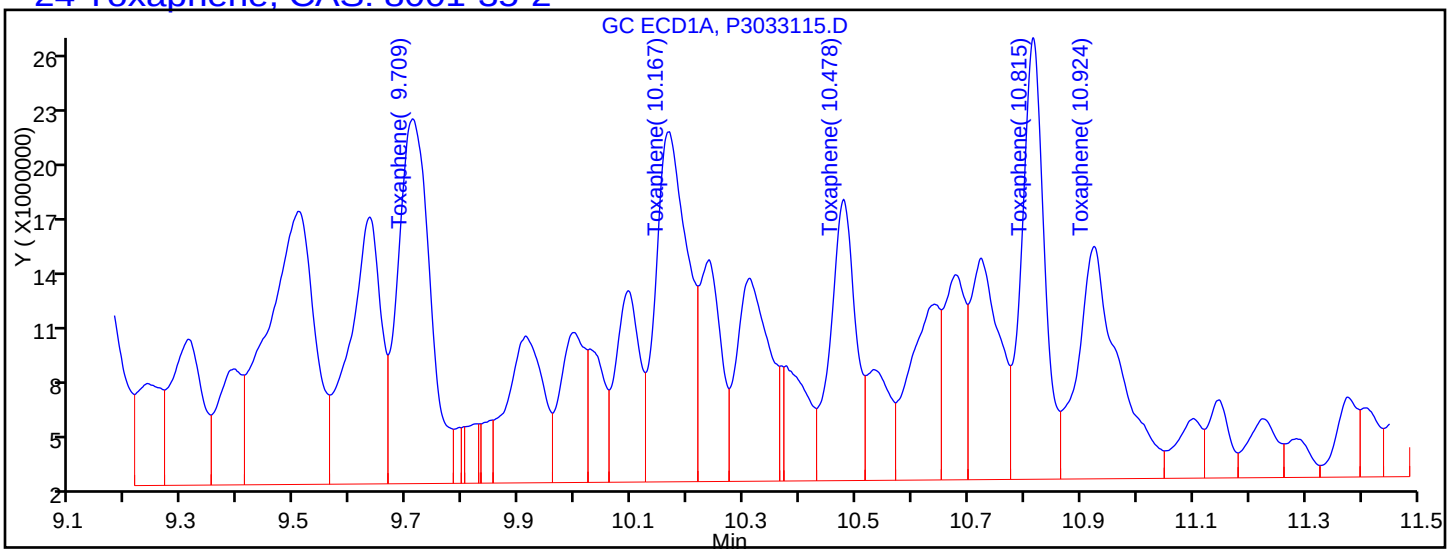
Report Date: 01-Apr-2015 08:57:31 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033115.D

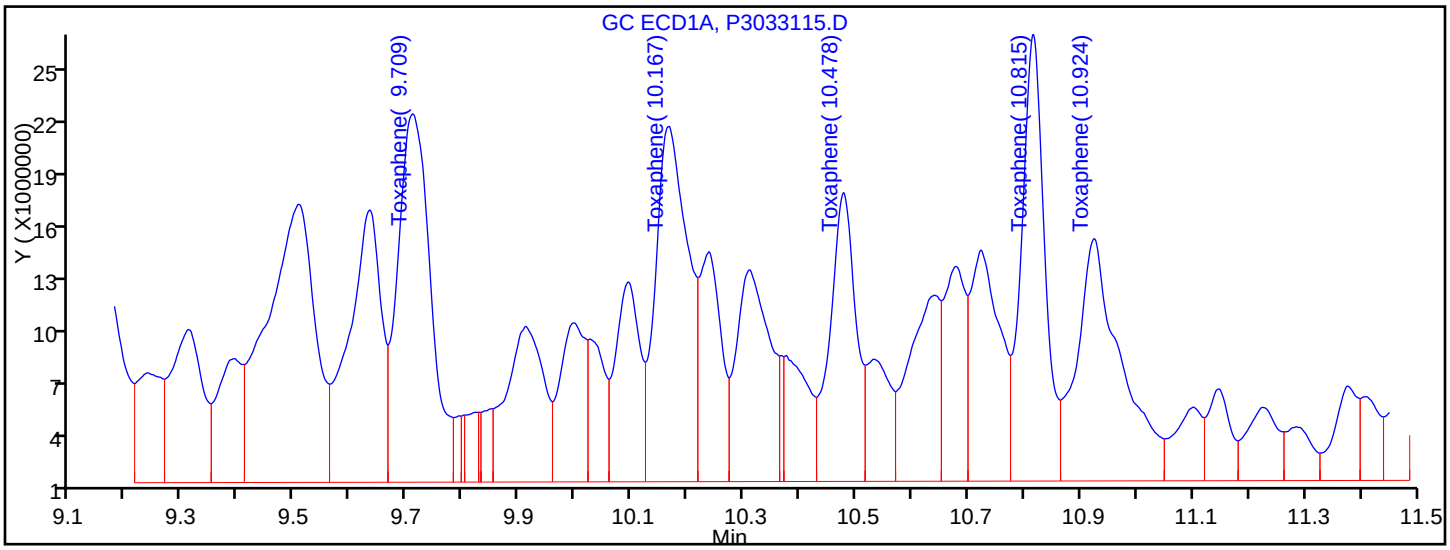
Injection Date:	31-Mar-2015 16:47:48	Instrument ID:	A2HP3
Lims ID:	STD TOX4		
Client ID:			
Operator ID:	430893	ALS Bottle#:	15 Worklist Smp#: 15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL
Column:		Detector	GC ECD1A

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.709	Response = 78032219	M
RT = 10.167	Response = 74215858	M
RT = 10.478	Response = 46827011	M
RT = 10.815	Response = 66448436	M
RT = 10.924	Response = 63858291	M



Manual Integration Results

RT = 9.709	Response = 82385228	M
RT = 10.167	Response = 78084498	M
RT = 10.478	Response = 50661085	M
RT = 10.815	Response = 70679302	M
RT = 10.924	Response = 72870864	M

Reviewer: matthewsb, 01-Apr-2015 08:32:22

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D
Lims ID: STD TOX5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 31-Mar-2015 17:11:00 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-016
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:57:33 Calib Date: 31-Mar-2015 17:11:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:32:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.707	9.708	-0.001	201242128	5000.0	5319.3	M
1	10.165	10.167	-0.002	188116864	5000.0	5133.6	M
1	10.476	10.478	-0.002	132101364	5000.0	5656.3	M
1	10.814	10.814	0.000	172790007	5000.0	5208.3	M
1	10.923	10.922	0.001	187835772	5000.0	5809.9	M
		Average of Peak Amounts =				5425.5	
2	11.109	11.108	0.001	272057035	5000.0	5249.8	M
2	11.274	11.275	-0.001	263525388	5000.0	5170.8	M
2	11.699	11.698	0.001	188891703	5000.0	5299.8	M
2	12.433	12.433	0.000	240683474	5000.0	5274.8	M
2	12.524	12.523	0.001	84924334	5000.0	5454.4	M
		Average of Peak Amounts =				5289.9	
						RPD = 2.53	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 500.00 Units: uL

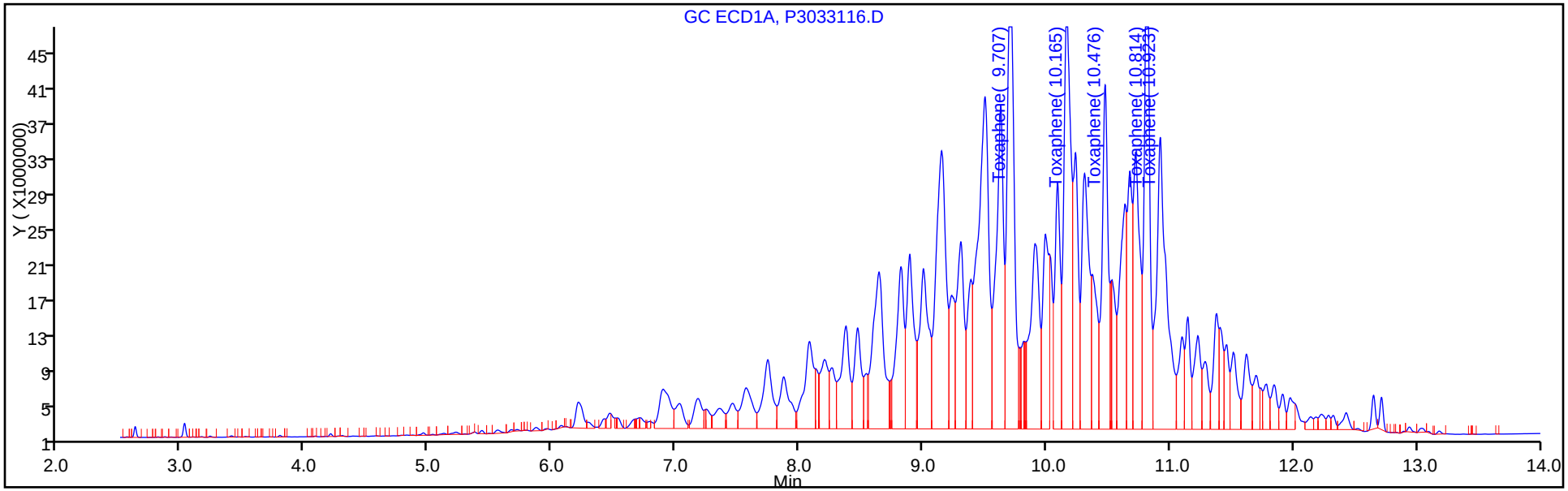
Report Date: 01-Apr-2015 08:57:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

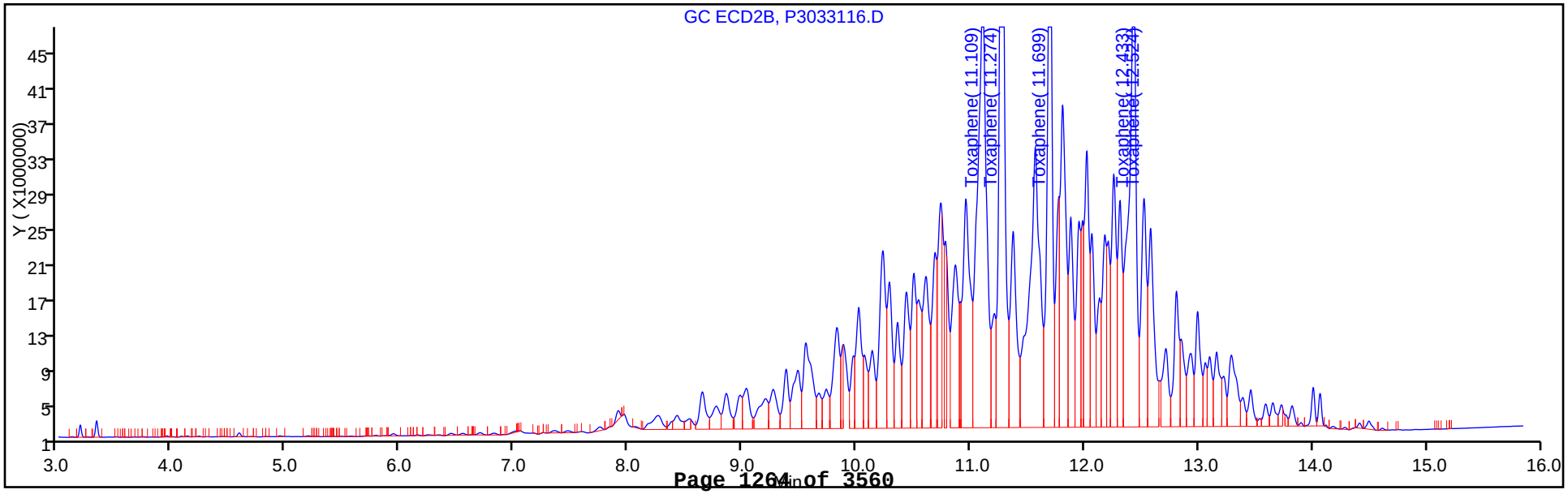
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Injection Date:	31-Mar-2015 17:11:00	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD TOX5			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



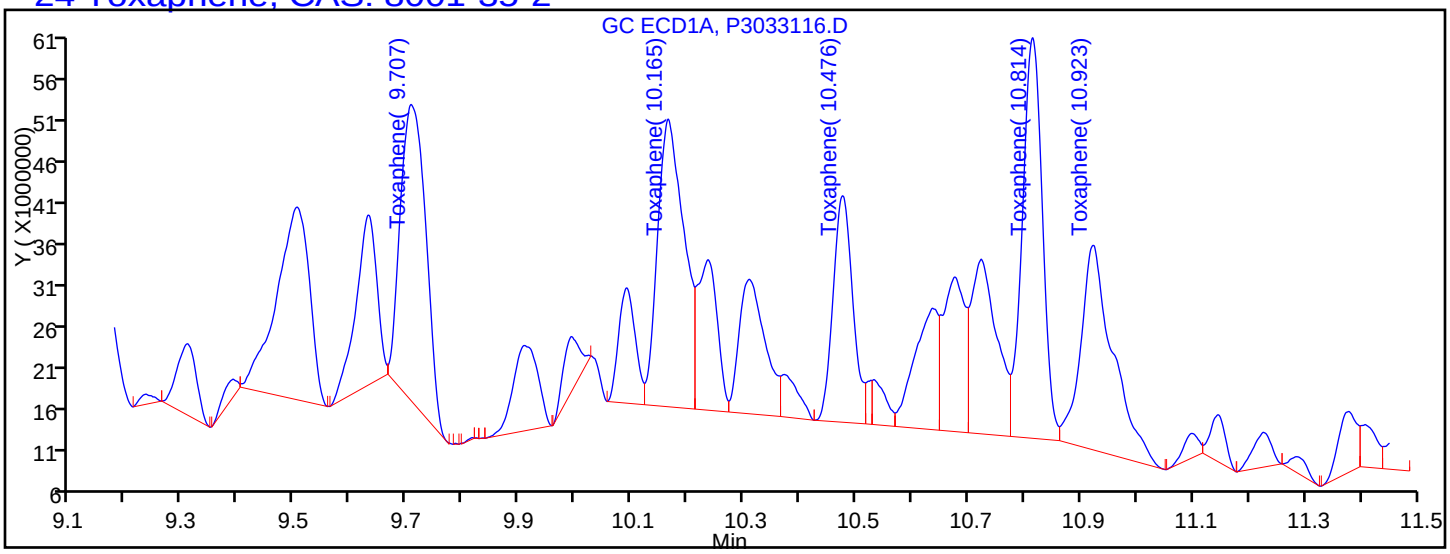
Report Date: 01-Apr-2015 08:57:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

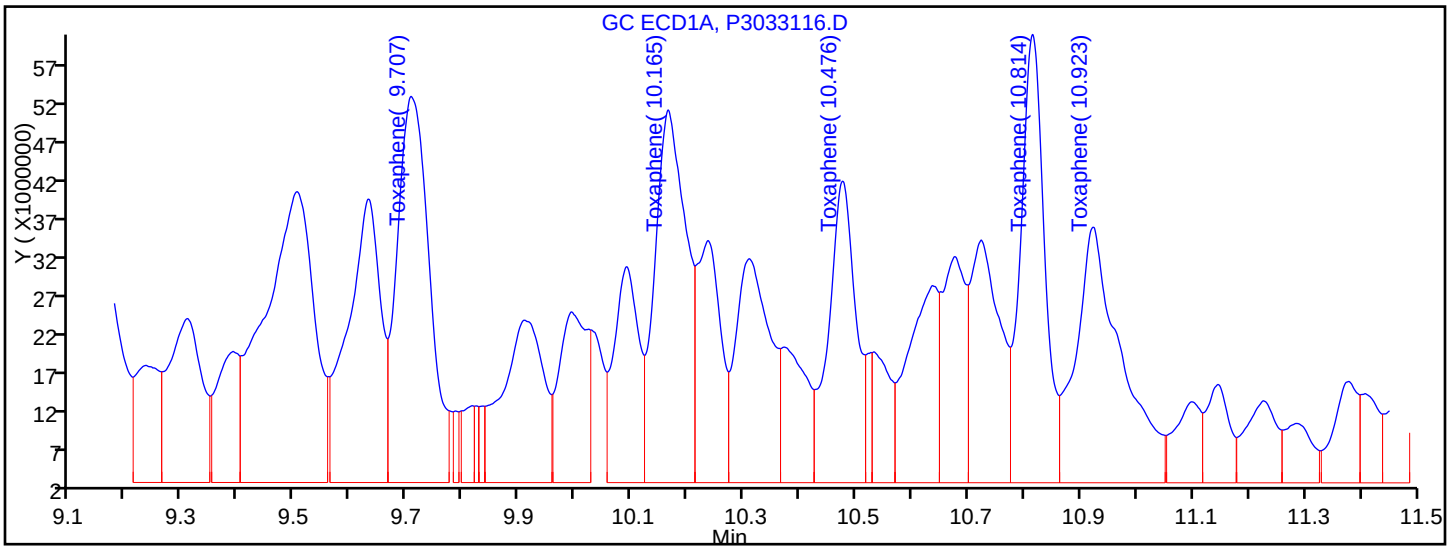
Injection Date:	31-Mar-2015 17:11:00	Instrument ID:	A2HP3
Lims ID:	STD TOX5		
Client ID:			
Operator ID:	430893	ALS Bottle#:	16 Worklist Smp#: 16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL
Column:		Detector	GC ECD1A

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.707	Response = 113589114	M
RT = 10.165	Response = 114318137	M
RT = 10.476	Response = 66929571	M
RT = 10.814	Response = 120945391	M
RT = 10.923	Response = 98831876	M



Manual Integration Results

RT = 9.707	Response = 201242128	M
RT = 10.165	Response = 188116864	M
RT = 10.476	Response = 132101364	M
RT = 10.814	Response = 172790007	M
RT = 10.923	Response = 187835772	M

Reviewer: matthewsb, 01-Apr-2015 08:41:39

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 15:37 Calibration End Date: 03/31/2015 17:11 Calibration ID: 27631

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-174448/12	P3033112.D
Level 2	STD 240-174448/13	P3033113.D
Level 3	STD 240-174448/14	P3033114.D
Level 4	STD 240-174448/15	P3033115.D
Level 5	STD 240-174448/16	P3033116.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Toxaphene Peak 1	11.109	11.109	11.108	11.108	11.109						11.080 - 11.140	11.109
Toxaphene Peak 2	11.275	11.275	11.275	11.275	11.274						11.247 - 11.307	11.275
Toxaphene Peak 3	11.698	11.697	11.698	11.698	11.699						11.670 - 11.730	11.698
Toxaphene Peak 4	12.434	12.433	12.433	12.431	12.433						12.404 - 12.464	12.433
Toxaphene Peak 5	12.523	12.520	12.523	12.524	12.524						12.493 - 12.553	12.523

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 15:37 Calibration End Date: 03/31/2015 17:11 Calibration ID: 27631

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-174448/12	P3033112.D
Level 2	STD 240-174448/13	P3033113.D
Level 3	STD 240-174448/14	P3033114.D
Level 4	STD 240-174448/15	P3033115.D
Level 5	STD 240-174448/16	P3033116.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Toxaphene Peak 1	49045 54411	49342	51234	55080	Ave		51822.5133				5.4		20.0			
Toxaphene Peak 2	47685 52705	49592	51077	53764	Ave		50964.6040				4.8		20.0			
Toxaphene Peak 3	32568 37778	34082	35703	38076	Ave		35641.4554				6.6		20.0			
Toxaphene Peak 4	42348 48137	43847	45292	48521	Ave		45629.0007				5.9		20.0			
Toxaphene Peak 5	13989 16985	14563	15291	17020	Ave		15569.7589				8.9		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 15:37 Calibration End Date: 03/31/2015 17:11 Calibration ID: 27631

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-174448/12	P3033112.D
Level 2	STD 240-174448/13	P3033113.D
Level 3	STD 240-174448/14	P3033114.D
Level 4	STD 240-174448/15	P3033115.D
Level 5	STD 240-174448/16	P3033116.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Toxaphene Peak 1	Ave	9809075	24670801	51233967	110160431	272057035	200	500	1000	2000	5000
Toxaphene Peak 2	Ave	9537081	24796029	51076818	107527323	263525388	200	500	1000	2000	5000
Toxaphene Peak 3	Ave	6513590	17040990	35702538	76152937	188891703	200	500	1000	2000	5000
Toxaphene Peak 4	Ave	8469581	21923625	45291737	97042833	240683474	200	500	1000	2000	5000
Toxaphene Peak 5	Ave	2797896	7281721	15291056	34039899	84924334	200	500	1000	2000	5000

Curve Type Legend:
Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033112.D
Lims ID: STD TOX1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 31-Mar-2015 15:37:59 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-012
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:57:20 Calib Date: 31-Mar-2015 17:11:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:04:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.707	9.709	-0.002	6680791	200.0	176.6	M
1	10.168	10.167	0.001	6788028	200.0	185.2	M
1	10.478	10.478	0.000	3941532	200.0	168.8	M
1	10.817	10.817	0.000	5983653	200.0	180.4	M
1	10.922	10.925	-0.003	5043128	200.0	156.0	M
		Average of Peak Amounts =				173.4	
2	11.109	11.110	-0.001	9809075	200.0	189.3	M
2	11.275	11.277	-0.002	9537081	200.0	187.1	M
2	11.698	11.700	-0.002	6513590	200.0	182.8	M
2	12.434	12.434	0.000	8469581	200.0	185.6	M
2	12.523	12.523	0.000	2797896	200.0	179.7	M
		Average of Peak Amounts =				184.9	
						RPD = 6.42	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 20.00 Units: uL

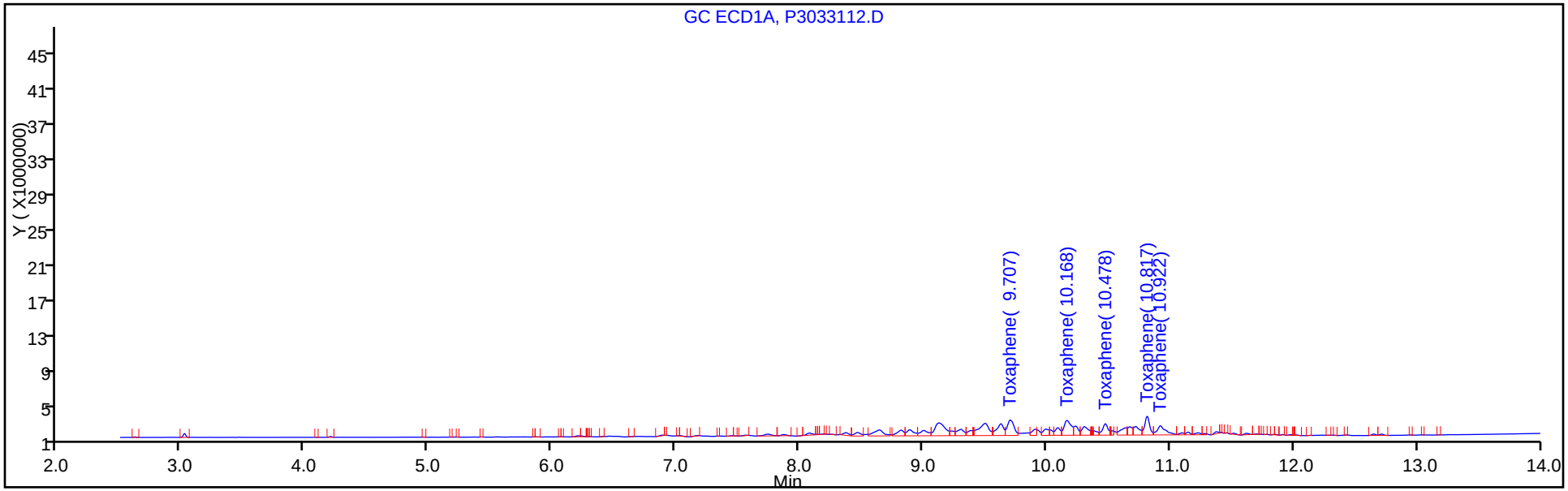
Report Date: 01-Apr-2015 08:57:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

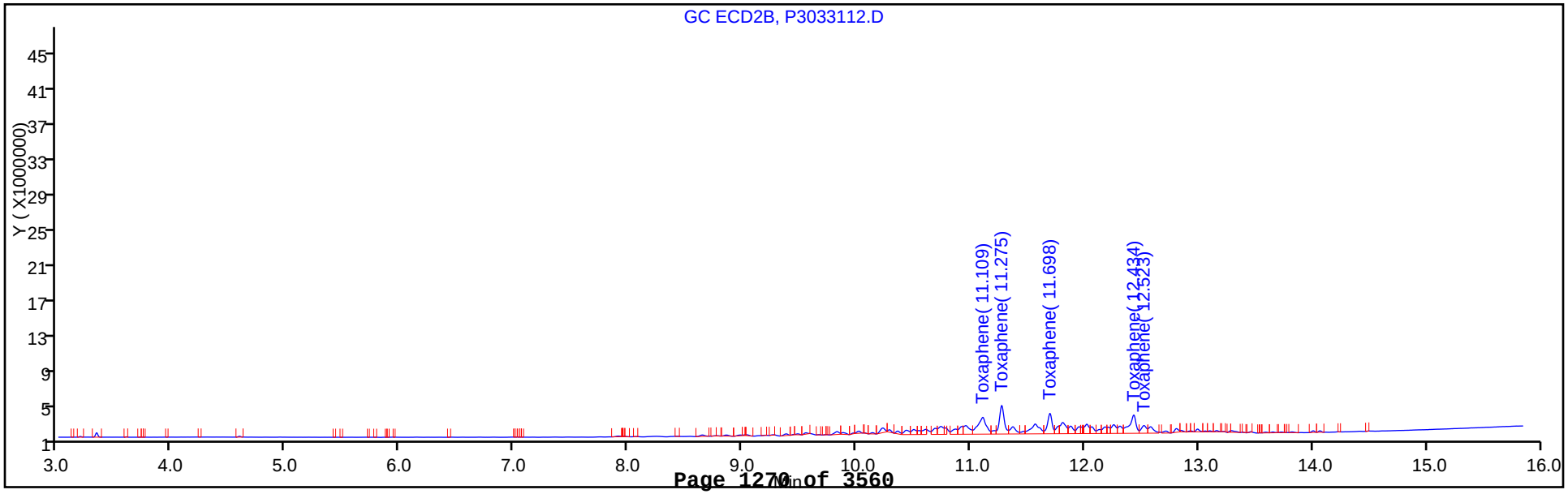
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033112.D

Injection Date:	31-Mar-2015 15:37:59	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD TOX1			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 01-Apr-2015 08:57:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033112.D

Injection Date: 31-Mar-2015 15:37:59 Instrument ID: A2HP3

Lims ID: STD TOX1

Client ID:

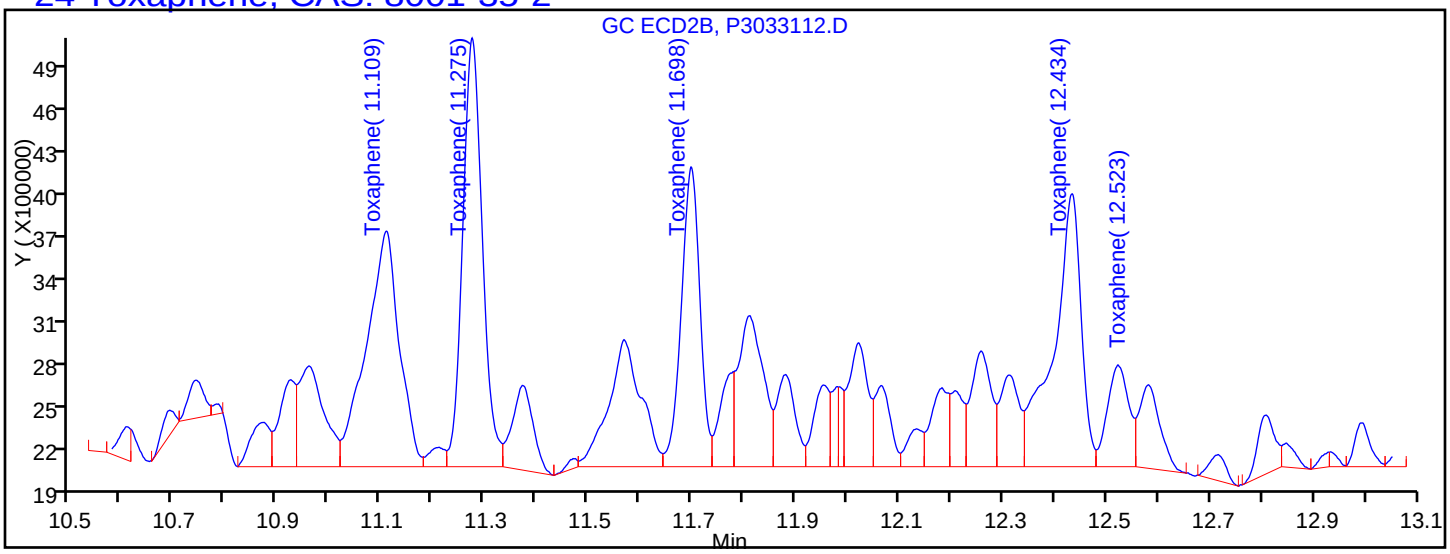
Operator ID: 430893 ALS Bottle#: 12 Worklist Smp#: 12

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

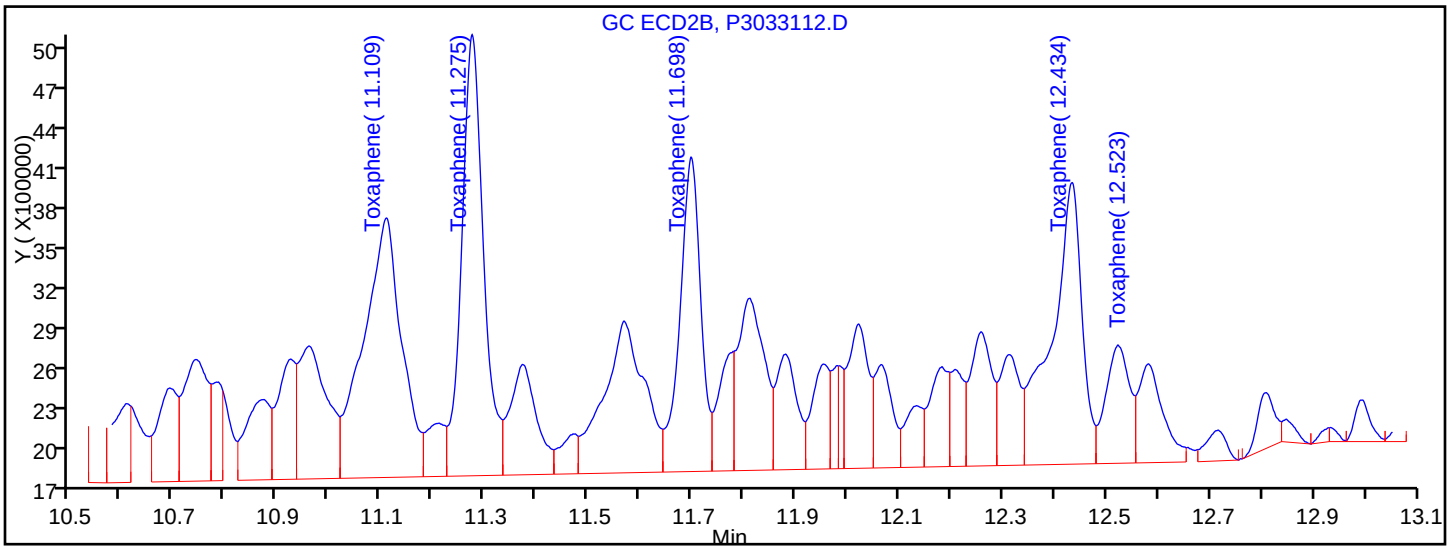
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 11.109	Response = 7268273	M
RT = 11.275	Response = 7911340	M
RT = 11.698	Response = 5259832	M
RT = 12.434	Response = 7082593	M
RT = 12.523	Response = 2065502	M



Manual Integration Results

RT = 11.109	Response = 9809075	M
RT = 11.275	Response = 9537081	M
RT = 11.698	Response = 6513590	M
RT = 12.434	Response = 8469581	M
RT = 12.523	Response = 2797896	M

Reviewer: matthewsb, 01-Apr-2015 08:31:27

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033113.D
Lims ID: STD TOX2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 31-Mar-2015 16:01:17 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-013
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:57:23 Calib Date: 31-Mar-2015 17:11:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:31:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.709	9.709	0.000	17643317	500.0	466.4	M
1	10.166	10.167	-0.001	17480003	500.0	477.0	M
1	10.478	10.478	0.000	10709959	500.0	458.6	M
1	10.817	10.817	0.000	15767196	500.0	475.3	M
1	10.923	10.925	-0.002	14521281	500.0	449.2	M
		Average of Peak Amounts =				465.3	
2	11.109	11.110	-0.001	24670801	500.0	476.1	M
2	11.275	11.277	-0.002	24796029	500.0	486.5	M
2	11.697	11.700	-0.003	17040990	500.0	478.1	M
2	12.433	12.434	-0.001	21923625	500.0	480.5	M
2	12.520	12.523	-0.003	7281721	500.0	467.7	M
		Average of Peak Amounts =				477.8	
						RPD = 2.65	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 50.00 Units: uL

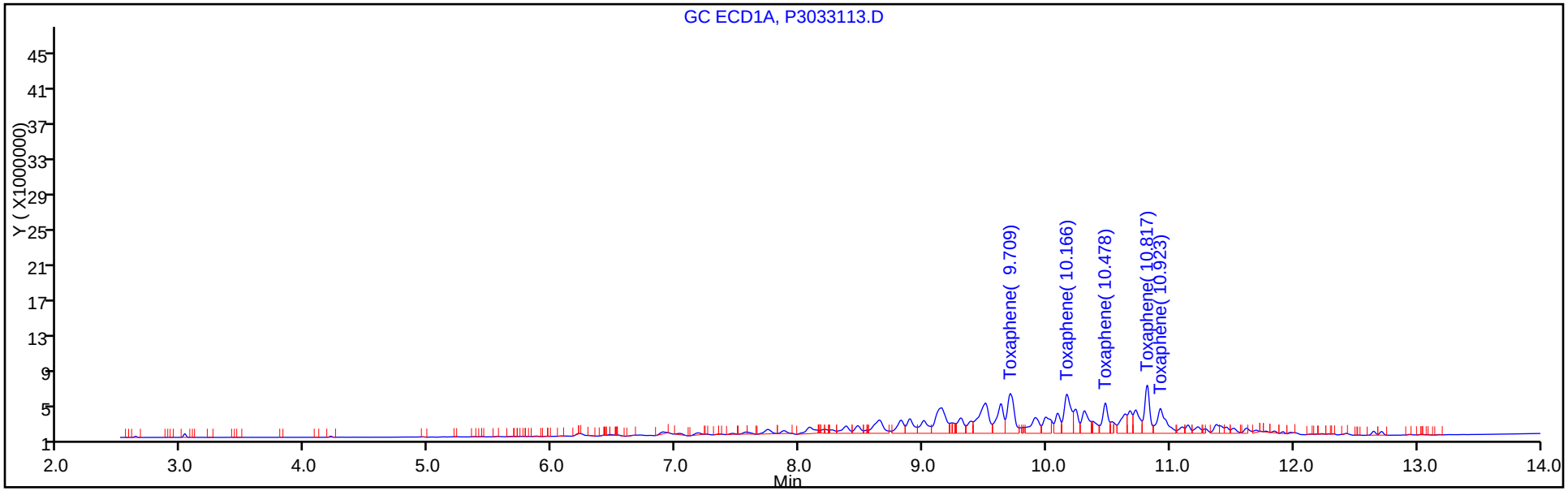
Report Date: 01-Apr-2015 08:57:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

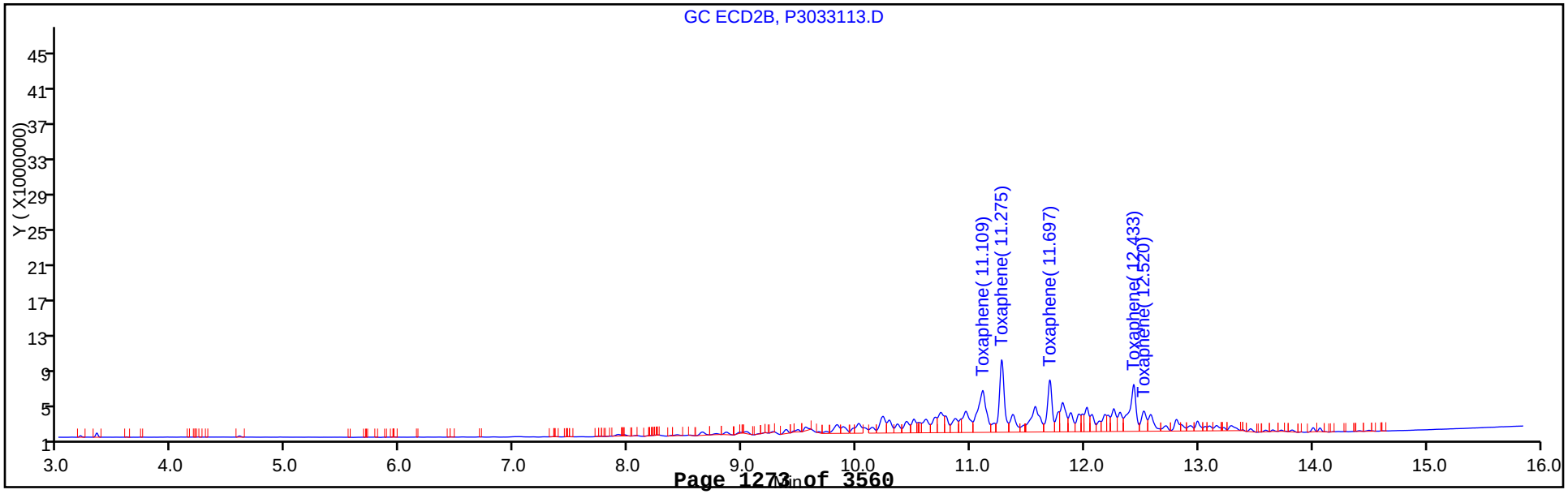
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033113.D

Injection Date:	31-Mar-2015 16:01:17	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD TOX2			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



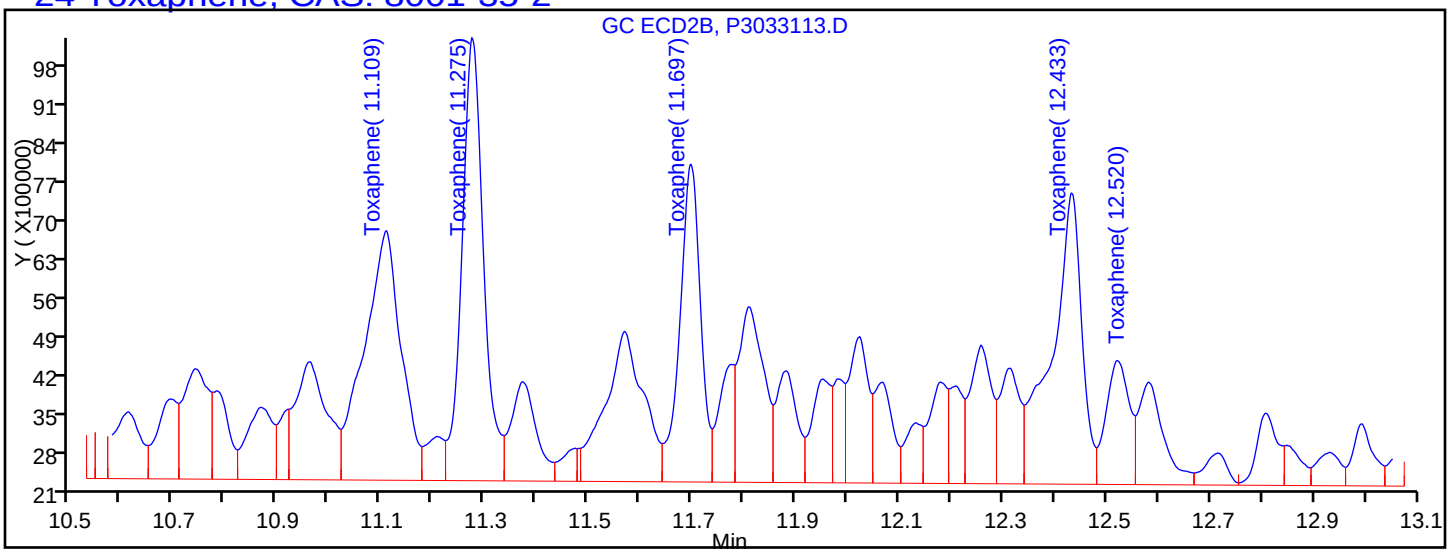
Report Date: 01-Apr-2015 08:57:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033113.D

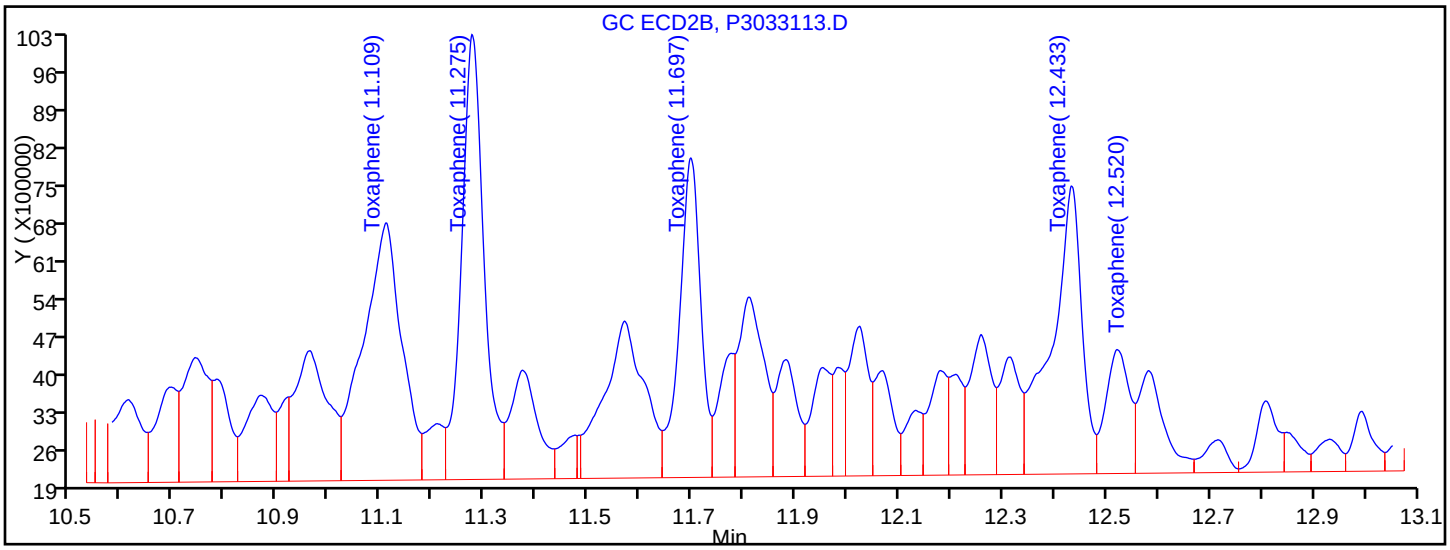
Injection Date:	31-Mar-2015 16:01:17	Instrument ID:	A2HP3		
Lims ID:	STD TOX2				
Client ID:					
Operator ID:	430893	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		
Column:		Detector	GC ecd2b		

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 11.109	Response = 22258333	M
RT = 11.275	Response = 23216556	M
RT = 11.697	Response = 16033086	M
RT = 12.433	Response = 21327843	M
RT = 12.520	Response = 7031573	M



Manual Integration Results

RT = 11.109	Response = 24670801	M
RT = 11.275	Response = 24796029	M
RT = 11.697	Response = 17040990	M
RT = 12.433	Response = 21923625	M
RT = 12.520	Response = 7281721	M

Reviewer: matthewsb, 01-Apr-2015 08:31:47

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033114.D
Lims ID: STD TOX3
Client ID:
Sample Type: ICRT Calib Level: 3
Inject. Date: 31-Mar-2015 16:24:32 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-014
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:57:26 Calib Date: 31-Mar-2015 17:11:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:32:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.708	9.708	0.000	39031109	1000.0	1031.7	M
1	10.167	10.167	0.000	37655028	1000.0	1027.6	M
1	10.478	10.478	0.000	23896272	1000.0	1023.2	M
1	10.814	10.814	0.000	34529098	1000.0	1040.8	M
1	10.922	10.922	0.000	33391038	1000.0	1032.8	M
		Average of Peak Amounts =				1031.2	
2	11.108	11.108	0.000	51233967	1000.0	988.6	M
2	11.275	11.275	0.000	51076818	1000.0	1002.2	M
2	11.698	11.698	0.000	35702538	1000.0	1001.7	M
2	12.433	12.433	0.000	45291737	1000.0	992.6	M
2	12.523	12.523	0.000	15291056	1000.0	982.1	M
		Average of Peak Amounts =				993.5	
						RPD = 3.73	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 100.00 Units: uL

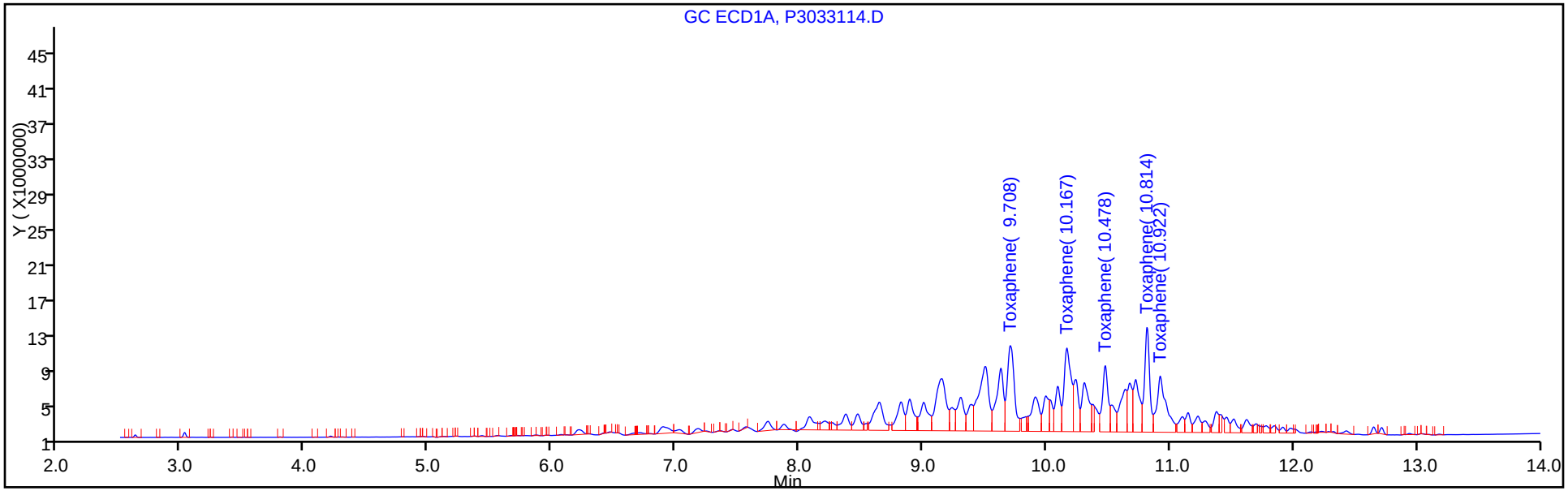
Report Date: 01-Apr-2015 08:57:27 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

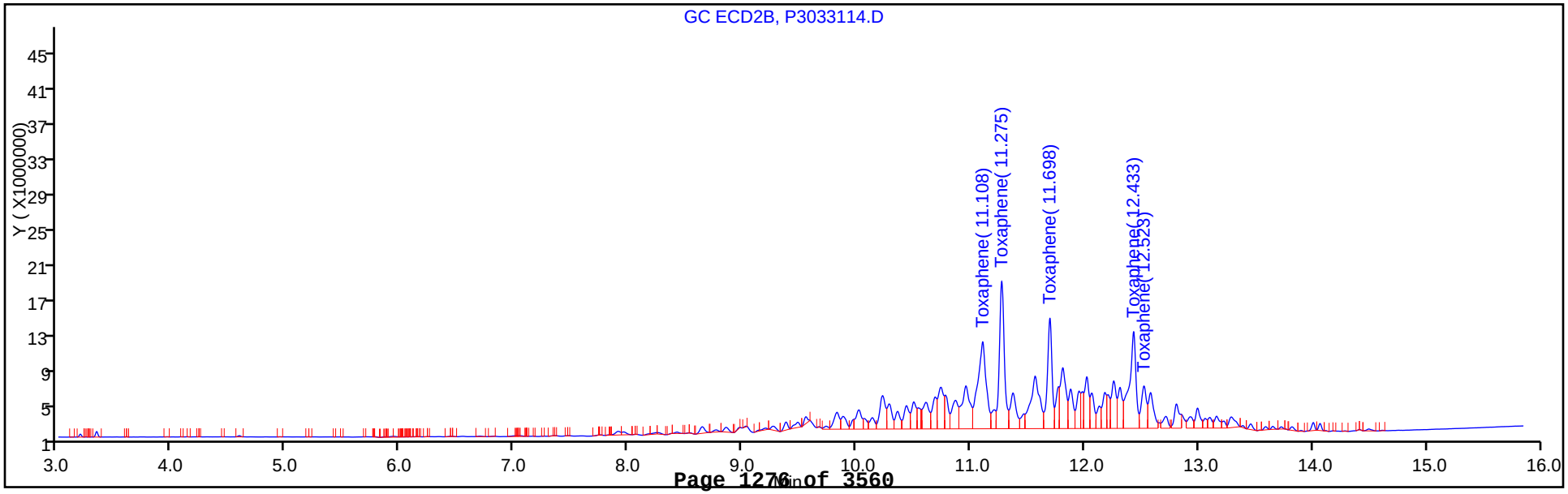
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033114.D

Injection Date:	31-Mar-2015 16:24:32	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD TOX3			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 01-Apr-2015 08:57:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033114.D

Injection Date: 31-Mar-2015 16:24:32 Instrument ID: A2HP3

Lims ID: STD TOX3

Client ID:

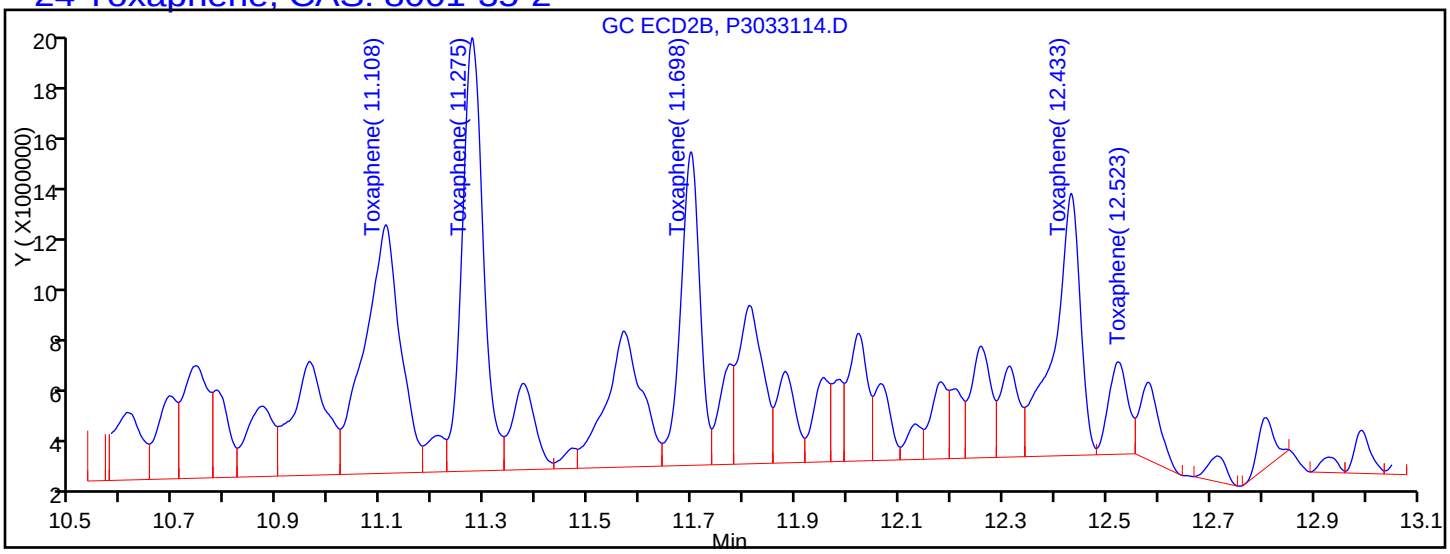
Operator ID: 430893 ALS Bottle#: 14 Worklist Smp#: 14

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

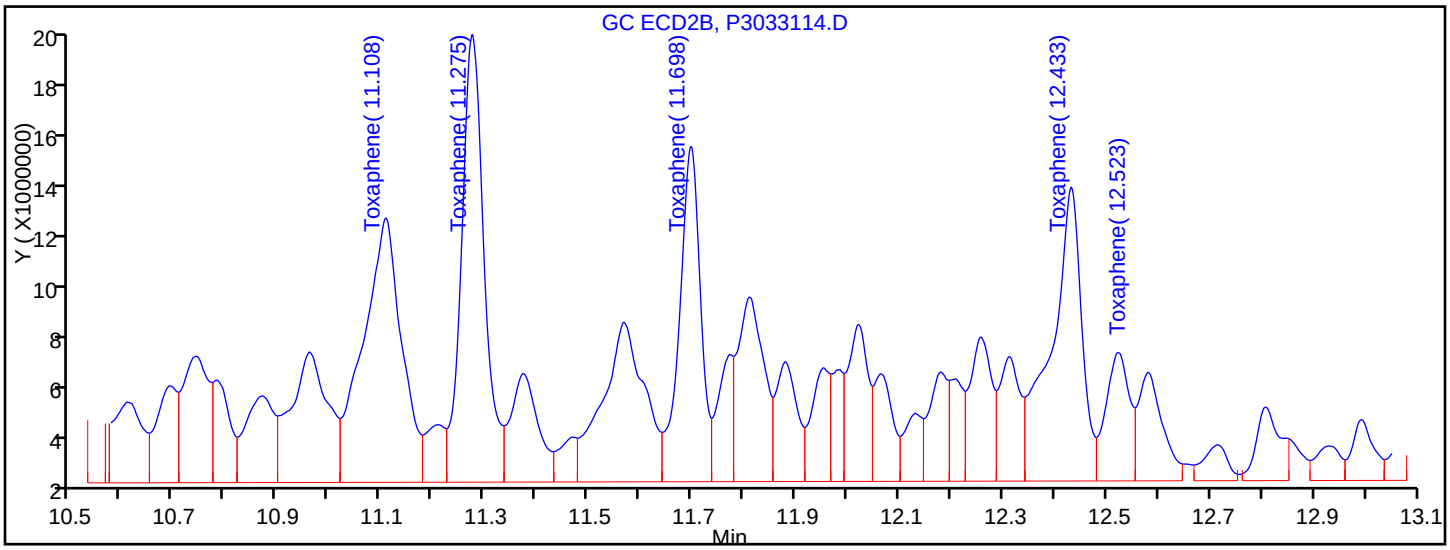
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 11.108	Response = 43949021	M
RT = 11.275	Response = 45453309	M
RT = 11.698	Response = 29769723	M
RT = 12.433	Response = 33995590	M
RT = 12.523	Response = 8947813	M



Manual Integration Results

RT = 11.108	Response = 51233967	M
RT = 11.275	Response = 51076818	M
RT = 11.698	Response = 35702538	M
RT = 12.433	Response = 45291737	M
RT = 12.523	Response = 15291056	M

Reviewer: matthewsb, 01-Apr-2015 08:32:04

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033115.D
Lims ID: STD TOX4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 31-Mar-2015 16:47:48 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-015
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:57:29 Calib Date: 31-Mar-2015 17:11:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:32:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.709	9.708	0.001	82385228	2000.0	2177.6	M
1	10.167	10.167	0.000	78084498	2000.0	2130.9	M
1	10.478	10.478	0.000	50661085	2000.0	2169.2	M
1	10.815	10.814	0.001	70679302	2000.0	2130.4	M
1	10.924	10.922	0.002	72870864	2000.0	2253.9	M
		Average of Peak Amounts =				2172.4	
2	11.108	11.108	0.000	110160431	2000.0	2125.7	M
2	11.275	11.275	0.000	107527323	2000.0	2109.8	M
2	11.698	11.698	0.000	76152937	2000.0	2136.6	M
2	12.431	12.433	-0.002	97042833	2000.0	2126.8	M
2	12.524	12.523	0.001	34039899	2000.0	2186.3	M
		Average of Peak Amounts =				2137.1	
						RPD = 1.64	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 200.00 Units: uL

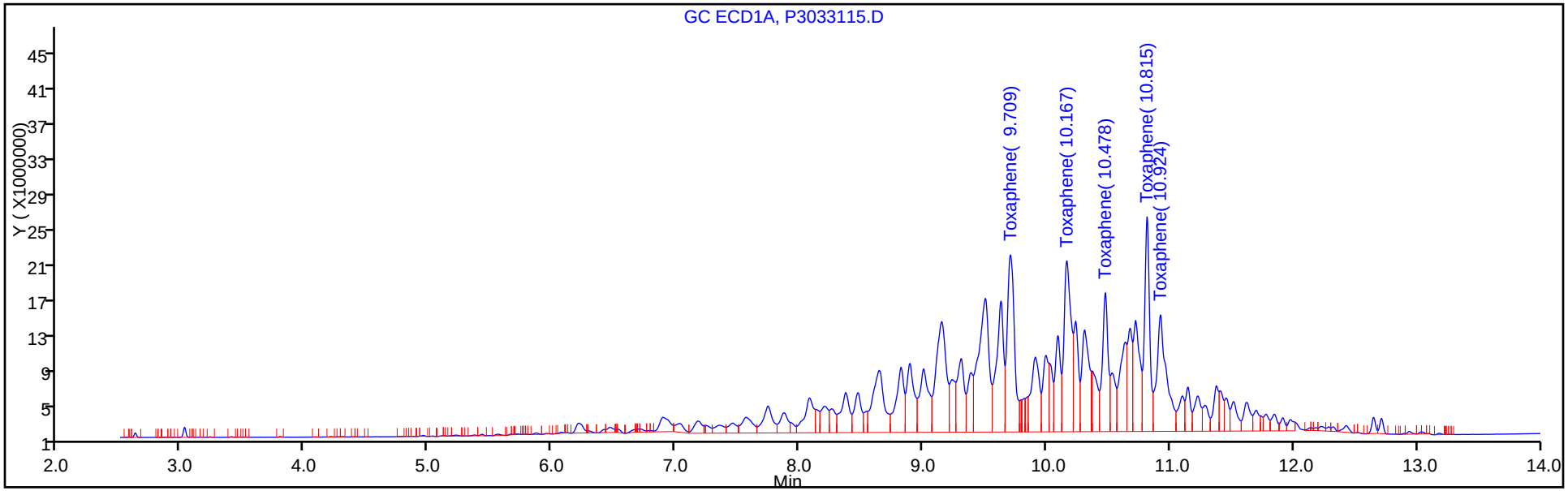
Report Date: 01-Apr-2015 08:57:31 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

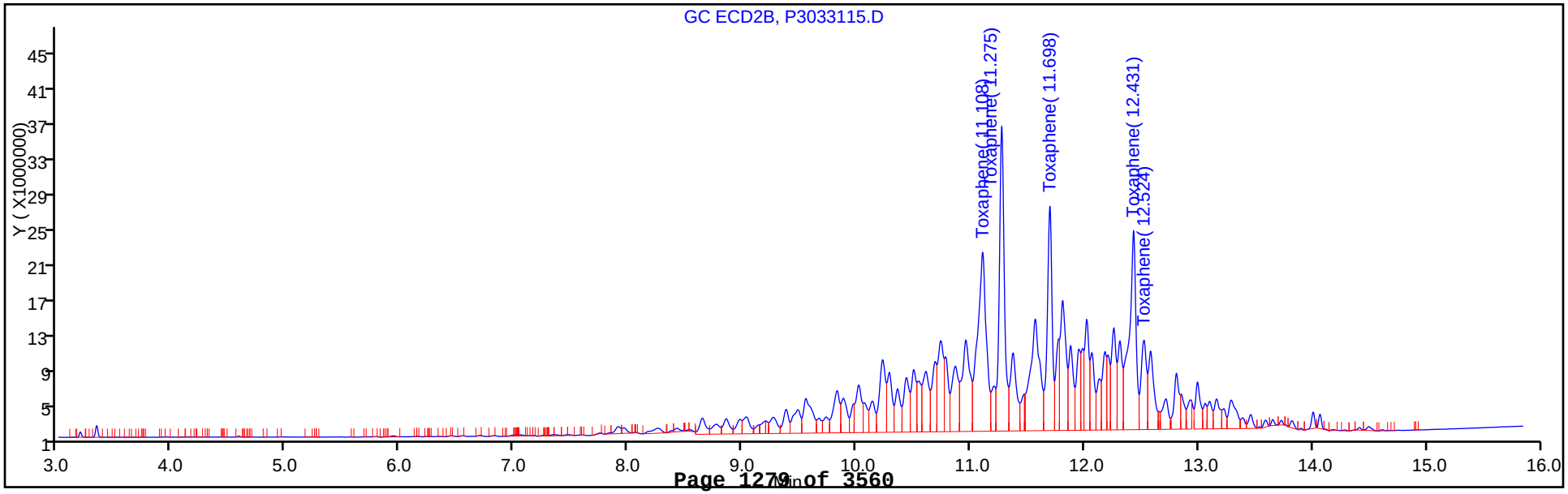
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033115.D

Injection Date:	31-Mar-2015 16:47:48	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD TOX4			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 01-Apr-2015 08:57:31 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033115.D

Injection Date: 31-Mar-2015 16:47:48 Instrument ID: A2HP3

Lims ID: STD TOX4

Client ID:

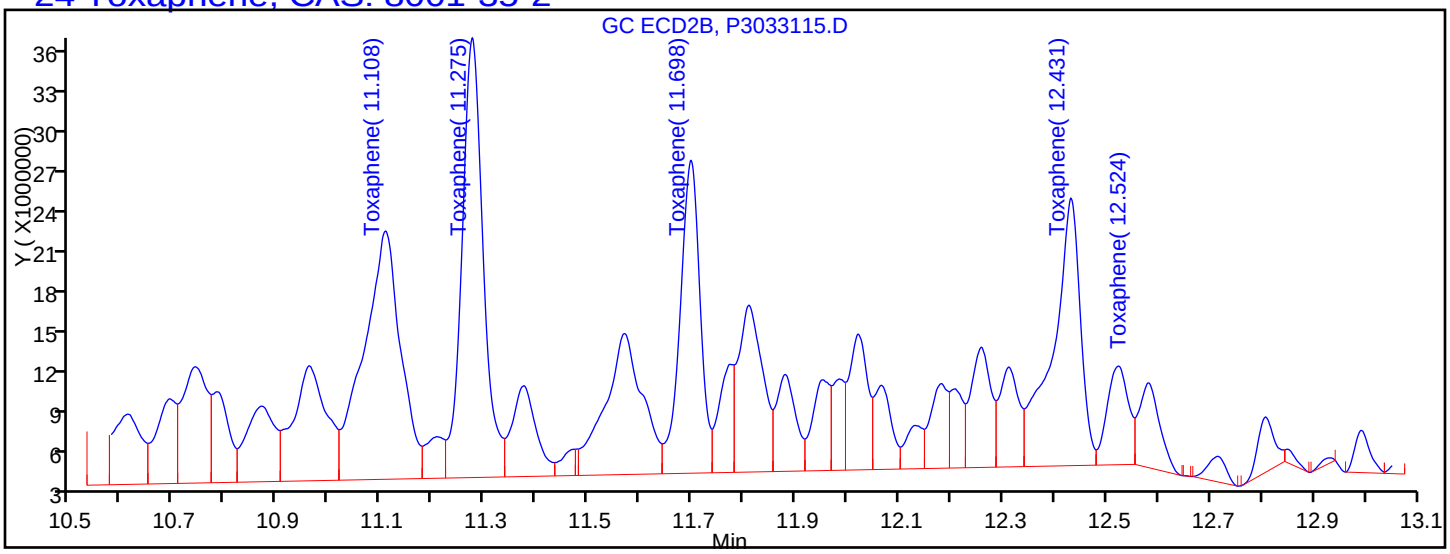
Operator ID: 430893 ALS Bottle#: 15 Worklist Smp#: 15

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

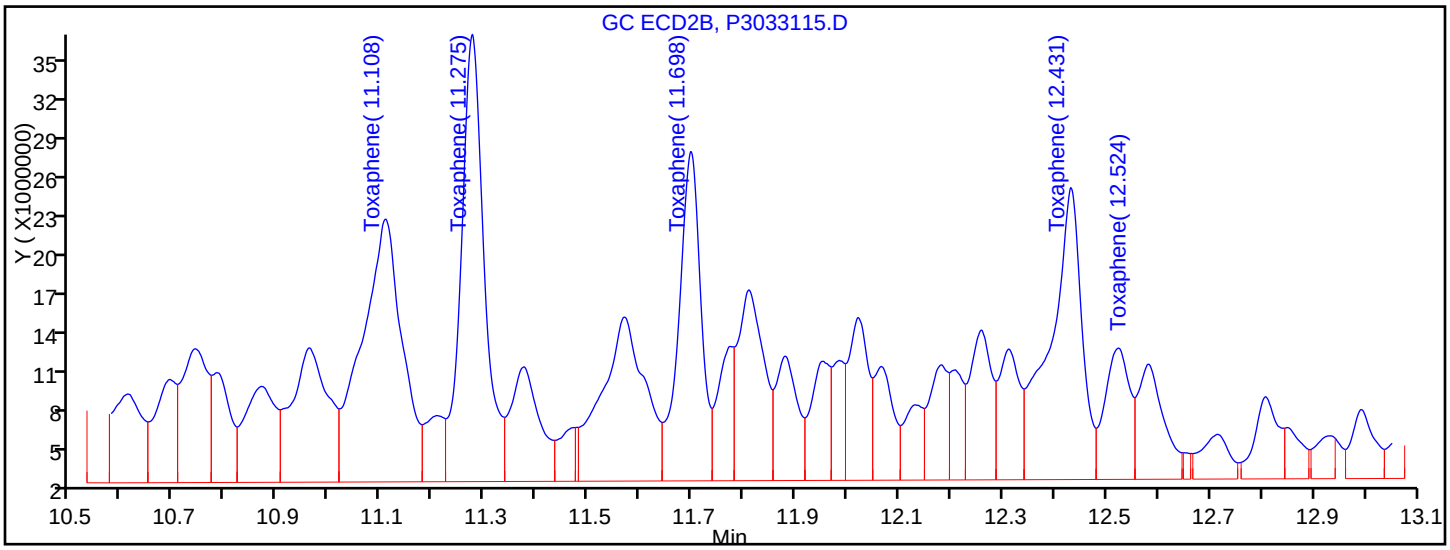
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 11.108	Response = 91132966	M
RT = 11.275	Response = 93243415	M
RT = 11.698	Response = 62581328	M
RT = 12.431	Response = 73763797	M
RT = 12.524	Response = 21194669	M



Manual Integration Results

RT = 11.108	Response = 110160431	M
RT = 11.275	Response = 107527323	M
RT = 11.698	Response = 76152937	M
RT = 12.431	Response = 97042833	M
RT = 12.524	Response = 34039899	M

Reviewer: matthewsb, 01-Apr-2015 08:32:22

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D
Lims ID: STD TOX5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 31-Mar-2015 17:11:00 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-016
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:57:33 Calib Date: 31-Mar-2015 17:11:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:32:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.707	9.708	-0.001	201242128	5000.0	5319.3	M
1	10.165	10.167	-0.002	188116864	5000.0	5133.6	M
1	10.476	10.478	-0.002	132101364	5000.0	5656.3	M
1	10.814	10.814	0.000	172790007	5000.0	5208.3	M
1	10.923	10.922	0.001	187835772	5000.0	5809.9	M
		Average of Peak Amounts =				5425.5	
2	11.109	11.108	0.001	272057035	5000.0	5249.8	M
2	11.274	11.275	-0.001	263525388	5000.0	5170.8	M
2	11.699	11.698	0.001	188891703	5000.0	5299.8	M
2	12.433	12.433	0.000	240683474	5000.0	5274.8	M
2	12.524	12.523	0.001	84924334	5000.0	5454.4	M
		Average of Peak Amounts =				5289.9	
						RPD = 2.53	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 500.00 Units: uL

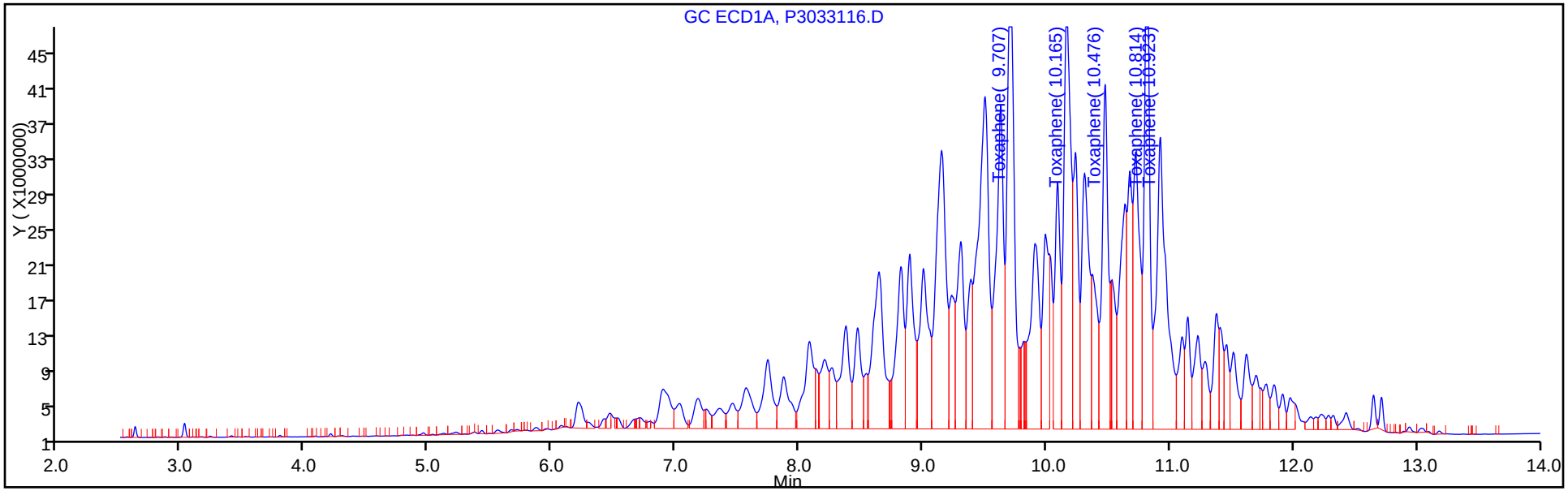
Report Date: 01-Apr-2015 08:57:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

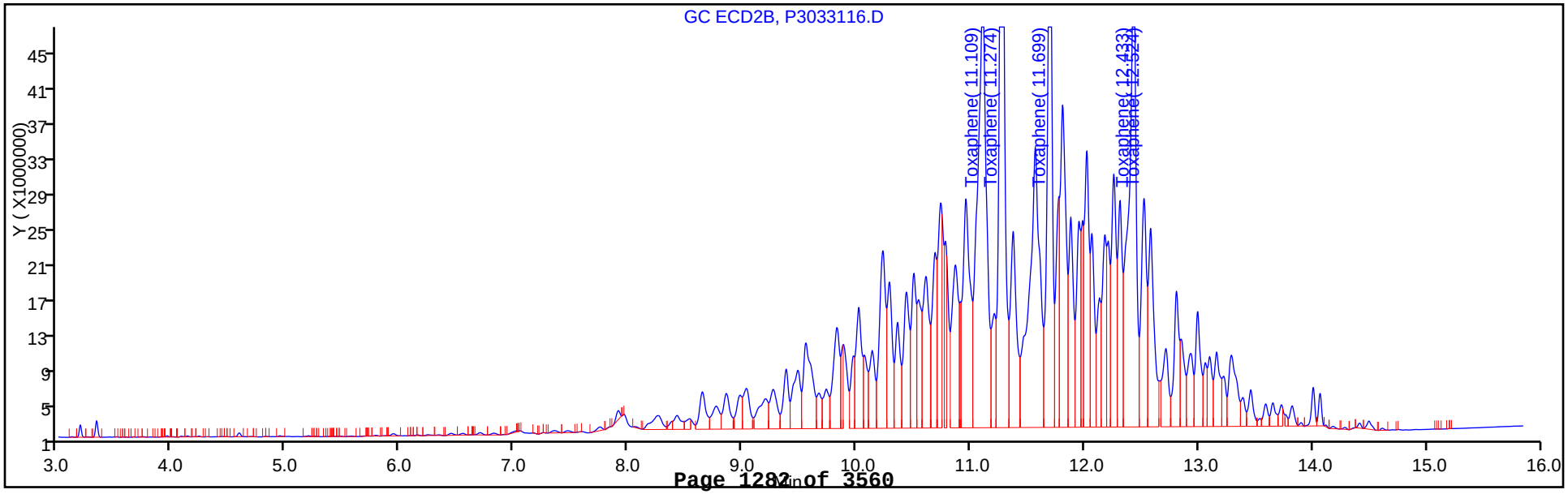
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Injection Date:	31-Mar-2015 17:11:00	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD TOX5			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



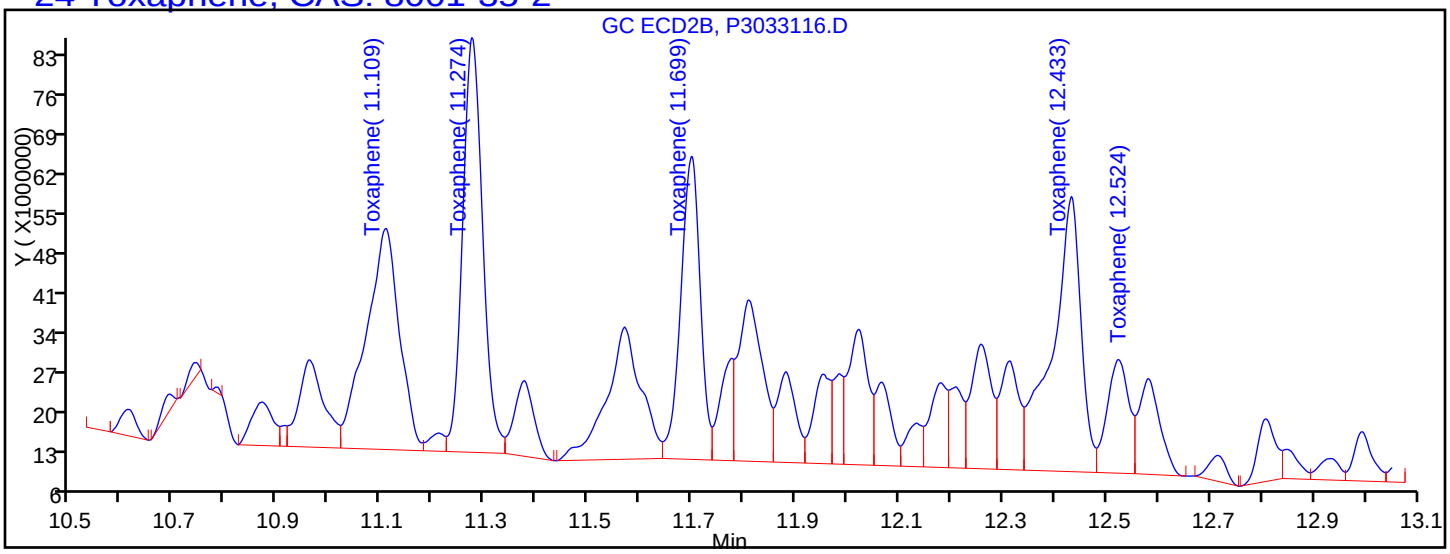
Report Date: 01-Apr-2015 08:57:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

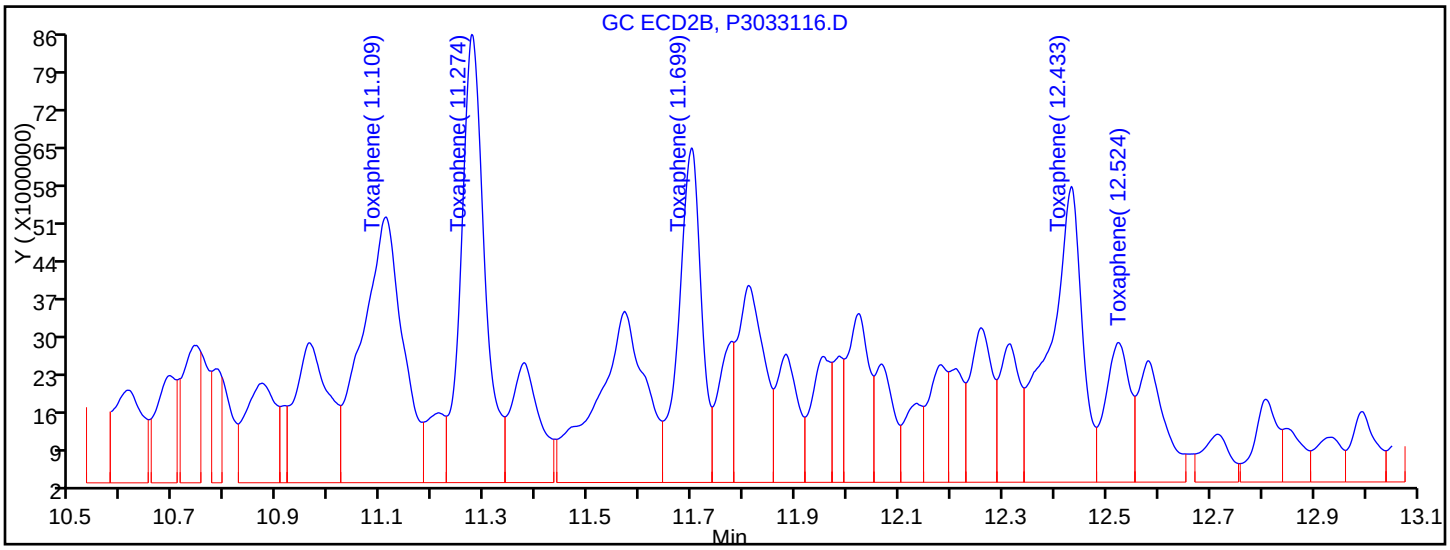
Injection Date:	31-Mar-2015 17:11:00	Instrument ID:	A2HP3
Lims ID:	STD TOX5		
Client ID:			
Operator ID:	430893	ALS Bottle#:	16 Worklist Smp#: 16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL
Column:		Detector	GC ecd2b

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 11.109	Response = 175653010	M
RT = 11.274	Response = 198970921	M
RT = 11.699	Response = 141437787	M
RT = 12.433	Response = 189724211	M
RT = 12.524	Response = 59374174	M



Manual Integration Results

RT = 11.109	Response = 272057035	M
RT = 11.274	Response = 263525388	M
RT = 11.699	Response = 188891703	M
RT = 12.433	Response = 240683474	M
RT = 12.524	Response = 84924334	M

Reviewer: matthewsb, 01-Apr-2015 08:32:36

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 20:34 Calibration End Date: 03/31/2015 22:29 Calibration ID: 27642

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-174448/25	P3033125.D
Level 2	STD 240-174448/26	P3033126.D
Level 3	STD 240-174448/27	P3033127.D
Level 4	STD 240-174448/28	P3033128.D
Level 5	STD 240-174448/29	P3033129.D
Level 6	STD 240-174448/30	P3033130.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
alpha-BHC	4.301	4.300	4.301	4.302	4.301	4.300					4.270 - 4.330	4.301
gamma-BHC (Lindane)	4.695	4.694	4.695	4.696	4.695	4.693					4.663 - 4.723	4.695
beta-BHC	4.836	4.835	4.835	4.836	4.835	4.832					4.804 - 4.864	4.835
delta-BHC	5.063	5.062	5.062	5.063	5.062	5.059					5.030 - 5.090	5.062
Heptachlor	5.356	5.354	5.356	5.356	5.356	5.353					5.324 - 5.384	5.355
Aldrin	5.833	5.831	5.833	5.833	5.832	5.830					5.801 - 5.861	5.832
Heptachlor epoxide	7.141	7.140	7.141	7.142	7.141	7.138					7.107 - 7.167	7.141
gamma-Chlordane	7.461	7.460	7.462	7.462	7.461	7.458					7.429 - 7.489	7.461
alpha-Chlordane	7.801	7.798	7.799	7.802	7.801	7.798					7.768 - 7.828	7.800
Endosulfan I	8.070	8.070	8.068	8.071	8.071	8.067					8.039 - 8.099	8.070
4,4'-DDE	8.167	8.166	8.166	8.166	8.164	8.160					8.132 - 8.192	8.165
Dieldrin	8.614	8.615	8.614	8.614	8.613	8.612					8.582 - 8.642	8.614
Endrin	9.062	9.061	9.061	9.061	9.061	9.060					9.031 - 9.091	9.061
4,4'-DDD	9.421	9.416	9.415	9.415	9.412	9.411					9.383 - 9.443	9.415
Endosulfan II	9.507	9.508	9.507	9.506	9.507	9.505					9.475 - 9.535	9.507
4,4'-DDT	9.927	9.925	9.924	9.926	9.925	9.922					9.894 - 9.954	9.925
Endrin aldehyde	10.296	10.296	10.296	10.295	10.294	10.294					10.262 - 10.322	10.295
Methoxychlor	10.872	10.869	10.868	10.869	10.867	10.867					10.836 - 10.896	10.869
Endosulfan sulfate	11.016	11.015	11.015	11.015	11.015	11.013					10.984 - 11.044	11.015
Endrin ketone	11.415	11.414	11.414	11.415	11.414	11.412					11.382 - 11.442	11.414
Tetrachloro-m-xylene	3.605	3.603	3.604	3.605	3.604	3.602					3.572 - 3.632	3.604
DCB Decachlorobiphenyl	13.011	13.010	13.011	13.012	13.011	13.009					12.979 - 13.039	13.011

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 20:34 Calibration End Date: 03/31/2015 22:29 Calibration ID: 27642

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-174448/25	P3033125.D
Level 2	STD 240-174448/26	P3033126.D
Level 3	STD 240-174448/27	P3033127.D
Level 4	STD 240-174448/28	P3033128.D
Level 5	STD 240-174448/29	P3033129.D
Level 6	STD 240-174448/30	P3033130.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
alpha-BHC	1598656 1862732	1542762 1774126	1870799	1741949	Ave		1731837.37				7.8		20.0			
gamma-BHC (Lindane)	1444166 1650625	1392125 1572055	1662962	1540505	Ave		1543739.54				7.1		20.0			
beta-BHC	648919 643562	603406 611547	668316	603300	Ave		629841.700				4.4		20.0			
delta-BHC	1334934 1669255	1265888 1595962	1624558	1526385	Ave		1502830.39				11.0		20.0			
Heptachlor	1419255 1539307	1328852 1440456	1594667	1432800	Ave		1459222.83				6.5		20.0			
Aldrin	1422590 1535272	1341784 1459417	1569878	1442389	Ave		1461888.26				5.6		20.0			
Heptachlor epoxide	1323608 1355951	1218719 1258576	1395232	1271141	Ave		1303871.02				5.1		20.0			
gamma-Chlordane	1319278 1436042	1234866 1373343	1424400	1315843	Ave		1350628.70				5.6		20.0			
alpha-Chlordane	1332420 1404141	1240746 1333789	1416003	1298558	Ave		1337609.30				4.9		20.0			
Endosulfan I	1232567 1278830	1154240 1187073	1316408	1195997	Ave		1227519.14				5.0		20.0			
4,4'-DDE	1068121 1305682	1059026 1268379	1242053	1164800	Ave		1184676.67				8.8		20.0			
Dieldrin	1238410 1396445	1203470 1306375	1407123	1293746	Ave		1307594.88				6.3		20.0			
Endrin	1100841 1228102	1054284 1147312	1250839	1126938	Ave		1151385.84				6.5		20.0			
4,4'-DDD	732191 995346	726214 976133	920182	872433	Ave		870416.413				13.5		20.0			
Endosulfan II	1178838 1186137	1109442 1087940	1269603	1109416	Ave		1156895.92				5.9		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 20:34 Calibration End Date: 03/31/2015 22:29 Calibration ID: 27642

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
4,4'-DDT	838052 1074969	788232 1058253	1030418	941265	Ave		955198.054				12.6		20.0			
Endrin aldehyde	918886 907222	869334 826852	962795	859942	Ave		890838.566				5.4		20.0			
Methoxychlor	469411 464723	438857 447611	491144	437625	Ave		458228.437				4.5		20.0			
Endosulfan sulfate	1017060 1023414	960900 947644	1064806	963339	Ave		996193.806				4.6		20.0			
Endrin ketone	1245844 1236216	1189679 1140175	1328097	1191871	Ave		1221980.44				5.3		20.0			
Tetrachloro-m-xylene	999059 1009794	924285 948186	1057759	962085	Ave		983527.986				4.9		20.0			
DCB Decachlorobiphenyl	1052590 882664	961176 848559	991991	881758	Ave		936456.367				8.4		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 20:34 Calibration End Date: 03/31/2015 22:29 Calibration ID: 27642

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-174448/25	P3033125.D
Level 2	STD 240-174448/26	P3033126.D
Level 3	STD 240-174448/27	P3033127.D
Level 4	STD 240-174448/28	P3033128.D
Level 5	STD 240-174448/29	P3033129.D
Level 6	STD 240-174448/30	P3033130.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
alpha-BHC	Ave	7993281 354825181	15427617	46769971	87097467	186273224	5.00 200	10.0	25.0	50.0	100
gamma-BHC (Lindane)	Ave	7220829 314410933	13921250	41574049	77025264	165062455	5.00 200	10.0	25.0	50.0	100
beta-BHC	Ave	3244596 122309456	6034059	16707890	30165006	64356210	5.00 200	10.0	25.0	50.0	100
delta-BHC	Ave	6674668 319192463	12658880	40613949	76319253	166925543	5.00 200	10.0	25.0	50.0	100
Heptachlor	Ave	7096274 288091249	13288516	39866687	71639995	153930697	5.00 200	10.0	25.0	50.0	100
Aldrin	Ave	7112948 291883438	13417843	39246951	72119434	153527177	5.00 200	10.0	25.0	50.0	100
Heptachlor epoxide	Ave	6618040 251715160	12187185	34880799	63557048	135595093	5.00 200	10.0	25.0	50.0	100
gamma-Chlordane	Ave	6596391 274668690	12348664	35610001	65792126	143604158	5.00 200	10.0	25.0	50.0	100
alpha-Chlordane	Ave	6662099 266757855	12407456	35400064	64927892	140414073	5.00 200	10.0	25.0	50.0	100
Endosulfan I	Ave	6162836 237414688	11542395	32910197	59799863	127882954	5.00 200	10.0	25.0	50.0	100
4,4'-DDE	Ave	5340605 253675814	10590255	31051315	58240006	130568170	5.00 200	10.0	25.0	50.0	100
Dieldrin	Ave	6192051 261274932	12034701	35178081	64687313	139644483	5.00 200	10.0	25.0	50.0	100
Endrin	Ave	5504203 229462332	10542835	31270972	56346911	122810215	5.00 200	10.0	25.0	50.0	100
4,4'-DDD	Ave	3660954 195226651	7262139	23004544	43621651	99534574	5.00 200	10.0	25.0	50.0	100
Endosulfan II	Ave	5894190 217587968	11094415	31740081	55470808	118613675	5.00 200	10.0	25.0	50.0	100
4,4'-DDT	Ave	4190259 211650515	7882323	25760449	47063249	107496871	5.00 200	10.0	25.0	50.0	100

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 20:34 Calibration End Date: 03/31/2015 22:29 Calibration ID: 27642

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Endrin aldehyde	Ave	4594432 165370411	8693339	24069870	42997118	90722188	5.00 200	10.0	25.0	50.0	100
Methoxychlor	Ave	2347056 89522192	4388568	12278595	21881225	46472336	5.00 200	10.0	25.0	50.0	100
Endosulfan sulfate	Ave	5085300 189528753	9609001	26620156	48166927	102341419	5.00 200	10.0	25.0	50.0	100
Endrin ketone	Ave	6229218 228035065	11896793	33202430	59593571	123621579	5.00 200	10.0	25.0	50.0	100
Tetrachloro-m-xylene	Ave	4995293 189637291	9242851	26443978	48104246	100979372	5.00 200	10.0	25.0	50.0	100
DCB Decachlorobiphenyl	Ave	5262952 169711774	9611764	24799770	44087885	88266403	5.00 200	10.0	25.0	50.0	100

Curve Type Legend:
Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033125.D
Lims ID: STD AB1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 31-Mar-2015 20:34:34 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-025
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:58:02 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:46:48

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.605	3.602	0.003	4995293	5.00	5.08	
2	4.287	4.287	0.000	5976395	5.00	5.30	
						RPD = 4.31	
4 alpha-BHC							
1	4.301	4.300	0.001	7993281	5.00	4.62	
2	5.198	5.198	0.000	9195421	5.00	4.70	
						RPD = 1.76	
5 gamma-BHC (Lindane)							
1	4.695	4.693	0.002	7220829	5.00	4.68	
2	5.838	5.837	0.001	8544743	5.00	4.83	
						RPD = 3.18	
6 beta-BHC							
1	4.836	4.834	0.002	3244596	5.00	5.15	
2	6.040	6.039	0.001	4183054	5.00	5.44	
						RPD = 5.52	
7 delta-BHC							
1	5.063	5.060	0.003	6674668	5.00	4.44	
2	6.681	6.681	0.000	8260715	5.00	4.66	
						RPD = 4.72	
9 Heptachlor							
1	5.356	5.354	0.002	7096274	5.00	4.86	
2	6.766	6.765	0.001	8502776	5.00	5.03	
						RPD = 3.37	
10 Aldrin							
1	5.833	5.831	0.002	7112948	5.00	4.87	
2	7.586	7.583	0.003	8372425	5.00	5.01	
						RPD = 2.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.141	7.137	0.004	6618040	5.00	5.08	
2	8.992	8.991	0.001	7415262	5.00	5.17	
						RPD = 1.76	
13 gamma-Chlordane							
1	7.461	7.459	0.002	6596391	5.00	4.88	
2	9.381	9.381	0.000	7494937	5.00	5.09	
						RPD = 4.22	
14 alpha-Chlordane							
1	7.801	7.798	0.003	6662099	5.00	4.98	
2	9.676	9.675	0.001	7252296	5.00	5.11	
						RPD = 2.48	
15 Endosulfan I							
1	8.070	8.069	0.001	6162836	5.00	5.02	
2	9.746	9.746	0.000	6816292	5.00	5.16	
						RPD = 2.69	
16 4,4'-DDE							
1	8.167	8.162	0.005	5340605	5.00	4.51	
2	10.096	10.096	0.000	6355333	5.00	4.81	
						RPD = 6.55	
17 Dieldrin							
1	8.614	8.612	0.002	6192051	5.00	4.74	
2	10.257	10.256	0.001	6788945	5.00	4.96	
						RPD = 4.68	
18 Endrin							
1	9.062	9.061	0.001	5504203	5.00	4.78	
2	10.767	10.766	0.001	6014479	5.00	4.99	
						RPD = 4.27	
20 4,4'-DDD							
1	9.421	9.413	0.008	3660954	5.00	4.21	
2	11.084	11.083	0.001	4604106	5.00	4.70	
						RPD = 11.19	
21 Endosulfan II							
1	9.507	9.505	0.002	5894190	5.00	5.09	
2	11.136	11.134	0.002	6066579	5.00	5.19	
						RPD = 1.81	
23 4,4'-DDT							
1	9.927	9.924	0.003	4190259	5.00	4.39	
2	11.566	11.564	0.002	4776608	5.00	4.79	
						RPD = 8.71	
25 Endrin aldehyde							
1	10.296	10.292	0.004	4594432	5.00	5.16	
2	11.691	11.689	0.002	4945988	5.00	5.30	
						RPD = 2.66	
27 Methoxychlor							
1	10.872	10.866	0.006	2347056	5.00	5.12	
2	12.629	12.626	0.003	2562127	5.00	5.24	
						RPD = 2.23	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	11.016	11.014	0.002	5085300	5.00	5.10	
2	12.111	12.110	0.001	5442796	5.00	5.14	
						RPD = 0.67	
29 Endrin ketone							
1	11.415	11.412	0.003	6229218	5.00	5.10	
2	12.856	12.855	0.001	6223871	5.00	5.07	
						RPD = 0.57	
$ 30 DCB Decachlorobiphenyl							
1	13.011	13.009	0.002	5262952	5.00	5.62	
2	14.571	14.568	0.003	5624059	5.00	5.52	
						RPD = 1.71	

Reagents:

SGPestAB1_00011 Amount Added: 1.00 Units: mL

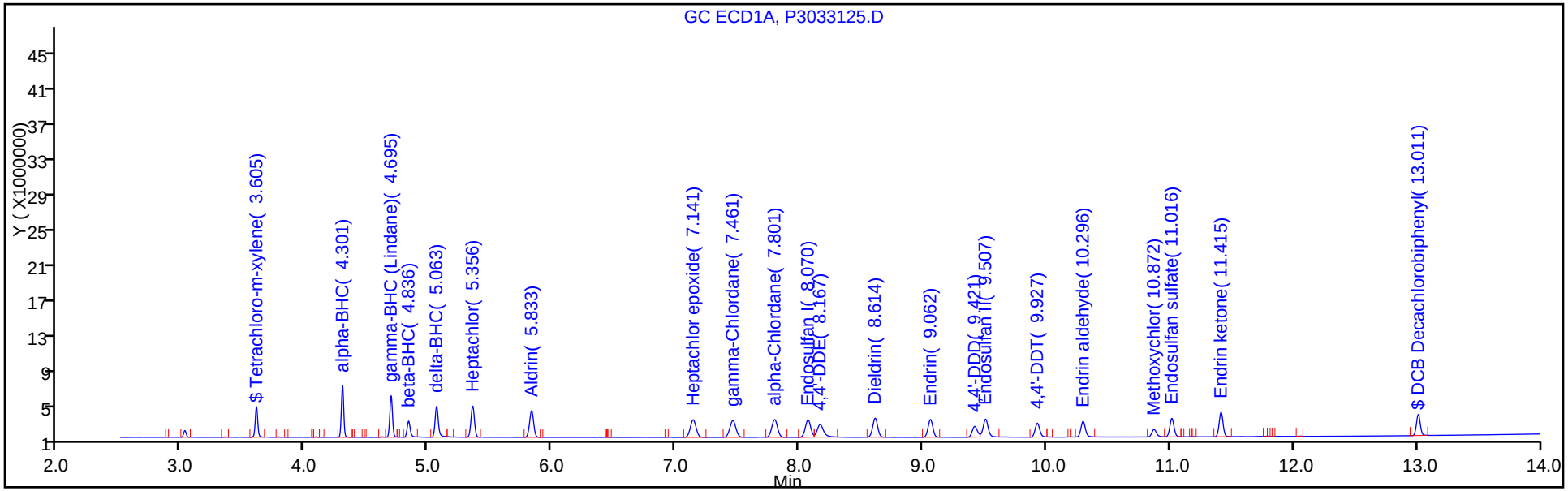
Report Date: 01-Apr-2015 08:58:04 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

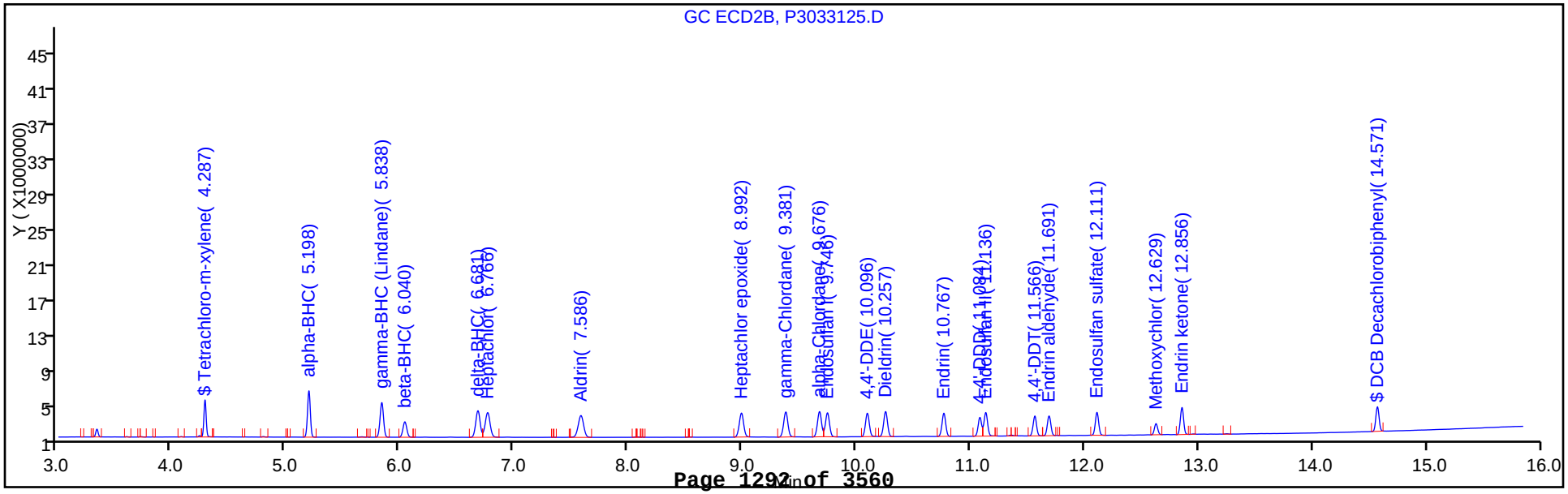
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033125.D

Injection Date:	31-Mar-2015 20:34:34	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD AB1			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033126.D
Lims ID: STD AB2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 31-Mar-2015 20:57:32 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-026
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:58:06 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.603	3.602	0.001	9242851	10.0	9.40	
2	4.286	4.287	-0.001	10851740	10.0	9.63	
						RPD = 2.43	
4 alpha-BHC							
1	4.300	4.300	0.000	15427617	10.0	8.91	
2	5.199	5.198	0.001	17699620	10.0	9.04	
						RPD = 1.49	
5 gamma-BHC (Lindane)							
1	4.694	4.693	0.001	13921250	10.0	9.02	
2	5.837	5.837	0.000	16139715	10.0	9.12	
						RPD = 1.14	
6 beta-BHC							
1	4.835	4.834	0.001	6034059	10.0	9.58	
2	6.040	6.039	0.001	7525710	10.0	9.79	
						RPD = 2.21	
7 delta-BHC							
1	5.062	5.060	0.002	12658880	10.0	8.42	
2	6.680	6.681	-0.001	15792059	10.0	8.90	
						RPD = 5.52	
9 Heptachlor							
1	5.354	5.354	0.000	13288516	10.0	9.11	
2	6.765	6.765	0.000	15740575	10.0	9.31	
						RPD = 2.22	
10 Aldrin							
1	5.831	5.831	0.000	13417843	10.0	9.18	
2	7.586	7.583	0.003	15503993	10.0	9.27	
						RPD = 1.01	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.140	7.137	0.003	12187185	10.0	9.35	
2	8.992	8.991	0.001	13689871	10.0	9.54	
						RPD = 2.01	
13 gamma-Chlordane							
1	7.460	7.459	0.001	12348664	10.0	9.14	
2	9.382	9.381	0.001	13636997	10.0	9.27	
						RPD = 1.38	
14 alpha-Chlordane							
1	7.798	7.798	0.000	12407456	10.0	9.28	
2	9.676	9.675	0.001	13324673	10.0	9.38	
						RPD = 1.13	
15 Endosulfan I							
1	8.070	8.069	0.001	11542395	10.0	9.40	
2	9.746	9.746	0.000	12609879	10.0	9.54	
						RPD = 1.46	
16 4,4'-DDE							
1	8.166	8.162	0.004	10590255	10.0	8.94	
2	10.097	10.096	0.001	12110985	10.0	9.17	
						RPD = 2.57	
17 Dieldrin							
1	8.615	8.612	0.003	12034701	10.0	9.20	
2	10.257	10.256	0.001	12731838	10.0	9.31	
						RPD = 1.11	
18 Endrin							
1	9.061	9.061	0.000	10542835	10.0	9.16	
2	10.768	10.766	0.002	11147706	10.0	9.25	
						RPD = 0.98	
20 4,4'-DDD							
1	9.416	9.413	0.003	7262139	10.0	8.34	
2	11.084	11.083	0.001	8648786	10.0	8.84	
						RPD = 5.75	
21 Endosulfan II							
1	9.508	9.505	0.003	11094415	10.0	9.59	
2	11.135	11.134	0.001	11114726	10.0	9.50	
						RPD = 0.89	
23 4,4'-DDT							
1	9.925	9.924	0.001	7882323	10.0	8.25	
2	11.565	11.564	0.001	8959182	10.0	8.98	
						RPD = 8.42	
25 Endrin aldehyde							
1	10.296	10.292	0.004	8693339	10.0	9.76	
2	11.690	11.689	0.001	9270072	10.0	9.93	
						RPD = 1.71	
27 Methoxychlor							
1	10.869	10.866	0.003	4388568	10.0	9.58	
2	12.628	12.626	0.002	4828736	10.0	9.87	
						RPD = 3.02	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	11.015	11.014	0.001	9609001	10.0	9.65	
2	12.111	12.110	0.001	10245858	10.0	9.67	
						RPD = 0.29	
29 Endrin ketone							
1	11.414	11.412	0.002	11896793	10.0	9.74	
2	12.855	12.855	0.000	11801446	10.0	9.61	
						RPD = 1.29	
$ 30 DCB Decachlorobiphenyl							
1	13.010	13.009	0.001	9611764	10.0	10.3	
2	14.570	14.568	0.002	10514527	10.0	10.3	
						RPD = 0.63	

Reagents:

SGPestAB2_00009 Amount Added: 1.00 Units: mL

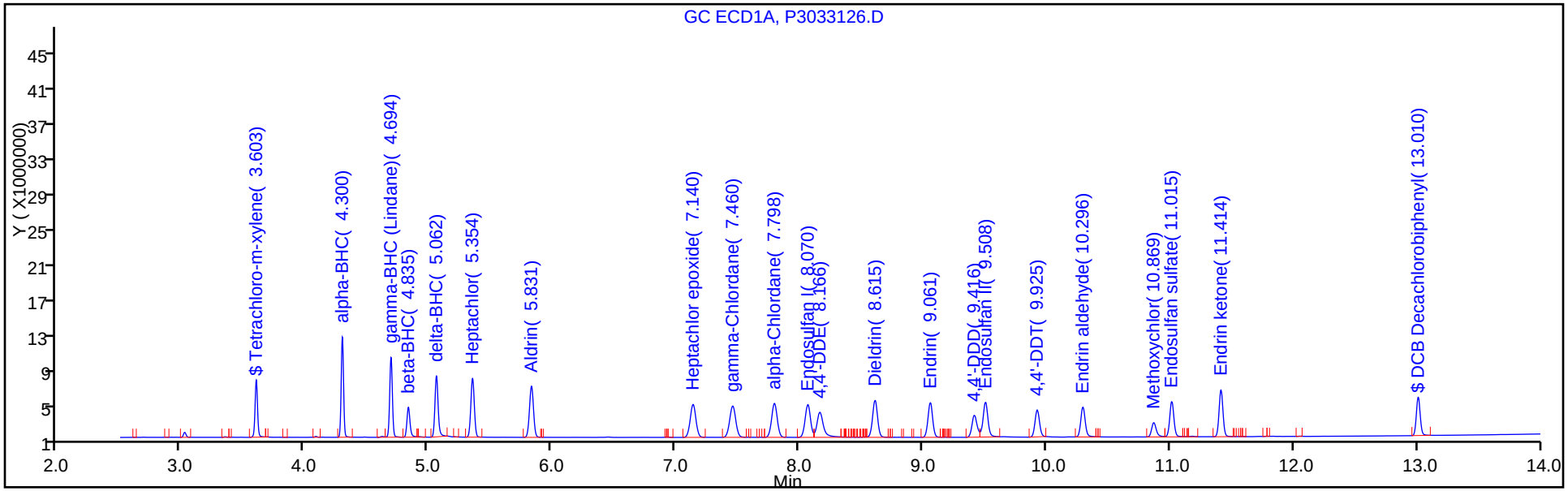
Report Date: 01-Apr-2015 08:58:07 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

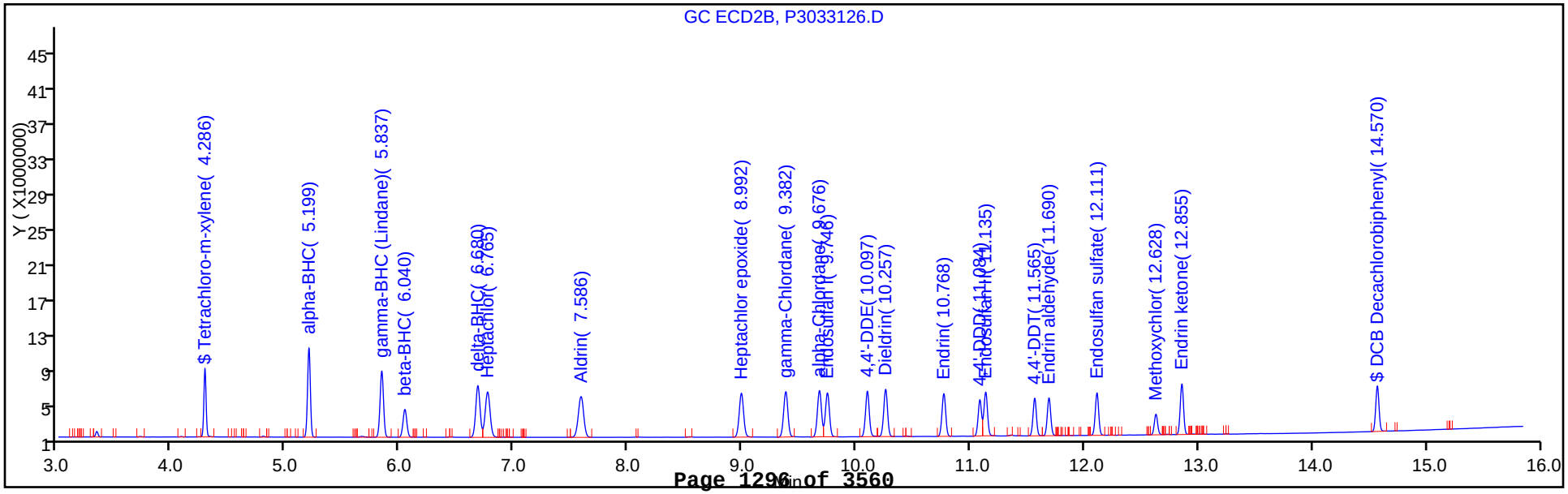
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033126.D

Injection Date:	31-Mar-2015 20:57:32	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD AB2			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033127.D
Lims ID: STD AB3
Client ID:
Sample Type: ICRT Calib Level: 3
Inject. Date: 31-Mar-2015 21:20:40 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-027
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:58:08 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.604	3.604	0.000	26443978	25.0	26.9	
2	4.287	4.287	0.000	30167206	25.0	26.8	
						RPD = 0.45	
4 alpha-BHC							
1	4.301	4.301	0.000	46769971	25.0	27.0	
2	5.199	5.199	0.000	52950629	25.0	27.0	
						RPD = 0.16	
5 gamma-BHC (Lindane)							
1	4.695	4.695	0.000	41574049	25.0	26.9	
2	5.837	5.837	0.000	47599126	25.0	26.9	
						RPD = 0.12	
6 beta-BHC							
1	4.835	4.835	0.000	16707890	25.0	26.5	
2	6.040	6.040	0.000	20332064	25.0	26.5	
						RPD = 0.25	
7 delta-BHC							
1	5.062	5.062	0.000	40613949	25.0	27.0	
2	6.681	6.681	0.000	47690894	25.0	26.9	
						RPD = 0.53	
9 Heptachlor							
1	5.356	5.356	0.000	39866687	25.0	27.3	
2	6.765	6.765	0.000	45959059	25.0	27.2	
						RPD = 0.49	
10 Aldrin							
1	5.833	5.833	0.000	39246951	25.0	26.8	
2	7.585	7.585	0.000	44658266	25.0	26.7	
						RPD = 0.52	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.141	7.141	0.000	34880799	25.0	26.8	
2	8.992	8.992	0.000	38457347	25.0	26.8	
						RPD = 0.15	
13 gamma-Chlordane							
1	7.462	7.462	0.000	35610001	25.0	26.4	
2	9.381	9.381	0.000	38906572	25.0	26.4	
						RPD = 0.31	
14 alpha-Chlordane							
1	7.799	7.799	0.000	35400064	25.0	26.5	
2	9.676	9.676	0.000	37899355	25.0	26.7	
						RPD = 0.82	
15 Endosulfan I							
1	8.068	8.068	0.000	32910197	25.0	26.8	
2	9.746	9.746	0.000	35568057	25.0	26.9	
						RPD = 0.38	
16 4,4'-DDE							
1	8.166	8.166	0.000	31051315	25.0	26.2	
2	10.096	10.096	0.000	35268356	25.0	26.7	
						RPD = 1.89	
17 Dieldrin							
1	8.614	8.614	0.000	35178081	25.0	26.9	
2	10.256	10.256	0.000	36449407	25.0	26.6	
						RPD = 0.97	
18 Endrin							
1	9.061	9.061	0.000	31270972	25.0	27.2	
2	10.768	10.768	0.000	32475088	25.0	26.9	
						RPD = 0.82	
20 4,4'-DDD							
1	9.415	9.415	0.000	23004544	25.0	26.4	
2	11.083	11.083	0.000	26001941	25.0	26.6	
						RPD = 0.53	
21 Endosulfan II							
1	9.507	9.507	0.000	31740081	25.0	27.4	
2	11.134	11.134	0.000	31413336	25.0	26.9	
						RPD = 2.11	
23 4,4'-DDT							
1	9.924	9.924	0.000	25760449	25.0	27.0	
2	11.565	11.565	0.000	26675891	25.0	26.7	
						RPD = 0.89	
25 Endrin aldehyde							
1	10.296	10.296	0.000	24069870	25.0	27.0	
2	11.690	11.690	0.000	24740219	25.0	26.5	
						RPD = 1.97	
27 Methoxychlor							
1	10.868	10.868	0.000	12278595	25.0	26.8	
2	12.628	12.628	0.000	13011833	25.0	26.6	
						RPD = 0.74	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	11.015	11.015	0.000	26620156	25.0	26.7	
2	12.110	12.110	0.000	28332394	25.0	26.8	
						RPD = 0.11	
29 Endrin ketone							
1	11.414	11.414	0.000	33202430	25.0	27.2	
2	12.856	12.856	0.000	32833375	25.0	26.7	
						RPD = 1.60	
$ 30 DCB Decachlorobiphenyl							
1	13.011	13.011	0.000	24799770	25.0	26.5	
2	14.570	14.570	0.000	27167237	25.0	26.7	
						RPD = 0.77	

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

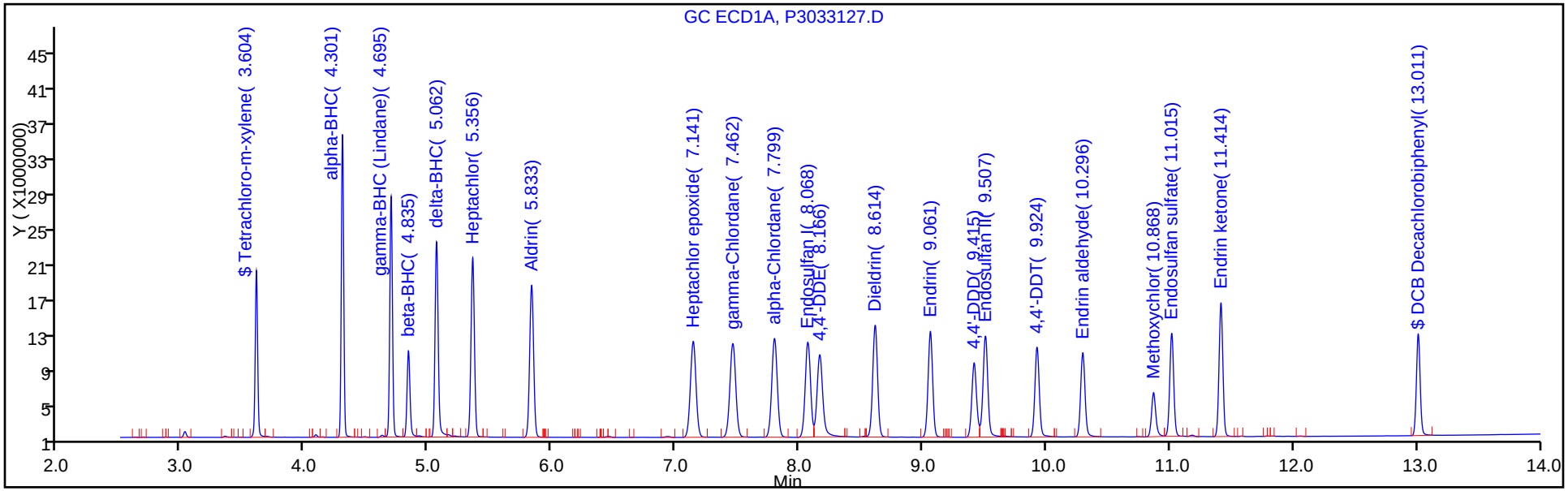
Report Date: 01-Apr-2015 08:58:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

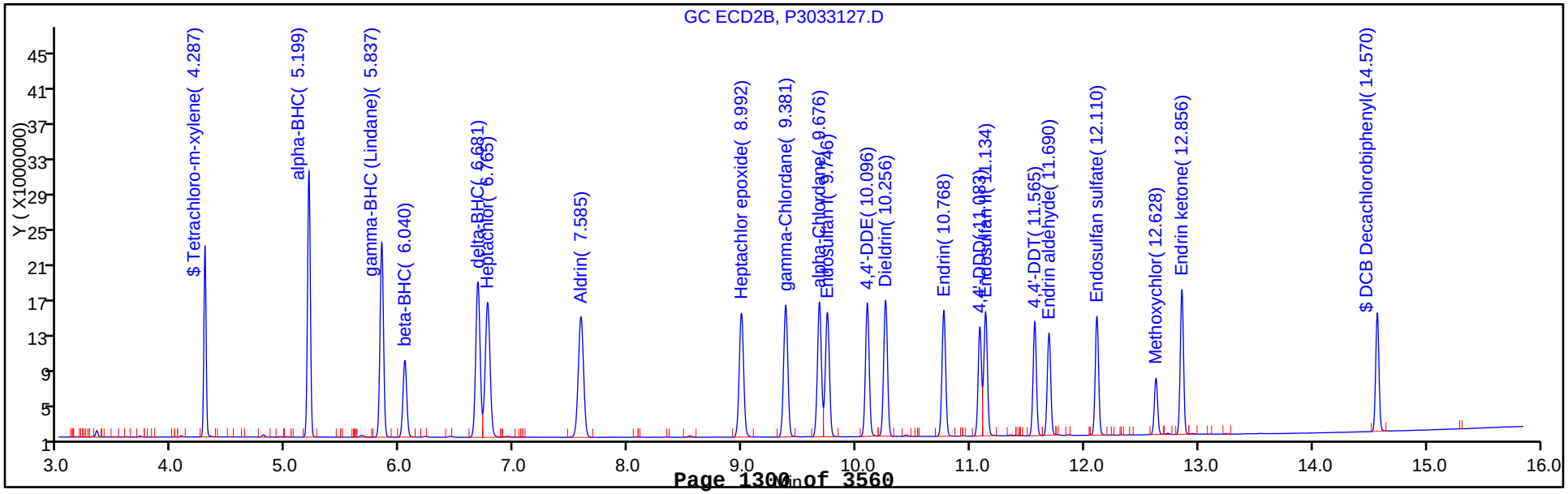
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033127.D

Injection Date:	31-Mar-2015 21:20:40	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD AB3			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033128.D
Lims ID: STD AB4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 31-Mar-2015 21:44:03 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-028
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:58:11 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:49:24

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.605	3.604	0.001	48104246	50.0	48.9	
2	4.287	4.287	0.000	54305672	50.0	48.2	
						RPD = 1.49	
4 alpha-BHC							
1	4.302	4.301	0.001	87097467	50.0	50.3	
2	5.198	5.199	-0.001	98042560	50.0	50.1	
						RPD = 0.41	
5 gamma-BHC (Lindane)							
1	4.696	4.695	0.001	77025264	50.0	49.9	
2	5.837	5.837	0.000	87552352	50.0	49.5	
						RPD = 0.84	
6 beta-BHC							
1	4.836	4.835	0.001	30165006	50.0	47.9	
2	6.040	6.040	0.000	36397222	50.0	47.4	
						RPD = 1.10	
7 delta-BHC							
1	5.063	5.062	0.001	76319253	50.0	50.8	
2	6.681	6.681	0.000	88387997	50.0	49.8	
						RPD = 1.92	
9 Heptachlor							
1	5.356	5.356	0.000	71639995	50.0	49.1	
2	6.766	6.765	0.001	81257807	50.0	48.1	
						RPD = 2.12	
10 Aldrin							
1	5.833	5.833	0.000	72119434	50.0	49.3	
2	7.586	7.585	0.001	81365132	50.0	48.7	
						RPD = 1.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.142	7.141	0.001	63557048	50.0	48.7	
2	8.992	8.992	0.000	69475178	50.0	48.4	
						RPD = 0.71	
13 gamma-Chlordane							
1	7.462	7.462	0.000	65792126	50.0	48.7	
2	9.381	9.381	0.000	71367916	50.0	48.5	
						RPD = 0.41	
14 alpha-Chlordane							
1	7.802	7.799	0.003	64927892	50.0	48.5	
2	9.677	9.676	0.001	68733372	50.0	48.4	
						RPD = 0.31	
15 Endosulfan I							
1	8.071	8.068	0.003	59799863	50.0	48.7	
2	9.747	9.746	0.001	63881581	50.0	48.3	
						RPD = 0.78	
16 4,4'-DDE							
1	8.166	8.166	0.000	58240006	50.0	49.2	
2	10.097	10.096	0.001	64399402	50.0	48.8	
						RPD = 0.79	
17 Dieldrin							
1	8.614	8.614	0.000	64687313	50.0	49.5	
2	10.256	10.256	0.000	66586628	50.0	48.7	
						RPD = 1.63	
18 Endrin							
1	9.061	9.061	0.000	56346911	50.0	48.9	
2	10.768	10.768	0.000	58027543	50.0	48.1	
						RPD = 1.66	
20 4,4'-DDD							
1	9.415	9.415	0.000	43621651	50.0	50.1	
2	11.084	11.083	0.001	48125406	50.0	49.2	
						RPD = 1.89	
21 Endosulfan II							
1	9.506	9.507	-0.001	55470808	50.0	47.9	
2	11.135	11.134	0.001	56194228	50.0	48.1	
						RPD = 0.22	
23 4,4'-DDT							
1	9.926	9.924	0.002	47063249	50.0	49.3	
2	11.565	11.565	0.000	47803384	50.0	47.9	
						RPD = 2.82	
25 Endrin aldehyde							
1	10.295	10.296	-0.001	42997118	50.0	48.3	
2	11.690	11.690	0.000	44519851	50.0	47.7	
						RPD = 1.24	
27 Methoxychlor							
1	10.869	10.868	0.001	21881225	50.0	47.8	
2	12.628	12.628	0.000	22888462	50.0	46.8	
						RPD = 2.04	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	11.015	11.015	0.000	48166927	50.0	48.4	
2	12.110	12.110	0.000	50695672	50.0	47.9	
						RPD = 1.01	
29 Endrin ketone							
1	11.415	11.414	0.001	59593571	50.0	48.8	
2	12.856	12.856	0.000	59168122	50.0	48.2	
						RPD = 1.20	
$ 30 DCB Decachlorobiphenyl							
1	13.012	13.011	0.001	44087885	50.0	47.1	
2	14.570	14.570	0.000	48028681	50.0	47.2	
						RPD = 0.21	

Reagents:

SGPestAB4_00009 Amount Added: 1.00 Units: mL

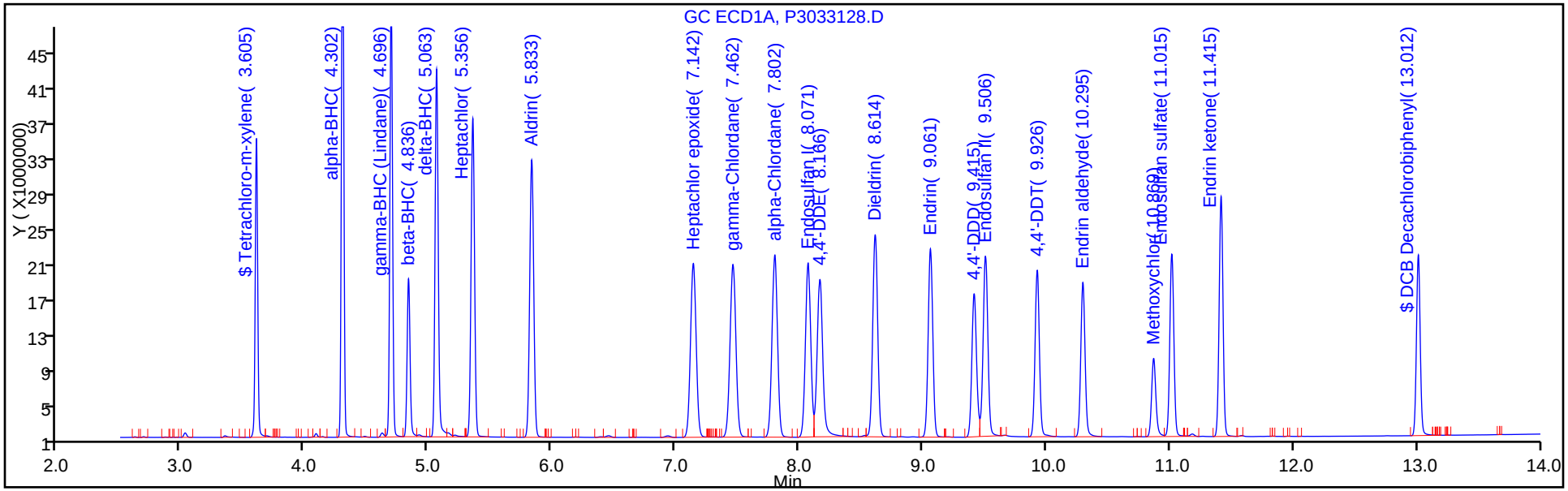
Report Date: 01-Apr-2015 08:58:13 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

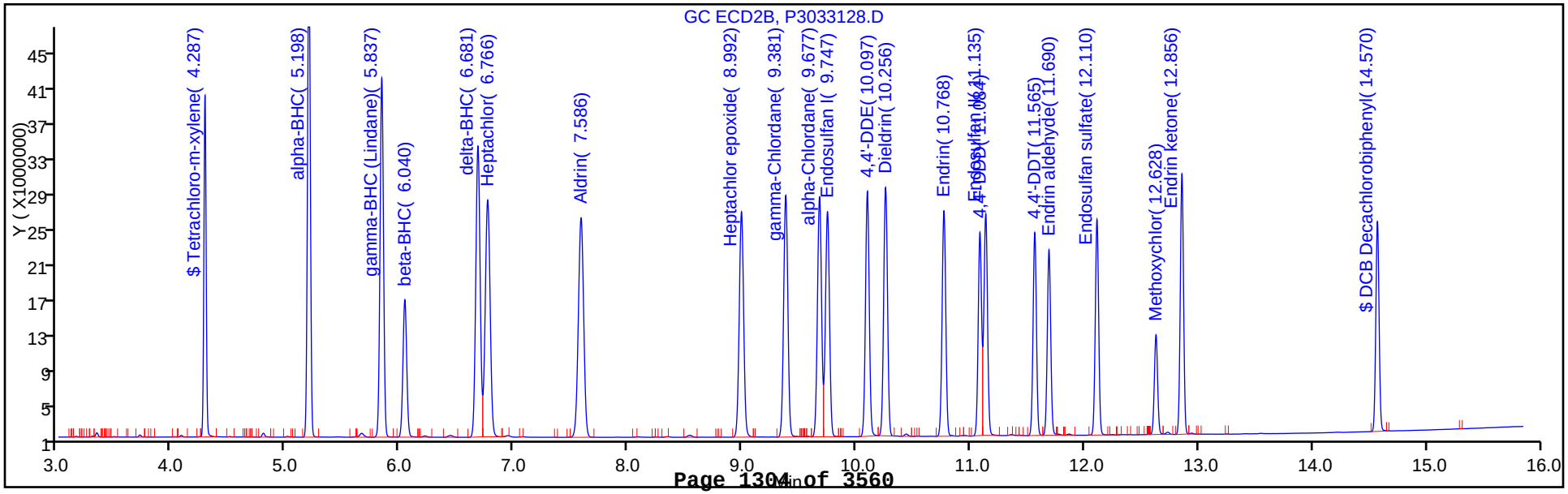
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033128.D

Injection Date:	31-Mar-2015 21:44:03	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD AB4			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033129.D
Lims ID: STD AB5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 31-Mar-2015 22:07:14 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-029
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:58:14 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.604	3.604	0.000	100979372	100.0	102.7	
2	4.287	4.287	0.000	113034706	100.0	100.3	
						RPD = 2.34	
4 alpha-BHC							
1	4.301	4.301	0.000	186273224	100.0	107.6	
2	5.199	5.199	0.000	208465883	100.0	106.5	
						RPD = 0.99	
5 gamma-BHC (Lindane)							
1	4.695	4.695	0.000	165062455	100.0	106.9	
2	5.837	5.837	0.000	186977616	100.0	105.7	
						RPD = 1.18	
6 beta-BHC							
1	4.835	4.835	0.000	64356210	100.0	102.2	
2	6.040	6.040	0.000	76204305	100.0	99.2	
						RPD = 2.98	
7 delta-BHC							
1	5.062	5.062	0.000	166925543	100.0	111.1	
2	6.680	6.681	-0.001	191902373	100.0	108.2	
						RPD = 2.65	
9 Heptachlor							
1	5.356	5.356	0.000	153930697	100.0	105.5	
2	6.767	6.765	0.002	176072167	100.0	104.2	
						RPD = 1.27	
10 Aldrin							
1	5.832	5.833	-0.001	153527177	100.0	105.0	
2	7.584	7.585	-0.001	174114951	100.0	104.1	
						RPD = 0.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.141	7.141	0.000	135595093	100.0	104.0	
2	8.992	8.992	0.000	146595251	100.0	102.1	
						RPD = 1.81	
13 gamma-Chlordane							
1	7.461	7.462	-0.001	143604158	100.0	106.3	
2	9.382	9.381	0.001	152807674	100.0	103.9	
						RPD = 2.34	
14 alpha-Chlordane							
1	7.801	7.799	0.002	140414073	100.0	105.0	
2	9.677	9.676	0.001	146119135	100.0	102.9	
						RPD = 2.02	
15 Endosulfan I							
1	8.071	8.068	0.003	127882954	100.0	104.2	
2	9.747	9.746	0.001	134897952	100.0	102.1	
						RPD = 2.04	
16 4,4'-DDE							
1	8.164	8.166	-0.002	130568170	100.0	110.2	
2	10.097	10.096	0.001	140151362	100.0	106.1	
						RPD = 3.76	
17 Dieldrin							
1	8.613	8.614	-0.001	139644483	100.0	106.8	
2	10.257	10.256	0.001	143152571	100.0	104.6	
						RPD = 2.04	
18 Endrin							
1	9.061	9.061	0.000	122810215	100.0	106.7	
2	10.767	10.768	-0.001	126436870	100.0	104.9	
						RPD = 1.69	
20 4,4'-DDD							
1	9.412	9.415	-0.003	99534574	100.0	114.4	
2	11.083	11.083	0.000	106287930	100.0	108.6	
						RPD = 5.15	
21 Endosulfan II							
1	9.507	9.507	0.000	118613675	100.0	102.5	
2	11.134	11.134	0.000	119019734	100.0	101.8	
						RPD = 0.74	
23 4,4'-DDT							
1	9.925	9.924	0.001	107496871	100.0	112.5	
2	11.565	11.565	0.000	106648312	100.0	106.9	
						RPD = 5.17	
25 Endrin aldehyde							
1	10.294	10.296	-0.002	90722188	100.0	101.8	
2	11.690	11.690	0.000	93913976	100.0	100.6	
						RPD = 1.26	
27 Methoxychlor							
1	10.867	10.868	-0.001	46472336	100.0	101.4	
2	12.627	12.628	-0.001	48177105	100.0	98.5	
						RPD = 2.94	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	11.015	11.015	0.000	102341419	100.0	102.7	
2	12.110	12.110	0.000	107630350	100.0	101.6	
						RPD = 1.09	
29 Endrin ketone							
1	11.414	11.414	0.000	123621579	100.0	101.2	
2	12.856	12.856	0.000	125541054	100.0	102.2	
						RPD = 1.06	
$ 30 DCB Decachlorobiphenyl							
1	13.011	13.011	0.000	88266403	100.0	94.3	
2	14.570	14.570	0.000	96538779	100.0	94.8	
						RPD = 0.61	

Reagents:

SGPestAB5_00009 Amount Added: 1.00 Units: mL

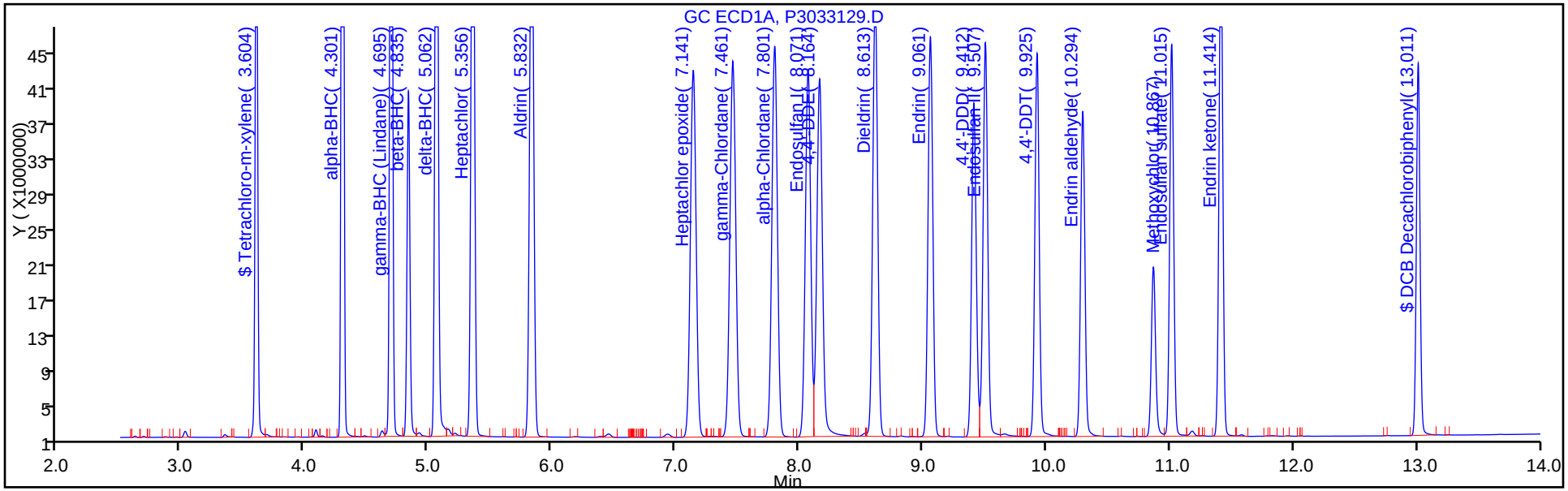
Report Date: 01-Apr-2015 08:58:16 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

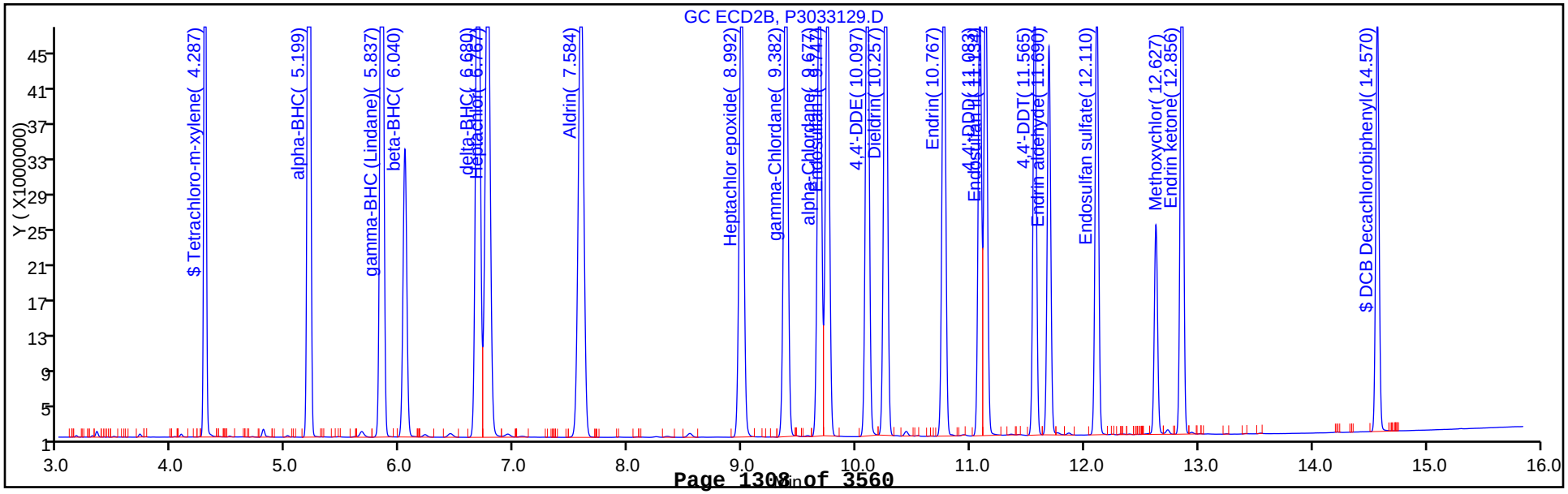
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033129.D

Injection Date:	31-Mar-2015 22:07:14	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD AB5			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D
Lims ID: STD AB6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 31-Mar-2015 22:29:58 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-030
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:58:17 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.602	3.604	-0.002	189637291	200.0	192.8	
2	4.287	4.287	0.000	211706263	200.0	187.8	
						RPD = 2.61	
4 alpha-BHC							
1	4.300	4.301	-0.001	354825181	200.0	204.9	
2	5.198	5.199	-0.001	394533340	200.0	201.5	
						RPD = 1.64	
5 gamma-BHC (Lindane)							
1	4.693	4.695	-0.002	314410933	200.0	203.7	
2	5.837	5.837	0.000	353874715	200.0	200.0	
						RPD = 1.83	
6 beta-BHC							
1	4.832	4.835	-0.003	122309456	200.0	194.2	
2	6.038	6.040	-0.002	143550510	200.0	186.8	
						RPD = 3.87	
7 delta-BHC							
1	5.059	5.062	-0.003	319192463	200.0	212.4	
2	6.680	6.681	-0.001	363835550	200.0	205.1	
						RPD = 3.51	
9 Heptachlor							
1	5.353	5.356	-0.003	288091249	200.0	197.4	
2	6.767	6.765	0.002	328861796	200.0	194.5	
						RPD = 1.48	
10 Aldrin							
1	5.830	5.833	-0.003	291883438	200.0	199.7	
2	7.585	7.585	0.000	330701385	200.0	197.8	
						RPD = 0.95	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.138	7.141	-0.003	251715160	200.0	193.1	
2	8.992	8.992	0.000	273352880	200.0	190.4	
						RPD = 1.37	
13 gamma-Chlordane							
1	7.458	7.462	-0.004	274668690	200.0	203.4	
2	9.381	9.381	0.000	290505462	200.0	197.5	
						RPD = 2.94	
14 alpha-Chlordane							
1	7.798	7.799	-0.001	266757855	200.0	199.4	
2	9.677	9.676	0.001	277491300	200.0	195.4	
						RPD = 2.06	
15 Endosulfan I							
1	8.067	8.068	-0.001	237414688	200.0	193.4	
2	9.747	9.746	0.001	251200604	200.0	190.1	
						RPD = 1.74	
16 4,4'-DDE							
1	8.160	8.166	-0.006	253675814	200.0	214.1	
2	10.097	10.096	0.001	268025917	200.0	203.0	
						RPD = 5.34	
17 Dieldrin							
1	8.612	8.614	-0.002	261274932	200.0	199.8	
2	10.257	10.256	0.001	271265368	200.0	198.3	
						RPD = 0.77	
18 Endrin							
1	9.060	9.061	-0.001	229462332	200.0	199.3	
2	10.767	10.768	-0.001	238375035	200.0	197.7	
						RPD = 0.79	
20 4,4'-DDD							
1	9.411	9.415	-0.004	195226651	200.0	224.3	
2	11.082	11.083	-0.001	204139326	200.0	208.6	
						RPD = 7.25	
21 Endosulfan II							
1	9.505	9.507	-0.002	217587968	200.0	188.1	
2	11.134	11.134	0.000	224229146	200.0	191.7	
						RPD = 1.93	
23 4,4'-DDT							
1	9.922	9.924	-0.002	211650515	200.0	221.6	
2	11.565	11.565	0.000	209429423	200.0	209.9	
						RPD = 5.44	
25 Endrin aldehyde							
1	10.294	10.296	-0.002	165370411	200.0	185.6	
2	11.689	11.690	-0.001	173564845	200.0	185.9	
						RPD = 0.12	
27 Methoxychlor							
1	10.867	10.868	-0.001	89522192	200.0	195.4	
2	12.627	12.628	-0.001	95972640	200.0	196.2	
						RPD = 0.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	11.013	11.015	-0.002	189528753	200.0	190.3	
2	12.110	12.110	0.000	203625762	200.0	192.3	
						RPD = 1.05	
29 Endrin ketone							
1	11.412	11.414	-0.002	228035065	200.0	186.6	
2	12.856	12.856	0.000	238046316	200.0	193.9	
						RPD = 3.81	
$ 30 DCB Decachlorobiphenyl							
1	13.009	13.011	-0.002	169711774	200.0	181.2	
2	14.569	14.570	-0.001	183801612	200.0	180.6	
						RPD = 0.37	

Reagents:

SGPestAB6_00010 Amount Added: 1.00 Units: mL

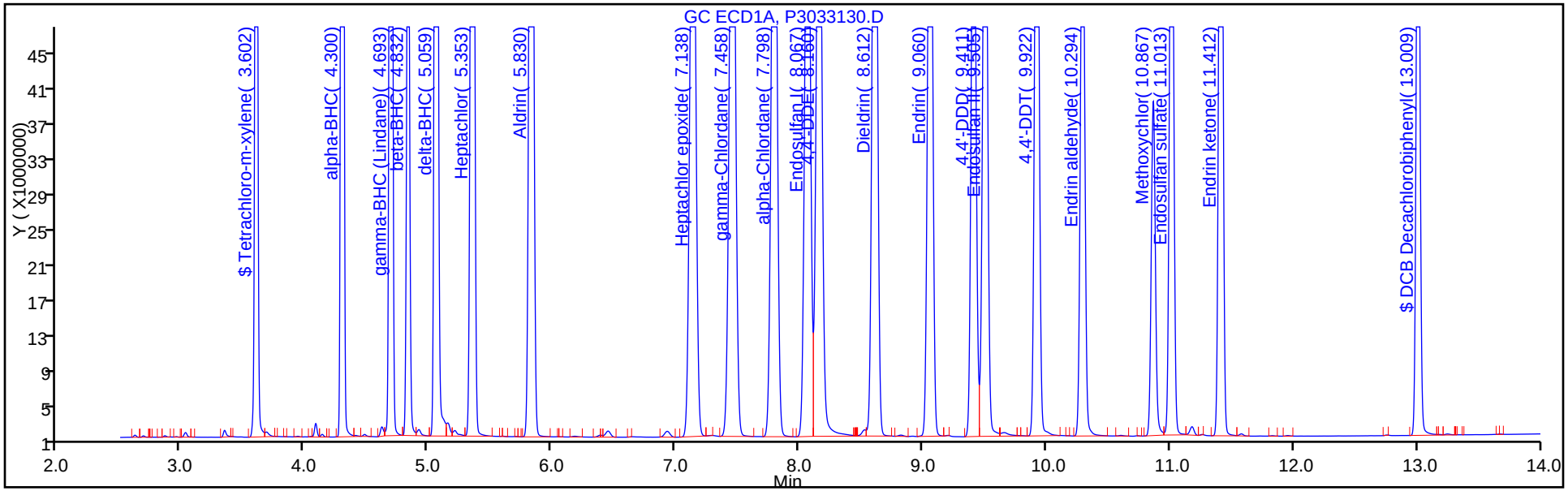
Report Date: 01-Apr-2015 08:58:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

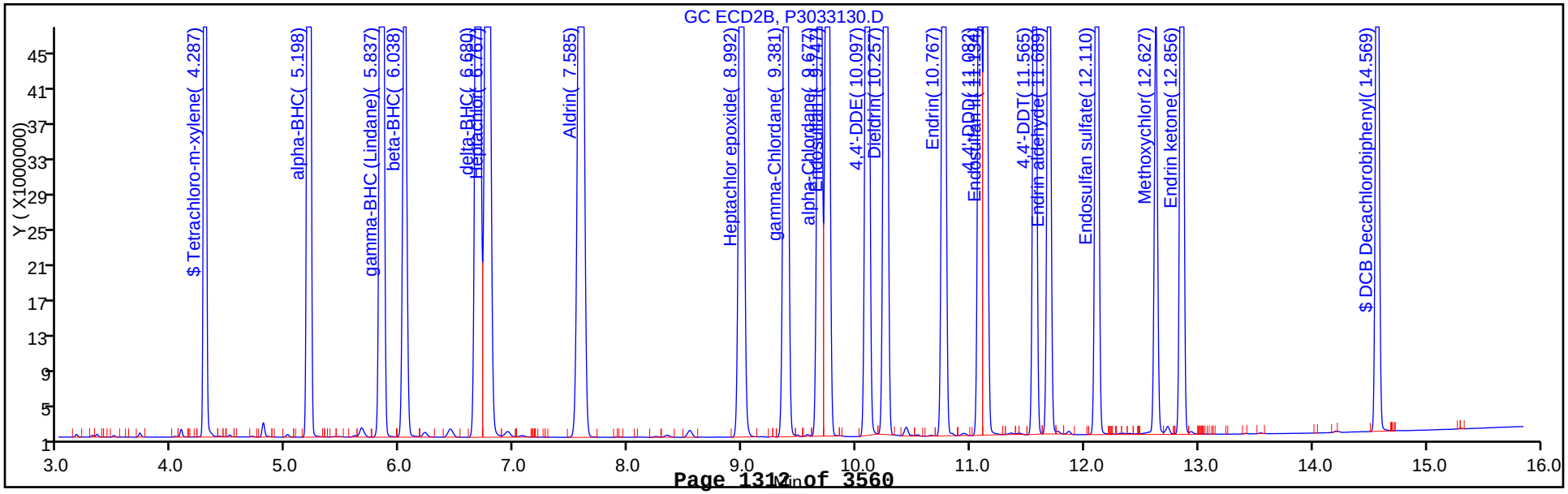
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Injection Date:	31-Mar-2015 22:29:58	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD AB6			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 20:34 Calibration End Date: 03/31/2015 22:29 Calibration ID: 27643

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-174448/25	P3033125.D
Level 2	STD 240-174448/26	P3033126.D
Level 3	STD 240-174448/27	P3033127.D
Level 4	STD 240-174448/28	P3033128.D
Level 5	STD 240-174448/29	P3033129.D
Level 6	STD 240-174448/30	P3033130.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
alpha-BHC	5.198	5.199	5.199	5.198	5.199	5.198					5.168 - 5.228	5.199
gamma-BHC (Lindane)	5.838	5.837	5.837	5.837	5.837	5.837					5.807 - 5.867	5.837
beta-BHC	6.040	6.040	6.040	6.040	6.040	6.038					6.009 - 6.069	6.040
delta-BHC	6.681	6.680	6.681	6.681	6.680	6.680					6.651 - 6.711	6.681
Heptachlor	6.766	6.765	6.765	6.766	6.767	6.767					6.735 - 6.795	6.766
Aldrin	7.586	7.586	7.585	7.586	7.584	7.585					7.553 - 7.613	7.585
Heptachlor epoxide	8.992	8.992	8.992	8.992	8.992	8.992					8.961 - 9.021	8.992
gamma-Chlordane	9.381	9.382	9.381	9.381	9.382	9.381					9.351 - 9.411	9.381
alpha-Chlordane	9.676	9.676	9.676	9.677	9.677	9.677					9.645 - 9.705	9.677
Endosulfan I	9.746	9.746	9.746	9.747	9.747	9.747					9.716 - 9.776	9.747
4,4'-DDE	10.096	10.097	10.096	10.097	10.097	10.097					10.066 - 10.126	10.097
Dieldrin	10.257	10.257	10.256	10.256	10.257	10.257					10.226 - 10.286	10.257
Endrin	10.767	10.768	10.768	10.768	10.767	10.767					10.736 - 10.796	10.768
4,4'-DDD	11.084	11.084	11.083	11.084	11.083	11.082					11.053 - 11.113	11.083
Endosulfan II	11.136	11.135	11.134	11.135	11.134	11.134					11.104 - 11.164	11.135
4,4'-DDT	11.566	11.565	11.565	11.565	11.565	11.565					11.534 - 11.594	11.565
Endrin aldehyde	11.691	11.690	11.690	11.690	11.690	11.689					11.659 - 11.719	11.690
Endosulfan sulfate	12.111	12.111	12.110	12.110	12.110	12.110					12.080 - 12.140	12.110
Methoxychlor	12.629	12.628	12.628	12.628	12.627	12.627					12.596 - 12.656	12.628
Endrin ketone	12.856	12.855	12.856	12.856	12.856	12.856					12.825 - 12.885	12.856
Tetrachloro-m-xylene	4.287	4.286	4.287	4.287	4.287	4.287					4.257 - 4.317	4.287
DCB Decachlorobiphenyl	14.571	14.570	14.570	14.570	14.570	14.569					14.538 - 14.598	14.570

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 20:34 Calibration End Date: 03/31/2015 22:29 Calibration ID: 27643

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-174448/25	P3033125.D
Level 2	STD 240-174448/26	P3033126.D
Level 3	STD 240-174448/27	P3033127.D
Level 4	STD 240-174448/28	P3033128.D
Level 5	STD 240-174448/29	P3033129.D
Level 6	STD 240-174448/30	P3033130.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
alpha-BHC	1839084 2084659	1769962 1972667	2118025	1960851	Ave		1957541.35				6.9		20.0			
gamma-BHC (Lindane)	1708949 1869776	1613972 1769374	1903965	1751047	Ave		1769513.65				6.0		20.0			
beta-BHC	836611 762043	752571 717753	813283	727944	Ave		768367.400				6.1		20.0			
delta-BHC	1652143 1919024	1579206 1819178	1907636	1767760	Ave		1774157.68				7.7		20.0			
Heptachlor	1700555 1760722	1574058 1644309	1838362	1625156	Ave		1690526.98				5.7		20.0			
Aldrin	1674485 1741150	1550399 1653507	1786331	1627303	Ave		1672195.67				5.0		20.0			
Heptachlor epoxide	1483052 1465953	1368987 1366764	1538294	1389504	Ave		1435425.64				4.9		20.0			
gamma-Chlordane	1498987 1528077	1363700 1452527	1556263	1427358	Ave		1471152.06				4.8		20.0			
alpha-Chlordane	1450459 1461191	1332467 1387457	1515974	1374667	Ave		1420369.33				4.7		20.0			
Endosulfan I	1363258 1348980	1260988 1256003	1422722	1277632	Ave		1321597.12				5.1		20.0			
4,4'-DDE	1271067 1401514	1211099 1340130	1410734	1287988	Ave		1320421.76				5.9		20.0			
Dieldrin	1357789 1431526	1273184 1356327	1457976	1331733	Ave		1368089.03				4.9		20.0			
Endrin	1202896 1264369	1114771 1191875	1299004	1160551	Ave		1205577.44				5.6		20.0			
4,4'-DDD	920821 1062879	864879 1020697	1040078	962508	Ave		978643.582				7.8		20.0			
Endosulfan II	1213316 1190197	1111473 1121146	1256533	1123885	Ave		1169424.91				5.1		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 20:34 Calibration End Date: 03/31/2015 22:29 Calibration ID: 27643

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
4,4'-DDT	955322 1066483	895918 1047147	1067036	956068	Ave		997995.559				7.2		20.0			
Endrin aldehyde	989198 939140	927007 867824	989609	890397	Ave		933862.428				5.4		20.0			
Endosulfan sulfate	1088559 1076304	1024586 1018129	1133296	1013913	Ave		1059131.09				4.5		20.0			
Methoxychlor	512425 481771	482874 479863	520473	457769	Ave		489195.968				4.7		20.0			
Endrin ketone	1244774 1255411	1180145 1190232	1313335	1183362	Ave		1227876.39				4.3		20.0			
Tetrachloro-m-xylene	1195279 1130347	1085174 1058531	1206688	1086113	Ave		1127022.18				5.5		20.0			
DCB Decachlorobiphenyl	1124812 965388	1051453 919008	1086689	960574	Ave		1017987.24				8.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 20:34 Calibration End Date: 03/31/2015 22:29 Calibration ID: 27643

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-174448/25	P3033125.D
Level 2	STD 240-174448/26	P3033126.D
Level 3	STD 240-174448/27	P3033127.D
Level 4	STD 240-174448/28	P3033128.D
Level 5	STD 240-174448/29	P3033129.D
Level 6	STD 240-174448/30	P3033130.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
alpha-BHC	Ave	9195421 394533340	17699620	52950629	98042560	208465883	5.00 200	10.0	25.0	50.0	100
gamma-BHC (Lindane)	Ave	8544743 353874715	16139715	47599126	87552352	186977616	5.00 200	10.0	25.0	50.0	100
beta-BHC	Ave	4183054 143550510	7525710	20332064	36397222	76204305	5.00 200	10.0	25.0	50.0	100
delta-BHC	Ave	8260715 363835550	15792059	47690894	88387997	191902373	5.00 200	10.0	25.0	50.0	100
Heptachlor	Ave	8502776 328861796	15740575	45959059	81257807	176072167	5.00 200	10.0	25.0	50.0	100
Aldrin	Ave	8372425 330701385	15503993	44658266	81365132	174114951	5.00 200	10.0	25.0	50.0	100
Heptachlor epoxide	Ave	7415262 273352880	13689871	38457347	69475178	146595251	5.00 200	10.0	25.0	50.0	100
gamma-Chlordane	Ave	7494937 290505462	13636997	38906572	71367916	152807674	5.00 200	10.0	25.0	50.0	100
alpha-Chlordane	Ave	7252296 277491300	13324673	37899355	68733372	146119135	5.00 200	10.0	25.0	50.0	100
Endosulfan I	Ave	6816292 251200604	12609879	35568057	63881581	134897952	5.00 200	10.0	25.0	50.0	100
4,4'-DDE	Ave	6355333 268025917	12110985	35268356	64399402	140151362	5.00 200	10.0	25.0	50.0	100
Dieldrin	Ave	6788945 271265368	12731838	36449407	66586628	143152571	5.00 200	10.0	25.0	50.0	100
Endrin	Ave	6014479 238375035	11147706	32475088	58027543	126436870	5.00 200	10.0	25.0	50.0	100
4,4'-DDD	Ave	4604106 204139326	8648786	26001941	48125406	106287930	5.00 200	10.0	25.0	50.0	100
Endosulfan II	Ave	6066579 224229146	11114726	31413336	56194228	119019734	5.00 200	10.0	25.0	50.0	100
4,4'-DDT	Ave	4776608 209429423	8959182	26675891	47803384	106648312	5.00 200	10.0	25.0	50.0	100

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174448

SDG No.:

Instrument ID: A2HP3 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 20:34 Calibration End Date: 03/31/2015 22:29 Calibration ID: 27643

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Endrin aldehyde	Ave	4945988 173564845	9270072	24740219	44519851	93913976	5.00 200	10.0	25.0	50.0	100
Endosulfan sulfate	Ave	5442796 203625762	10245858	28332394	50695672	107630350	5.00 200	10.0	25.0	50.0	100
Methoxychlor	Ave	2562127 95972640	4828736	13011833	22888462	48177105	5.00 200	10.0	25.0	50.0	100
Endrin ketone	Ave	6223871 238046316	11801446	32833375	59168122	125541054	5.00 200	10.0	25.0	50.0	100
Tetrachloro-m-xylene	Ave	5976395 211706263	10851740	30167206	54305672	113034706	5.00 200	10.0	25.0	50.0	100
DCB Decachlorobiphenyl	Ave	5624059 183801612	10514527	27167237	48028681	96538779	5.00 200	10.0	25.0	50.0	100

Curve Type Legend:
Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033125.D
Lims ID: STD AB1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 31-Mar-2015 20:34:34 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-025
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:58:02 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:46:48

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.605	3.602	0.003	4995293	5.00	5.08	
2	4.287	4.287	0.000	5976395	5.00	5.30	
						RPD = 4.31	
4 alpha-BHC							
1	4.301	4.300	0.001	7993281	5.00	4.62	
2	5.198	5.198	0.000	9195421	5.00	4.70	
						RPD = 1.76	
5 gamma-BHC (Lindane)							
1	4.695	4.693	0.002	7220829	5.00	4.68	
2	5.838	5.837	0.001	8544743	5.00	4.83	
						RPD = 3.18	
6 beta-BHC							
1	4.836	4.834	0.002	3244596	5.00	5.15	
2	6.040	6.039	0.001	4183054	5.00	5.44	
						RPD = 5.52	
7 delta-BHC							
1	5.063	5.060	0.003	6674668	5.00	4.44	
2	6.681	6.681	0.000	8260715	5.00	4.66	
						RPD = 4.72	
9 Heptachlor							
1	5.356	5.354	0.002	7096274	5.00	4.86	
2	6.766	6.765	0.001	8502776	5.00	5.03	
						RPD = 3.37	
10 Aldrin							
1	5.833	5.831	0.002	7112948	5.00	4.87	
2	7.586	7.583	0.003	8372425	5.00	5.01	
						RPD = 2.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.141	7.137	0.004	6618040	5.00	5.08	
2	8.992	8.991	0.001	7415262	5.00	5.17	
						RPD = 1.76	
13 gamma-Chlordane							
1	7.461	7.459	0.002	6596391	5.00	4.88	
2	9.381	9.381	0.000	7494937	5.00	5.09	
						RPD = 4.22	
14 alpha-Chlordane							
1	7.801	7.798	0.003	6662099	5.00	4.98	
2	9.676	9.675	0.001	7252296	5.00	5.11	
						RPD = 2.48	
15 Endosulfan I							
1	8.070	8.069	0.001	6162836	5.00	5.02	
2	9.746	9.746	0.000	6816292	5.00	5.16	
						RPD = 2.69	
16 4,4'-DDE							
1	8.167	8.162	0.005	5340605	5.00	4.51	
2	10.096	10.096	0.000	6355333	5.00	4.81	
						RPD = 6.55	
17 Dieldrin							
1	8.614	8.612	0.002	6192051	5.00	4.74	
2	10.257	10.256	0.001	6788945	5.00	4.96	
						RPD = 4.68	
18 Endrin							
1	9.062	9.061	0.001	5504203	5.00	4.78	
2	10.767	10.766	0.001	6014479	5.00	4.99	
						RPD = 4.27	
20 4,4'-DDD							
1	9.421	9.413	0.008	3660954	5.00	4.21	
2	11.084	11.083	0.001	4604106	5.00	4.70	
						RPD = 11.19	
21 Endosulfan II							
1	9.507	9.505	0.002	5894190	5.00	5.09	
2	11.136	11.134	0.002	6066579	5.00	5.19	
						RPD = 1.81	
23 4,4'-DDT							
1	9.927	9.924	0.003	4190259	5.00	4.39	
2	11.566	11.564	0.002	4776608	5.00	4.79	
						RPD = 8.71	
25 Endrin aldehyde							
1	10.296	10.292	0.004	4594432	5.00	5.16	
2	11.691	11.689	0.002	4945988	5.00	5.30	
						RPD = 2.66	
27 Methoxychlor							
1	10.872	10.866	0.006	2347056	5.00	5.12	
2	12.629	12.626	0.003	2562127	5.00	5.24	
						RPD = 2.23	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	11.016	11.014	0.002	5085300	5.00	5.10	
2	12.111	12.110	0.001	5442796	5.00	5.14	
						RPD = 0.67	
29 Endrin ketone							
1	11.415	11.412	0.003	6229218	5.00	5.10	
2	12.856	12.855	0.001	6223871	5.00	5.07	
						RPD = 0.57	
$ 30 DCB Decachlorobiphenyl							
1	13.011	13.009	0.002	5262952	5.00	5.62	
2	14.571	14.568	0.003	5624059	5.00	5.52	
						RPD = 1.71	

Reagents:

SGPestAB1_00011 Amount Added: 1.00 Units: mL

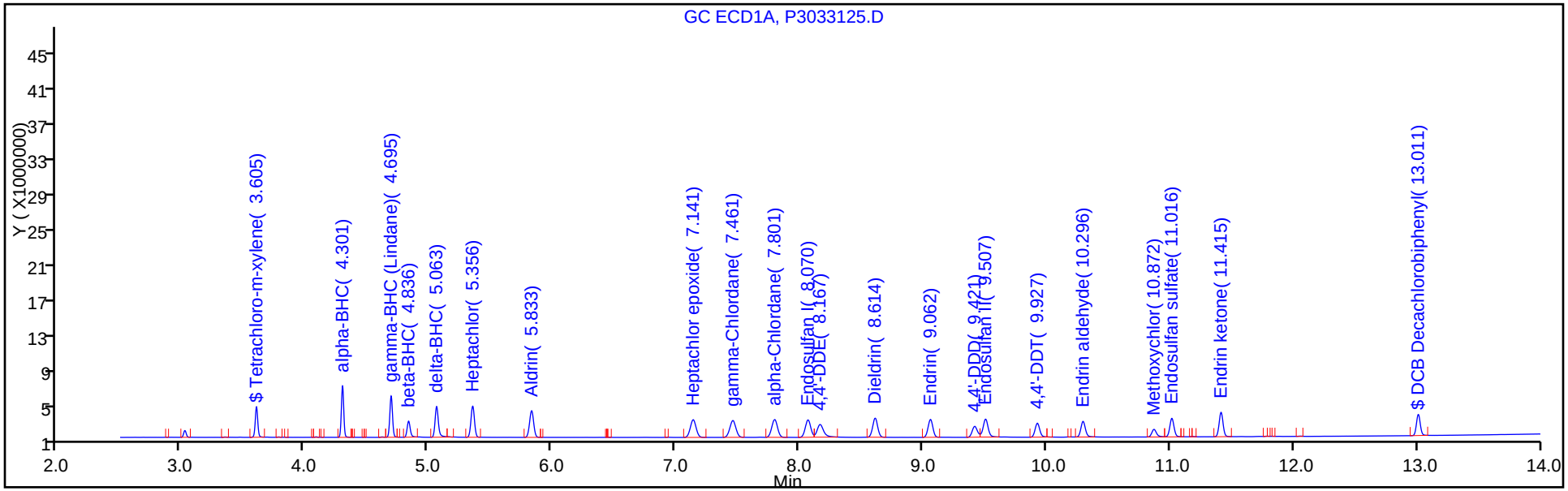
Report Date: 01-Apr-2015 08:58:04 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

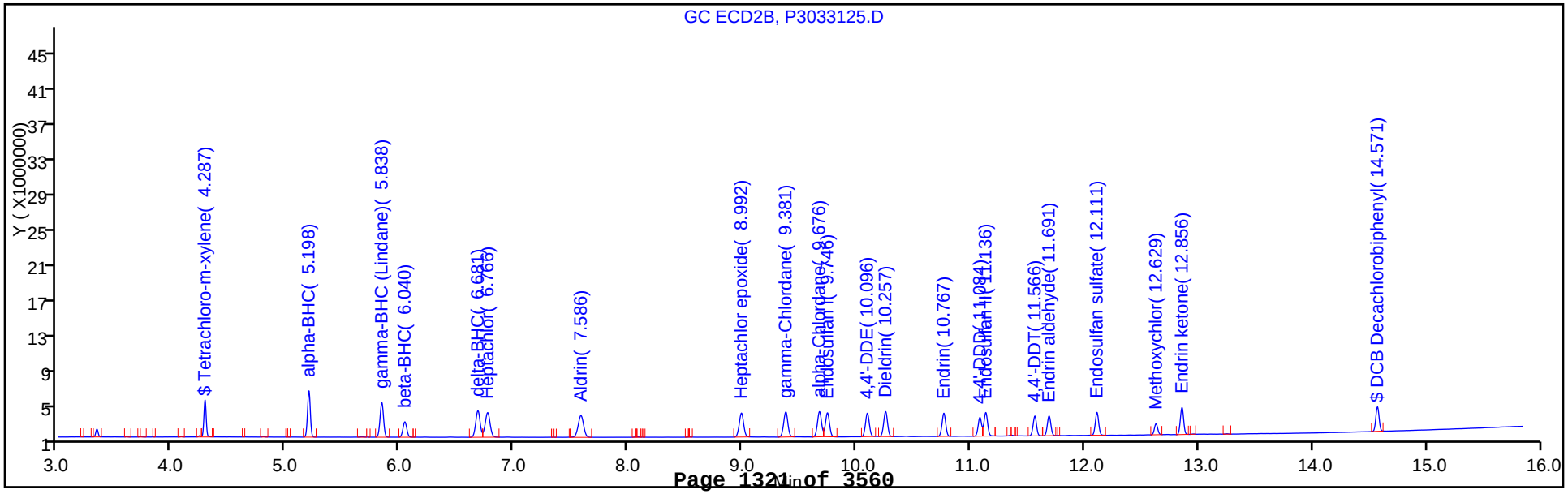
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033125.D

Injection Date:	31-Mar-2015 20:34:34	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD AB1			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033126.D
Lims ID: STD AB2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 31-Mar-2015 20:57:32 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-026
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:58:06 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.603	3.602	0.001	9242851	10.0	9.40	
2	4.286	4.287	-0.001	10851740	10.0	9.63	
						RPD = 2.43	
4 alpha-BHC							
1	4.300	4.300	0.000	15427617	10.0	8.91	
2	5.199	5.198	0.001	17699620	10.0	9.04	
						RPD = 1.49	
5 gamma-BHC (Lindane)							
1	4.694	4.693	0.001	13921250	10.0	9.02	
2	5.837	5.837	0.000	16139715	10.0	9.12	
						RPD = 1.14	
6 beta-BHC							
1	4.835	4.834	0.001	6034059	10.0	9.58	
2	6.040	6.039	0.001	7525710	10.0	9.79	
						RPD = 2.21	
7 delta-BHC							
1	5.062	5.060	0.002	12658880	10.0	8.42	
2	6.680	6.681	-0.001	15792059	10.0	8.90	
						RPD = 5.52	
9 Heptachlor							
1	5.354	5.354	0.000	13288516	10.0	9.11	
2	6.765	6.765	0.000	15740575	10.0	9.31	
						RPD = 2.22	
10 Aldrin							
1	5.831	5.831	0.000	13417843	10.0	9.18	
2	7.586	7.583	0.003	15503993	10.0	9.27	
						RPD = 1.01	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.140	7.137	0.003	12187185	10.0	9.35	
2	8.992	8.991	0.001	13689871	10.0	9.54	
						RPD = 2.01	
13 gamma-Chlordane							
1	7.460	7.459	0.001	12348664	10.0	9.14	
2	9.382	9.381	0.001	13636997	10.0	9.27	
						RPD = 1.38	
14 alpha-Chlordane							
1	7.798	7.798	0.000	12407456	10.0	9.28	
2	9.676	9.675	0.001	13324673	10.0	9.38	
						RPD = 1.13	
15 Endosulfan I							
1	8.070	8.069	0.001	11542395	10.0	9.40	
2	9.746	9.746	0.000	12609879	10.0	9.54	
						RPD = 1.46	
16 4,4'-DDE							
1	8.166	8.162	0.004	10590255	10.0	8.94	
2	10.097	10.096	0.001	12110985	10.0	9.17	
						RPD = 2.57	
17 Dieldrin							
1	8.615	8.612	0.003	12034701	10.0	9.20	
2	10.257	10.256	0.001	12731838	10.0	9.31	
						RPD = 1.11	
18 Endrin							
1	9.061	9.061	0.000	10542835	10.0	9.16	
2	10.768	10.766	0.002	11147706	10.0	9.25	
						RPD = 0.98	
20 4,4'-DDD							
1	9.416	9.413	0.003	7262139	10.0	8.34	
2	11.084	11.083	0.001	8648786	10.0	8.84	
						RPD = 5.75	
21 Endosulfan II							
1	9.508	9.505	0.003	11094415	10.0	9.59	
2	11.135	11.134	0.001	11114726	10.0	9.50	
						RPD = 0.89	
23 4,4'-DDT							
1	9.925	9.924	0.001	7882323	10.0	8.25	
2	11.565	11.564	0.001	8959182	10.0	8.98	
						RPD = 8.42	
25 Endrin aldehyde							
1	10.296	10.292	0.004	8693339	10.0	9.76	
2	11.690	11.689	0.001	9270072	10.0	9.93	
						RPD = 1.71	
27 Methoxychlor							
1	10.869	10.866	0.003	4388568	10.0	9.58	
2	12.628	12.626	0.002	4828736	10.0	9.87	
						RPD = 3.02	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	11.015	11.014	0.001	9609001	10.0	9.65	
2	12.111	12.110	0.001	10245858	10.0	9.67	
						RPD = 0.29	
29 Endrin ketone							
1	11.414	11.412	0.002	11896793	10.0	9.74	
2	12.855	12.855	0.000	11801446	10.0	9.61	
						RPD = 1.29	
$ 30 DCB Decachlorobiphenyl							
1	13.010	13.009	0.001	9611764	10.0	10.3	
2	14.570	14.568	0.002	10514527	10.0	10.3	
						RPD = 0.63	

Reagents:

SGPestAB2_00009 Amount Added: 1.00 Units: mL

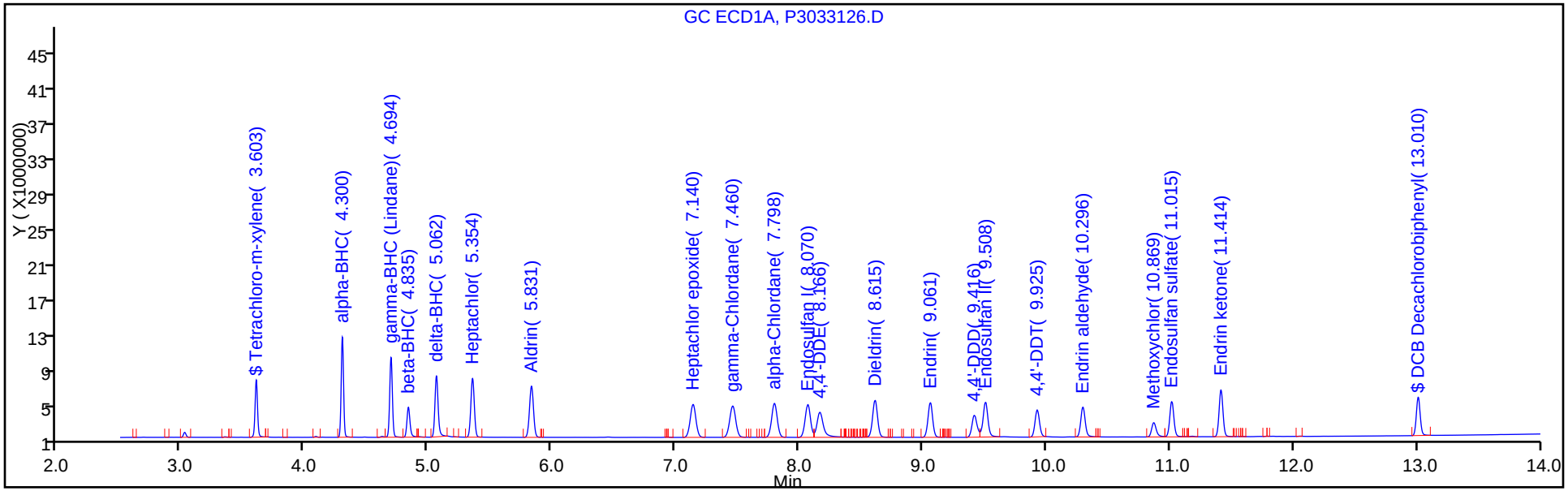
Report Date: 01-Apr-2015 08:58:07 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

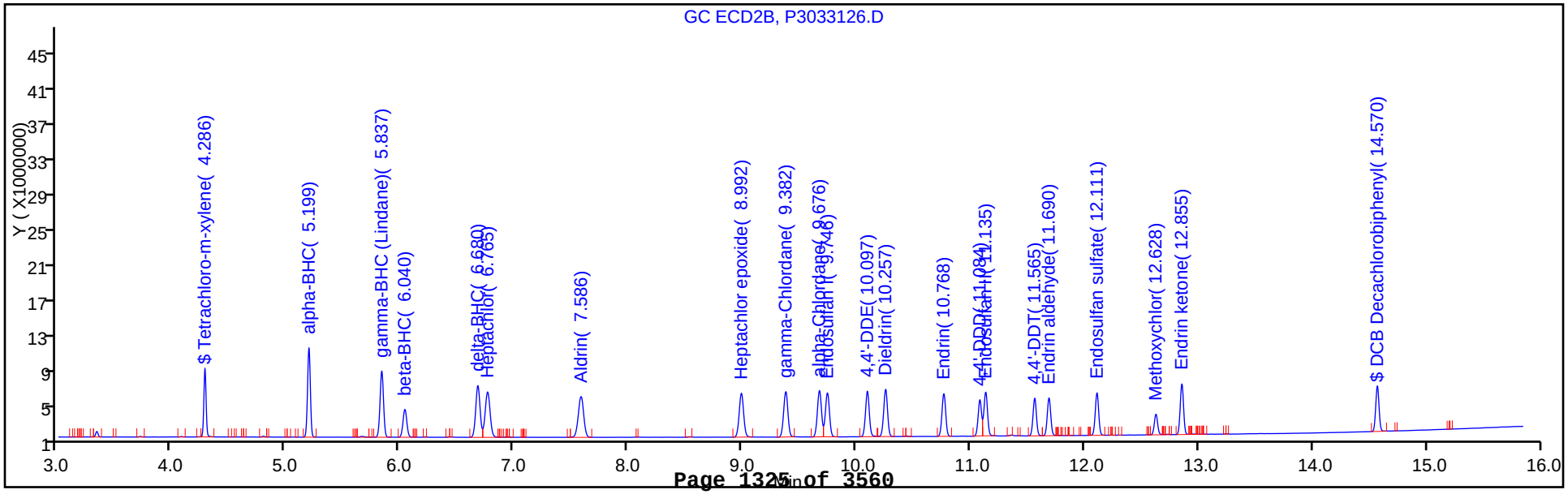
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033126.D

Injection Date:	31-Mar-2015 20:57:32	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD AB2			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033127.D
Lims ID: STD AB3
Client ID:
Sample Type: ICRT Calib Level: 3
Inject. Date: 31-Mar-2015 21:20:40 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-027
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:58:08 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.604	3.604	0.000	26443978	25.0	26.9	
2	4.287	4.287	0.000	30167206	25.0	26.8	
						RPD = 0.45	
4 alpha-BHC							
1	4.301	4.301	0.000	46769971	25.0	27.0	
2	5.199	5.199	0.000	52950629	25.0	27.0	
						RPD = 0.16	
5 gamma-BHC (Lindane)							
1	4.695	4.695	0.000	41574049	25.0	26.9	
2	5.837	5.837	0.000	47599126	25.0	26.9	
						RPD = 0.12	
6 beta-BHC							
1	4.835	4.835	0.000	16707890	25.0	26.5	
2	6.040	6.040	0.000	20332064	25.0	26.5	
						RPD = 0.25	
7 delta-BHC							
1	5.062	5.062	0.000	40613949	25.0	27.0	
2	6.681	6.681	0.000	47690894	25.0	26.9	
						RPD = 0.53	
9 Heptachlor							
1	5.356	5.356	0.000	39866687	25.0	27.3	
2	6.765	6.765	0.000	45959059	25.0	27.2	
						RPD = 0.49	
10 Aldrin							
1	5.833	5.833	0.000	39246951	25.0	26.8	
2	7.585	7.585	0.000	44658266	25.0	26.7	
						RPD = 0.52	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.141	7.141	0.000	34880799	25.0	26.8	
2	8.992	8.992	0.000	38457347	25.0	26.8	
						RPD = 0.15	
13 gamma-Chlordane							
1	7.462	7.462	0.000	35610001	25.0	26.4	
2	9.381	9.381	0.000	38906572	25.0	26.4	
						RPD = 0.31	
14 alpha-Chlordane							
1	7.799	7.799	0.000	35400064	25.0	26.5	
2	9.676	9.676	0.000	37899355	25.0	26.7	
						RPD = 0.82	
15 Endosulfan I							
1	8.068	8.068	0.000	32910197	25.0	26.8	
2	9.746	9.746	0.000	35568057	25.0	26.9	
						RPD = 0.38	
16 4,4'-DDE							
1	8.166	8.166	0.000	31051315	25.0	26.2	
2	10.096	10.096	0.000	35268356	25.0	26.7	
						RPD = 1.89	
17 Dieldrin							
1	8.614	8.614	0.000	35178081	25.0	26.9	
2	10.256	10.256	0.000	36449407	25.0	26.6	
						RPD = 0.97	
18 Endrin							
1	9.061	9.061	0.000	31270972	25.0	27.2	
2	10.768	10.768	0.000	32475088	25.0	26.9	
						RPD = 0.82	
20 4,4'-DDD							
1	9.415	9.415	0.000	23004544	25.0	26.4	
2	11.083	11.083	0.000	26001941	25.0	26.6	
						RPD = 0.53	
21 Endosulfan II							
1	9.507	9.507	0.000	31740081	25.0	27.4	
2	11.134	11.134	0.000	31413336	25.0	26.9	
						RPD = 2.11	
23 4,4'-DDT							
1	9.924	9.924	0.000	25760449	25.0	27.0	
2	11.565	11.565	0.000	26675891	25.0	26.7	
						RPD = 0.89	
25 Endrin aldehyde							
1	10.296	10.296	0.000	24069870	25.0	27.0	
2	11.690	11.690	0.000	24740219	25.0	26.5	
						RPD = 1.97	
27 Methoxychlor							
1	10.868	10.868	0.000	12278595	25.0	26.8	
2	12.628	12.628	0.000	13011833	25.0	26.6	
						RPD = 0.74	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	11.015	11.015	0.000	26620156	25.0	26.7	
2	12.110	12.110	0.000	28332394	25.0	26.8	
						RPD = 0.11	
29 Endrin ketone							
1	11.414	11.414	0.000	33202430	25.0	27.2	
2	12.856	12.856	0.000	32833375	25.0	26.7	
						RPD = 1.60	
$ 30 DCB Decachlorobiphenyl							
1	13.011	13.011	0.000	24799770	25.0	26.5	
2	14.570	14.570	0.000	27167237	25.0	26.7	
						RPD = 0.77	

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

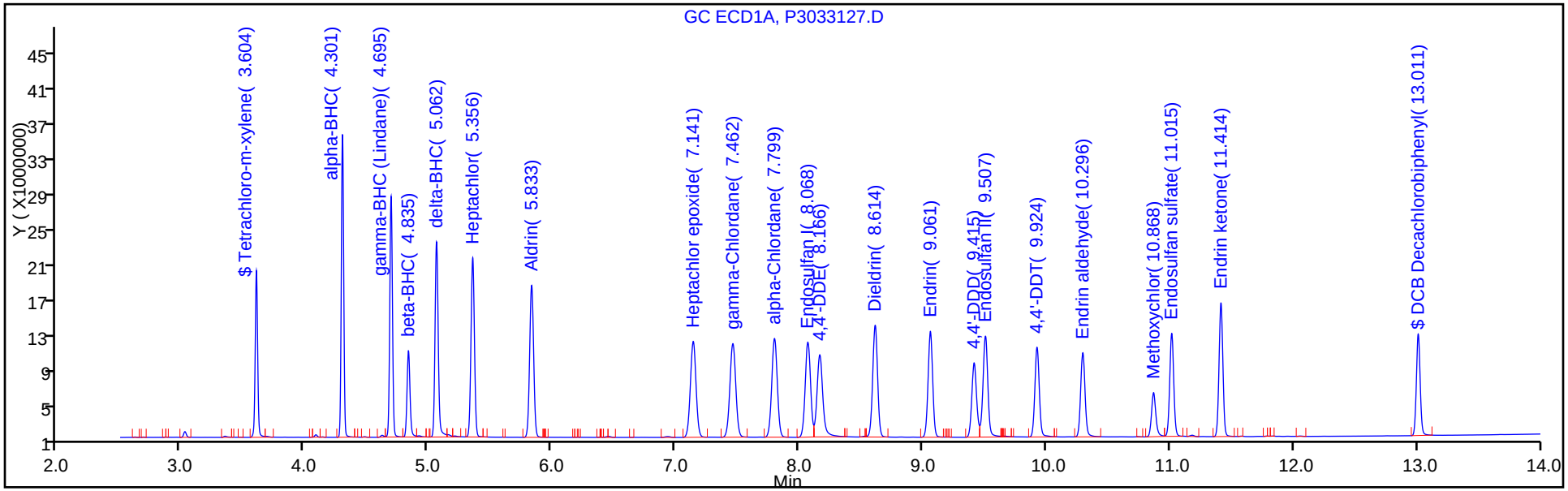
Report Date: 01-Apr-2015 08:58:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

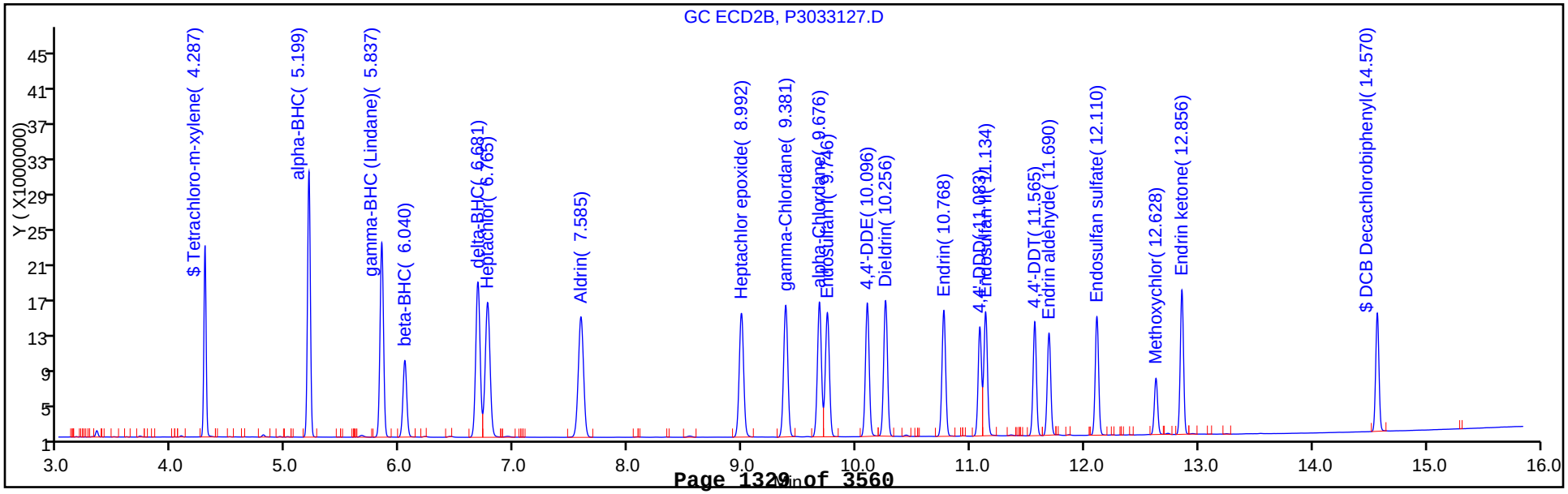
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033127.D

Injection Date:	31-Mar-2015 21:20:40	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD AB3			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033128.D
Lims ID: STD AB4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 31-Mar-2015 21:44:03 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-028
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:58:11 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:49:24

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.605	3.604	0.001	48104246	50.0	48.9	
2	4.287	4.287	0.000	54305672	50.0	48.2	
						RPD = 1.49	
4 alpha-BHC							
1	4.302	4.301	0.001	87097467	50.0	50.3	
2	5.198	5.199	-0.001	98042560	50.0	50.1	
						RPD = 0.41	
5 gamma-BHC (Lindane)							
1	4.696	4.695	0.001	77025264	50.0	49.9	
2	5.837	5.837	0.000	87552352	50.0	49.5	
						RPD = 0.84	
6 beta-BHC							
1	4.836	4.835	0.001	30165006	50.0	47.9	
2	6.040	6.040	0.000	36397222	50.0	47.4	
						RPD = 1.10	
7 delta-BHC							
1	5.063	5.062	0.001	76319253	50.0	50.8	
2	6.681	6.681	0.000	88387997	50.0	49.8	
						RPD = 1.92	
9 Heptachlor							
1	5.356	5.356	0.000	71639995	50.0	49.1	
2	6.766	6.765	0.001	81257807	50.0	48.1	
						RPD = 2.12	
10 Aldrin							
1	5.833	5.833	0.000	72119434	50.0	49.3	
2	7.586	7.585	0.001	81365132	50.0	48.7	
						RPD = 1.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.142	7.141	0.001	63557048	50.0	48.7	
2	8.992	8.992	0.000	69475178	50.0	48.4	
						RPD = 0.71	
13 gamma-Chlordane							
1	7.462	7.462	0.000	65792126	50.0	48.7	
2	9.381	9.381	0.000	71367916	50.0	48.5	
						RPD = 0.41	
14 alpha-Chlordane							
1	7.802	7.799	0.003	64927892	50.0	48.5	
2	9.677	9.676	0.001	68733372	50.0	48.4	
						RPD = 0.31	
15 Endosulfan I							
1	8.071	8.068	0.003	59799863	50.0	48.7	
2	9.747	9.746	0.001	63881581	50.0	48.3	
						RPD = 0.78	
16 4,4'-DDE							
1	8.166	8.166	0.000	58240006	50.0	49.2	
2	10.097	10.096	0.001	64399402	50.0	48.8	
						RPD = 0.79	
17 Dieldrin							
1	8.614	8.614	0.000	64687313	50.0	49.5	
2	10.256	10.256	0.000	66586628	50.0	48.7	
						RPD = 1.63	
18 Endrin							
1	9.061	9.061	0.000	56346911	50.0	48.9	
2	10.768	10.768	0.000	58027543	50.0	48.1	
						RPD = 1.66	
20 4,4'-DDD							
1	9.415	9.415	0.000	43621651	50.0	50.1	
2	11.084	11.083	0.001	48125406	50.0	49.2	
						RPD = 1.89	
21 Endosulfan II							
1	9.506	9.507	-0.001	55470808	50.0	47.9	
2	11.135	11.134	0.001	56194228	50.0	48.1	
						RPD = 0.22	
23 4,4'-DDT							
1	9.926	9.924	0.002	47063249	50.0	49.3	
2	11.565	11.565	0.000	47803384	50.0	47.9	
						RPD = 2.82	
25 Endrin aldehyde							
1	10.295	10.296	-0.001	42997118	50.0	48.3	
2	11.690	11.690	0.000	44519851	50.0	47.7	
						RPD = 1.24	
27 Methoxychlor							
1	10.869	10.868	0.001	21881225	50.0	47.8	
2	12.628	12.628	0.000	22888462	50.0	46.8	
						RPD = 2.04	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	11.015	11.015	0.000	48166927	50.0	48.4	
2	12.110	12.110	0.000	50695672	50.0	47.9	
						RPD = 1.01	
29 Endrin ketone							
1	11.415	11.414	0.001	59593571	50.0	48.8	
2	12.856	12.856	0.000	59168122	50.0	48.2	
						RPD = 1.20	
$ 30 DCB Decachlorobiphenyl							
1	13.012	13.011	0.001	44087885	50.0	47.1	
2	14.570	14.570	0.000	48028681	50.0	47.2	
						RPD = 0.21	

Reagents:

SGPestAB4_00009 Amount Added: 1.00 Units: mL

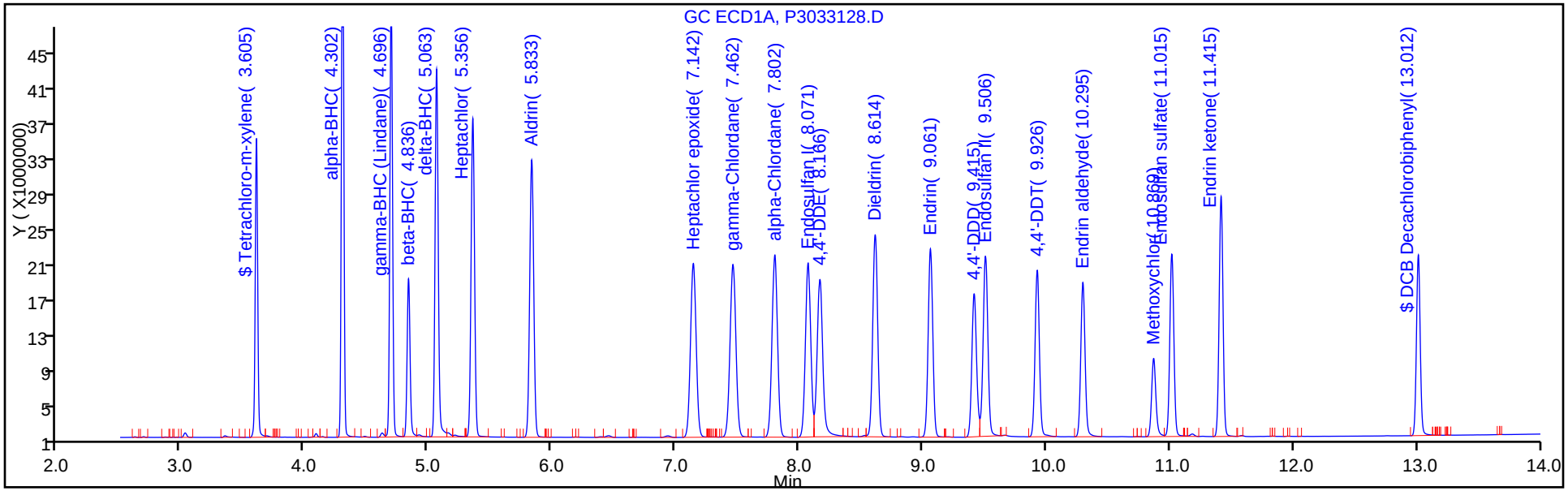
Report Date: 01-Apr-2015 08:58:13 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

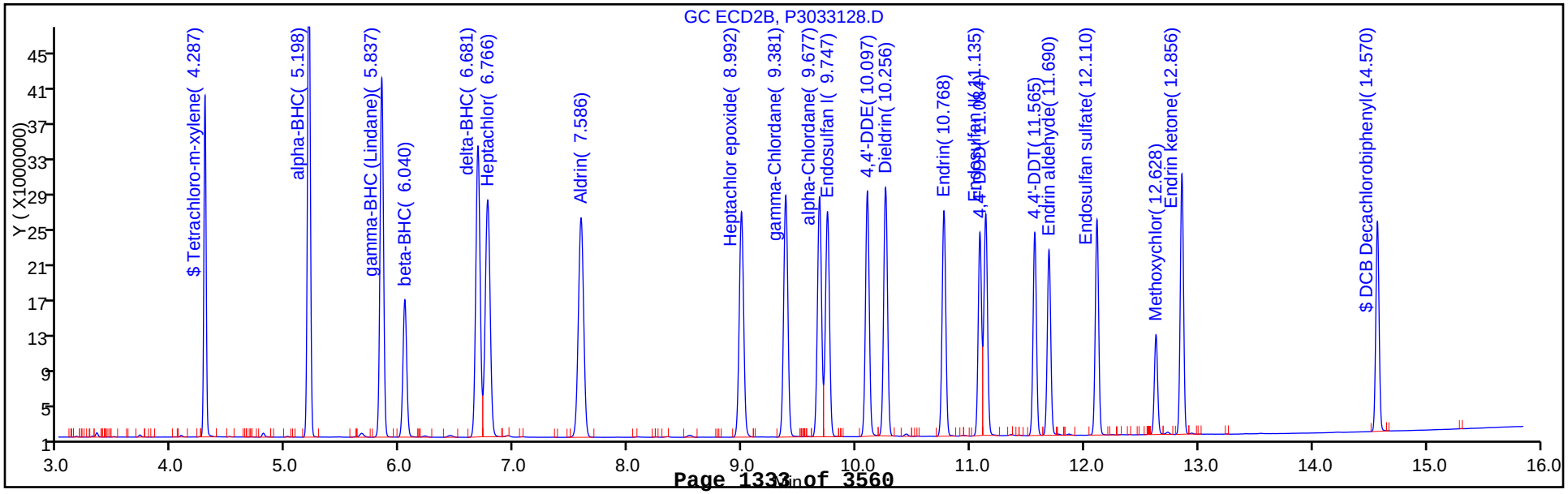
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033128.D

Injection Date:	31-Mar-2015 21:44:03	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD AB4			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033129.D
Lims ID: STD AB5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 31-Mar-2015 22:07:14 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-029
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:58:14 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.604	3.604	0.000	100979372	100.0	102.7	
2	4.287	4.287	0.000	113034706	100.0	100.3	
						RPD = 2.34	
4 alpha-BHC							
1	4.301	4.301	0.000	186273224	100.0	107.6	
2	5.199	5.199	0.000	208465883	100.0	106.5	
						RPD = 0.99	
5 gamma-BHC (Lindane)							
1	4.695	4.695	0.000	165062455	100.0	106.9	
2	5.837	5.837	0.000	186977616	100.0	105.7	
						RPD = 1.18	
6 beta-BHC							
1	4.835	4.835	0.000	64356210	100.0	102.2	
2	6.040	6.040	0.000	76204305	100.0	99.2	
						RPD = 2.98	
7 delta-BHC							
1	5.062	5.062	0.000	166925543	100.0	111.1	
2	6.680	6.681	-0.001	191902373	100.0	108.2	
						RPD = 2.65	
9 Heptachlor							
1	5.356	5.356	0.000	153930697	100.0	105.5	
2	6.767	6.765	0.002	176072167	100.0	104.2	
						RPD = 1.27	
10 Aldrin							
1	5.832	5.833	-0.001	153527177	100.0	105.0	
2	7.584	7.585	-0.001	174114951	100.0	104.1	
						RPD = 0.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.141	7.141	0.000	135595093	100.0	104.0	
2	8.992	8.992	0.000	146595251	100.0	102.1	
						RPD = 1.81	
13 gamma-Chlordane							
1	7.461	7.462	-0.001	143604158	100.0	106.3	
2	9.382	9.381	0.001	152807674	100.0	103.9	
						RPD = 2.34	
14 alpha-Chlordane							
1	7.801	7.799	0.002	140414073	100.0	105.0	
2	9.677	9.676	0.001	146119135	100.0	102.9	
						RPD = 2.02	
15 Endosulfan I							
1	8.071	8.068	0.003	127882954	100.0	104.2	
2	9.747	9.746	0.001	134897952	100.0	102.1	
						RPD = 2.04	
16 4,4'-DDE							
1	8.164	8.166	-0.002	130568170	100.0	110.2	
2	10.097	10.096	0.001	140151362	100.0	106.1	
						RPD = 3.76	
17 Dieldrin							
1	8.613	8.614	-0.001	139644483	100.0	106.8	
2	10.257	10.256	0.001	143152571	100.0	104.6	
						RPD = 2.04	
18 Endrin							
1	9.061	9.061	0.000	122810215	100.0	106.7	
2	10.767	10.768	-0.001	126436870	100.0	104.9	
						RPD = 1.69	
20 4,4'-DDD							
1	9.412	9.415	-0.003	99534574	100.0	114.4	
2	11.083	11.083	0.000	106287930	100.0	108.6	
						RPD = 5.15	
21 Endosulfan II							
1	9.507	9.507	0.000	118613675	100.0	102.5	
2	11.134	11.134	0.000	119019734	100.0	101.8	
						RPD = 0.74	
23 4,4'-DDT							
1	9.925	9.924	0.001	107496871	100.0	112.5	
2	11.565	11.565	0.000	106648312	100.0	106.9	
						RPD = 5.17	
25 Endrin aldehyde							
1	10.294	10.296	-0.002	90722188	100.0	101.8	
2	11.690	11.690	0.000	93913976	100.0	100.6	
						RPD = 1.26	
27 Methoxychlor							
1	10.867	10.868	-0.001	46472336	100.0	101.4	
2	12.627	12.628	-0.001	48177105	100.0	98.5	
						RPD = 2.94	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	11.015	11.015	0.000	102341419	100.0	102.7	
2	12.110	12.110	0.000	107630350	100.0	101.6	
						RPD = 1.09	
29 Endrin ketone							
1	11.414	11.414	0.000	123621579	100.0	101.2	
2	12.856	12.856	0.000	125541054	100.0	102.2	
						RPD = 1.06	
$ 30 DCB Decachlorobiphenyl							
1	13.011	13.011	0.000	88266403	100.0	94.3	
2	14.570	14.570	0.000	96538779	100.0	94.8	
						RPD = 0.61	

Reagents:

SGPestAB5_00009 Amount Added: 1.00 Units: mL

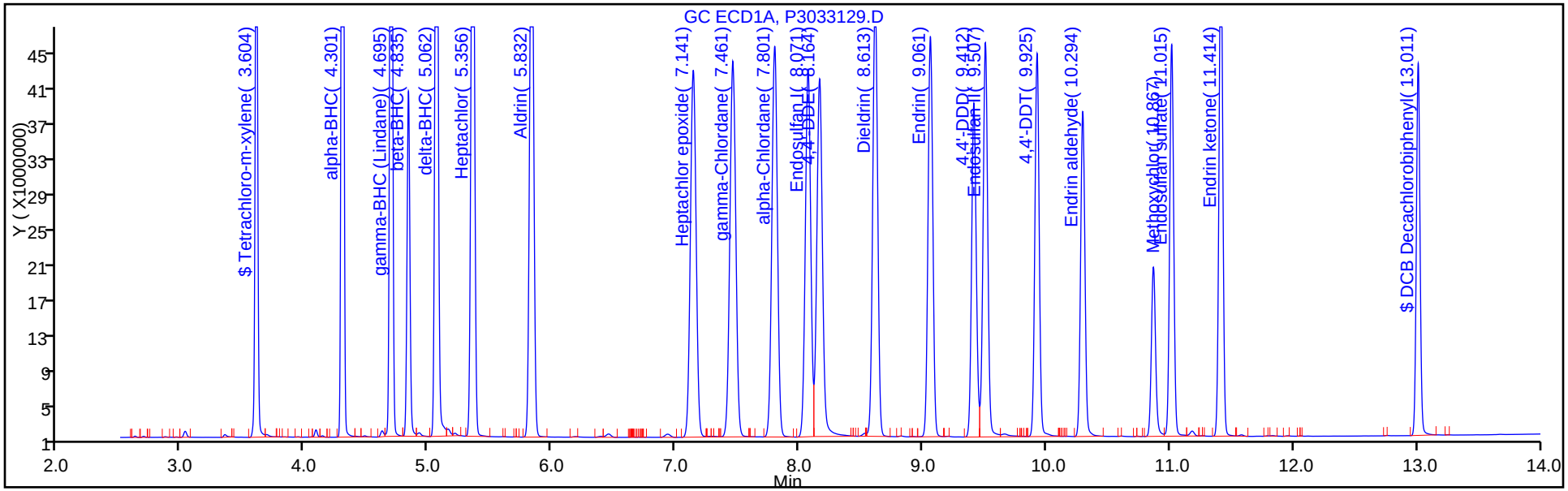
Report Date: 01-Apr-2015 08:58:16 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

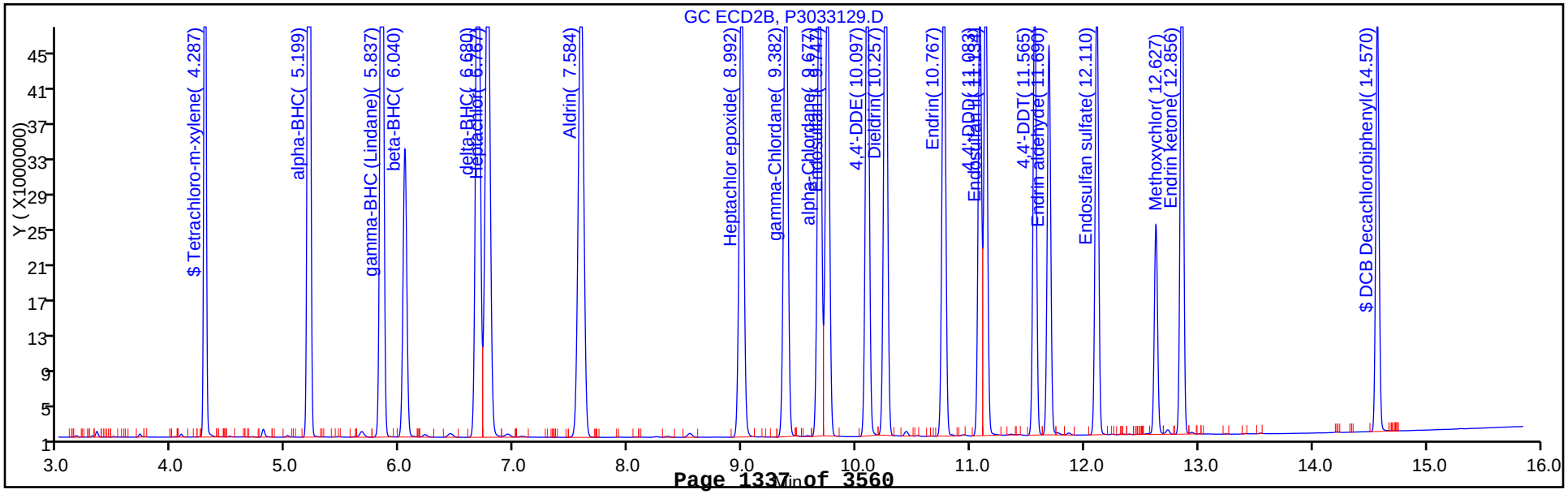
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033129.D

Injection Date:	31-Mar-2015 22:07:14	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD AB5			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D
Lims ID: STD AB6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 31-Mar-2015 22:29:58 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-030
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:58:17 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.602	3.604	-0.002	189637291	200.0	192.8	
2	4.287	4.287	0.000	211706263	200.0	187.8	
						RPD = 2.61	
4 alpha-BHC							
1	4.300	4.301	-0.001	354825181	200.0	204.9	
2	5.198	5.199	-0.001	394533340	200.0	201.5	
						RPD = 1.64	
5 gamma-BHC (Lindane)							
1	4.693	4.695	-0.002	314410933	200.0	203.7	
2	5.837	5.837	0.000	353874715	200.0	200.0	
						RPD = 1.83	
6 beta-BHC							
1	4.832	4.835	-0.003	122309456	200.0	194.2	
2	6.038	6.040	-0.002	143550510	200.0	186.8	
						RPD = 3.87	
7 delta-BHC							
1	5.059	5.062	-0.003	319192463	200.0	212.4	
2	6.680	6.681	-0.001	363835550	200.0	205.1	
						RPD = 3.51	
9 Heptachlor							
1	5.353	5.356	-0.003	288091249	200.0	197.4	
2	6.767	6.765	0.002	328861796	200.0	194.5	
						RPD = 1.48	
10 Aldrin							
1	5.830	5.833	-0.003	291883438	200.0	199.7	
2	7.585	7.585	0.000	330701385	200.0	197.8	
						RPD = 0.95	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.138	7.141	-0.003	251715160	200.0	193.1	
2	8.992	8.992	0.000	273352880	200.0	190.4	
						RPD = 1.37	
13 gamma-Chlordane							
1	7.458	7.462	-0.004	274668690	200.0	203.4	
2	9.381	9.381	0.000	290505462	200.0	197.5	
						RPD = 2.94	
14 alpha-Chlordane							
1	7.798	7.799	-0.001	266757855	200.0	199.4	
2	9.677	9.676	0.001	277491300	200.0	195.4	
						RPD = 2.06	
15 Endosulfan I							
1	8.067	8.068	-0.001	237414688	200.0	193.4	
2	9.747	9.746	0.001	251200604	200.0	190.1	
						RPD = 1.74	
16 4,4'-DDE							
1	8.160	8.166	-0.006	253675814	200.0	214.1	
2	10.097	10.096	0.001	268025917	200.0	203.0	
						RPD = 5.34	
17 Dieldrin							
1	8.612	8.614	-0.002	261274932	200.0	199.8	
2	10.257	10.256	0.001	271265368	200.0	198.3	
						RPD = 0.77	
18 Endrin							
1	9.060	9.061	-0.001	229462332	200.0	199.3	
2	10.767	10.768	-0.001	238375035	200.0	197.7	
						RPD = 0.79	
20 4,4'-DDD							
1	9.411	9.415	-0.004	195226651	200.0	224.3	
2	11.082	11.083	-0.001	204139326	200.0	208.6	
						RPD = 7.25	
21 Endosulfan II							
1	9.505	9.507	-0.002	217587968	200.0	188.1	
2	11.134	11.134	0.000	224229146	200.0	191.7	
						RPD = 1.93	
23 4,4'-DDT							
1	9.922	9.924	-0.002	211650515	200.0	221.6	
2	11.565	11.565	0.000	209429423	200.0	209.9	
						RPD = 5.44	
25 Endrin aldehyde							
1	10.294	10.296	-0.002	165370411	200.0	185.6	
2	11.689	11.690	-0.001	173564845	200.0	185.9	
						RPD = 0.12	
27 Methoxychlor							
1	10.867	10.868	-0.001	89522192	200.0	195.4	
2	12.627	12.628	-0.001	95972640	200.0	196.2	
						RPD = 0.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	11.013	11.015	-0.002	189528753	200.0	190.3	
2	12.110	12.110	0.000	203625762	200.0	192.3	
						RPD = 1.05	
29 Endrin ketone							
1	11.412	11.414	-0.002	228035065	200.0	186.6	
2	12.856	12.856	0.000	238046316	200.0	193.9	
						RPD = 3.81	
$ 30 DCB Decachlorobiphenyl							
1	13.009	13.011	-0.002	169711774	200.0	181.2	
2	14.569	14.570	-0.001	183801612	200.0	180.6	
						RPD = 0.37	

Reagents:

SGPestAB6_00010 Amount Added: 1.00 Units: mL

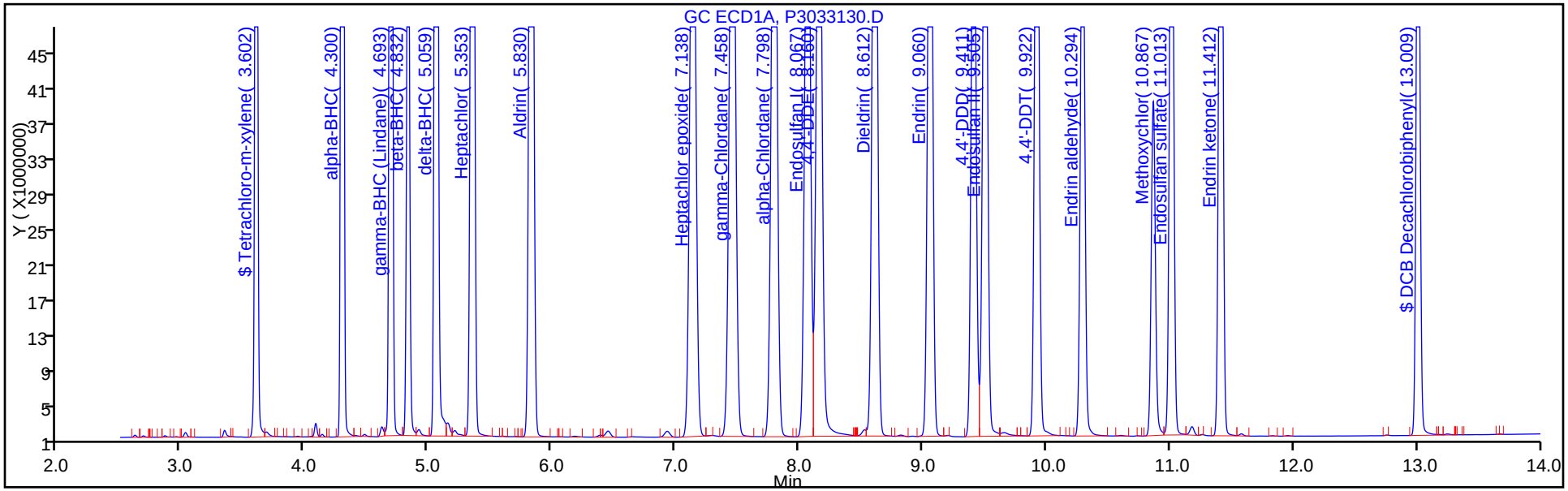
Report Date: 01-Apr-2015 08:58:19 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

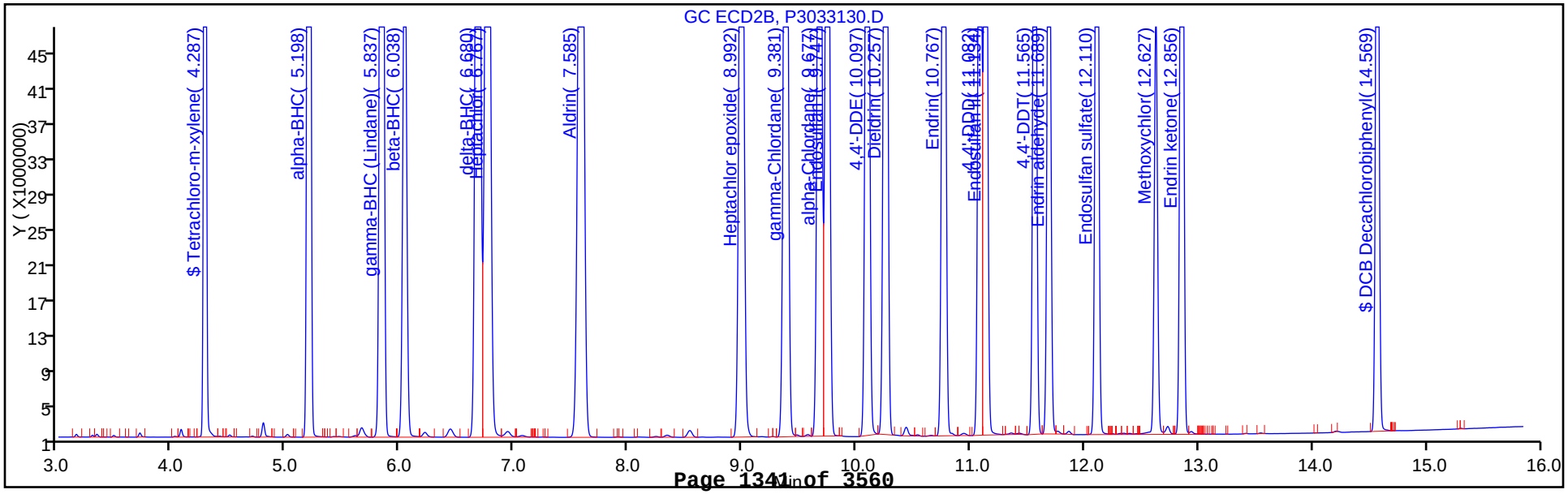
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Injection Date:	31-Mar-2015 22:29:58	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	STD AB6			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID (2): PEM 240-174448/24 Instrument ID (2): A2HP3

GC Column (2): CLP-1 ID: 0.53(mm) Date Analyzed (2): 03/31/2015 20:11

ANALYTE	RT	RESOLUTION (%)
Methoxychlor		100.0
Tetrachloro-m-xylene	3.60	100.0
alpha-BHC	4.30	100.0
gamma-BHC (Lindane)	4.69	100.0
beta-BHC	4.84	100.0
4,4'-DDE	8.18	100.0
Endrin	9.06	100.0
4,4'-DDD	9.42	100.0
4,4'-DDT	9.92	100.0
Endrin aldehyde	10.30	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID (1): PEM 240-174448/24 Instrument ID (1): A2HP3

GC Column (1): CLP-2 ID: 0.53(mm) Date Analyzed (1): 03/31/2015 20:11

ANALYTE	RT	RESOLUTION (%)
Methoxychlor		100.0
Tetrachloro-m-xylene	4.29	100.0
alpha-BHC	5.20	100.0
gamma-BHC (Lindane)	5.84	100.0
beta-BHC	6.04	100.0
4,4'-DDE	10.10	100.0
Endrin	10.77	100.0
4,4'-DDD	11.09	100.0
4,4'-DDT	11.57	100.0
Endrin aldehyde	11.69	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID (2): PEM 240-177258/27 Instrument ID (2): A2HP3

GC Column (2): CLP-1 ID: 0.53(mm) Date Analyzed (2): 04/21/2015 22:49

ANALYTE	RT	RESOLUTION (%)
Methoxychlor		100.0
Tetrachloro-m-xylene	3.55	100.0
alpha-BHC	4.25	100.0
gamma-BHC (Lindane)	4.63	100.0
beta-BHC	4.77	100.0
4,4'-DDE	8.05	100.0
Endrin	8.96	100.0
4,4'-DDD	9.32	100.0
4,4'-DDT	9.83	100.0
Endrin aldehyde	10.21	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID (1): PEM 240-177258/27 Instrument ID (1): A2HP3

GC Column (1): CLP-2 ID: 0.53(mm) Date Analyzed (1): 04/21/2015 22:49

ANALYTE	RT	RESOLUTION (%)
Methoxychlor		100.0
Tetrachloro-m-xylene	4.24	100.0
alpha-BHC	5.13	100.0
gamma-BHC (Lindane)	5.75	100.0
beta-BHC	5.95	100.0
4,4'-DDE	10.01	100.0
Endrin	10.68	100.0
4,4'-DDD	11.01	100.0
4,4'-DDT	11.49	100.0
Endrin aldehyde	11.61	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID (2): PEM 240-177463/5 Instrument ID (2): A2HP3

GC Column (2): CLP-1 ID: 0.53(mm) Date Analyzed (2): 04/22/2015 16:07

ANALYTE	RT	RESOLUTION (%)
Methoxychlor		100.0
Tetrachloro-m-xylene	3.56	100.0
alpha-BHC	4.26	100.0
gamma-BHC (Lindane)	4.64	100.0
beta-BHC	4.78	100.0
4,4'-DDE	8.09	100.0
Endrin	8.97	100.0
4,4'-DDD	9.35	100.0
4,4'-DDT	9.85	100.0
Endrin aldehyde	10.22	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID (1): PEM 240-177463/5 Instrument ID (1): A2HP3

GC Column (1): CLP-2 ID: 0.53(mm) Date Analyzed (1): 04/22/2015 16:07

ANALYTE	RT	RESOLUTION (%)
Methoxychlor		100.0
Tetrachloro-m-xylene	4.24	100.0
alpha-BHC	5.13	100.0
gamma-BHC (Lindane)	5.75	100.0
beta-BHC	5.95	100.0
4,4'-DDE	10.02	100.0
Endrin	10.68	100.0
4,4'-DDD	11.01	100.0
4,4'-DDT	11.49	100.0
Endrin aldehyde	11.61	100.0

FORM VII
GC SEMI VOA PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: PEM 240-174448/24 Calibration Date: 03/31/2015 20:11

Instrument ID: A2HP3 Calib Start Date: 03/19/2015 15:22

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/19/2015 17:18

Lab File ID: P3033124.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	9.06	52430236	6.07	15	
Endrin aldehyde	10.30	924740			
Endrin ketone	11.42	2465681			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	9.92	94164495	1.47	15	
4,4'-DDD	9.42	1197512			
4,4'-DDE	8.18	206271			

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033124.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 31-Mar-2015 20:11:15 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-024
Operator ID: 430893 Instrument ID: A2HP3
Sublist:

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 02-Apr-2015 08:54:24 Calib Date: 31-Mar-2015 19:26:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033122.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK054

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:46:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.603	3.602	0.001	19128359	NC	NC	
2	4.287	4.287	0.000	21973617	NC	NC	
						RPD = 0.52	
4 alpha-BHC							
1	4.300	4.300	0.000	14578958	NC	NC	
2	5.199	5.198	0.001	16698316	NC	NC	
						RPD = 1.28	
5 gamma-BHC (Lindane)							
1	4.693	4.693	0.000	13271936	NC	NC	
2	5.838	5.837	0.001	15369190	NC	NC	
						RPD = 1.64	
6 beta-BHC							
1	4.835	4.834	0.001	5749980	NC	NC	
2	6.041	6.039	0.002	7166413	NC	NC	
						RPD = 3.80	
16 4,4'-DDE							
1	8.175	8.162	0.013	206271		NC	M
2	10.101	10.096	0.005	254471		NC	a
						RPD = 176.34	
18 Endrin							
1	9.060	9.061	-0.001	52430236	NC	NC	
2	10.768	10.766	0.002	54400764	NC	NC	
						RPD = 3.82	
20 4,4'-DDD							
1	9.424	9.413	0.011	1197512		NC	
2	11.085	11.083	0.002	931094		NC	
						RPD = 26.11	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
23 4,4'-DDT							
1	9.924	9.924	0.000	94164495	NC	NC	
2	11.565	11.564	0.001	95320083	NC	NC	
						RPD = 4.31	
25 Endrin aldehyde							
1	10.300	10.292	0.008	924740		NC	
2	11.690	11.689	0.001	798586		NC	
						RPD = 16.66	
27 Methoxychlor							
1		10.866			ND	ND	
2		12.626					
29 Endrin ketone							
1	11.415	11.412	0.003	2465681		NC	
2	12.854	12.855	-0.001	2132474		NC	
						RPD = 15.92	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

SGPESTPEM_00014 Amount Added: 1.00 Units: mL

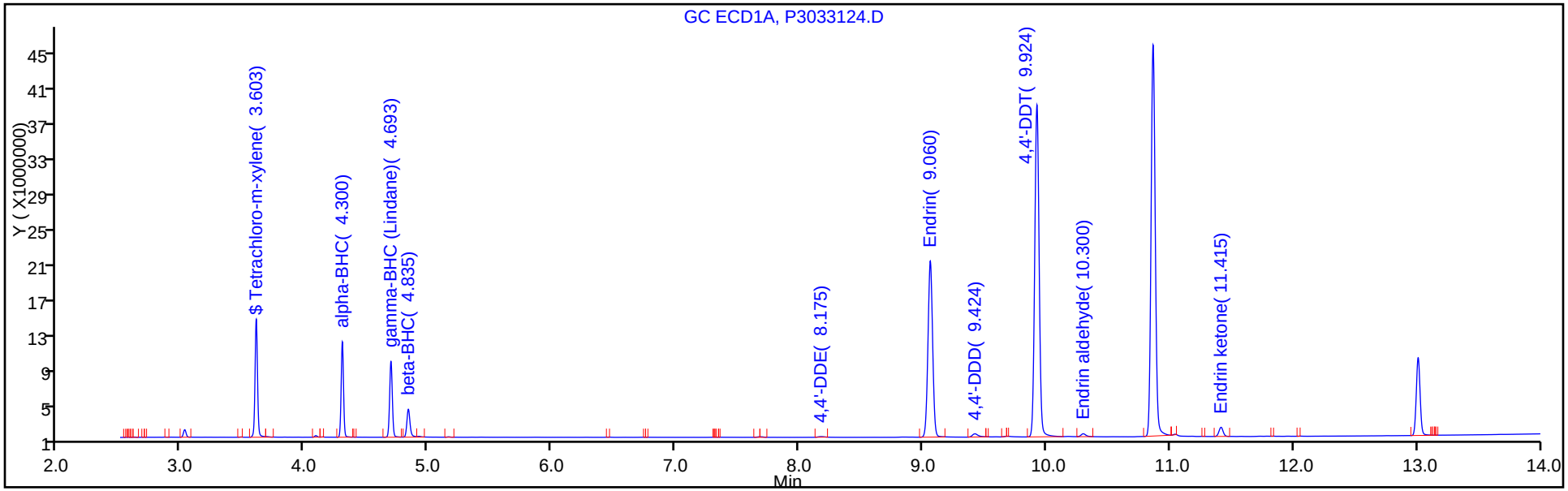
Report Date: 02-Apr-2015 15:27:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

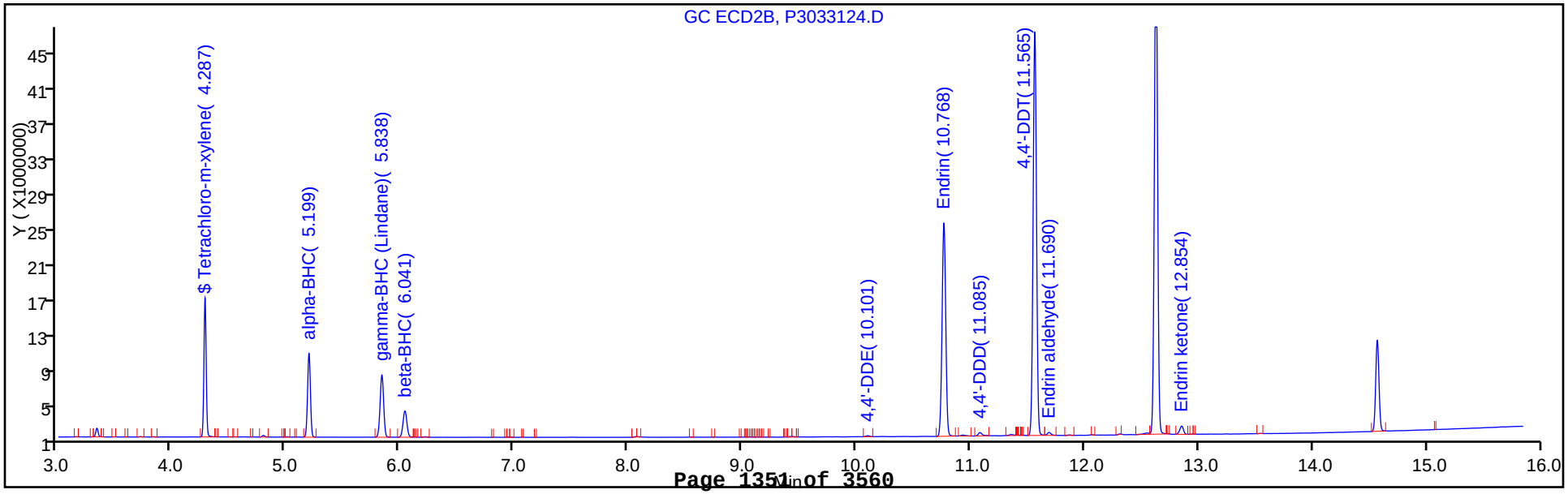
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033124.D

Injection Date:	31-Mar-2015 20:11:15	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	PEM			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: PEM 240-174448/24 Calibration Date: 03/31/2015 20:11

Instrument ID: A2HP3 Calib Start Date: 03/19/2015 15:22

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/19/2015 17:18

Lab File ID: P3033124.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	10.77	54400764	5.11	15	
Endrin aldehyde	11.69	798586			
Endrin ketone	12.85	2132474			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	11.57	95320083	1.23	15	
4,4'-DDD	11.09	931094			
4,4'-DDE	10.10	254471			

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033124.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 31-Mar-2015 20:11:15 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-024
Operator ID: 430893 Instrument ID: A2HP3
Sublist:

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 02-Apr-2015 08:54:24 Calib Date: 31-Mar-2015 19:26:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033122.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK054

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:46:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.603	3.602	0.001	19128359	NC	NC	
2	4.287	4.287	0.000	21973617	NC	NC	
						RPD = 0.52	
4 alpha-BHC							
1	4.300	4.300	0.000	14578958	NC	NC	
2	5.199	5.198	0.001	16698316	NC	NC	
						RPD = 1.28	
5 gamma-BHC (Lindane)							
1	4.693	4.693	0.000	13271936	NC	NC	
2	5.838	5.837	0.001	15369190	NC	NC	
						RPD = 1.64	
6 beta-BHC							
1	4.835	4.834	0.001	5749980	NC	NC	
2	6.041	6.039	0.002	7166413	NC	NC	
						RPD = 3.80	
16 4,4'-DDE							
1	8.175	8.162	0.013	206271		NC	M
2	10.101	10.096	0.005	254471		NC	a
						RPD = 176.34	
18 Endrin							
1	9.060	9.061	-0.001	52430236	NC	NC	
2	10.768	10.766	0.002	54400764	NC	NC	
						RPD = 3.82	
20 4,4'-DDD							
1	9.424	9.413	0.011	1197512		NC	
2	11.085	11.083	0.002	931094		NC	
						RPD = 26.11	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
23 4,4'-DDT							
1	9.924	9.924	0.000	94164495	NC	NC	
2	11.565	11.564	0.001	95320083	NC	NC	
						RPD = 4.31	
25 Endrin aldehyde							
1	10.300	10.292	0.008	924740		NC	
2	11.690	11.689	0.001	798586		NC	
						RPD = 16.66	
27 Methoxychlor							
1		10.866			ND	ND	
2		12.626					
29 Endrin ketone							
1	11.415	11.412	0.003	2465681		NC	
2	12.854	12.855	-0.001	2132474		NC	
						RPD = 15.92	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

SGPESTPEM_00014 Amount Added: 1.00 Units: mL

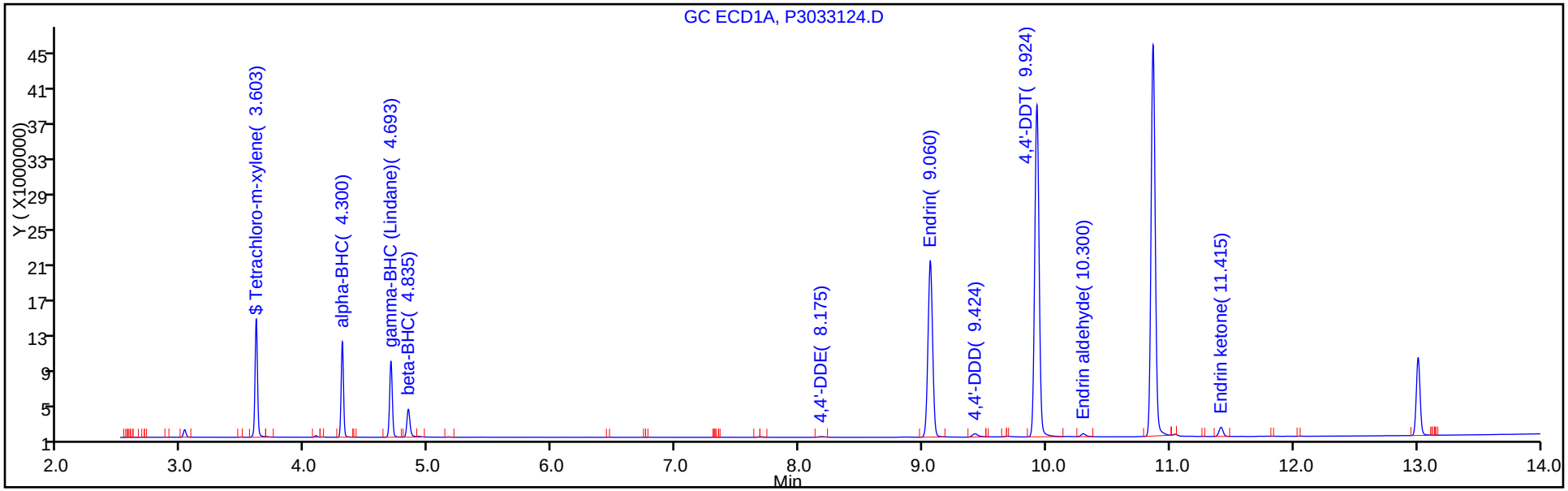
Report Date: 02-Apr-2015 15:27:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

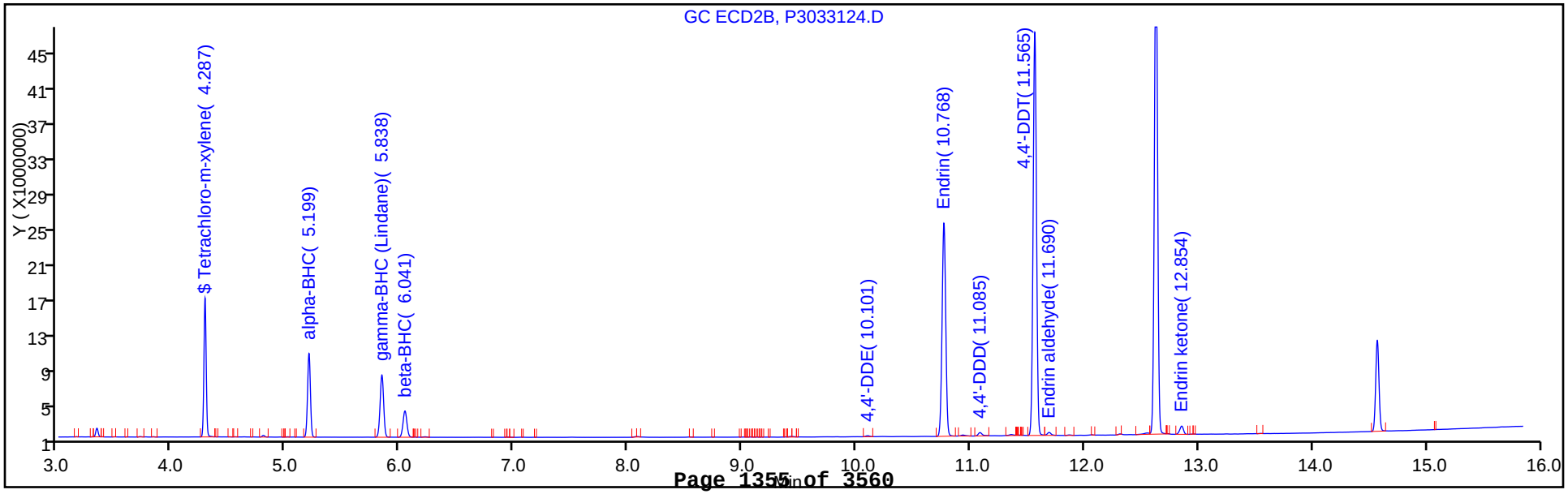
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033124.D

Injection Date:	31-Mar-2015 20:11:15	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	PEM			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: PEM 240-177258/27 Calibration Date: 04/21/2015 22:49

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042127.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	8.96	62852510	4.44	15	
Endrin aldehyde	10.21	704130			
Endrin ketone	11.33	2216617			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	9.83	101584019	4.17	15	
4,4'-DDD	9.32	4193343			
4,4'-DDE	8.05	224047			

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042127.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 21-Apr-2015 22:49:30 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-027
Operator ID: 430893 Instrument ID: A2HP3
Sublist:

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:49 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:28:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.550	3.554	-0.004	22114936	10.0	22.5	
2	4.235	4.235	0.000	25037271	10.0	22.2	
						RPD = 1.21	
4 alpha-BHC							
1	4.246	4.250	-0.004	17321003	10.0	10.0	
2	5.128	5.128	0.000	19632697	10.0	10.0	
						RPD = 0.28	
5 gamma-BHC (Lindane)							
1	4.632	4.638	-0.006	15791420	10.0	10.2	
2	5.751	5.751	0.000	18049275	10.0	10.2	
						RPD = 0.29	
6 beta-BHC							
1	4.771	4.776	-0.005	6736133	10.0	10.7	
2	5.951	5.949	0.002	8128987	10.0	10.6	
						RPD = 1.08	
16 4,4'-DDE							
1	8.054	8.059	-0.005	224047		0.1891	M
2	10.011	10.012	-0.001	314483		0.2382	a
						RPD = 22.96	
LOD = 0.5000							
18 Endrin							
1	8.958	8.962	-0.004	62852510	50.0	54.6	
2	10.681	10.681	0.000	62942171	50.0	52.2	
						RPD = 4.46	
20 4,4'-DDD							
1	9.321	9.327	-0.006	4193343		4.82	
2	11.005	11.006	-0.001	4392579		4.49	
						RPD = 7.07	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
23 4,4'-DDT							
1	9.833	9.841	-0.008	101584019	100.0	106.3	
2	11.486	11.487	-0.001	99820361	100.0	100.0	
						RPD = 6.13	
25 Endrin aldehyde							
1	10.208	10.209	-0.001	704130		0.7904	
2	11.609	11.609	0.000	637730		0.6829	
						RPD = 14.60	
27 Methoxychlor							
1		10.795			ND	ND	
2		12.554					
29 Endrin ketone							
1	11.331	11.334	-0.003	2216617		1.81	
2	12.772	12.776	-0.004	2297048		1.87	
						RPD = 3.08	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Reagents:

SGPESTPEM_00014 Amount Added: 1.00 Units: mL

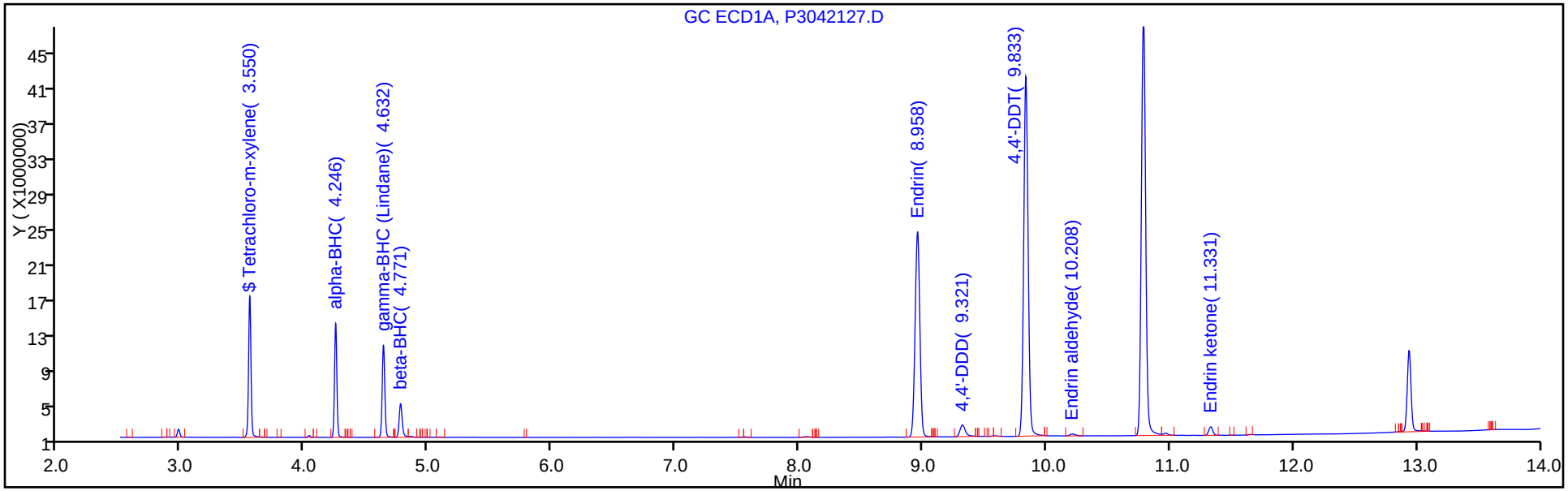
Report Date: 22-Apr-2015 08:57:57 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

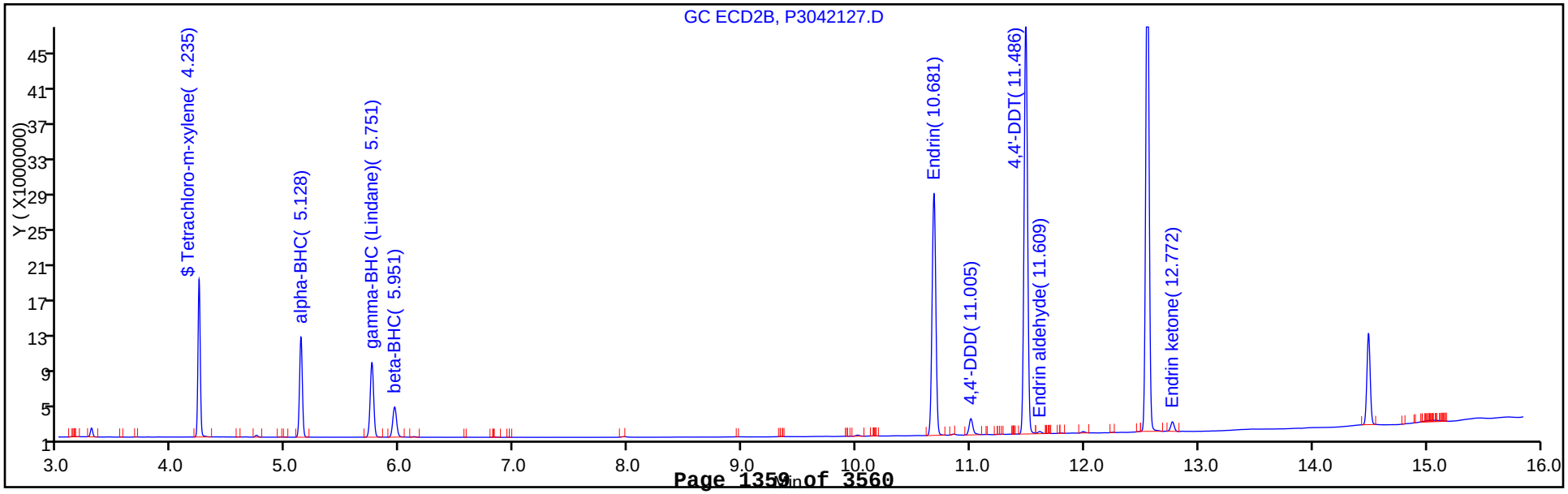
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042127.D

Injection Date:	21-Apr-2015 22:49:30	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	PEM			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: PEM 240-177258/27 Calibration Date: 04/21/2015 22:49

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042127.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	10.68	62942171	4.45	15	
Endrin aldehyde	11.61	637730			
Endrin ketone	12.77	2297048			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	11.49	99820361	4.50	15	
4,4'-DDD	11.01	4392579			
4,4'-DDE	10.01	314483			

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042127.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 21-Apr-2015 22:49:30 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-027
Operator ID: 430893 Instrument ID: A2HP3
Sublist:

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:49 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:28:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.550	3.554	-0.004	22114936	10.0	22.5	
2	4.235	4.235	0.000	25037271	10.0	22.2	
						RPD = 1.21	
4 alpha-BHC							
1	4.246	4.250	-0.004	17321003	10.0	10.0	
2	5.128	5.128	0.000	19632697	10.0	10.0	
						RPD = 0.28	
5 gamma-BHC (Lindane)							
1	4.632	4.638	-0.006	15791420	10.0	10.2	
2	5.751	5.751	0.000	18049275	10.0	10.2	
						RPD = 0.29	
6 beta-BHC							
1	4.771	4.776	-0.005	6736133	10.0	10.7	
2	5.951	5.949	0.002	8128987	10.0	10.6	
						RPD = 1.08	
16 4,4'-DDE							
1	8.054	8.059	-0.005	224047		0.1891	M
2	10.011	10.012	-0.001	314483		0.2382	a
						RPD = 22.96	
LOD = 0.5000							
18 Endrin							
1	8.958	8.962	-0.004	62852510	50.0	54.6	
2	10.681	10.681	0.000	62942171	50.0	52.2	
						RPD = 4.46	
20 4,4'-DDD							
1	9.321	9.327	-0.006	4193343		4.82	
2	11.005	11.006	-0.001	4392579		4.49	
						RPD = 7.07	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
23 4,4'-DDT							
1	9.833	9.841	-0.008	101584019	100.0	106.3	
2	11.486	11.487	-0.001	99820361	100.0	100.0	
						RPD = 6.13	
25 Endrin aldehyde							
1	10.208	10.209	-0.001	704130		0.7904	
2	11.609	11.609	0.000	637730		0.6829	
						RPD = 14.60	
27 Methoxychlor							
1		10.795			ND	ND	
2		12.554					
29 Endrin ketone							
1	11.331	11.334	-0.003	2216617		1.81	
2	12.772	12.776	-0.004	2297048		1.87	
						RPD = 3.08	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Reagents:

SGPESTPEM_00014 Amount Added: 1.00 Units: mL

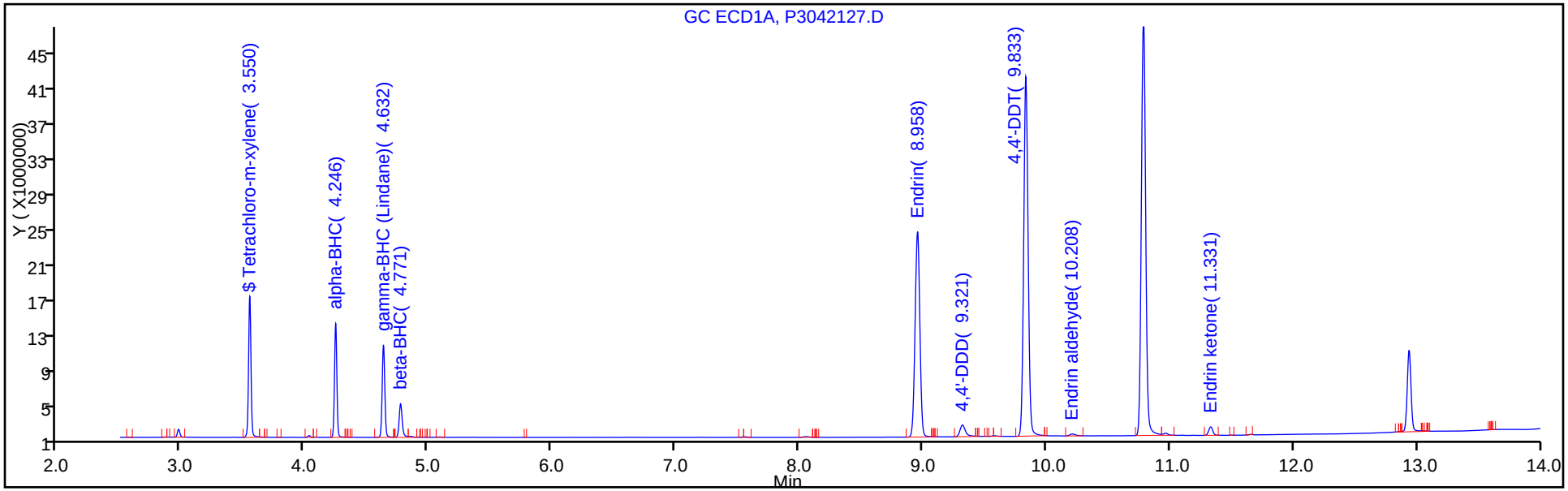
Report Date: 22-Apr-2015 08:57:58 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

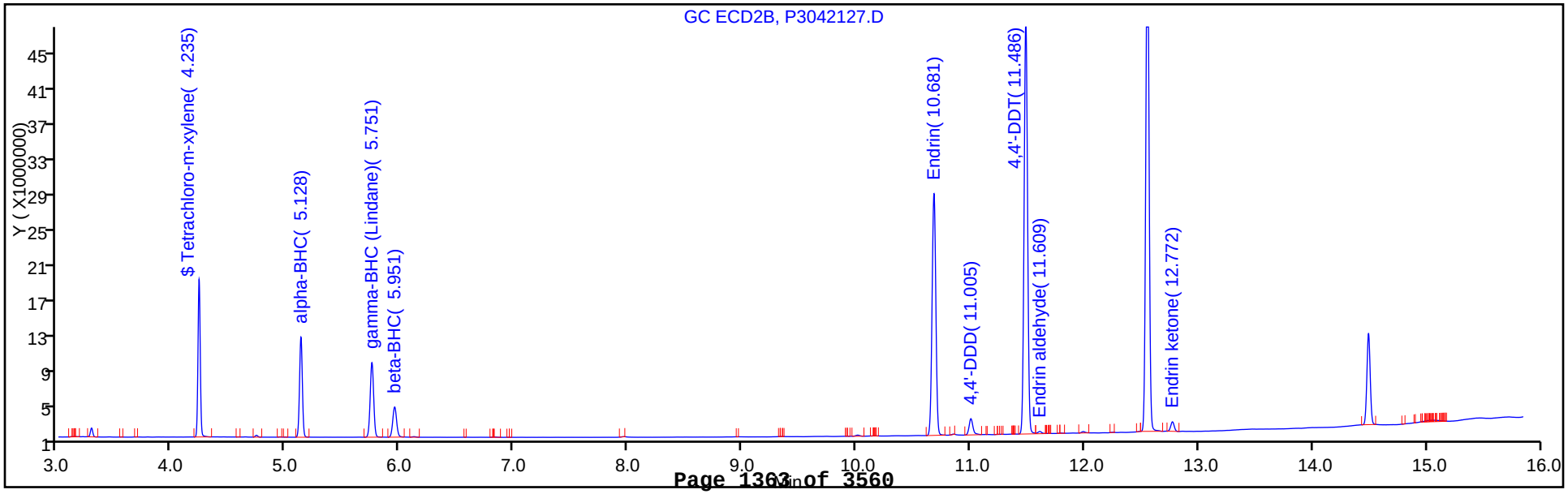
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042127.D

Injection Date:	21-Apr-2015 22:49:30	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	PEM			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: PEM 240-177463/5 Calibration Date: 04/22/2015 16:07

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042205.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	8.97	56189832	5.74	15	
Endrin aldehyde	10.22	787996			
Endrin ketone	11.34	2634356			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	9.85	83772532	5.00	15	
4,4'-DDD	9.35	4076784			
4,4'-DDE	8.09	328171			

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042205.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 22-Apr-2015 16:07:03 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-005
Operator ID: 430893 Instrument ID: A2HP3
Sublist:

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:54 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:21:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.558	3.555	0.003	20028747	10.0	20.4	
2	4.235	4.235	0.000	23851340	10.0	21.2	
						RPD = 3.85	
4 alpha-BHC							
1	4.255	4.251	0.004	15795492	10.0	9.12	
2	5.128	5.128	0.000	18413598	10.0	9.41	
						RPD = 3.09	
5 gamma-BHC (Lindane)							
1	4.643	4.638	0.005	14117499	10.0	9.15	
2	5.751	5.751	0.000	16554203	10.0	9.36	
						RPD = 2.27	
6 beta-BHC							
1	4.784	4.778	0.006	5303626	10.0	8.42	
2	5.950	5.951	-0.001	7285652	10.0	9.48	
						RPD = 11.86	
16 4,4'-DDE							
1	8.091	8.065	0.026	328171		0.2770	M
2	10.017	10.012	0.005	645109		0.4886	a
						RPD = 55.27	
LOD = 0.5000							
18 Endrin							
1	8.970	8.963	0.007	56189832	50.0	48.8	
2	10.680	10.681	-0.001	56733083	50.0	47.1	
						RPD = 3.64	
20 4,4'-DDD							
1	9.347	9.332	0.015	4076784		4.68	
2	11.009	11.006	0.003	5235778		5.35	
						RPD = 13.28	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
23 4,4'-DDT							
1	9.850	9.843	0.007	83772532	100.0	87.7	
2	11.487	11.486	0.001	84199352	100.0	84.4	
						RPD = 3.87	
25 Endrin aldehyde							
1	10.220	10.209	0.011	787996		0.8846	
2	11.605	11.609	-0.004	1166102		1.25	
						RPD = 34.14	
27 Methoxychlor							
1		10.797			ND	ND	
2		12.554					
29 Endrin ketone							
1	11.339	11.334	0.005	2634356		2.16	
2	12.772	12.774	-0.002	4041202		3.29	
						RPD = 41.69	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Reagents:

SGPESTPEM_00014 Amount Added: 1.00 Units: mL

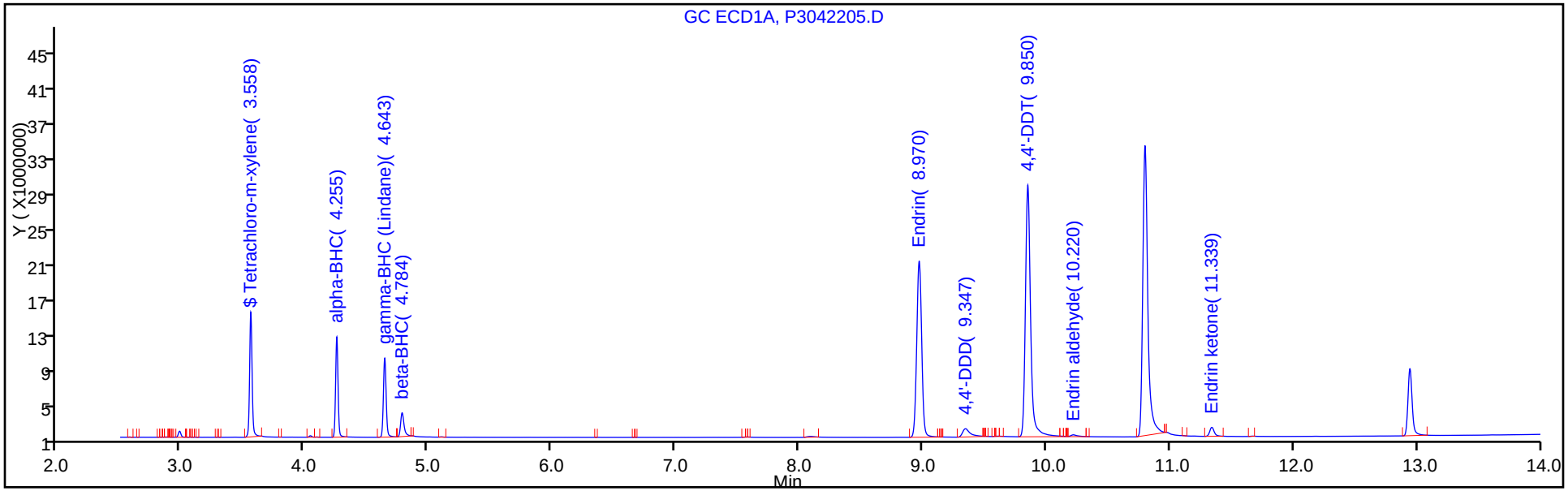
Report Date: 23-Apr-2015 07:42:55 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

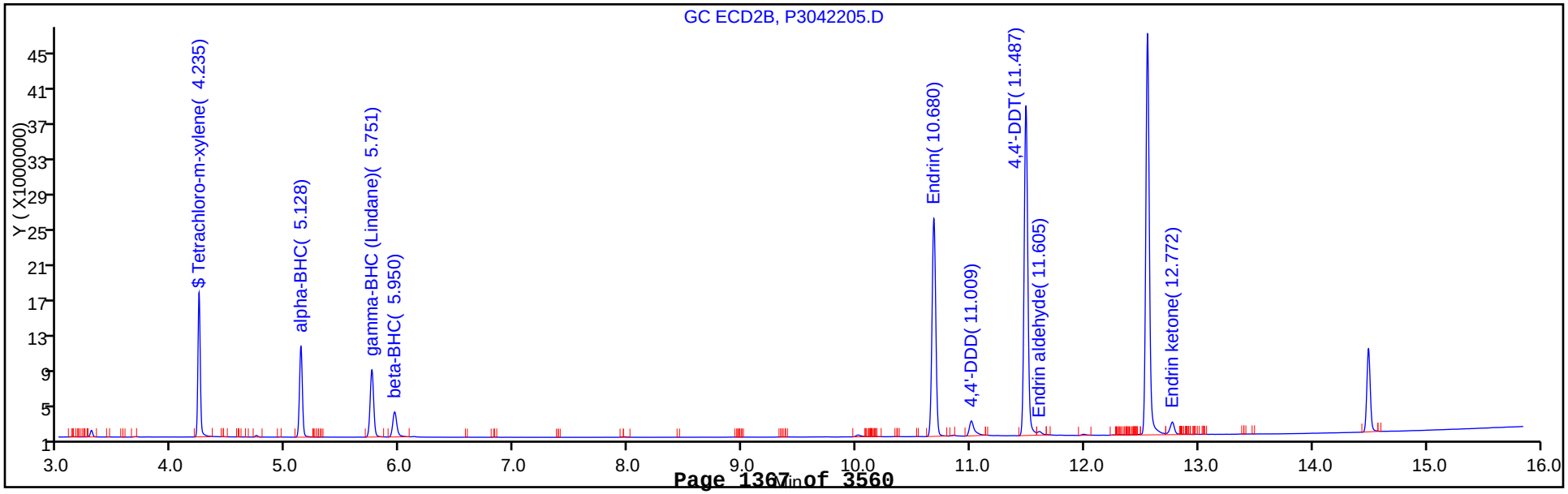
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042205.D

Injection Date:	22-Apr-2015 16:07:03	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	PEM			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: PEM 240-177463/5 Calibration Date: 04/22/2015 16:07

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042205.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	10.68	56733083	8.41	15	
Endrin aldehyde	11.61	1166102			
Endrin ketone	12.77	4041202			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	11.49	84199352	6.53	15	
4,4'-DDD	11.01	5235778			
4,4'-DDE	10.02	645109			

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042205.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 22-Apr-2015 16:07:03 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-005
Operator ID: 430893 Instrument ID: A2HP3
Sublist:

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:54 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:21:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.558	3.555	0.003	20028747	10.0	20.4	
2	4.235	4.235	0.000	23851340	10.0	21.2	
						RPD = 3.85	
4 alpha-BHC							
1	4.255	4.251	0.004	15795492	10.0	9.12	
2	5.128	5.128	0.000	18413598	10.0	9.41	
						RPD = 3.09	
5 gamma-BHC (Lindane)							
1	4.643	4.638	0.005	14117499	10.0	9.15	
2	5.751	5.751	0.000	16554203	10.0	9.36	
						RPD = 2.27	
6 beta-BHC							
1	4.784	4.778	0.006	5303626	10.0	8.42	
2	5.950	5.951	-0.001	7285652	10.0	9.48	
						RPD = 11.86	
16 4,4'-DDE							
1	8.091	8.065	0.026	328171		0.2770	M
2	10.017	10.012	0.005	645109		0.4886	a
						RPD = 55.27	
LOD = 0.5000							
18 Endrin							
1	8.970	8.963	0.007	56189832	50.0	48.8	
2	10.680	10.681	-0.001	56733083	50.0	47.1	
						RPD = 3.64	
20 4,4'-DDD							
1	9.347	9.332	0.015	4076784		4.68	
2	11.009	11.006	0.003	5235778		5.35	
						RPD = 13.28	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
23 4,4'-DDT							
1	9.850	9.843	0.007	83772532	100.0	87.7	
2	11.487	11.486	0.001	84199352	100.0	84.4	
						RPD = 3.87	
25 Endrin aldehyde							
1	10.220	10.209	0.011	787996		0.8846	
2	11.605	11.609	-0.004	1166102		1.25	
						RPD = 34.14	
27 Methoxychlor							
1		10.797			ND	ND	
2		12.554					
29 Endrin ketone							
1	11.339	11.334	0.005	2634356		2.16	
2	12.772	12.774	-0.002	4041202		3.29	
						RPD = 41.69	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

7 - Failed Limit of Detection

Reagents:

SGPESTPEM_00014 Amount Added: 1.00 Units: mL

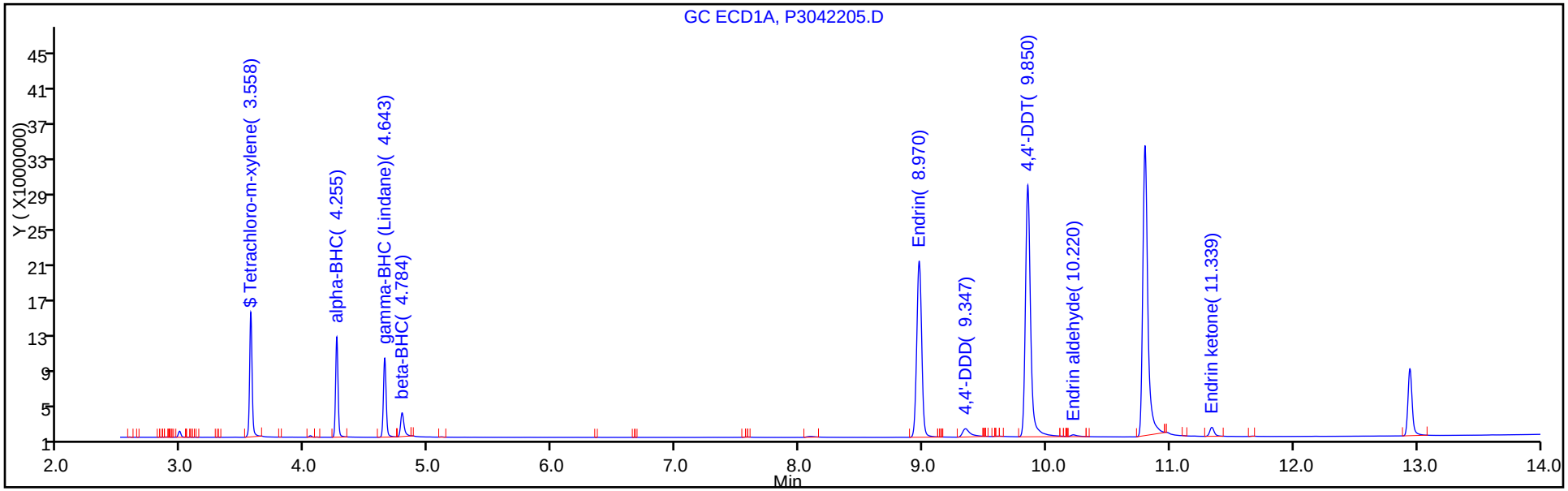
Report Date: 23-Apr-2015 07:42:55 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

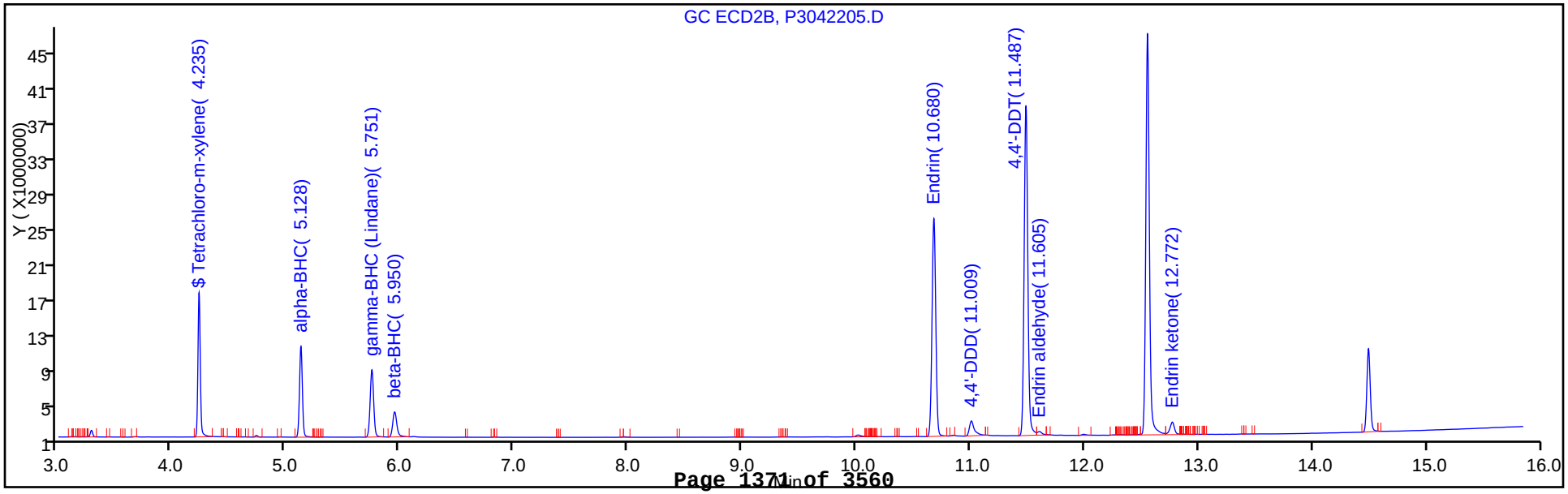
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042205.D

Injection Date:	22-Apr-2015 16:07:03	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	PEM			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174448/17 Calibration Date: 03/31/2015 17:34

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3033117.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	37833	42537		1120	1000	12.4	20.0
Toxaphene Peak 2	Ave	36644	38369		1050	1000	4.7	20.0
Toxaphene Peak 3	Ave	23355	26929		1150	1000	15.3	20.0
Toxaphene Peak 4	Ave	33176	37077		1120	1000	11.8	20.0
Toxaphene Peak 5	Ave	32330	36873		1140	1000	14.0	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174448/17 Calibration Date: 03/31/2015 17:34

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3033117.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	9.71	9.68	9.74
Toxaphene Peak 2	10.17	10.14	10.20
Toxaphene Peak 3	10.48	10.45	10.51
Toxaphene Peak 4	10.82	10.78	10.84
Toxaphene Peak 5	10.93	10.89	10.95

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033117.D
Lims ID: ICV TOX
Client ID:
Sample Type: ICV
Inject. Date: 31-Mar-2015 17:34:14 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-017
Operator ID: 430893 Instrument ID: A2HP3
Sublist:

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:57:33 Calib Date: 31-Mar-2015 17:11:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:40:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.708	9.708	0.000	42537298	1000.0	1124.4	M
1	10.165	10.167	-0.002	38369101	1000.0	1047.1	M
1	10.476	10.478	-0.002	26928611	1000.0	1153.0	M
1	10.816	10.814	0.002	37077392	1000.0	1117.6	M
1	10.925	10.922	0.003	36872517	1000.0	1140.5	M
		Average of Peak Amounts =				1116.5	
2	11.110	11.108	0.002	56398273	1000.0	1088.3	M
2	11.275	11.275	0.000	54666334	1000.0	1072.6	M
2	11.698	11.698	0.000	38048417	1000.0	1067.5	M
2	12.433	12.433	0.000	48902236	1000.0	1071.7	M
2	12.523	12.523	0.000	16163268	1000.0	1038.1	M
		Average of Peak Amounts =				1067.7	
						RPD = 4.47	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

TOX ChemS_00004 Amount Added: 100.00 Units: uL

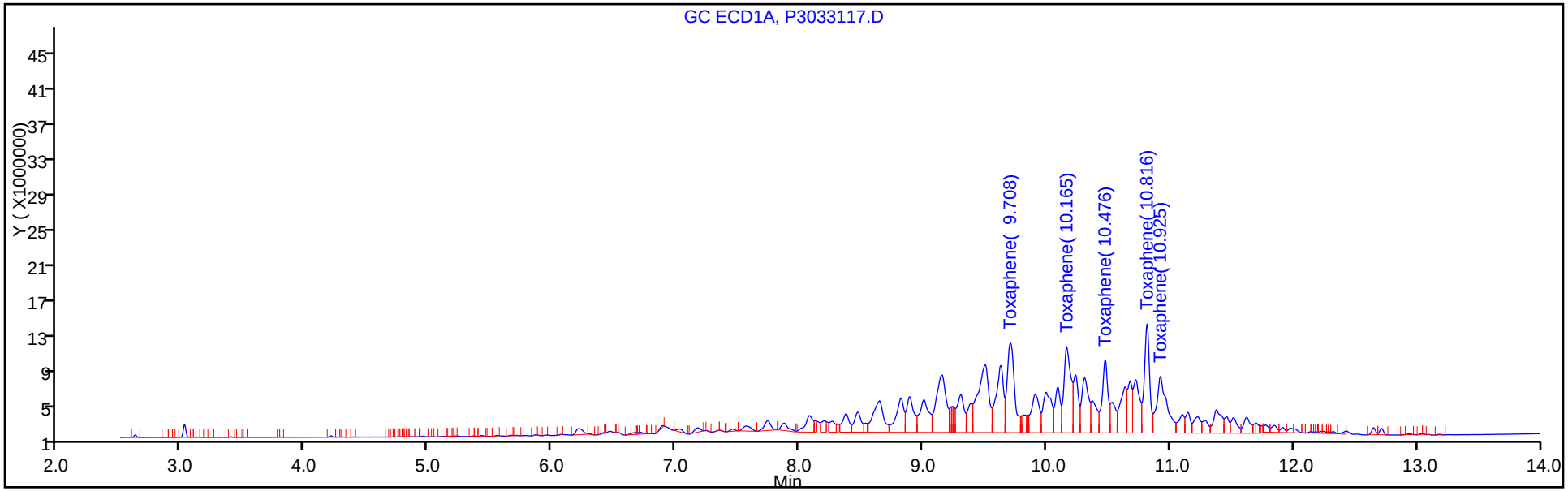
Report Date: 01-Apr-2015 08:57:37 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

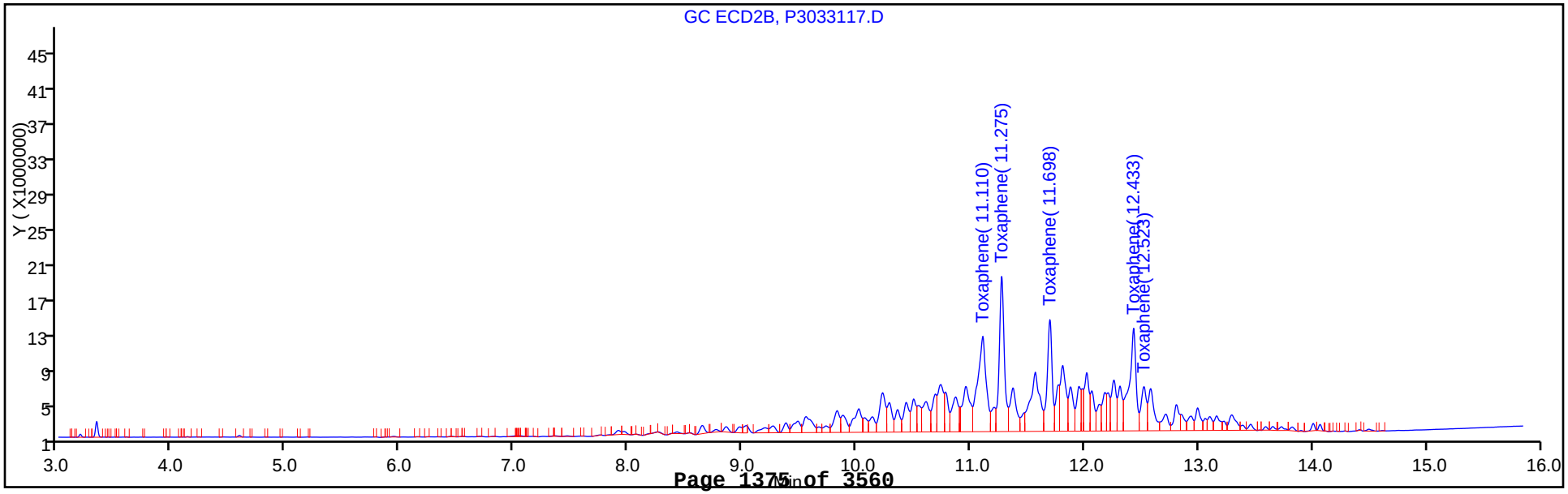
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033117.D

Injection Date:	31-Mar-2015 17:34:14	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	ICV TOX			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 01-Apr-2015 08:57:37 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033117.D

Injection Date: 31-Mar-2015 17:34:14 Instrument ID: A2HP3

Lims ID: ICV TOX

Client ID:

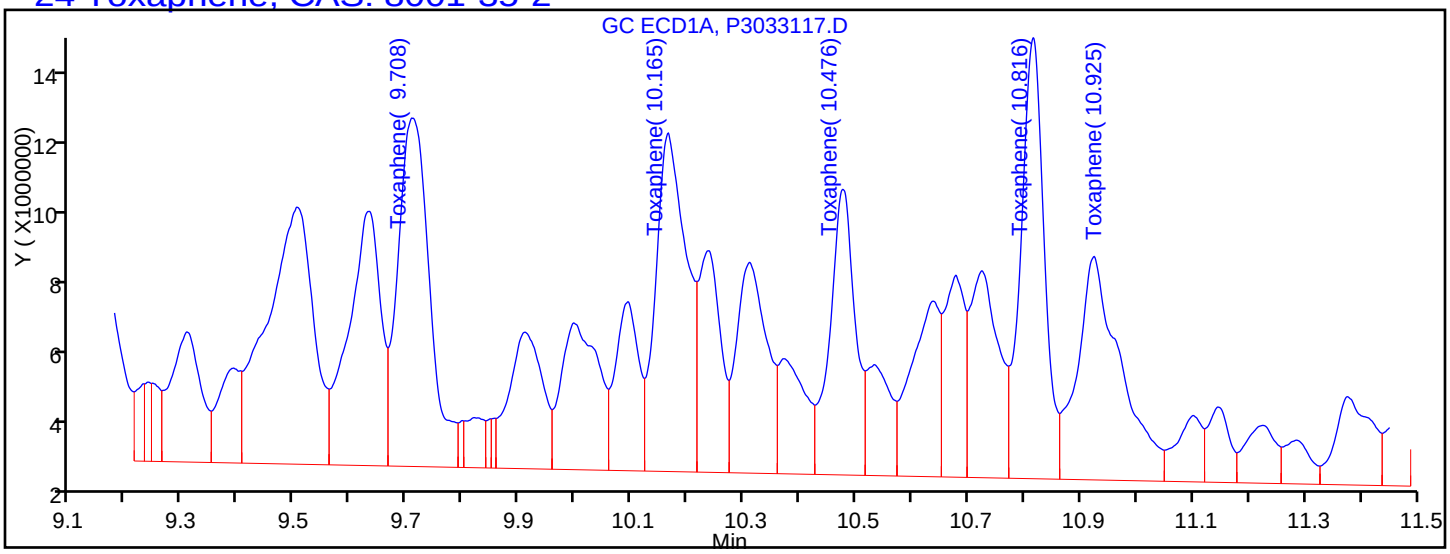
Operator ID: 430893 ALS Bottle#: 17 Worklist Smp#: 17

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

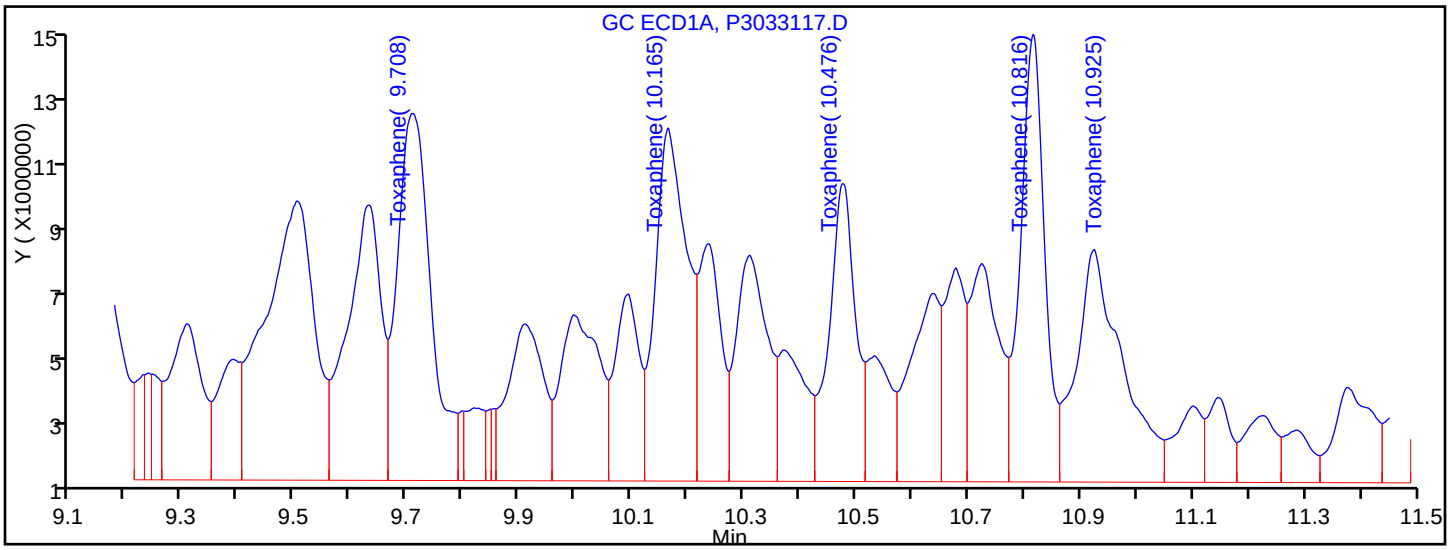
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.708	Response = 37512287	M
RT = 10.165	Response = 35267675	M
RT = 10.476	Response = 24366449	M
RT = 10.816	Response = 34987878	M
RT = 10.925	Response = 32987231	M



Manual Integration Results

RT = 9.708	Response = 42537298	M
RT = 10.165	Response = 38369101	M
RT = 10.476	Response = 26928611	M
RT = 10.816	Response = 37077392	M
RT = 10.925	Response = 36872517	M

Reviewer: matthewsb, 01-Apr-2015 08:40:39

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174448/17 Calibration Date: 03/31/2015 17:34

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3033117.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	51823	56398		1090	1000	8.8	20.0
Toxaphene Peak 2	Ave	50965	54666		1070	1000	7.3	20.0
Toxaphene Peak 3	Ave	35641	38048		1070	1000	6.8	20.0
Toxaphene Peak 4	Ave	45629	48902		1070	1000	7.2	20.0
Toxaphene Peak 5	Ave	15570	16163		1040	1000	3.8	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174448/17 Calibration Date: 03/31/2015 17:34

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3033117.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	11.11	11.08	11.14
Toxaphene Peak 2	11.28	11.25	11.31
Toxaphene Peak 3	11.70	11.67	11.73
Toxaphene Peak 4	12.43	12.40	12.46
Toxaphene Peak 5	12.52	12.49	12.55

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033117.D
Lims ID: ICV TOX
Client ID:
Sample Type: ICV
Inject. Date: 31-Mar-2015 17:34:14 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-017
Operator ID: 430893 Instrument ID: A2HP3
Sublist:

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 01-Apr-2015 08:57:33 Calib Date: 31-Mar-2015 17:11:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033116.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK034

First Level Reviewer: matthewsb Date: 01-Apr-2015 08:40:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.708	9.708	0.000	42537298	1000.0	1124.4	M
1	10.165	10.167	-0.002	38369101	1000.0	1047.1	M
1	10.476	10.478	-0.002	26928611	1000.0	1153.0	M
1	10.816	10.814	0.002	37077392	1000.0	1117.6	M
1	10.925	10.922	0.003	36872517	1000.0	1140.5	M
		Average of Peak Amounts =				1116.5	
2	11.110	11.108	0.002	56398273	1000.0	1088.3	M
2	11.275	11.275	0.000	54666334	1000.0	1072.6	M
2	11.698	11.698	0.000	38048417	1000.0	1067.5	M
2	12.433	12.433	0.000	48902236	1000.0	1071.7	M
2	12.523	12.523	0.000	16163268	1000.0	1038.1	M
		Average of Peak Amounts =				1067.7	
						RPD = 4.47	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

TOX ChemS_00004 Amount Added: 100.00 Units: uL

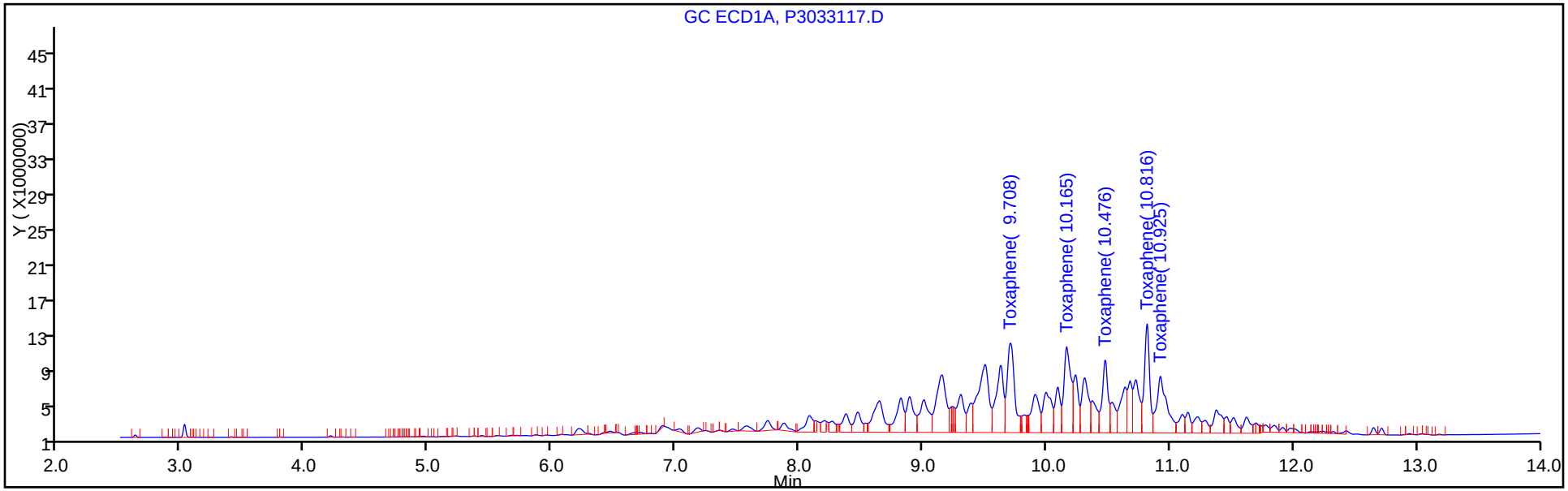
Report Date: 01-Apr-2015 08:57:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

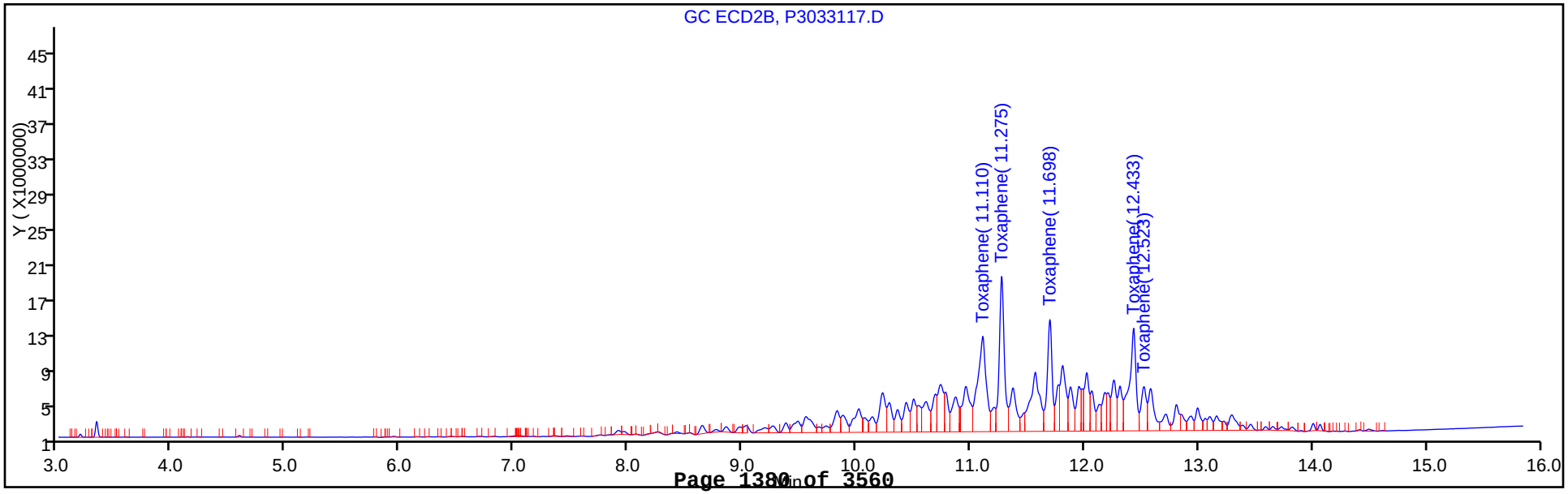
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033117.D

Injection Date:	31-Mar-2015 17:34:14	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	ICV TOX			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 01-Apr-2015 08:57:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033117.D

Injection Date: 31-Mar-2015 17:34:14 Instrument ID: A2HP3

Lims ID: ICV TOX

Client ID:

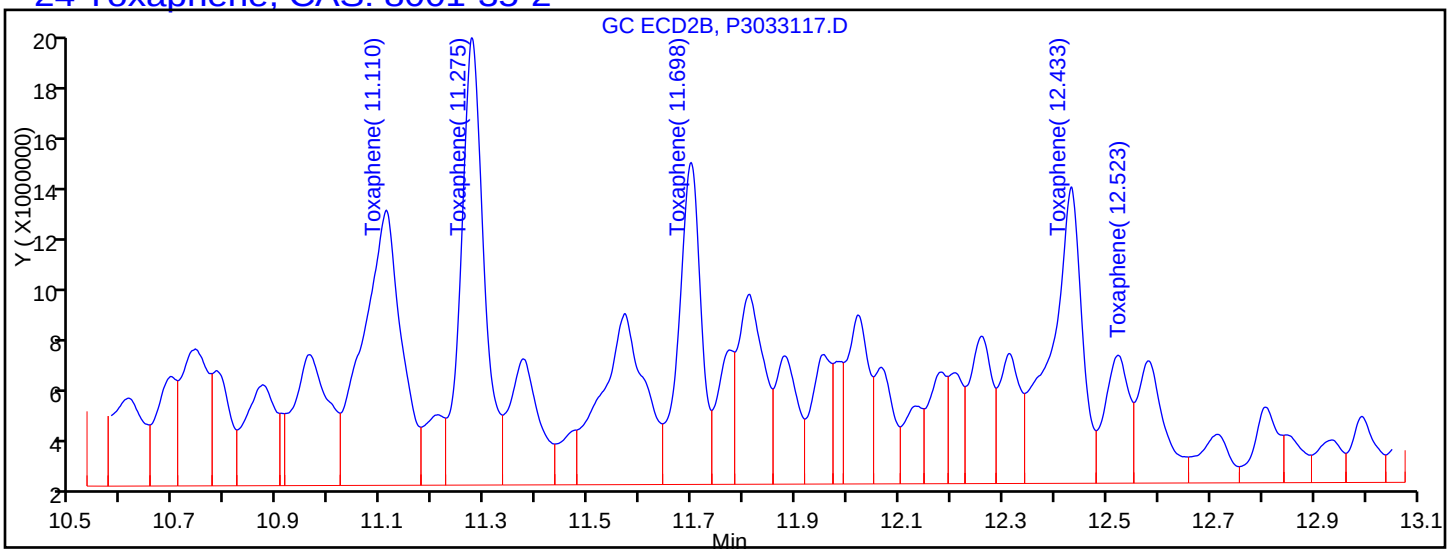
Operator ID: 430893 ALS Bottle#: 17 Worklist Smp#: 17

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

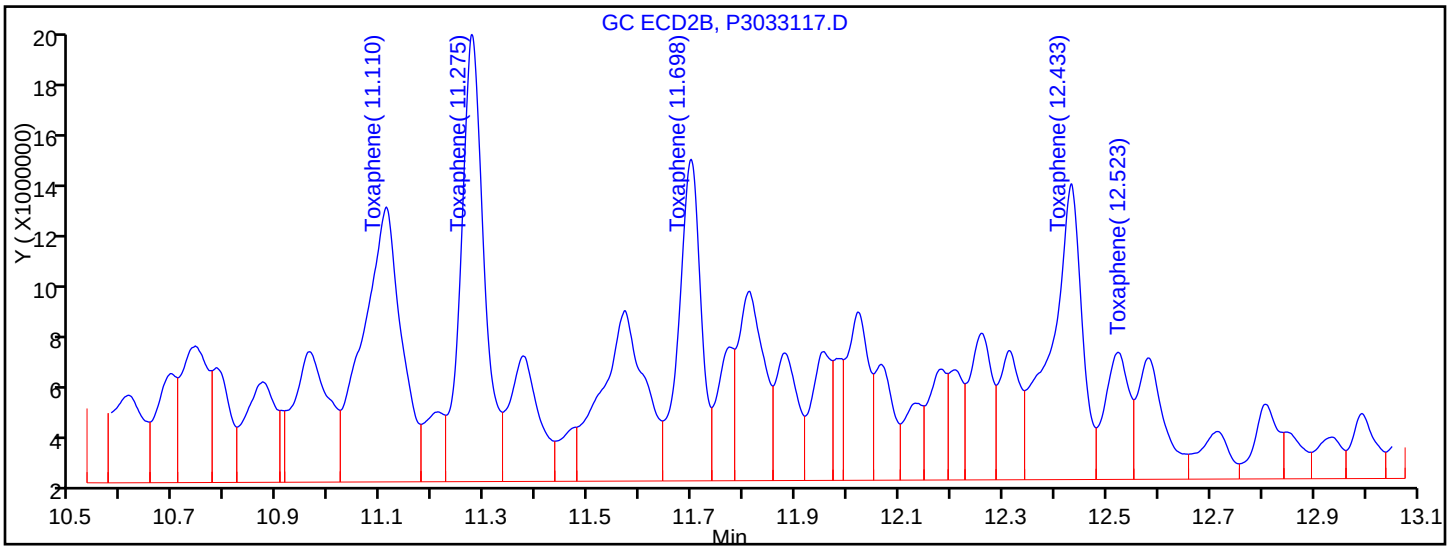
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 11.110	Response = 56628306	M
RT = 11.275	Response = 54840132	M
RT = 11.698	Response = 38221022	M
RT = 12.433	Response = 49210966	M
RT = 12.523	Response = 16329473	M



Manual Integration Results

RT = 11.110	Response = 56398273	M
RT = 11.275	Response = 54666334	M
RT = 11.698	Response = 38048417	M
RT = 12.433	Response = 48902236	M
RT = 12.523	Response = 16163268	M

Reviewer: matthewsb, 01-Apr-2015 08:42:05

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174448/31 Calibration Date: 03/31/2015 22:53

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3033131.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1731837	1795174		25.9	25.0	3.7	20.0
gamma-BHC (Lindane)	Ave	1543740	1577464		25.5	25.0	2.2	20.0
beta-BHC	Ave	629842	625485		24.8	25.0	-0.7	20.0
delta-BHC	Ave	1502830	1474905		24.5	25.0	-1.9	20.0
Heptachlor	Ave	1459223	1499048		25.7	25.0	2.7	20.0
Aldrin	Ave	1461888	1519074		26.0	25.0	3.9	20.0
Heptachlor epoxide	Ave	1303871	1316658		25.2	25.0	1.0	20.0
gamma-Chlordane	Ave	1350629	1357203		25.1	25.0	0.5	20.0
alpha-Chlordane	Ave	1337609	1348627		25.2	25.0	0.8	20.0
Endosulfan I	Ave	1227519	1204013		24.5	25.0	-1.9	20.0
4,4'-DDE	Ave	1184677	1161392		24.5	25.0	-2.0	20.0
Dieldrin	Ave	1307595	1338260		25.6	25.0	2.3	20.0
Endrin	Ave	1151386	1158992		25.2	25.0	0.7	20.0
4,4'-DDD	Ave	870416	819604		23.5	25.0	-5.8	20.0
Endosulfan II	Ave	1156896	1161400		25.1	25.0	0.4	20.0
4,4'-DDT	Ave	955198	945443		24.7	25.0	-1.0	20.0
Endrin aldehyde	Ave	890839	868728		24.4	25.0	-2.5	20.0
Methoxychlor	Ave	458228	455478		24.8	25.0	-0.6	20.0
Endosulfan sulfate	Ave	996194	1003154		25.2	25.0	0.7	20.0
Endrin ketone	Ave	1221980	1184636		24.2	25.0	-3.1	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174448/31 Calibration Date: 03/31/2015 22:53

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3033131.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	4.30	4.27	4.33
gamma-BHC (Lindane)	4.70	4.67	4.73
beta-BHC	4.84	4.81	4.87
delta-BHC	5.06	5.03	5.09
Heptachlor	5.36	5.33	5.39
Aldrin	5.83	5.80	5.86
Heptachlor epoxide	7.14	7.11	7.17
gamma-Chlordane	7.46	7.43	7.49
alpha-Chlordane	7.80	7.77	7.83
Endosulfan I	8.07	8.04	8.10
4,4'-DDE	8.17	8.14	8.20
Dieldrin	8.61	8.58	8.64
Endrin	9.06	9.03	9.09
4,4'-DDD	9.42	9.39	9.45
Endosulfan II	9.51	9.48	9.54
4,4'-DDT	9.92	9.89	9.95
Endrin aldehyde	10.29	10.27	10.33
Methoxychlor	10.87	10.84	10.90
Endosulfan sulfate	11.02	10.99	11.05
Endrin ketone	11.41	11.38	11.44

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033131.D
Lims ID: ICV AB3
Client ID:
Sample Type: ICV
Inject. Date: 31-Mar-2015 22:53:01 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-031
Operator ID: 430893 Instrument ID: A2HP3
Sublist:

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 02-Apr-2015 08:54:24 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK054

First Level Reviewer: shockr Date: 02-Apr-2015 15:32:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
4 alpha-BHC							
1	4.301	4.301	0.000	44879358	25.0	25.9	
2	5.198	5.199	-0.001	50737027	25.0	25.9	
						RPD = 0.02	
5 gamma-BHC (Lindane)							
1	4.695	4.695	0.000	39436605	25.0	25.5	
2	5.837	5.837	0.000	45112830	25.0	25.5	
						RPD = 0.20	
6 beta-BHC							
1	4.835	4.835	0.000	15637116	25.0	24.8	
2	6.039	6.040	-0.001	19020835	25.0	24.8	
						RPD = 0.29	
7 delta-BHC							
1	5.063	5.062	0.001	36872618	25.0	24.5	
2	6.681	6.681	0.000	44536005	25.0	25.1	
						RPD = 2.29	
9 Heptachlor							
1	5.355	5.356	-0.001	37476200	25.0	25.7	
2	6.764	6.765	-0.001	43127307	25.0	25.5	
						RPD = 0.67	
10 Aldrin							
1	5.831	5.833	-0.002	37976852	25.0	26.0	
2	7.584	7.585	-0.001	43002022	25.0	25.7	
						RPD = 1.01	
12 Heptachlor epoxide							
1	7.139	7.141	-0.002	32916451	25.0	25.2	
2	8.992	8.992	0.000	36524385	25.0	25.4	
						RPD = 0.79	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
13 gamma-Chlordane							
1	7.459	7.462	-0.003	33930076	25.0	25.1	
2	9.381	9.381	0.000	37272758	25.0	25.3	
						RPD = 0.85	
14 alpha-Chlordane							
1	7.799	7.799	0.000	33715682	25.0	25.2	
2	9.676	9.676	0.000	36113014	25.0	25.4	
						RPD = 0.87	
15 Endosulfan I							
1	8.069	8.068	0.001	30100325	25.0	24.5	
2	9.746	9.746	0.000	32598160	25.0	24.7	
						RPD = 0.59	
16 4,4'-DDE							
1	8.166	8.166	0.000	29034811	25.0	24.5	
2	10.097	10.096	0.001	33335661	25.0	25.2	
						RPD = 2.96	
17 Dieldrin							
1	8.613	8.614	-0.001	33456492	25.0	25.6	
2	10.256	10.256	0.000	35043674	25.0	25.6	
						RPD = 0.11	
18 Endrin							
1	9.060	9.061	-0.001	28974803	25.0	25.2	
2	10.768	10.768	0.000	30071663	25.0	24.9	
						RPD = 0.88	
20 4,4'-DDD							
1	9.417	9.415	0.002	20490111	25.0	23.5	
2	11.084	11.083	0.001	24146438	25.0	24.7	
						RPD = 4.70	
21 Endosulfan II							
1	9.507	9.507	0.000	29035012	25.0	25.1	
2	11.134	11.134	0.000	29251300	25.0	25.0	
						RPD = 0.34	
23 4,4'-DDT							
1	9.924	9.924	0.000	23636070	25.0	24.7	
2	11.564	11.565	-0.001	24551771	25.0	24.6	
						RPD = 0.58	
25 Endrin aldehyde							
1	10.294	10.296	-0.002	21718197	25.0	24.4	
2	11.689	11.690	-0.001	22384198	25.0	24.0	
						RPD = 1.70	
27 Methoxychlor							
1	10.869	10.868	0.001	11386945	25.0	24.8	
2	12.628	12.628	0.000	12122347	25.0	24.8	
						RPD = 0.28	
28 Endosulfan sulfate							
1	11.015	11.015	0.000	25078855	25.0	25.2	
2	12.110	12.110	0.000	26415051	25.0	24.9	
						RPD = 0.94	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
29 Endrin ketone							
1	11.414	11.414	0.000	29615910	25.0	24.2	
2	12.856	12.856	0.000	29229119	25.0	23.8	
						RPD =	1.80

Reagents:

SGPESTABCV_00017 Amount Added: 1.00 Units: mL

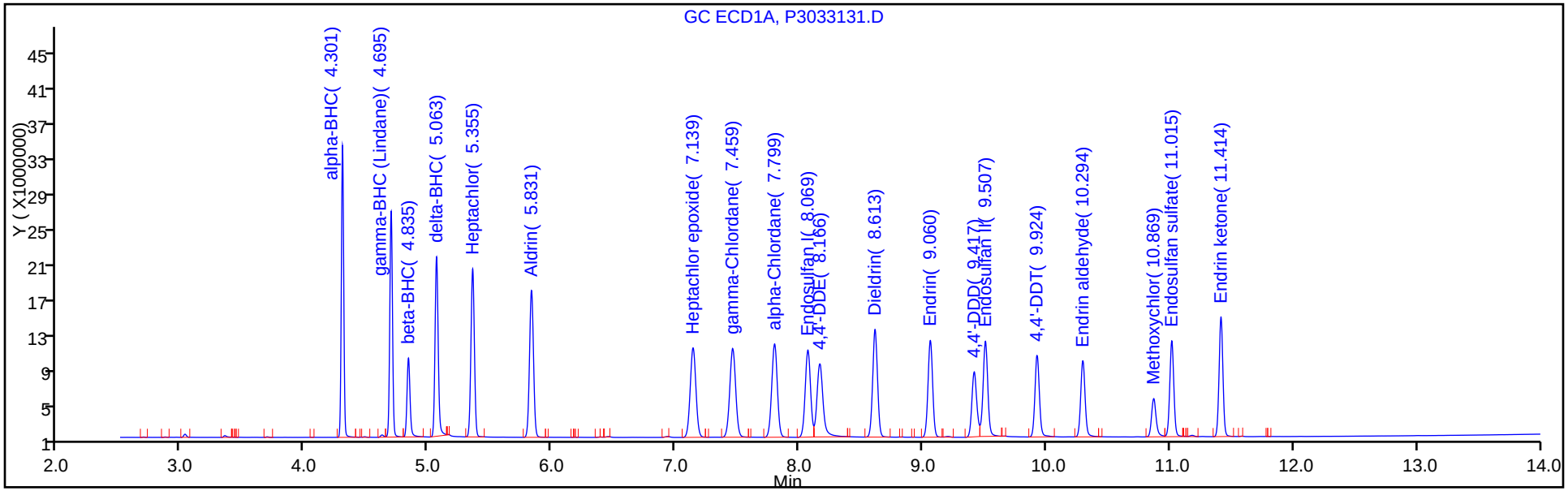
Report Date: 02-Apr-2015 15:32:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

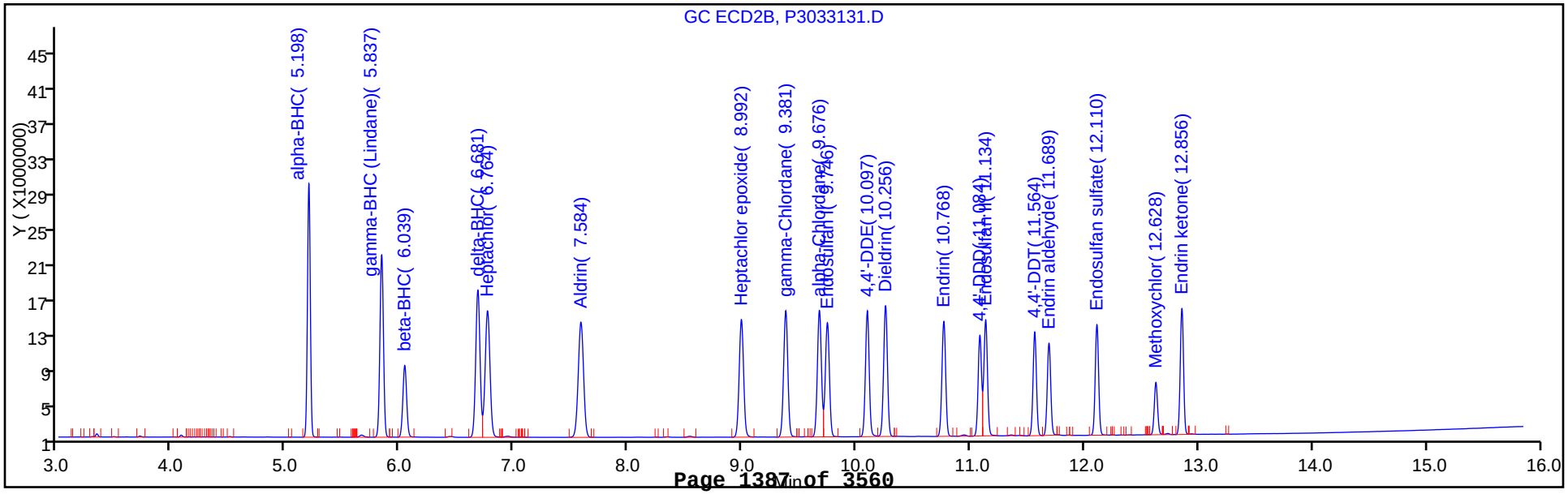
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033131.D

Injection Date:	31-Mar-2015 22:53:01	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	ICV AB3			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174448/31 Calibration Date: 03/31/2015 22:53

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3033131.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1957541	2029481		25.9	25.0	3.7	20.0
gamma-BHC (Lindane)	Ave	1769514	1804513		25.5	25.0	2.0	20.0
beta-BHC	Ave	768367	760833		24.8	25.0	-1.0	20.0
delta-BHC	Ave	1774158	1781440		25.1	25.0	0.4	20.0
Heptachlor	Ave	1690527	1725092		25.5	25.0	2.0	20.0
Aldrin	Ave	1672196	1720081		25.7	25.0	2.9	20.0
Heptachlor epoxide	Ave	1435426	1460975		25.4	25.0	1.8	20.0
gamma-Chlordane	Ave	1471152	1490910		25.3	25.0	1.3	20.0
alpha-Chlordane	Ave	1420369	1444521		25.4	25.0	1.7	20.0
Endosulfan I	Ave	1321597	1303926		24.7	25.0	-1.3	20.0
4,4'-DDE	Ave	1320422	1333426		25.2	25.0	1.0	20.0
Dieldrin	Ave	1368089	1401747		25.6	25.0	2.5	20.0
Endrin	Ave	1205577	1202867		24.9	25.0	-0.2	20.0
4,4'-DDD	Ave	978644	965858		24.7	25.0	-1.3	20.0
Endosulfan II	Ave	1169425	1170052		25.0	25.0	0.0	20.0
4,4'-DDT	Ave	997996	982071		24.6	25.0	-1.6	20.0
Endrin aldehyde	Ave	933862	895368		24.0	25.0	-4.1	20.0
Endosulfan sulfate	Ave	1059131	1056602		24.9	25.0	-0.2	20.0
Methoxychlor	Ave	489196	484894		24.8	25.0	-0.9	20.0
Endrin ketone	Ave	1227876	1169165		23.8	25.0	-4.8	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174448/31 Calibration Date: 03/31/2015 22:53

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3033131.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	5.20	5.17	5.23
gamma-BHC (Lindane)	5.84	5.81	5.87
beta-BHC	6.04	6.01	6.07
delta-BHC	6.68	6.65	6.71
Heptachlor	6.76	6.74	6.80
Aldrin	7.58	7.56	7.62
Heptachlor epoxide	8.99	8.96	9.02
gamma-Chlordane	9.38	9.35	9.41
alpha-Chlordane	9.68	9.65	9.71
Endosulfan I	9.75	9.72	9.78
4,4'-DDE	10.10	10.07	10.13
Dieldrin	10.26	10.23	10.29
Endrin	10.77	10.74	10.80
4,4'-DDD	11.08	11.05	11.11
Endosulfan II	11.13	11.10	11.16
4,4'-DDT	11.56	11.54	11.60
Endrin aldehyde	11.69	11.66	11.72
Endosulfan sulfate	12.11	12.08	12.14
Methoxychlor	12.63	12.60	12.66
Endrin ketone	12.86	12.83	12.89

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033131.D
Lims ID: ICV AB3
Client ID:
Sample Type: ICV
Inject. Date: 31-Mar-2015 22:53:01 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042076-031
Operator ID: 430893 Instrument ID: A2HP3
Sublist:

Method: \\NCChrom\ChromData\A2HP3\20150331-42076.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 02-Apr-2015 08:54:24 Calib Date: 31-Mar-2015 22:29:58
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033130.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK054

First Level Reviewer: shockr Date: 02-Apr-2015 15:32:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
4 alpha-BHC							
1	4.301	4.301	0.000	44879358	25.0	25.9	
2	5.198	5.199	-0.001	50737027	25.0	25.9	
						RPD = 0.02	
5 gamma-BHC (Lindane)							
1	4.695	4.695	0.000	39436605	25.0	25.5	
2	5.837	5.837	0.000	45112830	25.0	25.5	
						RPD = 0.20	
6 beta-BHC							
1	4.835	4.835	0.000	15637116	25.0	24.8	
2	6.039	6.040	-0.001	19020835	25.0	24.8	
						RPD = 0.29	
7 delta-BHC							
1	5.063	5.062	0.001	36872618	25.0	24.5	
2	6.681	6.681	0.000	44536005	25.0	25.1	
						RPD = 2.29	
9 Heptachlor							
1	5.355	5.356	-0.001	37476200	25.0	25.7	
2	6.764	6.765	-0.001	43127307	25.0	25.5	
						RPD = 0.67	
10 Aldrin							
1	5.831	5.833	-0.002	37976852	25.0	26.0	
2	7.584	7.585	-0.001	43002022	25.0	25.7	
						RPD = 1.01	
12 Heptachlor epoxide							
1	7.139	7.141	-0.002	32916451	25.0	25.2	
2	8.992	8.992	0.000	36524385	25.0	25.4	
						RPD = 0.79	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
13 gamma-Chlordane							
1	7.459	7.462	-0.003	33930076	25.0	25.1	
2	9.381	9.381	0.000	37272758	25.0	25.3	
						RPD = 0.85	
14 alpha-Chlordane							
1	7.799	7.799	0.000	33715682	25.0	25.2	
2	9.676	9.676	0.000	36113014	25.0	25.4	
						RPD = 0.87	
15 Endosulfan I							
1	8.069	8.068	0.001	30100325	25.0	24.5	
2	9.746	9.746	0.000	32598160	25.0	24.7	
						RPD = 0.59	
16 4,4'-DDE							
1	8.166	8.166	0.000	29034811	25.0	24.5	
2	10.097	10.096	0.001	33335661	25.0	25.2	
						RPD = 2.96	
17 Dieldrin							
1	8.613	8.614	-0.001	33456492	25.0	25.6	
2	10.256	10.256	0.000	35043674	25.0	25.6	
						RPD = 0.11	
18 Endrin							
1	9.060	9.061	-0.001	28974803	25.0	25.2	
2	10.768	10.768	0.000	30071663	25.0	24.9	
						RPD = 0.88	
20 4,4'-DDD							
1	9.417	9.415	0.002	20490111	25.0	23.5	
2	11.084	11.083	0.001	24146438	25.0	24.7	
						RPD = 4.70	
21 Endosulfan II							
1	9.507	9.507	0.000	29035012	25.0	25.1	
2	11.134	11.134	0.000	29251300	25.0	25.0	
						RPD = 0.34	
23 4,4'-DDT							
1	9.924	9.924	0.000	23636070	25.0	24.7	
2	11.564	11.565	-0.001	24551771	25.0	24.6	
						RPD = 0.58	
25 Endrin aldehyde							
1	10.294	10.296	-0.002	21718197	25.0	24.4	
2	11.689	11.690	-0.001	22384198	25.0	24.0	
						RPD = 1.70	
27 Methoxychlor							
1	10.869	10.868	0.001	11386945	25.0	24.8	
2	12.628	12.628	0.000	12122347	25.0	24.8	
						RPD = 0.28	
28 Endosulfan sulfate							
1	11.015	11.015	0.000	25078855	25.0	25.2	
2	12.110	12.110	0.000	26415051	25.0	24.9	
						RPD = 0.94	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
29 Endrin ketone							
1	11.414	11.414	0.000	29615910	25.0	24.2	
2	12.856	12.856	0.000	29229119	25.0	23.8	
						RPD = 1.80	

Reagents:

SGPESTABCV_00017 Amount Added: 1.00 Units: mL

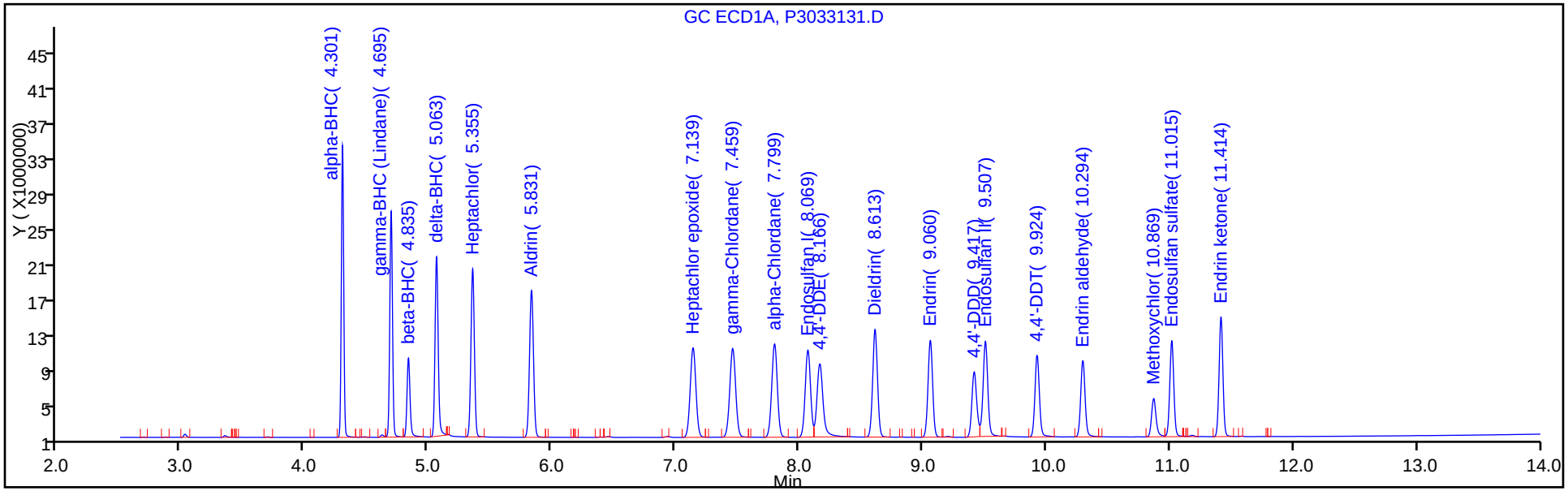
Report Date: 02-Apr-2015 15:32:12 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

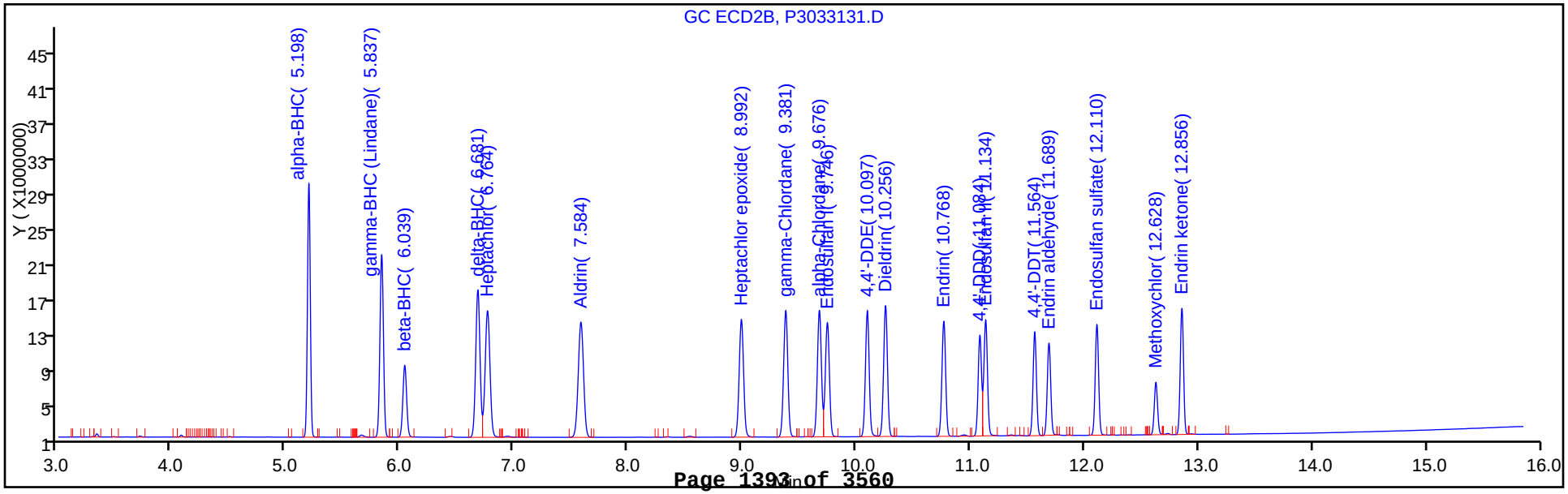
Data File: \\NCChrom\ChromData\A2HP3\20150331-42076.b\P3033131.D

Injection Date:	31-Mar-2015 22:53:01	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	ICV AB3			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/8 Calibration Date: 04/21/2015 15:32

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042108.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	37833	41315		1090	1000	9.2	20.0
Toxaphene Peak 2	Ave	36644	38859		1060	1000	6.0	20.0
Toxaphene Peak 3	Ave	23355	24547		1050	1000	5.1	20.0
Toxaphene Peak 4	Ave	33176	35156		1060	1000	6.0	20.0
Toxaphene Peak 5	Ave	32330	33684		1040	1000	4.2	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/8 Calibration Date: 04/21/2015 15:32

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042108.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	9.62	9.59	9.65
Toxaphene Peak 2	10.08	10.05	10.11
Toxaphene Peak 3	10.39	10.36	10.42
Toxaphene Peak 4	10.74	10.71	10.77
Toxaphene Peak 5	10.84	10.81	10.87

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042108.D
Lims ID: CCV TOX3
Client ID:
Sample Type: CCVRT
Inject. Date: 21-Apr-2015 15:32:24 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-008
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:58:37 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:18:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.622	9.622	0.000	41314691	1000.0	1092.0	M
1	10.081	10.081	0.000	38859344	1000.0	1060.5	M
1	10.393	10.393	0.000	24547309	1000.0	1051.1	M
1	10.735	10.735	0.000	35155538	1000.0	1059.7	M
1	10.840	10.840	0.000	33684015	1000.0	1041.9	M
		Average of Peak Amounts =				1061.0	
2	11.025	11.025	0.000	53616903	1000.0	1034.6	M
2	11.195	11.195	0.000	53467893	1000.0	1049.1	M
2	11.618	11.618	0.000	36878172	1000.0	1034.7	M
2	12.353	12.353	0.000	46136479	1000.0	1011.1	M
2	12.444	12.444	0.000	15246591	1000.0	979.2	M
		Average of Peak Amounts =				1021.8	
						RPD = 3.77	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 100.00 Units: uL

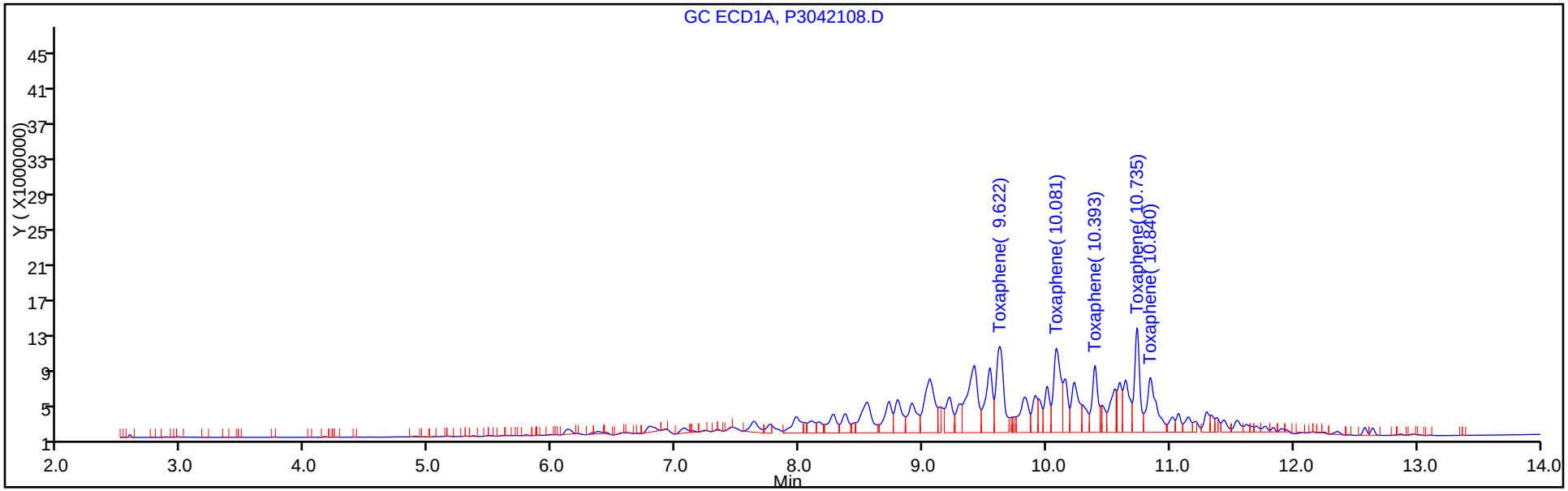
Report Date: 22-Apr-2015 08:58:38 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

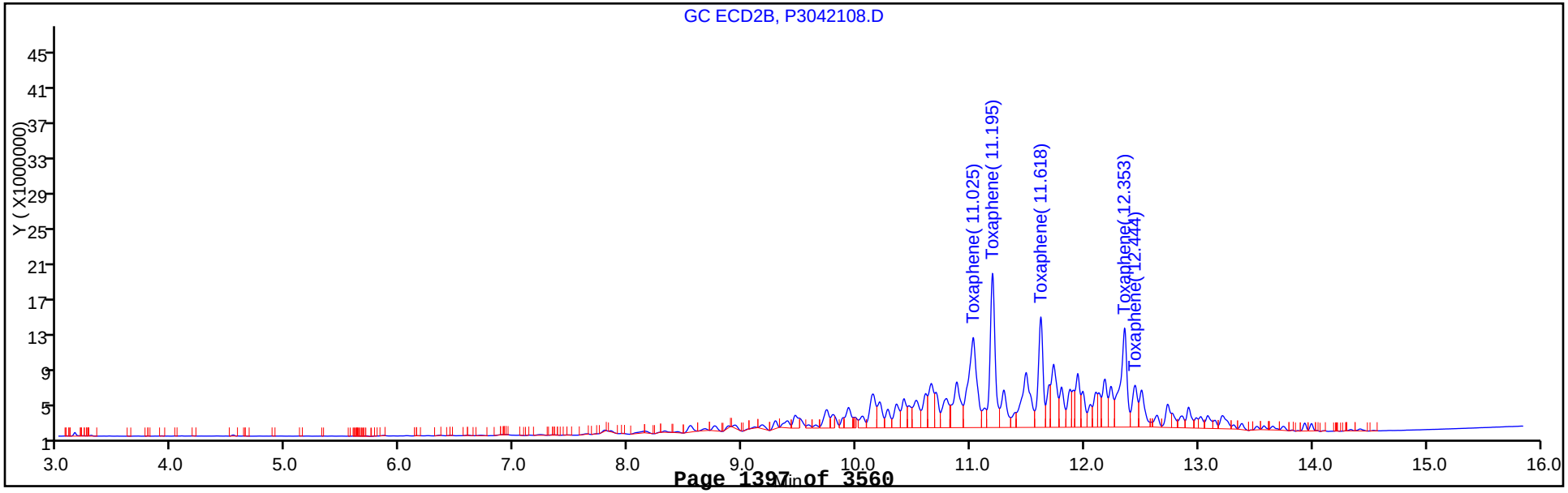
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042108.D

Injection Date:	21-Apr-2015 15:32:24	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV TOX3			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 22-Apr-2015 08:58:38 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042108.D

Injection Date: 21-Apr-2015 15:32:24 Instrument ID: A2HP3

Lims ID: CCV TOX3

Client ID:

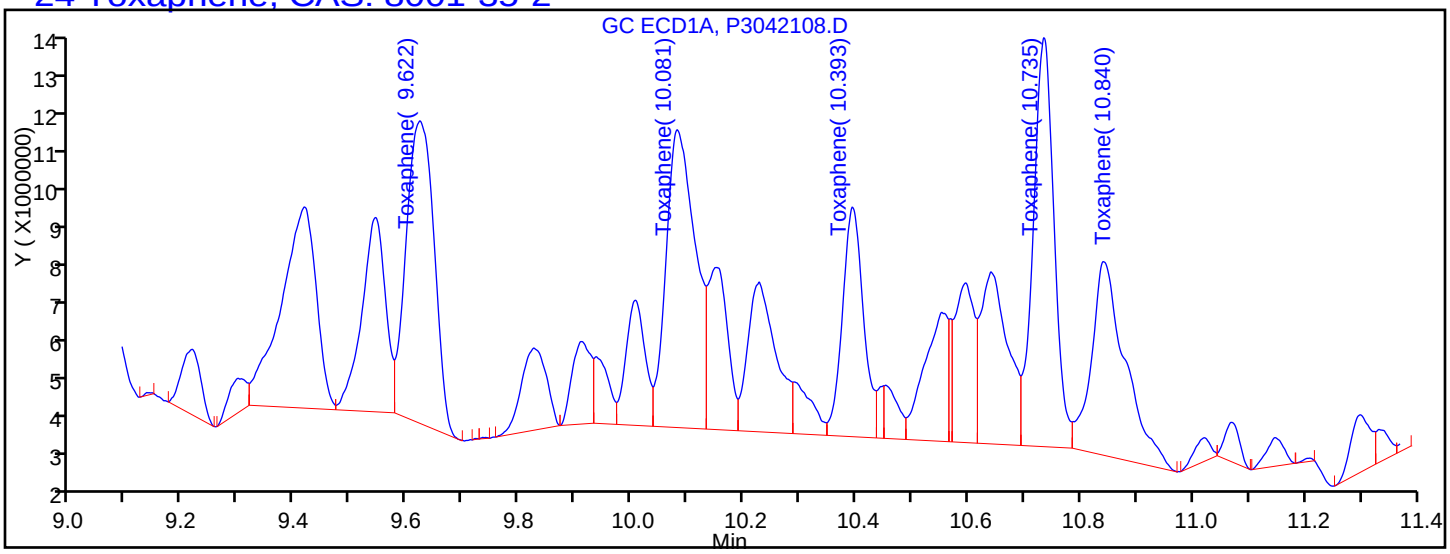
Operator ID: 430893 ALS Bottle#: 8 Worklist Smp#: 8

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

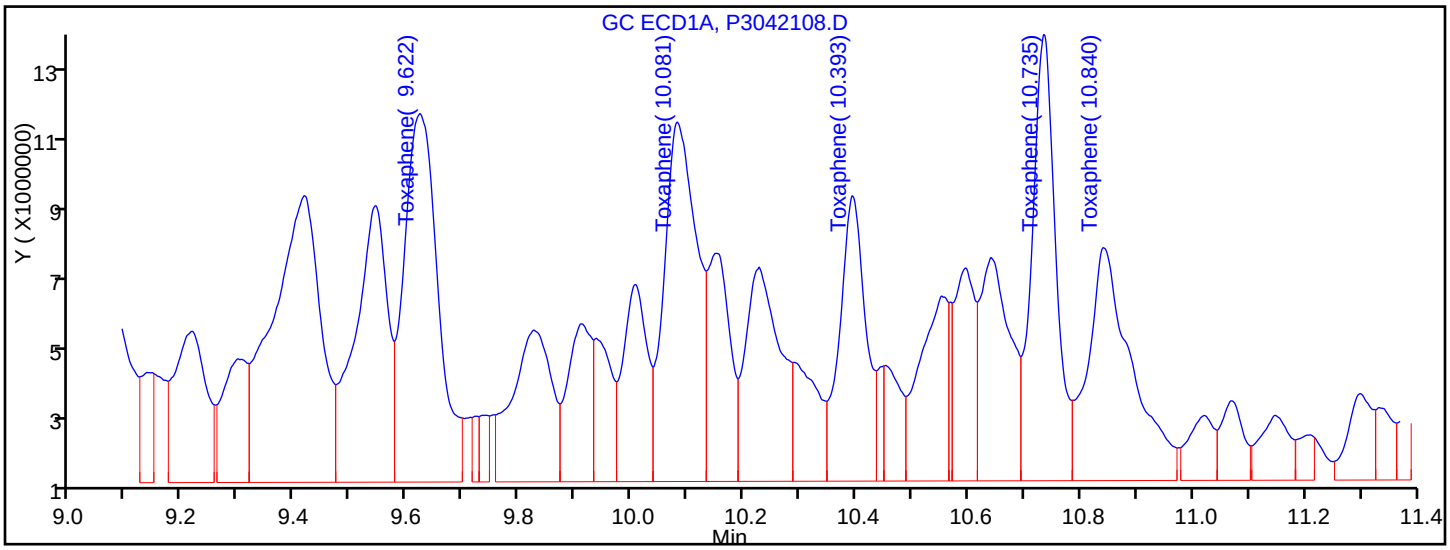
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.622	Response = 26531778	M
RT = 10.081	Response = 27431614	M
RT = 10.393	Response = 15173978	M
RT = 10.735	Response = 26901276	M
RT = 10.840	Response = 20666479	M



Manual Integration Results

RT = 9.622	Response = 41314691	M
RT = 10.081	Response = 38859344	M
RT = 10.393	Response = 24547309	M
RT = 10.735	Response = 35155538	M
RT = 10.840	Response = 33684015	M

Reviewer: matthewsb, 22-Apr-2015 07:18:40

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/8 Calibration Date: 04/21/2015 15:32

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042108.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	51823	53617		1030	1000	3.5	20.0
Toxaphene Peak 2	Ave	50965	53468		1050	1000	4.9	20.0
Toxaphene Peak 3	Ave	35641	36878		1030	1000	3.5	20.0
Toxaphene Peak 4	Ave	45629	46136		1010	1000	1.1	20.0
Toxaphene Peak 5	Ave	15570	15247		979	1000	-2.1	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/8 Calibration Date: 04/21/2015 15:32

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042108.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	11.03	11.00	11.06
Toxaphene Peak 2	11.20	11.17	11.23
Toxaphene Peak 3	11.62	11.59	11.65
Toxaphene Peak 4	12.35	12.32	12.38
Toxaphene Peak 5	12.44	12.41	12.47

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042108.D
Lims ID: CCV TOX3
Client ID:
Sample Type: CCVRT
Inject. Date: 21-Apr-2015 15:32:24 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-008
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:58:37 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:18:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.622	9.622	0.000	41314691	1000.0	1092.0	M
1	10.081	10.081	0.000	38859344	1000.0	1060.5	M
1	10.393	10.393	0.000	24547309	1000.0	1051.1	M
1	10.735	10.735	0.000	35155538	1000.0	1059.7	M
1	10.840	10.840	0.000	33684015	1000.0	1041.9	M
		Average of Peak Amounts =				1061.0	
2	11.025	11.025	0.000	53616903	1000.0	1034.6	M
2	11.195	11.195	0.000	53467893	1000.0	1049.1	M
2	11.618	11.618	0.000	36878172	1000.0	1034.7	M
2	12.353	12.353	0.000	46136479	1000.0	1011.1	M
2	12.444	12.444	0.000	15246591	1000.0	979.2	M
		Average of Peak Amounts =				1021.8	
						RPD = 3.77	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 100.00 Units: uL

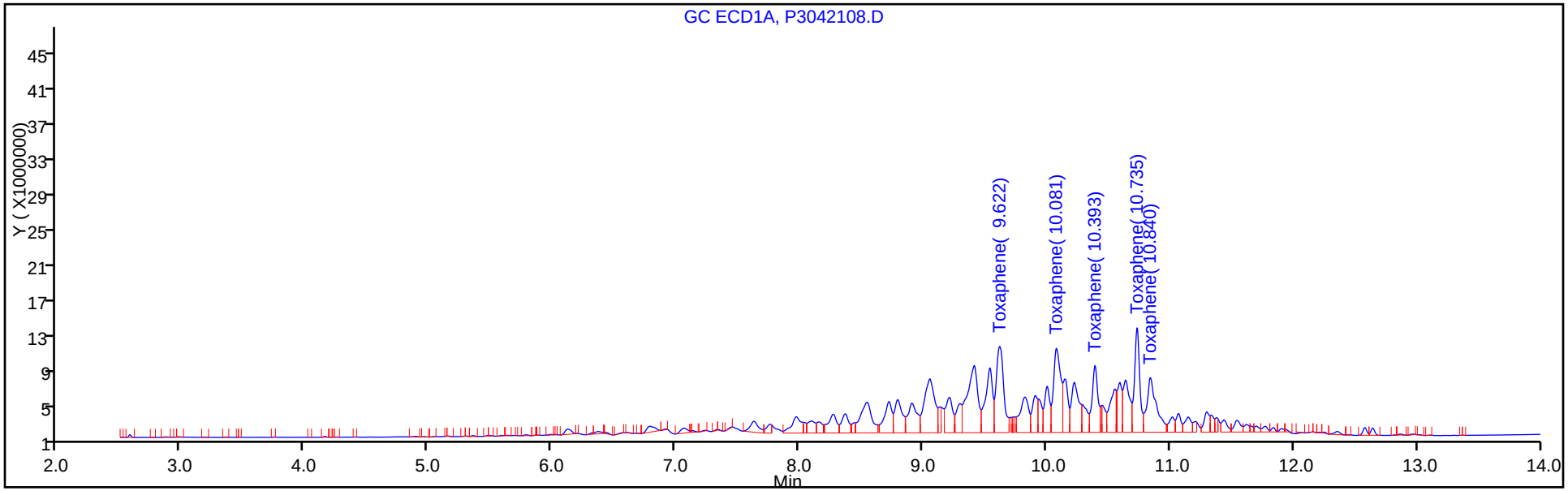
Report Date: 22-Apr-2015 08:58:38 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

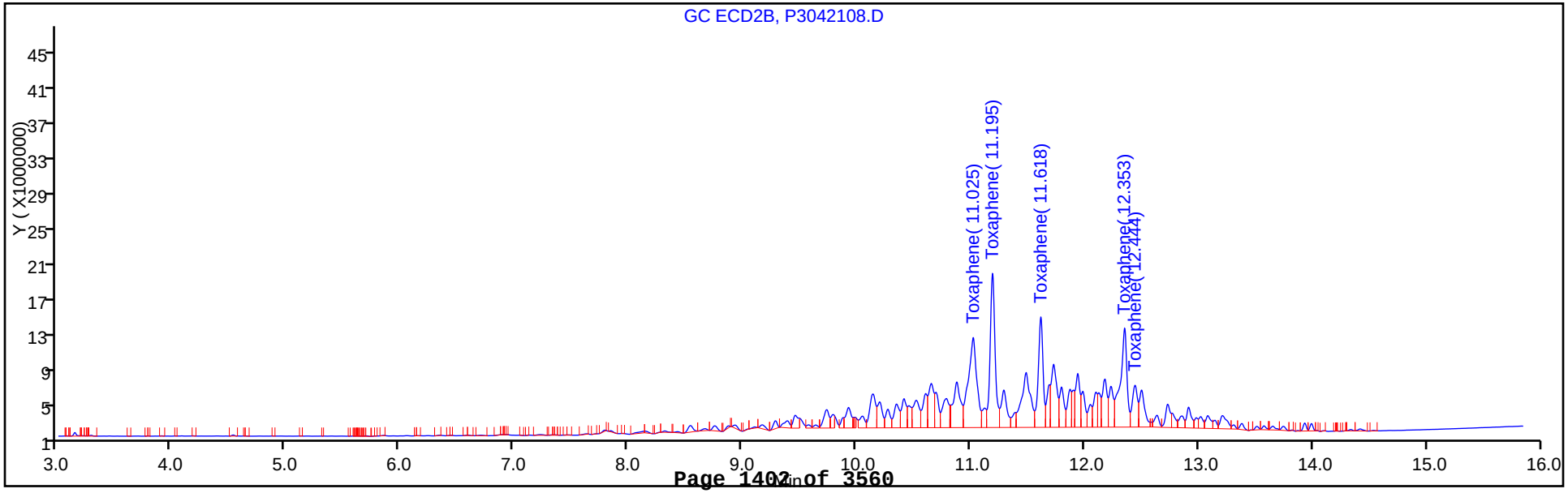
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042108.D

Injection Date:	21-Apr-2015 15:32:24	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV TOX3			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 22-Apr-2015 08:58:38 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042108.D

Injection Date: 21-Apr-2015 15:32:24 Instrument ID: A2HP3

Lims ID: CCV TOX3

Client ID:

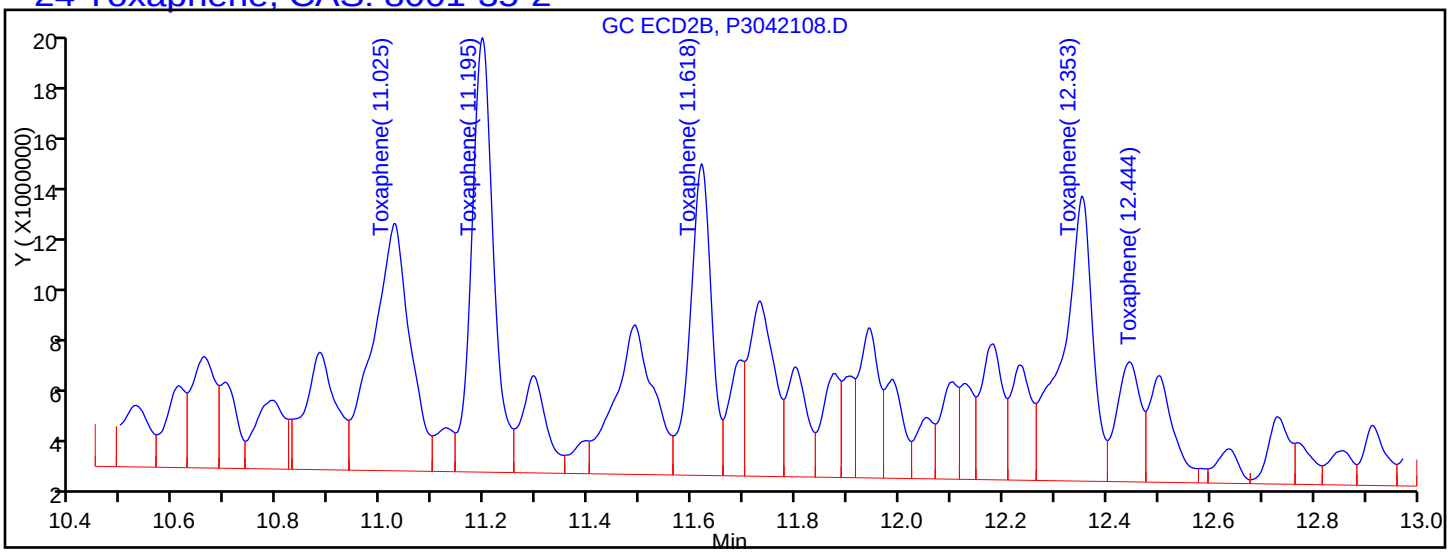
Operator ID: 430893 ALS Bottle#: 8 Worklist Smp#: 8

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

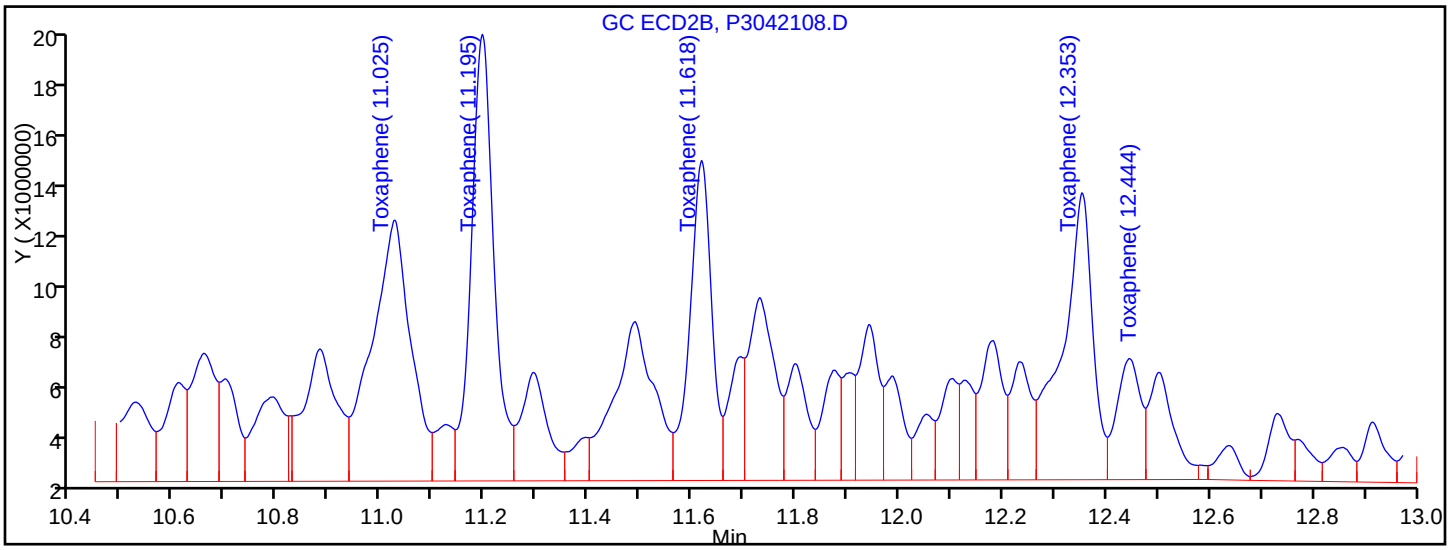
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 11.025	Response = 48466481	M
RT = 11.195	Response = 50262934	M
RT = 11.618	Response = 34968258	M
RT = 12.353	Response = 45470836	M
RT = 12.444	Response = 15049699	M



Manual Integration Results

RT = 11.025	Response = 53616903	M
RT = 11.195	Response = 53467893	M
RT = 11.618	Response = 36878172	M
RT = 12.353	Response = 46136479	M
RT = 12.444	Response = 15246591	M

Reviewer: matthewsb, 22-Apr-2015 07:18:40

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/10 Calibration Date: 04/21/2015 16:19

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042110.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1731837	1808791		26.1	25.0	4.4	20.0
gamma-BHC (Lindane)	Ave	1543740	1564381		25.3	25.0	1.3	20.0
beta-BHC	Ave	629842	597873		23.7	25.0	-5.1	20.0
delta-BHC	Ave	1502830	1271193		21.1	25.0	-15.4	20.0
Heptachlor	Ave	1459223	1499733		25.7	25.0	2.8	20.0
Aldrin	Ave	1461888	1520551		26.0	25.0	4.0	20.0
Heptachlor epoxide	Ave	1303871	1271782		24.4	25.0	-2.5	20.0
gamma-Chlordane	Ave	1350629	1280427		23.7	25.0	-5.2	20.0
alpha-Chlordane	Ave	1337609	1283749		24.0	25.0	-4.0	20.0
Endosulfan I	Ave	1227519	1128400		23.0	25.0	-8.1	20.0
4,4'-DDE	Ave	1184677	928159		19.6	25.0	-21.7*	20.0
Dieldrin	Ave	1307595	1193810		22.8	25.0	-8.7	20.0
Endrin	Ave	1151386	984908		21.4	25.0	-14.5	20.0
4,4'-DDD	Ave	870416	527167		15.1	25.0	-39.4*	20.0
Endosulfan II	Ave	1156896	1063646		23.0	25.0	-8.1	20.0
4,4'-DDT	Ave	955198	696811		18.2	25.0	-27.1*	20.0
Endrin aldehyde	Ave	890839	721739		20.3	25.0	-19.0	20.0
Methoxychlor	Ave	458228	326836		17.8	25.0	-28.7*	20.0
Endosulfan sulfate	Ave	996194	861303		21.6	25.0	-13.5	20.0
Endrin ketone	Ave	1221980	1036944		21.2	25.0	-15.1	20.0
Tetrachloro-m-xylene	Ave	983528	1058121		26.9	25.0	7.6	20.0
DCB Decachlorobiphenyl	Ave	936456	736909		19.7	25.0	-21.3*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/10 Calibration Date: 04/21/2015 16:19

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042110.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	4.25	4.22	4.28
gamma-BHC (Lindane)	4.64	4.61	4.67
beta-BHC	4.78	4.75	4.81
delta-BHC	5.00	4.97	5.03
Heptachlor	5.29	5.26	5.32
Aldrin	5.75	5.72	5.78
Heptachlor epoxide	7.03	7.00	7.06
gamma-Chlordane	7.34	7.31	7.37
alpha-Chlordane	7.69	7.66	7.72
Endosulfan I	7.96	7.93	7.99
4,4'-DDE	8.07	8.04	8.10
Dieldrin	8.51	8.48	8.54
Endrin	8.96	8.93	8.99
4,4'-DDD	9.34	9.31	9.37
Endosulfan II	9.42	9.39	9.45
4,4'-DDT	9.85	9.82	9.88
Endrin aldehyde	10.21	10.18	10.24
Methoxychlor	10.80	10.77	10.83
Endosulfan sulfate	10.93	10.90	10.96
Endrin ketone	11.34	11.31	11.37
Tetrachloro-m-xylene	3.56	3.53	3.59
DCB Decachlorobiphenyl	12.94	12.91	12.97

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042110.D
Lims ID: CCV AB3
Client ID:
Sample Type: CCVRT
Inject. Date: 21-Apr-2015 16:19:17 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-010
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:58:42 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.556	3.556	0.000	26453014	25.0	26.9	
2	4.234	4.234	0.000	30747869	25.0	27.3	
						RPD = 1.43	
4 alpha-BHC							
1	4.252	4.252	0.000	45219784	25.0	26.1	
2	5.127	5.127	0.000	52058366	25.0	26.6	
						RPD = 1.83	
5 gamma-BHC (Lindane)							
1	4.639	4.639	0.000	39109531	25.0	25.3	
2	5.750	5.750	0.000	45624379	25.0	25.8	
						RPD = 1.76	
6 beta-BHC							
1	4.779	4.779	0.000	14946815	25.0	23.7	
2	5.949	5.949	0.000	18864703	25.0	24.6	
						RPD = 3.40	
7 delta-BHC							
1	5.001	5.001	0.000	31779836	25.0	21.1	
2	6.572	6.572	0.000	40399794	25.0	22.8	
						RPD = 7.40	
9 Heptachlor							
1	5.285	5.285	0.000	37493329	25.0	25.7	
2	6.652	6.652	0.000	44442253	25.0	26.3	
						RPD = 2.29	
10 Aldrin							
1	5.751	5.751	0.000	38013765	25.0	26.0	
2	7.457	7.457	0.000	43800899	25.0	26.2	
						RPD = 0.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.026	7.026	0.000	31794557	25.0	24.4	
2	8.889	8.889	0.000	36139374	25.0	25.2	
						RPD = 3.20	
13 gamma-Chlordane							
1	7.341	7.341	0.000	32010675	25.0	23.7	
2	9.284	9.284	0.000	36311278	25.0	24.7	
						RPD = 4.06	
14 alpha-Chlordane							
1	7.688	7.688	0.000	32093726	25.0	24.0	
2	9.583	9.583	0.000	35269381	25.0	24.8	
						RPD = 3.43	
15 Endosulfan I							
1	7.960	7.960	0.000	28210000	25.0	23.0	
2	9.652	9.652	0.000	31721257	25.0	24.0	
						RPD = 4.35	
16 4,4'-DDE							
1	8.067	8.067	0.000	23203976	25.0	19.6	
2	10.011	10.011	0.000	27828661	25.0	21.1	
						RPD = 7.32	
17 Dieldrin							
1	8.512	8.512	0.000	29845262	25.0	22.8	
2	10.166	10.166	0.000	32363640	25.0	23.7	
						RPD = 3.58	
18 Endrin							
1	8.964	8.964	0.000	24622711	25.0	21.4	
2	10.679	10.679	0.000	25668396	25.0	21.3	
						RPD = 0.44	
20 4,4'-DDD							
1	9.335	9.335	0.000	13179172	25.0	15.1	
2	11.006	11.006	0.000	16261445	25.0	16.6	
						RPD = 9.29	
21 Endosulfan II							
1	9.415	9.415	0.000	26591144	25.0	23.0	
2	11.049	11.049	0.000	29180565	25.0	25.0	
						RPD = 8.21	
23 4,4'-DDT							
1	9.845	9.845	0.000	17420270	25.0	18.2	
2	11.487	11.487	0.000	18378524	25.0	18.4	
						RPD = 0.97	
25 Endrin aldehyde							
1	10.212	10.212	0.000	18043484	25.0	20.3	
2	11.609	11.609	0.000	18771669	25.0	20.1	
						RPD = 0.76	
27 Methoxychlor							
1	10.798	10.798	0.000	8170907	25.0	17.8	
2	12.555	12.555	0.000	8932806	25.0	18.3	
						RPD = 2.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.934	10.934	0.000	21532581	25.0	21.6	
2	12.030	12.030	0.000	22397188	25.0	21.1	
						RPD = 2.19	
29 Endrin ketone							
1	11.336	11.336	0.000	25923610	25.0	21.2	
2	12.775	12.775	0.000	25860007	25.0	21.1	
						RPD = 0.73	
$ 30 DCB Decachlorobiphenyl							
1	12.942	12.942	0.000	18422726	25.0	19.7	
2	14.494	14.494	0.000	19918645	25.0	19.6	
						RPD = 0.54	

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

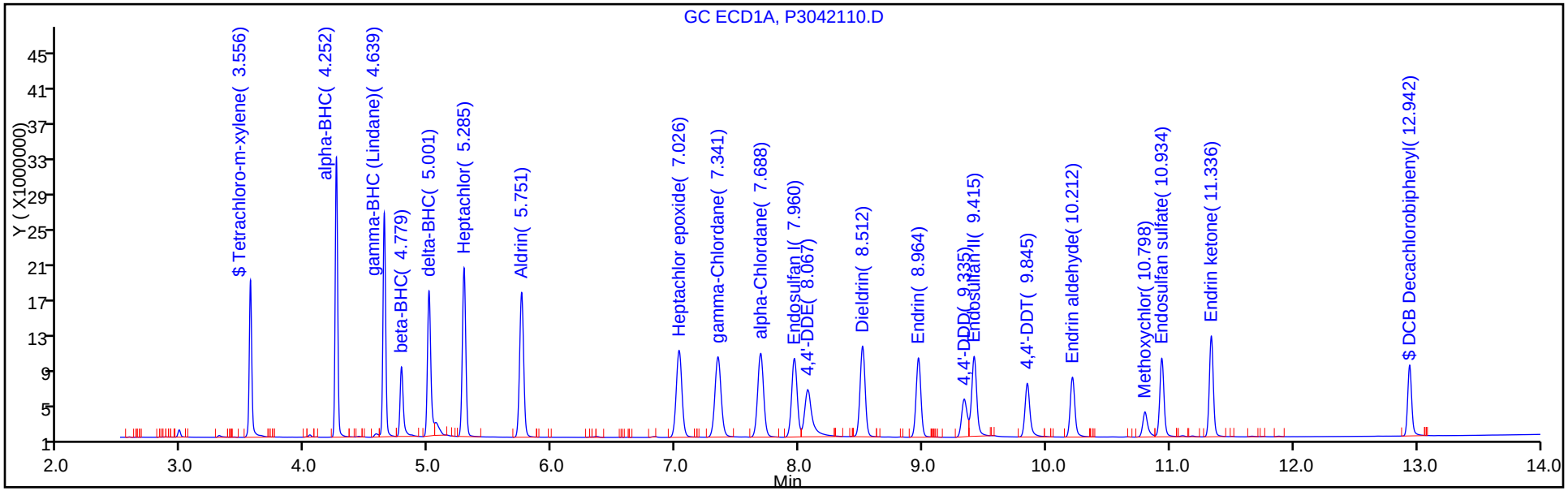
Report Date: 22-Apr-2015 08:58:42 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

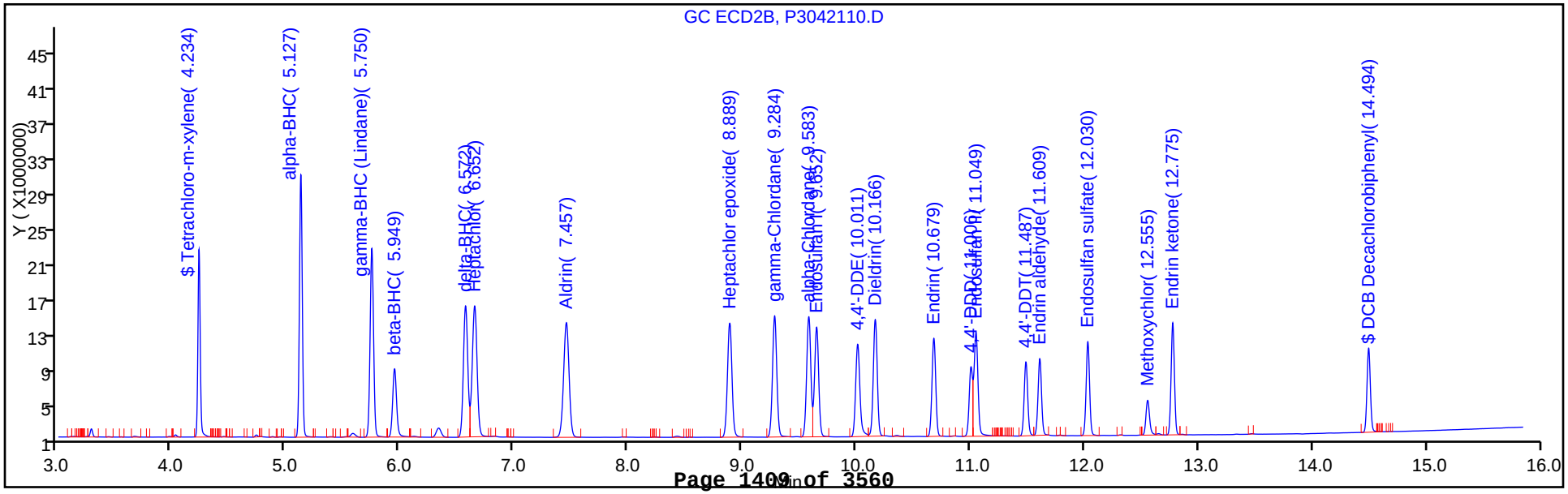
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042110.D

Injection Date:	21-Apr-2015 16:19:17	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV AB3			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/10 Calibration Date: 04/21/2015 16:19

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042110.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1957541	2082335		26.6	25.0	6.4	20.0
gamma-BHC (Lindane)	Ave	1769514	1824975		25.8	25.0	3.1	20.0
beta-BHC	Ave	768367	754588		24.6	25.0	-1.8	20.0
delta-BHC	Ave	1774158	1615992		22.8	25.0	-8.9	20.0
Heptachlor	Ave	1690527	1777690		26.3	25.0	5.2	20.0
Aldrin	Ave	1672196	1752036		26.2	25.0	4.8	20.0
Heptachlor epoxide	Ave	1435426	1445575		25.2	25.0	0.7	20.0
gamma-Chlordane	Ave	1471152	1452451		24.7	25.0	-1.3	20.0
alpha-Chlordane	Ave	1420369	1410775		24.8	25.0	-0.7	20.0
Endosulfan I	Ave	1321597	1268850		24.0	25.0	-4.0	20.0
4,4'-DDE	Ave	1320422	1113146		21.1	25.0	-15.7	20.0
Dieldrin	Ave	1368089	1294546		23.7	25.0	-5.4	20.0
Endrin	Ave	1205577	1026736		21.3	25.0	-14.8	20.0
4,4'-DDD	Ave	978644	650458		16.6	25.0	-33.5*	20.0
Endosulfan II	Ave	1169425	1167223		25.0	25.0	-0.2	20.0
4,4'-DDT	Ave	997996	735141		18.4	25.0	-26.3*	20.0
Endrin aldehyde	Ave	933862	750867		20.1	25.0	-19.6	20.0
Endosulfan sulfate	Ave	1059131	895888		21.1	25.0	-15.4	20.0
Methoxychlor	Ave	489196	357312		18.3	25.0	-27.0*	20.0
Endrin ketone	Ave	1227876	1034400		21.1	25.0	-15.8	20.0
Tetrachloro-m-xylene	Ave	1127022	1229915		27.3	25.0	9.1	20.0
DCB Decachlorobiphenyl	Ave	1017987	796746		19.6	25.0	-21.7*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/10 Calibration Date: 04/21/2015 16:19

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042110.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	5.13	5.10	5.16
gamma-BHC (Lindane)	5.75	5.72	5.78
beta-BHC	5.95	5.92	5.98
delta-BHC	6.57	6.54	6.60
Heptachlor	6.65	6.62	6.68
Aldrin	7.46	7.43	7.49
Heptachlor epoxide	8.89	8.86	8.92
gamma-Chlordane	9.28	9.25	9.31
alpha-Chlordane	9.58	9.55	9.61
Endosulfan I	9.65	9.62	9.68
4,4'-DDE	10.01	9.98	10.04
Dieldrin	10.17	10.14	10.20
Endrin	10.68	10.65	10.71
4,4'-DDD	11.01	10.98	11.04
Endosulfan II	11.05	11.02	11.08
4,4'-DDT	11.49	11.46	11.52
Endrin aldehyde	11.61	11.58	11.64
Endosulfan sulfate	12.03	12.00	12.06
Methoxychlor	12.56	12.53	12.59
Endrin ketone	12.78	12.75	12.81
Tetrachloro-m-xylene	4.23	4.20	4.26
DCB Decachlorobiphenyl	14.49	14.46	14.52

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042110.D
Lims ID: CCV AB3
Client ID:
Sample Type: CCVRT
Inject. Date: 21-Apr-2015 16:19:17 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-010
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:58:42 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.556	3.556	0.000	26453014	25.0	26.9	
2	4.234	4.234	0.000	30747869	25.0	27.3	
						RPD = 1.43	
4 alpha-BHC							
1	4.252	4.252	0.000	45219784	25.0	26.1	
2	5.127	5.127	0.000	52058366	25.0	26.6	
						RPD = 1.83	
5 gamma-BHC (Lindane)							
1	4.639	4.639	0.000	39109531	25.0	25.3	
2	5.750	5.750	0.000	45624379	25.0	25.8	
						RPD = 1.76	
6 beta-BHC							
1	4.779	4.779	0.000	14946815	25.0	23.7	
2	5.949	5.949	0.000	18864703	25.0	24.6	
						RPD = 3.40	
7 delta-BHC							
1	5.001	5.001	0.000	31779836	25.0	21.1	
2	6.572	6.572	0.000	40399794	25.0	22.8	
						RPD = 7.40	
9 Heptachlor							
1	5.285	5.285	0.000	37493329	25.0	25.7	
2	6.652	6.652	0.000	44442253	25.0	26.3	
						RPD = 2.29	
10 Aldrin							
1	5.751	5.751	0.000	38013765	25.0	26.0	
2	7.457	7.457	0.000	43800899	25.0	26.2	
						RPD = 0.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.026	7.026	0.000	31794557	25.0	24.4	
2	8.889	8.889	0.000	36139374	25.0	25.2	
						RPD = 3.20	
13 gamma-Chlordane							
1	7.341	7.341	0.000	32010675	25.0	23.7	
2	9.284	9.284	0.000	36311278	25.0	24.7	
						RPD = 4.06	
14 alpha-Chlordane							
1	7.688	7.688	0.000	32093726	25.0	24.0	
2	9.583	9.583	0.000	35269381	25.0	24.8	
						RPD = 3.43	
15 Endosulfan I							
1	7.960	7.960	0.000	28210000	25.0	23.0	
2	9.652	9.652	0.000	31721257	25.0	24.0	
						RPD = 4.35	
16 4,4'-DDE							
1	8.067	8.067	0.000	23203976	25.0	19.6	
2	10.011	10.011	0.000	27828661	25.0	21.1	
						RPD = 7.32	
17 Dieldrin							
1	8.512	8.512	0.000	29845262	25.0	22.8	
2	10.166	10.166	0.000	32363640	25.0	23.7	
						RPD = 3.58	
18 Endrin							
1	8.964	8.964	0.000	24622711	25.0	21.4	
2	10.679	10.679	0.000	25668396	25.0	21.3	
						RPD = 0.44	
20 4,4'-DDD							
1	9.335	9.335	0.000	13179172	25.0	15.1	
2	11.006	11.006	0.000	16261445	25.0	16.6	
						RPD = 9.29	
21 Endosulfan II							
1	9.415	9.415	0.000	26591144	25.0	23.0	
2	11.049	11.049	0.000	29180565	25.0	25.0	
						RPD = 8.21	
23 4,4'-DDT							
1	9.845	9.845	0.000	17420270	25.0	18.2	
2	11.487	11.487	0.000	18378524	25.0	18.4	
						RPD = 0.97	
25 Endrin aldehyde							
1	10.212	10.212	0.000	18043484	25.0	20.3	
2	11.609	11.609	0.000	18771669	25.0	20.1	
						RPD = 0.76	
27 Methoxychlor							
1	10.798	10.798	0.000	8170907	25.0	17.8	
2	12.555	12.555	0.000	8932806	25.0	18.3	
						RPD = 2.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.934	10.934	0.000	21532581	25.0	21.6	
2	12.030	12.030	0.000	22397188	25.0	21.1	
						RPD = 2.19	
29 Endrin ketone							
1	11.336	11.336	0.000	25923610	25.0	21.2	
2	12.775	12.775	0.000	25860007	25.0	21.1	
						RPD = 0.73	
$ 30 DCB Decachlorobiphenyl							
1	12.942	12.942	0.000	18422726	25.0	19.7	
2	14.494	14.494	0.000	19918645	25.0	19.6	
						RPD = 0.54	

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

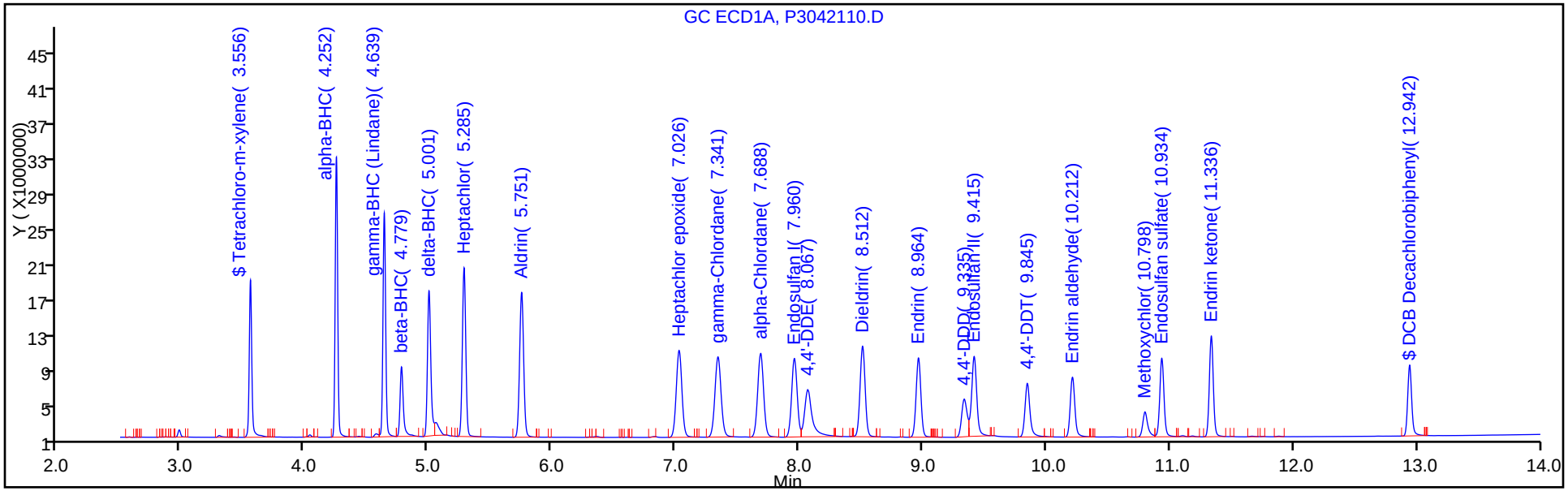
Report Date: 22-Apr-2015 08:58:43 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

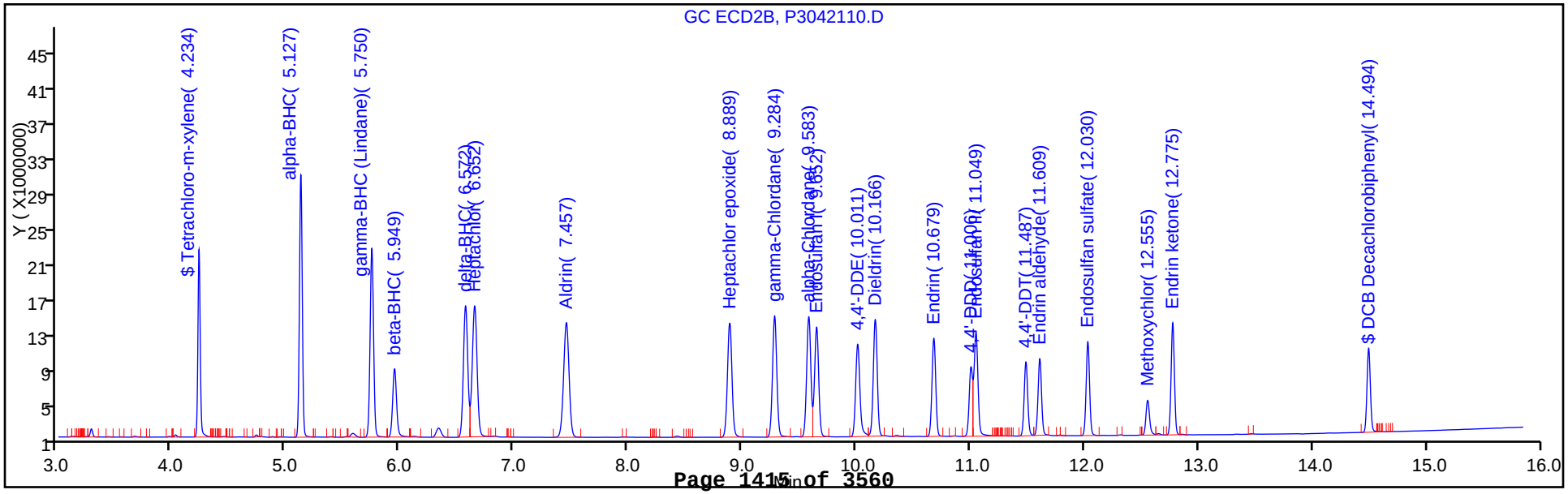
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042110.D

Injection Date:	21-Apr-2015 16:19:17	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV AB3			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/28 Calibration Date: 04/21/2015 23:12

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042128.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1731837	2094656		30.2	25.0	20.9*	20.0
gamma-BHC (Lindane)	Ave	1543740	1855916		30.1	25.0	20.2*	20.0
beta-BHC	Ave	629842	728496		28.9	25.0	15.7	20.0
delta-BHC	Ave	1502830	1723183		28.7	25.0	14.7	20.0
Heptachlor	Ave	1459223	1830635		31.4	25.0	25.5*	20.0
Aldrin	Ave	1461888	1715145		29.3	25.0	17.3	20.0
Heptachlor epoxide	Ave	1303871	1542541		29.6	25.0	18.3	20.0
gamma-Chlordane	Ave	1350629	1542295		28.5	25.0	14.2	20.0
alpha-Chlordane	Ave	1337609	1534091		28.7	25.0	14.7	20.0
Endosulfan I	Ave	1227519	1441110		29.4	25.0	17.4	20.0
4,4'-DDE	Ave	1184677	1384857		29.2	25.0	16.9	20.0
Dieldrin	Ave	1307595	1540397		29.5	25.0	17.8	20.0
Endrin	Ave	1151386	1371088		29.8	25.0	19.1	20.0
4,4'-DDD	Ave	870416	1059121		30.4	25.0	21.7*	20.0
Endosulfan II	Ave	1156896	1371355		29.6	25.0	18.5	20.0
4,4'-DDT	Ave	955198	976904		25.6	25.0	2.3	20.0
Endrin aldehyde	Ave	890839	1001073		28.1	25.0	12.4	20.0
Methoxychlor	Ave	458228	505155		27.6	25.0	10.2	20.0
Endosulfan sulfate	Ave	996194	1133016		28.4	25.0	13.7	20.0
Endrin ketone	Ave	1221980	1379122		28.2	25.0	12.9	20.0
Tetrachloro-m-xylene	Ave	983528	1174902		29.9	25.0	19.5	20.0
DCB Decachlorobiphenyl	Ave	936456	1013076		27.0	25.0	8.2	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/28 Calibration Date: 04/21/2015 23:12

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042128.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	4.25	4.22	4.28
gamma-BHC (Lindane)	4.64	4.61	4.67
beta-BHC	4.78	4.75	4.81
delta-BHC	5.00	4.97	5.03
Heptachlor	5.28	5.25	5.31
Aldrin	5.75	5.72	5.78
Heptachlor epoxide	7.02	6.99	7.05
gamma-Chlordane	7.34	7.31	7.37
alpha-Chlordane	7.68	7.65	7.71
Endosulfan I	7.96	7.93	7.99
4,4'-DDE	8.06	8.03	8.09
Dieldrin	8.51	8.48	8.54
Endrin	8.96	8.93	8.99
4,4'-DDD	9.33	9.30	9.36
Endosulfan II	9.41	9.38	9.44
4,4'-DDT	9.84	9.81	9.87
Endrin aldehyde	10.21	10.18	10.24
Methoxychlor	10.79	10.76	10.82
Endosulfan sulfate	10.93	10.90	10.96
Endrin ketone	11.33	11.30	11.36
Tetrachloro-m-xylene	3.55	3.52	3.58
DCB Decachlorobiphenyl	12.94	12.91	12.97

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042128.D
Lims ID: CCV AB3
Client ID:
Sample Type: CCV
Inject. Date: 21-Apr-2015 23:12:33 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-028
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.554	3.554	0.000	29372540	25.0	29.9	
2	4.235	4.235	0.000	33307438	25.0	29.6	
						RPD = 1.05	
4 alpha-BHC							
1	4.250	4.250	0.000	52366403	25.0	30.2	
2	5.129	5.129	0.000	59088560	25.0	30.2	
						RPD = 0.17	
5 gamma-BHC (Lindane)							
1	4.639	4.639	0.000	46397906	25.0	30.1	
2	5.752	5.752	0.000	53072803	25.0	30.0	
						RPD = 0.21	
6 beta-BHC							
1	4.776	4.776	0.000	18212393	25.0	28.9	
2	5.951	5.951	0.000	22349437	25.0	29.1	
						RPD = 0.59	
7 delta-BHC							
1	4.999	4.999	0.000	43079586	25.0	28.7	
2	6.574	6.574	0.000	50531970	25.0	28.5	
						RPD = 0.64	
9 Heptachlor							
1	5.284	5.284	0.000	45765884	25.0	31.4	
2	6.654	6.654	0.000	52672698	25.0	31.2	
						RPD = 0.66	
10 Aldrin							
1	5.750	5.750	0.000	42878620	25.0	29.3	
2	7.460	7.460	0.000	48903315	25.0	29.2	
						RPD = 0.29	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.023	7.023	0.000	38563522	25.0	29.6	
2	8.891	8.891	0.000	42603409	25.0	29.7	
						RPD = 0.35	
13 gamma-Chlordane							
1	7.339	7.339	0.000	38557386	25.0	28.5	
2	9.285	9.285	0.000	41811373	25.0	28.4	
						RPD = 0.45	
14 alpha-Chlordane							
1	7.684	7.684	0.000	38352273	25.0	28.7	
2	9.584	9.584	0.000	40761131	25.0	28.7	
						RPD = 0.09	
15 Endosulfan I							
1	7.959	7.959	0.000	36027749	25.0	29.4	
2	9.653	9.653	0.000	38862369	25.0	29.4	
						RPD = 0.19	
16 4,4'-DDE							
1	8.057	8.057	0.000	34621414	25.0	29.2	
2	10.012	10.012	0.000	37989414	25.0	28.8	
						RPD = 1.56	
17 Dieldrin							
1	8.510	8.510	0.000	38509918	25.0	29.5	
2	10.168	10.168	0.000	39888194	25.0	29.2	
						RPD = 1.01	
18 Endrin							
1	8.963	8.963	0.000	34277193	25.0	29.8	
2	10.681	10.681	0.000	34635643	25.0	28.7	
						RPD = 3.56	
20 4,4'-DDD							
1	9.326	9.326	0.000	26478036	25.0	30.4	
2	11.006	11.006	0.000	28052306	25.0	28.7	
						RPD = 5.94	
21 Endosulfan II							
1	9.413	9.413	0.000	34283886	25.0	29.6	
2	11.051	11.051	0.000	34921959	25.0	29.9	
						RPD = 0.77	
23 4,4'-DDT							
1	9.840	9.840	0.000	24422608	25.0	25.6	
2	11.488	11.488	0.000	24371070	25.0	24.4	
						RPD = 4.59	
25 Endrin aldehyde							
1	10.209	10.209	0.000	25026829	25.0	28.1	
2	11.609	11.609	0.000	25393619	25.0	27.2	
						RPD = 3.26	
27 Methoxychlor							
1	10.792	10.792	0.000	12628865	25.0	27.6	
2	12.555	12.555	0.000	12398063	25.0	25.3	
						RPD = 8.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.933	10.933	0.000	28325390	25.0	28.4	
2	12.032	12.032	0.000	29169881	25.0	27.5	
						RPD = 3.19	
29 Endrin ketone							
1	11.334	11.334	0.000	34478041	25.0	28.2	
2	12.776	12.776	0.000	33703661	25.0	27.4	
						RPD = 2.75	
$ 30 DCB Decachlorobiphenyl							
1	12.940	12.940	0.000	25326899	25.0	27.0	
2	14.493	14.493	0.000	27239369	25.0	26.8	
						RPD = 1.07	

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

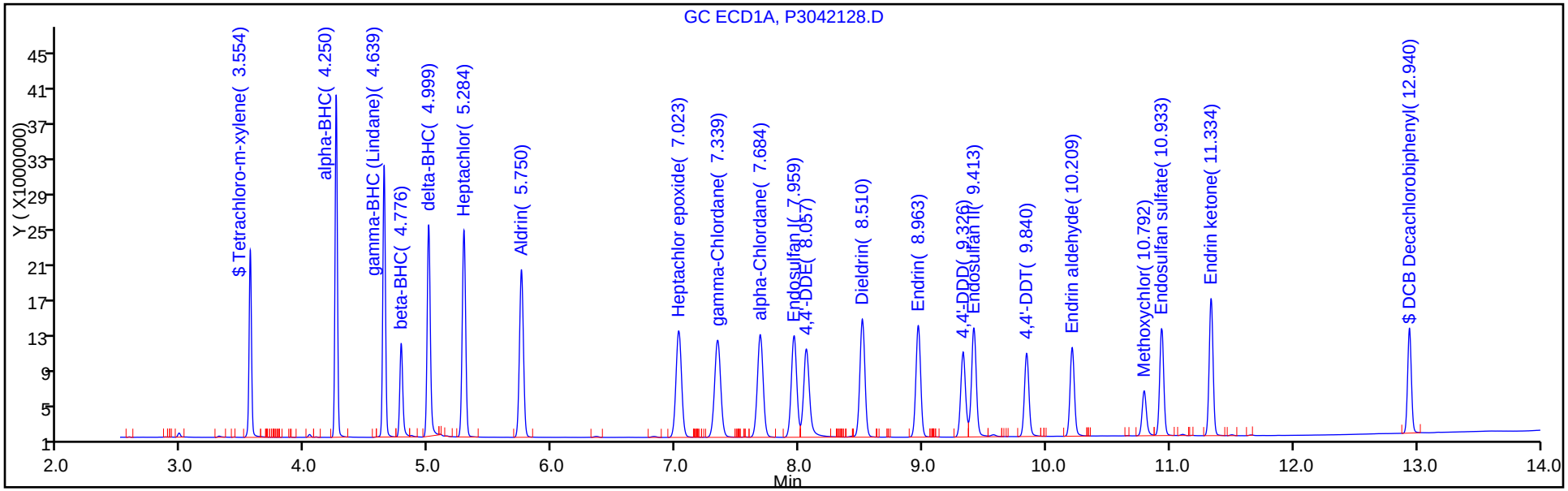
Report Date: 22-Apr-2015 08:57:59 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

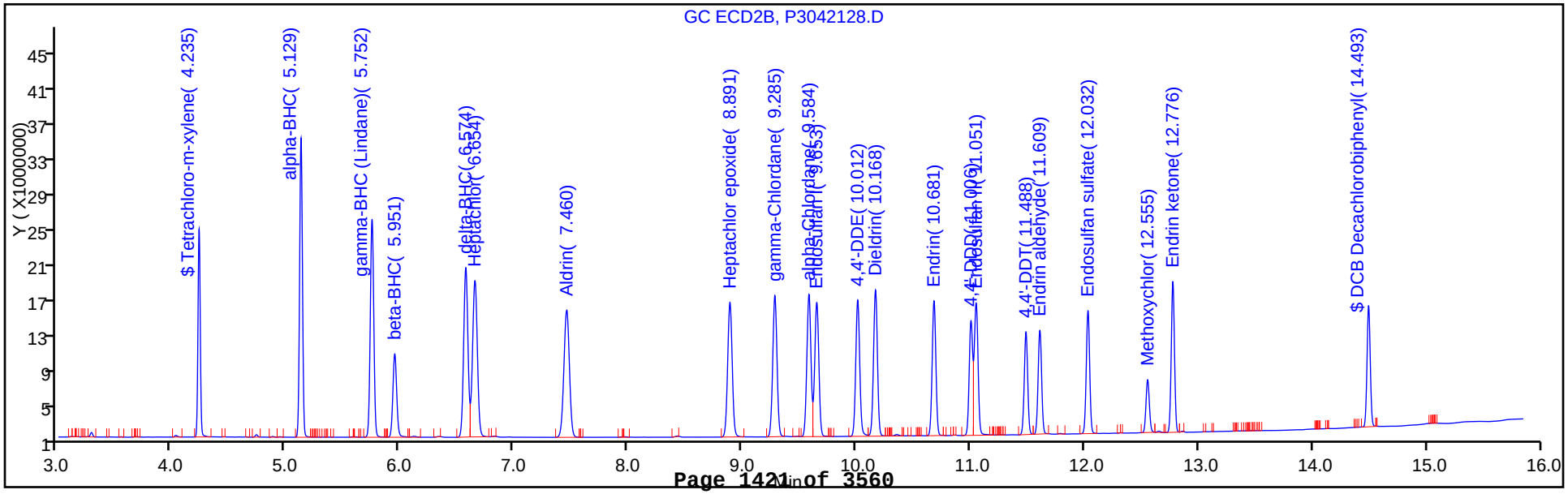
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042128.D

Injection Date:	21-Apr-2015 23:12:33	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV AB3			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/28 Calibration Date: 04/21/2015 23:12

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042128.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1957541	2363542		30.2	25.0	20.7*	20.0
gamma-BHC (Lindane)	Ave	1769514	2122912		30.0	25.0	20.0	20.0
beta-BHC	Ave	768367	893977		29.1	25.0	16.3	20.0
delta-BHC	Ave	1774158	2021279		28.5	25.0	13.9	20.0
Heptachlor	Ave	1690527	2106908		31.2	25.0	24.6*	20.0
Aldrin	Ave	1672196	1956133		29.2	25.0	17.0	20.0
Heptachlor epoxide	Ave	1435426	1704136		29.7	25.0	18.7	20.0
gamma-Chlordane	Ave	1471152	1672455		28.4	25.0	13.7	20.0
alpha-Chlordane	Ave	1420369	1630445		28.7	25.0	14.8	20.0
Endosulfan I	Ave	1321597	1554495		29.4	25.0	17.6	20.0
4,4'-DDE	Ave	1320422	1519577		28.8	25.0	15.1	20.0
Dieldrin	Ave	1368089	1595528		29.2	25.0	16.6	20.0
Endrin	Ave	1205577	1385426		28.7	25.0	14.9	20.0
4,4'-DDD	Ave	978644	1122092		28.7	25.0	14.7	20.0
Endosulfan II	Ave	1169425	1396878		29.9	25.0	19.5	20.0
4,4'-DDT	Ave	997996	974843		24.4	25.0	-2.3	20.0
Endrin aldehyde	Ave	933862	1015745		27.2	25.0	8.8	20.0
Endosulfan sulfate	Ave	1059131	1166795		27.5	25.0	10.2	20.0
Methoxychlor	Ave	489196	495923		25.3	25.0	1.4	20.0
Endrin ketone	Ave	1227876	1348146		27.4	25.0	9.8	20.0
Tetrachloro-m-xylene	Ave	1127022	1332298		29.6	25.0	18.2	20.0
DCB Decachlorobiphenyl	Ave	1017987	1089575		26.8	25.0	7.0	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/28 Calibration Date: 04/21/2015 23:12

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042128.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	5.13	5.10	5.16
gamma-BHC (Lindane)	5.75	5.72	5.78
beta-BHC	5.95	5.92	5.98
delta-BHC	6.57	6.54	6.60
Heptachlor	6.65	6.62	6.68
Aldrin	7.46	7.43	7.49
Heptachlor epoxide	8.89	8.86	8.92
gamma-Chlordane	9.29	9.26	9.32
alpha-Chlordane	9.58	9.55	9.61
Endosulfan I	9.65	9.62	9.68
4,4'-DDE	10.01	9.98	10.04
Dieldrin	10.17	10.14	10.20
Endrin	10.68	10.65	10.71
4,4'-DDD	11.01	10.98	11.04
Endosulfan II	11.05	11.02	11.08
4,4'-DDT	11.49	11.46	11.52
Endrin aldehyde	11.61	11.58	11.64
Endosulfan sulfate	12.03	12.00	12.06
Methoxychlor	12.56	12.53	12.59
Endrin ketone	12.78	12.75	12.81
Tetrachloro-m-xylene	4.24	4.21	4.27
DCB Decachlorobiphenyl	14.49	14.46	14.52

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042128.D
Lims ID: CCV AB3
Client ID:
Sample Type: CCV
Inject. Date: 21-Apr-2015 23:12:33 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-028
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.554	3.554	0.000	29372540	25.0	29.9	
2	4.235	4.235	0.000	33307438	25.0	29.6	
						RPD = 1.05	
4 alpha-BHC							
1	4.250	4.250	0.000	52366403	25.0	30.2	
2	5.129	5.129	0.000	59088560	25.0	30.2	
						RPD = 0.17	
5 gamma-BHC (Lindane)							
1	4.639	4.639	0.000	46397906	25.0	30.1	
2	5.752	5.752	0.000	53072803	25.0	30.0	
						RPD = 0.21	
6 beta-BHC							
1	4.776	4.776	0.000	18212393	25.0	28.9	
2	5.951	5.951	0.000	22349437	25.0	29.1	
						RPD = 0.59	
7 delta-BHC							
1	4.999	4.999	0.000	43079586	25.0	28.7	
2	6.574	6.574	0.000	50531970	25.0	28.5	
						RPD = 0.64	
9 Heptachlor							
1	5.284	5.284	0.000	45765884	25.0	31.4	
2	6.654	6.654	0.000	52672698	25.0	31.2	
						RPD = 0.66	
10 Aldrin							
1	5.750	5.750	0.000	42878620	25.0	29.3	
2	7.460	7.460	0.000	48903315	25.0	29.2	
						RPD = 0.29	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.023	7.023	0.000	38563522	25.0	29.6	
2	8.891	8.891	0.000	42603409	25.0	29.7	
						RPD = 0.35	
13 gamma-Chlordane							
1	7.339	7.339	0.000	38557386	25.0	28.5	
2	9.285	9.285	0.000	41811373	25.0	28.4	
						RPD = 0.45	
14 alpha-Chlordane							
1	7.684	7.684	0.000	38352273	25.0	28.7	
2	9.584	9.584	0.000	40761131	25.0	28.7	
						RPD = 0.09	
15 Endosulfan I							
1	7.959	7.959	0.000	36027749	25.0	29.4	
2	9.653	9.653	0.000	38862369	25.0	29.4	
						RPD = 0.19	
16 4,4'-DDE							
1	8.057	8.057	0.000	34621414	25.0	29.2	
2	10.012	10.012	0.000	37989414	25.0	28.8	
						RPD = 1.56	
17 Dieldrin							
1	8.510	8.510	0.000	38509918	25.0	29.5	
2	10.168	10.168	0.000	39888194	25.0	29.2	
						RPD = 1.01	
18 Endrin							
1	8.963	8.963	0.000	34277193	25.0	29.8	
2	10.681	10.681	0.000	34635643	25.0	28.7	
						RPD = 3.56	
20 4,4'-DDD							
1	9.326	9.326	0.000	26478036	25.0	30.4	
2	11.006	11.006	0.000	28052306	25.0	28.7	
						RPD = 5.94	
21 Endosulfan II							
1	9.413	9.413	0.000	34283886	25.0	29.6	
2	11.051	11.051	0.000	34921959	25.0	29.9	
						RPD = 0.77	
23 4,4'-DDT							
1	9.840	9.840	0.000	24422608	25.0	25.6	
2	11.488	11.488	0.000	24371070	25.0	24.4	
						RPD = 4.59	
25 Endrin aldehyde							
1	10.209	10.209	0.000	25026829	25.0	28.1	
2	11.609	11.609	0.000	25393619	25.0	27.2	
						RPD = 3.26	
27 Methoxychlor							
1	10.792	10.792	0.000	12628865	25.0	27.6	
2	12.555	12.555	0.000	12398063	25.0	25.3	
						RPD = 8.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.933	10.933	0.000	28325390	25.0	28.4	
2	12.032	12.032	0.000	29169881	25.0	27.5	
						RPD = 3.19	
29 Endrin ketone							
1	11.334	11.334	0.000	34478041	25.0	28.2	
2	12.776	12.776	0.000	33703661	25.0	27.4	
						RPD = 2.75	
$ 30 DCB Decachlorobiphenyl							
1	12.940	12.940	0.000	25326899	25.0	27.0	
2	14.493	14.493	0.000	27239369	25.0	26.8	
						RPD = 1.07	

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

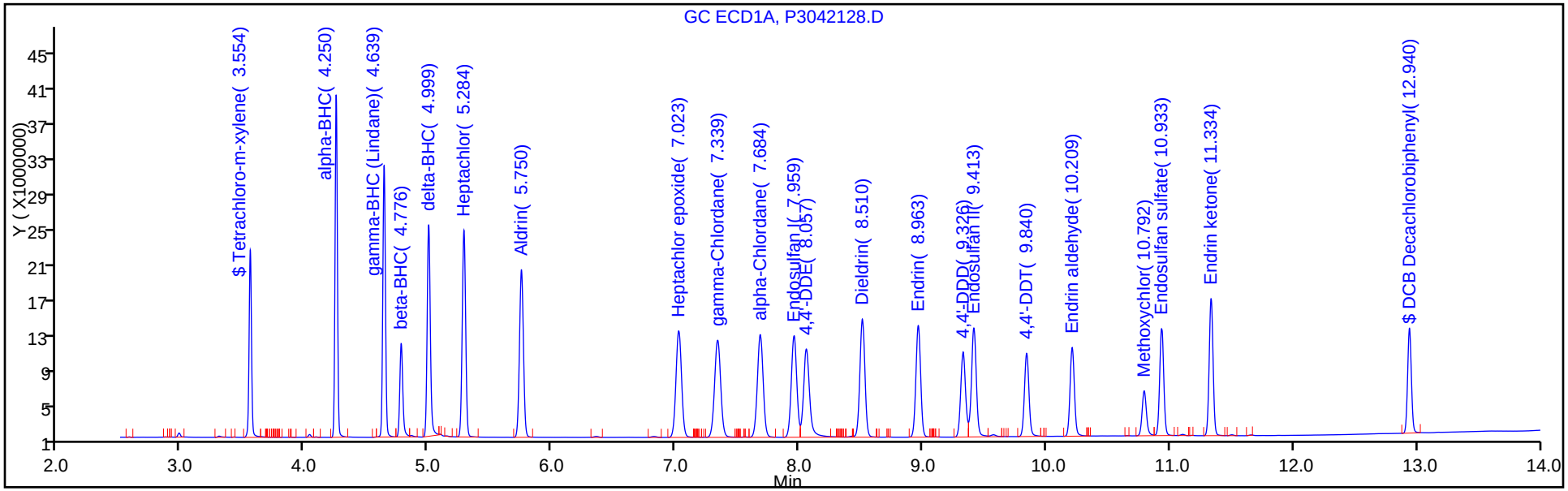
Report Date: 22-Apr-2015 08:57:59 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

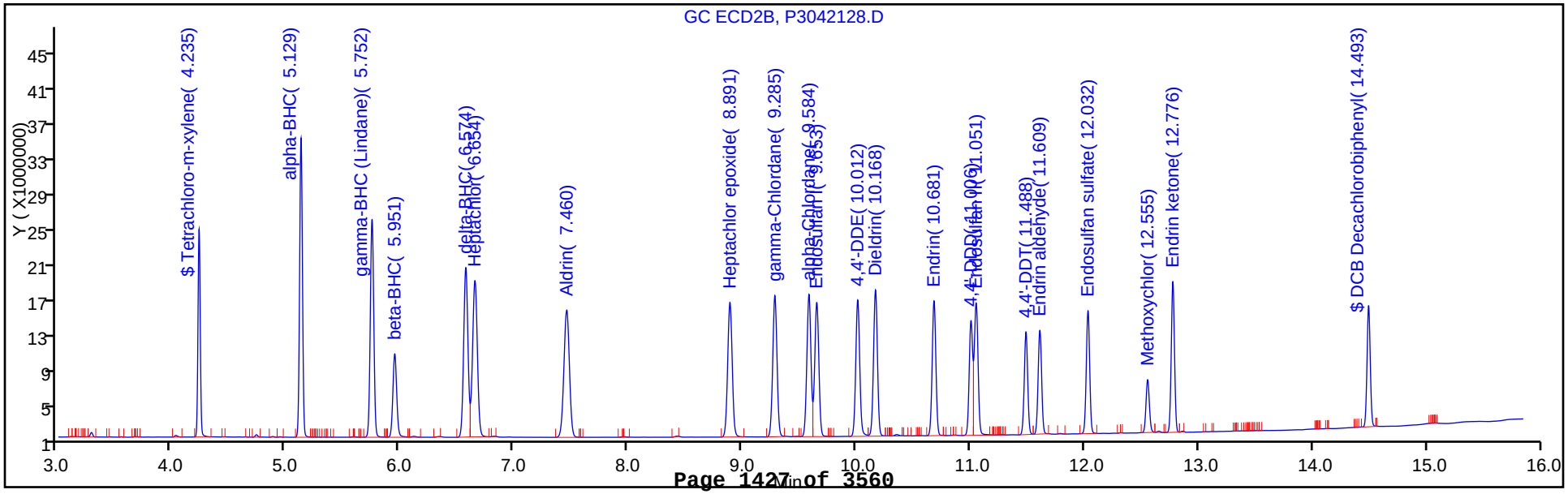
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042128.D

Injection Date:	21-Apr-2015 23:12:33	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV AB3			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/40 Calibration Date: 04/22/2015 03:48

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042140.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1731837	2116480		30.6	25.0	22.2*	20.0
gamma-BHC (Lindane)	Ave	1543740	1870261		30.3	25.0	21.2*	20.0
beta-BHC	Ave	629842	728275		28.9	25.0	15.6	20.0
delta-BHC	Ave	1502830	1788197		29.7	25.0	19.0	20.0
Heptachlor	Ave	1459223	1838231		31.5	25.0	26.0*	20.0
Aldrin	Ave	1461888	1737847		29.7	25.0	18.9	20.0
Heptachlor epoxide	Ave	1303871	1570022		30.1	25.0	20.4*	20.0
gamma-Chlordane	Ave	1350629	1574471		29.1	25.0	16.6	20.0
alpha-Chlordane	Ave	1337609	1565501		29.3	25.0	17.0	20.0
Endosulfan I	Ave	1227519	1473268		30.0	25.0	20.0	20.0
4,4'-DDE	Ave	1184677	1437458		30.3	25.0	21.3*	20.0
Dieldrin	Ave	1307595	1570280		30.0	25.0	20.1*	20.0
Endrin	Ave	1151386	1426849		31.0	25.0	23.9*	20.0
4,4'-DDD	Ave	870416	1182765		34.0	25.0	35.9*	20.0
Endosulfan II	Ave	1156896	1413060		30.5	25.0	22.1*	20.0
4,4'-DDT	Ave	955198	963556		25.2	25.0	0.9	20.0
Endrin aldehyde	Ave	890839	1053546		29.6	25.0	18.3	20.0
Methoxychlor	Ave	458228	515307		28.1	25.0	12.5	20.0
Endosulfan sulfate	Ave	996194	1201579		30.2	25.0	20.6*	20.0
Endrin ketone	Ave	1221980	1434137		29.3	25.0	17.4	20.0
Tetrachloro-m-xylene	Ave	983528	1182203		30.1	25.0	20.2*	20.0
DCB Decachlorobiphenyl	Ave	936456	1081895		28.9	25.0	15.5	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/40 Calibration Date: 04/22/2015 03:48

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042140.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	4.25	4.22	4.28
gamma-BHC (Lindane)	4.64	4.61	4.67
beta-BHC	4.78	4.75	4.81
delta-BHC	5.00	4.97	5.03
Heptachlor	5.28	5.25	5.31
Aldrin	5.75	5.72	5.78
Heptachlor epoxide	7.02	6.99	7.05
gamma-Chlordane	7.34	7.31	7.37
alpha-Chlordane	7.68	7.65	7.71
Endosulfan I	7.96	7.93	7.99
4,4'-DDE	8.06	8.03	8.09
Dieldrin	8.51	8.48	8.54
Endrin	8.96	8.93	8.99
4,4'-DDD	9.32	9.29	9.35
Endosulfan II	9.41	9.38	9.44
4,4'-DDT	9.84	9.81	9.87
Endrin aldehyde	10.21	10.18	10.24
Methoxychlor	10.79	10.76	10.82
Endosulfan sulfate	10.93	10.90	10.96
Endrin ketone	11.33	11.30	11.36
Tetrachloro-m-xylene	3.55	3.52	3.58
DCB Decachlorobiphenyl	12.94	12.91	12.97

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042140.D
Lims ID: CCV AB3
Client ID:
Sample Type: CCV
Inject. Date: 22-Apr-2015 03:48:08 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-040
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:58:14 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:35:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.554	3.554	0.000	29555063	25.0	30.1	
2	4.235	4.235	0.000	32939364	25.0	29.2	
						RPD = 2.78	
4 alpha-BHC							
1	4.250	4.250	0.000	52911988	25.0	30.6	
2	5.128	5.128	0.000	58897626	25.0	30.1	
						RPD = 1.53	
5 gamma-BHC (Lindane)							
1	4.637	4.637	0.000	46756527	25.0	30.3	
2	5.751	5.751	0.000	52691645	25.0	29.8	
						RPD = 1.70	
6 beta-BHC							M
1	4.775	4.775	0.000	18206886	25.0	28.9	M
2	5.950	5.950	0.000	22238624	25.0	28.9	
						RPD = 0.12	
7 delta-BHC							
1	4.998	4.998	0.000	44704926	25.0	29.7	
2	6.573	6.573	0.000	51700857	25.0	29.1	
						RPD = 2.06	
9 Heptachlor							
1	5.283	5.283	0.000	45955772	25.0	31.5	
2	6.653	6.653	0.000	51905425	25.0	30.7	
						RPD = 2.54	
10 Aldrin							
1	5.748	5.748	0.000	43446167	25.0	29.7	
2	7.458	7.458	0.000	48979415	25.0	29.3	
						RPD = 1.45	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.021	7.021	0.000	39250553	25.0	30.1	
2	8.889	8.889	0.000	42490686	25.0	29.6	
						RPD = 1.68	
13 gamma-Chlordane							
1	7.337	7.337	0.000	39361766	25.0	29.1	
2	9.285	9.285	0.000	41937267	25.0	28.5	
						RPD = 2.21	
14 alpha-Chlordane							
1	7.682	7.682	0.000	39137523	25.0	29.3	
2	9.583	9.583	0.000	40649142	25.0	28.6	
						RPD = 2.21	
15 Endosulfan I							
1	7.957	7.957	0.000	36831688	25.0	30.0	
2	9.651	9.651	0.000	38575115	25.0	29.2	
						RPD = 2.76	
16 4,4'-DDE							
1	8.056	8.056	0.000	35936444	25.0	30.3	
2	10.009	10.009	0.000	38637884	25.0	29.3	
						RPD = 3.60	
17 Dieldrin							
1	8.508	8.508	0.000	39256989	25.0	30.0	
2	10.167	10.167	0.000	39661860	25.0	29.0	
						RPD = 3.50	
18 Endrin							
1	8.962	8.962	0.000	35671222	25.0	31.0	
2	10.680	10.680	0.000	34363335	25.0	28.5	
						RPD = 8.33	
20 4,4'-DDD							
1	9.322	9.322	0.000	29569121	25.0	34.0	
2	11.004	11.004	0.000	30178584	25.0	30.8	
						RPD = 9.67	
21 Endosulfan II							
1	9.411	9.411	0.000	35326493	25.0	30.5	
2	11.050	11.050	0.000	35384417	25.0	30.3	
						RPD = 0.91	
23 4,4'-DDT							
1	9.838	9.838	0.000	24088909	25.0	25.2	
2	11.487	11.487	0.000	22587477	25.0	22.6	
						RPD = 10.81	
25 Endrin aldehyde							
1	10.206	10.206	0.000	26338638	25.0	29.6	
2	11.609	11.609	0.000	26098630	25.0	27.9	
						RPD = 5.63	
27 Methoxychlor							
1	10.789	10.789	0.000	12882686	25.0	28.1	
2	12.553	12.553	0.000	12237895	25.0	25.0	
						RPD = 11.66	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.933	10.933	0.000	30039475	25.0	30.2	
2	12.030	12.030	0.000	30288870	25.0	28.6	
						RPD = 5.30	
29 Endrin ketone							
1	11.333	11.333	0.000	35853430	25.0	29.3	
2	12.773	12.773	0.000	35206578	25.0	28.7	
						RPD = 2.30	
$ 30 DCB Decachlorobiphenyl							
1	12.938	12.938	0.000	27047381	25.0	28.9	
2	14.493	14.493	0.000	28316814	25.0	27.8	
						RPD = 3.76	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

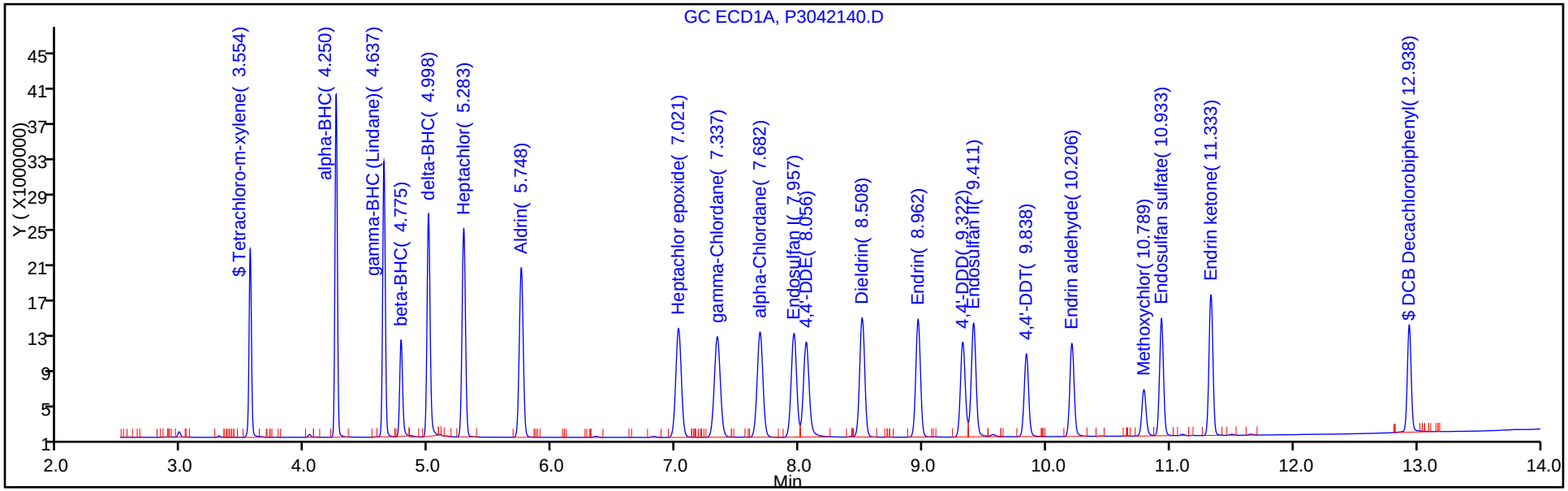
Report Date: 22-Apr-2015 08:58:15 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

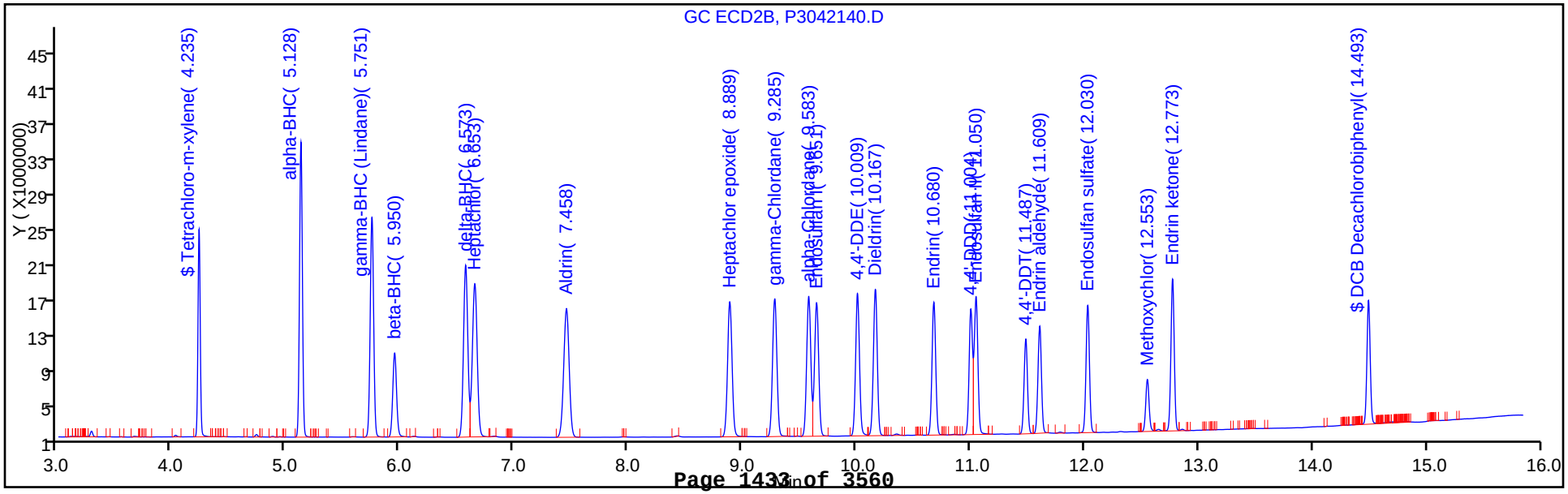
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042140.D

Injection Date:	22-Apr-2015 03:48:08	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV AB3			Worklist Smp#:	40
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Manual Integration/User Assign Peak Report

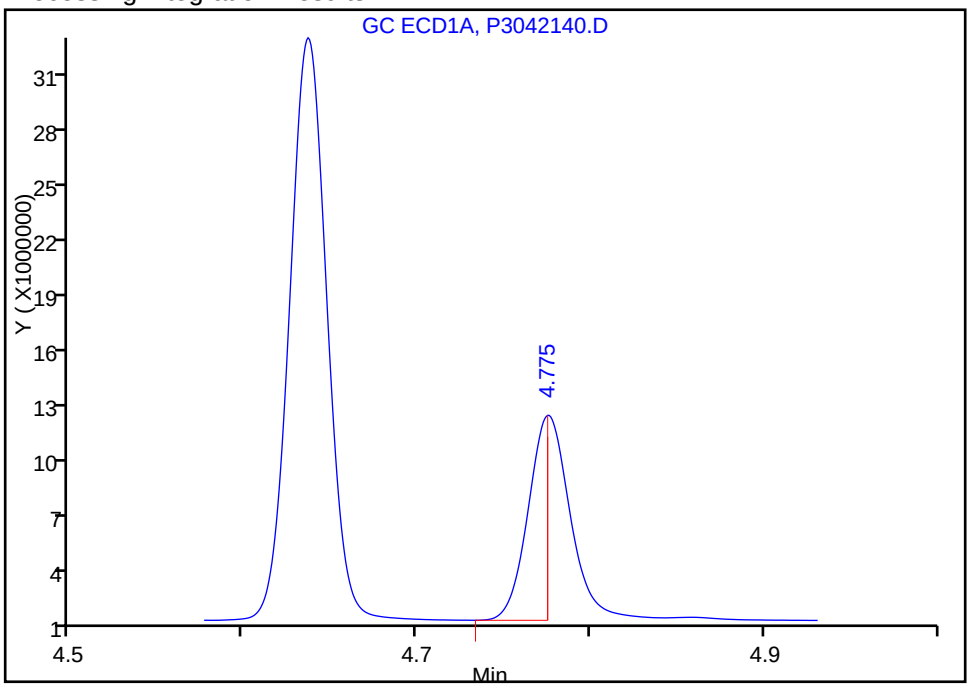
TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042140.D
Injection Date: 22-Apr-2015 03:48:08 Instrument ID: A2HP3
Lims ID: CCV AB3
Client ID:
Operator ID: 430893 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: PEST3 Limit Group: GC 8081 D0D ICAL
Column: Detector GC ECD1A

6 beta-BHC, CAS: 319-85-7

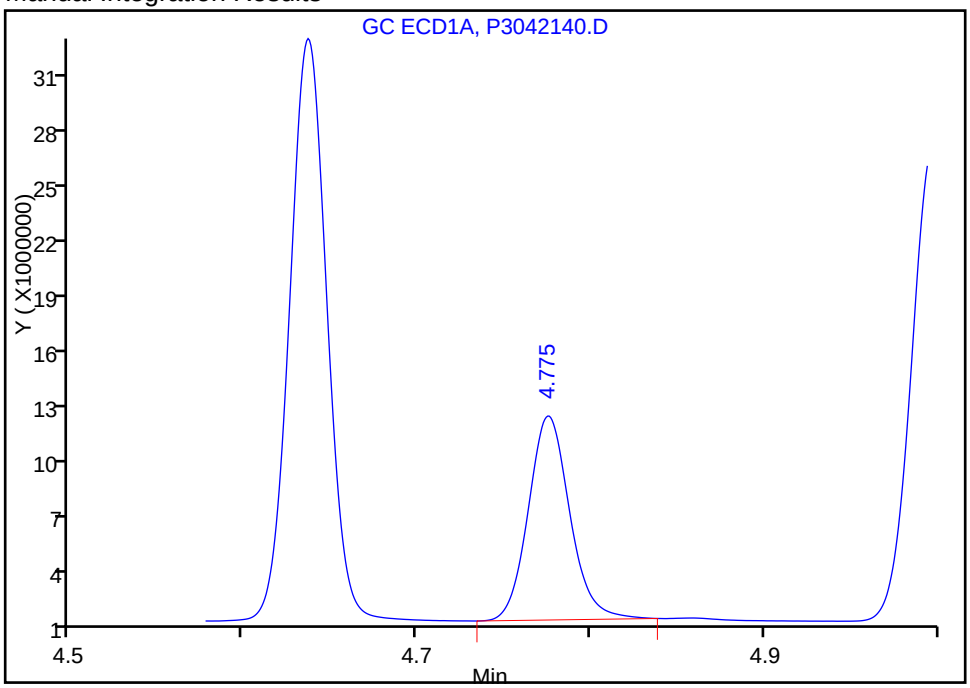
Processing Integration Results

RT: 4.78
Area: 8441079
Amount: 13.401906
Amount Units: ug/l



Manual Integration Results

RT: 4.78
Area: 18206886
Amount: 28.907083
Amount Units: ug/l



Reviewer: matthewsb, 22-Apr-2015 07:35:09
Audit Action: Manually Integrated
Audit Reason: Baseline Event

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/40 Calibration Date: 04/22/2015 03:48

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042140.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1957541	2355905		30.1	25.0	20.4*	20.0
gamma-BHC (Lindane)	Ave	1769514	2107666		29.8	25.0	19.1	20.0
beta-BHC	Ave	768367	889545		28.9	25.0	15.8	20.0
delta-BHC	Ave	1774158	2068034		29.1	25.0	16.6	20.0
Heptachlor	Ave	1690527	2076217		30.7	25.0	22.8*	20.0
Aldrin	Ave	1672196	1959177		29.3	25.0	17.2	20.0
Heptachlor epoxide	Ave	1435426	1699627		29.6	25.0	18.4	20.0
gamma-Chlordane	Ave	1471152	1677491		28.5	25.0	14.0	20.0
alpha-Chlordane	Ave	1420369	1625966		28.6	25.0	14.5	20.0
Endosulfan I	Ave	1321597	1543005		29.2	25.0	16.8	20.0
4,4'-DDE	Ave	1320422	1545515		29.3	25.0	17.0	20.0
Dieldrin	Ave	1368089	1586474		29.0	25.0	16.0	20.0
Endrin	Ave	1205577	1374533		28.5	25.0	14.0	20.0
4,4'-DDD	Ave	978644	1207143		30.8	25.0	23.3*	20.0
Endosulfan II	Ave	1169425	1415377		30.3	25.0	21.0*	20.0
4,4'-DDT	Ave	997996	903499		22.6	25.0	-9.5	20.0
Endrin aldehyde	Ave	933862	1043945		27.9	25.0	11.8	20.0
Endosulfan sulfate	Ave	1059131	1211555		28.6	25.0	14.4	20.0
Methoxychlor	Ave	489196	489516		25.0	25.0	0.0	20.0
Endrin ketone	Ave	1227876	1408263		28.7	25.0	14.7	20.0
Tetrachloro-m-xylene	Ave	1127022	1317575		29.2	25.0	16.9	20.0
DCB Decachlorobiphenyl	Ave	1017987	1132673		27.8	25.0	11.3	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/40 Calibration Date: 04/22/2015 03:48

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042140.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	5.13	5.10	5.16
gamma-BHC (Lindane)	5.75	5.72	5.78
beta-BHC	5.95	5.92	5.98
delta-BHC	6.57	6.54	6.60
Heptachlor	6.65	6.62	6.68
Aldrin	7.46	7.43	7.49
Heptachlor epoxide	8.89	8.86	8.92
gamma-Chlordane	9.29	9.26	9.32
alpha-Chlordane	9.58	9.55	9.61
Endosulfan I	9.65	9.62	9.68
4,4'-DDE	10.01	9.98	10.04
Dieldrin	10.17	10.14	10.20
Endrin	10.68	10.65	10.71
4,4'-DDD	11.00	10.97	11.03
Endosulfan II	11.05	11.02	11.08
4,4'-DDT	11.49	11.46	11.52
Endrin aldehyde	11.61	11.58	11.64
Endosulfan sulfate	12.03	12.00	12.06
Methoxychlor	12.55	12.52	12.58
Endrin ketone	12.77	12.74	12.80
Tetrachloro-m-xylene	4.24	4.21	4.27
DCB Decachlorobiphenyl	14.49	14.46	14.52

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042140.D
Lims ID: CCV AB3
Client ID:
Sample Type: CCV
Inject. Date: 22-Apr-2015 03:48:08 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-040
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:58:14 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:35:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.554	3.554	0.000	29555063	25.0	30.1	
2	4.235	4.235	0.000	32939364	25.0	29.2	
						RPD = 2.78	
4 alpha-BHC							
1	4.250	4.250	0.000	52911988	25.0	30.6	
2	5.128	5.128	0.000	58897626	25.0	30.1	
						RPD = 1.53	
5 gamma-BHC (Lindane)							
1	4.637	4.637	0.000	46756527	25.0	30.3	
2	5.751	5.751	0.000	52691645	25.0	29.8	
						RPD = 1.70	
6 beta-BHC							M
1	4.775	4.775	0.000	18206886	25.0	28.9	M
2	5.950	5.950	0.000	22238624	25.0	28.9	
						RPD = 0.12	
7 delta-BHC							
1	4.998	4.998	0.000	44704926	25.0	29.7	
2	6.573	6.573	0.000	51700857	25.0	29.1	
						RPD = 2.06	
9 Heptachlor							
1	5.283	5.283	0.000	45955772	25.0	31.5	
2	6.653	6.653	0.000	51905425	25.0	30.7	
						RPD = 2.54	
10 Aldrin							
1	5.748	5.748	0.000	43446167	25.0	29.7	
2	7.458	7.458	0.000	48979415	25.0	29.3	
						RPD = 1.45	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.021	7.021	0.000	39250553	25.0	30.1	
2	8.889	8.889	0.000	42490686	25.0	29.6	
						RPD = 1.68	
13 gamma-Chlordane							
1	7.337	7.337	0.000	39361766	25.0	29.1	
2	9.285	9.285	0.000	41937267	25.0	28.5	
						RPD = 2.21	
14 alpha-Chlordane							
1	7.682	7.682	0.000	39137523	25.0	29.3	
2	9.583	9.583	0.000	40649142	25.0	28.6	
						RPD = 2.21	
15 Endosulfan I							
1	7.957	7.957	0.000	36831688	25.0	30.0	
2	9.651	9.651	0.000	38575115	25.0	29.2	
						RPD = 2.76	
16 4,4'-DDE							
1	8.056	8.056	0.000	35936444	25.0	30.3	
2	10.009	10.009	0.000	38637884	25.0	29.3	
						RPD = 3.60	
17 Dieldrin							
1	8.508	8.508	0.000	39256989	25.0	30.0	
2	10.167	10.167	0.000	39661860	25.0	29.0	
						RPD = 3.50	
18 Endrin							
1	8.962	8.962	0.000	35671222	25.0	31.0	
2	10.680	10.680	0.000	34363335	25.0	28.5	
						RPD = 8.33	
20 4,4'-DDD							
1	9.322	9.322	0.000	29569121	25.0	34.0	
2	11.004	11.004	0.000	30178584	25.0	30.8	
						RPD = 9.67	
21 Endosulfan II							
1	9.411	9.411	0.000	35326493	25.0	30.5	
2	11.050	11.050	0.000	35384417	25.0	30.3	
						RPD = 0.91	
23 4,4'-DDT							
1	9.838	9.838	0.000	24088909	25.0	25.2	
2	11.487	11.487	0.000	22587477	25.0	22.6	
						RPD = 10.81	
25 Endrin aldehyde							
1	10.206	10.206	0.000	26338638	25.0	29.6	
2	11.609	11.609	0.000	26098630	25.0	27.9	
						RPD = 5.63	
27 Methoxychlor							
1	10.789	10.789	0.000	12882686	25.0	28.1	
2	12.553	12.553	0.000	12237895	25.0	25.0	
						RPD = 11.66	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.933	10.933	0.000	30039475	25.0	30.2	
2	12.030	12.030	0.000	30288870	25.0	28.6	
						RPD = 5.30	
29 Endrin ketone							
1	11.333	11.333	0.000	35853430	25.0	29.3	
2	12.773	12.773	0.000	35206578	25.0	28.7	
						RPD = 2.30	
$ 30 DCB Decachlorobiphenyl							
1	12.938	12.938	0.000	27047381	25.0	28.9	
2	14.493	14.493	0.000	28316814	25.0	27.8	
						RPD = 3.76	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

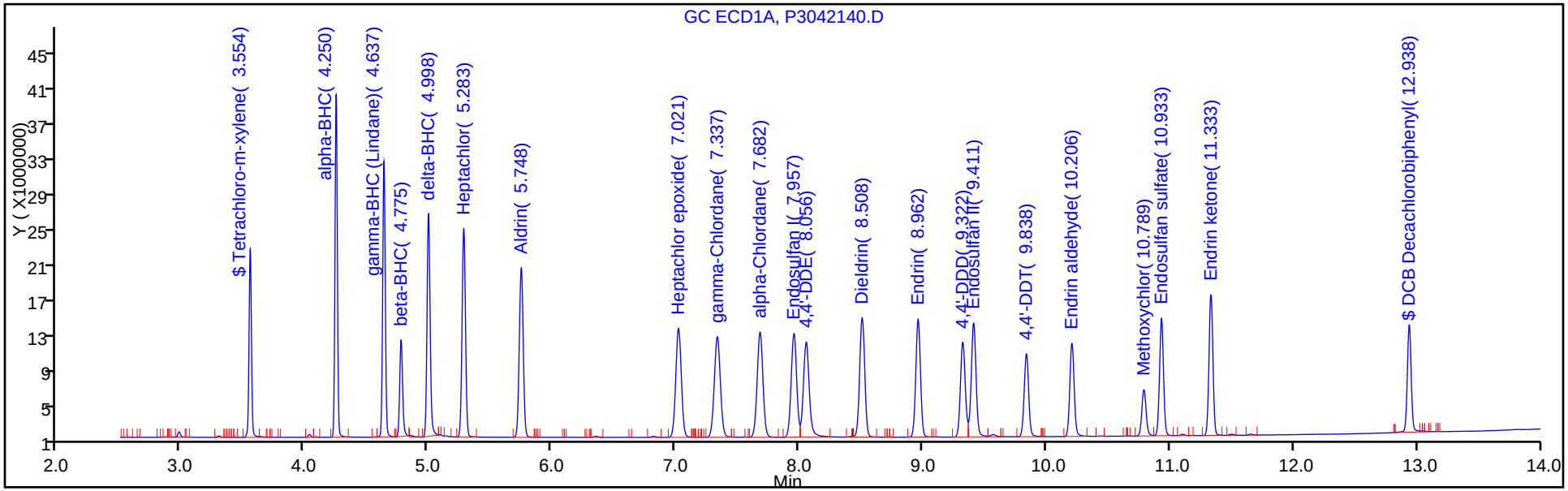
Report Date: 22-Apr-2015 08:58:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

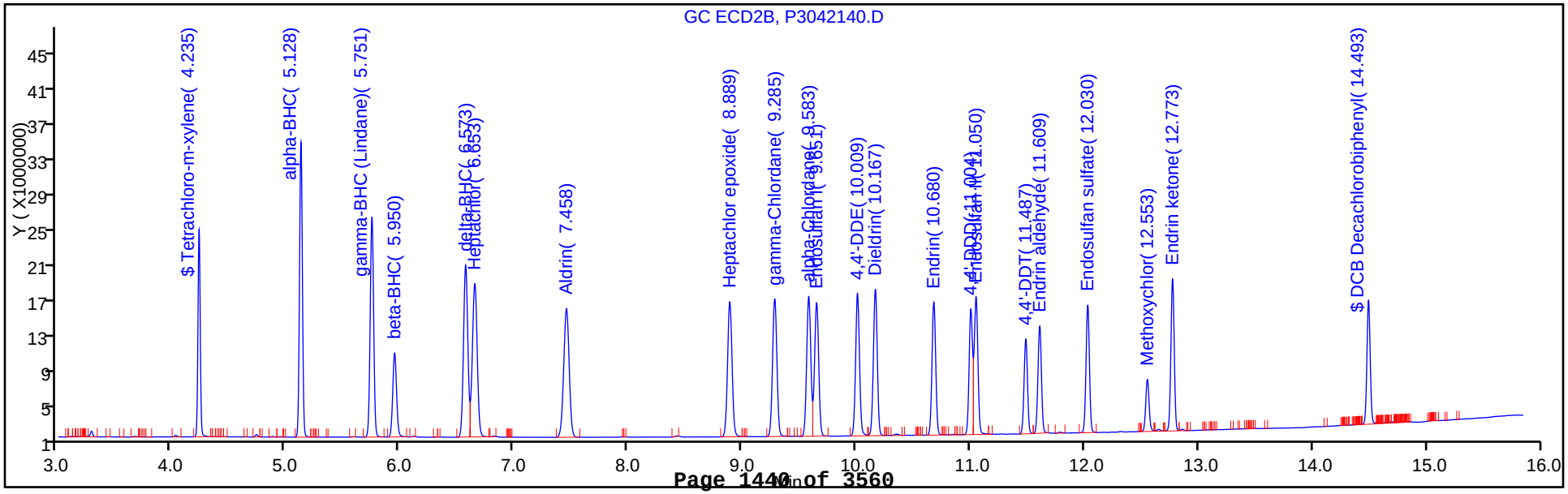
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042140.D

Injection Date:	22-Apr-2015 03:48:08	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV AB3			Worklist Smp#:	40
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/52 Calibration Date: 04/22/2015 08:22

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042152.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	37833	38595		1020	1000	2.0	20.0
Toxaphene Peak 2	Ave	36644	35137		959	1000	-4.1	20.0
Toxaphene Peak 3	Ave	23355	20327		870	1000	-13.0	20.0
Toxaphene Peak 4	Ave	33176	29991		904	1000	-9.6	20.0
Toxaphene Peak 5	Ave	32330	24173		748	1000	-25.2*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/52 Calibration Date: 04/22/2015 08:22

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042152.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	9.62	9.59	9.65
Toxaphene Peak 2	10.08	10.05	10.11
Toxaphene Peak 3	10.40	10.37	10.43
Toxaphene Peak 4	10.74	10.71	10.77
Toxaphene Peak 5	10.84	10.81	10.87

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042152.D
Lims ID: CCV TOX3
Client ID:
Sample Type: CCV
Inject. Date: 22-Apr-2015 08:22:45 ALS Bottle#: 52 Worklist Smp#: 52
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-052
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:58:31 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 08:56:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.619	9.619	0.000	38595148	1000.0	1020.2	M
1	10.083	10.083	0.000	35136800	1000.0	958.9	M
1	10.396	10.396	0.000	20327024	1000.0	870.4	M
1	10.738	10.738	0.000	29991346	1000.0	904.0	M
1	10.844	10.844	0.000	24173211	1000.0	747.7	M
		Average of Peak Amounts =				900.2	
2	11.027	11.027	0.000	52524589	1000.0	1013.5	M
2	11.196	11.196	0.000	51261832	1000.0	1005.8	M
2	11.620	11.620	0.000	33747227	1000.0	946.9	M
2	12.354	12.354	0.000	40530943	1000.0	888.3	M
2	12.444	12.444	0.000	12401680	1000.0	796.5	M
		Average of Peak Amounts =				930.2	
						RPD = 3.28	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 100.00 Units: uL

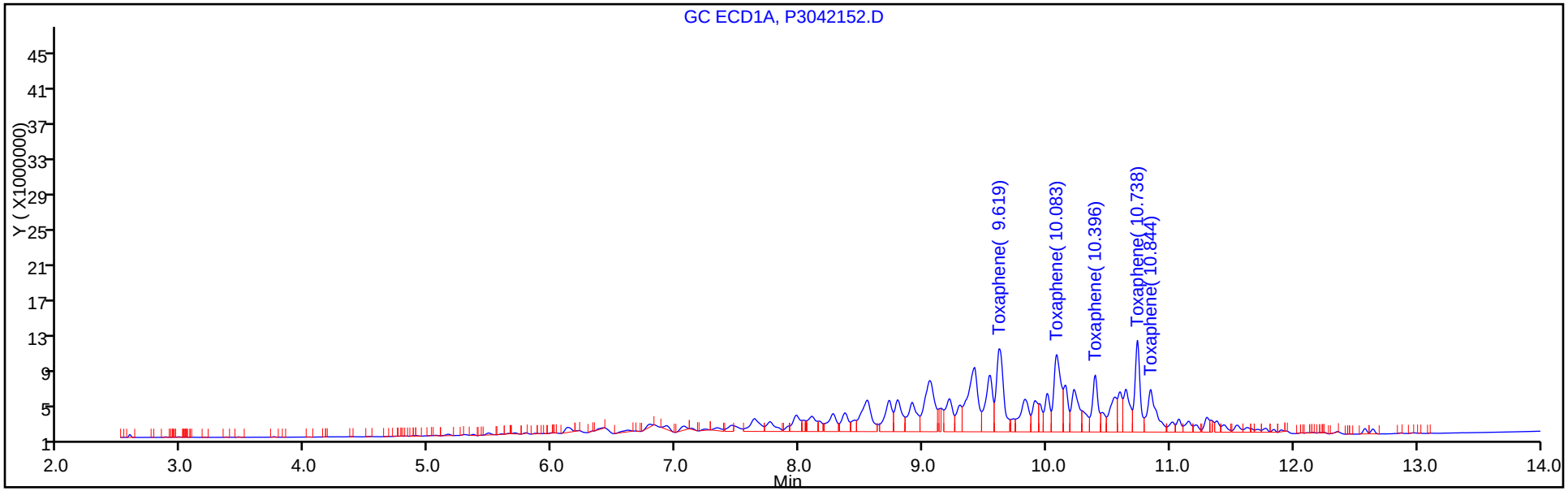
Report Date: 22-Apr-2015 08:58:31 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

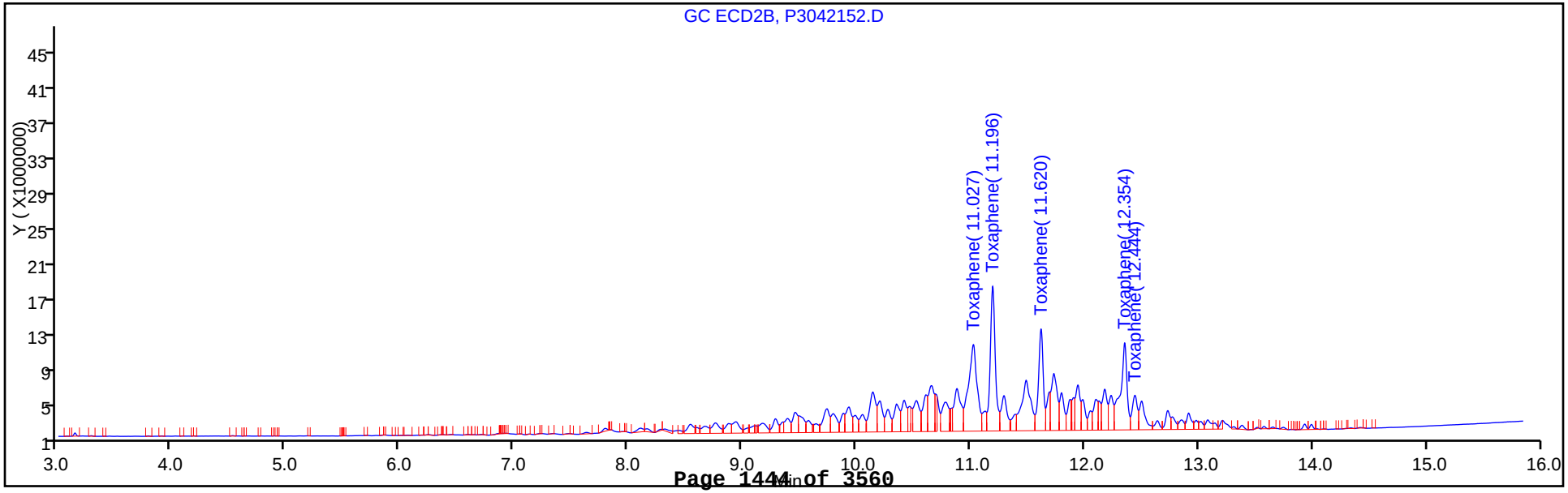
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042152.D

Injection Date:	22-Apr-2015 08:22:45	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV TOX3			Worklist Smp#:	52
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	52
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 22-Apr-2015 08:58:31 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042152.D

Injection Date: 22-Apr-2015 08:22:45 Instrument ID: A2HP3

Lims ID: CCV TOX3

Client ID:

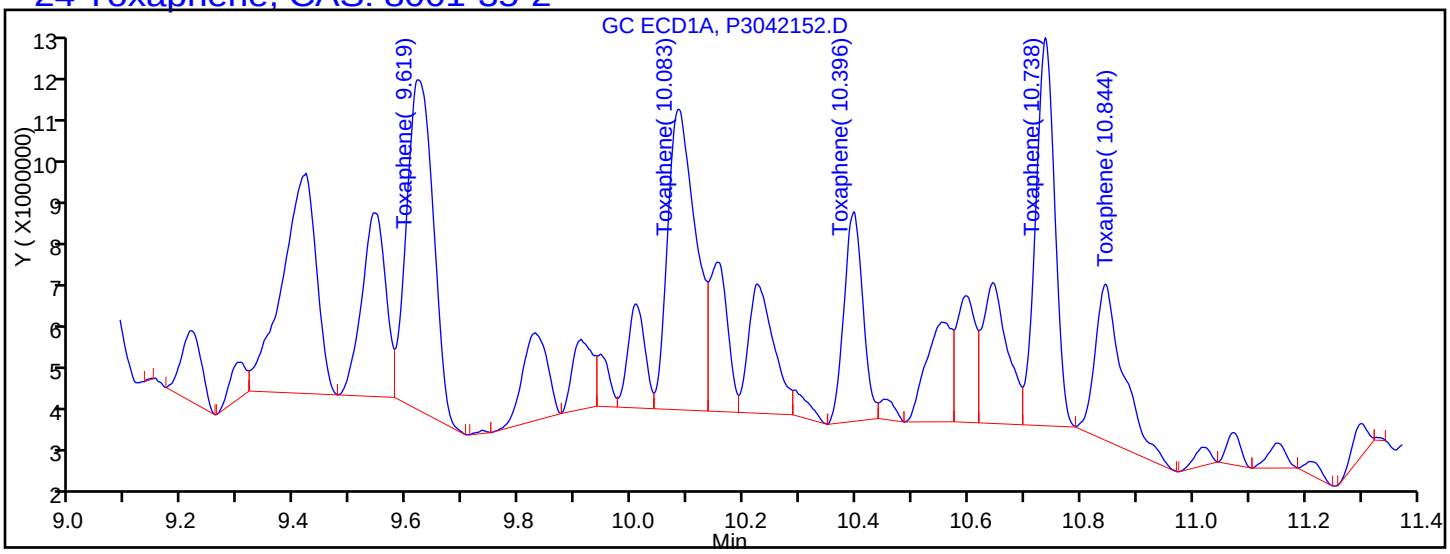
Operator ID: 430893 ALS Bottle#: 52 Worklist Smp#: 52

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

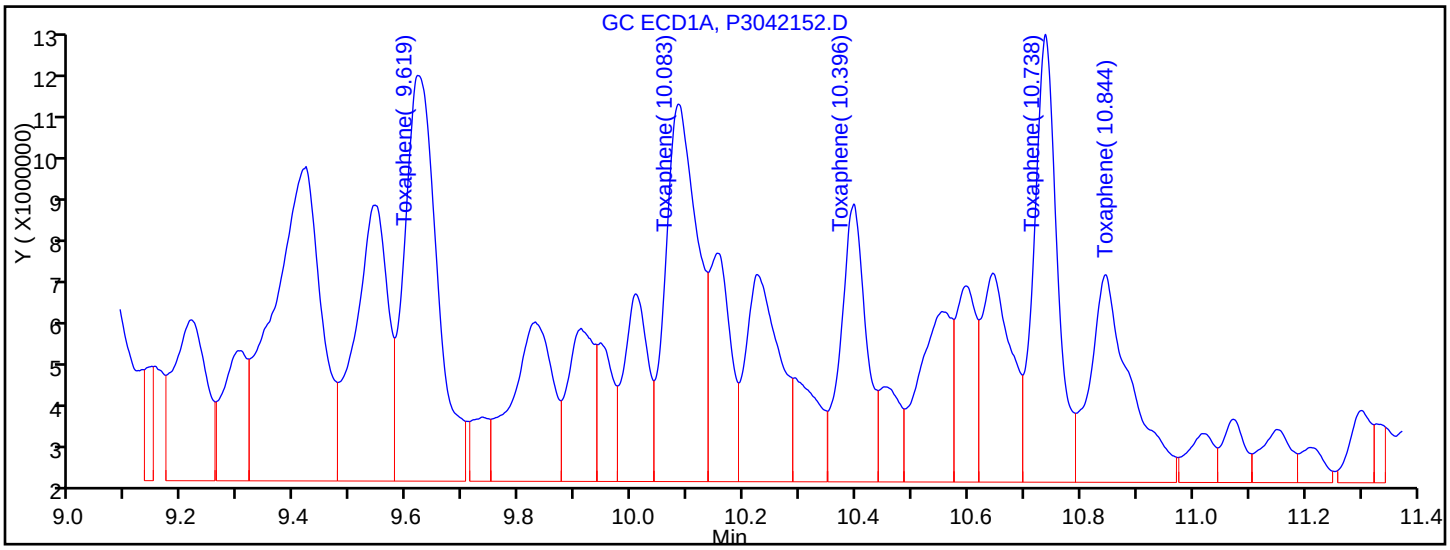
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.619	Response = 24875806	M
RT = 10.083	Response = 23788166	M
RT = 10.396	Response = 11132663	M
RT = 10.738	Response = 20901098	M
RT = 10.844	Response = 12507731	M



Manual Integration Results

RT = 9.619	Response = 38595148	M
RT = 10.083	Response = 35136800	M
RT = 10.396	Response = 20327024	M
RT = 10.738	Response = 29991346	M
RT = 10.844	Response = 24173211	M

Reviewer: matthewsb, 22-Apr-2015 08:57:25

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/52 Calibration Date: 04/22/2015 08:22

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042152.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	51823	52525		1010	1000	1.4	20.0
Toxaphene Peak 2	Ave	50965	51262		1010	1000	0.6	20.0
Toxaphene Peak 3	Ave	35641	33747		947	1000	-5.3	20.0
Toxaphene Peak 4	Ave	45629	40531		888	1000	-11.2	20.0
Toxaphene Peak 5	Ave	15570	12402		797	1000	-20.3*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177258/52 Calibration Date: 04/22/2015 08:22

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042152.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	11.03	11.00	11.06
Toxaphene Peak 2	11.20	11.17	11.23
Toxaphene Peak 3	11.62	11.59	11.65
Toxaphene Peak 4	12.35	12.32	12.38
Toxaphene Peak 5	12.44	12.41	12.47

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042152.D
Lims ID: CCV TOX3
Client ID:
Sample Type: CCV
Inject. Date: 22-Apr-2015 08:22:45 ALS Bottle#: 52 Worklist Smp#: 52
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-052
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:58:31 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 08:56:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.619	9.619	0.000	38595148	1000.0	1020.2	M
1	10.083	10.083	0.000	35136800	1000.0	958.9	M
1	10.396	10.396	0.000	20327024	1000.0	870.4	M
1	10.738	10.738	0.000	29991346	1000.0	904.0	M
1	10.844	10.844	0.000	24173211	1000.0	747.7	M
		Average of Peak Amounts =				900.2	
2	11.027	11.027	0.000	52524589	1000.0	1013.5	M
2	11.196	11.196	0.000	51261832	1000.0	1005.8	M
2	11.620	11.620	0.000	33747227	1000.0	946.9	M
2	12.354	12.354	0.000	40530943	1000.0	888.3	M
2	12.444	12.444	0.000	12401680	1000.0	796.5	M
		Average of Peak Amounts =				930.2	
						RPD = 3.28	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 100.00 Units: uL

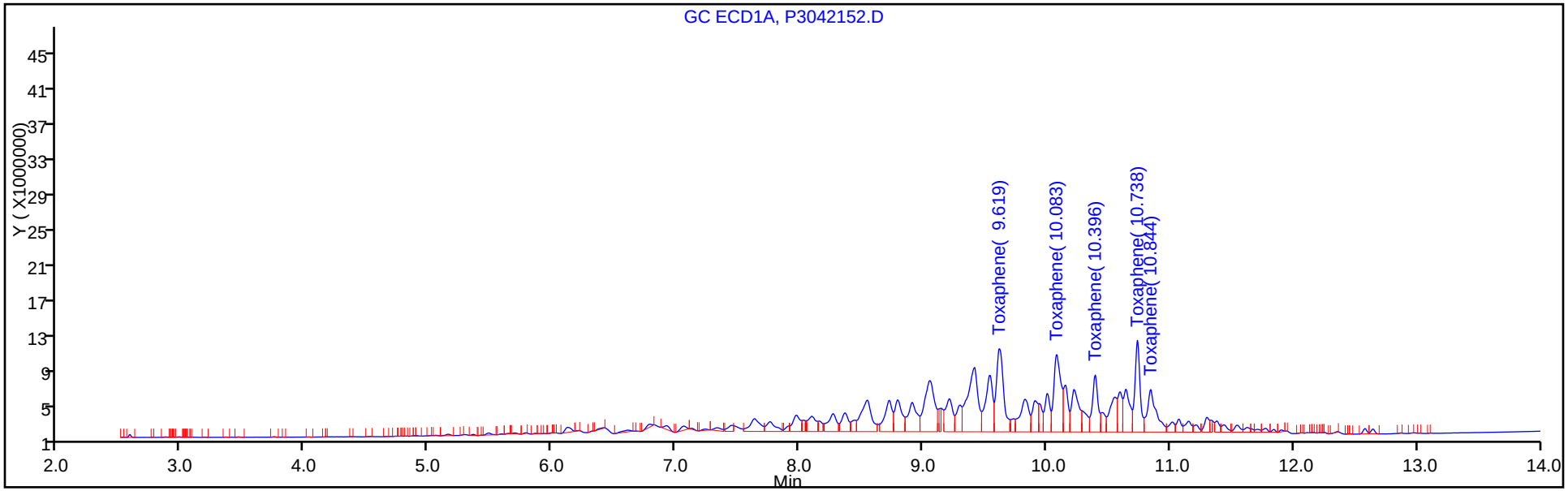
Report Date: 22-Apr-2015 08:58:32 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

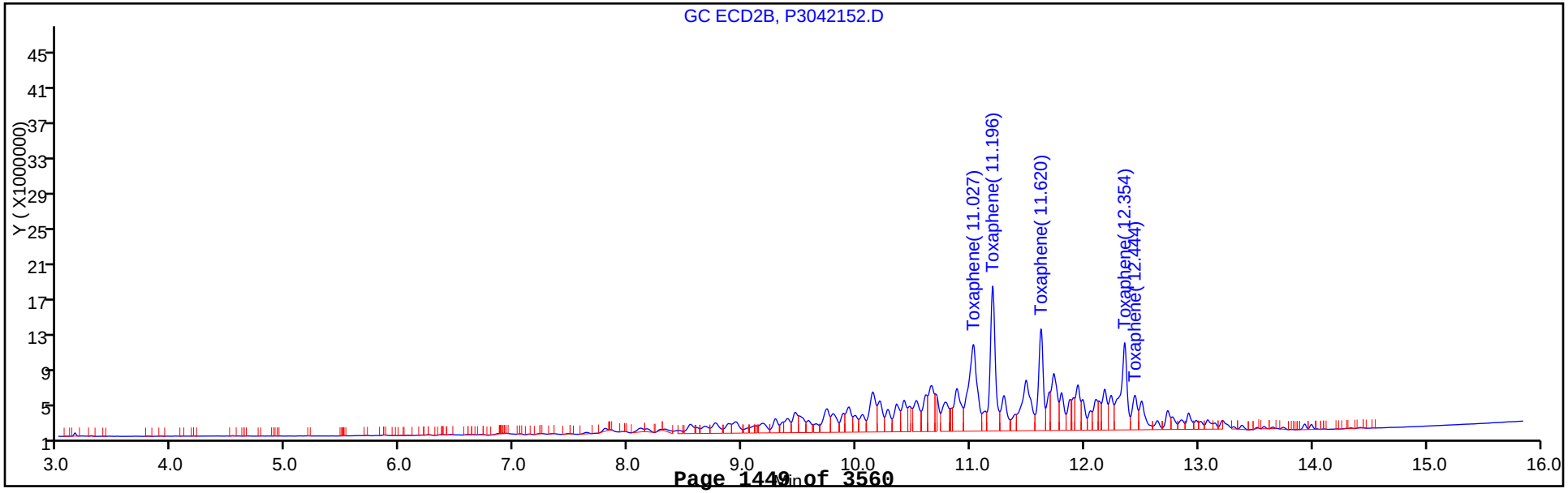
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042152.D

Injection Date:	22-Apr-2015 08:22:45	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV TOX3			Worklist Smp#:	52
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	52
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 22-Apr-2015 08:58:32 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042152.D

Injection Date: 22-Apr-2015 08:22:45 Instrument ID: A2HP3

Lims ID: CCV TOX3

Client ID:

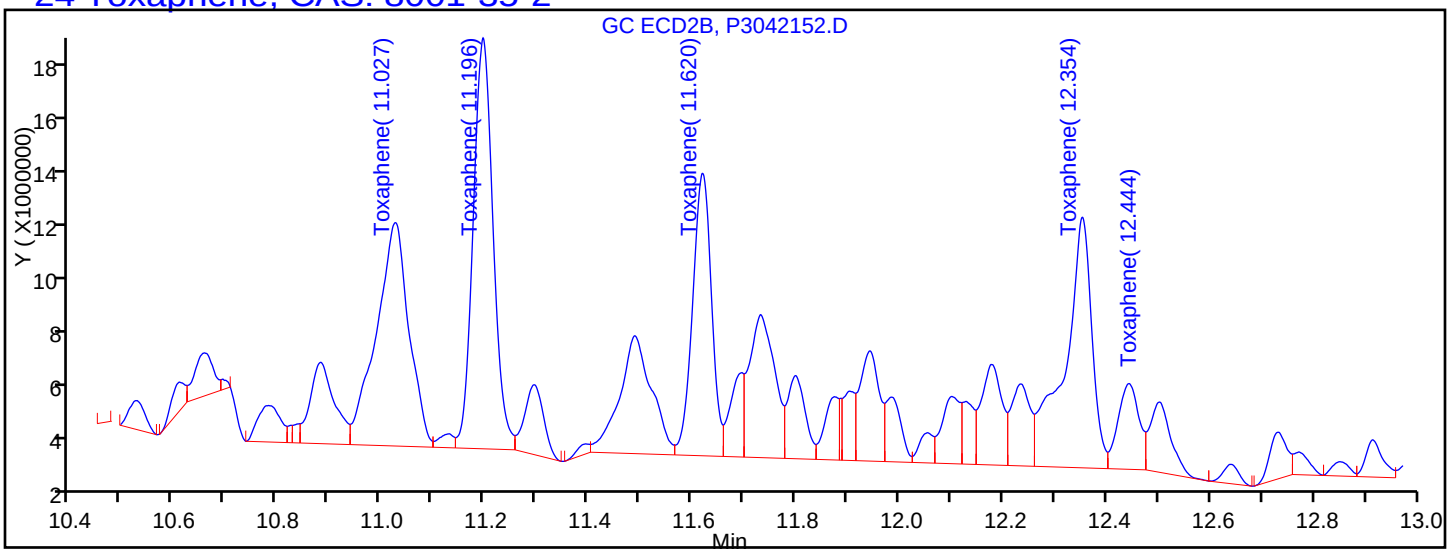
Operator ID: 430893 ALS Bottle#: 52 Worklist Smp#: 52

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

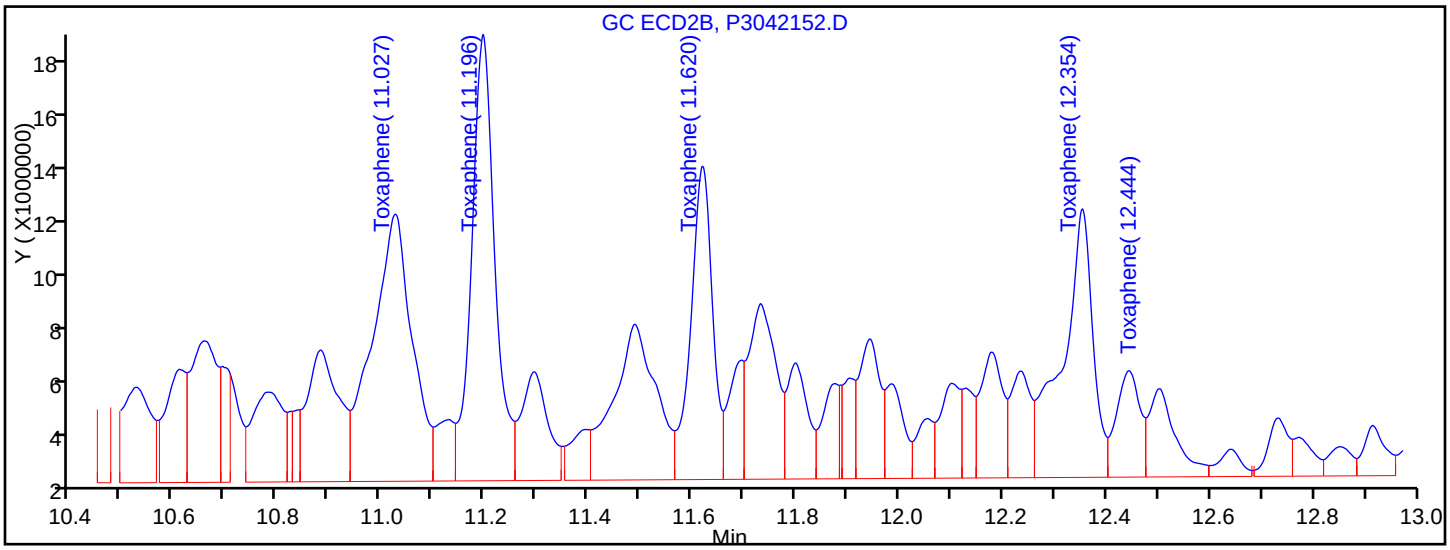
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 11.027	Response = 34934835	M
RT = 11.196	Response = 39485626	M
RT = 11.620	Response = 25724400	M
RT = 12.354	Response = 32703518	M
RT = 12.444	Response = 8678285	M



Manual Integration Results

RT = 11.027	Response = 52524589	M
RT = 11.196	Response = 51261832	M
RT = 11.620	Response = 33747227	M
RT = 12.354	Response = 40530943	M
RT = 12.444	Response = 12401680	M

Reviewer: matthewsb, 22-Apr-2015 08:56:32

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/6 Calibration Date: 04/22/2015 16:30

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042206.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	37833	43417		1150	1000	14.8	20.0
Toxaphene Peak 2	Ave	36644	39505		1080	1000	7.8	20.0
Toxaphene Peak 3	Ave	23355	24063		1030	1000	3.0	20.0
Toxaphene Peak 4	Ave	33176	34953		1050	1000	5.4	20.0
Toxaphene Peak 5	Ave	32330	32049		991	1000	-0.9	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/6 Calibration Date: 04/22/2015 16:30

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042206.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	9.63	9.60	9.66
Toxaphene Peak 2	10.08	10.05	10.11
Toxaphene Peak 3	10.40	10.37	10.43
Toxaphene Peak 4	10.74	10.71	10.77
Toxaphene Peak 5	10.85	10.82	10.88

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042206.D
Lims ID: CCV TOX3
Client ID:
Sample Type: CCVRT
Inject. Date: 22-Apr-2015 16:30:36 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-006
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:56 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:22:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.625	9.625	0.000	43416869	1000.0	1147.6	M
1	10.083	10.083	0.000	39505301	1000.0	1078.1	M
1	10.397	10.397	0.000	24062500	1000.0	1030.3	M
1	10.738	10.738	0.000	34953101	1000.0	1053.6	M
1	10.846	10.846	0.000	32049344	1000.0	991.3	M
		Average of Peak Amounts =				1060.2	
2	11.024	11.024	0.000	55567636	1000.0	1072.3	
2	11.195	11.195	0.000	54179293	1000.0	1063.1	
2	11.618	11.618	0.000	36742791	1000.0	1030.9	
2	12.353	12.353	0.000	45739889	1000.0	1002.4	
2	12.443	12.443	0.000	14949387	1000.0	960.2	
		Average of Peak Amounts =				1025.8	
						RPD = 3.30	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 100.00 Units: uL

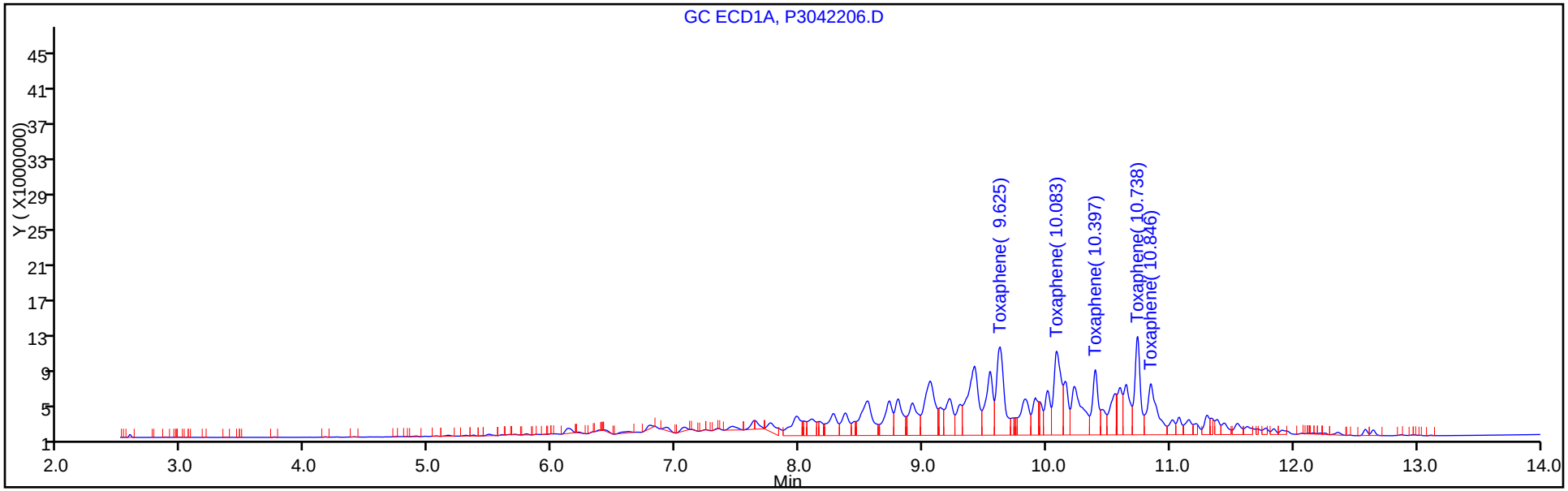
Report Date: 23-Apr-2015 07:42:56 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

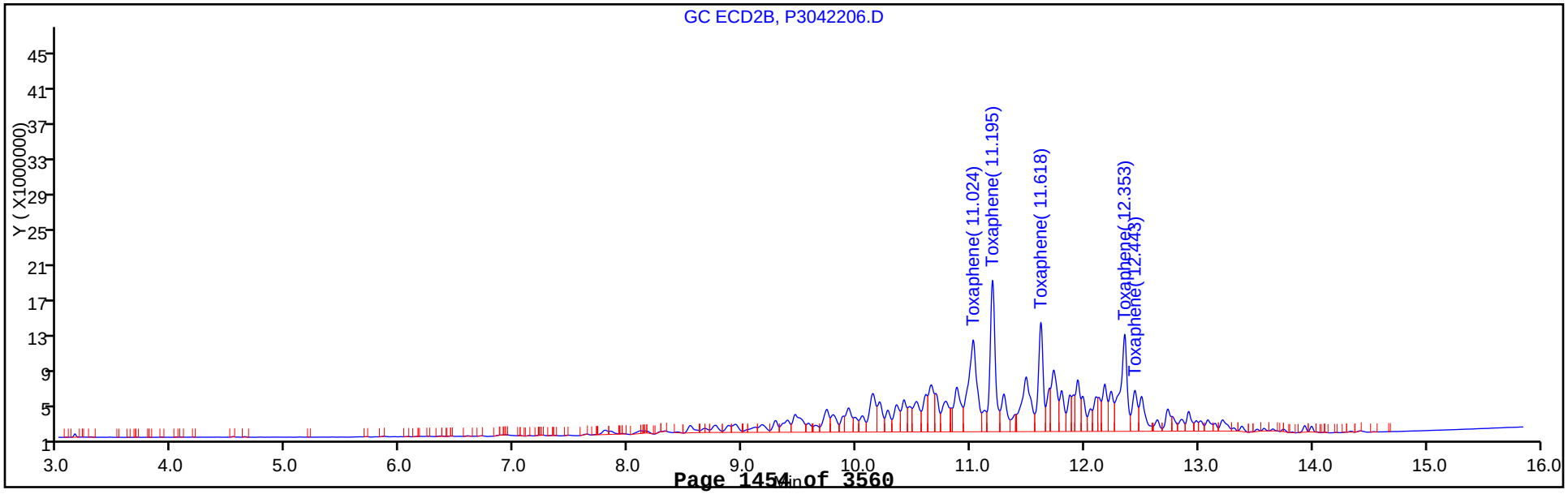
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042206.D

Injection Date:	22-Apr-2015 16:30:36	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV TOX3			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 23-Apr-2015 07:42:56 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042206.D

Injection Date: 22-Apr-2015 16:30:36 Instrument ID: A2HP3

Lims ID: CCV TOX3

Client ID:

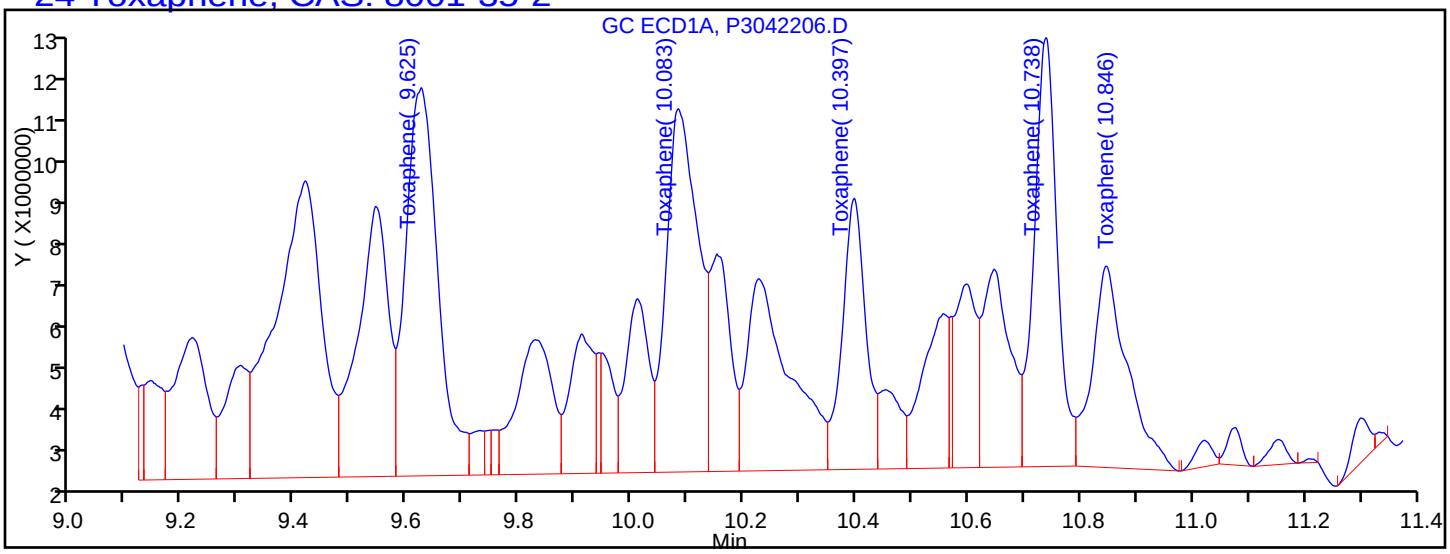
Operator ID: 430893 ALS Bottle#: 6 Worklist Smp#: 6

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

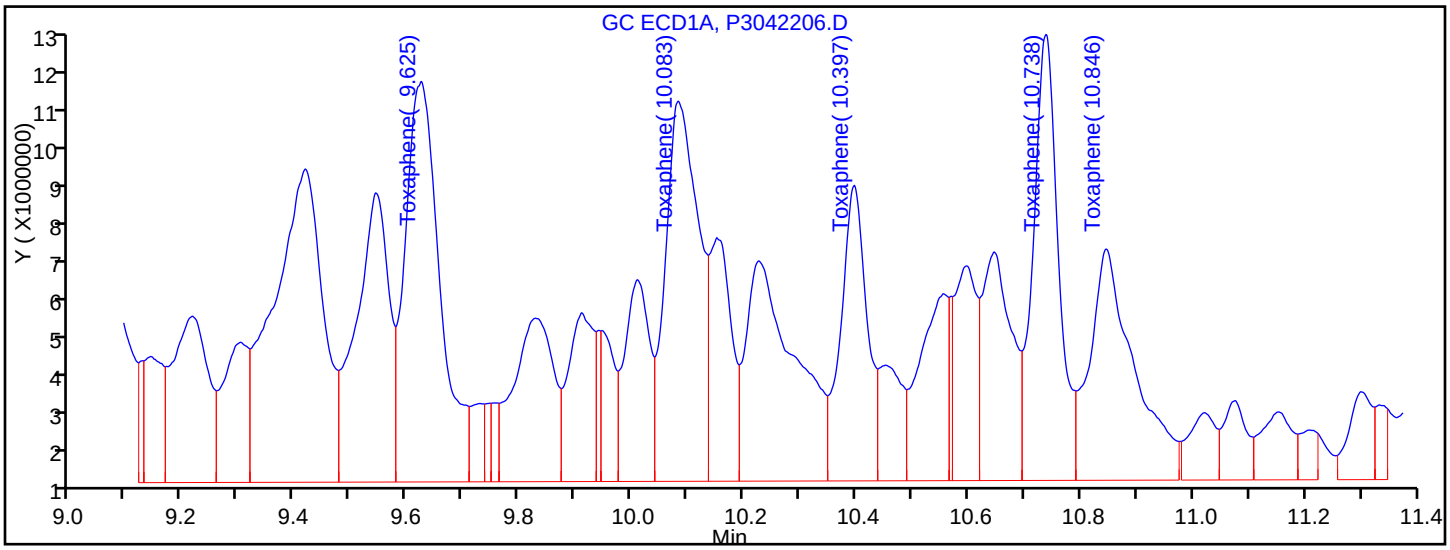
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.625	Response = 36355221	M
RT = 10.083	Response = 33917296	M
RT = 10.397	Response = 18597783	M
RT = 10.738	Response = 28752430	M
RT = 10.846	Response = 20716917	M



Manual Integration Results

RT = 9.625	Response = 43416869	M
RT = 10.083	Response = 39505301	M
RT = 10.397	Response = 24062500	M
RT = 10.738	Response = 34953101	M
RT = 10.846	Response = 32049344	M

Reviewer: matthewsb, 23-Apr-2015 07:22:18

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/6 Calibration Date: 04/22/2015 16:30

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042206.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	51823	55568		1070	1000	7.2	20.0
Toxaphene Peak 2	Ave	50965	54179		1060	1000	6.3	20.0
Toxaphene Peak 3	Ave	35641	36743		1030	1000	3.1	20.0
Toxaphene Peak 4	Ave	45629	45740		1000	1000	0.2	20.0
Toxaphene Peak 5	Ave	15570	14949		960	1000	-4.0	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/6 Calibration Date: 04/22/2015 16:30

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042206.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	11.02	10.99	11.05
Toxaphene Peak 2	11.20	11.17	11.23
Toxaphene Peak 3	11.62	11.59	11.65
Toxaphene Peak 4	12.35	12.32	12.38
Toxaphene Peak 5	12.44	12.41	12.47

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042206.D
Lims ID: CCV TOX3
Client ID:
Sample Type: CCVRT
Inject. Date: 22-Apr-2015 16:30:36 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-006
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:56 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:22:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.625	9.625	0.000	43416869	1000.0	1147.6	M
1	10.083	10.083	0.000	39505301	1000.0	1078.1	M
1	10.397	10.397	0.000	24062500	1000.0	1030.3	M
1	10.738	10.738	0.000	34953101	1000.0	1053.6	M
1	10.846	10.846	0.000	32049344	1000.0	991.3	M
		Average of Peak Amounts =				1060.2	
2	11.024	11.024	0.000	55567636	1000.0	1072.3	
2	11.195	11.195	0.000	54179293	1000.0	1063.1	
2	11.618	11.618	0.000	36742791	1000.0	1030.9	
2	12.353	12.353	0.000	45739889	1000.0	1002.4	
2	12.443	12.443	0.000	14949387	1000.0	960.2	
		Average of Peak Amounts =				1025.8	
						RPD = 3.30	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 100.00 Units: uL

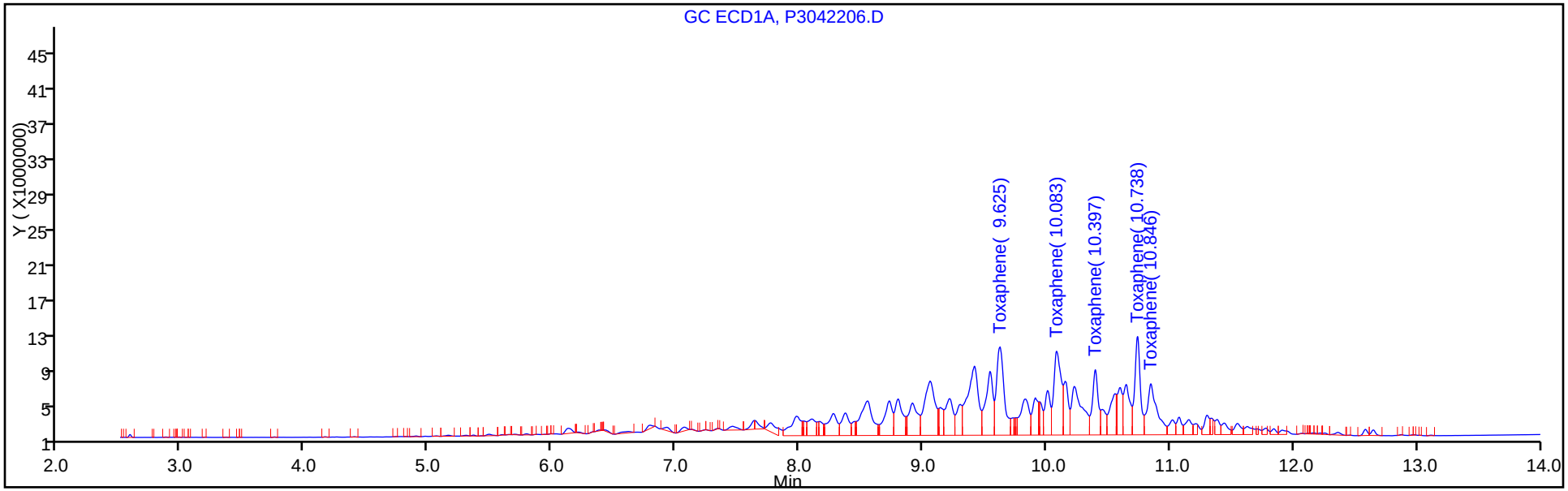
Report Date: 23-Apr-2015 07:42:56 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

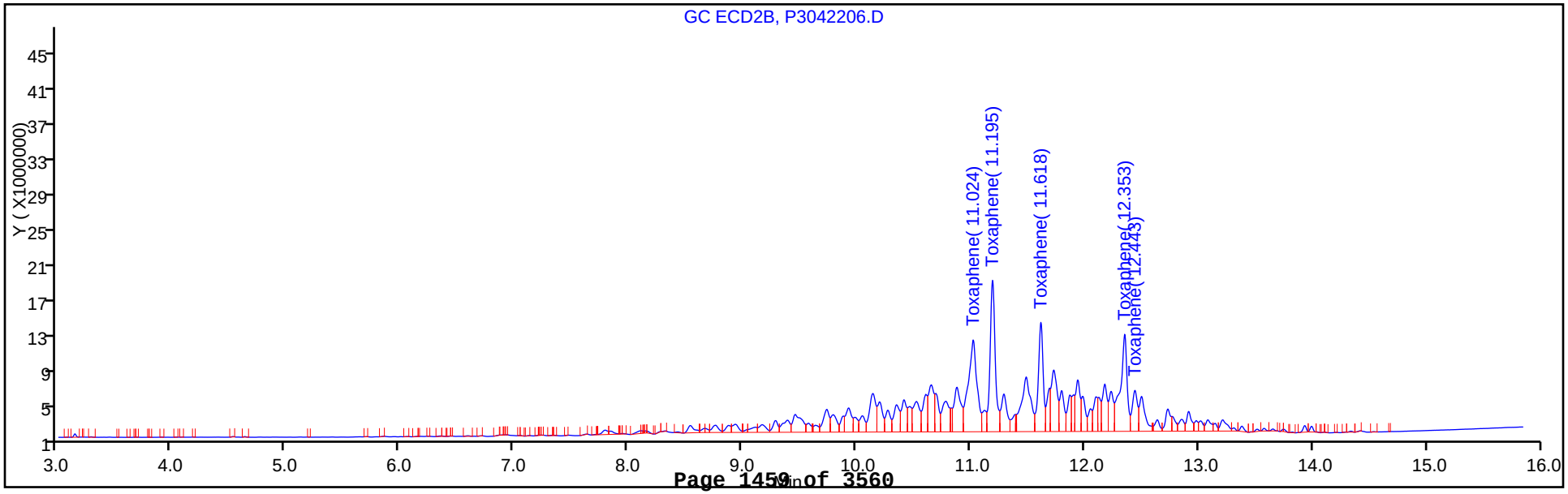
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042206.D

Injection Date:	22-Apr-2015 16:30:36	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV TOX3			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/8 Calibration Date: 04/22/2015 17:19

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042208.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1731837	1913807		27.6	25.0	10.5	20.0
gamma-BHC (Lindane)	Ave	1543740	1678176		27.2	25.0	8.7	20.0
beta-BHC	Ave	629842	683023		27.1	25.0	8.4	20.0
delta-BHC	Ave	1502830	1518791		25.3	25.0	1.1	20.0
Heptachlor	Ave	1459223	1676777		28.7	25.0	14.9	20.0
Aldrin	Ave	1461888	1590259		27.2	25.0	8.8	20.0
Heptachlor epoxide	Ave	1303871	1396782		26.8	25.0	7.1	20.0
gamma-Chlordane	Ave	1350629	1382827		25.6	25.0	2.4	20.0
alpha-Chlordane	Ave	1337609	1388205		25.9	25.0	3.8	20.0
Endosulfan I	Ave	1227519	1257669		25.6	25.0	2.5	20.0
4,4'-DDE	Ave	1184677	962570		20.3	25.0	-18.7	20.0
Dieldrin	Ave	1307595	1352969		25.9	25.0	3.5	20.0
Endrin	Ave	1151386	1201949		26.1	25.0	4.4	20.0
4,4'-DDD	Ave	870416	556124		16.0	25.0	-36.1*	20.0
Endosulfan II	Ave	1156896	1283988		27.7	25.0	11.0	20.0
4,4'-DDT	Ave	955198	716365		18.7	25.0	-25.0*	20.0
Endrin aldehyde	Ave	890839	803095		22.5	25.0	-9.8	20.0
Methoxychlor	Ave	458228	367525		20.1	25.0	-19.8	20.0
Endosulfan sulfate	Ave	996194	1018299		25.6	25.0	2.2	20.0
Endrin ketone	Ave	1221980	1224126		25.0	25.0	0.2	20.0
Tetrachloro-m-xylene	Ave	983528	1066099		27.1	25.0	8.4	20.0
DCB Decachlorobiphenyl	Ave	936456	864209		23.1	25.0	-7.7	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/8 Calibration Date: 04/22/2015 17:19

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042208.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	4.25	4.22	4.28
gamma-BHC (Lindane)	4.64	4.61	4.67
beta-BHC	4.78	4.75	4.81
delta-BHC	5.00	4.97	5.03
Heptachlor	5.29	5.26	5.32
Aldrin	5.75	5.72	5.78
Heptachlor epoxide	7.03	7.00	7.06
gamma-Chlordane	7.34	7.31	7.37
alpha-Chlordane	7.69	7.66	7.72
Endosulfan I	7.96	7.93	7.99
4,4'-DDE	8.07	8.04	8.10
Dieldrin	8.51	8.48	8.54
Endrin	8.97	8.94	9.00
4,4'-DDD	9.34	9.31	9.37
Endosulfan II	9.42	9.39	9.45
4,4'-DDT	9.85	9.82	9.88
Endrin aldehyde	10.21	10.18	10.24
Methoxychlor	10.80	10.77	10.83
Endosulfan sulfate	10.94	10.91	10.97
Endrin ketone	11.34	11.31	11.37
Tetrachloro-m-xylene	3.56	3.53	3.59
DCB Decachlorobiphenyl	12.94	12.91	12.97

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042208.D
Lims ID: CCV AB3
Client ID:
Sample Type: CCVRT
Inject. Date: 22-Apr-2015 17:19:18 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-008
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:58 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:23:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.556	3.556	0.000	26652485	25.0	27.1	
2	4.235	4.235	0.000	30984891	25.0	27.5	
						RPD = 1.44	
4 alpha-BHC							
1	4.252	4.252	0.000	47845176	25.0	27.6	
2	5.128	5.128	0.000	54666381	25.0	27.9	
						RPD = 1.08	
5 gamma-BHC (Lindane)							
1	4.640	4.640	0.000	41954400	25.0	27.2	
2	5.750	5.750	0.000	48257067	25.0	27.3	
						RPD = 0.35	
6 beta-BHC							
1	4.780	4.780	0.000	17075580	25.0	27.1	
2	5.950	5.950	0.000	19545567	25.0	25.4	
						RPD = 6.37	
7 delta-BHC							
1	5.003	5.003	0.000	37969767	25.0	25.3	
2	6.574	6.574	0.000	41232714	25.0	23.2	
						RPD = 8.35	
9 Heptachlor							
1	5.286	5.286	0.000	41919432	25.0	28.7	
2	6.652	6.652	0.000	50423607	25.0	29.8	
						RPD = 3.76	
10 Aldrin							
1	5.751	5.751	0.000	39756475	25.0	27.2	
2	7.458	7.458	0.000	45894313	25.0	27.4	
						RPD = 0.92	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.027	7.027	0.000	34919543	25.0	26.8	
2	8.890	8.890	0.000	39546846	25.0	27.6	
						RPD = 2.83	
13 gamma-Chlordane							
1	7.341	7.341	0.000	34570675	25.0	25.6	
2	9.284	9.284	0.000	39252706	25.0	26.7	
						RPD = 4.15	
14 alpha-Chlordane							
1	7.686	7.686	0.000	34705134	25.0	25.9	
2	9.583	9.583	0.000	37860570	25.0	26.7	
						RPD = 2.70	
15 Endosulfan I							
1	7.961	7.961	0.000	31441718	25.0	25.6	
2	9.652	9.652	0.000	35895888	25.0	27.2	
						RPD = 5.86	
16 4,4'-DDE							
1	8.071	8.071	0.000	24064243	25.0	20.3	
2	10.014	10.014	0.000	30358125	25.0	23.0	
						RPD = 12.37	
17 Dieldrin							
1	8.513	8.513	0.000	33824220	25.0	25.9	
2	10.167	10.167	0.000	37809602	25.0	27.6	
						RPD = 6.61	
18 Endrin							
1	8.965	8.965	0.000	30048724	25.0	26.1	
2	10.680	10.680	0.000	30843682	25.0	25.6	
						RPD = 1.99	
20 4,4'-DDD							
1	9.338	9.338	0.000	13903090	25.0	16.0	
2	11.010	11.010	0.000	17451498	25.0	17.8	
						RPD = 11.00	
21 Endosulfan II							
1	9.417	9.417	0.000	32099696	25.0	27.7	
2	11.050	11.050	0.000	36819727	25.0	31.5	
						RPD = 12.62	
23 4,4'-DDT							
1	9.847	9.847	0.000	17909123	25.0	18.7	
2	11.488	11.488	0.000	18624916	25.0	18.7	
						RPD = 0.46	
25 Endrin aldehyde							
1	10.212	10.212	0.000	20077364	25.0	22.5	
2	11.609	11.609	0.000	21554917	25.0	23.1	
						RPD = 2.38	
27 Methoxychlor							
1	10.802	10.802	0.000	9188118	25.0	20.1	
2	12.556	12.556	0.000	9559063	25.0	19.5	
						RPD = 2.58	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.936	10.936	0.000	25457486	25.0	25.6	
2	12.031	12.031	0.000	26294877	25.0	24.8	
						RPD = 2.89	
29 Endrin ketone							
1	11.336	11.336	0.000	30603151	25.0	25.0	
2	12.774	12.774	0.000	30893633	25.0	25.2	
						RPD = 0.46	
$ 30 DCB Decachlorobiphenyl							
1	12.943	12.943	0.000	21605232	25.0	23.1	
2	14.492	14.492	0.000	23553800	25.0	23.1	
						RPD = 0.29	

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

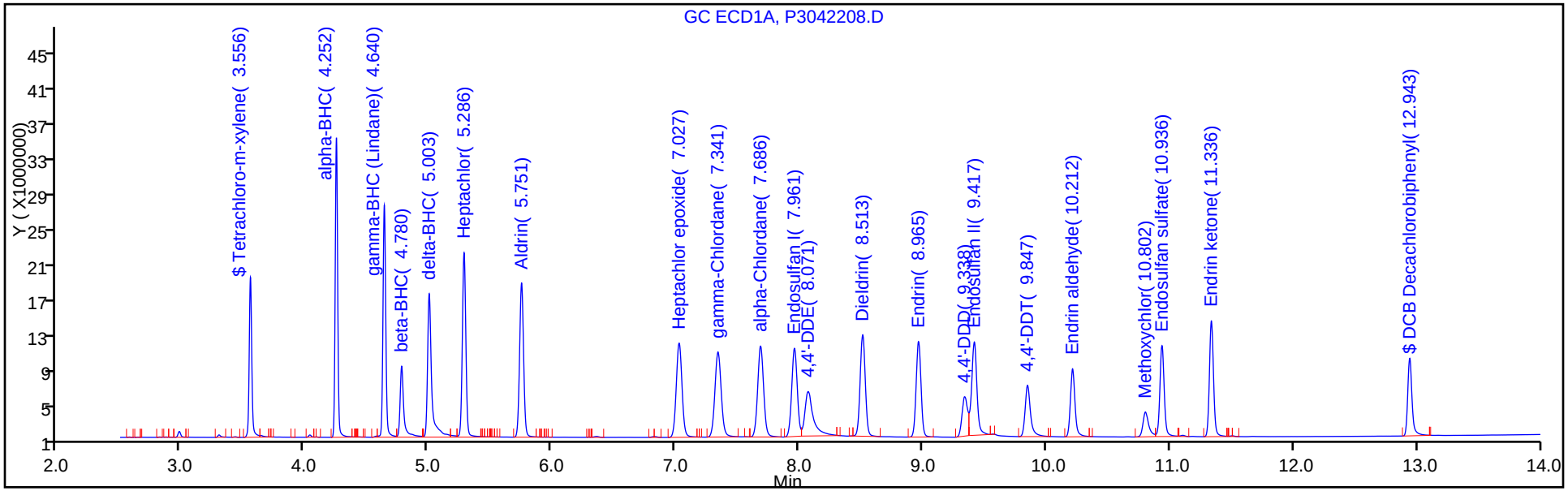
Report Date: 23-Apr-2015 07:42:59 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

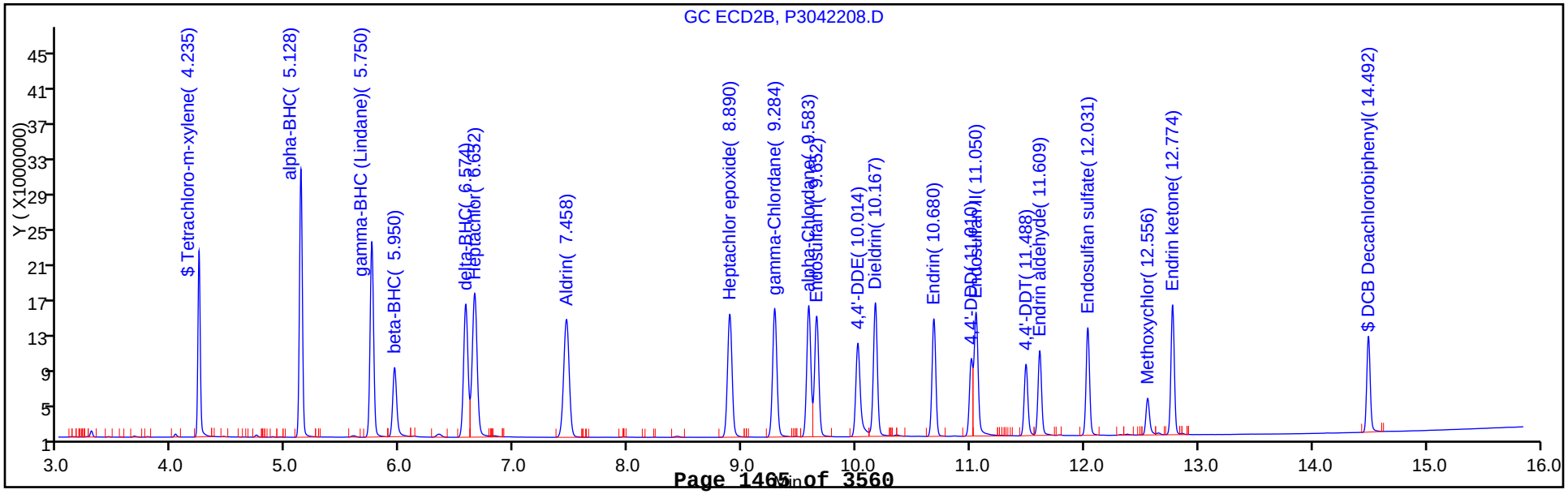
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042208.D

Injection Date:	22-Apr-2015 17:19:18	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV AB3			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/8 Calibration Date: 04/22/2015 17:19

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042208.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1957541	2186655		27.9	25.0	11.7	20.0
gamma-BHC (Lindane)	Ave	1769514	1930283		27.3	25.0	9.1	20.0
beta-BHC	Ave	768367	781823		25.4	25.0	1.8	20.0
delta-BHC	Ave	1774158	1649309		23.2	25.0	-7.0	20.0
Heptachlor	Ave	1690527	2016944		29.8	25.0	19.3	20.0
Aldrin	Ave	1672196	1835773		27.4	25.0	9.8	20.0
Heptachlor epoxide	Ave	1435426	1581874		27.6	25.0	10.2	20.0
gamma-Chlordane	Ave	1471152	1570108		26.7	25.0	6.7	20.0
alpha-Chlordane	Ave	1420369	1514423		26.7	25.0	6.6	20.0
Endosulfan I	Ave	1321597	1435836		27.2	25.0	8.6	20.0
4,4'-DDE	Ave	1320422	1214325		23.0	25.0	-8.0	20.0
Dieldrin	Ave	1368089	1512384		27.6	25.0	10.5	20.0
Endrin	Ave	1205577	1233747		25.6	25.0	2.3	20.0
4,4'-DDD	Ave	978644	698060		17.8	25.0	-28.7*	20.0
Endosulfan II	Ave	1169425	1472789		31.5	25.0	25.9*	20.0
4,4'-DDT	Ave	997996	744997		18.7	25.0	-25.4*	20.0
Endrin aldehyde	Ave	933862	862197		23.1	25.0	-7.7	20.0
Endosulfan sulfate	Ave	1059131	1051795		24.8	25.0	-0.7	20.0
Methoxychlor	Ave	489196	382363		19.5	25.0	-21.8*	20.0
Endrin ketone	Ave	1227876	1235745		25.2	25.0	0.6	20.0
Tetrachloro-m-xylene	Ave	1127022	1239396		27.5	25.0	10.0	20.0
DCB Decachlorobiphenyl	Ave	1017987	942152		23.1	25.0	-7.4	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/8 Calibration Date: 04/22/2015 17:19

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042208.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	5.13	5.10	5.16
gamma-BHC (Lindane)	5.75	5.72	5.78
beta-BHC	5.95	5.92	5.98
delta-BHC	6.57	6.54	6.60
Heptachlor	6.65	6.62	6.68
Aldrin	7.46	7.43	7.49
Heptachlor epoxide	8.89	8.86	8.92
gamma-Chlordane	9.28	9.25	9.31
alpha-Chlordane	9.58	9.55	9.61
Endosulfan I	9.65	9.62	9.68
4,4'-DDE	10.01	9.98	10.04
Dieldrin	10.17	10.14	10.20
Endrin	10.68	10.65	10.71
4,4'-DDD	11.01	10.98	11.04
Endosulfan II	11.05	11.02	11.08
4,4'-DDT	11.49	11.46	11.52
Endrin aldehyde	11.61	11.58	11.64
Endosulfan sulfate	12.03	12.00	12.06
Methoxychlor	12.56	12.53	12.59
Endrin ketone	12.77	12.74	12.80
Tetrachloro-m-xylene	4.24	4.21	4.27
DCB Decachlorobiphenyl	14.49	14.46	14.52

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042208.D
Lims ID: CCV AB3
Client ID:
Sample Type: CCVRT
Inject. Date: 22-Apr-2015 17:19:18 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-008
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:58 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:23:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.556	3.556	0.000	26652485	25.0	27.1	
2	4.235	4.235	0.000	30984891	25.0	27.5	
						RPD = 1.44	
4 alpha-BHC							
1	4.252	4.252	0.000	47845176	25.0	27.6	
2	5.128	5.128	0.000	54666381	25.0	27.9	
						RPD = 1.08	
5 gamma-BHC (Lindane)							
1	4.640	4.640	0.000	41954400	25.0	27.2	
2	5.750	5.750	0.000	48257067	25.0	27.3	
						RPD = 0.35	
6 beta-BHC							
1	4.780	4.780	0.000	17075580	25.0	27.1	
2	5.950	5.950	0.000	19545567	25.0	25.4	
						RPD = 6.37	
7 delta-BHC							
1	5.003	5.003	0.000	37969767	25.0	25.3	
2	6.574	6.574	0.000	41232714	25.0	23.2	
						RPD = 8.35	
9 Heptachlor							
1	5.286	5.286	0.000	41919432	25.0	28.7	
2	6.652	6.652	0.000	50423607	25.0	29.8	
						RPD = 3.76	
10 Aldrin							
1	5.751	5.751	0.000	39756475	25.0	27.2	
2	7.458	7.458	0.000	45894313	25.0	27.4	
						RPD = 0.92	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.027	7.027	0.000	34919543	25.0	26.8	
2	8.890	8.890	0.000	39546846	25.0	27.6	
						RPD = 2.83	
13 gamma-Chlordane							
1	7.341	7.341	0.000	34570675	25.0	25.6	
2	9.284	9.284	0.000	39252706	25.0	26.7	
						RPD = 4.15	
14 alpha-Chlordane							
1	7.686	7.686	0.000	34705134	25.0	25.9	
2	9.583	9.583	0.000	37860570	25.0	26.7	
						RPD = 2.70	
15 Endosulfan I							
1	7.961	7.961	0.000	31441718	25.0	25.6	
2	9.652	9.652	0.000	35895888	25.0	27.2	
						RPD = 5.86	
16 4,4'-DDE							
1	8.071	8.071	0.000	24064243	25.0	20.3	
2	10.014	10.014	0.000	30358125	25.0	23.0	
						RPD = 12.37	
17 Dieldrin							
1	8.513	8.513	0.000	33824220	25.0	25.9	
2	10.167	10.167	0.000	37809602	25.0	27.6	
						RPD = 6.61	
18 Endrin							
1	8.965	8.965	0.000	30048724	25.0	26.1	
2	10.680	10.680	0.000	30843682	25.0	25.6	
						RPD = 1.99	
20 4,4'-DDD							
1	9.338	9.338	0.000	13903090	25.0	16.0	
2	11.010	11.010	0.000	17451498	25.0	17.8	
						RPD = 11.00	
21 Endosulfan II							
1	9.417	9.417	0.000	32099696	25.0	27.7	
2	11.050	11.050	0.000	36819727	25.0	31.5	
						RPD = 12.62	
23 4,4'-DDT							
1	9.847	9.847	0.000	17909123	25.0	18.7	
2	11.488	11.488	0.000	18624916	25.0	18.7	
						RPD = 0.46	
25 Endrin aldehyde							
1	10.212	10.212	0.000	20077364	25.0	22.5	
2	11.609	11.609	0.000	21554917	25.0	23.1	
						RPD = 2.38	
27 Methoxychlor							
1	10.802	10.802	0.000	9188118	25.0	20.1	
2	12.556	12.556	0.000	9559063	25.0	19.5	
						RPD = 2.58	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.936	10.936	0.000	25457486	25.0	25.6	
2	12.031	12.031	0.000	26294877	25.0	24.8	
						RPD = 2.89	
29 Endrin ketone							
1	11.336	11.336	0.000	30603151	25.0	25.0	
2	12.774	12.774	0.000	30893633	25.0	25.2	
						RPD = 0.46	
$ 30 DCB Decachlorobiphenyl							
1	12.943	12.943	0.000	21605232	25.0	23.1	
2	14.492	14.492	0.000	23553800	25.0	23.1	
						RPD = 0.29	

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

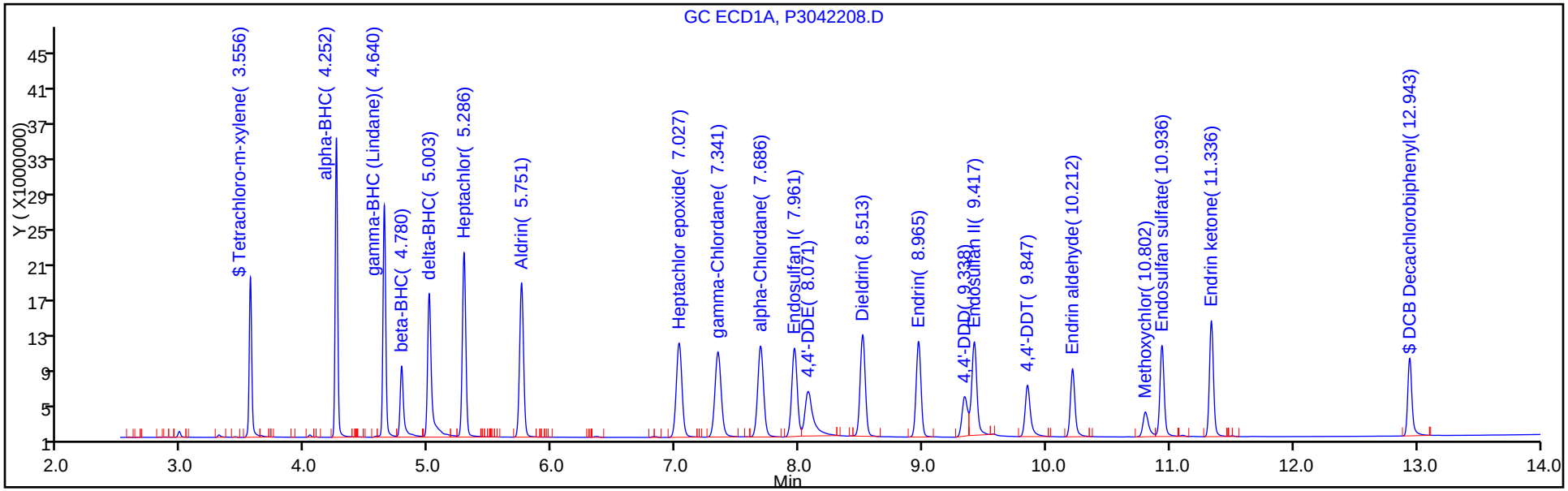
Report Date: 23-Apr-2015 07:42:59 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

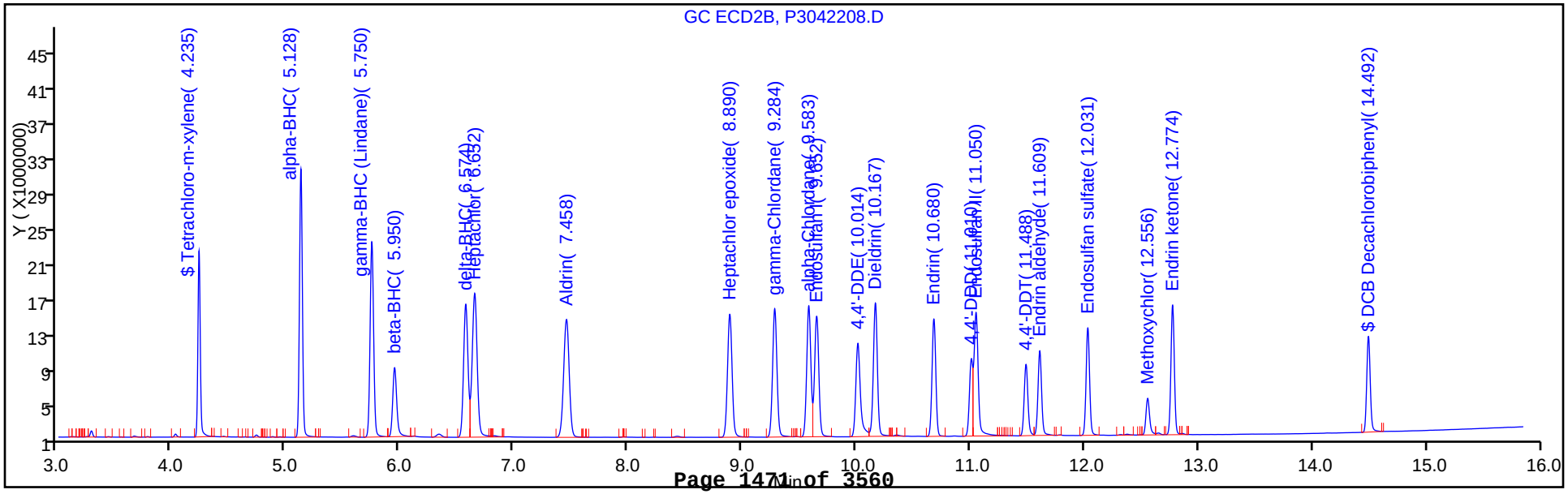
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042208.D

Injection Date:	22-Apr-2015 17:19:18	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV AB3			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/16 Calibration Date: 04/22/2015 20:29

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042216.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1731837	2004636		28.9	25.0	15.8	20.0
gamma-BHC (Lindane)	Ave	1543740	1766817		28.6	25.0	14.5	20.0
beta-BHC	Ave	629842	717713		28.5	25.0	14.0	20.0
delta-BHC	Ave	1502830	1668242		27.8	25.0	11.0	20.0
Heptachlor	Ave	1459223	1756264		30.1	25.0	20.4*	20.0
Aldrin	Ave	1461888	1660526		28.4	25.0	13.6	20.0
Heptachlor epoxide	Ave	1303871	1500199		28.8	25.0	15.1	20.0
gamma-Chlordane	Ave	1350629	1506236		27.9	25.0	11.5	20.0
alpha-Chlordane	Ave	1337609	1496562		28.0	25.0	11.9	20.0
Endosulfan I	Ave	1227519	1392578		28.4	25.0	13.4	20.0
4,4'-DDE	Ave	1184677	1292192		27.3	25.0	9.1	20.0
Dieldrin	Ave	1307595	1497520		28.6	25.0	14.5	20.0
Endrin	Ave	1151386	1354419		29.4	25.0	17.6	20.0
4,4'-DDD	Ave	870416	927257		26.6	25.0	6.5	20.0
Endosulfan II	Ave	1156896	1393732		30.1	25.0	20.5*	20.0
4,4'-DDT	Ave	955198	954184		25.0	25.0	-0.1	20.0
Endrin aldehyde	Ave	890839	948870		26.6	25.0	6.5	20.0
Methoxychlor	Ave	458228	495660		27.0	25.0	8.2	20.0
Endosulfan sulfate	Ave	996194	1116898		28.0	25.0	12.1	20.0
Endrin ketone	Ave	1221980	1345974		27.5	25.0	10.1	20.0
Tetrachloro-m-xylene	Ave	983528	1122433		28.5	25.0	14.1	20.0
DCB Decachlorobiphenyl	Ave	936456	984067		26.3	25.0	5.1	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/16 Calibration Date: 04/22/2015 20:29

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042216.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	4.25	4.22	4.28
gamma-BHC (Lindane)	4.64	4.61	4.67
beta-BHC	4.78	4.75	4.81
delta-BHC	5.00	4.97	5.03
Heptachlor	5.28	5.25	5.31
Aldrin	5.75	5.72	5.78
Heptachlor epoxide	7.03	7.00	7.06
gamma-Chlordane	7.34	7.31	7.37
alpha-Chlordane	7.68	7.65	7.71
Endosulfan I	7.96	7.93	7.99
4,4'-DDE	8.07	8.04	8.10
Dieldrin	8.51	8.48	8.54
Endrin	8.97	8.94	9.00
4,4'-DDD	9.33	9.30	9.36
Endosulfan II	9.42	9.39	9.45
4,4'-DDT	9.84	9.81	9.87
Endrin aldehyde	10.21	10.18	10.24
Methoxychlor	10.80	10.77	10.83
Endosulfan sulfate	10.94	10.91	10.97
Endrin ketone	11.34	11.31	11.37
Tetrachloro-m-xylene	3.56	3.53	3.59
DCB Decachlorobiphenyl	12.94	12.91	12.97

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042216.D
Lims ID: CCV AB3
Client ID:
Sample Type: CCV
Inject. Date: 22-Apr-2015 20:29:11 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-016
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:43 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555	3.555	0.000	28060814	25.0	28.5	
2	4.234	4.234	0.000	31917060	25.0	28.3	
						RPD = 0.74	
4 alpha-BHC							
1	4.251	4.251	0.000	50115902	25.0	28.9	
2	5.128	5.128	0.000	56779915	25.0	29.0	
						RPD = 0.23	
5 gamma-BHC (Lindane)							
1	4.639	4.639	0.000	44170417	25.0	28.6	
2	5.751	5.751	0.000	50776203	25.0	28.7	
						RPD = 0.29	
6 beta-BHC							
1	4.779	4.779	0.000	17942813	25.0	28.5	
2	5.950	5.950	0.000	21439228	25.0	27.9	
						RPD = 2.08	
7 delta-BHC							
1	5.001	5.001	0.000	41706052	25.0	27.8	
2	6.574	6.574	0.000	47681767	25.0	26.9	
						RPD = 3.21	
9 Heptachlor							
1	5.284	5.284	0.000	43906593	25.0	30.1	
2	6.653	6.653	0.000	52337996	25.0	31.0	
						RPD = 2.85	
10 Aldrin							
1	5.750	5.750	0.000	41513138	25.0	28.4	
2	7.457	7.457	0.000	47652082	25.0	28.5	
						RPD = 0.35	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.025	7.025	0.000	37504965	25.0	28.8	
2	8.889	8.889	0.000	41479314	25.0	28.9	
						RPD = 0.46	
13 gamma-Chlordane							
1	7.339	7.339	0.000	37655904	25.0	27.9	
2	9.283	9.283	0.000	41146915	25.0	28.0	
						RPD = 0.32	
14 alpha-Chlordane							
1	7.684	7.684	0.000	37414040	25.0	28.0	
2	9.583	9.583	0.000	39808197	25.0	28.0	
						RPD = 0.20	
15 Endosulfan I							
1	7.958	7.958	0.000	34814454	25.0	28.4	
2	9.652	9.652	0.000	37910250	25.0	28.7	
						RPD = 1.13	
16 4,4'-DDE							
1	8.065	8.065	0.000	32304789	25.0	27.3	
2	10.012	10.012	0.000	36477489	25.0	27.6	
						RPD = 1.30	
17 Dieldrin							
1	8.513	8.513	0.000	37437995	25.0	28.6	
2	10.167	10.167	0.000	39300656	25.0	28.7	
						RPD = 0.33	
18 Endrin							
1	8.965	8.965	0.000	33860471	25.0	29.4	
2	10.681	10.681	0.000	33874167	25.0	28.1	
						RPD = 4.56	
20 4,4'-DDD							
1	9.332	9.332	0.000	23181427	25.0	26.6	
2	11.005	11.005	0.000	25944854	25.0	26.5	
						RPD = 0.46	
21 Endosulfan II							
1	9.415	9.415	0.000	34843296	25.0	30.1	
2	11.050	11.050	0.000	36064803	25.0	30.8	
						RPD = 2.37	
23 4,4'-DDT							
1	9.844	9.844	0.000	23854610	25.0	25.0	
2	11.487	11.487	0.000	23585381	25.0	23.6	
						RPD = 5.52	
25 Endrin aldehyde							
1	10.210	10.210	0.000	23721743	25.0	26.6	
2	11.608	11.608	0.000	24463611	25.0	26.2	
						RPD = 1.64	
27 Methoxychlor							
1	10.795	10.795	0.000	12391488	25.0	27.0	
2	12.554	12.554	0.000	11822644	25.0	24.2	
						RPD = 11.23	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.935	10.935	0.000	27922452	25.0	28.0	
2	12.030	12.030	0.000	29097011	25.0	27.5	
						RPD = 2.01	
29 Endrin ketone							
1	11.336	11.336	0.000	33649359	25.0	27.5	
2	12.773	12.773	0.000	33508738	25.0	27.3	
						RPD = 0.90	
$ 30 DCB Decachlorobiphenyl							
1	12.940	12.940	0.000	24601674	25.0	26.3	
2	14.492	14.492	0.000	26492036	25.0	26.0	
						RPD = 0.94	

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

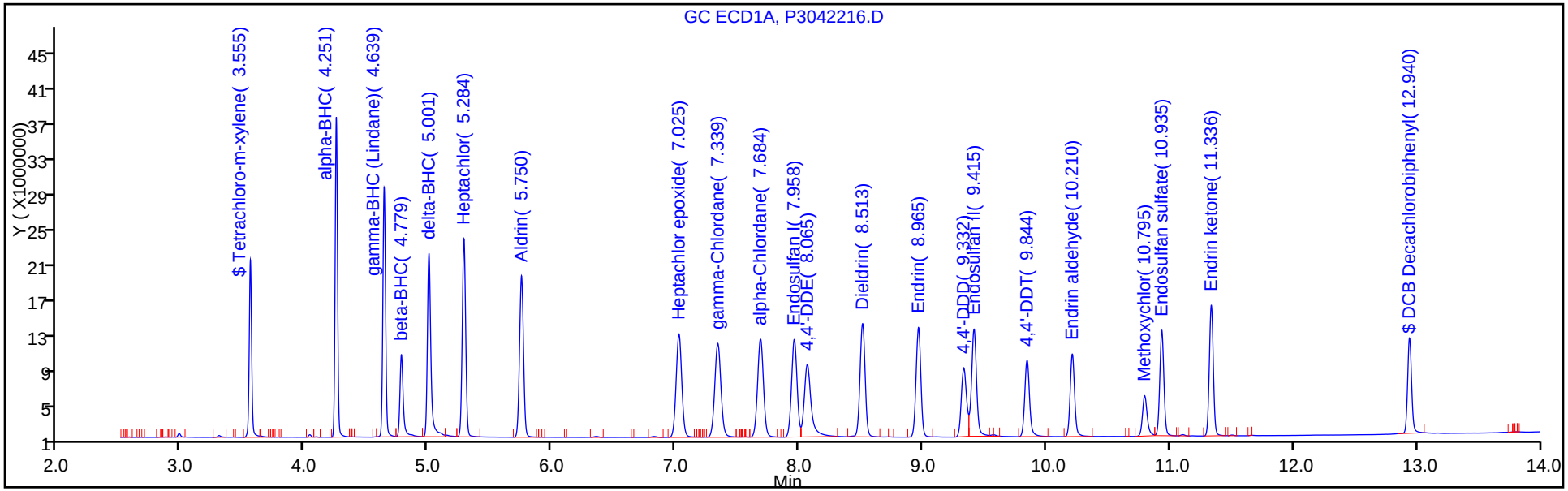
Report Date: 23-Apr-2015 07:42:43 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

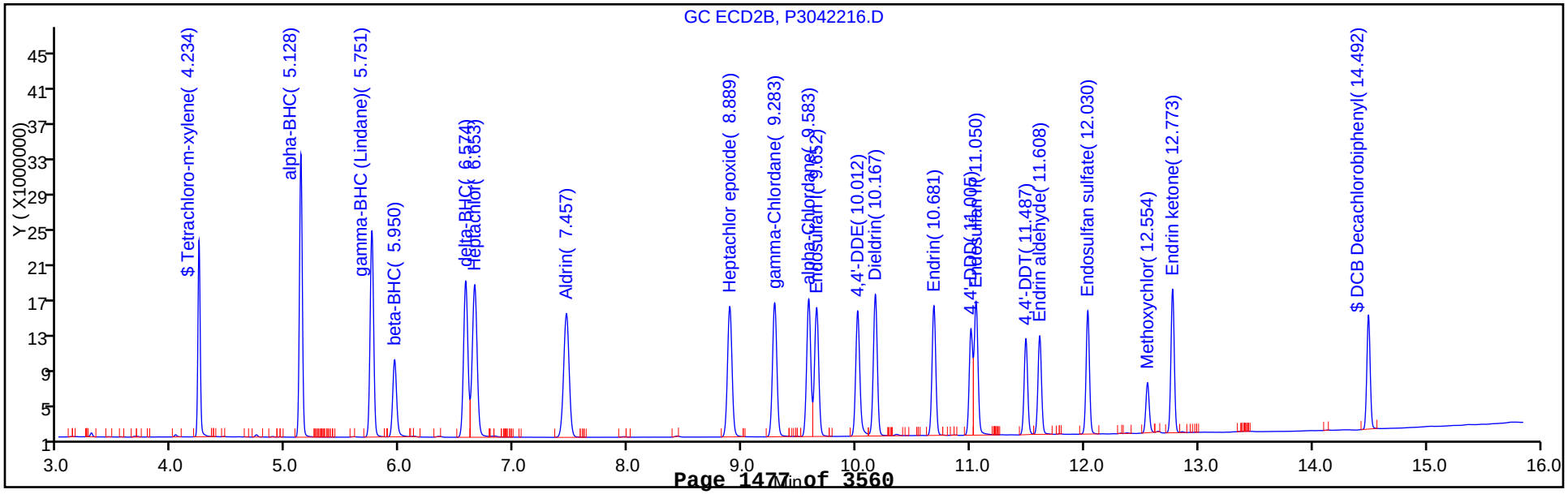
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042216.D

Injection Date:	22-Apr-2015 20:29:11	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV AB3			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/16 Calibration Date: 04/22/2015 20:29

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042216.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1957541	2271197		29.0	25.0	16.0	20.0
gamma-BHC (Lindane)	Ave	1769514	2031048		28.7	25.0	14.8	20.0
beta-BHC	Ave	768367	857569		27.9	25.0	11.6	20.0
delta-BHC	Ave	1774158	1907271		26.9	25.0	7.5	20.0
Heptachlor	Ave	1690527	2093520		31.0	25.0	23.8*	20.0
Aldrin	Ave	1672196	1906083		28.5	25.0	14.0	20.0
Heptachlor epoxide	Ave	1435426	1659173		28.9	25.0	15.6	20.0
gamma-Chlordane	Ave	1471152	1645877		28.0	25.0	11.9	20.0
alpha-Chlordane	Ave	1420369	1592328		28.0	25.0	12.1	20.0
Endosulfan I	Ave	1321597	1516410		28.7	25.0	14.7	20.0
4,4'-DDE	Ave	1320422	1459100		27.6	25.0	10.5	20.0
Dieldrin	Ave	1368089	1572026		28.7	25.0	14.9	20.0
Endrin	Ave	1205577	1354967		28.1	25.0	12.4	20.0
4,4'-DDD	Ave	978644	1037794		26.5	25.0	6.0	20.0
Endosulfan II	Ave	1169425	1442592		30.8	25.0	23.4*	20.0
4,4'-DDT	Ave	997996	943415		23.6	25.0	-5.5	20.0
Endrin aldehyde	Ave	933862	978544		26.2	25.0	4.8	20.0
Endosulfan sulfate	Ave	1059131	1163880		27.5	25.0	9.9	20.0
Methoxychlor	Ave	489196	472906		24.2	25.0	-3.3	20.0
Endrin ketone	Ave	1227876	1340350		27.3	25.0	9.2	20.0
Tetrachloro-m-xylene	Ave	1127022	1276682		28.3	25.0	13.3	20.0
DCB Decachlorobiphenyl	Ave	1017987	1059681		26.0	25.0	4.1	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/16 Calibration Date: 04/22/2015 20:29

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042216.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	5.13	5.10	5.16
gamma-BHC (Lindane)	5.75	5.72	5.78
beta-BHC	5.95	5.92	5.98
delta-BHC	6.57	6.54	6.60
Heptachlor	6.65	6.62	6.68
Aldrin	7.46	7.43	7.49
Heptachlor epoxide	8.89	8.86	8.92
gamma-Chlordane	9.28	9.25	9.31
alpha-Chlordane	9.58	9.55	9.61
Endosulfan I	9.65	9.62	9.68
4,4'-DDE	10.01	9.98	10.04
Dieldrin	10.17	10.14	10.20
Endrin	10.68	10.65	10.71
4,4'-DDD	11.01	10.98	11.04
Endosulfan II	11.05	11.02	11.08
4,4'-DDT	11.49	11.46	11.52
Endrin aldehyde	11.61	11.58	11.64
Endosulfan sulfate	12.03	12.00	12.06
Methoxychlor	12.55	12.52	12.58
Endrin ketone	12.77	12.74	12.80
Tetrachloro-m-xylene	4.23	4.20	4.26
DCB Decachlorobiphenyl	14.49	14.46	14.52

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042216.D
Lims ID: CCV AB3
Client ID:
Sample Type: CCV
Inject. Date: 22-Apr-2015 20:29:11 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-016
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:43 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555	3.555	0.000	28060814	25.0	28.5	
2	4.234	4.234	0.000	31917060	25.0	28.3	
						RPD = 0.74	
4 alpha-BHC							
1	4.251	4.251	0.000	50115902	25.0	28.9	
2	5.128	5.128	0.000	56779915	25.0	29.0	
						RPD = 0.23	
5 gamma-BHC (Lindane)							
1	4.639	4.639	0.000	44170417	25.0	28.6	
2	5.751	5.751	0.000	50776203	25.0	28.7	
						RPD = 0.29	
6 beta-BHC							
1	4.779	4.779	0.000	17942813	25.0	28.5	
2	5.950	5.950	0.000	21439228	25.0	27.9	
						RPD = 2.08	
7 delta-BHC							
1	5.001	5.001	0.000	41706052	25.0	27.8	
2	6.574	6.574	0.000	47681767	25.0	26.9	
						RPD = 3.21	
9 Heptachlor							
1	5.284	5.284	0.000	43906593	25.0	30.1	
2	6.653	6.653	0.000	52337996	25.0	31.0	
						RPD = 2.85	
10 Aldrin							
1	5.750	5.750	0.000	41513138	25.0	28.4	
2	7.457	7.457	0.000	47652082	25.0	28.5	
						RPD = 0.35	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.025	7.025	0.000	37504965	25.0	28.8	
2	8.889	8.889	0.000	41479314	25.0	28.9	
						RPD = 0.46	
13 gamma-Chlordane							
1	7.339	7.339	0.000	37655904	25.0	27.9	
2	9.283	9.283	0.000	41146915	25.0	28.0	
						RPD = 0.32	
14 alpha-Chlordane							
1	7.684	7.684	0.000	37414040	25.0	28.0	
2	9.583	9.583	0.000	39808197	25.0	28.0	
						RPD = 0.20	
15 Endosulfan I							
1	7.958	7.958	0.000	34814454	25.0	28.4	
2	9.652	9.652	0.000	37910250	25.0	28.7	
						RPD = 1.13	
16 4,4'-DDE							
1	8.065	8.065	0.000	32304789	25.0	27.3	
2	10.012	10.012	0.000	36477489	25.0	27.6	
						RPD = 1.30	
17 Dieldrin							
1	8.513	8.513	0.000	37437995	25.0	28.6	
2	10.167	10.167	0.000	39300656	25.0	28.7	
						RPD = 0.33	
18 Endrin							
1	8.965	8.965	0.000	33860471	25.0	29.4	
2	10.681	10.681	0.000	33874167	25.0	28.1	
						RPD = 4.56	
20 4,4'-DDD							
1	9.332	9.332	0.000	23181427	25.0	26.6	
2	11.005	11.005	0.000	25944854	25.0	26.5	
						RPD = 0.46	
21 Endosulfan II							
1	9.415	9.415	0.000	34843296	25.0	30.1	
2	11.050	11.050	0.000	36064803	25.0	30.8	
						RPD = 2.37	
23 4,4'-DDT							
1	9.844	9.844	0.000	23854610	25.0	25.0	
2	11.487	11.487	0.000	23585381	25.0	23.6	
						RPD = 5.52	
25 Endrin aldehyde							
1	10.210	10.210	0.000	23721743	25.0	26.6	
2	11.608	11.608	0.000	24463611	25.0	26.2	
						RPD = 1.64	
27 Methoxychlor							
1	10.795	10.795	0.000	12391488	25.0	27.0	
2	12.554	12.554	0.000	11822644	25.0	24.2	
						RPD = 11.23	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.935	10.935	0.000	27922452	25.0	28.0	
2	12.030	12.030	0.000	29097011	25.0	27.5	
						RPD = 2.01	
29 Endrin ketone							
1	11.336	11.336	0.000	33649359	25.0	27.5	
2	12.773	12.773	0.000	33508738	25.0	27.3	
						RPD = 0.90	
$ 30 DCB Decachlorobiphenyl							
1	12.940	12.940	0.000	24601674	25.0	26.3	
2	14.492	14.492	0.000	26492036	25.0	26.0	
						RPD = 0.94	

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

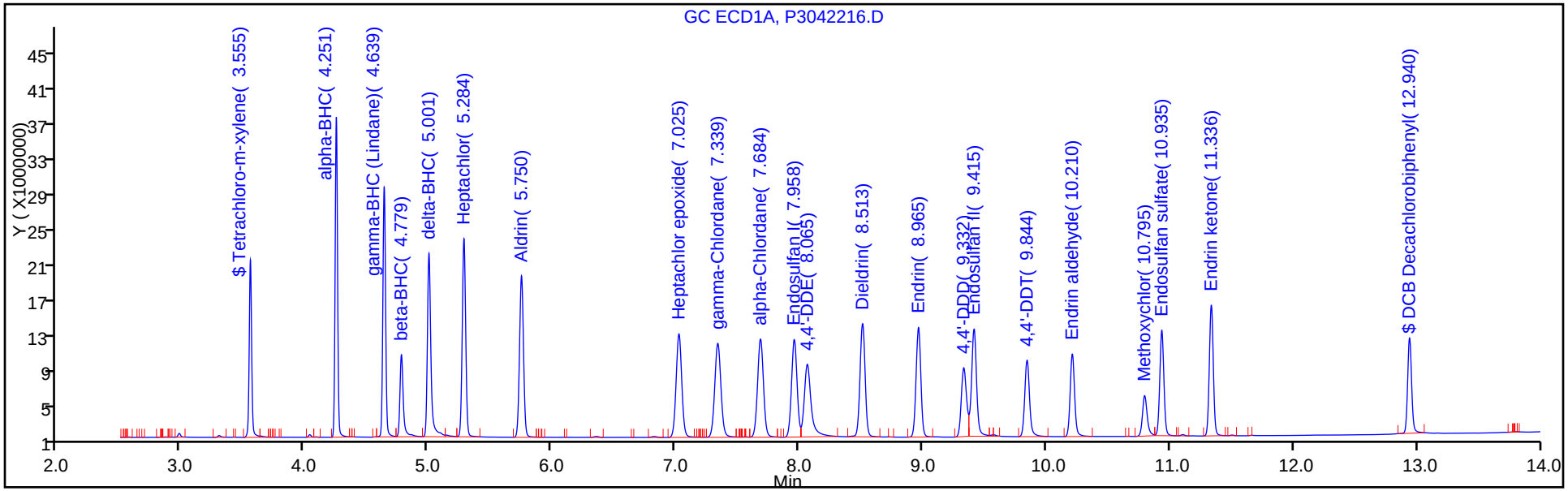
Report Date: 23-Apr-2015 07:42:43 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

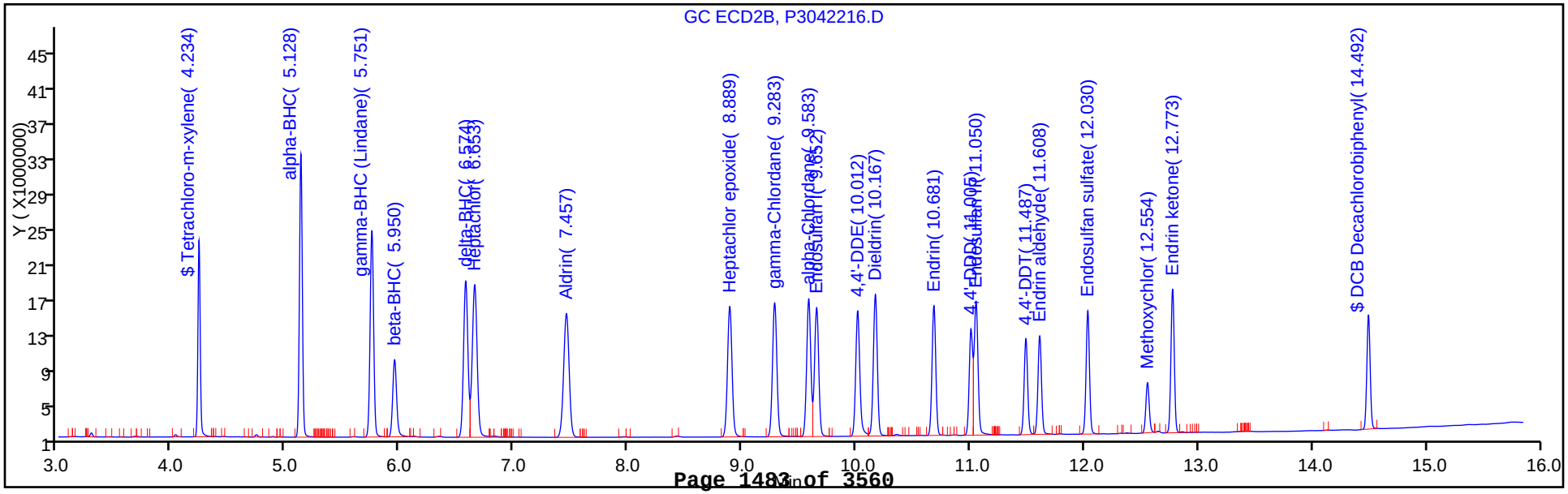
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042216.D

Injection Date:	22-Apr-2015 20:29:11	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV AB3			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/22 Calibration Date: 04/22/2015 22:50

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042222.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	37833	40351		1070	1000	6.7	20.0
Toxaphene Peak 2	Ave	36644	37992		1040	1000	3.7	20.0
Toxaphene Peak 3	Ave	23355	22267		953	1000	-4.7	20.0
Toxaphene Peak 4	Ave	33176	32583		982	1000	-1.8	20.0
Toxaphene Peak 5	Ave	32330	27543		852	1000	-14.8	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/22 Calibration Date: 04/22/2015 22:50

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042222.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	9.62	9.59	9.65
Toxaphene Peak 2	10.08	10.05	10.11
Toxaphene Peak 3	10.39	10.36	10.42
Toxaphene Peak 4	10.74	10.71	10.77
Toxaphene Peak 5	10.84	10.81	10.87

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042222.D
Lims ID: CCV TOX3
Client ID:
Sample Type: CCV
Inject. Date: 22-Apr-2015 22:50:58 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-022
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:51 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:39:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.622	9.622	0.000	40351483	1000.0	1066.6	M
1	10.083	10.083	0.000	37991953	1000.0	1036.8	M
1	10.393	10.393	0.000	22266827	1000.0	953.4	M
1	10.735	10.735	0.000	32583089	1000.0	982.1	M
1	10.842	10.842	0.000	27543414	1000.0	851.9	M
		Average of Peak Amounts =				978.2	
2	11.025	11.025	0.000	53895983	1000.0	1040.0	M
2	11.195	11.195	0.000	53219523	1000.0	1044.2	M
2	11.619	11.619	0.000	35990289	1000.0	1009.8	M
2	12.354	12.354	0.000	45052494	1000.0	987.4	M
2	12.444	12.444	0.000	13869733	1000.0	890.8	M
		Average of Peak Amounts =				994.4	
						RPD = 1.65	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 100.00 Units: uL

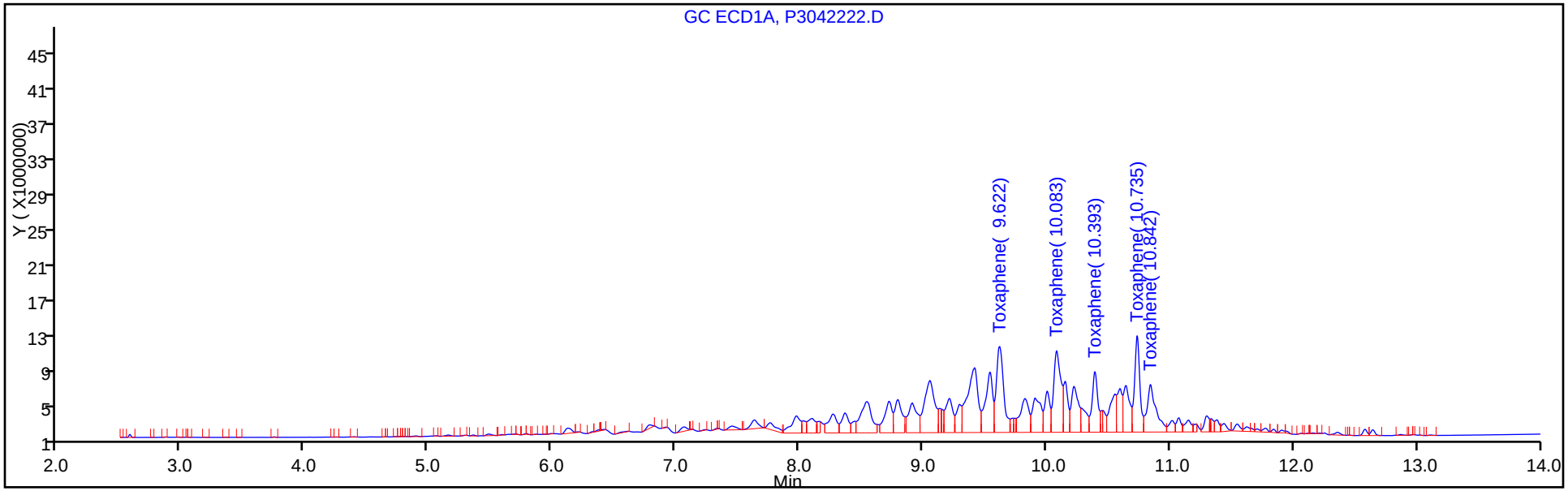
Report Date: 23-Apr-2015 07:42:51 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

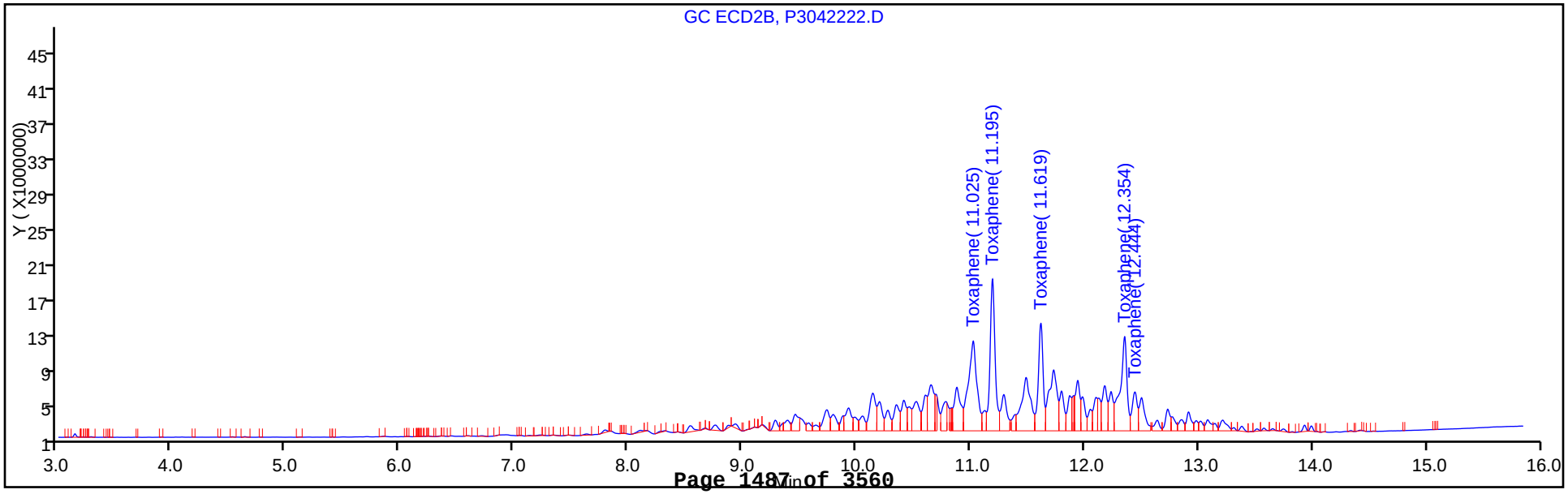
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042222.D

Injection Date:	22-Apr-2015 22:50:58	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV TOX3			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 23-Apr-2015 07:42:51 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042222.D

Injection Date: 22-Apr-2015 22:50:58 Instrument ID: A2HP3

Lims ID: CCV TOX3

Client ID:

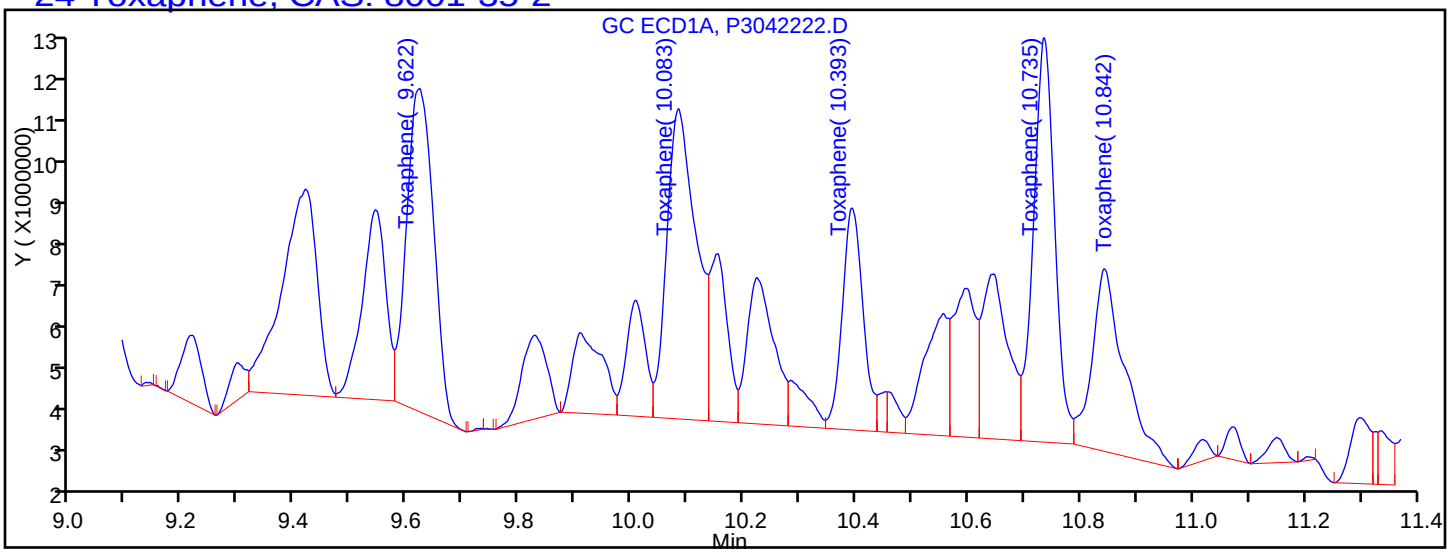
Operator ID: 430893 ALS Bottle#: 22 Worklist Smp#: 22

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

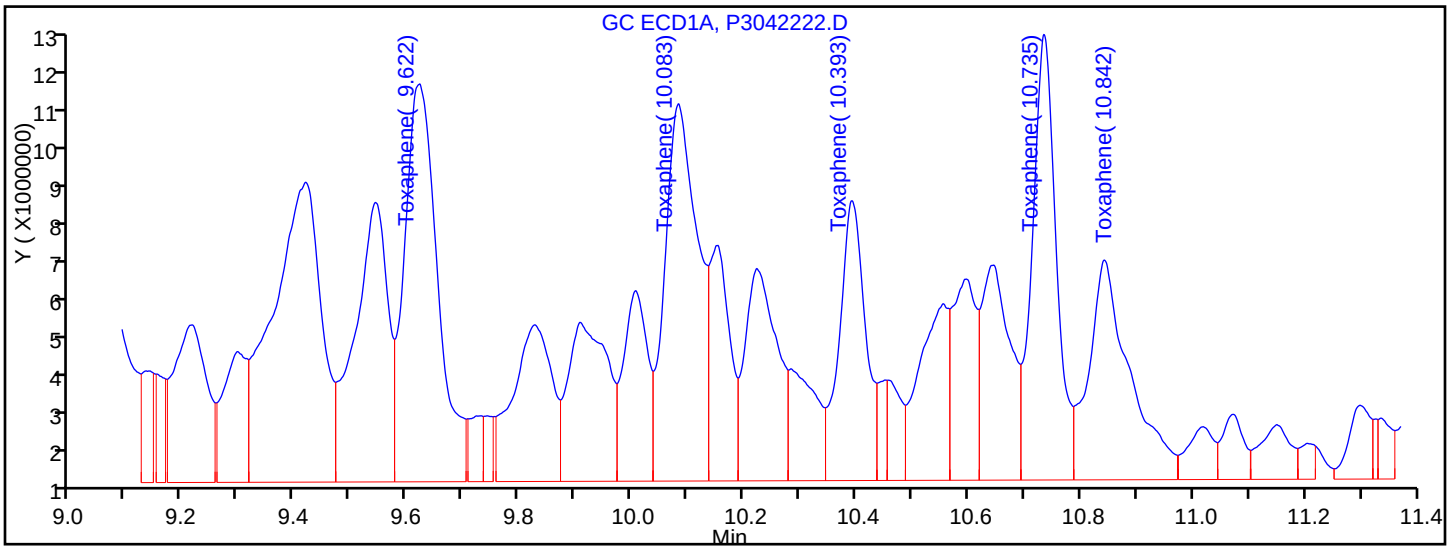
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.622	Response = 25800777	M
RT = 10.083	Response = 27160984	M
RT = 10.393	Response = 13742759	M
RT = 10.735	Response = 25585487	M
RT = 10.842	Response = 17607177	M



Manual Integration Results

RT = 9.622	Response = 40351483	M
RT = 10.083	Response = 37991953	M
RT = 10.393	Response = 22266827	M
RT = 10.735	Response = 32583089	M
RT = 10.842	Response = 27543414	M

Reviewer: matthewsb, 23-Apr-2015 07:39:49

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/22 Calibration Date: 04/22/2015 22:50

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042222.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	51823	53896		1040	1000	4.0	20.0
Toxaphene Peak 2	Ave	50965	53220		1040	1000	4.4	20.0
Toxaphene Peak 3	Ave	35641	35990		1010	1000	1.0	20.0
Toxaphene Peak 4	Ave	45629	45052		987	1000	-1.3	20.0
Toxaphene Peak 5	Ave	15570	13870		891	1000	-10.9	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/22 Calibration Date: 04/22/2015 22:50

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 15:37

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 17:11

Lab File ID: P3042222.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	11.03	11.00	11.06
Toxaphene Peak 2	11.20	11.17	11.23
Toxaphene Peak 3	11.62	11.59	11.65
Toxaphene Peak 4	12.35	12.32	12.38
Toxaphene Peak 5	12.44	12.41	12.47

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042222.D
Lims ID: CCV TOX3
Client ID:
Sample Type: CCV
Inject. Date: 22-Apr-2015 22:50:58 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-022
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub5

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:51 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:39:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Toxaphene							M
1	9.622	9.622	0.000	40351483	1000.0	1066.6	M
1	10.083	10.083	0.000	37991953	1000.0	1036.8	M
1	10.393	10.393	0.000	22266827	1000.0	953.4	M
1	10.735	10.735	0.000	32583089	1000.0	982.1	M
1	10.842	10.842	0.000	27543414	1000.0	851.9	M
		Average of Peak Amounts =				978.2	
2	11.025	11.025	0.000	53895983	1000.0	1040.0	M
2	11.195	11.195	0.000	53219523	1000.0	1044.2	M
2	11.619	11.619	0.000	35990289	1000.0	1009.8	M
2	12.354	12.354	0.000	45052494	1000.0	987.4	M
2	12.444	12.444	0.000	13869733	1000.0	890.8	M
		Average of Peak Amounts =				994.4	
						RPD = 1.65	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 100.00 Units: uL

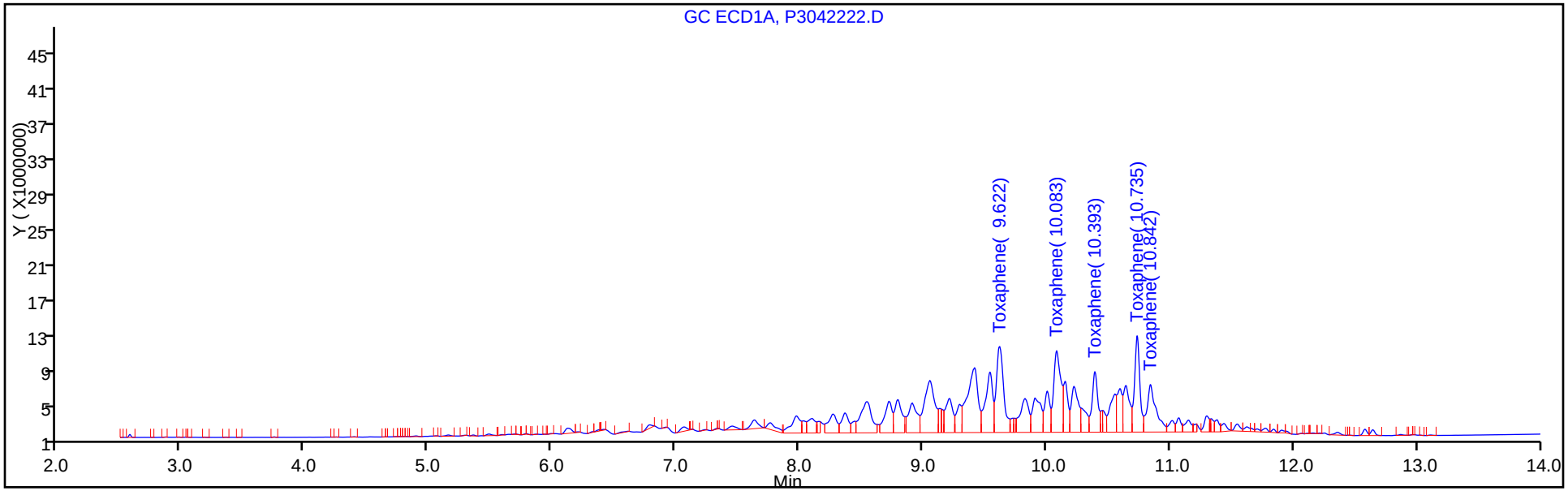
Report Date: 23-Apr-2015 07:42:51 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

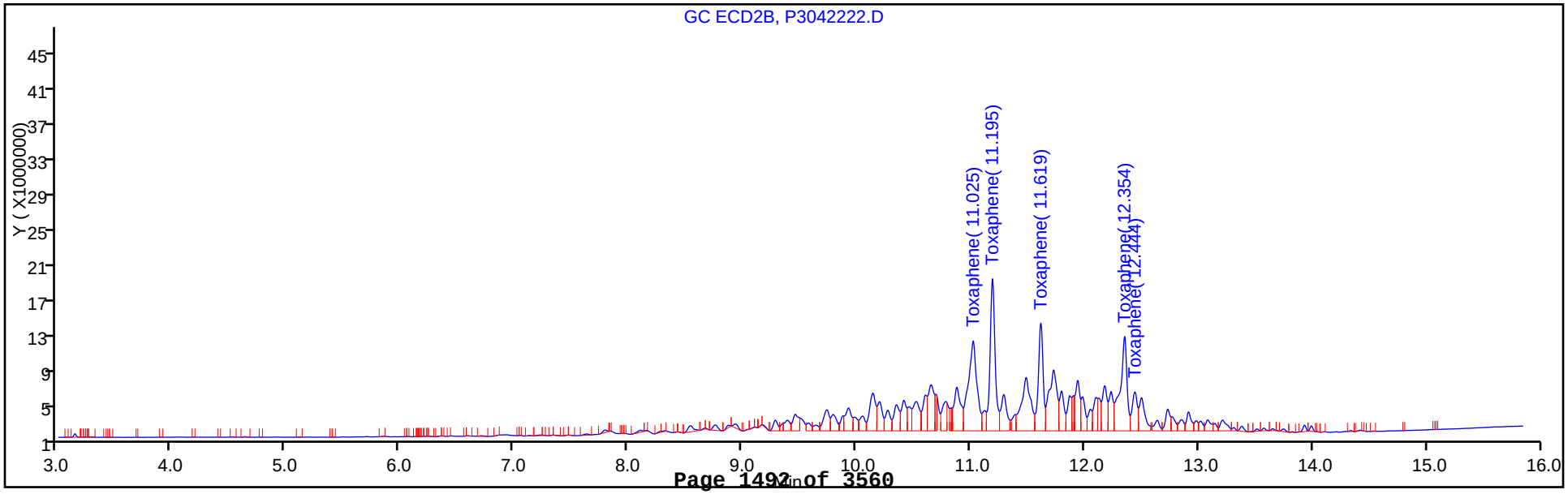
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042222.D

Injection Date:	22-Apr-2015 22:50:58	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV TOX3			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 23-Apr-2015 07:42:52 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042222.D

Injection Date: 22-Apr-2015 22:50:58 Instrument ID: A2HP3

Lims ID: CCV TOX3

Client ID:

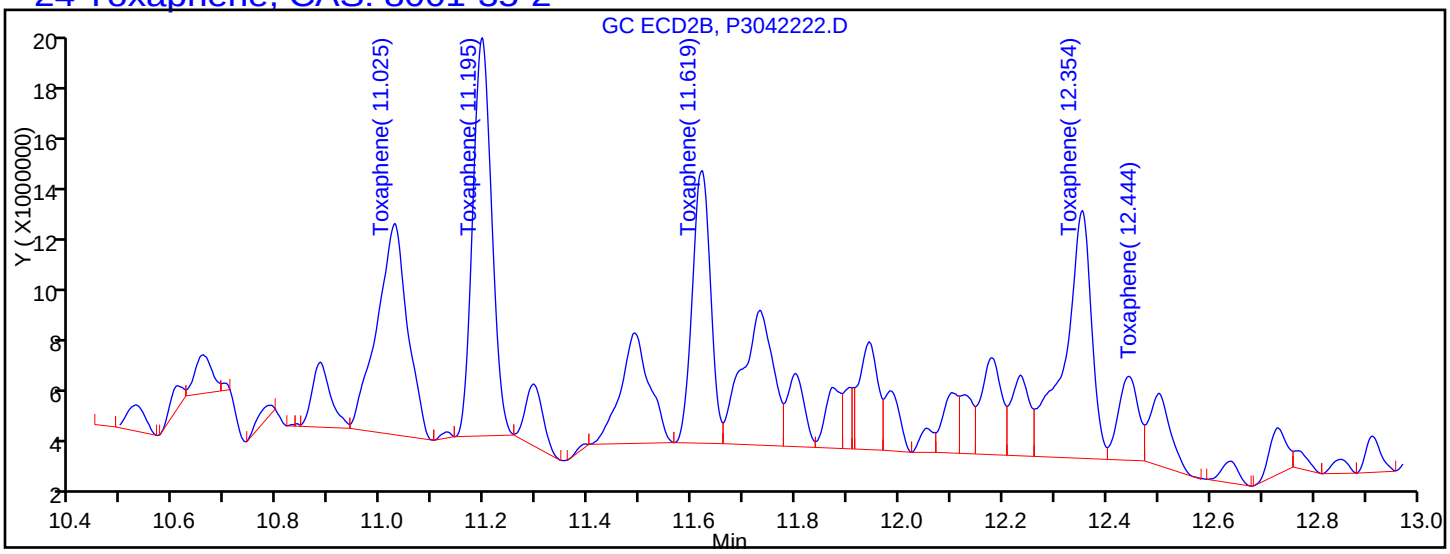
Operator ID: 430893 ALS Bottle#: 22 Worklist Smp#: 22

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

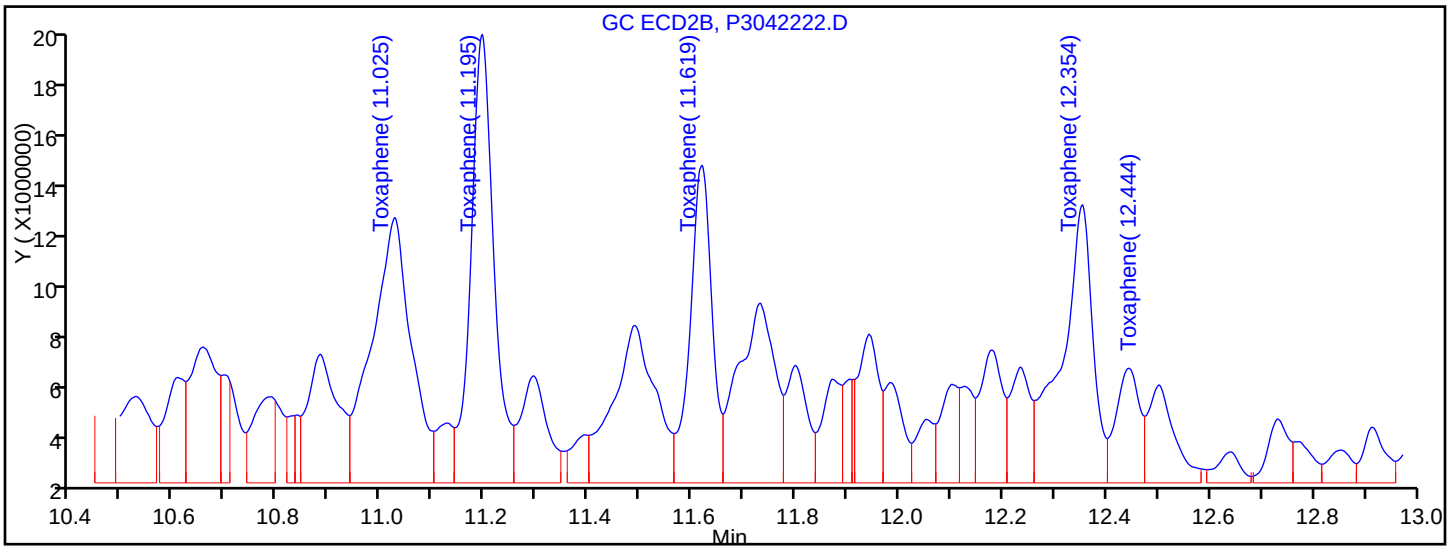
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 11.025	Response = 32547908	M
RT = 11.195	Response = 38437222	M
RT = 11.619	Response = 25339340	M
RT = 12.354	Response = 33913652	M
RT = 12.444	Response = 8602405	M



Manual Integration Results

RT = 11.025	Response = 53895983	M
RT = 11.195	Response = 53219523	M
RT = 11.619	Response = 35990289	M
RT = 12.354	Response = 45052494	M
RT = 12.444	Response = 13869733	M

Reviewer: matthewsb, 23-Apr-2015 07:39:49

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/24 Calibration Date: 04/22/2015 23:37

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042224.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1731837	2054230		29.7	25.0	18.6	20.0
gamma-BHC (Lindane)	Ave	1543740	1811129		29.3	25.0	17.3	20.0
beta-BHC	Ave	629842	727399		28.9	25.0	15.5	20.0
delta-BHC	Ave	1502830	1685359		28.0	25.0	12.1	20.0
Heptachlor	Ave	1459223	1798432		30.8	25.0	23.2*	20.0
Aldrin	Ave	1461888	1707430		29.2	25.0	16.8	20.0
Heptachlor epoxide	Ave	1303871	1528777		29.3	25.0	17.2	20.0
gamma-Chlordane	Ave	1350629	1532189		28.4	25.0	13.4	20.0
alpha-Chlordane	Ave	1337609	1530044		28.6	25.0	14.4	20.0
Endosulfan I	Ave	1227519	1427895		29.1	25.0	16.3	20.0
4,4'-DDE	Ave	1184677	1296062		27.4	25.0	9.4	20.0
Dieldrin	Ave	1307595	1555729		29.7	25.0	19.0	20.0
Endrin	Ave	1151386	1383694		30.0	25.0	20.2*	20.0
4,4'-DDD	Ave	870416	838344		24.1	25.0	-3.7	20.0
Endosulfan II	Ave	1156896	1501152		32.4	25.0	29.8*	20.0
4,4'-DDT	Ave	955198	935773		24.5	25.0	-2.0	20.0
Endrin aldehyde	Ave	890839	965497		27.1	25.0	8.4	20.0
Methoxychlor	Ave	458228	495124		27.0	25.0	8.1	20.0
Endosulfan sulfate	Ave	996194	1182126		29.7	25.0	18.7	20.0
Endrin ketone	Ave	1221980	1417907		29.0	25.0	16.0	20.0
Tetrachloro-m-xylene	Ave	983528	1144539		29.1	25.0	16.4	20.0
DCB Decachlorobiphenyl	Ave	936456	1036594		27.7	25.0	10.7	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/24 Calibration Date: 04/22/2015 23:37

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042224.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	4.25	4.22	4.28
gamma-BHC (Lindane)	4.64	4.61	4.67
beta-BHC	4.78	4.75	4.81
delta-BHC	5.00	4.97	5.03
Heptachlor	5.28	5.25	5.31
Aldrin	5.75	5.72	5.78
Heptachlor epoxide	7.02	6.99	7.05
gamma-Chlordane	7.34	7.31	7.37
alpha-Chlordane	7.69	7.66	7.72
Endosulfan I	7.96	7.93	7.99
4,4'-DDE	8.07	8.04	8.10
Dieldrin	8.51	8.48	8.54
Endrin	8.96	8.93	8.99
4,4'-DDD	9.33	9.30	9.36
Endosulfan II	9.41	9.38	9.44
4,4'-DDT	9.84	9.81	9.87
Endrin aldehyde	10.21	10.18	10.24
Methoxychlor	10.80	10.77	10.83
Endosulfan sulfate	10.93	10.90	10.96
Endrin ketone	11.33	11.30	11.36
Tetrachloro-m-xylene	3.56	3.53	3.59
DCB Decachlorobiphenyl	12.94	12.91	12.97

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042224.D
Lims ID: CCV AB3
Client ID:
Sample Type: CCV
Inject. Date: 22-Apr-2015 23:37:14 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-024
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:54 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:42:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555	3.555	0.000	28613487	25.0	29.1	
2	4.235	4.235	0.000	33337363	25.0	29.6	
						RPD = 1.66	
4 alpha-BHC							
1	4.251	4.251	0.000	51355739	25.0	29.7	
2	5.128	5.128	0.000	58910387	25.0	30.1	
						RPD = 1.47	
5 gamma-BHC (Lindane)							
1	4.638	4.638	0.000	45278222	25.0	29.3	
2	5.751	5.751	0.000	52901914	25.0	29.9	
						RPD = 1.91	
6 beta-BHC							
1	4.778	4.778	0.000	18184985	25.0	28.9	
2	5.951	5.951	0.000	22533467	25.0	29.3	
						RPD = 1.56	
7 delta-BHC							
1	5.001	5.001	0.000	42133972	25.0	28.0	
2	6.573	6.573	0.000	47953212	25.0	27.0	
						RPD = 3.66	
9 Heptachlor							
1	5.284	5.284	0.000	44960806	25.0	30.8	
2	6.652	6.652	0.000	55086927	25.0	32.6	
						RPD = 5.60	
10 Aldrin							
1	5.749	5.749	0.000	42685759	25.0	29.2	
2	7.459	7.459	0.000	49369107	25.0	29.5	
						RPD = 1.11	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.023	7.023	0.000	38219413	25.0	29.3	
2	8.890	8.890	0.000	43434864	25.0	30.3	
						RPD = 3.18	
13 gamma-Chlordane							
1	7.339	7.339	0.000	38304731	25.0	28.4	
2	9.286	9.286	0.000	42683612	25.0	29.0	
						RPD = 2.28	
14 alpha-Chlordane							
1	7.686	7.686	0.000	38251111	25.0	28.6	
2	9.583	9.583	0.000	41502901	25.0	29.2	
						RPD = 2.16	
15 Endosulfan I							
1	7.958	7.958	0.000	35697365	25.0	29.1	
2	9.653	9.653	0.000	40033954	25.0	30.3	
						RPD = 4.08	
16 4,4'-DDE							
1	8.065	8.065	0.000	32401560	25.0	27.4	
2	10.012	10.012	0.000	36819023	25.0	27.9	
						RPD = 1.93	
17 Dieldrin							
1	8.510	8.510	0.000	38893226	25.0	29.7	
2	10.166	10.166	0.000	41443552	25.0	30.3	
						RPD = 1.83	
18 Endrin							
1	8.963	8.963	0.000	34592343	25.0	30.0	
2	10.681	10.681	0.000	35444004	25.0	29.4	
						RPD = 2.17	
20 4,4'-DDD							
1	9.332	9.332	0.000	20958606	25.0	24.1	
2	11.006	11.006	0.000	23890615	25.0	24.4	
						RPD = 1.37	
21 Endosulfan II							
1	9.414	9.414	0.000	37528803	25.0	32.4	
2	11.050	11.050	0.000	40555249	25.0	34.7	
						RPD = 6.68	
23 4,4'-DDT							
1	9.843	9.843	0.000	23394329	25.0	24.5	
2	11.486	11.486	0.000	23990476	25.0	24.0	
						RPD = 1.87	
25 Endrin aldehyde							
1	10.209	10.209	0.000	24137415	25.0	27.1	
2	11.609	11.609	0.000	25558524	25.0	27.4	
						RPD = 1.00	
27 Methoxychlor							
1	10.797	10.797	0.000	12378105	25.0	27.0	
2	12.554	12.554	0.000	12468980	25.0	25.5	
						RPD = 5.81	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.934	10.934	0.000	29553151	25.0	29.7	
2	12.030	12.030	0.000	30705697	25.0	29.0	
						RPD = 2.30	
29 Endrin ketone							
1	11.334	11.334	0.000	35447684	25.0	29.0	
2	12.774	12.774	0.000	35854165	25.0	29.2	
						RPD = 0.66	
$ 30 DCB Decachlorobiphenyl							
1	12.941	12.941	0.000	25914853	25.0	27.7	
2	14.491	14.491	0.000	28130193	25.0	27.6	
						RPD = 0.15	

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

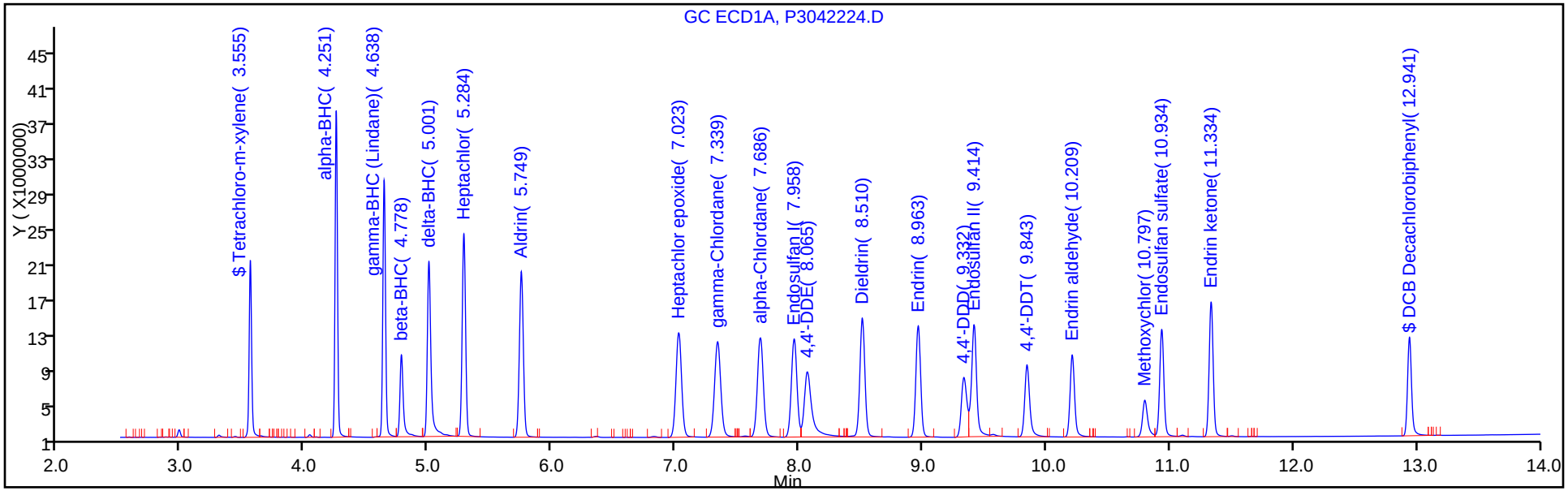
Report Date: 23-Apr-2015 07:42:54 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

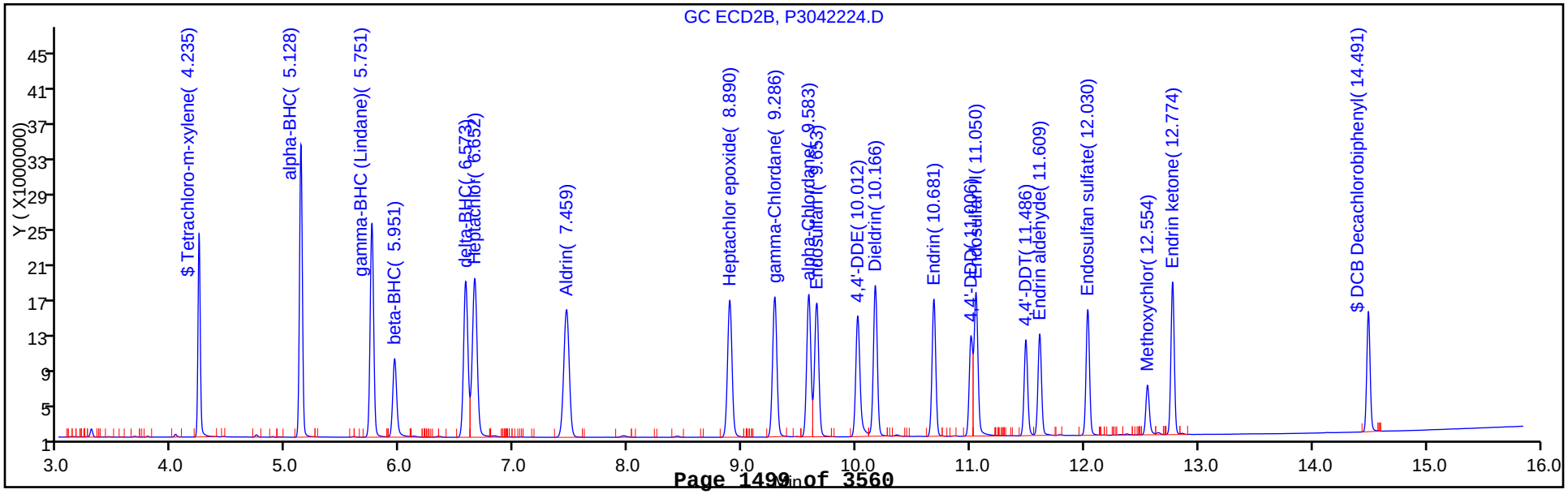
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042224.D

Injection Date:	22-Apr-2015 23:37:14	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV AB3			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/24 Calibration Date: 04/22/2015 23:37

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042224.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	1957541	2356415		30.1	25.0	20.4*	20.0
gamma-BHC (Lindane)	Ave	1769514	2116077		29.9	25.0	19.6	20.0
beta-BHC	Ave	768367	901339		29.3	25.0	17.3	20.0
delta-BHC	Ave	1774158	1918128		27.0	25.0	8.1	20.0
Heptachlor	Ave	1690527	2203477		32.6	25.0	30.3*	20.0
Aldrin	Ave	1672196	1974764		29.5	25.0	18.1	20.0
Heptachlor epoxide	Ave	1435426	1737395		30.3	25.0	21.0*	20.0
gamma-Chlordane	Ave	1471152	1707344		29.0	25.0	16.1	20.0
alpha-Chlordane	Ave	1420369	1660116		29.2	25.0	16.9	20.0
Endosulfan I	Ave	1321597	1601358		30.3	25.0	21.2*	20.0
4,4'-DDE	Ave	1320422	1472761		27.9	25.0	11.5	20.0
Dieldrin	Ave	1368089	1657742		30.3	25.0	21.2*	20.0
Endrin	Ave	1205577	1417760		29.4	25.0	17.6	20.0
4,4'-DDD	Ave	978644	955625		24.4	25.0	-2.4	20.0
Endosulfan II	Ave	1169425	1622210		34.7	25.0	38.7*	20.0
4,4'-DDT	Ave	997996	959619		24.0	25.0	-3.8	20.0
Endrin aldehyde	Ave	933862	1022341		27.4	25.0	9.5	20.0
Endosulfan sulfate	Ave	1059131	1228228		29.0	25.0	16.0	20.0
Methoxychlor	Ave	489196	498759		25.5	25.0	2.0	20.0
Endrin ketone	Ave	1227876	1434167		29.2	25.0	16.8	20.0
Tetrachloro-m-xylene	Ave	1127022	1333495		29.6	25.0	18.3	20.0
DCB Decachlorobiphenyl	Ave	1017987	1125208		27.6	25.0	10.5	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-177463/24 Calibration Date: 04/22/2015 23:37

Instrument ID: A2HP3 Calib Start Date: 03/31/2015 20:34

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/31/2015 22:29

Lab File ID: P3042224.D

Analyte	RT	RT WINDOW	
		FROM	TO
alpha-BHC	5.13	5.10	5.16
gamma-BHC (Lindane)	5.75	5.72	5.78
beta-BHC	5.95	5.92	5.98
delta-BHC	6.57	6.54	6.60
Heptachlor	6.65	6.62	6.68
Aldrin	7.46	7.43	7.49
Heptachlor epoxide	8.89	8.86	8.92
gamma-Chlordane	9.29	9.26	9.32
alpha-Chlordane	9.58	9.55	9.61
Endosulfan I	9.65	9.62	9.68
4,4'-DDE	10.01	9.98	10.04
Dieldrin	10.17	10.14	10.20
Endrin	10.68	10.65	10.71
4,4'-DDD	11.01	10.98	11.04
Endosulfan II	11.05	11.02	11.08
4,4'-DDT	11.49	11.46	11.52
Endrin aldehyde	11.61	11.58	11.64
Endosulfan sulfate	12.03	12.00	12.06
Methoxychlor	12.55	12.52	12.58
Endrin ketone	12.77	12.74	12.80
Tetrachloro-m-xylene	4.24	4.21	4.27
DCB Decachlorobiphenyl	14.49	14.46	14.52

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042224.D
Lims ID: CCV AB3
Client ID:
Sample Type: CCV
Inject. Date: 22-Apr-2015 23:37:14 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-024
Operator ID: 430893 Instrument ID: A2HP3
Sublist: chrom-PEST3*sub7

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:54 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:42:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555	3.555	0.000	28613487	25.0	29.1	
2	4.235	4.235	0.000	33337363	25.0	29.6	
						RPD = 1.66	
4 alpha-BHC							
1	4.251	4.251	0.000	51355739	25.0	29.7	
2	5.128	5.128	0.000	58910387	25.0	30.1	
						RPD = 1.47	
5 gamma-BHC (Lindane)							
1	4.638	4.638	0.000	45278222	25.0	29.3	
2	5.751	5.751	0.000	52901914	25.0	29.9	
						RPD = 1.91	
6 beta-BHC							
1	4.778	4.778	0.000	18184985	25.0	28.9	
2	5.951	5.951	0.000	22533467	25.0	29.3	
						RPD = 1.56	
7 delta-BHC							
1	5.001	5.001	0.000	42133972	25.0	28.0	
2	6.573	6.573	0.000	47953212	25.0	27.0	
						RPD = 3.66	
9 Heptachlor							
1	5.284	5.284	0.000	44960806	25.0	30.8	
2	6.652	6.652	0.000	55086927	25.0	32.6	
						RPD = 5.60	
10 Aldrin							
1	5.749	5.749	0.000	42685759	25.0	29.2	
2	7.459	7.459	0.000	49369107	25.0	29.5	
						RPD = 1.11	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.023	7.023	0.000	38219413	25.0	29.3	
2	8.890	8.890	0.000	43434864	25.0	30.3	
						RPD = 3.18	
13 gamma-Chlordane							
1	7.339	7.339	0.000	38304731	25.0	28.4	
2	9.286	9.286	0.000	42683612	25.0	29.0	
						RPD = 2.28	
14 alpha-Chlordane							
1	7.686	7.686	0.000	38251111	25.0	28.6	
2	9.583	9.583	0.000	41502901	25.0	29.2	
						RPD = 2.16	
15 Endosulfan I							
1	7.958	7.958	0.000	35697365	25.0	29.1	
2	9.653	9.653	0.000	40033954	25.0	30.3	
						RPD = 4.08	
16 4,4'-DDE							
1	8.065	8.065	0.000	32401560	25.0	27.4	
2	10.012	10.012	0.000	36819023	25.0	27.9	
						RPD = 1.93	
17 Dieldrin							
1	8.510	8.510	0.000	38893226	25.0	29.7	
2	10.166	10.166	0.000	41443552	25.0	30.3	
						RPD = 1.83	
18 Endrin							
1	8.963	8.963	0.000	34592343	25.0	30.0	
2	10.681	10.681	0.000	35444004	25.0	29.4	
						RPD = 2.17	
20 4,4'-DDD							
1	9.332	9.332	0.000	20958606	25.0	24.1	
2	11.006	11.006	0.000	23890615	25.0	24.4	
						RPD = 1.37	
21 Endosulfan II							
1	9.414	9.414	0.000	37528803	25.0	32.4	
2	11.050	11.050	0.000	40555249	25.0	34.7	
						RPD = 6.68	
23 4,4'-DDT							
1	9.843	9.843	0.000	23394329	25.0	24.5	
2	11.486	11.486	0.000	23990476	25.0	24.0	
						RPD = 1.87	
25 Endrin aldehyde							
1	10.209	10.209	0.000	24137415	25.0	27.1	
2	11.609	11.609	0.000	25558524	25.0	27.4	
						RPD = 1.00	
27 Methoxychlor							
1	10.797	10.797	0.000	12378105	25.0	27.0	
2	12.554	12.554	0.000	12468980	25.0	25.5	
						RPD = 5.81	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.934	10.934	0.000	29553151	25.0	29.7	
2	12.030	12.030	0.000	30705697	25.0	29.0	
						RPD = 2.30	
29 Endrin ketone							
1	11.334	11.334	0.000	35447684	25.0	29.0	
2	12.774	12.774	0.000	35854165	25.0	29.2	
						RPD = 0.66	
$ 30 DCB Decachlorobiphenyl							
1	12.941	12.941	0.000	25914853	25.0	27.7	
2	14.491	14.491	0.000	28130193	25.0	27.6	
						RPD = 0.15	

Reagents:

SGPestAB3_00015 Amount Added: 1.00 Units: mL

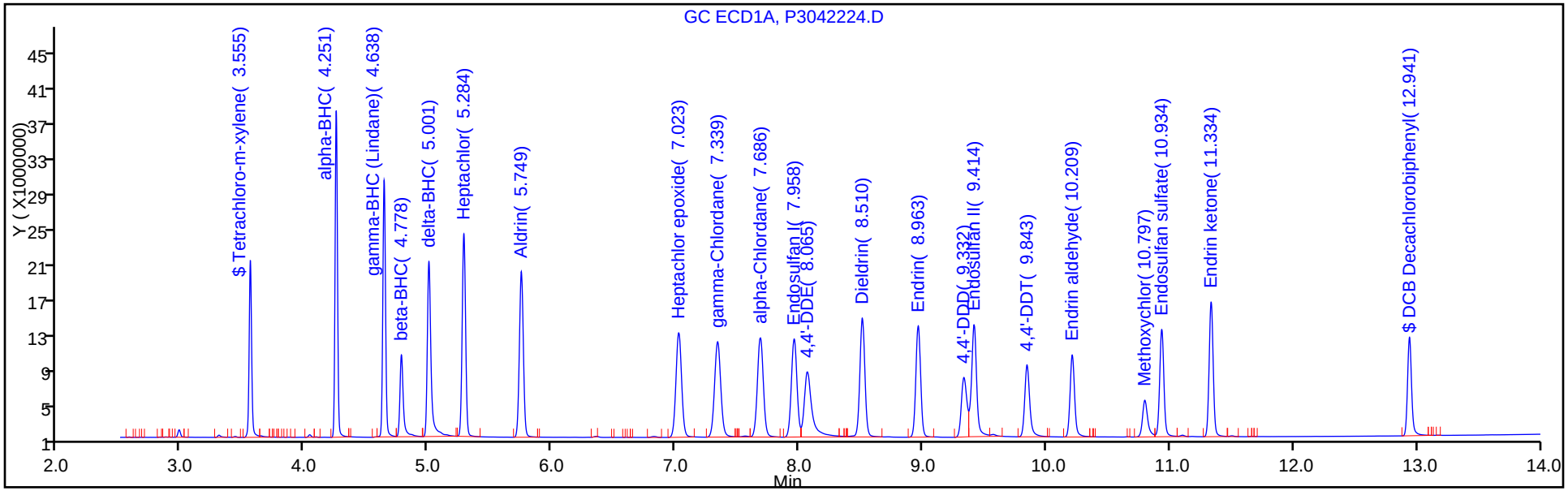
Report Date: 23-Apr-2015 07:42:54 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

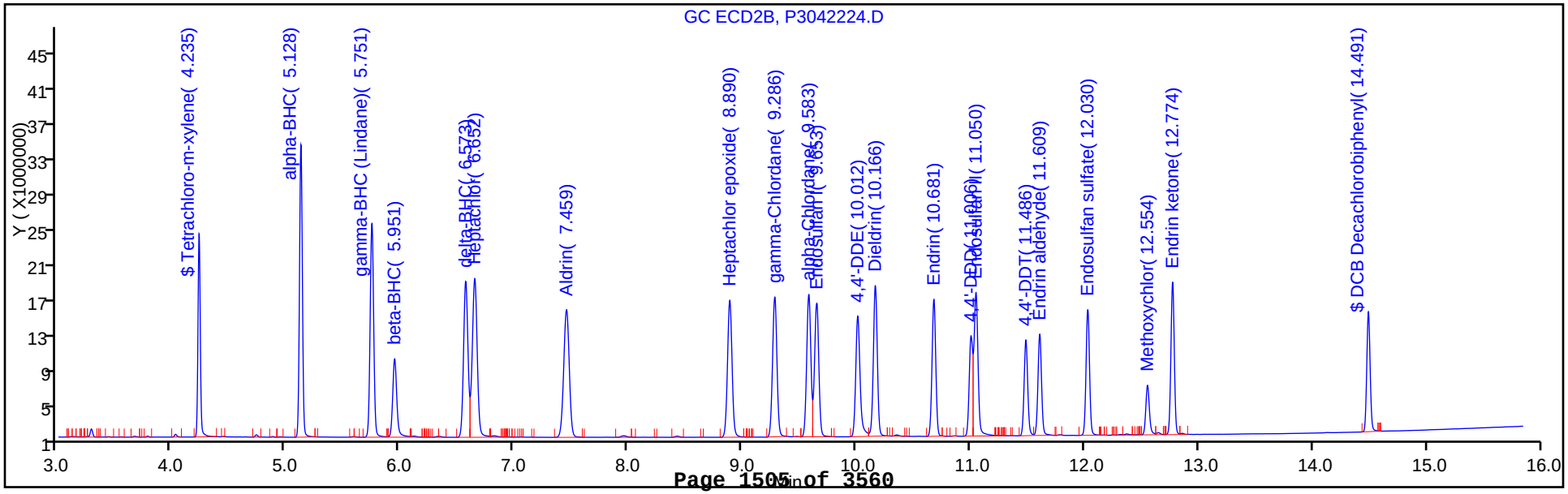
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042224.D

Injection Date:	22-Apr-2015 23:37:14	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	CCV AB3			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-177037/7-A

Matrix: Solid | Lab File ID: P3042138.D

Analysis Method: 8081A | Date Collected:

Extraction Method: 3540C | Date Extracted: 04/20/2015 09:00

Sample wt/vol: 30(g) | Date Analyzed: 04/22/2015 03:02

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	0.42	U	2.0	0.42	0.20
72-55-9	4,4'-DDE	0.42	U	1.7	0.42	0.27
50-29-3	4,4'-DDT	0.83	U	2.0	0.83	0.31
309-00-2	Aldrin	0.83	U	4.0	0.83	0.20
319-84-6	alpha-BHC	1.7	U	2.5	1.7	0.60
5103-71-9	alpha-Chlordane	0.83	U	3.0	0.83	0.25
319-85-7	beta-BHC	0.83	U	3.5	0.83	0.36
319-86-8	delta-BHC	0.83	U	4.0	0.83	0.22
60-57-1	Dieldrin	0.42	U	1.7	0.42	0.16
959-98-8	Endosulfan I	0.83	U	1.7	0.83	0.25
33213-65-9	Endosulfan II	0.83	U	2.5	0.83	0.38
1031-07-8	Endosulfan sulfate	0.83	U	3.0	0.83	0.34
72-20-8	Endrin	0.83	U	1.7	0.83	0.21
7421-93-4	Endrin aldehyde	0.83	U	3.0	0.83	0.32
53494-70-5	Endrin ketone	1.7	U	2.0	1.7	0.42
58-89-9	gamma-BHC (Lindane)	1.7	U	2.5	1.7	0.46
5103-74-2	gamma-Chlordane	1.7	U	1.7	1.7	0.86
76-44-8	Heptachlor	1.7	U	3.5	1.7	0.70
1024-57-3	Heptachlor epoxide	1.7	U	2.5	1.7	0.40
72-43-5	Methoxychlor	1.7	U	5.0	1.7	0.54
8001-35-2	Toxaphene	17	U	67	17	9.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	105		55-130
877-09-8	Tetrachloro-m-xylene	100		70-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042138.D
Lims ID: MB 240-177037/7-A
Client ID:
Sample Type: MB
Inject. Date: 22-Apr-2015 03:02:33 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-038
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.554	3.554	0.000	19643984	20.0	20.0	
2	4.236	4.235	0.001	22030277	20.0	19.5	
						RPD = 2.15	
3 Hexachlorobenzene							
1		4.030				ND	
2		4.879					
2 Diallate							
1		4.125				ND	
1		4.292					
2		4.831					
2		4.993					
4 alpha-BHC							
1		4.250				ND	
2		5.129					
5 gamma-BHC (Lindane)							
1		4.639				ND	
2		5.752					
6 beta-BHC							
1		4.776				ND	
2		5.951					
7 delta-BHC							
1		4.999				ND	
2		6.574					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.166				ND	
1		6.055					
1		7.339					
1		7.677					
2		6.325					
2		7.950					
2		9.283					
2		9.581					
9 Heptachlor							
1		5.284				ND	
2		6.654					
10 Aldrin							
1		5.750				ND	
2		7.460					
11 Isodrin							
1		6.354				ND	
2		8.430					
12 Heptachlor epoxide							
1		7.023				ND	
2		8.891					
13 gamma-Chlordane							
1		7.339				ND	
2		9.285					
14 alpha-Chlordane							
1		7.684				ND	
2		9.584					
15 Endosulfan I							
1		7.959				ND	
2		9.653					
16 4,4'-DDE							
1		8.057				ND	
2		10.012					
17 Dieldrin							
1		8.510				ND	
2		10.168					
18 Endrin							
1		8.963				ND	
2		10.681					
19 Kepone							
1		9.020				ND	
2		10.835					
20 4,4'-DDD							
1		9.326				ND	
2		11.006					
21 Endosulfan II							
1		9.413				ND	
2		11.051					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
22 Chlorobenzilate							
1		9.422				ND	
2		10.829					
24 Toxaphene							
1		9.622				ND	
1		10.081					
1		10.393					
1		10.735					
1		10.840					
2		11.025					
2		11.195					
2		11.618					
2		12.353					
2		12.444					
23 4,4'-DDT							
1		9.840				ND	
2		11.488					
25 Endrin aldehyde							
1		10.209				ND	
2		11.609					
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1		10.792				ND	
2		12.555					
28 Endosulfan sulfate							
1	10.957	10.933	0.024	999522		1.00	
2	12.052	12.032	0.020	887047		0.8375	
						RPD = 18.02	
29 Endrin ketone							
1		11.334				ND	
2		12.776					
$ 30 DCB Decachlorobiphenyl							
1	12.939	12.940	-0.001	19665114	20.0	21.0	
2	14.492	14.493	-0.001	20941113	20.0	20.6	
						RPD = 2.06	

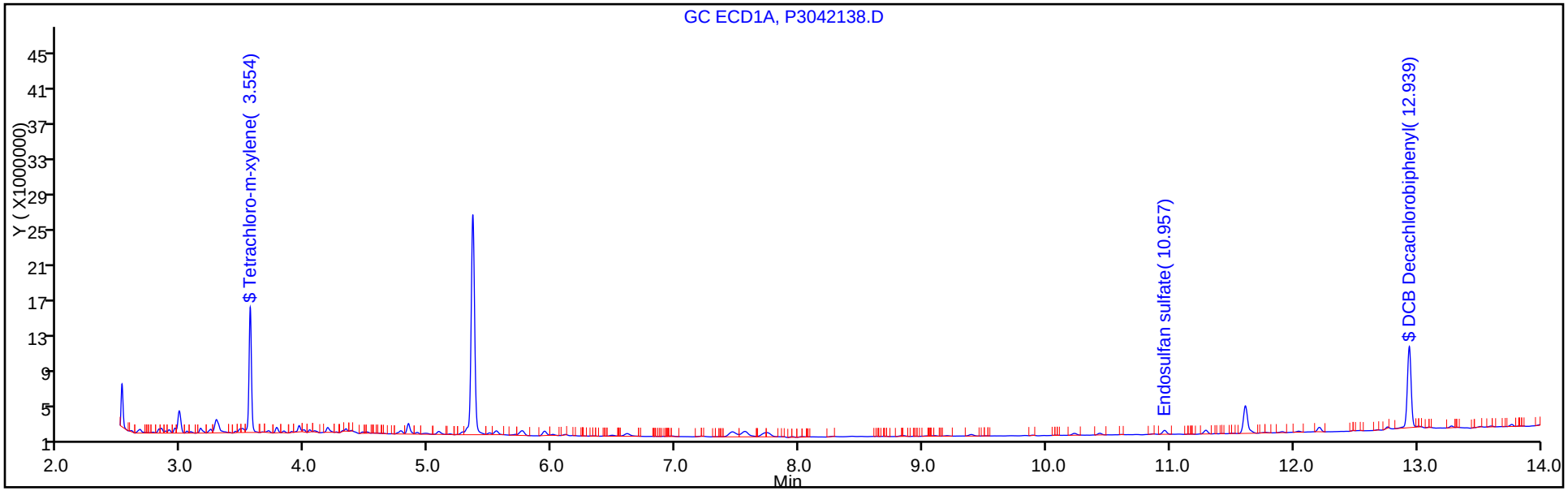
Report Date: 22-Apr-2015 08:58:13 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

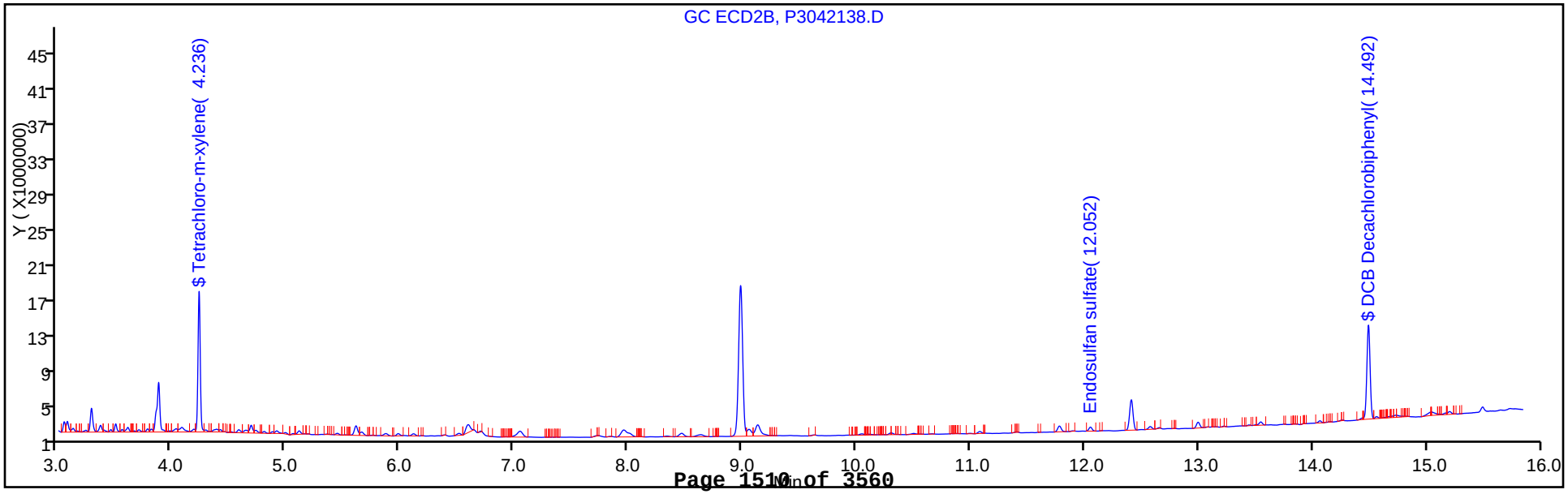
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042138.D

Injection Date:	22-Apr-2015 03:02:33	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MB 240-177037/7-A			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-177037/7-A

Matrix: Solid Lab File ID: P3042138.D

Analysis Method: 8081A Date Collected:

Extraction Method: 3540C Date Extracted: 04/20/2015 09:00

Sample wt/vol: 30(g) Date Analyzed: 04/22/2015 03:02

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	103		55-130
877-09-8	Tetrachloro-m-xylene	98		70-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042138.D
Lims ID: MB 240-177037/7-A
Client ID:
Sample Type: MB
Inject. Date: 22-Apr-2015 03:02:33 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-038
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.554	3.554	0.000	19643984	20.0	20.0	
2	4.236	4.235	0.001	22030277	20.0	19.5	
						RPD = 2.15	
3 Hexachlorobenzene							
1		4.030				ND	
2		4.879					
2 Diallate							
1		4.125				ND	
1		4.292					
2		4.831					
2		4.993					
4 alpha-BHC							
1		4.250				ND	
2		5.129					
5 gamma-BHC (Lindane)							
1		4.639				ND	
2		5.752					
6 beta-BHC							
1		4.776				ND	
2		5.951					
7 delta-BHC							
1		4.999				ND	
2		6.574					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.166				ND	
1		6.055					
1		7.339					
1		7.677					
2		6.325					
2		7.950					
2		9.283					
2		9.581					
9 Heptachlor							
1		5.284				ND	
2		6.654					
10 Aldrin							
1		5.750				ND	
2		7.460					
11 Isodrin							
1		6.354				ND	
2		8.430					
12 Heptachlor epoxide							
1		7.023				ND	
2		8.891					
13 gamma-Chlordane							
1		7.339				ND	
2		9.285					
14 alpha-Chlordane							
1		7.684				ND	
2		9.584					
15 Endosulfan I							
1		7.959				ND	
2		9.653					
16 4,4'-DDE							
1		8.057				ND	
2		10.012					
17 Dieldrin							
1		8.510				ND	
2		10.168					
18 Endrin							
1		8.963				ND	
2		10.681					
19 Kepone							
1		9.020				ND	
2		10.835					
20 4,4'-DDD							
1		9.326				ND	
2		11.006					
21 Endosulfan II							
1		9.413				ND	
2		11.051					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
22 Chlorobenzilate							
1		9.422				ND	
2		10.829					
24 Toxaphene							
1		9.622				ND	
1		10.081					
1		10.393					
1		10.735					
1		10.840					
2		11.025					
2		11.195					
2		11.618					
2		12.353					
2		12.444					
23 4,4'-DDT							
1		9.840				ND	
2		11.488					
25 Endrin aldehyde							
1		10.209				ND	
2		11.609					
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1		10.792				ND	
2		12.555					
28 Endosulfan sulfate							
1	10.957	10.933	0.024	999522		1.00	
2	12.052	12.032	0.020	887047		0.8375	
						RPD = 18.02	
29 Endrin ketone							
1		11.334				ND	
2		12.776					
$ 30 DCB Decachlorobiphenyl							
1	12.939	12.940	-0.001	19665114	20.0	21.0	
2	14.492	14.493	-0.001	20941113	20.0	20.6	
						RPD = 2.06	

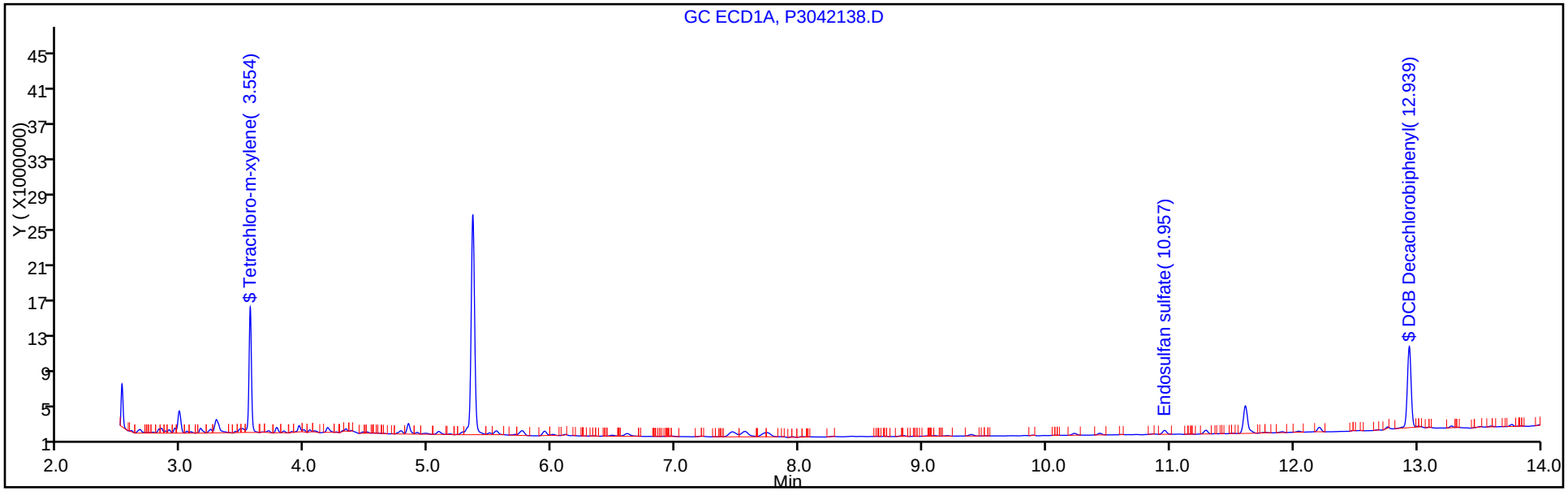
Report Date: 22-Apr-2015 08:58:13 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

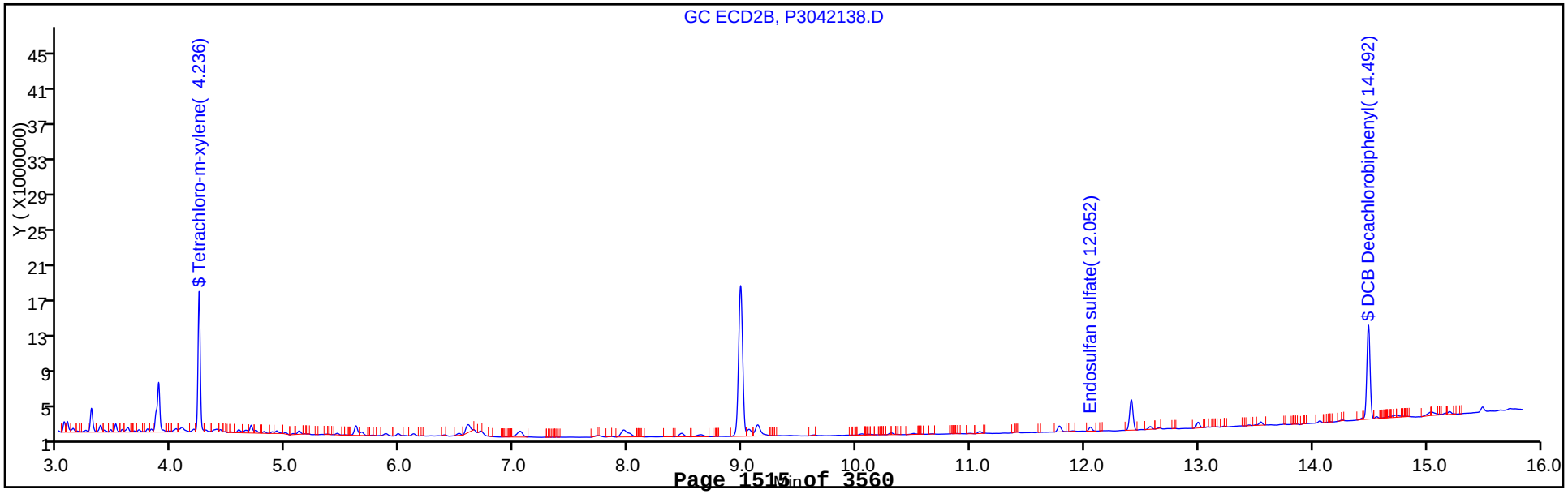
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042138.D

Injection Date:	22-Apr-2015 03:02:33	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MB 240-177037/7-A			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-177037/8-A

Matrix: Solid | Lab File ID: P3042219.D

Analysis Method: 8081A | Date Collected:

Extraction Method: 3540C | Date Extracted: 04/20/2015 09:00

Sample wt/vol: 30(g) | Date Analyzed: 04/22/2015 21:41

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177463 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	32.6		2.0	0.42	0.20
72-55-9	4,4'-DDE	25.9		1.7	0.42	0.27
50-29-3	4,4'-DDT	30.8		2.0	0.83	0.31
309-00-2	Aldrin	23.1		4.0	0.83	0.20
319-84-6	alpha-BHC	28.8		2.5	1.7	0.60
5103-71-9	alpha-Chlordane	27.7		3.0	0.83	0.25
319-85-7	beta-BHC	26.6		3.5	0.83	0.36
319-86-8	delta-BHC	28.4		4.0	0.83	0.22
60-57-1	Dieldrin	29.1		1.7	0.42	0.16
959-98-8	Endosulfan I	16.8		1.7	0.83	0.25
33213-65-9	Endosulfan II	22.8		2.5	0.83	0.38
1031-07-8	Endosulfan sulfate	28.4		3.0	0.83	0.34
72-20-8	Endrin	30.1		1.7	0.83	0.21
7421-93-4	Endrin aldehyde	27.8		3.0	0.83	0.32
53494-70-5	Endrin ketone	27.0		2.0	1.7	0.42
58-89-9	gamma-BHC (Lindane)	29.1		2.5	1.7	0.46
5103-74-2	gamma-Chlordane	28.2		1.7	1.7	0.86
76-44-8	Heptachlor	31.5		3.5	1.7	0.70
1024-57-3	Heptachlor epoxide	28.7		2.5	1.7	0.40
72-43-5	Methoxychlor	30.7		5.0	1.7	0.54

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	95		55-130
877-09-8	Tetrachloro-m-xylene	90		70-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042219.D
Lims ID: LCS 240-177037/8-A
Client ID:
Sample Type: LCS
Inject. Date: 22-Apr-2015 21:41:27 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-019
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:43 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:31:31

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555	3.555	0.000	17712355	20.0	18.0	
2	4.235	4.234	0.001	18920538	20.0	16.8	
						RPD = 7.02	
4 alpha-BHC							
1	4.251	4.251	0.000	149771434	100.0	86.5	
2	5.128	5.128	0.000	175737844	100.0	89.8	
						RPD = 3.74	
5 gamma-BHC (Lindane)							
1	4.638	4.639	-0.001	134537082	100.0	87.2	
2	5.751	5.751	0.000	157059690	100.0	88.8	
						RPD = 1.83	
6 beta-BHC							
1	4.776	4.779	-0.003	50333156	100.0	79.9	
2	5.949	5.950	-0.001	61887409	100.0	80.5	
						RPD = 0.79	
7 delta-BHC							
1	4.998	5.001	-0.003	127866272	100.0	85.1	
2	6.572	6.574	-0.002	133336658	100.0	75.2	
						RPD = 12.39	
9 Heptachlor							
1	5.283	5.284	-0.001	137760374	100.0	94.4	
2	6.653	6.653	0.000	147372201	100.0	87.2	
						RPD = 7.96	
10 Aldrin							
1	5.749	5.750	-0.001	101499075	100.0	69.4	
2	7.458	7.457	0.001	144397384	100.0	86.4	
						RPD = 21.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.023	7.025	-0.002	112455144	100.0	86.2	
2	8.888	8.889	-0.001	131090302	100.0	91.3	
						RPD = 5.72	
13 gamma-Chlordane							
1	7.335	7.339	-0.004	114330145	100.0	84.6	
2	9.283	9.283	0.000	123119829	100.0	83.7	
						RPD = 1.14	
14 alpha-Chlordane							
1	7.683	7.684	-0.001	111313682	100.0	83.2	
2	9.582	9.583	-0.001	120648770	100.0	84.9	
						RPD = 2.05	
15 Endosulfan I							
1	7.957	7.958	-0.001	61752690	100.0	50.3	
2	9.651	9.652	-0.001	85757581	100.0	64.9	
						RPD = 25.32	
16 4,4'-DDE							
1	8.052	8.065	-0.013	92128597	100.0	77.8	
2	10.008	10.012	-0.004	116566874	100.0	88.3	
						RPD = 12.66	
17 Dieldrin							
1	8.508	8.513	-0.005	114139423	100.0	87.3	
2	10.166	10.167	-0.001	123994918	100.0	90.6	
						RPD = 3.76	
18 Endrin							
1	8.962	8.965	-0.003	104027308	100.0	90.3	
2	10.679	10.681	-0.002	108661522	100.0	90.1	
						RPD = 0.24	
20 4,4'-DDD							
1	9.319	9.332	-0.013	85115729	100.0	97.8	
2	11.002	11.005	-0.003	92164032	100.0	94.2	
						RPD = 3.76	
21 Endosulfan II							
1	9.411	9.415	-0.004	79168745	100.0	68.4	
2	11.049	11.050	-0.001	84683780	100.0	72.4	
						RPD = 5.66	
23 4,4'-DDT							
1	9.837	9.844	-0.007	88177382	100.0	92.3	
2	11.484	11.487	-0.003	89584144	100.0	89.8	
						RPD = 2.80	
25 Endrin aldehyde							
1	10.207	10.210	-0.003	74190683	100.0	83.3	
2	11.606	11.608	-0.002	80030758	100.0	85.7	
						RPD = 2.86	
27 Methoxychlor							
1	10.788	10.795	-0.007	42202901	100.0	92.1	
2	12.551	12.554	-0.003	44978391	100.0	91.9	
						RPD = 0.17	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.931	10.935	-0.004	84834711	100.0	85.2	
2	12.028	12.030	-0.002	90829126	100.0	85.8	
						RPD = 0.70	
29 Endrin ketone							
1	11.332	11.336	-0.004	99091211	100.0	81.1	
2	12.772	12.773	-0.001	102356933	100.0	83.4	
						RPD = 2.76	
$ 30 DCB Decachlorobiphenyl							
1	12.938	12.940	-0.002	17860051	20.0	19.1	
2	14.491	14.492	-0.001	18156785	20.0	17.8	
						RPD = 6.70	

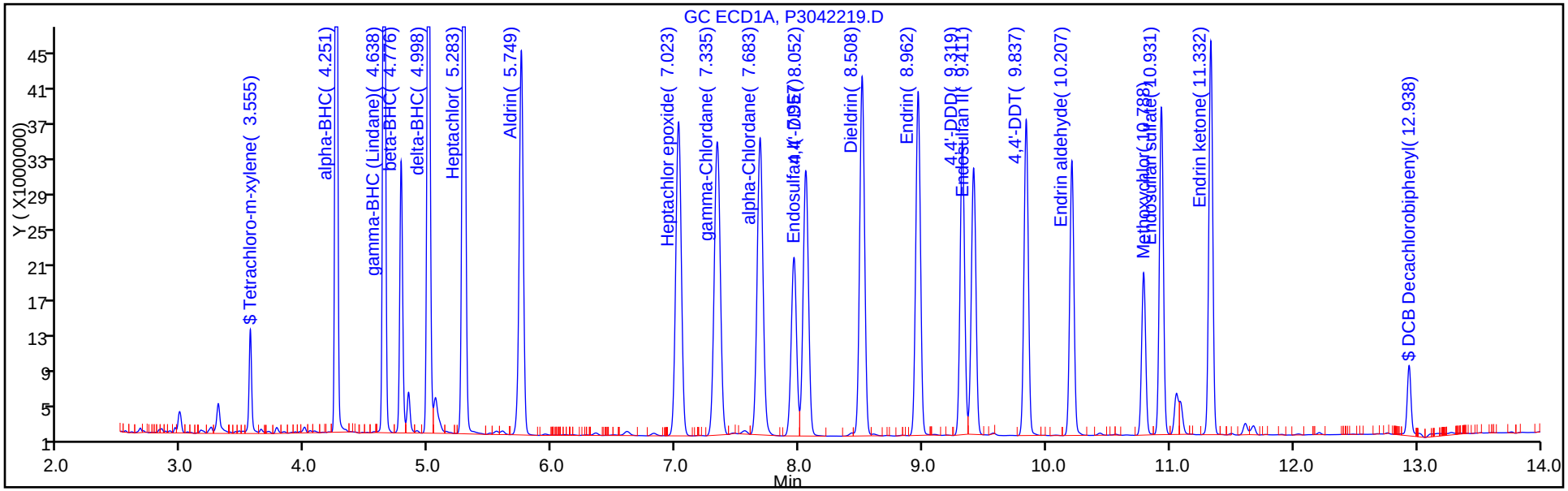
Report Date: 23-Apr-2015 07:42:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

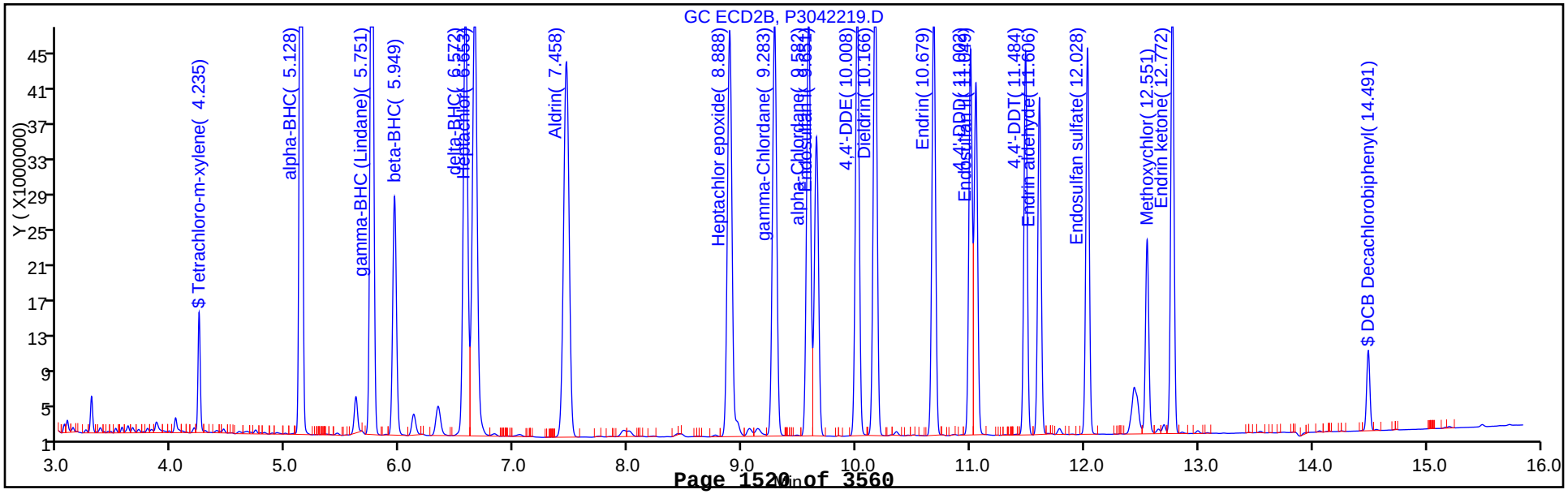
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042219.D

Injection Date:	22-Apr-2015 21:41:27	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	LCS 240-177037/8-A			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-177037/8-A

Matrix: Solid Lab File ID: P3042219.D

Analysis Method: 8081A Date Collected:

Extraction Method: 3540C Date Extracted: 04/20/2015 09:00

Sample wt/vol: 30(g) Date Analyzed: 04/22/2015 21:41

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 177463 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	89		55-130
877-09-8	Tetrachloro-m-xylene	84		70-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042219.D
Lims ID: LCS 240-177037/8-A
Client ID:
Sample Type: LCS
Inject. Date: 22-Apr-2015 21:41:27 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-019
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:43 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:31:31

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555	3.555	0.000	17712355	20.0	18.0	
2	4.235	4.234	0.001	18920538	20.0	16.8	
						RPD = 7.02	
4 alpha-BHC							
1	4.251	4.251	0.000	149771434	100.0	86.5	
2	5.128	5.128	0.000	175737844	100.0	89.8	
						RPD = 3.74	
5 gamma-BHC (Lindane)							
1	4.638	4.639	-0.001	134537082	100.0	87.2	
2	5.751	5.751	0.000	157059690	100.0	88.8	
						RPD = 1.83	
6 beta-BHC							
1	4.776	4.779	-0.003	50333156	100.0	79.9	
2	5.949	5.950	-0.001	61887409	100.0	80.5	
						RPD = 0.79	
7 delta-BHC							
1	4.998	5.001	-0.003	127866272	100.0	85.1	
2	6.572	6.574	-0.002	133336658	100.0	75.2	
						RPD = 12.39	
9 Heptachlor							
1	5.283	5.284	-0.001	137760374	100.0	94.4	
2	6.653	6.653	0.000	147372201	100.0	87.2	
						RPD = 7.96	
10 Aldrin							
1	5.749	5.750	-0.001	101499075	100.0	69.4	
2	7.458	7.457	0.001	144397384	100.0	86.4	
						RPD = 21.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 Heptachlor epoxide							
1	7.023	7.025	-0.002	112455144	100.0	86.2	
2	8.888	8.889	-0.001	131090302	100.0	91.3	
						RPD = 5.72	
13 gamma-Chlordane							
1	7.335	7.339	-0.004	114330145	100.0	84.6	
2	9.283	9.283	0.000	123119829	100.0	83.7	
						RPD = 1.14	
14 alpha-Chlordane							
1	7.683	7.684	-0.001	111313682	100.0	83.2	
2	9.582	9.583	-0.001	120648770	100.0	84.9	
						RPD = 2.05	
15 Endosulfan I							
1	7.957	7.958	-0.001	61752690	100.0	50.3	
2	9.651	9.652	-0.001	85757581	100.0	64.9	
						RPD = 25.32	
16 4,4'-DDE							
1	8.052	8.065	-0.013	92128597	100.0	77.8	
2	10.008	10.012	-0.004	116566874	100.0	88.3	
						RPD = 12.66	
17 Dieldrin							
1	8.508	8.513	-0.005	114139423	100.0	87.3	
2	10.166	10.167	-0.001	123994918	100.0	90.6	
						RPD = 3.76	
18 Endrin							
1	8.962	8.965	-0.003	104027308	100.0	90.3	
2	10.679	10.681	-0.002	108661522	100.0	90.1	
						RPD = 0.24	
20 4,4'-DDD							
1	9.319	9.332	-0.013	85115729	100.0	97.8	
2	11.002	11.005	-0.003	92164032	100.0	94.2	
						RPD = 3.76	
21 Endosulfan II							
1	9.411	9.415	-0.004	79168745	100.0	68.4	
2	11.049	11.050	-0.001	84683780	100.0	72.4	
						RPD = 5.66	
23 4,4'-DDT							
1	9.837	9.844	-0.007	88177382	100.0	92.3	
2	11.484	11.487	-0.003	89584144	100.0	89.8	
						RPD = 2.80	
25 Endrin aldehyde							
1	10.207	10.210	-0.003	74190683	100.0	83.3	
2	11.606	11.608	-0.002	80030758	100.0	85.7	
						RPD = 2.86	
27 Methoxychlor							
1	10.788	10.795	-0.007	42202901	100.0	92.1	
2	12.551	12.554	-0.003	44978391	100.0	91.9	
						RPD = 0.17	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
28 Endosulfan sulfate							
1	10.931	10.935	-0.004	84834711	100.0	85.2	
2	12.028	12.030	-0.002	90829126	100.0	85.8	
						RPD = 0.70	
29 Endrin ketone							
1	11.332	11.336	-0.004	99091211	100.0	81.1	
2	12.772	12.773	-0.001	102356933	100.0	83.4	
						RPD = 2.76	
$ 30 DCB Decachlorobiphenyl							
1	12.938	12.940	-0.002	17860051	20.0	19.1	
2	14.491	14.492	-0.001	18156785	20.0	17.8	
						RPD = 6.70	

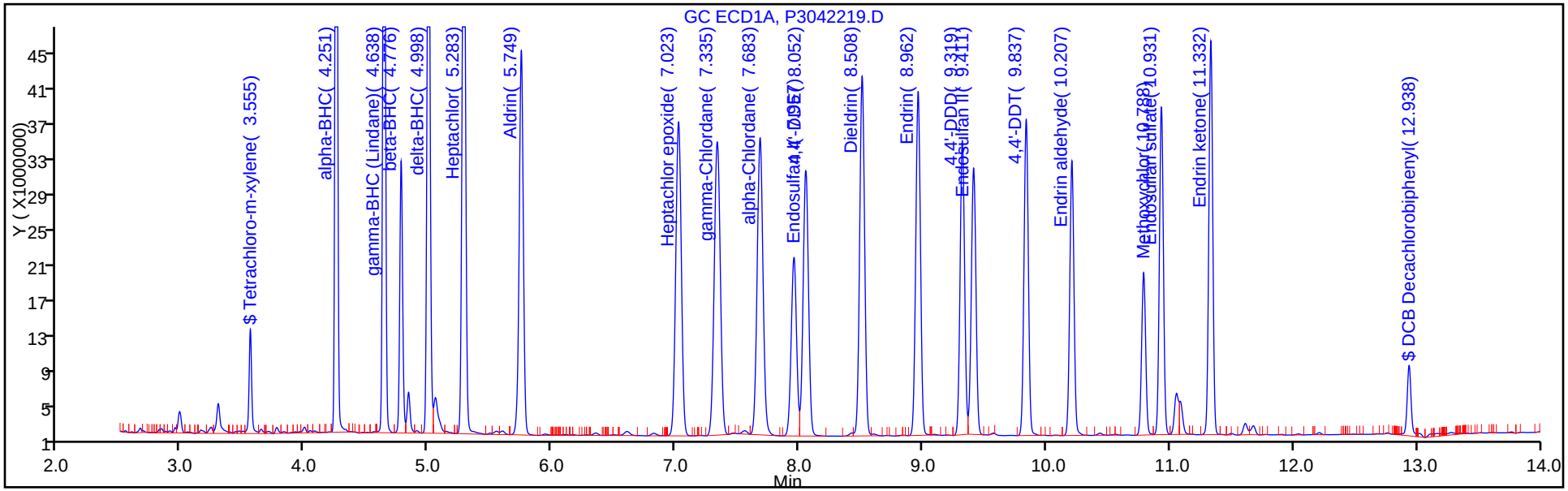
Report Date: 23-Apr-2015 07:42:47 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

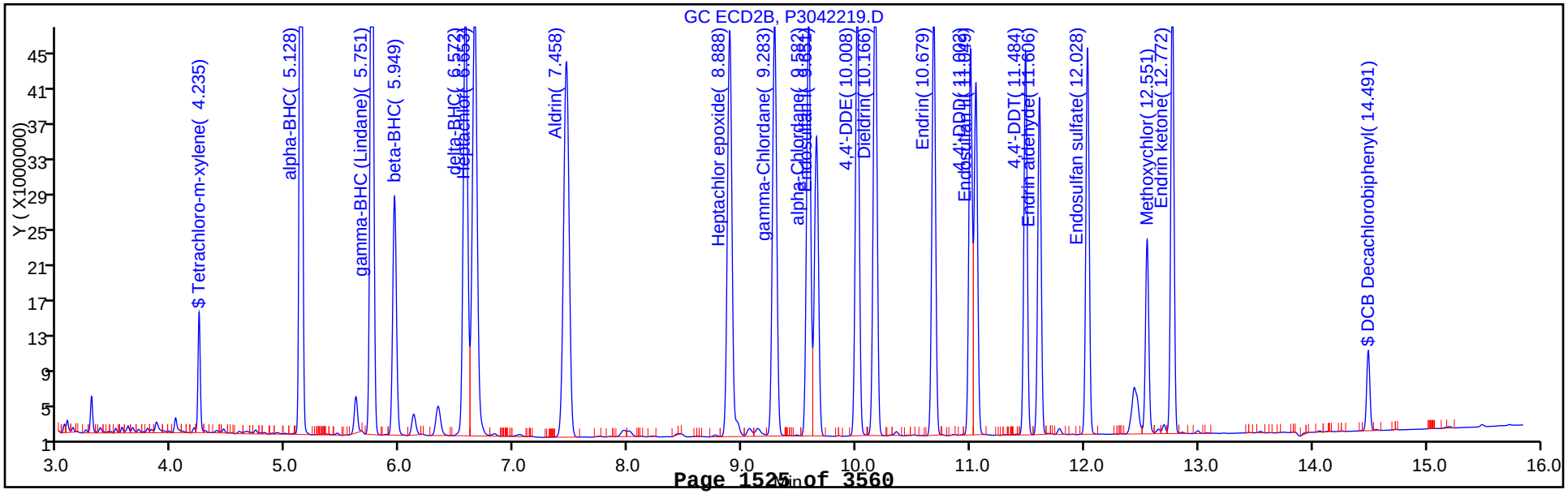
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042219.D

Injection Date:	22-Apr-2015 21:41:27	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	LCS 240-177037/8-A			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-177258/29

Matrix: Solid Lab File ID: P3042129.D

Analysis Method: 8081A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 23:35

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	Toxaphene	171		2.0	1.0	0.20

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042129.D
Lims ID: MRL TOX
Client ID:
Sample Type: MRL
Inject. Date: 21-Apr-2015 23:35:39 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-029
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:29:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.554					ND	
2	4.235						
3 Hexachlorobenzene							
1	4.030					ND	
2	4.879						
2 Diallate							
1	4.125					ND	
1	4.292						
2	4.831						
2	4.993						
4 alpha-BHC							
1	4.250					ND	
2	5.129						
5 gamma-BHC (Lindane)							
1	4.639					ND	
2	5.752						
6 beta-BHC							
1	4.776					ND	
2	5.951						
7 delta-BHC							
1	4.999					ND	
2	6.574						

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.166				ND	
1		6.055					
1		7.339					
1		7.677					
2		6.325					
2		7.950					
2		9.283					
2		9.581					
9 Heptachlor							
1		5.284				ND	
2		6.654					
10 Aldrin							
1		5.750				ND	
2		7.460					
11 Isodrin							
1		6.354				ND	
2		8.430					
12 Heptachlor epoxide							
1		7.023				ND	
2		8.891					
13 gamma-Chlordane							
1		7.339				ND	
2		9.285					
14 alpha-Chlordane							
1		7.684				ND	
2		9.584					
15 Endosulfan I							
1		7.959				ND	
2		9.653					
16 4,4'-DDE							
1		8.057				ND	
2		10.012					
17 Dieldrin							
1		8.510				ND	
2		10.168					
18 Endrin							
1		8.963				ND	
2		10.681					
19 Kepone							
1		9.020				ND	
2		10.835					
20 4,4'-DDD							
1		9.326				ND	
2		11.006					
21 Endosulfan II							
1		9.413				ND	
2		11.051					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
22 Chlorobenzilate							
1		9.422				ND	
2		10.829					
24 Toxaphene							M
1	9.622	9.622	0.000	6841047	200.0	180.8	M
1	10.083	10.081	0.002	6802579	200.0	185.6	M
1	10.396	10.393	0.003	3849960	200.0	164.8	M
1	10.738	10.735	0.003	6161840	200.0	185.7	M
1	10.846	10.840	0.006	4432890	200.0	137.1	M
		Average of Peak Amounts =				170.8	
2	11.026	11.025	0.001	9566982	200.0	184.6	
2	11.196	11.195	0.001	9701611	200.0	190.4	
2	11.621	11.618	0.003	6078519	200.0	170.5	
2	12.355	12.353	0.002	6252942	200.0	137.0	
2	12.443	12.444	-0.001	1692638	200.0	108.7	
		Average of Peak Amounts =				158.3	
						RPD = 7.64	
23 4,4'-DDT							
1		9.840				ND	
2		11.488					
25 Endrin aldehyde							
1		10.209				ND	
2		11.609					
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1		10.792				ND	
2		12.555					
28 Endosulfan sulfate							
1		10.933				ND	
2		12.032					
29 Endrin ketone							
1		11.334				ND	
2		12.776					
$ 30 DCB Decachlorobiphenyl							
1	12.948	12.940	0.008	9051		0.009665	
2	14.487	14.493	-0.006	25156		0.0247	
						RPD = 87.54	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 20.00 Units: uL

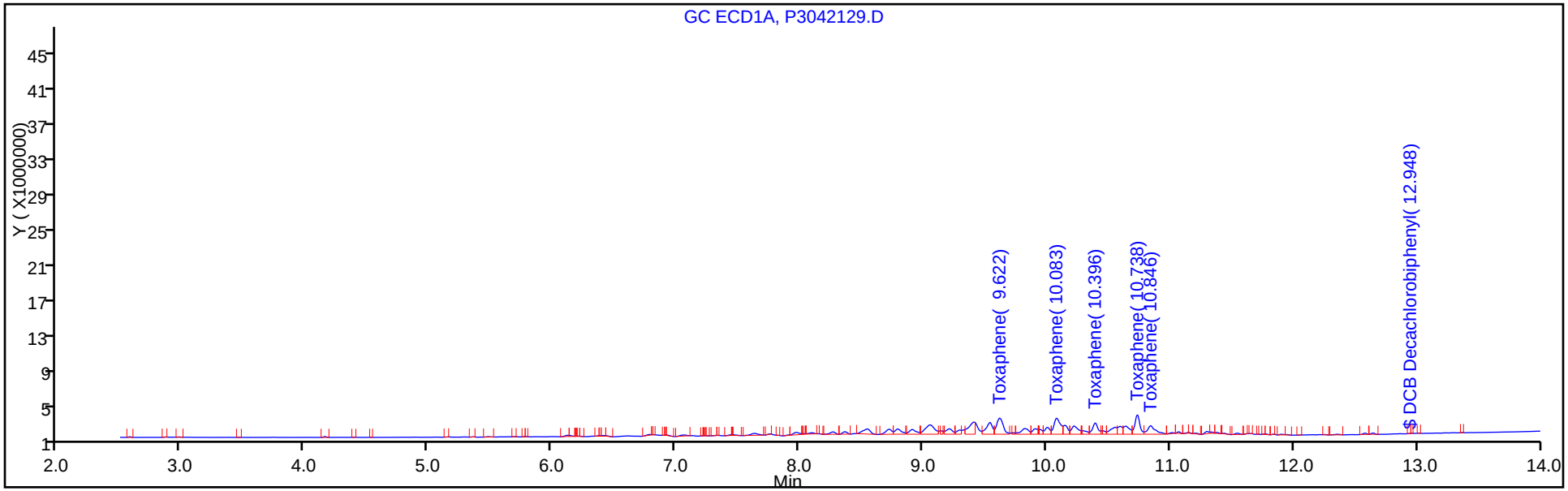
Report Date: 22-Apr-2015 08:58:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

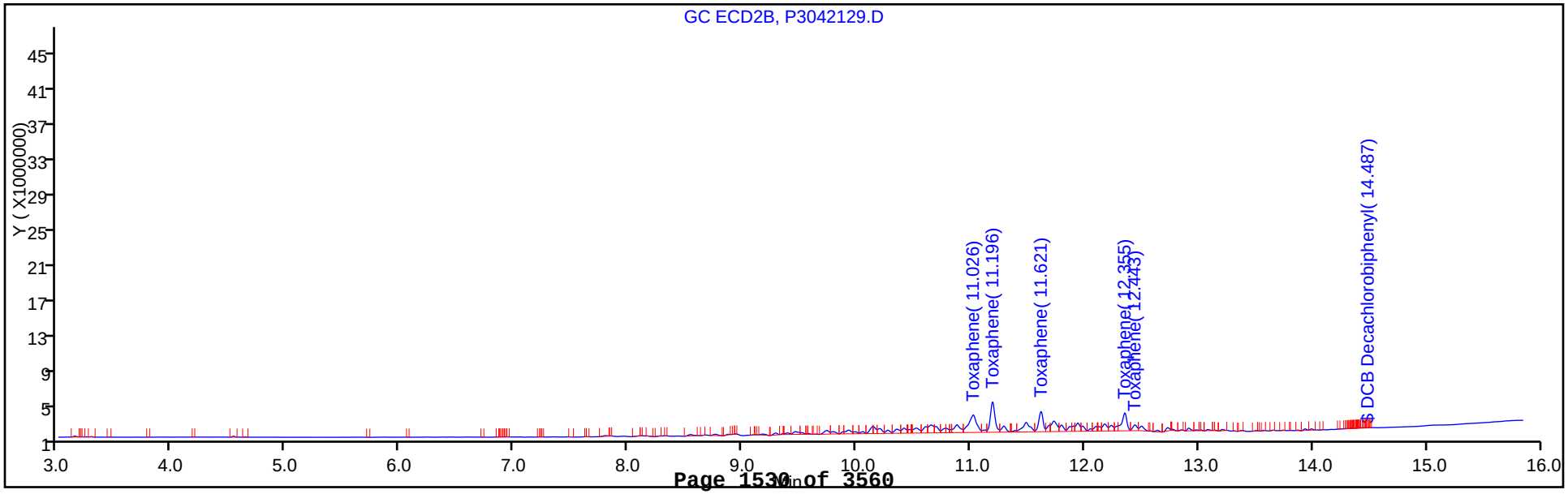
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042129.D

Injection Date:	21-Apr-2015 23:35:39	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL TOX			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 22-Apr-2015 08:58:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042129.D

Injection Date: 21-Apr-2015 23:35:39 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

Operator ID: 430893 ALS Bottle#: 29 Worklist Smp#: 29

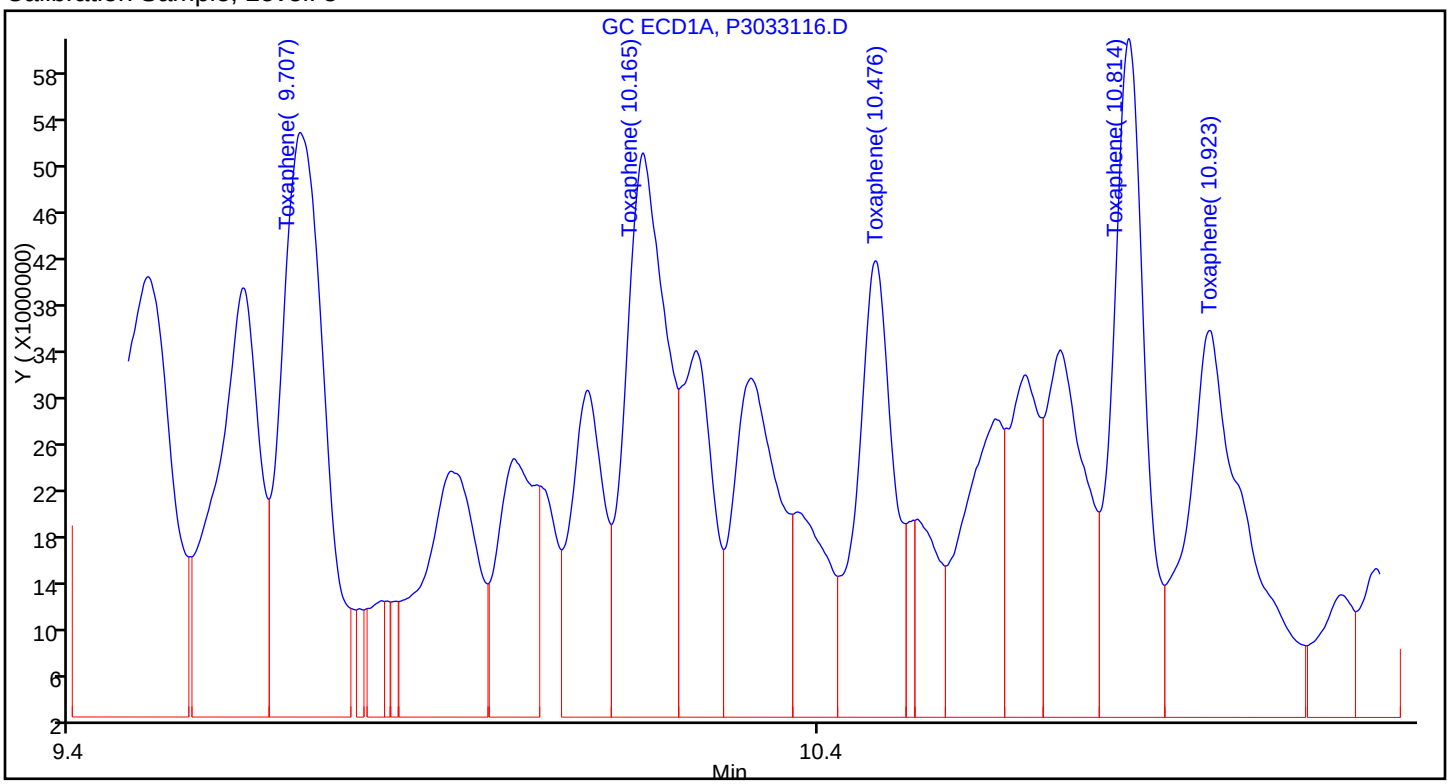
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

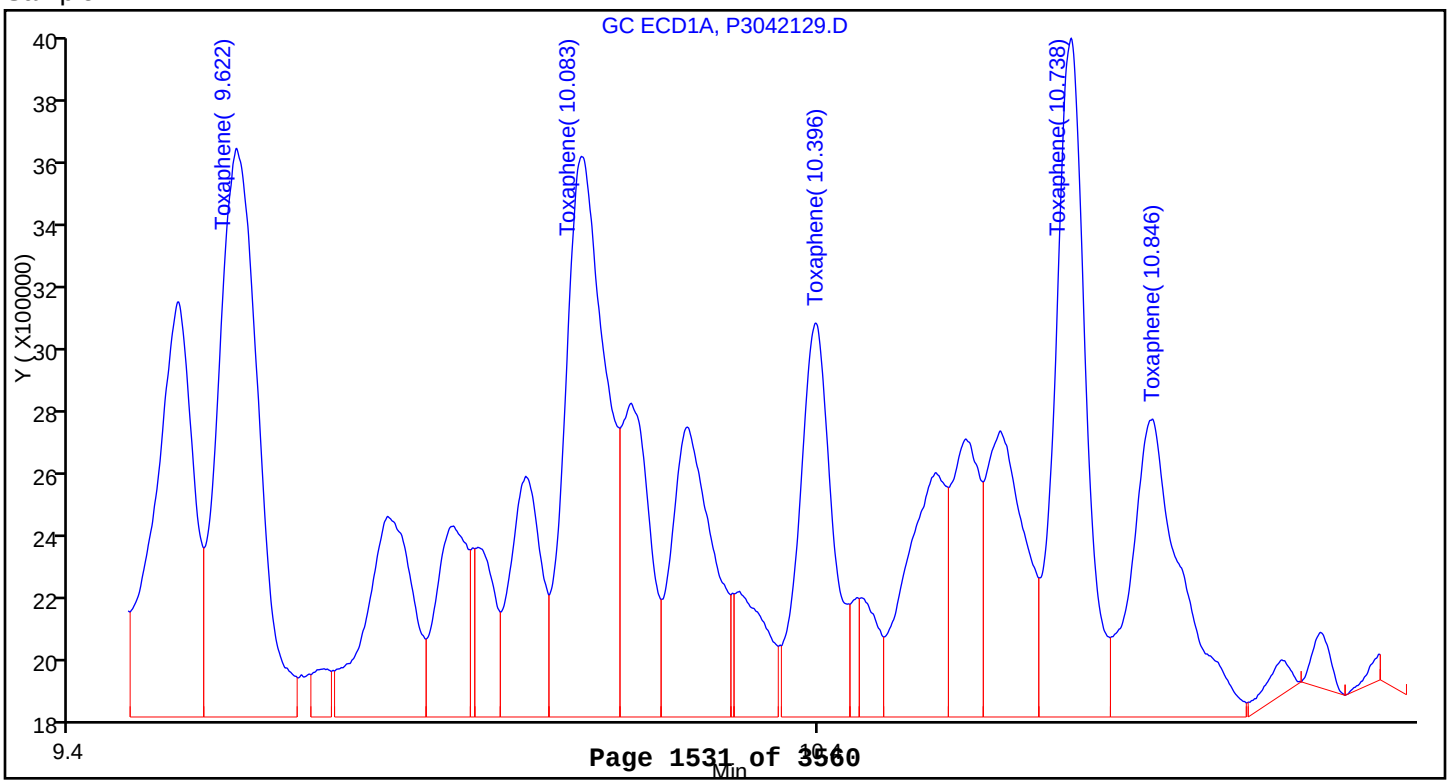
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 5



Sample



Report Date: 22-Apr-2015 08:58:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042129.D

Injection Date: 21-Apr-2015 23:35:39 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

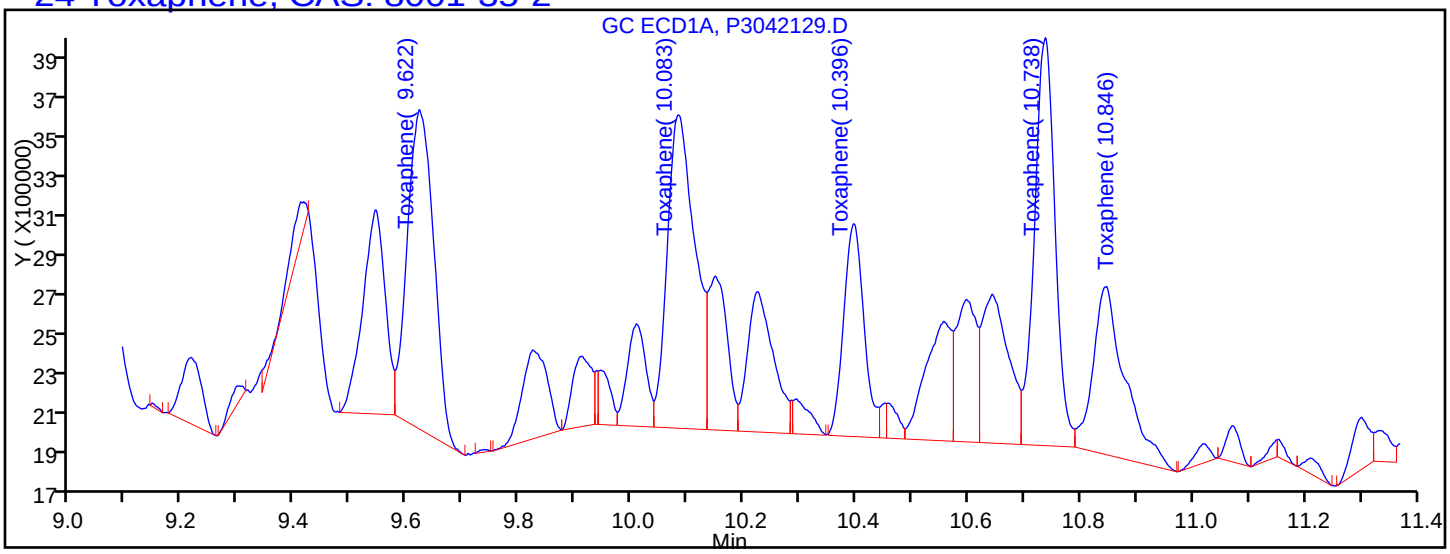
Operator ID: 430893 ALS Bottle#: 29 Worklist Smp#: 29

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

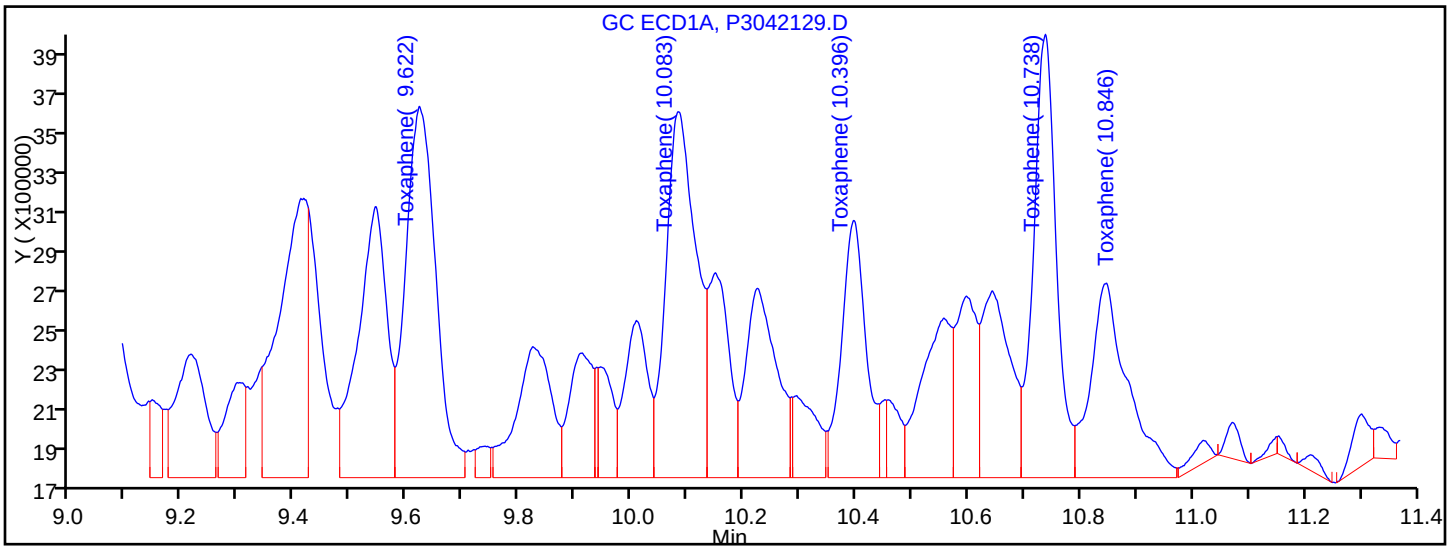
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.622	Response = 5151755	M
RT = 10.083	Response = 5329052	M
RT = 10.396	Response = 2650437	M
RT = 10.738	Response = 5168082	M
RT = 10.846	Response = 3280313	M



Manual Integration Results

RT = 9.622	Response = 6841047	M
RT = 10.083	Response = 6802579	M
RT = 10.396	Response = 3849960	M
RT = 10.738	Response = 6161840	M
RT = 10.846	Response = 4432890	M

Reviewer: matthewsb, 22-Apr-2015 07:29:39

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-177258/29

Matrix: Solid Lab File ID: P3042129.D

Analysis Method: 8081A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 23:35

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	*Toxaphene*	*158*		*2.0*	1.0	*0.20*

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042129.D
Lims ID: MRL TOX
Client ID:
Sample Type: MRL
Inject. Date: 21-Apr-2015 23:35:39 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-029
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:29:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.554					ND	
2	4.235						
3 Hexachlorobenzene							
1	4.030					ND	
2	4.879						
2 Diallate							
1	4.125					ND	
1	4.292						
2	4.831						
2	4.993						
4 alpha-BHC							
1	4.250					ND	
2	5.129						
5 gamma-BHC (Lindane)							
1	4.639					ND	
2	5.752						
6 beta-BHC							
1	4.776					ND	
2	5.951						
7 delta-BHC							
1	4.999					ND	
2	6.574						

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.166				ND	
1		6.055					
1		7.339					
1		7.677					
2		6.325					
2		7.950					
2		9.283					
2		9.581					
9 Heptachlor							
1		5.284				ND	
2		6.654					
10 Aldrin							
1		5.750				ND	
2		7.460					
11 Isodrin							
1		6.354				ND	
2		8.430					
12 Heptachlor epoxide							
1		7.023				ND	
2		8.891					
13 gamma-Chlordane							
1		7.339				ND	
2		9.285					
14 alpha-Chlordane							
1		7.684				ND	
2		9.584					
15 Endosulfan I							
1		7.959				ND	
2		9.653					
16 4,4'-DDE							
1		8.057				ND	
2		10.012					
17 Dieldrin							
1		8.510				ND	
2		10.168					
18 Endrin							
1		8.963				ND	
2		10.681					
19 Kepone							
1		9.020				ND	
2		10.835					
20 4,4'-DDD							
1		9.326				ND	
2		11.006					
21 Endosulfan II							
1		9.413				ND	
2		11.051					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
22 Chlorobenzilate							
1		9.422				ND	
2		10.829					
24 Toxaphene							M
1	9.622	9.622	0.000	6841047	200.0	180.8	M
1	10.083	10.081	0.002	6802579	200.0	185.6	M
1	10.396	10.393	0.003	3849960	200.0	164.8	M
1	10.738	10.735	0.003	6161840	200.0	185.7	M
1	10.846	10.840	0.006	4432890	200.0	137.1	M
		Average of Peak Amounts =				170.8	
2	11.026	11.025	0.001	9566982	200.0	184.6	
2	11.196	11.195	0.001	9701611	200.0	190.4	
2	11.621	11.618	0.003	6078519	200.0	170.5	
2	12.355	12.353	0.002	6252942	200.0	137.0	
2	12.443	12.444	-0.001	1692638	200.0	108.7	
		Average of Peak Amounts =				158.3	
						RPD = 7.64	
23 4,4'-DDT							
1		9.840				ND	
2		11.488					
25 Endrin aldehyde							
1		10.209				ND	
2		11.609					
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1		10.792				ND	
2		12.555					
28 Endosulfan sulfate							
1		10.933				ND	
2		12.032					
29 Endrin ketone							
1		11.334				ND	
2		12.776					
$ 30 DCB Decachlorobiphenyl							
1	12.948	12.940	0.008	9051		0.009665	
2	14.487	14.493	-0.006	25156		0.0247	
						RPD = 87.54	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 20.00 Units: uL

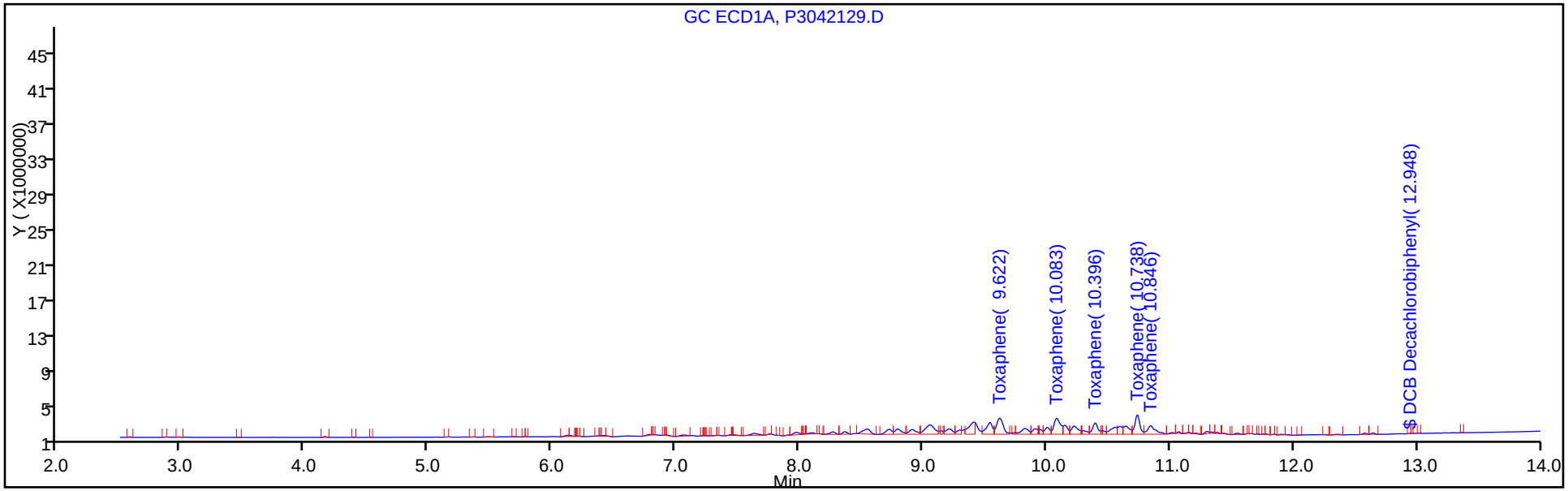
Report Date: 22-Apr-2015 08:58:01 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

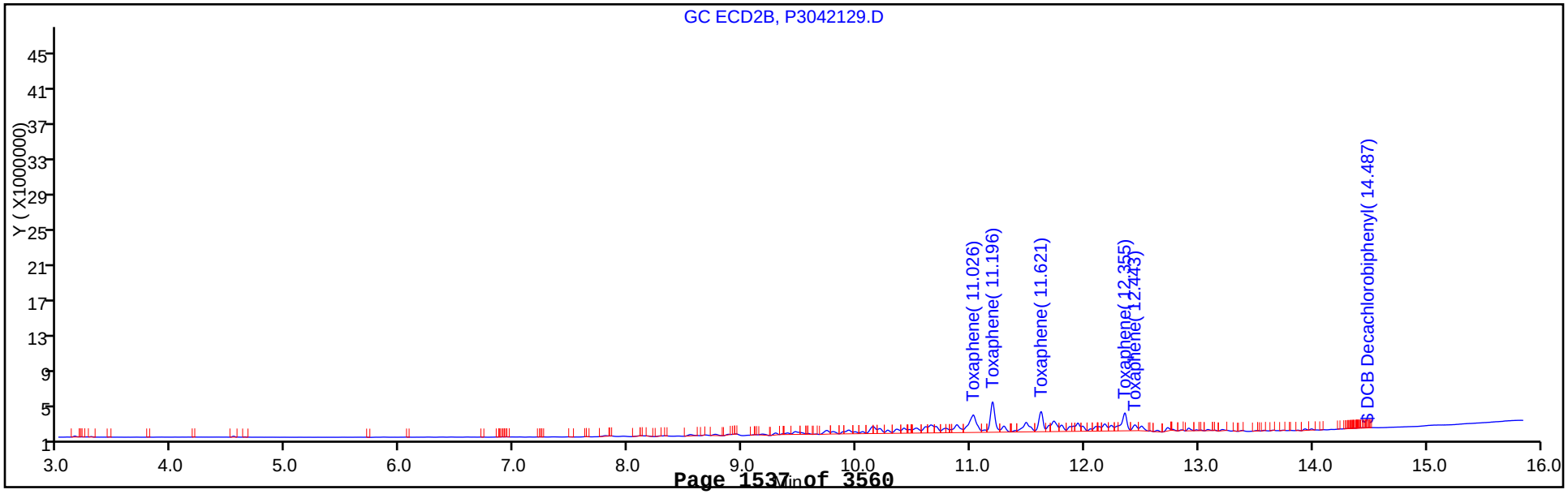
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042129.D

Injection Date:	21-Apr-2015 23:35:39	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL TOX			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 22-Apr-2015 08:58:01 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042129.D

Injection Date: 21-Apr-2015 23:35:39 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

Operator ID: 430893 ALS Bottle#: 29 Worklist Smp#: 29

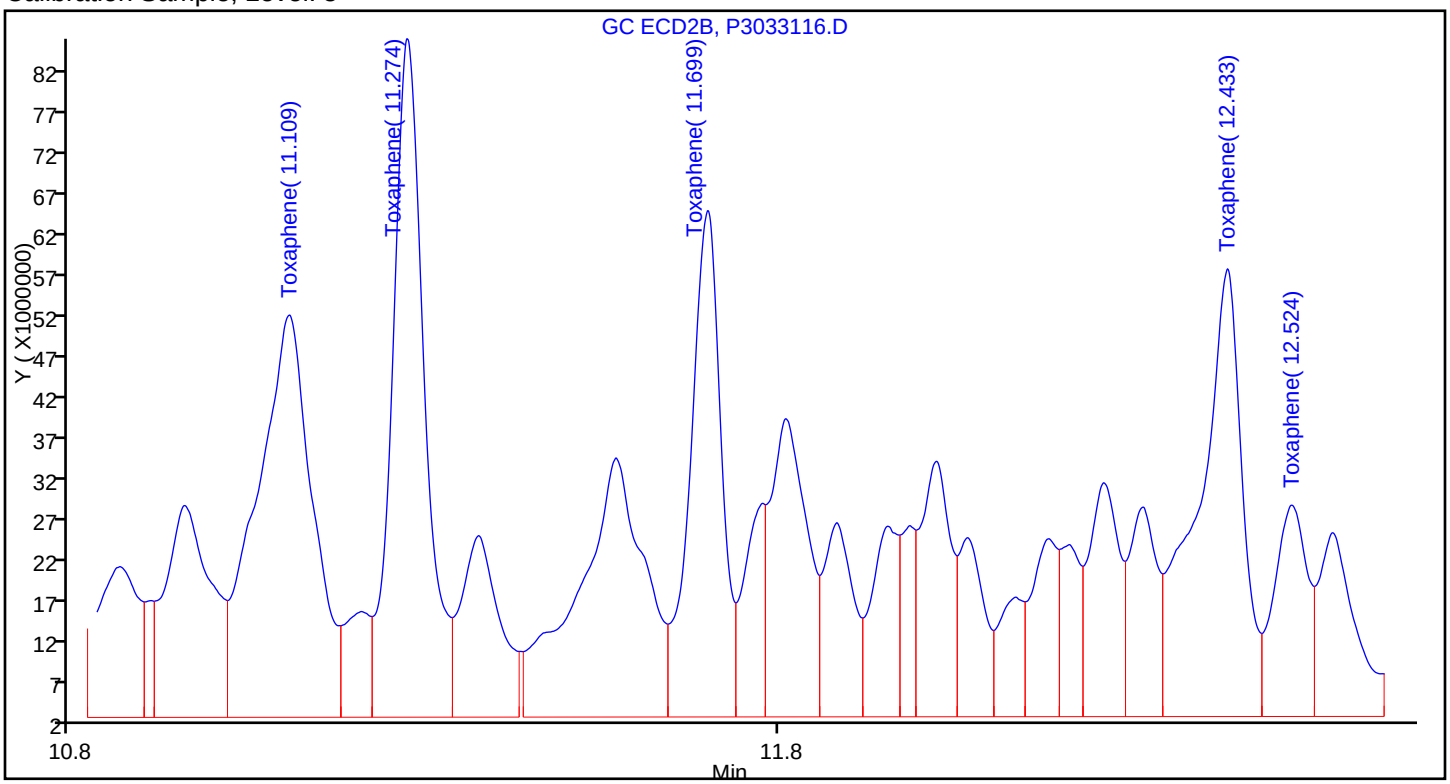
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

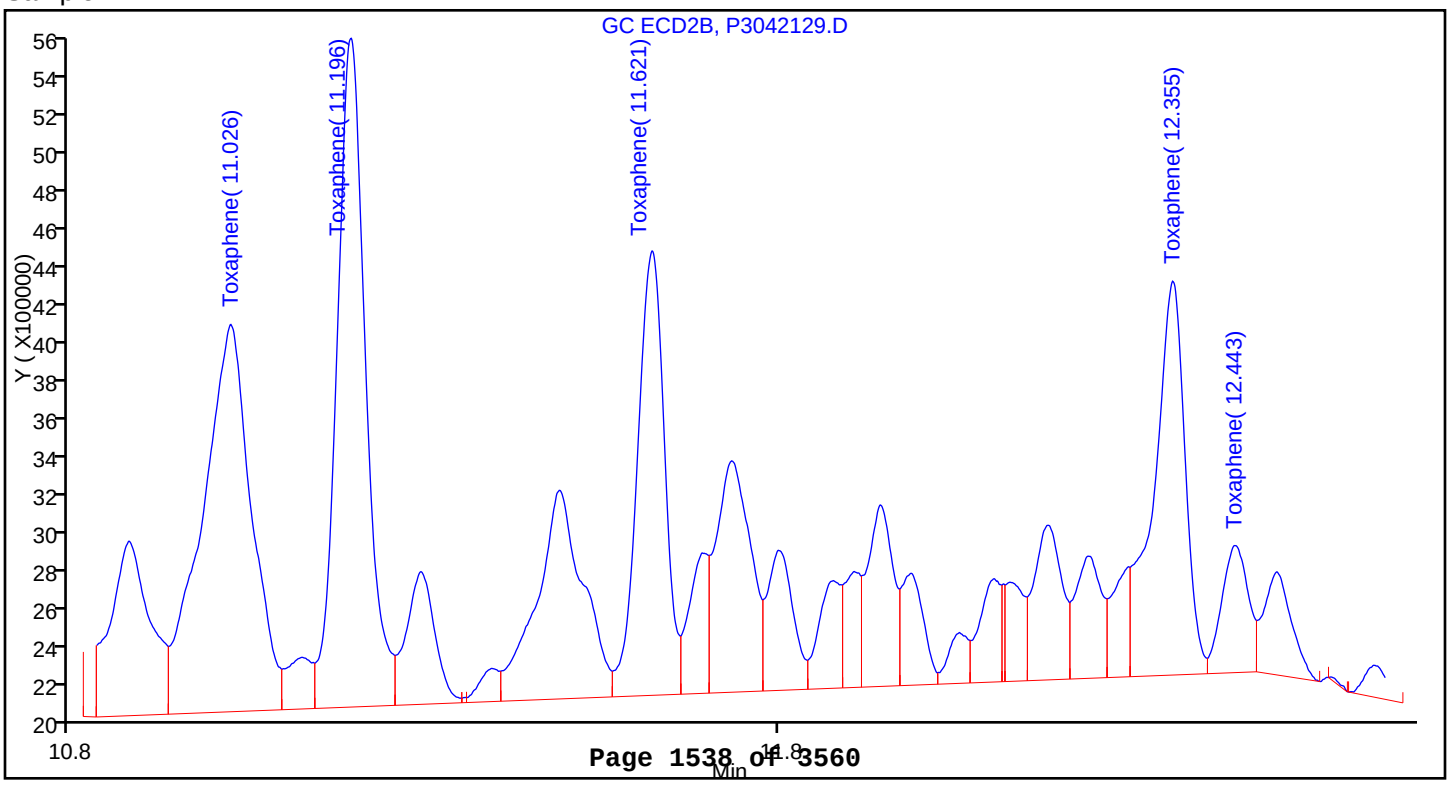
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 5



Sample



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177258/31

Matrix: Solid | Lab File ID: P3042131.D

Analysis Method: 8081A | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 00:22

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	5.36		0.050	0.050	0.018
72-55-9	4,4'-DDE	5.45		0.050	0.050	0.0090
50-29-3	4,4'-DDT	4.88		0.050	0.050	0.014
309-00-2	Aldrin	5.49		0.050	0.050	0.013
319-84-6	alpha-BHC	5.33		0.050	0.050	0.014
5103-71-9	alpha-Chlordane	5.66		0.050	0.050	0.012
319-85-7	beta-BHC	6.10		0.050	0.050	0.013
319-86-8	delta-BHC	5.07		0.050	0.050	0.029
60-57-1	Dieldrin	5.61		0.050	0.050	0.013
959-98-8	Endosulfan I	5.86		0.050	0.050	0.016
33213-65-9	Endosulfan II	6.21		0.050	0.050	0.015
1031-07-8	Endosulfan sulfate	6.06		0.050	0.050	0.011
72-20-8	Endrin	5.75		0.050	0.050	0.012
7421-93-4	Endrin aldehyde	6.03		0.050	0.050	0.0080
53494-70-5	Endrin ketone	5.88		0.050	0.050	0.0090
58-89-9	gamma-BHC (Lindane)	5.48		0.050	0.050	0.012
5103-74-2	gamma-Chlordane	5.54		0.050	0.050	0.010
76-44-8	Heptachlor	5.88		0.050	0.050	0.0050
1024-57-3	Heptachlor epoxide	5.86		0.050	0.050	0.014
72-43-5	Methoxychlor	5.97		0.10	0.050	0.012

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	123		50-150
877-09-8	Tetrachloro-m-xylene	116		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042131.D
Lims ID: MRL AB
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 00:22:12 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-031
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.556	3.554	0.002	5725930	5.00	5.82	
2	4.234	4.235	-0.001	6746827	5.00	5.99	
						RPD = 2.79	
3 Hexachlorobenzene							
1		4.030				ND	
2		4.879					
2 Diallate							
1		4.125				ND	
1		4.292					
2		4.831					
2		4.993					
4 alpha-BHC							
1	4.251	4.250	0.001	9222761	5.00	5.33	
2	5.128	5.129	-0.001	10589950	5.00	5.41	
						RPD = 1.57	
5 gamma-BHC (Lindane)							
1	4.638	4.639	-0.001	8464116	5.00	5.48	
2	5.751	5.752	-0.001	9801144	5.00	5.54	
						RPD = 1.02	
6 beta-BHC							
1	4.777	4.776	0.001	3845003	5.00	6.10	
2	5.950	5.951	-0.001	4698715	5.00	6.12	
						RPD = 0.17	
7 delta-BHC							
1	4.999	4.999	0.000	7611876	5.00	5.07	
2	6.573	6.574	-0.001	9263730	5.00	5.22	
						RPD = 3.04	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.166				ND	
1		6.055					
1		7.339					
1		7.677					
2		6.325					
2		7.950					
2		9.283					
2		9.581					
9 Heptachlor							
1	5.285	5.284	0.001	8584429	5.00	5.88	
2	6.652	6.654	-0.002	10345377	5.00	6.12	
						RPD = 3.94	
10 Aldrin							
1	5.750	5.750	0.000	8029918	5.00	5.49	
2	7.457	7.460	-0.003	9349319	5.00	5.59	
						RPD = 1.77	
11 Isodrin							
1		6.354				ND	
2		8.430					
12 Heptachlor epoxide							
1	7.025	7.023	0.002	7639658	5.00	5.86	
2	8.891	8.891	0.000	8607207	5.00	6.00	
						RPD = 2.31	
13 gamma-Chlordane							
1	7.340	7.339	0.001	7483907	5.00	5.54	
2	9.285	9.285	0.000	8488299	5.00	5.77	
						RPD = 4.05	
14 alpha-Chlordane							
1	7.685	7.684	0.001	7569272	5.00	5.66	
2	9.583	9.584	-0.001	8203936	5.00	5.78	
						RPD = 2.05	
15 Endosulfan I							
1	7.961	7.959	0.002	7195680	5.00	5.86	
2	9.652	9.653	-0.001	7929788	5.00	6.00	
						RPD = 2.33	
16 4,4'-DDE							
1	8.061	8.057	0.004	6458444	5.00	5.45	
2	10.012	10.012	0.000	7422072	5.00	5.62	
						RPD = 3.06	
17 Dieldrin							
1	8.512	8.510	0.002	7337526	5.00	5.61	
2	10.166	10.168	-0.002	7951043	5.00	5.81	
						RPD = 3.51	
18 Endrin							
1	8.965	8.963	0.002	6616084	5.00	5.75	
2	10.681	10.681	0.000	7005609	5.00	5.81	
						RPD = 1.12	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
19 Kepone							
1		9.020				ND	
2		10.835					
20 4,4'-DDD							
1	9.330	9.326	0.004	4668940	5.00	5.36	
2	11.006	11.006	0.000	5155938	5.00	5.27	
						RPD = 1.80	
21 Endosulfan II							
1	9.415	9.413	0.002	7180990	5.00	6.21	
2	11.049	11.051	-0.002	7523870	5.00	6.43	
						RPD = 3.59	
22 Chlorobenzilate							
1		9.422				ND	
2		10.829					
24 Toxaphene							
1		9.622				ND	
1		10.081					
1		10.393					
1		10.735					
1		10.840					
2		11.025					
2		11.195					
2		11.618					
2		12.353					
2		12.444					
23 4,4'-DDT							
1	9.842	9.840	0.002	4659601	5.00	4.88	
2	11.487	11.488	-0.001	4979806	5.00	4.99	
						RPD = 2.26	
25 Endrin aldehyde							
1	10.210	10.209	0.001	5367576	5.00	6.03	
2	11.608	11.609	-0.001	5665725	5.00	6.07	
						RPD = 0.69	
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1	10.794	10.792	0.002	2734003	5.00	5.97	
2	12.554	12.555	-0.001	2957679	5.00	6.05	
						RPD = 1.32	
28 Endosulfan sulfate							
1	10.935	10.933	0.002	6034111	5.00	6.06	
2	12.030	12.032	-0.002	6478500	5.00	6.12	
						RPD = 0.98	
29 Endrin ketone							
1	11.335	11.334	0.001	7185279	5.00	5.88	
2	12.774	12.776	-0.002	7144288	5.00	5.82	
						RPD = 1.05	

Report Date: 22-Apr-2015 08:58:04 Chrom Revision: 2.2 09-Apr-2015 10:05:40
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042131.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 30 DCB Decachlorobiphenyl							
1	12.941	12.940	0.001	5775402	5.00	6.17	
2	14.493	14.493	0.000	6239737	5.00	6.13	
						RPD = 0.61	

Reagents:

SGPestAB1_00011 Amount Added: 1.00 Units: mL

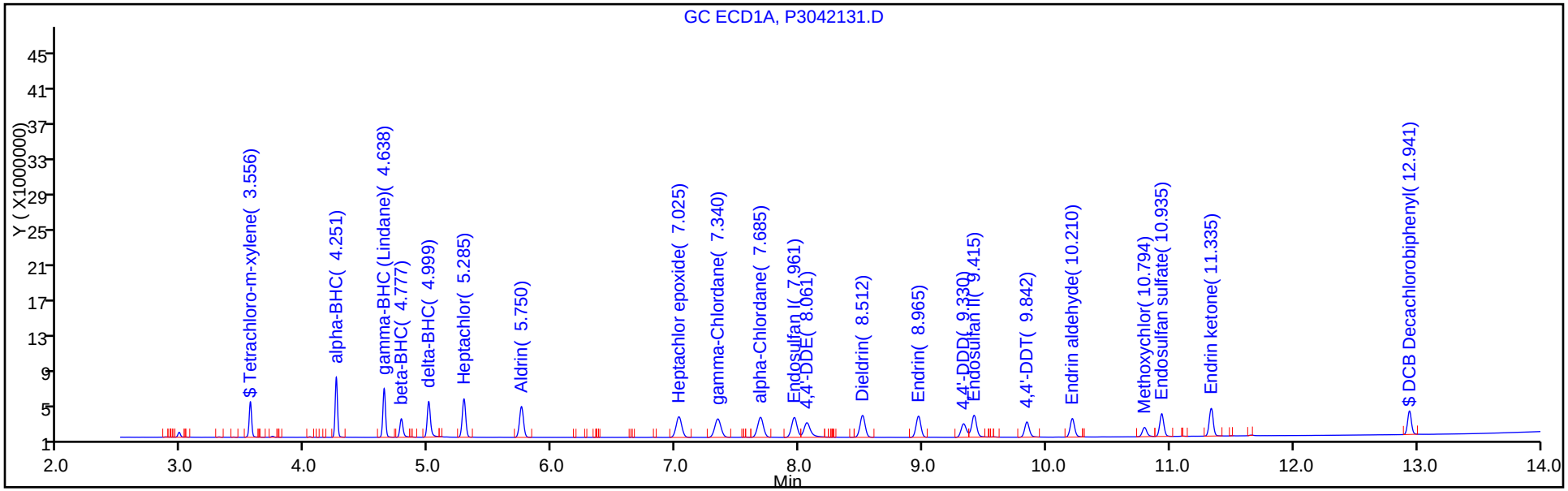
Report Date: 22-Apr-2015 08:58:04 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

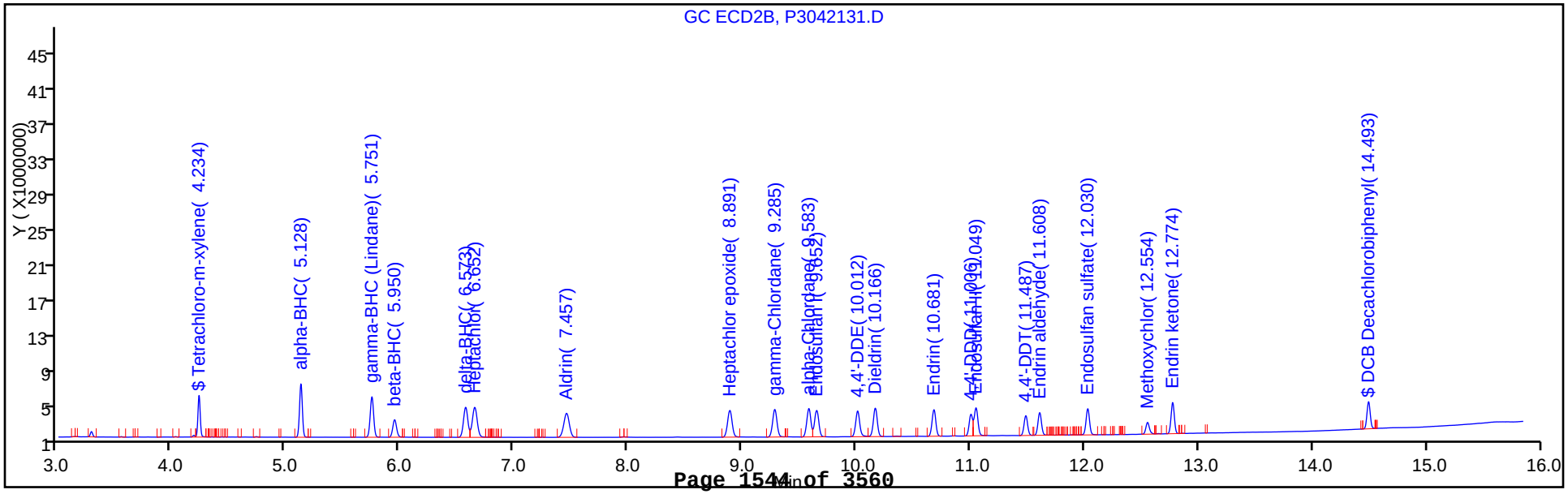
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042131.D

Injection Date:	22-Apr-2015 00:22:12	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL AB			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177258/31

Matrix: Solid | Lab File ID: P3042131.D

Analysis Method: 8081A | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 00:22

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	*4,4'-DDD*	*5.27*		*0.050*	0.050	*0.018*
72-55-9	*4,4'-DDE*	*5.62*		*0.050*	0.050	*0.0090*
50-29-3	*4,4'-DDT*	*4.99*		*0.050*	0.050	*0.014*
309-00-2	*Aldrin*	*5.59*		*0.050*	0.050	*0.013*
319-84-6	*alpha-BHC*	*5.41*		*0.050*	0.050	*0.014*
5103-71-9	*alpha-Chlordane*	*5.78*		*0.050*	0.050	*0.012*
319-85-7	*beta-BHC*	*6.12*		*0.050*	0.050	*0.013*
319-86-8	*delta-BHC*	*5.22*		*0.050*	0.050	*0.029*
60-57-1	*Dieldrin*	*5.81*		*0.050*	0.050	*0.013*
959-98-8	*Endosulfan I*	*6.00*		*0.050*	0.050	*0.016*
33213-65-9	*Endosulfan II*	*6.43*		*0.050*	0.050	*0.015*
1031-07-8	*Endosulfan sulfate*	*6.12*		*0.050*	0.050	*0.011*
72-20-8	*Endrin*	*5.81*		*0.050*	0.050	*0.012*
7421-93-4	*Endrin aldehyde*	*6.07*		*0.050*	0.050	*0.0080*
53494-70-5	*Endrin ketone*	*5.82*		*0.050*	0.050	*0.0090*
58-89-9	*gamma-BHC (Lindane)*	*5.54*		*0.050*	0.050	*0.012*
5103-74-2	*gamma-Chlordane*	*5.77*		*0.050*	0.050	*0.010*
76-44-8	*Heptachlor*	*6.12*		*0.050*	0.050	*0.0050*
1024-57-3	*Heptachlor epoxide*	*6.00*		*0.050*	0.050	*0.014*
72-43-5	*Methoxychlor*	*6.05*		*0.10*	0.050	*0.012*
8001-35-2	Toxaphene	1.0	U	2.0	1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	123		50-150
877-09-8	Tetrachloro-m-xylene	120		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042131.D
Lims ID: MRL AB
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 00:22:12 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-031
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:57:59 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.556	3.554	0.002	5725930	5.00	5.82	
2	4.234	4.235	-0.001	6746827	5.00	5.99	
						RPD = 2.79	
3 Hexachlorobenzene							
1		4.030				ND	
2		4.879					
2 Diallate							
1		4.125				ND	
1		4.292					
2		4.831					
2		4.993					
4 alpha-BHC							
1	4.251	4.250	0.001	9222761	5.00	5.33	
2	5.128	5.129	-0.001	10589950	5.00	5.41	
						RPD = 1.57	
5 gamma-BHC (Lindane)							
1	4.638	4.639	-0.001	8464116	5.00	5.48	
2	5.751	5.752	-0.001	9801144	5.00	5.54	
						RPD = 1.02	
6 beta-BHC							
1	4.777	4.776	0.001	3845003	5.00	6.10	
2	5.950	5.951	-0.001	4698715	5.00	6.12	
						RPD = 0.17	
7 delta-BHC							
1	4.999	4.999	0.000	7611876	5.00	5.07	
2	6.573	6.574	-0.001	9263730	5.00	5.22	
						RPD = 3.04	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.166				ND	
1		6.055					
1		7.339					
1		7.677					
2		6.325					
2		7.950					
2		9.283					
2		9.581					
9 Heptachlor							
1	5.285	5.284	0.001	8584429	5.00	5.88	
2	6.652	6.654	-0.002	10345377	5.00	6.12	
						RPD = 3.94	
10 Aldrin							
1	5.750	5.750	0.000	8029918	5.00	5.49	
2	7.457	7.460	-0.003	9349319	5.00	5.59	
						RPD = 1.77	
11 Isodrin							
1		6.354				ND	
2		8.430					
12 Heptachlor epoxide							
1	7.025	7.023	0.002	7639658	5.00	5.86	
2	8.891	8.891	0.000	8607207	5.00	6.00	
						RPD = 2.31	
13 gamma-Chlordane							
1	7.340	7.339	0.001	7483907	5.00	5.54	
2	9.285	9.285	0.000	8488299	5.00	5.77	
						RPD = 4.05	
14 alpha-Chlordane							
1	7.685	7.684	0.001	7569272	5.00	5.66	
2	9.583	9.584	-0.001	8203936	5.00	5.78	
						RPD = 2.05	
15 Endosulfan I							
1	7.961	7.959	0.002	7195680	5.00	5.86	
2	9.652	9.653	-0.001	7929788	5.00	6.00	
						RPD = 2.33	
16 4,4'-DDE							
1	8.061	8.057	0.004	6458444	5.00	5.45	
2	10.012	10.012	0.000	7422072	5.00	5.62	
						RPD = 3.06	
17 Dieldrin							
1	8.512	8.510	0.002	7337526	5.00	5.61	
2	10.166	10.168	-0.002	7951043	5.00	5.81	
						RPD = 3.51	
18 Endrin							
1	8.965	8.963	0.002	6616084	5.00	5.75	
2	10.681	10.681	0.000	7005609	5.00	5.81	
						RPD = 1.12	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
19 Kepone							
1		9.020				ND	
2		10.835					
20 4,4'-DDD							
1	9.330	9.326	0.004	4668940	5.00	5.36	
2	11.006	11.006	0.000	5155938	5.00	5.27	
						RPD = 1.80	
21 Endosulfan II							
1	9.415	9.413	0.002	7180990	5.00	6.21	
2	11.049	11.051	-0.002	7523870	5.00	6.43	
						RPD = 3.59	
22 Chlorobenzilate							
1		9.422				ND	
2		10.829					
24 Toxaphene							
1		9.622				ND	
1		10.081					
1		10.393					
1		10.735					
1		10.840					
2		11.025					
2		11.195					
2		11.618					
2		12.353					
2		12.444					
23 4,4'-DDT							
1	9.842	9.840	0.002	4659601	5.00	4.88	
2	11.487	11.488	-0.001	4979806	5.00	4.99	
						RPD = 2.26	
25 Endrin aldehyde							
1	10.210	10.209	0.001	5367576	5.00	6.03	
2	11.608	11.609	-0.001	5665725	5.00	6.07	
						RPD = 0.69	
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1	10.794	10.792	0.002	2734003	5.00	5.97	
2	12.554	12.555	-0.001	2957679	5.00	6.05	
						RPD = 1.32	
28 Endosulfan sulfate							
1	10.935	10.933	0.002	6034111	5.00	6.06	
2	12.030	12.032	-0.002	6478500	5.00	6.12	
						RPD = 0.98	
29 Endrin ketone							
1	11.335	11.334	0.001	7185279	5.00	5.88	
2	12.774	12.776	-0.002	7144288	5.00	5.82	
						RPD = 1.05	

Report Date: 22-Apr-2015 08:58:04 Chrom Revision: 2.2 09-Apr-2015 10:05:40

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042131.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 30 DCB Decachlorobiphenyl							
1	12.941	12.940	0.001	5775402	5.00	6.17	
2	14.493	14.493	0.000	6239737	5.00	6.13	
						RPD = 0.61	

Reagents:

SGPestAB1_00011 Amount Added: 1.00 Units: mL

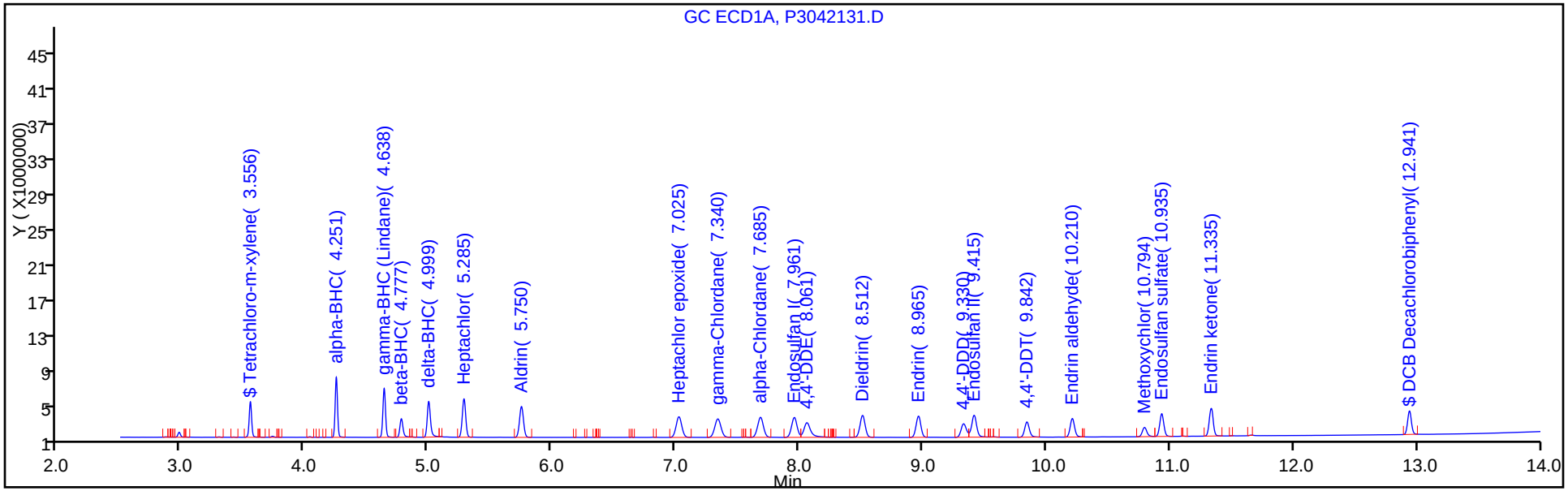
Report Date: 22-Apr-2015 08:58:04 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

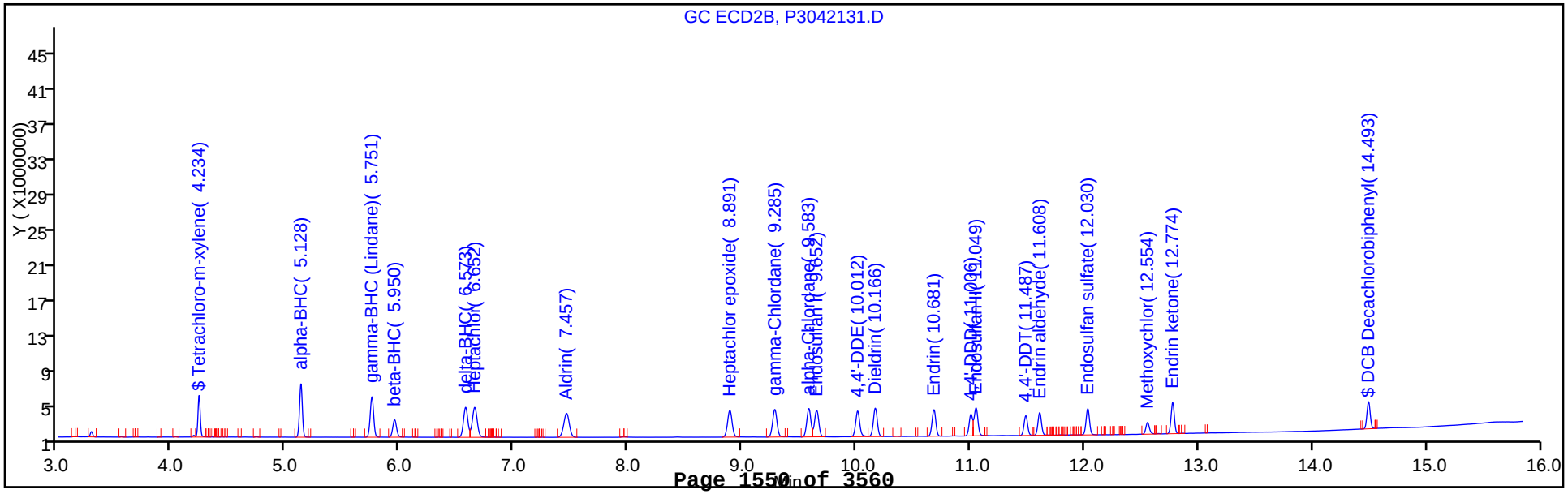
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042131.D

Injection Date:	22-Apr-2015 00:22:12	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL AB			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-177258/47

Matrix: Solid Lab File ID: P3042147.D

Analysis Method: 8081A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/22/2015 06:25

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	Toxaphene	148		2.0	1.0	0.20

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042147.D
Lims ID: MRL TOX
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 06:25:59 ALS Bottle#: 47 Worklist Smp#: 47
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-047
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:58:14 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:37:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.554					ND	
2	4.235						
3 Hexachlorobenzene							
1	4.030					ND	
2	4.879						
2 Diallate							
1	4.125					ND	
1	4.292						
2	4.831						
2	4.993						
4 alpha-BHC							
1	4.250					ND	
2	5.128						
5 gamma-BHC (Lindane)							
1	4.637					ND	
2	5.751						
6 beta-BHC							
1	4.775					ND	
2	5.950						
7 delta-BHC							
1	4.998					ND	
2	6.573						

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.166				ND	
1		6.055					
1		7.339					
1		7.677					
2		6.325					
2		7.950					
2		9.283					
2		9.581					
9 Heptachlor							
1		5.283				ND	
2		6.653					
10 Aldrin							
1		5.748				ND	
2		7.458					
11 Isodrin							
1		6.354				ND	
2		8.430					
12 Heptachlor epoxide							
1		7.021				ND	
2		8.889					
13 gamma-Chlordane							
1		7.337				ND	
2		9.285					
14 alpha-Chlordane							
1		7.682				ND	
2		9.583					
15 Endosulfan I							
1		7.957				ND	
2		9.651					
16 4,4'-DDE							
1		8.056				ND	
2		10.009					
17 Dieldrin							
1		8.508				ND	
2		10.167					
18 Endrin							
1		8.962				ND	
2		10.680					
19 Kepone							
1		9.020				ND	
2		10.835					
20 4,4'-DDD							
1		9.322				ND	
2		11.004					
21 Endosulfan II							
1		9.411				ND	
2		11.050					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
22 Chlorobenzilate							
1		9.422				ND	
2		10.829					
24 Toxaphene							M
1	9.618	9.622	-0.004	6668723	200.0	176.3	M
1	10.083	10.081	0.002	6158420	200.0	168.1	M
1	10.393	10.393	0.000	3305126	200.0	141.5	M
1	10.736	10.735	0.001	5308916	200.0	160.0	M
1	10.841	10.840	0.001	3051798	200.0	94.4	M
		Average of Peak Amounts =				148.1	
2	11.025	11.025	0.000	8123575	200.0	156.8	M
2	11.195	11.195	0.000	8454792	200.0	165.9	M
2	11.619	11.618	0.001	5432969	200.0	152.4	M
2	12.355	12.353	0.002	5372334	200.0	117.7	M
2	12.441	12.444	-0.003	1914467	200.0	123.0	M
		Average of Peak Amounts =				143.2	
						RPD = 3.36	
23 4,4'-DDT							
1		9.838				ND	
2		11.487					
25 Endrin aldehyde							
1		10.206				ND	
2		11.609					
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1		10.789				ND	
2		12.553					
28 Endosulfan sulfate							
1		10.933				ND	
2		12.030					
29 Endrin ketone							
1		11.333				ND	
2		12.773					
$ 30 DCB Decachlorobiphenyl							
1		12.938				ND	
2		14.493					

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 20.00 Units: uL

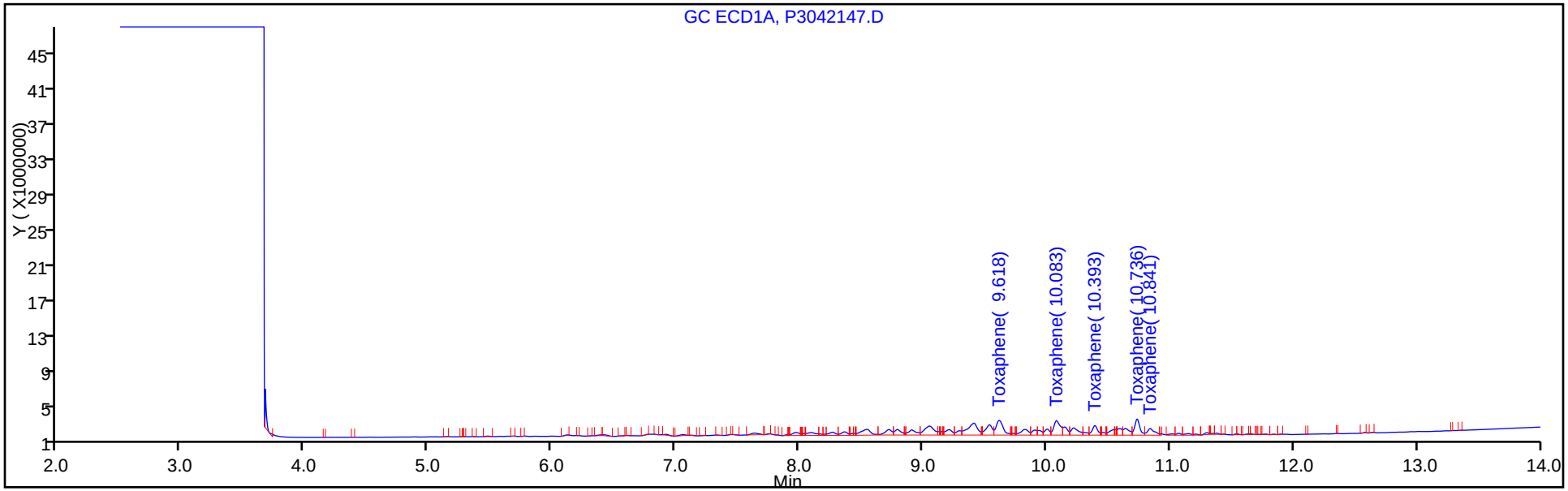
Report Date: 22-Apr-2015 08:58:25 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

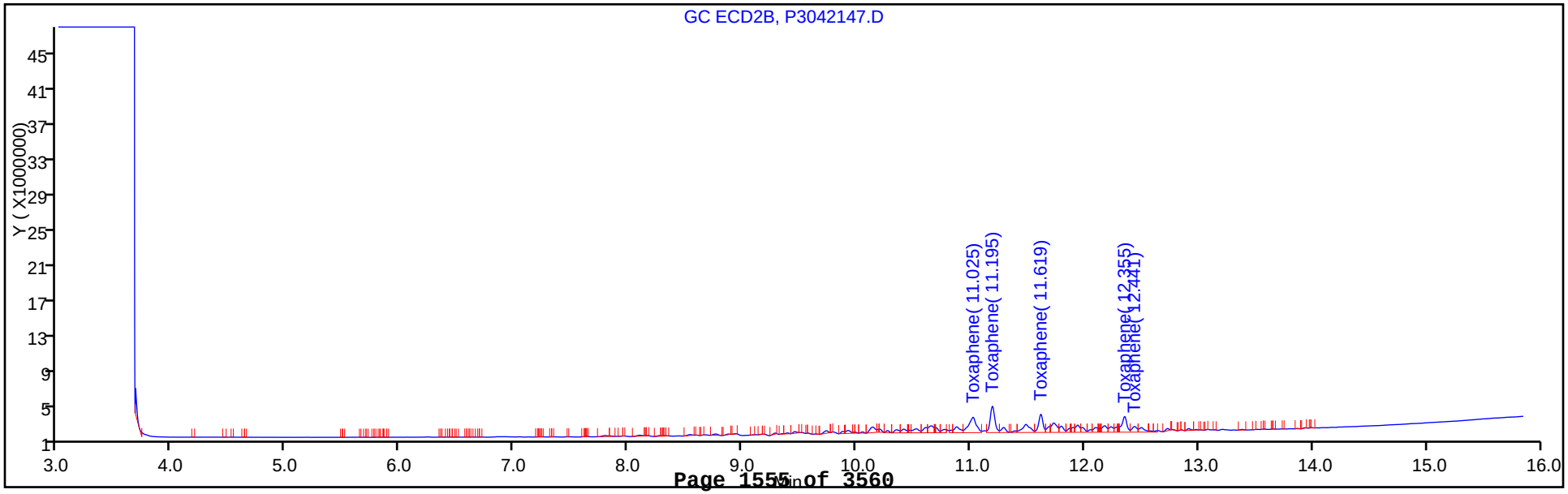
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042147.D

Injection Date:	22-Apr-2015 06:25:59	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL TOX			Worklist Smp#:	47
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 22-Apr-2015 08:58:26 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042147.D

Injection Date: 22-Apr-2015 06:25:59 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

Operator ID: 430893 ALS Bottle#: 47 Worklist Smp#: 47

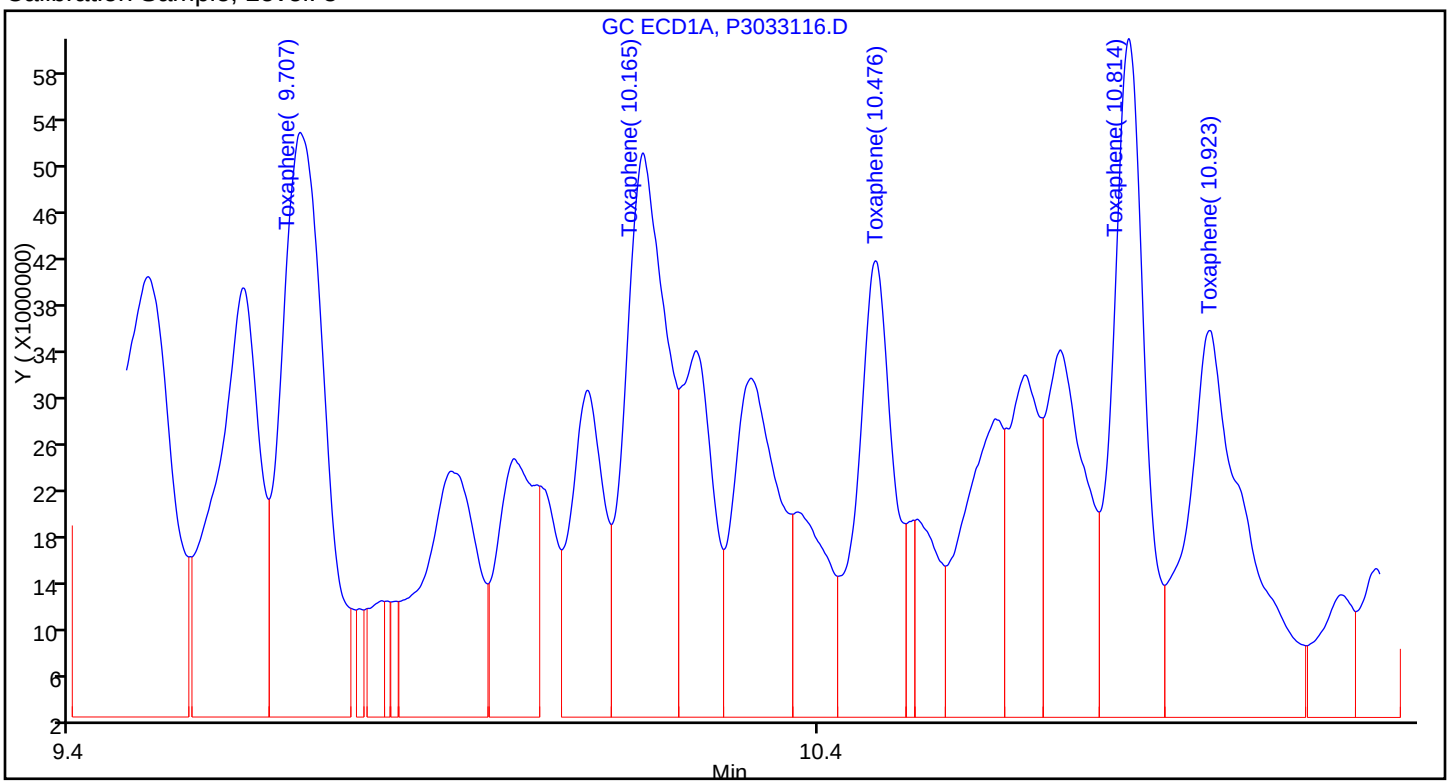
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

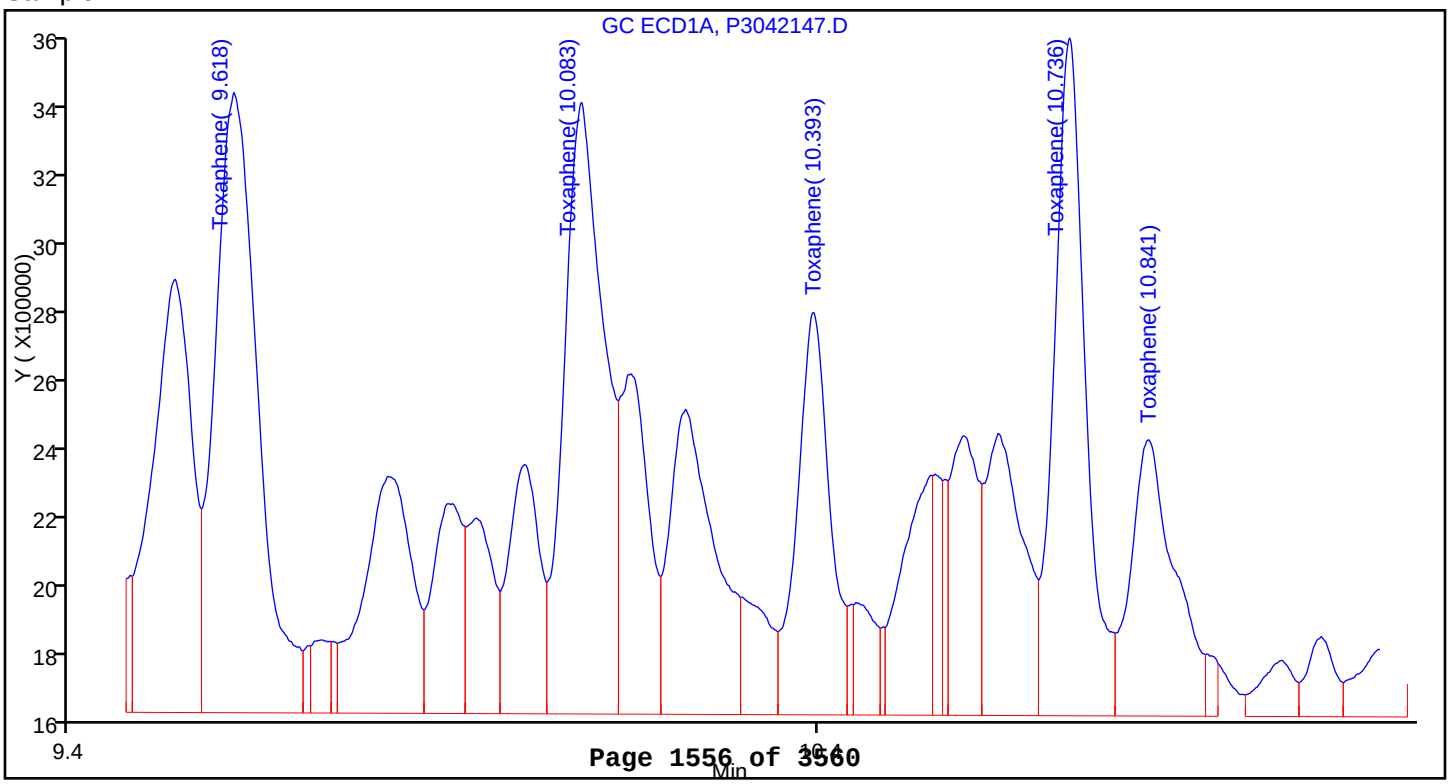
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 5



Sample



Report Date: 22-Apr-2015 08:58:26 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042147.D

Injection Date: 22-Apr-2015 06:25:59 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

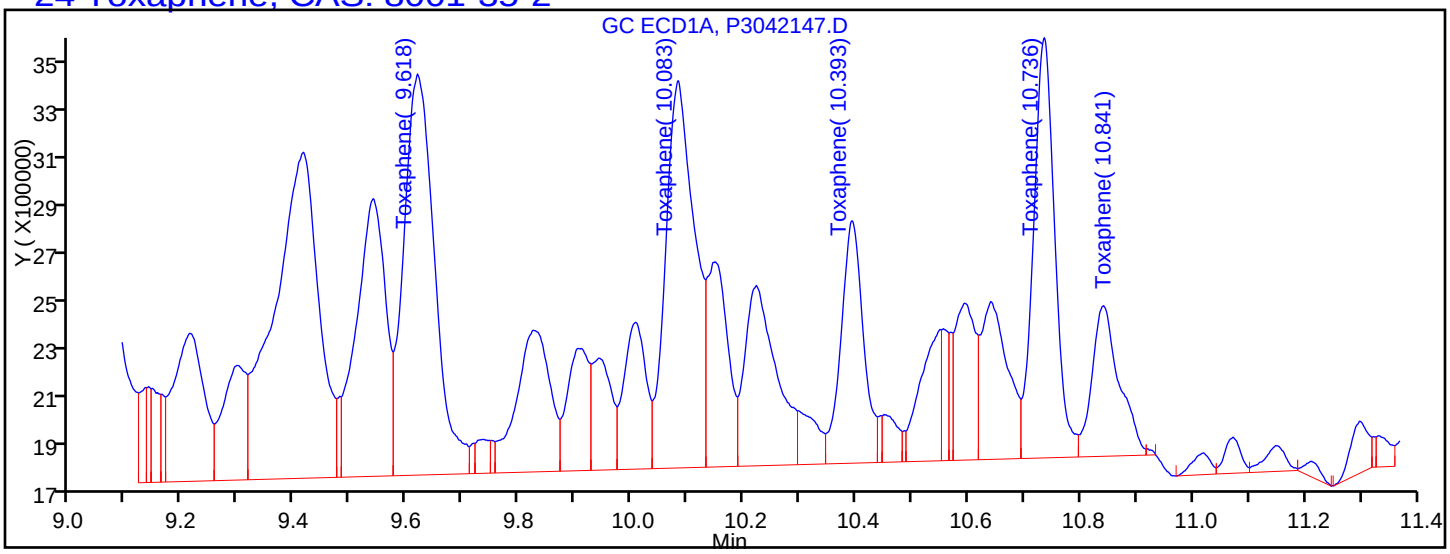
Operator ID: 430893 ALS Bottle#: 47 Worklist Smp#: 47

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

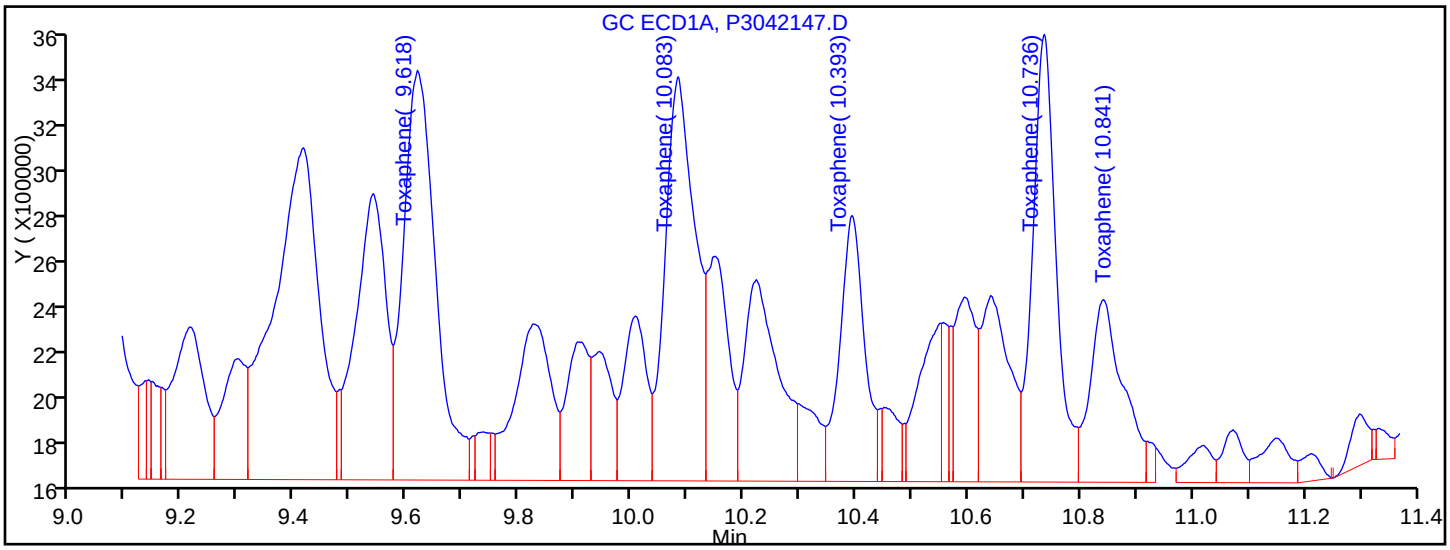
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.618	Response = 6233656	M
RT = 10.083	Response = 5675294	M
RT = 10.393	Response = 2720411	M
RT = 10.736	Response = 4510246	M
RT = 10.841	Response = 2054115	M



Manual Integration Results

RT = 9.618	Response = 6668723	M
RT = 10.083	Response = 6158420	M
RT = 10.393	Response = 3305126	M
RT = 10.736	Response = 5308916	M
RT = 10.841	Response = 3051798	M

Reviewer: matthewsb, 22-Apr-2015 07:37:43

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-177258/47

Matrix: Solid Lab File ID: P3042147.D

Analysis Method: 8081A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/22/2015 06:25

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	*Toxaphene*	*143*		*2.0*	1.0	*0.20*

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042147.D
Lims ID: MRL TOX
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 06:25:59 ALS Bottle#: 47 Worklist Smp#: 47
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-047
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:58:14 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 07:37:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1		3.554				ND	
2		4.235					
3 Hexachlorobenzene							
1		4.030				ND	
2		4.879					
2 Diallate							
1		4.125				ND	
1		4.292					
2		4.831					
2		4.993					
4 alpha-BHC							
1		4.250				ND	
2		5.128					
5 gamma-BHC (Lindane)							
1		4.637				ND	
2		5.751					
6 beta-BHC							
1		4.775				ND	
2		5.950					
7 delta-BHC							
1		4.998				ND	
2		6.573					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.166				ND	
1		6.055					
1		7.339					
1		7.677					
2		6.325					
2		7.950					
2		9.283					
2		9.581					
9 Heptachlor							
1		5.283				ND	
2		6.653					
10 Aldrin							
1		5.748				ND	
2		7.458					
11 Isodrin							
1		6.354				ND	
2		8.430					
12 Heptachlor epoxide							
1		7.021				ND	
2		8.889					
13 gamma-Chlordane							
1		7.337				ND	
2		9.285					
14 alpha-Chlordane							
1		7.682				ND	
2		9.583					
15 Endosulfan I							
1		7.957				ND	
2		9.651					
16 4,4'-DDE							
1		8.056				ND	
2		10.009					
17 Dieldrin							
1		8.508				ND	
2		10.167					
18 Endrin							
1		8.962				ND	
2		10.680					
19 Kepone							
1		9.020				ND	
2		10.835					
20 4,4'-DDD							
1		9.322				ND	
2		11.004					
21 Endosulfan II							
1		9.411				ND	
2		11.050					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
22 Chlorobenzilate							
1		9.422				ND	
2		10.829					
24 Toxaphene							M
1	9.618	9.622	-0.004	6668723	200.0	176.3	M
1	10.083	10.081	0.002	6158420	200.0	168.1	M
1	10.393	10.393	0.000	3305126	200.0	141.5	M
1	10.736	10.735	0.001	5308916	200.0	160.0	M
1	10.841	10.840	0.001	3051798	200.0	94.4	M
		Average of Peak Amounts =				148.1	
2	11.025	11.025	0.000	8123575	200.0	156.8	M
2	11.195	11.195	0.000	8454792	200.0	165.9	M
2	11.619	11.618	0.001	5432969	200.0	152.4	M
2	12.355	12.353	0.002	5372334	200.0	117.7	M
2	12.441	12.444	-0.003	1914467	200.0	123.0	M
		Average of Peak Amounts =				143.2	
						RPD = 3.36	
23 4,4'-DDT							
1		9.838				ND	
2		11.487					
25 Endrin aldehyde							
1		10.206				ND	
2		11.609					
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1		10.789				ND	
2		12.553					
28 Endosulfan sulfate							
1		10.933				ND	
2		12.030					
29 Endrin ketone							
1		11.333				ND	
2		12.773					
$ 30 DCB Decachlorobiphenyl							
1		12.938				ND	
2		14.493					

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 20.00 Units: uL

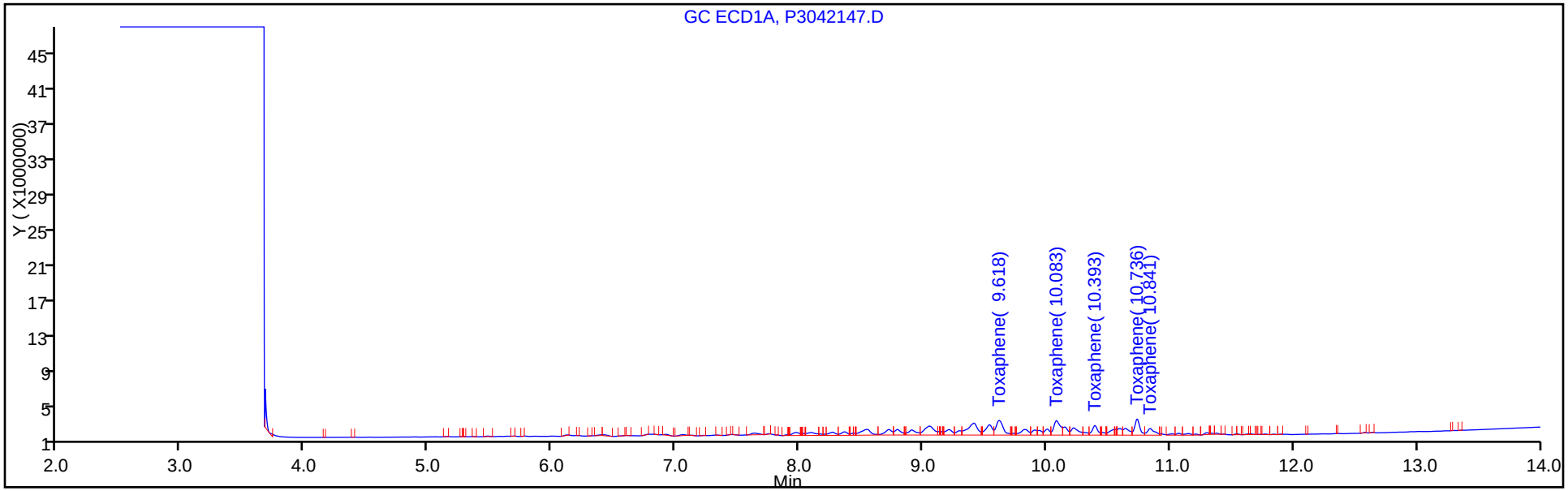
Report Date: 22-Apr-2015 08:58:26 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

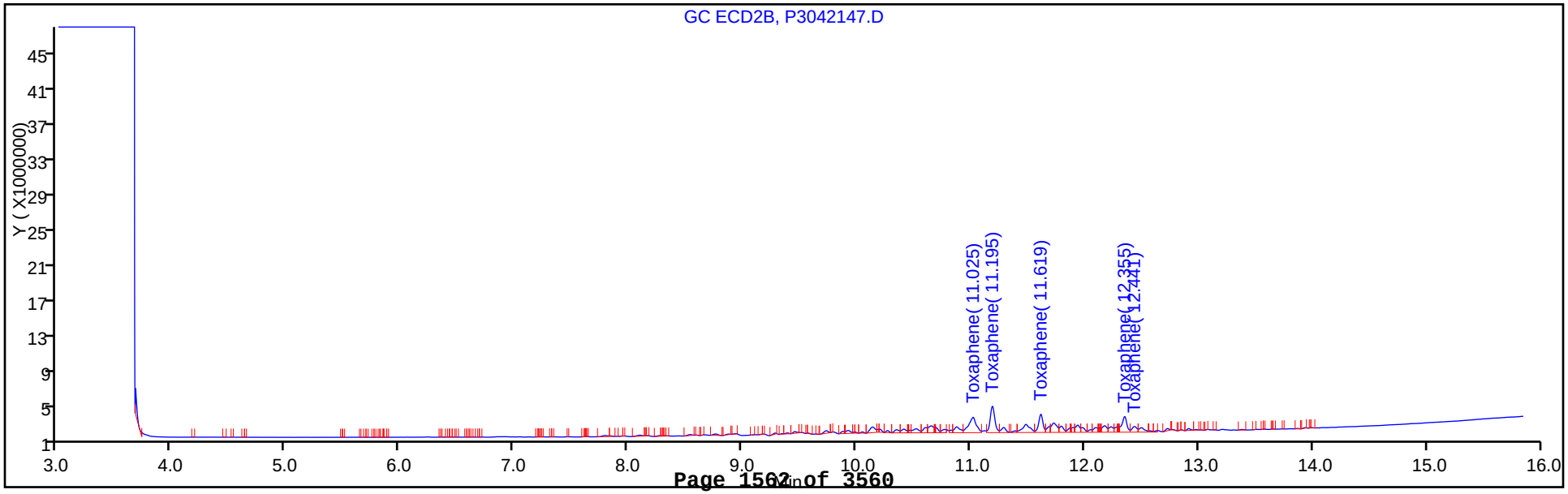
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042147.D

Injection Date:	22-Apr-2015 06:25:59	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL TOX			Worklist Smp#:	47
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 22-Apr-2015 08:58:26 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042147.D

Injection Date: 22-Apr-2015 06:25:59 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

Operator ID: 430893 ALS Bottle#: 47 Worklist Smp#: 47

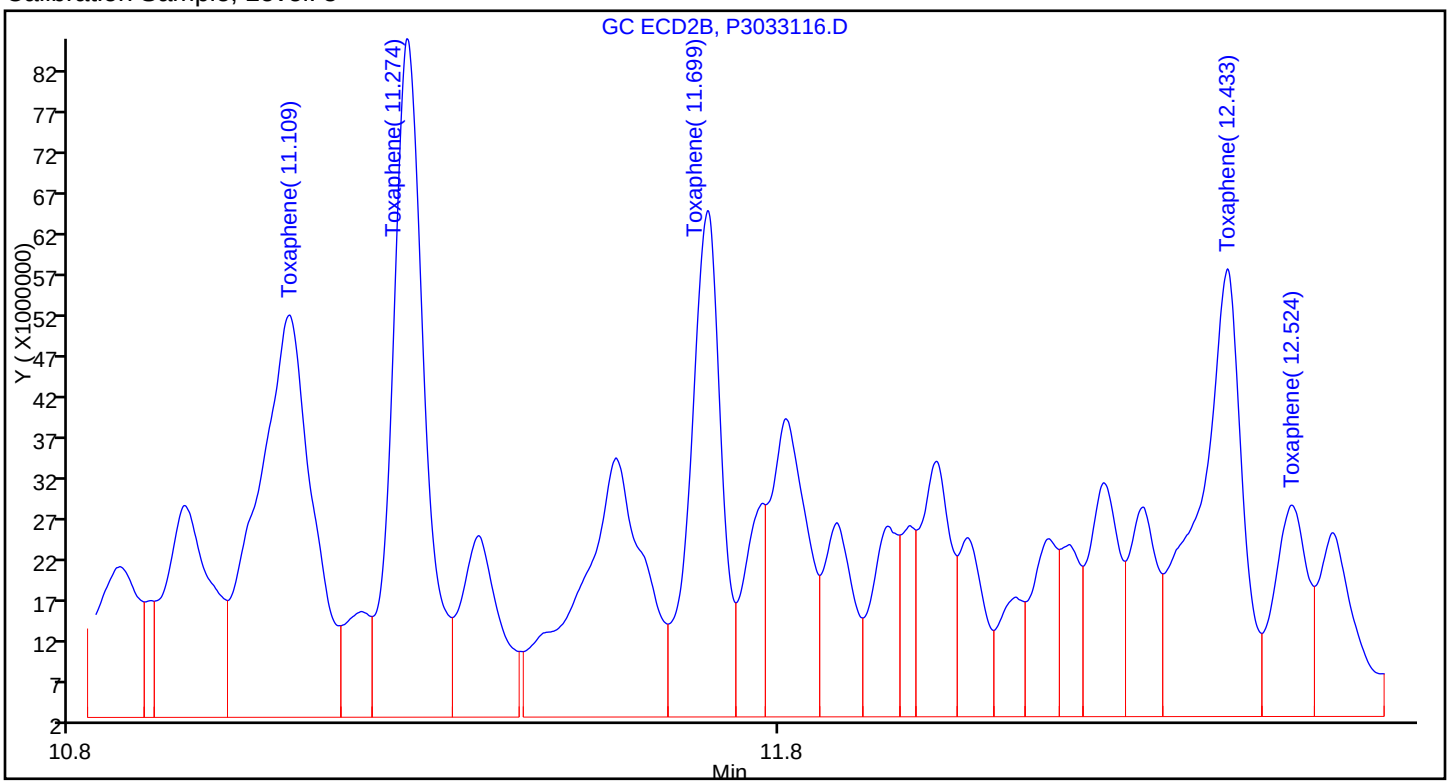
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

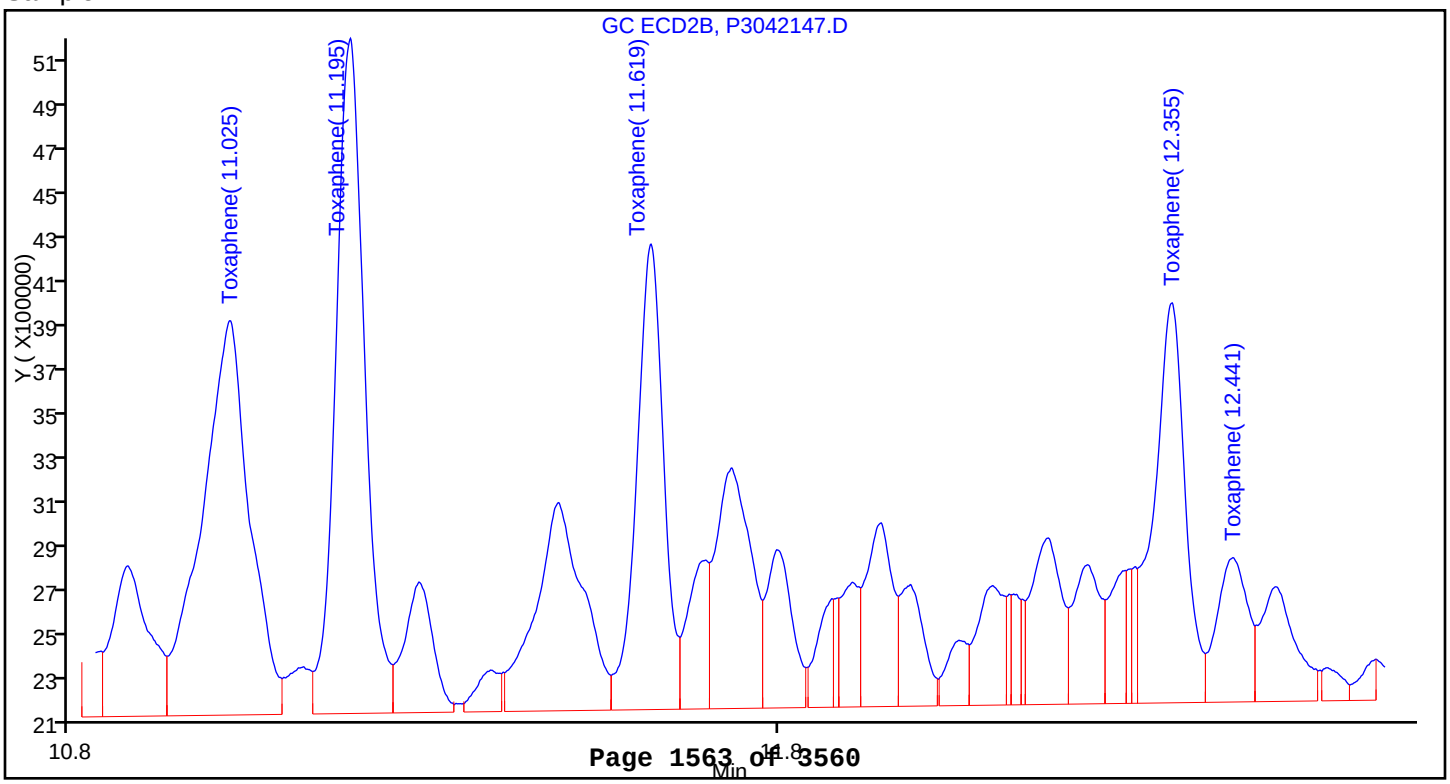
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 5



Sample



Report Date: 22-Apr-2015 08:58:26 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042147.D

Injection Date: 22-Apr-2015 06:25:59 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

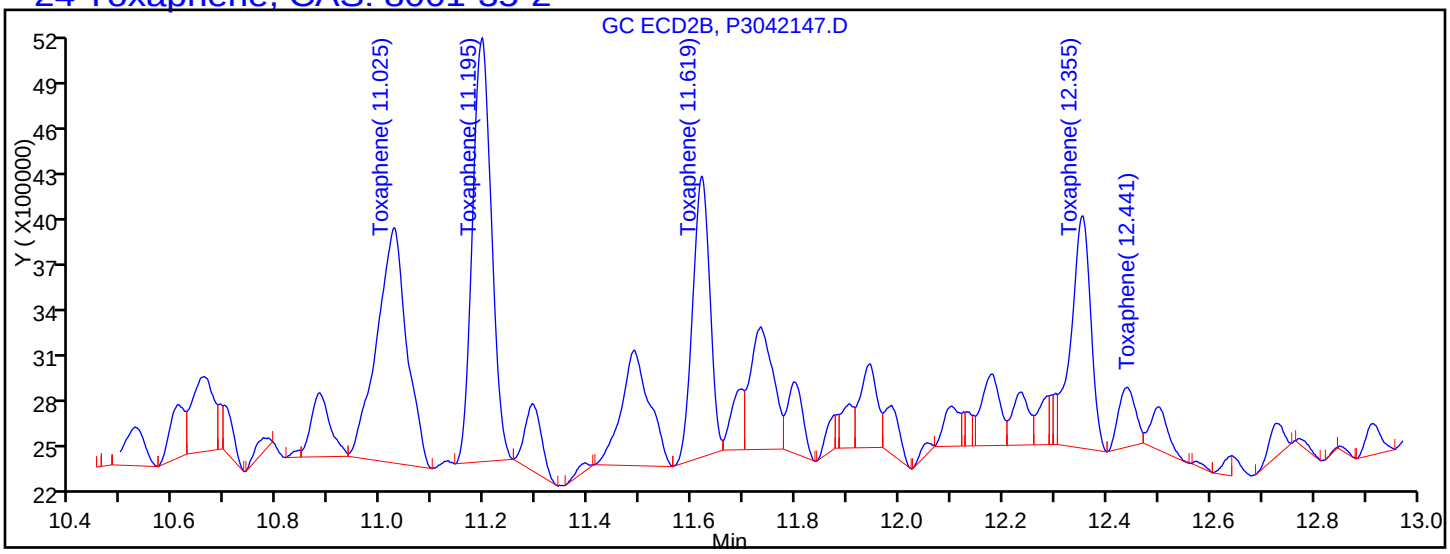
Operator ID: 430893 ALS Bottle#: 47 Worklist Smp#: 47

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

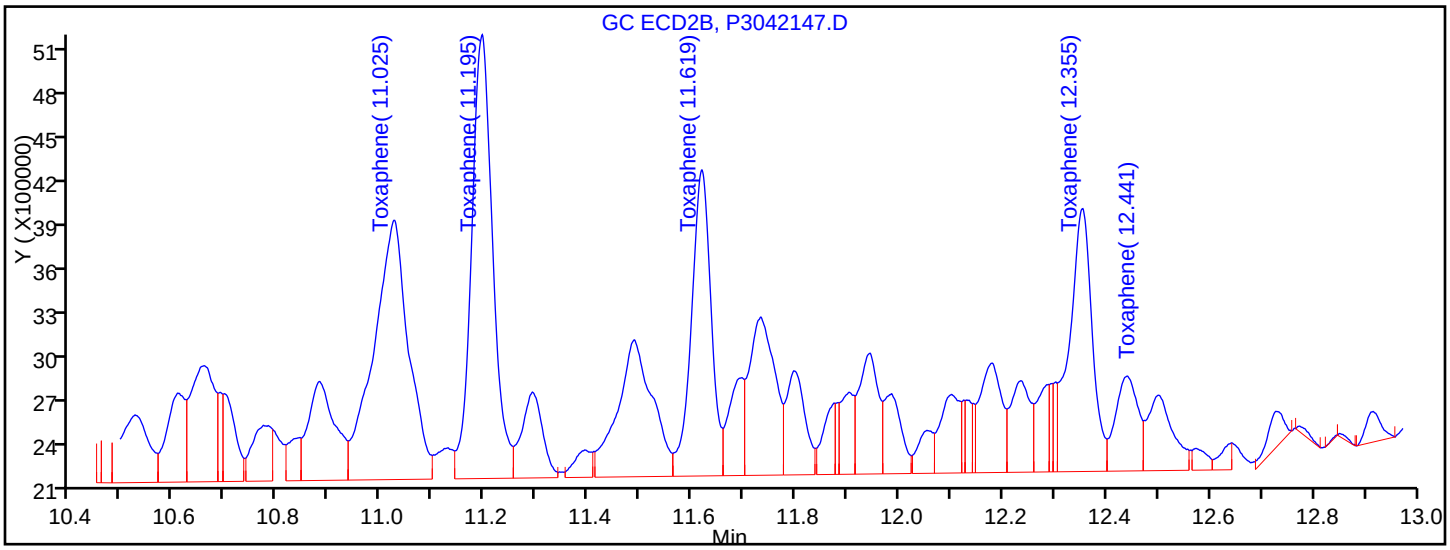
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 11.025	Response = 6166955	M
RT = 11.195	Response = 7098168	M
RT = 11.619	Response = 4250424	M
RT = 12.355	Response = 3993179	M
RT = 12.441	Response = 901540	M



Manual Integration Results

RT = 11.025	Response = 8123575	M
RT = 11.195	Response = 8454792	M
RT = 11.619	Response = 5432969	M
RT = 12.355	Response = 5372334	M
RT = 12.441	Response = 1914467	M

Reviewer: matthewsb, 22-Apr-2015 07:37:43

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177258/49

Matrix: Solid | Lab File ID: P3042149.D

Analysis Method: 8081A | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 07:12

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	5.35		0.050	0.050	0.018
72-55-9	4,4'-DDE	5.35		0.050	0.050	0.0090
50-29-3	4,4'-DDT	3.49		0.050	0.050	0.014
309-00-2	Aldrin	5.43		0.050	0.050	0.013
319-84-6	alpha-BHC	5.37		0.050	0.050	0.014
5103-71-9	alpha-Chlordane	5.57		0.050	0.050	0.012
319-85-7	beta-BHC	5.80		0.050	0.050	0.013
319-86-8	delta-BHC	4.82		0.050	0.050	0.029
60-57-1	Dieldrin	5.56		0.050	0.050	0.013
959-98-8	Endosulfan I	5.78		0.050	0.050	0.016
33213-65-9	Endosulfan II	6.16		0.050	0.050	0.015
1031-07-8	Endosulfan sulfate	5.67		0.050	0.050	0.011
72-20-8	Endrin	5.61		0.050	0.050	0.012
7421-93-4	Endrin aldehyde	5.29		0.050	0.050	0.0080
53494-70-5	Endrin ketone	5.38		0.050	0.050	0.0090
58-89-9	gamma-BHC (Lindane)	5.36		0.050	0.050	0.012
5103-74-2	gamma-Chlordane	5.45		0.050	0.050	0.010
76-44-8	Heptachlor	5.73		0.050	0.050	0.0050
1024-57-3	Heptachlor epoxide	5.76		0.050	0.050	0.014
72-43-5	Methoxychlor	4.23		0.10	0.050	0.012

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	116		50-150
877-09-8	Tetrachloro-m-xylene	117		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042149.D
Lims ID: MRL AB
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 07:12:11 ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-049
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:58:14 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 08:10:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555	3.554	0.001	5759700	5.00	5.86	
2	4.235	4.235	0.000	6674773	5.00	5.92	
						RPD = 1.13	
3 Hexachlorobenzene							
1		4.030				ND	
2		4.879					
2 Diallate							
1		4.125				ND	
1		4.292					
2		4.831					
2		4.993					
4 alpha-BHC							
1	4.250	4.250	0.000	9297189	5.00	5.37	
2	5.129	5.128	0.001	10527383	5.00	5.38	
						RPD = 0.18	
5 gamma-BHC (Lindane)							
1	4.638	4.637	0.001	8280119	5.00	5.36	
2	5.751	5.751	0.000	9653649	5.00	5.46	
						RPD = 1.70	
6 beta-BHC							
1	4.777	4.775	0.002	3650972	5.00	5.80	
2	5.952	5.950	0.002	4637872	5.00	6.04	
						RPD = 4.05	
7 delta-BHC							
1	5.000	4.998	0.002	7242641	5.00	4.82	
2	6.575	6.573	0.002	8681316	5.00	4.89	
						RPD = 1.52	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.166				ND	
1		6.055					
1		7.339					
1		7.677					
2		6.325					
2		7.950					
2		9.283					
2		9.581					
9 Heptachlor							
1	5.285	5.283	0.002	8365986	5.00	5.73	
2	6.653	6.653	0.000	10069563	5.00	5.96	
						RPD = 3.82	
10 Aldrin							
1	5.750	5.748	0.002	7942814	5.00	5.43	
2	7.458	7.458	0.000	9285452	5.00	5.55	
						RPD = 2.18	
11 Isodrin							
1		6.354				ND	
2		8.430					
12 Heptachlor epoxide							
1	7.025	7.021	0.004	7509932	5.00	5.76	
2	8.889	8.889	0.000	8417740	5.00	5.86	
						RPD = 1.80	
13 gamma-Chlordane							
1	7.340	7.337	0.003	7356533	5.00	5.45	
2	9.284	9.285	-0.001	8306900	5.00	5.65	
						RPD = 3.60	
14 alpha-Chlordane							
1	7.685	7.682	0.003	7453295	5.00	5.57	
2	9.584	9.583	0.001	8008390	5.00	5.64	
						RPD = 1.18	
15 Endosulfan I							
1	7.958	7.957	0.001	7090410	5.00	5.78	
2	9.653	9.651	0.002	7760039	5.00	5.87	
						RPD = 1.64	
16 4,4'-DDE							
1	8.061	8.056	0.005	6336434	5.00	5.35	
2	10.012	10.009	0.003	7190910	5.00	5.45	
						RPD = 1.80	
17 Dieldrin							
1	8.511	8.508	0.003	7266323	5.00	5.56	
2	10.167	10.167	0.000	7763329	5.00	5.67	
						RPD = 2.09	
18 Endrin							
1	8.964	8.962	0.002	6461451	5.00	5.61	
2	10.680	10.680	0.000	6537728	5.00	5.42	
						RPD = 3.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
19 Kepone							
1		9.020				ND	
2		10.835					
20 4,4'-DDD							
1	9.330	9.322	0.008	4660374	5.00	5.35	
2	11.006	11.004	0.002	5123179	5.00	5.23	
						RPD = 2.25	
21 Endosulfan II							
1	9.414	9.411	0.003	7125507	5.00	6.16	
2	11.050	11.050	0.000	7587472	5.00	6.49	
						RPD = 5.20	
22 Chlorobenzilate							
1		9.422				ND	
2		10.829					
24 Toxaphene							
1		9.622				ND	
1		10.081					
1		10.393					
1		10.735					
1		10.840					
2		11.025					
2		11.195					
2		11.618					
2		12.353					
2		12.444					
23 4,4'-DDT							
1	9.841	9.838	0.003	3331675	5.00	3.49	
2	11.486	11.487	-0.001	3447548	5.00	3.45	
						RPD = 0.96	
25 Endrin aldehyde							
1	10.210	10.206	0.004	4710760	5.00	5.29	
2	11.609	11.609	0.000	4861346	5.00	5.21	
						RPD = 1.57	
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1	10.793	10.789	0.004	1940360	5.00	4.23	
2	12.554	12.553	0.001	1928694	5.00	3.94	
						RPD = 7.14	
28 Endosulfan sulfate							
1	10.935	10.933	0.002	5653115	5.00	5.67	
2	12.030	12.030	0.000	5971930	5.00	5.64	
						RPD = 0.64	
29 Endrin ketone							
1	11.334	11.333	0.001	6578132	5.00	5.38	
2	12.774	12.773	0.001	6574509	5.00	5.35	
						RPD = 0.54	

Report Date: 22-Apr-2015 08:58:28 Chrom Revision: 2.2 09-Apr-2015 10:05:40

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042149.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 30 DCB Decachlorobiphenyl							
1	12.940	12.938	0.002	5434719	5.00	5.80	
2	14.492	14.493	-0.001	5979986	5.00	5.87	
						RPD = 1.21	

Reagents:

SGPestAB1_00011 Amount Added: 1.00 Units: mL

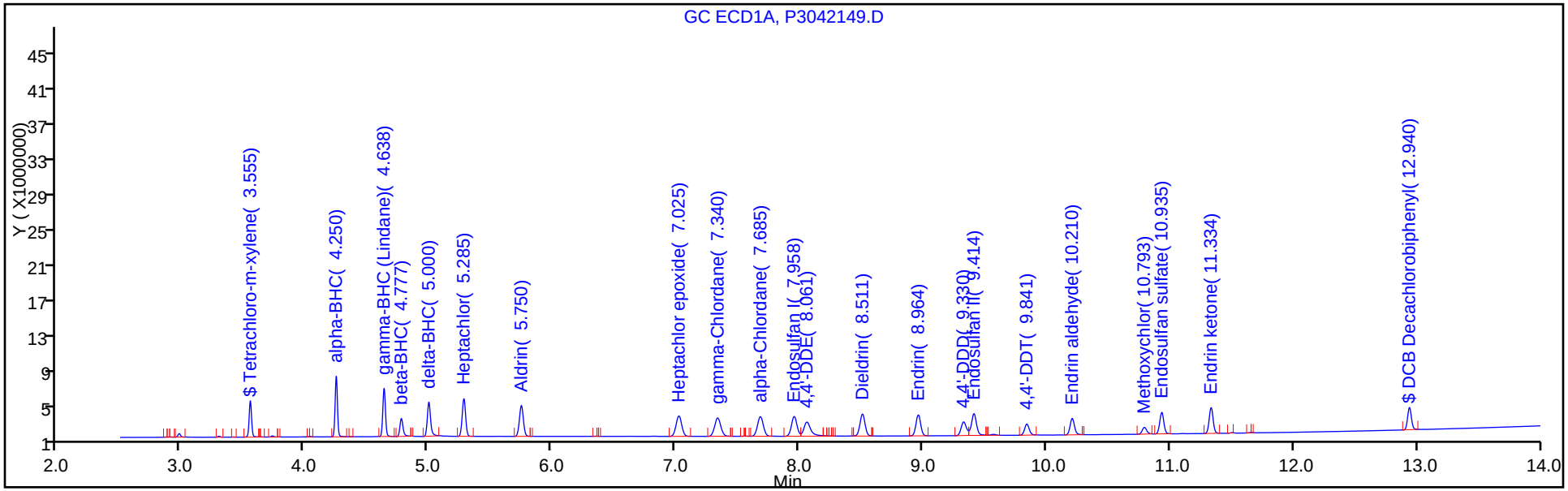
Report Date: 22-Apr-2015 08:58:28 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

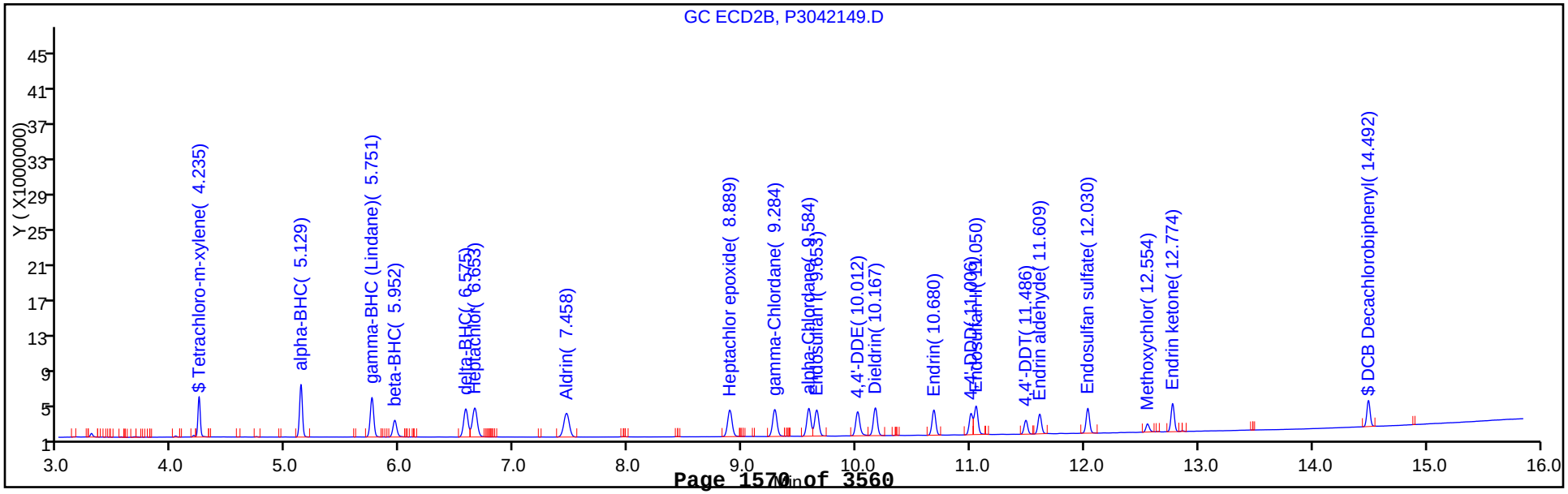
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042149.D

Injection Date:	22-Apr-2015 07:12:11	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL AB			Worklist Smp#:	49
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	49
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177258/49

Matrix: Solid | Lab File ID: P3042149.D

Analysis Method: 8081A | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 07:12

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177258 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	*4,4'-DDD*	*5.23*		*0.050*	0.050	*0.018*
72-55-9	*4,4'-DDE*	*5.45*		*0.050*	0.050	*0.0090*
50-29-3	*4,4'-DDT*	*3.45*	^	*0.050*	0.050	*0.014*
309-00-2	*Aldrin*	*5.55*		*0.050*	0.050	*0.013*
319-84-6	*alpha-BHC*	*5.38*		*0.050*	0.050	*0.014*
5103-71-9	*alpha-Chlordane*	*5.64*		*0.050*	0.050	*0.012*
319-85-7	*beta-BHC*	*6.04*		*0.050*	0.050	*0.013*
319-86-8	*delta-BHC*	*4.89*		*0.050*	0.050	*0.029*
60-57-1	*Dieldrin*	*5.67*		*0.050*	0.050	*0.013*
959-98-8	*Endosulfan I*	*5.87*		*0.050*	0.050	*0.016*
33213-65-9	*Endosulfan II*	*6.49*		*0.050*	0.050	*0.015*
1031-07-8	*Endosulfan sulfate*	*5.64*		*0.050*	0.050	*0.011*
72-20-8	*Endrin*	*5.42*		*0.050*	0.050	*0.012*
7421-93-4	*Endrin aldehyde*	*5.21*		*0.050*	0.050	*0.0080*
53494-70-5	*Endrin ketone*	*5.35*		*0.050*	0.050	*0.0090*
58-89-9	*gamma-BHC (Lindane)*	*5.46*		*0.050*	0.050	*0.012*
5103-74-2	*gamma-Chlordane*	*5.65*		*0.050*	0.050	*0.010*
76-44-8	*Heptachlor*	*5.96*		*0.050*	0.050	*0.0050*
1024-57-3	*Heptachlor epoxide*	*5.86*		*0.050*	0.050	*0.014*
72-43-5	*Methoxychlor*	*3.94*		*0.10*	0.050	*0.012*

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	117		50-150
877-09-8	Tetrachloro-m-xylene	118		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042149.D
Lims ID: MRL AB
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 07:12:11 ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042770-049
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150421-42770.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 22-Apr-2015 08:58:14 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK008

First Level Reviewer: matthewsb Date: 22-Apr-2015 08:10:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555	3.554	0.001	5759700	5.00	5.86	
2	4.235	4.235	0.000	6674773	5.00	5.92	
						RPD = 1.13	
3 Hexachlorobenzene							
1		4.030				ND	
2		4.879					
2 Diallate							
1		4.125				ND	
1		4.292					
2		4.831					
2		4.993					
4 alpha-BHC							
1	4.250	4.250	0.000	9297189	5.00	5.37	
2	5.129	5.128	0.001	10527383	5.00	5.38	
						RPD = 0.18	
5 gamma-BHC (Lindane)							
1	4.638	4.637	0.001	8280119	5.00	5.36	
2	5.751	5.751	0.000	9653649	5.00	5.46	
						RPD = 1.70	
6 beta-BHC							
1	4.777	4.775	0.002	3650972	5.00	5.80	
2	5.952	5.950	0.002	4637872	5.00	6.04	
						RPD = 4.05	
7 delta-BHC							
1	5.000	4.998	0.002	7242641	5.00	4.82	
2	6.575	6.573	0.002	8681316	5.00	4.89	
						RPD = 1.52	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.166				ND	
1		6.055					
1		7.339					
1		7.677					
2		6.325					
2		7.950					
2		9.283					
2		9.581					
9 Heptachlor							
1	5.285	5.283	0.002	8365986	5.00	5.73	
2	6.653	6.653	0.000	10069563	5.00	5.96	
						RPD = 3.82	
10 Aldrin							
1	5.750	5.748	0.002	7942814	5.00	5.43	
2	7.458	7.458	0.000	9285452	5.00	5.55	
						RPD = 2.18	
11 Isodrin							
1		6.354				ND	
2		8.430					
12 Heptachlor epoxide							
1	7.025	7.021	0.004	7509932	5.00	5.76	
2	8.889	8.889	0.000	8417740	5.00	5.86	
						RPD = 1.80	
13 gamma-Chlordane							
1	7.340	7.337	0.003	7356533	5.00	5.45	
2	9.284	9.285	-0.001	8306900	5.00	5.65	
						RPD = 3.60	
14 alpha-Chlordane							
1	7.685	7.682	0.003	7453295	5.00	5.57	
2	9.584	9.583	0.001	8008390	5.00	5.64	
						RPD = 1.18	
15 Endosulfan I							
1	7.958	7.957	0.001	7090410	5.00	5.78	
2	9.653	9.651	0.002	7760039	5.00	5.87	
						RPD = 1.64	
16 4,4'-DDE							
1	8.061	8.056	0.005	6336434	5.00	5.35	
2	10.012	10.009	0.003	7190910	5.00	5.45	
						RPD = 1.80	
17 Dieldrin							
1	8.511	8.508	0.003	7266323	5.00	5.56	
2	10.167	10.167	0.000	7763329	5.00	5.67	
						RPD = 2.09	
18 Endrin							
1	8.964	8.962	0.002	6461451	5.00	5.61	
2	10.680	10.680	0.000	6537728	5.00	5.42	
						RPD = 3.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
19 Kepone							
1		9.020				ND	
2		10.835					
20 4,4'-DDD							
1	9.330	9.322	0.008	4660374	5.00	5.35	
2	11.006	11.004	0.002	5123179	5.00	5.23	
						RPD = 2.25	
21 Endosulfan II							
1	9.414	9.411	0.003	7125507	5.00	6.16	
2	11.050	11.050	0.000	7587472	5.00	6.49	
						RPD = 5.20	
22 Chlorobenzilate							
1		9.422				ND	
2		10.829					
24 Toxaphene							
1		9.622				ND	
1		10.081					
1		10.393					
1		10.735					
1		10.840					
2		11.025					
2		11.195					
2		11.618					
2		12.353					
2		12.444					
23 4,4'-DDT							
1	9.841	9.838	0.003	3331675	5.00	3.49	
2	11.486	11.487	-0.001	3447548	5.00	3.45	
						RPD = 0.96	
25 Endrin aldehyde							
1	10.210	10.206	0.004	4710760	5.00	5.29	
2	11.609	11.609	0.000	4861346	5.00	5.21	
						RPD = 1.57	
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1	10.793	10.789	0.004	1940360	5.00	4.23	
2	12.554	12.553	0.001	1928694	5.00	3.94	
						RPD = 7.14	
28 Endosulfan sulfate							
1	10.935	10.933	0.002	5653115	5.00	5.67	
2	12.030	12.030	0.000	5971930	5.00	5.64	
						RPD = 0.64	
29 Endrin ketone							
1	11.334	11.333	0.001	6578132	5.00	5.38	
2	12.774	12.773	0.001	6574509	5.00	5.35	
						RPD = 0.54	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 30 DCB Decachlorobiphenyl							
1	12.940	12.938	0.002	5434719	5.00	5.80	
2	14.492	14.493	-0.001	5979986	5.00	5.87	
						RPD = 1.21	

Reagents:

SGPestAB1_00011 Amount Added: 1.00 Units: mL

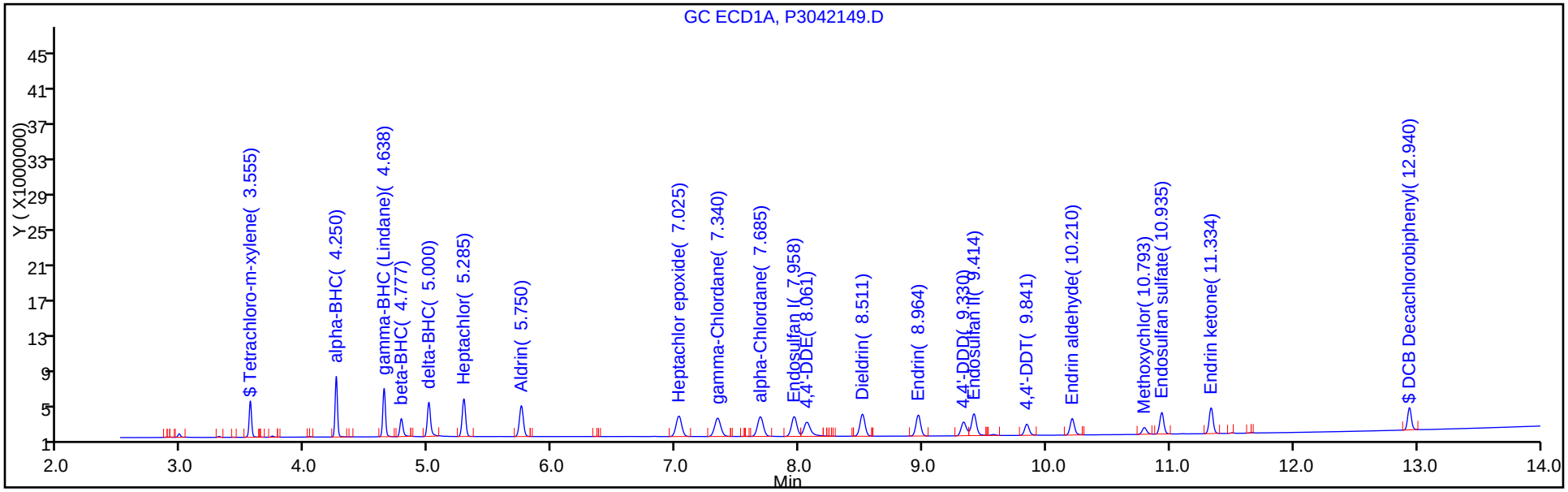
Report Date: 22-Apr-2015 08:58:28 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

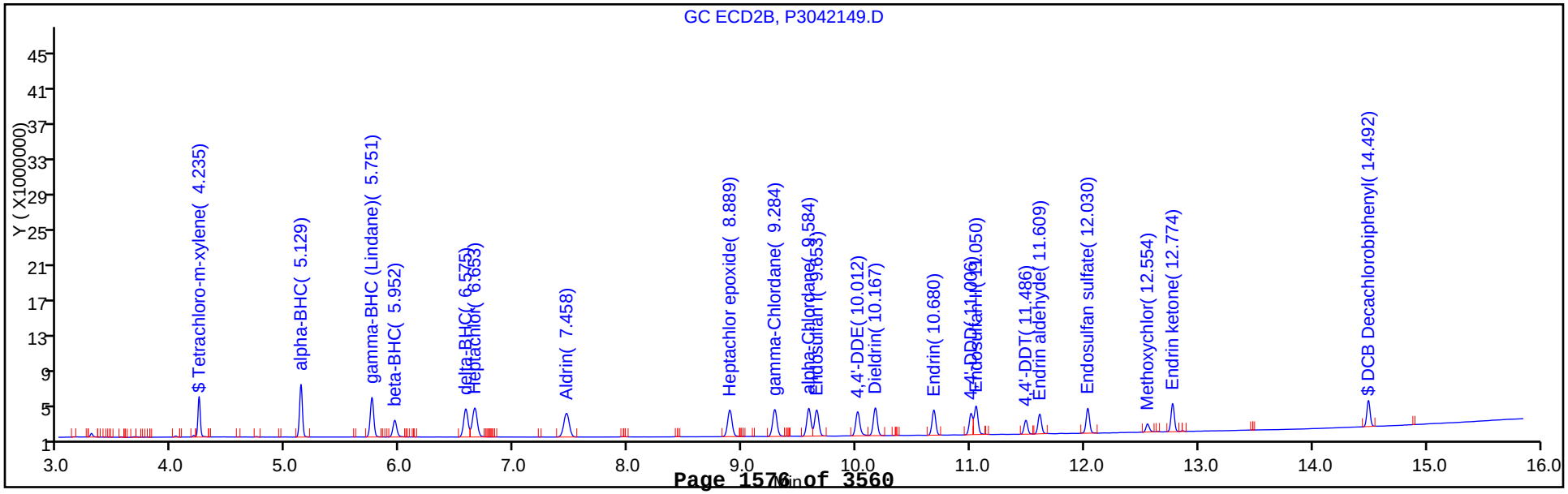
Data File: \\NCChrom\ChromData\A2HP3\20150421-42770.b\P3042149.D

Injection Date:	22-Apr-2015 07:12:11	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL AB			Worklist Smp#:	49
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	49
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-177463/17

Matrix: Solid Lab File ID: P3042217.D

Analysis Method: 8081A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/22/2015 20:53

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 177463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	Toxaphene	152		2.0	1.0	0.20

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042217.D
Lims ID: MRL TOX
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 20:53:46 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-017
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:43 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:30:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555					ND	
2	4.234						
3 Hexachlorobenzene							
1	4.030					ND	
2	4.880						
2 Diallate							
1	4.130					ND	
1	4.296						
2	4.833						
2	4.996						
4 alpha-BHC							
1	4.251					ND	
2	5.128						
5 gamma-BHC (Lindane)							
1	4.639					ND	
2	5.751						
6 beta-BHC							
1	4.779					ND	
2	5.950						
7 delta-BHC							
1	5.001					ND	
2	6.574						

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.173				ND	
1		6.063					
1		7.350					
1		7.690					
2		6.326					
2		7.951					
2		9.283					
2		9.583					
9 Heptachlor							
1		5.284				ND	
2		6.653					
10 Aldrin							
1		5.750				ND	
2		7.457					
11 Isodrin							
1		6.355				ND	
2		8.429					
12 Heptachlor epoxide							
1		7.025				ND	
2		8.889					
13 gamma-Chlordane							
1		7.339				ND	
2		9.283					
14 alpha-Chlordane							
1		7.684				ND	
2		9.583					
15 Endosulfan I							
1		7.958				ND	
2		9.652					
16 4,4'-DDE							
1		8.065				ND	
2		10.012					
17 Dieldrin							
1		8.513				ND	
2		10.167					
18 Endrin							
1		8.965				ND	
2		10.681					
19 Kepone							
1		9.039				ND	
2		10.845					
20 4,4'-DDD							
1		9.332				ND	
2		11.005					
21 Endosulfan II							
1		9.415				ND	
2		11.050					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
22 Chlorobenzilate							
1		9.427				ND	
2		10.829					
24 Toxaphene							M
1	9.623	9.625	-0.002	6436088	200.0	170.1	M
1	10.090	10.083	0.007	6297418	200.0	171.9	M
1	10.398	10.397	0.001	3409376	200.0	146.0	M
1	10.740	10.738	0.002	5519907	200.0	166.4	M
1	10.845	10.846	-0.001	3434830	200.0	106.2	M
		Average of Peak Amounts =				152.1	
2	11.025	11.024	0.001	9811028	200.0	189.3	M
2	11.194	11.195	-0.001	9634406	200.0	189.0	M
2	11.620	11.618	0.002	6484083	200.0	181.9	M
2	12.355	12.353	0.002	7074487	200.0	155.0	M
2	12.442	12.443	-0.001	2557926	200.0	164.3	M
		Average of Peak Amounts =				175.9	
						RPD = 14.52	
23 4,4'-DDT							
1		9.844				ND	
2		11.487					
25 Endrin aldehyde							
1		10.210				ND	
2		11.608					
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1		10.795				ND	
2		12.554					
28 Endosulfan sulfate							
1		10.935				ND	
2		12.030					
29 Endrin ketone							
1		11.336				ND	
2		12.773					
$ 30 DCB Decachlorobiphenyl							
1		12.940				ND	
2		14.492					

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 20.00 Units: uL

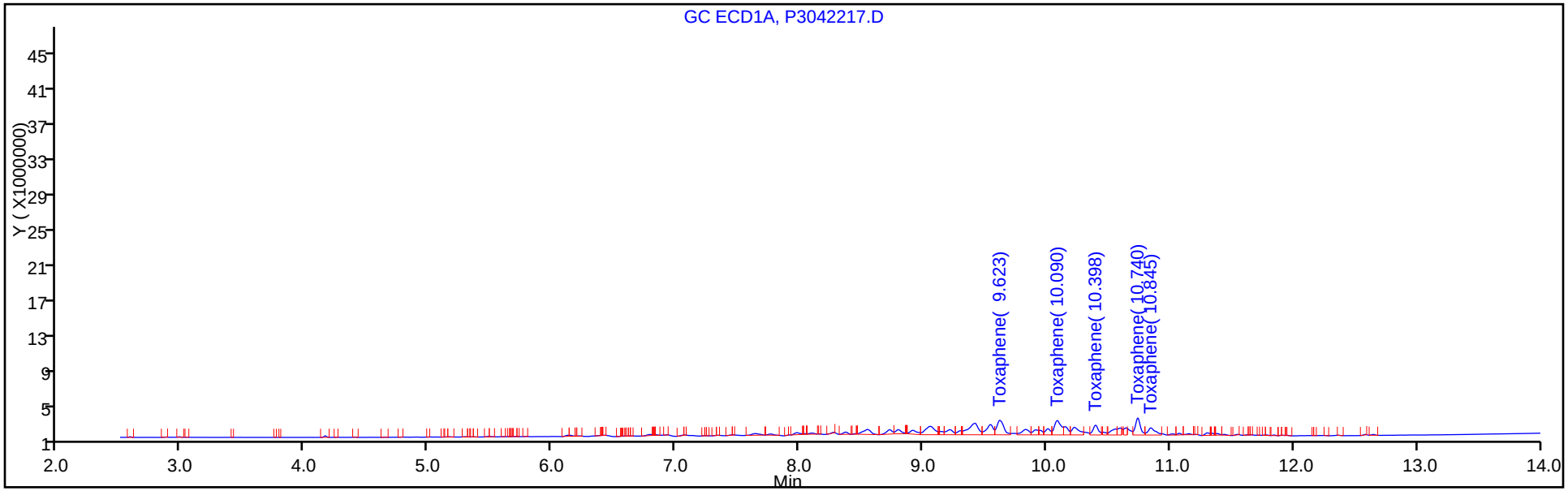
Report Date: 23-Apr-2015 07:42:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

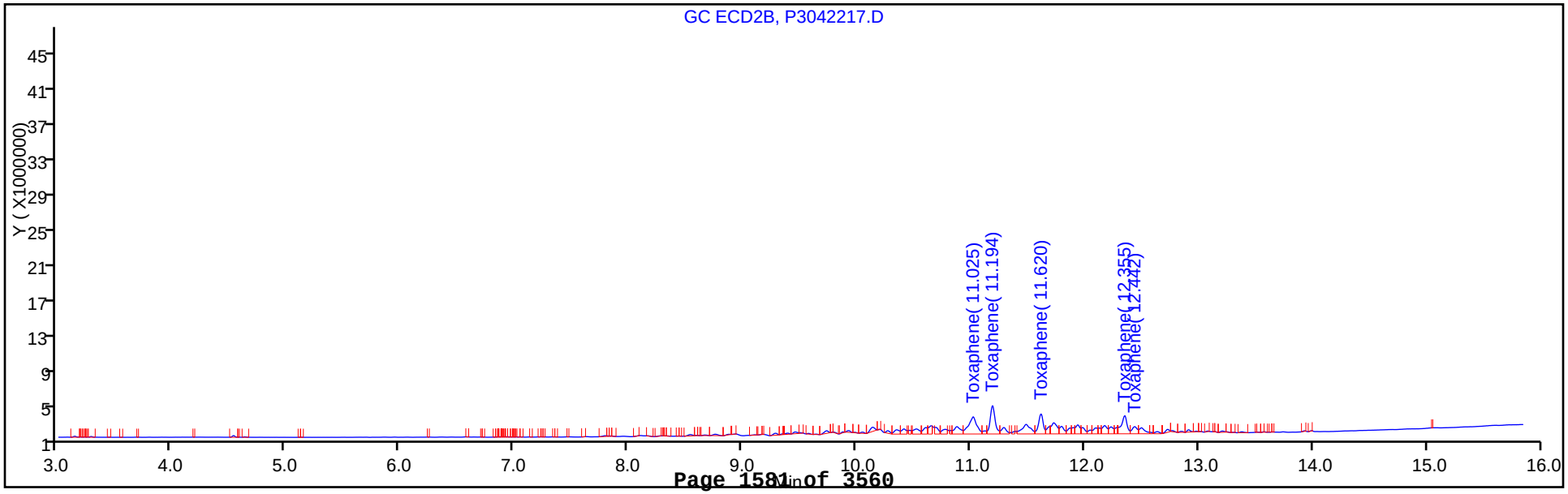
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042217.D

Injection Date:	22-Apr-2015 20:53:46	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL TOX			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 23-Apr-2015 07:42:45 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042217.D

Injection Date: 22-Apr-2015 20:53:46 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

Operator ID: 430893 ALS Bottle#: 17 Worklist Smp#: 17

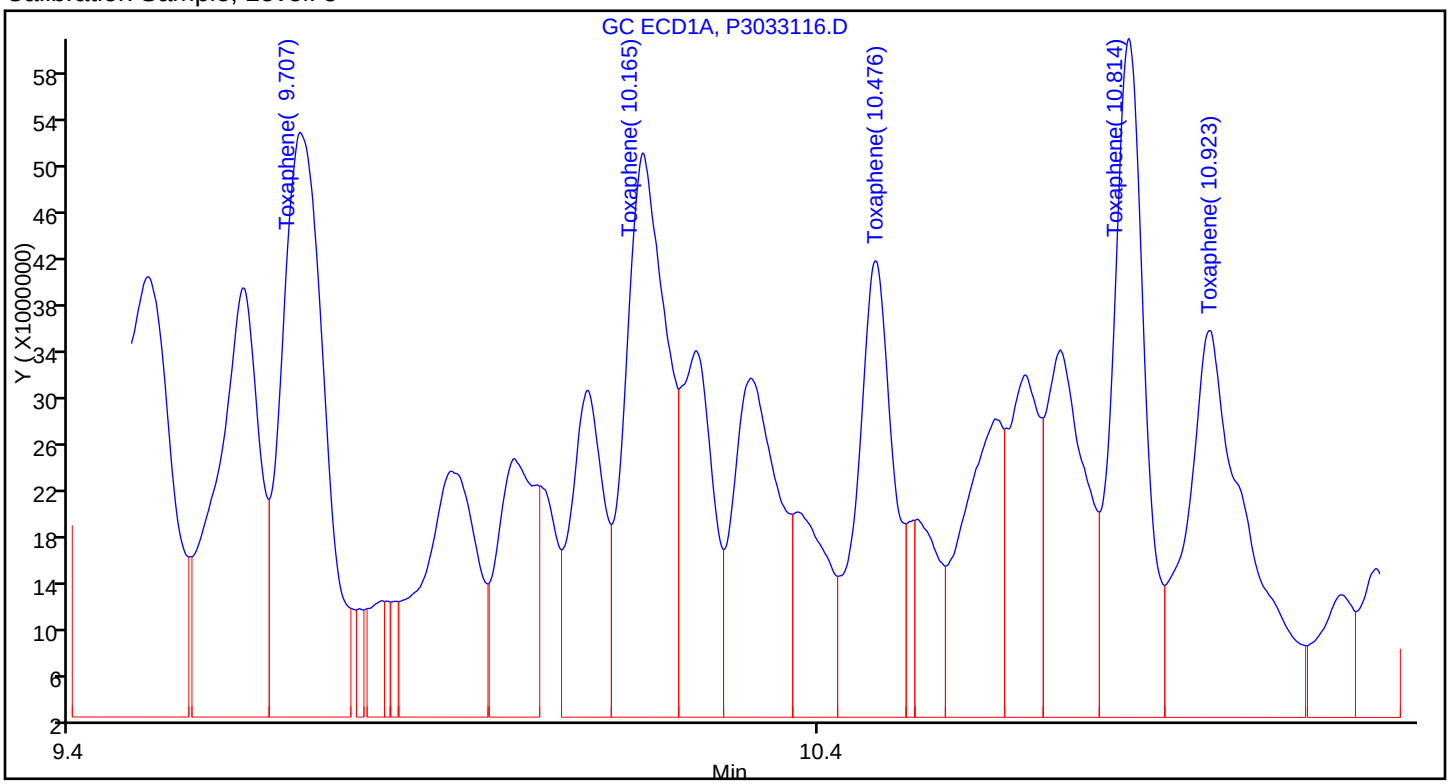
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

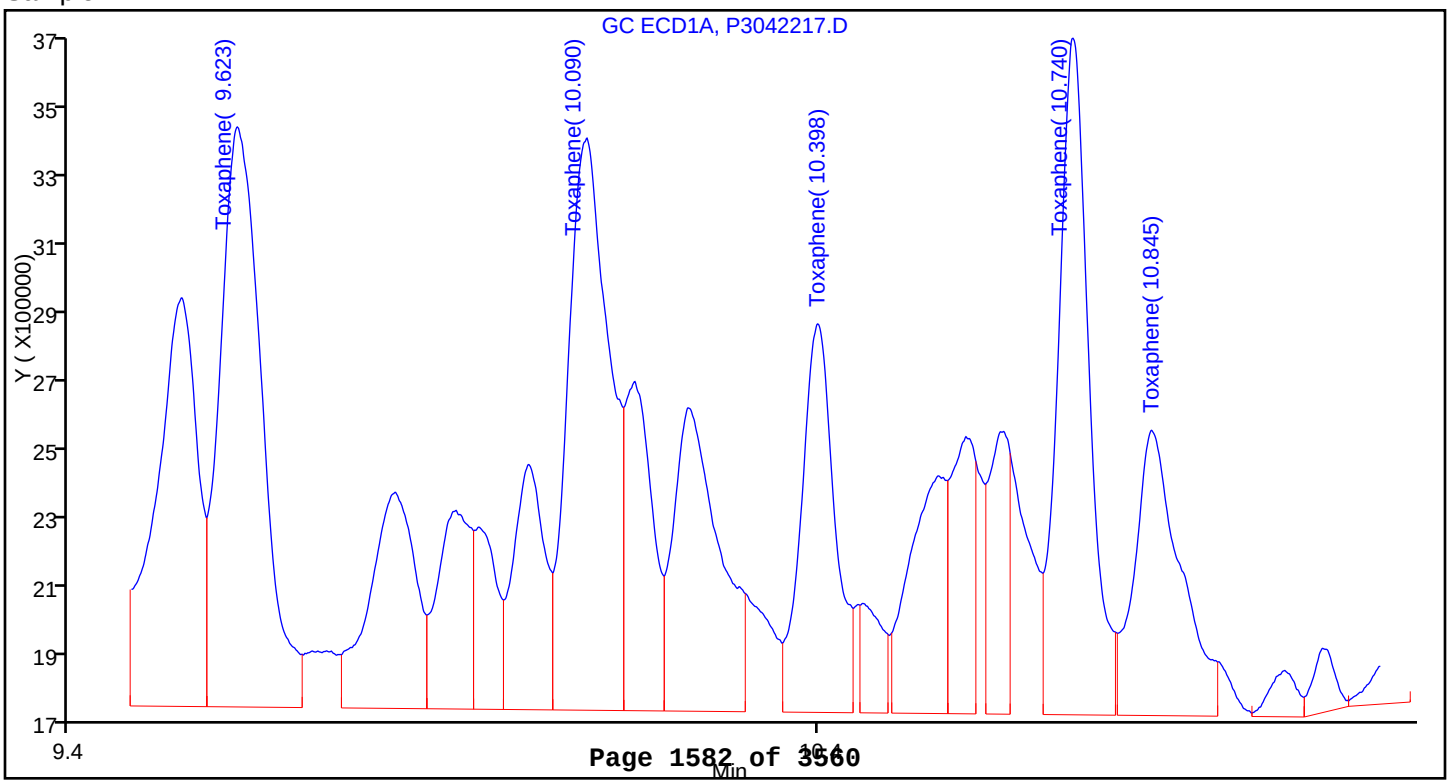
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 5



Sample



Report Date: 23-Apr-2015 07:42:45 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042217.D

Injection Date: 22-Apr-2015 20:53:46 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

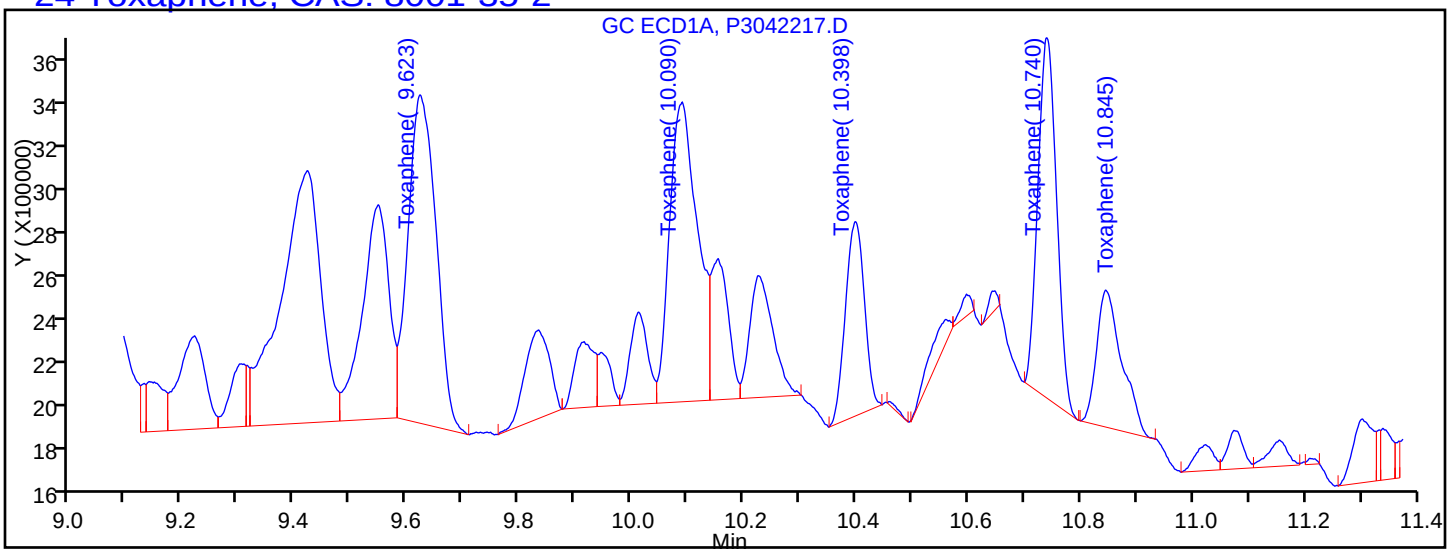
Operator ID: 430893 ALS Bottle#: 17 Worklist Smp#: 17

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

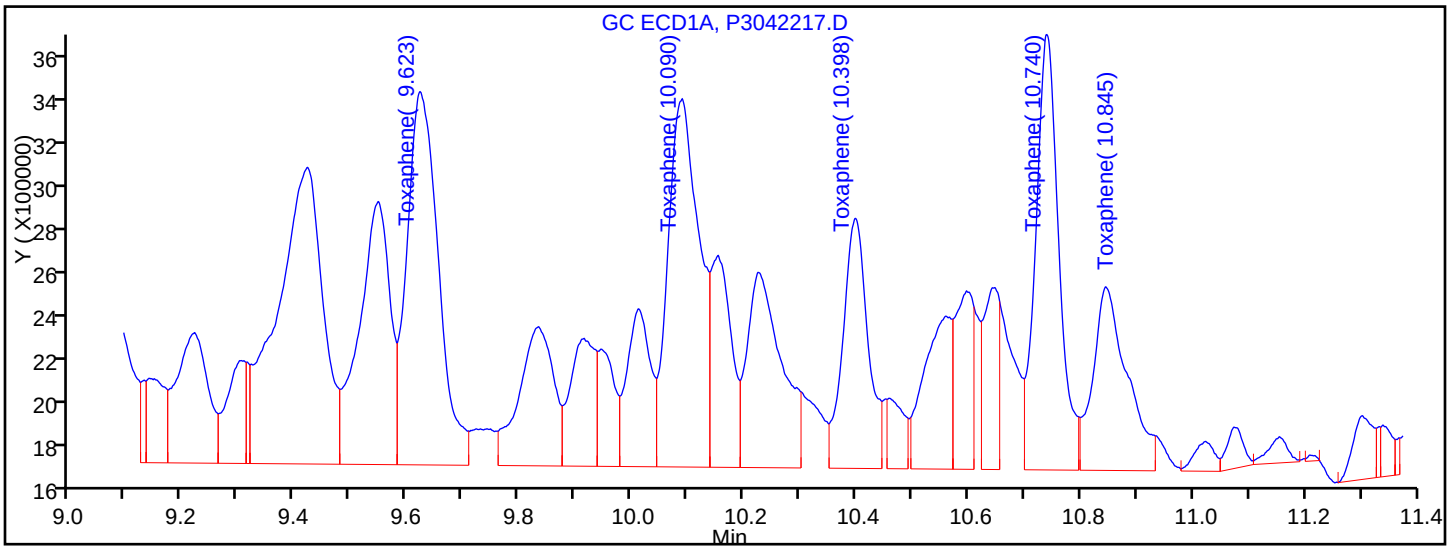
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.623	Response = 5022991	M
RT = 10.090	Response = 4578204	M
RT = 10.398	Response = 2024284	M
RT = 10.740	Response = 3686735	M
RT = 10.845	Response = 1883719	M



Manual Integration Results

RT = 9.623	Response = 6436088	M
RT = 10.090	Response = 6297418	M
RT = 10.398	Response = 3409376	M
RT = 10.740	Response = 5519907	M
RT = 10.845	Response = 3434830	M

Reviewer: matthewsb, 23-Apr-2015 07:30:46

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-177463/17

Matrix: Solid Lab File ID: P3042217.D

Analysis Method: 8081A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/22/2015 20:53

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 177463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	*Toxaphene*	*176*		*2.0*	1.0	*0.20*

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042217.D
Lims ID: MRL TOX
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 20:53:46 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-017
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:43 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:30:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555					ND	
2	4.234						
3 Hexachlorobenzene							
1	4.030					ND	
2	4.880						
2 Diallate							
1	4.130					ND	
1	4.296						
2	4.833						
2	4.996						
4 alpha-BHC							
1	4.251					ND	
2	5.128						
5 gamma-BHC (Lindane)							
1	4.639					ND	
2	5.751						
6 beta-BHC							
1	4.779					ND	
2	5.950						
7 delta-BHC							
1	5.001					ND	
2	6.574						

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.173				ND	
1		6.063					
1		7.350					
1		7.690					
2		6.326					
2		7.951					
2		9.283					
2		9.583					
9 Heptachlor							
1		5.284				ND	
2		6.653					
10 Aldrin							
1		5.750				ND	
2		7.457					
11 Isodrin							
1		6.355				ND	
2		8.429					
12 Heptachlor epoxide							
1		7.025				ND	
2		8.889					
13 gamma-Chlordane							
1		7.339				ND	
2		9.283					
14 alpha-Chlordane							
1		7.684				ND	
2		9.583					
15 Endosulfan I							
1		7.958				ND	
2		9.652					
16 4,4'-DDE							
1		8.065				ND	
2		10.012					
17 Dieldrin							
1		8.513				ND	
2		10.167					
18 Endrin							
1		8.965				ND	
2		10.681					
19 Kepone							
1		9.039				ND	
2		10.845					
20 4,4'-DDD							
1		9.332				ND	
2		11.005					
21 Endosulfan II							
1		9.415				ND	
2		11.050					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
22 Chlorobenzilate							
1		9.427				ND	
2		10.829					
24 Toxaphene							M
1	9.623	9.625	-0.002	6436088	200.0	170.1	M
1	10.090	10.083	0.007	6297418	200.0	171.9	M
1	10.398	10.397	0.001	3409376	200.0	146.0	M
1	10.740	10.738	0.002	5519907	200.0	166.4	M
1	10.845	10.846	-0.001	3434830	200.0	106.2	M
		Average of Peak Amounts =				152.1	
2	11.025	11.024	0.001	9811028	200.0	189.3	M
2	11.194	11.195	-0.001	9634406	200.0	189.0	M
2	11.620	11.618	0.002	6484083	200.0	181.9	M
2	12.355	12.353	0.002	7074487	200.0	155.0	M
2	12.442	12.443	-0.001	2557926	200.0	164.3	M
		Average of Peak Amounts =				175.9	
						RPD = 14.52	
23 4,4'-DDT							
1		9.844				ND	
2		11.487					
25 Endrin aldehyde							
1		10.210				ND	
2		11.608					
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1		10.795				ND	
2		12.554					
28 Endosulfan sulfate							
1		10.935				ND	
2		12.030					
29 Endrin ketone							
1		11.336				ND	
2		12.773					
$ 30 DCB Decachlorobiphenyl							
1		12.940				ND	
2		14.492					

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 20.00 Units: uL

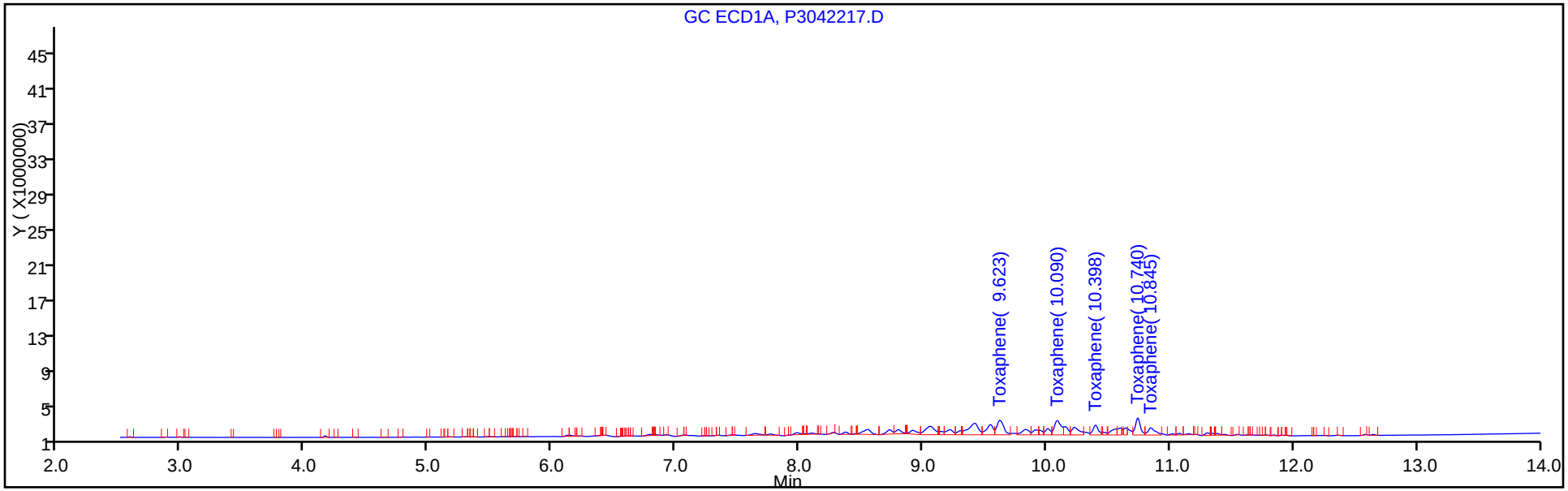
Report Date: 23-Apr-2015 07:42:45 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

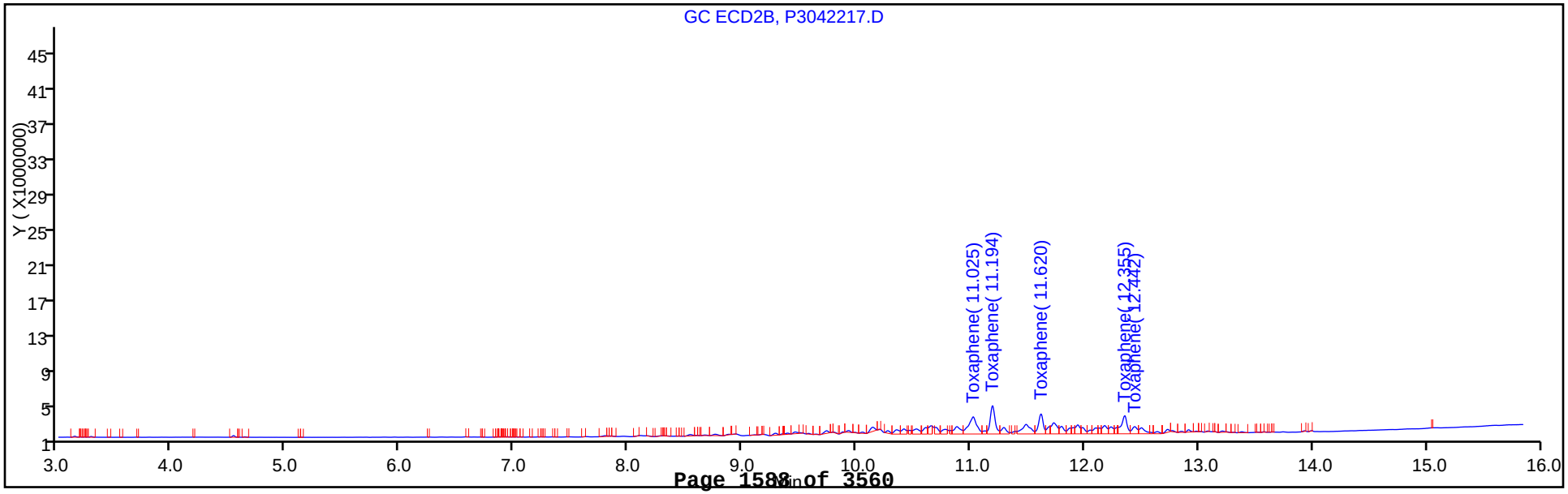
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042217.D

Injection Date:	22-Apr-2015 20:53:46	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL TOX			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 23-Apr-2015 07:42:45 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042217.D

Injection Date: 22-Apr-2015 20:53:46 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

Operator ID: 430893 ALS Bottle#: 17 Worklist Smp#: 17

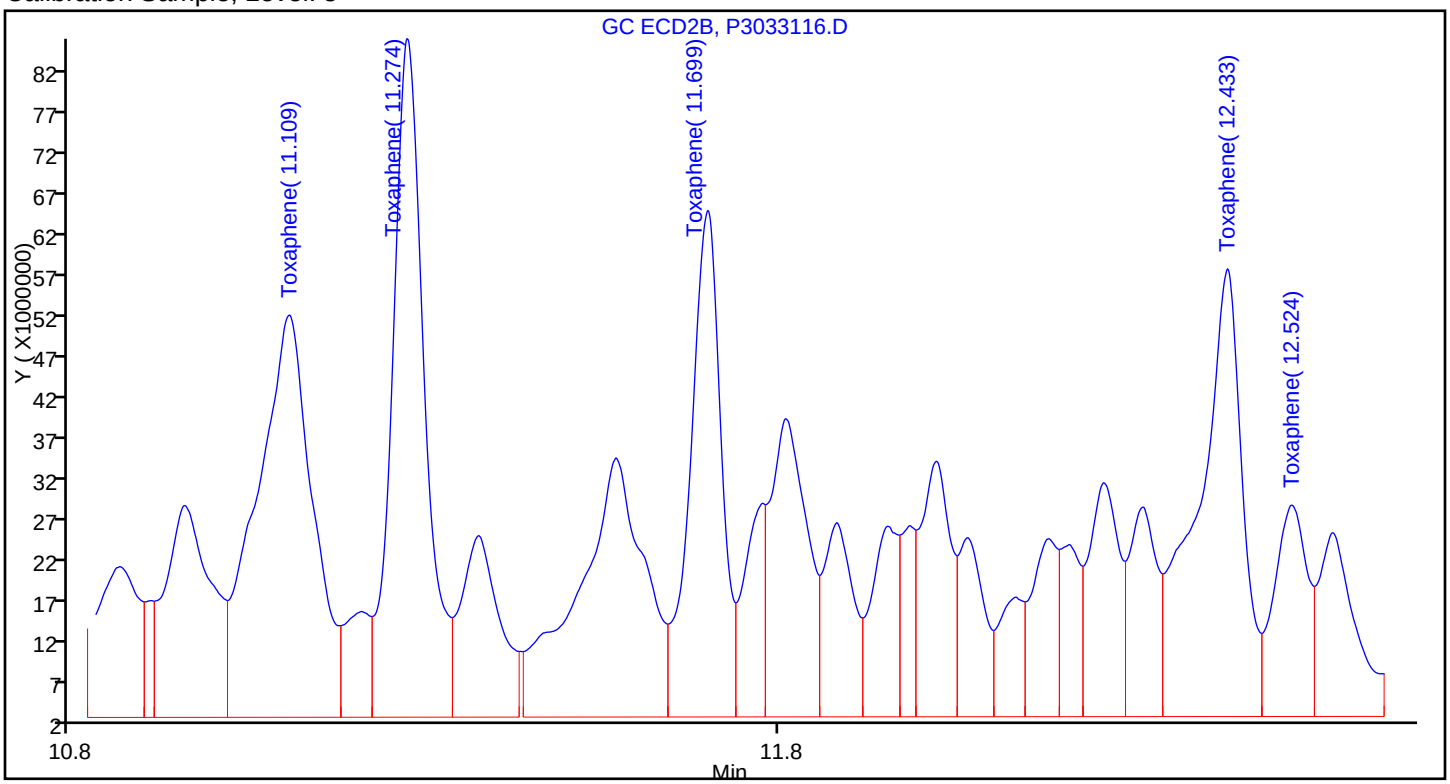
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

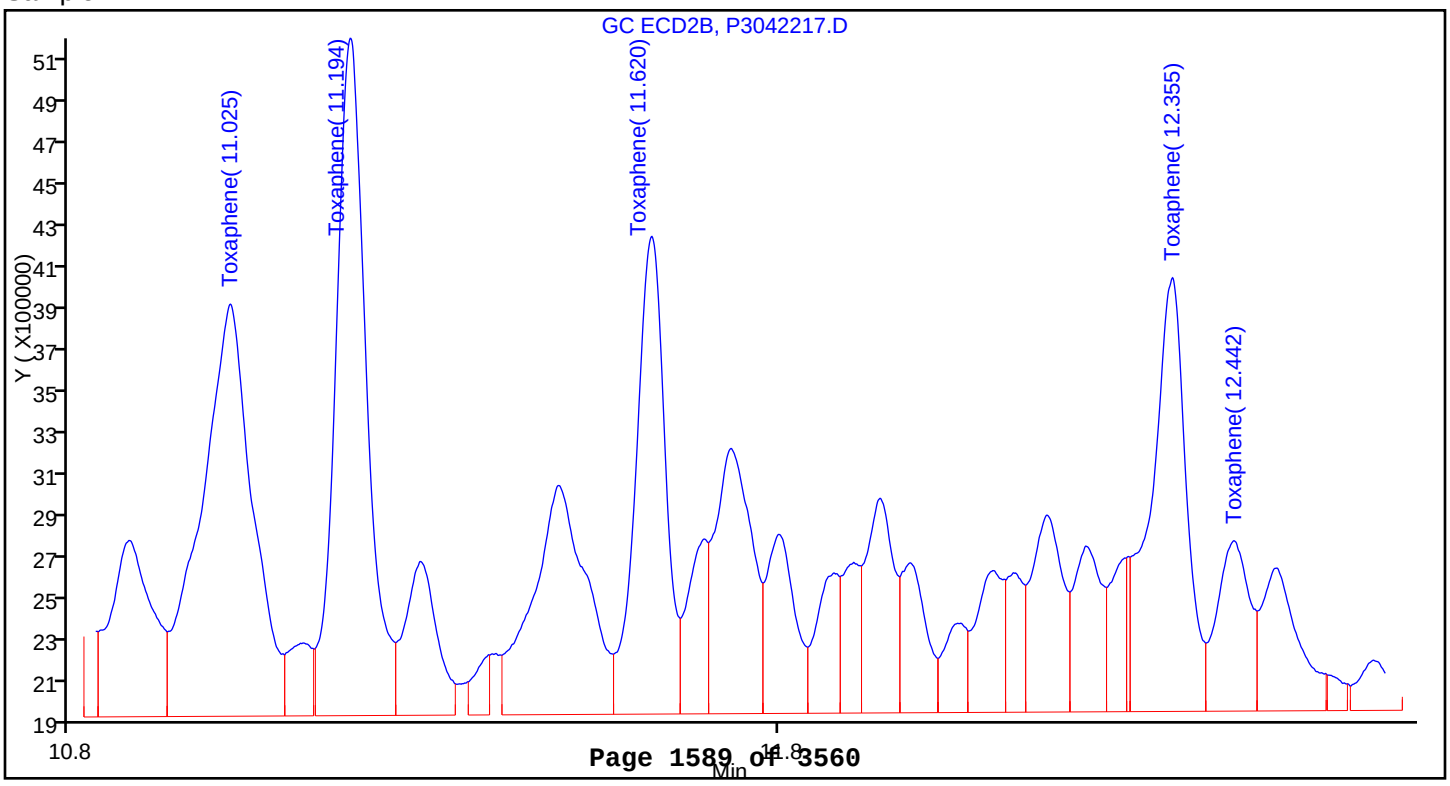
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 5



Sample



Report Date: 23-Apr-2015 07:42:45 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042217.D

Injection Date: 22-Apr-2015 20:53:46 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

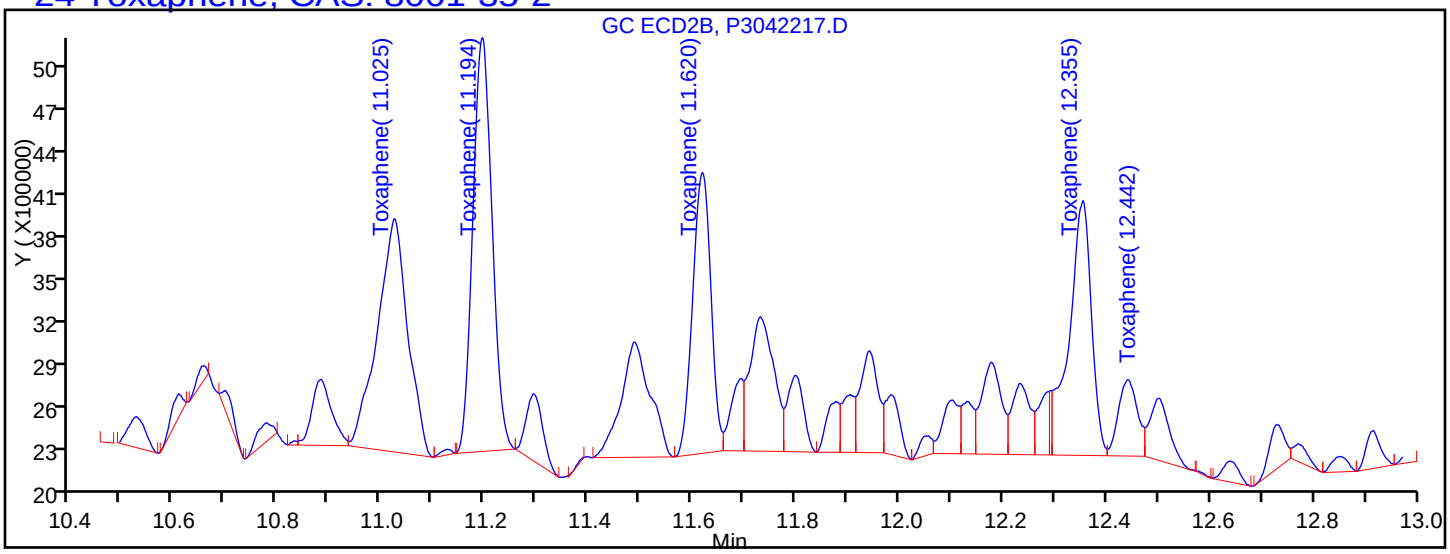
Operator ID: 430893 ALS Bottle#: 17 Worklist Smp#: 17

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

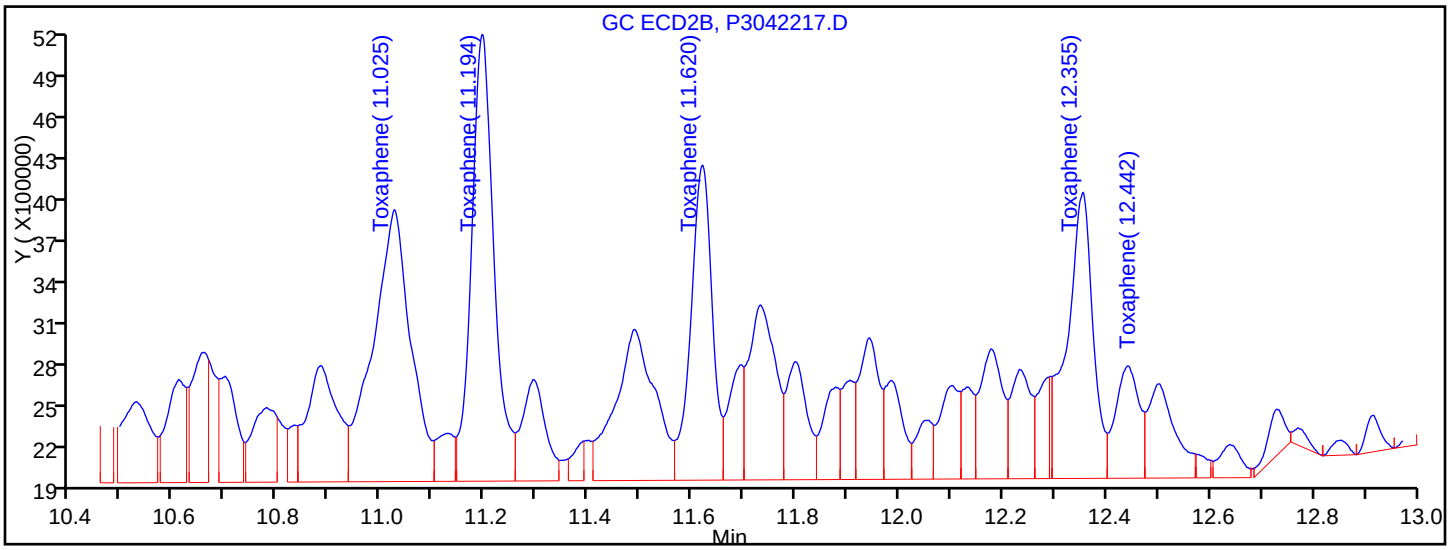
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 11.025	Response = 6538727	M
RT = 11.194	Response = 7402581	M
RT = 11.620	Response = 4770602	M
RT = 12.355	Response = 5284180	M
RT = 12.442	Response = 1366141	M



Manual Integration Results

RT = 11.025	Response = 9811028	M
RT = 11.194	Response = 9634406	M
RT = 11.620	Response = 6484083	M
RT = 12.355	Response = 7074487	M
RT = 12.442	Response = 2557926	M

Reviewer: matthewsb, 23-Apr-2015 07:30:46

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177463/18

Matrix: Solid | Lab File ID: P3042218.D

Analysis Method: 8081A | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 21:18

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177463 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	3.82		0.050	0.050	0.018
72-55-9	4,4'-DDE	4.48		0.050	0.050	0.0090
50-29-3	4,4'-DDT	3.60		0.050	0.050	0.014
309-00-2	Aldrin	5.08		0.050	0.050	0.013
319-84-6	alpha-BHC	4.93		0.050	0.050	0.014
5103-71-9	alpha-Chlordane	5.13		0.050	0.050	0.012
319-85-7	beta-BHC	5.49		0.050	0.050	0.013
319-86-8	delta-BHC	4.34		0.050	0.050	0.029
60-57-1	Dieldrin	5.01		0.050	0.050	0.013
959-98-8	Endosulfan I	5.27		0.050	0.050	0.016
33213-65-9	Endosulfan II	6.00		0.050	0.050	0.015
1031-07-8	Endosulfan sulfate	5.49		0.050	0.050	0.011
72-20-8	Endrin	5.07		0.050	0.050	0.012
7421-93-4	Endrin aldehyde	4.94		0.050	0.050	0.0080
53494-70-5	Endrin ketone	5.28		0.050	0.050	0.0090
58-89-9	gamma-BHC (Lindane)	4.99		0.050	0.050	0.012
5103-74-2	gamma-Chlordane	5.04		0.050	0.050	0.010
76-44-8	Heptachlor	5.36		0.050	0.050	0.0050
1024-57-3	Heptachlor epoxide	5.37		0.050	0.050	0.014
72-43-5	Methoxychlor	4.76		0.10	0.050	0.012

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	114		50-150
877-09-8	Tetrachloro-m-xylene	108		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042218.D
Lims ID: MRL AB
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 21:18:23 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-018
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:43 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.559	3.555	0.004	5289714	5.00	5.38	
2	4.234	4.234	0.000	6362225	5.00	5.65	
						RPD = 4.84	
3 Hexachlorobenzene							
1		4.030				ND	
2		4.880					
2 Diallate							
1		4.130				ND	
1		4.296					
2		4.833					
2		4.996					
4 alpha-BHC							
1	4.254	4.251	0.003	8532970	5.00	4.93	
2	5.128	5.128	0.000	9861183	5.00	5.04	
						RPD = 2.22	
5 gamma-BHC (Lindane)							
1	4.642	4.639	0.003	7696131	5.00	4.99	
2	5.750	5.751	-0.001	9060915	5.00	5.12	
						RPD = 2.68	
6 beta-BHC							
1	4.783	4.779	0.004	3460320	5.00	5.49	
2	5.951	5.950	0.001	4248175	5.00	5.53	
						RPD = 0.63	
7 delta-BHC							
1	5.005	5.001	0.004	6529177	5.00	4.34	
2	6.574	6.574	0.000	7749958	5.00	4.37	
						RPD = 0.54	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.173				ND	
1		6.063					
1		7.350					
1		7.690					
2		6.326					
2		7.951					
2		9.283					
2		9.583					
9 Heptachlor							
1	5.289	5.284	0.005	7822514	5.00	5.36	
2	6.652	6.653	-0.001	9772134	5.00	5.78	
						RPD = 7.54	
10 Aldrin							
1	5.754	5.750	0.004	7427320	5.00	5.08	
2	7.457	7.457	0.000	8811499	5.00	5.27	
						RPD = 3.65	
11 Isodrin							
1		6.355				ND	
2		8.429					
12 Heptachlor epoxide							
1	7.029	7.025	0.004	6996921	5.00	5.37	
2	8.889	8.889	0.000	7977194	5.00	5.56	
						RPD = 3.50	
13 gamma-Chlordane							
1	7.345	7.339	0.006	6811985	5.00	5.04	
2	9.284	9.283	0.001	7726183	5.00	5.25	
						RPD = 4.05	
14 alpha-Chlordane							
1	7.689	7.684	0.005	6858564	5.00	5.13	
2	9.583	9.583	0.000	7491611	5.00	5.27	
						RPD = 2.83	
15 Endosulfan I							
1	7.963	7.958	0.005	6474295	5.00	5.27	
2	9.650	9.652	-0.002	7252005	5.00	5.49	
						RPD = 3.96	
16 4,4'-DDE							
1	8.076	8.065	0.011	5305642	5.00	4.48	
2	10.012	10.012	0.000	6331743	5.00	4.80	
						RPD = 6.83	
17 Dieldrin							
1	8.516	8.513	0.003	6554503	5.00	5.01	
2	10.165	10.167	-0.002	7252594	5.00	5.30	
						RPD = 5.60	
18 Endrin							
1	8.969	8.965	0.004	5832890	5.00	5.07	
2	10.680	10.681	-0.001	6137593	5.00	5.09	
						RPD = 0.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
19 Kepone							
1		9.039				ND	
2		10.845					
20 4,4'-DDD							
1	9.344	9.332	0.012	3321034	5.00	3.82	
2	11.008	11.005	0.003	3904370	5.00	3.99	
						RPD = 4.46	
21 Endosulfan II							
1	9.419	9.415	0.004	6946126	5.00	6.00	
2	11.049	11.050	-0.001	7417924	5.00	6.34	
						RPD = 5.49	
22 Chlorobenzilate							
1		9.427				ND	
2		10.829					
24 Toxaphene							
1		9.625				ND	
1		10.083					
1		10.397					
1		10.738					
1		10.846					
2		11.024					
2		11.195					
2		11.618					
2		12.353					
2		12.443					
23 4,4'-DDT							
1	9.849	9.844	0.005	3436530	5.00	3.60	
2	11.487	11.487	0.000	3625190	5.00	3.63	
						RPD = 0.96	
25 Endrin aldehyde							
1	10.213	10.210	0.003	4399347	5.00	4.94	
2	11.607	11.608	-0.001	4622912	5.00	4.95	
						RPD = 0.24	
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1	10.802	10.795	0.007	2179415	5.00	4.76	
2	12.554	12.554	0.000	2051653	5.00	4.19	
						RPD = 12.56	
28 Endosulfan sulfate							
1	10.938	10.935	0.003	5468803	5.00	5.49	
2	12.029	12.030	-0.001	5637330	5.00	5.32	
						RPD = 3.09	
29 Endrin ketone							
1	11.337	11.336	0.001	6455773	5.00	5.28	
2	12.774	12.773	0.001	6419557	5.00	5.23	
						RPD = 1.04	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 30 DCB Decachlorobiphenyl							
1	12.943	12.940	0.003	5322038	5.00	5.68	
2	14.491	14.492	-0.001	5620744	5.00	5.52	
						RPD = 2.89	

Reagents:

SGPestAB1_00011 Amount Added: 1.00 Units: mL

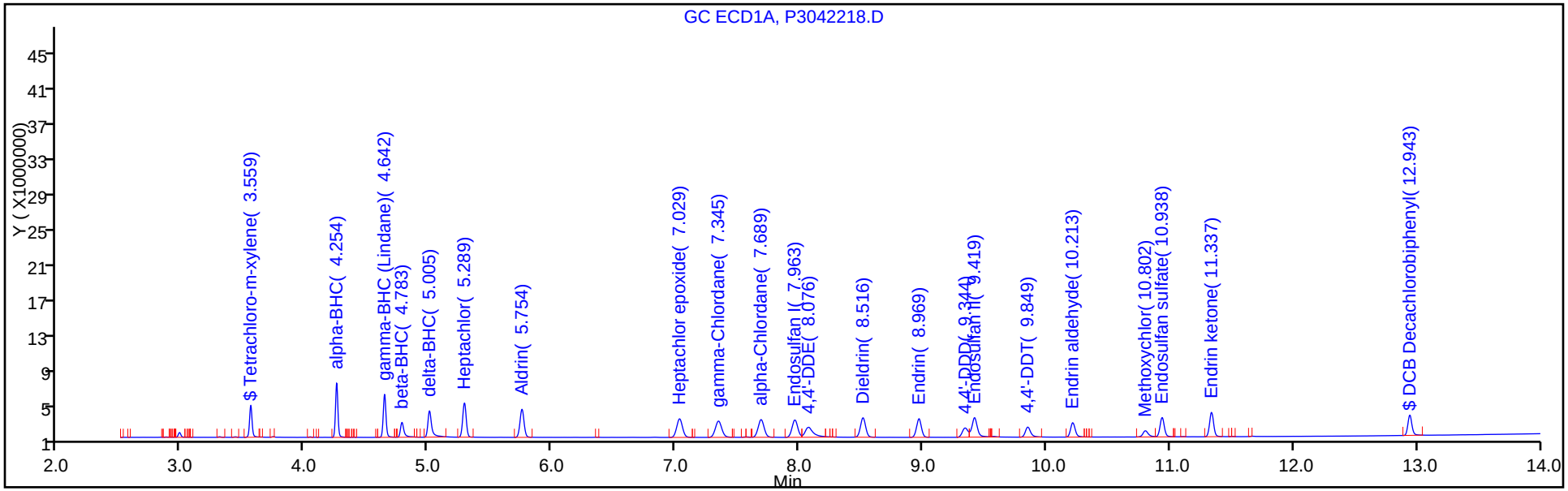
Report Date: 23-Apr-2015 07:42:46 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

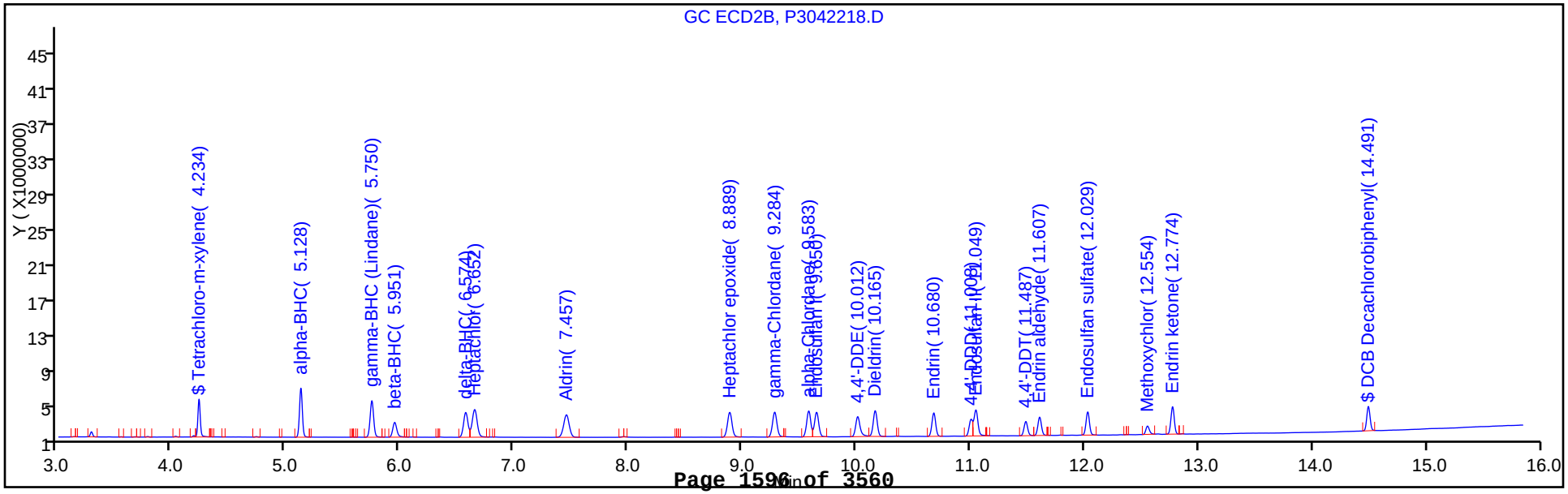
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042218.D

Injection Date:	22-Apr-2015 21:18:23	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL AB			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177463/18

Matrix: Solid | Lab File ID: P3042218.D

Analysis Method: 8081A | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 21:18

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177463 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	*4,4'-DDD*	*3.99*		*0.050*	0.050	*0.018*
72-55-9	*4,4'-DDE*	*4.80*		*0.050*	0.050	*0.0090*
50-29-3	*4,4'-DDT*	*3.63*		*0.050*	0.050	*0.014*
309-00-2	*Aldrin*	*5.27*		*0.050*	0.050	*0.013*
319-84-6	*alpha-BHC*	*5.04*		*0.050*	0.050	*0.014*
5103-71-9	*alpha-Chlordane*	*5.27*		*0.050*	0.050	*0.012*
319-85-7	*beta-BHC*	*5.53*		*0.050*	0.050	*0.013*
319-86-8	*delta-BHC*	*4.37*		*0.050*	0.050	*0.029*
60-57-1	*Dieldrin*	*5.30*		*0.050*	0.050	*0.013*
959-98-8	*Endosulfan I*	*5.49*		*0.050*	0.050	*0.016*
33213-65-9	*Endosulfan II*	*6.34*		*0.050*	0.050	*0.015*
1031-07-8	*Endosulfan sulfate*	*5.32*		*0.050*	0.050	*0.011*
72-20-8	*Endrin*	*5.09*		*0.050*	0.050	*0.012*
7421-93-4	*Endrin aldehyde*	*4.95*		*0.050*	0.050	*0.0080*
53494-70-5	*Endrin ketone*	*5.23*		*0.050*	0.050	*0.0090*
58-89-9	*gamma-BHC (Lindane)*	*5.12*		*0.050*	0.050	*0.012*
5103-74-2	*gamma-Chlordane*	*5.25*		*0.050*	0.050	*0.010*
76-44-8	*Heptachlor*	*5.78*		*0.050*	0.050	*0.0050*
1024-57-3	*Heptachlor epoxide*	*5.56*		*0.050*	0.050	*0.014*
72-43-5	*Methoxychlor*	*4.19*		*0.10*	0.050	*0.012*

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	110		50-150
877-09-8	Tetrachloro-m-xylene	113		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042218.D
Lims ID: MRL AB
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 21:18:23 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-018
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:43 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.559	3.555	0.004	5289714	5.00	5.38	
2	4.234	4.234	0.000	6362225	5.00	5.65	
						RPD = 4.84	
3 Hexachlorobenzene							
1		4.030				ND	
2		4.880					
2 Diallate							
1		4.130				ND	
1		4.296					
2		4.833					
2		4.996					
4 alpha-BHC							
1	4.254	4.251	0.003	8532970	5.00	4.93	
2	5.128	5.128	0.000	9861183	5.00	5.04	
						RPD = 2.22	
5 gamma-BHC (Lindane)							
1	4.642	4.639	0.003	7696131	5.00	4.99	
2	5.750	5.751	-0.001	9060915	5.00	5.12	
						RPD = 2.68	
6 beta-BHC							
1	4.783	4.779	0.004	3460320	5.00	5.49	
2	5.951	5.950	0.001	4248175	5.00	5.53	
						RPD = 0.63	
7 delta-BHC							
1	5.005	5.001	0.004	6529177	5.00	4.34	
2	6.574	6.574	0.000	7749958	5.00	4.37	
						RPD = 0.54	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.173				ND	
1		6.063					
1		7.350					
1		7.690					
2		6.326					
2		7.951					
2		9.283					
2		9.583					
9 Heptachlor							
1	5.289	5.284	0.005	7822514	5.00	5.36	
2	6.652	6.653	-0.001	9772134	5.00	5.78	
						RPD = 7.54	
10 Aldrin							
1	5.754	5.750	0.004	7427320	5.00	5.08	
2	7.457	7.457	0.000	8811499	5.00	5.27	
						RPD = 3.65	
11 Isodrin							
1		6.355				ND	
2		8.429					
12 Heptachlor epoxide							
1	7.029	7.025	0.004	6996921	5.00	5.37	
2	8.889	8.889	0.000	7977194	5.00	5.56	
						RPD = 3.50	
13 gamma-Chlordane							
1	7.345	7.339	0.006	6811985	5.00	5.04	
2	9.284	9.283	0.001	7726183	5.00	5.25	
						RPD = 4.05	
14 alpha-Chlordane							
1	7.689	7.684	0.005	6858564	5.00	5.13	
2	9.583	9.583	0.000	7491611	5.00	5.27	
						RPD = 2.83	
15 Endosulfan I							
1	7.963	7.958	0.005	6474295	5.00	5.27	
2	9.650	9.652	-0.002	7252005	5.00	5.49	
						RPD = 3.96	
16 4,4'-DDE							
1	8.076	8.065	0.011	5305642	5.00	4.48	
2	10.012	10.012	0.000	6331743	5.00	4.80	
						RPD = 6.83	
17 Dieldrin							
1	8.516	8.513	0.003	6554503	5.00	5.01	
2	10.165	10.167	-0.002	7252594	5.00	5.30	
						RPD = 5.60	
18 Endrin							
1	8.969	8.965	0.004	5832890	5.00	5.07	
2	10.680	10.681	-0.001	6137593	5.00	5.09	
						RPD = 0.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
19 Kepone							
1		9.039				ND	
2		10.845					
20 4,4'-DDD							
1	9.344	9.332	0.012	3321034	5.00	3.82	
2	11.008	11.005	0.003	3904370	5.00	3.99	
						RPD = 4.46	
21 Endosulfan II							
1	9.419	9.415	0.004	6946126	5.00	6.00	
2	11.049	11.050	-0.001	7417924	5.00	6.34	
						RPD = 5.49	
22 Chlorobenzilate							
1		9.427				ND	
2		10.829					
24 Toxaphene							
1		9.625				ND	
1		10.083					
1		10.397					
1		10.738					
1		10.846					
2		11.024					
2		11.195					
2		11.618					
2		12.353					
2		12.443					
23 4,4'-DDT							
1	9.849	9.844	0.005	3436530	5.00	3.60	
2	11.487	11.487	0.000	3625190	5.00	3.63	
						RPD = 0.96	
25 Endrin aldehyde							
1	10.213	10.210	0.003	4399347	5.00	4.94	
2	11.607	11.608	-0.001	4622912	5.00	4.95	
						RPD = 0.24	
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1	10.802	10.795	0.007	2179415	5.00	4.76	
2	12.554	12.554	0.000	2051653	5.00	4.19	
						RPD = 12.56	
28 Endosulfan sulfate							
1	10.938	10.935	0.003	5468803	5.00	5.49	
2	12.029	12.030	-0.001	5637330	5.00	5.32	
						RPD = 3.09	
29 Endrin ketone							
1	11.337	11.336	0.001	6455773	5.00	5.28	
2	12.774	12.773	0.001	6419557	5.00	5.23	
						RPD = 1.04	

Report Date: 23-Apr-2015 07:42:46 Chrom Revision: 2.2 09-Apr-2015 10:05:40

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042218.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 30 DCB Decachlorobiphenyl							
1	12.943	12.940	0.003	5322038	5.00	5.68	
2	14.491	14.492	-0.001	5620744	5.00	5.52	
						RPD = 2.89	

Reagents:

SGPestAB1_00011 Amount Added: 1.00 Units: mL

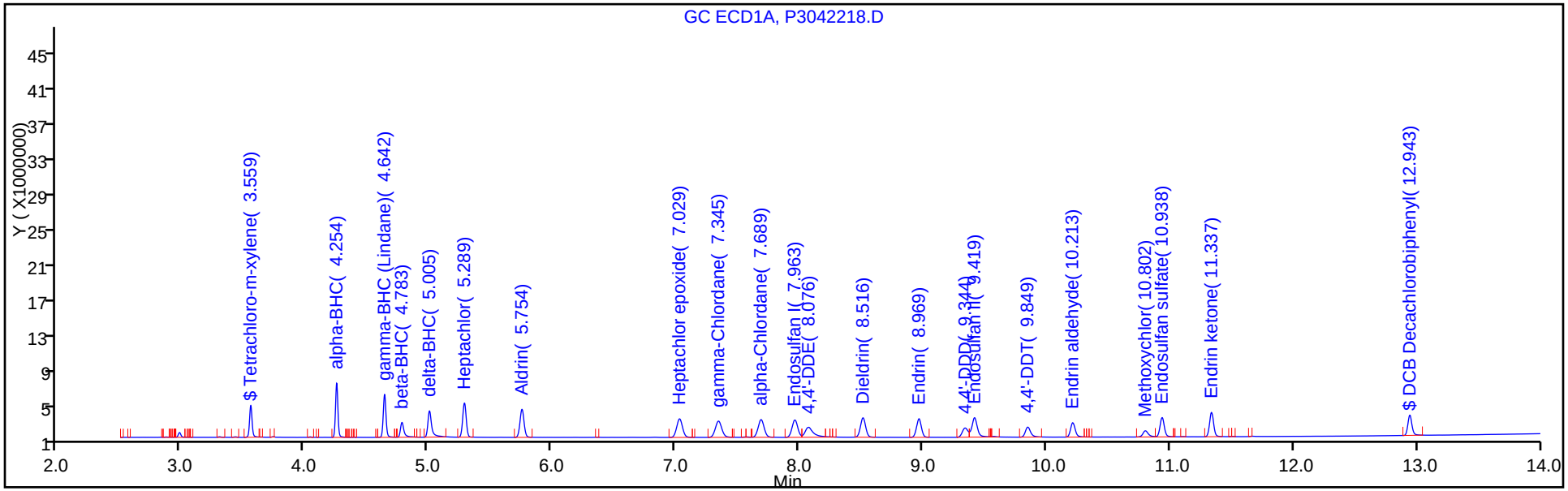
Report Date: 23-Apr-2015 07:42:46 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

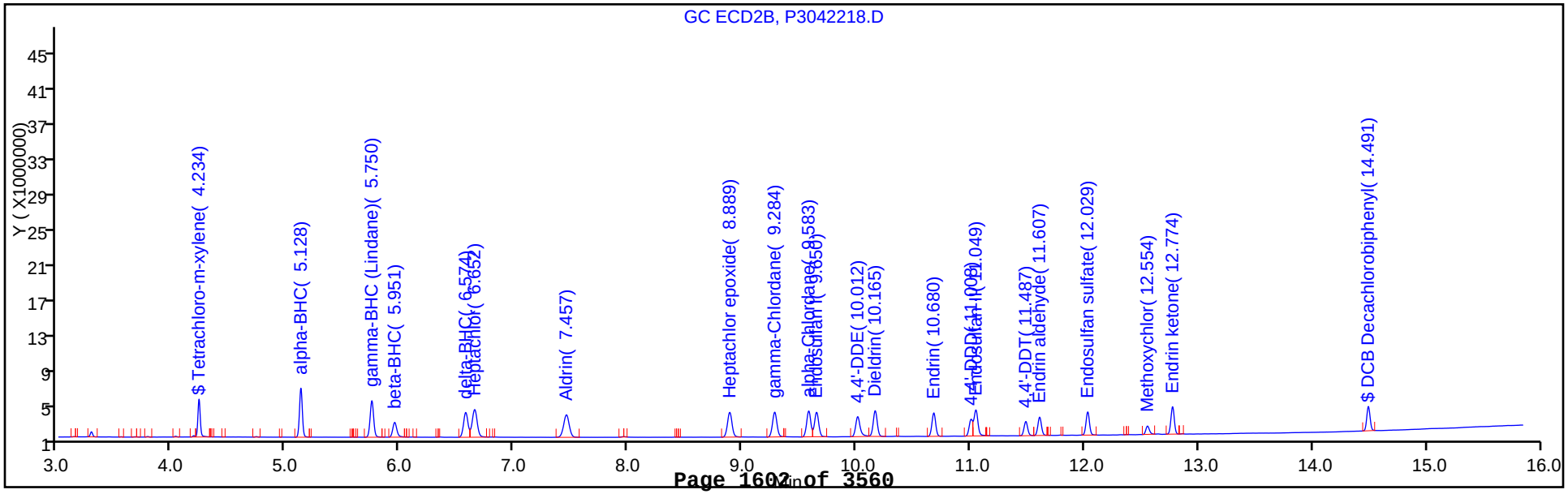
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042218.D

Injection Date:	22-Apr-2015 21:18:23	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL AB			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-177463/20

Matrix: Solid Lab File ID: P3042220.D

Analysis Method: 8081A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/22/2015 22:04

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 177463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	Toxaphene	157		2.0	1.0	0.20

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042220.D
Lims ID: MRL TOX
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 22:04:29 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-020
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:43 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:38:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555					ND	
2	4.234						
3 Hexachlorobenzene							
1	4.030					ND	
2	4.880						
2 Diallate							
1	4.130					ND	
1	4.296						
2	4.833						
2	4.996						
4 alpha-BHC							
1	4.251					ND	
2	5.128						
5 gamma-BHC (Lindane)							
1	4.639					ND	
2	5.751						
6 beta-BHC							
1	4.779					ND	
2	5.950						
7 delta-BHC							
1	5.001					ND	
2	6.574						

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.173				ND	
1		6.063					
1		7.350					
1		7.690					
2		6.326					
2		7.951					
2		9.283					
2		9.583					
9 Heptachlor							
1		5.284				ND	
2		6.653					
10 Aldrin							
1		5.750				ND	
2		7.457					
11 Isodrin							
1		6.355				ND	
2		8.429					
12 Heptachlor epoxide							
1		7.025				ND	
2		8.889					
13 gamma-Chlordane							
1		7.339				ND	
2		9.283					
14 alpha-Chlordane							
1		7.684				ND	
2		9.583					
15 Endosulfan I							
1		7.958				ND	
2		9.652					
16 4,4'-DDE							
1		8.065				ND	
2		10.012					
17 Dieldrin							
1		8.513				ND	
2		10.167					
18 Endrin							
1		8.965				ND	
2		10.681					
19 Kepone							
1		9.039				ND	
2		10.845					
20 4,4'-DDD							
1		9.332				ND	
2		11.005					
21 Endosulfan II							
1		9.415				ND	
2		11.050					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
22 Chlorobenzilate							
1		9.427				ND	
2		10.829					
24 Toxaphene							M
1	9.615	9.625	-0.010	6620421	200.0	175.0	M
1	10.081	10.083	-0.002	6530287	200.0	178.2	M
1	10.394	10.397	-0.003	3505426	200.0	150.1	M
1	10.736	10.738	-0.002	5639712	200.0	170.0	M
1	10.843	10.846	-0.003	3578920	200.0	110.7	M
		Average of Peak Amounts =				156.8	
2	11.023	11.024	-0.001	8855446	200.0	170.9	M
2	11.196	11.195	0.001	9004374	200.0	176.7	M
2	11.618	11.618	0.000	6377005	200.0	178.9	M
2	12.354	12.353	0.001	6633405	200.0	145.4	M
2	12.442	12.443	-0.001	2111828	200.0	135.6	M
		Average of Peak Amounts =				161.5	
						RPD = 2.95	
23 4,4'-DDT							
1		9.844				ND	
2		11.487					
25 Endrin aldehyde							
1		10.210				ND	
2		11.608					
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1		10.795				ND	
2		12.554					
28 Endosulfan sulfate							
1		10.935				ND	
2		12.030					
29 Endrin ketone							
1		11.336				ND	
2		12.773					
$ 30 DCB Decachlorobiphenyl							
1		12.940				ND	
2		14.492					

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 20.00 Units: uL

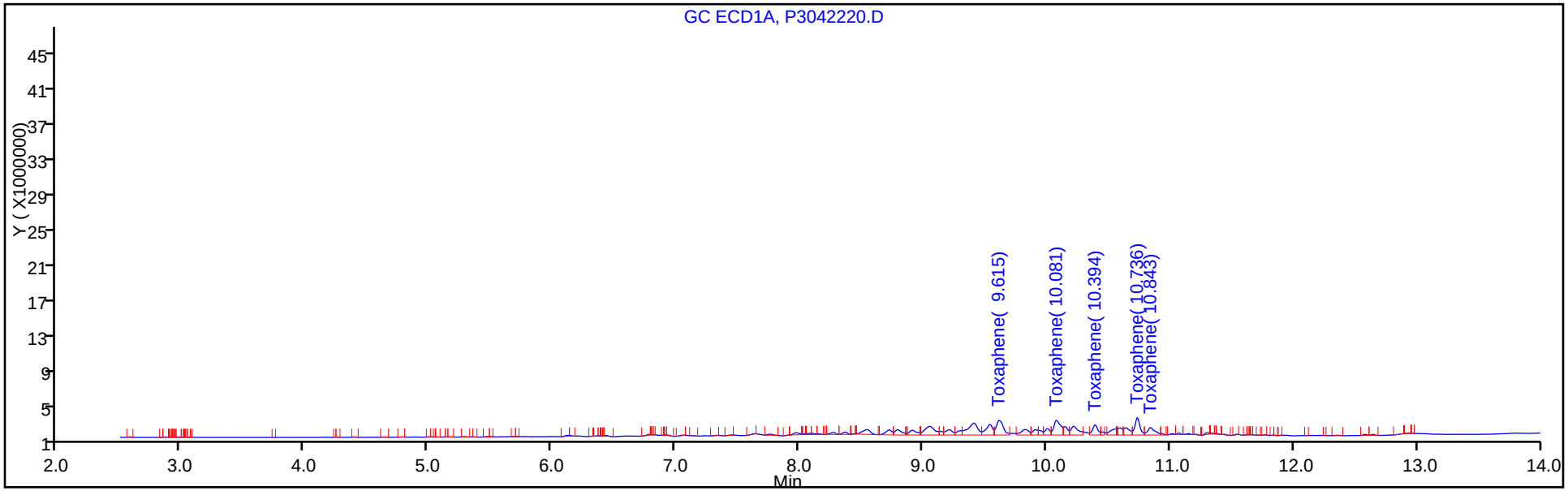
Report Date: 23-Apr-2015 07:42:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

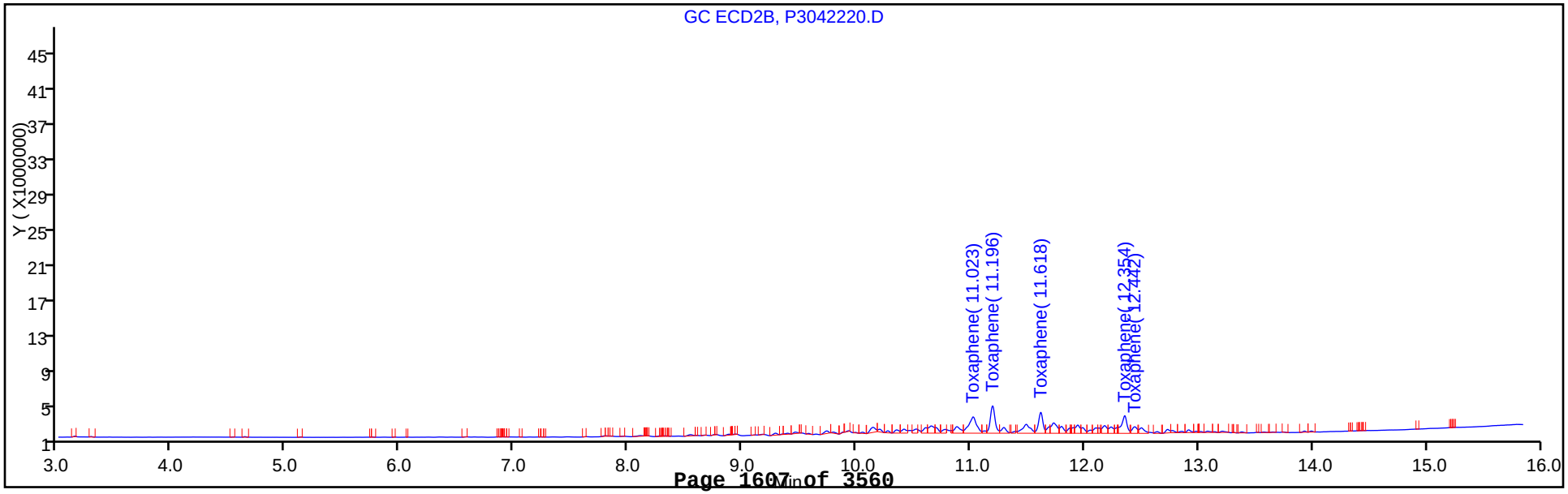
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042220.D

Injection Date:	22-Apr-2015 22:04:29	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL TOX			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 23-Apr-2015 07:42:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042220.D

Injection Date: 22-Apr-2015 22:04:29 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

Operator ID: 430893 ALS Bottle#: 20 Worklist Smp#: 20

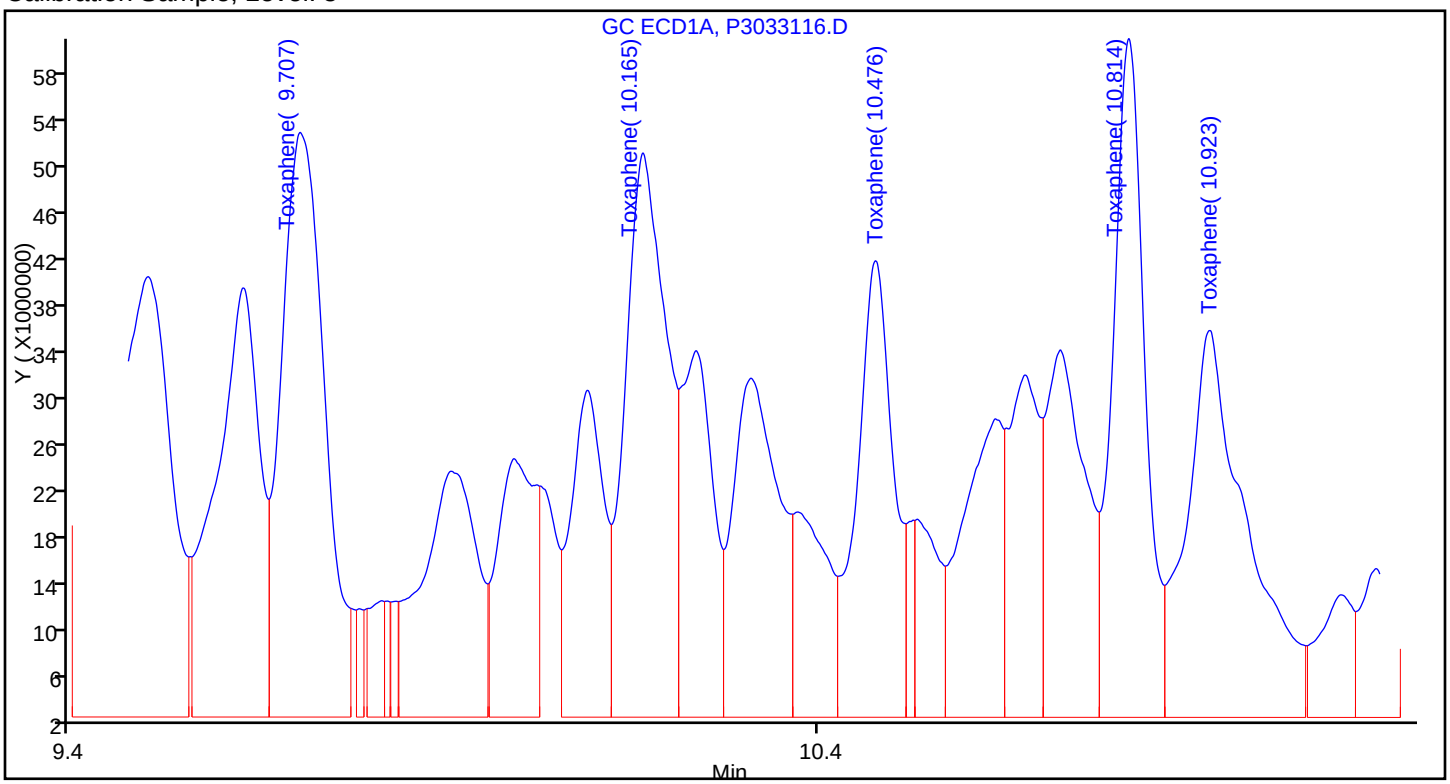
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

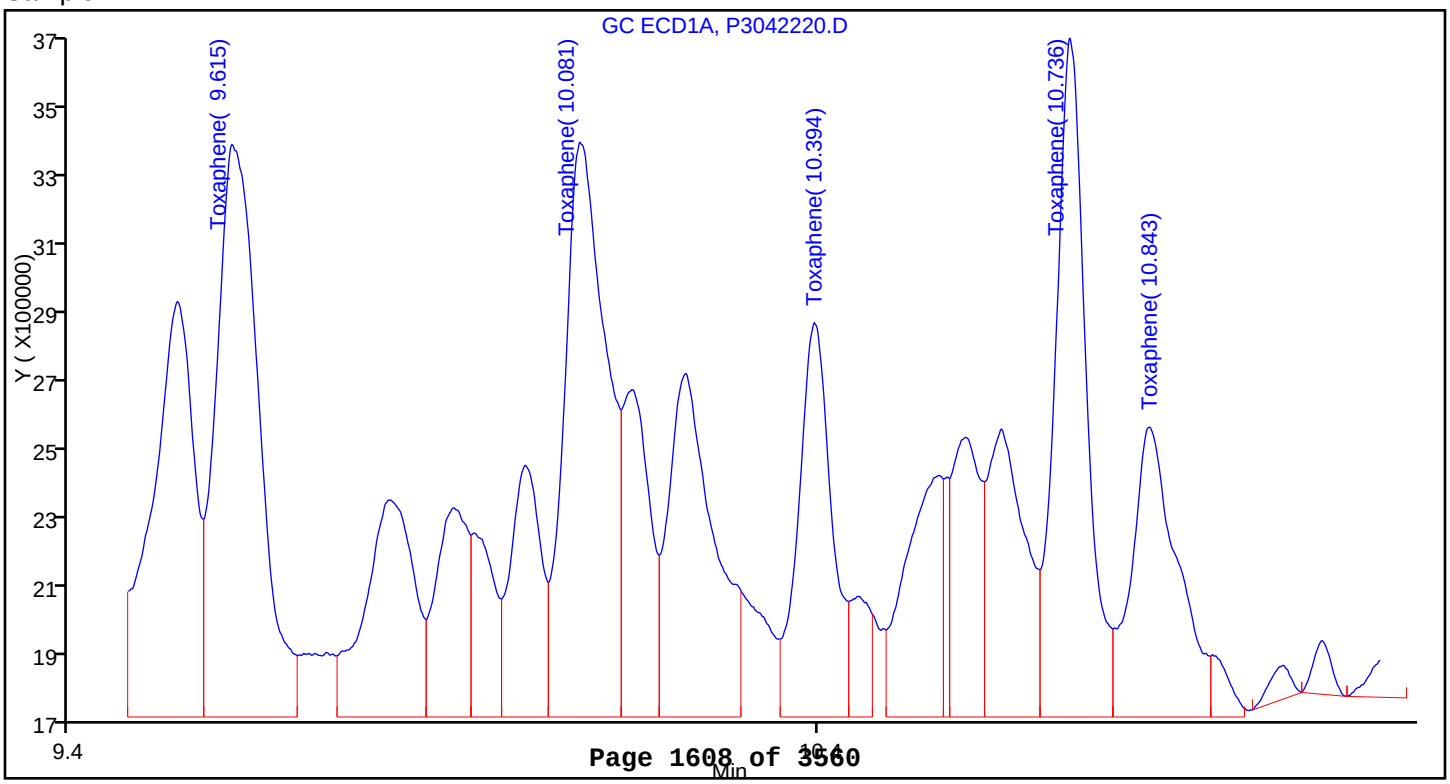
Column: Detector GC ECD1A

24 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 5



Sample



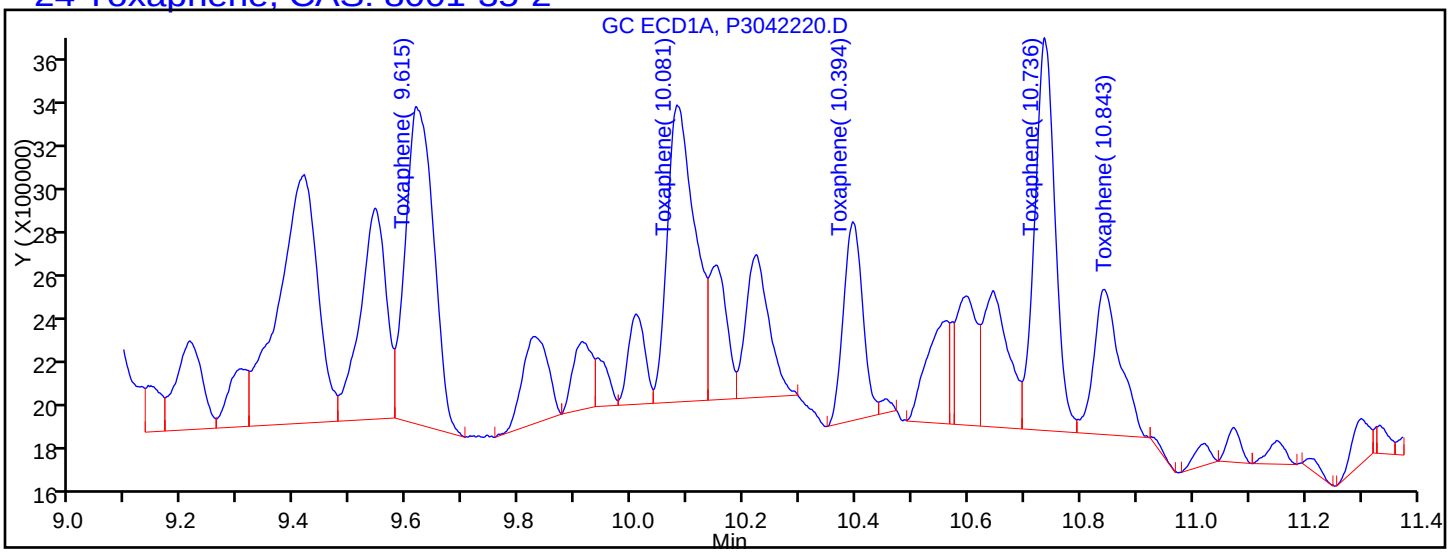
Report Date: 23-Apr-2015 07:42:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042220.D

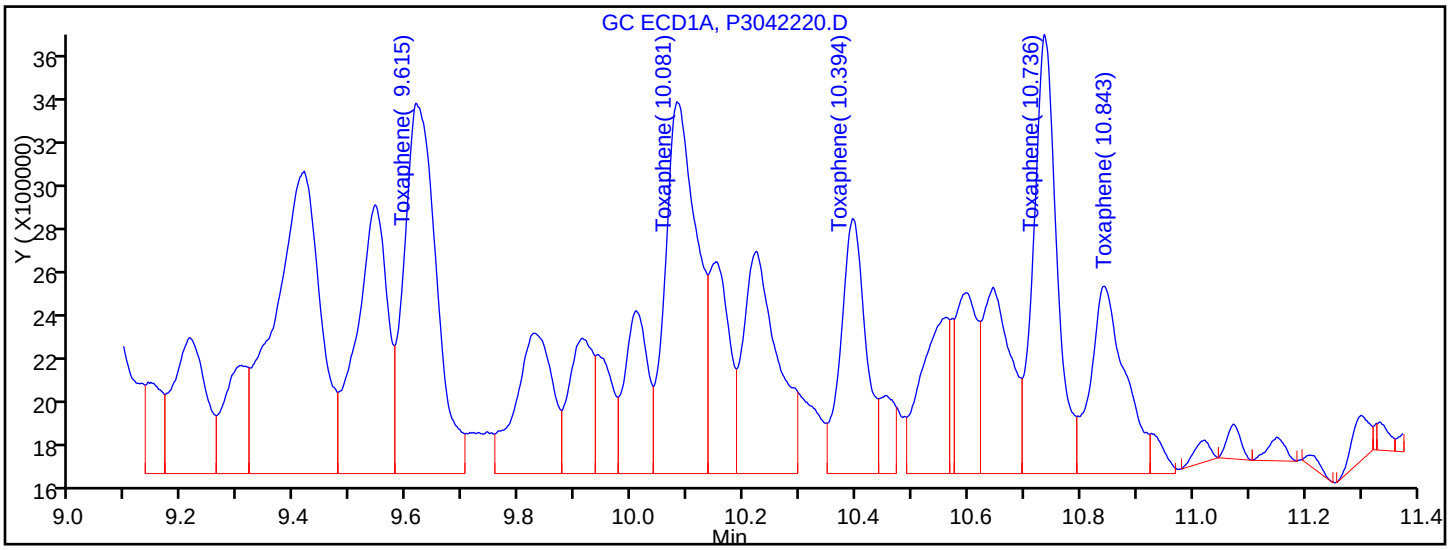
Injection Date:	22-Apr-2015 22:04:29	Instrument ID:	A2HP3		
Lims ID:	MRL TOX				
Client ID:					
Operator ID:	430893	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		
Column:		Detector	GC ECD1A		

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 9.615	Response = 4974651	M
RT = 10.081	Response = 4572348	M
RT = 10.394	Response = 2122929	M
RT = 10.736	Response = 4438663	M
RT = 10.843	Response = 2120665	M



Manual Integration Results

RT = 9.615	Response = 6620421	M
RT = 10.081	Response = 6530287	M
RT = 10.394	Response = 3505426	M
RT = 10.736	Response = 5639712	M
RT = 10.843	Response = 3578920	M

Reviewer: matthewsb, 23-Apr-2015 07:38:26

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-177463/20

Matrix: Solid Lab File ID: P3042220.D

Analysis Method: 8081A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/22/2015 22:04

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 177463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	*Toxaphene*	*161*		*2.0*	1.0	*0.20*

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042220.D
Lims ID: MRL TOX
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 22:04:29 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-020
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:43 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

First Level Reviewer: matthewsb Date: 23-Apr-2015 07:38:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555					ND	
2	4.234						
3 Hexachlorobenzene							
1	4.030					ND	
2	4.880						
2 Diallate							
1	4.130					ND	
1	4.296						
2	4.833						
2	4.996						
4 alpha-BHC							
1	4.251					ND	
2	5.128						
5 gamma-BHC (Lindane)							
1	4.639					ND	
2	5.751						
6 beta-BHC							
1	4.779					ND	
2	5.950						
7 delta-BHC							
1	5.001					ND	
2	6.574						

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.173				ND	
1		6.063					
1		7.350					
1		7.690					
2		6.326					
2		7.951					
2		9.283					
2		9.583					
9 Heptachlor							
1		5.284				ND	
2		6.653					
10 Aldrin							
1		5.750				ND	
2		7.457					
11 Isodrin							
1		6.355				ND	
2		8.429					
12 Heptachlor epoxide							
1		7.025				ND	
2		8.889					
13 gamma-Chlordane							
1		7.339				ND	
2		9.283					
14 alpha-Chlordane							
1		7.684				ND	
2		9.583					
15 Endosulfan I							
1		7.958				ND	
2		9.652					
16 4,4'-DDE							
1		8.065				ND	
2		10.012					
17 Dieldrin							
1		8.513				ND	
2		10.167					
18 Endrin							
1		8.965				ND	
2		10.681					
19 Kepone							
1		9.039				ND	
2		10.845					
20 4,4'-DDD							
1		9.332				ND	
2		11.005					
21 Endosulfan II							
1		9.415				ND	
2		11.050					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
22 Chlorobenzilate							
1		9.427				ND	
2		10.829					
24 Toxaphene							M
1	9.615	9.625	-0.010	6620421	200.0	175.0	M
1	10.081	10.083	-0.002	6530287	200.0	178.2	M
1	10.394	10.397	-0.003	3505426	200.0	150.1	M
1	10.736	10.738	-0.002	5639712	200.0	170.0	M
1	10.843	10.846	-0.003	3578920	200.0	110.7	M
		Average of Peak Amounts =				156.8	
2	11.023	11.024	-0.001	8855446	200.0	170.9	M
2	11.196	11.195	0.001	9004374	200.0	176.7	M
2	11.618	11.618	0.000	6377005	200.0	178.9	M
2	12.354	12.353	0.001	6633405	200.0	145.4	M
2	12.442	12.443	-0.001	2111828	200.0	135.6	M
		Average of Peak Amounts =				161.5	
						RPD = 2.95	
23 4,4'-DDT							
1		9.844				ND	
2		11.487					
25 Endrin aldehyde							
1		10.210				ND	
2		11.608					
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1		10.795				ND	
2		12.554					
28 Endosulfan sulfate							
1		10.935				ND	
2		12.030					
29 Endrin ketone							
1		11.336				ND	
2		12.773					
$ 30 DCB Decachlorobiphenyl							
1		12.940				ND	
2		14.492					

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

Tox Ultra_00008 Amount Added: 20.00 Units: uL

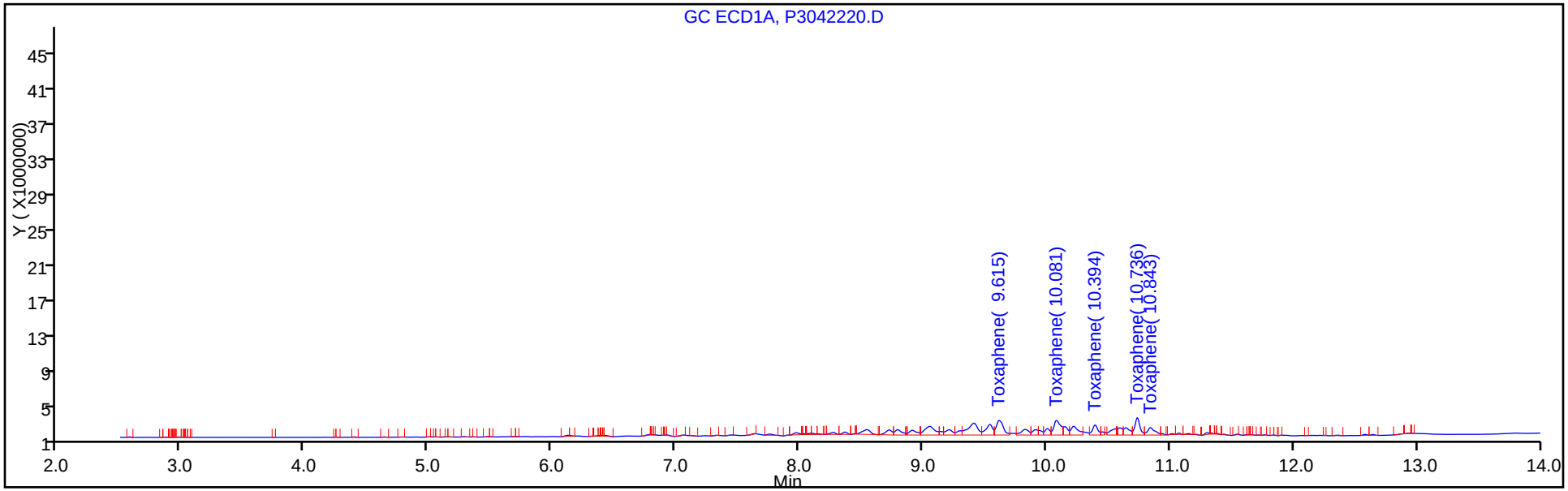
Report Date: 23-Apr-2015 07:42:49 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

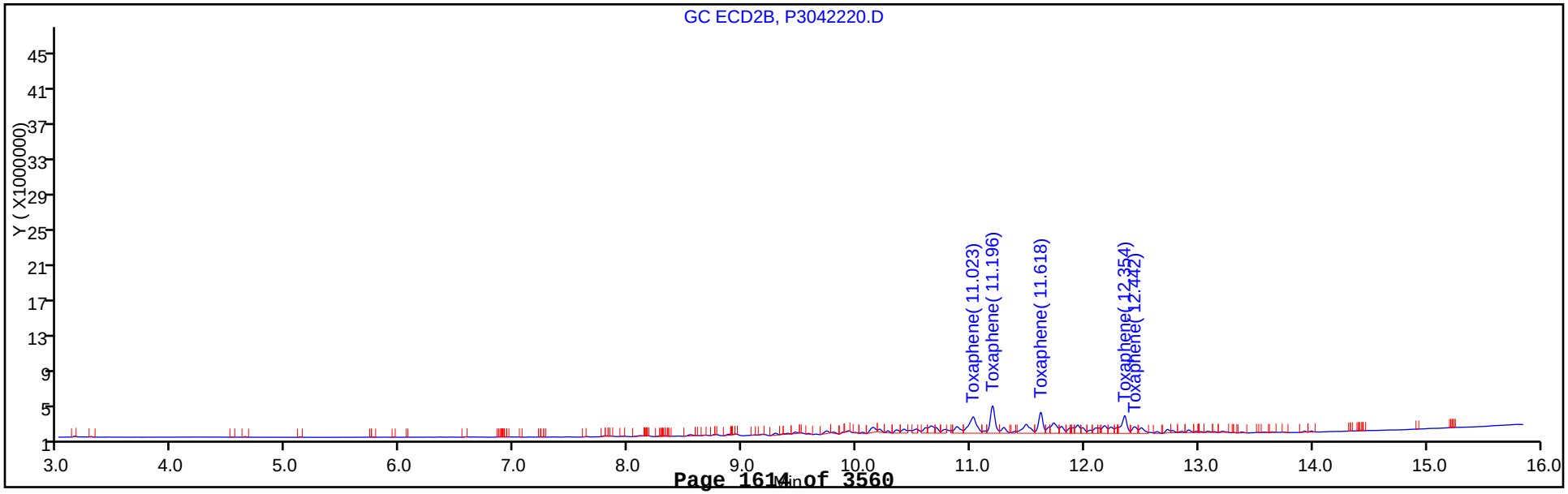
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042220.D

Injection Date:	22-Apr-2015 22:04:29	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL TOX			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 23-Apr-2015 07:42:49 Chrom Revision: 2.2 09-Apr-2015 10:05:40

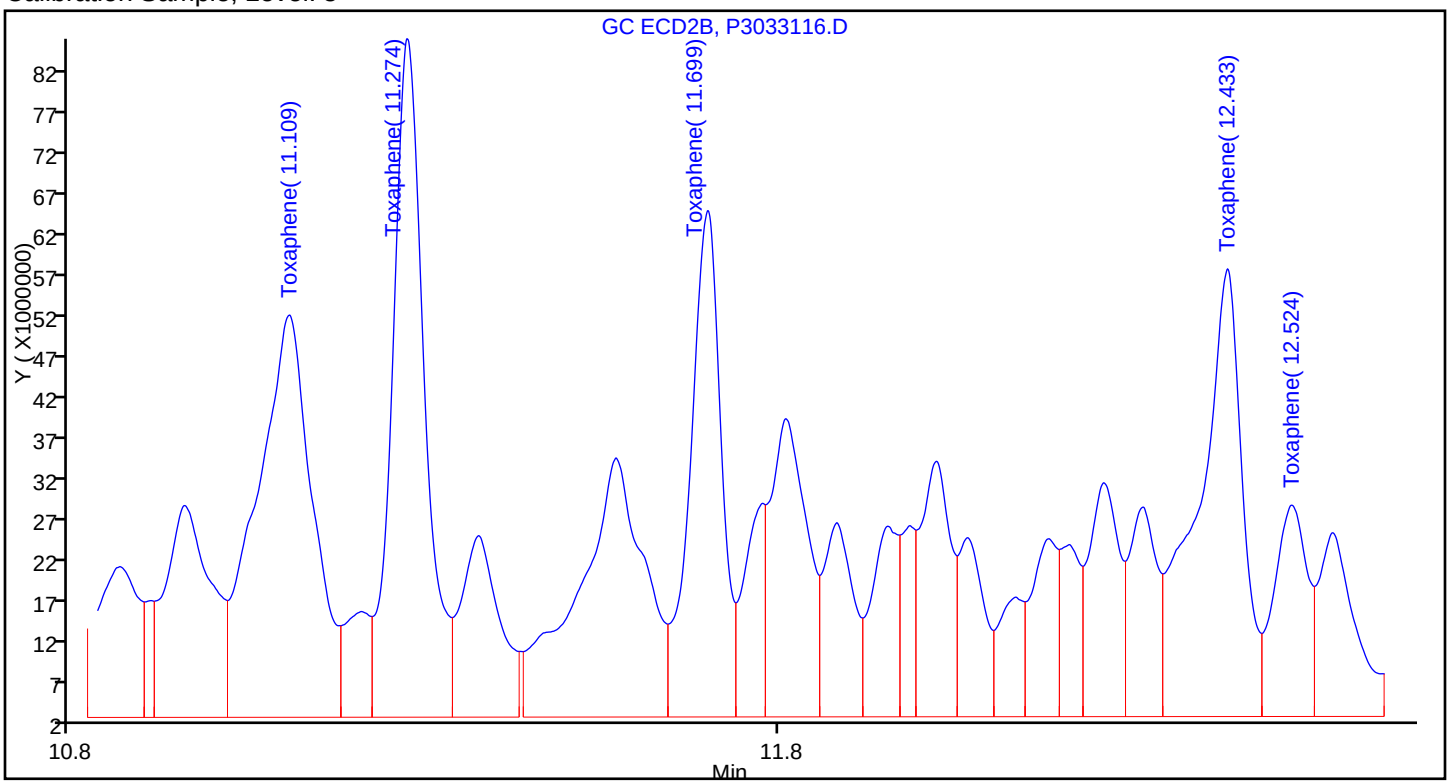
TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042220.D

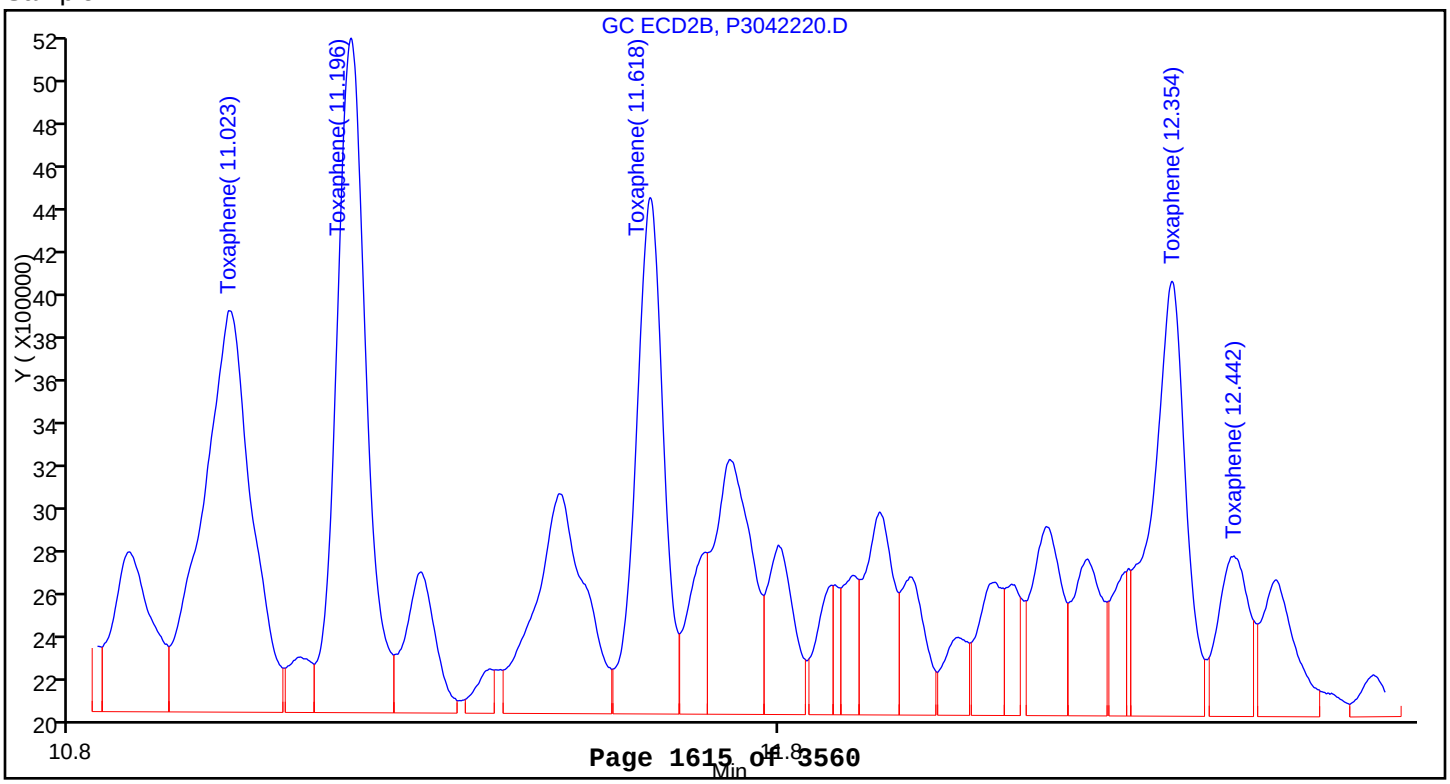
Injection Date:	22-Apr-2015 22:04:29	Instrument ID:	A2HP3		
Lims ID:	MRL TOX				
Client ID:					
Operator ID:	430893	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		
Column:		Detector	GC ecd2b		

24 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 5



Sample



Report Date: 23-Apr-2015 07:42:49 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042220.D

Injection Date: 22-Apr-2015 22:04:29 Instrument ID: A2HP3

Lims ID: MRL TOX

Client ID:

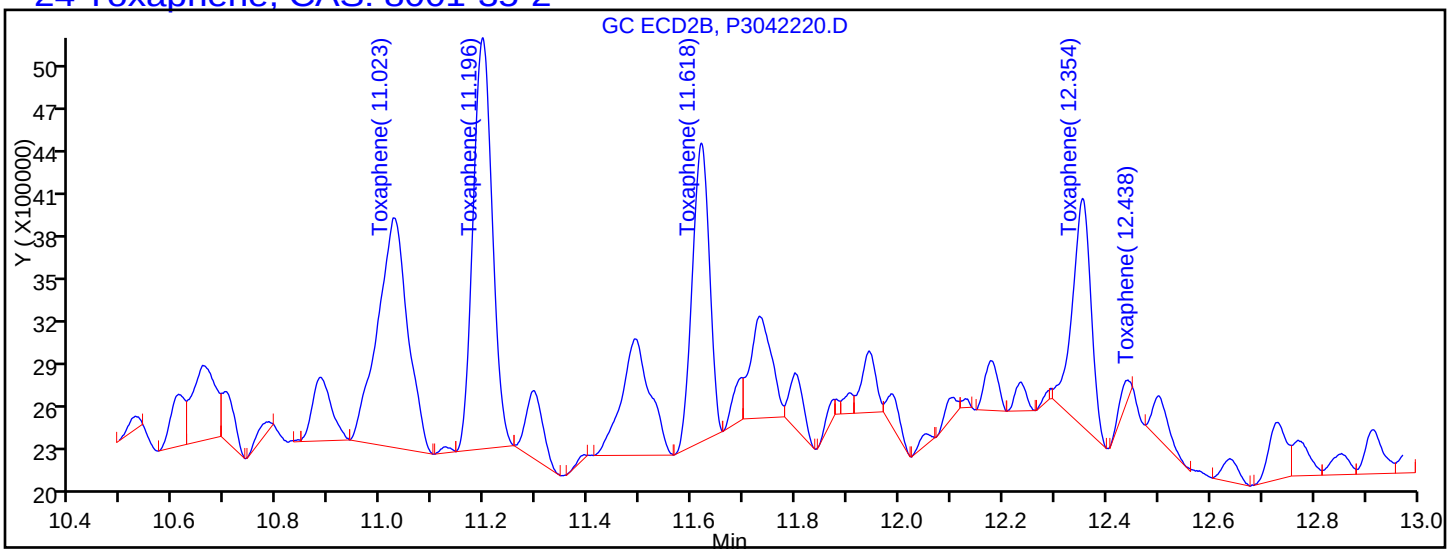
Operator ID: 430893 ALS Bottle#: 20 Worklist Smp#: 20

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PEST3 Limit Group: GC 8081 D0D ICAL

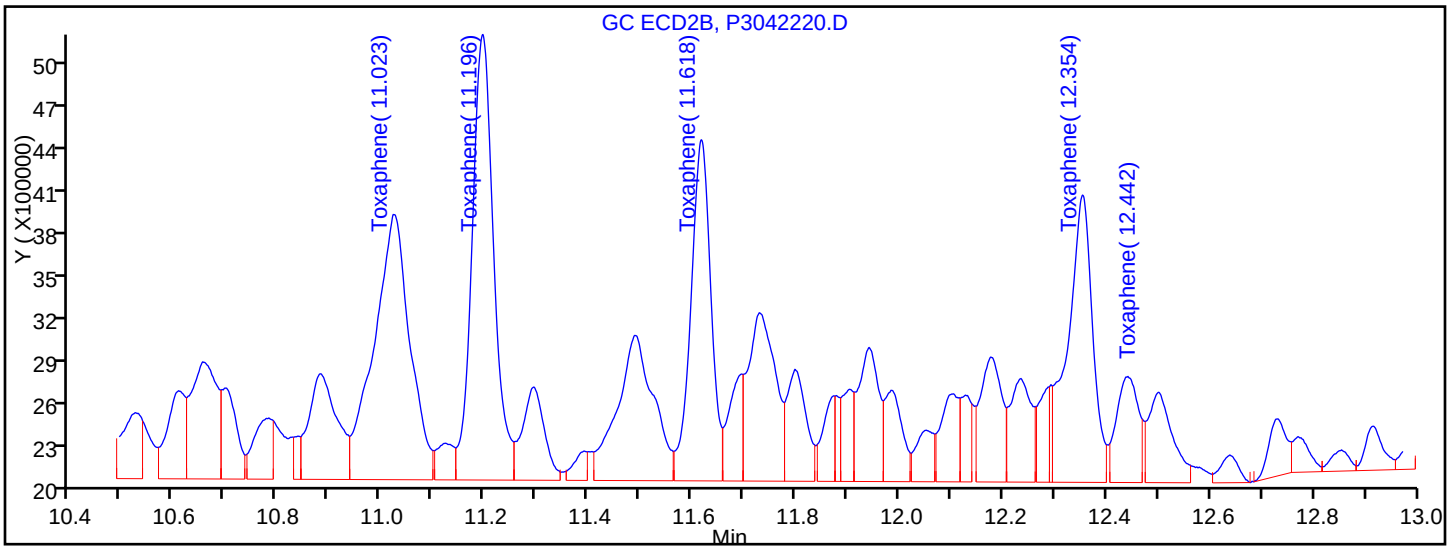
Column: Detector GC ecd2b

24 Toxaphene, CAS: 8001-35-2



Processing Integration Results

RT = 11.023	Response = 6440466	M
RT = 11.196	Response = 7373075	M
RT = 11.618	Response = 4784580	M
RT = 12.354	Response = 3939168	M
RT = 12.438	Response = 245783	M



Manual Integration Results

RT = 11.023	Response = 8855446	M
RT = 11.196	Response = 9004374	M
RT = 11.618	Response = 6377005	M
RT = 12.354	Response = 6633405	M
RT = 12.442	Response = 2111828	M

Reviewer: matthewsb, 23-Apr-2015 07:38:26

Audit Action: Assigned New Baseline

Audit Reason: Baseline Event

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177463/21

Matrix: Solid | Lab File ID: P3042221.D

Analysis Method: 8081A | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 22:27

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177463 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	4.20		0.050	0.050	0.018
72-55-9	4,4'-DDE	5.09		0.050	0.050	0.0090
50-29-3	4,4'-DDT	3.95		0.050	0.050	0.014
309-00-2	Aldrin	5.25		0.050	0.050	0.013
319-84-6	alpha-BHC	5.14		0.050	0.050	0.014
5103-71-9	alpha-Chlordane	5.31		0.050	0.050	0.012
319-85-7	beta-BHC	5.58		0.050	0.050	0.013
319-86-8	delta-BHC	4.62		0.050	0.050	0.029
60-57-1	Dieldrin	5.39		0.050	0.050	0.013
959-98-8	Endosulfan I	5.58		0.050	0.050	0.016
33213-65-9	Endosulfan II	6.01		0.050	0.050	0.015
1031-07-8	Endosulfan sulfate	5.59		0.050	0.050	0.011
72-20-8	Endrin	5.44		0.050	0.050	0.012
7421-93-4	Endrin aldehyde	5.04		0.050	0.050	0.0080
53494-70-5	Endrin ketone	5.43		0.050	0.050	0.0090
58-89-9	gamma-BHC (Lindane)	5.14		0.050	0.050	0.012
5103-74-2	gamma-Chlordane	5.26		0.050	0.050	0.010
76-44-8	Heptachlor	5.60		0.050	0.050	0.0050
1024-57-3	Heptachlor epoxide	5.57		0.050	0.050	0.014
72-43-5	Methoxychlor	5.06		0.10	0.050	0.012

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	114		50-150
877-09-8	Tetrachloro-m-xylene	111		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042221.D
Lims ID: MRL AB
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 22:27:49 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-021
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:43 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555	3.555	0.000	5457064	5.00	5.55	
2	4.235	4.234	0.001	6605207	5.00	5.86	
						RPD = 5.47	
3 Hexachlorobenzene							
1		4.030				ND	
2		4.880					
2 Diallate							
1		4.130				ND	
1		4.296					
2		4.833					
2		4.996					
4 alpha-BHC							
1	4.251	4.251	0.000	8905819	5.00	5.14	
2	5.128	5.128	0.000	10217613	5.00	5.22	
						RPD = 1.49	
5 gamma-BHC (Lindane)							
1	4.639	4.639	0.000	7933598	5.00	5.14	
2	5.750	5.751	-0.001	9510505	5.00	5.37	
						RPD = 4.48	
6 beta-BHC							
1	4.780	4.779	0.001	3513658	5.00	5.58	
2	5.951	5.950	0.001	4578019	5.00	5.96	
						RPD = 6.58	
7 delta-BHC							
1	5.002	5.001	0.001	6941581	5.00	4.62	
2	6.573	6.574	-0.001	8174920	5.00	4.61	
						RPD = 0.24	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.173				ND	
1		6.063					
1		7.350					
1		7.690					
2		6.326					
2		7.951					
2		9.283					
2		9.583					
9 Heptachlor							
1	5.284	5.284	0.000	8173832	5.00	5.60	
2	6.653	6.653	0.000	10168974	5.00	6.02	
						RPD = 7.12	
10 Aldrin							
1	5.750	5.750	0.000	7681792	5.00	5.25	
2	7.457	7.457	0.000	9078766	5.00	5.43	
						RPD = 3.27	
11 Isodrin							
1		6.355				ND	
2		8.429					
12 Heptachlor epoxide							
1	7.025	7.025	0.000	7257584	5.00	5.57	
2	8.890	8.889	0.001	8328190	5.00	5.80	
						RPD = 4.15	
13 gamma-Chlordane							
1	7.340	7.339	0.001	7104621	5.00	5.26	
2	9.284	9.283	0.001	8224392	5.00	5.59	
						RPD = 6.09	
14 alpha-Chlordane							
1	7.685	7.684	0.001	7108797	5.00	5.31	
2	9.582	9.583	-0.001	7960382	5.00	5.60	
						RPD = 5.31	
15 Endosulfan I							
1	7.960	7.958	0.002	6846734	5.00	5.58	
2	9.651	9.652	-0.001	7749146	5.00	5.86	
						RPD = 5.00	
16 4,4'-DDE							
1	8.067	8.065	0.002	6035131	5.00	5.09	
2	10.010	10.012	-0.002	6861374	5.00	5.20	
						RPD = 1.98	
17 Dieldrin							
1	8.510	8.513	-0.003	7046886	5.00	5.39	
2	10.165	10.167	-0.002	7734511	5.00	5.65	
						RPD = 4.79	
18 Endrin							
1	8.963	8.965	-0.002	6260233	5.00	5.44	
2	10.679	10.681	-0.002	6525107	5.00	5.41	
						RPD = 0.46	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
19 Kepone							
1		9.039				ND	
2		10.845					
20 4,4'-DDD							
1	9.335	9.332	0.003	3657808	5.00	4.20	
2	11.007	11.005	0.002	4239440	5.00	4.33	
						RPD = 3.04	
21 Endosulfan II							
1	9.415	9.415	0.000	6949177	5.00	6.01	
2	11.048	11.050	-0.002	7663852	5.00	6.55	
						RPD = 8.71	
22 Chlorobenzilate							
1		9.427				ND	
2		10.829					
24 Toxaphene							
1		9.625				ND	
1		10.083					
1		10.397					
1		10.738					
1		10.846					
2		11.024					
2		11.195					
2		11.618					
2		12.353					
2		12.443					
23 4,4'-DDT							
1	9.845	9.844	0.001	3773942	5.00	3.95	
2	11.487	11.487	0.000	3932558	5.00	3.94	
						RPD = 0.27	
25 Endrin aldehyde							
1	10.210	10.210	0.000	4485458	5.00	5.04	
2	11.607	11.608	-0.001	4713064	5.00	5.05	
						RPD = 0.23	
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1	10.797	10.795	0.002	2318237	5.00	5.06	
2	12.554	12.554	0.000	2256563	5.00	4.61	
						RPD = 9.23	
28 Endosulfan sulfate							
1	10.935	10.935	0.000	5572371	5.00	5.59	
2	12.030	12.030	0.000	6085558	5.00	5.75	
						RPD = 2.68	
29 Endrin ketone							
1	11.335	11.336	-0.001	6630052	5.00	5.43	
2	12.774	12.773	0.001	6734935	5.00	5.49	
						RPD = 1.09	

Report Date: 23-Apr-2015 07:42:50 Chrom Revision: 2.2 09-Apr-2015 10:05:40

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042221.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 30 DCB Decachlorobiphenyl							
1	12.940	12.940	0.000	5358943	5.00	5.72	
2	14.491	14.492	-0.001	5851586	5.00	5.75	
						RPD = 0.45	

Reagents:

SGPestAB1_00011 Amount Added: 1.00 Units: mL

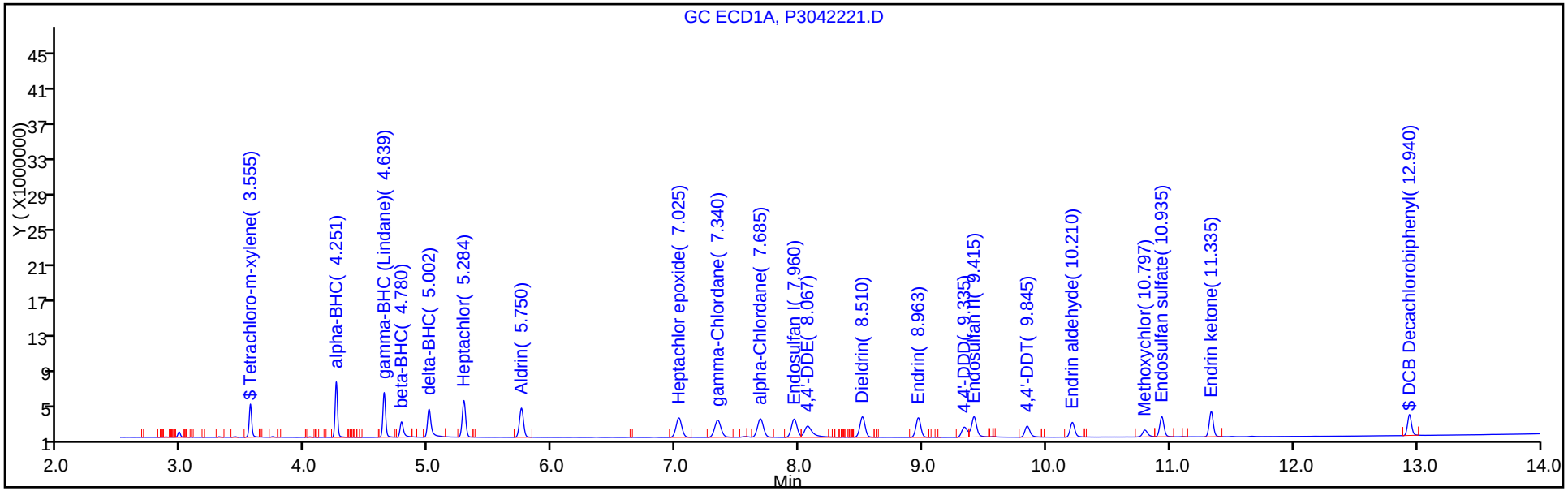
Report Date: 23-Apr-2015 07:42:50 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

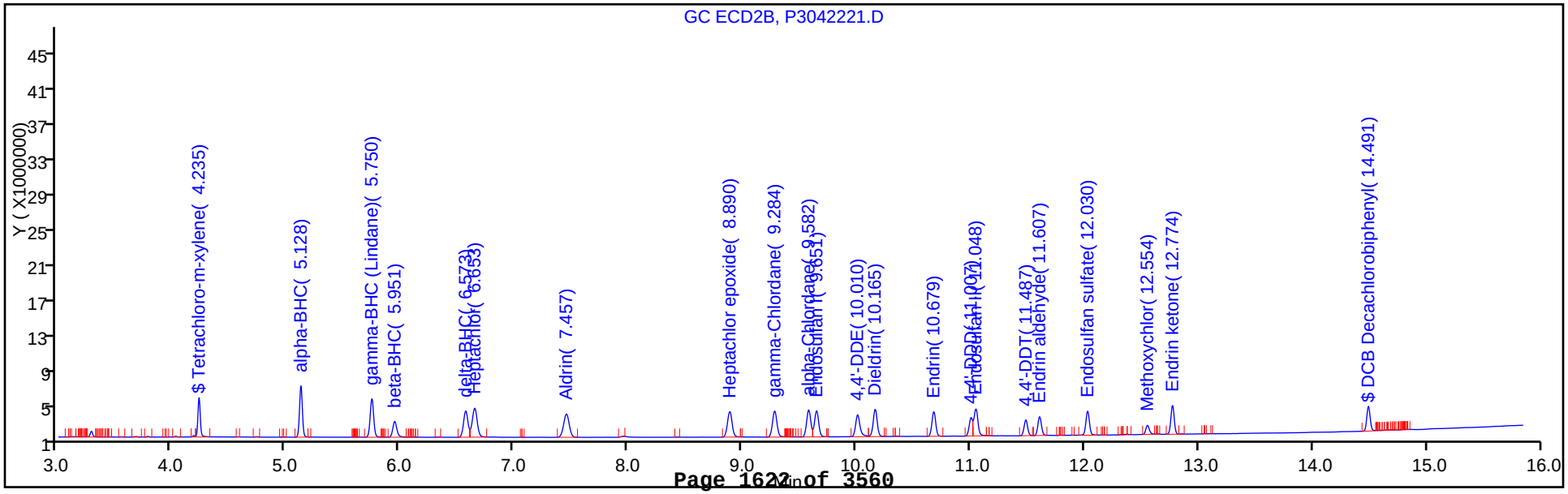
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042221.D

Injection Date:	22-Apr-2015 22:27:49	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL AB			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-177463/21

Matrix: Solid | Lab File ID: P3042221.D

Analysis Method: 8081A | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/22/2015 22:27

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 177463 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	*4,4'-DDD*	*4.33*		*0.050*	0.050	*0.018*
72-55-9	*4,4'-DDE*	*5.20*		*0.050*	0.050	*0.0090*
50-29-3	*4,4'-DDT*	*3.94*		*0.050*	0.050	*0.014*
309-00-2	*Aldrin*	*5.43*		*0.050*	0.050	*0.013*
319-84-6	*alpha-BHC*	*5.22*		*0.050*	0.050	*0.014*
5103-71-9	*alpha-Chlordane*	*5.60*		*0.050*	0.050	*0.012*
319-85-7	*beta-BHC*	*5.96*		*0.050*	0.050	*0.013*
319-86-8	*delta-BHC*	*4.61*		*0.050*	0.050	*0.029*
60-57-1	*Dieldrin*	*5.65*		*0.050*	0.050	*0.013*
959-98-8	*Endosulfan I*	*5.86*		*0.050*	0.050	*0.016*
33213-65-9	*Endosulfan II*	*6.55*	^	*0.050*	0.050	*0.015*
1031-07-8	*Endosulfan sulfate*	*5.75*		*0.050*	0.050	*0.011*
72-20-8	*Endrin*	*5.41*		*0.050*	0.050	*0.012*
7421-93-4	*Endrin aldehyde*	*5.05*		*0.050*	0.050	*0.0080*
53494-70-5	*Endrin ketone*	*5.49*		*0.050*	0.050	*0.0090*
58-89-9	*gamma-BHC (Lindane)*	*5.37*		*0.050*	0.050	*0.012*
5103-74-2	*gamma-Chlordane*	*5.59*		*0.050*	0.050	*0.010*
76-44-8	*Heptachlor*	*6.02*		*0.050*	0.050	*0.0050*
1024-57-3	*Heptachlor epoxide*	*5.80*		*0.050*	0.050	*0.014*
72-43-5	*Methoxychlor*	*4.61*		*0.10*	0.050	*0.012*

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	115		50-150
877-09-8	Tetrachloro-m-xylene	117		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042221.D
Lims ID: MRL AB
Client ID:
Sample Type: MRL
Inject. Date: 22-Apr-2015 22:27:49 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042824-021
Operator ID: 430893 Instrument ID: A2HP3

Method: \\NCChrom\ChromData\A2HP3\20150422-42824.b\PEST3.m
Limit Group: GC 8081 D0D ICAL
Last Update: 23-Apr-2015 07:42:43 Calib Date: 20-Apr-2015 15:05:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A2HP3\20150420-42706.b\P3042011.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK053

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 Tetrachloro-m-xylene							
1	3.555	3.555	0.000	5457064	5.00	5.55	
2	4.235	4.234	0.001	6605207	5.00	5.86	
						RPD = 5.47	
3 Hexachlorobenzene							
1		4.030				ND	
2		4.880					
2 Diallate							
1		4.130				ND	
1		4.296					
2		4.833					
2		4.996					
4 alpha-BHC							
1	4.251	4.251	0.000	8905819	5.00	5.14	
2	5.128	5.128	0.000	10217613	5.00	5.22	
						RPD = 1.49	
5 gamma-BHC (Lindane)							
1	4.639	4.639	0.000	7933598	5.00	5.14	
2	5.750	5.751	-0.001	9510505	5.00	5.37	
						RPD = 4.48	
6 beta-BHC							
1	4.780	4.779	0.001	3513658	5.00	5.58	
2	5.951	5.950	0.001	4578019	5.00	5.96	
						RPD = 6.58	
7 delta-BHC							
1	5.002	5.001	0.001	6941581	5.00	4.62	
2	6.573	6.574	-0.001	8174920	5.00	4.61	
						RPD = 0.24	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 Chlordane (technical)							
1		5.173				ND	
1		6.063					
1		7.350					
1		7.690					
2		6.326					
2		7.951					
2		9.283					
2		9.583					
9 Heptachlor							
1	5.284	5.284	0.000	8173832	5.00	5.60	
2	6.653	6.653	0.000	10168974	5.00	6.02	
						RPD = 7.12	
10 Aldrin							
1	5.750	5.750	0.000	7681792	5.00	5.25	
2	7.457	7.457	0.000	9078766	5.00	5.43	
						RPD = 3.27	
11 Isodrin							
1		6.355				ND	
2		8.429					
12 Heptachlor epoxide							
1	7.025	7.025	0.000	7257584	5.00	5.57	
2	8.890	8.889	0.001	8328190	5.00	5.80	
						RPD = 4.15	
13 gamma-Chlordane							
1	7.340	7.339	0.001	7104621	5.00	5.26	
2	9.284	9.283	0.001	8224392	5.00	5.59	
						RPD = 6.09	
14 alpha-Chlordane							
1	7.685	7.684	0.001	7108797	5.00	5.31	
2	9.582	9.583	-0.001	7960382	5.00	5.60	
						RPD = 5.31	
15 Endosulfan I							
1	7.960	7.958	0.002	6846734	5.00	5.58	
2	9.651	9.652	-0.001	7749146	5.00	5.86	
						RPD = 5.00	
16 4,4'-DDE							
1	8.067	8.065	0.002	6035131	5.00	5.09	
2	10.010	10.012	-0.002	6861374	5.00	5.20	
						RPD = 1.98	
17 Dieldrin							
1	8.510	8.513	-0.003	7046886	5.00	5.39	
2	10.165	10.167	-0.002	7734511	5.00	5.65	
						RPD = 4.79	
18 Endrin							
1	8.963	8.965	-0.002	6260233	5.00	5.44	
2	10.679	10.681	-0.002	6525107	5.00	5.41	
						RPD = 0.46	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
19 Kepone							
1		9.039				ND	
2		10.845					
20 4,4'-DDD							
1	9.335	9.332	0.003	3657808	5.00	4.20	
2	11.007	11.005	0.002	4239440	5.00	4.33	
						RPD = 3.04	
21 Endosulfan II							
1	9.415	9.415	0.000	6949177	5.00	6.01	
2	11.048	11.050	-0.002	7663852	5.00	6.55	
						RPD = 8.71	
22 Chlorobenzilate							
1		9.427				ND	
2		10.829					
24 Toxaphene							
1		9.625				ND	
1		10.083					
1		10.397					
1		10.738					
1		10.846					
2		11.024					
2		11.195					
2		11.618					
2		12.353					
2		12.443					
23 4,4'-DDT							
1	9.845	9.844	0.001	3773942	5.00	3.95	
2	11.487	11.487	0.000	3932558	5.00	3.94	
						RPD = 0.27	
25 Endrin aldehyde							
1	10.210	10.210	0.000	4485458	5.00	5.04	
2	11.607	11.608	-0.001	4713064	5.00	5.05	
						RPD = 0.23	
26 Mirex							
1		10.663				ND	
2		12.669					
27 Methoxychlor							
1	10.797	10.795	0.002	2318237	5.00	5.06	
2	12.554	12.554	0.000	2256563	5.00	4.61	
						RPD = 9.23	
28 Endosulfan sulfate							
1	10.935	10.935	0.000	5572371	5.00	5.59	
2	12.030	12.030	0.000	6085558	5.00	5.75	
						RPD = 2.68	
29 Endrin ketone							
1	11.335	11.336	-0.001	6630052	5.00	5.43	
2	12.774	12.773	0.001	6734935	5.00	5.49	
						RPD = 1.09	

Report Date: 23-Apr-2015 07:42:50 Chrom Revision: 2.2 09-Apr-2015 10:05:40

Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042221.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 30 DCB Decachlorobiphenyl							
1	12.940	12.940	0.000	5358943	5.00	5.72	
2	14.491	14.492	-0.001	5851586	5.00	5.75	
						RPD = 0.45	

Reagents:

SGPestAB1_00011 Amount Added: 1.00 Units: mL

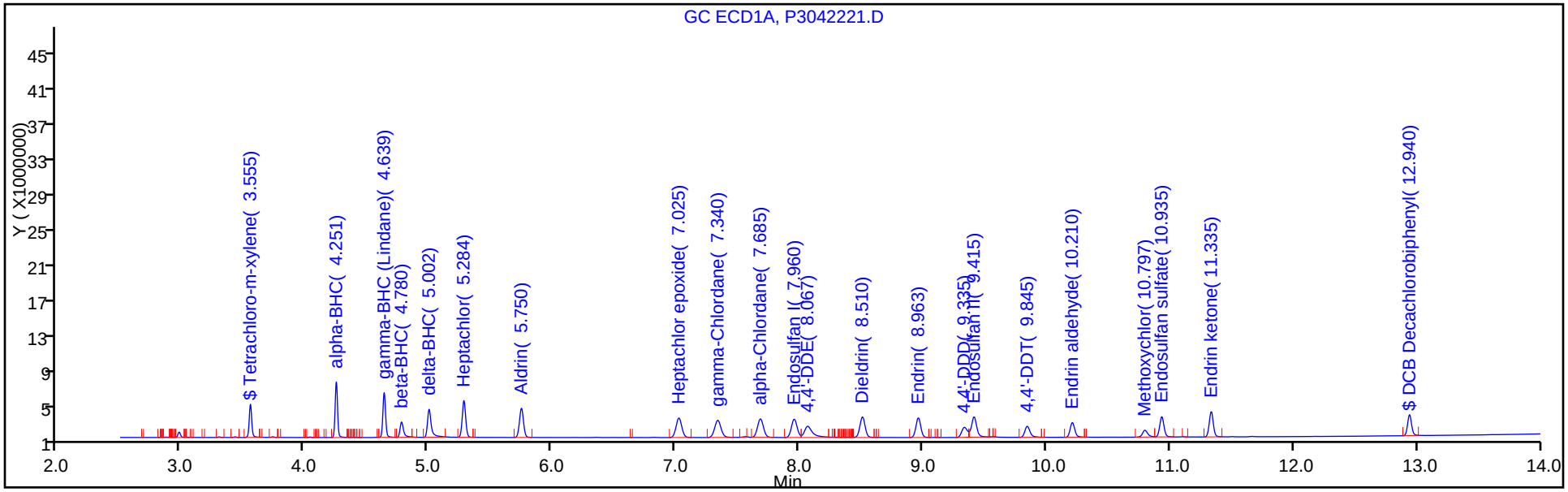
Report Date: 23-Apr-2015 07:42:50 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

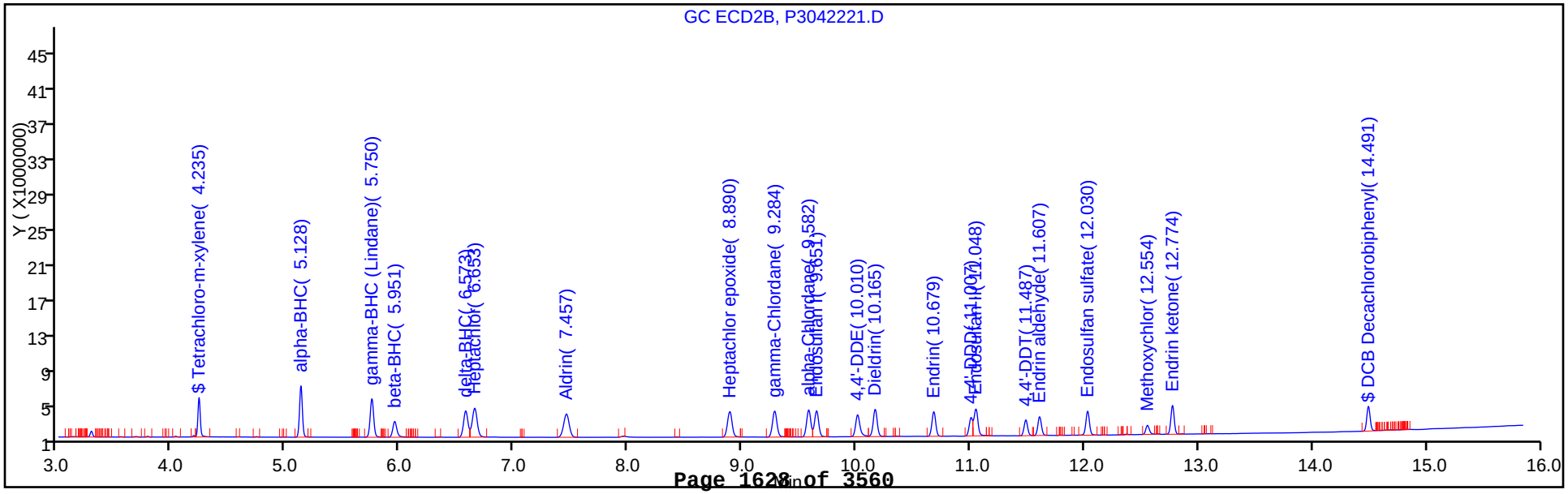
Data File: \\NCChrom\ChromData\A2HP3\20150422-42824.b\P3042221.D

Injection Date:	22-Apr-2015 22:27:49	Instrument ID:	A2HP3	Operator ID:	430893
Lims ID:	MRL AB			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PEST3	Limit Group:	GC 8081 D0D ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Start Date: 03/31/2015 12:56

Analysis Batch Number: 174448 End Date: 03/31/2015 22:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD 240-174448/5 IC		03/31/2015 12:56	1		CLP-1 0.53(mm)
STD 240-174448/5 IC		03/31/2015 12:56	1		CLP-2 0.53(mm)
STD 240-174448/6 IC		03/31/2015 13:19	1		CLP-1 0.53(mm)
STD 240-174448/6 IC		03/31/2015 13:19	1		CLP-2 0.53(mm)
STD 240-174448/7 IC		03/31/2015 13:42	1		CLP-1 0.53(mm)
STD 240-174448/7 IC		03/31/2015 13:42	1		CLP-2 0.53(mm)
STD 240-174448/8 IC		03/31/2015 14:05	1		CLP-1 0.53(mm)
STD 240-174448/8 IC		03/31/2015 14:05	1		CLP-2 0.53(mm)
STD 240-174448/9 IC		03/31/2015 14:28	1		CLP-1 0.53(mm)
STD 240-174448/9 IC		03/31/2015 14:28	1		CLP-2 0.53(mm)
STD 240-174448/10 IC		03/31/2015 14:51	1		CLP-1 0.53(mm)
STD 240-174448/10 IC		03/31/2015 14:51	1		CLP-2 0.53(mm)
ICV 240-174448/11		03/31/2015 15:15	1		CLP-1 0.53(mm)
ICV 240-174448/11		03/31/2015 15:15	1		CLP-2 0.53(mm)
STD 240-174448/12 IC		03/31/2015 15:37	1	P3033112.D	CLP-1 0.53(mm)
STD 240-174448/12 IC		03/31/2015 15:37	1	P3033112.D	CLP-2 0.53(mm)
STD 240-174448/13 IC		03/31/2015 16:01	1	P3033113.D	CLP-1 0.53(mm)
STD 240-174448/13 IC		03/31/2015 16:01	1	P3033113.D	CLP-2 0.53(mm)
STD 240-174448/14 ICRT		03/31/2015 16:24	1	P3033114.D	CLP-1 0.53(mm)
STD 240-174448/14 ICRT		03/31/2015 16:24	1	P3033114.D	CLP-2 0.53(mm)
STD 240-174448/15 IC		03/31/2015 16:47	1	P3033115.D	CLP-1 0.53(mm)
STD 240-174448/15 IC		03/31/2015 16:47	1	P3033115.D	CLP-2 0.53(mm)
STD 240-174448/16 IC		03/31/2015 17:11	1	P3033116.D	CLP-1 0.53(mm)
STD 240-174448/16 IC		03/31/2015 17:11	1	P3033116.D	CLP-2 0.53(mm)
ICV 240-174448/17		03/31/2015 17:34	1	P3033117.D	CLP-1 0.53(mm)
ICV 240-174448/17		03/31/2015 17:34	1	P3033117.D	CLP-2 0.53(mm)
STD 240-174448/18 IC		03/31/2015 17:57	1		CLP-1 0.53(mm)
STD 240-174448/18 IC		03/31/2015 17:57	1		CLP-2 0.53(mm)
STD 240-174448/19 IC		03/31/2015 18:19	1		CLP-1 0.53(mm)
STD 240-174448/19 IC		03/31/2015 18:19	1		CLP-2 0.53(mm)
STD 240-174448/20 ICRT		03/31/2015 18:42	1		CLP-1 0.53(mm)
STD 240-174448/20 ICRT		03/31/2015 18:42	1		CLP-2 0.53(mm)
STD 240-174448/21 IC		03/31/2015 19:04	1		CLP-1 0.53(mm)
STD 240-174448/21 IC		03/31/2015 19:04	1		CLP-2 0.53(mm)
STD 240-174448/22 IC		03/31/2015 19:26	1		CLP-1 0.53(mm)
STD 240-174448/22 IC		03/31/2015 19:26	1		CLP-2 0.53(mm)
ICV 240-174448/23		03/31/2015 19:48	1		CLP-1 0.53(mm)
ICV 240-174448/23		03/31/2015 19:48	1		CLP-2 0.53(mm)
PEM 240-174448/24		03/31/2015 20:11	1	P3033124.D	CLP-1 0.53(mm)
PEM 240-174448/24		03/31/2015 20:11	1	P3033124.D	CLP-2 0.53(mm)
STD 240-174448/25 IC		03/31/2015 20:34	1	P3033125.D	CLP-1 0.53(mm)
STD 240-174448/25 IC		03/31/2015 20:34	1	P3033125.D	CLP-2 0.53(mm)
STD 240-174448/26 IC		03/31/2015 20:57	1	P3033126.D	CLP-1 0.53(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Start Date: 03/31/2015 12:56

Analysis Batch Number: 174448 End Date: 03/31/2015 22:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD 240-174448/26 IC		03/31/2015 20:57	1	P3033126.D	CLP-2 0.53(mm)
STD 240-174448/27 ICRT		03/31/2015 21:20	1	P3033127.D	CLP-1 0.53(mm)
STD 240-174448/27 ICRT		03/31/2015 21:20	1	P3033127.D	CLP-2 0.53(mm)
STD 240-174448/28 IC		03/31/2015 21:44	1	P3033128.D	CLP-1 0.53(mm)
STD 240-174448/28 IC		03/31/2015 21:44	1	P3033128.D	CLP-2 0.53(mm)
STD 240-174448/29 IC		03/31/2015 22:07	1	P3033129.D	CLP-1 0.53(mm)
STD 240-174448/29 IC		03/31/2015 22:07	1	P3033129.D	CLP-2 0.53(mm)
STD 240-174448/30 IC		03/31/2015 22:29	1	P3033130.D	CLP-1 0.53(mm)
STD 240-174448/30 IC		03/31/2015 22:29	1	P3033130.D	CLP-2 0.53(mm)
ICV 240-174448/31		03/31/2015 22:53	1	P3033131.D	CLP-1 0.53(mm)
ICV 240-174448/31		03/31/2015 22:53	1	P3033131.D	CLP-2 0.53(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Start Date: 04/21/2015 14:22

Analysis Batch Number: 177258 End Date: 04/22/2015 09:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PEM 240-177258/5		04/21/2015 14:22	1		CLP-1 0.53(mm)
PEM 240-177258/5		04/21/2015 14:22	1		CLP-2 0.53(mm)
CCV 240-177258/6 CCVRT		04/21/2015 14:46	1		CLP-1 0.53(mm)
CCV 240-177258/6 CCVRT		04/21/2015 14:46	1		CLP-2 0.53(mm)
CCV 240-177258/7 CCVRT		04/21/2015 15:08	1		CLP-1 0.53(mm)
CCV 240-177258/7 CCVRT		04/21/2015 15:08	1		CLP-2 0.53(mm)
CCV 240-177258/8 CCVRT		04/21/2015 15:32	1	P3042108.D	CLP-1 0.53(mm)
CCV 240-177258/8 CCVRT		04/21/2015 15:32	1	P3042108.D	CLP-2 0.53(mm)
CCV 240-177258/9 CCVRT		04/21/2015 15:55	1		CLP-1 0.53(mm)
CCV 240-177258/9 CCVRT		04/21/2015 15:55	1		CLP-2 0.53(mm)
CCV 240-177258/10 CCVRT		04/21/2015 16:19	1	P3042110.D	CLP-1 0.53(mm)
CCV 240-177258/10 CCVRT		04/21/2015 16:19	1	P3042110.D	CLP-2 0.53(mm)
ZZZZZ		04/21/2015 17:05	20		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 17:05	20		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 17:28	1		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 17:28	1		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 17:52	1		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 17:52	1		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 18:15	1		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 18:15	1		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 18:38	10		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 18:38	10		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 19:01	10		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 19:01	10		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 19:24	50		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 19:24	50		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 19:47	20		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 19:47	20		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 20:10	1		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 20:10	1		CLP-2 0.53(mm)
CCV 240-177258/21		04/21/2015 20:33	1		CLP-1 0.53(mm)
CCV 240-177258/21		04/21/2015 20:33	1		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 20:56	20		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 20:56	20		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 21:19	20		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 21:19	20		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 21:42	20		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 21:42	20		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 22:04	1		CLP-1 0.53(mm)
ZZZZZ		04/21/2015 22:04	1		CLP-2 0.53(mm)
ZZZZZ		04/21/2015 22:27	1		CLP-1 0.53(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Start Date: 04/21/2015 14:22

Analysis Batch Number: 177258 End Date: 04/22/2015 09:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/21/2015 22:27	1		CLP-2 0.53(mm)
PEM 240-177258/27		04/21/2015 22:49	1	P3042127.D	CLP-1 0.53(mm)
PEM 240-177258/27		04/21/2015 22:49	1	P3042127.D	CLP-2 0.53(mm)
CCV 240-177258/28		04/21/2015 23:12	1	P3042128.D	CLP-1 0.53(mm)
CCV 240-177258/28		04/21/2015 23:12	1	P3042128.D	CLP-2 0.53(mm)
MRL 240-177258/29		04/21/2015 23:35	1	P3042129.D	CLP-1 0.53(mm)
MRL 240-177258/29		04/21/2015 23:35	1	P3042129.D	CLP-2 0.53(mm)
MRL 240-177258/30		04/21/2015 23:58	1	P3042130.D	CLP-1 0.53(mm)
MRL 240-177258/30		04/21/2015 23:58	1	P3042130.D	CLP-2 0.53(mm)
MRL 240-177258/31		04/22/2015 00:22	1	P3042131.D	CLP-1 0.53(mm)
MRL 240-177258/31		04/22/2015 00:22	1	P3042131.D	CLP-2 0.53(mm)
ZZZZZ		04/22/2015 00:45	1		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 00:45	1		CLP-2 0.53(mm)
ZZZZZ		04/22/2015 01:08	1		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 01:08	1		CLP-2 0.53(mm)
ZZZZZ		04/22/2015 01:31	1		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 01:31	1		CLP-2 0.53(mm)
240-49171-6 RE	079SB-0352M-0001-SO RE	04/22/2015 01:54	1	P3042135.D	CLP-1 0.53(mm)
240-49171-6 RE	079SB-0352M-0001-SO RE	04/22/2015 01:54	1	P3042135.D	CLP-2 0.53(mm)
240-49171-8 RE	079SB-0353M-0001-SO RE	04/22/2015 02:17	1	P3042136.D	CLP-1 0.53(mm)
240-49171-8 RE	079SB-0353M-0001-SO RE	04/22/2015 02:17	1	P3042136.D	CLP-2 0.53(mm)
240-49171-10 RE	079SB-0354M-0001-SO RE	04/22/2015 02:39	1	P3042137.D	CLP-1 0.53(mm)
240-49171-10 RE	079SB-0354M-0001-SO RE	04/22/2015 02:39	1	P3042137.D	CLP-2 0.53(mm)
MB 240-177037/7-A		04/22/2015 03:02	1	P3042138.D	CLP-1 0.53(mm)
MB 240-177037/7-A		04/22/2015 03:02	1	P3042138.D	CLP-2 0.53(mm)
ZZZZZ		04/22/2015 03:25	1		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 03:25	1		CLP-2 0.53(mm)
CCV 240-177258/40		04/22/2015 03:48	1	P3042140.D	CLP-1 0.53(mm)
CCV 240-177258/40		04/22/2015 03:48	1	P3042140.D	CLP-2 0.53(mm)
ZZZZZ		04/22/2015 04:55	1		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 04:55	1		CLP-2 0.53(mm)
ZZZZZ		04/22/2015 05:18	1		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 05:18	1		CLP-2 0.53(mm)
ZZZZZ		04/22/2015 05:39	1		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 05:39	1		CLP-2 0.53(mm)
ZZZZZ		04/22/2015 06:03	5		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 06:03	5		CLP-2 0.53(mm)
MRL 240-177258/47		04/22/2015 06:25	1	P3042147.D	CLP-1 0.53(mm)
MRL 240-177258/47		04/22/2015 06:25	1	P3042147.D	CLP-2 0.53(mm)
MRL 240-177258/48		04/22/2015 06:49	1	P3042148.D	CLP-1 0.53(mm)
MRL 240-177258/48		04/22/2015 06:49	1	P3042148.D	CLP-2 0.53(mm)
MRL 240-177258/49		04/22/2015 07:12	1	P3042149.D	CLP-1 0.53(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Start Date: 04/21/2015 14:22

Analysis Batch Number: 177258 End Date: 04/22/2015 09:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
MRL 240-177258/49		04/22/2015 07:12	1	P3042149.D	CLP-2 0.53(mm)
CCV 240-177258/50		04/22/2015 07:36	1		CLP-1 0.53(mm)
CCV 240-177258/50		04/22/2015 07:36	1		CLP-2 0.53(mm)
CCV 240-177258/51		04/22/2015 07:59	1		CLP-1 0.53(mm)
CCV 240-177258/51		04/22/2015 07:59	1		CLP-2 0.53(mm)
CCV 240-177258/52		04/22/2015 08:22	1	P3042152.D	CLP-1 0.53(mm)
CCV 240-177258/52		04/22/2015 08:22	1	P3042152.D	CLP-2 0.53(mm)
CCV 240-177258/53		04/22/2015 08:46	1		CLP-1 0.53(mm)
CCV 240-177258/53		04/22/2015 08:46	1		CLP-2 0.53(mm)
CCV 240-177258/54		04/22/2015 09:08	1		CLP-1 0.53(mm)
CCV 240-177258/54		04/22/2015 09:08	1		CLP-2 0.53(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP3 Start Date: 04/22/2015 16:07

Analysis Batch Number: 177463 End Date: 04/22/2015 23:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PEM 240-177463/5		04/22/2015 16:07	1	P3042205.D	CLP-1 0.53(mm)
PEM 240-177463/5		04/22/2015 16:07	1	P3042205.D	CLP-2 0.53(mm)
CCV 240-177463/6 CCVRT		04/22/2015 16:30	1	P3042206.D	CLP-1 0.53(mm)
CCV 240-177463/6 CCVRT		04/22/2015 16:30	1	P3042206.D	CLP-2 0.53(mm)
CCV 240-177463/7 CCVRT		04/22/2015 16:55	1		CLP-1 0.53(mm)
CCV 240-177463/7 CCVRT		04/22/2015 16:55	1		CLP-2 0.53(mm)
CCV 240-177463/8 CCVRT		04/22/2015 17:19	1	P3042208.D	CLP-1 0.53(mm)
CCV 240-177463/8 CCVRT		04/22/2015 17:19	1	P3042208.D	CLP-2 0.53(mm)
ZZZZZ		04/22/2015 18:07	2		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 18:07	2		CLP-2 0.53(mm)
ZZZZZ		04/22/2015 18:30	5		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 18:30	5		CLP-2 0.53(mm)
ZZZZZ		04/22/2015 18:54	10		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 18:54	10		CLP-2 0.53(mm)
ZZZZZ		04/22/2015 19:18	50		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 19:18	50		CLP-2 0.53(mm)
ZZZZZ		04/22/2015 19:42	10		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 19:42	10		CLP-2 0.53(mm)
ZZZZZ		04/22/2015 20:05	1		CLP-1 0.53(mm)
ZZZZZ		04/22/2015 20:05	1		CLP-2 0.53(mm)
CCV 240-177463/16		04/22/2015 20:29	1	P3042216.D	CLP-1 0.53(mm)
CCV 240-177463/16		04/22/2015 20:29	1	P3042216.D	CLP-2 0.53(mm)
MRL 240-177463/17		04/22/2015 20:53	1	P3042217.D	CLP-1 0.53(mm)
MRL 240-177463/17		04/22/2015 20:53	1	P3042217.D	CLP-2 0.53(mm)
MRL 240-177463/18		04/22/2015 21:18	1	P3042218.D	CLP-1 0.53(mm)
MRL 240-177463/18		04/22/2015 21:18	1	P3042218.D	CLP-2 0.53(mm)
LCS 240-177037/8-A		04/22/2015 21:41	1	P3042219.D	CLP-1 0.53(mm)
LCS 240-177037/8-A		04/22/2015 21:41	1	P3042219.D	CLP-2 0.53(mm)
MRL 240-177463/20		04/22/2015 22:04	1	P3042220.D	CLP-1 0.53(mm)
MRL 240-177463/20		04/22/2015 22:04	1	P3042220.D	CLP-2 0.53(mm)
MRL 240-177463/21		04/22/2015 22:27	1	P3042221.D	CLP-1 0.53(mm)
MRL 240-177463/21		04/22/2015 22:27	1	P3042221.D	CLP-2 0.53(mm)
CCV 240-177463/22		04/22/2015 22:50	1	P3042222.D	CLP-1 0.53(mm)
CCV 240-177463/22		04/22/2015 22:50	1	P3042222.D	CLP-2 0.53(mm)
CCV 240-177463/23		04/22/2015 23:14	1		CLP-1 0.53(mm)
CCV 240-177463/23		04/22/2015 23:14	1		CLP-2 0.53(mm)
CCV 240-177463/24		04/22/2015 23:37	1	P3042224.D	CLP-1 0.53(mm)
CCV 240-177463/24		04/22/2015 23:37	1	P3042224.D	CLP-2 0.53(mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 177037 Batch Start Date: 04/20/15 11:15 Batch Analyst: Coast, Chris

Batch Method: 3540C Batch End Date: 04/21/15 03:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	EX2/.2SURRW 00053	exNPDES spike 00003	AnalysisComment	
240-49171-A-6-A	079SB-0352M-0001 -SO	3540C, 8081A	T	30.31 g	10 mL	1 mL			
240-49171-A-8-A	079SB-0353M-0001 -SO	3540C, 8081A	T	29.98 g	10 mL	1 mL			
240-49171-A-10-A	079SB-0354M-0001 -SO	3540C, 8081A	T	30.08 g	10 mL	1 mL			
MB 240-177037/7		3540C, 8081A		30 g	10 mL	1 mL		associate w/ 177040	
LCS 240-177037/8		3540C, 8081A		30 g	10 mL	1 mL	1 mL		

Batch Notes	
Balance ID	1339907
Na2SO4 Lot Number	1942695
Prep Solvent Lot #	1928227

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8082 DOD

Polychlorinated Biphenyls (PCBs) by Gas Chromatography by Method 8082/DOD

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-2 ID: 0.53 (mm) GC Column (2): CLP-1 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCB1 #	DCB2 #
079SB-0352M-0001-SO	240-49171-6	85	110	91	98
079SB-0353M-0001-SO	240-49171-8	86	87	98	101
079SB-0354M-0001-SO	240-49171-10	87	89	100	103
	MB 240-176299/12-A	84	90	103	104
	LCS 240-176299/13-A	82	104	98	99

	QC LIMITS
TCX = Tetrachloro-m-xylene	40-140
DCB = DCB Decachlorobiphenyl	60-125

Column to be used to flag recovery values

FORM II 8082

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): CLP-2 ID: 0.53 (mm) GC Column (2): CLP-1 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCB1 #	DCB2 #
	MRL 240-176718/4	111	188 ^	126	116
	MRL 240-176718/13	107	178 ^	119	118

	QC LIMITS
TCX = Tetrachloro-m-xylene	50-150
DCB = DCB Decachlorobiphenyl	50-150

Column to be used to flag recovery values

FORM II 8082

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: SIG10019.D

Lab ID: LCS 240-176299/13-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Aroclor-1016	333	257	77	40-140	
Aroclor-1260	333	283	85	60-130	

Column to be used to flag recovery and RPD values

FORM III 8082

FORM III
PCBS METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: SIG10011.D

Lab ID: MRL 240-176718/4 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Aroclor-1016	0.0500	0.0529	106	70-130	
Aroclor-1016	0.0500	0.0533	107	70-130	
Aroclor-1260	0.0500	0.0553	111	70-130	
Aroclor-1260	0.0500	0.0551	110	70-130	

Column to be used to flag recovery and RPD values

FORM III 8082

FORM III
PCBS METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Water Level: Low Lab File ID: SIG10020.D

Lab ID: MRL 240-176718/13 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Aroclor-1016	0.0500	0.0512	102	70-130	
Aroclor-1016	0.0500	0.0539	108	70-130	
Aroclor-1260	0.0500	0.0540	108	70-130	
Aroclor-1260	0.0500	0.0516	103	70-130	

Column to be used to flag recovery and RPD values

FORM III 8082

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: MB 240-176299/12-A

Matrix: Solid Date Extracted: 04/14/2015 07:22

Lab File ID:(1) SIG10018.D Lab File ID:(2) SIG10018.D

Date Analyzed:(1) 04/16/2015 14:18 Date Analyzed:(2) 04/16/2015 14:18

Instrument ID:(1) A2HP10 Instrument ID:(2) A2HP10

GC Column:(1) CLP-2 ID: 0.53(mm) GC Column:(2) CLP-1 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
079SB-0352M-0001-SO	240-49171-6	04/16/2015 13:31	04/16/2015 13:31
079SB-0353M-0001-SO	240-49171-8	04/16/2015 13:47	04/16/2015 13:47
079SB-0354M-0001-SO	240-49171-10	04/16/2015 14:02	04/16/2015 14:02
	LCS 240-176299/13-A	04/16/2015 14:33	04/16/2015 14:33

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: STD05 240-174339/31 Date Analyzed: 03/30/2015 22:40

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): SIG10031.D Heated Purge: (Y/N) N

Calibration ID: 27551

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
INITIAL CALIBRATION SURROGATE				1.46	7.23	
UPPER LIMIT				1.49	7.26	
LOWER LIMIT				1.43	7.20	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD05 240-174339/31 ICRT		03/30/2015 22:40	SIG10031.D	1.46	7.23	

Column used to flag values outside QC limits

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: STD05 240-174339/31 Date Analyzed: 03/30/2015 22:40

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): SIG10031.D Heated Purge: (Y/N) N

Calibration ID: 27552

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
INITIAL CALIBRATION SURROGATE				1.85	8.29	
UPPER LIMIT				1.88	8.32	
LOWER LIMIT				1.82	8.26	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD05 240-174339/31 ICRT		03/30/2015 22:40	SIG10031.D	1.85	8.29	

Column used to flag values outside QC limits

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: CCV 240-176718/3 Date Analyzed: 04/16/2015 12:14

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): SIG10010.D Heated Purge: (Y/N) N

Calibration ID: 27551

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.44	7.20	
UPPER LIMIT				1.47	7.23	
LOWER LIMIT				1.41	7.17	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-176718/3 CCVRT		04/16/2015 12:14	SIG10010.D	1.44	7.20	
240-49171-6	079SB-0352M-0001-SO	04/16/2015 13:31	SIG10015.D	1.44	7.20	
240-49171-8	079SB-0353M-0001-SO	04/16/2015 13:47	SIG10016.D	1.43	7.20	
240-49171-10	079SB-0354M-0001-SO	04/16/2015 14:02	SIG10017.D	1.44	7.20	
MB 240-176299/12-A		04/16/2015 14:18	SIG10018.D	1.44	7.20	
LCS 240-176299/13-A		04/16/2015 14:33	SIG10019.D	1.43	7.20	
CCV 240-176718/14		04/16/2015 15:04	SIG10021.D	1.44	7.20	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.03 minutes of surrogate RT
DCB RT Limit = ± 0.03 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Sample No.: CCV 240-176718/3 Date Analyzed: 04/16/2015 12:14

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): SIG10010.D Heated Purge: (Y/N) N

Calibration ID: 27552

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.83	8.27	
UPPER LIMIT				1.86	8.30	
LOWER LIMIT				1.80	8.24	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-176718/3 CCVRT		04/16/2015 12:14	SIG10010.D	1.83	8.27	
240-49171-6	079SB-0352M-0001-SO	04/16/2015 13:31	SIG10015.D	1.83	8.27	
240-49171-8	079SB-0353M-0001-SO	04/16/2015 13:47	SIG10016.D	1.83	8.27	
240-49171-10	079SB-0354M-0001-SO	04/16/2015 14:02	SIG10017.D	1.83	8.27	
MB 240-176299/12-A		04/16/2015 14:18	SIG10018.D	1.83	8.27	
LCS 240-176299/13-A		04/16/2015 14:33	SIG10019.D	1.83	8.27	
CCV 240-176718/14		04/16/2015 15:04	SIG10021.D	1.83	8.27	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.03 minutes of surrogate RT
DCB RT Limit = ± 0.03 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-176299/13-A

Instrument ID (1): A2HP10 Instrument ID (2): A2HP10

Date Analyzed (1): 04/16/2015 14:33 Date Analyzed (2): 04/16/2015 14:33

GC Column (1): CLP-2 ID: 0.53(mm) GC Column (2): CLP-1 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor-1016	1	1	2.37	2.32	2.42	232	246	4.4
		2	2.81	2.76	2.86	255		
		3	3.30	3.25	3.35	272		
		4	3.45	3.40	3.50	227		
		5	3.96	3.91	4.01	243		
	2	1	1.77	1.72	1.82	238	257	
		2	2.11	2.06	2.16	254		
		3	2.56	2.52	2.62	272		
		4	2.70	2.65	2.75	272		
		5	3.13	3.08	3.18	250		
Aroclor-1260	1	1	5.34	5.29	5.39	271	288	1.9
		2	5.58	5.53	5.63	284		
		3	5.95	5.90	6.00	318		
		4	6.65	6.60	6.70	280		
		5	7.03	6.98	7.08	286		
	2	1	4.42	4.37	4.47	267	283	
		2	4.72	4.67	4.77	279		
		3	5.01	4.96	5.06	312		
		4	5.73	5.69	5.79	265		
		5	6.03	5.98	6.08	289		

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO | Lab Sample ID: 240-49171-6

Matrix: Solid | Lab File ID: SIG10015.D

Analysis Method: 8082 | Date Collected: 04/08/2015 10:27

Extraction Method: 3540C | Date Extracted: 04/14/2015 07:22

Sample wt/vol: 29.52(g) | Date Analyzed: 04/16/2015 13:31

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 2.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
11104-28-2	Aroclor-1221	34	U	52	34	17
12674-11-2	Aroclor-1016	34	U	68	34	12
11141-16-5	Aroclor-1232	34	U	47	34	21
53469-21-9	Aroclor-1242	34	U	42	34	11
12672-29-6	Aroclor-1248	34	U	57	34	8.3
11097-69-1	Aroclor-1254	34	U	57	34	15
11096-82-5	Aroclor-1260	34	U	57	34	9.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	110		40-140
2051-24-3	DCB Decachlorobiphenyl	98		60-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10015.D
Lims ID: 240-49171-A-6-B Lab Sample ID: 240-49171-6
Client ID: 079SB-0352M-0001-SO
Sample Type: Client
Inject. Date: 16-Apr-2015 13:31:34 ALS Bottle#: 15 Worklist Smp#: 8
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-008
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 17-Apr-2015 08:24:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene						
1	1.435	1.436	-0.001	16536380	0.0220	
2	1.832	1.833	-0.001	12708633	0.0170	
					RPD = 25.62	
3 PCB-1221						
1		1.599			ND	
1		1.731				
1		1.768				
2		2.155				
2		2.303				
2		2.366				
4 PCB-1232						
1		1.767			ND	
1		2.106				
1		2.565				
1		2.700				
1		3.128				
2		2.365				
2		2.808				
2		3.301				
2		3.449				
2		4.095				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
5 PCB-1242						
1		1.769			ND	
1		2.107				
1		2.564				
1		2.701				
1		3.127				
2		2.366				
2		2.809				
2		3.303				
2		3.449				
2		4.097				
6 PCB-1016						
1		1.769			ND	
1		2.108				
1		2.566				
1		2.701				
1		3.128				
2		2.366				
2		2.809				
2		3.302				
2		3.449				
2		3.964				
7 PCB-1248						
1		2.106			ND	
1		2.562				
1		3.127				
1		3.757				
1		4.222				
2		2.807				
2		3.302				
2		4.095				
2		4.427				
2		5.128				
8 PCB-1254						
1		3.526			ND	
1		3.809				
1		4.220				
1		4.519				
1		5.012				
2		4.422				
2		4.642				
2		5.128				
2		5.382				
2		5.954				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
10 PCB-1260						
1		4.420			ND	
1		4.721				
1		5.011				
1		5.736				
1		6.026				
2		5.341				
2		5.579				
2		5.949				
2		6.647				
2		7.030				
$ 12 DCB Decachlorobiphenyl						
1	7.200	7.199	0.001	11601339	0.0196	
2	8.273	8.271	0.002	11754152	0.0182	
					RPD = 7.53	

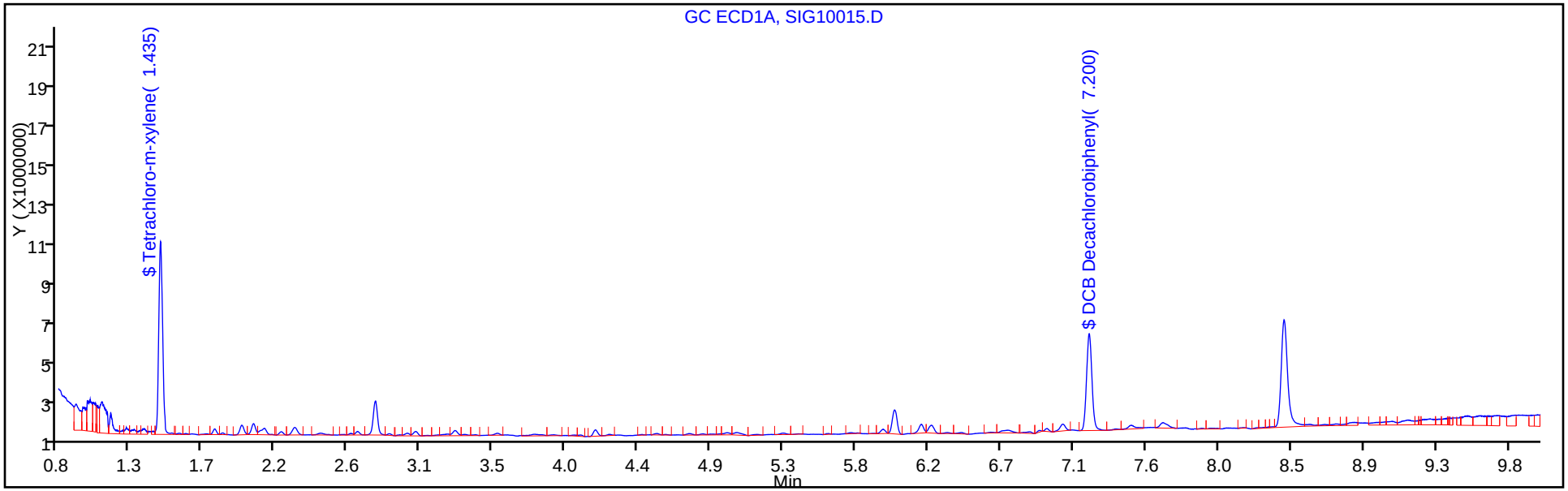
Report Date: 17-Apr-2015 08:30:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

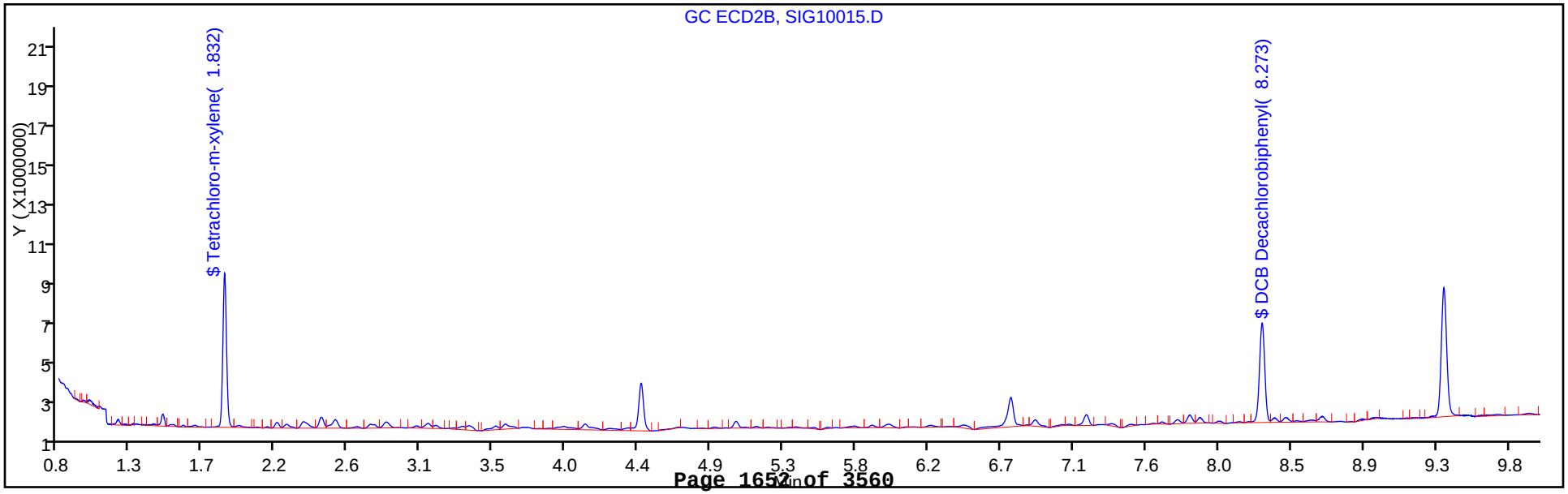
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10015.D

Injection Date:	16-Apr-2015 13:31:34	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	240-49171-A-6-B	Lab Sample ID:	240-49171-6	Worklist Smp#:	8
Client ID:	079SB-0352M-0001-SO				
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO Lab Sample ID: 240-49171-6

Matrix: Solid Lab File ID: SIG10015.D

Analysis Method: 8082 Date Collected: 04/08/2015 10:27

Extraction Method: 3540C Date Extracted: 04/14/2015 07:22

Sample wt/vol: 29.52(g) Date Analyzed: 04/16/2015 13:31

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 2.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	85		40-140
2051-24-3	DCB Decachlorobiphenyl	91		60-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10015.D
Lims ID: 240-49171-A-6-B Lab Sample ID: 240-49171-6
Client ID: 079SB-0352M-0001-SO
Sample Type: Client
Inject. Date: 16-Apr-2015 13:31:34 ALS Bottle#: 15 Worklist Smp#: 8
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-008
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 17-Apr-2015 08:24:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene						
1	1.435	1.436	-0.001	16536380	0.0220	
2	1.832	1.833	-0.001	12708633	0.0170	
					RPD = 25.62	
3 PCB-1221						
1		1.599			ND	
1		1.731				
1		1.768				
2		2.155				
2		2.303				
2		2.366				
4 PCB-1232						
1		1.767			ND	
1		2.106				
1		2.565				
1		2.700				
1		3.128				
2		2.365				
2		2.808				
2		3.301				
2		3.449				
2		4.095				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
5 PCB-1242						
1		1.769			ND	
1		2.107				
1		2.564				
1		2.701				
1		3.127				
2		2.366				
2		2.809				
2		3.303				
2		3.449				
2		4.097				
6 PCB-1016						
1		1.769			ND	
1		2.108				
1		2.566				
1		2.701				
1		3.128				
2		2.366				
2		2.809				
2		3.302				
2		3.449				
2		3.964				
7 PCB-1248						
1		2.106			ND	
1		2.562				
1		3.127				
1		3.757				
1		4.222				
2		2.807				
2		3.302				
2		4.095				
2		4.427				
2		5.128				
8 PCB-1254						
1		3.526			ND	
1		3.809				
1		4.220				
1		4.519				
1		5.012				
2		4.422				
2		4.642				
2		5.128				
2		5.382				
2		5.954				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
10 PCB-1260						
1		4.420			ND	
1		4.721				
1		5.011				
1		5.736				
1		6.026				
2		5.341				
2		5.579				
2		5.949				
2		6.647				
2		7.030				
$ 12 DCB Decachlorobiphenyl						
1	7.200	7.199	0.001	11601339	0.0196	
2	8.273	8.271	0.002	11754152	0.0182	
					RPD = 7.53	

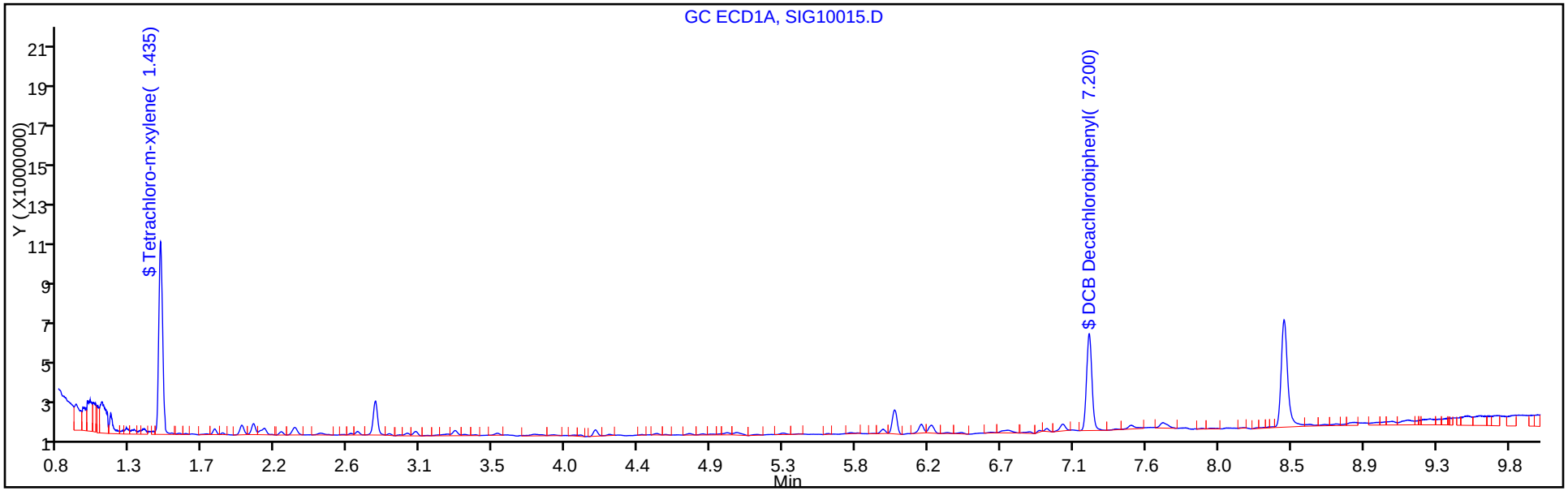
Report Date: 17-Apr-2015 08:30:36 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

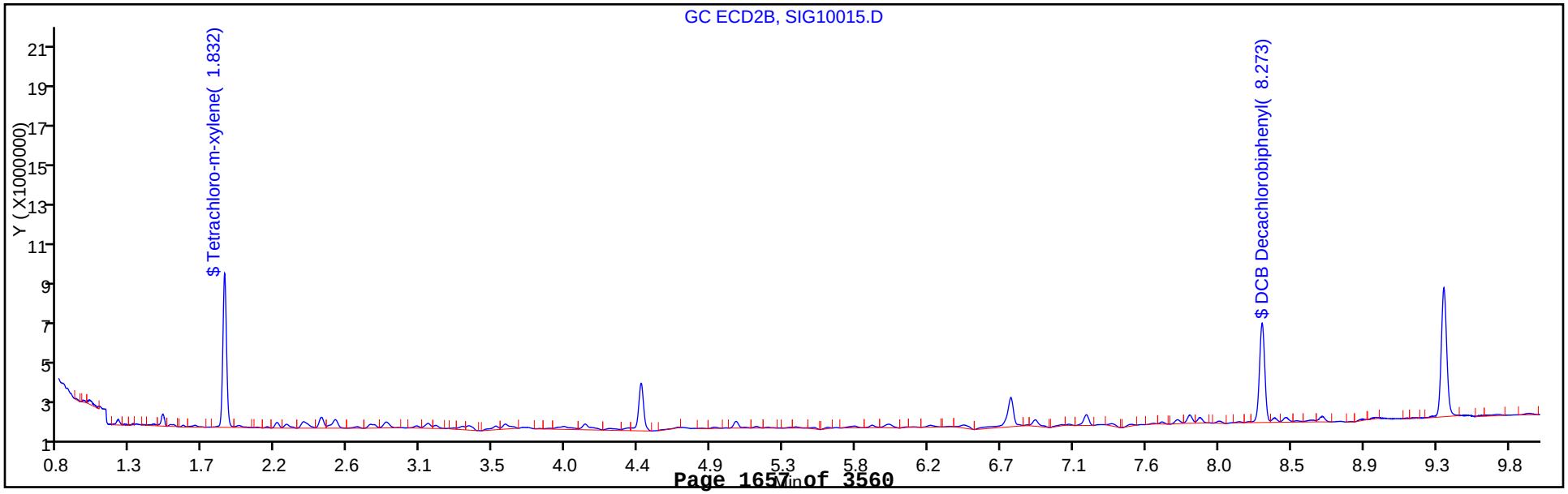
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10015.D

Injection Date:	16-Apr-2015 13:31:34	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	240-49171-A-6-B	Lab Sample ID:	240-49171-6	Worklist Smp#:	8
Client ID:	079SB-0352M-0001-SO				
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO | Lab Sample ID: 240-49171-8

Matrix: Solid | Lab File ID: SIG10016.D

Analysis Method: 8082 | Date Collected: 04/08/2015 09:57

Extraction Method: 3540C | Date Extracted: 04/14/2015 07:22

Sample wt/vol: 30.26(g) | Date Analyzed: 04/16/2015 13:47

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 2.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
11104-28-2	Aroclor-1221	34	U	51	34	16
12674-11-2	Aroclor-1016	34	U	66	34	12
11141-16-5	Aroclor-1232	34	U	46	34	20
53469-21-9	Aroclor-1242	34	U	41	34	11
12672-29-6	Aroclor-1248	34	U	56	34	8.1
11097-69-1	Aroclor-1254	34	U	56	34	14
11096-82-5	Aroclor-1260	34	U	56	34	9.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	87		40-140
2051-24-3	DCB Decachlorobiphenyl	101		60-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10016.D
Lims ID: 240-49171-A-8-B Lab Sample ID: 240-49171-8
Client ID: 079SB-0353M-0001-SO
Sample Type: Client
Inject. Date: 16-Apr-2015 13:47:00 ALS Bottle#: 16 Worklist Smp#: 9
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-009
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 17-Apr-2015 08:24:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene						
1	1.434	1.436	-0.002	13131066	0.0175	
2	1.833	1.833	0.000	12856385	0.0172	
					RPD = 1.55	
3 PCB-1221						
1		1.599			ND	
1		1.731				
1		1.768				
2		2.155				
2		2.303				
2		2.366				
4 PCB-1232						
1		1.767			ND	
1		2.106				
1		2.565				
1		2.700				
1		3.128				
2		2.365				
2		2.808				
2		3.301				
2		3.449				
2		4.095				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
5 PCB-1242						
1		1.769			ND	
1		2.107				
1		2.564				
1		2.701				
1		3.127				
2		2.366				
2		2.809				
2		3.303				
2		3.449				
2		4.097				
6 PCB-1016						
1		1.769			ND	
1		2.108				
1		2.566				
1		2.701				
1		3.128				
2		2.366				
2		2.809				
2		3.302				
2		3.449				
2		3.964				
7 PCB-1248						
1		2.106			ND	
1		2.562				
1		3.127				
1		3.757				
1		4.222				
2		2.807				
2		3.302				
2		4.095				
2		4.427				
2		5.128				
8 PCB-1254						
1		3.526			ND	
1		3.809				
1		4.220				
1		4.519				
1		5.012				
2		4.422				
2		4.642				
2		5.128				
2		5.382				
2		5.954				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
10 PCB-1260						
1		4.420			ND	
1		4.721				
1		5.011				
1		5.736				
1		6.026				
2		5.341				
2		5.579				
2		5.949				
2		6.647				
2		7.030				
$ 12 DCB Decachlorobiphenyl						
1	7.200	7.199	0.001	11879210	0.0201	
2	8.274	8.271	0.003	12646499	0.0196	
					RPD = 2.58	

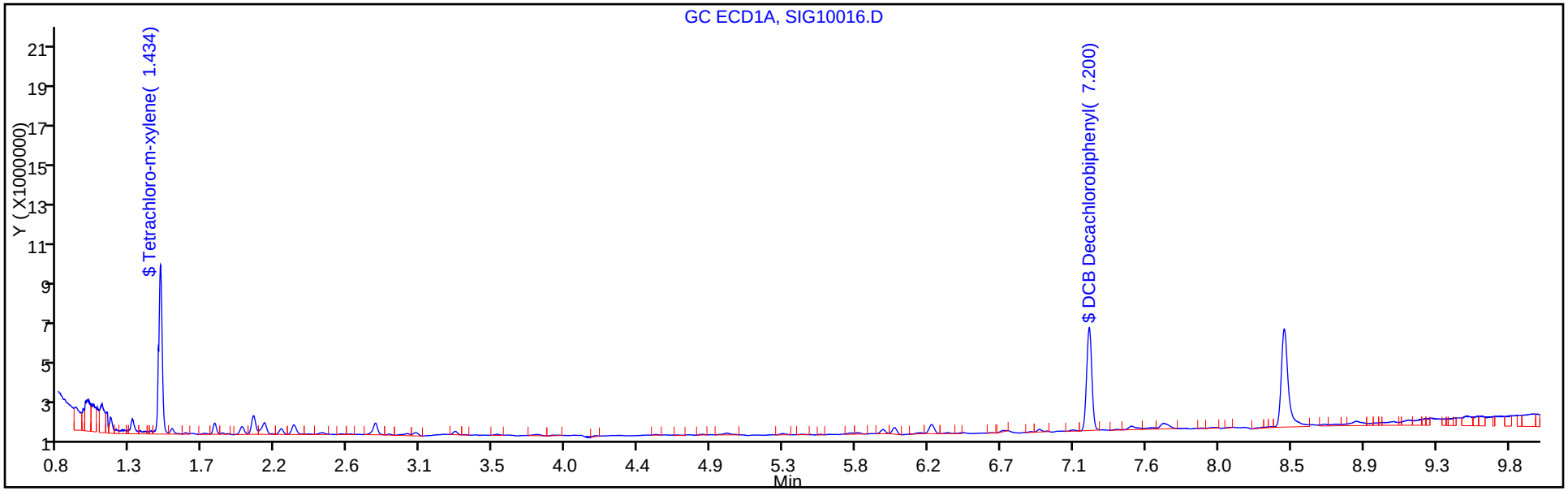
Report Date: 17-Apr-2015 08:30:36 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

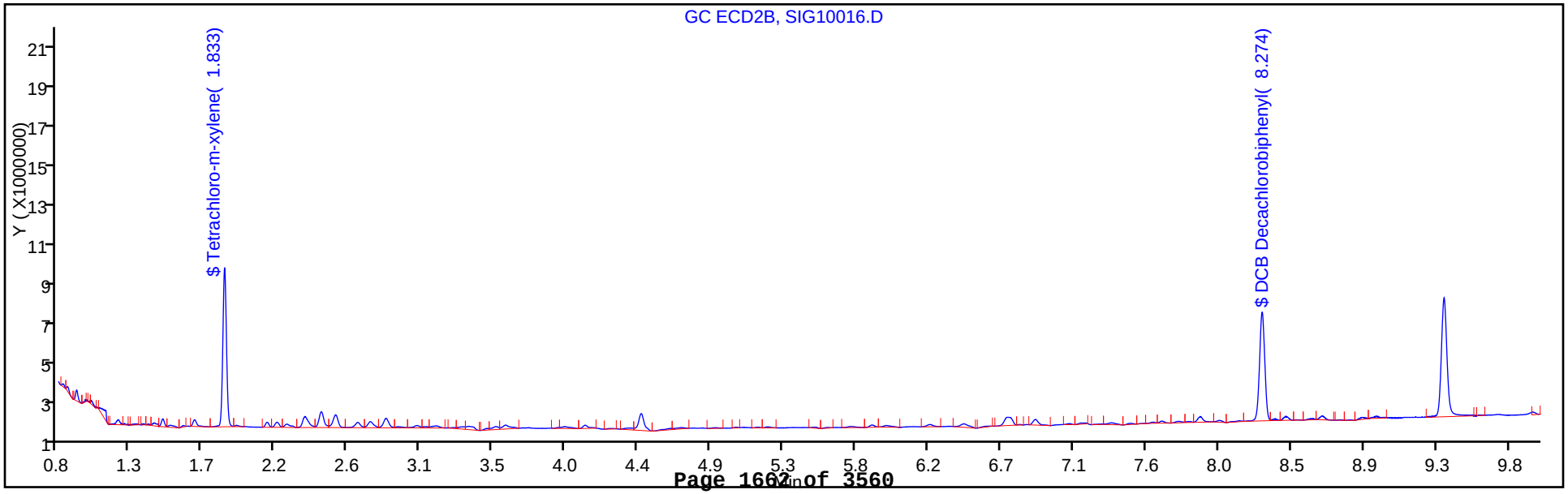
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10016.D

Injection Date:	16-Apr-2015 13:47:00	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	240-49171-A-8-B	Lab Sample ID:	240-49171-8	Worklist Smp#:	9
Client ID:	079SB-0353M-0001-SO				
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO Lab Sample ID: 240-49171-8

Matrix: Solid Lab File ID: SIG10016.D

Analysis Method: 8082 Date Collected: 04/08/2015 09:57

Extraction Method: 3540C Date Extracted: 04/14/2015 07:22

Sample wt/vol: 30.26(g) Date Analyzed: 04/16/2015 13:47

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 2.4 GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	86		40-140
2051-24-3	DCB Decachlorobiphenyl	98		60-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10016.D
Lims ID: 240-49171-A-8-B Lab Sample ID: 240-49171-8
Client ID: 079SB-0353M-0001-SO
Sample Type: Client
Inject. Date: 16-Apr-2015 13:47:00 ALS Bottle#: 16 Worklist Smp#: 9
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-009
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 17-Apr-2015 08:24:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene						
1	1.434	1.436	-0.002	13131066	0.0175	
2	1.833	1.833	0.000	12856385	0.0172	
					RPD = 1.55	
3 PCB-1221						
1		1.599			ND	
1		1.731				
1		1.768				
2		2.155				
2		2.303				
2		2.366				
4 PCB-1232						
1		1.767			ND	
1		2.106				
1		2.565				
1		2.700				
1		3.128				
2		2.365				
2		2.808				
2		3.301				
2		3.449				
2		4.095				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
5 PCB-1242						
1		1.769			ND	
1		2.107				
1		2.564				
1		2.701				
1		3.127				
2		2.366				
2		2.809				
2		3.303				
2		3.449				
2		4.097				
6 PCB-1016						
1		1.769			ND	
1		2.108				
1		2.566				
1		2.701				
1		3.128				
2		2.366				
2		2.809				
2		3.302				
2		3.449				
2		3.964				
7 PCB-1248						
1		2.106			ND	
1		2.562				
1		3.127				
1		3.757				
1		4.222				
2		2.807				
2		3.302				
2		4.095				
2		4.427				
2		5.128				
8 PCB-1254						
1		3.526			ND	
1		3.809				
1		4.220				
1		4.519				
1		5.012				
2		4.422				
2		4.642				
2		5.128				
2		5.382				
2		5.954				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
10 PCB-1260						
1		4.420			ND	
1		4.721				
1		5.011				
1		5.736				
1		6.026				
2		5.341				
2		5.579				
2		5.949				
2		6.647				
2		7.030				
$ 12 DCB Decachlorobiphenyl						
1	7.200	7.199	0.001	11879210	0.0201	
2	8.274	8.271	0.003	12646499	0.0196	
					RPD = 2.58	

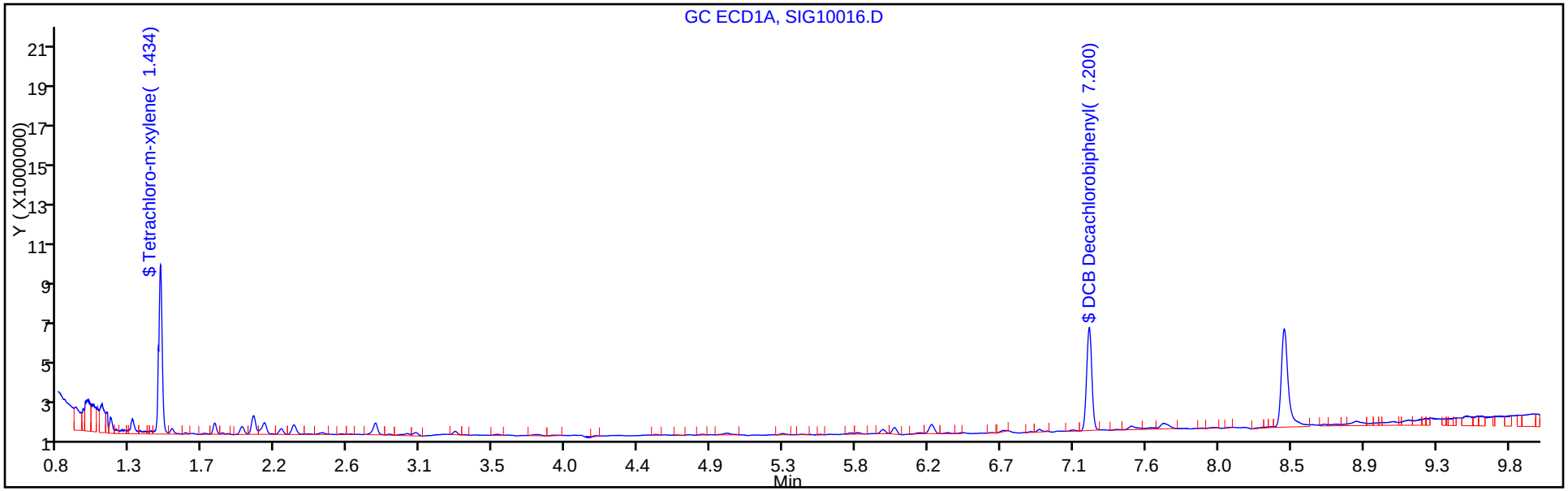
Report Date: 17-Apr-2015 08:30:37 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

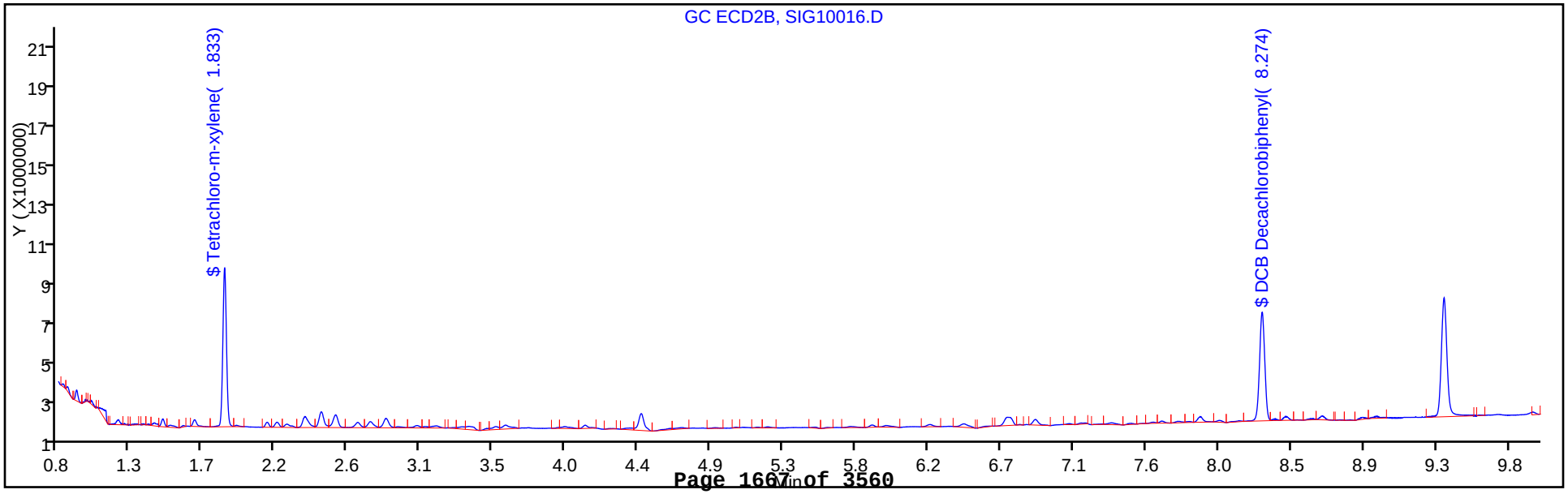
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10016.D

Injection Date:	16-Apr-2015 13:47:00	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	240-49171-A-8-B	Lab Sample ID:	240-49171-8	Worklist Smp#:	9
Client ID:	079SB-0353M-0001-SO				
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0354M-0001-SO | Lab Sample ID: 240-49171-10

Matrix: Solid | Lab File ID: SIG10017.D

Analysis Method: 8082 | Date Collected: 04/08/2015 11:30

Extraction Method: 3540C | Date Extracted: 04/14/2015 07:22

Sample wt/vol: 29.64(g) | Date Analyzed: 04/16/2015 14:02

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 1.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
11104-28-2	Aroclor-1221	34	U	51	34	16
12674-11-2	Aroclor-1016	34	U	67	34	12
11141-16-5	Aroclor-1232	34	U	46	34	20
53469-21-9	Aroclor-1242	34	U	41	34	11
12672-29-6	Aroclor-1248	34	U	56	34	8.2
11097-69-1	Aroclor-1254	34	U	56	34	14
11096-82-5	Aroclor-1260	34	U	56	34	9.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	89		40-140
2051-24-3	DCB Decachlorobiphenyl	103		60-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10017.D
Lims ID: 240-49171-A-10-B Lab Sample ID: 240-49171-10
Client ID: 079SB-0354M-0001-SO
Sample Type: Client
Inject. Date: 16-Apr-2015 14:02:35 ALS Bottle#: 17 Worklist Smp#: 10
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-010
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 17-Apr-2015 08:24:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene						
1	1.436	1.436	0.000	13412523	0.0178	
2	1.833	1.833	0.000	13038333	0.0174	
					RPD = 2.26	
3 PCB-1221						
1		1.599			ND	
1		1.731				
1		1.768				
2		2.155				
2		2.303				
2		2.366				
4 PCB-1232						
1		1.767			ND	
1		2.106				
1		2.565				
1		2.700				
1		3.128				
2		2.365				
2		2.808				
2		3.301				
2		3.449				
2		4.095				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
5 PCB-1242						
1		1.769			ND	
1		2.107				
1		2.564				
1		2.701				
1		3.127				
2		2.366				
2		2.809				
2		3.303				
2		3.449				
2		4.097				
6 PCB-1016						
1		1.769			ND	
1		2.108				
1		2.566				
1		2.701				
1		3.128				
2		2.366				
2		2.809				
2		3.302				
2		3.449				
2		3.964				
7 PCB-1248						
1		2.106			ND	
1		2.562				
1		3.127				
1		3.757				
1		4.222				
2		2.807				
2		3.302				
2		4.095				
2		4.427				
2		5.128				
8 PCB-1254						
1		3.526			ND	
1		3.809				
1		4.220				
1		4.519				
1		5.012				
2		4.422				
2		4.642				
2		5.128				
2		5.382				
2		5.954				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
10 PCB-1260						
1		4.420			ND	
1		4.721				
1		5.011				
1		5.736				
1		6.026				
2		5.341				
2		5.579				
2		5.949				
2		6.647				
2		7.030				
$ 12 DCB Decachlorobiphenyl						
1	7.199	7.199	0.000	12146444	0.0206	
2	8.272	8.271	0.001	12898729	0.0200	
					RPD = 2.83	

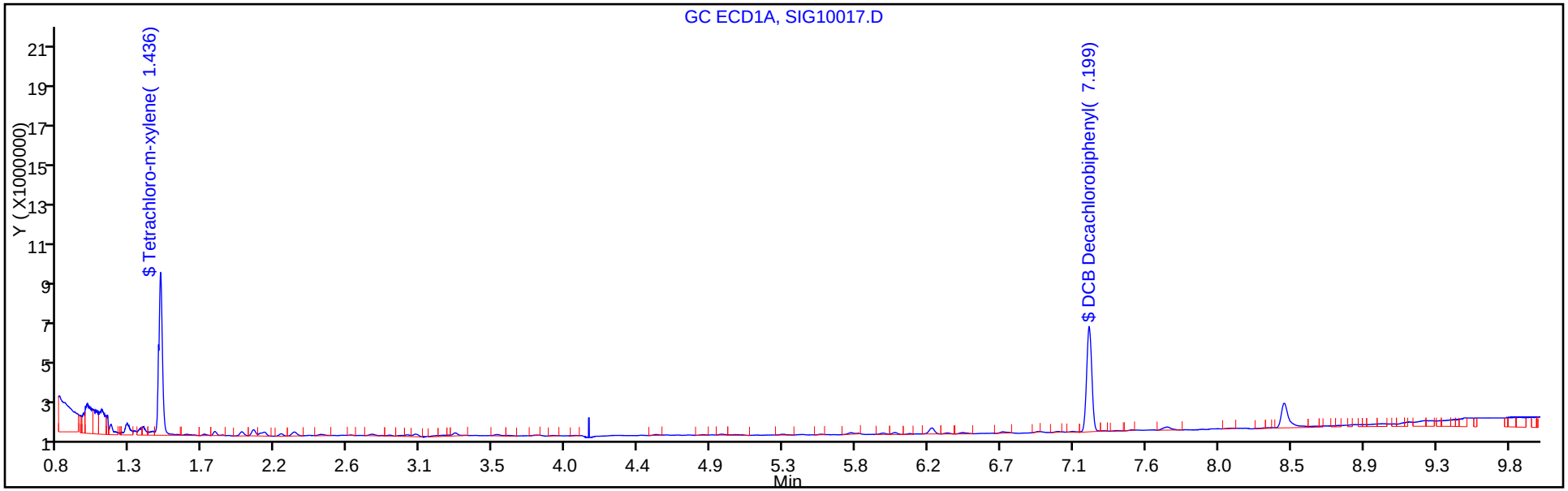
Report Date: 17-Apr-2015 08:30:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

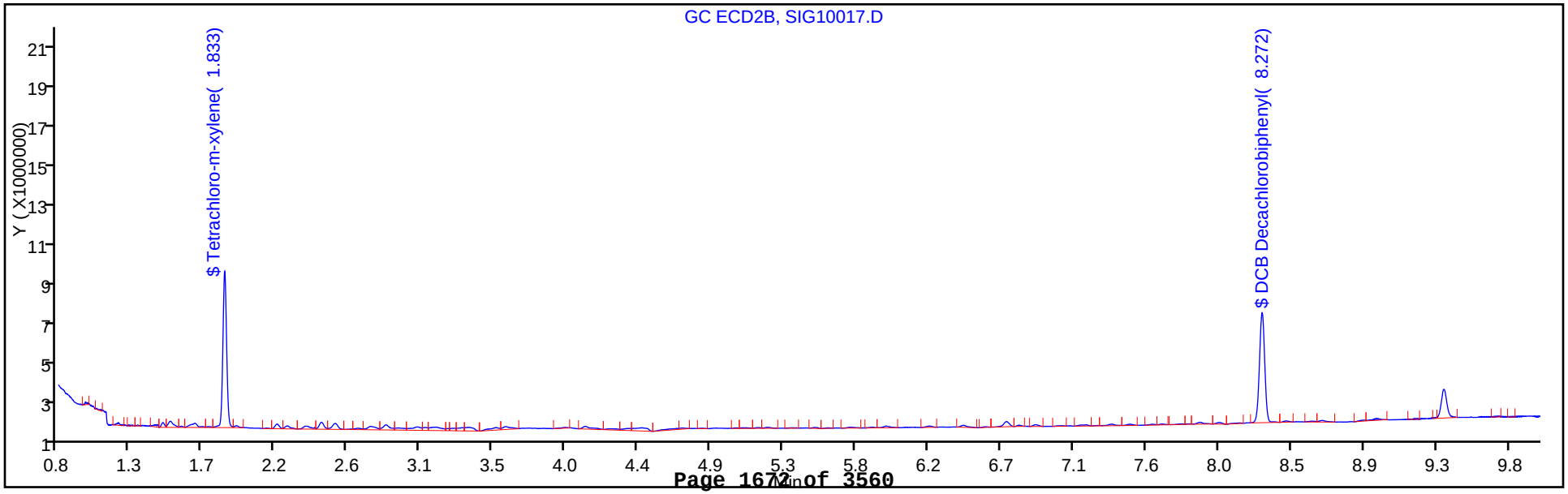
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10017.D

Injection Date:	16-Apr-2015 14:02:35	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	240-49171-A-10-B	Lab Sample ID:	240-49171-10	Worklist Smp#:	10
Client ID:	079SB-0354M-0001-SO				
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0354M-0001-SO Lab Sample ID: 240-49171-10

Matrix: Solid Lab File ID: SIG10017.D

Analysis Method: 8082 Date Collected: 04/08/2015 11:30

Extraction Method: 3540C Date Extracted: 04/14/2015 07:22

Sample wt/vol: 29.64(g) Date Analyzed: 04/16/2015 14:02

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 1.1 GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	87		40-140
2051-24-3	DCB Decachlorobiphenyl	100		60-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10017.D
Lims ID: 240-49171-A-10-B Lab Sample ID: 240-49171-10
Client ID: 079SB-0354M-0001-SO
Sample Type: Client
Inject. Date: 16-Apr-2015 14:02:35 ALS Bottle#: 17 Worklist Smp#: 10
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-010
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 17-Apr-2015 08:24:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene						
1	1.436	1.436	0.000	13412523	0.0178	
2	1.833	1.833	0.000	13038333	0.0174	
					RPD = 2.26	
3 PCB-1221						
1		1.599			ND	
1		1.731				
1		1.768				
2		2.155				
2		2.303				
2		2.366				
4 PCB-1232						
1		1.767			ND	
1		2.106				
1		2.565				
1		2.700				
1		3.128				
2		2.365				
2		2.808				
2		3.301				
2		3.449				
2		4.095				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
5 PCB-1242						
1		1.769			ND	
1		2.107				
1		2.564				
1		2.701				
1		3.127				
2		2.366				
2		2.809				
2		3.303				
2		3.449				
2		4.097				
6 PCB-1016						
1		1.769			ND	
1		2.108				
1		2.566				
1		2.701				
1		3.128				
2		2.366				
2		2.809				
2		3.302				
2		3.449				
2		3.964				
7 PCB-1248						
1		2.106			ND	
1		2.562				
1		3.127				
1		3.757				
1		4.222				
2		2.807				
2		3.302				
2		4.095				
2		4.427				
2		5.128				
8 PCB-1254						
1		3.526			ND	
1		3.809				
1		4.220				
1		4.519				
1		5.012				
2		4.422				
2		4.642				
2		5.128				
2		5.382				
2		5.954				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ul	Flags
10 PCB-1260						
1		4.420			ND	
1		4.721				
1		5.011				
1		5.736				
1		6.026				
2		5.341				
2		5.579				
2		5.949				
2		6.647				
2		7.030				
$ 12 DCB Decachlorobiphenyl						
1	7.199	7.199	0.000	12146444	0.0206	
2	8.272	8.271	0.001	12898729	0.0200	
					RPD = 2.83	

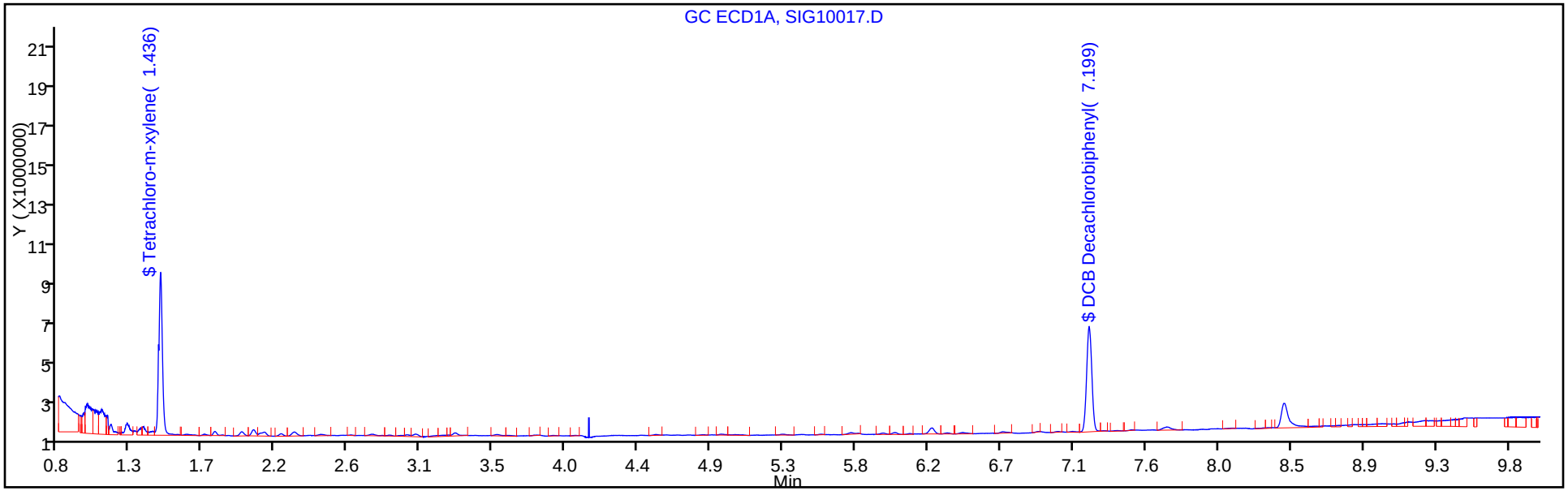
Report Date: 17-Apr-2015 08:30:38 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

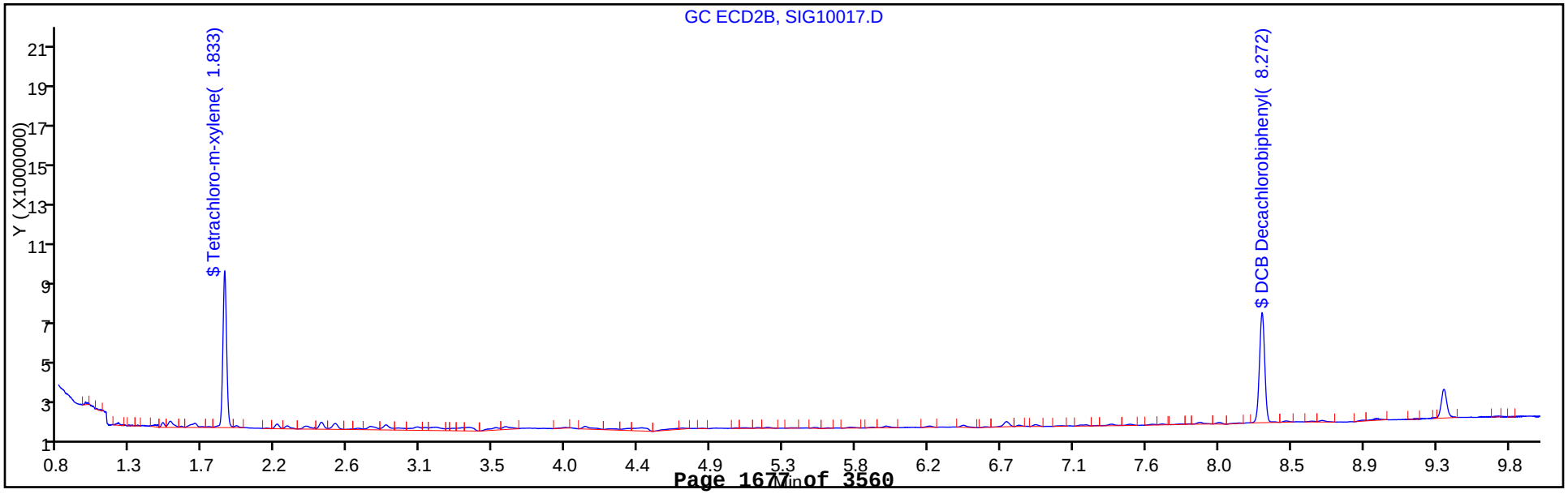
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10017.D

Injection Date:	16-Apr-2015 14:02:35	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	240-49171-A-10-B	Lab Sample ID:	240-49171-10	Worklist Smp#:	10
Client ID:	079SB-0354M-0001-SO				
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 15:41 Calibration End Date: 03/30/2015 16:58 Calibration ID: 27527

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/4	SIG10004.D
Level 2	STD01 240-174339/5	SIG10005.D
Level 3	STD02 240-174339/6	SIG10006.D
Level 4	STD05 240-174339/7	SIG10007.D
Level 5	STD1 240-174339/8	SIG10008.D
Level 6	STD2 240-174339/9	SIG10009.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1232 Peak 1	1.771	1.772	1.771	1.773	1.772	1.772					1.721 - 1.821	1.772
PCB-1232 Peak 2	2.108	2.110	2.109	2.111	2.110	2.110					2.058 - 2.158	2.110
PCB-1232 Peak 3	2.568	2.568	2.566	2.570	2.568	2.568					2.518 - 2.618	2.568
PCB-1232 Peak 4	2.703	2.706	2.704	2.705	2.706	2.704					2.653 - 2.753	2.705
PCB-1232 Peak 5	3.132	3.131	3.130	3.133	3.132	3.131					3.082 - 3.182	3.132
PCB-1262 Peak 1	4.422	4.423	4.422	4.424	4.423	4.423					4.372 - 4.472	4.423
PCB-1262 Peak 2	4.724	4.724	4.725	4.725	4.725	4.724					4.674 - 4.774	4.725
PCB-1262 Peak 3	5.140	5.143	5.144	5.143	5.144	5.144					5.090 - 5.190	5.143
PCB-1262 Peak 4	5.737	5.737	5.735	5.736	5.736	5.737					5.687 - 5.787	5.736
PCB-1262 Peak 5	6.075	6.076	6.077	6.075	6.076	6.076					6.025 - 6.125	6.076

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 15:41 Calibration End Date: 03/30/2015 16:58 Calibration ID: 27527

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/4	SIG10004.D
Level 2	STD01 240-174339/5	SIG10005.D
Level 3	STD02 240-174339/6	SIG10006.D
Level 4	STD05 240-174339/7	SIG10007.D
Level 5	STD1 240-174339/8	SIG10008.D
Level 6	STD2 240-174339/9	SIG10009.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1232 Peak 1	16800580 13057898	16587290 11632999	15446905	14466298	Ave		14665328.3				13.9		20.0			
PCB-1232 Peak 2	11598800 9634169	13194520 8931256	11387330	10824444	Ave		10928419.8				13.9		20.0			
PCB-1232 Peak 3	27102640 21074914	26537850 19887486	23332520	23154556	Ave		23514994.3				12.2		20.0			
PCB-1232 Peak 4	11548660 9735208	11833940 8997847	9980205	10369868	Ave		10410954.6				10.5		20.0			
PCB-1232 Peak 5	10588720 8753756	9911760 8135504	9507600	9284666	Ave		9363667.67				9.2		20.0			
PCB-1262 Peak 1	13239120 9917983	12017730 9392096	11298965	10716726	Ave		11097103.3				12.7		20.0			
PCB-1262 Peak 2	17901100 12743274	16213810 12515387	15164530	14085122	Ave		14770537.2				14.1		20.0			
PCB-1262 Peak 3	18714120 14469921	17474190 14264584	16947120	15853068	Ave		16287167.2				10.7		20.0			
PCB-1262 Peak 4	36131580 28988498	35810580 29174505	33412125	31340252	Ave		32476256.7				9.7		20.0			
PCB-1262 Peak 5	14213820 11198768	14268320 11018097	13112180	12319828	Ave		12688502.2				11.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI

PCBS INITIAL CALIBRATION DATA

EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 15:41 Calibration End Date: 03/30/2015 16:58 Calibration ID: 27527

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/4	SIG10004.D
Level 2	STD01 240-174339/5	SIG10005.D
Level 3	STD02 240-174339/6	SIG10006.D
Level 4	STD05 240-174339/7	SIG10007.D
Level 5	STD1 240-174339/8	SIG10008.D
Level 6	STD2 240-174339/9	SIG10009.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	Ave	840029 23265998	1658729	3089381	7233149	13057898	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1232 Peak 2	Ave	579940 17862511	1319452	2277466	5412222	9634169	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1232 Peak 3	Ave	1355132 39774971	2653785	4666504	11577278	21074914	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1232 Peak 4	Ave	577433 17995693	1183394	1996041	5184934	9735208	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1232 Peak 5	Ave	529436 16271008	991176	1901520	4642333	8753756	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1262 Peak 1	Ave	661956 18784192	1201773	2259793	5358363	9917983	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1262 Peak 2	Ave	895055 25030774	1621381	3032906	7042561	12743274	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1262 Peak 3	Ave	935706 28529168	1747419	3389424	7926534	14469921	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1262 Peak 4	Ave	1806579 58349010	3581058	6682425	15670126	28988498	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1262 Peak 5	Ave	710691 22036194	1426832	2622436	6159914	11198768	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:

Ave = Average by Height

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10004.D
Lims ID: STD005 1232 1262
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Mar-2015 15:41:29 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-004
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub10

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:41 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:02:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.771	1.771	0.000	840029	0.0500	0.0573	
1	2.108	2.108	0.000	579940	0.0500	0.0531	
1	2.568	2.568	0.000	1355132	0.0500	0.0576	
1	2.703	2.703	0.000	577433	0.0500	0.0555	
1	3.132	3.132	0.000	529436	0.0500	0.0565	
		Average of Peak Amounts =				0.0560	
2	2.367	2.367	0.000	981800	0.0500	0.0597	
2	2.808	2.808	0.000	869952	0.0500	0.0636	
2	3.300	3.300	0.000	1578042	0.0500	0.0606	
2	3.449	3.449	0.000	793900	0.0500	0.0632	
2	4.092	4.092	0.000	588484	0.0500	0.0590	
		Average of Peak Amounts =				0.0612	
						RPD = 8.90	
9 PCB-1262							
1	4.422	4.422	0.000	661956H	0.0500	0.0597	
1	4.724	4.724	0.000	895055H	0.0500	0.0606	
1	5.140	5.140	0.000	935706H	0.0500	0.0575	
1	5.737	5.737	0.000	1806579H	0.0500	0.0556	
1	6.075	6.075	0.000	710691H	0.0500	0.0560	
		Average of Peak Amounts =				0.0579	
2	5.573	5.573	0.000	753299H	0.0500	0.0566	
2	6.052	6.052	0.000	998140H	0.0500	0.0544	
2	6.360	6.360	0.000	1041675H	0.0500	0.0565	
2	6.641	6.641	0.000	1873051H	0.0500	0.0532	
2	7.022	7.022	0.000	1249069H	0.0500	0.0550	
		Average of Peak Amounts =				0.0552	
						RPD = 4.78	

Reagents:

SG3262@.05PPM_00002 Amount Added: 1.00 Units: mL

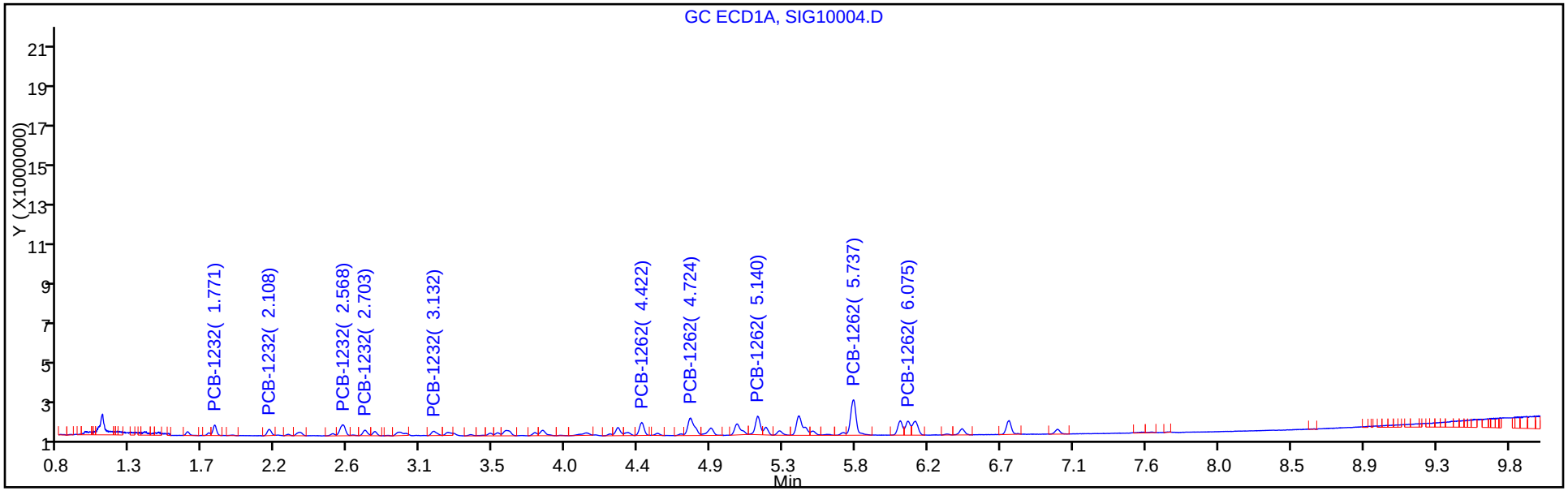
Report Date: 31-Mar-2015 06:13:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

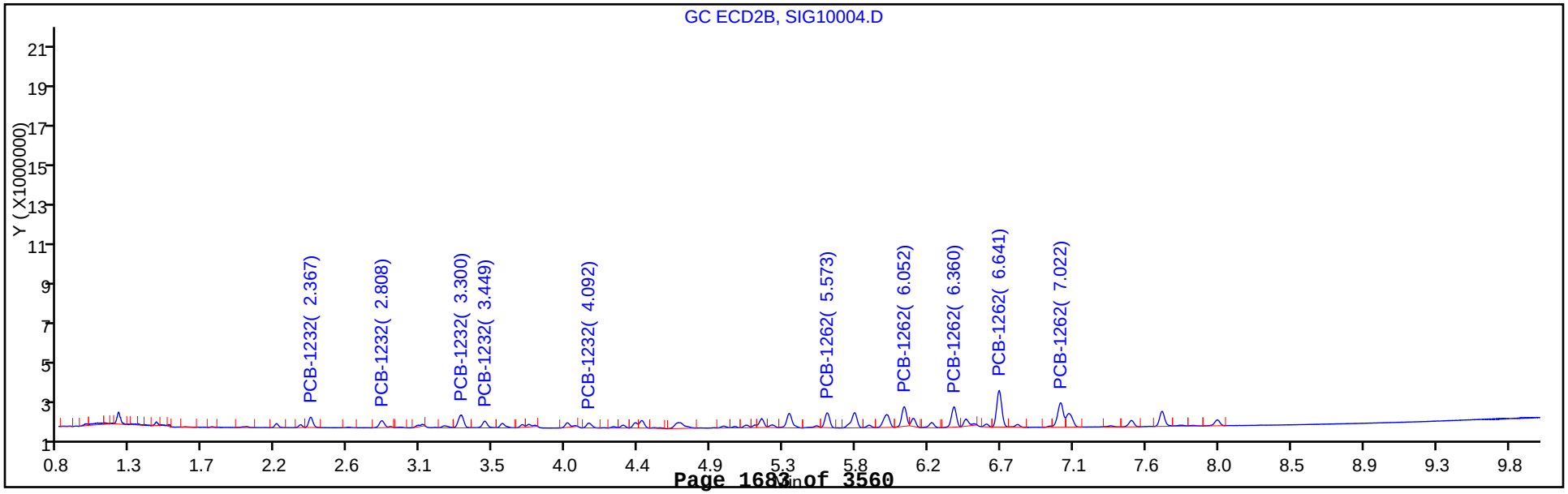
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10004.D

Injection Date:	30-Mar-2015 15:41:29	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD005 1232 1262			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10005.D
Lims ID: STD01 1232 1262
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Mar-2015 15:57:00 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-005
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub10

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:43 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:03:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.772	1.771	0.001	1658729	0.1000	0.1131	
1	2.110	2.108	0.002	1319452	0.1000	0.1207	
1	2.568	2.568	0.000	2653785	0.1000	0.1129	
1	2.706	2.703	0.003	1183394	0.1000	0.1137	
1	3.131	3.132	-0.001	991176	0.1000	0.1059	
		Average of Peak Amounts =				0.1132	
2	2.368	2.367	0.001	1899568	0.1000	0.1154	
2	2.809	2.808	0.001	1565384	0.1000	0.1144	
2	3.300	3.300	0.000	2900061	0.1000	0.1114	
2	3.449	3.449	0.000	1486906	0.1000	0.1183	
2	4.093	4.092	0.001	1069612	0.1000	0.1073	
		Average of Peak Amounts =				0.1134	
						RPD = 0.11	
9 PCB-1262							
1	4.423	4.422	0.001	1201773H	0.1000	0.1083	
1	4.724	4.724	0.000	1621381H	0.1000	0.1098	
1	5.143	5.140	0.003	1747419H	0.1000	0.1073	
1	5.737	5.737	0.000	3581058H	0.1000	0.1103	
1	6.076	6.075	0.001	1426832H	0.1000	0.1125	
		Average of Peak Amounts =				0.1096	
2	5.573	5.573	0.000	1415480H	0.1000	0.1064	
2	6.050	6.052	-0.002	2001483H	0.1000	0.1092	
2	6.360	6.360	0.000	1951728H	0.1000	0.1059	
2	6.640	6.641	-0.001	3632999H	0.1000	0.1032	
2	7.022	7.022	0.000	2408530H	0.1000	0.1060	
		Average of Peak Amounts =				0.1062	
						RPD = 3.21	

Reagents:

SG3262@0.1PPM_00002 Amount Added: 1.00 Units: mL

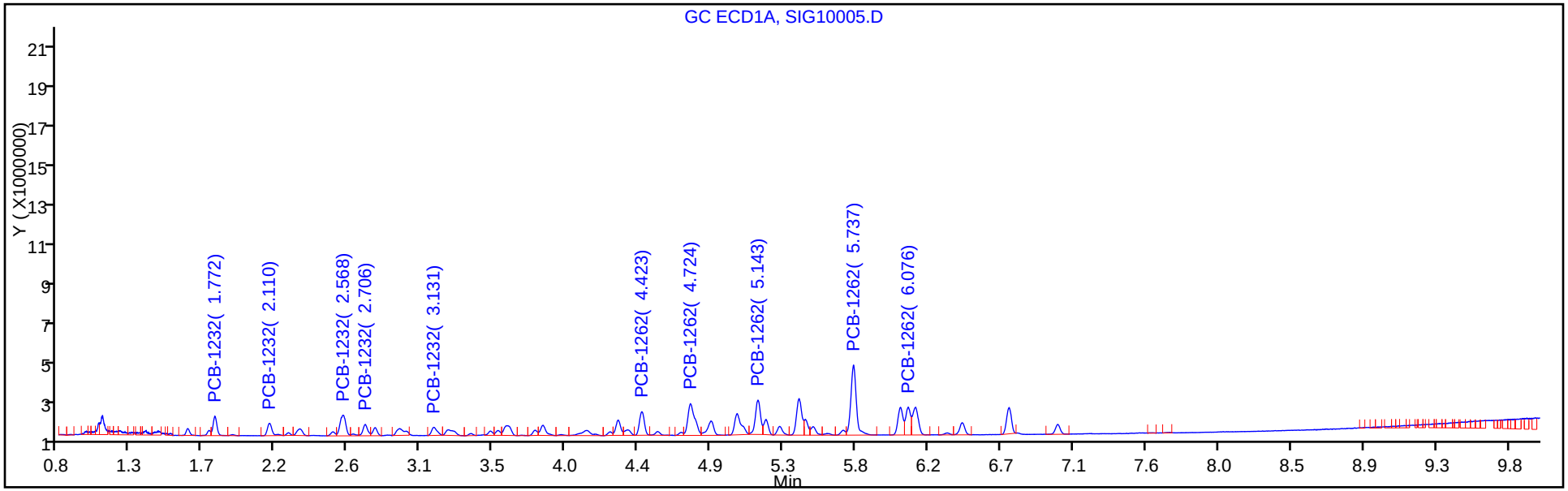
Report Date: 31-Mar-2015 06:13:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

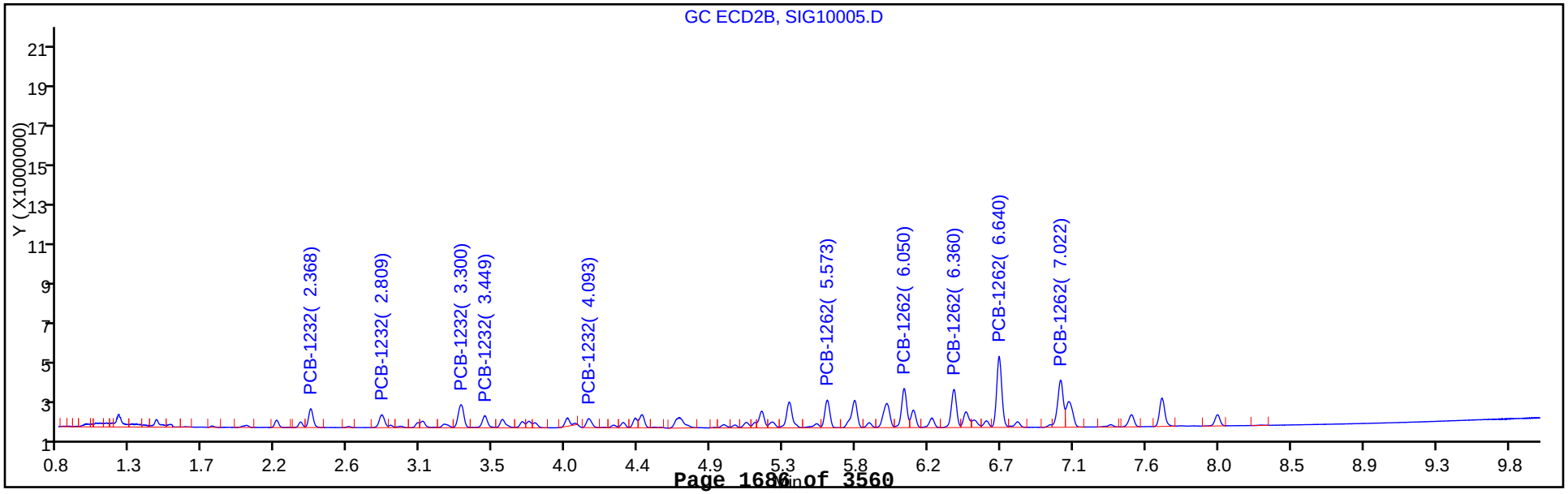
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10005.D

Injection Date:	30-Mar-2015 15:57:00	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD01 1232 1262			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10006.D
Lims ID: STD02 1232 1262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Mar-2015 16:12:28 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-006
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub10

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:45 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.771	1.771	0.000	3089381	0.2000	0.2107	
1	2.109	2.108	0.001	2277466	0.2000	0.2084	
1	2.566	2.568	-0.002	4666504	0.2000	0.1984	
1	2.704	2.703	0.001	1996041	0.2000	0.1917	
1	3.130	3.132	-0.002	1901520	0.2000	0.2031	
		Average of Peak Amounts =				0.2025	
2	2.367	2.367	0.000	3264663	0.2000	0.1984	
2	2.809	2.808	0.001	2748813	0.2000	0.2008	
2	3.300	3.300	0.000	5207790	0.2000	0.2001	
2	3.448	3.449	-0.001	2510495	0.2000	0.1998	
2	4.092	4.092	0.000	2111923	0.2000	0.2118	
		Average of Peak Amounts =				0.2022	
						RPD = 0.14	
9 PCB-1262							
1	4.422	4.422	0.000	2259793H	0.2000	0.2036	
1	4.725	4.724	0.001	3032906H	0.2000	0.2053	
1	5.144	5.140	0.004	3389424H	0.2000	0.2081	
1	5.735	5.737	-0.002	6682425H	0.2000	0.2058	
1	6.077	6.075	0.002	2622436H	0.2000	0.2067	
		Average of Peak Amounts =				0.2059	
2	5.574	5.573	0.001	2791277H	0.2000	0.2099	
2	6.050	6.052	-0.002	3685382H	0.2000	0.2010	
2	6.360	6.360	0.000	3674138H	0.2000	0.1993	
2	6.640	6.641	-0.001	6877007H	0.2000	0.1954	
2	7.021	7.022	-0.001	4542410H	0.2000	0.2000	
		Average of Peak Amounts =				0.2011	
						RPD = 2.34	

Reagents:

SG3262@.2PPM_00002 Amount Added: 1.00 Units: mL

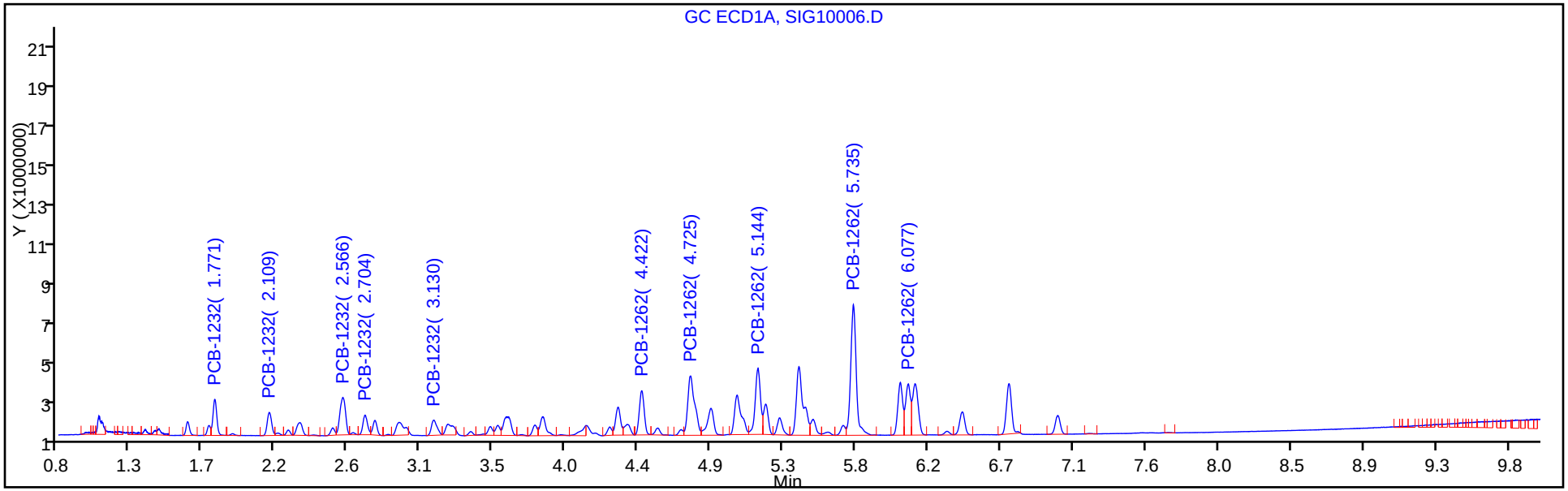
Report Date: 31-Mar-2015 06:13:47 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

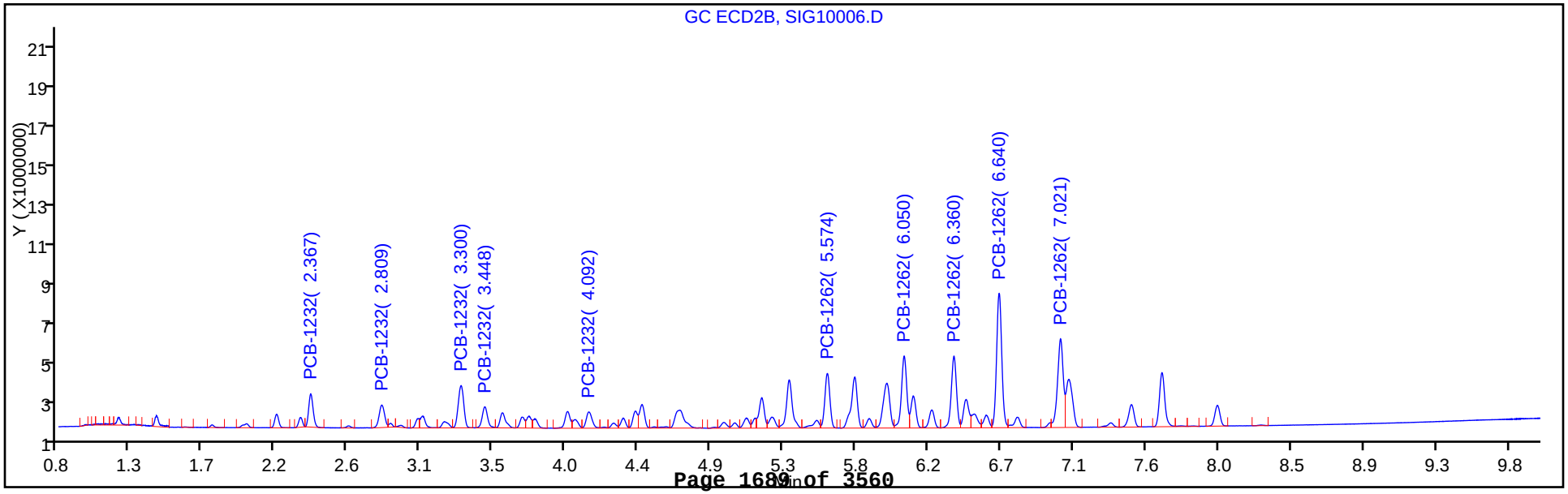
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10006.D

Injection Date:	30-Mar-2015 16:12:28	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD02 1232 1262			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10007.D
Lims ID: STD05 1232 1262
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-Mar-2015 16:27:54 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-007
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub10

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:48 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.773	1.771	0.002	7233149	0.5000	0.4932	
1	2.111	2.108	0.003	5412222	0.5000	0.4952	
1	2.570	2.568	0.002	11577278	0.5000	0.4923	
1	2.705	2.703	0.002	5184934	0.5000	0.4980	
1	3.133	3.132	0.001	4642333	0.5000	0.4958	
		Average of Peak Amounts =				0.4949	
2	2.367	2.367	0.000	7969401	0.5000	0.4842	
2	2.808	2.808	0.000	6500598	0.5000	0.4750	
2	3.301	3.300	0.001	12298801	0.5000	0.4726	
2	3.448	3.449	-0.001	5806181	0.5000	0.4620	
2	4.095	4.092	0.003	4830424	0.5000	0.4844	
		Average of Peak Amounts =				0.4757	
						RPD = 3.97	
9 PCB-1262							
1	4.424	4.422	0.002	5358363H	0.5000	0.4829	
1	4.725	4.724	0.001	7042561H	0.5000	0.4768	
1	5.143	5.140	0.003	7926534H	0.5000	0.4867	
1	5.736	5.737	-0.001	15670126H	0.5000	0.4825	
1	6.075	6.075	0.000	6159914H	0.5000	0.4855	
		Average of Peak Amounts =				0.4829	
2	5.575	5.573	0.002	6380050H	0.5000	0.4797	
2	6.052	6.052	0.000	8893439H	0.5000	0.4851	
2	6.361	6.360	0.001	8921079H	0.5000	0.4840	
2	6.641	6.641	0.000	17579172H	0.5000	0.4995	
2	7.023	7.022	0.001	11150612H	0.5000	0.4909	
		Average of Peak Amounts =				0.4879	
						RPD = 1.03	

Reagents:

SG3262@0.5PPM_00004 Amount Added: 1.00 Units: mL

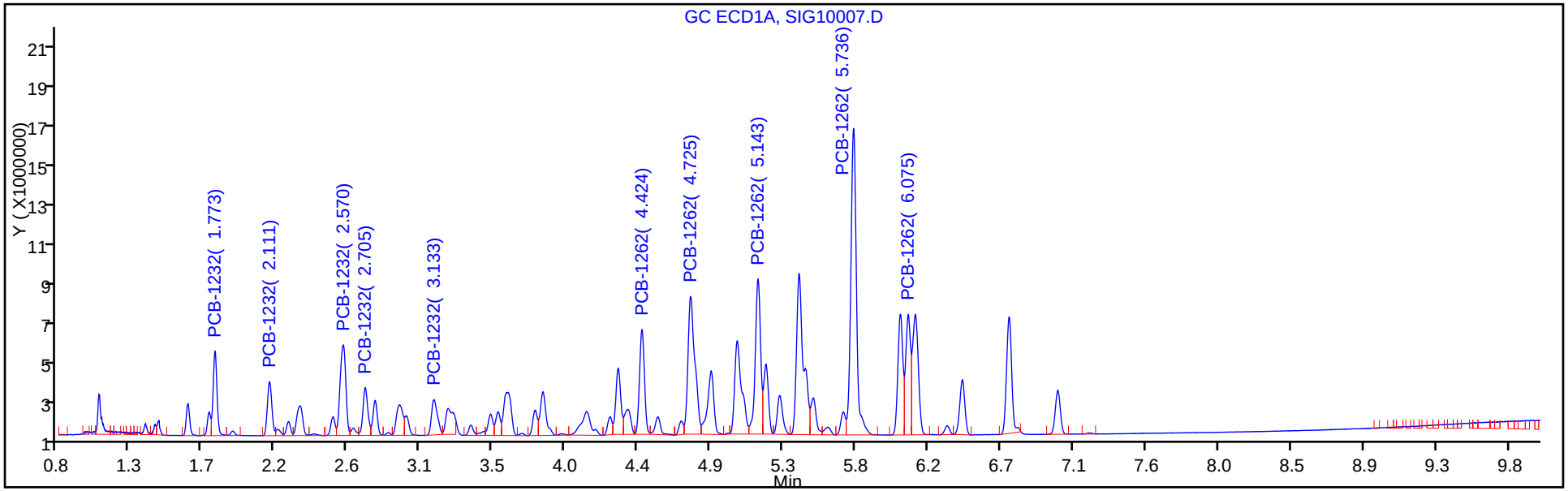
Report Date: 31-Mar-2015 06:13:49 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

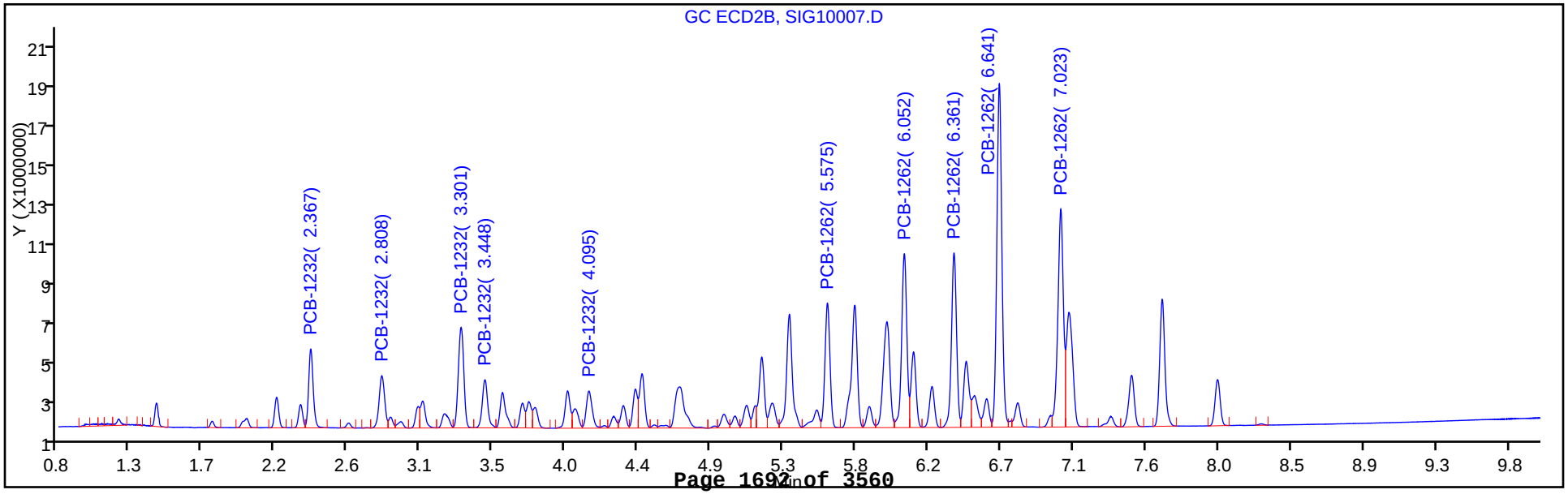
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10007.D

Injection Date:	30-Mar-2015 16:27:54	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD05 1232 1262			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10008.D
Lims ID: STD1 1232 1262
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Mar-2015 16:43:22 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-008
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub10

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:50 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.772	1.771	0.001	13057898	1.00	0.8904	
1	2.110	2.108	0.002	9634169	1.00	0.8816	
1	2.568	2.568	0.000	21074914	1.00	0.8962	
1	2.706	2.703	0.003	9735208	1.00	0.9351	
1	3.132	3.132	0.000	8753756	1.00	0.9349	
		Average of Peak Amounts =				0.9076	
2	2.368	2.367	0.001	14401649	1.00	0.8750	
2	2.809	2.808	0.001	11585089	1.00	0.8464	
2	3.300	3.300	0.000	22712675	1.00	0.8728	
2	3.449	3.449	0.000	10632437	1.00	0.8460	
2	4.094	4.092	0.002	8911369	1.00	0.8937	
		Average of Peak Amounts =				0.8668	
						RPD = 4.60	
9 PCB-1262							
1	4.423	4.422	0.001	9917983	1.00	0.8937	H
1	4.725	4.724	0.001	12743274	1.00	0.8627	H
1	5.144	5.140	0.004	14469921	1.00	0.8884	H
1	5.736	5.737	-0.001	28988498	1.00	0.8926	H
1	6.076	6.075	0.001	11198768	1.00	0.8826	H
		Average of Peak Amounts =				0.8840	
2	5.575	5.573	0.002	11722061	1.00	0.8814	H
2	6.052	6.052	0.000	16880040	1.00	0.9208	H
2	6.359	6.360	-0.001	17003668	1.00	0.9225	H
2	6.639	6.641	-0.002	33627131	1.00	0.9555	H
2	7.022	7.022	0.000	20804806	1.00	0.9159	H
		Average of Peak Amounts =				0.9192	
						RPD = 3.91	

Reagents:

SG3262@1.0PPM_00002 Amount Added: 1.00 Units: mL

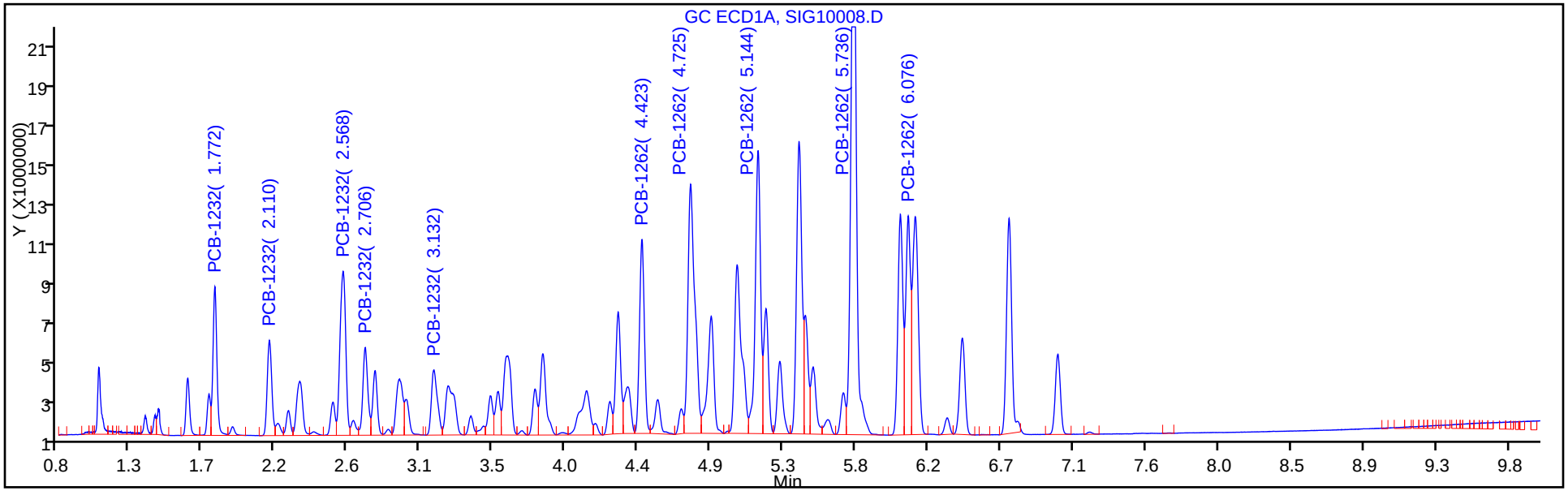
Report Date: 31-Mar-2015 06:13:51 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

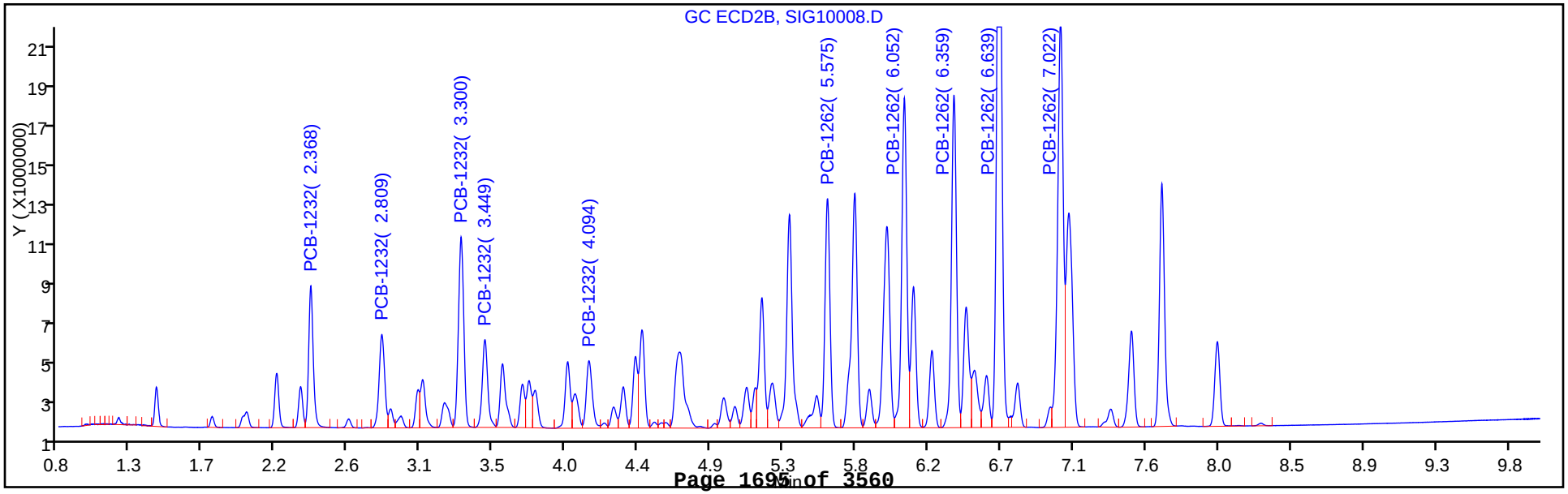
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10008.D

Injection Date:	30-Mar-2015 16:43:22	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD1 1232 1262			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10009.D
Lims ID: STD2 1232 1262
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Mar-2015 16:58:57 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-009
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub10

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:52 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.772	1.771	0.001	23265998	2.00	1.59	
1	2.110	2.108	0.002	17862511	2.00	1.63	
1	2.568	2.568	0.000	39774971	2.00	1.69	
1	2.704	2.703	0.001	17995693	2.00	1.73	
1	3.131	3.132	-0.001	16271008	2.00	1.74	
		Average of Peak Amounts =				1.68	
2	2.367	2.367	0.000	26909776	2.00	1.64	
2	2.808	2.808	0.000	21475050	2.00	1.57	
2	3.300	3.300	0.000	44434094	2.00	1.71	
2	3.449	3.449	0.000	19720090	2.00	1.57	
2	4.094	4.092	0.002	16456950	2.00	1.65	
		Average of Peak Amounts =				1.63	
						RPD = 3.00	
9 PCB-1262							
1	4.423	4.422	0.001	18784192H	2.00	1.69	
1	4.724	4.724	0.000	25030774H	2.00	1.69	
1	5.144	5.140	0.004	28529168H	2.00	1.75	
1	5.737	5.737	0.000	58349010H	2.00	1.80	
1	6.076	6.075	0.001	22036194H	2.00	1.74	
		Average of Peak Amounts =				1.73	
2	5.574	5.573	0.001	24266284H	2.00	1.82	
2	6.052	6.052	0.000	33840437H	2.00	1.85	
2	6.361	6.360	0.001	34041523H	2.00	1.85	
2	6.641	6.641	0.000	68375289H	2.00	1.94	
2	7.022	7.022	0.000	42813683H	2.00	1.88	
		Average of Peak Amounts =				1.87	
						RPD = 7.47	

Reagents:

SG3262@2.0ppm_00002 Amount Added: 1.00 Units: mL

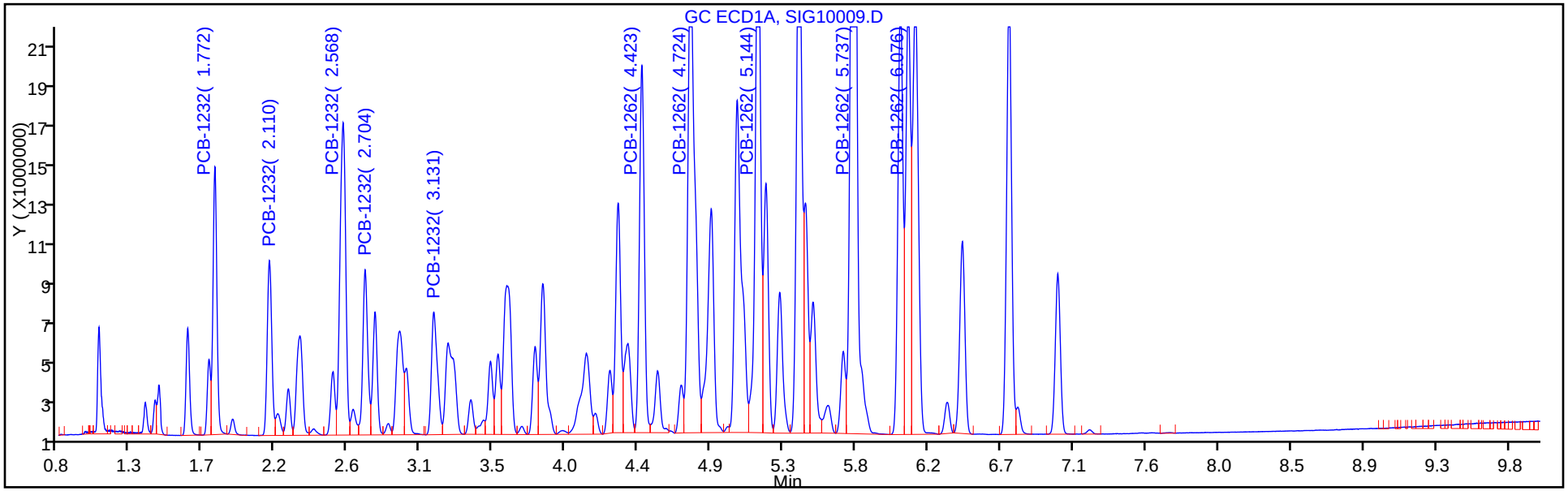
Report Date: 31-Mar-2015 06:13:53 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

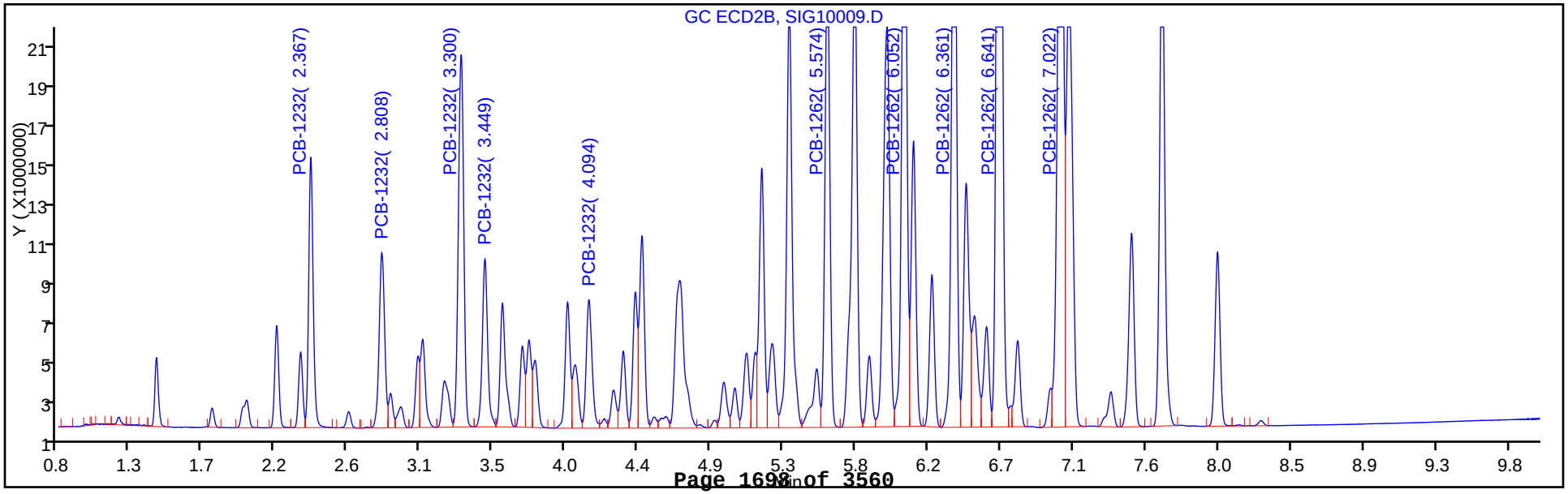
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10009.D

Injection Date:	30-Mar-2015 16:58:57	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD2 1232 1262			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 15:41 Calibration End Date: 03/30/2015 16:58 Calibration ID: 27528

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/4	SIG10004.D
Level 2	STD01 240-174339/5	SIG10005.D
Level 3	STD02 240-174339/6	SIG10006.D
Level 4	STD05 240-174339/7	SIG10007.D
Level 5	STD1 240-174339/8	SIG10008.D
Level 6	STD2 240-174339/9	SIG10009.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1232 Peak 1	2.367	2.368	2.367	2.367	2.368	2.367					2.317 - 2.417	2.367
PCB-1232 Peak 2	2.808	2.809	2.809	2.808	2.809	2.808					2.758 - 2.858	2.809
PCB-1232 Peak 3	3.300	3.300	3.300	3.301	3.300	3.300					3.250 - 3.350	3.300
PCB-1232 Peak 4	3.449	3.449	3.448	3.448	3.449	3.449					3.399 - 3.499	3.449
PCB-1232 Peak 5	4.092	4.093	4.092	4.095	4.094	4.094					4.042 - 4.142	4.093
PCB-1262 Peak 1	5.573	5.573	5.574	5.575	5.575	5.574					5.523 - 5.623	5.574
PCB-1262 Peak 2	6.052	6.050	6.050	6.052	6.052	6.052					6.002 - 6.102	6.051
PCB-1262 Peak 3	6.360	6.360	6.360	6.361	6.359	6.361					6.310 - 6.410	6.360
PCB-1262 Peak 4	6.641	6.640	6.640	6.641	6.639	6.641					6.591 - 6.691	6.640
PCB-1262 Peak 5	7.022	7.022	7.021	7.023	7.022	7.022					6.972 - 7.072	7.022

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-49171-1 | Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 | GC Column: CLP-2 | ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 15:41 | Calibration End Date: 03/30/2015 16:58 | Calibration ID: 27528

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/4	SIG10004.D
Level 2	STD01 240-174339/5	SIG10005.D
Level 3	STD02 240-174339/6	SIG10006.D
Level 4	STD05 240-174339/7	SIG10007.D
Level 5	STD1 240-174339/8	SIG10008.D
Level 6	STD2 240-174339/9	SIG10009.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1232 Peak 1	19636000 14401649	18995680 13454888	16323315	15938802	Ave		16458389.0				14.9		20.0			
PCB-1232 Peak 2	17399040 11585089	15653840 10737525	13744065	13001196	Ave		13686792.5				18.3		20.0			
PCB-1232 Peak 3	31560840 22712675	29000610 22217047	26038950	24597602	Ave		26021287.3				14.1		20.0			
PCB-1232 Peak 4	15878000 10632437	14869060 9860045	12552475	11612362	Ave		12567396.5				18.9		20.0			
PCB-1232 Peak 5	11769680 8911369	10696120 8228475	10559615	9660848	Ave		9971017.83				13.0		20.0			
PCB-1262 Peak 1	15065980 11722061	14154800 12133142	13956385	12760100	Ave		13298744.7				9.8		20.0			
PCB-1262 Peak 2	19962800 16880040	20014830 16920219	18426910	17786878	Ave		18331946.1				7.7		20.0			
PCB-1262 Peak 3	20833500 17003668	19517280 17020762	18370690	17842158	Ave		18431342.9				8.2		20.0			
PCB-1262 Peak 4	37461020 33627131	36329990 34187645	34385035	35158344	Ave		35191527.4				4.1		20.0			
PCB-1262 Peak 5	24981380 20804806	24085300 21406842	22712050	22301224	Ave		22715266.9				7.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI

PCBS INITIAL CALIBRATION DATA

EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 15:41 Calibration End Date: 03/30/2015 16:58 Calibration ID: 27528

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/4	SIG10004.D
Level 2	STD01 240-174339/5	SIG10005.D
Level 3	STD02 240-174339/6	SIG10006.D
Level 4	STD05 240-174339/7	SIG10007.D
Level 5	STD1 240-174339/8	SIG10008.D
Level 6	STD2 240-174339/9	SIG10009.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	Ave	981800 26909776	1899568	3264663	7969401	14401649	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1232 Peak 2	Ave	869952 21475050	1565384	2748813	6500598	11585089	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1232 Peak 3	Ave	1578042 44434094	2900061	5207790	12298801	22712675	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1232 Peak 4	Ave	793900 19720090	1486906	2510495	5806181	10632437	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1232 Peak 5	Ave	588484 16456950	1069612	2111923	4830424	8911369	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1262 Peak 1	Ave	753299 24266284	1415480	2791277	6380050	11722061	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1262 Peak 2	Ave	998140 33840437	2001483	3685382	8893439	16880040	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1262 Peak 3	Ave	1041675 34041523	1951728	3674138	8921079	17003668	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1262 Peak 4	Ave	1873051 68375289	3632999	6877007	17579172	33627131	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1262 Peak 5	Ave	1249069 42813683	2408530	4542410	11150612	20804806	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:

Ave = Average by Height

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10004.D
Lims ID: STD005 1232 1262
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Mar-2015 15:41:29 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-004
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub10

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:41 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:02:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.771	1.771	0.000	840029	0.0500	0.0573	
1	2.108	2.108	0.000	579940	0.0500	0.0531	
1	2.568	2.568	0.000	1355132	0.0500	0.0576	
1	2.703	2.703	0.000	577433	0.0500	0.0555	
1	3.132	3.132	0.000	529436	0.0500	0.0565	
		Average of Peak Amounts =				0.0560	
2	2.367	2.367	0.000	981800	0.0500	0.0597	
2	2.808	2.808	0.000	869952	0.0500	0.0636	
2	3.300	3.300	0.000	1578042	0.0500	0.0606	
2	3.449	3.449	0.000	793900	0.0500	0.0632	
2	4.092	4.092	0.000	588484	0.0500	0.0590	
		Average of Peak Amounts =				0.0612	
						RPD = 8.90	
9 PCB-1262							
1	4.422	4.422	0.000	661956H	0.0500	0.0597	
1	4.724	4.724	0.000	895055H	0.0500	0.0606	
1	5.140	5.140	0.000	935706H	0.0500	0.0575	
1	5.737	5.737	0.000	1806579H	0.0500	0.0556	
1	6.075	6.075	0.000	710691H	0.0500	0.0560	
		Average of Peak Amounts =				0.0579	
2	5.573	5.573	0.000	753299H	0.0500	0.0566	
2	6.052	6.052	0.000	998140H	0.0500	0.0544	
2	6.360	6.360	0.000	1041675H	0.0500	0.0565	
2	6.641	6.641	0.000	1873051H	0.0500	0.0532	
2	7.022	7.022	0.000	1249069H	0.0500	0.0550	
		Average of Peak Amounts =				0.0552	
						RPD = 4.78	

Reagents:

SG3262@.05PPM_00002 Amount Added: 1.00 Units: mL

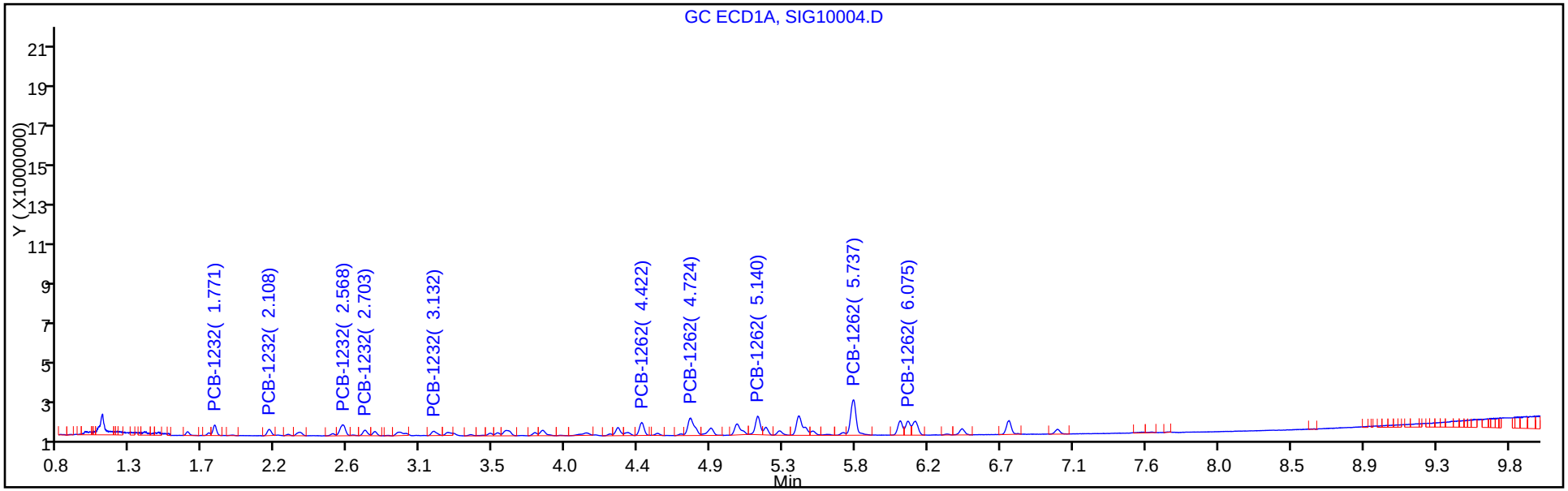
Report Date: 31-Mar-2015 06:13:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

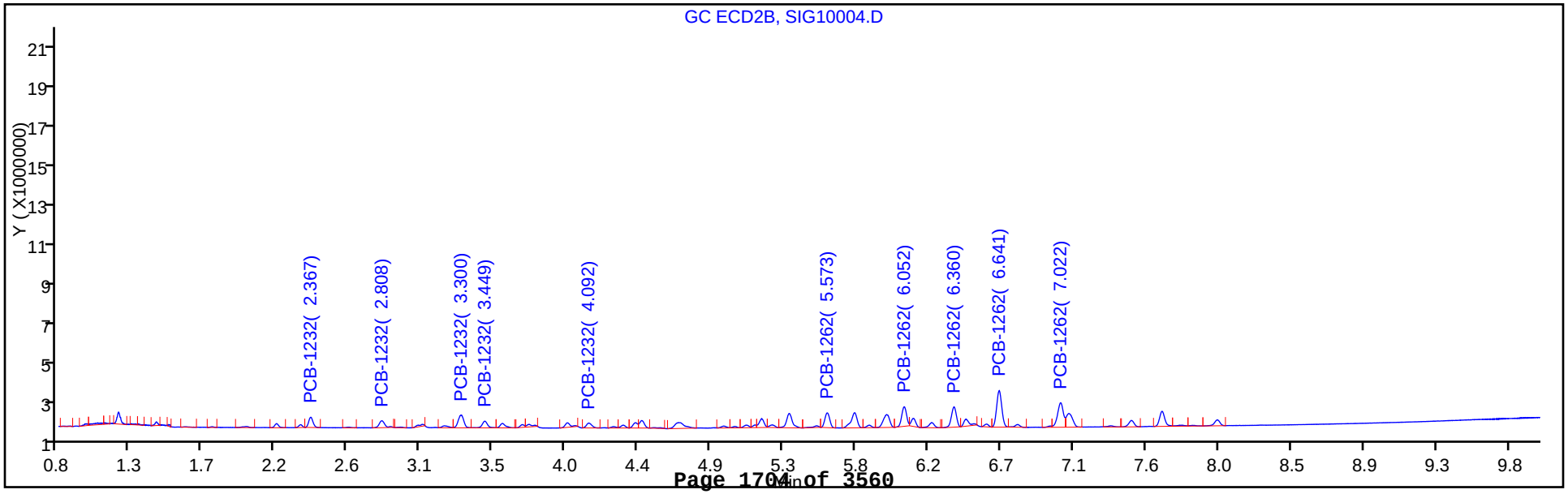
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10004.D

Injection Date:	30-Mar-2015 15:41:29	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD005 1232 1262			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10005.D
Lims ID: STD01 1232 1262
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Mar-2015 15:57:00 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-005
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub10

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:43 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:03:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.772	1.771	0.001	1658729	0.1000	0.1131	
1	2.110	2.108	0.002	1319452	0.1000	0.1207	
1	2.568	2.568	0.000	2653785	0.1000	0.1129	
1	2.706	2.703	0.003	1183394	0.1000	0.1137	
1	3.131	3.132	-0.001	991176	0.1000	0.1059	
		Average of Peak Amounts =				0.1132	
2	2.368	2.367	0.001	1899568	0.1000	0.1154	
2	2.809	2.808	0.001	1565384	0.1000	0.1144	
2	3.300	3.300	0.000	2900061	0.1000	0.1114	
2	3.449	3.449	0.000	1486906	0.1000	0.1183	
2	4.093	4.092	0.001	1069612	0.1000	0.1073	
		Average of Peak Amounts =				0.1134	
						RPD = 0.11	
9 PCB-1262							
1	4.423	4.422	0.001	1201773H	0.1000	0.1083	
1	4.724	4.724	0.000	1621381H	0.1000	0.1098	
1	5.143	5.140	0.003	1747419H	0.1000	0.1073	
1	5.737	5.737	0.000	3581058H	0.1000	0.1103	
1	6.076	6.075	0.001	1426832H	0.1000	0.1125	
		Average of Peak Amounts =				0.1096	
2	5.573	5.573	0.000	1415480H	0.1000	0.1064	
2	6.050	6.052	-0.002	2001483H	0.1000	0.1092	
2	6.360	6.360	0.000	1951728H	0.1000	0.1059	
2	6.640	6.641	-0.001	3632999H	0.1000	0.1032	
2	7.022	7.022	0.000	2408530H	0.1000	0.1060	
		Average of Peak Amounts =				0.1062	
						RPD = 3.21	

Reagents:

SG3262@0.1PPM_00002 Amount Added: 1.00 Units: mL

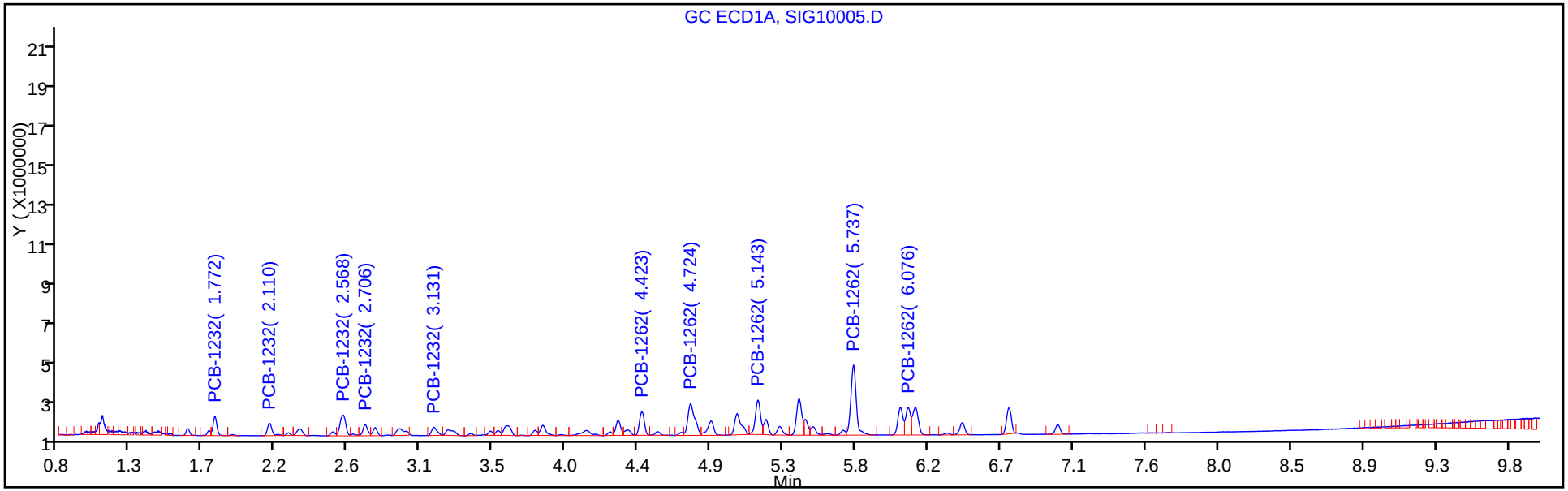
Report Date: 31-Mar-2015 06:13:45 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

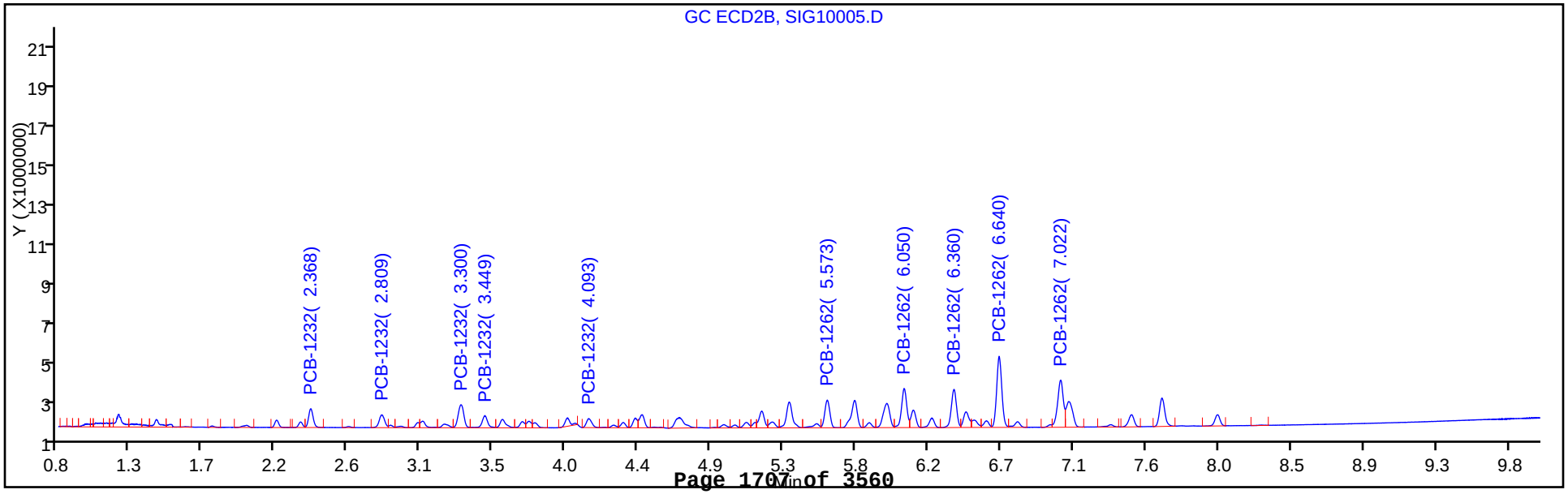
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10005.D

Injection Date:	30-Mar-2015 15:57:00	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD01 1232 1262			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10006.D
Lims ID: STD02 1232 1262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Mar-2015 16:12:28 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-006
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub10

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:45 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.771	1.771	0.000	3089381	0.2000	0.2107	
1	2.109	2.108	0.001	2277466	0.2000	0.2084	
1	2.566	2.568	-0.002	4666504	0.2000	0.1984	
1	2.704	2.703	0.001	1996041	0.2000	0.1917	
1	3.130	3.132	-0.002	1901520	0.2000	0.2031	
		Average of Peak Amounts =				0.2025	
2	2.367	2.367	0.000	3264663	0.2000	0.1984	
2	2.809	2.808	0.001	2748813	0.2000	0.2008	
2	3.300	3.300	0.000	5207790	0.2000	0.2001	
2	3.448	3.449	-0.001	2510495	0.2000	0.1998	
2	4.092	4.092	0.000	2111923	0.2000	0.2118	
		Average of Peak Amounts =				0.2022	
						RPD = 0.14	
9 PCB-1262							
1	4.422	4.422	0.000	2259793H	0.2000	0.2036	
1	4.725	4.724	0.001	3032906H	0.2000	0.2053	
1	5.144	5.140	0.004	3389424H	0.2000	0.2081	
1	5.735	5.737	-0.002	6682425H	0.2000	0.2058	
1	6.077	6.075	0.002	2622436H	0.2000	0.2067	
		Average of Peak Amounts =				0.2059	
2	5.574	5.573	0.001	2791277H	0.2000	0.2099	
2	6.050	6.052	-0.002	3685382H	0.2000	0.2010	
2	6.360	6.360	0.000	3674138H	0.2000	0.1993	
2	6.640	6.641	-0.001	6877007H	0.2000	0.1954	
2	7.021	7.022	-0.001	4542410H	0.2000	0.2000	
		Average of Peak Amounts =				0.2011	
						RPD = 2.34	

Reagents:

SG3262@.2PPM_00002 Amount Added: 1.00 Units: mL

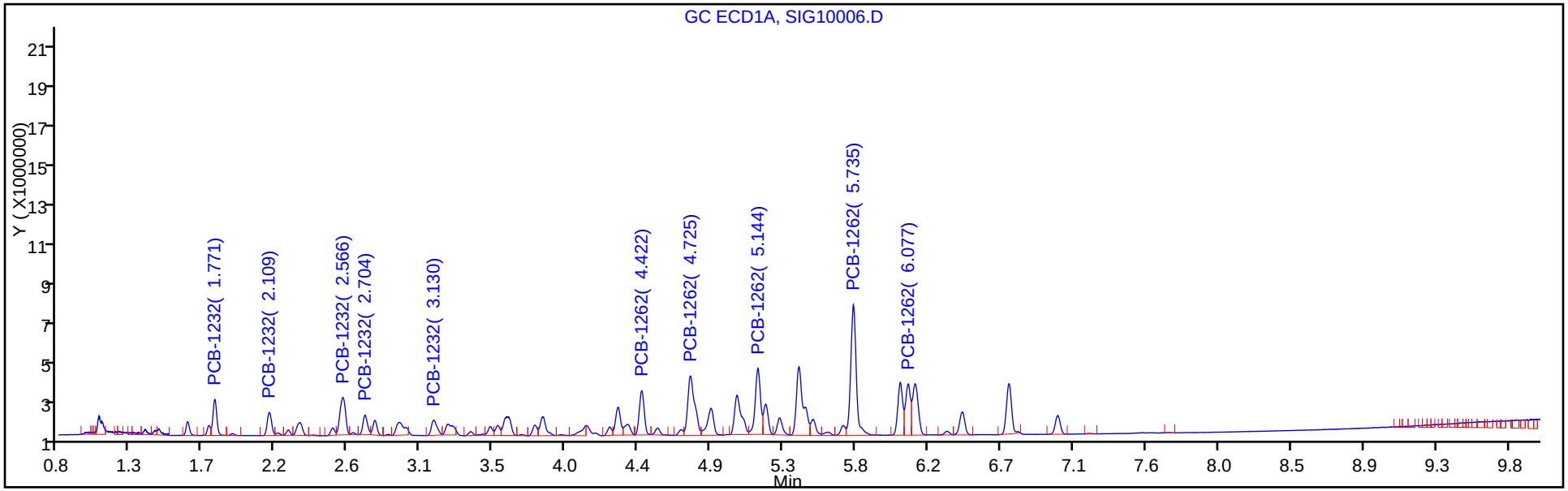
Report Date: 31-Mar-2015 06:13:47 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

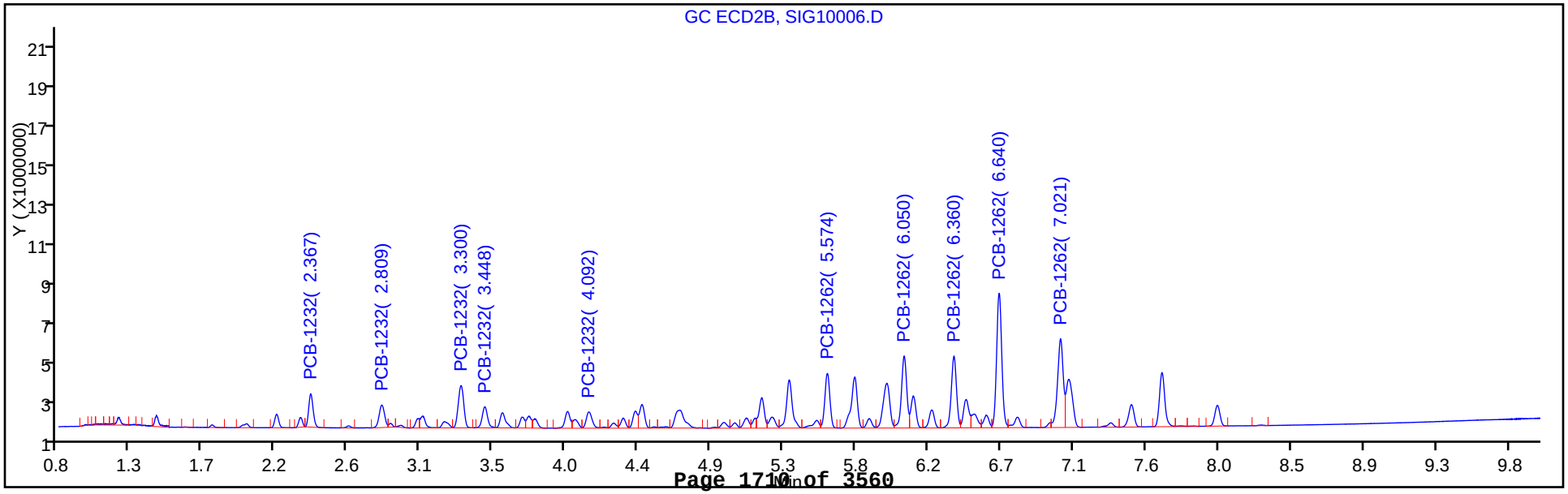
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10006.D

Injection Date:	30-Mar-2015 16:12:28	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD02 1232 1262			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10007.D
Lims ID: STD05 1232 1262
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-Mar-2015 16:27:54 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-007
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub10

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:48 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.773	1.771	0.002	7233149	0.5000	0.4932	
1	2.111	2.108	0.003	5412222	0.5000	0.4952	
1	2.570	2.568	0.002	11577278	0.5000	0.4923	
1	2.705	2.703	0.002	5184934	0.5000	0.4980	
1	3.133	3.132	0.001	4642333	0.5000	0.4958	
		Average of Peak Amounts =				0.4949	
2	2.367	2.367	0.000	7969401	0.5000	0.4842	
2	2.808	2.808	0.000	6500598	0.5000	0.4750	
2	3.301	3.300	0.001	12298801	0.5000	0.4726	
2	3.448	3.449	-0.001	5806181	0.5000	0.4620	
2	4.095	4.092	0.003	4830424	0.5000	0.4844	
		Average of Peak Amounts =				0.4757	
						RPD = 3.97	
9 PCB-1262							
1	4.424	4.422	0.002	5358363H	0.5000	0.4829	
1	4.725	4.724	0.001	7042561H	0.5000	0.4768	
1	5.143	5.140	0.003	7926534H	0.5000	0.4867	
1	5.736	5.737	-0.001	15670126H	0.5000	0.4825	
1	6.075	6.075	0.000	6159914H	0.5000	0.4855	
		Average of Peak Amounts =				0.4829	
2	5.575	5.573	0.002	6380050H	0.5000	0.4797	
2	6.052	6.052	0.000	8893439H	0.5000	0.4851	
2	6.361	6.360	0.001	8921079H	0.5000	0.4840	
2	6.641	6.641	0.000	17579172H	0.5000	0.4995	
2	7.023	7.022	0.001	11150612H	0.5000	0.4909	
		Average of Peak Amounts =				0.4879	
						RPD = 1.03	

Reagents:

SG3262@0.5PPM_00004 Amount Added: 1.00 Units: mL

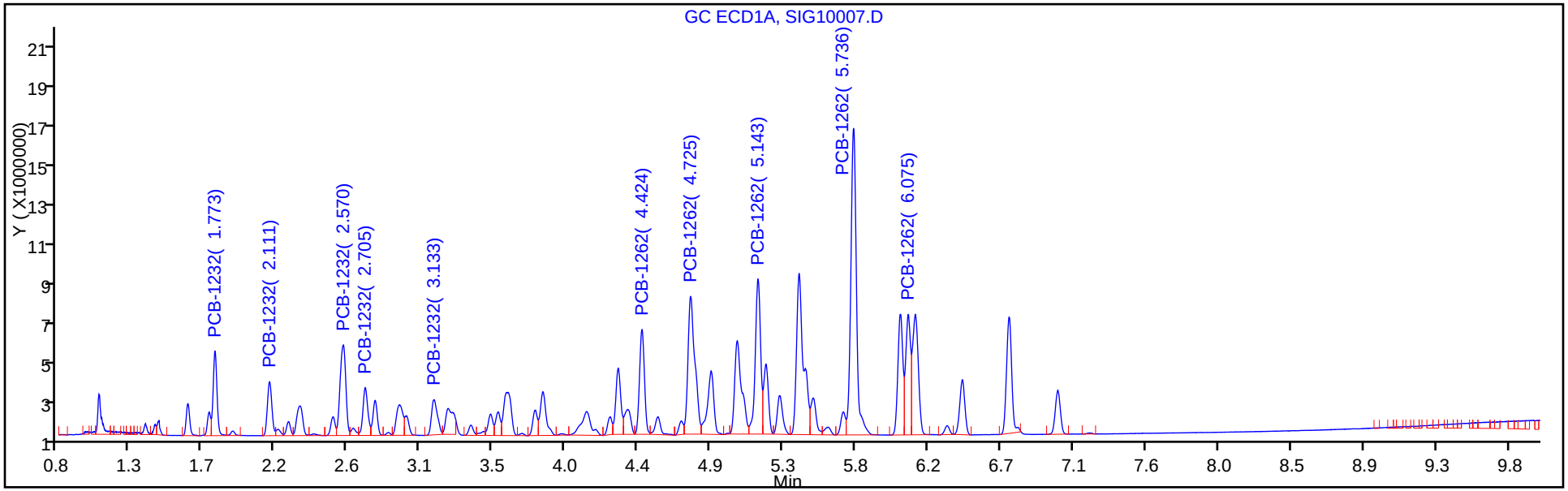
Report Date: 31-Mar-2015 06:13:49 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

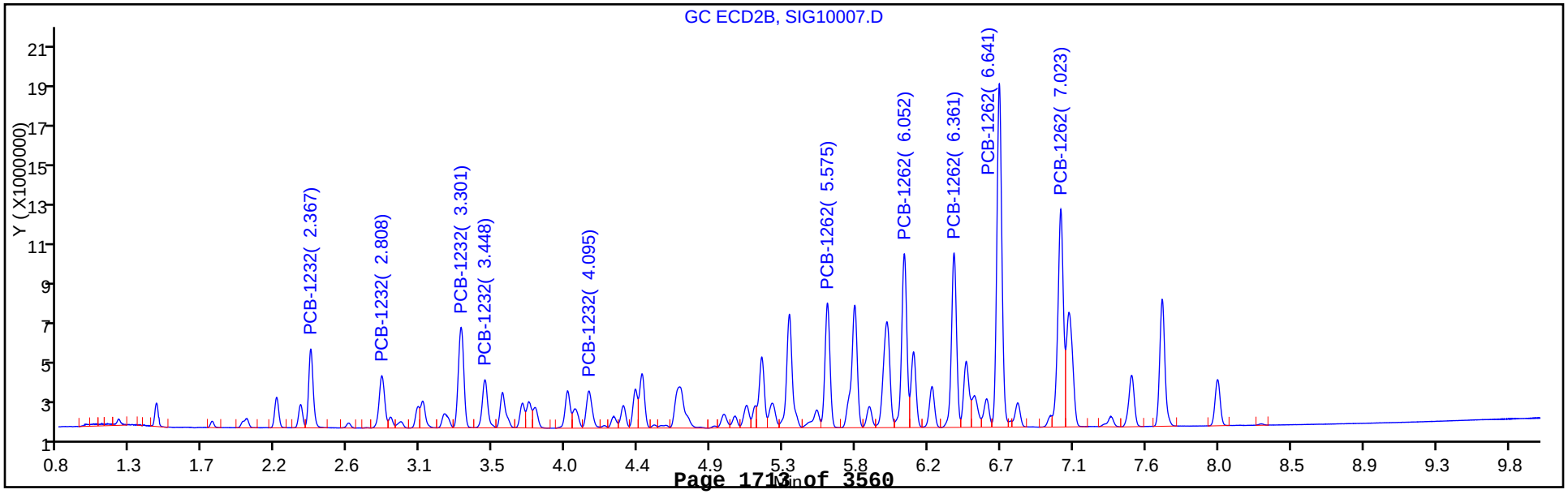
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10007.D

Injection Date:	30-Mar-2015 16:27:54	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD05 1232 1262			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10008.D
Lims ID: STD1 1232 1262
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Mar-2015 16:43:22 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-008
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub10

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:50 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.772	1.771	0.001	13057898	1.00	0.8904	
1	2.110	2.108	0.002	9634169	1.00	0.8816	
1	2.568	2.568	0.000	21074914	1.00	0.8962	
1	2.706	2.703	0.003	9735208	1.00	0.9351	
1	3.132	3.132	0.000	8753756	1.00	0.9349	
		Average of Peak Amounts =				0.9076	
2	2.368	2.367	0.001	14401649	1.00	0.8750	
2	2.809	2.808	0.001	11585089	1.00	0.8464	
2	3.300	3.300	0.000	22712675	1.00	0.8728	
2	3.449	3.449	0.000	10632437	1.00	0.8460	
2	4.094	4.092	0.002	8911369	1.00	0.8937	
		Average of Peak Amounts =				0.8668	
						RPD = 4.60	
9 PCB-1262							
1	4.423	4.422	0.001	9917983	1.00	0.8937	H
1	4.725	4.724	0.001	12743274	1.00	0.8627	H
1	5.144	5.140	0.004	14469921	1.00	0.8884	H
1	5.736	5.737	-0.001	28988498	1.00	0.8926	H
1	6.076	6.075	0.001	11198768	1.00	0.8826	H
		Average of Peak Amounts =				0.8840	
2	5.575	5.573	0.002	11722061	1.00	0.8814	H
2	6.052	6.052	0.000	16880040	1.00	0.9208	H
2	6.359	6.360	-0.001	17003668	1.00	0.9225	H
2	6.639	6.641	-0.002	33627131	1.00	0.9555	H
2	7.022	7.022	0.000	20804806	1.00	0.9159	H
		Average of Peak Amounts =				0.9192	
						RPD = 3.91	

Reagents:

SG3262@1.0PPM_00002 Amount Added: 1.00 Units: mL

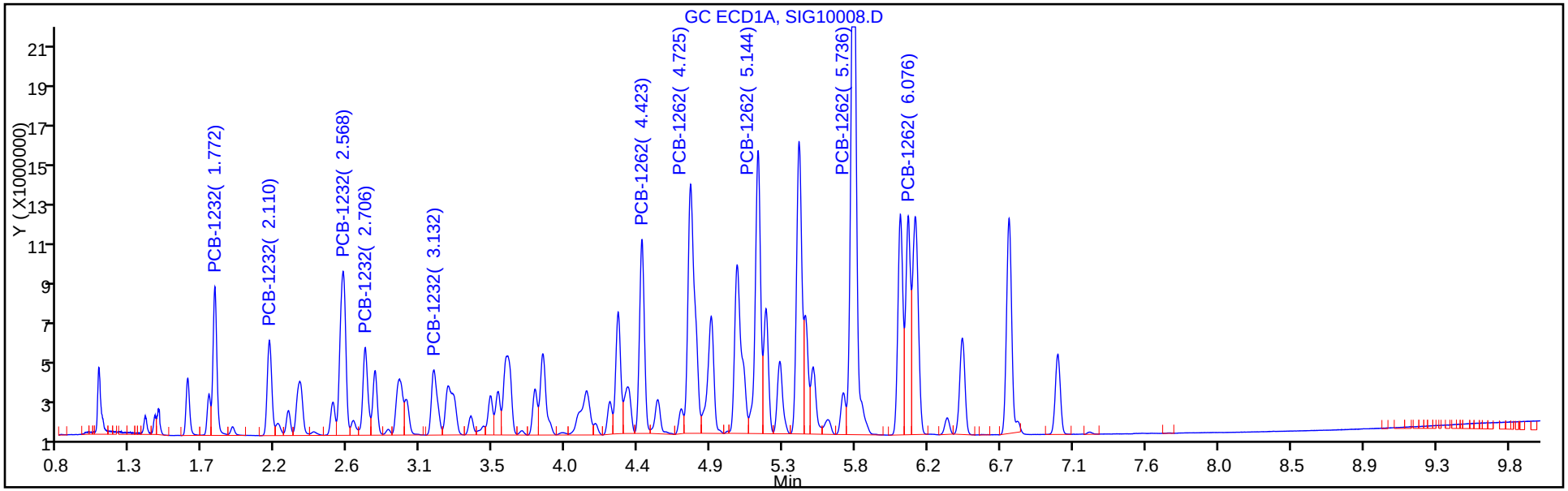
Report Date: 31-Mar-2015 06:13:51 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

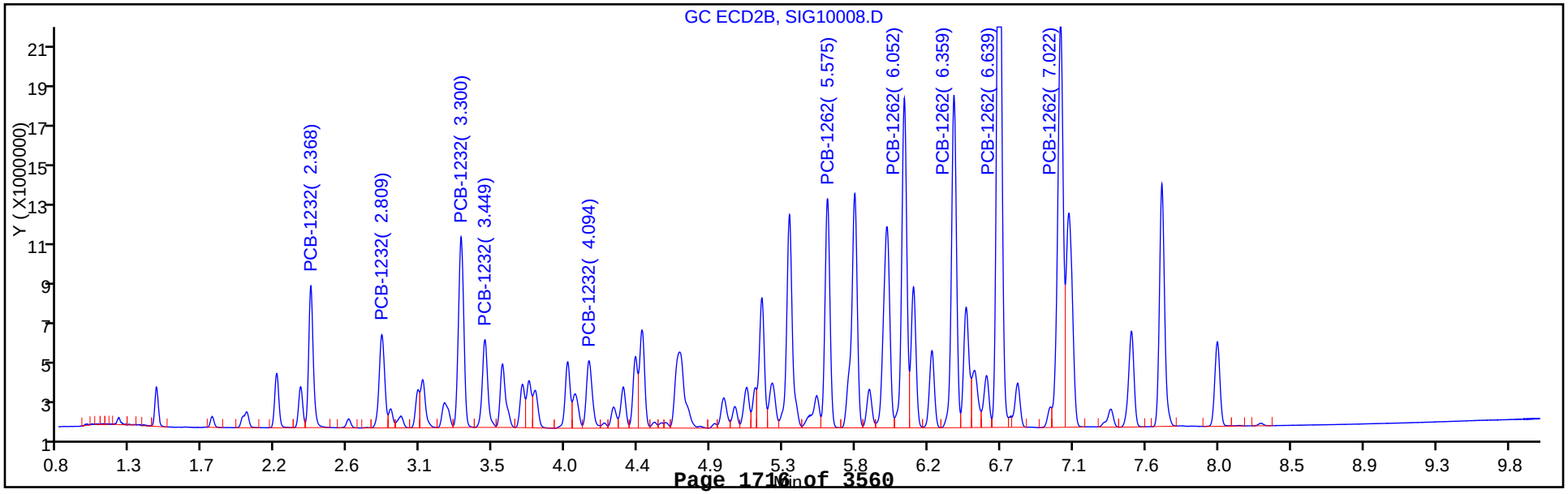
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10008.D

Injection Date:	30-Mar-2015 16:43:22	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD1 1232 1262			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10009.D
Lims ID: STD2 1232 1262
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Mar-2015 16:58:57 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-009
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub10

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:52 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.772	1.771	0.001	23265998	2.00	1.59	
1	2.110	2.108	0.002	17862511	2.00	1.63	
1	2.568	2.568	0.000	39774971	2.00	1.69	
1	2.704	2.703	0.001	17995693	2.00	1.73	
1	3.131	3.132	-0.001	16271008	2.00	1.74	
		Average of Peak Amounts =				1.68	
2	2.367	2.367	0.000	26909776	2.00	1.64	
2	2.808	2.808	0.000	21475050	2.00	1.57	
2	3.300	3.300	0.000	44434094	2.00	1.71	
2	3.449	3.449	0.000	19720090	2.00	1.57	
2	4.094	4.092	0.002	16456950	2.00	1.65	
		Average of Peak Amounts =				1.63	
						RPD = 3.00	
9 PCB-1262							
1	4.423	4.422	0.001	18784192H	2.00	1.69	
1	4.724	4.724	0.000	25030774H	2.00	1.69	
1	5.144	5.140	0.004	28529168H	2.00	1.75	
1	5.737	5.737	0.000	58349010H	2.00	1.80	
1	6.076	6.075	0.001	22036194H	2.00	1.74	
		Average of Peak Amounts =				1.73	
2	5.574	5.573	0.001	24266284H	2.00	1.82	
2	6.052	6.052	0.000	33840437H	2.00	1.85	
2	6.361	6.360	0.001	34041523H	2.00	1.85	
2	6.641	6.641	0.000	68375289H	2.00	1.94	
2	7.022	7.022	0.000	42813683H	2.00	1.88	
		Average of Peak Amounts =				1.87	
						RPD = 7.47	

Reagents:

SG3262@2.0ppm_00002 Amount Added: 1.00 Units: mL

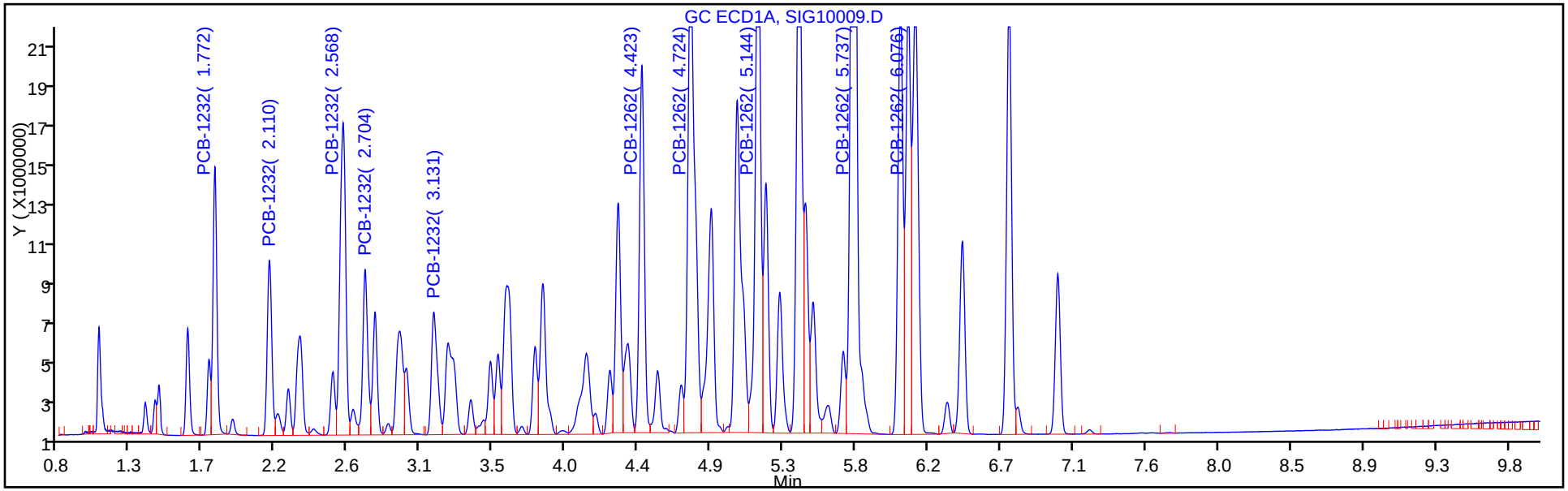
Report Date: 31-Mar-2015 06:13:53 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

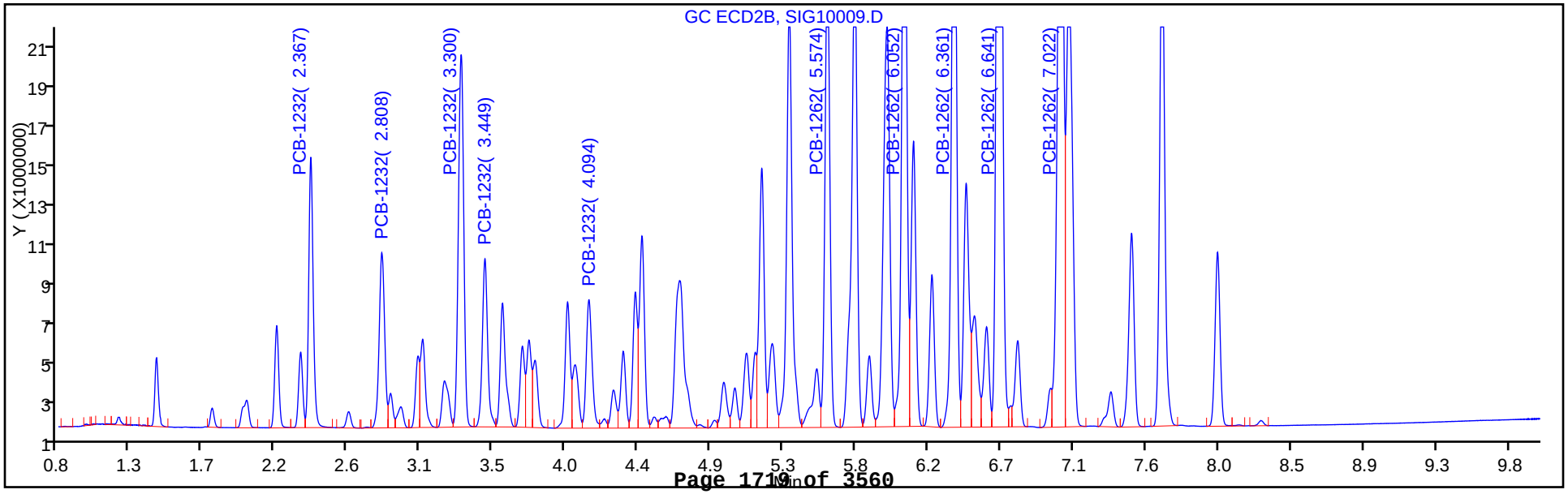
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10009.D

Injection Date:	30-Mar-2015 16:58:57	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD2 1232 1262			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 17:14 Calibration End Date: 03/30/2015 18:31 Calibration ID: 27533

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/10	SIG10010.D
Level 2	STD01 240-174339/11	SIG10011.D
Level 3	STD02 240-174339/12	SIG10012.D
Level 4	STD05 240-174339/13	SIG10013.D
Level 5	STD1 240-174339/14	SIG10014.D
Level 6	STD2 240-174339/15	SIG10015.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1242 Peak 1	1.771	1.772	1.772	1.771	1.772	1.772					1.721 - 1.821	1.772
PCB-1242 Peak 2	2.111	2.110	2.110	2.109	2.110	2.111					2.061 - 2.161	2.110
PCB-1242 Peak 3	2.563	2.567	2.570	2.568	2.567	2.568					2.513 - 2.613	2.567
PCB-1242 Peak 4	2.706	2.705	2.705	2.703	2.705	2.704					2.656 - 2.756	2.705
PCB-1242 Peak 5	3.131	3.130	3.130	3.132	3.131	3.130					3.081 - 3.181	3.131
PCB-1268 Peak 1	6.076	6.076	6.075	6.075	6.075	6.077					6.026 - 6.126	6.076
PCB-1268 Peak 2	6.115	6.113	6.114	6.115	6.115	6.114					6.065 - 6.165	6.114
PCB-1268 Peak 3	6.318	6.317	6.316	6.317	6.317	6.317					6.268 - 6.368	6.317
PCB-1268 Peak 4	6.703	6.701	6.700	6.703	6.702	6.701					6.653 - 6.753	6.702
PCB-1268 Peak 5	7.004	7.005	7.003	7.003	7.005	7.003					6.954 - 7.054	7.004

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 17:14 Calibration End Date: 03/30/2015 18:31 Calibration ID: 27533

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/10	SIG10010.D
Level 2	STD01 240-174339/11	SIG10011.D
Level 3	STD02 240-174339/12	SIG10012.D
Level 4	STD05 240-174339/13	SIG10013.D
Level 5	STD1 240-174339/14	SIG10014.D
Level 6	STD2 240-174339/15	SIG10015.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1242 Peak 1	11510120 9329446	11725580 8305390	10571420	9878068	Ave		10220003.9				12.9		20.0			
PCB-1242 Peak 2	21199200 16969620	22087120 15173354	19146605	18019896	Ave		18765965.8				13.9		20.0			
PCB-1242 Peak 3	47439620 36647861	45281700 33669969	39887830	36917370	Ave		39974058.3				13.4		20.0			
PCB-1242 Peak 4	21237580 16616577	20424220 15158043	18391635	15895412	Ave		17953911.1				13.9		20.0			
PCB-1242 Peak 5	19825780 16402311	20141380 15002327	18196545	16768714	Ave		17722842.8				11.4		20.0			
PCB-1268 Peak 1	88978480 70935317	88511560 68525154	78046325	76305940	Ave		78550462.6				11.0		20.0			
PCB-1268 Peak 2	84574240 72193667	82375210 67897998	74451265	74478778	Ave		75995193.0				8.3		20.0			
PCB-1268 Peak 3	68430720 56833676	65264760 55044064	60389535	60573444	Ave		61089366.4				8.2		20.0			
PCB-1268 Peak 4	34950640 28511059	33823370 26994607	31393135	30608252	Ave		31046843.8				9.8		20.0			
PCB-1268 Peak 5	214992520 193651952	217927910 185690833	200966300	203256802	Ave		202747719				6.1		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 17:14 Calibration End Date: 03/30/2015 18:31 Calibration ID: 27533

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/10	SIG10010.D
Level 2	STD01 240-174339/11	SIG10011.D
Level 3	STD02 240-174339/12	SIG10012.D
Level 4	STD05 240-174339/13	SIG10013.D
Level 5	STD1 240-174339/14	SIG10014.D
Level 6	STD2 240-174339/15	SIG10015.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	Ave	575506 16610779	1172558	2114284	4939034	9329446	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1242 Peak 2	Ave	1059960 30346707	2208712	3829321	9009948	16969620	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1242 Peak 3	Ave	2371981 67339937	4528170	7977566	18458685	36647861	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1242 Peak 4	Ave	1061879 30316085	2042422	3678327	7947706	16616577	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1242 Peak 5	Ave	991289 30004654	2014138	3639309	8384357	16402311	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1268 Peak 1	Ave	4448924 137050307	8851156	15609265	38152970	70935317	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1268 Peak 2	Ave	4228712 135795996	8237521	14890253	37239389	72193667	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1268 Peak 3	Ave	3421536 110088127	6526476	12077907	30286722	56833676	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1268 Peak 4	Ave	1747532 53989213	3382337	6278627	15304126	28511059	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1268 Peak 5	Ave	10749626 371381665	21792791	40193260	101628401	193651952	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10010.D
Lims ID: STD005 1242 1268
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Mar-2015 17:14:24 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-010
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub11

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:54 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:04:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.771	1.771	0.000	575506	0.0500	0.0563	
1	2.111	2.111	0.000	1059960	0.0500	0.0565	
1	2.563	2.563	0.000	2371981	0.0500	0.0593	
1	2.706	2.706	0.000	1061879	0.0500	0.0591	
1	3.131	3.131	0.000	991289	0.0500	0.0559	
		Average of Peak Amounts =				0.0574	
2	2.369	2.369	0.000	818109	0.0500	0.0413	
2	2.811	2.811	0.000	1412738	0.0500	0.0376	
2	3.301	3.301	0.000	2573528	0.0500	0.0589	
2	3.447	3.447	0.000	1226296	0.0500	0.0613	
2	4.093	4.093	0.000	1084497	0.0500	0.0586	
		Average of Peak Amounts =				0.0515	
						RPD = 10.84	
11 PCB-1268							
1	6.076	6.076	0.000	4448924	0.0500	0.0566	
1	6.115	6.115	0.000	4228712	0.0500	0.0556	
1	6.318	6.318	0.000	3421536	0.0500	0.0560	
1	6.703	6.703	0.000	1747532	0.0500	0.0563	
1	7.004	7.004	0.000	10749626	0.0500	0.0530	
		Average of Peak Amounts =				0.0555	
2	7.020	7.020	0.000	4591821	0.0500	0.0553	
2	7.069	7.069	0.000	4576295	0.0500	0.0538	
2	7.332	7.332	0.000	3701825	0.0500	0.0544	
2	7.650	7.650	0.000	1800113	0.0500	0.0553	
2	7.995	7.995	0.000	11358105	0.0500	0.0498	
		Average of Peak Amounts =				0.0537	
						RPD = 3.27	

Reagents:

SG4268@.05PPM_00003 Amount Added: 1.00 Units: mL

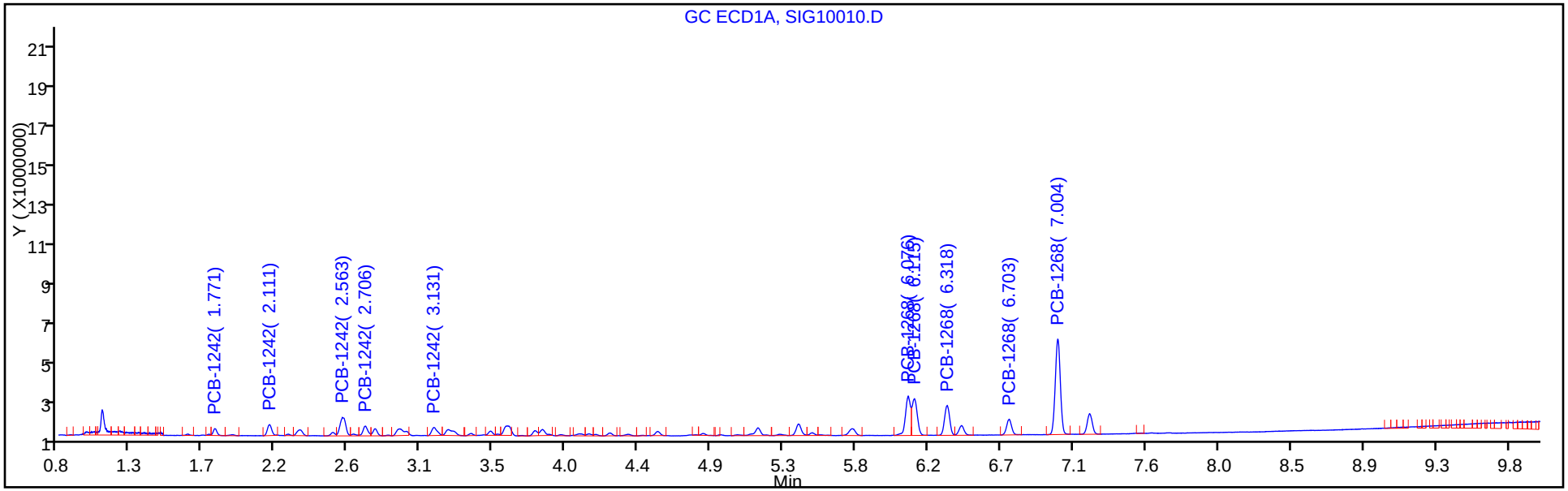
Report Date: 31-Mar-2015 06:13:55 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

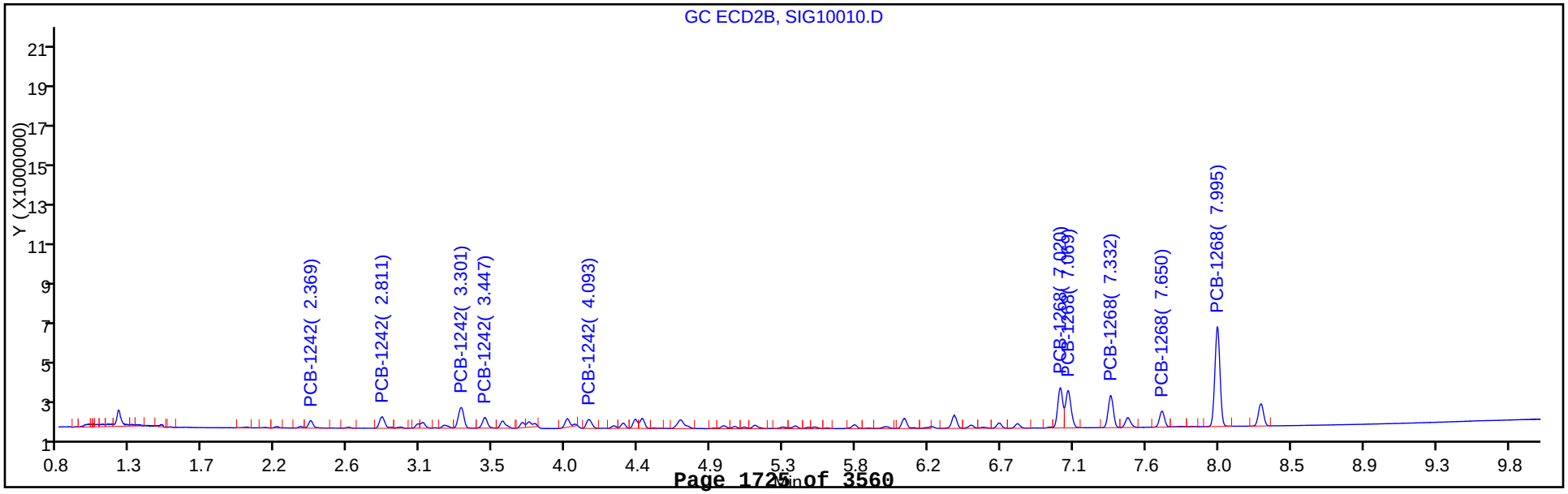
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10010.D

Injection Date:	30-Mar-2015 17:14:24	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD005 1242 1268			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10011.D
Lims ID: STD01 1242 1268
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Mar-2015 17:29:51 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-011
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub11

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:56 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.772	1.771	0.001	1172558	0.1000	0.1147	
1	2.110	2.111	-0.001	2208712	0.1000	0.1177	
1	2.567	2.563	0.004	4528170	0.1000	0.1133	
1	2.705	2.706	-0.001	2042422	0.1000	0.1138	
1	3.130	3.131	-0.001	2014138	0.1000	0.1136	
		Average of Peak Amounts =				0.1146	
2	2.367	2.369	-0.002	1432544	0.1000	0.1051	
2	2.808	2.811	-0.003	2674967	0.1000	0.1106	
2	3.299	3.301	-0.002	4798531	0.1000	0.1099	
2	3.448	3.447	0.001	2272372	0.1000	0.1135	
2	4.093	4.093	0.000	2121747	0.1000	0.1146	
		Average of Peak Amounts =				0.1107	
						RPD = 3.46	
11 PCB-1268							
1	6.076	6.076	0.000	8851156	0.1000	0.1127	
1	6.113	6.115	-0.002	8237521	0.1000	0.1084	
1	6.317	6.318	-0.001	6526476	0.1000	0.1068	
1	6.701	6.703	-0.002	3382337	0.1000	0.1089	
1	7.005	7.004	0.001	21792791	0.1000	0.1075	
		Average of Peak Amounts =				0.1089	
2	7.021	7.020	0.001	8877985	0.1000	0.1069	
2	7.068	7.069	-0.001	8981861	0.1000	0.1056	
2	7.333	7.332	0.001	7279280	0.1000	0.1071	
2	7.653	7.650	0.003	3512915	0.1000	0.1079	
2	7.995	7.995	0.000	23539619	0.1000	0.1033	
		Average of Peak Amounts =				0.1062	
						RPD = 2.52	

Reagents:

SG4268@.1PPM_00003 Amount Added: 1.00 Units: mL

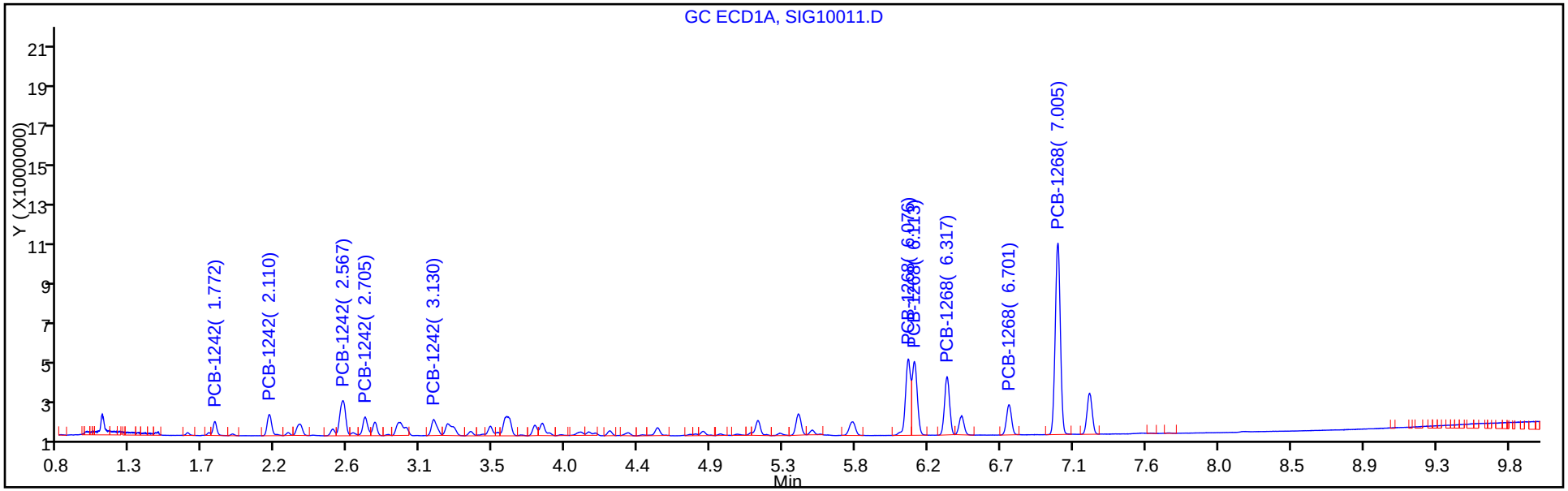
Report Date: 31-Mar-2015 06:13:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

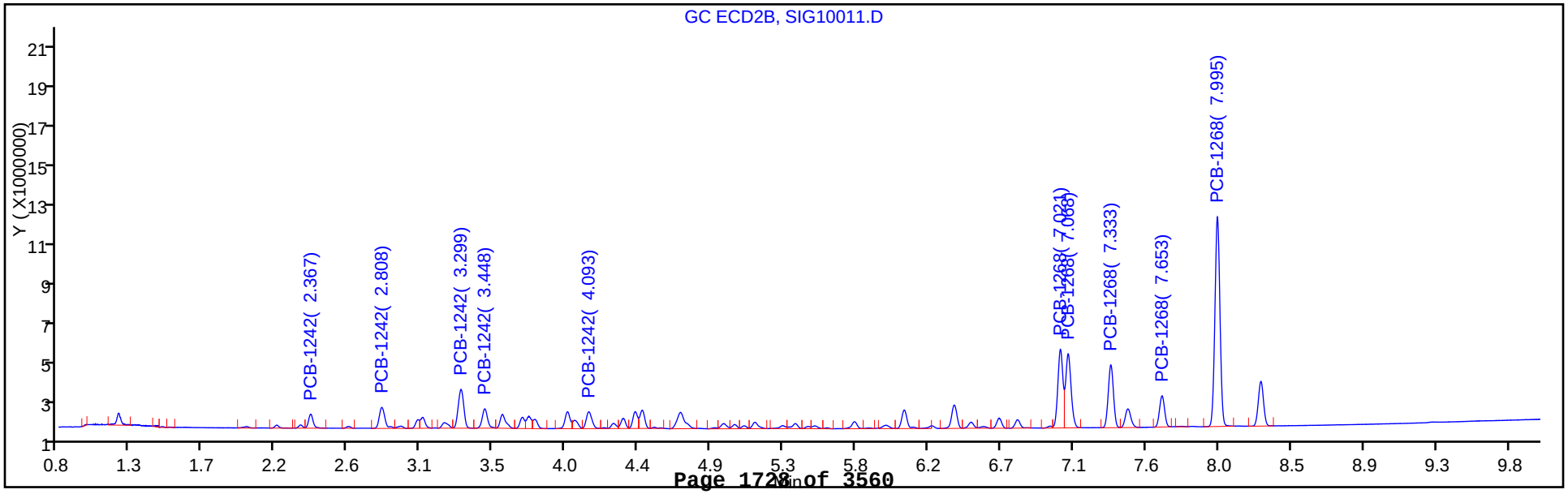
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10011.D

Injection Date:	30-Mar-2015 17:29:51	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD01 1242 1268			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10012.D
Lims ID: STD02 1242 1268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Mar-2015 17:45:16 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-012
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub11

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:58 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.772	1.771	0.001	2114284	0.2000	0.2069	
1	2.110	2.111	-0.001	3829321	0.2000	0.2041	
1	2.570	2.563	0.007	7977566	0.2000	0.1996	
1	2.705	2.706	-0.001	3678327	0.2000	0.2049	
1	3.130	3.131	-0.001	3639309	0.2000	0.2053	
		Average of Peak Amounts =				0.2041	
2	2.367	2.369	-0.002	2475004	0.2000	0.2132	
2	2.810	2.811	-0.001	4567893	0.2000	0.2200	
2	3.301	3.301	0.000	8479882	0.2000	0.1942	
2	3.448	3.447	0.001	3999864	0.2000	0.1998	
2	4.095	4.093	0.002	3742010	0.2000	0.2021	
		Average of Peak Amounts =				0.2059	
						RPD = 0.84	
11 PCB-1268							
1	6.075	6.076	-0.001	15609265	0.2000	0.1987	
1	6.114	6.115	-0.001	14890253	0.2000	0.1959	
1	6.316	6.318	-0.002	12077907	0.2000	0.1977	
1	6.700	6.703	-0.003	6278627	0.2000	0.2022	
1	7.003	7.004	-0.001	40193260	0.2000	0.1982	
		Average of Peak Amounts =				0.1986	
2	7.021	7.020	0.001	15904246	0.2000	0.1915	
2	7.069	7.069	0.000	16355682	0.2000	0.1922	
2	7.334	7.332	0.002	13087450	0.2000	0.1925	
2	7.652	7.650	0.002	6420502	0.2000	0.1973	
2	7.995	7.995	0.000	44410213	0.2000	0.1949	
		Average of Peak Amounts =				0.1937	
						RPD = 2.49	

Reagents:

SG4268@.2PPM_00002 Amount Added: 1.00 Units: mL

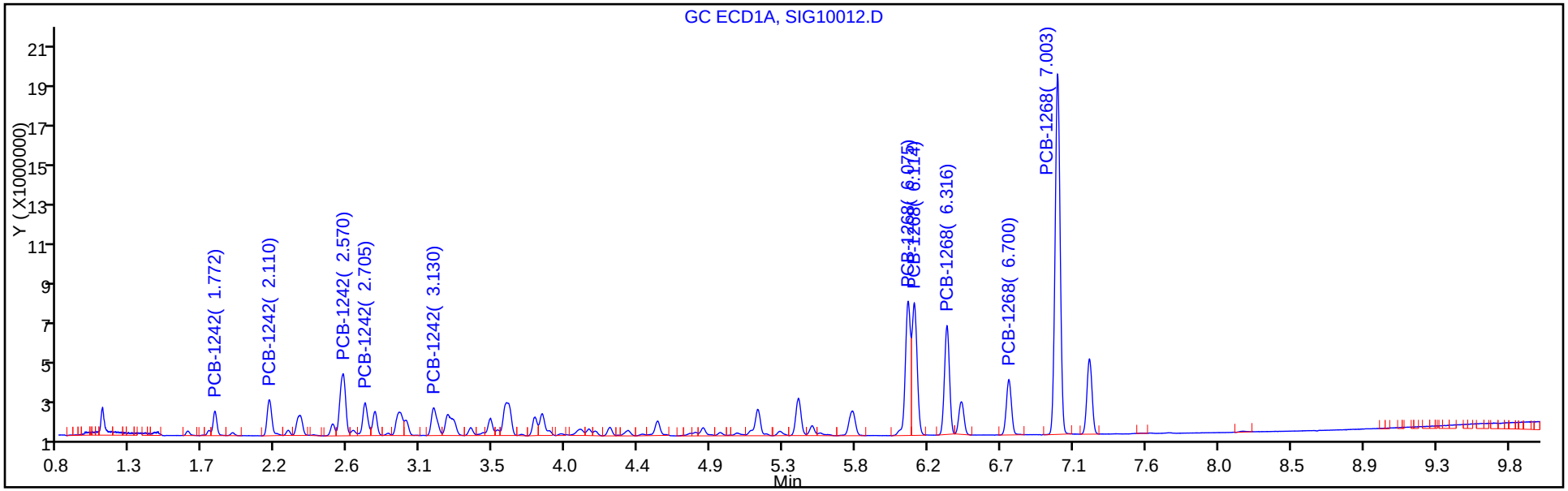
Report Date: 31-Mar-2015 06:13:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

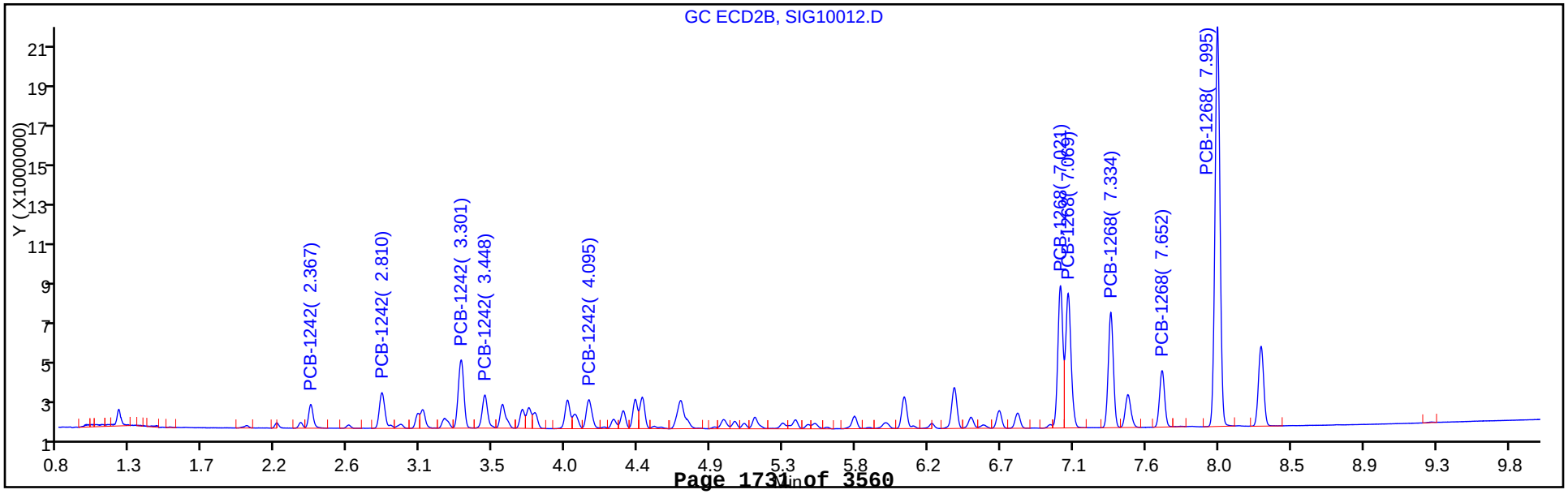
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10012.D

Injection Date:	30-Mar-2015 17:45:16	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD02 1242 1268			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10013.D
Lims ID: STD05 1242 1268
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-Mar-2015 18:00:50 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-013
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub11

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:00 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.771	1.771	0.000	4939034	0.5000	0.4833	
1	2.109	2.111	-0.002	9009948	0.5000	0.4801	
1	2.568	2.563	0.005	18458685	0.5000	0.4618	
1	2.703	2.706	-0.003	7947706	0.5000	0.4427	
1	3.132	3.131	0.001	8384357	0.5000	0.4731	
		Average of Peak Amounts =				0.4682	
2	2.367	2.369	-0.002	5530634	0.5000	0.5303	
2	2.808	2.811	-0.003	9862900	0.5000	0.5261	
2	3.301	3.301	0.000	20507336	0.5000	0.4696	
2	3.448	3.447	0.001	9252432	0.5000	0.4621	
2	4.093	4.093	0.000	8624694	0.5000	0.4659	
		Average of Peak Amounts =				0.4908	
						RPD = 4.72	
11 PCB-1268							
1	6.075	6.076	-0.001	38152970	0.5000	0.4857	
1	6.115	6.115	0.000	37239389	0.5000	0.4900	
1	6.317	6.318	-0.001	30286722	0.5000	0.4958	
1	6.703	6.703	0.000	15304126	0.5000	0.4929	
1	7.003	7.004	-0.001	101628401	0.5000	0.5013	
		Average of Peak Amounts =				0.4931	
2	7.021	7.020	0.001	40736949	0.5000	0.4905	
2	7.068	7.069	-0.001	42124185	0.5000	0.4951	
2	7.333	7.332	0.001	33661181	0.5000	0.4951	
2	7.652	7.650	0.002	15912802	0.5000	0.4889	
2	7.996	7.995	0.001	117728602	0.5000	0.5167	
		Average of Peak Amounts =				0.4973	
						RPD = 0.83	

Reagents:

SG4268@0.5PPM_00003 Amount Added: 1.00 Units: mL

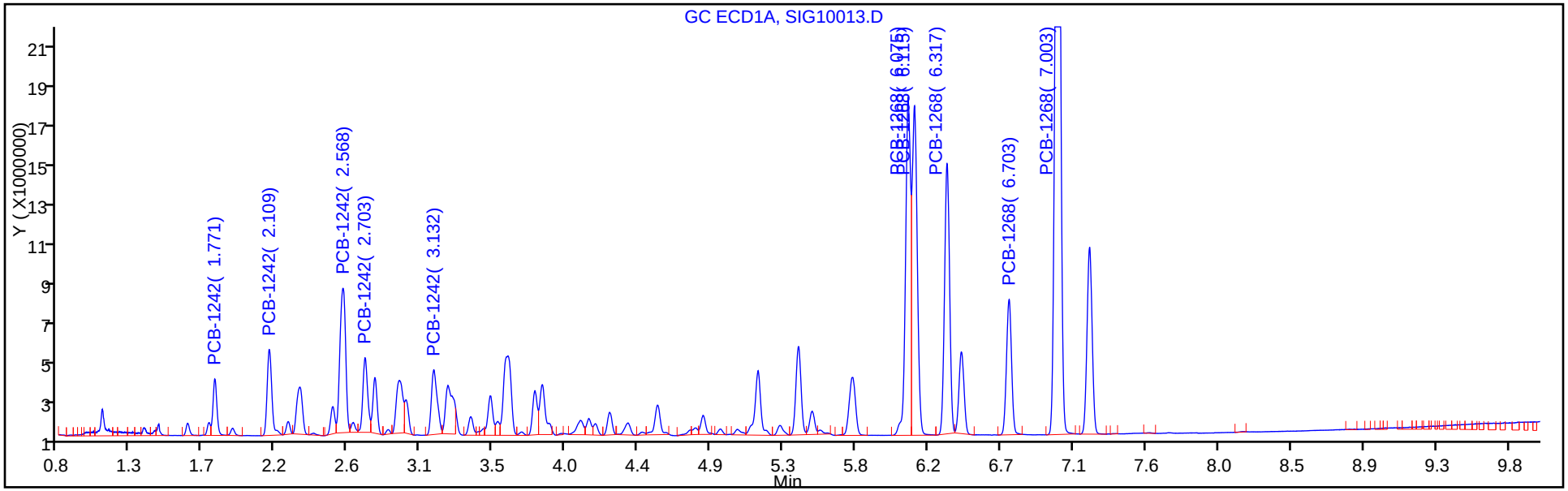
Report Date: 31-Mar-2015 06:14:01 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

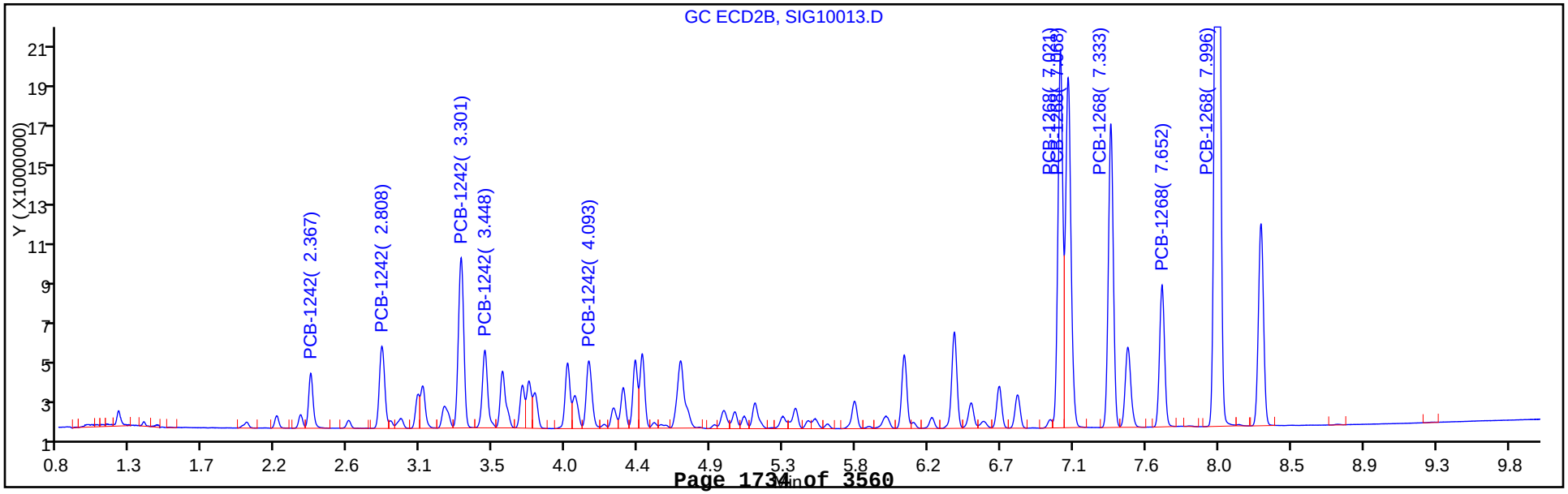
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10013.D

Injection Date:	30-Mar-2015 18:00:50	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD05 1242 1268			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10014.D
Lims ID: STD1 1242 1268
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Mar-2015 18:16:20 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-014
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub11

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:03 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.772	1.771	0.001	9329446	1.00	0.9129	
1	2.110	2.111	-0.001	16969620	1.00	0.9043	
1	2.567	2.563	0.004	36647861	1.00	0.9168	
1	2.705	2.706	-0.001	16616577	1.00	0.9255	
1	3.131	3.131	0.000	16402311	1.00	0.9255	
		Average of Peak Amounts =				0.9170	
2	2.367	2.369	-0.002	10366059	1.00	1.03	
2	2.809	2.811	-0.002	18492407	1.00	1.03	
2	3.300	3.301	-0.001	40297934	1.00	0.9227	
2	3.448	3.447	0.001	17776265	1.00	0.8879	
2	4.093	4.093	0.000	16562630	1.00	0.8947	
		Average of Peak Amounts =				0.9525	
						RPD = 3.80	
11 PCB-1268							
1	6.075	6.076	-0.001	70935317	1.00	0.9031	
1	6.115	6.115	0.000	72193667	1.00	0.9500	
1	6.317	6.318	-0.001	56833676	1.00	0.9303	
1	6.702	6.703	-0.001	28511059	1.00	0.9183	
1	7.005	7.004	0.001	193651952	1.00	0.9551	
		Average of Peak Amounts =				0.9314	
2	7.020	7.020	0.000	78832278	1.00	0.9491	
2	7.067	7.069	-0.002	82276709	1.00	0.9671	
2	7.334	7.332	0.002	64450818	1.00	0.9480	
2	7.652	7.650	0.002	30282008	1.00	0.9304	
2	7.996	7.995	0.001	225780946	1.00	0.99	
		Average of Peak Amounts =				0.9571	
						RPD = 2.73	

Reagents:

SG42/68@1.0PP_00003 Amount Added: 1.00 Units: mL

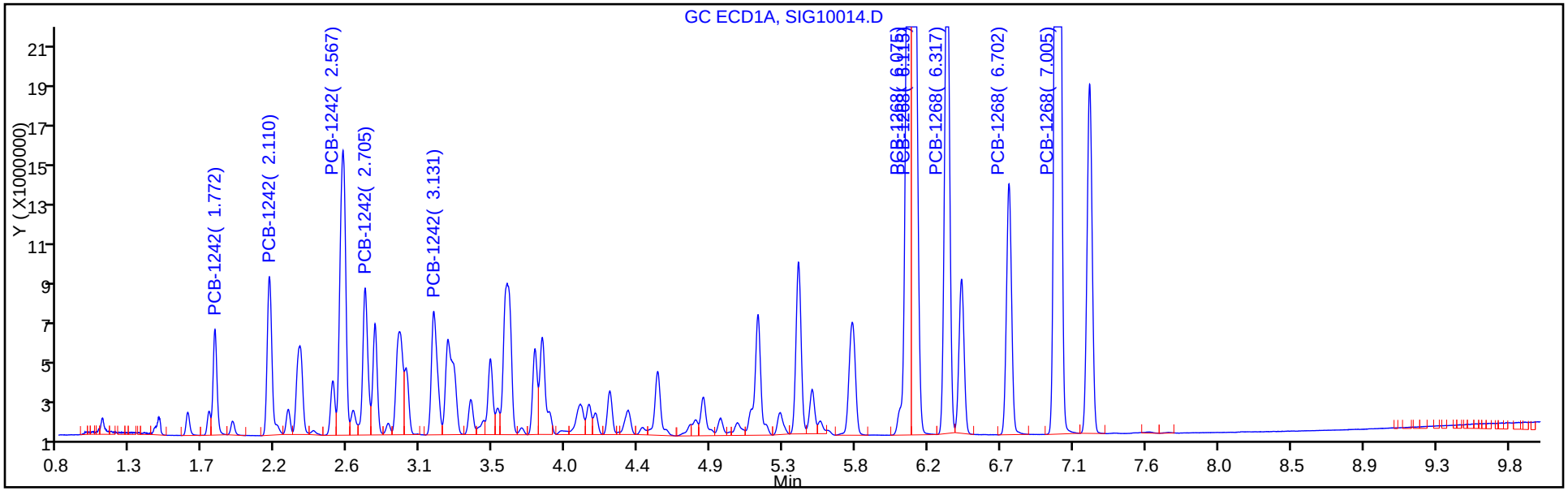
Report Date: 31-Mar-2015 06:14:04 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

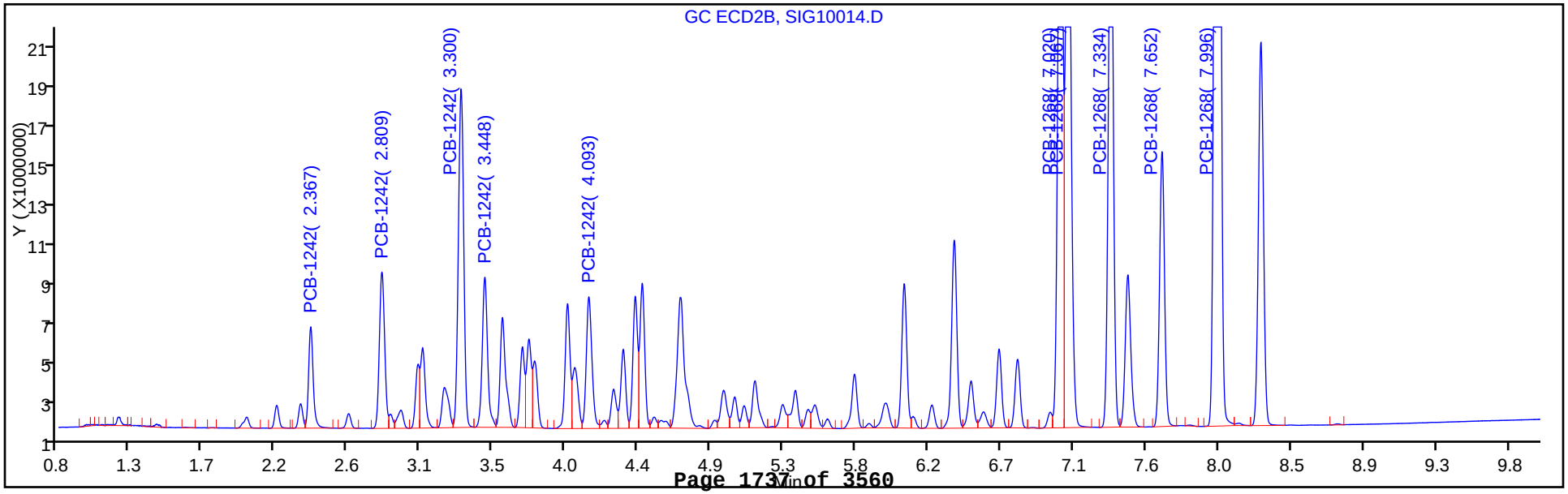
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10014.D

Injection Date:	30-Mar-2015 18:16:20	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD1 1242 1268			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10015.D
Lims ID: STD2 1242 1268
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Mar-2015 18:31:51 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-015
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub11

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:05 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.772	1.771	0.001	16610779	2.00	1.63	
1	2.111	2.111	0.000	30346707	2.00	1.62	
1	2.568	2.563	0.005	67339937	2.00	1.68	
1	2.704	2.706	-0.002	30316085	2.00	1.69	
1	3.130	3.131	-0.001	30004654	2.00	1.69	
		Average of Peak Amounts =				1.66	
2	2.366	2.369	-0.003	18998989	2.00	1.93	
2	2.808	2.811	-0.003	34158044	2.00	1.93	
2	3.300	3.301	-0.001	77729306	2.00	1.78	
2	3.447	3.447	0.000	33188564	2.00	1.66	
2	4.093	4.093	0.000	31281793	2.00	1.69	
		Average of Peak Amounts =				1.80	
						RPD = 7.83	
11 PCB-1268							
1	6.077	6.076	0.001	137050307	2.00	1.74	
1	6.114	6.115	-0.001	135795996	2.00	1.79	
1	6.317	6.318	-0.001	110088127	2.00	1.80	
1	6.701	6.703	-0.002	53989213	2.00	1.74	
1	7.003	7.004	-0.001	371381665	2.00	1.83	
		Average of Peak Amounts =				1.78	
2	7.021	7.020	0.001	155818616	2.00	1.88	
2	7.068	7.069	-0.001	161621548	2.00	1.90	
2	7.333	7.332	0.001	127789469	2.00	1.88	
2	7.652	7.650	0.002	59873041	2.00	1.84	
2	7.996	7.995	0.001	442534558	2.00	1.94	
		Average of Peak Amounts =				1.89	
						RPD = 5.81	

Reagents:

SG4268@2.0PPM_00002 Amount Added: 1.00 Units: mL

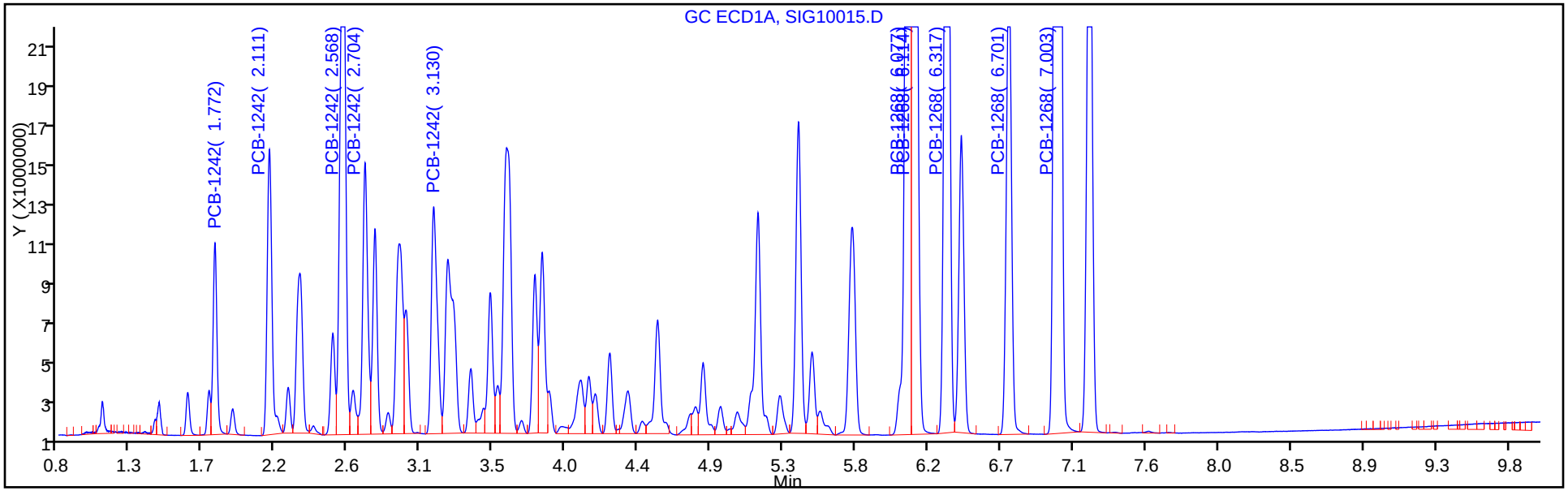
Report Date: 31-Mar-2015 06:14:07 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

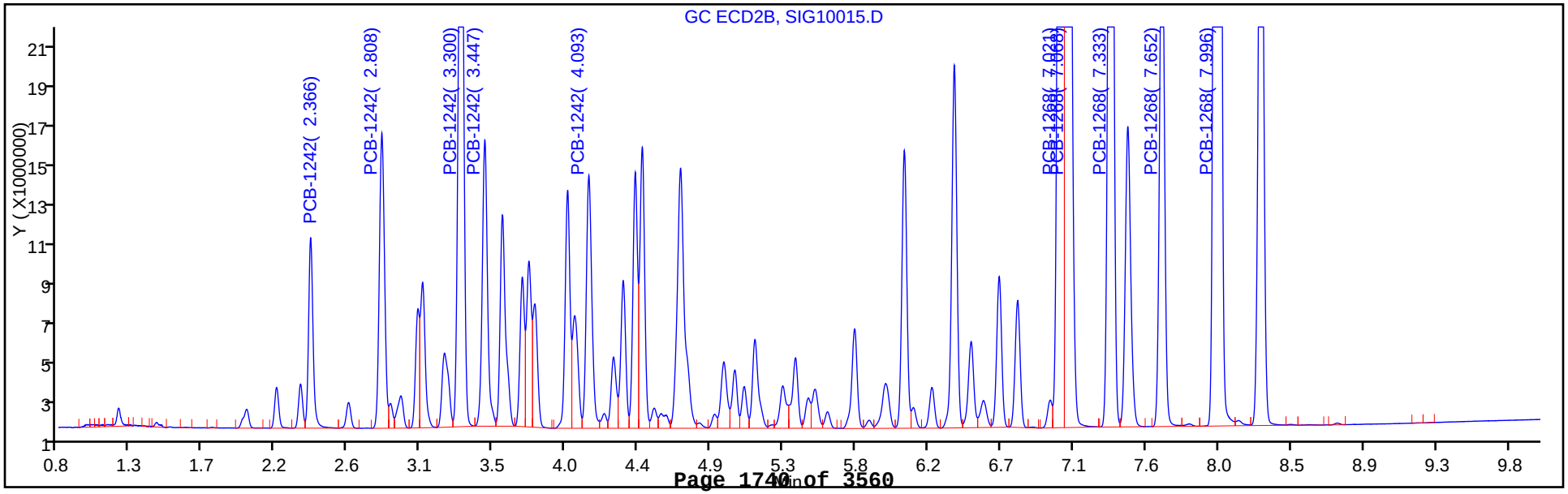
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10015.D

Injection Date:	30-Mar-2015 18:31:51	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD2 1242 1268			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 17:14 Calibration End Date: 03/30/2015 18:31 Calibration ID: 27534

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/10	SIG10010.D
Level 2	STD01 240-174339/11	SIG10011.D
Level 3	STD02 240-174339/12	SIG10012.D
Level 4	STD05 240-174339/13	SIG10013.D
Level 5	STD1 240-174339/14	SIG10014.D
Level 6	STD2 240-174339/15	SIG10015.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1242 Peak 1	2.369	2.367	2.367	2.367	2.367	2.366					2.319 - 2.419	2.367
PCB-1242 Peak 2	2.811	2.808	2.810	2.808	2.809	2.808					2.761 - 2.861	2.809
PCB-1242 Peak 3	3.301	3.299	3.301	3.301	3.300	3.300					3.251 - 3.351	3.300
PCB-1242 Peak 4	3.447	3.448	3.448	3.448	3.448	3.447					3.397 - 3.497	3.448
PCB-1242 Peak 5	4.093	4.093	4.095	4.093	4.093	4.093					4.043 - 4.143	4.093
PCB-1268 Peak 1	7.020	7.021	7.021	7.021	7.020	7.021					6.970 - 7.070	7.021
PCB-1268 Peak 2	7.069	7.068	7.069	7.068	7.067	7.068					7.019 - 7.119	7.068
PCB-1268 Peak 3	7.332	7.333	7.334	7.333	7.334	7.333					7.282 - 7.382	7.333
PCB-1268 Peak 4	7.650	7.653	7.652	7.652	7.652	7.652					7.600 - 7.700	7.652
PCB-1268 Peak 5	7.995	7.995	7.995	7.996	7.996	7.996					7.945 - 8.045	7.996

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 17:14 Calibration End Date: 03/30/2015 18:31 Calibration ID: 27534

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/10	SIG10010.D
Level 2	STD01 240-174339/11	SIG10011.D
Level 3	STD02 240-174339/12	SIG10012.D
Level 4	STD05 240-174339/13	SIG10013.D
Level 5	STD1 240-174339/14	SIG10014.D
Level 6	STD2 240-174339/15	SIG10015.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1242 Peak 1	16362180 10366059	14325440 9499495	12375020	11061268	Lin1	419972.313	9636754.58							0.9970		0.9900
PCB-1242 Peak 2	28254760 18492407	26749670 17079022	22839465	19725800	Lin1	762571.917	17297017.5							0.9960		0.9900
PCB-1242 Peak 3	51470560 40297934	47985310 38864653	42399410	41014672	Ave		43672089.8				11.3		20.0			
PCB-1242 Peak 4	24525920 17776265	22723720 16594282	19999320	18504864	Ave		20020728.5				15.3		20.0			
PCB-1242 Peak 5	21689940 16562630	21217470 15640897	18710050	17249388	Ave		18511729.1				13.5		20.0			
PCB-1268 Peak 1	91836420 78832278	88779850 77909308	79521230	81473898	Ave		83058830.7				7.0		20.0			
PCB-1268 Peak 2	91525900 82276709	89818610 80810774	81778410	84248370	Ave		85076462.2				5.3		20.0			
PCB-1268 Peak 3	74036500 64450818	72792800 63894735	65437250	67322362	Ave		67989077.4				6.4		20.0			
PCB-1268 Peak 4	36002260 30282008	35129150 29936521	32102510	31825604	Ave		32546342.1				7.7		20.0			
PCB-1268 Peak 5	227162100 225780946	235396190 221267279	222051065	235457204	Ave		227852464				2.8		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 17:14 Calibration End Date: 03/30/2015 18:31 Calibration ID: 27534

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/10	SIG10010.D
Level 2	STD01 240-174339/11	SIG10011.D
Level 3	STD02 240-174339/12	SIG10012.D
Level 4	STD05 240-174339/13	SIG10013.D
Level 5	STD1 240-174339/14	SIG10014.D
Level 6	STD2 240-174339/15	SIG10015.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	Lin1	818109 18998989	1432544	2475004	5530634	10366059	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1242 Peak 2	Lin1	1412738 34158044	2674967	4567893	9862900	18492407	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1242 Peak 3	Ave	2573528 77729306	4798531	8479882	20507336	40297934	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1242 Peak 4	Ave	1226296 33188564	2272372	3999864	9252432	17776265	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1242 Peak 5	Ave	1084497 31281793	2121747	3742010	8624694	16562630	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1268 Peak 1	Ave	4591821 155818616	8877985	15904246	40736949	78832278	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1268 Peak 2	Ave	4576295 161621548	8981861	16355682	42124185	82276709	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1268 Peak 3	Ave	3701825 127789469	7279280	13087450	33661181	64450818	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1268 Peak 4	Ave	1800113 59873041	3512915	6420502	15912802	30282008	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1268 Peak 5	Ave	11358105 442534558	23539619	44410213	117728602	225780946	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:

Ave = Average
Lin1 = Linear 1/conc

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10010.D
Lims ID: STD005 1242 1268
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Mar-2015 17:14:24 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-010
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub11

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:54 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:04:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.771	1.771	0.000	575506	0.0500	0.0563	
1	2.111	2.111	0.000	1059960	0.0500	0.0565	
1	2.563	2.563	0.000	2371981	0.0500	0.0593	
1	2.706	2.706	0.000	1061879	0.0500	0.0591	
1	3.131	3.131	0.000	991289	0.0500	0.0559	
		Average of Peak Amounts =				0.0574	
2	2.369	2.369	0.000	818109	0.0500	0.0413	
2	2.811	2.811	0.000	1412738	0.0500	0.0376	
2	3.301	3.301	0.000	2573528	0.0500	0.0589	
2	3.447	3.447	0.000	1226296	0.0500	0.0613	
2	4.093	4.093	0.000	1084497	0.0500	0.0586	
		Average of Peak Amounts =				0.0515	
						RPD = 10.84	
11 PCB-1268							
1	6.076	6.076	0.000	4448924	0.0500	0.0566	
1	6.115	6.115	0.000	4228712	0.0500	0.0556	
1	6.318	6.318	0.000	3421536	0.0500	0.0560	
1	6.703	6.703	0.000	1747532	0.0500	0.0563	
1	7.004	7.004	0.000	10749626	0.0500	0.0530	
		Average of Peak Amounts =				0.0555	
2	7.020	7.020	0.000	4591821	0.0500	0.0553	
2	7.069	7.069	0.000	4576295	0.0500	0.0538	
2	7.332	7.332	0.000	3701825	0.0500	0.0544	
2	7.650	7.650	0.000	1800113	0.0500	0.0553	
2	7.995	7.995	0.000	11358105	0.0500	0.0498	
		Average of Peak Amounts =				0.0537	
						RPD = 3.27	

Reagents:

SG4268@.05PPM_00003 Amount Added: 1.00 Units: mL

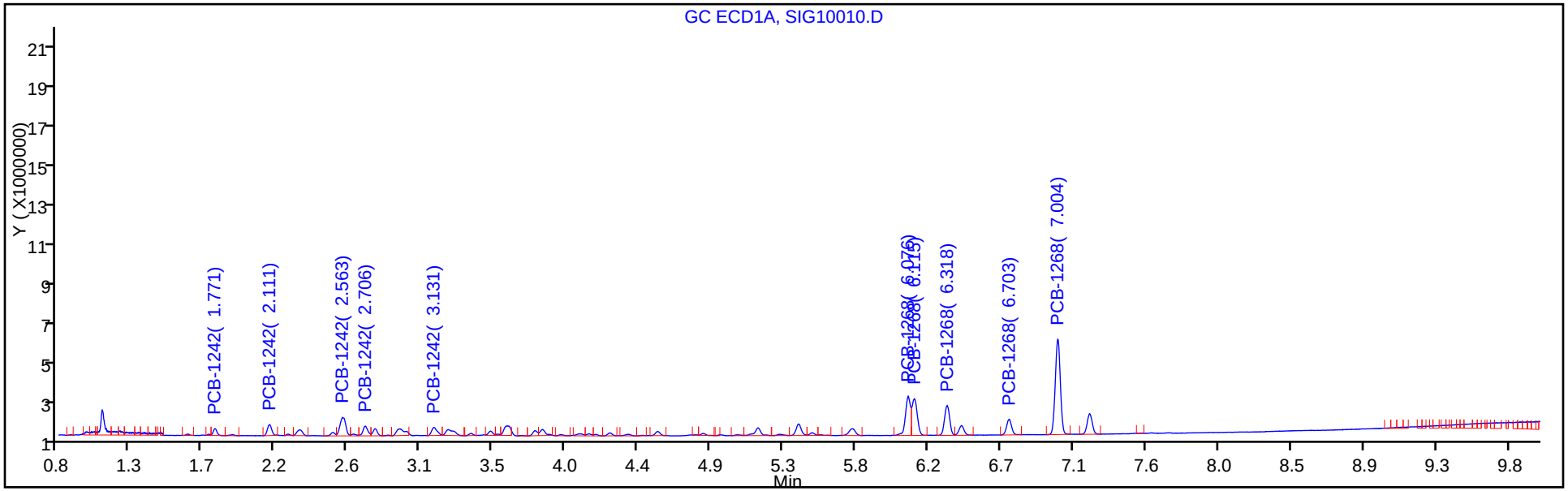
Report Date: 31-Mar-2015 06:13:55 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

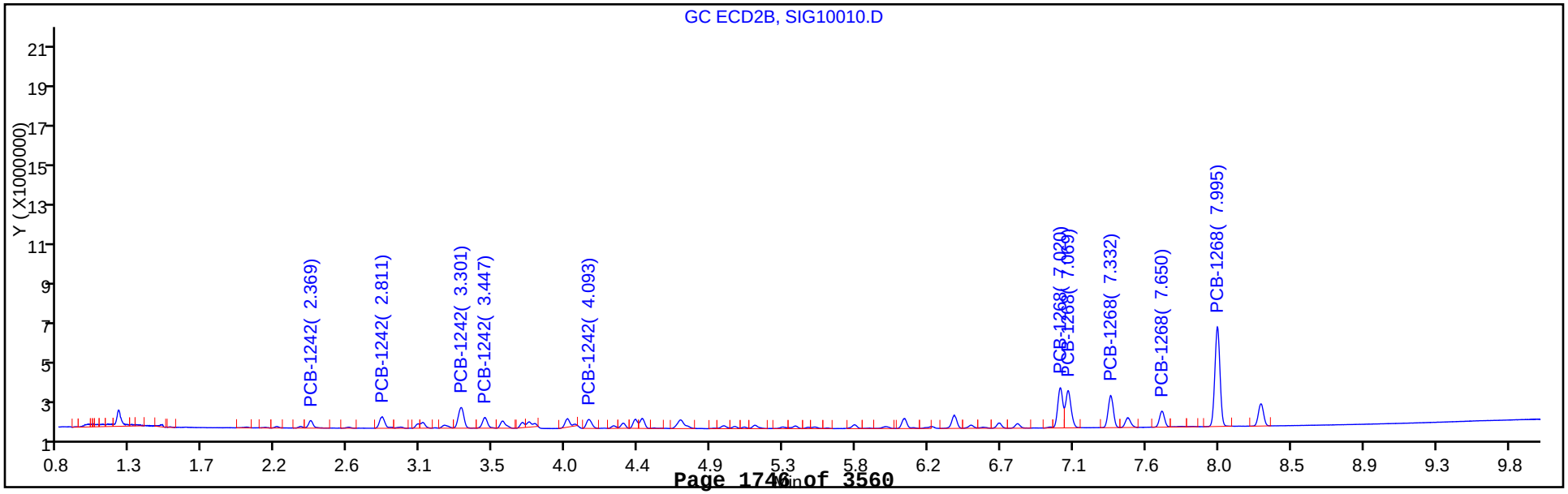
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10010.D

Injection Date:	30-Mar-2015 17:14:24	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD005 1242 1268			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10011.D
Lims ID: STD01 1242 1268
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Mar-2015 17:29:51 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-011
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub11

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:56 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.772	1.771	0.001	1172558	0.1000	0.1147	
1	2.110	2.111	-0.001	2208712	0.1000	0.1177	
1	2.567	2.563	0.004	4528170	0.1000	0.1133	
1	2.705	2.706	-0.001	2042422	0.1000	0.1138	
1	3.130	3.131	-0.001	2014138	0.1000	0.1136	
		Average of Peak Amounts =				0.1146	
2	2.367	2.369	-0.002	1432544	0.1000	0.1051	
2	2.808	2.811	-0.003	2674967	0.1000	0.1106	
2	3.299	3.301	-0.002	4798531	0.1000	0.1099	
2	3.448	3.447	0.001	2272372	0.1000	0.1135	
2	4.093	4.093	0.000	2121747	0.1000	0.1146	
		Average of Peak Amounts =				0.1107	
						RPD = 3.46	
11 PCB-1268							
1	6.076	6.076	0.000	8851156	0.1000	0.1127	
1	6.113	6.115	-0.002	8237521	0.1000	0.1084	
1	6.317	6.318	-0.001	6526476	0.1000	0.1068	
1	6.701	6.703	-0.002	3382337	0.1000	0.1089	
1	7.005	7.004	0.001	21792791	0.1000	0.1075	
		Average of Peak Amounts =				0.1089	
2	7.021	7.020	0.001	8877985	0.1000	0.1069	
2	7.068	7.069	-0.001	8981861	0.1000	0.1056	
2	7.333	7.332	0.001	7279280	0.1000	0.1071	
2	7.653	7.650	0.003	3512915	0.1000	0.1079	
2	7.995	7.995	0.000	23539619	0.1000	0.1033	
		Average of Peak Amounts =				0.1062	
						RPD = 2.52	

Reagents:

SG4268@.1PPM_00003 Amount Added: 1.00 Units: mL

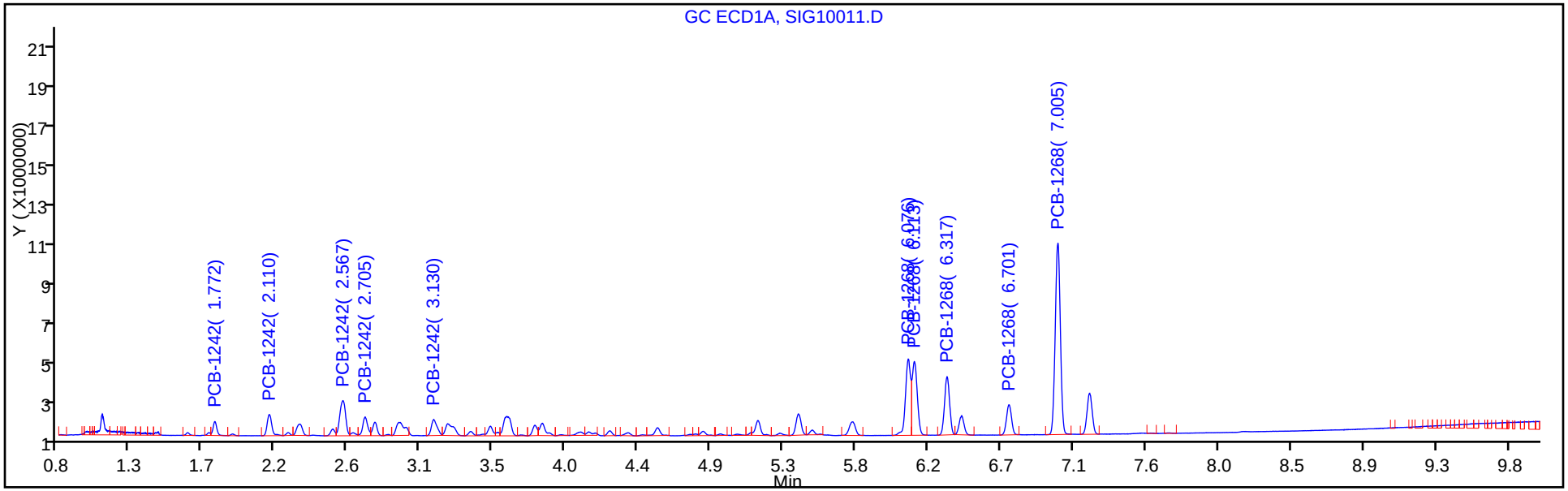
Report Date: 31-Mar-2015 06:13:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

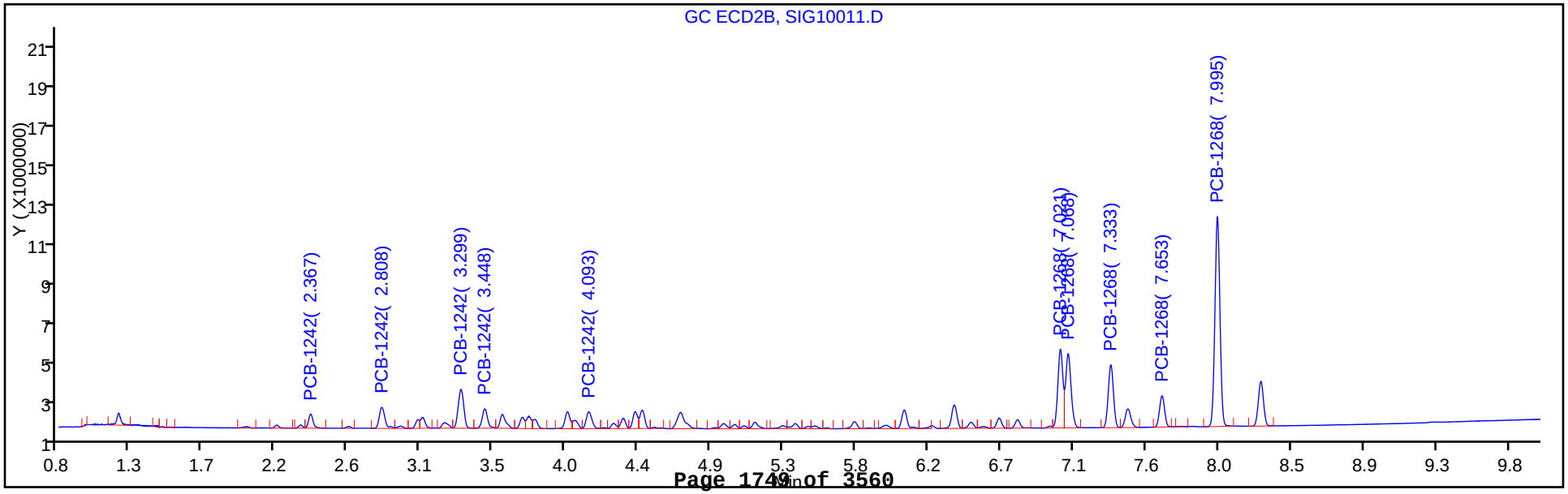
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10011.D

Injection Date:	30-Mar-2015 17:29:51	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD01 1242 1268			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10012.D
Lims ID: STD02 1242 1268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Mar-2015 17:45:16 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-012
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub11

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:13:58 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.772	1.771	0.001	2114284	0.2000	0.2069	
1	2.110	2.111	-0.001	3829321	0.2000	0.2041	
1	2.570	2.563	0.007	7977566	0.2000	0.1996	
1	2.705	2.706	-0.001	3678327	0.2000	0.2049	
1	3.130	3.131	-0.001	3639309	0.2000	0.2053	
		Average of Peak Amounts =				0.2041	
2	2.367	2.369	-0.002	2475004	0.2000	0.2132	
2	2.810	2.811	-0.001	4567893	0.2000	0.2200	
2	3.301	3.301	0.000	8479882	0.2000	0.1942	
2	3.448	3.447	0.001	3999864	0.2000	0.1998	
2	4.095	4.093	0.002	3742010	0.2000	0.2021	
		Average of Peak Amounts =				0.2059	
						RPD = 0.84	
11 PCB-1268							
1	6.075	6.076	-0.001	15609265	0.2000	0.1987	
1	6.114	6.115	-0.001	14890253	0.2000	0.1959	
1	6.316	6.318	-0.002	12077907	0.2000	0.1977	
1	6.700	6.703	-0.003	6278627	0.2000	0.2022	
1	7.003	7.004	-0.001	40193260	0.2000	0.1982	
		Average of Peak Amounts =				0.1986	
2	7.021	7.020	0.001	15904246	0.2000	0.1915	
2	7.069	7.069	0.000	16355682	0.2000	0.1922	
2	7.334	7.332	0.002	13087450	0.2000	0.1925	
2	7.652	7.650	0.002	6420502	0.2000	0.1973	
2	7.995	7.995	0.000	44410213	0.2000	0.1949	
		Average of Peak Amounts =				0.1937	
						RPD = 2.49	

Reagents:

SG4268@.2PPM_00002 Amount Added: 1.00 Units: mL

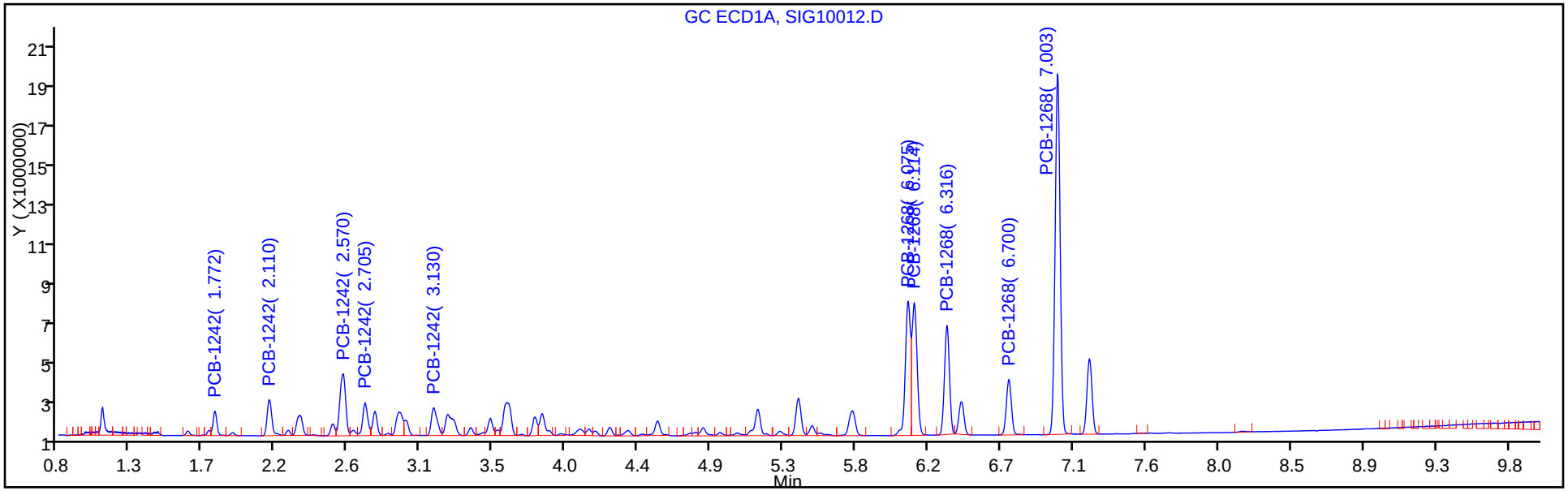
Report Date: 31-Mar-2015 06:13:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

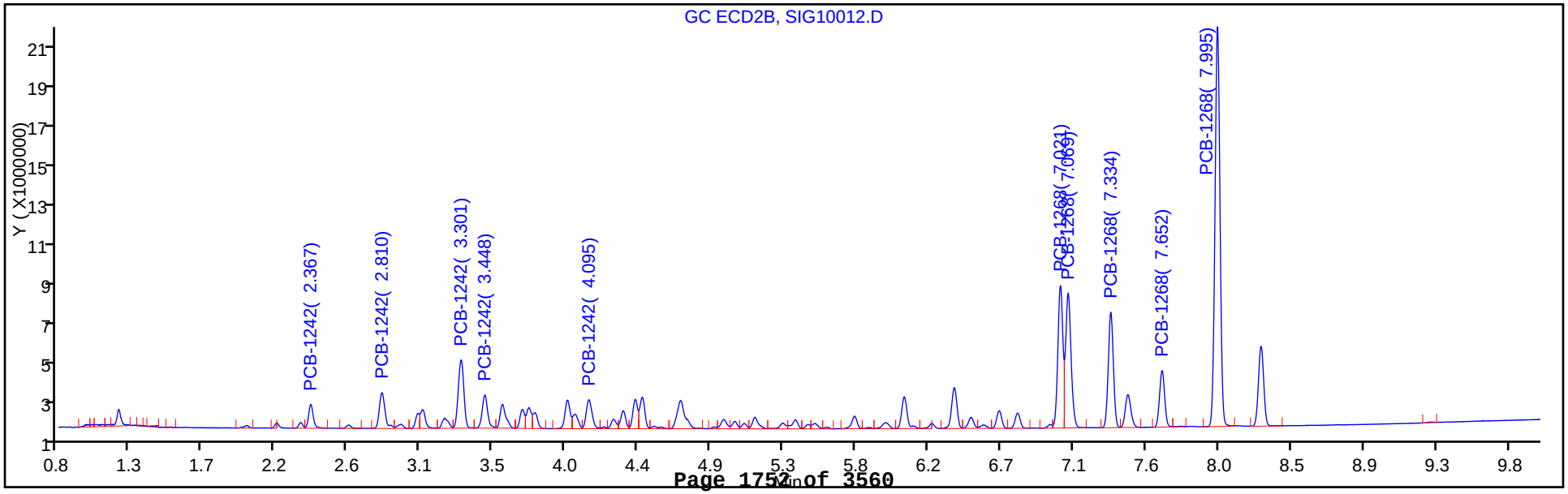
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10012.D

Injection Date:	30-Mar-2015 17:45:16	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD02 1242 1268			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10013.D
Lims ID: STD05 1242 1268
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-Mar-2015 18:00:50 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-013
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub11

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:00 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.771	1.771	0.000	4939034	0.5000	0.4833	
1	2.109	2.111	-0.002	9009948	0.5000	0.4801	
1	2.568	2.563	0.005	18458685	0.5000	0.4618	
1	2.703	2.706	-0.003	7947706	0.5000	0.4427	
1	3.132	3.131	0.001	8384357	0.5000	0.4731	
		Average of Peak Amounts =				0.4682	
2	2.367	2.369	-0.002	5530634	0.5000	0.5303	
2	2.808	2.811	-0.003	9862900	0.5000	0.5261	
2	3.301	3.301	0.000	20507336	0.5000	0.4696	
2	3.448	3.447	0.001	9252432	0.5000	0.4621	
2	4.093	4.093	0.000	8624694	0.5000	0.4659	
		Average of Peak Amounts =				0.4908	
						RPD = 4.72	
11 PCB-1268							
1	6.075	6.076	-0.001	38152970	0.5000	0.4857	
1	6.115	6.115	0.000	37239389	0.5000	0.4900	
1	6.317	6.318	-0.001	30286722	0.5000	0.4958	
1	6.703	6.703	0.000	15304126	0.5000	0.4929	
1	7.003	7.004	-0.001	101628401	0.5000	0.5013	
		Average of Peak Amounts =				0.4931	
2	7.021	7.020	0.001	40736949	0.5000	0.4905	
2	7.068	7.069	-0.001	42124185	0.5000	0.4951	
2	7.333	7.332	0.001	33661181	0.5000	0.4951	
2	7.652	7.650	0.002	15912802	0.5000	0.4889	
2	7.996	7.995	0.001	117728602	0.5000	0.5167	
		Average of Peak Amounts =				0.4973	
						RPD = 0.83	

Reagents:

SG4268@0.5PPM_00003 Amount Added: 1.00 Units: mL

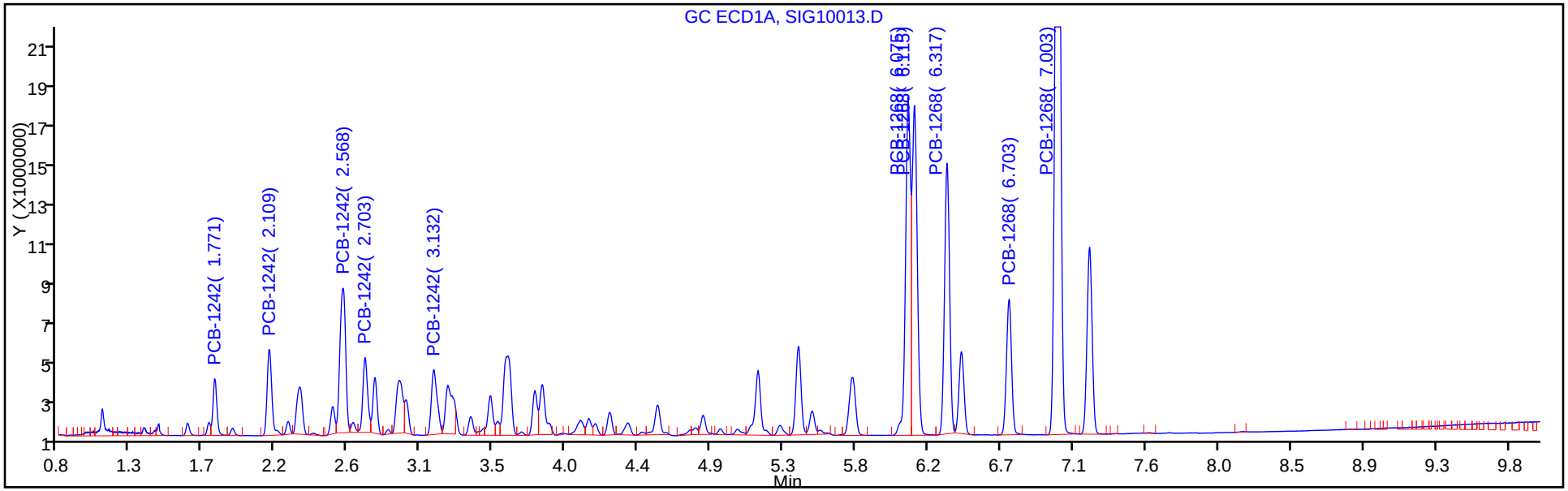
Report Date: 31-Mar-2015 06:14:01 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

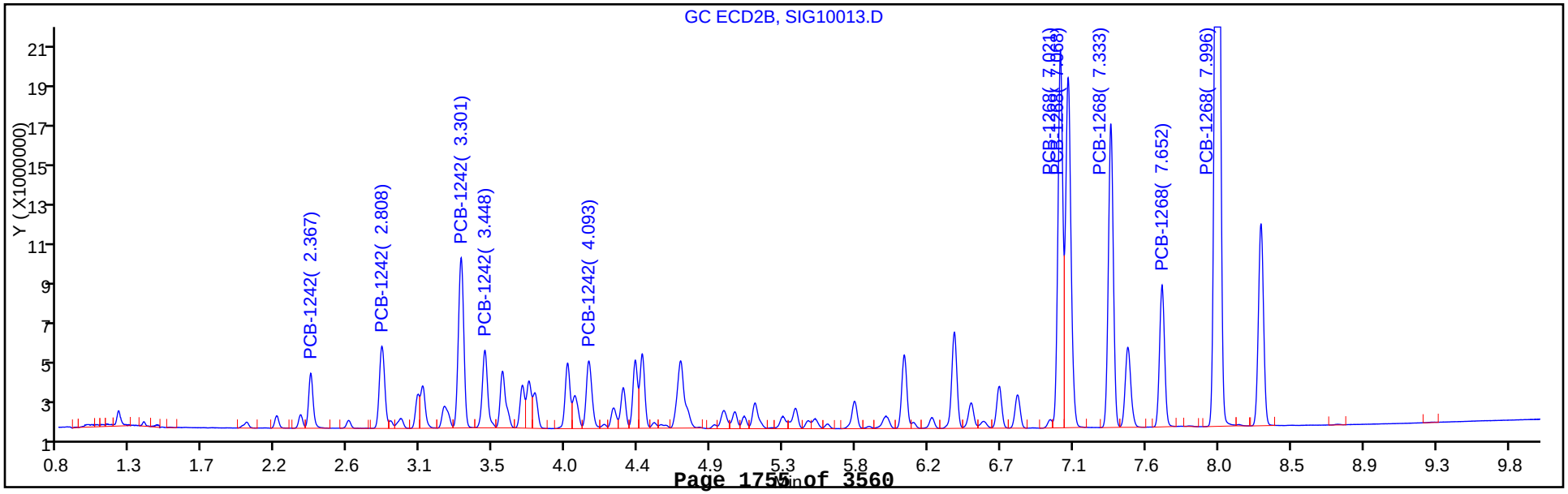
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10013.D

Injection Date:	30-Mar-2015 18:00:50	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD05 1242 1268			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10014.D
Lims ID: STD1 1242 1268
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Mar-2015 18:16:20 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-014
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub11

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:03 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.772	1.771	0.001	9329446	1.00	0.9129	
1	2.110	2.111	-0.001	16969620	1.00	0.9043	
1	2.567	2.563	0.004	36647861	1.00	0.9168	
1	2.705	2.706	-0.001	16616577	1.00	0.9255	
1	3.131	3.131	0.000	16402311	1.00	0.9255	
		Average of Peak Amounts =				0.9170	
2	2.367	2.369	-0.002	10366059	1.00	1.03	
2	2.809	2.811	-0.002	18492407	1.00	1.03	
2	3.300	3.301	-0.001	40297934	1.00	0.9227	
2	3.448	3.447	0.001	17776265	1.00	0.8879	
2	4.093	4.093	0.000	16562630	1.00	0.8947	
		Average of Peak Amounts =				0.9525	
						RPD = 3.80	
11 PCB-1268							
1	6.075	6.076	-0.001	70935317	1.00	0.9031	
1	6.115	6.115	0.000	72193667	1.00	0.9500	
1	6.317	6.318	-0.001	56833676	1.00	0.9303	
1	6.702	6.703	-0.001	28511059	1.00	0.9183	
1	7.005	7.004	0.001	193651952	1.00	0.9551	
		Average of Peak Amounts =				0.9314	
2	7.020	7.020	0.000	78832278	1.00	0.9491	
2	7.067	7.069	-0.002	82276709	1.00	0.9671	
2	7.334	7.332	0.002	64450818	1.00	0.9480	
2	7.652	7.650	0.002	30282008	1.00	0.9304	
2	7.996	7.995	0.001	225780946	1.00	0.99	
		Average of Peak Amounts =				0.9571	
						RPD = 2.73	

Reagents:

SG42/68@1.0PP_00003 Amount Added: 1.00 Units: mL

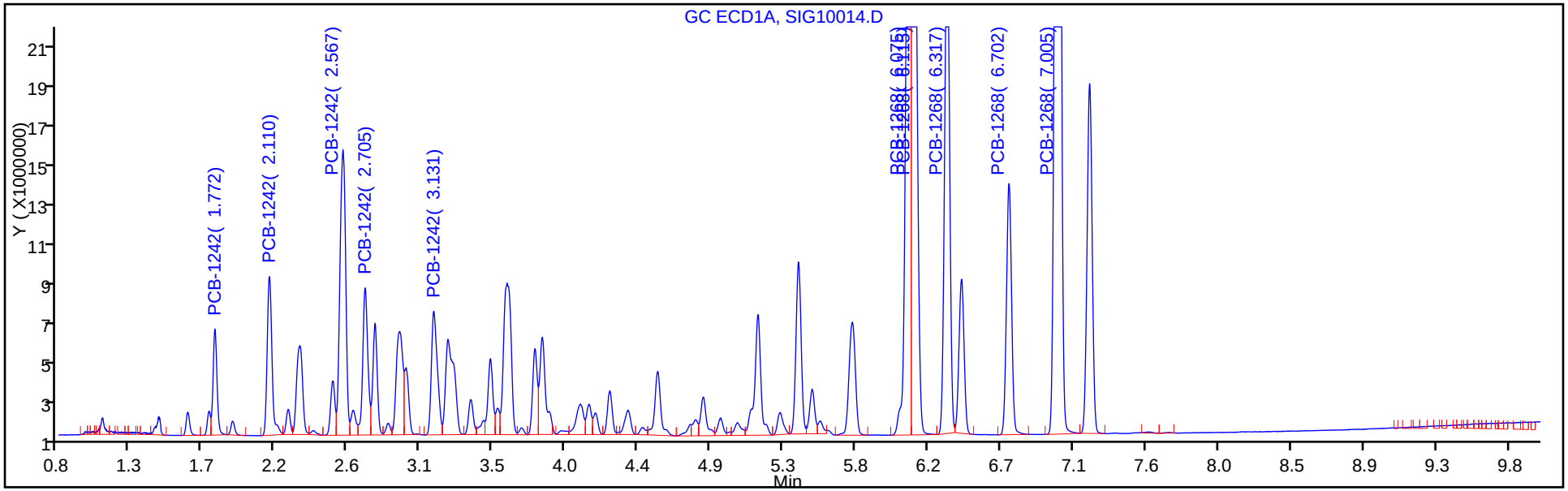
Report Date: 31-Mar-2015 06:14:05 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

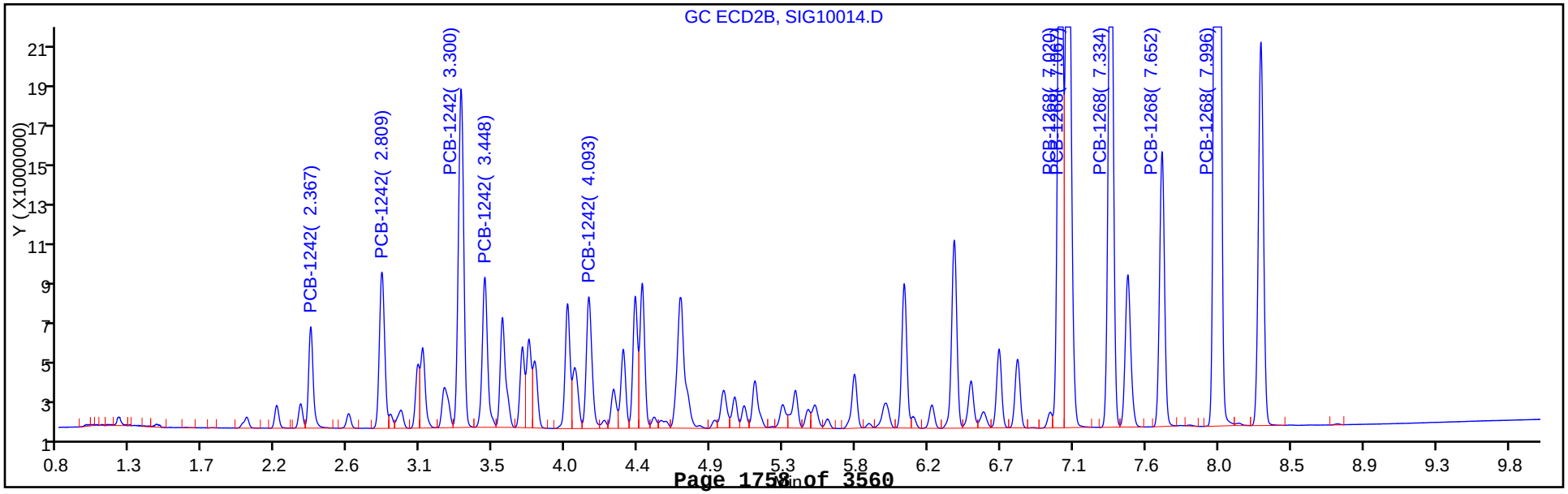
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10014.D

Injection Date:	30-Mar-2015 18:16:20	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD1 1242 1268			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10015.D
Lims ID: STD2 1242 1268
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Mar-2015 18:31:51 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-015
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub11

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:05 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.772	1.771	0.001	16610779	2.00	1.63	
1	2.111	2.111	0.000	30346707	2.00	1.62	
1	2.568	2.563	0.005	67339937	2.00	1.68	
1	2.704	2.706	-0.002	30316085	2.00	1.69	
1	3.130	3.131	-0.001	30004654	2.00	1.69	
		Average of Peak Amounts =				1.66	
2	2.366	2.369	-0.003	18998989	2.00	1.93	
2	2.808	2.811	-0.003	34158044	2.00	1.93	
2	3.300	3.301	-0.001	77729306	2.00	1.78	
2	3.447	3.447	0.000	33188564	2.00	1.66	
2	4.093	4.093	0.000	31281793	2.00	1.69	
		Average of Peak Amounts =				1.80	
						RPD = 7.83	
11 PCB-1268							
1	6.077	6.076	0.001	137050307	2.00	1.74	
1	6.114	6.115	-0.001	135795996	2.00	1.79	
1	6.317	6.318	-0.001	110088127	2.00	1.80	
1	6.701	6.703	-0.002	53989213	2.00	1.74	
1	7.003	7.004	-0.001	371381665	2.00	1.83	
		Average of Peak Amounts =				1.78	
2	7.021	7.020	0.001	155818616	2.00	1.88	
2	7.068	7.069	-0.001	161621548	2.00	1.90	
2	7.333	7.332	0.001	127789469	2.00	1.88	
2	7.652	7.650	0.002	59873041	2.00	1.84	
2	7.996	7.995	0.001	442534558	2.00	1.94	
		Average of Peak Amounts =				1.89	
						RPD = 5.81	

Reagents:

SG4268@2.0PPM_00002 Amount Added: 1.00 Units: mL

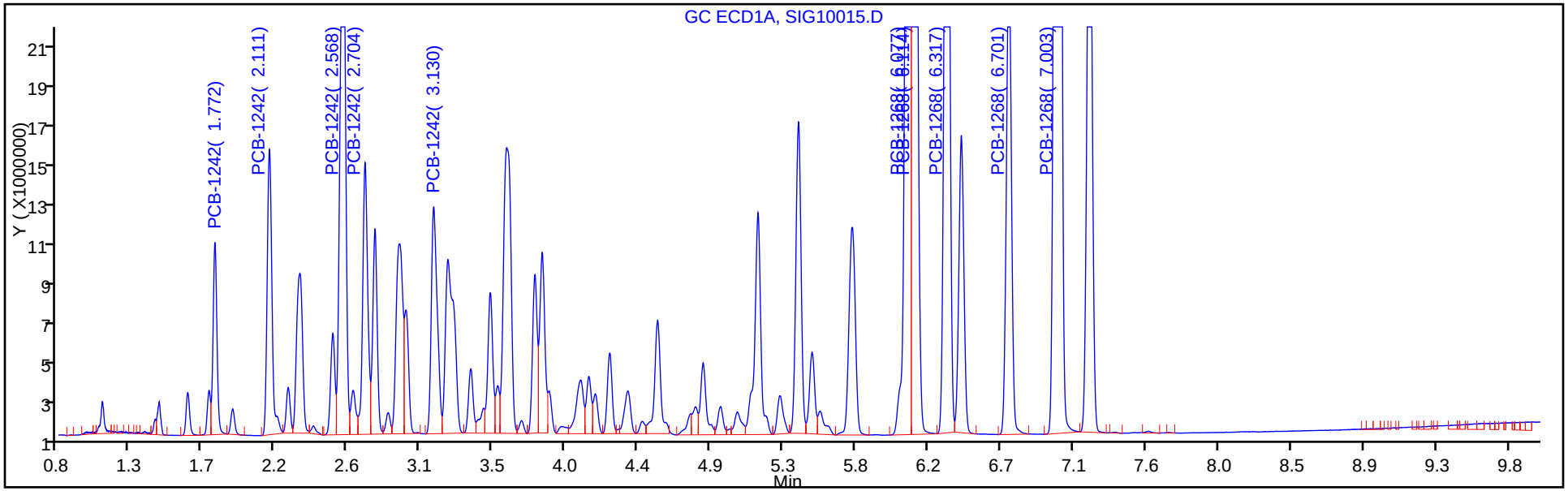
Report Date: 31-Mar-2015 06:14:07 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

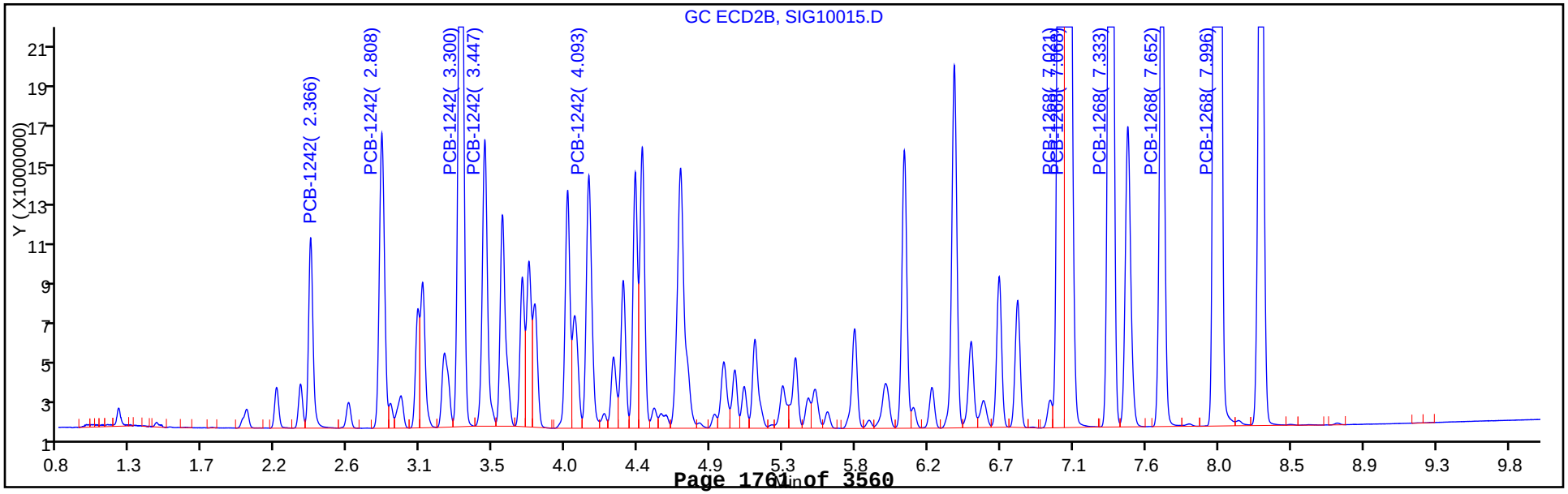
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10015.D

Injection Date:	30-Mar-2015 18:31:51	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD2 1242 1268			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 18:47 Calibration End Date: 03/30/2015 20:05 Calibration ID: 27539

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/16	SIG10016.D
Level 2	STD01 240-174339/17	SIG10017.D
Level 3	STD02 240-174339/18	SIG10018.D
Level 4	STD05 240-174339/19	SIG10019.D
Level 5	STD1 240-174339/20	SIG10020.D
Level 6	STD2 240-174339/21	SIG10021.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1248 Peak 1	2.108	2.109	2.108	2.109	2.108	2.114					2.058 - 2.158	2.109
PCB-1248 Peak 2	2.563	2.566	2.565	2.566	2.565	2.569					2.513 - 2.613	2.566
PCB-1248 Peak 3	3.128	3.133	3.130	3.130	3.130	3.135					3.078 - 3.178	3.131
PCB-1248 Peak 4	3.758	3.761	3.759	3.760	3.760	3.765					3.708 - 3.808	3.761
PCB-1248 Peak 5	4.223	4.224	4.225	4.222	4.224	4.229					4.173 - 4.273	4.225

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 18:47 Calibration End Date: 03/30/2015 20:05 Calibration ID: 27539

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/16	SIG10016.D
Level 2	STD01 240-174339/17	SIG10017.D
Level 3	STD02 240-174339/18	SIG10018.D
Level 4	STD05 240-174339/19	SIG10019.D
Level 5	STD1 240-174339/20	SIG10020.D
Level 6	STD2 240-174339/21	SIG10021.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1248 Peak 1	11210480 8317950	9778240 7600051	10438860	9128742	Ave		9412387.17				14.2		20.0			
PCB-1248 Peak 2	32509700 23303535	28523740 21869608	27947360	25389612	Ave		26590592.5				14.6		20.0			
PCB-1248 Peak 3	33714760 24508425	29904540 22640212	29309465	26696470	Ave		27795645.3				14.4		20.0			
PCB-1248 Peak 4	18987320 14571930	17012170 13922607	17001430	16026472	Ave		16253654.8				11.3		20.0			
PCB-1248 Peak 5	15715760 11675176	13644570 11424881	14111720	12830662	Ave		13233794.8				12.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 18:47 Calibration End Date: 03/30/2015 20:05 Calibration ID: 27539

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/16	SIG10016.D
Level 2	STD01 240-174339/17	SIG10017.D
Level 3	STD02 240-174339/18	SIG10018.D
Level 4	STD05 240-174339/19	SIG10019.D
Level 5	STD1 240-174339/20	SIG10020.D
Level 6	STD2 240-174339/21	SIG10021.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	Ave	560524 15200102	977824	2087772	4564371	8317950	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1248 Peak 2	Ave	1625485 43739216	2852374	5589472	12694806	23303535	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1248 Peak 3	Ave	1685738 45280424	2990454	5861893	13348235	24508425	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1248 Peak 4	Ave	949366 27845213	1701217	3400286	8013236	14571930	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1248 Peak 5	Ave	785788 22849761	1364457	2822344	6415331	11675176	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10016.D
Lims ID: STD005 1248
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Mar-2015 18:47:21 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-016
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub3

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:07 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:05:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.108	2.108	0.000	560524	0.0500	0.0596	
1	2.563	2.563	0.000	1625485	0.0500	0.0611	
1	3.128	3.128	0.000	1685738	0.0500	0.0606	
1	3.758	3.758	0.000	949366	0.0500	0.0584	
1	4.223	4.223	0.000	785788	0.0500	0.0594	
		Average of Peak Amounts =				0.0598	
2	2.807	2.807	0.000	726028	0.0500	0.0642	
2	3.296	3.296	0.000	1772934	0.0500	0.0615	
2	4.091	4.091	0.000	1635560	0.0500	0.0601	
2	4.423	4.423	0.000	1784798	0.0500	0.0597	
2	5.125	5.125	0.000	996946	0.0500	0.0598	
		Average of Peak Amounts =				0.0611	
						RPD = 2.05	

Reagents:

SG1248@.05ppm_00015 Amount Added: 1.00 Units: mL

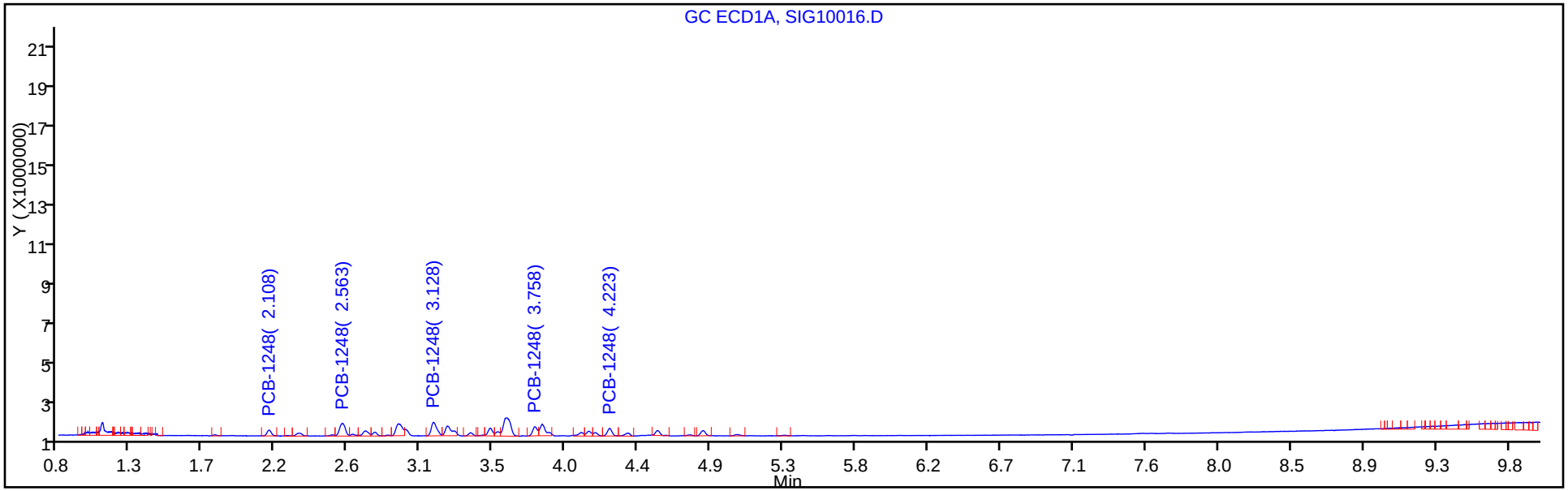
Report Date: 31-Mar-2015 06:14:08 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

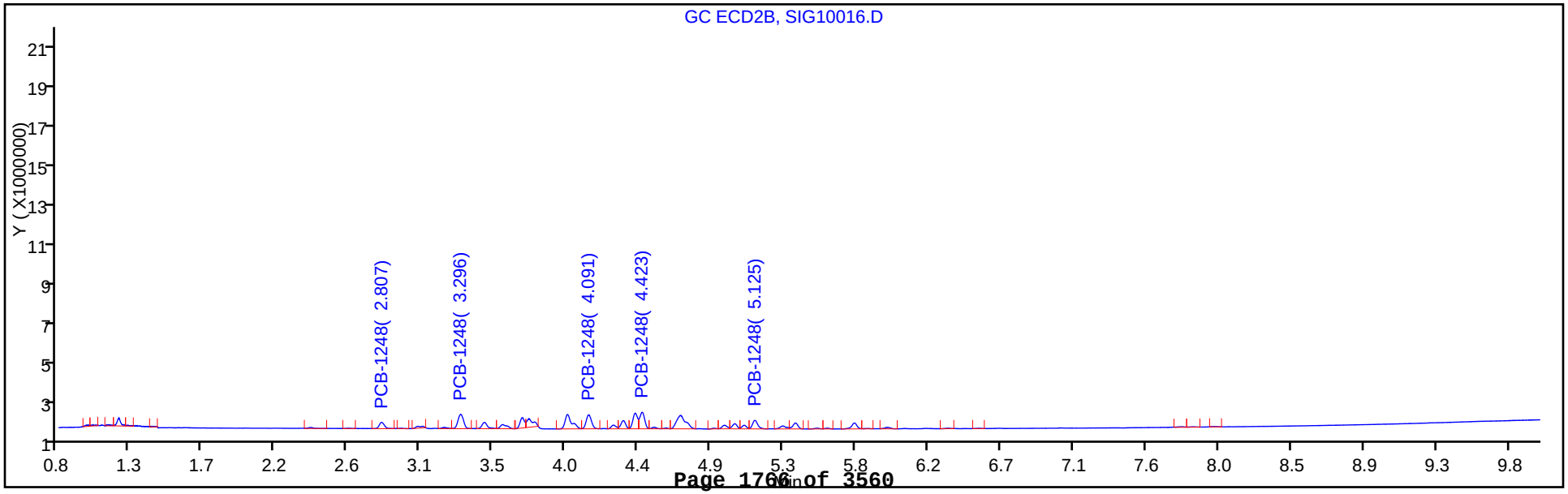
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10016.D

Injection Date:	30-Mar-2015 18:47:21	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD005 1248			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10017.D
Lims ID: STD01 1248
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Mar-2015 19:02:59 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-017
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub3

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:09 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.109	2.108	0.001	977824	0.1000	0.1039	
1	2.566	2.563	0.003	2852374	0.1000	0.1073	
1	3.133	3.128	0.005	2990454	0.1000	0.1076	
1	3.761	3.758	0.003	1701217	0.1000	0.1047	
1	4.224	4.223	0.001	1364457	0.1000	0.1031	
		Average of Peak Amounts =				0.1053	
2	2.808	2.807	0.001	1272915	0.1000	0.1126	
2	3.299	3.296	0.003	3093016	0.1000	0.1074	
2	4.094	4.091	0.003	2841864	0.1000	0.1045	
2	4.424	4.423	0.001	3170679	0.1000	0.1060	
2	5.125	5.125	0.000	1829657	0.1000	0.1097	
		Average of Peak Amounts =				0.1080	
						RPD = 2.55	

Reagents:

SG1248@0.1PPM_00012 Amount Added: 1.00 Units: mL

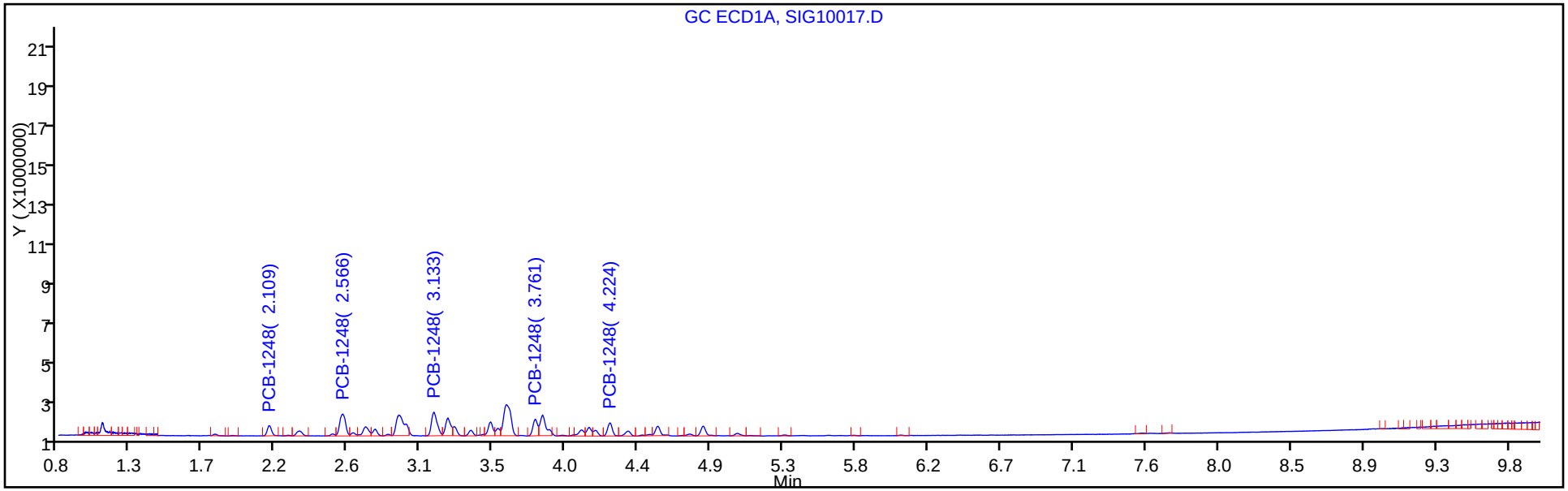
Report Date: 31-Mar-2015 06:14:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

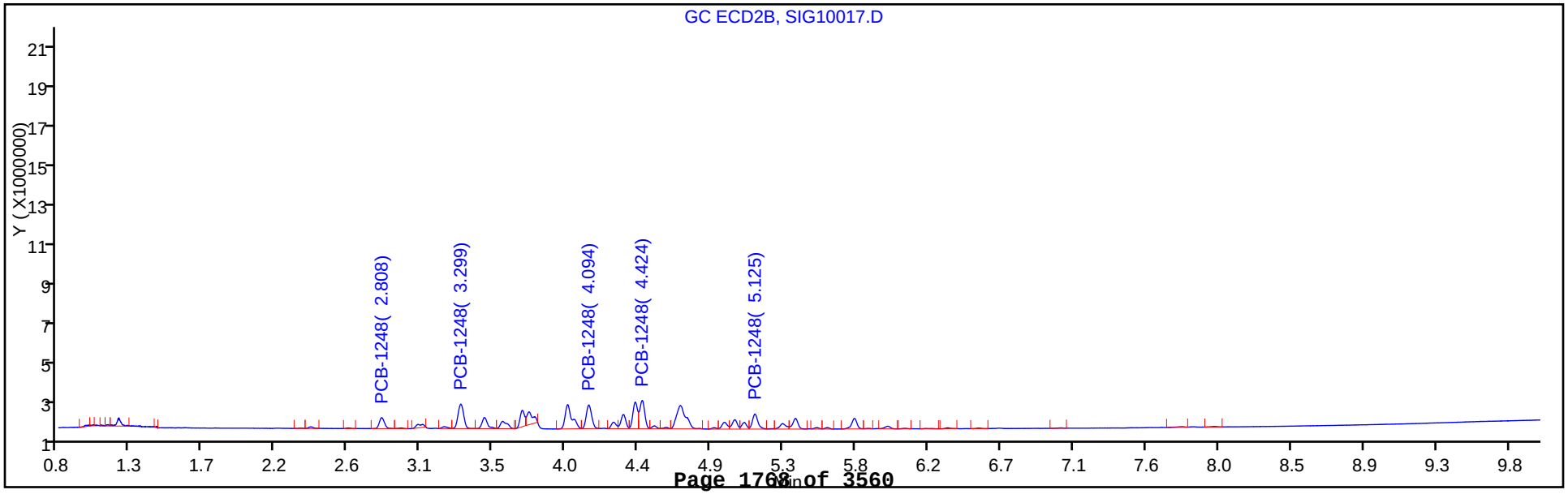
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10017.D

Injection Date:	30-Mar-2015 19:02:59	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD01 1248			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10018.D
Lims ID: STD02 1248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Mar-2015 19:18:27 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-018
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub3

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:11 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.108	2.108	0.000	2087772	0.2000	0.2218	
1	2.565	2.563	0.002	5589472	0.2000	0.2102	
1	3.130	3.128	0.002	5861893	0.2000	0.2109	
1	3.759	3.758	0.001	3400286	0.2000	0.2092	
1	4.225	4.223	0.002	2822344	0.2000	0.2133	
		Average of Peak Amounts =				0.2131	
2	2.808	2.807	0.001	2377272	0.2000	0.2103	
2	3.299	3.296	0.003	5932934	0.2000	0.2060	
2	4.093	4.091	0.002	5697379	0.2000	0.2095	
2	4.424	4.423	0.001	6150649	0.2000	0.2056	
2	5.123	5.125	-0.002	3503560	0.2000	0.2100	
		Average of Peak Amounts =				0.2083	
						RPD = 2.28	

Reagents:

SG1248@0.2ppm_00012 Amount Added: 1.00 Units: mL

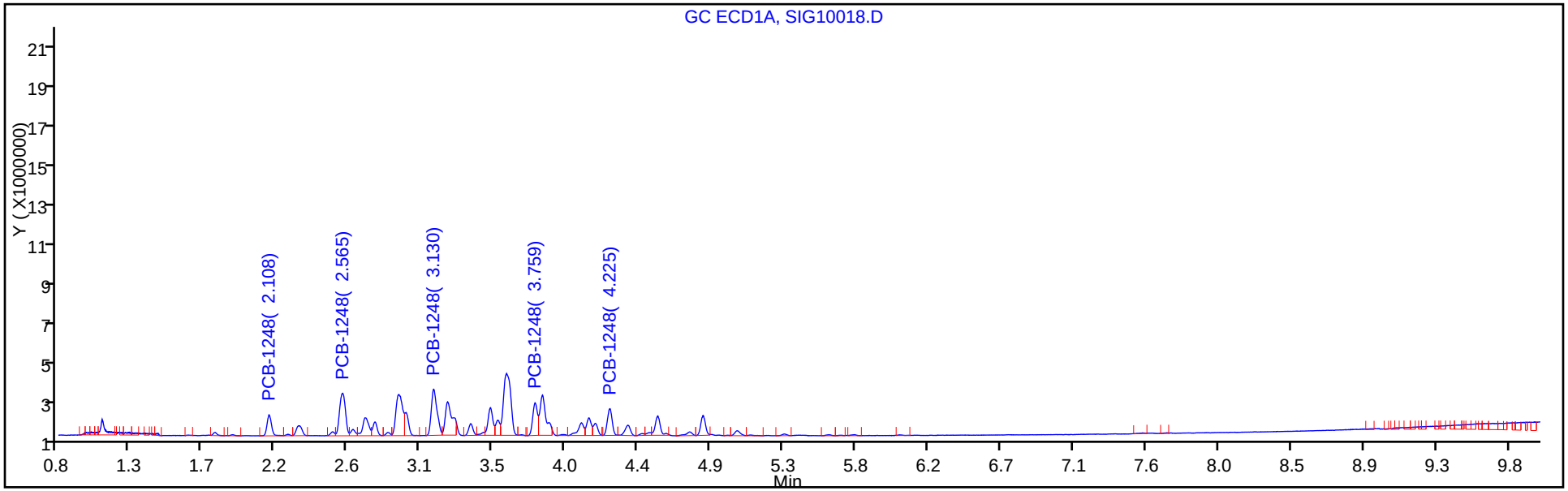
Report Date: 31-Mar-2015 06:14:12 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

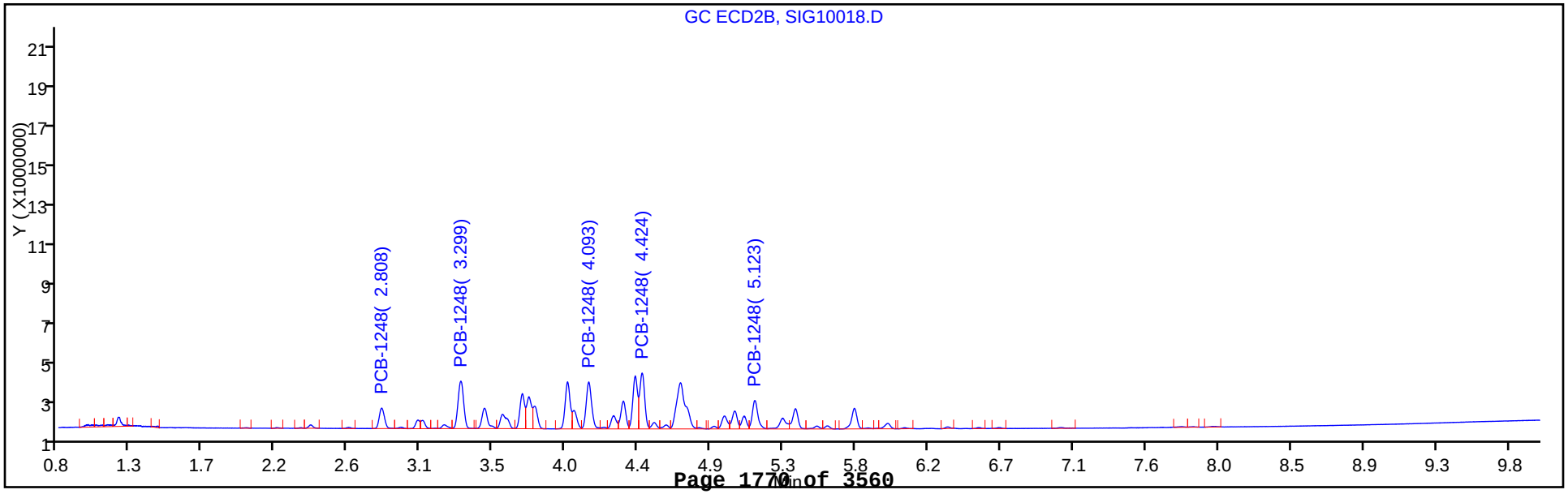
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10018.D

Injection Date:	30-Mar-2015 19:18:27	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD02 1248			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10019.D
Lims ID: STD05 1248
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-Mar-2015 19:33:56 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-019
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub3

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:13 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.109	2.108	0.001	4564371	0.5000	0.4849	
1	2.566	2.563	0.003	12694806	0.5000	0.4774	
1	3.130	3.128	0.002	13348235	0.5000	0.4802	
1	3.760	3.758	0.002	8013236	0.5000	0.4930	
1	4.222	4.223	-0.001	6415331	0.5000	0.4848	
		Average of Peak Amounts =				0.4841	
2	2.808	2.807	0.001	5276314	0.5000	0.4667	
2	3.299	3.296	0.003	13447918	0.5000	0.4668	
2	4.093	4.091	0.002	12961278	0.5000	0.4766	
2	4.424	4.423	0.001	14047865	0.5000	0.4696	
2	5.124	5.125	-0.001	7914566	0.5000	0.4744	
		Average of Peak Amounts =				0.4708	
						RPD = 2.77	

Reagents:

SG1248@0.5ppm_00015 Amount Added: 1.00 Units: mL

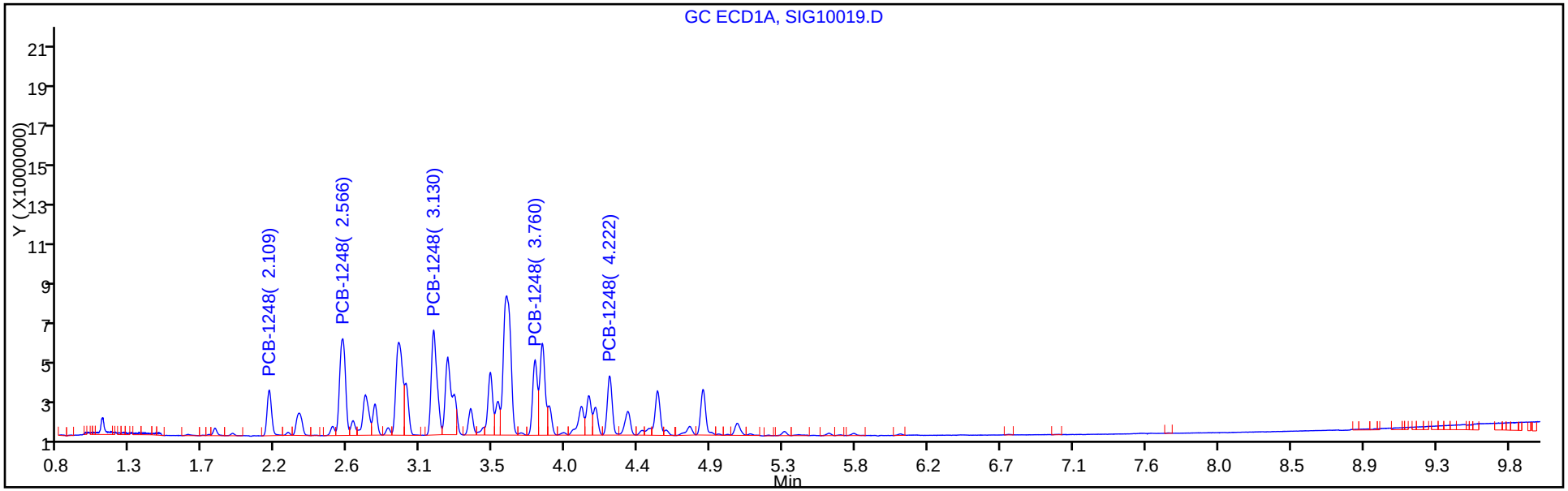
Report Date: 31-Mar-2015 06:14:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

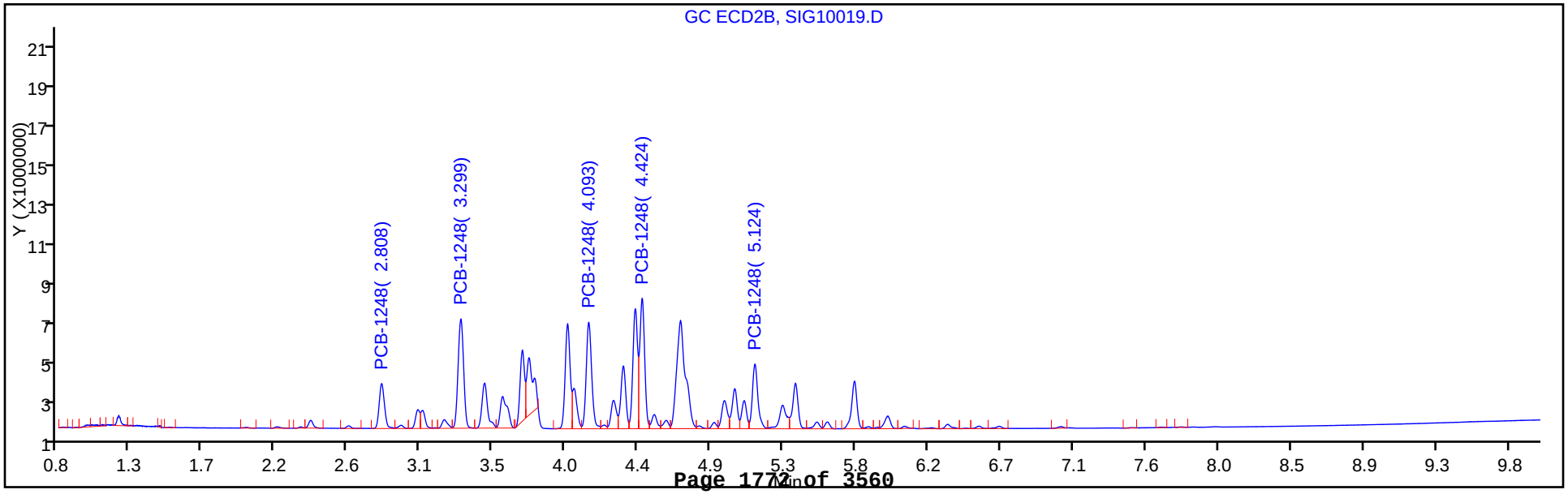
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10019.D

Injection Date:	30-Mar-2015 19:33:56	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD05 1248			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10020.D
Lims ID: STD1 1248
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Mar-2015 19:49:28 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-020
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub3

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:15 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.108	2.108	0.000	8317950	1.00	0.8837	
1	2.565	2.563	0.002	23303535	1.00	0.8764	
1	3.130	3.128	0.002	24508425	1.00	0.8817	
1	3.760	3.758	0.002	14571930	1.00	0.8965	
1	4.224	4.223	0.001	11675176	1.00	0.8822	
		Average of Peak Amounts =				0.8841	
2	2.808	2.807	0.001	9441201	1.00	0.8350	
2	3.299	3.296	0.003	25240451	1.00	0.8762	
2	4.093	4.091	0.002	24161186	1.00	0.8884	
2	4.424	4.423	0.001	26813471	1.00	0.8964	
2	5.125	5.125	0.000	14485123	1.00	0.8683	
		Average of Peak Amounts =				0.8729	
						RPD = 1.28	

Reagents:

SG1248@1.0ppm_00010 Amount Added: 1.00 Units: mL

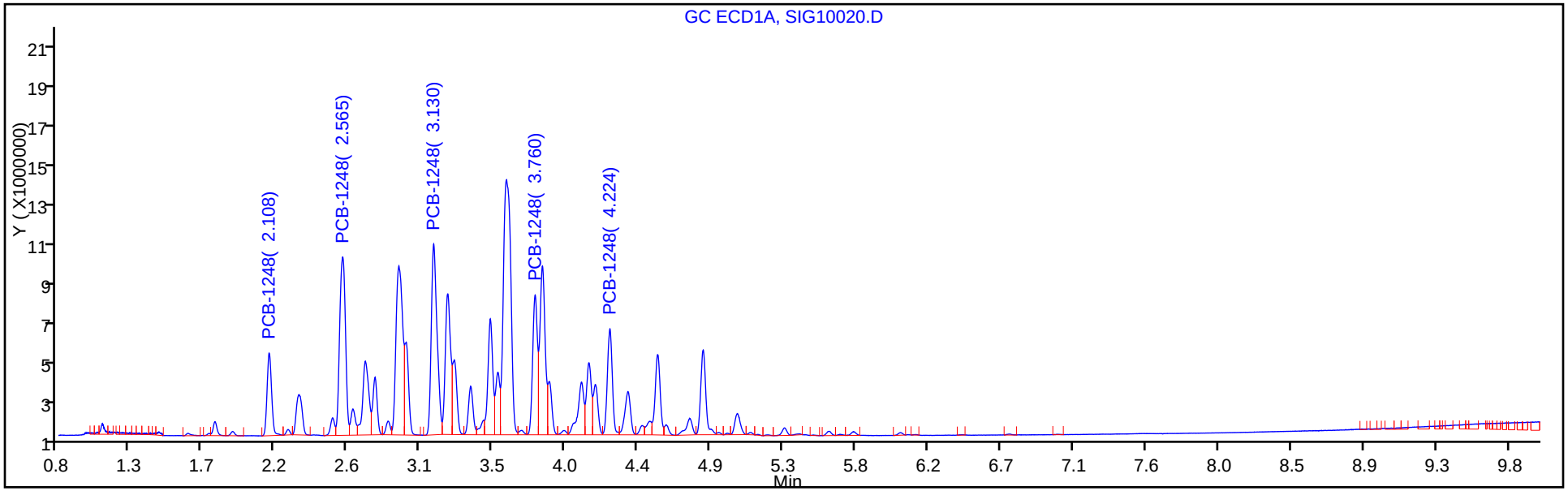
Report Date: 31-Mar-2015 06:14:17 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

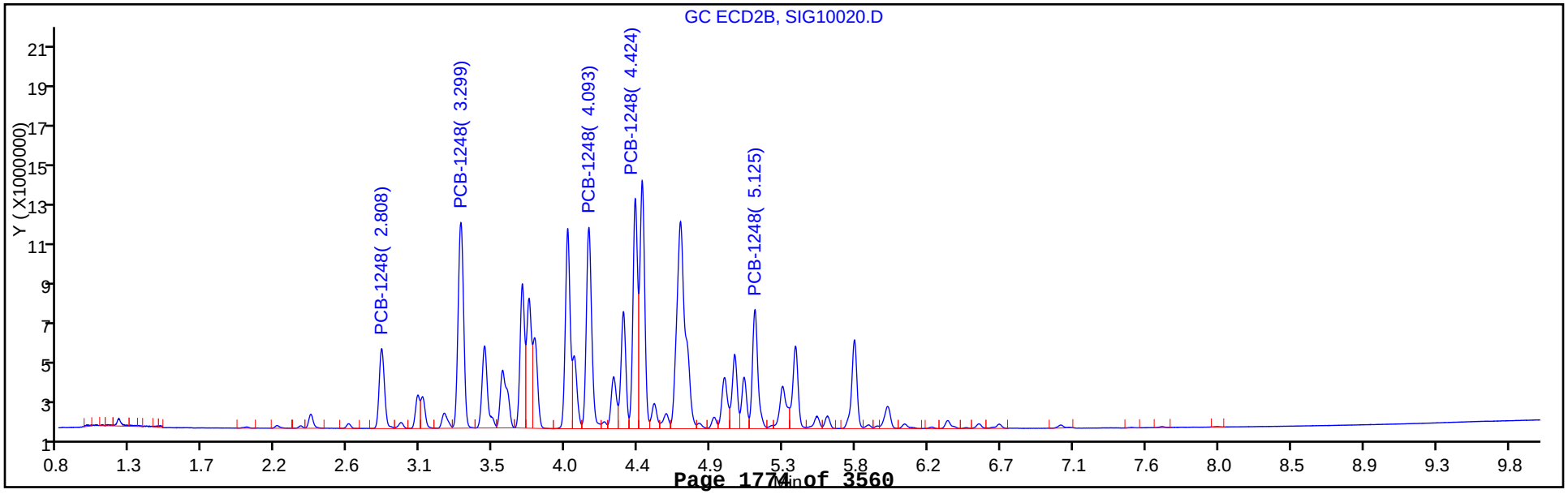
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10020.D

Injection Date:	30-Mar-2015 19:49:28	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD1 1248			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10021.D
Lims ID: STD2 1248
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Mar-2015 20:05:05 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-021
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub3

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:17 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.114	2.108	0.006	15200102	2.00	1.61	
1	2.569	2.563	0.006	43739216	2.00	1.64	
1	3.135	3.128	0.007	45280424	2.00	1.63	
1	3.765	3.758	0.007	27845213	2.00	1.71	
1	4.229	4.223	0.006	22849761	2.00	1.73	
		Average of Peak Amounts =				1.67	
2	2.811	2.807	0.004	17418422	2.00	1.54	
2	3.304	3.296	0.008	49308624	2.00	1.71	
2	4.098	4.091	0.007	46958450	2.00	1.73	
2	4.429	4.423	0.006	52808122	2.00	1.77	
2	5.129	5.125	0.004	28060900	2.00	1.68	
		Average of Peak Amounts =				1.69	
						RPD = 1.17	

Reagents:

SG1248@2.0ppm_00010 Amount Added: 1.00 Units: mL

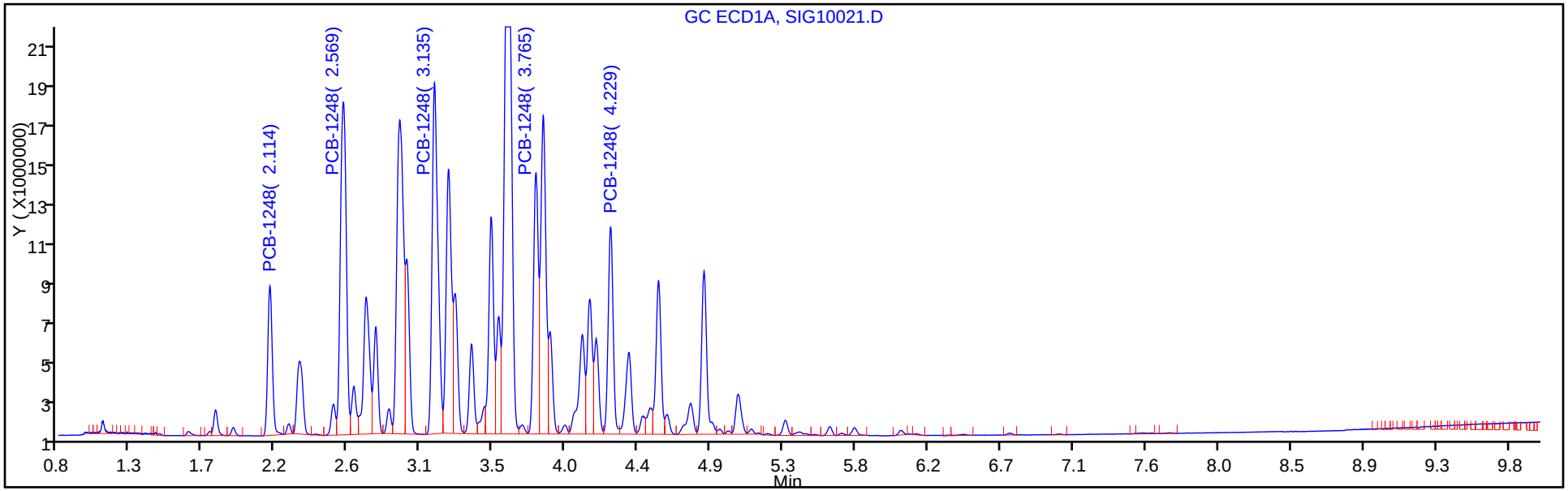
Report Date: 31-Mar-2015 06:14:19 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

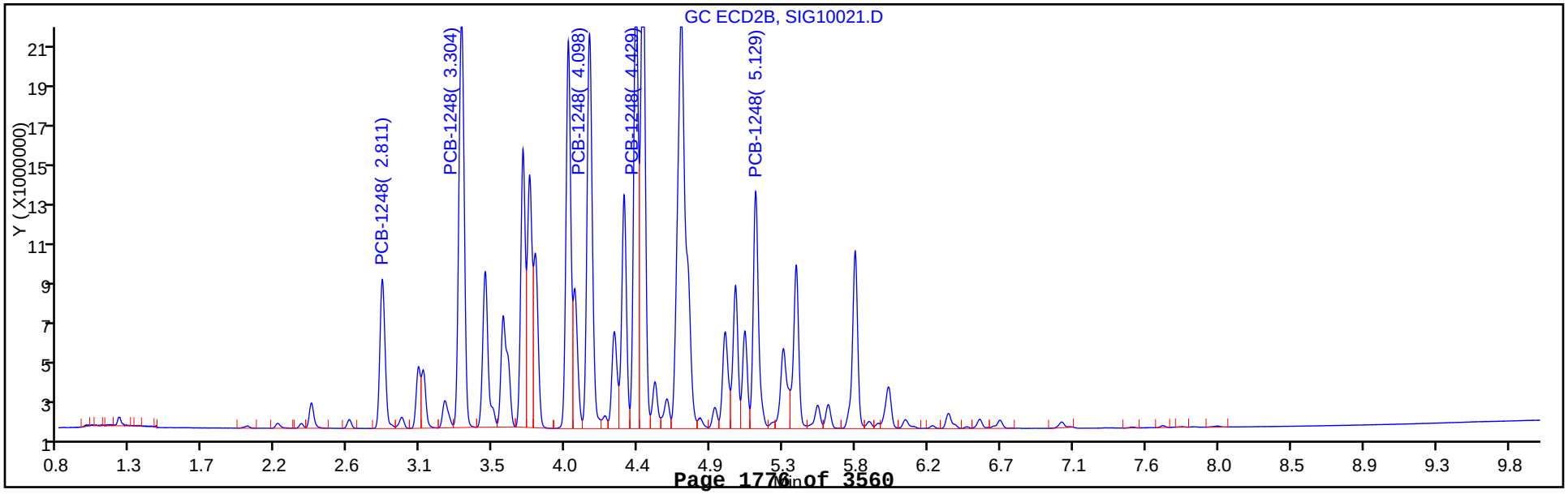
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10021.D

Injection Date:	30-Mar-2015 20:05:05	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD2 1248			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 18:47 Calibration End Date: 03/30/2015 20:05 Calibration ID: 27540

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/16	SIG10016.D
Level 2	STD01 240-174339/17	SIG10017.D
Level 3	STD02 240-174339/18	SIG10018.D
Level 4	STD05 240-174339/19	SIG10019.D
Level 5	STD1 240-174339/20	SIG10020.D
Level 6	STD2 240-174339/21	SIG10021.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1248 Peak 1	2.807	2.808	2.808	2.808	2.808	2.811					2.757 - 2.857	2.808
PCB-1248 Peak 2	3.296	3.299	3.299	3.299	3.299	3.304					3.246 - 3.346	3.299
PCB-1248 Peak 3	4.091	4.094	4.093	4.093	4.093	4.098					4.041 - 4.141	4.094
PCB-1248 Peak 4	4.423	4.424	4.424	4.424	4.424	4.429					4.373 - 4.473	4.425
PCB-1248 Peak 5	5.125	5.125	5.123	5.124	5.125	5.129					5.075 - 5.175	5.125

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 18:47 Calibration End Date: 03/30/2015 20:05 Calibration ID: 27540

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/16	SIG10016.D
Level 2	STD01 240-174339/17	SIG10017.D
Level 3	STD02 240-174339/18	SIG10018.D
Level 4	STD05 240-174339/19	SIG10019.D
Level 5	STD1 240-174339/20	SIG10020.D
Level 6	STD2 240-174339/21	SIG10021.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1248 Peak 1	14520560 9441201	12729150 8709211	11886360	10552628	Ave		11306518.3				19.2		20.0			
PCB-1248 Peak 2	35458680 25240451	30930160 24654312	29664670	26895836	Ave		28807351.5				14.2		20.0			
PCB-1248 Peak 3	32711200 24161186	28418640 23479225	28486895	25922556	Ave		27196617.0				12.5		20.0			
PCB-1248 Peak 4	35695960 26813471	31706790 26404061	30753245	28095730	Ave		29911542.8				11.8		20.0			
PCB-1248 Peak 5	19938920 14485123	18296570 14030450	17517800	15829132	Ave		16682999.2				13.8		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI

PCBS INITIAL CALIBRATION DATA

EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 18:47 Calibration End Date: 03/30/2015 20:05 Calibration ID: 27540

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/16	SIG10016.D
Level 2	STD01 240-174339/17	SIG10017.D
Level 3	STD02 240-174339/18	SIG10018.D
Level 4	STD05 240-174339/19	SIG10019.D
Level 5	STD1 240-174339/20	SIG10020.D
Level 6	STD2 240-174339/21	SIG10021.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	Ave	726028 17418422	1272915	2377272	5276314	9441201	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1248 Peak 2	Ave	1772934 49308624	3093016	5932934	13447918	25240451	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1248 Peak 3	Ave	1635560 46958450	2841864	5697379	12961278	24161186	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1248 Peak 4	Ave	1784798 52808122	3170679	6150649	14047865	26813471	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1248 Peak 5	Ave	996946 28060900	1829657	3503560	7914566	14485123	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:

Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10016.D
Lims ID: STD005 1248
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Mar-2015 18:47:21 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-016
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub3

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:07 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:05:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.108	2.108	0.000	560524	0.0500	0.0596	
1	2.563	2.563	0.000	1625485	0.0500	0.0611	
1	3.128	3.128	0.000	1685738	0.0500	0.0606	
1	3.758	3.758	0.000	949366	0.0500	0.0584	
1	4.223	4.223	0.000	785788	0.0500	0.0594	
		Average of Peak Amounts =				0.0598	
2	2.807	2.807	0.000	726028	0.0500	0.0642	
2	3.296	3.296	0.000	1772934	0.0500	0.0615	
2	4.091	4.091	0.000	1635560	0.0500	0.0601	
2	4.423	4.423	0.000	1784798	0.0500	0.0597	
2	5.125	5.125	0.000	996946	0.0500	0.0598	
		Average of Peak Amounts =				0.0611	
						RPD = 2.05	

Reagents:

SG1248@.05ppm_00015 Amount Added: 1.00 Units: mL

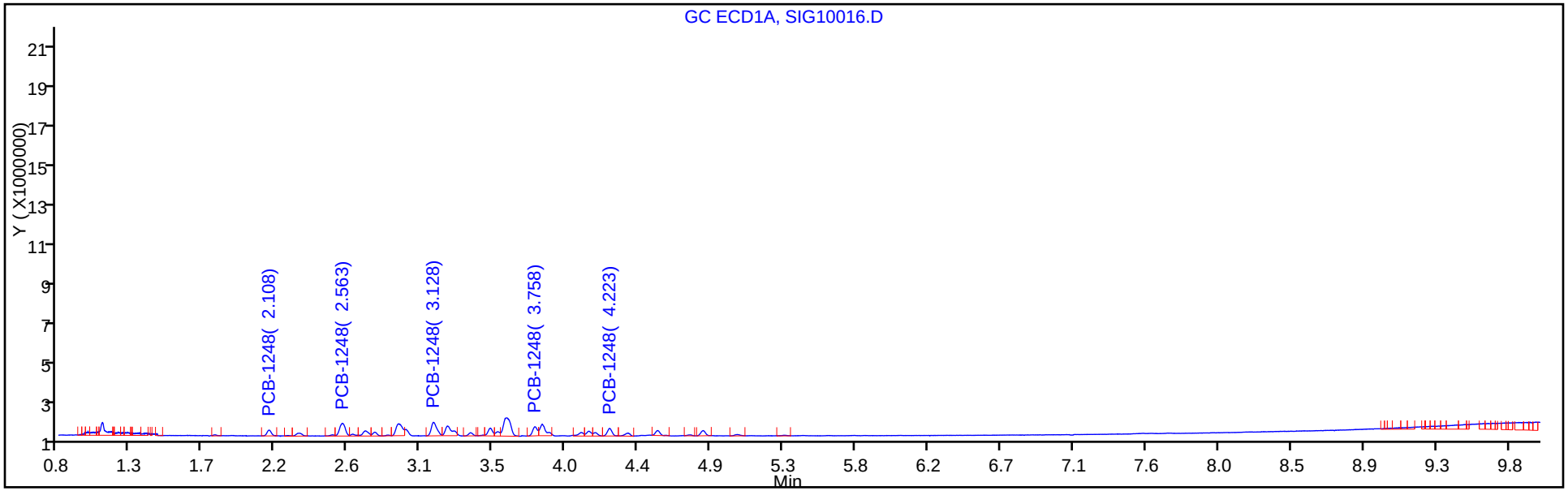
Report Date: 31-Mar-2015 06:14:09 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

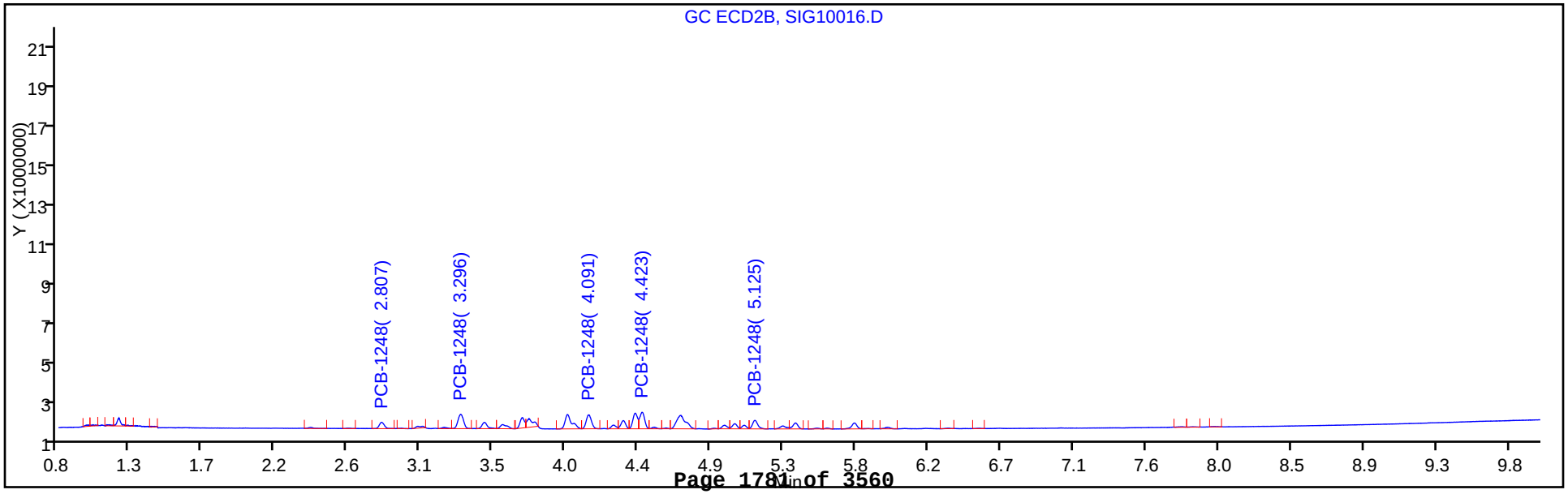
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10016.D

Injection Date:	30-Mar-2015 18:47:21	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD005 1248			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10017.D
Lims ID: STD01 1248
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Mar-2015 19:02:59 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-017
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub3

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:09 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.109	2.108	0.001	977824	0.1000	0.1039	
1	2.566	2.563	0.003	2852374	0.1000	0.1073	
1	3.133	3.128	0.005	2990454	0.1000	0.1076	
1	3.761	3.758	0.003	1701217	0.1000	0.1047	
1	4.224	4.223	0.001	1364457	0.1000	0.1031	
		Average of Peak Amounts =				0.1053	
2	2.808	2.807	0.001	1272915	0.1000	0.1126	
2	3.299	3.296	0.003	3093016	0.1000	0.1074	
2	4.094	4.091	0.003	2841864	0.1000	0.1045	
2	4.424	4.423	0.001	3170679	0.1000	0.1060	
2	5.125	5.125	0.000	1829657	0.1000	0.1097	
		Average of Peak Amounts =				0.1080	
						RPD = 2.55	

Reagents:

SG1248@0.1PPM_00012 Amount Added: 1.00 Units: mL

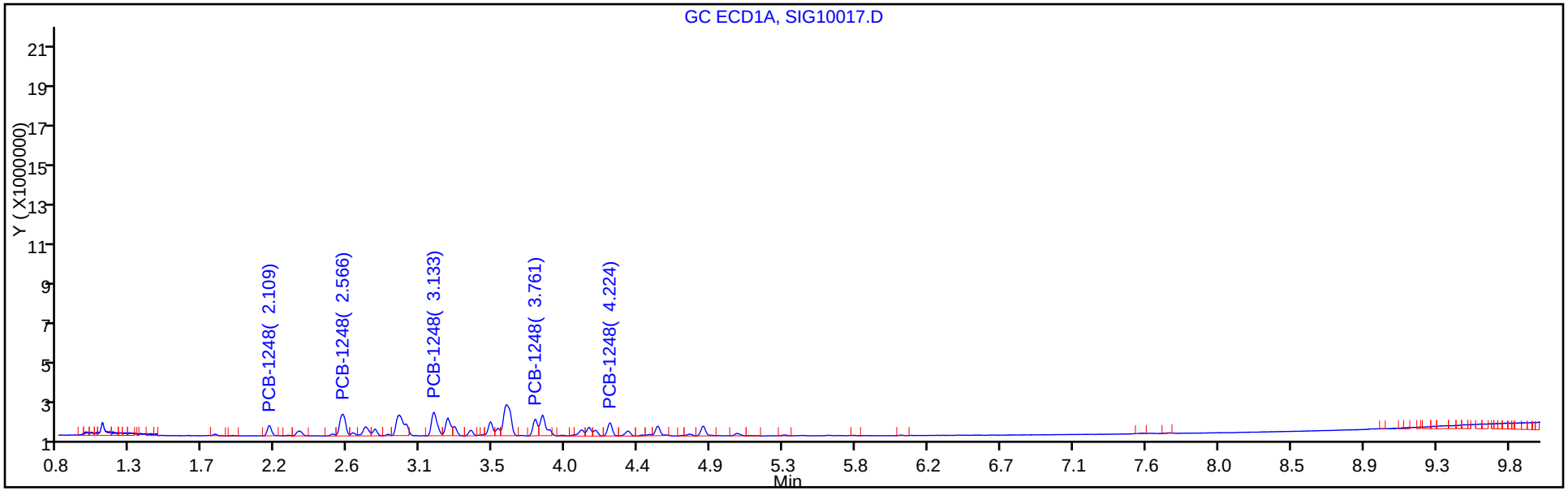
Report Date: 31-Mar-2015 06:14:10 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

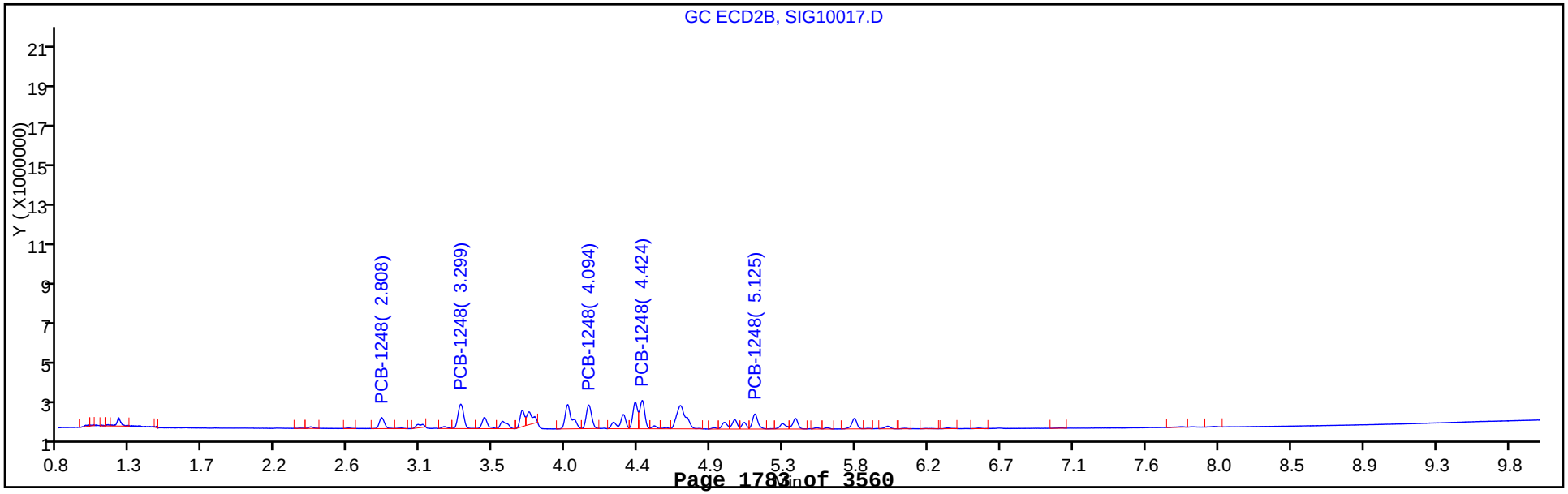
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10017.D

Injection Date:	30-Mar-2015 19:02:59	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD01 1248			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10018.D
Lims ID: STD02 1248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Mar-2015 19:18:27 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-018
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub3

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:11 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.108	2.108	0.000	2087772	0.2000	0.2218	
1	2.565	2.563	0.002	5589472	0.2000	0.2102	
1	3.130	3.128	0.002	5861893	0.2000	0.2109	
1	3.759	3.758	0.001	3400286	0.2000	0.2092	
1	4.225	4.223	0.002	2822344	0.2000	0.2133	
		Average of Peak Amounts =				0.2131	
2	2.808	2.807	0.001	2377272	0.2000	0.2103	
2	3.299	3.296	0.003	5932934	0.2000	0.2060	
2	4.093	4.091	0.002	5697379	0.2000	0.2095	
2	4.424	4.423	0.001	6150649	0.2000	0.2056	
2	5.123	5.125	-0.002	3503560	0.2000	0.2100	
		Average of Peak Amounts =				0.2083	
						RPD = 2.28	

Reagents:

SG1248@0.2ppm_00012 Amount Added: 1.00 Units: mL

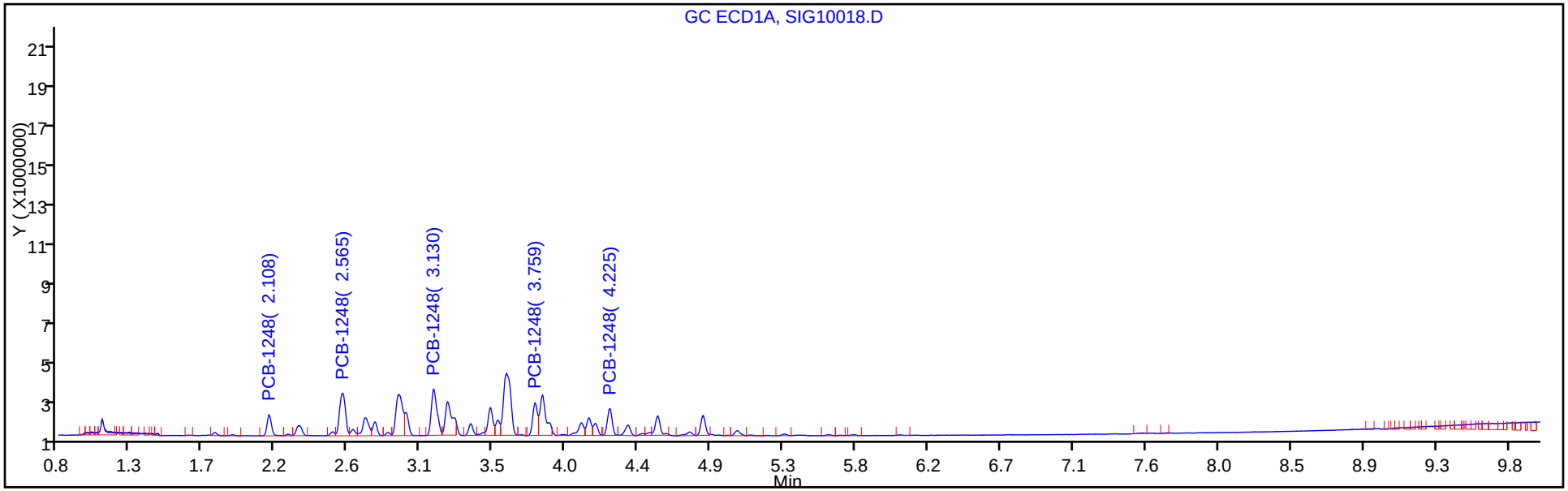
Report Date: 31-Mar-2015 06:14:12 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

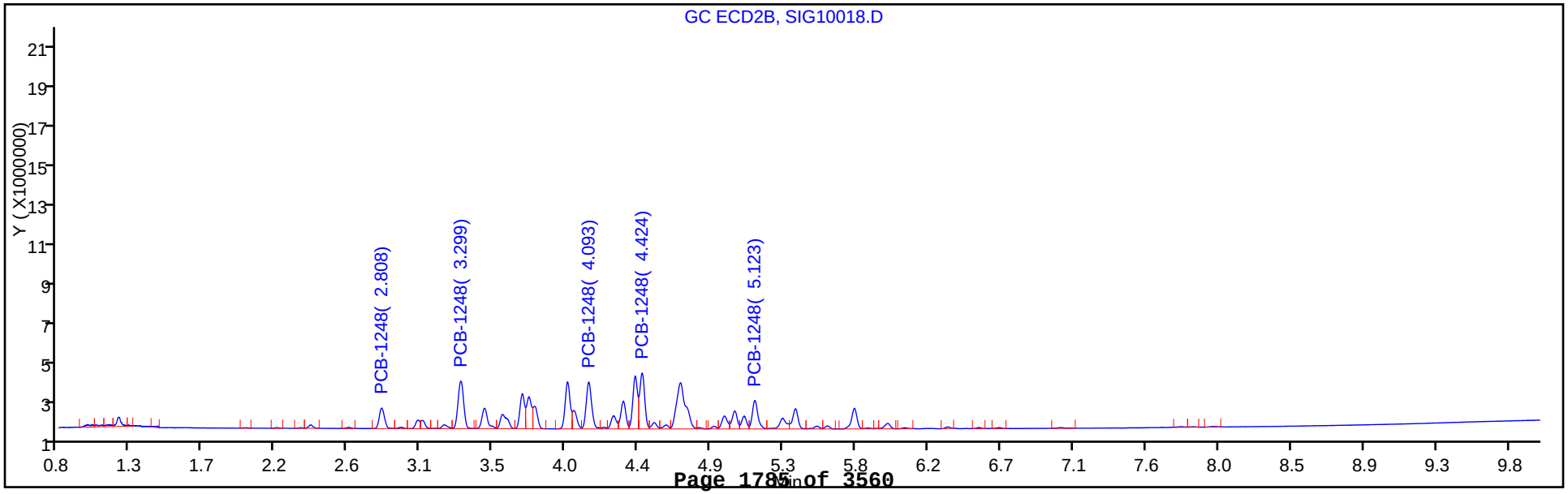
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10018.D

Injection Date:	30-Mar-2015 19:18:27	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD02 1248			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10019.D
Lims ID: STD05 1248
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-Mar-2015 19:33:56 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-019
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub3

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:13 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.109	2.108	0.001	4564371	0.5000	0.4849	
1	2.566	2.563	0.003	12694806	0.5000	0.4774	
1	3.130	3.128	0.002	13348235	0.5000	0.4802	
1	3.760	3.758	0.002	8013236	0.5000	0.4930	
1	4.222	4.223	-0.001	6415331	0.5000	0.4848	
		Average of Peak Amounts =				0.4841	
2	2.808	2.807	0.001	5276314	0.5000	0.4667	
2	3.299	3.296	0.003	13447918	0.5000	0.4668	
2	4.093	4.091	0.002	12961278	0.5000	0.4766	
2	4.424	4.423	0.001	14047865	0.5000	0.4696	
2	5.124	5.125	-0.001	7914566	0.5000	0.4744	
		Average of Peak Amounts =				0.4708	
						RPD = 2.77	

Reagents:

SG1248@0.5ppm_00015 Amount Added: 1.00 Units: mL

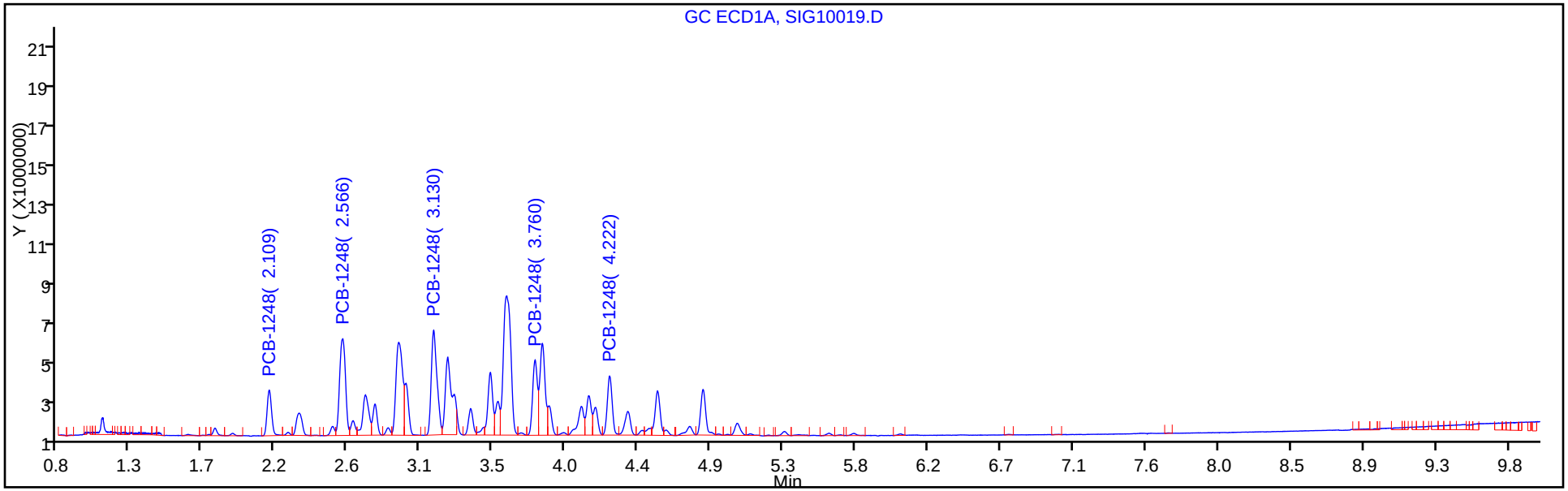
Report Date: 31-Mar-2015 06:14:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

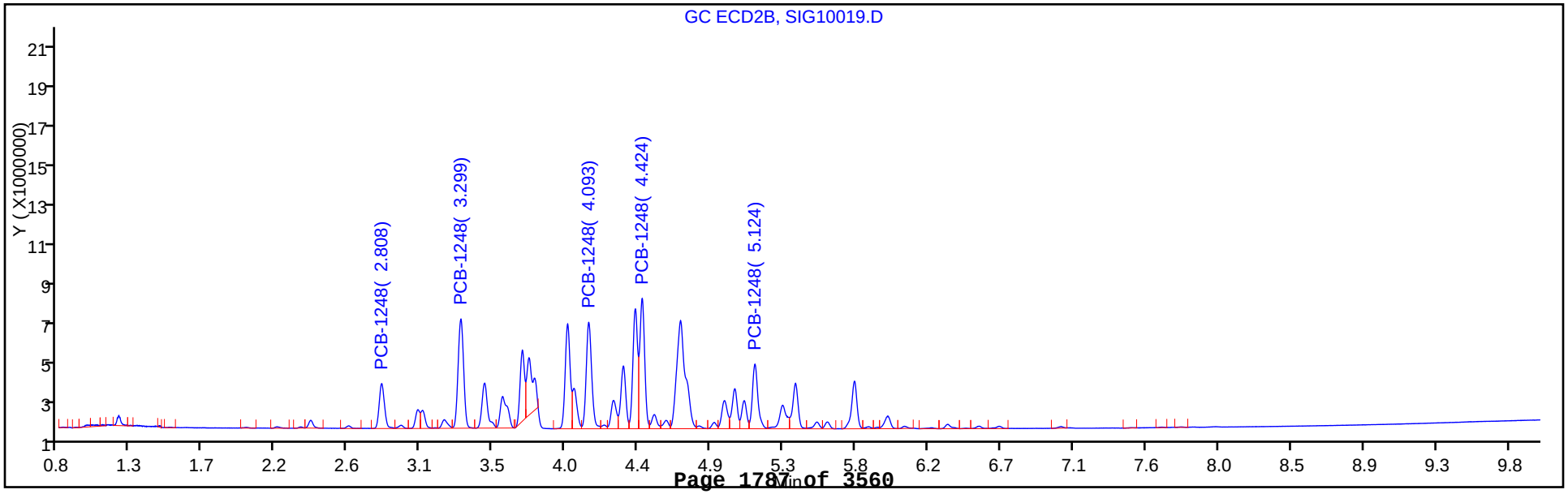
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10019.D

Injection Date:	30-Mar-2015 19:33:56	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD05 1248			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10020.D
Lims ID: STD1 1248
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Mar-2015 19:49:28 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-020
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub3

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:15 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.108	2.108	0.000	8317950	1.00	0.8837	
1	2.565	2.563	0.002	23303535	1.00	0.8764	
1	3.130	3.128	0.002	24508425	1.00	0.8817	
1	3.760	3.758	0.002	14571930	1.00	0.8965	
1	4.224	4.223	0.001	11675176	1.00	0.8822	
		Average of Peak Amounts =				0.8841	
2	2.808	2.807	0.001	9441201	1.00	0.8350	
2	3.299	3.296	0.003	25240451	1.00	0.8762	
2	4.093	4.091	0.002	24161186	1.00	0.8884	
2	4.424	4.423	0.001	26813471	1.00	0.8964	
2	5.125	5.125	0.000	14485123	1.00	0.8683	
		Average of Peak Amounts =				0.8729	
						RPD = 1.28	

Reagents:

SG1248@1.0ppm_00010 Amount Added: 1.00 Units: mL

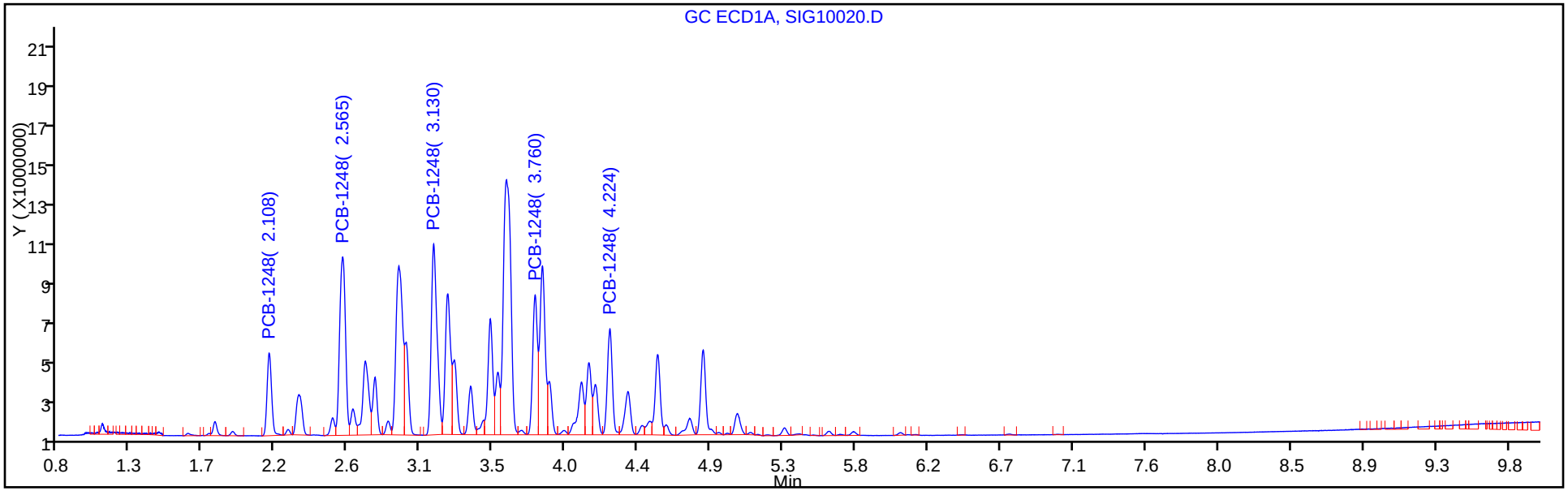
Report Date: 31-Mar-2015 06:14:17 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

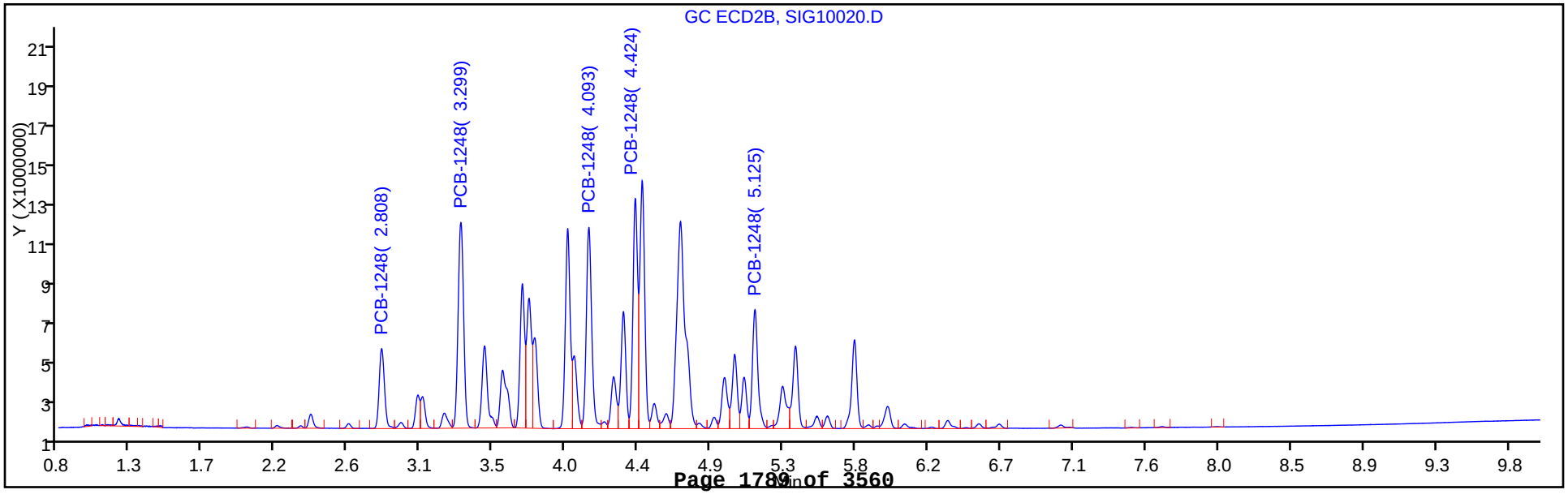
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10020.D

Injection Date:	30-Mar-2015 19:49:28	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD1 1248			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10021.D
Lims ID: STD2 1248
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Mar-2015 20:05:05 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-021
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub3

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:17 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.114	2.108	0.006	15200102	2.00	1.61	
1	2.569	2.563	0.006	43739216	2.00	1.64	
1	3.135	3.128	0.007	45280424	2.00	1.63	
1	3.765	3.758	0.007	27845213	2.00	1.71	
1	4.229	4.223	0.006	22849761	2.00	1.73	
		Average of Peak Amounts =				1.67	
2	2.811	2.807	0.004	17418422	2.00	1.54	
2	3.304	3.296	0.008	49308624	2.00	1.71	
2	4.098	4.091	0.007	46958450	2.00	1.73	
2	4.429	4.423	0.006	52808122	2.00	1.77	
2	5.129	5.125	0.004	28060900	2.00	1.68	
		Average of Peak Amounts =				1.69	
						RPD = 1.17	

Reagents:

SG1248@2.0ppm_00010 Amount Added: 1.00 Units: mL

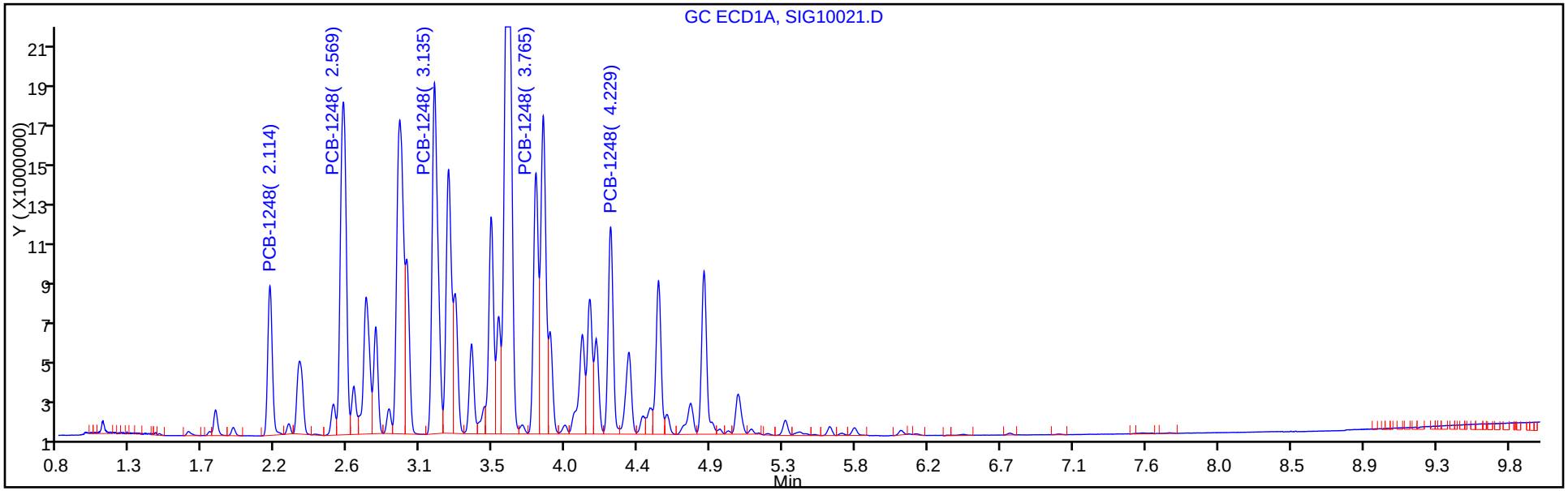
Report Date: 31-Mar-2015 06:14:19 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

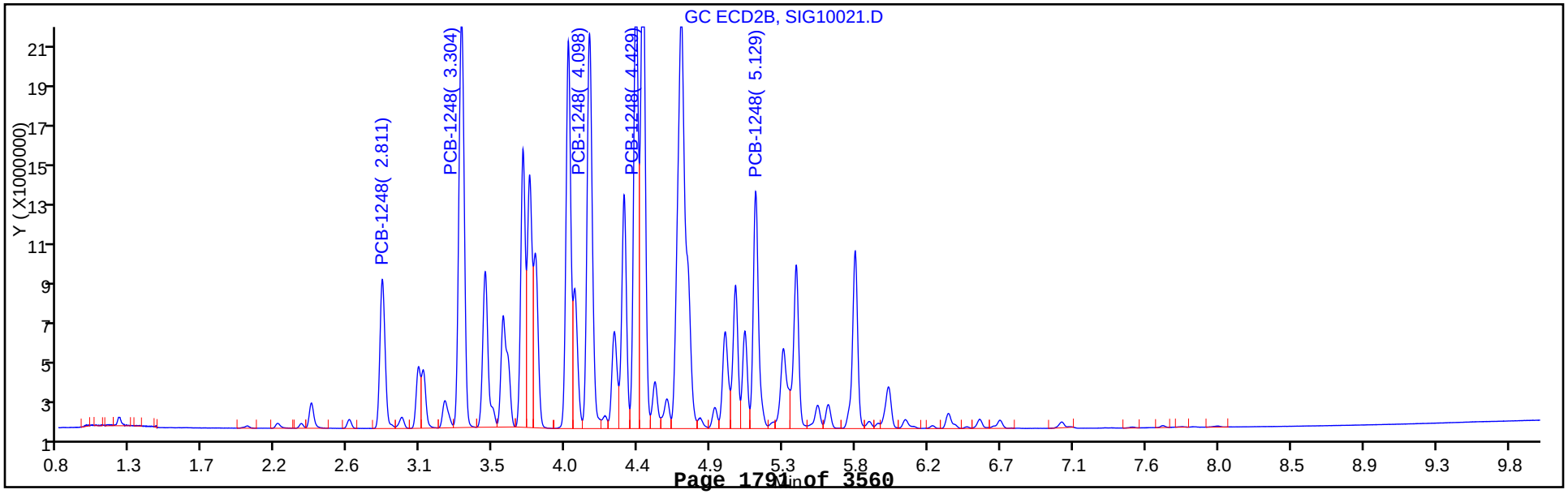
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10021.D

Injection Date:	30-Mar-2015 20:05:05	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD2 1248			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 20:20 Calibration End Date: 03/30/2015 21:38 Calibration ID: 27545

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/22	SIG10022.D
Level 2	STD01 240-174339/23	SIG10023.D
Level 3	STD02 240-174339/24	SIG10024.D
Level 4	STD05 240-174339/25	SIG10025.D
Level 5	STD1 240-174339/26	SIG10026.D
Level 6	STD2 240-174339/27	SIG10027.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1221 Peak 1	1.606	1.606	1.610	1.611	1.610	1.611					1.556 - 1.656	1.609
PCB-1221 Peak 2	1.738	1.740	1.744	1.742	1.742	1.743					1.688 - 1.788	1.742
PCB-1221 Peak 3	1.775	1.775	1.779	1.779	1.779	1.780					1.725 - 1.825	1.778
PCB-1254 Peak 1	3.532	3.531	3.538	3.540	3.538	3.539					3.482 - 3.582	3.536
PCB-1254 Peak 2	3.815	3.816	3.821	3.821	3.821	3.821					3.765 - 3.865	3.819
PCB-1254 Peak 3	4.226	4.226	4.233	4.233	4.232	4.231					4.176 - 4.276	4.230
PCB-1254 Peak 4	4.526	4.524	4.530	4.530	4.530	4.531					4.476 - 4.576	4.529
PCB-1254 Peak 5	5.018	5.020	5.023	5.026	5.023	5.024					4.968 - 5.068	5.022

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 20:20 Calibration End Date: 03/30/2015 21:38 Calibration ID: 27545

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/22	SIG10022.D
Level 2	STD01 240-174339/23	SIG10023.D
Level 3	STD02 240-174339/24	SIG10024.D
Level 4	STD05 240-174339/25	SIG10025.D
Level 5	STD1 240-174339/26	SIG10026.D
Level 6	STD2 240-174339/27	SIG10027.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	9025600 6558989	8349640 5884256	8049750	6541332	Ave		7401594.42				16.8		20.0			
PCB-1221 Peak 2	5771360 4005985	5079080 3398885	4975565	3950358	Ave		4530205.42				19.6		20.0			
PCB-1221 Peak 3	21916960 15349192	20527630 13582285	19017210	15502010	Ave		17649214.5				18.8		20.0			
PCB-1254 Peak 1	27261340 18622173	25735100 16788045	23334895	19188870	Ave		21821737.2				19.4		20.0			
PCB-1254 Peak 2	40819240 35043301	44933210 31795543	43618575	34823784	Ave		38505608.8				13.9		20.0			
PCB-1254 Peak 3	53429280 37184949	50115160 33179986	43334780	36051076	Ave		42215871.8				19.4		20.0			
PCB-1254 Peak 4	37525840 29797677	37594460 27204721	33969550	29469208	Ave		32593576.1				13.6		20.0			
PCB-1254 Peak 5	49422600 37199314	46041930 33465509	42636450	36510034	Ave		40879306.2				15.1		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI

PCBS INITIAL CALIBRATION DATA

EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 20:20 Calibration End Date: 03/30/2015 21:38 Calibration ID: 27545

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/22	SIG10022.D
Level 2	STD01 240-174339/23	SIG10023.D
Level 3	STD02 240-174339/24	SIG10024.D
Level 4	STD05 240-174339/25	SIG10025.D
Level 5	STD1 240-174339/26	SIG10026.D
Level 6	STD2 240-174339/27	SIG10027.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	Ave	451280 11768511	834964	1609950	3270666	6558989	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1221 Peak 2	Ave	288568 6797769	507908	995113	1975179	4005985	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1221 Peak 3	Ave	1095848 27164570	2052763	3803442	7751005	15349192	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 1	Ave	1363067 33576090	2573510	4666979	9594435	18622173	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 2	Ave	2040962 63591085	4493321	8723715	17411892	35043301	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 3	Ave	2671464 66359972	5011516	8666956	18025538	37184949	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 4	Ave	1876292 54409443	3759446	6793910	14734604	29797677	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 5	Ave	2471130 66931018	4604193	8527290	18255017	37199314	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:

Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10022.D
Lims ID: STD005 AR2154
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Mar-2015 20:20:34 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-022
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub4

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:19 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:06:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.606	1.606	0.000	451280	0.0500	0.0610	
1	1.738	1.738	0.000	288568	0.0500	0.0637	
1	1.775	1.775	0.000	1095848	0.0500	0.0621	
		Average of Peak Amounts =				0.0623	
2	2.158	2.158	0.000	543690	0.0500	0.0378	
2	2.307	2.307	0.000	379002	0.0500	0.0364	
2	2.372	2.372	0.000	1321163	0.0500	0.0404	
		Average of Peak Amounts =				0.0382	
						RPD = 47.94	
8 PCB-1254							
1	3.532	3.532	0.000	1363067	0.0500	0.0625	
1	3.815	3.815	0.000	2040962	0.0500	0.0530	
1	4.226	4.226	0.000	2671464	0.0500	0.0633	
1	4.526	4.526	0.000	1876292	0.0500	0.0576	
1	5.018	5.018	0.000	2471130	0.0500	0.0604	
		Average of Peak Amounts =				0.0594	
2	4.422	4.422	0.000	1842374	0.0500	0.0644	
2	4.642	4.642	0.000	2026566	0.0500	0.0623	
2	5.129	5.129	0.000	3066948	0.0500	0.0614	
2	5.380	5.380	0.000	2057610	0.0500	0.0612	
2	5.953	5.953	0.000	2715422	0.0500	0.0616	
		Average of Peak Amounts =				0.0622	
						RPD = 4.66	

Reagents:

SG2154@0.05PP_00008 Amount Added: 1.00 Units: mL

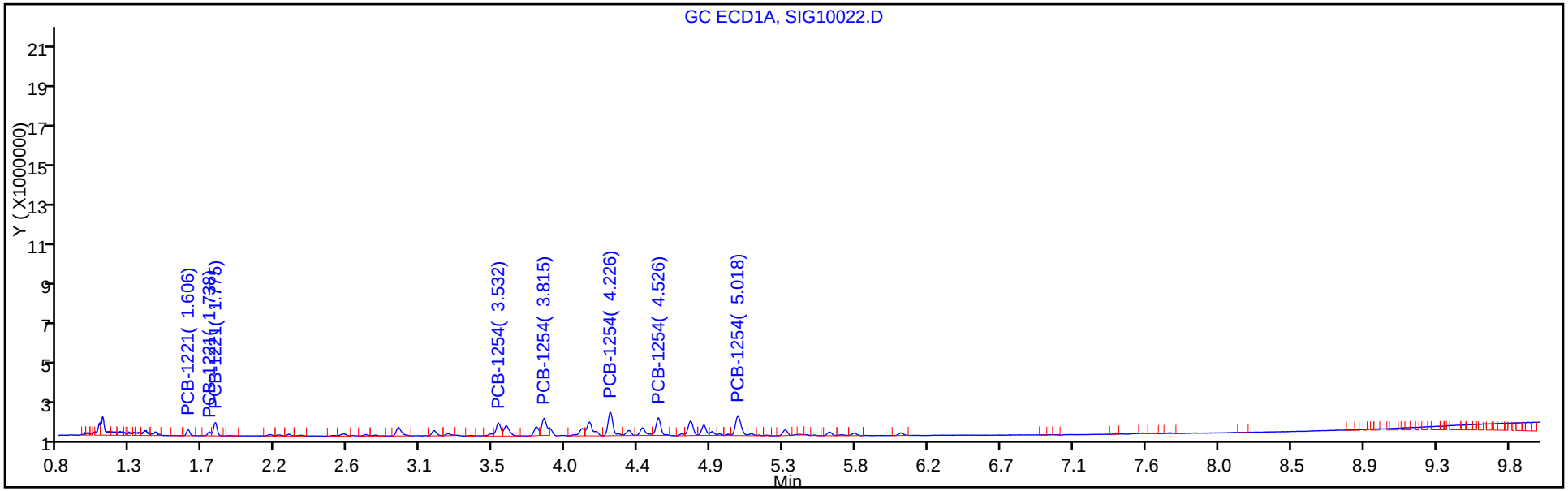
Report Date: 31-Mar-2015 06:14:20 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

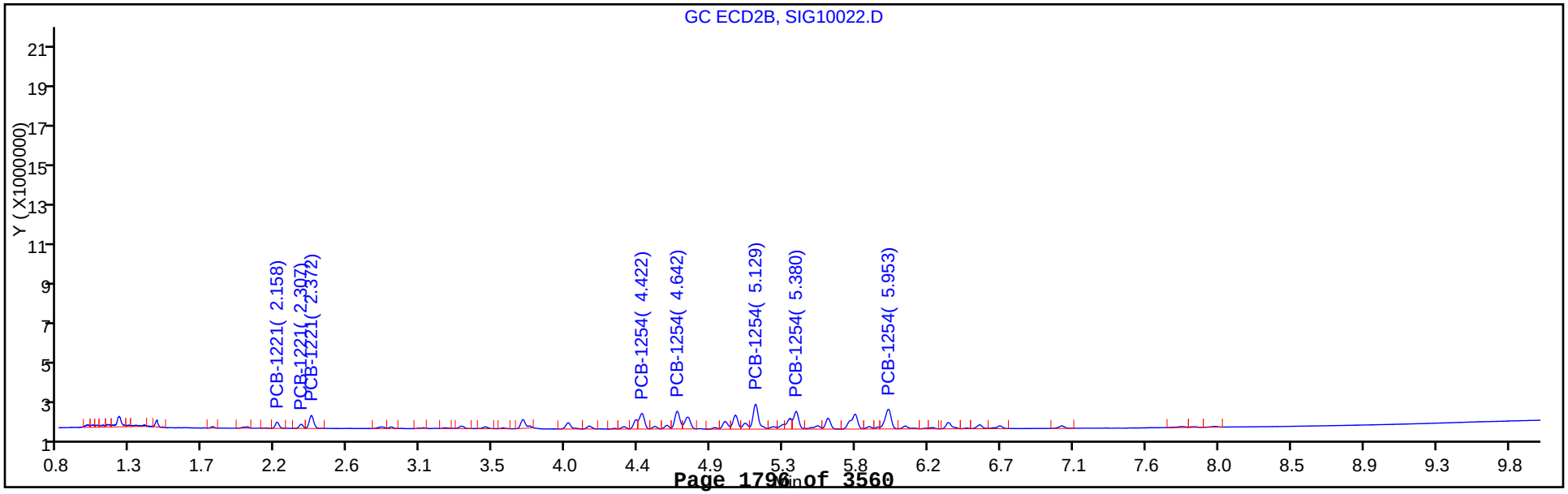
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10022.D

Injection Date:	30-Mar-2015 20:20:34	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD005 AR2154			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10023.D
Lims ID: STD01 AR2154
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Mar-2015 20:36:01 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-023
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub4

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:21 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:06:24

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.606	1.606	0.000	834964	0.1000	0.1128	
1	1.740	1.738	0.002	507908	0.1000	0.1121	
1	1.775	1.775	0.000	2052763	0.1000	0.1163	
		Average of Peak Amounts =				0.1137	
2	2.159	2.158	0.001	1003516	0.1000	0.1083	
2	2.308	2.307	0.001	689516	0.1000	0.1071	
2	2.372	2.372	0.000	2348686	0.1000	0.1065	
		Average of Peak Amounts =				0.1073	
						RPD = 5.83	
8 PCB-1254							
1	3.531	3.532	-0.001	2573510	0.1000	0.1179	
1	3.816	3.815	0.001	4493321	0.1000	0.1167	
1	4.226	4.226	0.000	5011516	0.1000	0.1187	
1	4.524	4.526	-0.002	3759446	0.1000	0.1153	
1	5.020	5.018	0.002	4604193	0.1000	0.1126	
		Average of Peak Amounts =				0.1163	
2	4.421	4.422	-0.001	3261629	0.1000	0.1140	
2	4.642	4.642	0.000	3761226	0.1000	0.1156	
2	5.129	5.129	0.000	5621039	0.1000	0.1126	
2	5.381	5.380	0.001	3791257	0.1000	0.1128	
2	5.952	5.953	-0.001	4855031	0.1000	0.1101	
		Average of Peak Amounts =				0.1130	
						RPD = 2.83	

Reagents:

SG2154@O.1PPM_00010 Amount Added: 1.00 Units: mL

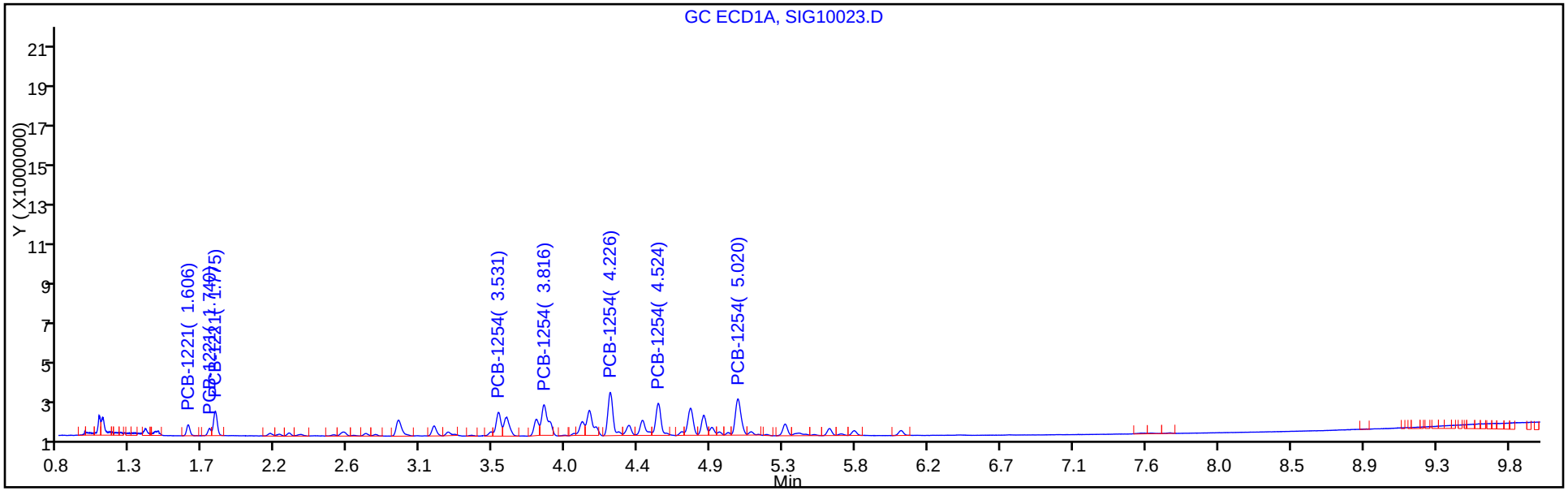
Report Date: 31-Mar-2015 06:14:22 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

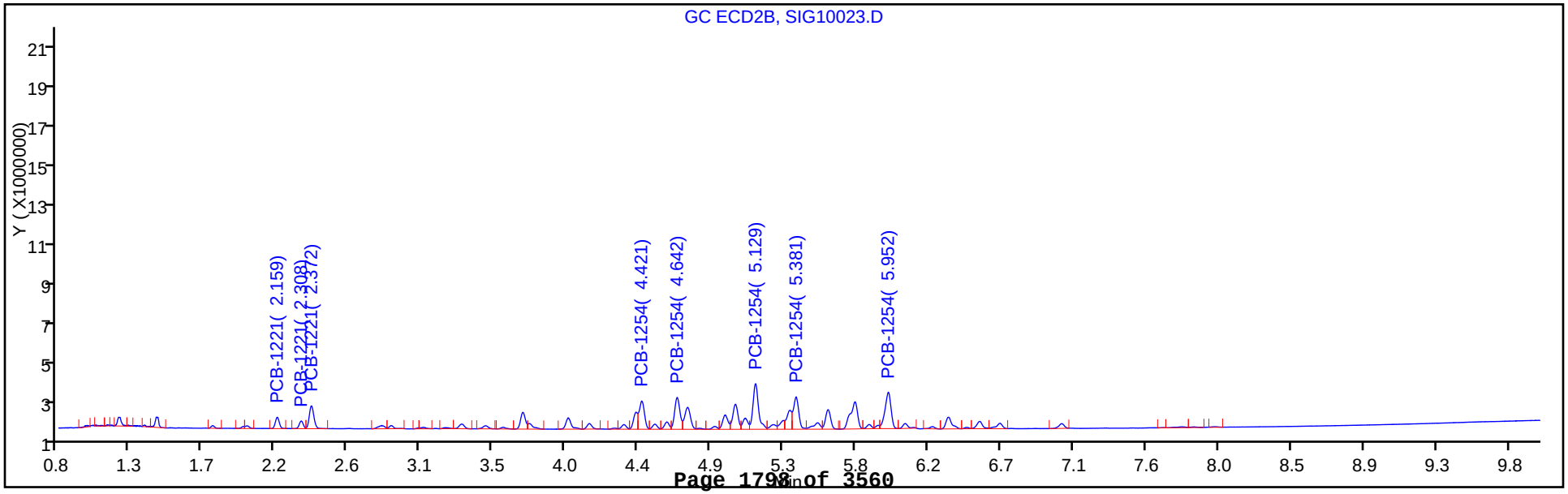
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10023.D

Injection Date:	30-Mar-2015 20:36:01	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD01 AR2154			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10024.D
Lims ID: STD02 AR2154
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Mar-2015 20:51:31 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-024
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub4

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:23 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.610	1.606	0.004	1609950	0.2000	0.2175	
1	1.744	1.738	0.006	995113	0.2000	0.2197	
1	1.779	1.775	0.004	3803442	0.2000	0.2155	
		Average of Peak Amounts =				0.2176	
2	2.164	2.158	0.006	1788536	0.2000	0.2285	
2	2.312	2.307	0.005	1245916	0.2000	0.2339	
2	2.375	2.372	0.003	4192807	0.2000	0.2252	
		Average of Peak Amounts =				0.2292	
						RPD = 5.22	
8 PCB-1254							
1	3.538	3.532	0.006	4666979	0.2000	0.2139	
1	3.821	3.815	0.006	8723715	0.2000	0.2266	
1	4.233	4.226	0.007	8666956	0.2000	0.2053	
1	4.530	4.526	0.004	6793910	0.2000	0.2084	
1	5.023	5.018	0.005	8527290	0.2000	0.2086	
		Average of Peak Amounts =				0.2126	
2	4.428	4.422	0.006	5978435	0.2000	0.2089	
2	4.647	4.642	0.005	6796765	0.2000	0.2088	
2	5.133	5.129	0.004	10349819	0.2000	0.2073	
2	5.384	5.380	0.004	7025154	0.2000	0.2091	
2	5.959	5.953	0.006	9114208	0.2000	0.2068	
		Average of Peak Amounts =				0.2082	
						RPD = 2.08	

Reagents:

SG2154@0.2PPM_00009 Amount Added: 1.00 Units: mL

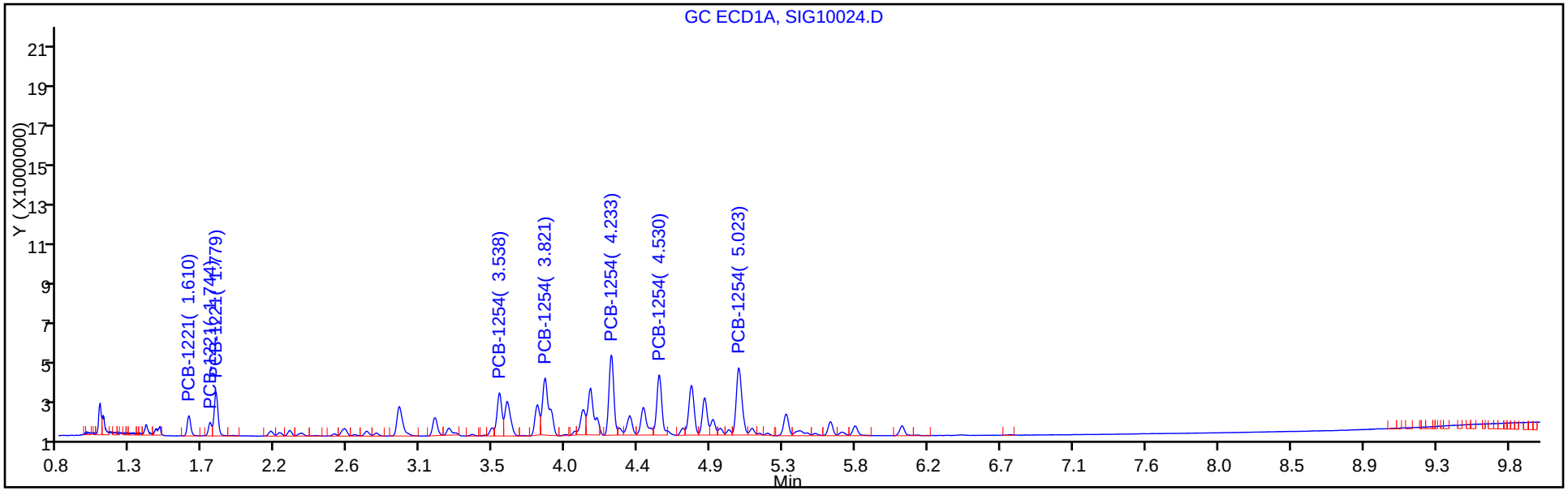
Report Date: 31-Mar-2015 06:14:25 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

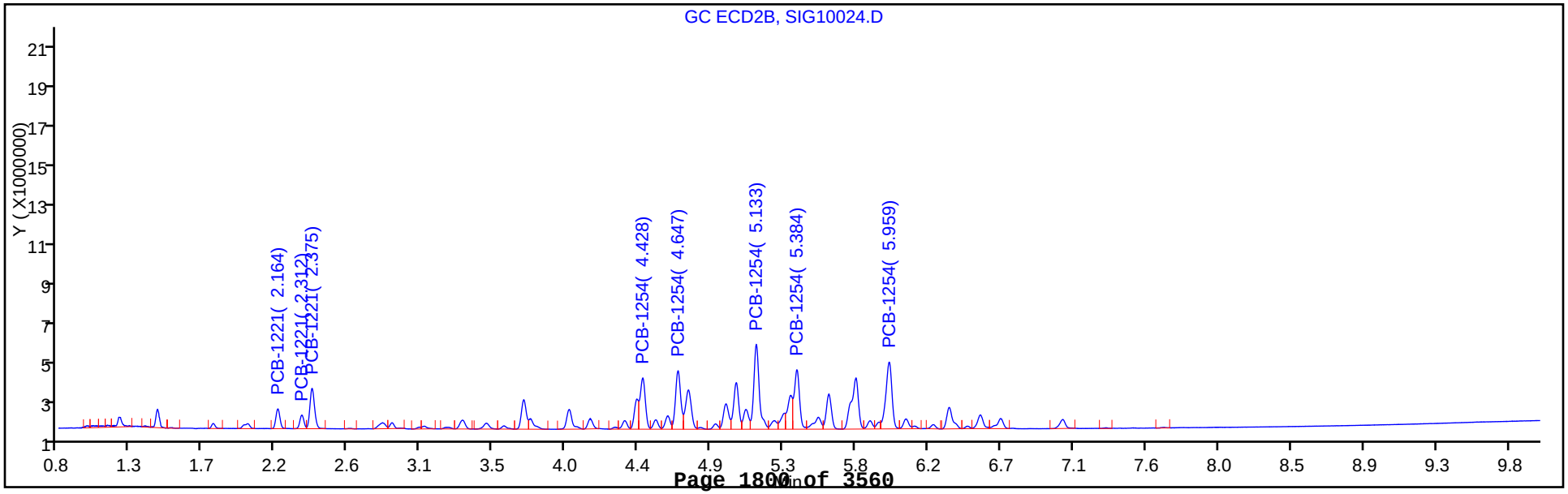
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10024.D

Injection Date:	30-Mar-2015 20:51:31	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD02 AR2154			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10025.D
Lims ID: STD05 AR2154
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-Mar-2015 21:07:06 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-025
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub4

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:25 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.611	1.606	0.005	3270666	0.5000	0.4419	
1	1.742	1.738	0.004	1975179	0.5000	0.4360	
1	1.779	1.775	0.004	7751005	0.5000	0.4392	
		Average of Peak Amounts =				0.4390	
2	2.163	2.158	0.005	3594360	0.5000	0.5052	
2	2.312	2.307	0.005	2471533	0.5000	0.5132	
2	2.375	2.372	0.003	8370837	0.5000	0.4942	
		Average of Peak Amounts =				0.5042	
						RPD = 13.82	
8 PCB-1254							
1	3.540	3.532	0.008	9594435	0.5000	0.4397	
1	3.821	3.815	0.006	17411892	0.5000	0.4522	
1	4.233	4.226	0.007	18025538	0.5000	0.4270	
1	4.530	4.526	0.004	14734604	0.5000	0.4521	
1	5.026	5.018	0.008	18255017	0.5000	0.4466	
		Average of Peak Amounts =				0.4435	
2	4.428	4.422	0.006	12059972	0.5000	0.4214	
2	4.647	4.642	0.005	13736873	0.5000	0.4220	
2	5.133	5.129	0.004	21388318	0.5000	0.4284	
2	5.386	5.380	0.006	14335862	0.5000	0.4267	
2	5.958	5.953	0.005	19065045	0.5000	0.4325	
		Average of Peak Amounts =				0.4262	
						RPD = 3.97	

Reagents:

SG2154@0.5PPM_00016 Amount Added: 1.00 Units: mL

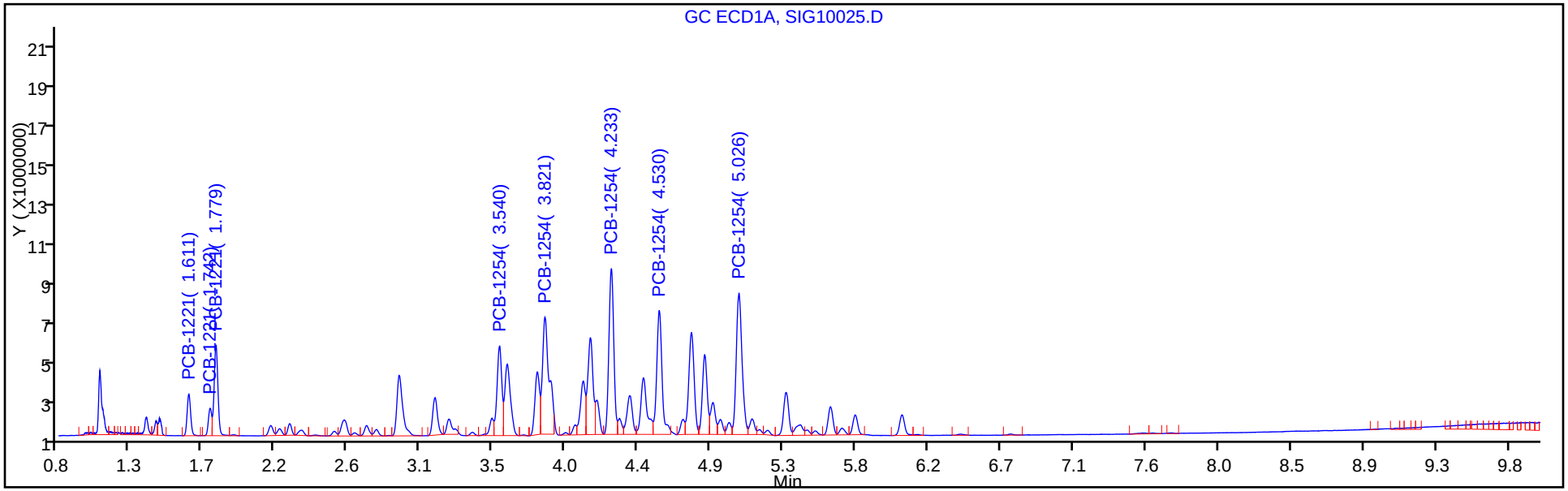
Report Date: 31-Mar-2015 06:14:27 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

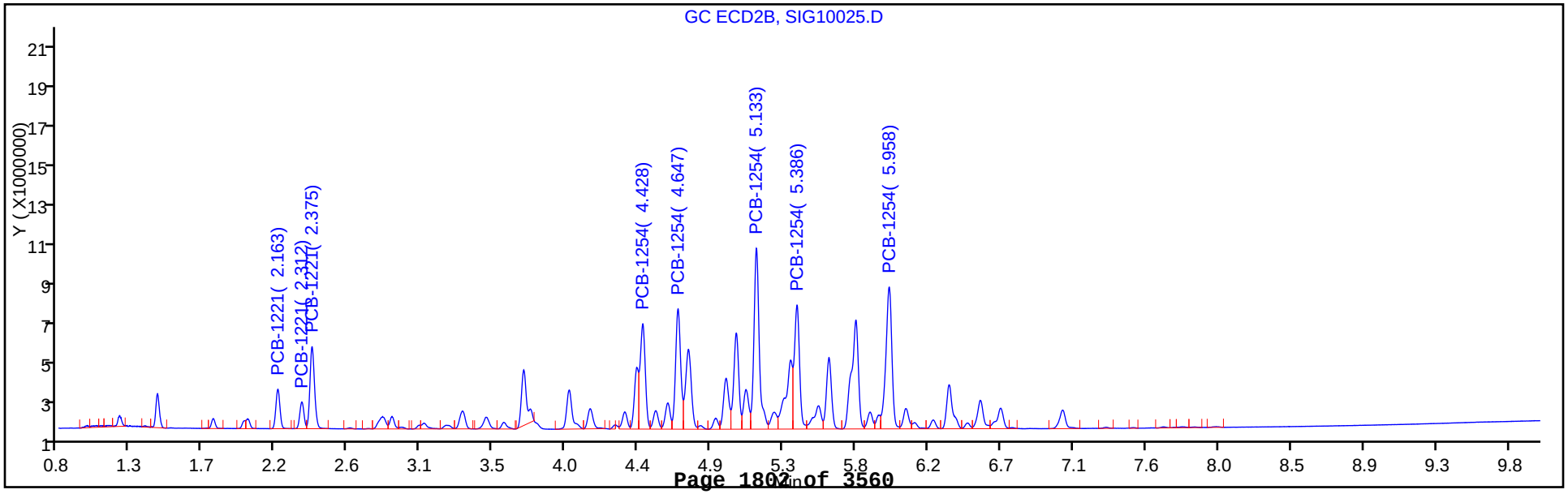
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10025.D

Injection Date:	30-Mar-2015 21:07:06	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD05 AR2154			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10026.D
Lims ID: STD1 AR2154
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Mar-2015 21:22:35 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-026
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub4

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:27 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.610	1.606	0.004	6558989	1.00	0.8862	
1	1.742	1.738	0.004	4005985	1.00	0.8843	
1	1.779	1.775	0.004	15349192	1.00	0.8697	
		Average of Peak Amounts =				0.8800	
2	2.162	2.158	0.004	7122168	1.00	1.05	
2	2.311	2.307	0.004	4834438	1.00	1.05	
2	2.375	2.372	0.003	16891418	1.00	1.04	
		Average of Peak Amounts =				1.05	
						RPD = 17.30	
8 PCB-1254							
1	3.538	3.532	0.006	18622173	1.00	0.8534	
1	3.821	3.815	0.006	35043301	1.00	0.9101	
1	4.232	4.226	0.006	37184949	1.00	0.8808	
1	4.530	4.526	0.004	29797677	1.00	0.9142	
1	5.023	5.018	0.005	37199314	1.00	0.9100	
		Average of Peak Amounts =				0.8937	
2	4.427	4.422	0.005	25009896	1.00	0.8739	
2	4.647	4.642	0.005	28818763	1.00	0.8854	
2	5.132	5.129	0.003	45126929	1.00	0.9039	
2	5.384	5.380	0.004	30117149	1.00	0.8964	
2	5.957	5.953	0.004	40296409	1.00	0.9142	
		Average of Peak Amounts =				0.8948	
						RPD = 0.12	

Reagents:

SG2154@1.0PPM_00010 Amount Added: 1.00 Units: mL

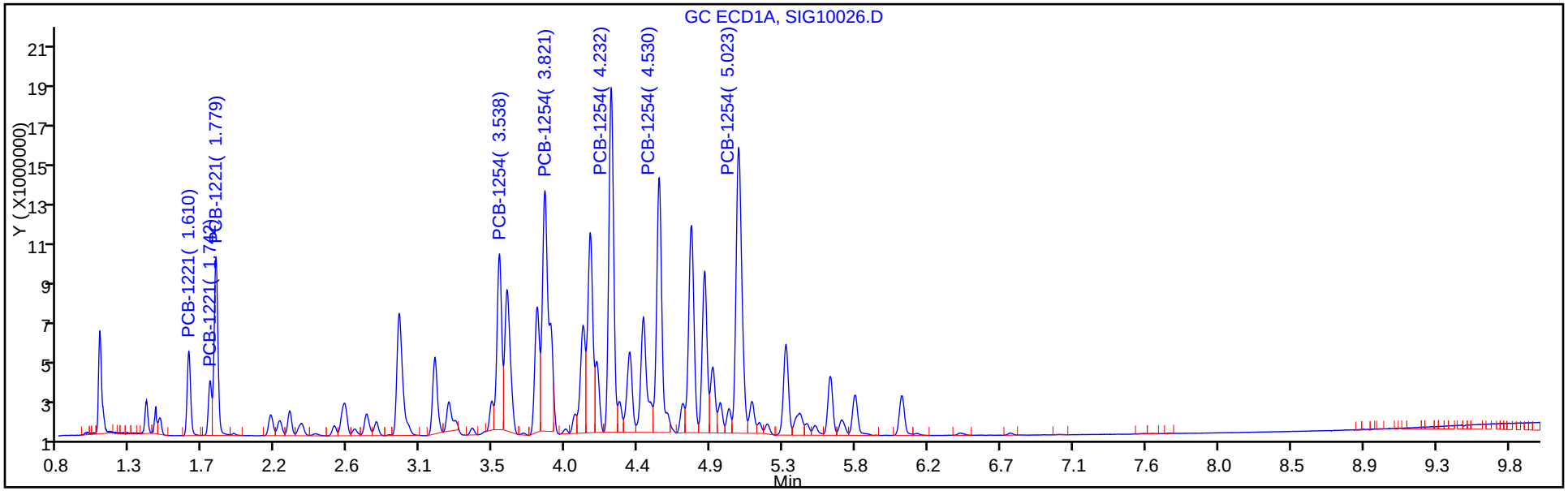
Report Date: 31-Mar-2015 06:14:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

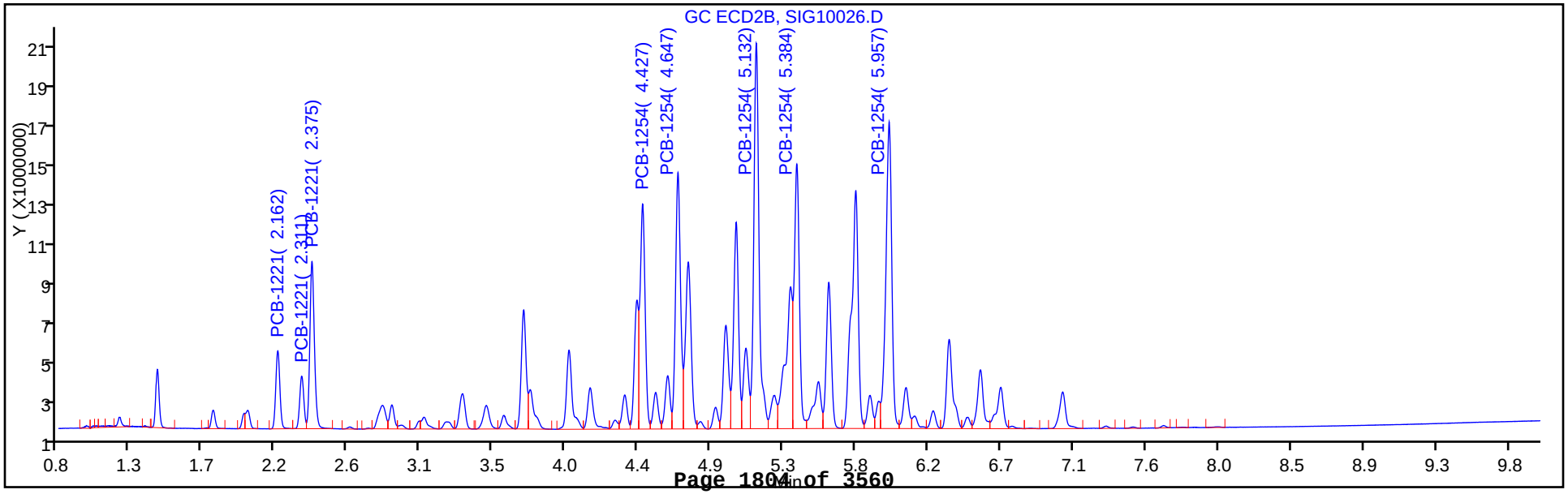
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10026.D

Injection Date:	30-Mar-2015 21:22:35	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD1 AR2154			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10027.D
Lims ID: STD2 AR2154
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Mar-2015 21:38:05 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-027
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub4

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:29 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.611	1.606	0.005	11768511	2.00	1.59	
1	1.743	1.738	0.005	6797769	2.00	1.50	
1	1.780	1.775	0.005	27164570	2.00	1.54	
		Average of Peak Amounts =				1.54	
2	2.163	2.158	0.005	12858040	2.00	1.92	
2	2.312	2.307	0.005	8590304	2.00	1.91	
2	2.376	2.372	0.004	30847509	2.00	1.94	
		Average of Peak Amounts =				1.92	
						RPD = 21.98	
8 PCB-1254							
1	3.539	3.532	0.007	33576090	2.00	1.54	
1	3.821	3.815	0.006	63591085	2.00	1.65	
1	4.231	4.226	0.005	66359972	2.00	1.57	
1	4.531	4.526	0.005	54409443	2.00	1.67	
1	5.024	5.018	0.006	66931018	2.00	1.64	
		Average of Peak Amounts =				1.61	
2	4.427	4.422	0.005	46445022	2.00	1.62	
2	4.647	4.642	0.005	53742256	2.00	1.65	
2	5.132	5.129	0.003	84699665	2.00	1.70	
2	5.386	5.380	0.006	57198581	2.00	1.70	
2	5.957	5.953	0.004	75206536	2.00	1.71	
		Average of Peak Amounts =				1.68	
						RPD = 3.78	

Reagents:

SG2154@2.0PPM_00009 Amount Added: 1.00 Units: mL

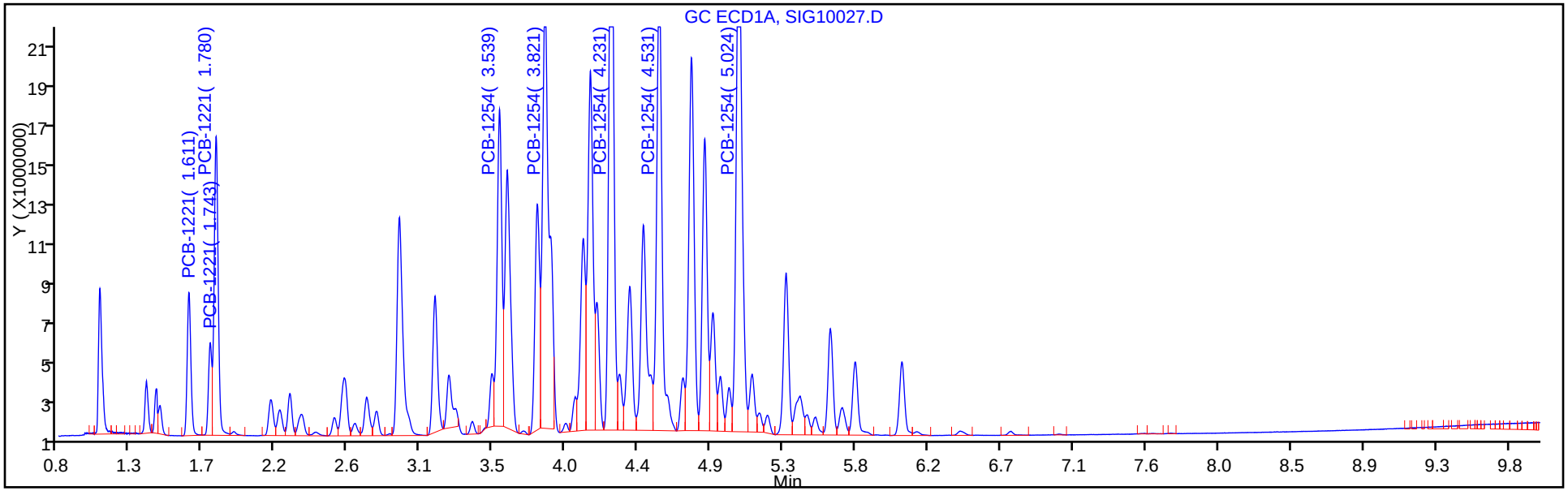
Report Date: 31-Mar-2015 06:14:30 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

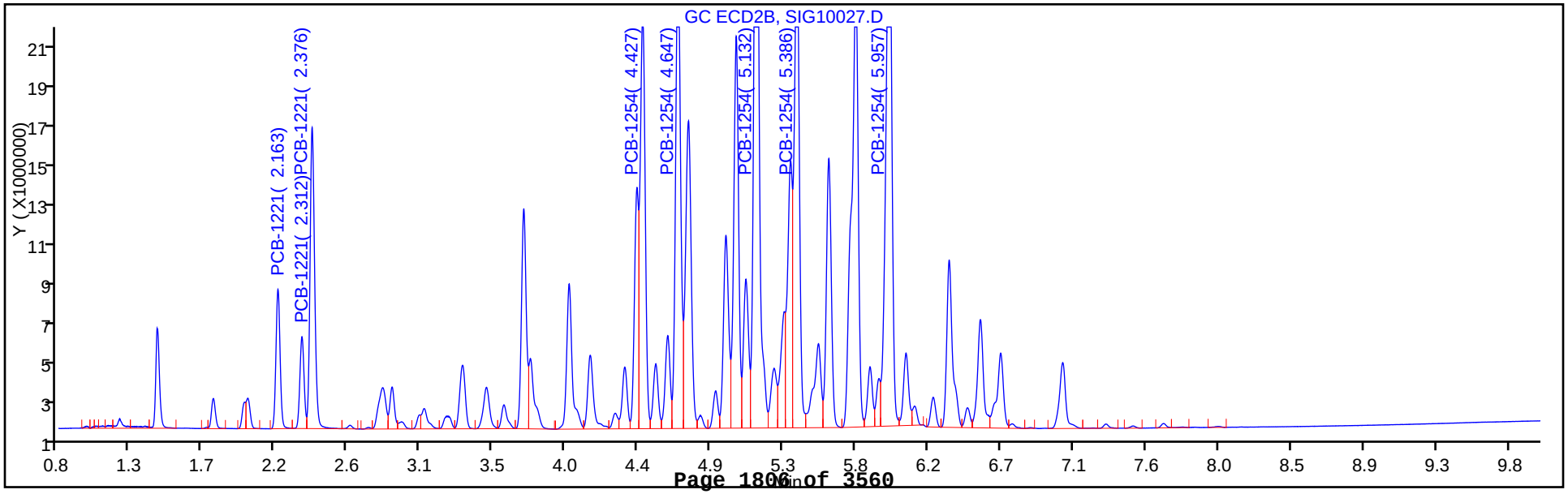
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10027.D

Injection Date:	30-Mar-2015 21:38:05	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD2 AR2154			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 20:20 Calibration End Date: 03/30/2015 21:38 Calibration ID: 27546

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/22	SIG10022.D
Level 2	STD01 240-174339/23	SIG10023.D
Level 3	STD02 240-174339/24	SIG10024.D
Level 4	STD05 240-174339/25	SIG10025.D
Level 5	STD1 240-174339/26	SIG10026.D
Level 6	STD2 240-174339/27	SIG10027.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1221 Peak 1	2.158	2.159	2.164	2.163	2.162	2.163					2.108 - 2.208	2.162
PCB-1221 Peak 2	2.307	2.308	2.312	2.312	2.311	2.312					2.257 - 2.357	2.310
PCB-1221 Peak 3	2.372	2.372	2.375	2.375	2.375	2.376					2.322 - 2.422	2.374
PCB-1254 Peak 1	4.422	4.421	4.428	4.428	4.427	4.427					4.372 - 4.472	4.426
PCB-1254 Peak 2	4.642	4.642	4.647	4.647	4.647	4.647					4.592 - 4.692	4.645
PCB-1254 Peak 3	5.129	5.129	5.133	5.133	5.132	5.132					5.079 - 5.179	5.131
PCB-1254 Peak 4	5.380	5.381	5.384	5.386	5.384	5.386					5.330 - 5.430	5.384
PCB-1254 Peak 5	5.953	5.952	5.959	5.958	5.957	5.957					5.903 - 6.003	5.956

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 20:20 Calibration End Date: 03/30/2015 21:38 Calibration ID: 27546

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/22	SIG10022.D
Level 2	STD01 240-174339/23	SIG10023.D
Level 3	STD02 240-174339/24	SIG10024.D
Level 4	STD05 240-174339/25	SIG10025.D
Level 5	STD1 240-174339/26	SIG10026.D
Level 6	STD2 240-174339/27	SIG10027.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	10873800 7122168	10035160 6429020	8942680	7188720	Lin1	296864.333	6527045.19							0.9960		0.9900
PCB-1221 Peak 2	7580040 4834438	6895160 4295152	6229580	4943066	Lin1	219459.787	4388039.03							0.9940		0.9900
PCB-1221 Peak 3	26423260 16891418	23486860 15423755	20964035	16741674	Lin1	694139.771	15534436.7							0.9970		0.9900
PCB-1254 Peak 1	36847480 25009896	32616290 23222511	29892175	24119944	Ave		28618049.3				19.0		20.0			
PCB-1254 Peak 2	40531320 28818763	37612260 26871128	33983825	27473746	Ave		32548507.0				17.6		20.0			
PCB-1254 Peak 3	61338960 45126929	56210390 42349833	51749095	42776636	Ave		49925307.1				15.6		20.0			
PCB-1254 Peak 4	41152200 30117149	37912570 28599291	35125770	28671724	Ave		33596450.6				15.7		20.0			
PCB-1254 Peak 5	54308440 40296409	48550310 37603268	45571040	38130090	Ave		44076592.8				15.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 20:20 Calibration End Date: 03/30/2015 21:38 Calibration ID: 27546

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/22	SIG10022.D
Level 2	STD01 240-174339/23	SIG10023.D
Level 3	STD02 240-174339/24	SIG10024.D
Level 4	STD05 240-174339/25	SIG10025.D
Level 5	STD1 240-174339/26	SIG10026.D
Level 6	STD2 240-174339/27	SIG10027.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	Lin1	543690 12858040	1003516	1788536	3594360	7122168	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1221 Peak 2	Lin1	379002 8590304	689516	1245916	2471533	4834438	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1221 Peak 3	Lin1	1321163 30847509	2348686	4192807	8370837	16891418	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 1	Ave	1842374 46445022	3261629	5978435	12059972	25009896	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 2	Ave	2026566 53742256	3761226	6796765	13736873	28818763	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 3	Ave	3066948 84699665	5621039	10349819	21388318	45126929	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 4	Ave	2057610 57198581	3791257	7025154	14335862	30117149	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 5	Ave	2715422 75206536	4855031	9114208	19065045	40296409	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:

Ave = Average
Lin1 = Linear 1/conc

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10022.D
Lims ID: STD005 AR2154
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Mar-2015 20:20:34 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-022
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub4

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:19 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:06:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.606	1.606	0.000	451280	0.0500	0.0610	
1	1.738	1.738	0.000	288568	0.0500	0.0637	
1	1.775	1.775	0.000	1095848	0.0500	0.0621	
		Average of Peak Amounts =				0.0623	
2	2.158	2.158	0.000	543690	0.0500	0.0378	
2	2.307	2.307	0.000	379002	0.0500	0.0364	
2	2.372	2.372	0.000	1321163	0.0500	0.0404	
		Average of Peak Amounts =				0.0382	
						RPD = 47.94	
8 PCB-1254							
1	3.532	3.532	0.000	1363067	0.0500	0.0625	
1	3.815	3.815	0.000	2040962	0.0500	0.0530	
1	4.226	4.226	0.000	2671464	0.0500	0.0633	
1	4.526	4.526	0.000	1876292	0.0500	0.0576	
1	5.018	5.018	0.000	2471130	0.0500	0.0604	
		Average of Peak Amounts =				0.0594	
2	4.422	4.422	0.000	1842374	0.0500	0.0644	
2	4.642	4.642	0.000	2026566	0.0500	0.0623	
2	5.129	5.129	0.000	3066948	0.0500	0.0614	
2	5.380	5.380	0.000	2057610	0.0500	0.0612	
2	5.953	5.953	0.000	2715422	0.0500	0.0616	
		Average of Peak Amounts =				0.0622	
						RPD = 4.66	

Reagents:

SG2154@0.05PP_00008 Amount Added: 1.00 Units: mL

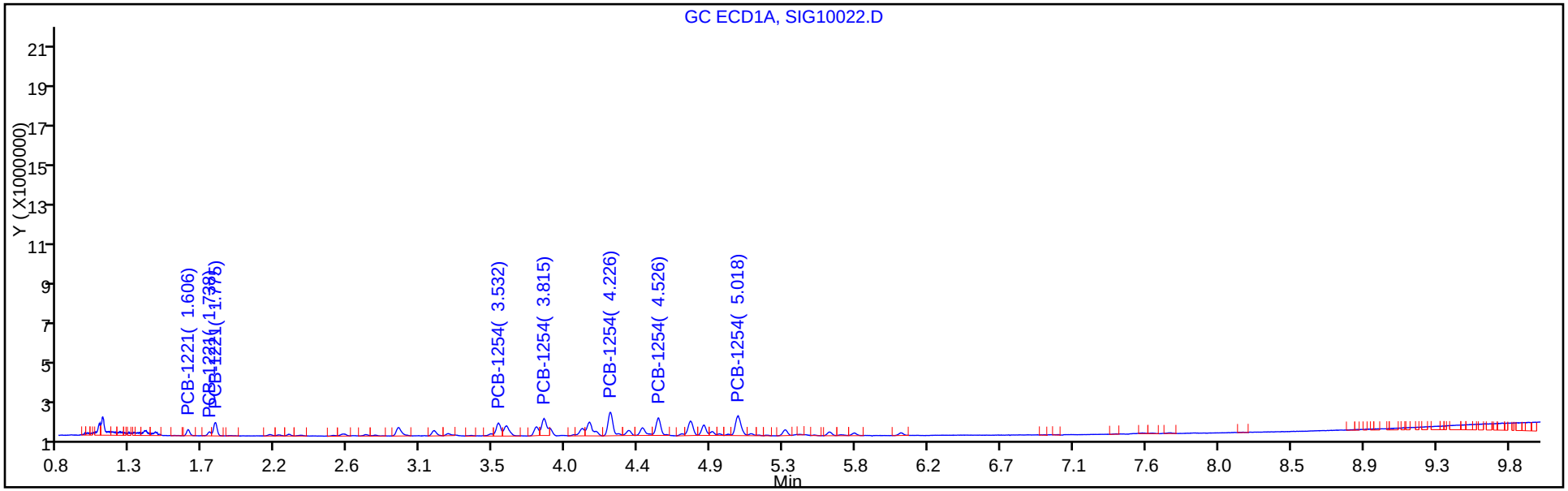
Report Date: 31-Mar-2015 06:14:21 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

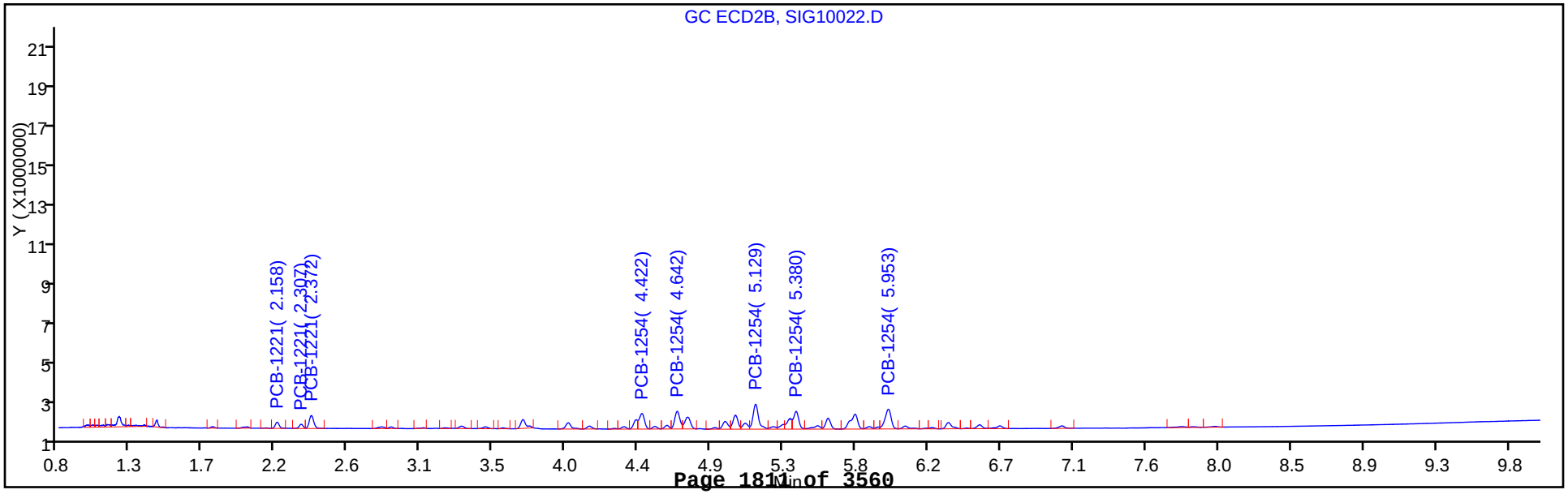
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10022.D

Injection Date:	30-Mar-2015 20:20:34	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD005 AR2154			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10023.D
Lims ID: STD01 AR2154
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Mar-2015 20:36:01 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-023
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub4

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:21 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:06:24

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.606	1.606	0.000	834964	0.1000	0.1128	
1	1.740	1.738	0.002	507908	0.1000	0.1121	
1	1.775	1.775	0.000	2052763	0.1000	0.1163	
		Average of Peak Amounts =				0.1137	
2	2.159	2.158	0.001	1003516	0.1000	0.1083	
2	2.308	2.307	0.001	689516	0.1000	0.1071	
2	2.372	2.372	0.000	2348686	0.1000	0.1065	
		Average of Peak Amounts =				0.1073	
						RPD = 5.83	
8 PCB-1254							
1	3.531	3.532	-0.001	2573510	0.1000	0.1179	
1	3.816	3.815	0.001	4493321	0.1000	0.1167	
1	4.226	4.226	0.000	5011516	0.1000	0.1187	
1	4.524	4.526	-0.002	3759446	0.1000	0.1153	
1	5.020	5.018	0.002	4604193	0.1000	0.1126	
		Average of Peak Amounts =				0.1163	
2	4.421	4.422	-0.001	3261629	0.1000	0.1140	
2	4.642	4.642	0.000	3761226	0.1000	0.1156	
2	5.129	5.129	0.000	5621039	0.1000	0.1126	
2	5.381	5.380	0.001	3791257	0.1000	0.1128	
2	5.952	5.953	-0.001	4855031	0.1000	0.1101	
		Average of Peak Amounts =				0.1130	
						RPD = 2.83	

Reagents:

SG2154@O.1PPM_00010 Amount Added: 1.00 Units: mL

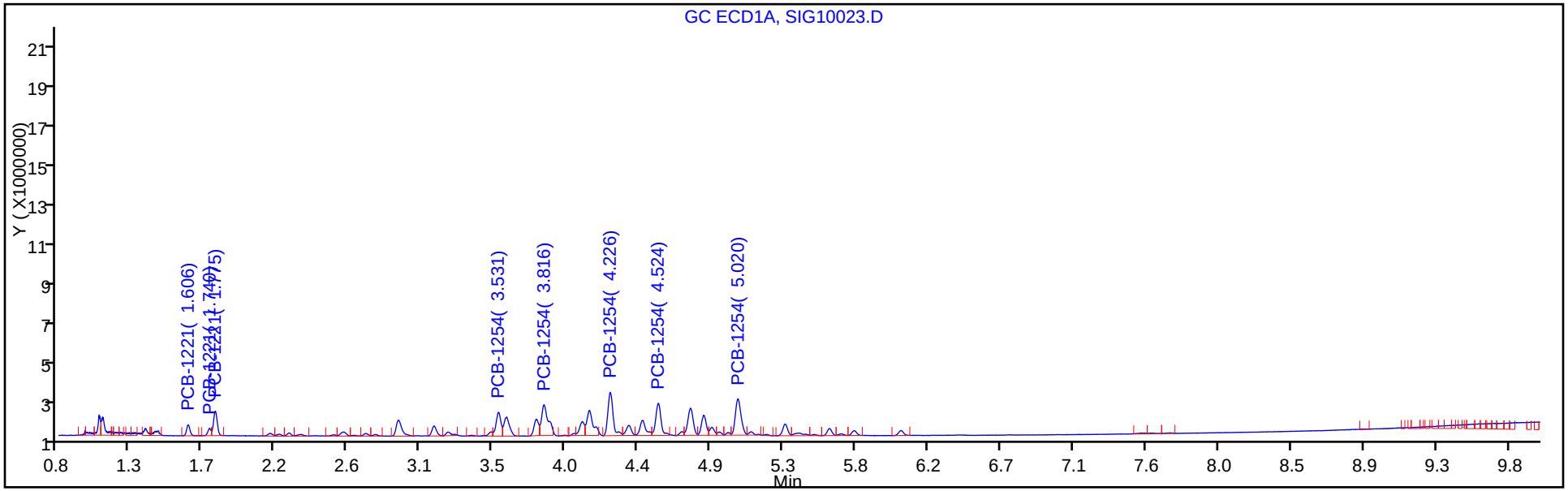
Report Date: 31-Mar-2015 06:14:23 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

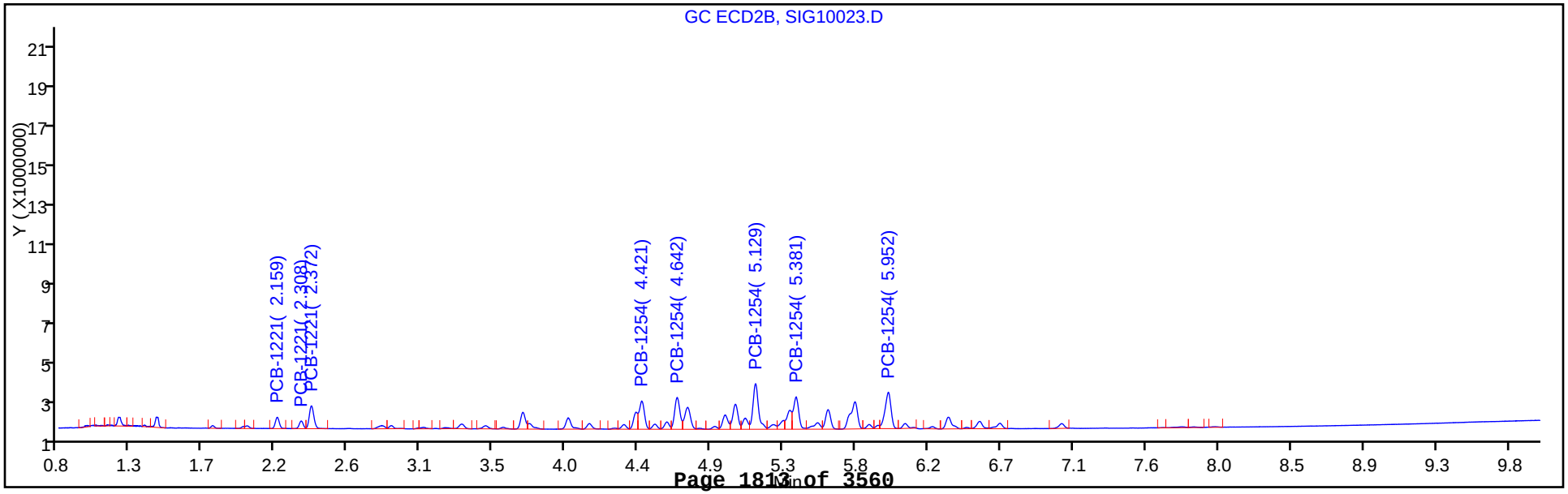
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10023.D

Injection Date:	30-Mar-2015 20:36:01	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD01 AR2154			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10024.D
Lims ID: STD02 AR2154
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Mar-2015 20:51:31 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-024
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub4

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:23 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.610	1.606	0.004	1609950	0.2000	0.2175	
1	1.744	1.738	0.006	995113	0.2000	0.2197	
1	1.779	1.775	0.004	3803442	0.2000	0.2155	
		Average of Peak Amounts =				0.2176	
2	2.164	2.158	0.006	1788536	0.2000	0.2285	
2	2.312	2.307	0.005	1245916	0.2000	0.2339	
2	2.375	2.372	0.003	4192807	0.2000	0.2252	
		Average of Peak Amounts =				0.2292	
						RPD = 5.22	
8 PCB-1254							
1	3.538	3.532	0.006	4666979	0.2000	0.2139	
1	3.821	3.815	0.006	8723715	0.2000	0.2266	
1	4.233	4.226	0.007	8666956	0.2000	0.2053	
1	4.530	4.526	0.004	6793910	0.2000	0.2084	
1	5.023	5.018	0.005	8527290	0.2000	0.2086	
		Average of Peak Amounts =				0.2126	
2	4.428	4.422	0.006	5978435	0.2000	0.2089	
2	4.647	4.642	0.005	6796765	0.2000	0.2088	
2	5.133	5.129	0.004	10349819	0.2000	0.2073	
2	5.384	5.380	0.004	7025154	0.2000	0.2091	
2	5.959	5.953	0.006	9114208	0.2000	0.2068	
		Average of Peak Amounts =				0.2082	
						RPD = 2.08	

Reagents:

SG2154@0.2PPM_00009 Amount Added: 1.00 Units: mL

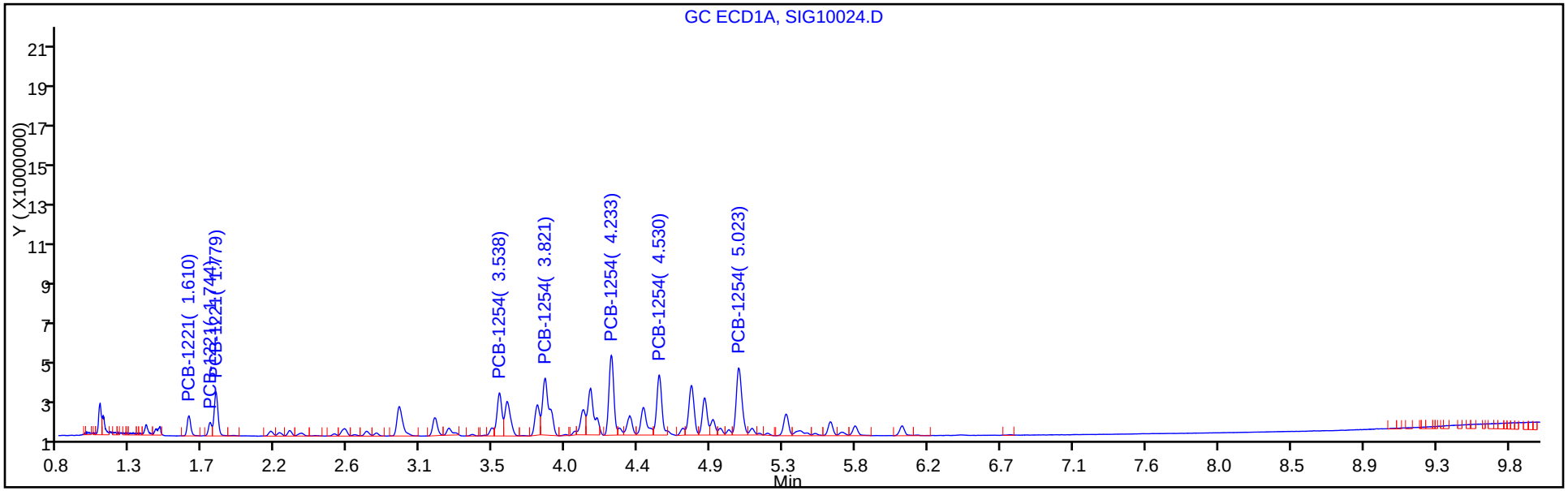
Report Date: 31-Mar-2015 06:14:25 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

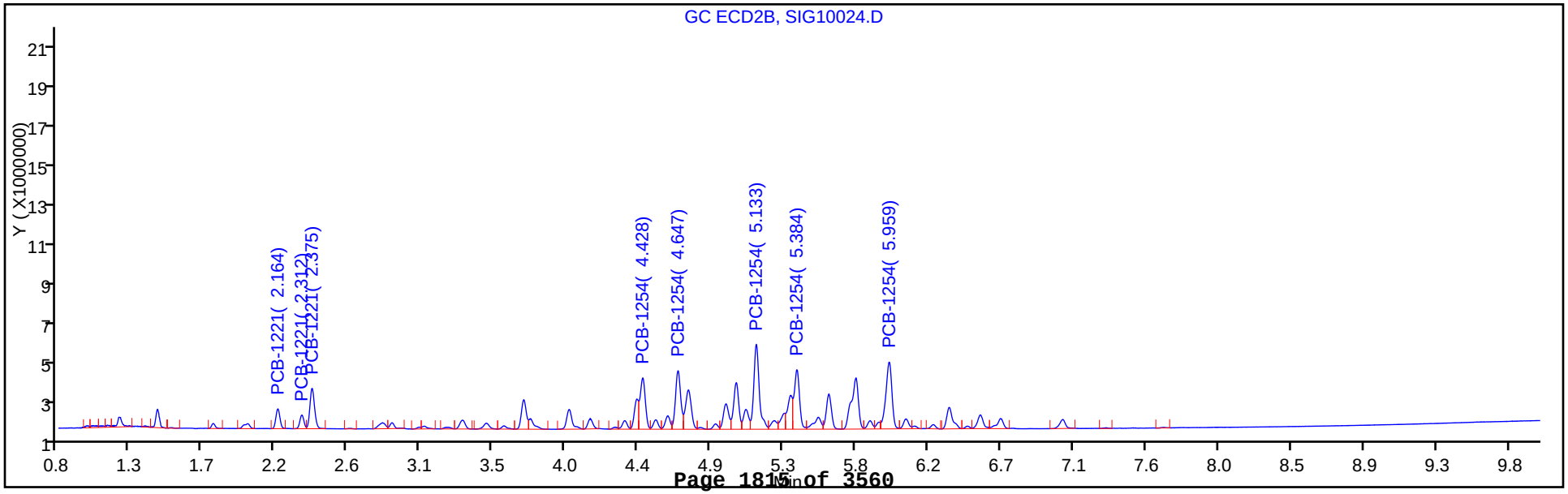
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10024.D

Injection Date:	30-Mar-2015 20:51:31	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD02 AR2154			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10025.D
Lims ID: STD05 AR2154
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-Mar-2015 21:07:06 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-025
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub4

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:25 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.611	1.606	0.005	3270666	0.5000	0.4419	
1	1.742	1.738	0.004	1975179	0.5000	0.4360	
1	1.779	1.775	0.004	7751005	0.5000	0.4392	
		Average of Peak Amounts =				0.4390	
2	2.163	2.158	0.005	3594360	0.5000	0.5052	
2	2.312	2.307	0.005	2471533	0.5000	0.5132	
2	2.375	2.372	0.003	8370837	0.5000	0.4942	
		Average of Peak Amounts =				0.5042	
						RPD = 13.82	
8 PCB-1254							
1	3.540	3.532	0.008	9594435	0.5000	0.4397	
1	3.821	3.815	0.006	17411892	0.5000	0.4522	
1	4.233	4.226	0.007	18025538	0.5000	0.4270	
1	4.530	4.526	0.004	14734604	0.5000	0.4521	
1	5.026	5.018	0.008	18255017	0.5000	0.4466	
		Average of Peak Amounts =				0.4435	
2	4.428	4.422	0.006	12059972	0.5000	0.4214	
2	4.647	4.642	0.005	13736873	0.5000	0.4220	
2	5.133	5.129	0.004	21388318	0.5000	0.4284	
2	5.386	5.380	0.006	14335862	0.5000	0.4267	
2	5.958	5.953	0.005	19065045	0.5000	0.4325	
		Average of Peak Amounts =				0.4262	
						RPD = 3.97	

Reagents:

SG2154@0.5PPM_00016 Amount Added: 1.00 Units: mL

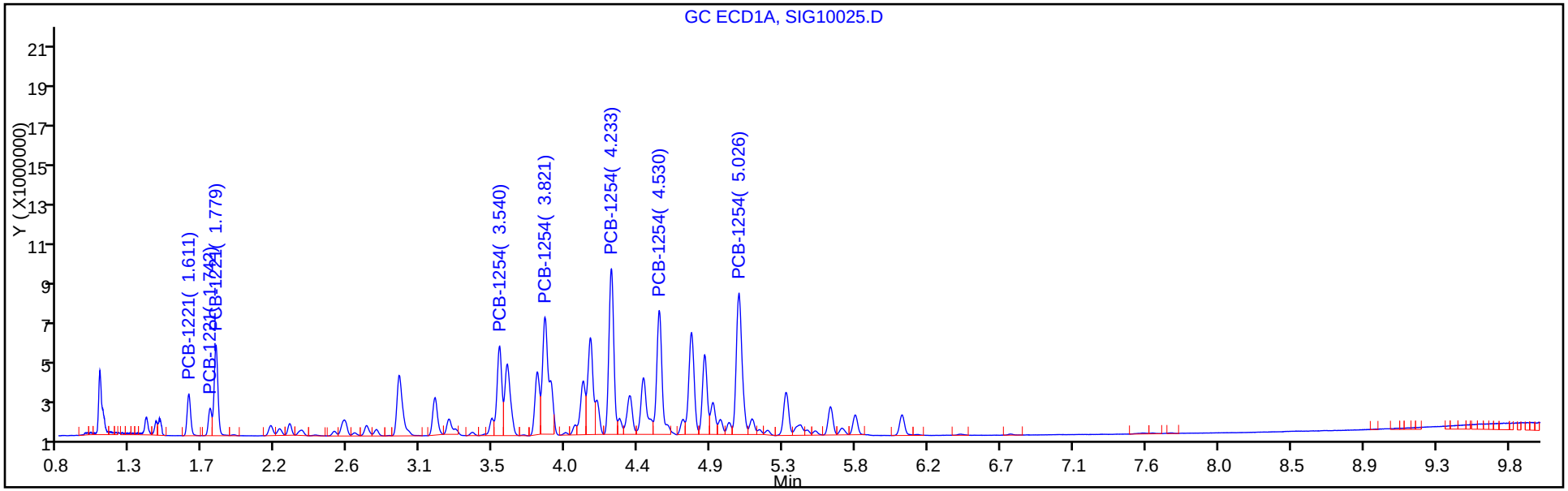
Report Date: 31-Mar-2015 06:14:27 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

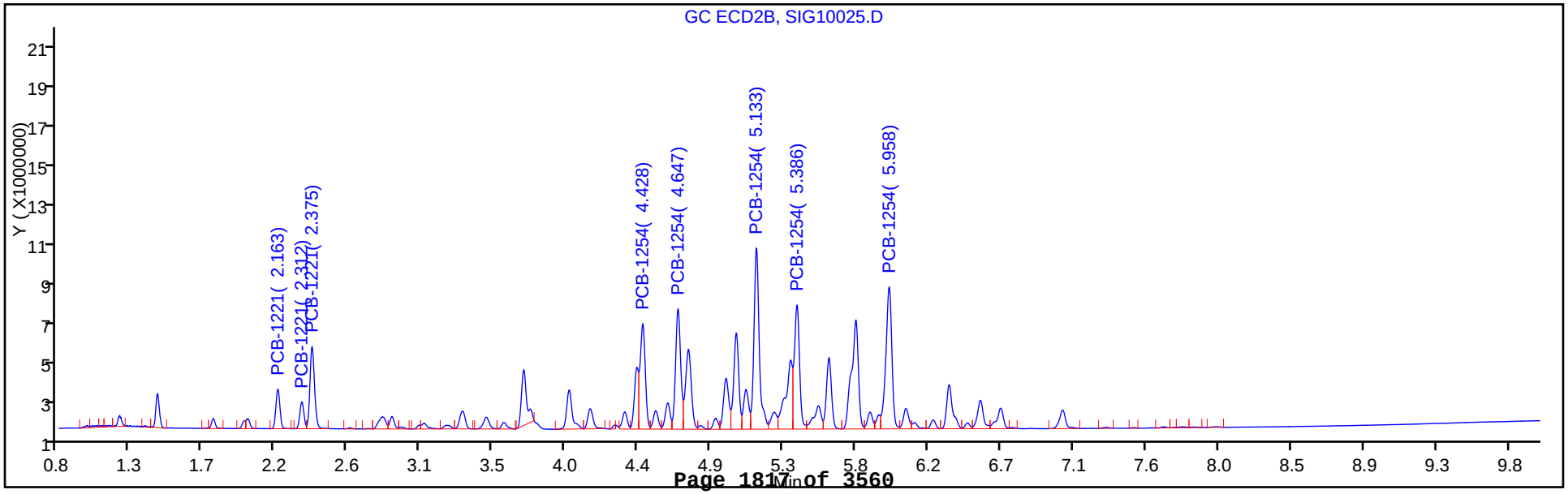
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10025.D

Injection Date:	30-Mar-2015 21:07:06	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD05 AR2154			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10026.D
Lims ID: STD1 AR2154
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Mar-2015 21:22:35 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-026
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub4

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:27 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.610	1.606	0.004	6558989	1.00	0.8862	
1	1.742	1.738	0.004	4005985	1.00	0.8843	
1	1.779	1.775	0.004	15349192	1.00	0.8697	
		Average of Peak Amounts =				0.8800	
2	2.162	2.158	0.004	7122168	1.00	1.05	
2	2.311	2.307	0.004	4834438	1.00	1.05	
2	2.375	2.372	0.003	16891418	1.00	1.04	
		Average of Peak Amounts =				1.05	
						RPD = 17.30	
8 PCB-1254							
1	3.538	3.532	0.006	18622173	1.00	0.8534	
1	3.821	3.815	0.006	35043301	1.00	0.9101	
1	4.232	4.226	0.006	37184949	1.00	0.8808	
1	4.530	4.526	0.004	29797677	1.00	0.9142	
1	5.023	5.018	0.005	37199314	1.00	0.9100	
		Average of Peak Amounts =				0.8937	
2	4.427	4.422	0.005	25009896	1.00	0.8739	
2	4.647	4.642	0.005	28818763	1.00	0.8854	
2	5.132	5.129	0.003	45126929	1.00	0.9039	
2	5.384	5.380	0.004	30117149	1.00	0.8964	
2	5.957	5.953	0.004	40296409	1.00	0.9142	
		Average of Peak Amounts =				0.8948	
						RPD = 0.12	

Reagents:

SG2154@1.0PPM_00010 Amount Added: 1.00 Units: mL

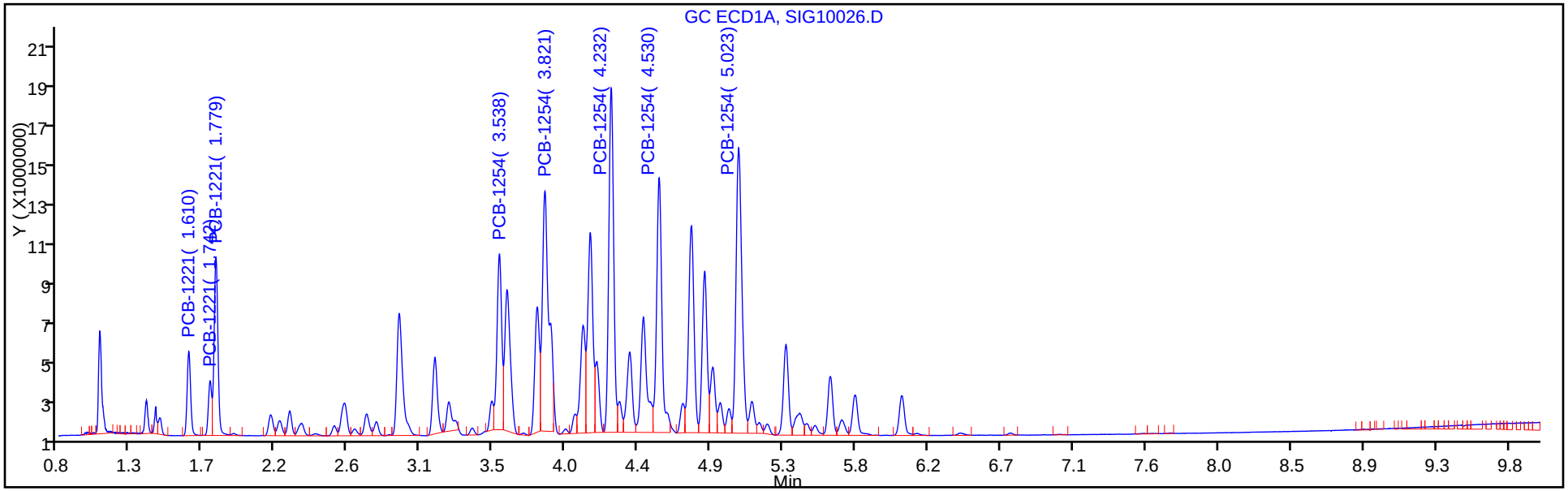
Report Date: 31-Mar-2015 06:14:29 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

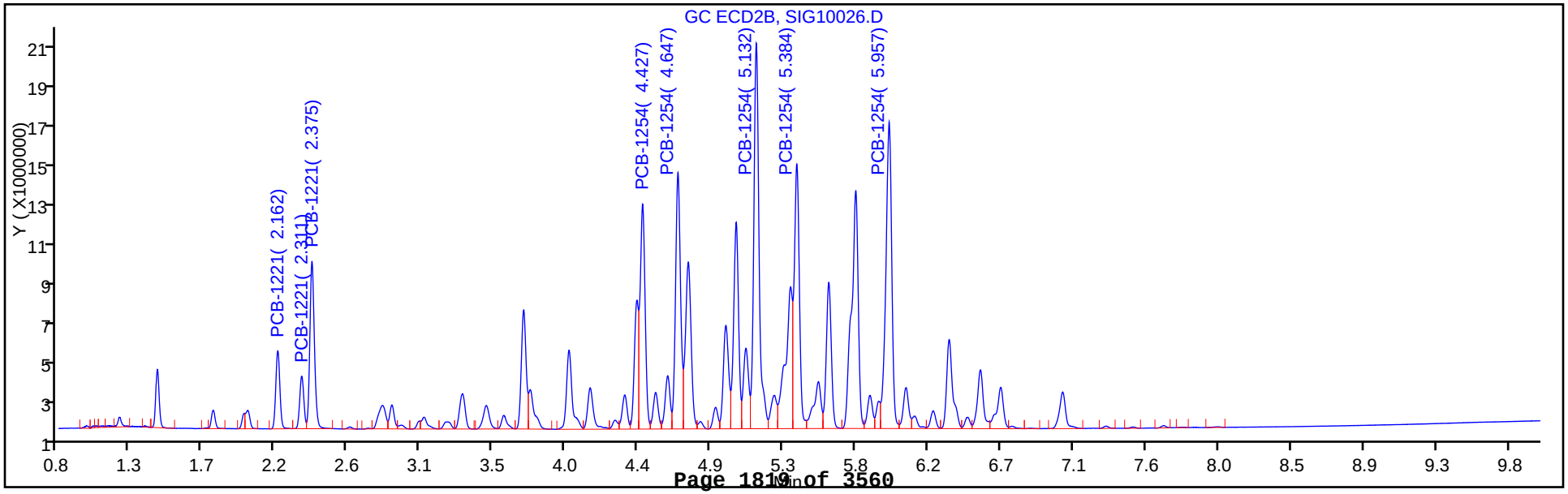
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10026.D

Injection Date:	30-Mar-2015 21:22:35	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD1 AR2154			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10027.D
Lims ID: STD2 AR2154
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Mar-2015 21:38:05 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-027
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub4

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:29 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.611	1.606	0.005	11768511	2.00	1.59	
1	1.743	1.738	0.005	6797769	2.00	1.50	
1	1.780	1.775	0.005	27164570	2.00	1.54	
		Average of Peak Amounts =				1.54	
2	2.163	2.158	0.005	12858040	2.00	1.92	
2	2.312	2.307	0.005	8590304	2.00	1.91	
2	2.376	2.372	0.004	30847509	2.00	1.94	
		Average of Peak Amounts =				1.92	
						RPD = 21.98	
8 PCB-1254							
1	3.539	3.532	0.007	33576090	2.00	1.54	
1	3.821	3.815	0.006	63591085	2.00	1.65	
1	4.231	4.226	0.005	66359972	2.00	1.57	
1	4.531	4.526	0.005	54409443	2.00	1.67	
1	5.024	5.018	0.006	66931018	2.00	1.64	
		Average of Peak Amounts =				1.61	
2	4.427	4.422	0.005	46445022	2.00	1.62	
2	4.647	4.642	0.005	53742256	2.00	1.65	
2	5.132	5.129	0.003	84699665	2.00	1.70	
2	5.386	5.380	0.006	57198581	2.00	1.70	
2	5.957	5.953	0.004	75206536	2.00	1.71	
		Average of Peak Amounts =				1.68	
						RPD = 3.78	

Reagents:

SG2154@2.0PPM_00009 Amount Added: 1.00 Units: mL

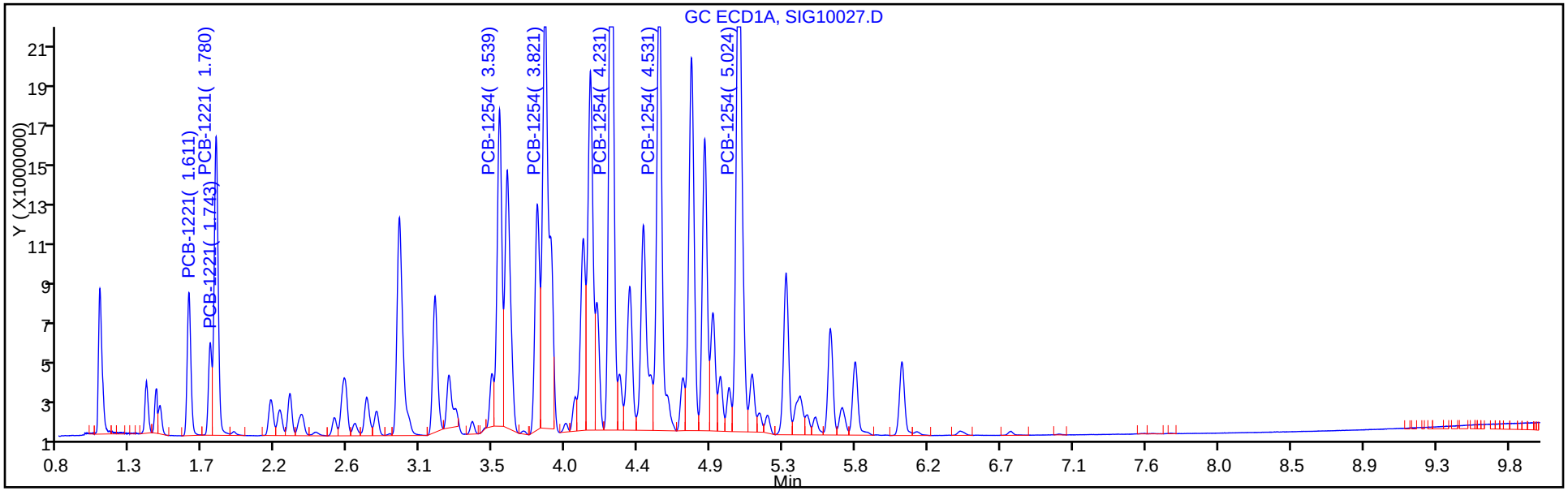
Report Date: 31-Mar-2015 06:14:31 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

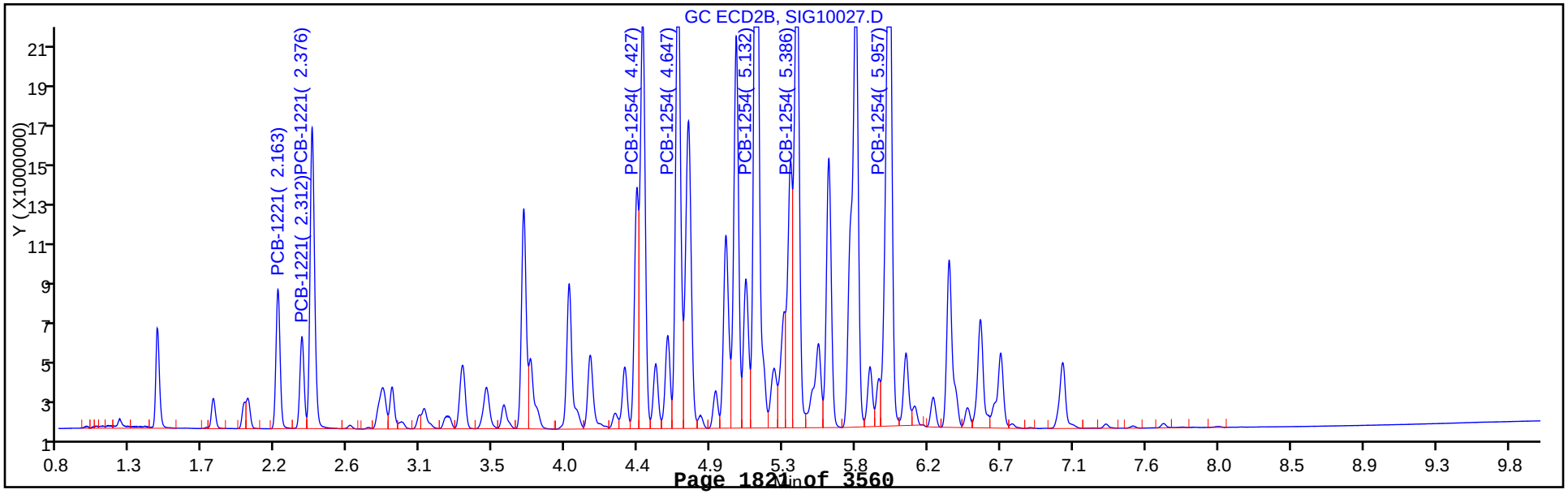
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10027.D

Injection Date:	30-Mar-2015 21:38:05	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD2 AR2154			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 21:53 Calibration End Date: 03/30/2015 23:10 Calibration ID: 27551

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/28	SIG10028.D
Level 2	STD01 240-174339/29	SIG10029.D
Level 3	STD02 240-174339/30	SIG10030.D
Level 4	STD05 240-174339/31	SIG10031.D
Level 5	STD1 240-174339/32	SIG10032.D
Level 6	STD2 240-174339/33	SIG10033.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1016 Peak 1	1.779	1.785	1.785	1.790	1.790	1.791					1.740 - 1.840	1.787
PCB-1016 Peak 2	2.118	2.125	2.125	2.131	2.130	2.130					2.081 - 2.181	2.127
PCB-1016 Peak 3	2.577	2.582	2.584	2.589	2.589	2.589					2.539 - 2.639	2.585
PCB-1016 Peak 4	2.713	2.722	2.720	2.726	2.726	2.727					2.676 - 2.776	2.722
PCB-1016 Peak 5	3.140	3.147	3.147	3.153	3.151	3.152					3.103 - 3.203	3.148
PCB-1260 Peak 1	4.430	4.439	4.438	4.445	4.445	4.445					4.395 - 4.495	4.440
PCB-1260 Peak 2	4.731	4.740	4.740	4.746	4.745	4.747					4.696 - 4.796	4.742
PCB-1260 Peak 3	5.023	5.029	5.032	5.036	5.037	5.037					4.986 - 5.086	5.032
PCB-1260 Peak 4	5.748	5.753	5.753	5.760	5.760	5.761					5.710 - 5.810	5.756
PCB-1260 Peak 5	6.035	6.047	6.045	6.051	6.050	6.052					6.001 - 6.101	6.047
Tetrachloro-m-xylene	1.445	1.450	1.445	1.455	1.455	1.456					1.405 - 1.505	1.451
DCB Decachlorobiphenyl	7.210	7.219	7.219	7.225	7.226	7.227					7.175 - 7.275	7.221

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 21:53 Calibration End Date: 03/30/2015 23:10 Calibration ID: 27551

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/28	SIG10028.D
Level 2	STD01 240-174339/29	SIG10029.D
Level 3	STD02 240-174339/30	SIG10030.D
Level 4	STD05 240-174339/31	SIG10031.D
Level 5	STD1 240-174339/32	SIG10032.D
Level 6	STD2 240-174339/33	SIG10033.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1016 Peak 1	15377120 11508707	14673030 10180749	13151395	12488982	Ave		12896663.8				15.1		20.0			
PCB-1016 Peak 2	28982160 20644934	25151090 18350029	23951020	22930862	Ave		23335015.8				15.8		20.0			
PCB-1016 Peak 3	55769780 44992977	53151130 41438186	50166170	48348580	Ave		48977803.8				10.7		20.0			
PCB-1016 Peak 4	25124540 19943730	23241920 18339945	22635935	22188702	Ave		21912462.0				11.1		20.0			
PCB-1016 Peak 5	27292740 19500851	24580270 17956904	21928840	21262078	Ave		22086947.1				15.4		20.0			
PCB-1260 Peak 1	35366040 27377235	32890200 25286124	30229660	29145760	Ave		30049169.8				12.2		20.0			
PCB-1260 Peak 2	62383700 49088916	57833230 45409865	53964160	51654694	Ave		53389094.2				11.4		20.0			
PCB-1260 Peak 3	57955700 46771566	53541720 43565571	49949480	48369582	Ave		50025603.1				10.2		20.0			
PCB-1260 Peak 4	81909440 66457275	76139170 61525768	70774595	67713722	Ave		70753328.3				10.3		20.0			
PCB-1260 Peak 5	40319860 32648835	38311820 30310011	35336160	33452456	Ave		35063190.3				10.6		20.0			
Tetrachloro-m-xylene	936937600 695595300	780597600 612873300	817770500	669558880	Ave		752222197				15.6		20.0			
DCB Decachlorobiphenyl	732748400 558283280	616788000 507226930	591322500	537503400	Ave		590645418				13.5		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI

PCBS INITIAL CALIBRATION DATA

EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 21:53 Calibration End Date: 03/30/2015 23:10 Calibration ID: 27551

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/28	SIG10028.D
Level 2	STD01 240-174339/29	SIG10029.D
Level 3	STD02 240-174339/30	SIG10030.D
Level 4	STD05 240-174339/31	SIG10031.D
Level 5	STD1 240-174339/32	SIG10032.D
Level 6	STD2 240-174339/33	SIG10033.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Ave	768856 20361498	1467303	2630279	6244491	11508707	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1016 Peak 2	Ave	1449108 36700058	2515109	4790204	11465431	20644934	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1016 Peak 3	Ave	2788489 82876371	5315113	10033234	24174290	44992977	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1016 Peak 4	Ave	1256227 36679890	2324192	4527187	11094351	19943730	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1016 Peak 5	Ave	1364637 35913807	2458027	4385768	10631039	19500851	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 1	Ave	1768302 50572248	3289020	6045932	14572880	27377235	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 2	Ave	3119185 90819730	5783323	10792832	25827347	49088916	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 3	Ave	2897785 87131141	5354172	9989896	24184791	46771566	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 4	Ave	4095472 123051535	7613917	14154919	33856861	66457275	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 5	Ave	2015993 60620021	3831182	7067232	16726228	32648835	0.0500 2.00	0.100	0.200	0.500	1.00
Tetrachloro-m-xylene	Ave	2342344 61287330	3902988	8177705	16738972	34779765	0.00250 0.100	0.00500	0.0100	0.0250	0.0500
DCB Decachlorobiphenyl	Ave	1831871 50722693	3083940	5913225	13437585	27914164	0.00250 0.100	0.00500	0.0100	0.0250	0.0500

Curve Type Legend:

Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10028.D
Lims ID: STD005 1660
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Mar-2015 21:53:33 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-028
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:31 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.445	1.455	-0.010	2342344	0.002500	0.003114	
2	1.842	1.851	-0.009	2261035	0.002500	0.003023	
						RPD = 2.97	
6 PCB-1016							
1	1.779	1.790	-0.011	768856	0.0500	0.0596	
1	2.118	2.131	-0.013	1449108	0.0500	0.0621	
1	2.577	2.589	-0.012	2788489	0.0500	0.0569	
1	2.713	2.726	-0.013	1256227	0.0500	0.0573	
1	3.140	3.153	-0.013	1364637	0.0500	0.0618	
		Average of Peak Amounts =				0.0596	
2	2.375	2.386	-0.011	907734	0.0500	0.0633	
2	2.817	2.828	-0.011	1751865	0.0500	0.0640	
2	3.310	3.321	-0.011	3291430	0.0500	0.0605	
2	3.457	3.469	-0.012	1597822	0.0500	0.0652	
2	3.971	3.984	-0.013	1291147	0.0500	0.0657	
		Average of Peak Amounts =				0.0637	
						RPD = 6.80	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.430	4.445	-0.015	1768302	0.0500	0.0588	
1	4.731	4.746	-0.015	3119185	0.0500	0.0584	
1	5.023	5.036	-0.013	2897785	0.0500	0.0579	
1	5.748	5.760	-0.012	4095472	0.0500	0.0579	
1	6.035	6.051	-0.016	2015993	0.0500	0.0575	
		Average of Peak Amounts =				0.0581	
2	5.348	5.361	-0.013	2201474	0.0500	0.0611	
2	5.582	5.597	-0.015	2269121	0.0500	0.0597	
2	5.955	5.968	-0.013	3269499	0.0500	0.0594	
2	6.650	6.663	-0.013	3931032	0.0500	0.0562	
2	7.034	7.046	-0.012	2896392	0.0500	0.0567	
		Average of Peak Amounts =				0.0586	
						RPD = 0.88	
$ 12 DCB Decachlorobiphenyl							
1	7.210	7.225	-0.015	1831871	0.002500	0.003101	
2	8.274	8.290	-0.016	2100998	0.002500	0.003256	
						RPD = 4.86	

Reagents:

SG1660@.05PPM_00012 Amount Added: 1.00 Units: mL

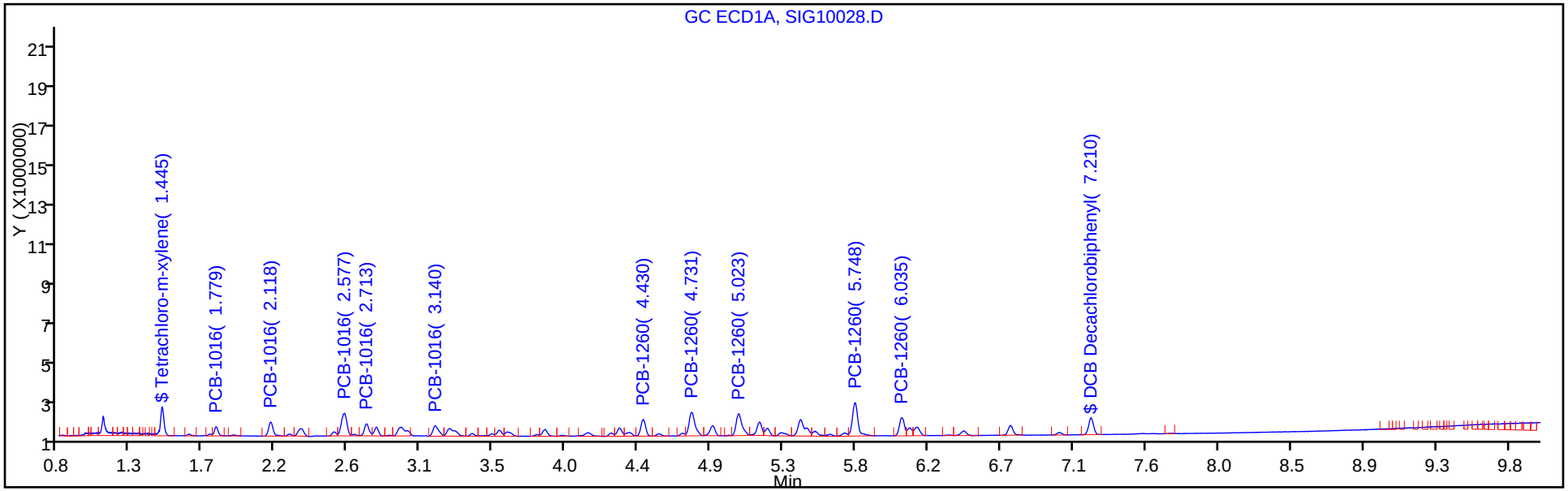
Report Date: 31-Mar-2015 06:14:32 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

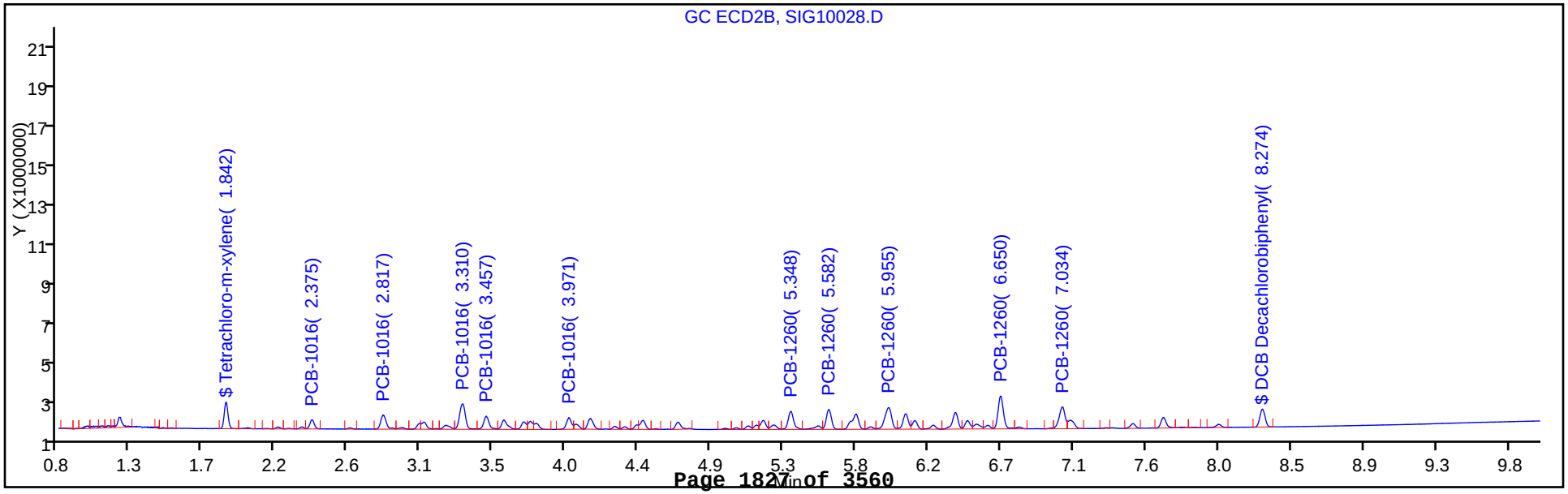
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10028.D

Injection Date:	30-Mar-2015 21:53:33	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD005 1660			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10029.D
Lims ID: STD01 1660
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Mar-2015 22:09:07 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-029
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:33 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:06:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.450	1.455	-0.005	3902988	0.005000	0.005189	
2	1.846	1.851	-0.005	3842112	0.005000	0.005137	
						RPD = 1.01	
6 PCB-1016							
1	1.785	1.790	-0.005	1467303	0.1000	0.1138	
1	2.125	2.131	-0.006	2515109	0.1000	0.1078	
1	2.582	2.589	-0.007	5315113	0.1000	0.1085	
1	2.722	2.726	-0.004	2324192	0.1000	0.1061	
1	3.147	3.153	-0.006	2458027	0.1000	0.1113	
		Average of Peak Amounts =				0.1095	
2	2.380	2.386	-0.006	1652687	0.1000	0.1152	
2	2.822	2.828	-0.006	3157748	0.1000	0.1154	
2	3.316	3.321	-0.005	5730469	0.1000	0.1054	
2	3.462	3.469	-0.007	2681137	0.1000	0.1094	
2	3.976	3.984	-0.008	2213060	0.1000	0.1127	
		Average of Peak Amounts =				0.1116	
						RPD = 1.91	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.439	4.445	-0.006	3289020	0.1000	0.1095	
1	4.740	4.746	-0.006	5783323	0.1000	0.1083	
1	5.029	5.036	-0.007	5354172	0.1000	0.1070	
1	5.753	5.760	-0.007	7613917	0.1000	0.1076	
1	6.047	6.051	-0.004	3831182	0.1000	0.1093	
		Average of Peak Amounts =				0.1083	
2	5.354	5.361	-0.007	3937927	0.1000	0.1093	
2	5.591	5.597	-0.006	4087199	0.1000	0.1076	
2	5.961	5.968	-0.007	5820572	0.1000	0.1057	
2	6.657	6.663	-0.006	7304283	0.1000	0.1045	
2	7.039	7.046	-0.007	5388737	0.1000	0.1055	
		Average of Peak Amounts =				0.1065	
						RPD = 1.70	
$ 12 DCB Decachlorobiphenyl							
1	7.219	7.225	-0.006	3083940	0.005000	0.005221	
2	8.282	8.290	-0.008	3396844	0.005000	0.005264	
						RPD = 0.82	

Reagents:

SG1660STD@0.1_00012 Amount Added: 1.00 Units: mL

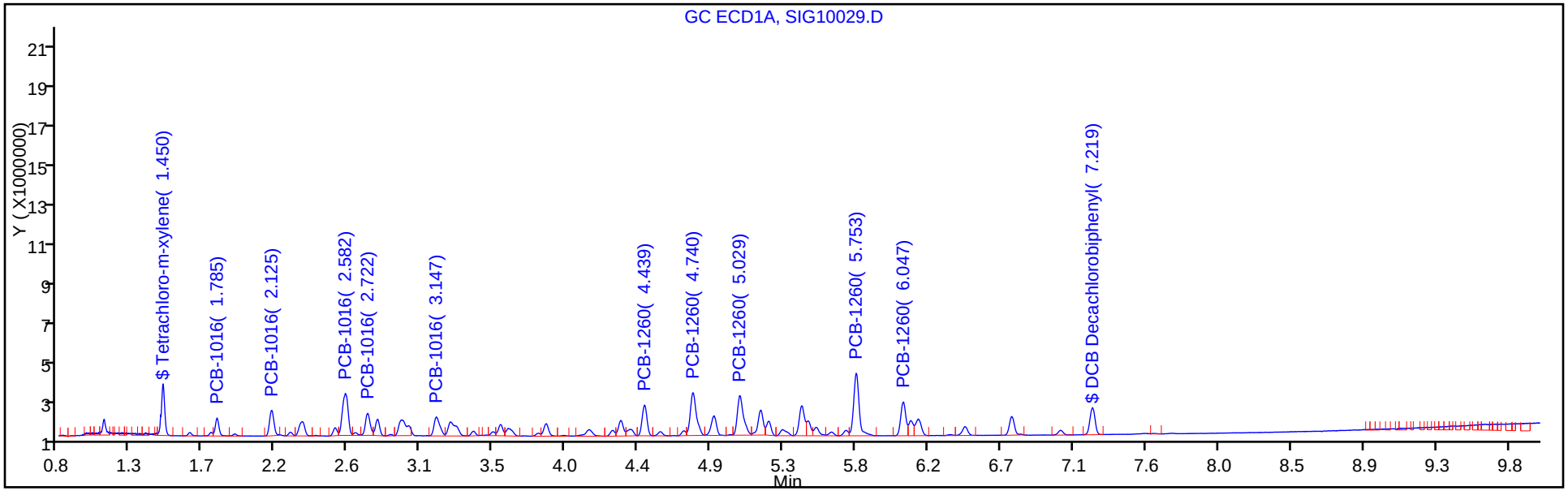
Report Date: 31-Mar-2015 06:14:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

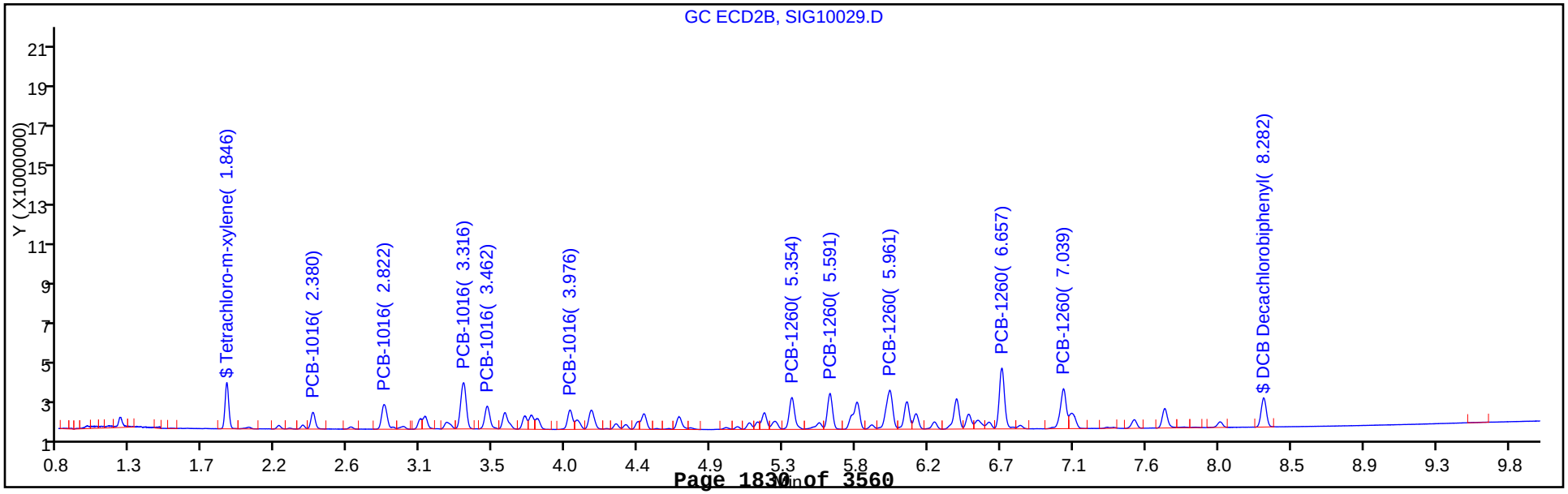
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10029.D

Injection Date:	30-Mar-2015 22:09:07	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD01 1660			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10030.D
Lims ID: STD02 1660
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Mar-2015 22:24:34 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-030
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:35 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.445	1.455	-0.010	8177705	0.0100	0.0109	
2	1.846	1.851	-0.005	7185534	0.0100	0.009607	
						RPD = 12.35	
6 PCB-1016							
1	1.785	1.790	-0.005	2630279	0.2000	0.2040	
1	2.125	2.131	-0.006	4790204	0.2000	0.2053	
1	2.584	2.589	-0.005	10033234	0.2000	0.2049	
1	2.720	2.726	-0.006	4527187	0.2000	0.2066	
1	3.147	3.153	-0.006	4385768	0.2000	0.1986	
		Average of Peak Amounts =				0.2039	
2	2.380	2.386	-0.006	2906841	0.2000	0.2026	
2	2.822	2.828	-0.006	5641019	0.2000	0.2061	
2	3.315	3.321	-0.006	10577651	0.2000	0.1945	
2	3.464	3.469	-0.005	4851253	0.2000	0.1980	
2	3.977	3.984	-0.007	3903164	0.2000	0.1987	
		Average of Peak Amounts =				0.2000	
						RPD = 1.92	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.438	4.445	-0.007	6045932	0.2000	0.2012	
1	4.740	4.746	-0.006	10792832	0.2000	0.2022	
1	5.032	5.036	-0.004	9989896	0.2000	0.1997	
1	5.753	5.760	-0.007	14154919	0.2000	0.2001	
1	6.045	6.051	-0.006	7067232	0.2000	0.2016	
		Average of Peak Amounts =				0.2009	
2	5.354	5.361	-0.007	7106747	0.2000	0.1972	
2	5.590	5.597	-0.007	7529490	0.2000	0.1982	
2	5.962	5.968	-0.006	10728940	0.2000	0.1948	
2	6.656	6.663	-0.007	13712588	0.2000	0.1961	
2	7.040	7.046	-0.006	10079143	0.2000	0.1974	
		Average of Peak Amounts =				0.1967	
						RPD = 2.11	
$ 12 DCB Decachlorobiphenyl							
1	7.219	7.225	-0.006	5913225	0.0100	0.0100	
2	8.282	8.290	-0.008	6403214	0.0100	0.0099	
						RPD = 0.88	

Reagents:

SG1660@0.2ppm_00011 Amount Added: 1.00 Units: mL

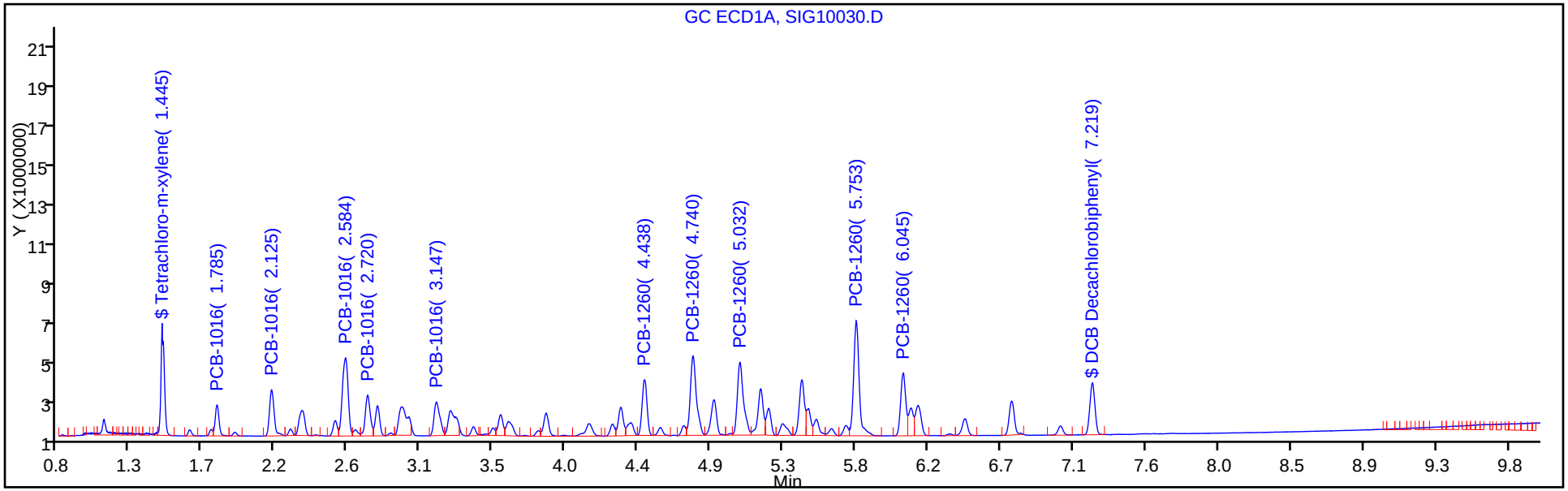
Report Date: 31-Mar-2015 06:14:37 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

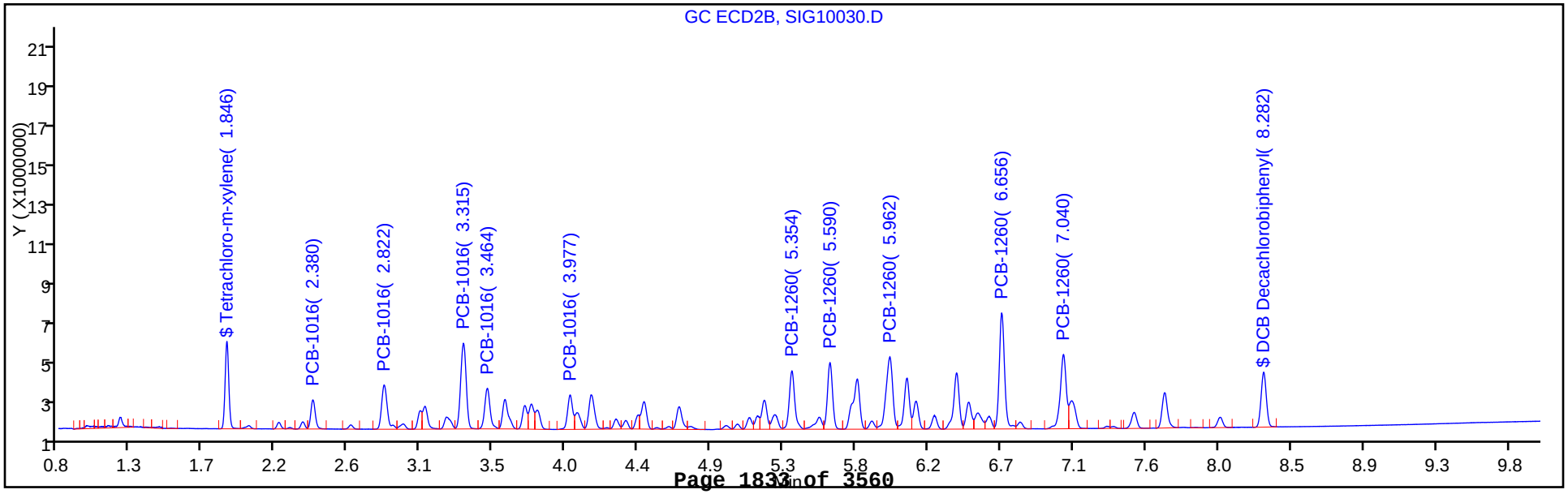
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10030.D

Injection Date:	30-Mar-2015 22:24:34	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD02 1660			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10031.D
Lims ID: STD05 1660
Client ID:
Sample Type: ICRT Calib Level: 4
Inject. Date: 30-Mar-2015 22:40:02 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-031
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:38 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.455	1.455	0.000	16738972	0.0250	0.0223	
2	1.851	1.851	0.000	17994211	0.0250	0.0241	
						RPD = 7.79	
6 PCB-1016							
1	1.790	1.790	0.000	6244491	0.5000	0.4842	
1	2.131	2.131	0.000	11465431	0.5000	0.4913	
1	2.589	2.589	0.000	24174290	0.5000	0.4936	
1	2.726	2.726	0.000	11094351	0.5000	0.5063	
1	3.153	3.153	0.000	10631039	0.5000	0.4813	
		Average of Peak Amounts =				0.4913	
2	2.386	2.386	0.000	6740583	0.5000	0.4697	
2	2.828	2.828	0.000	13045833	0.5000	0.4766	
2	3.321	3.321	0.000	25982490	0.5000	0.4777	
2	3.469	3.469	0.000	11438306	0.5000	0.4668	
2	3.984	3.984	0.000	9024129	0.5000	0.4595	
		Average of Peak Amounts =				0.4701	
						RPD = 4.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.445	4.445	0.000	14572880	0.5000	0.4850	
1	4.746	4.746	0.000	25827347	0.5000	0.4838	
1	5.036	5.036	0.000	24184791	0.5000	0.4834	
1	5.760	5.760	0.000	33856861	0.5000	0.4785	
1	6.051	6.051	0.000	16726228	0.5000	0.4770	
		Average of Peak Amounts =				0.4815	
2	5.361	5.361	0.000	17073105	0.5000	0.4738	
2	5.597	5.597	0.000	18051151	0.5000	0.4751	
2	5.968	5.968	0.000	25989418	0.5000	0.4720	
2	6.663	6.663	0.000	32955803	0.5000	0.4713	
2	7.046	7.046	0.000	23829543	0.5000	0.4667	
		Average of Peak Amounts =				0.4718	
						RPD = 2.05	
$ 12 DCB Decachlorobiphenyl							
1	7.225	7.225	0.000	13437585	0.0250	0.0228	
2	8.290	8.290	0.000	14084030	0.0250	0.0218	
						RPD = 4.14	

Reagents:

SG1660@0.5PPM_00042 Amount Added: 1.00 Units: mL

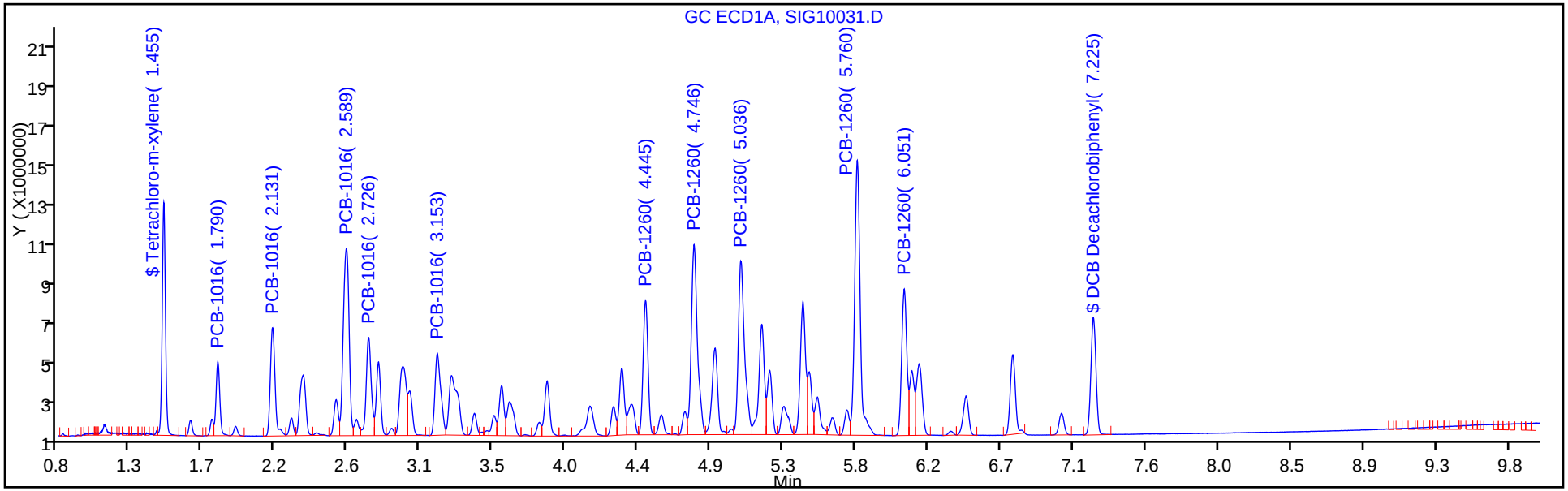
Report Date: 31-Mar-2015 06:14:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

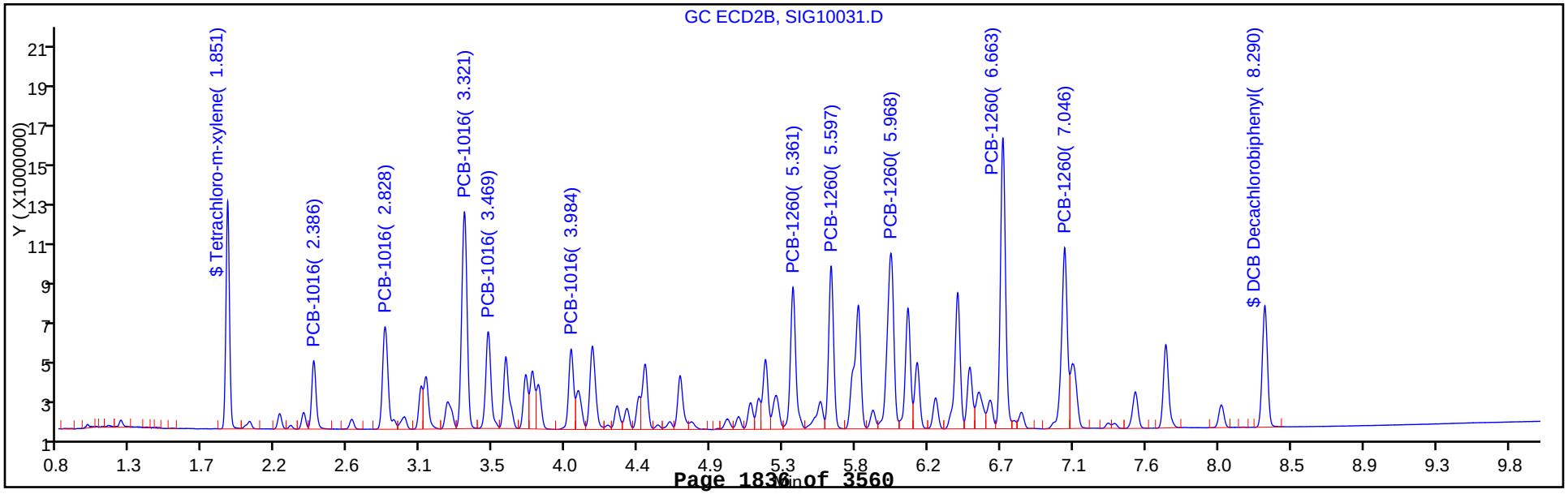
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10031.D

Injection Date:	30-Mar-2015 22:40:02	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD05 1660			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10032.D
Lims ID: STD1 1660
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Mar-2015 22:55:28 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-032
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:40 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.455	1.455	0.000	34779765	0.0500	0.0462	
2	1.851	1.851	0.000	35079083	0.0500	0.0469	
						RPD = 1.42	
6 PCB-1016							
1	1.790	1.790	0.000	11508707	1.00	0.8924	
1	2.130	2.131	-0.001	20644934	1.00	0.8847	
1	2.589	2.589	0.000	44992977	1.00	0.9186	
1	2.726	2.726	0.000	19943730	1.00	0.9102	
1	3.151	3.153	-0.002	19500851	1.00	0.8829	
		Average of Peak Amounts =				0.8978	
2	2.385	2.386	-0.001	12240949	1.00	0.8531	
2	2.828	2.828	0.000	22676227	1.00	0.8284	
2	3.321	3.321	0.000	50598588	1.00	0.9303	
2	3.469	3.469	0.000	21323724	1.00	0.8702	
2	3.982	3.984	-0.002	16777539	1.00	0.8543	
		Average of Peak Amounts =				0.8672	
						RPD = 3.46	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.445	4.445	0.000	27377235	1.00	0.9111	
1	4.745	4.746	-0.001	49088916	1.00	0.9195	
1	5.037	5.036	0.001	46771566	1.00	0.9350	
1	5.760	5.760	0.000	66457275	1.00	0.9393	
1	6.050	6.051	-0.001	32648835	1.00	0.9311	
		Average of Peak Amounts =				0.9272	
2	5.360	5.361	-0.001	32508172	1.00	0.9022	
2	5.596	5.597	-0.001	34840627	1.00	0.9170	
2	5.969	5.968	0.001	52021997	1.00	0.9447	
2	6.664	6.663	0.001	68328477	1.00	0.9772	
2	7.047	7.046	0.001	49194774	1.00	0.9634	
		Average of Peak Amounts =				0.9409	
						RPD = 1.47	
$ 12 DCB Decachlorobiphenyl							
1	7.226	7.225	0.001	27914164	0.0500	0.0473	
2	8.289	8.290	-0.001	29933367	0.0500	0.0464	
						RPD = 1.86	

Reagents:

SG1660@1.0PPM_00011 Amount Added: 1.00 Units: mL

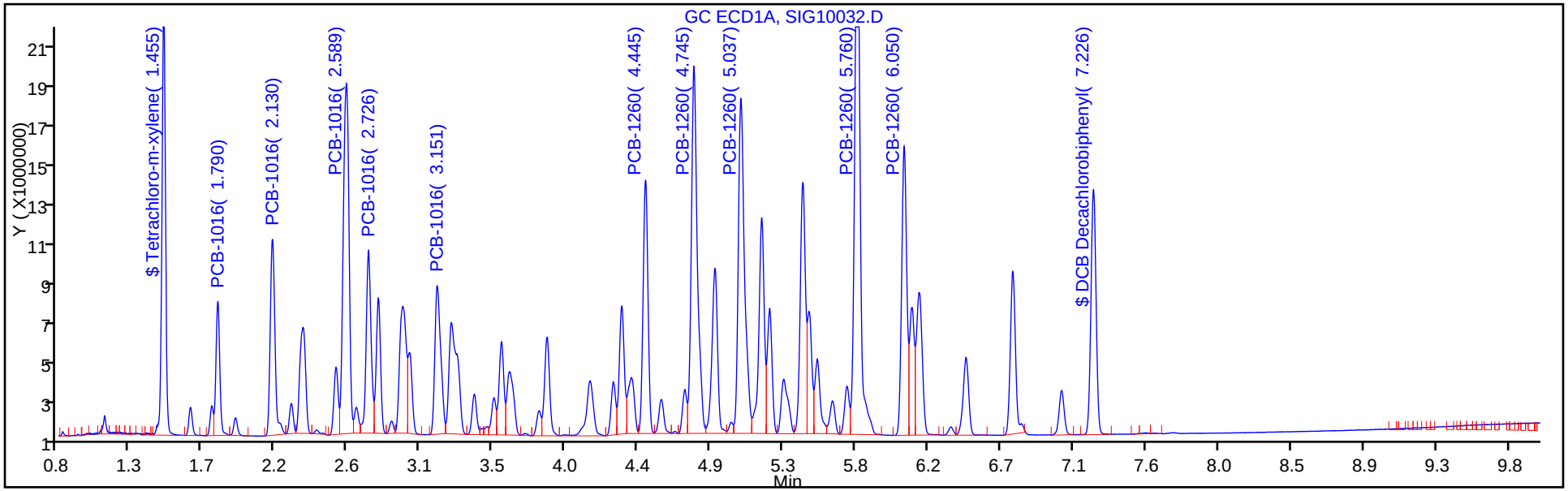
Report Date: 31-Mar-2015 06:14:41 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

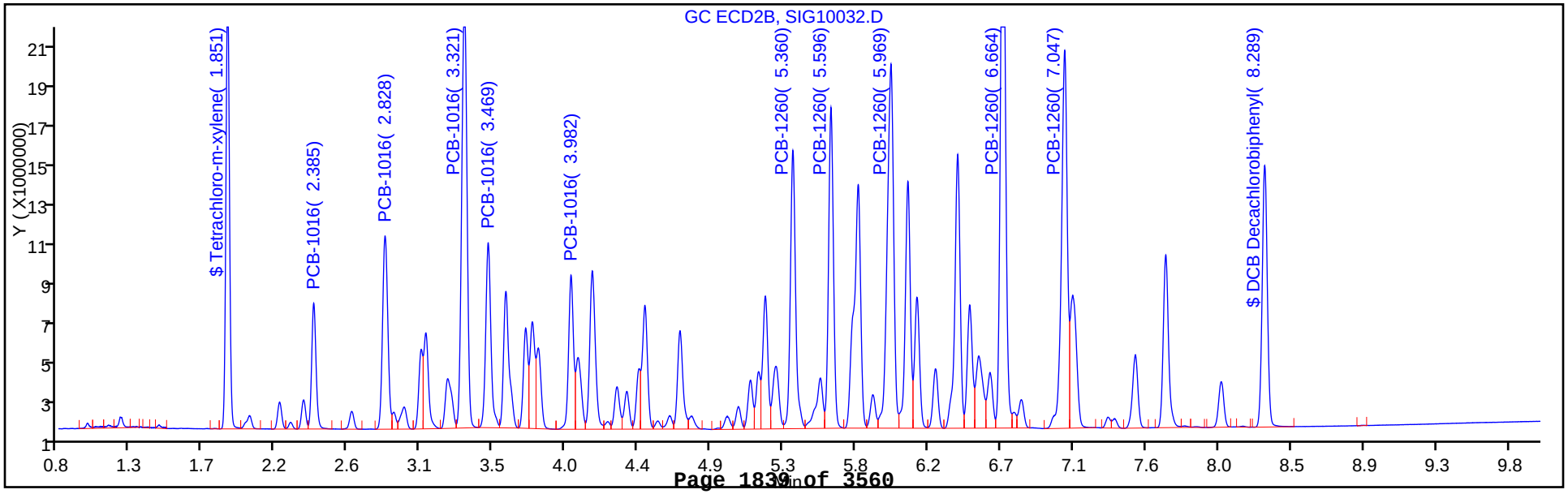
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10032.D

Injection Date:	30-Mar-2015 22:55:28	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD1 1660			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D
Lims ID: STD2 1660
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Mar-2015 23:10:59 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-033
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:42 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:07:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.456	1.455	0.001	61287330	0.1000	0.0815	
2	1.852	1.851	0.001	67510901	0.1000	0.0903	
						RPD = 10.23	
6 PCB-1016							
1	1.791	1.790	0.001	20361498	2.00	1.58	
1	2.130	2.131	-0.001	36700058	2.00	1.57	
1	2.589	2.589	0.000	82876371	2.00	1.69	
1	2.727	2.726	0.001	36679890	2.00	1.67	
1	3.152	3.153	-0.001	35913807	2.00	1.63	
		Average of Peak Amounts =				1.63	
2	2.386	2.386	0.000	22316608	2.00	1.56	
2	2.829	2.828	0.001	41291131	2.00	1.51	
2	3.321	3.321	0.000	95497488	2.00	1.76	
2	3.469	3.469	0.000	39617994	2.00	1.62	
2	3.983	3.984	-0.001	31083720	2.00	1.58	
		Average of Peak Amounts =				1.60	
						RPD = 1.54	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.445	4.445	0.000	50572248	2.00	1.68	
1	4.747	4.746	0.001	90819730	2.00	1.70	
1	5.037	5.036	0.001	87131141	2.00	1.74	
1	5.761	5.760	0.001	123051535	2.00	1.74	
1	6.052	6.051	0.001	60620021	2.00	1.73	
		Average of Peak Amounts =				1.72	
2	5.361	5.361	0.000	61189588	2.00	1.70	
2	5.597	5.597	0.000	66251011	2.00	1.74	
2	5.969	5.968	0.001	98335317	2.00	1.79	
2	6.664	6.663	0.001	130131056	2.00	1.86	
2	7.047	7.046	0.001	94631471	2.00	1.85	
		Average of Peak Amounts =				1.79	
						RPD = 3.97	
$ 12 DCB Decachlorobiphenyl							
1	7.227	7.225	0.002	50722693	0.1000	0.0859	
2	8.288	8.290	-0.002	54940278	0.1000	0.0851	
						RPD = 0.86	

Reagents:

SG1660@2.0PPM_00012 Amount Added: 1.00 Units: mL

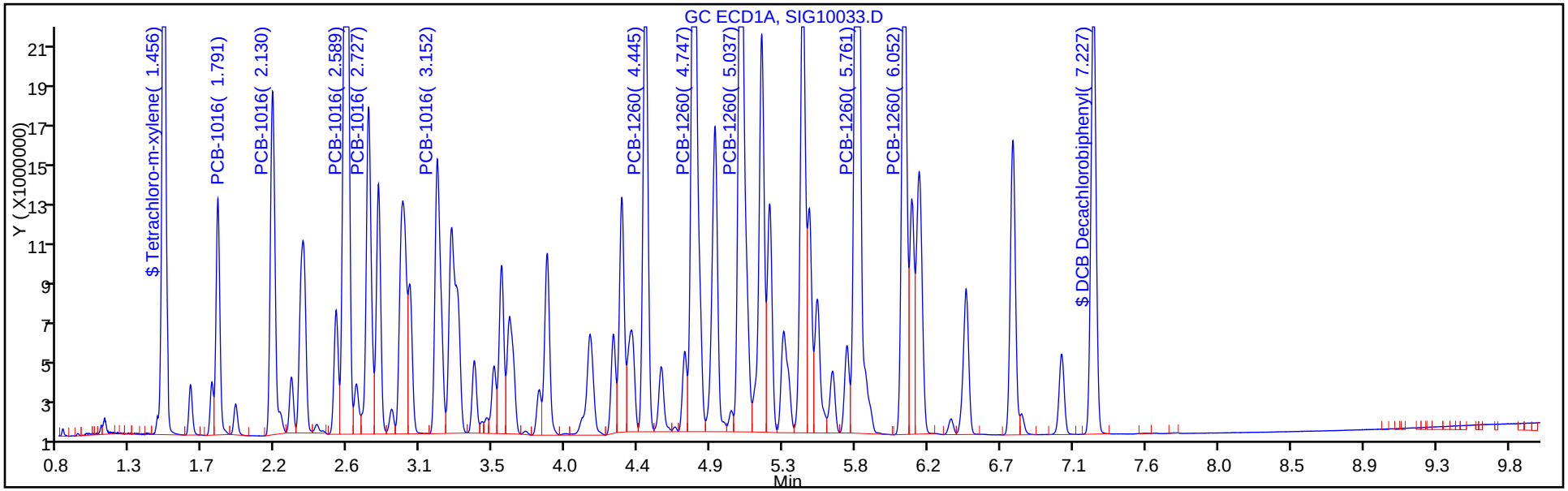
Report Date: 31-Mar-2015 06:14:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

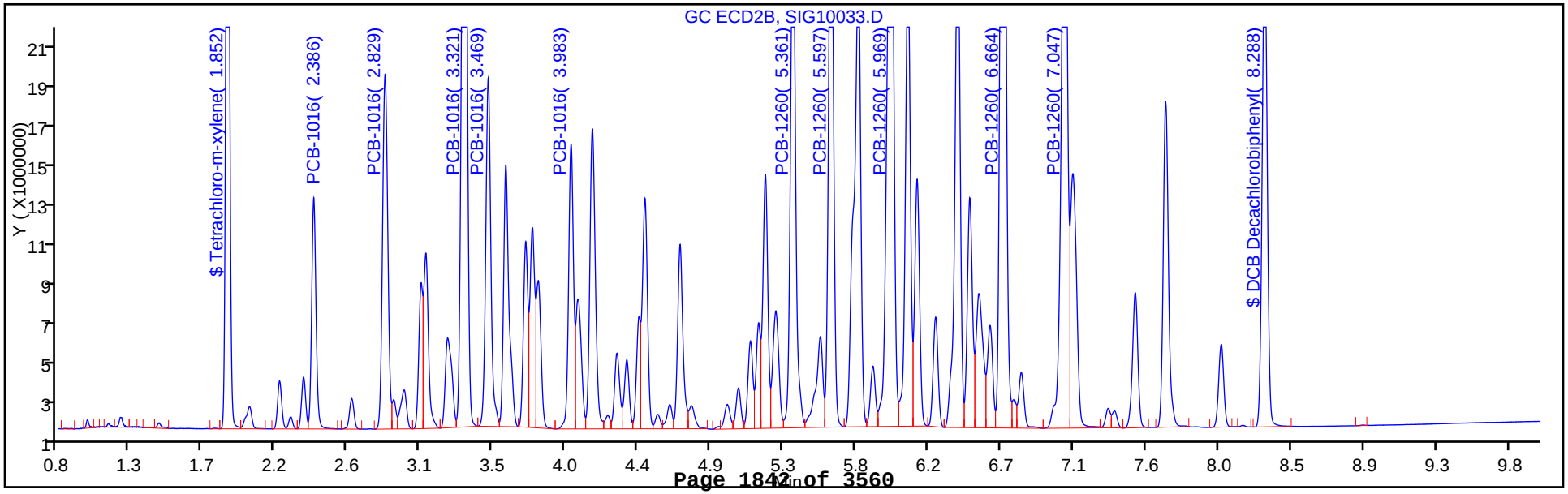
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Injection Date:	30-Mar-2015 23:10:59	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD2 1660			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 21:53 Calibration End Date: 03/30/2015 23:10 Calibration ID: 27552

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/28	SIG10028.D
Level 2	STD01 240-174339/29	SIG10029.D
Level 3	STD02 240-174339/30	SIG10030.D
Level 4	STD05 240-174339/31	SIG10031.D
Level 5	STD1 240-174339/32	SIG10032.D
Level 6	STD2 240-174339/33	SIG10033.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1016 Peak 1	2.375	2.380	2.380	2.386	2.385	2.386					2.336 - 2.436	2.382
PCB-1016 Peak 2	2.817	2.822	2.822	2.828	2.828	2.829					2.778 - 2.878	2.824
PCB-1016 Peak 3	3.310	3.316	3.315	3.321	3.321	3.321					3.271 - 3.371	3.317
PCB-1016 Peak 4	3.457	3.462	3.464	3.469	3.469	3.469					3.419 - 3.519	3.465
PCB-1016 Peak 5	3.971	3.976	3.977	3.984	3.982	3.983					3.934 - 4.034	3.979
PCB-1260 Peak 1	5.348	5.354	5.354	5.361	5.360	5.361					5.311 - 5.411	5.356
PCB-1260 Peak 2	5.582	5.591	5.590	5.597	5.596	5.597					5.547 - 5.647	5.592
PCB-1260 Peak 3	5.955	5.961	5.962	5.968	5.969	5.969					5.918 - 6.018	5.964
PCB-1260 Peak 4	6.650	6.657	6.656	6.663	6.664	6.664					6.613 - 6.713	6.659
PCB-1260 Peak 5	7.034	7.039	7.040	7.046	7.047	7.047					6.996 - 7.096	7.042
Tetrachloro-m-xylene	1.842	1.846	1.846	1.851	1.851	1.852					1.801 - 1.901	1.848
DCB Decachlorobiphenyl	8.274	8.282	8.282	8.290	8.289	8.288					8.240 - 8.340	8.284

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 21:53 Calibration End Date: 03/30/2015 23:10 Calibration ID: 27552

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/28	SIG10028.D
Level 2	STD01 240-174339/29	SIG10029.D
Level 3	STD02 240-174339/30	SIG10030.D
Level 4	STD05 240-174339/31	SIG10031.D
Level 5	STD1 240-174339/32	SIG10032.D
Level 6	STD2 240-174339/33	SIG10033.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1016 Peak 1	18154680 12240949	16526870 11158304	14534205	13481166	Ave		14349362.3				18.3		20.0			
PCB-1016 Peak 2	35037300 22676227	31577480 20645566	28205095	26091666	Ave		27372222.3				19.7		20.0			
PCB-1016 Peak 3	65828600 50598588	57304690 47748744	52888255	51964980	Ave		54388976.2				11.8		20.0			
PCB-1016 Peak 4	31956440 21323724	26811370 19808997	24256265	22876612	Ave		24505568.0				17.9		20.0			
PCB-1016 Peak 5	25822940 16777539	22130600 15541860	19515820	18048258	Ave		19639502.8				19.3		20.0			
PCB-1260 Peak 1	44029480 32508172	39379270 30594794	35533735	34146210	Ave		36031943.5				13.6		20.0			
PCB-1260 Peak 2	45382420 34840627	40871990 33125506	37647450	36102302	Ave		37995049.1				11.8		20.0			
PCB-1260 Peak 3	65389980 52021997	58205720 49167659	53644700	51978836	Ave		55068148.6				10.7		20.0			
PCB-1260 Peak 4	78620640 68328477	73042830 65065528	68562940	65911606	Ave		69922003.5				7.3		20.0			
PCB-1260 Peak 5	57927840 49194774	53887370 47315736	50395715	47659086	Ave		51063420.1				8.1		20.0			
Tetrachloro-m-xylene	904414000 701581660	768422400 675109010	718553400	719768440	Ave		747974818				11.0		20.0			
DCB Decachlorobiphenyl	840399200 598667340	679368800 549402780	640321400	563361200	Ave		645253453				16.6		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49171-1 Analy Batch No.: 174339

SDG No.:

Instrument ID: A2HP10 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 21:53 Calibration End Date: 03/30/2015 23:10 Calibration ID: 27552

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-174339/28	SIG10028.D
Level 2	STD01 240-174339/29	SIG10029.D
Level 3	STD02 240-174339/30	SIG10030.D
Level 4	STD05 240-174339/31	SIG10031.D
Level 5	STD1 240-174339/32	SIG10032.D
Level 6	STD2 240-174339/33	SIG10033.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Ave	907734 22316608	1652687	2906841	6740583	12240949	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1016 Peak 2	Ave	1751865 41291131	3157748	5641019	13045833	22676227	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1016 Peak 3	Ave	3291430 95497488	5730469	10577651	25982490	50598588	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1016 Peak 4	Ave	1597822 39617994	2681137	4851253	11438306	21323724	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1016 Peak 5	Ave	1291147 31083720	2213060	3903164	9024129	16777539	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 1	Ave	2201474 61189588	3937927	7106747	17073105	32508172	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 2	Ave	2269121 66251011	4087199	7529490	18051151	34840627	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 3	Ave	3269499 98335317	5820572	10728940	25989418	52021997	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 4	Ave	3931032 130131056	7304283	13712588	32955803	68328477	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 5	Ave	2896392 94631471	5388737	10079143	23829543	49194774	0.0500 2.00	0.100	0.200	0.500	1.00
Tetrachloro-m-xylene	Ave	2261035 67510901	3842112	7185534	17994211	35079083	0.00250 0.100	0.00500	0.0100	0.0250	0.0500
DCB Decachlorobiphenyl	Ave	2100998 54940278	3396844	6403214	14084030	29933367	0.00250 0.100	0.00500	0.0100	0.0250	0.0500

Curve Type Legend:
Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10028.D
Lims ID: STD005 1660
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Mar-2015 21:53:33 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-028
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:31 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.445	1.455	-0.010	2342344	0.002500	0.003114	
2	1.842	1.851	-0.009	2261035	0.002500	0.003023	
						RPD = 2.97	
6 PCB-1016							
1	1.779	1.790	-0.011	768856	0.0500	0.0596	
1	2.118	2.131	-0.013	1449108	0.0500	0.0621	
1	2.577	2.589	-0.012	2788489	0.0500	0.0569	
1	2.713	2.726	-0.013	1256227	0.0500	0.0573	
1	3.140	3.153	-0.013	1364637	0.0500	0.0618	
		Average of Peak Amounts =				0.0596	
2	2.375	2.386	-0.011	907734	0.0500	0.0633	
2	2.817	2.828	-0.011	1751865	0.0500	0.0640	
2	3.310	3.321	-0.011	3291430	0.0500	0.0605	
2	3.457	3.469	-0.012	1597822	0.0500	0.0652	
2	3.971	3.984	-0.013	1291147	0.0500	0.0657	
		Average of Peak Amounts =				0.0637	
						RPD = 6.80	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.430	4.445	-0.015	1768302	0.0500	0.0588	
1	4.731	4.746	-0.015	3119185	0.0500	0.0584	
1	5.023	5.036	-0.013	2897785	0.0500	0.0579	
1	5.748	5.760	-0.012	4095472	0.0500	0.0579	
1	6.035	6.051	-0.016	2015993	0.0500	0.0575	
		Average of Peak Amounts =				0.0581	
2	5.348	5.361	-0.013	2201474	0.0500	0.0611	
2	5.582	5.597	-0.015	2269121	0.0500	0.0597	
2	5.955	5.968	-0.013	3269499	0.0500	0.0594	
2	6.650	6.663	-0.013	3931032	0.0500	0.0562	
2	7.034	7.046	-0.012	2896392	0.0500	0.0567	
		Average of Peak Amounts =				0.0586	
						RPD = 0.88	
$ 12 DCB Decachlorobiphenyl							
1	7.210	7.225	-0.015	1831871	0.002500	0.003101	
2	8.274	8.290	-0.016	2100998	0.002500	0.003256	
						RPD = 4.86	

Reagents:

SG1660@.05PPM_00012 Amount Added: 1.00 Units: mL

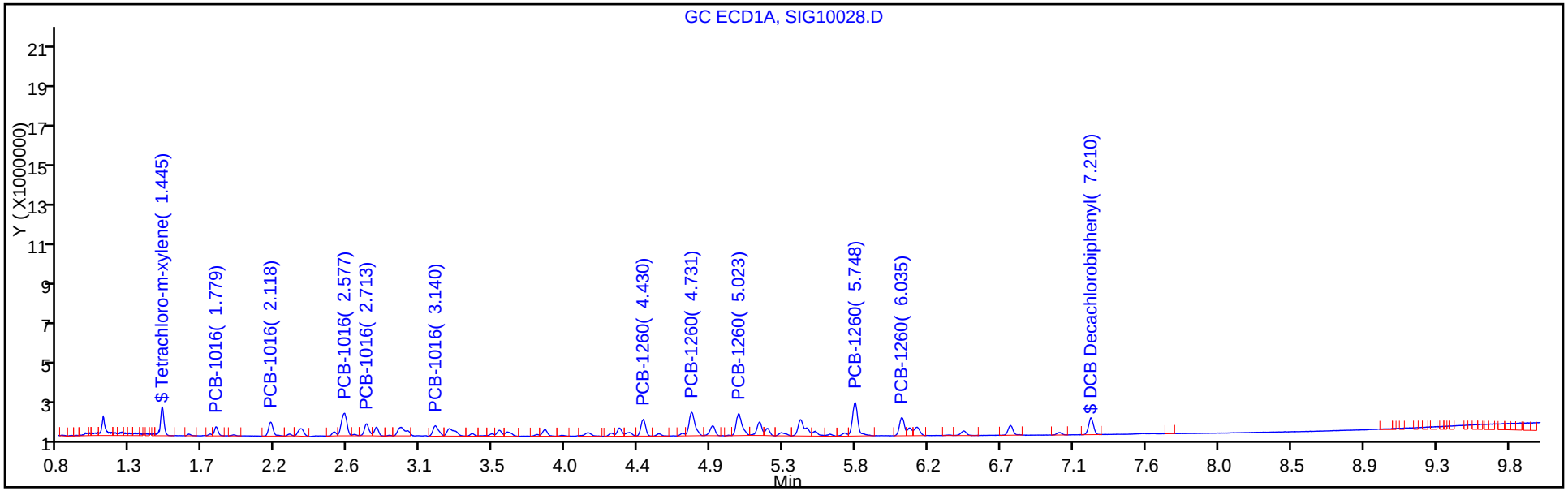
Report Date: 31-Mar-2015 06:14:33 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

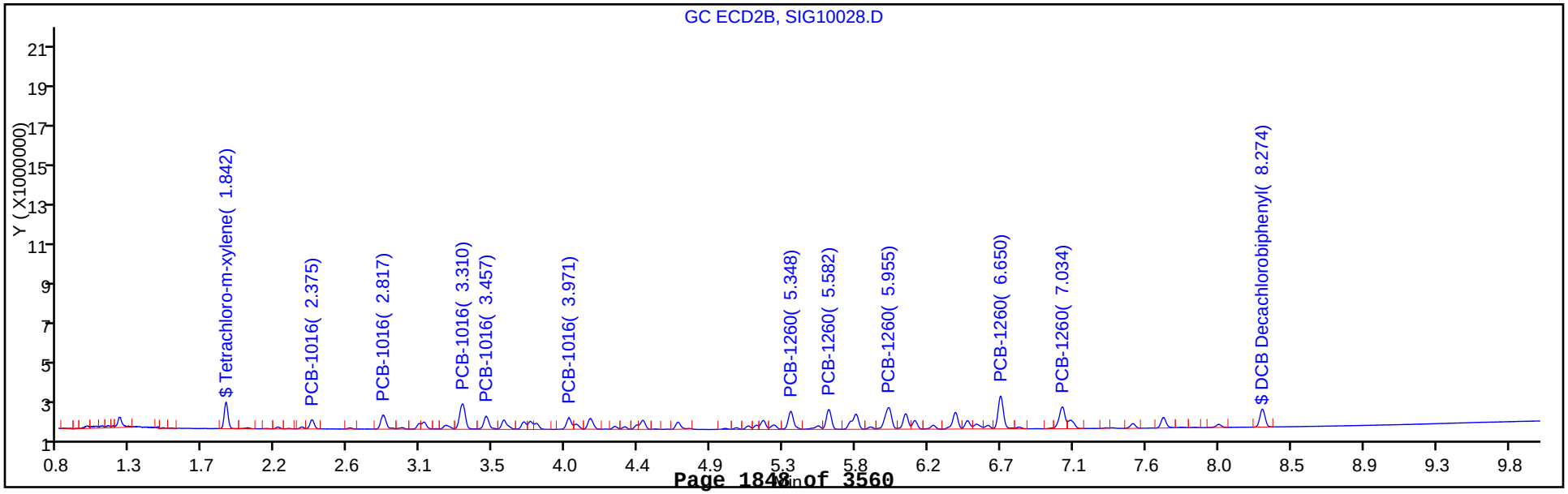
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10028.D

Injection Date:	30-Mar-2015 21:53:33	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD005 1660			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10029.D
Lims ID: STD01 1660
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Mar-2015 22:09:07 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-029
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:33 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:06:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.450	1.455	-0.005	3902988	0.005000	0.005189	
2	1.846	1.851	-0.005	3842112	0.005000	0.005137	
						RPD = 1.01	
6 PCB-1016							
1	1.785	1.790	-0.005	1467303	0.1000	0.1138	
1	2.125	2.131	-0.006	2515109	0.1000	0.1078	
1	2.582	2.589	-0.007	5315113	0.1000	0.1085	
1	2.722	2.726	-0.004	2324192	0.1000	0.1061	
1	3.147	3.153	-0.006	2458027	0.1000	0.1113	
		Average of Peak Amounts =				0.1095	
2	2.380	2.386	-0.006	1652687	0.1000	0.1152	
2	2.822	2.828	-0.006	3157748	0.1000	0.1154	
2	3.316	3.321	-0.005	5730469	0.1000	0.1054	
2	3.462	3.469	-0.007	2681137	0.1000	0.1094	
2	3.976	3.984	-0.008	2213060	0.1000	0.1127	
		Average of Peak Amounts =				0.1116	
						RPD = 1.91	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.439	4.445	-0.006	3289020	0.1000	0.1095	
1	4.740	4.746	-0.006	5783323	0.1000	0.1083	
1	5.029	5.036	-0.007	5354172	0.1000	0.1070	
1	5.753	5.760	-0.007	7613917	0.1000	0.1076	
1	6.047	6.051	-0.004	3831182	0.1000	0.1093	
		Average of Peak Amounts =				0.1083	
2	5.354	5.361	-0.007	3937927	0.1000	0.1093	
2	5.591	5.597	-0.006	4087199	0.1000	0.1076	
2	5.961	5.968	-0.007	5820572	0.1000	0.1057	
2	6.657	6.663	-0.006	7304283	0.1000	0.1045	
2	7.039	7.046	-0.007	5388737	0.1000	0.1055	
		Average of Peak Amounts =				0.1065	
						RPD = 1.70	
$ 12 DCB Decachlorobiphenyl							
1	7.219	7.225	-0.006	3083940	0.005000	0.005221	
2	8.282	8.290	-0.008	3396844	0.005000	0.005264	
						RPD = 0.82	

Reagents:

SG1660STD@0.1_00012 Amount Added: 1.00 Units: mL

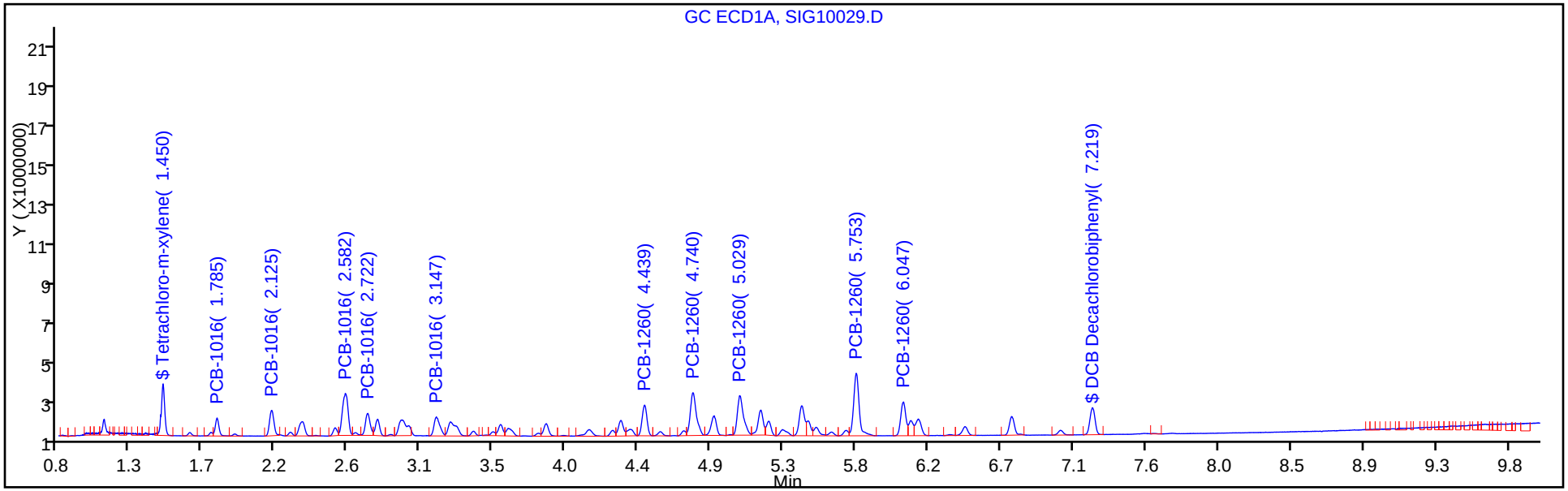
Report Date: 31-Mar-2015 06:14:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

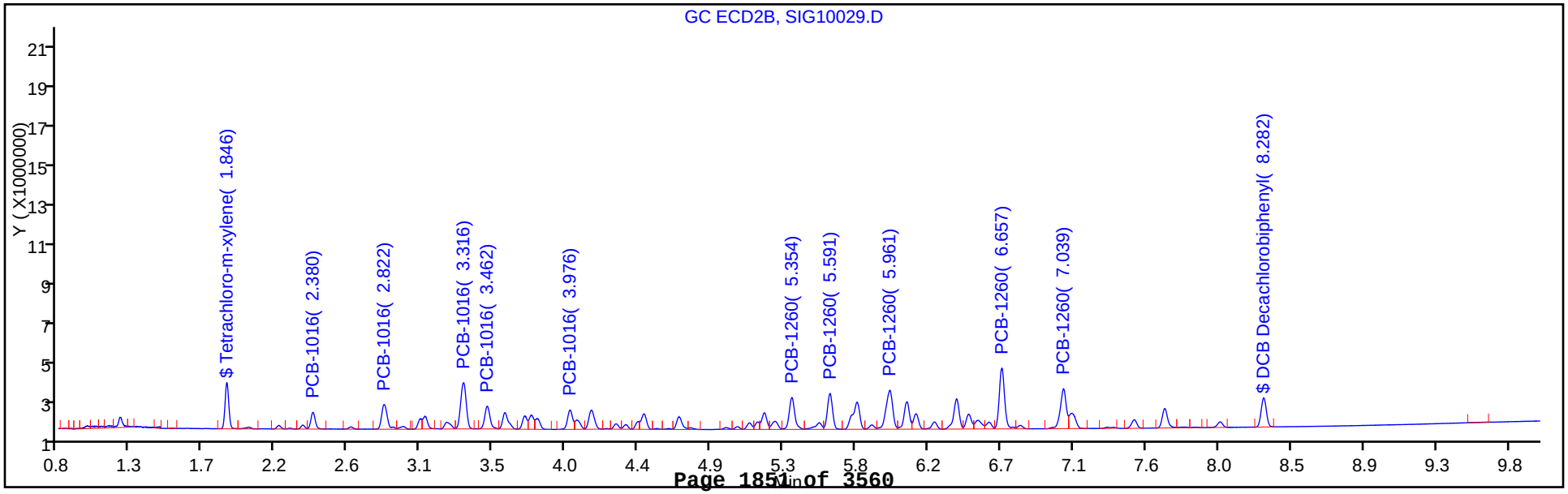
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10029.D

Injection Date:	30-Mar-2015 22:09:07	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD01 1660			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10030.D
Lims ID: STD02 1660
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Mar-2015 22:24:34 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-030
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:35 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.445	1.455	-0.010	8177705	0.0100	0.0109	
2	1.846	1.851	-0.005	7185534	0.0100	0.009607	
						RPD = 12.35	
6 PCB-1016							
1	1.785	1.790	-0.005	2630279	0.2000	0.2040	
1	2.125	2.131	-0.006	4790204	0.2000	0.2053	
1	2.584	2.589	-0.005	10033234	0.2000	0.2049	
1	2.720	2.726	-0.006	4527187	0.2000	0.2066	
1	3.147	3.153	-0.006	4385768	0.2000	0.1986	
		Average of Peak Amounts =				0.2039	
2	2.380	2.386	-0.006	2906841	0.2000	0.2026	
2	2.822	2.828	-0.006	5641019	0.2000	0.2061	
2	3.315	3.321	-0.006	10577651	0.2000	0.1945	
2	3.464	3.469	-0.005	4851253	0.2000	0.1980	
2	3.977	3.984	-0.007	3903164	0.2000	0.1987	
		Average of Peak Amounts =				0.2000	
						RPD = 1.92	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.438	4.445	-0.007	6045932	0.2000	0.2012	
1	4.740	4.746	-0.006	10792832	0.2000	0.2022	
1	5.032	5.036	-0.004	9989896	0.2000	0.1997	
1	5.753	5.760	-0.007	14154919	0.2000	0.2001	
1	6.045	6.051	-0.006	7067232	0.2000	0.2016	
		Average of Peak Amounts =				0.2009	
2	5.354	5.361	-0.007	7106747	0.2000	0.1972	
2	5.590	5.597	-0.007	7529490	0.2000	0.1982	
2	5.962	5.968	-0.006	10728940	0.2000	0.1948	
2	6.656	6.663	-0.007	13712588	0.2000	0.1961	
2	7.040	7.046	-0.006	10079143	0.2000	0.1974	
		Average of Peak Amounts =				0.1967	
						RPD = 2.11	
$ 12 DCB Decachlorobiphenyl							
1	7.219	7.225	-0.006	5913225	0.0100	0.0100	
2	8.282	8.290	-0.008	6403214	0.0100	0.0099	
						RPD = 0.88	

Reagents:

SG1660@0.2ppm_00011 Amount Added: 1.00 Units: mL

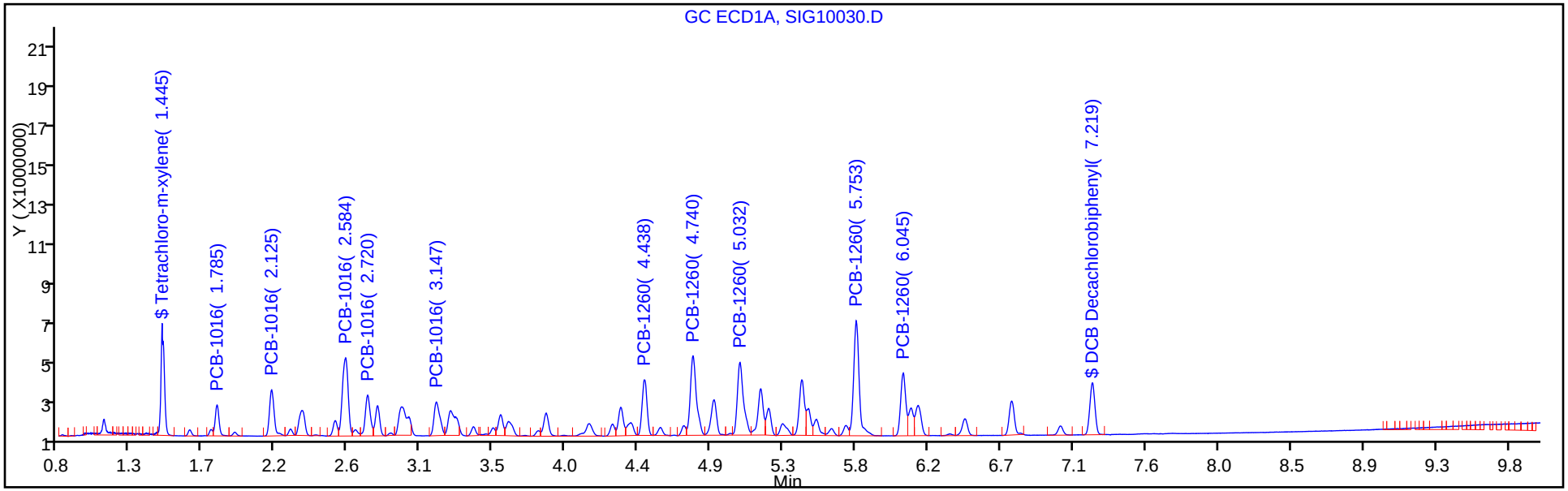
Report Date: 31-Mar-2015 06:14:37 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

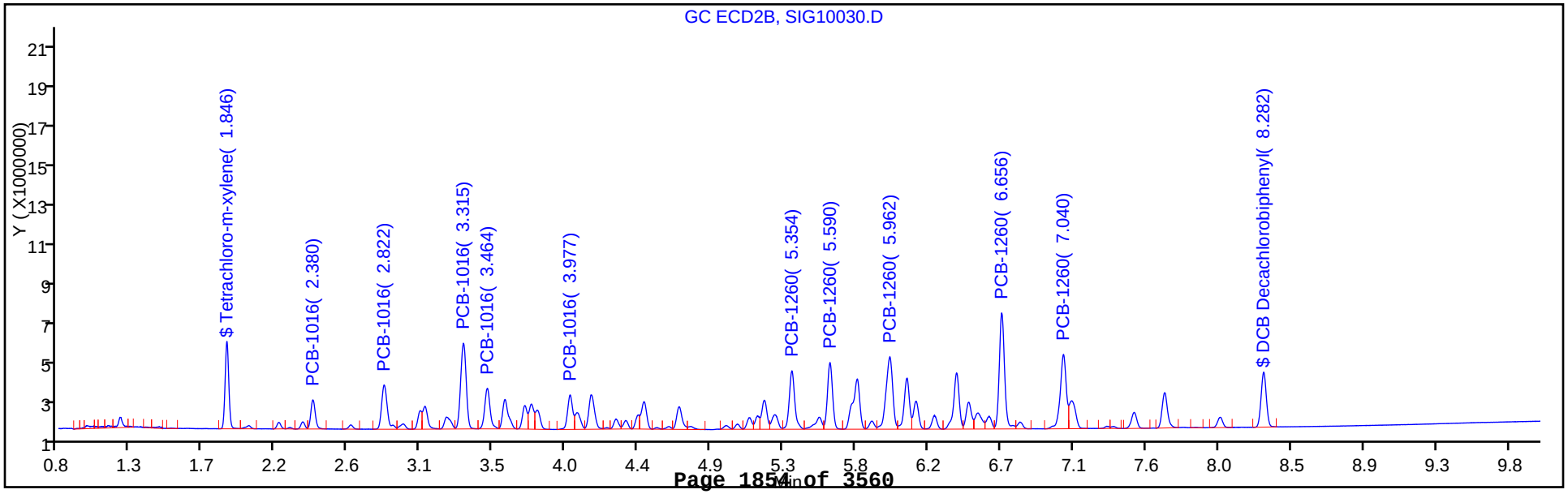
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10030.D

Injection Date:	30-Mar-2015 22:24:34	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD02 1660			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10031.D
Lims ID: STD05 1660
Client ID:
Sample Type: ICRT Calib Level: 4
Inject. Date: 30-Mar-2015 22:40:02 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-031
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:38 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.455	1.455	0.000	16738972	0.0250	0.0223	
2	1.851	1.851	0.000	17994211	0.0250	0.0241	
						RPD = 7.79	
6 PCB-1016							
1	1.790	1.790	0.000	6244491	0.5000	0.4842	
1	2.131	2.131	0.000	11465431	0.5000	0.4913	
1	2.589	2.589	0.000	24174290	0.5000	0.4936	
1	2.726	2.726	0.000	11094351	0.5000	0.5063	
1	3.153	3.153	0.000	10631039	0.5000	0.4813	
		Average of Peak Amounts =				0.4913	
2	2.386	2.386	0.000	6740583	0.5000	0.4697	
2	2.828	2.828	0.000	13045833	0.5000	0.4766	
2	3.321	3.321	0.000	25982490	0.5000	0.4777	
2	3.469	3.469	0.000	11438306	0.5000	0.4668	
2	3.984	3.984	0.000	9024129	0.5000	0.4595	
		Average of Peak Amounts =				0.4701	
						RPD = 4.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.445	4.445	0.000	14572880	0.5000	0.4850	
1	4.746	4.746	0.000	25827347	0.5000	0.4838	
1	5.036	5.036	0.000	24184791	0.5000	0.4834	
1	5.760	5.760	0.000	33856861	0.5000	0.4785	
1	6.051	6.051	0.000	16726228	0.5000	0.4770	
		Average of Peak Amounts =				0.4815	
2	5.361	5.361	0.000	17073105	0.5000	0.4738	
2	5.597	5.597	0.000	18051151	0.5000	0.4751	
2	5.968	5.968	0.000	25989418	0.5000	0.4720	
2	6.663	6.663	0.000	32955803	0.5000	0.4713	
2	7.046	7.046	0.000	23829543	0.5000	0.4667	
		Average of Peak Amounts =				0.4718	
						RPD = 2.05	
$ 12 DCB Decachlorobiphenyl							
1	7.225	7.225	0.000	13437585	0.0250	0.0228	
2	8.290	8.290	0.000	14084030	0.0250	0.0218	
						RPD = 4.14	

Reagents:

SG1660@0.5PPM_00042 Amount Added: 1.00 Units: mL

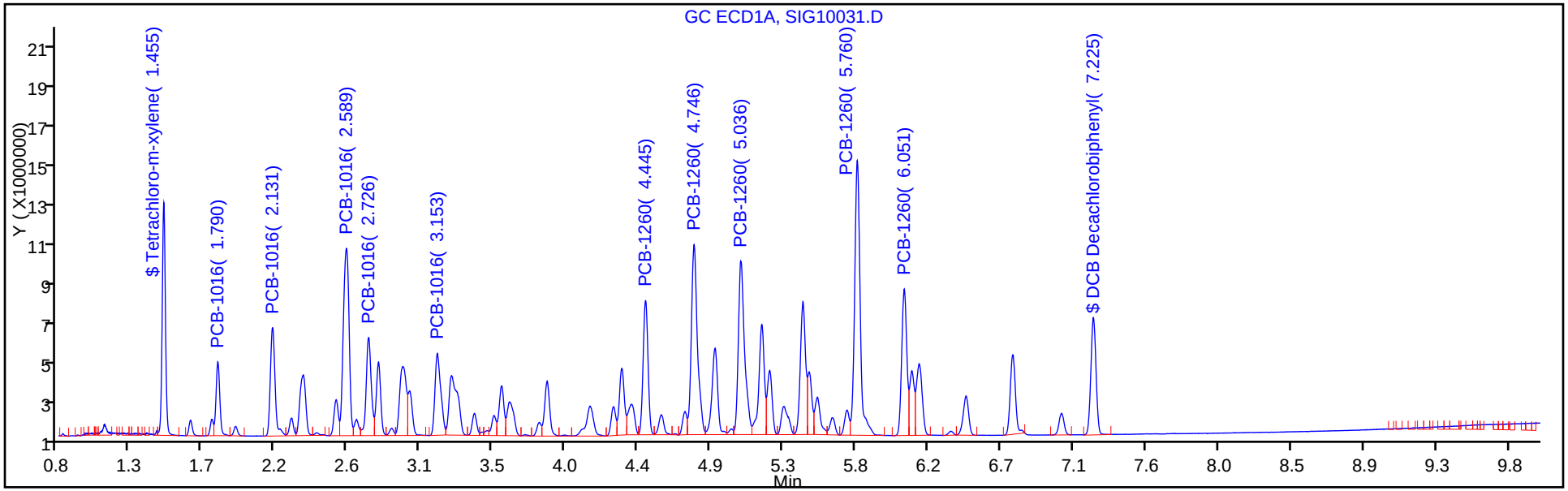
Report Date: 31-Mar-2015 06:14:39 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

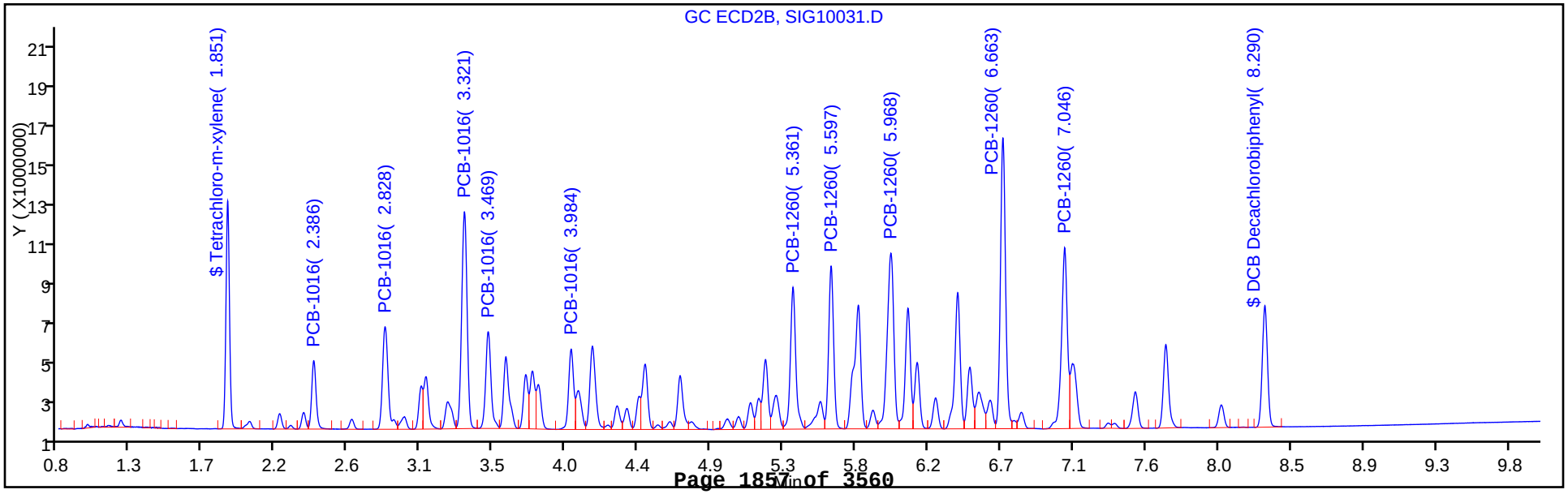
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10031.D

Injection Date:	30-Mar-2015 22:40:02	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD05 1660			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10032.D
Lims ID: STD1 1660
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Mar-2015 22:55:28 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-032
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:40 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.455	1.455	0.000	34779765	0.0500	0.0462	
2	1.851	1.851	0.000	35079083	0.0500	0.0469	
						RPD = 1.42	
6 PCB-1016							
1	1.790	1.790	0.000	11508707	1.00	0.8924	
1	2.130	2.131	-0.001	20644934	1.00	0.8847	
1	2.589	2.589	0.000	44992977	1.00	0.9186	
1	2.726	2.726	0.000	19943730	1.00	0.9102	
1	3.151	3.153	-0.002	19500851	1.00	0.8829	
		Average of Peak Amounts =				0.8978	
2	2.385	2.386	-0.001	12240949	1.00	0.8531	
2	2.828	2.828	0.000	22676227	1.00	0.8284	
2	3.321	3.321	0.000	50598588	1.00	0.9303	
2	3.469	3.469	0.000	21323724	1.00	0.8702	
2	3.982	3.984	-0.002	16777539	1.00	0.8543	
		Average of Peak Amounts =				0.8672	
						RPD = 3.46	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.445	4.445	0.000	27377235	1.00	0.9111	
1	4.745	4.746	-0.001	49088916	1.00	0.9195	
1	5.037	5.036	0.001	46771566	1.00	0.9350	
1	5.760	5.760	0.000	66457275	1.00	0.9393	
1	6.050	6.051	-0.001	32648835	1.00	0.9311	
		Average of Peak Amounts =				0.9272	
2	5.360	5.361	-0.001	32508172	1.00	0.9022	
2	5.596	5.597	-0.001	34840627	1.00	0.9170	
2	5.969	5.968	0.001	52021997	1.00	0.9447	
2	6.664	6.663	0.001	68328477	1.00	0.9772	
2	7.047	7.046	0.001	49194774	1.00	0.9634	
		Average of Peak Amounts =				0.9409	
						RPD = 1.47	
$ 12 DCB Decachlorobiphenyl							
1	7.226	7.225	0.001	27914164	0.0500	0.0473	
2	8.289	8.290	-0.001	29933367	0.0500	0.0464	
						RPD = 1.86	

Reagents:

SG1660@1.0PPM_00011 Amount Added: 1.00 Units: mL

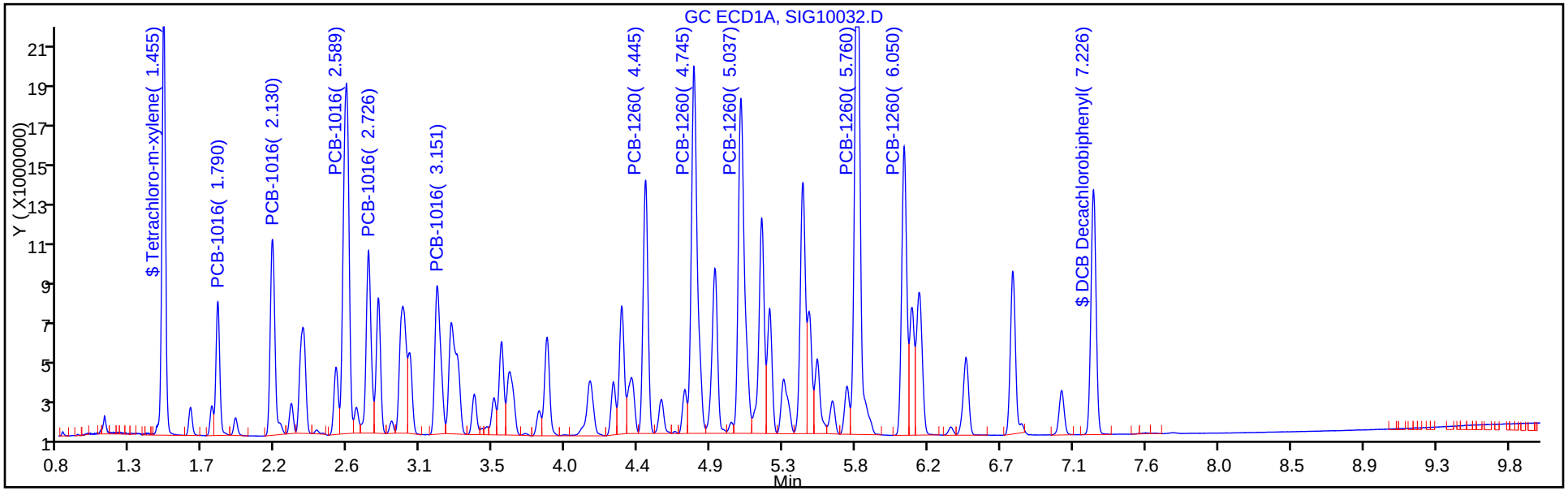
Report Date: 31-Mar-2015 06:14:42 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

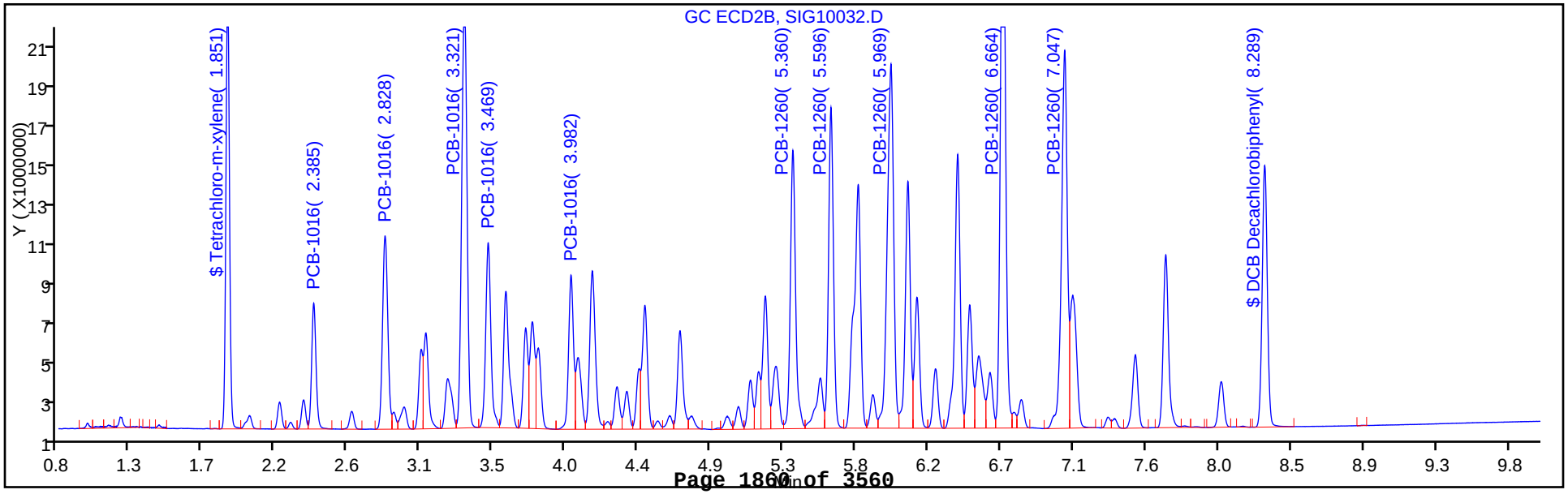
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10032.D

Injection Date:	30-Mar-2015 22:55:28	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD1 1660			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D
Lims ID: STD2 1660
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Mar-2015 23:10:59 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-033
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:42 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:07:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.456	1.455	0.001	61287330	0.1000	0.0815	
2	1.852	1.851	0.001	67510901	0.1000	0.0903	
						RPD = 10.23	
6 PCB-1016							
1	1.791	1.790	0.001	20361498	2.00	1.58	
1	2.130	2.131	-0.001	36700058	2.00	1.57	
1	2.589	2.589	0.000	82876371	2.00	1.69	
1	2.727	2.726	0.001	36679890	2.00	1.67	
1	3.152	3.153	-0.001	35913807	2.00	1.63	
		Average of Peak Amounts =				1.63	
2	2.386	2.386	0.000	22316608	2.00	1.56	
2	2.829	2.828	0.001	41291131	2.00	1.51	
2	3.321	3.321	0.000	95497488	2.00	1.76	
2	3.469	3.469	0.000	39617994	2.00	1.62	
2	3.983	3.984	-0.001	31083720	2.00	1.58	
		Average of Peak Amounts =				1.60	
						RPD = 1.54	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.445	4.445	0.000	50572248	2.00	1.68	
1	4.747	4.746	0.001	90819730	2.00	1.70	
1	5.037	5.036	0.001	87131141	2.00	1.74	
1	5.761	5.760	0.001	123051535	2.00	1.74	
1	6.052	6.051	0.001	60620021	2.00	1.73	
		Average of Peak Amounts =				1.72	
2	5.361	5.361	0.000	61189588	2.00	1.70	
2	5.597	5.597	0.000	66251011	2.00	1.74	
2	5.969	5.968	0.001	98335317	2.00	1.79	
2	6.664	6.663	0.001	130131056	2.00	1.86	
2	7.047	7.046	0.001	94631471	2.00	1.85	
		Average of Peak Amounts =				1.79	
						RPD = 3.97	
$ 12 DCB Decachlorobiphenyl							
1	7.227	7.225	0.002	50722693	0.1000	0.0859	
2	8.288	8.290	-0.002	54940278	0.1000	0.0851	
						RPD = 0.86	

Reagents:

SG1660@2.0PPM_00012 Amount Added: 1.00 Units: mL

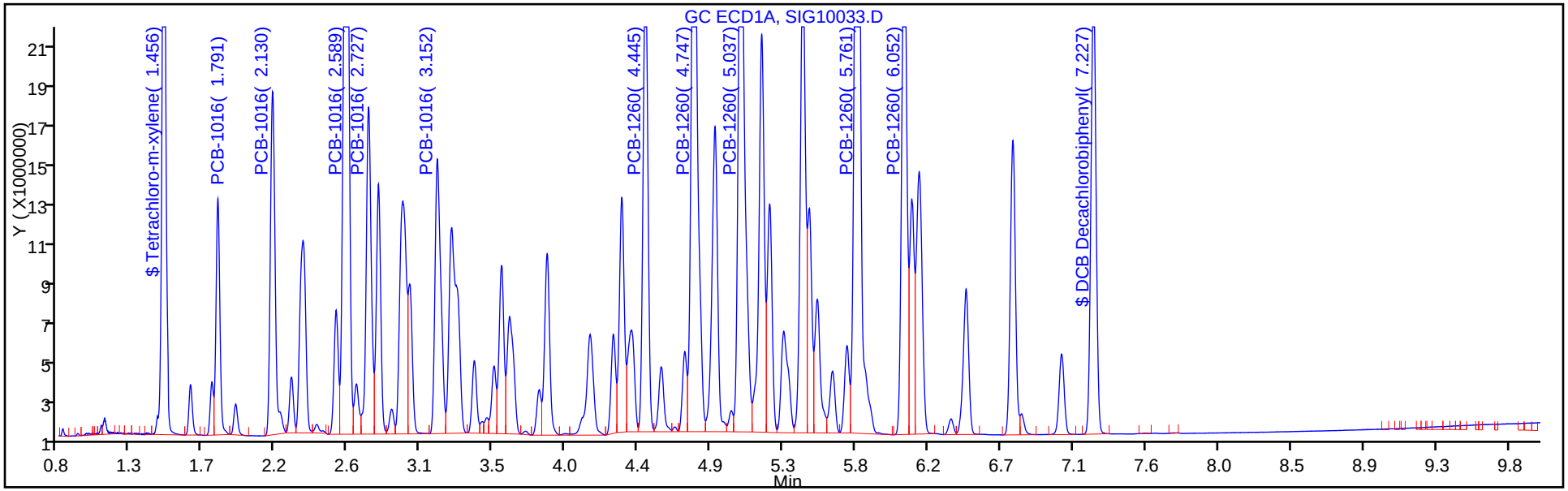
Report Date: 31-Mar-2015 06:14:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

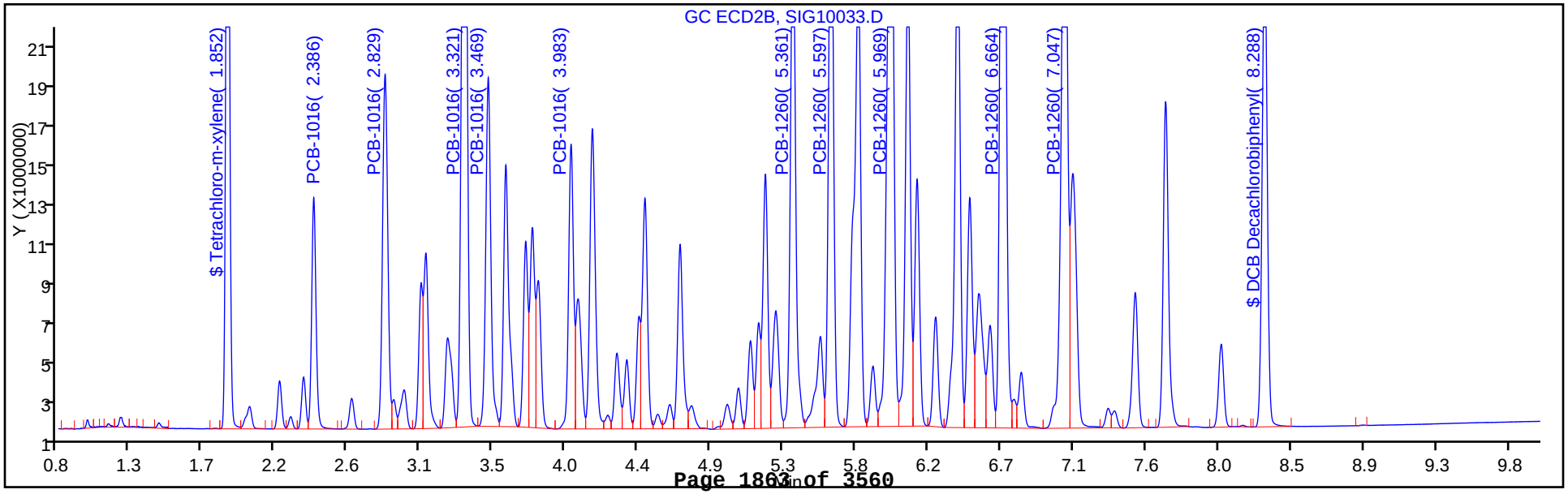
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Injection Date:	30-Mar-2015 23:10:59	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	STD2 1660			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/34 Calibration Date: 03/30/2015 23:26

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 20:20

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 21:38

Lab File ID: SIG10034.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Ave	7401594	7914812		1.07	1.00	6.9	20.0
PCB-1221 Peak 2	Ave	4530205	3937540		0.869	1.00	-13.1	20.0
PCB-1221 Peak 3	Ave	17649215	16111766		0.913	1.00	-8.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/34 Calibration Date: 03/30/2015 23:26

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 20:20

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 21:38

Lab File ID: SIG10034.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	1.62	1.56	1.66
PCB-1221 Peak 2	1.76	1.69	1.79
PCB-1221 Peak 3	1.79	1.73	1.83

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10034.D
Lims ID: ICV 1221
Client ID:
Sample Type: ICV
Inject. Date: 30-Mar-2015 23:26:21 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-034
Operator ID: Instrument ID: A2HP10
Sublist:

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:42 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:08:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.622	1.606	0.016	7914812	1.00	1.07	
1	1.757	1.738	0.019	3937540	1.00	0.8692	
1	1.792	1.775	0.017	16111766	1.00	0.9129	
		Average of Peak Amounts =				0.9505	
2	2.177	2.158	0.019	7144461	1.00	1.05	
2	2.327	2.307	0.020	5484731	1.00	1.20	
2	2.390	2.372	0.018	19621851	1.00	1.22	
		Average of Peak Amounts =				1.16	
						RPD = 19.50	

Reagents:

SG1221ICV@1.0_00003 Amount Added: 1.00 Units: mL

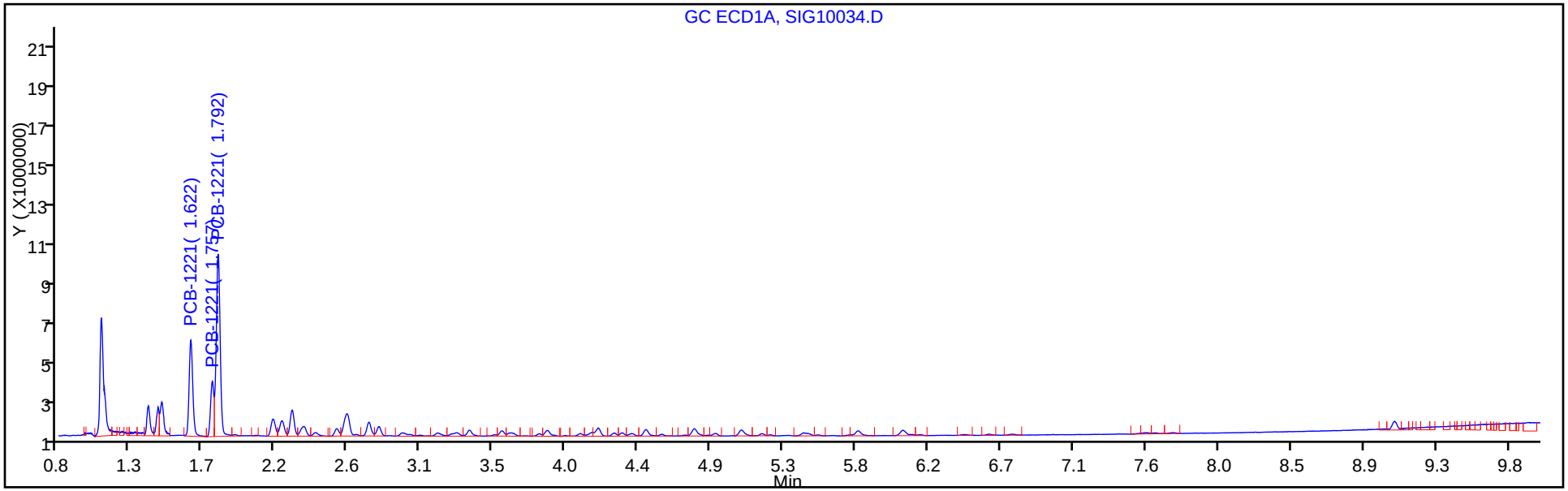
Report Date: 31-Mar-2015 06:14:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

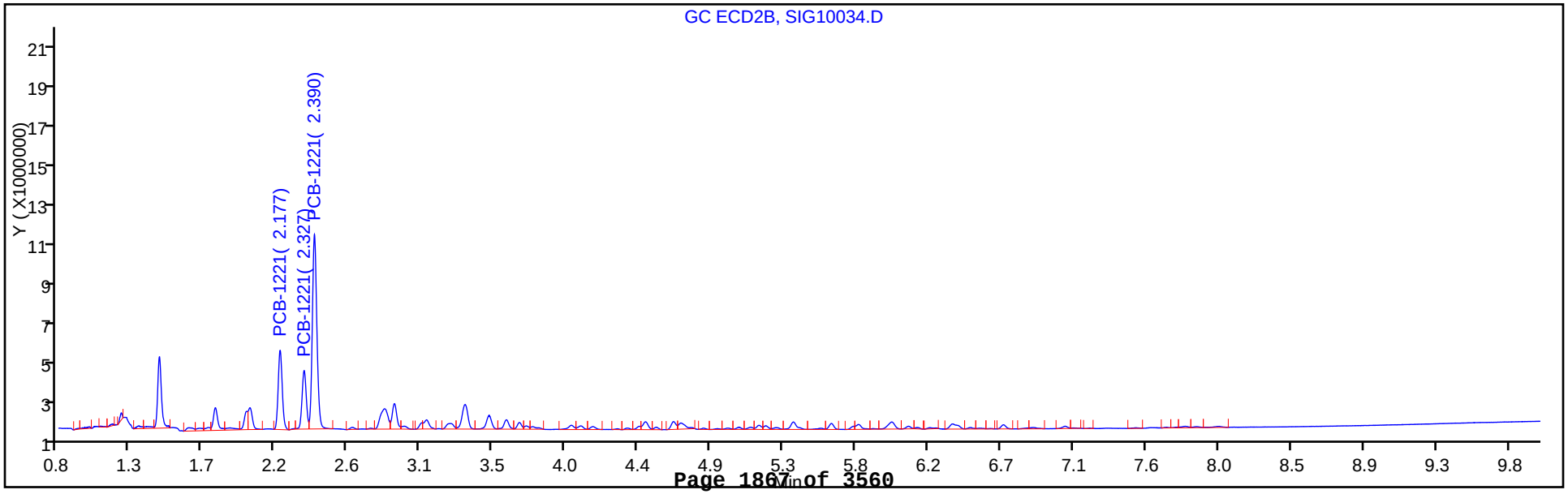
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10034.D

Injection Date:	30-Mar-2015 23:26:21	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	ICV 1221			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/34 Calibration Date: 03/30/2015 23:26

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 20:20

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 21:38

Lab File ID: SIG10034.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Lin1		7144461		1.05	1.00	4.9	20.0
PCB-1221 Peak 2	Lin1		5484731		1.20	1.00	20.0	20.0
PCB-1221 Peak 3	Lin1		19621851		1.22	1.00	21.8*	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/34 Calibration Date: 03/30/2015 23:26

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 20:20

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 21:38

Lab File ID: SIG10034.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	2.18	2.11	2.21
PCB-1221 Peak 2	2.33	2.26	2.36
PCB-1221 Peak 3	2.39	2.32	2.42

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10034.D
Lims ID: ICV 1221
Client ID:
Sample Type: ICV
Inject. Date: 30-Mar-2015 23:26:21 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-034
Operator ID: Instrument ID: A2HP10
Sublist:

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:42 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:08:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
3 PCB-1221							
1	1.622	1.606	0.016	7914812	1.00	1.07	
1	1.757	1.738	0.019	3937540	1.00	0.8692	
1	1.792	1.775	0.017	16111766	1.00	0.9129	
		Average of Peak Amounts =				0.9505	
2	2.177	2.158	0.019	7144461	1.00	1.05	
2	2.327	2.307	0.020	5484731	1.00	1.20	
2	2.390	2.372	0.018	19621851	1.00	1.22	
		Average of Peak Amounts =				1.16	
						RPD = 19.50	

Reagents:

SG1221ICV@1.0_00003 Amount Added: 1.00 Units: mL

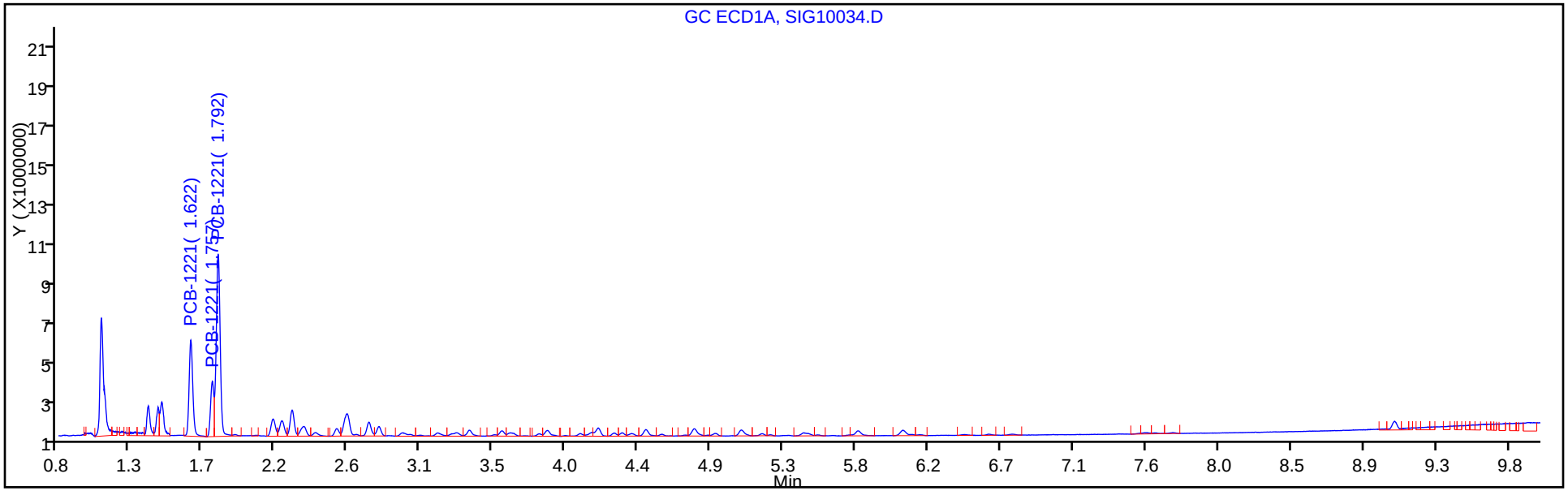
Report Date: 31-Mar-2015 06:14:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

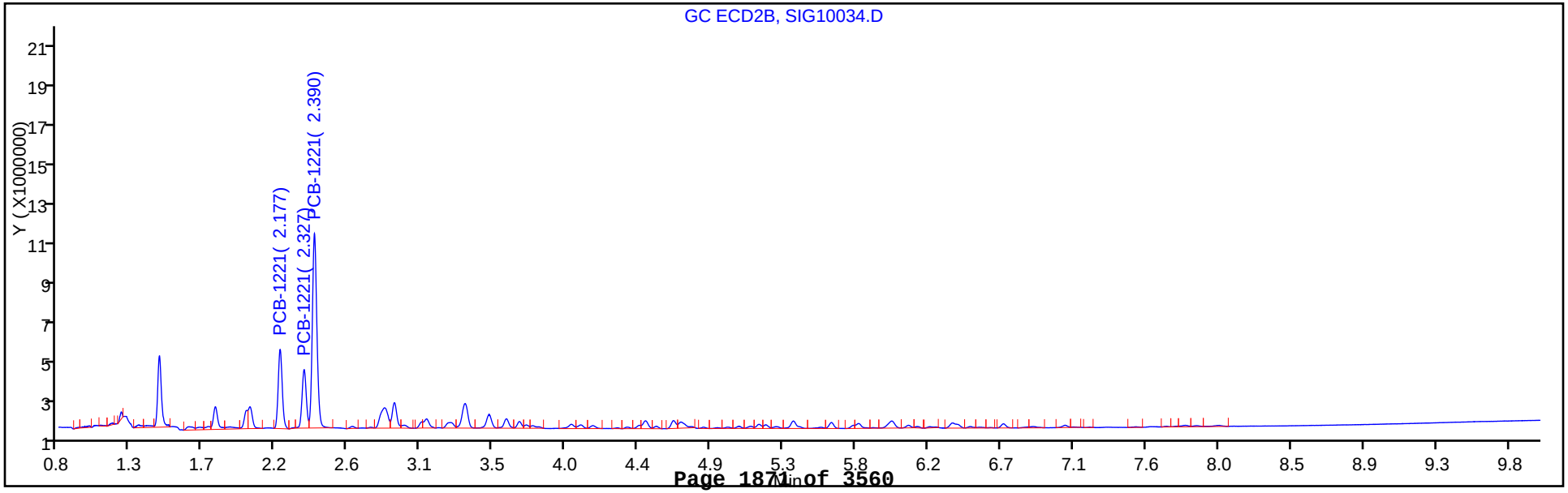
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10034.D

Injection Date:	30-Mar-2015 23:26:21	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	ICV 1221			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/35 Calibration Date: 03/30/2015 23:41

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 15:41

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 16:58

Lab File ID: SIG10035.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Ave	14665328	13038040		0.889	1.00	-11.1	20.0
PCB-1232 Peak 2	Ave	10928420	11132850		1.02	1.00	1.9	20.0
PCB-1232 Peak 3	Ave	23514994	24653545		1.05	1.00	4.8	20.0
PCB-1232 Peak 4	Ave	10410955	11193513		1.08	1.00	7.5	20.0
PCB-1232 Peak 5	Ave	9363668	10585686		1.13	1.00	13.1	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/35 Calibration Date: 03/30/2015 23:41

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 15:41

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 16:58

Lab File ID: SIG10035.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	1.79	1.72	1.82
PCB-1232 Peak 2	2.13	2.06	2.16
PCB-1232 Peak 3	2.59	2.52	2.62
PCB-1232 Peak 4	2.73	2.65	2.75
PCB-1232 Peak 5	3.15	3.08	3.18

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10035.D
Lims ID: ICV 1232
Client ID:
Sample Type: ICV
Inject. Date: 30-Mar-2015 23:41:46 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-035
Operator ID: Instrument ID: A2HP10
Sublist:

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:42 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:09:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.791	1.771	0.020	13038040	1.00	0.8890	a
1	2.131	2.108	0.023	11132850	1.00	1.02	
1	2.591	2.568	0.023	24653545	1.00	1.05	
1	2.728	2.703	0.025	11193513	1.00	1.08	
1	3.154	3.132	0.022	10585686	1.00	1.13	
		Average of Peak Amounts =				1.03	
2	2.389	2.367	0.022	15784571	1.00	0.9591	
2	2.831	2.808	0.023	13098686	1.00	0.9570	
2	3.323	3.300	0.023	26614574	1.00	1.02	
2	3.471	3.449	0.022	11426787	1.00	0.9092	
2	4.117	4.092	0.025	10095519	1.00	1.01	
		Average of Peak Amounts =				0.9721	
						RPD = 6.01	

Reagents:

SG1232ICV@1.0_00004 Amount Added: 1.00 Units: mL

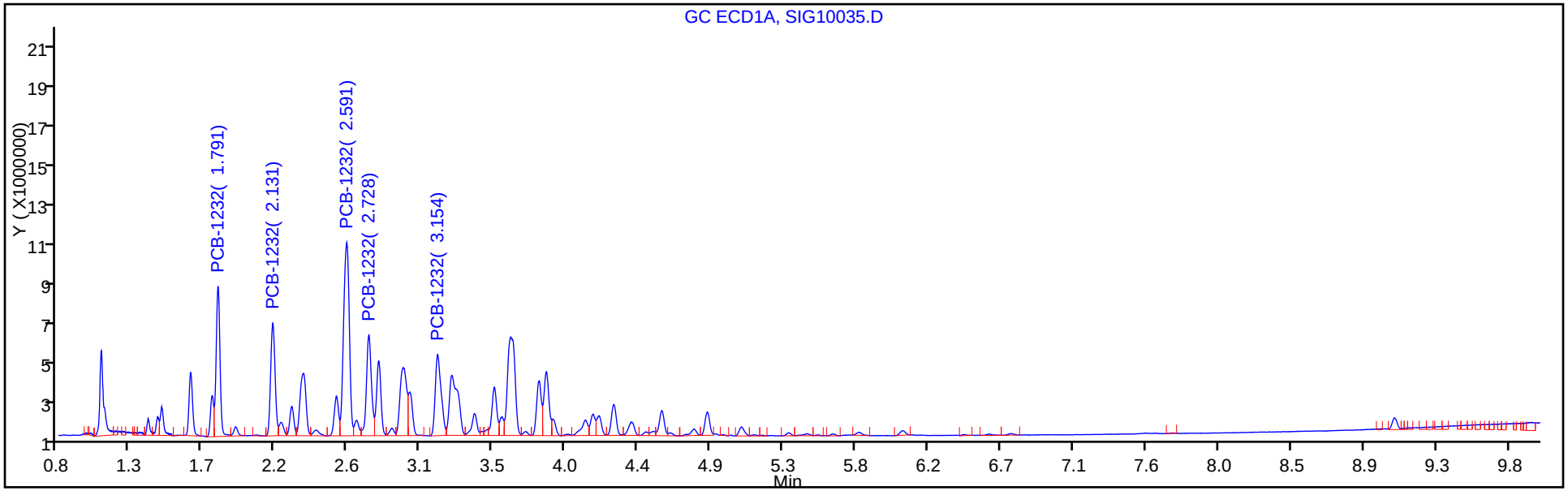
Report Date: 31-Mar-2015 06:14:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

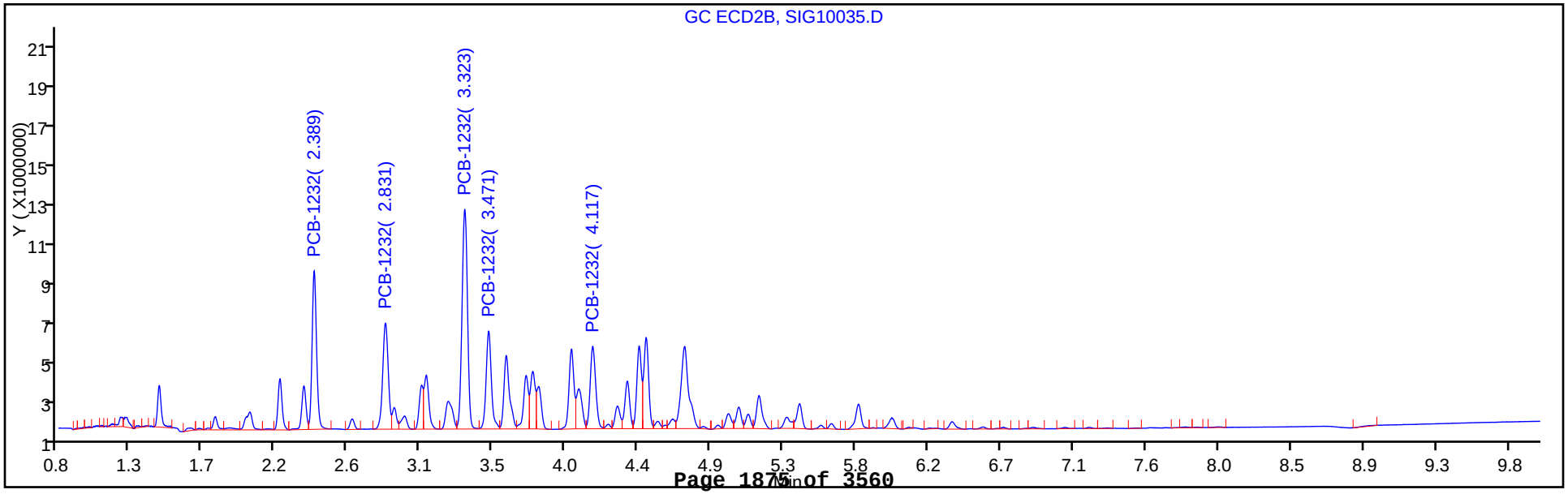
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10035.D

Injection Date:	30-Mar-2015 23:41:46	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	ICV 1232			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/35 Calibration Date: 03/30/2015 23:41

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 15:41

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 16:58

Lab File ID: SIG10035.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Ave	16458389	15784571		0.959	1.00	-4.1	20.0
PCB-1232 Peak 2	Ave	13686793	13098686		0.957	1.00	-4.3	20.0
PCB-1232 Peak 3	Ave	26021287	26614574		1.02	1.00	2.3	20.0
PCB-1232 Peak 4	Ave	12567397	11426787		0.909	1.00	-9.1	20.0
PCB-1232 Peak 5	Ave	9971018	10095519		1.01	1.00	1.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/35 Calibration Date: 03/30/2015 23:41

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 15:41

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 16:58

Lab File ID: SIG10035.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	2.39	2.32	2.42
PCB-1232 Peak 2	2.83	2.76	2.86
PCB-1232 Peak 3	3.32	3.25	3.35
PCB-1232 Peak 4	3.47	3.40	3.50
PCB-1232 Peak 5	4.12	4.04	4.14

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10035.D
Lims ID: ICV 1232
Client ID:
Sample Type: ICV
Inject. Date: 30-Mar-2015 23:41:46 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-035
Operator ID: Instrument ID: A2HP10
Sublist:

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:42 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:09:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 PCB-1232							
1	1.791	1.771	0.020	13038040	1.00	0.8890	a
1	2.131	2.108	0.023	11132850	1.00	1.02	
1	2.591	2.568	0.023	24653545	1.00	1.05	
1	2.728	2.703	0.025	11193513	1.00	1.08	
1	3.154	3.132	0.022	10585686	1.00	1.13	
		Average of Peak Amounts =				1.03	
2	2.389	2.367	0.022	15784571	1.00	0.9591	
2	2.831	2.808	0.023	13098686	1.00	0.9570	
2	3.323	3.300	0.023	26614574	1.00	1.02	
2	3.471	3.449	0.022	11426787	1.00	0.9092	
2	4.117	4.092	0.025	10095519	1.00	1.01	
		Average of Peak Amounts =				0.9721	
						RPD = 6.01	

Reagents:

SG1232ICV@1.0_00004 Amount Added: 1.00 Units: mL

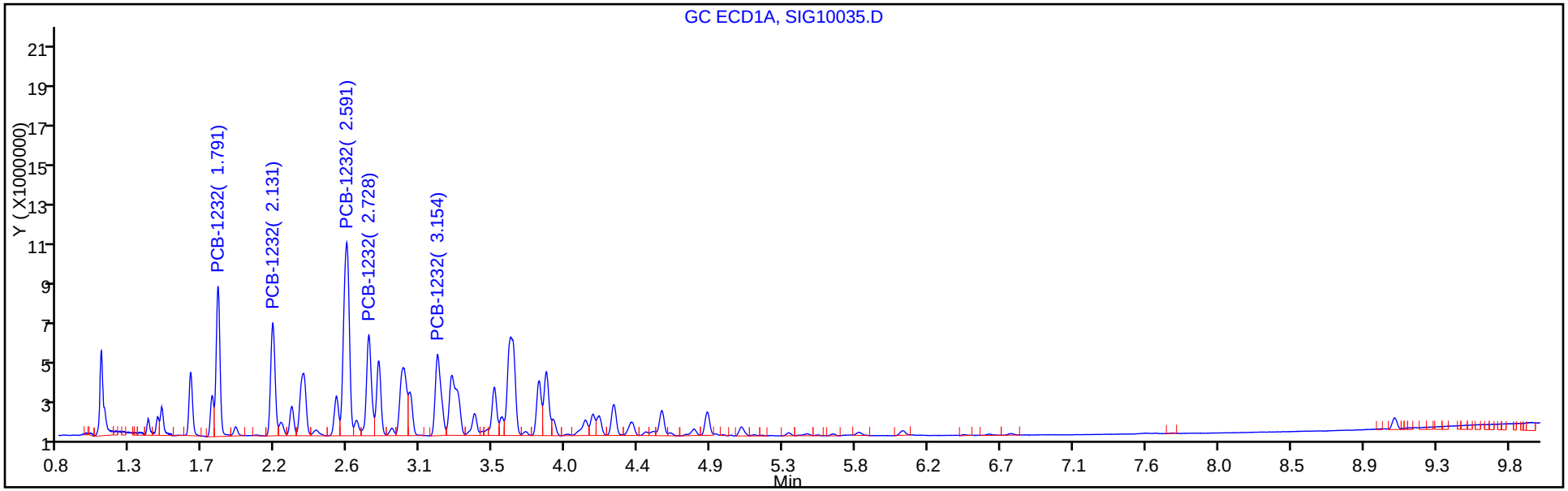
Report Date: 31-Mar-2015 06:14:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

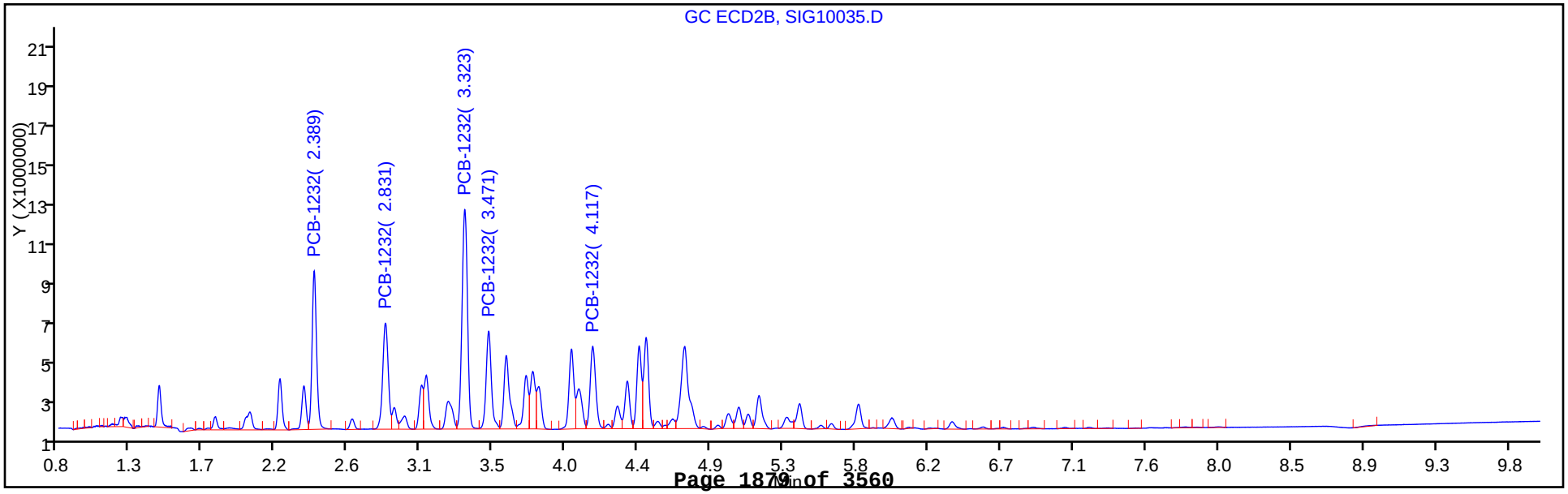
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10035.D

Injection Date:	30-Mar-2015 23:41:46	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	ICV 1232			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/36 Calibration Date: 03/30/2015 23:57

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 17:14

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 18:31

Lab File ID: SIG10036.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Ave	10220004	9812244		0.960	1.00	-4.0	20.0
PCB-1242 Peak 2	Ave	18765966	20127653		1.07	1.00	7.3	20.0
PCB-1242 Peak 3	Ave	39974058	43111536		1.08	1.00	7.8	20.0
PCB-1242 Peak 4	Ave	17953911	19728044		1.10	1.00	9.9	20.0
PCB-1242 Peak 5	Ave	17722843	19588159		1.11	1.00	10.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/36 Calibration Date: 03/30/2015 23:57

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 17:14

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 18:31

Lab File ID: SIG10036.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	1.79	1.72	1.82
PCB-1242 Peak 2	2.13	2.06	2.16
PCB-1242 Peak 3	2.59	2.51	2.61
PCB-1242 Peak 4	2.73	2.66	2.76
PCB-1242 Peak 5	3.16	3.08	3.18

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10036.D
Lims ID: ICV 1242
Client ID:
Sample Type: ICV
Inject. Date: 30-Mar-2015 23:57:10 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-036
Operator ID: Instrument ID: A2HP10
Sublist:

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 07:18:14 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK051

First Level Reviewer: bosworthh Date: 16-Apr-2015 14:25:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.793	1.771	0.022	9812244	1.00	0.9601	a
1	2.132	2.111	0.021	20127653	1.00	1.07	
1	2.591	2.563	0.028	43111536	1.00	1.08	
1	2.729	2.706	0.023	19728044	1.00	1.10	
1	3.155	3.131	0.024	19588159	1.00	1.11	
		Average of Peak Amounts =				1.06	
2	2.389	2.369	0.020	12348581	1.00	1.24	
2	2.831	2.811	0.020	22105833	1.00	1.23	
2	3.325	3.301	0.024	48949580	1.00	1.12	
2	3.472	3.447	0.025	20661830	1.00	1.03	
2	4.118	4.093	0.025	19180241	1.00	1.04	
		Average of Peak Amounts =				1.13	
						RPD = 6.30	

Reagents:

SG1242ICV@1.0_00003 Amount Added: 1.00 Units: mL

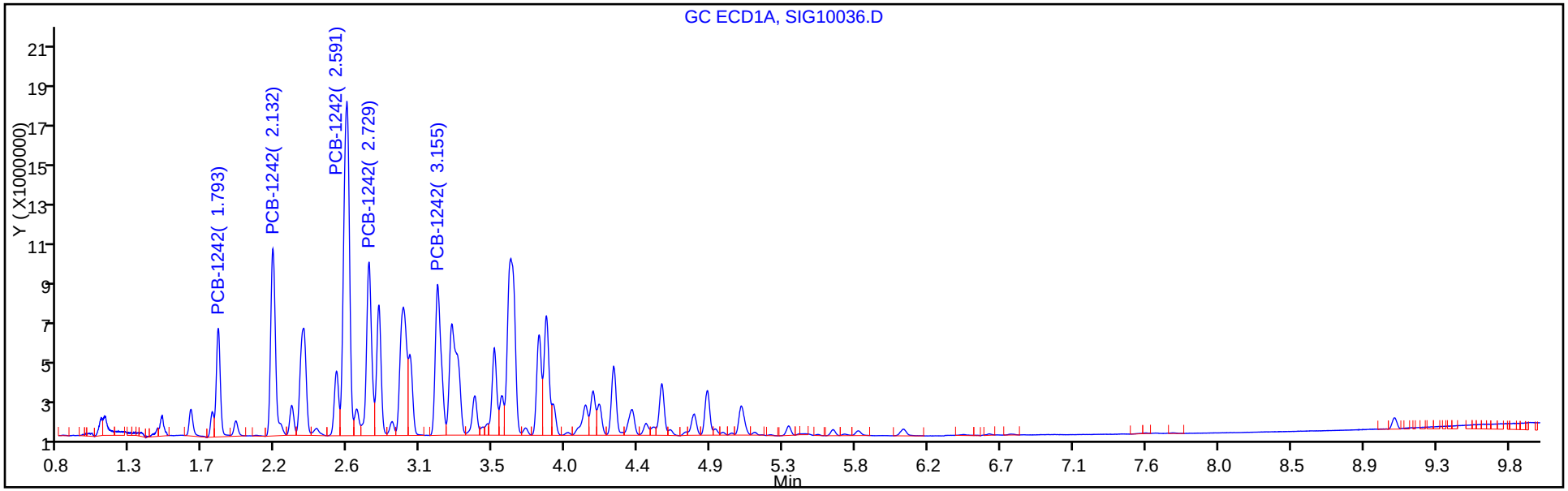
Report Date: 16-Apr-2015 14:25:09 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

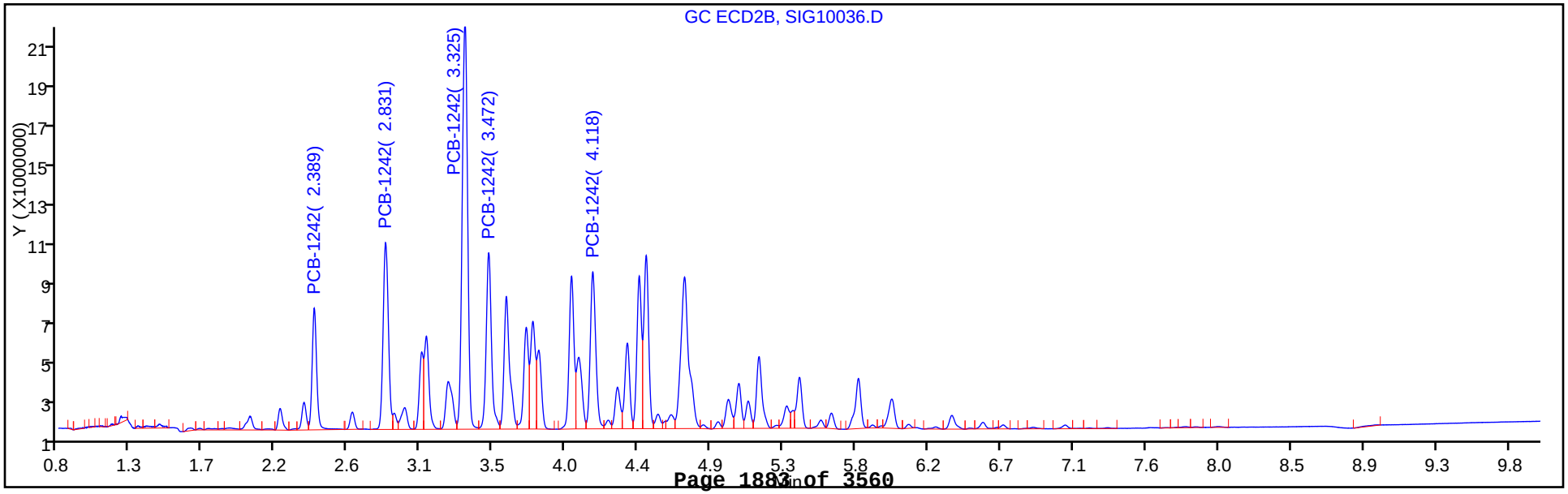
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10036.D

Injection Date:	30-Mar-2015 23:57:10	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	ICV 1242			Worklist Smp#:	36
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/36 Calibration Date: 03/30/2015 23:57

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 17:14

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 18:31

Lab File ID: SIG10036.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Lin1		12348581		1.24	1.00	23.8*	20.0
PCB-1242 Peak 2	Lin1		22105833		1.23	1.00	23.4*	20.0
PCB-1242 Peak 3	Ave	43672090	48949580		1.12	1.00	12.1	20.0
PCB-1242 Peak 4	Ave	20020729	20661830		1.03	1.00	3.2	20.0
PCB-1242 Peak 5	Ave	18511729	19180241		1.04	1.00	3.6	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/36 Calibration Date: 03/30/2015 23:57

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 17:14

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 18:31

Lab File ID: SIG10036.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	2.39	2.32	2.42
PCB-1242 Peak 2	2.83	2.76	2.86
PCB-1242 Peak 3	3.33	3.25	3.35
PCB-1242 Peak 4	3.47	3.40	3.50
PCB-1242 Peak 5	4.12	4.04	4.14

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10036.D
Lims ID: ICV 1242
Client ID:
Sample Type: ICV
Inject. Date: 30-Mar-2015 23:57:10 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-036
Operator ID: Instrument ID: A2HP10
Sublist:

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 07:18:14 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK051

First Level Reviewer: bosworthh Date: 16-Apr-2015 14:25:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1	1.793	1.771	0.022	9812244	1.00	0.9601	a
1	2.132	2.111	0.021	20127653	1.00	1.07	
1	2.591	2.563	0.028	43111536	1.00	1.08	
1	2.729	2.706	0.023	19728044	1.00	1.10	
1	3.155	3.131	0.024	19588159	1.00	1.11	
		Average of Peak Amounts =				1.06	
2	2.389	2.369	0.020	12348581	1.00	1.24	
2	2.831	2.811	0.020	22105833	1.00	1.23	
2	3.325	3.301	0.024	48949580	1.00	1.12	
2	3.472	3.447	0.025	20661830	1.00	1.03	
2	4.118	4.093	0.025	19180241	1.00	1.04	
		Average of Peak Amounts =				1.13	
						RPD = 6.30	

Reagents:

SG1242ICV@1.0_00003 Amount Added: 1.00 Units: mL

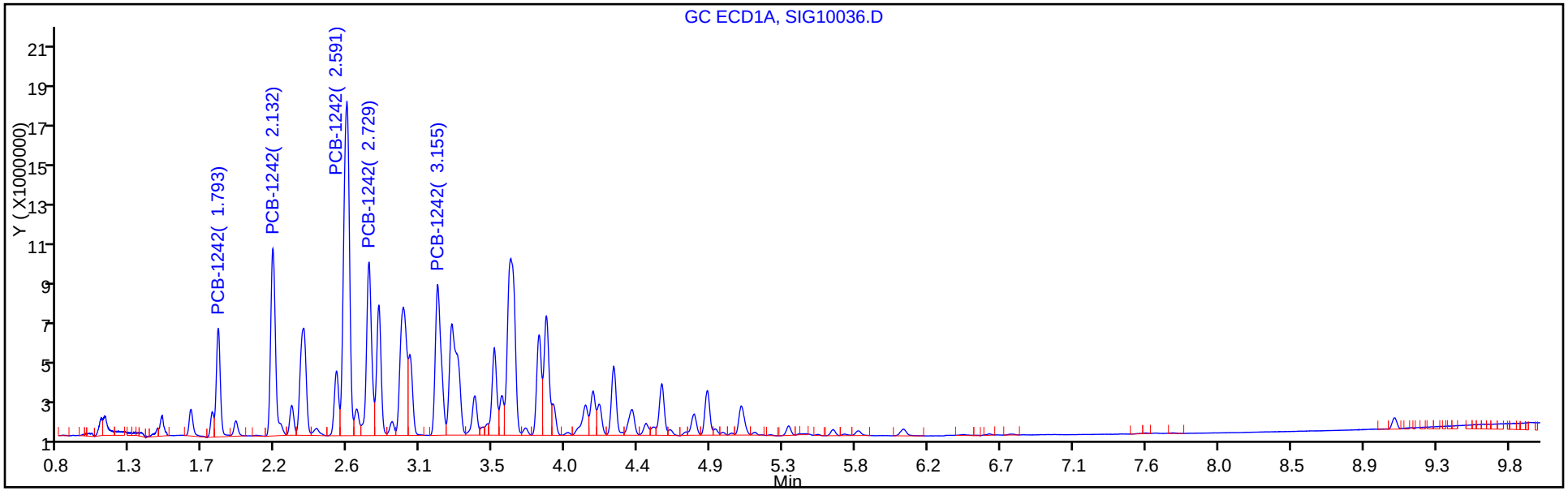
Report Date: 16-Apr-2015 14:25:12 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

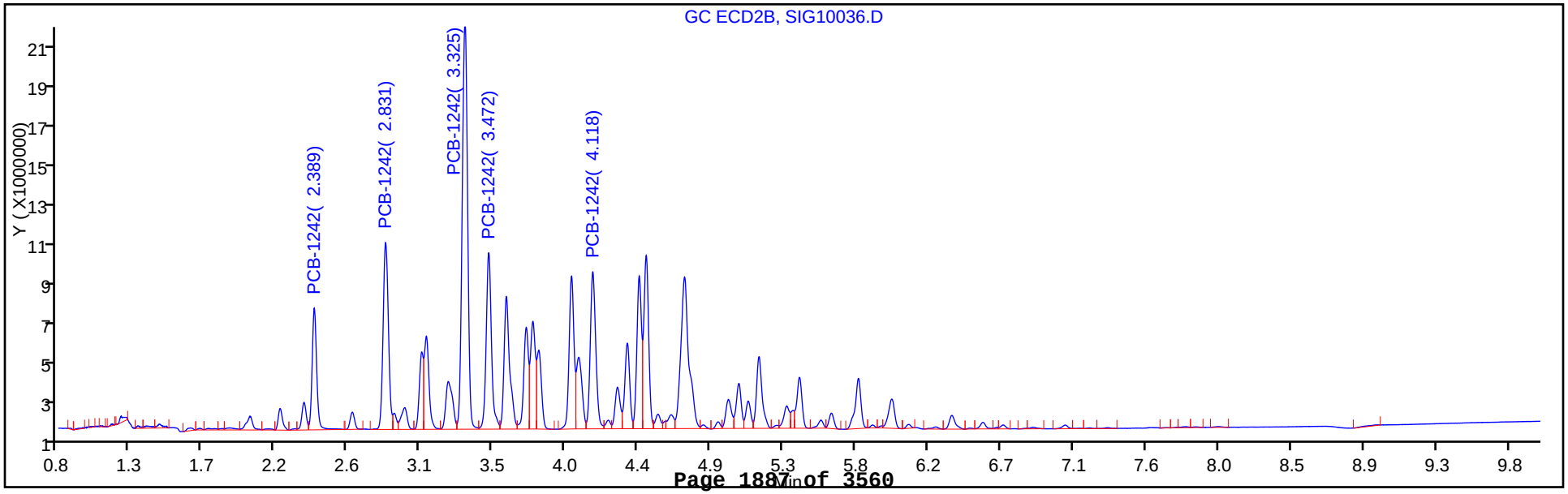
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10036.D

Injection Date:	30-Mar-2015 23:57:10	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	ICV 1242			Worklist Smp#:	36
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/37 Calibration Date: 03/31/2015 00:12

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 18:47

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 20:05

Lab File ID: SIG10037.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	9412387	10012904		1.06	1.00	6.4	20.0
PCB-1248 Peak 2	Ave	26590593	28288907		1.06	1.00	6.4	20.0
PCB-1248 Peak 3	Ave	27795645	28843181		1.04	1.00	3.8	20.0
PCB-1248 Peak 4	Ave	16253655	17753733		1.09	1.00	9.2	20.0
PCB-1248 Peak 5	Ave	13233795	15506472		1.17	1.00	17.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/37 Calibration Date: 03/31/2015 00:12

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 18:47

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 20:05

Lab File ID: SIG10037.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	2.13	2.06	2.16
PCB-1248 Peak 2	2.59	2.51	2.61
PCB-1248 Peak 3	3.16	3.08	3.18
PCB-1248 Peak 4	3.79	3.71	3.81
PCB-1248 Peak 5	4.25	4.17	4.27

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10037.D
Lims ID: ICV 1248
Client ID:
Sample Type: ICV
Inject. Date: 31-Mar-2015 00:12:44 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-037
Operator ID: Instrument ID: A2HP10
Sublist:

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:42 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:10:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.133	2.108	0.025	10012904	1.00	1.06	
1	2.591	2.563	0.028	28288907	1.00	1.06	
1	3.157	3.128	0.029	28843181	1.00	1.04	
1	3.787	3.758	0.029	17753733	1.00	1.09	
1	4.252	4.223	0.029	15506472	1.00	1.17	
		Average of Peak Amounts =				1.09	
2	2.832	2.807	0.025	11308320	1.00	1.00	
2	3.324	3.296	0.028	31252589	1.00	1.08	
2	4.120	4.091	0.029	28858837	1.00	1.06	
2	4.452	4.423	0.029	32489978	1.00	1.09	a
2	5.152	5.125	0.027	18128108	1.00	1.09	
		Average of Peak Amounts =				1.06	
						RPD = 2.05	

Reagents:

SG1248ICV@1.0_00003 Amount Added: 1.00 Units: mL

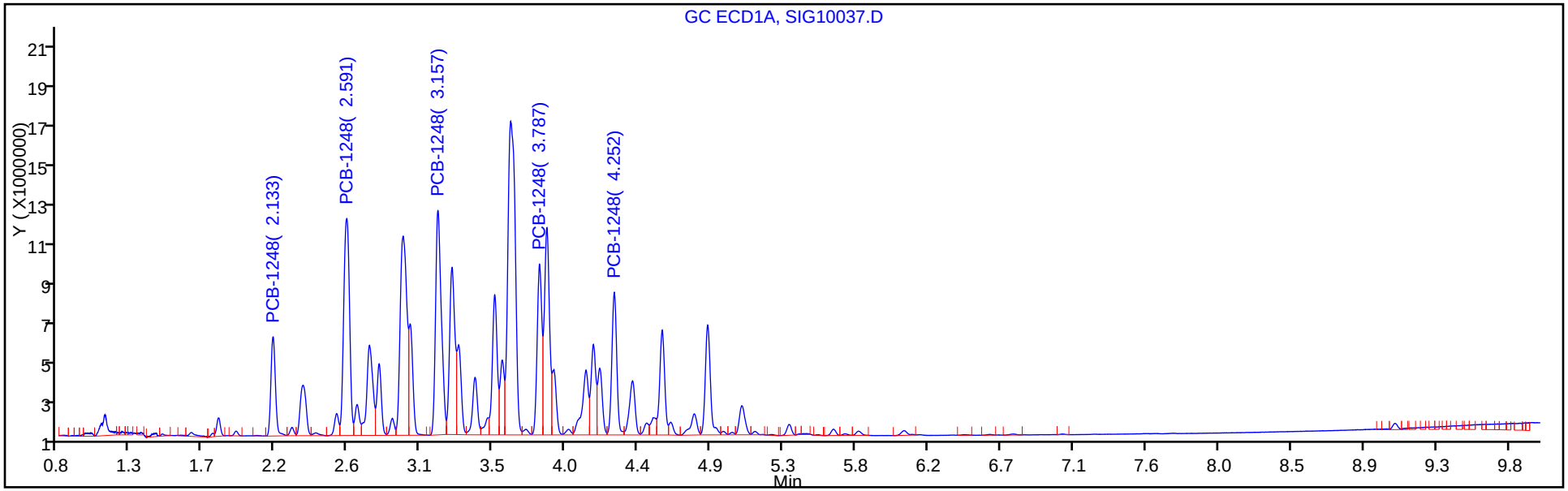
Report Date: 31-Mar-2015 06:14:56 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

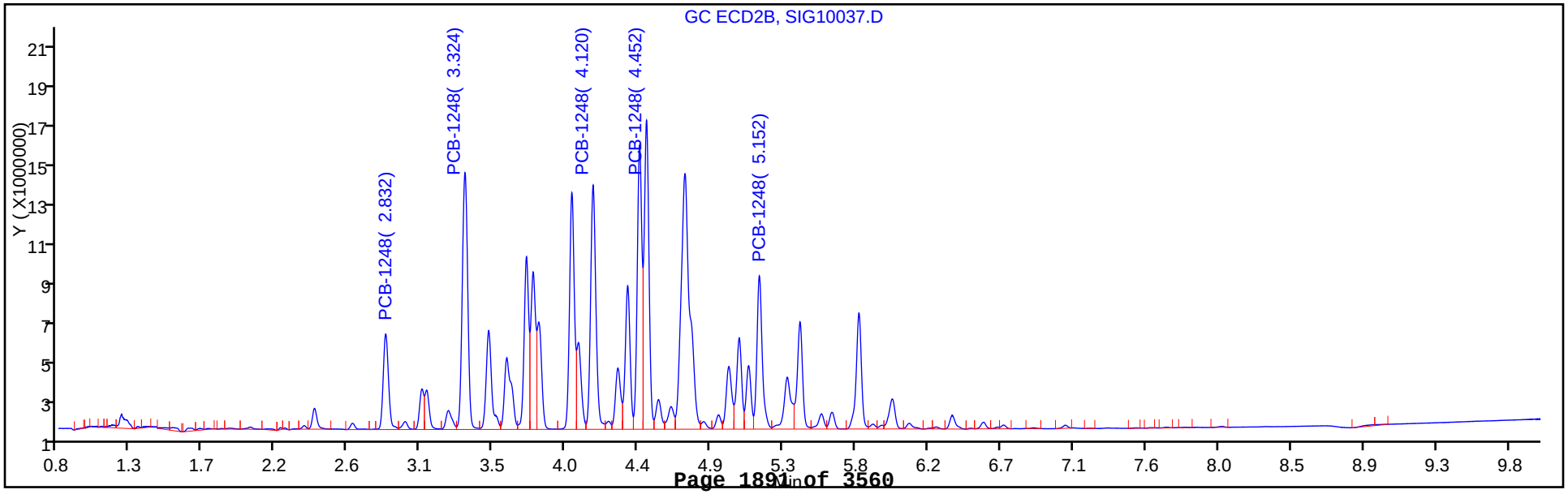
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10037.D

Injection Date:	31-Mar-2015 00:12:44	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	ICV 1248			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/37 Calibration Date: 03/31/2015 00:12

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 18:47

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 20:05

Lab File ID: SIG10037.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	11306518	11308320		1.00	1.00	0.0	20.0
PCB-1248 Peak 2	Ave	28807352	31252589		1.08	1.00	8.5	20.0
PCB-1248 Peak 3	Ave	27196617	28858837		1.06	1.00	6.1	20.0
PCB-1248 Peak 4	Ave	29911543	32489978		1.09	1.00	8.6	20.0
PCB-1248 Peak 5	Ave	16682999	18128108		1.09	1.00	8.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/37 Calibration Date: 03/31/2015 00:12

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 18:47

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 20:05

Lab File ID: SIG10037.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	2.83	2.76	2.86
PCB-1248 Peak 2	3.32	3.25	3.35
PCB-1248 Peak 3	4.12	4.04	4.14
PCB-1248 Peak 4	4.45	4.37	4.47
PCB-1248 Peak 5	5.15	5.08	5.18

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10037.D
Lims ID: ICV 1248
Client ID:
Sample Type: ICV
Inject. Date: 31-Mar-2015 00:12:44 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-037
Operator ID: Instrument ID: A2HP10
Sublist:

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:42 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:10:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
7 PCB-1248							
1	2.133	2.108	0.025	10012904	1.00	1.06	
1	2.591	2.563	0.028	28288907	1.00	1.06	
1	3.157	3.128	0.029	28843181	1.00	1.04	
1	3.787	3.758	0.029	17753733	1.00	1.09	
1	4.252	4.223	0.029	15506472	1.00	1.17	
		Average of Peak Amounts =				1.09	
2	2.832	2.807	0.025	11308320	1.00	1.00	
2	3.324	3.296	0.028	31252589	1.00	1.08	
2	4.120	4.091	0.029	28858837	1.00	1.06	
2	4.452	4.423	0.029	32489978	1.00	1.09	a
2	5.152	5.125	0.027	18128108	1.00	1.09	
		Average of Peak Amounts =				1.06	
						RPD = 2.05	

Reagents:

SG1248ICV@1.0_00003 Amount Added: 1.00 Units: mL

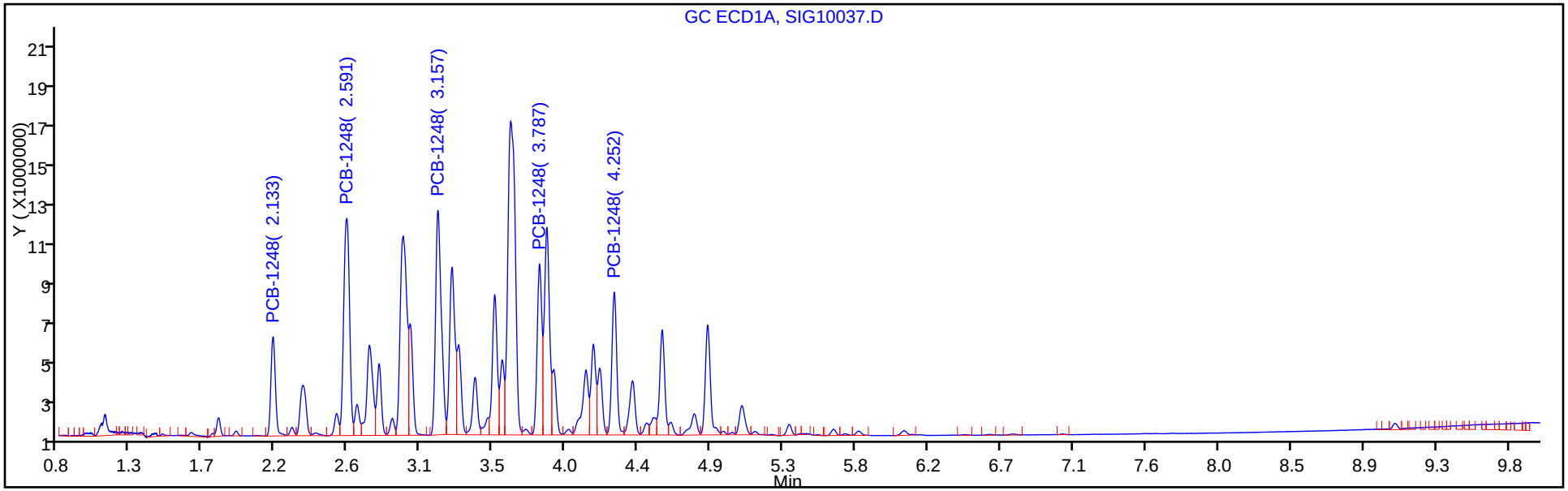
Report Date: 31-Mar-2015 06:14:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

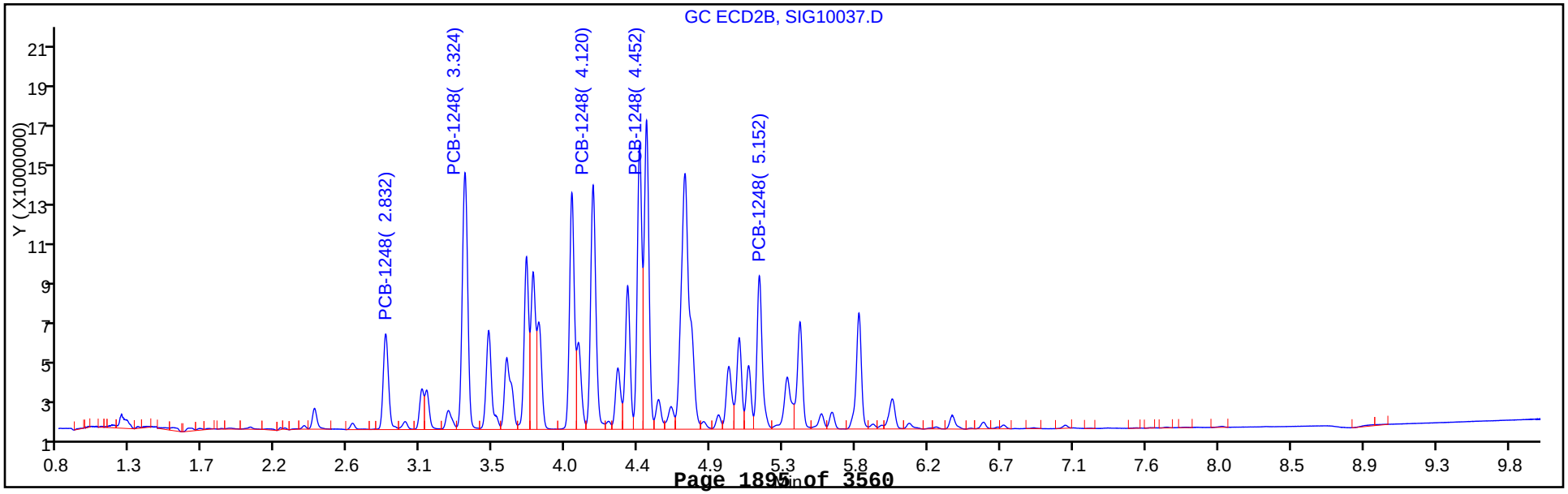
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10037.D

Injection Date:	31-Mar-2015 00:12:44	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	ICV 1248			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/38 Calibration Date: 03/31/2015 00:28

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 20:20

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 21:38

Lab File ID: SIG10038.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1254 Peak 1	Ave	21821737	21722915		0.995	1.00	-0.5	20.0
PCB-1254 Peak 2	Ave	38505609	38783460		1.01	1.00	0.7	20.0
PCB-1254 Peak 3	Ave	42215872	40503175		0.959	1.00	-4.1	20.0
PCB-1254 Peak 4	Ave	32593576	35404976		1.09	1.00	8.6	20.0
PCB-1254 Peak 5	Ave	40879306	45620761		1.12	1.00	11.6	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/38 Calibration Date: 03/31/2015 00:28

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 20:20

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 21:38

Lab File ID: SIG10038.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1254 Peak 1	3.56	3.48	3.58
PCB-1254 Peak 2	3.84	3.77	3.87
PCB-1254 Peak 3	4.25	4.18	4.28
PCB-1254 Peak 4	4.55	4.48	4.58
PCB-1254 Peak 5	5.04	4.97	5.07

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10038.D
Lims ID: ICV 1254
Client ID:
Sample Type: ICV
Inject. Date: 31-Mar-2015 00:28:14 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-038
Operator ID: Instrument ID: A2HP10
Sublist:

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:42 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:10:53

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
8 PCB-1254							
1	3.557	3.532	0.025	21722915	1.00	1.00	a
1	3.839	3.815	0.024	38783460	1.00	1.01	a
1	4.251	4.226	0.025	40503175	1.00	0.9594	
1	4.549	4.526	0.023	35404976	1.00	1.09	
1	5.043	5.018	0.025	45620761	1.00	1.12	
		Average of Peak Amounts =				1.03	
2	4.445	4.422	0.023	27198974	1.00	0.9504	a
2	4.664	4.642	0.022	32195639	1.00	0.9892	
2	5.152	5.129	0.023	50984146	1.00	1.02	
2	5.403	5.380	0.023	34574843	1.00	1.03	a
2	5.976	5.953	0.023	50394842	1.00	1.14	
		Average of Peak Amounts =				1.03	
						RPD = 0.60	

Reagents:

SG1254ICV@1.0_00004 Amount Added: 1.00 Units: mL

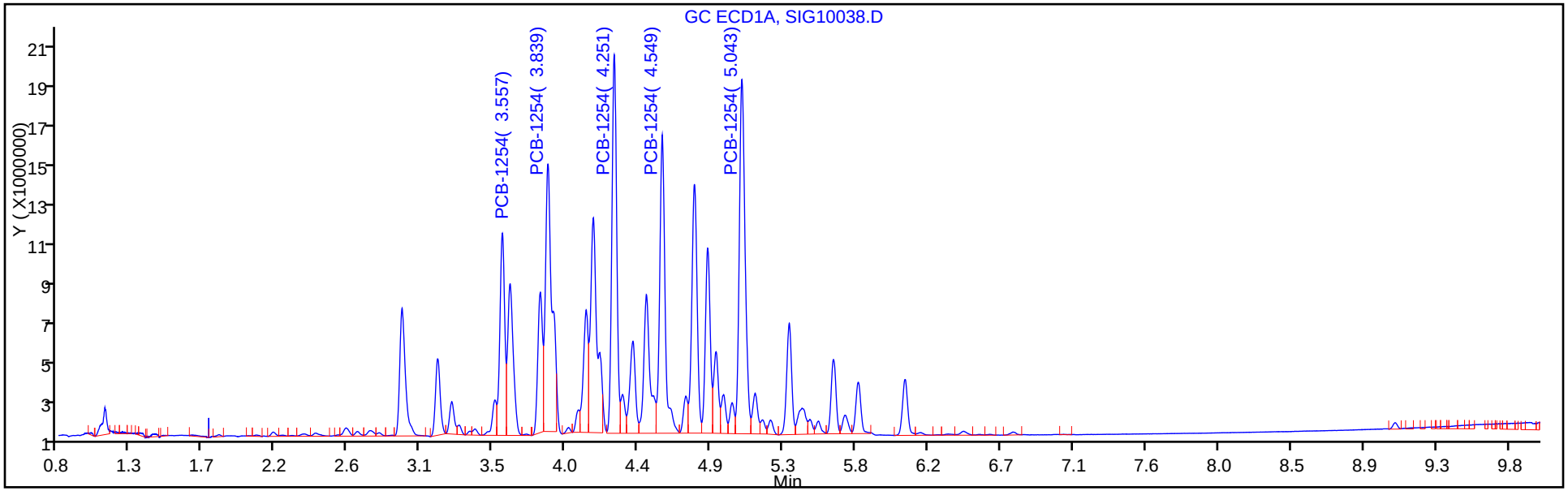
Report Date: 31-Mar-2015 06:14:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

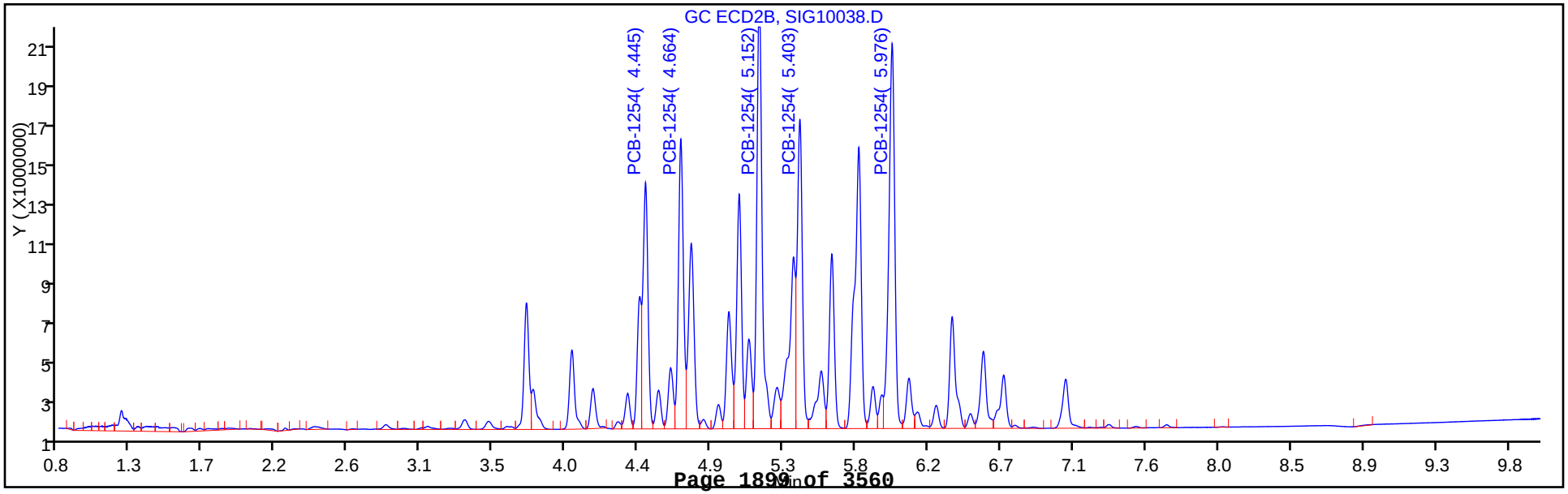
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10038.D

Injection Date:	31-Mar-2015 00:28:14	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	ICV 1254			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/38 Calibration Date: 03/31/2015 00:28

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 20:20

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 21:38

Lab File ID: SIG10038.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1254 Peak 1	Ave	28618049	27198974		0.950	1.00	-5.0	20.0
PCB-1254 Peak 2	Ave	32548507	32195639		0.989	1.00	-1.1	20.0
PCB-1254 Peak 3	Ave	49925307	50984146		1.02	1.00	2.1	20.0
PCB-1254 Peak 4	Ave	33596451	34574843		1.03	1.00	2.9	20.0
PCB-1254 Peak 5	Ave	44076593	50394842		1.14	1.00	14.3	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/38 Calibration Date: 03/31/2015 00:28

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 20:20

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 21:38

Lab File ID: SIG10038.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1254 Peak 1	4.45	4.37	4.47
PCB-1254 Peak 2	4.66	4.59	4.69
PCB-1254 Peak 3	5.15	5.08	5.18
PCB-1254 Peak 4	5.40	5.33	5.43
PCB-1254 Peak 5	5.98	5.90	6.00

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10038.D
Lims ID: ICV 1254
Client ID:
Sample Type: ICV
Inject. Date: 31-Mar-2015 00:28:14 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-038
Operator ID: Instrument ID: A2HP10
Sublist:

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:42 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:10:53

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
8 PCB-1254							
1	3.557	3.532	0.025	21722915	1.00	1.00	a
1	3.839	3.815	0.024	38783460	1.00	1.01	a
1	4.251	4.226	0.025	40503175	1.00	0.9594	
1	4.549	4.526	0.023	35404976	1.00	1.09	
1	5.043	5.018	0.025	45620761	1.00	1.12	
		Average of Peak Amounts =				1.03	
2	4.445	4.422	0.023	27198974	1.00	0.9504	a
2	4.664	4.642	0.022	32195639	1.00	0.9892	
2	5.152	5.129	0.023	50984146	1.00	1.02	
2	5.403	5.380	0.023	34574843	1.00	1.03	a
2	5.976	5.953	0.023	50394842	1.00	1.14	
		Average of Peak Amounts =				1.03	
						RPD = 0.60	

Reagents:

SG1254ICV@1.0_00004 Amount Added: 1.00 Units: mL

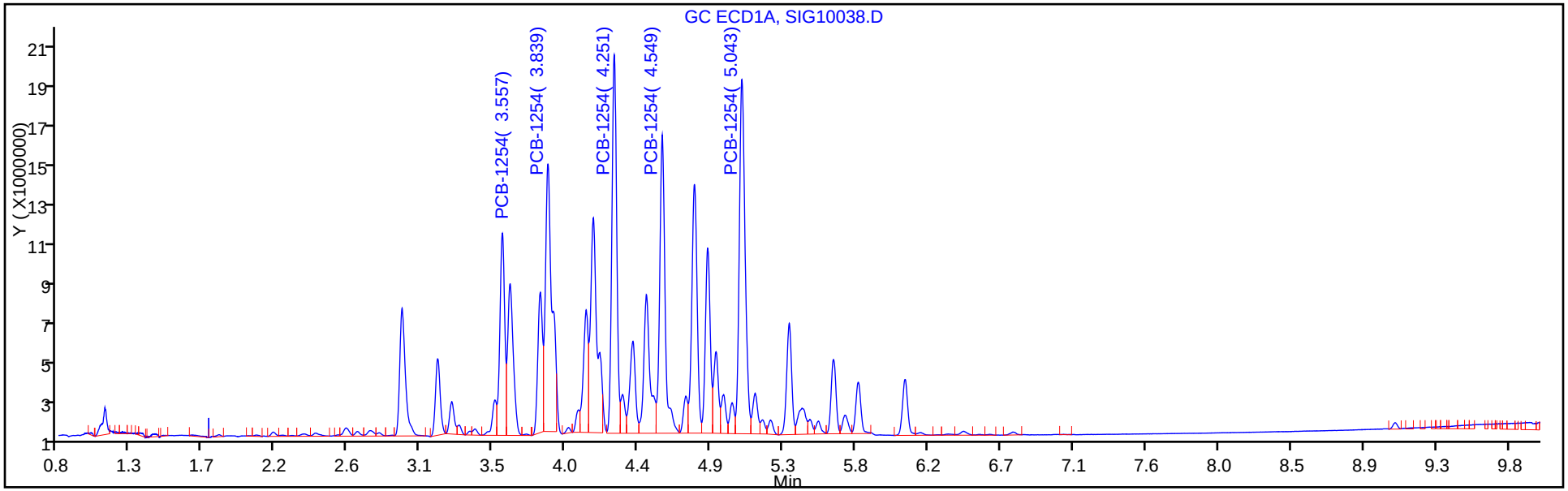
Report Date: 31-Mar-2015 06:15:00 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

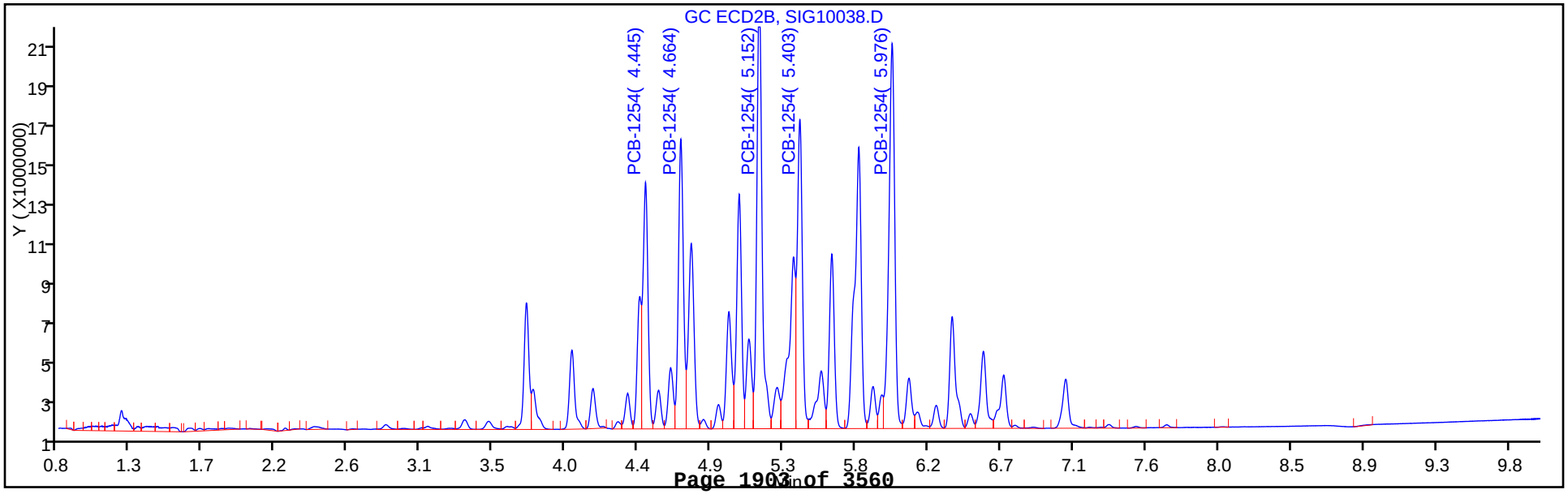
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10038.D

Injection Date:	31-Mar-2015 00:28:14	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	ICV 1254			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/39 Calibration Date: 03/31/2015 00:43

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 21:53

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 23:10

Lab File ID: SIG10039.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	12896664	12545584		0.973	1.00	-2.7	20.0
PCB-1016 Peak 2	Ave	23335016	25965165		1.11	1.00	11.3	20.0
PCB-1016 Peak 3	Ave	48977804	57273996		1.17	1.00	16.9	20.0
PCB-1016 Peak 4	Ave	21912462	25497592		1.16	1.00	16.4	20.0
PCB-1016 Peak 5	Ave	22086947	24072222		1.09	1.00	9.0	20.0
PCB-1260 Peak 1	Ave	30049170	33433406		1.11	1.00	11.3	20.0
PCB-1260 Peak 2	Ave	53389094	59909894		1.12	1.00	12.2	20.0
PCB-1260 Peak 3	Ave	50025603	61816514		1.24	1.00	23.6*	20.0
PCB-1260 Peak 4	Ave	70753328	73276510		1.04	1.00	3.6	20.0
PCB-1260 Peak 5	Ave	35063190	40100161		1.14	1.00	14.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/39 Calibration Date: 03/31/2015 00:43

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 21:53

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 23:10

Lab File ID: SIG10039.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	1.79	1.74	1.84
PCB-1016 Peak 2	2.13	2.08	2.18
PCB-1016 Peak 3	2.59	2.54	2.64
PCB-1016 Peak 4	2.73	2.68	2.78
PCB-1016 Peak 5	3.16	3.10	3.20
PCB-1260 Peak 1	4.45	4.40	4.50
PCB-1260 Peak 2	4.75	4.70	4.80
PCB-1260 Peak 3	5.04	4.99	5.09
PCB-1260 Peak 4	5.77	5.71	5.81
PCB-1260 Peak 5	6.06	6.00	6.10

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10039.D
Lims ID: ICV 1660
Client ID:
Sample Type: ICV
Inject. Date: 31-Mar-2015 00:43:41 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-039
Operator ID: Instrument ID: A2HP10
Sublist:

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:42 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:11:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
6 PCB-1016							
1	1.794	1.790	0.004	12545584	1.00	0.9728	
1	2.134	2.131	0.003	25965165	1.00	1.11	
1	2.594	2.589	0.005	57273996	1.00	1.17	
1	2.730	2.726	0.004	25497592	1.00	1.16	
1	3.156	3.153	0.003	24072222	1.00	1.09	
		Average of Peak Amounts =				1.10	
2	2.390	2.386	0.004	14714969	1.00	1.03	
2	2.833	2.828	0.005	30291670	1.00	1.11	
2	3.326	3.321	0.005	65699281	1.00	1.21	
2	3.473	3.469	0.004	27384327	1.00	1.12	
2	3.988	3.984	0.004	21013714	1.00	1.07	
		Average of Peak Amounts =				1.11	
						RPD = 0.35	
10 PCB-1260							
1	4.451	4.445	0.006	33433406	1.00	1.11	
1	4.751	4.746	0.005	59909894	1.00	1.12	
1	5.042	5.036	0.006	61816514	1.00	1.24	
1	5.765	5.760	0.005	73276510	1.00	1.04	
1	6.056	6.051	0.005	40100161	1.00	1.14	
		Average of Peak Amounts =				1.13	
2	5.365	5.361	0.004	41246287	1.00	1.14	
2	5.601	5.597	0.004	44105840	1.00	1.16	
2	5.974	5.968	0.006	70311280	1.00	1.28	
2	6.668	6.663	0.005	77055456	1.00	1.10	
2	7.052	7.046	0.006	57384552	1.00	1.12	
		Average of Peak Amounts =				1.16	
						RPD = 2.76	

Reagents:

SG1660ICV@1.0_00004 Amount Added: 1.00 Units: mL

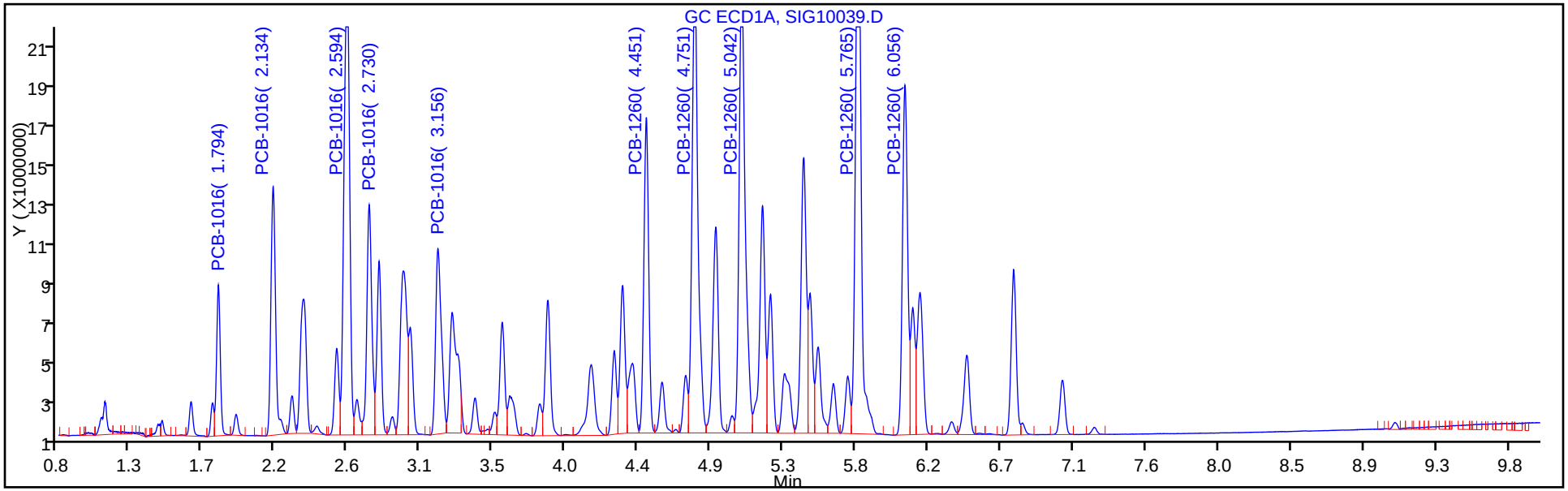
Report Date: 31-Mar-2015 06:15:05 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

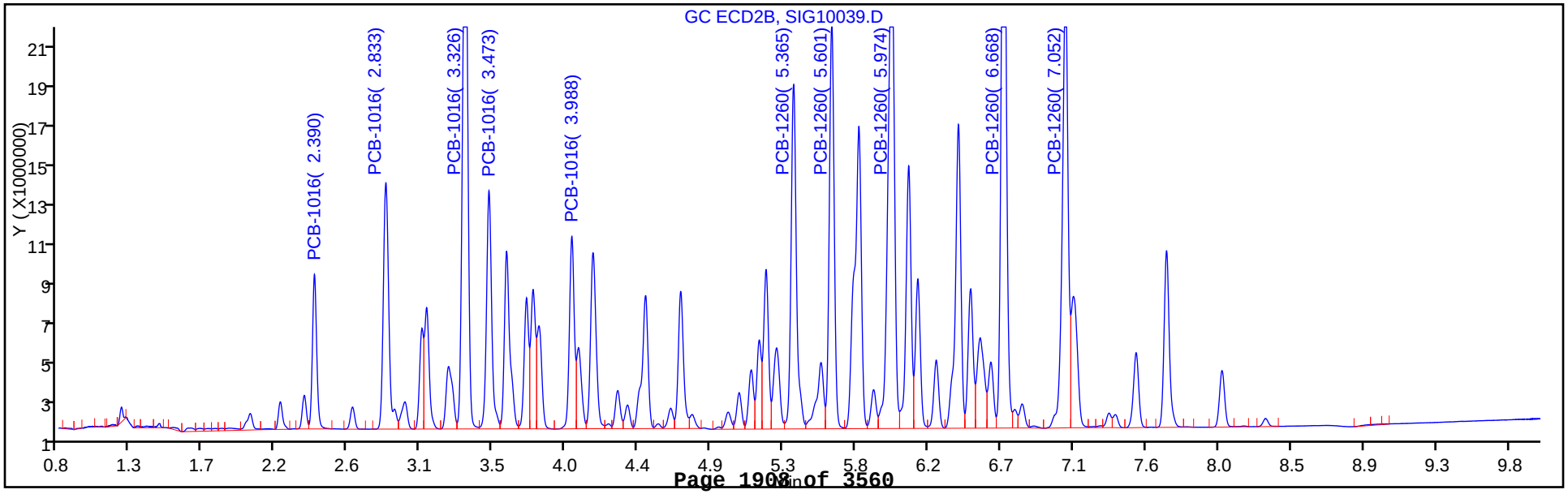
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10039.D

Injection Date:	31-Mar-2015 00:43:41	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	ICV 1660			Worklist Smp#:	39
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/39 Calibration Date: 03/31/2015 00:43

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 21:53

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 23:10

Lab File ID: SIG10039.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	14349362	14714969		1.03	1.00	2.5	20.0
PCB-1016 Peak 2	Ave	27372222	30291670		1.11	1.00	10.7	20.0
PCB-1016 Peak 3	Ave	54388976	65699281		1.21	1.00	20.8*	20.0
PCB-1016 Peak 4	Ave	24505568	27384327		1.12	1.00	11.7	20.0
PCB-1016 Peak 5	Ave	19639503	21013714		1.07	1.00	7.0	20.0
PCB-1260 Peak 1	Ave	36031944	41246287		1.14	1.00	14.5	20.0
PCB-1260 Peak 2	Ave	37995049	44105840		1.16	1.00	16.1	20.0
PCB-1260 Peak 3	Ave	55068149	70311280		1.28	1.00	27.7*	20.0
PCB-1260 Peak 4	Ave	69922004	77055456		1.10	1.00	10.2	20.0
PCB-1260 Peak 5	Ave	51063420	57384552		1.12	1.00	12.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 240-174339/39 Calibration Date: 03/31/2015 00:43

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 21:53

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 23:10

Lab File ID: SIG10039.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.39	2.34	2.44
PCB-1016 Peak 2	2.83	2.78	2.88
PCB-1016 Peak 3	3.33	3.27	3.37
PCB-1016 Peak 4	3.47	3.42	3.52
PCB-1016 Peak 5	3.99	3.93	4.03
PCB-1260 Peak 1	5.37	5.31	5.41
PCB-1260 Peak 2	5.60	5.55	5.65
PCB-1260 Peak 3	5.97	5.92	6.02
PCB-1260 Peak 4	6.67	6.61	6.71
PCB-1260 Peak 5	7.05	7.00	7.10

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10039.D
Lims ID: ICV 1660
Client ID:
Sample Type: ICV
Inject. Date: 31-Mar-2015 00:43:41 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0042050-039
Operator ID: Instrument ID: A2HP10
Sublist:

Method: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 31-Mar-2015 06:14:42 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 31-Mar-2015 06:11:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
6 PCB-1016							
1	1.794	1.790	0.004	12545584	1.00	0.9728	
1	2.134	2.131	0.003	25965165	1.00	1.11	
1	2.594	2.589	0.005	57273996	1.00	1.17	
1	2.730	2.726	0.004	25497592	1.00	1.16	
1	3.156	3.153	0.003	24072222	1.00	1.09	
		Average of Peak Amounts =				1.10	
2	2.390	2.386	0.004	14714969	1.00	1.03	
2	2.833	2.828	0.005	30291670	1.00	1.11	
2	3.326	3.321	0.005	65699281	1.00	1.21	
2	3.473	3.469	0.004	27384327	1.00	1.12	
2	3.988	3.984	0.004	21013714	1.00	1.07	
		Average of Peak Amounts =				1.11	
						RPD = 0.35	
10 PCB-1260							
1	4.451	4.445	0.006	33433406	1.00	1.11	
1	4.751	4.746	0.005	59909894	1.00	1.12	
1	5.042	5.036	0.006	61816514	1.00	1.24	
1	5.765	5.760	0.005	73276510	1.00	1.04	
1	6.056	6.051	0.005	40100161	1.00	1.14	
		Average of Peak Amounts =				1.13	
2	5.365	5.361	0.004	41246287	1.00	1.14	
2	5.601	5.597	0.004	44105840	1.00	1.16	
2	5.974	5.968	0.006	70311280	1.00	1.28	
2	6.668	6.663	0.005	77055456	1.00	1.10	
2	7.052	7.046	0.006	57384552	1.00	1.12	
		Average of Peak Amounts =				1.16	
						RPD = 2.76	

Reagents:

SG1660ICV@1.0_00004 Amount Added: 1.00 Units: mL

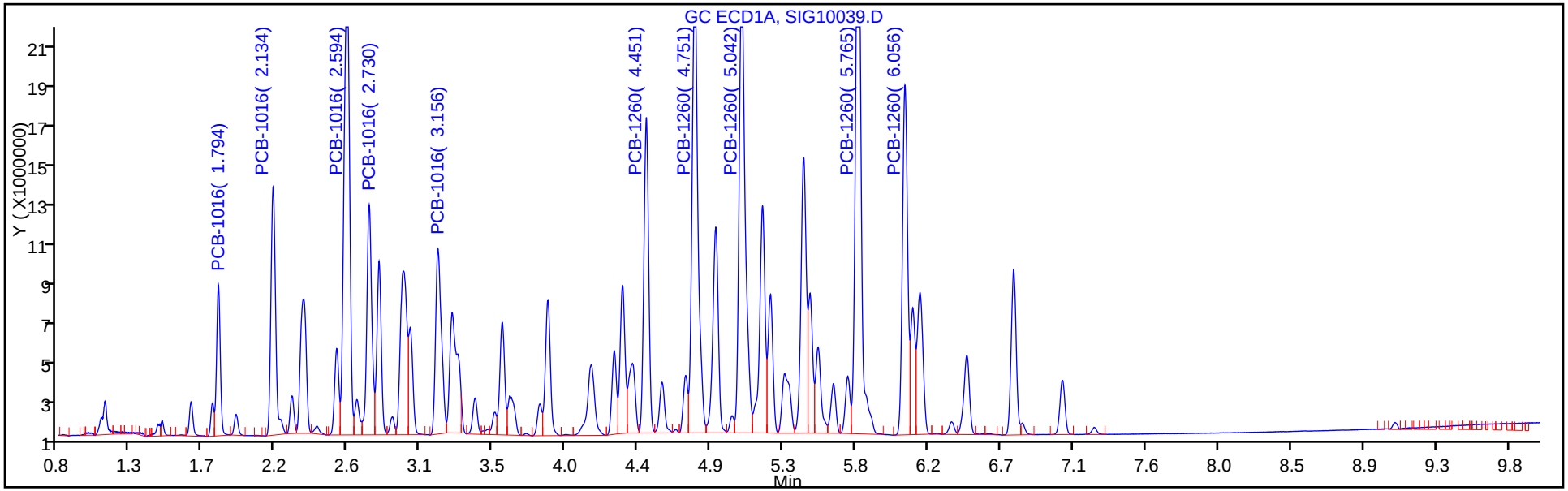
Report Date: 31-Mar-2015 06:15:05 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

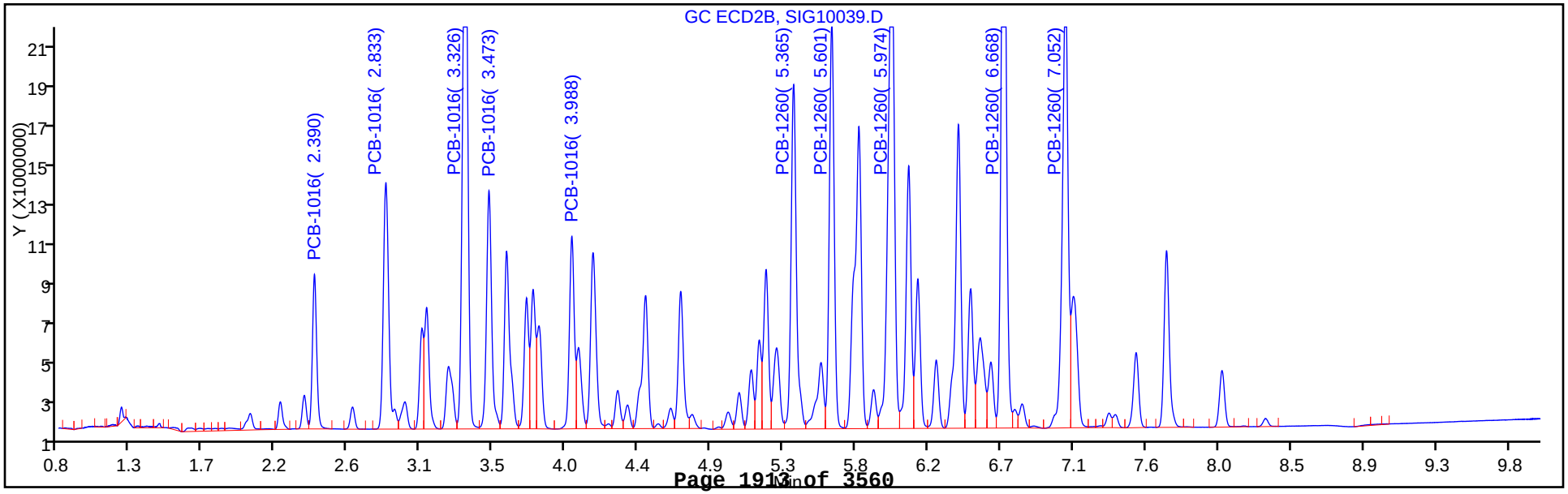
Data File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10039.D

Injection Date:	31-Mar-2015 00:43:41	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	ICV 1660			Worklist Smp#:	39
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176718/3 Calibration Date: 04/16/2015 12:14

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 21:53

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 23:10

Lab File ID: SIG10010.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	12896664	11330674		0.439	0.500	-12.1	20.0
PCB-1016 Peak 2	Ave	23335016	20509478		0.439	0.500	-12.1	20.0
PCB-1016 Peak 3	Ave	48977804	43979390		0.449	0.500	-10.2	20.0
PCB-1016 Peak 4	Ave	21912462	19551322		0.446	0.500	-10.8	20.0
PCB-1016 Peak 5	Ave	22086947	19154728		0.434	0.500	-13.3	20.0
PCB-1260 Peak 1	Ave	30049170	26387398		0.439	0.500	-12.2	20.0
PCB-1260 Peak 2	Ave	53389094	48212902		0.452	0.500	-9.7	20.0
PCB-1260 Peak 3	Ave	50025603	46830590		0.468	0.500	-6.4	20.0
PCB-1260 Peak 4	Ave	70753328	65660930		0.464	0.500	-7.2	20.0
PCB-1260 Peak 5	Ave	35063190	32001374		0.456	0.500	-8.7	20.0
Tetrachloro-m-xylene	Ave	752222197	837890120		0.0278	0.0250	11.4	20.0
DCB Decachlorobiphenyl	Ave	590645418	541968360		0.0229	0.0250	-8.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176718/3 Calibration Date: 04/16/2015 12:14

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 21:53

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 23:10

Lab File ID: SIG10010.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	1.77	1.72	1.82
PCB-1016 Peak 2	2.11	2.06	2.16
PCB-1016 Peak 3	2.57	2.52	2.62
PCB-1016 Peak 4	2.70	2.65	2.75
PCB-1016 Peak 5	3.13	3.08	3.18
PCB-1260 Peak 1	4.42	4.37	4.47
PCB-1260 Peak 2	4.72	4.67	4.77
PCB-1260 Peak 3	5.01	4.96	5.06
PCB-1260 Peak 4	5.74	5.69	5.79
PCB-1260 Peak 5	6.03	5.98	6.08
Tetrachloro-m-xylene	1.44	1.39	1.49
DCB Decachlorobiphenyl	7.20	7.15	7.25

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10010.D
Lims ID: CCV AR1660
Client ID:
Sample Type: CCVRT
Inject. Date: 16-Apr-2015 12:14:17 ALS Bottle#: 10 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-003
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.436	1.436	0.000	20947253	0.0250	0.0278	
2	1.833	1.833	0.000	15885156	0.0250	0.0212	
						RPD = 26.93	
6 PCB-1016							
1	1.769	1.769	0.000	5665337	0.5000	0.4393	
1	2.108	2.108	0.000	10254739	0.5000	0.4395	
1	2.566	2.566	0.000	21989695	0.5000	0.4490	
1	2.701	2.701	0.000	9775661	0.5000	0.4461	
1	3.128	3.128	0.000	9577364	0.5000	0.4336	
		Average of Peak Amounts =				0.4415	
2	2.366	2.366	0.000	5888349	0.5000	0.4104	
2	2.809	2.809	0.000	11602718	0.5000	0.4239	
2	3.302	3.302	0.000	23287891	0.5000	0.4282	
2	3.449	3.449	0.000	10352447	0.5000	0.4225	
2	3.964	3.964	0.000	7990683	0.5000	0.4069	
		Average of Peak Amounts =				0.4183	
						RPD = 5.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.420	4.420	0.000	13193699	0.5000	0.4391	
1	4.721	4.721	0.000	24106451	0.5000	0.4515	
1	5.011	5.011	0.000	23415295	0.5000	0.4681	
1	5.736	5.736	0.000	32830465	0.5000	0.4640	
1	6.026	6.026	0.000	16000687	0.5000	0.4563	
		Average of Peak Amounts =				0.4558	
2	5.341	5.341	0.000	15062570	0.5000	0.4180	
2	5.579	5.579	0.000	16929614	0.5000	0.4456	
2	5.949	5.949	0.000	24831584	0.5000	0.4509	
2	6.647	6.647	0.000	32812466	0.5000	0.4693	
2	7.030	7.030	0.000	24067457	0.5000	0.4713	
		Average of Peak Amounts =				0.4510	
						RPD = 1.05	
$ 12 DCB Decachlorobiphenyl							
1	7.199	7.199	0.000	13549209	0.0250	0.0229	
2	8.271	8.271	0.000	14208114	0.0250	0.0220	
						RPD = 4.09	

Reagents:

SG1660@0.5PPM_00044 Amount Added: 1.00 Units: mL

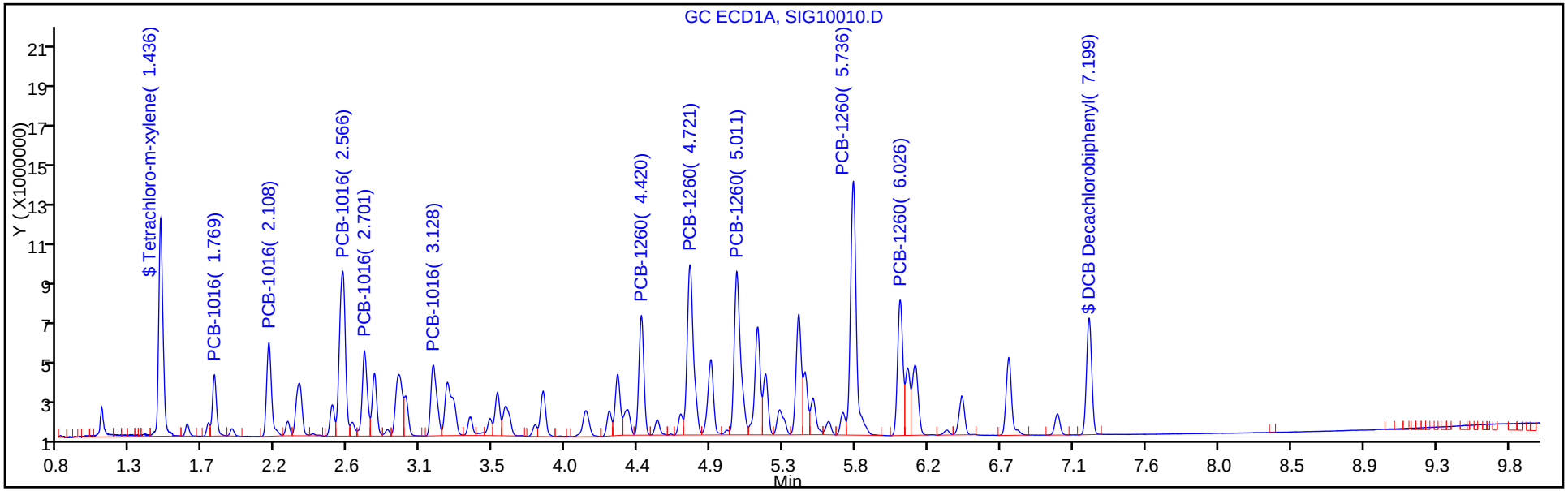
Report Date: 17-Apr-2015 08:30:26 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

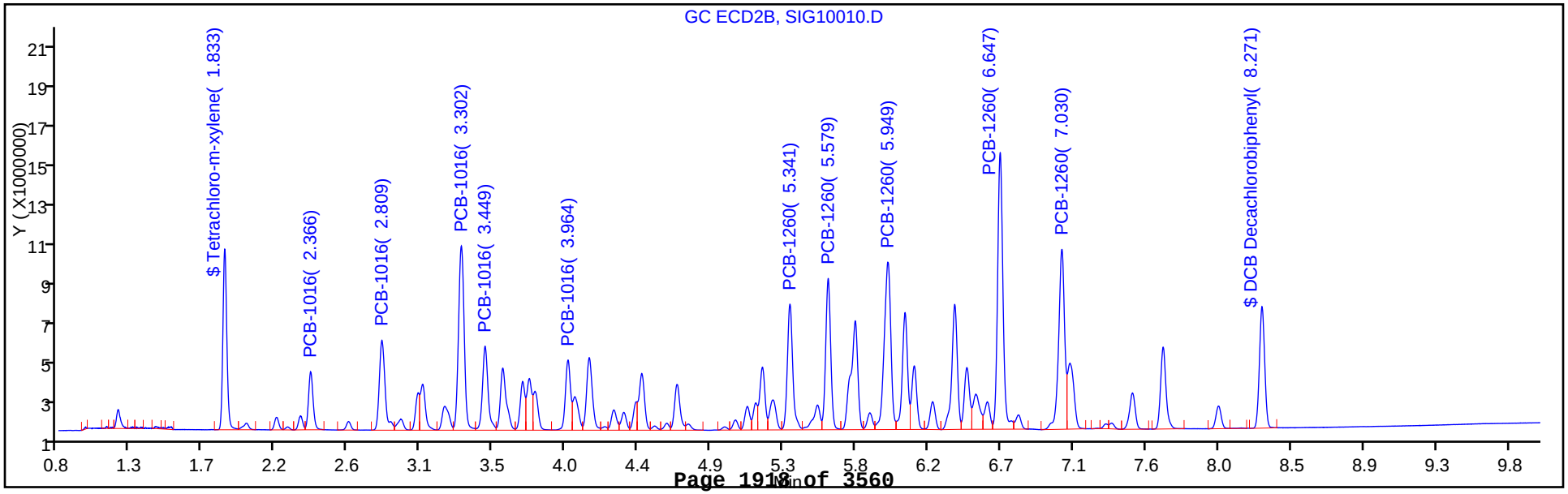
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10010.D

Injection Date:	16-Apr-2015 12:14:17	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	CCV AR1660			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176718/3 Calibration Date: 04/16/2015 12:14

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 21:53

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 23:10

Lab File ID: SIG10010.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	14349362	11776698		0.410	0.500	-17.9	20.0
PCB-1016 Peak 2	Ave	27372222	23205436		0.424	0.500	-15.2	20.0
PCB-1016 Peak 3	Ave	54388976	46575782		0.428	0.500	-14.4	20.0
PCB-1016 Peak 4	Ave	24505568	20704894		0.422	0.500	-15.5	20.0
PCB-1016 Peak 5	Ave	19639503	15981366		0.407	0.500	-18.6	20.0
PCB-1260 Peak 1	Ave	36031944	30125140		0.418	0.500	-16.4	20.0
PCB-1260 Peak 2	Ave	37995049	33859228		0.446	0.500	-10.9	20.0
PCB-1260 Peak 3	Ave	55068149	49663168		0.451	0.500	-9.8	20.0
PCB-1260 Peak 4	Ave	69922004	65624932		0.469	0.500	-6.1	20.0
PCB-1260 Peak 5	Ave	51063420	48134914		0.471	0.500	-5.7	20.0
Tetrachloro-m-xylene	Ave	747974818	635406240		0.0212	0.0250	-15.0	20.0
DCB Decachlorobiphenyl	Ave	645253453	568324560		0.0220	0.0250	-11.9	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176718/3 Calibration Date: 04/16/2015 12:14

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 21:53

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 23:10

Lab File ID: SIG10010.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.37	2.32	2.42
PCB-1016 Peak 2	2.81	2.76	2.86
PCB-1016 Peak 3	3.30	3.25	3.35
PCB-1016 Peak 4	3.45	3.40	3.50
PCB-1016 Peak 5	3.96	3.91	4.01
PCB-1260 Peak 1	5.34	5.29	5.39
PCB-1260 Peak 2	5.58	5.53	5.63
PCB-1260 Peak 3	5.95	5.90	6.00
PCB-1260 Peak 4	6.65	6.60	6.70
PCB-1260 Peak 5	7.03	6.98	7.08
Tetrachloro-m-xylene	1.83	1.78	1.88
DCB Decachlorobiphenyl	8.27	8.22	8.32

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10010.D
Lims ID: CCV AR1660
Client ID:
Sample Type: CCVRT
Inject. Date: 16-Apr-2015 12:14:17 ALS Bottle#: 10 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-003
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.436	1.436	0.000	20947253	0.0250	0.0278	
2	1.833	1.833	0.000	15885156	0.0250	0.0212	
						RPD = 26.93	
6 PCB-1016							
1	1.769	1.769	0.000	5665337	0.5000	0.4393	
1	2.108	2.108	0.000	10254739	0.5000	0.4395	
1	2.566	2.566	0.000	21989695	0.5000	0.4490	
1	2.701	2.701	0.000	9775661	0.5000	0.4461	
1	3.128	3.128	0.000	9577364	0.5000	0.4336	
		Average of Peak Amounts =				0.4415	
2	2.366	2.366	0.000	5888349	0.5000	0.4104	
2	2.809	2.809	0.000	11602718	0.5000	0.4239	
2	3.302	3.302	0.000	23287891	0.5000	0.4282	
2	3.449	3.449	0.000	10352447	0.5000	0.4225	
2	3.964	3.964	0.000	7990683	0.5000	0.4069	
		Average of Peak Amounts =				0.4183	
						RPD = 5.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.420	4.420	0.000	13193699	0.5000	0.4391	
1	4.721	4.721	0.000	24106451	0.5000	0.4515	
1	5.011	5.011	0.000	23415295	0.5000	0.4681	
1	5.736	5.736	0.000	32830465	0.5000	0.4640	
1	6.026	6.026	0.000	16000687	0.5000	0.4563	
		Average of Peak Amounts =				0.4558	
2	5.341	5.341	0.000	15062570	0.5000	0.4180	
2	5.579	5.579	0.000	16929614	0.5000	0.4456	
2	5.949	5.949	0.000	24831584	0.5000	0.4509	
2	6.647	6.647	0.000	32812466	0.5000	0.4693	
2	7.030	7.030	0.000	24067457	0.5000	0.4713	
		Average of Peak Amounts =				0.4510	
						RPD = 1.05	
$ 12 DCB Decachlorobiphenyl							
1	7.199	7.199	0.000	13549209	0.0250	0.0229	
2	8.271	8.271	0.000	14208114	0.0250	0.0220	
						RPD = 4.09	

Reagents:

SG1660@0.5PPM_00044 Amount Added: 1.00 Units: mL

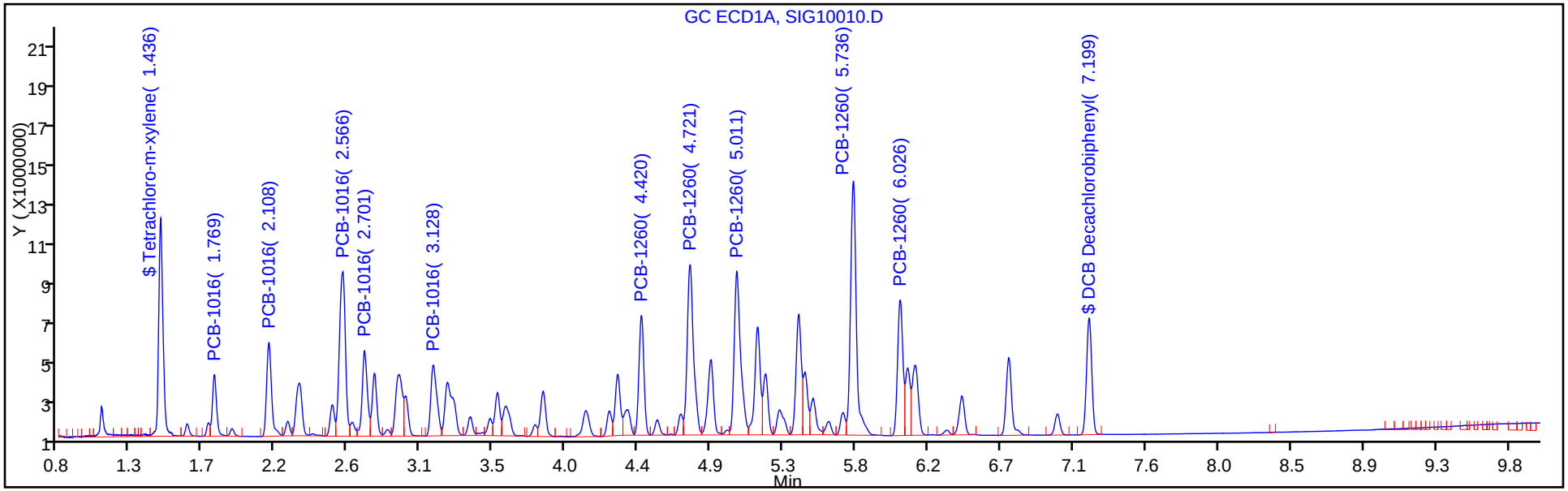
Report Date: 17-Apr-2015 08:30:26 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

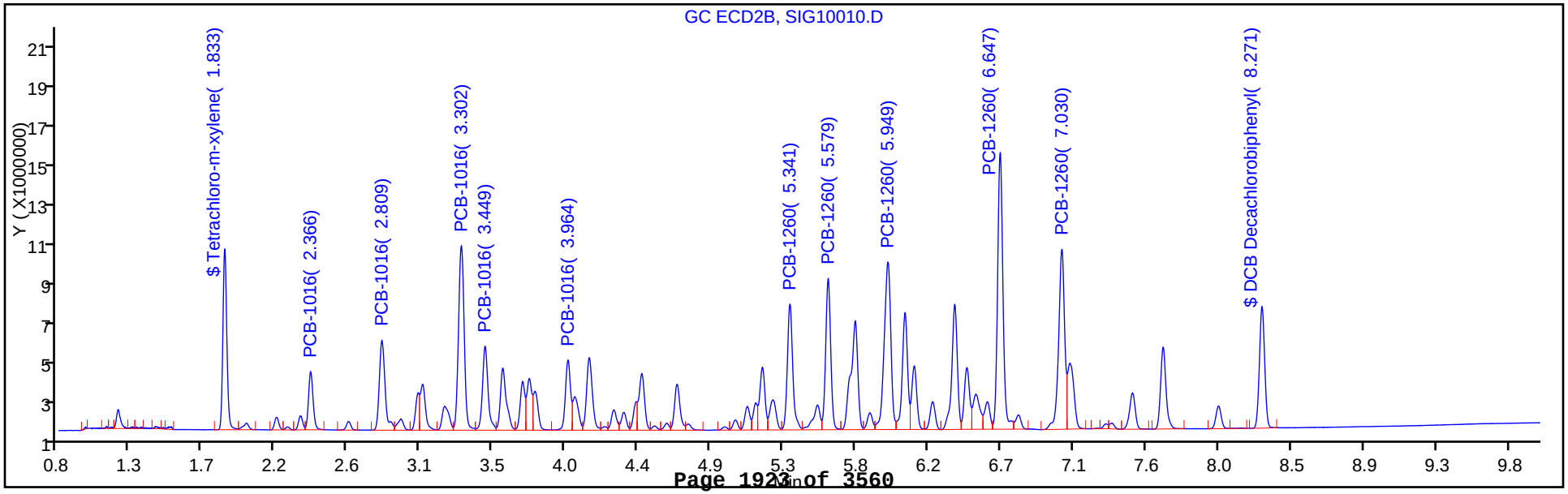
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10010.D

Injection Date:	16-Apr-2015 12:14:17	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	CCV AR1660			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176718/14 Calibration Date: 04/16/2015 15:04

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 21:53

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 23:10

Lab File ID: SIG10021.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	12896664	11633360		0.451	0.500	-9.8	20.0
PCB-1016 Peak 2	Ave	23335016	20707560		0.444	0.500	-11.3	20.0
PCB-1016 Peak 3	Ave	48977804	43340874		0.442	0.500	-11.5	20.0
PCB-1016 Peak 4	Ave	21912462	18580710		0.424	0.500	-15.2	20.0
PCB-1016 Peak 5	Ave	22086947	19650696		0.445	0.500	-11.0	20.0
PCB-1260 Peak 1	Ave	30049170	27079658		0.451	0.500	-9.9	20.0
PCB-1260 Peak 2	Ave	53389094	49567562		0.464	0.500	-7.2	20.0
PCB-1260 Peak 3	Ave	50025603	47899376		0.479	0.500	-4.3	20.0
PCB-1260 Peak 4	Ave	70753328	67982970		0.480	0.500	-3.9	20.0
PCB-1260 Peak 5	Ave	35063190	33824038		0.482	0.500	-3.5	20.0
Tetrachloro-m-xylene	Ave	752222197	639771960		0.0213	0.0250	-14.9	20.0
DCB Decachlorobiphenyl	Ave	590645418	581081640		0.0246	0.0250	-1.6	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176718/14 Calibration Date: 04/16/2015 15:04

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 21:53

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 03/30/2015 23:10

Lab File ID: SIG10021.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	1.77	1.72	1.82
PCB-1016 Peak 2	2.11	2.06	2.16
PCB-1016 Peak 3	2.57	2.52	2.62
PCB-1016 Peak 4	2.70	2.65	2.75
PCB-1016 Peak 5	3.13	3.08	3.18
PCB-1260 Peak 1	4.42	4.37	4.47
PCB-1260 Peak 2	4.72	4.67	4.77
PCB-1260 Peak 3	5.01	4.96	5.06
PCB-1260 Peak 4	5.74	5.69	5.79
PCB-1260 Peak 5	6.03	5.98	6.08
Tetrachloro-m-xylene	1.44	1.39	1.49
DCB Decachlorobiphenyl	7.20	7.15	7.25

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10021.D
Lims ID: CCV AR1660
Client ID:
Sample Type: CCV
Inject. Date: 16-Apr-2015 15:04:28 ALS Bottle#: 21 Worklist Smp#: 14
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-014
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:44 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.436	1.436	0.000	15994299	0.0250	0.0213	
2	1.833	1.833	0.000	16301259	0.0250	0.0218	
						RPD = 2.47	
6 PCB-1016							
1	1.769	1.769	0.000	5816680	0.5000	0.4510	
1	2.106	2.106	0.000	10353780	0.5000	0.4437	
1	2.566	2.566	0.000	21670437	0.5000	0.4425	
1	2.701	2.701	0.000	9290355	0.5000	0.4240	
1	3.127	3.127	0.000	9825348	0.5000	0.4448	
		Average of Peak Amounts =				0.4412	
2	2.366	2.366	0.000	6022147	0.5000	0.4197	
2	2.809	2.809	0.000	11176955	0.5000	0.4083	
2	3.302	3.302	0.000	23953489	0.5000	0.4404	
2	3.449	3.449	0.000	10515513	0.5000	0.4291	
2	3.964	3.964	0.000	8150640	0.5000	0.4150	
		Average of Peak Amounts =				0.4225	
						RPD = 4.33	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.420	4.420	0.000	13539829	0.5000	0.4506	
1	4.721	4.721	0.000	24783781	0.5000	0.4642	
1	5.011	5.011	0.000	23949688	0.5000	0.4787	
1	5.735	5.735	0.000	33991485	0.5000	0.4804	
1	6.026	6.026	0.000	16912019	0.5000	0.4823	
		Average of Peak Amounts =				0.4713	
2	5.342	5.342	0.000	15187228	0.5000	0.4215	
2	5.580	5.580	0.000	17231998	0.5000	0.4535	
2	5.951	5.951	0.000	25401714	0.5000	0.4613	
2	6.648	6.648	0.000	33236006	0.5000	0.4753	
2	7.030	7.030	0.000	25134314	0.5000	0.4922	
		Average of Peak Amounts =				0.4608	
						RPD = 2.25	
$ 12 DCB Decachlorobiphenyl							
1	7.201	7.201	0.000	14527041	0.0250	0.0246	
2	8.272	8.272	0.000	15104203	0.0250	0.0234	
						RPD = 4.95	

Reagents:

SG1660@0.5PPM_00044 Amount Added: 1.00 Units: mL

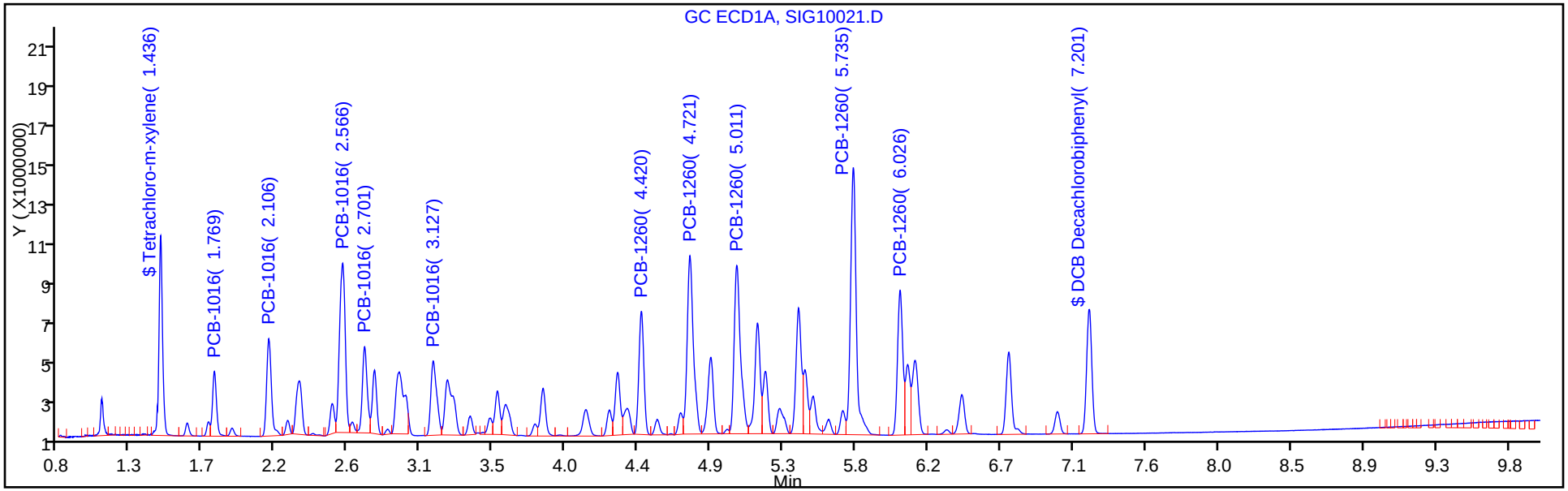
Report Date: 17-Apr-2015 08:30:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

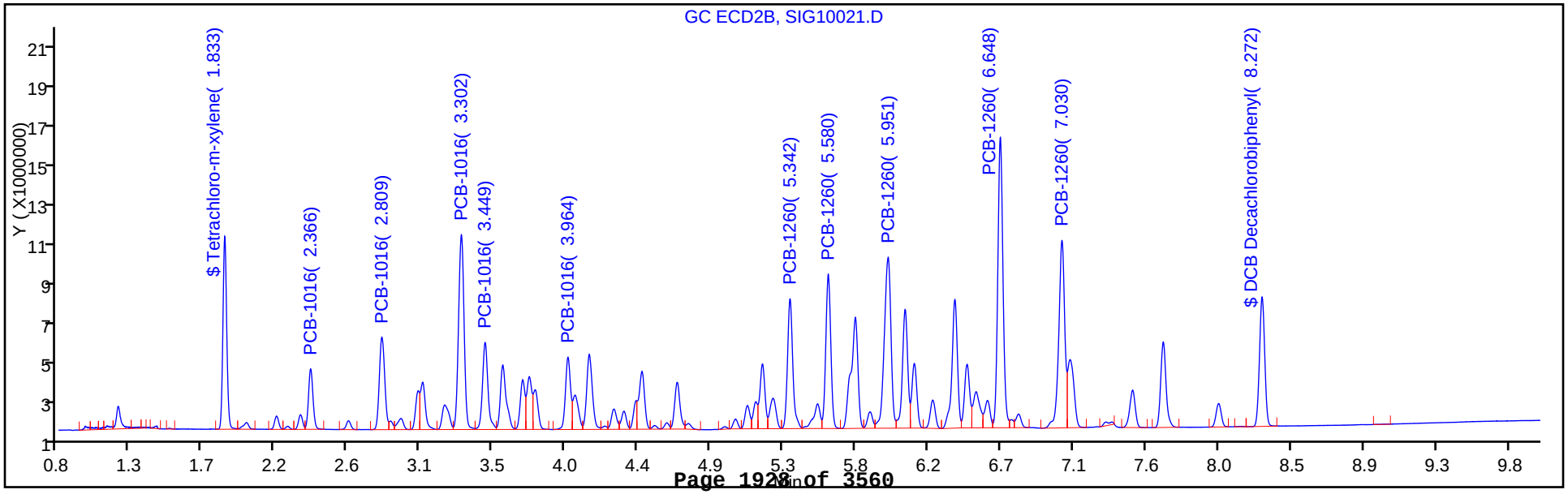
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10021.D

Injection Date:	16-Apr-2015 15:04:28	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	CCV AR1660			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176718/14 Calibration Date: 04/16/2015 15:04

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 21:53

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 23:10

Lab File ID: SIG10021.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	14349362	12044294		0.420	0.500	-16.1	20.0
PCB-1016 Peak 2	Ave	27372222	22353910		0.408	0.500	-18.3	20.0
PCB-1016 Peak 3	Ave	54388976	47906978		0.440	0.500	-11.9	20.0
PCB-1016 Peak 4	Ave	24505568	21031026		0.429	0.500	-14.2	20.0
PCB-1016 Peak 5	Ave	19639503	16301280		0.415	0.500	-17.0	20.0
PCB-1260 Peak 1	Ave	36031944	30374456		0.421	0.500	-15.7	20.0
PCB-1260 Peak 2	Ave	37995049	34463996		0.454	0.500	-9.3	20.0
PCB-1260 Peak 3	Ave	55068149	50803428		0.461	0.500	-7.7	20.0
PCB-1260 Peak 4	Ave	69922004	66472012		0.475	0.500	-4.9	20.0
PCB-1260 Peak 5	Ave	51063420	50268628		0.492	0.500	-1.6	20.0
Tetrachloro-m-xylene	Ave	747974818	652050360		0.0218	0.0250	-12.8	20.0
DCB Decachlorobiphenyl	Ave	645253453	604168120		0.0234	0.0250	-6.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 240-176718/14 Calibration Date: 04/16/2015 15:04

Instrument ID: A2HP10 Calib Start Date: 03/30/2015 21:53

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/30/2015 23:10

Lab File ID: SIG10021.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.37	2.32	2.42
PCB-1016 Peak 2	2.81	2.76	2.86
PCB-1016 Peak 3	3.30	3.25	3.35
PCB-1016 Peak 4	3.45	3.40	3.50
PCB-1016 Peak 5	3.96	3.91	4.01
PCB-1260 Peak 1	5.34	5.29	5.39
PCB-1260 Peak 2	5.58	5.53	5.63
PCB-1260 Peak 3	5.95	5.90	6.00
PCB-1260 Peak 4	6.65	6.60	6.70
PCB-1260 Peak 5	7.03	6.98	7.08
Tetrachloro-m-xylene	1.83	1.78	1.88
DCB Decachlorobiphenyl	8.27	8.22	8.32

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10021.D
Lims ID: CCV AR1660
Client ID:
Sample Type: CCV
Inject. Date: 16-Apr-2015 15:04:28 ALS Bottle#: 21 Worklist Smp#: 14
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-014
Operator ID: Instrument ID: A2HP10
Sublist: chrom-PCB10*sub5

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:44 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.436	1.436	0.000	15994299	0.0250	0.0213	
2	1.833	1.833	0.000	16301259	0.0250	0.0218	
						RPD = 2.47	
6 PCB-1016							
1	1.769	1.769	0.000	5816680	0.5000	0.4510	
1	2.106	2.106	0.000	10353780	0.5000	0.4437	
1	2.566	2.566	0.000	21670437	0.5000	0.4425	
1	2.701	2.701	0.000	9290355	0.5000	0.4240	
1	3.127	3.127	0.000	9825348	0.5000	0.4448	
		Average of Peak Amounts =				0.4412	
2	2.366	2.366	0.000	6022147	0.5000	0.4197	
2	2.809	2.809	0.000	11176955	0.5000	0.4083	
2	3.302	3.302	0.000	23953489	0.5000	0.4404	
2	3.449	3.449	0.000	10515513	0.5000	0.4291	
2	3.964	3.964	0.000	8150640	0.5000	0.4150	
		Average of Peak Amounts =				0.4225	
						RPD = 4.33	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.420	4.420	0.000	13539829	0.5000	0.4506	
1	4.721	4.721	0.000	24783781	0.5000	0.4642	
1	5.011	5.011	0.000	23949688	0.5000	0.4787	
1	5.735	5.735	0.000	33991485	0.5000	0.4804	
1	6.026	6.026	0.000	16912019	0.5000	0.4823	
		Average of Peak Amounts =				0.4713	
2	5.342	5.342	0.000	15187228	0.5000	0.4215	
2	5.580	5.580	0.000	17231998	0.5000	0.4535	
2	5.951	5.951	0.000	25401714	0.5000	0.4613	
2	6.648	6.648	0.000	33236006	0.5000	0.4753	
2	7.030	7.030	0.000	25134314	0.5000	0.4922	
		Average of Peak Amounts =				0.4608	
						RPD = 2.25	
$ 12 DCB Decachlorobiphenyl							
1	7.201	7.201	0.000	14527041	0.0250	0.0246	
2	8.272	8.272	0.000	15104203	0.0250	0.0234	
						RPD = 4.95	

Reagents:

SG1660@0.5PPM_00044 Amount Added: 1.00 Units: mL

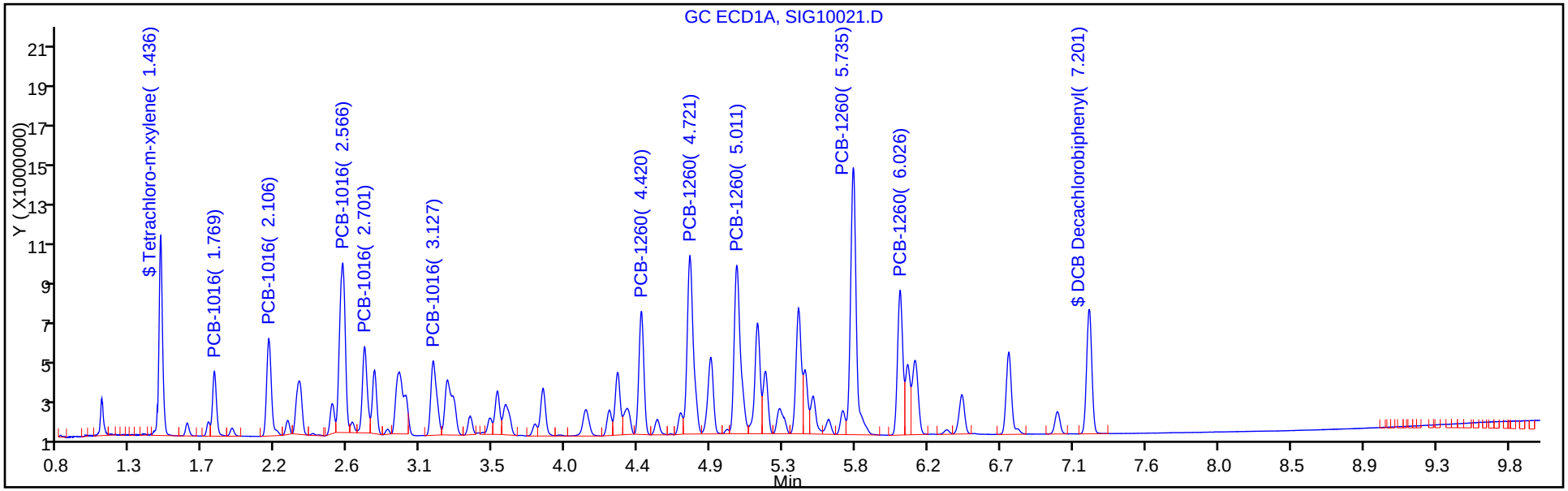
Report Date: 17-Apr-2015 08:30:45 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

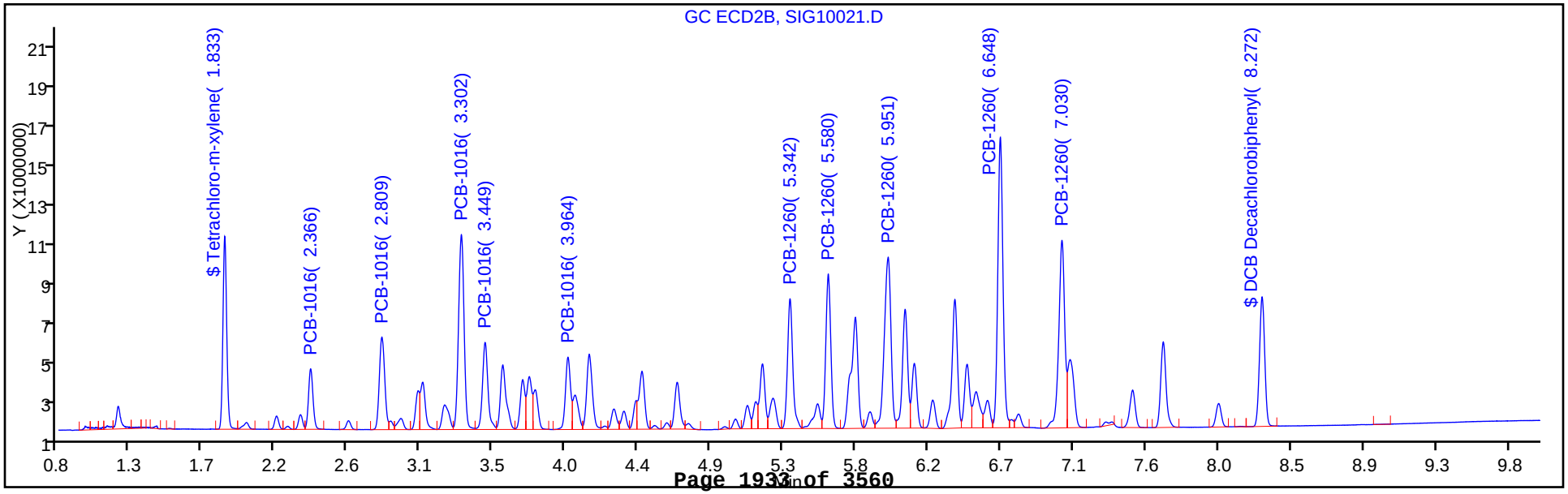
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10021.D

Injection Date:	16-Apr-2015 15:04:28	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	CCV AR1660			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-176299/12-A

Matrix: Solid | Lab File ID: SIG10018.D

Analysis Method: 8082 | Date Collected:

Extraction Method: 3540C | Date Extracted: 04/14/2015 07:22

Sample wt/vol: 30(g) | Date Analyzed: 04/16/2015 14:18

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
11104-28-2	Aroclor-1221	33	U	50	33	16
12674-11-2	Aroclor-1016	33	U	65	33	12
11141-16-5	Aroclor-1232	33	U	45	33	20
53469-21-9	Aroclor-1242	33	U	40	33	11
12672-29-6	Aroclor-1248	33	U	55	33	8.0
11097-69-1	Aroclor-1254	33	U	55	33	14
11096-82-5	Aroclor-1260	33	U	55	33	9.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	90		40-140
2051-24-3	DCB Decachlorobiphenyl	104		60-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10018.D
Lims ID: MB 240-176299/12-A
Client ID:
Sample Type: MB
Inject. Date: 16-Apr-2015 14:18:01 ALS Bottle#: 18 Worklist Smp#: 11
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-011
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total							
1		1.000				ND	
$ 2 Tetrachloro-m-xylene							
1	1.435	1.436	-0.001	13608483	0.0200	0.0181	
2	1.833	1.833	0.000	12534322	0.0200	0.0168	
						RPD = 7.65	
3 PCB-1221							
1		1.599				ND	
1		1.731					
1		1.768					
2		2.155					
2		2.303					
2		2.366					
4 PCB-1232							
1		1.767				ND	
1		2.106					
1		2.565					
1		2.700					
1		3.128					
2		2.365					
2		2.808					
2		3.301					
2		3.449					
2		4.095					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1		1.769				ND	
1		2.107					
1		2.564					
1		2.701					
1		3.127					
2		2.366					
2		2.809					
2		3.303					
2		3.449					
2		4.097					
6 PCB-1016							
1		1.769				ND	
1		2.108					
1		2.566					
1		2.701					
1		3.128					
2		2.366					
2		2.809					
2		3.302					
2		3.449					
2		3.964					
7 PCB-1248							
1		2.106				ND	
1		2.562					
1		3.127					
1		3.757					
1		4.222					
2		2.807					
2		3.302					
2		4.095					
2		4.427					
2		5.128					
8 PCB-1254							
1		3.526				ND	
1		3.809					
1		4.220					
1		4.519					
1		5.012					
2		4.422					
2		4.642					
2		5.128					
2		5.382					
2		5.954					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1		4.419				ND	
1		4.725					
1		5.140					
1		5.735					
1		6.073					
2		5.580					
2		6.056					
2		6.366					
2		6.646					
2		7.029					
10 PCB-1260							
1		4.420				ND	
1		4.721					
1		5.011					
1		5.736					
1		6.026					
2		5.341					
2		5.579					
2		5.949					
2		6.647					
2		7.030					
11 PCB-1268							
1		6.074				ND	
1		6.114					
1		6.314					
1		6.700					
1		7.001					
2		7.028					
2		7.076					
2		7.340					
2		7.659					
2		8.004					
$ 12 DCB Decachlorobiphenyl							
1	7.199	7.199	0.000	12329519	0.0200	0.0209	
2	8.273	8.271	0.002	13237312	0.0200	0.0205	
						RPD = 1.74	

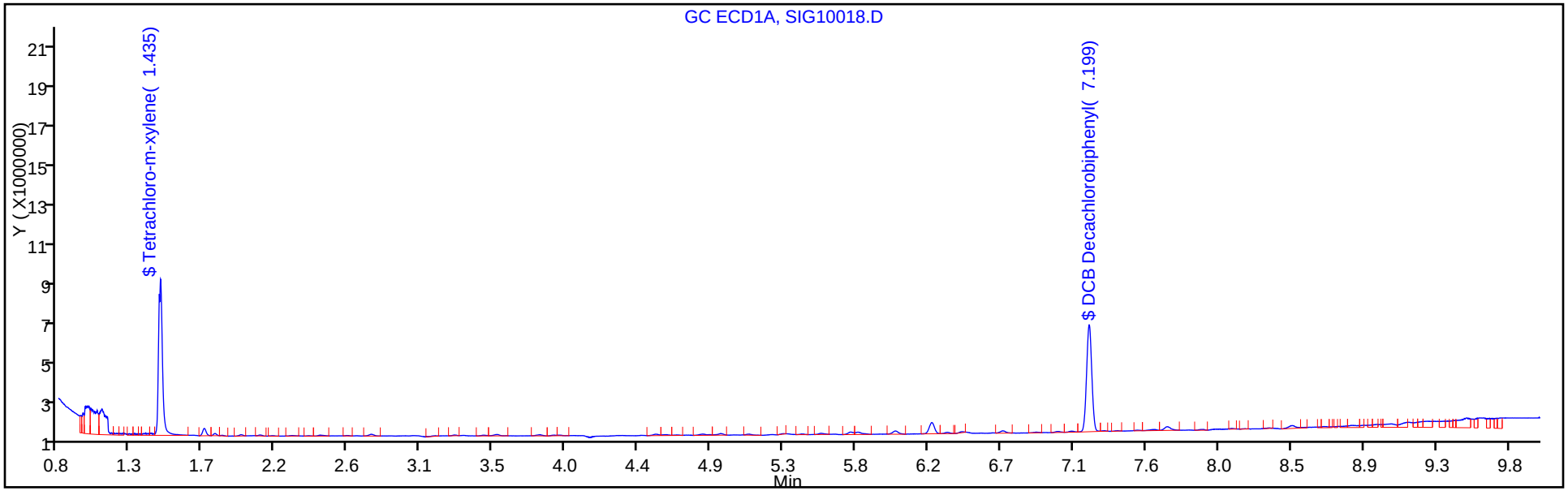
Report Date: 17-Apr-2015 08:30:40 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

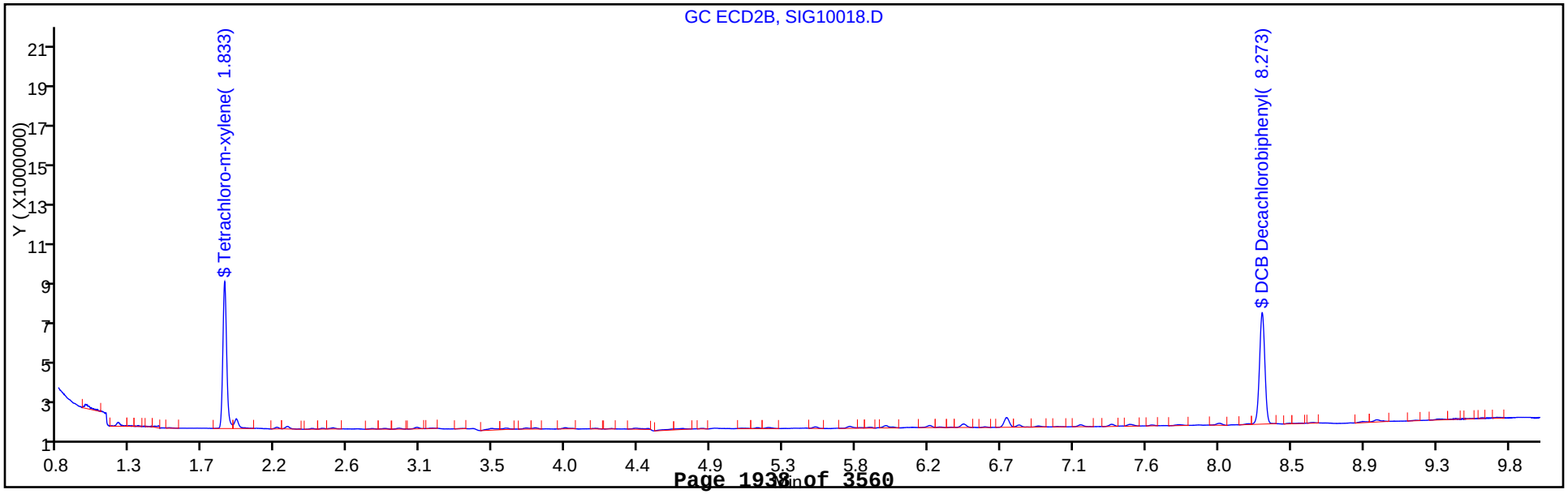
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10018.D

Injection Date:	16-Apr-2015 14:18:01	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	MB 240-176299/12-A			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-176299/12-A

Matrix: Solid Lab File ID: SIG10018.D

Analysis Method: 8082 Date Collected:

Extraction Method: 3540C Date Extracted: 04/14/2015 07:22

Sample wt/vol: 30(g) Date Analyzed: 04/16/2015 14:18

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	84		40-140
2051-24-3	DCB Decachlorobiphenyl	103		60-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10018.D
Lims ID: MB 240-176299/12-A
Client ID:
Sample Type: MB
Inject. Date: 16-Apr-2015 14:18:01 ALS Bottle#: 18 Worklist Smp#: 11
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-011
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total							
1		1.000				ND	
$ 2 Tetrachloro-m-xylene							
1	1.435	1.436	-0.001	13608483	0.0200	0.0181	
2	1.833	1.833	0.000	12534322	0.0200	0.0168	
						RPD = 7.65	
3 PCB-1221							
1		1.599				ND	
1		1.731					
1		1.768					
2		2.155					
2		2.303					
2		2.366					
4 PCB-1232							
1		1.767				ND	
1		2.106					
1		2.565					
1		2.700					
1		3.128					
2		2.365					
2		2.808					
2		3.301					
2		3.449					
2		4.095					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1		1.769				ND	
1		2.107					
1		2.564					
1		2.701					
1		3.127					
2		2.366					
2		2.809					
2		3.303					
2		3.449					
2		4.097					
6 PCB-1016							
1		1.769				ND	
1		2.108					
1		2.566					
1		2.701					
1		3.128					
2		2.366					
2		2.809					
2		3.302					
2		3.449					
2		3.964					
7 PCB-1248							
1		2.106				ND	
1		2.562					
1		3.127					
1		3.757					
1		4.222					
2		2.807					
2		3.302					
2		4.095					
2		4.427					
2		5.128					
8 PCB-1254							
1		3.526				ND	
1		3.809					
1		4.220					
1		4.519					
1		5.012					
2		4.422					
2		4.642					
2		5.128					
2		5.382					
2		5.954					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1		4.419				ND	
1		4.725					
1		5.140					
1		5.735					
1		6.073					
2		5.580					
2		6.056					
2		6.366					
2		6.646					
2		7.029					
10 PCB-1260							
1		4.420				ND	
1		4.721					
1		5.011					
1		5.736					
1		6.026					
2		5.341					
2		5.579					
2		5.949					
2		6.647					
2		7.030					
11 PCB-1268							
1		6.074				ND	
1		6.114					
1		6.314					
1		6.700					
1		7.001					
2		7.028					
2		7.076					
2		7.340					
2		7.659					
2		8.004					
$ 12 DCB Decachlorobiphenyl							
1	7.199	7.199	0.000	12329519	0.0200	0.0209	
2	8.273	8.271	0.002	13237312	0.0200	0.0205	
						RPD = 1.74	

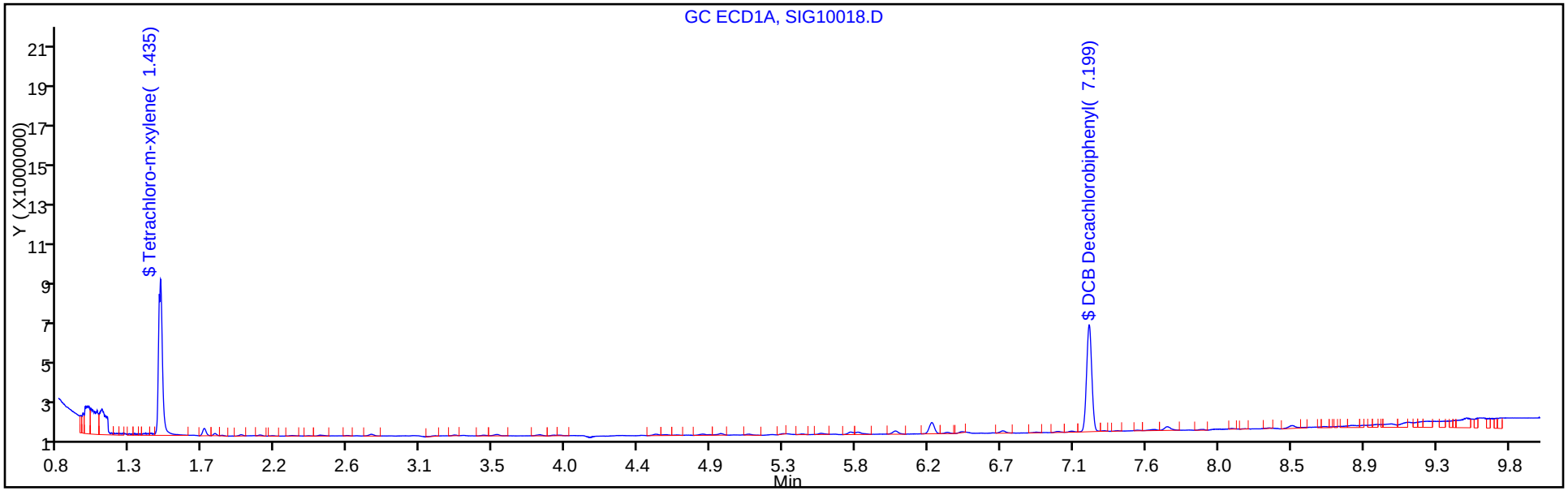
Report Date: 17-Apr-2015 08:30:40 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

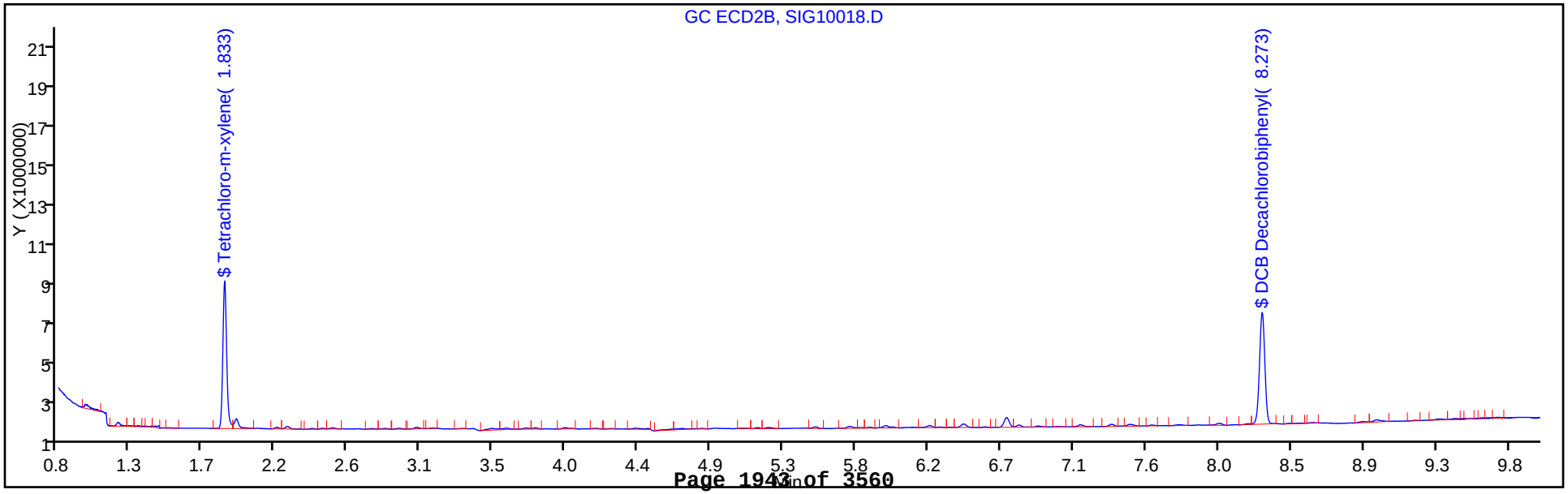
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10018.D

Injection Date:	16-Apr-2015 14:18:01	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	MB 240-176299/12-A			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-176299/13-A

Matrix: Solid Lab File ID: SIG10019.D

Analysis Method: 8082 Date Collected:

Extraction Method: 3540C Date Extracted: 04/14/2015 07:22

Sample wt/vol: 30(g) Date Analyzed: 04/16/2015 14:33

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Aroclor-1016	257		65	33	12
11096-82-5	Aroclor-1260	283		55	33	9.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	104		40-140
2051-24-3	DCB Decachlorobiphenyl	99		60-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10019.D
Lims ID: LCS 240-176299/13-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Apr-2015 14:33:30 ALS Bottle#: 19 Worklist Smp#: 12
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-012
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.434	1.436	-0.002	15589502	0.0200	0.0207	
2	1.832	1.833	-0.001	12330974	0.0200	0.0165	
						RPD = 22.78	
6 PCB-1016							
1	1.768	1.769	-0.001	9193092	1.00	0.7128	
1	2.106	2.108	-0.002	17799942	1.00	0.7628	
1	2.564	2.566	-0.002	39916704	1.00	0.8150	
1	2.700	2.701	-0.001	17888434	1.00	0.8164	
1	3.127	3.128	-0.001	16563913	1.00	0.7499	
		Average of Peak Amounts =				0.7714	
2	2.366	2.366	0.000	9983544	1.00	0.6957	
2	2.807	2.809	-0.002	20967040	1.00	0.7660	
2	3.301	3.302	-0.001	44385114	1.00	0.8161	
2	3.450	3.449	0.001	16713544	1.00	0.6820	
2	3.963	3.964	-0.001	14344682	1.00	0.7304	
		Average of Peak Amounts =				0.7380	
						RPD = 4.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.419	4.420	-0.001	24111770	1.00	0.8024	
1	4.721	4.721	0.000	44691311	1.00	0.8371	
1	5.011	5.011	0.000	46872734	1.00	0.9370	
1	5.734	5.736	-0.002	56266747	1.00	0.7953	
1	6.025	6.026	-0.001	30412421	1.00	0.8674	
		Average of Peak Amounts =				0.8478	
2	5.340	5.341	-0.001	29334434	1.00	0.8141	
2	5.579	5.579	0.000	32414374	1.00	0.8531	
2	5.950	5.949	0.001	52603391	1.00	0.9552	
2	6.647	6.647	0.000	58825848	1.00	0.8413	
2	7.030	7.030	0.000	43825680	1.00	0.8583	
		Average of Peak Amounts =				0.8644	
						RPD = 1.94	
$ 12 DCB Decachlorobiphenyl							
1	7.199	7.199	0.000	11742108	0.0200	0.0199	
2	8.272	8.271	0.001	12709414	0.0200	0.0197	
						RPD = 0.93	

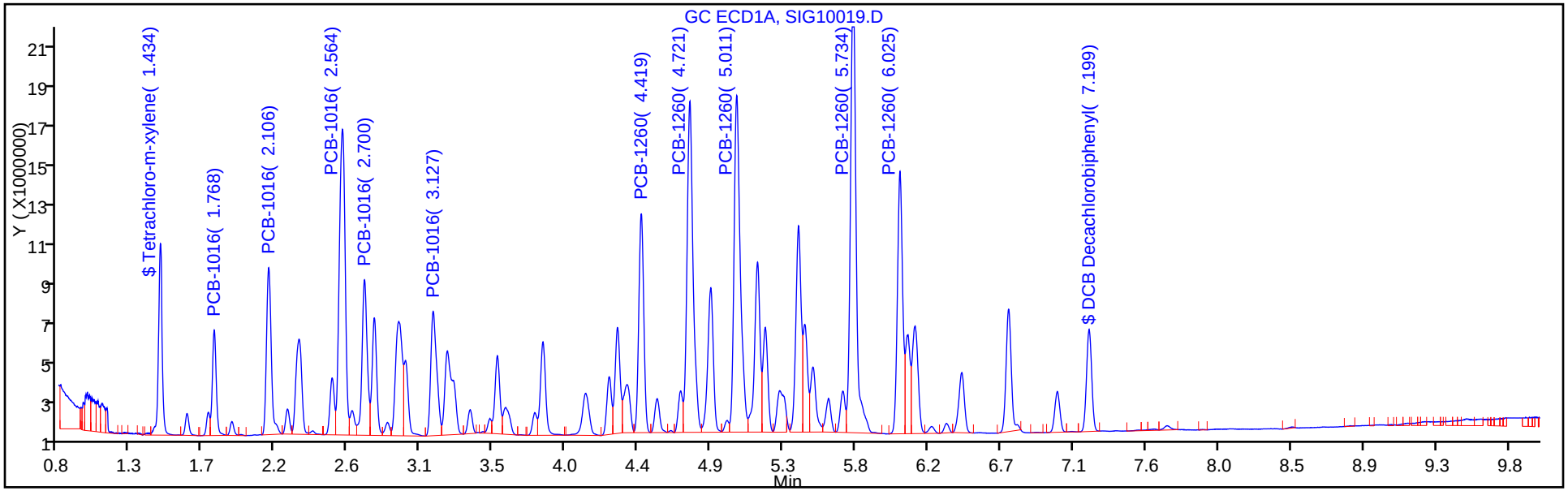
Report Date: 17-Apr-2015 08:30:40 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

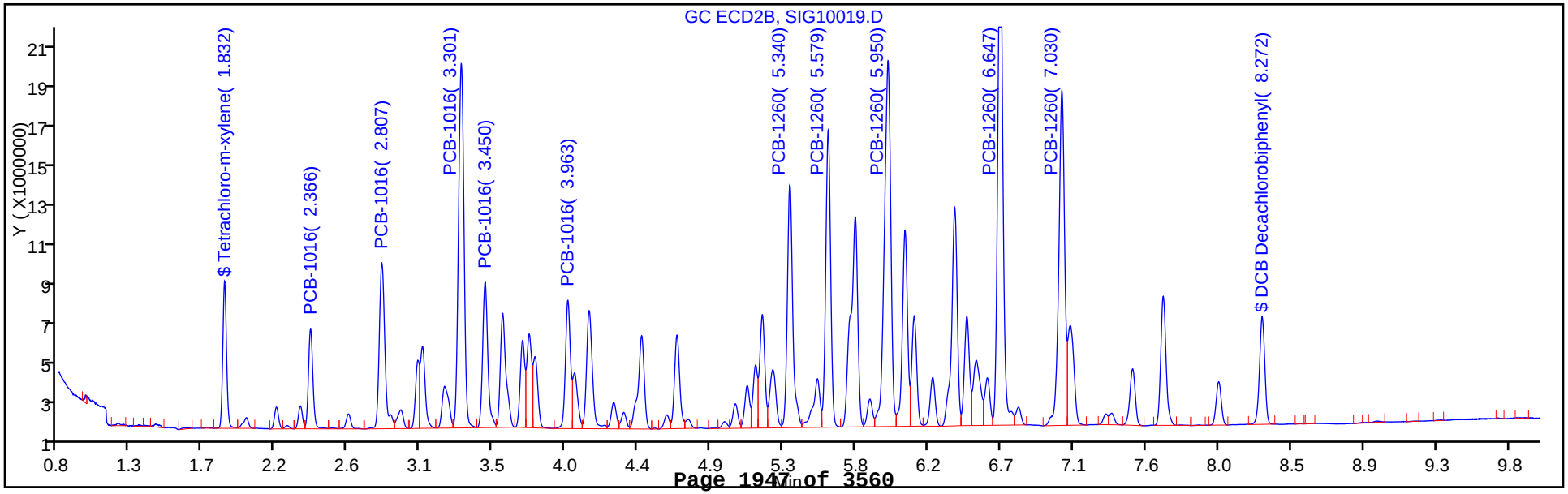
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10019.D

Injection Date:	16-Apr-2015 14:33:30	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	LCS 240-176299/13-A			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 17-Apr-2015 08:30:41 Chrom Revision: 2.2 13-Mar-2015 11:20:44

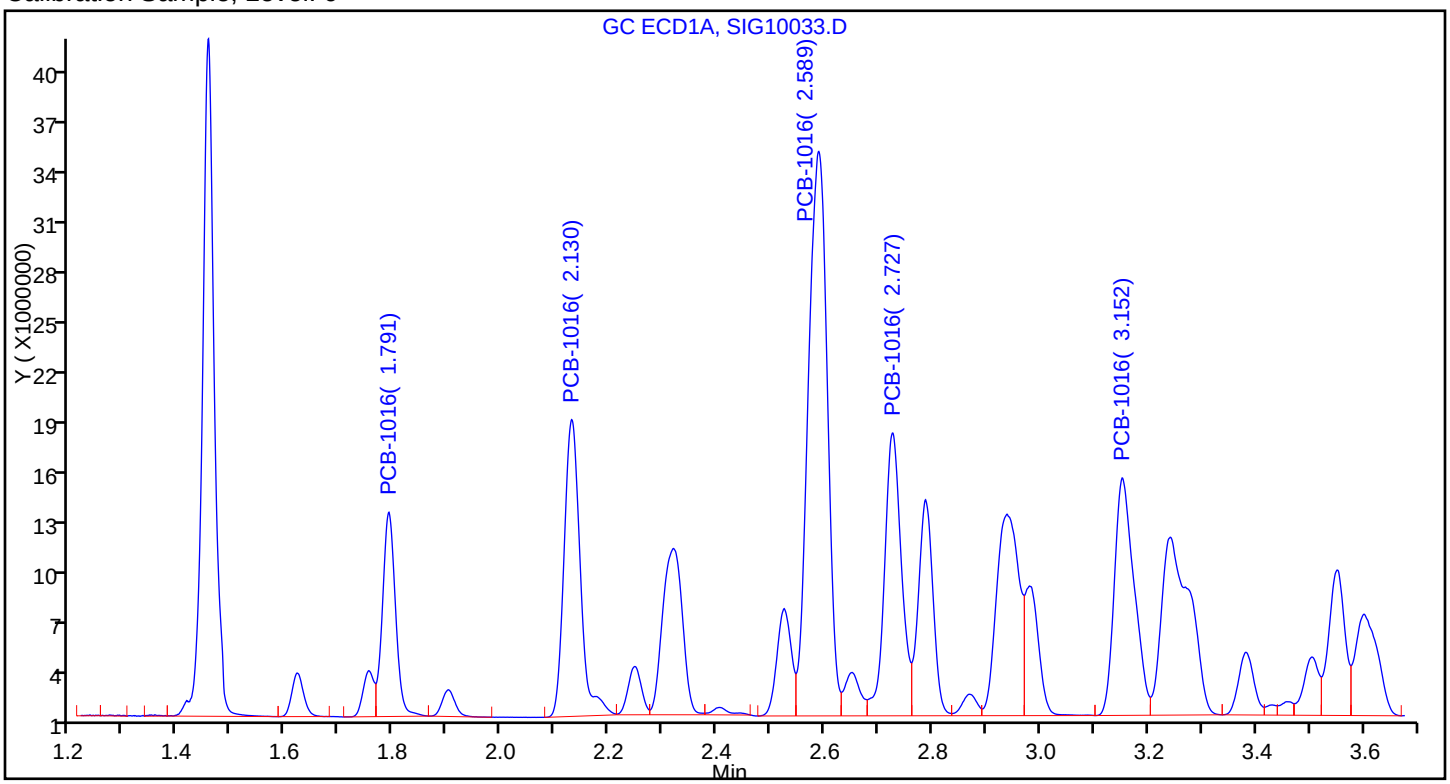
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10019.D

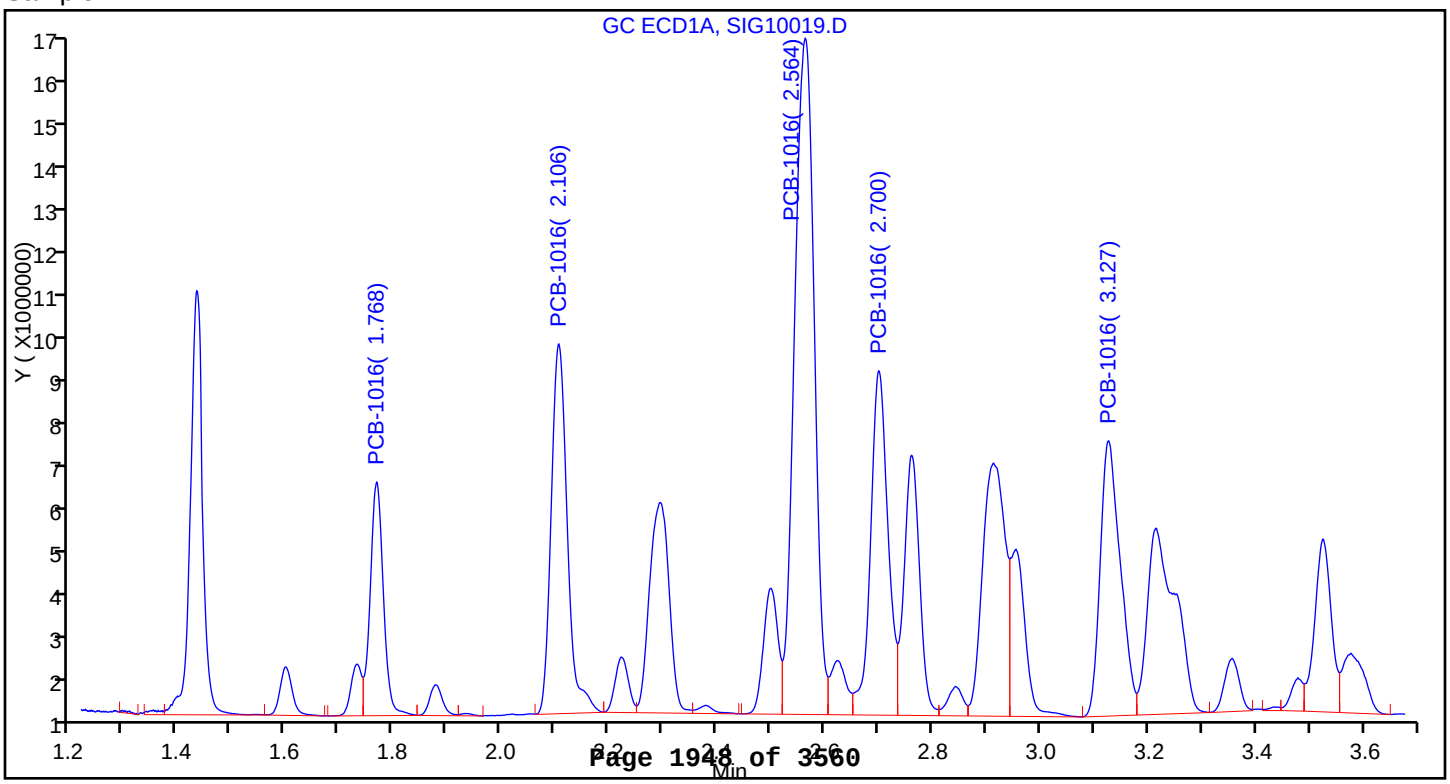
Injection Date:	16-Apr-2015 14:33:30	Instrument ID:	A2HP10
Lims ID:	LCS 240-176299/13-A		
Client ID:			
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 12
Injection Vol:	1.0 uL	Dil. Factor:	1.0000
Method:	PCB10	Limit Group:	GC 8082A ICAL
Column:		Detector	GC ECD1A

6 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 6



Sample



Report Date: 17-Apr-2015 08:30:41 Chrom Revision: 2.2 13-Mar-2015 11:20:44

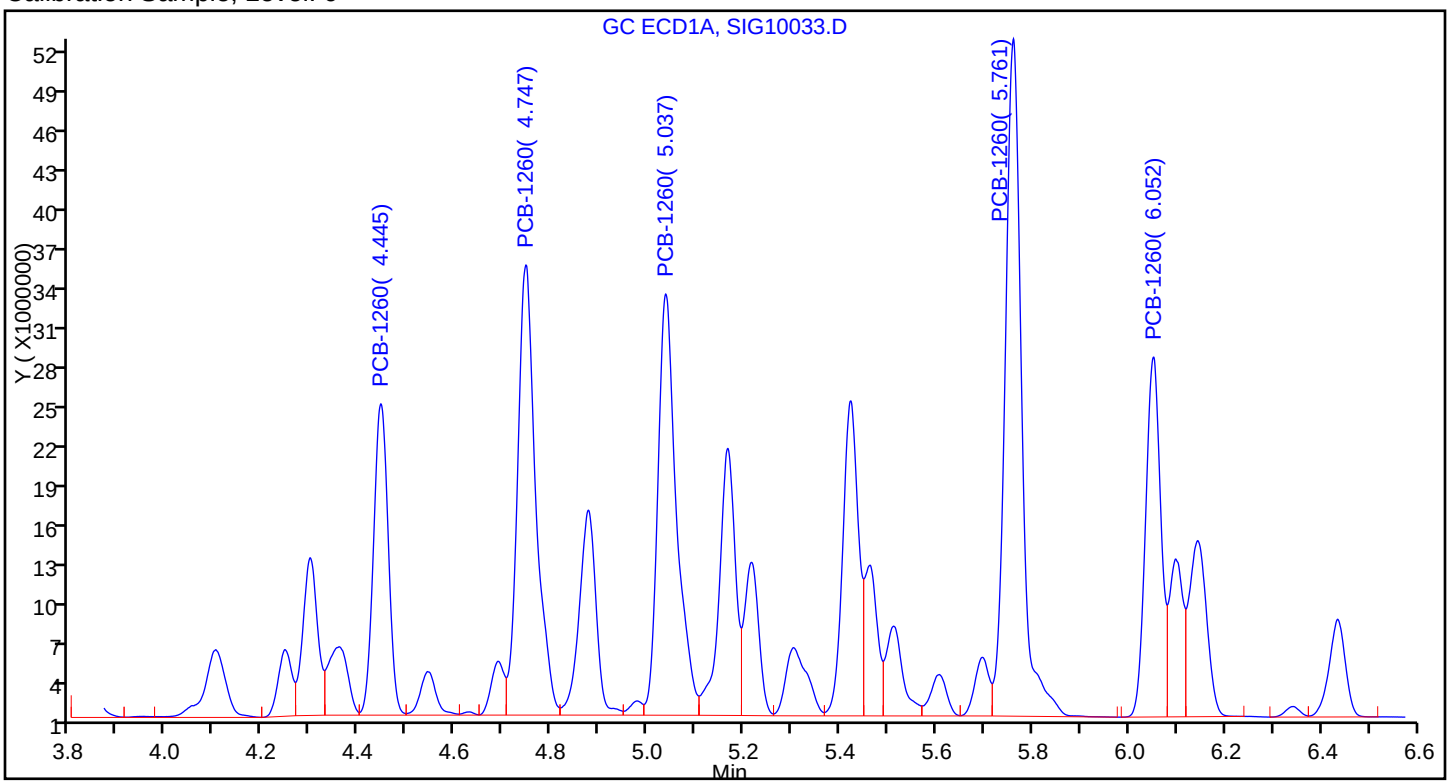
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10019.D

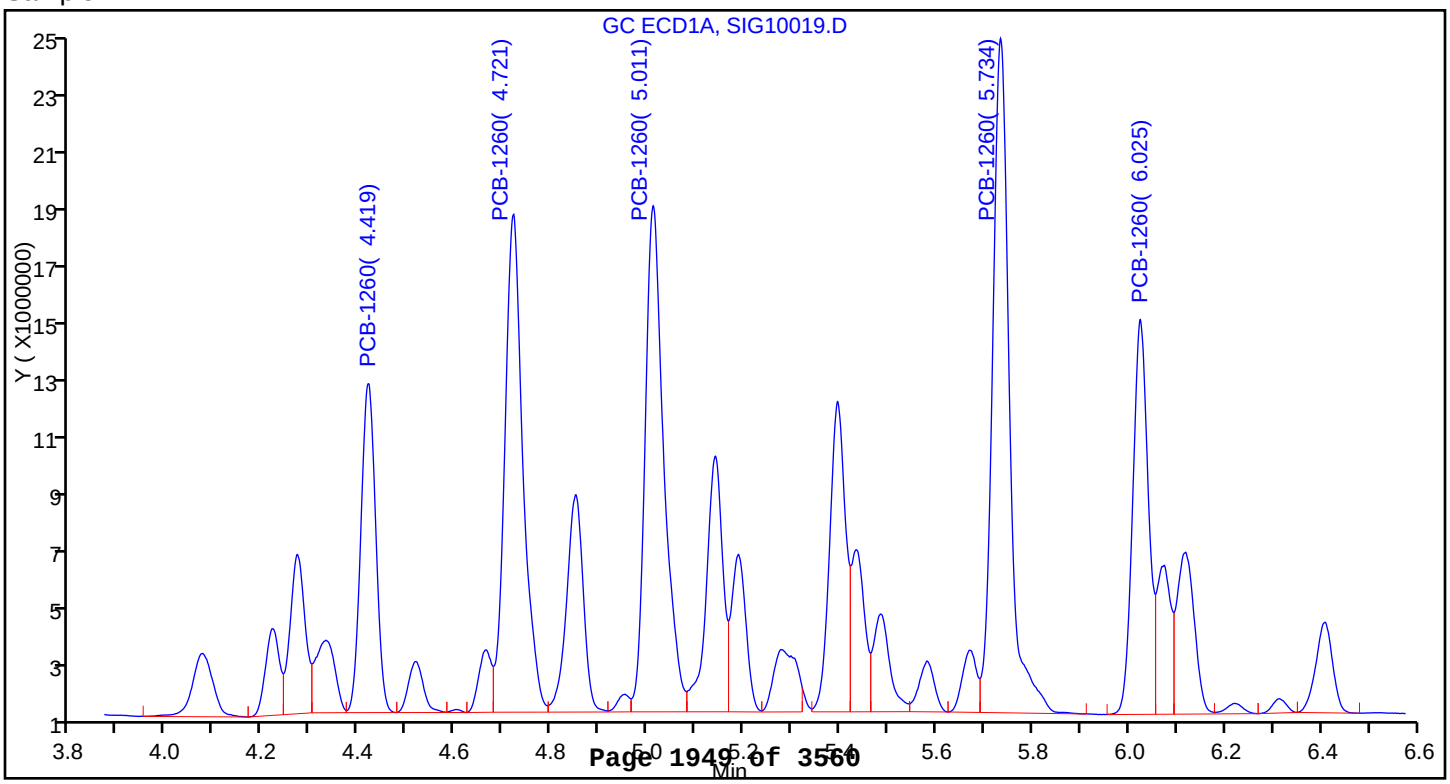
Injection Date:	16-Apr-2015 14:33:30	Instrument ID:	A2HP10
Lims ID:	LCS 240-176299/13-A		
Client ID:			
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 12
Injection Vol:	1.0 uL	Dil. Factor:	1.0000
Method:	PCB10	Limit Group:	GC 8082A ICAL
Column:		Detector	GC ECD1A

10 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-176299/13-A

Matrix: Solid Lab File ID: SIG10019.D

Analysis Method: 8082 Date Collected:

Extraction Method: 3540C Date Extracted: 04/14/2015 07:22

Sample wt/vol: 30(g) Date Analyzed: 04/16/2015 14:33

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	82		40-140
2051-24-3	DCB Decachlorobiphenyl	98		60-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10019.D
Lims ID: LCS 240-176299/13-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Apr-2015 14:33:30 ALS Bottle#: 19 Worklist Smp#: 12
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-012
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
$ 2 Tetrachloro-m-xylene							
1	1.434	1.436	-0.002	15589502	0.0200	0.0207	
2	1.832	1.833	-0.001	12330974	0.0200	0.0165	
						RPD = 22.78	
6 PCB-1016							
1	1.768	1.769	-0.001	9193092	1.00	0.7128	
1	2.106	2.108	-0.002	17799942	1.00	0.7628	
1	2.564	2.566	-0.002	39916704	1.00	0.8150	
1	2.700	2.701	-0.001	17888434	1.00	0.8164	
1	3.127	3.128	-0.001	16563913	1.00	0.7499	
		Average of Peak Amounts =				0.7714	
2	2.366	2.366	0.000	9983544	1.00	0.6957	
2	2.807	2.809	-0.002	20967040	1.00	0.7660	
2	3.301	3.302	-0.001	44385114	1.00	0.8161	
2	3.450	3.449	0.001	16713544	1.00	0.6820	
2	3.963	3.964	-0.001	14344682	1.00	0.7304	
		Average of Peak Amounts =				0.7380	
						RPD = 4.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
10 PCB-1260							
1	4.419	4.420	-0.001	24111770	1.00	0.8024	
1	4.721	4.721	0.000	44691311	1.00	0.8371	
1	5.011	5.011	0.000	46872734	1.00	0.9370	
1	5.734	5.736	-0.002	56266747	1.00	0.7953	
1	6.025	6.026	-0.001	30412421	1.00	0.8674	
		Average of Peak Amounts =				0.8478	
2	5.340	5.341	-0.001	29334434	1.00	0.8141	
2	5.579	5.579	0.000	32414374	1.00	0.8531	
2	5.950	5.949	0.001	52603391	1.00	0.9552	
2	6.647	6.647	0.000	58825848	1.00	0.8413	
2	7.030	7.030	0.000	43825680	1.00	0.8583	
		Average of Peak Amounts =				0.8644	
						RPD = 1.94	
$ 12 DCB Decachlorobiphenyl							
1	7.199	7.199	0.000	11742108	0.0200	0.0199	
2	8.272	8.271	0.001	12709414	0.0200	0.0197	
						RPD = 0.93	

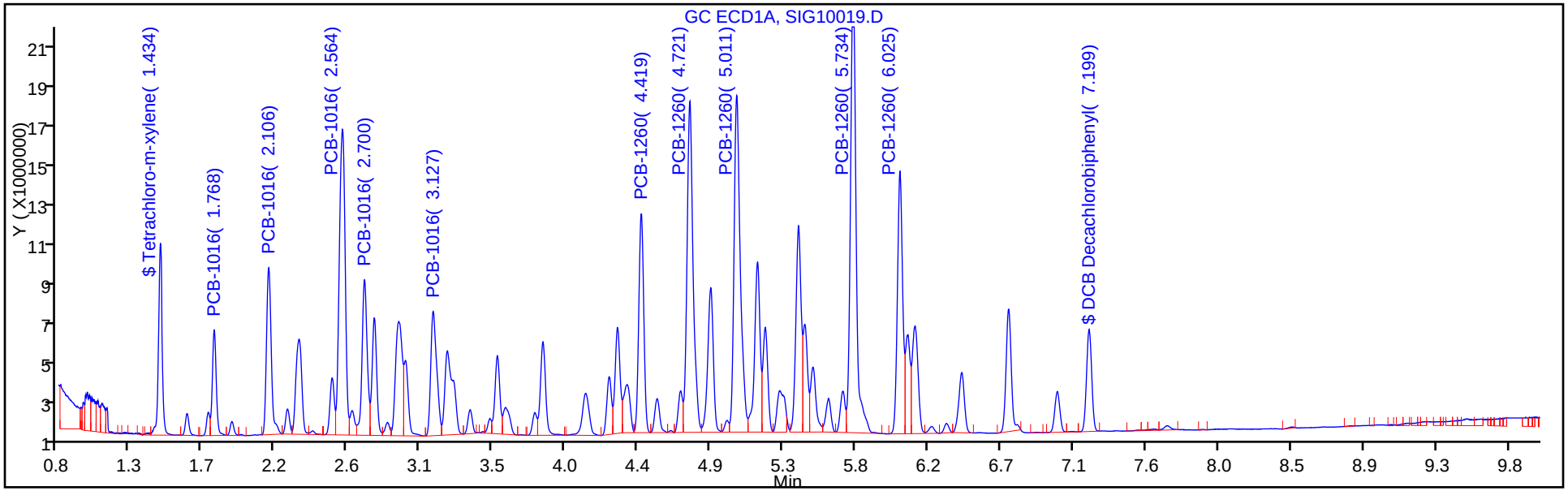
Report Date: 17-Apr-2015 08:30:41 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

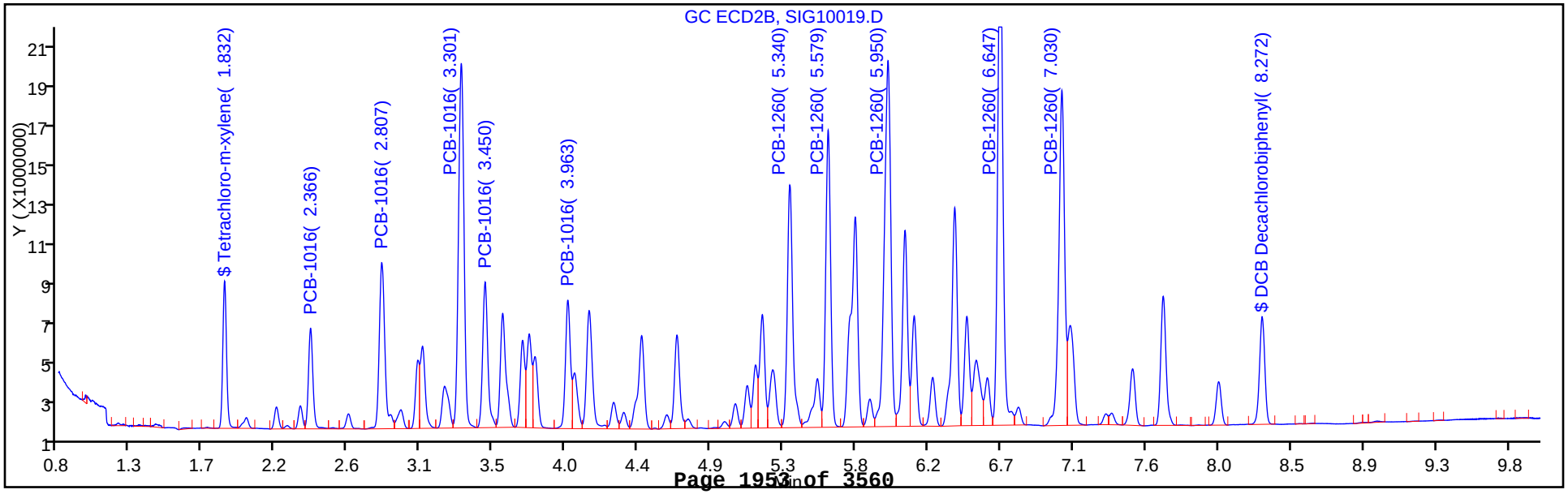
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10019.D

Injection Date:	16-Apr-2015 14:33:30	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	LCS 240-176299/13-A			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 17-Apr-2015 08:30:41 Chrom Revision: 2.2 13-Mar-2015 11:20:44

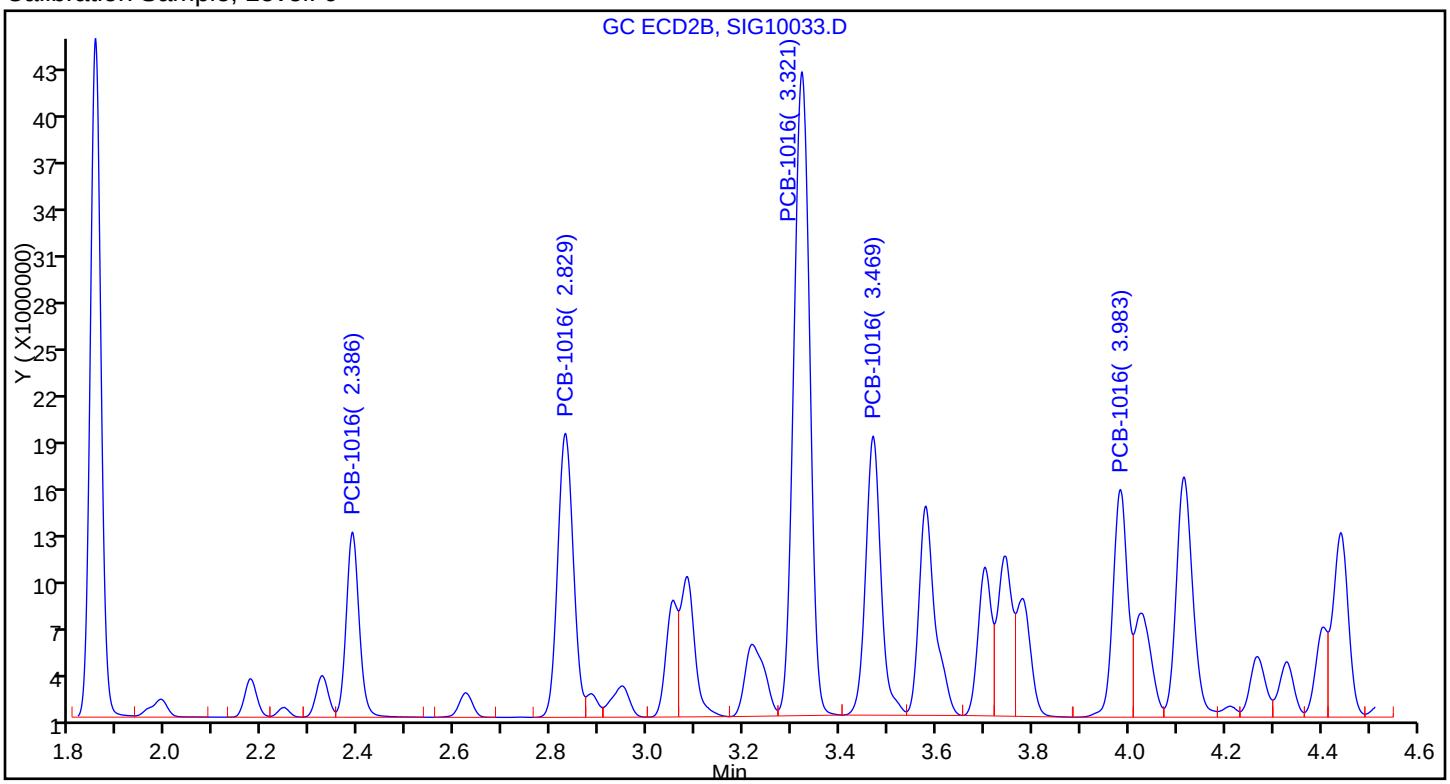
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10019.D

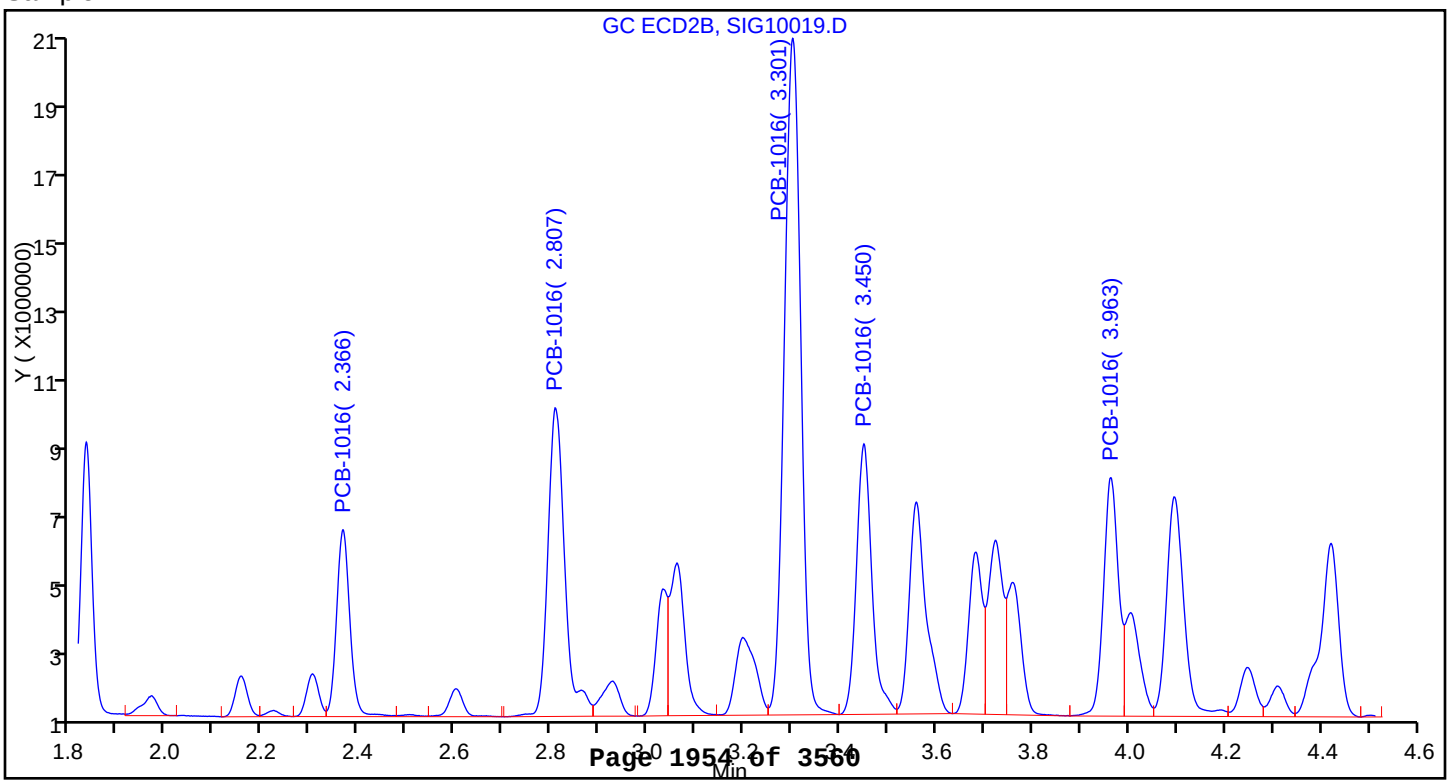
Injection Date:	16-Apr-2015 14:33:30	Instrument ID:	A2HP10
Lims ID:	LCS 240-176299/13-A		
Client ID:			
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 12
Injection Vol:	1.0 uL	Dil. Factor:	1.0000
Method:	PCB10	Limit Group:	GC 8082A ICAL
Column:		Detector	GC ecd2b

6 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 6



Sample



Report Date: 17-Apr-2015 08:30:41 Chrom Revision: 2.2 13-Mar-2015 11:20:44

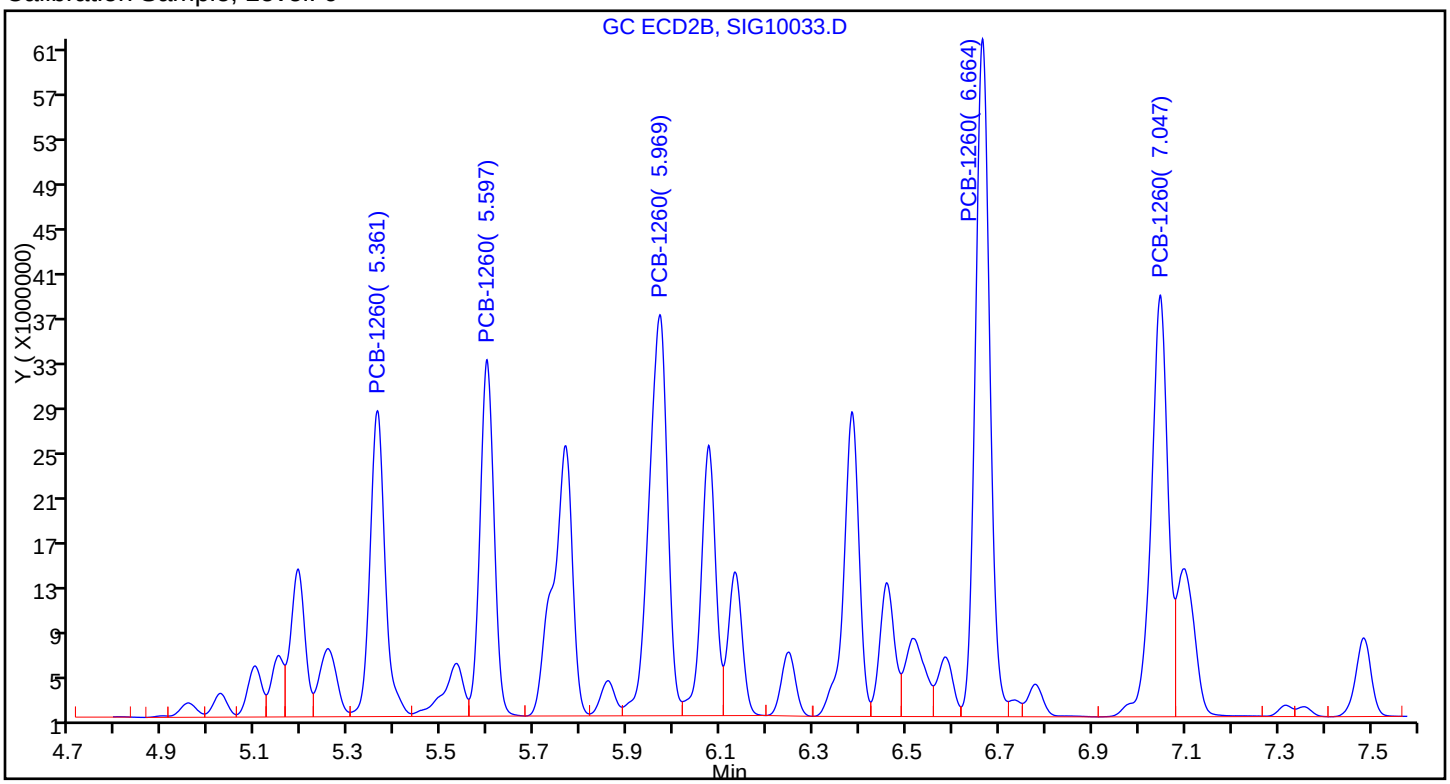
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10019.D

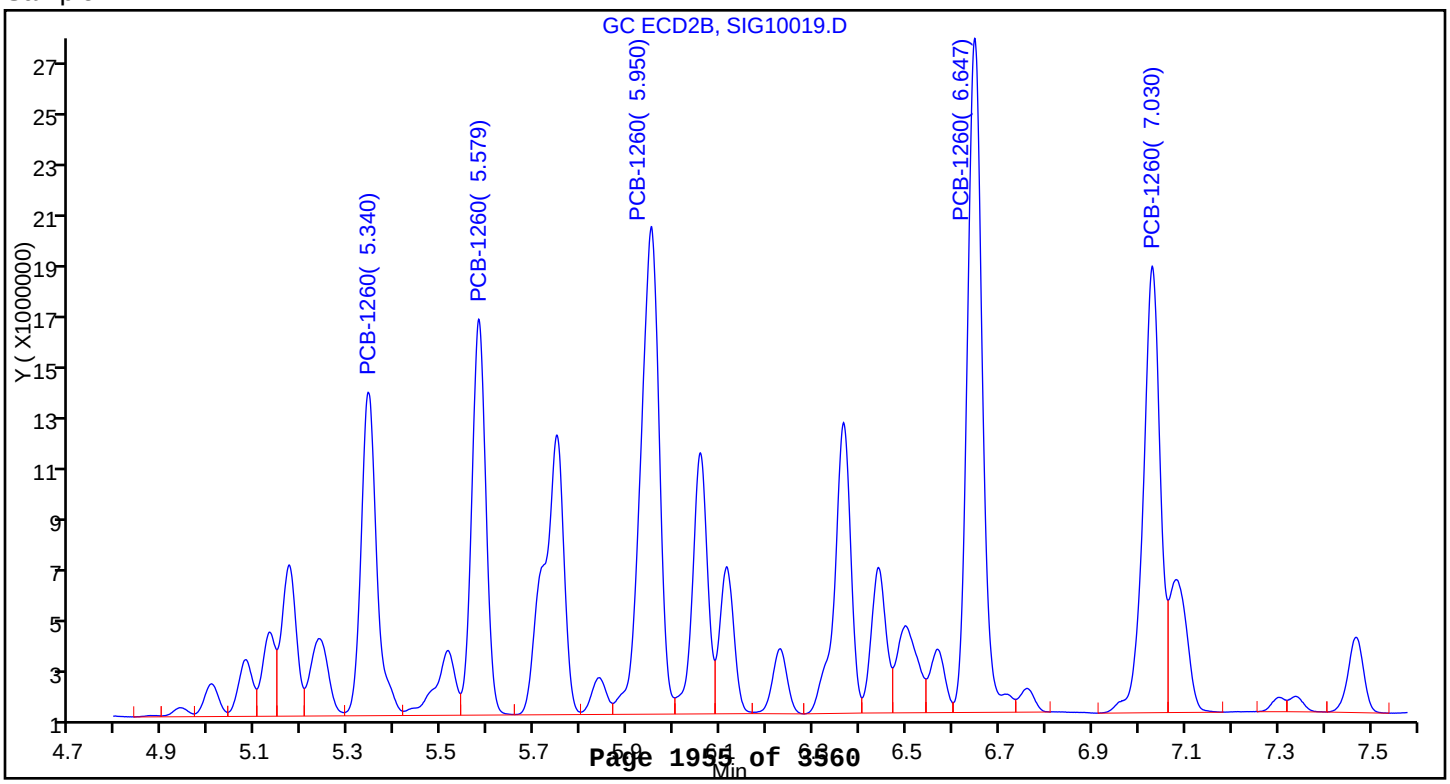
Injection Date:	16-Apr-2015 14:33:30	Instrument ID:	A2HP10
Lims ID:	LCS 240-176299/13-A		
Client ID:			
Operator ID:		ALS Bottle#:	19 Worklist Smp#: 12
Injection Vol:	1.0 uL	Dil. Factor:	1.0000
Method:	PCB10	Limit Group:	GC 8082A ICAL
Column:		Detector	GC ecd2b

10 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-176718/4

Matrix: Solid Lab File ID: SIG10011.D

Analysis Method: 8082 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/16/2015 12:29

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
11104-28-2	Aroclor-1221	0.00020	U	0.050	0.00020	0.013
12674-11-2	Aroclor-1016	0.0529		0.050	0.00020	0.017
11141-16-5	Aroclor-1232	0.00020	U	0.050	0.00020	0.016
53469-21-9	Aroclor-1242	0.00040	U	0.050	0.00040	0.022
12672-29-6	Aroclor-1248	0.00020	U	0.050	0.00020	0.010
11097-69-1	Aroclor-1254	0.00020	U	0.050	0.00020	0.016
11096-82-5	Aroclor-1260	0.0553		0.050	0.00020	0.017

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	188	^	50-150
2051-24-3	DCB Decachlorobiphenyl	116		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10011.D
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 16-Apr-2015 12:29:43 ALS Bottle#: 11 Worklist Smp#: 4
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-004
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 17-Apr-2015 08:23:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total							
1		1.000				ND	
$ 2 Tetrachloro-m-xylene							
1	1.434	1.436	-0.002	3534331	0.002500	0.004699	
2	1.832	1.833	-0.001	2066921	0.002500	0.002763	
						RPD = 51.87	
3 PCB-1221							
1		1.599				ND	
1		1.731					
1		1.768					
2		2.155					
2		2.303					
2		2.366					
4 PCB-1232							
1		1.767				ND	
1		2.106					
1		2.565					
1		2.700					
1		3.128					
2		2.365					
2		2.808					
2		3.301					
2		3.449					
2		4.095					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1		1.769				ND	
1		2.107					
1		2.564					
1		2.701					
1		3.127					
2		2.366					
2		2.809					
2		3.303					
2		3.449					
2		4.097					
6 PCB-1016							
1	1.768	1.769	-0.001	693238	0.0500	0.0538	
1	2.106	2.108	-0.002	1288965	0.0500	0.0552	
1	2.564	2.566	-0.002	2544842	0.0500	0.0520	
1	2.701	2.701	0.000	1085147	0.0500	0.0495	
1	3.125	3.128	-0.003	1190437	0.0500	0.0539	
		Average of Peak Amounts =				0.0529	
2	2.366	2.366	0.000	763573	0.0500	0.0532	
2	2.807	2.809	-0.002	1558820	0.0500	0.0569	
2	3.302	3.302	0.000	2810218	0.0500	0.0517	
2	3.449	3.449	0.000	1265776	0.0500	0.0517	
2	3.963	3.964	-0.001	1043171	0.0500	0.0531	
		Average of Peak Amounts =				0.0533	
						RPD = 0.84	
7 PCB-1248							
1		2.106				ND	
1		2.562					
1		3.127					
1		3.757					
1		4.222					
2		2.807					
2		3.302					
2		4.095					
2		4.427					
2		5.128					
8 PCB-1254							
1		3.526				ND	
1		3.809					
1		4.220					
1		4.519					
1		5.012					
2		4.422					
2		4.642					
2		5.128					
2		5.382					
2		5.954					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1		4.419				ND	
1		4.725					
1		5.140					
1		5.735					
1		6.073					
2		5.580					
2		6.056					
2		6.366					
2		6.646					
2		7.029					
10 PCB-1260							
1	4.416	4.420	-0.004	1630326	0.0500	0.0543	
1	4.722	4.721	0.001	2960909	0.0500	0.0555	
1	5.013	5.011	0.002	2836776	0.0500	0.0567	
1	5.734	5.736	-0.002	3857860	0.0500	0.0545	
1	6.025	6.026	-0.001	1939156	0.0500	0.0553	
		Average of Peak Amounts =				0.0553	
2	5.342	5.341	0.001	1934184	0.0500	0.0537	
2	5.578	5.579	-0.001	2142831	0.0500	0.0564	
2	5.950	5.949	0.001	3020155	0.0500	0.0548	
2	6.646	6.647	-0.001	3746977	0.0500	0.0536	
2	7.030	7.030	0.000	2908753	0.0500	0.0570	
		Average of Peak Amounts =				0.0551	
						RPD = 0.28	
11 PCB-1268							
1		6.074				ND	
1		6.114					
1		6.314					
1		6.700					
1		7.001					
2		7.028					
2		7.076					
2		7.340					
2		7.659					
2		8.004					
$ 12 DCB Decachlorobiphenyl							
1	7.201	7.199	0.002	1712160	0.002500	0.002899	
2	8.271	8.271	0.000	2037439	0.002500	0.003158	
						RPD = 8.55	

Reagents:

SG1660@.05PPM_00012 Amount Added: 1.00 Units: mL

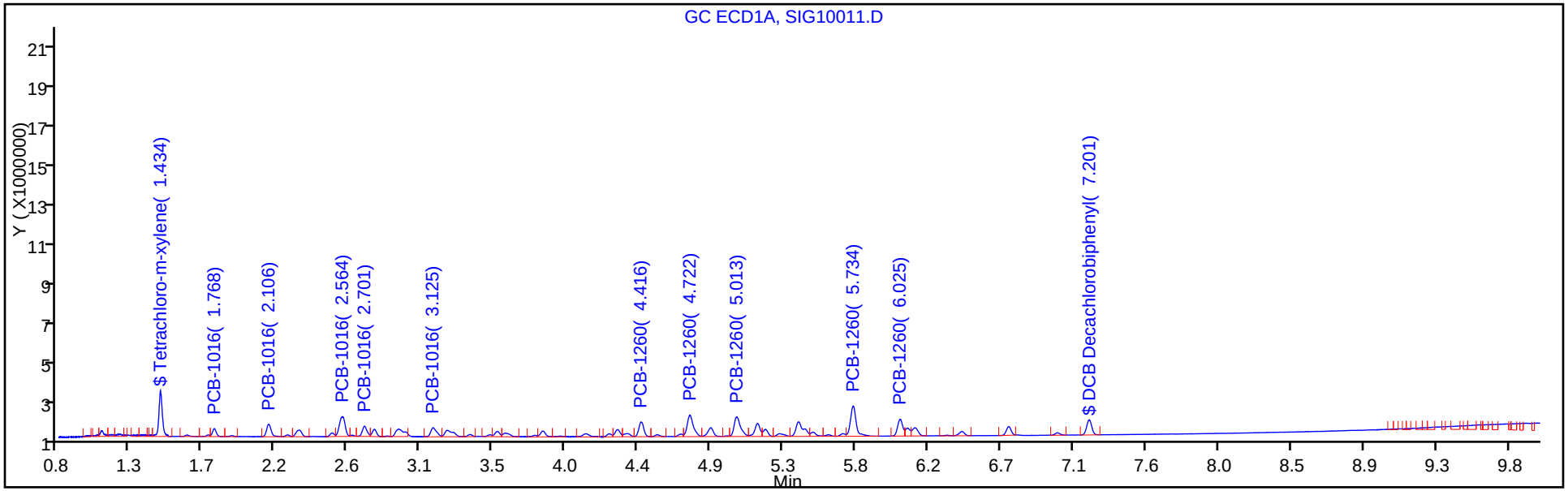
Report Date: 17-Apr-2015 08:30:27 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

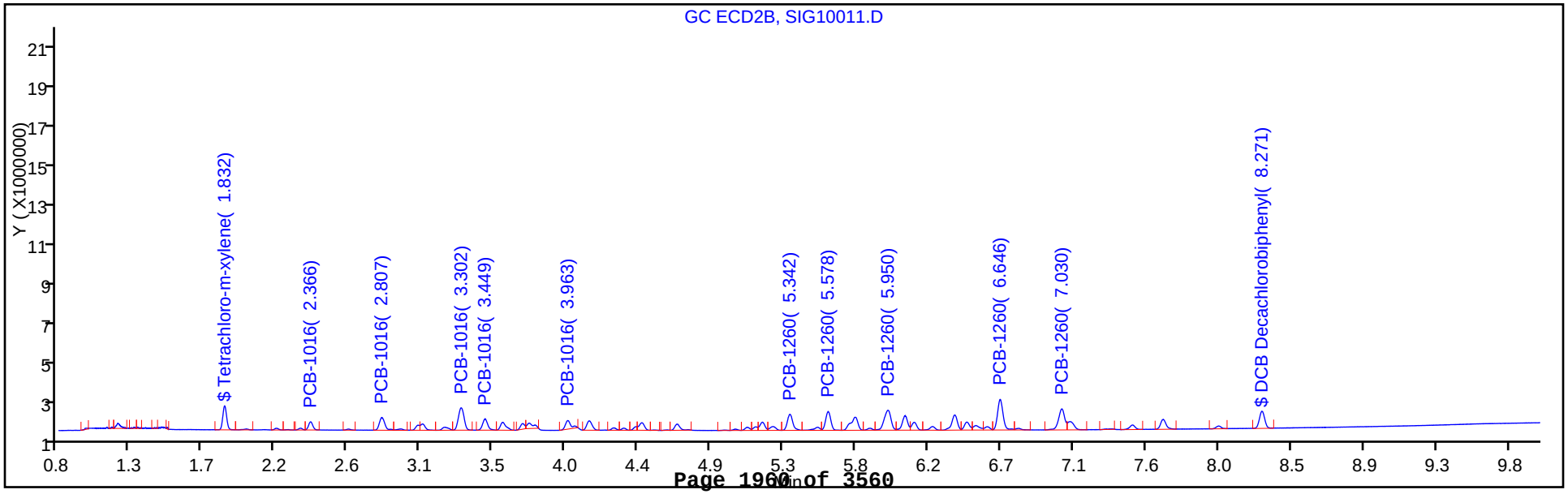
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10011.D

Injection Date:	16-Apr-2015 12:29:43	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	MRL			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 17-Apr-2015 08:30:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

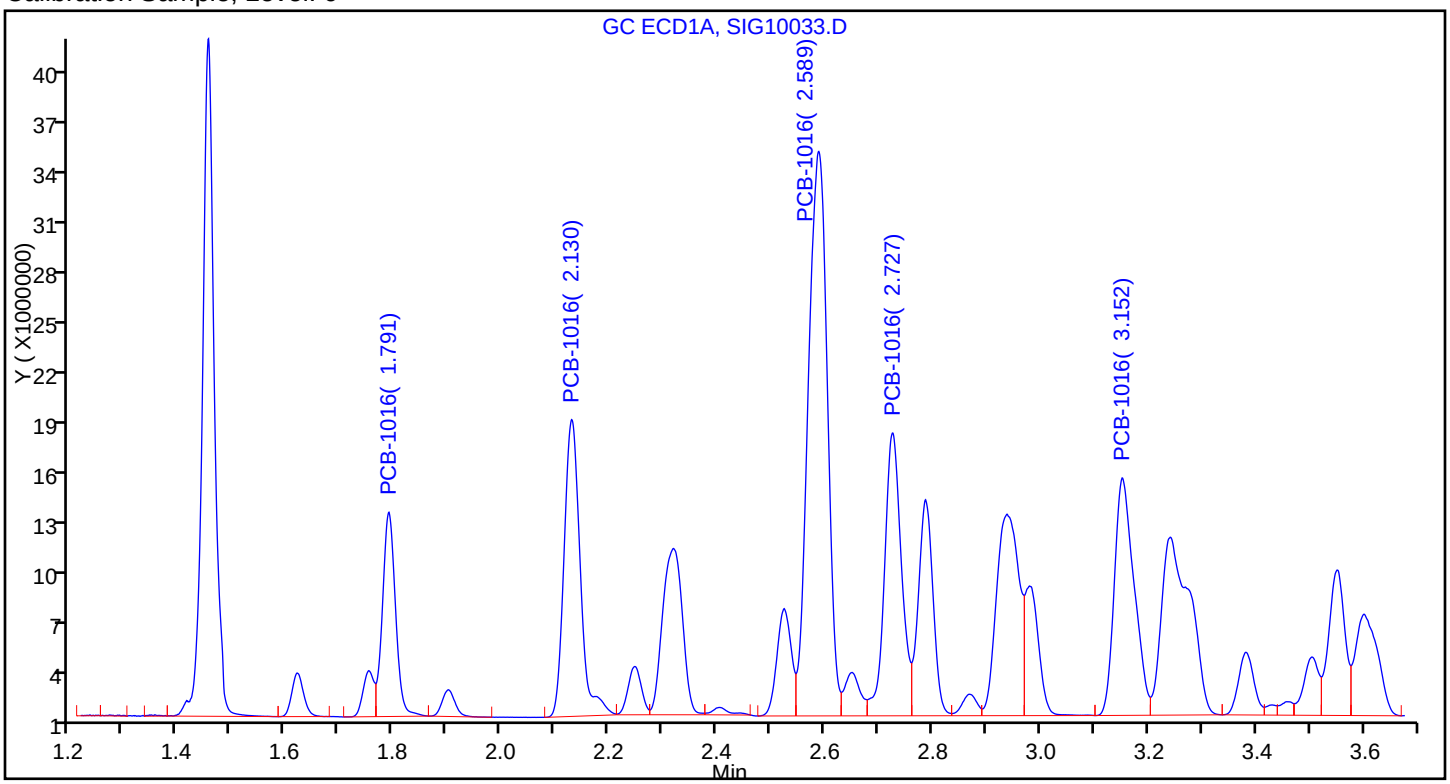
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10011.D

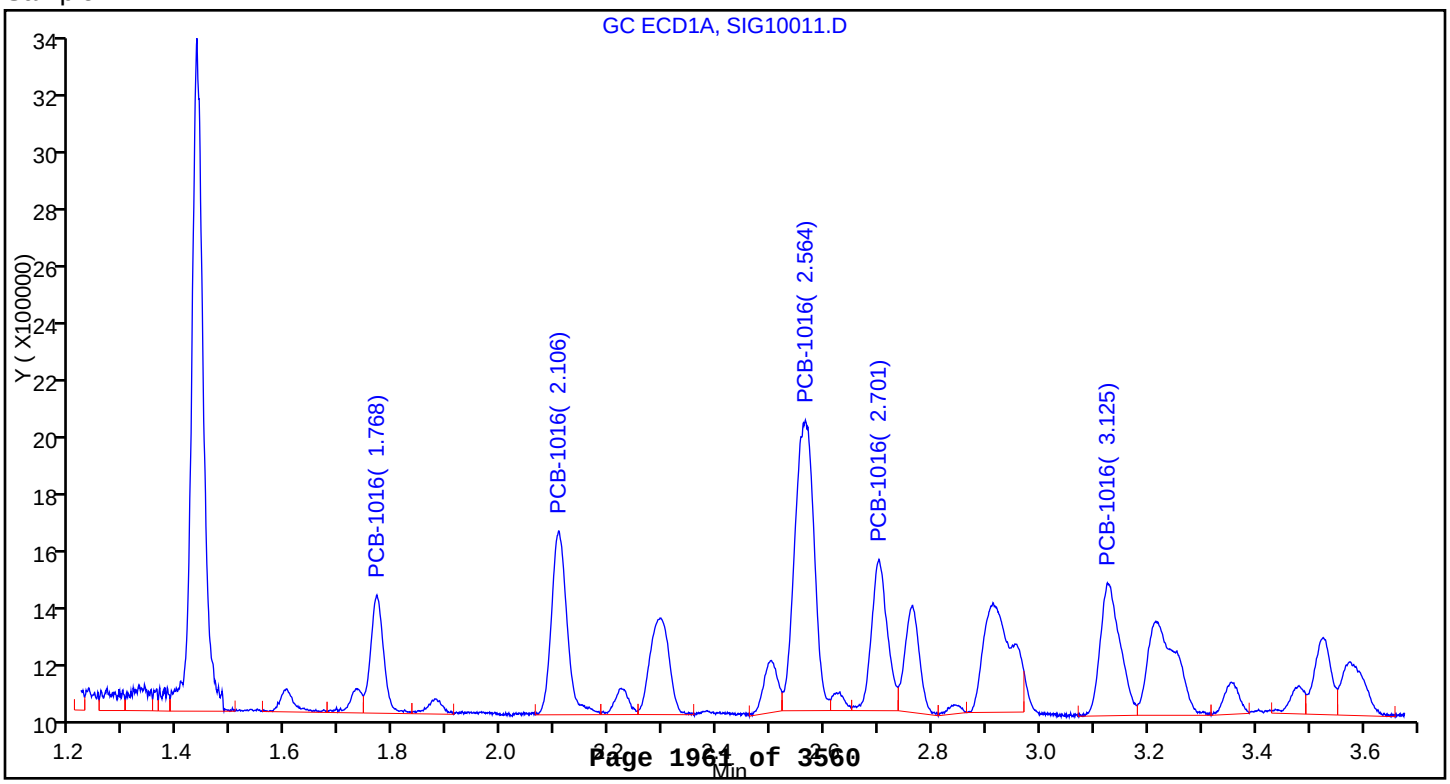
Injection Date:	16-Apr-2015 12:29:43	Instrument ID:	A2HP10
Lims ID:	MRL		
Client ID:			
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 4
Injection Vol:	1.0 uL	Dil. Factor:	1.0000
Method:	PCB10	Limit Group:	GC 8082A ICAL
Column:		Detector	GC ECD1A

6 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 6



Sample



Report Date: 17-Apr-2015 08:30:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

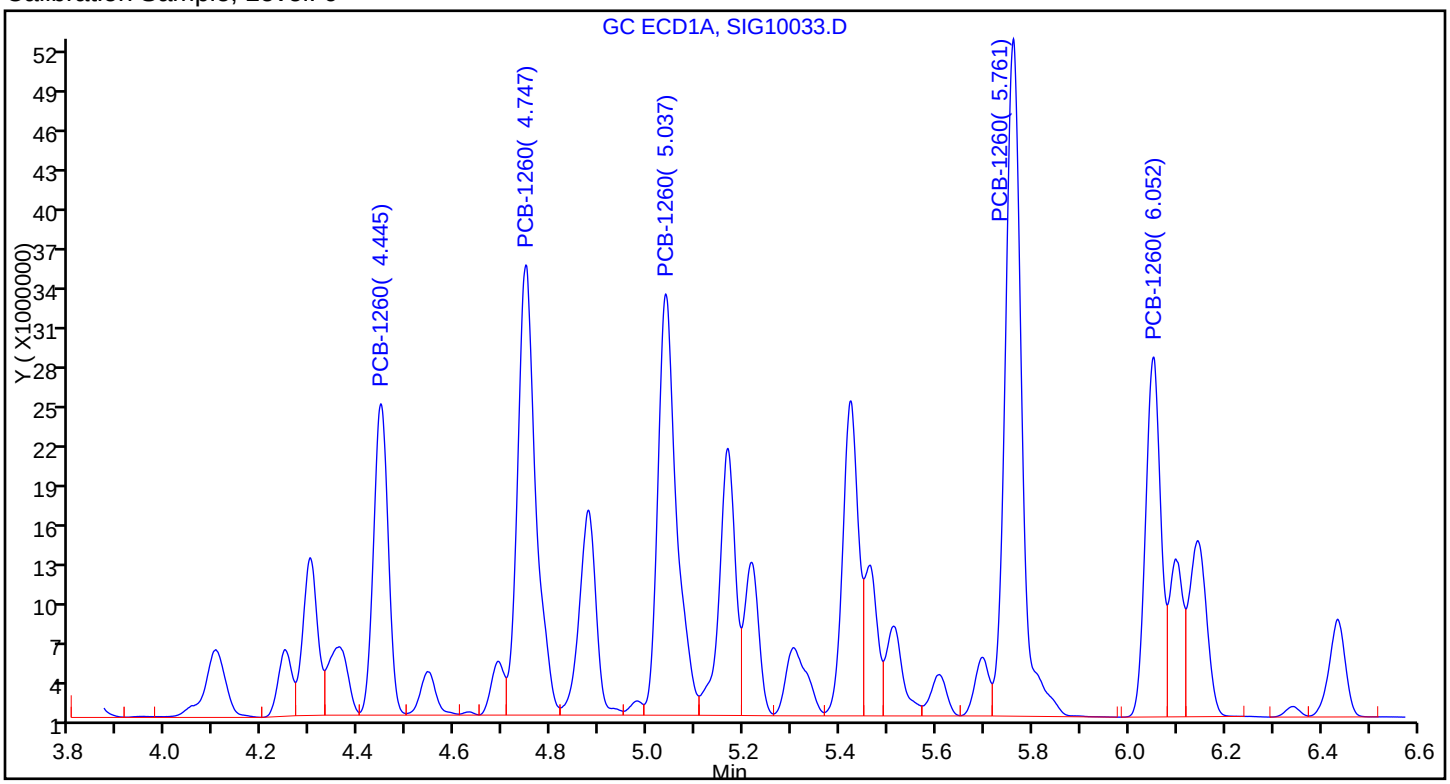
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10011.D

Injection Date:	16-Apr-2015 12:29:43	Instrument ID:	A2HP10
Lims ID:	MRL		
Client ID:			
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 4
Injection Vol:	1.0 uL	Dil. Factor:	1.0000
Method:	PCB10	Limit Group:	GC 8082A ICAL
Column:		Detector	GC ECD1A

10 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



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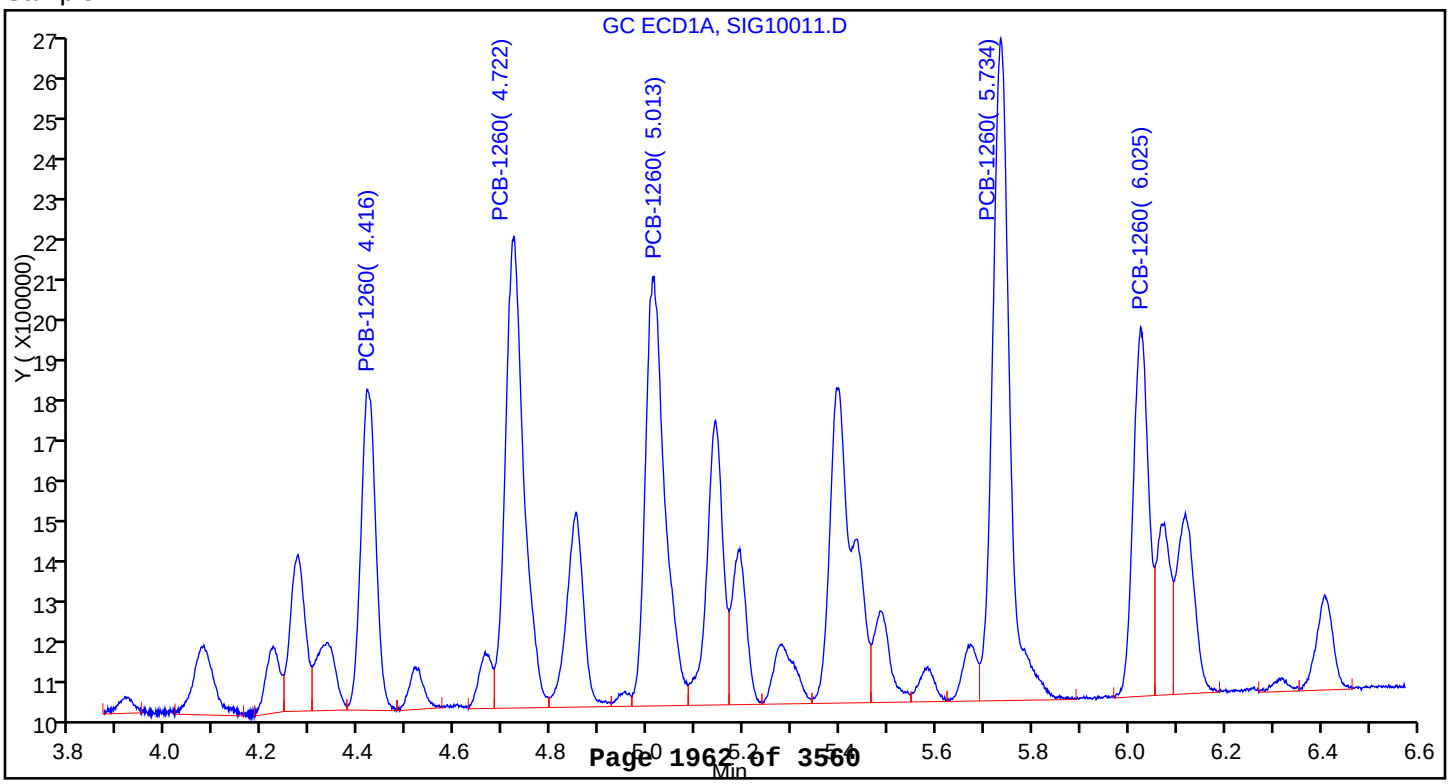


FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-176718/4

Matrix: Solid | Lab File ID: SIG10011.D

Analysis Method: 8082 | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/16/2015 12:29

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
11104-28-2	*Aroclor-1221*	*0.00020*	*U*	*0.050*	0.00020	*0.013*
12674-11-2	*Aroclor-1016*	*0.0533*		*0.050*	0.00020	*0.017*
11141-16-5	*Aroclor-1232*	*0.00020*	*U*	*0.050*	0.00020	*0.016*
53469-21-9	*Aroclor-1242*	*0.00040*	*U*	*0.050*	0.00040	*0.022*
12672-29-6	*Aroclor-1248*	*0.00020*	*U*	*0.050*	0.00020	*0.010*
11097-69-1	*Aroclor-1254*	*0.00020*	*U*	*0.050*	0.00020	*0.016*
11096-82-5	*Aroclor-1260*	*0.0551*		*0.050*	0.00020	*0.017*

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	111		50-150
2051-24-3	DCB Decachlorobiphenyl	126		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10011.D
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 16-Apr-2015 12:29:43 ALS Bottle#: 11 Worklist Smp#: 4
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-004
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 17-Apr-2015 08:23:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total							
1		1.000				ND	
$ 2 Tetrachloro-m-xylene							
1	1.434	1.436	-0.002	3534331	0.002500	0.004699	
2	1.832	1.833	-0.001	2066921	0.002500	0.002763	
						RPD = 51.87	
3 PCB-1221							
1		1.599				ND	
1		1.731					
1		1.768					
2		2.155					
2		2.303					
2		2.366					
4 PCB-1232							
1		1.767				ND	
1		2.106					
1		2.565					
1		2.700					
1		3.128					
2		2.365					
2		2.808					
2		3.301					
2		3.449					
2		4.095					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1		1.769				ND	
1		2.107					
1		2.564					
1		2.701					
1		3.127					
2		2.366					
2		2.809					
2		3.303					
2		3.449					
2		4.097					
6 PCB-1016							
1	1.768	1.769	-0.001	693238	0.0500	0.0538	
1	2.106	2.108	-0.002	1288965	0.0500	0.0552	
1	2.564	2.566	-0.002	2544842	0.0500	0.0520	
1	2.701	2.701	0.000	1085147	0.0500	0.0495	
1	3.125	3.128	-0.003	1190437	0.0500	0.0539	
		Average of Peak Amounts =				0.0529	
2	2.366	2.366	0.000	763573	0.0500	0.0532	
2	2.807	2.809	-0.002	1558820	0.0500	0.0569	
2	3.302	3.302	0.000	2810218	0.0500	0.0517	
2	3.449	3.449	0.000	1265776	0.0500	0.0517	
2	3.963	3.964	-0.001	1043171	0.0500	0.0531	
		Average of Peak Amounts =				0.0533	
						RPD = 0.84	
7 PCB-1248							
1		2.106				ND	
1		2.562					
1		3.127					
1		3.757					
1		4.222					
2		2.807					
2		3.302					
2		4.095					
2		4.427					
2		5.128					
8 PCB-1254							
1		3.526				ND	
1		3.809					
1		4.220					
1		4.519					
1		5.012					
2		4.422					
2		4.642					
2		5.128					
2		5.382					
2		5.954					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1		4.419				ND	
1		4.725					
1		5.140					
1		5.735					
1		6.073					
2		5.580					
2		6.056					
2		6.366					
2		6.646					
2		7.029					
10 PCB-1260							
1	4.416	4.420	-0.004	1630326	0.0500	0.0543	
1	4.722	4.721	0.001	2960909	0.0500	0.0555	
1	5.013	5.011	0.002	2836776	0.0500	0.0567	
1	5.734	5.736	-0.002	3857860	0.0500	0.0545	
1	6.025	6.026	-0.001	1939156	0.0500	0.0553	
		Average of Peak Amounts =				0.0553	
2	5.342	5.341	0.001	1934184	0.0500	0.0537	
2	5.578	5.579	-0.001	2142831	0.0500	0.0564	
2	5.950	5.949	0.001	3020155	0.0500	0.0548	
2	6.646	6.647	-0.001	3746977	0.0500	0.0536	
2	7.030	7.030	0.000	2908753	0.0500	0.0570	
		Average of Peak Amounts =				0.0551	
						RPD = 0.28	
11 PCB-1268							
1		6.074				ND	
1		6.114					
1		6.314					
1		6.700					
1		7.001					
2		7.028					
2		7.076					
2		7.340					
2		7.659					
2		8.004					
$ 12 DCB Decachlorobiphenyl							
1	7.201	7.199	0.002	1712160	0.002500	0.002899	
2	8.271	8.271	0.000	2037439	0.002500	0.003158	
						RPD = 8.55	

Reagents:

SG1660@.05PPM_00012 Amount Added: 1.00 Units: mL

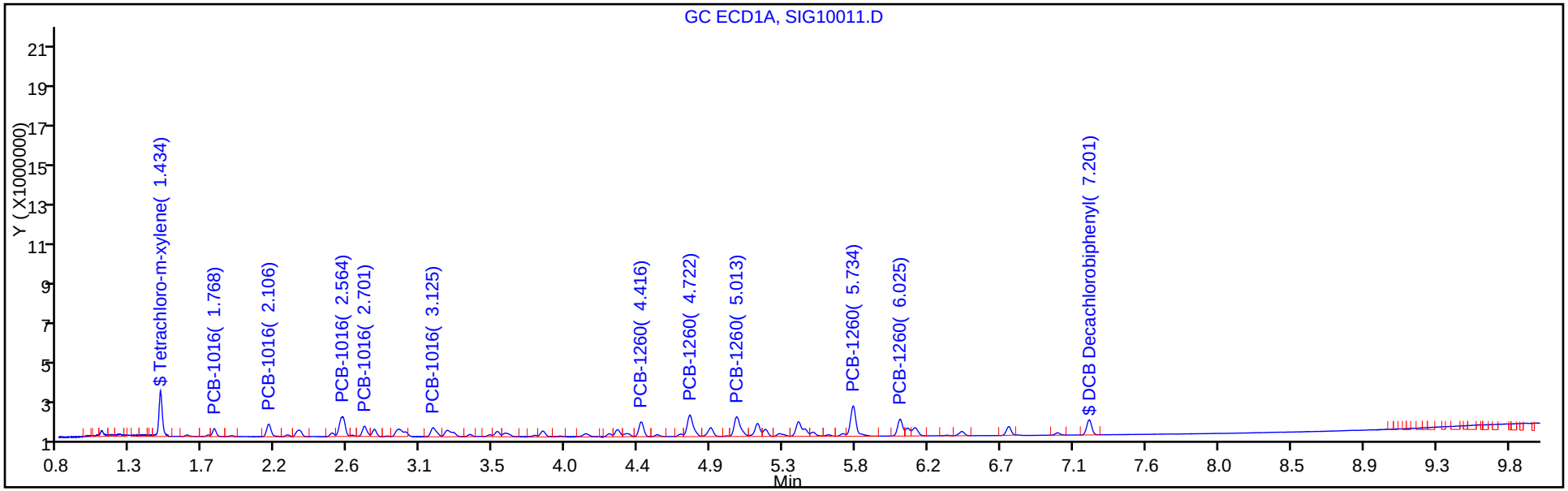
Report Date: 17-Apr-2015 08:30:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

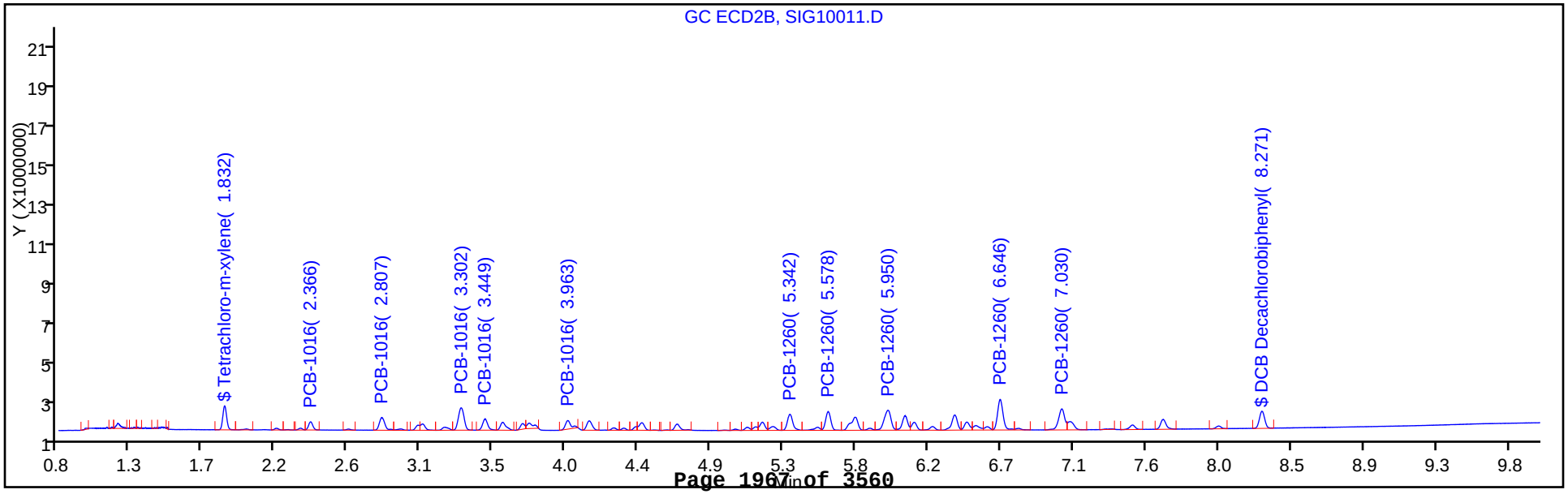
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10011.D

Injection Date:	16-Apr-2015 12:29:43	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	MRL			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 17-Apr-2015 08:30:29 Chrom Revision: 2.2 13-Mar-2015 11:20:44

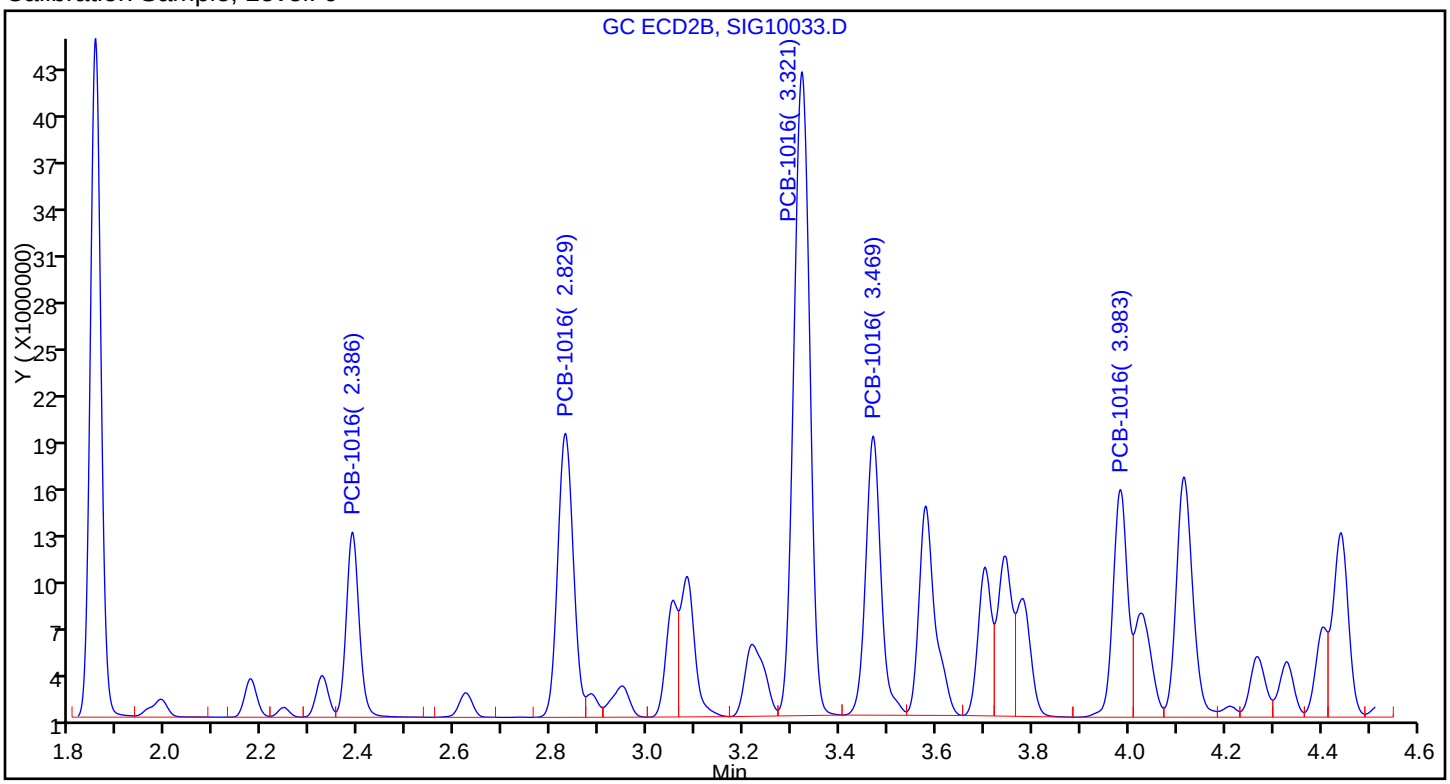
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10011.D

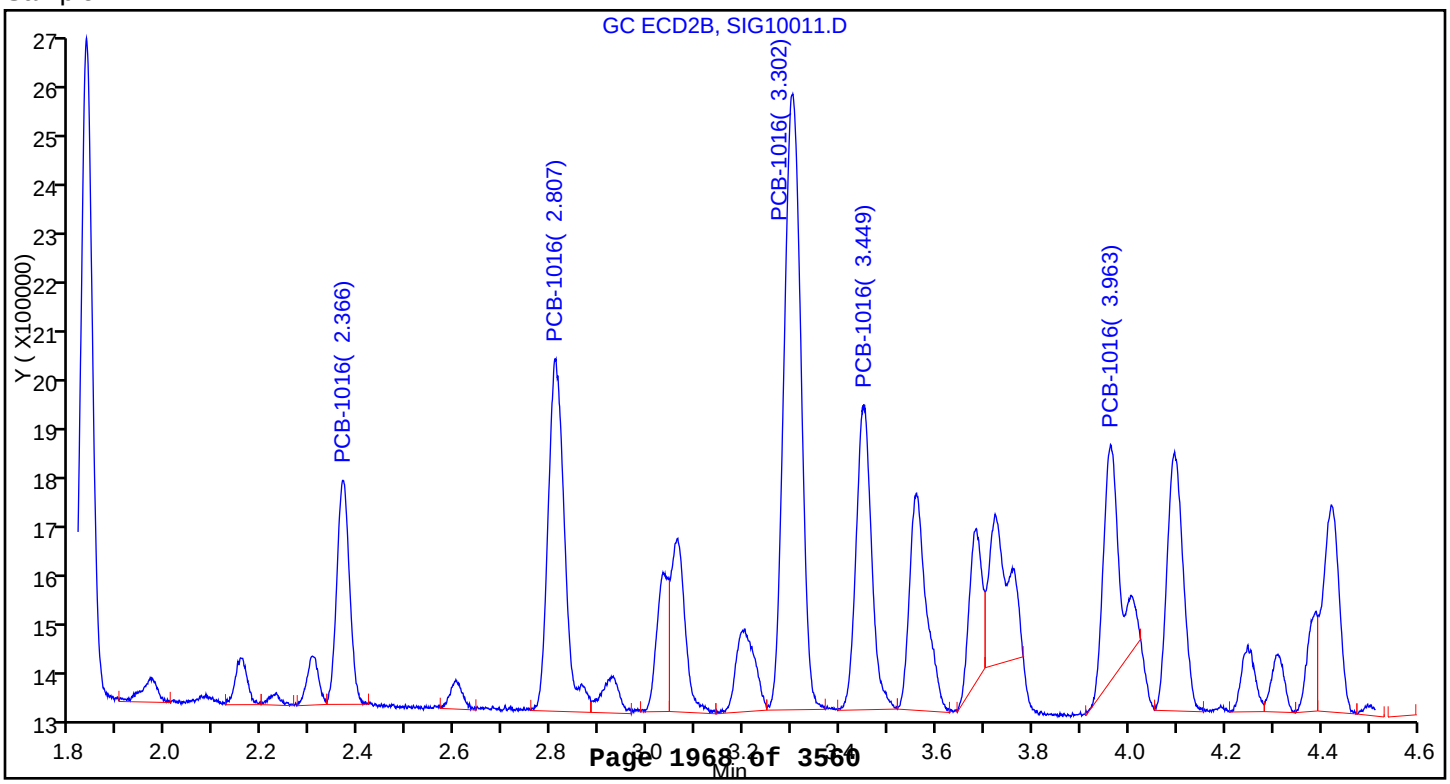
Injection Date:	16-Apr-2015 12:29:43	Instrument ID:	A2HP10
Lims ID:	MRL		
Client ID:			
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 4
Injection Vol:	1.0 uL	Dil. Factor:	1.0000
Method:	PCB10	Limit Group:	GC 8082A ICAL
Column:		Detector	GC ecd2b

6 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 6



Sample



Report Date: 17-Apr-2015 08:30:29 Chrom Revision: 2.2 13-Mar-2015 11:20:44

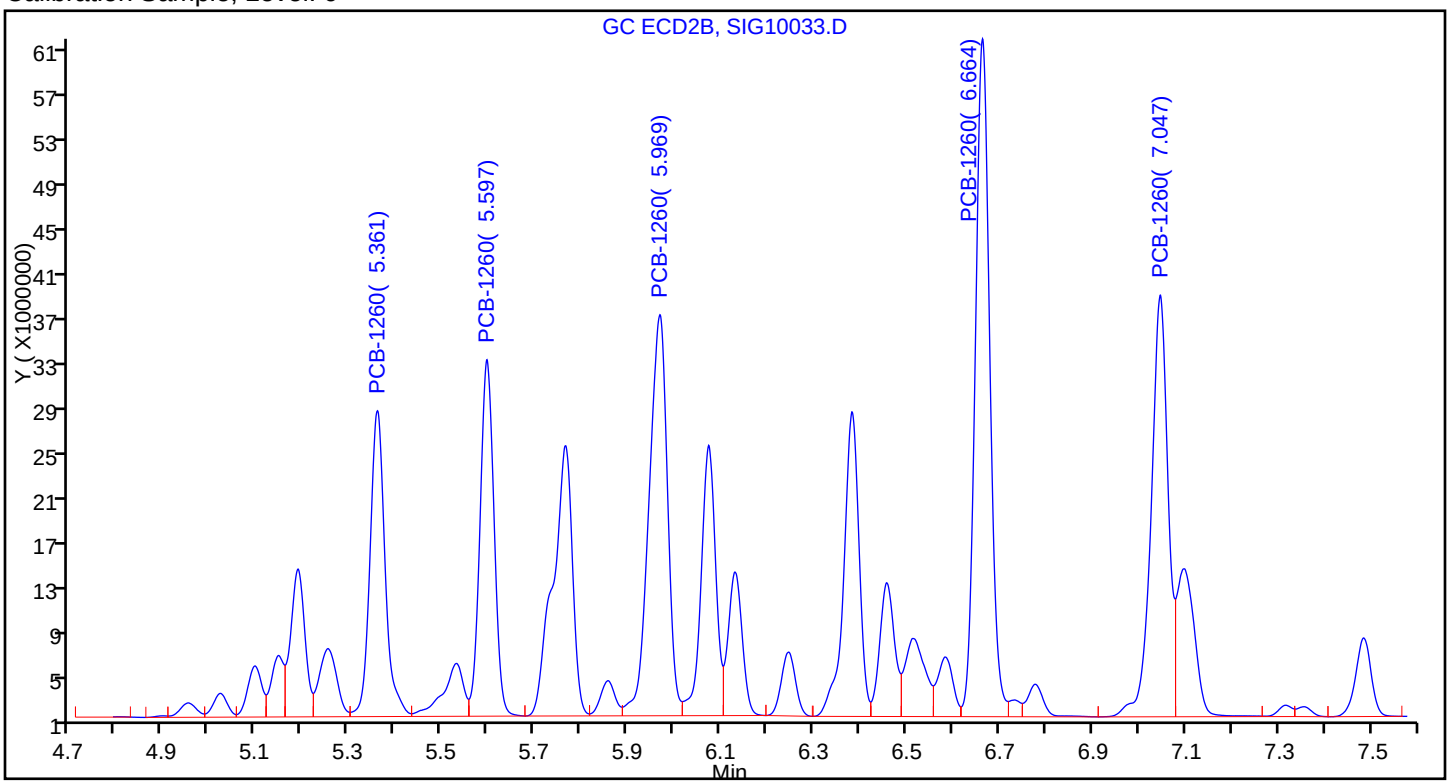
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10011.D

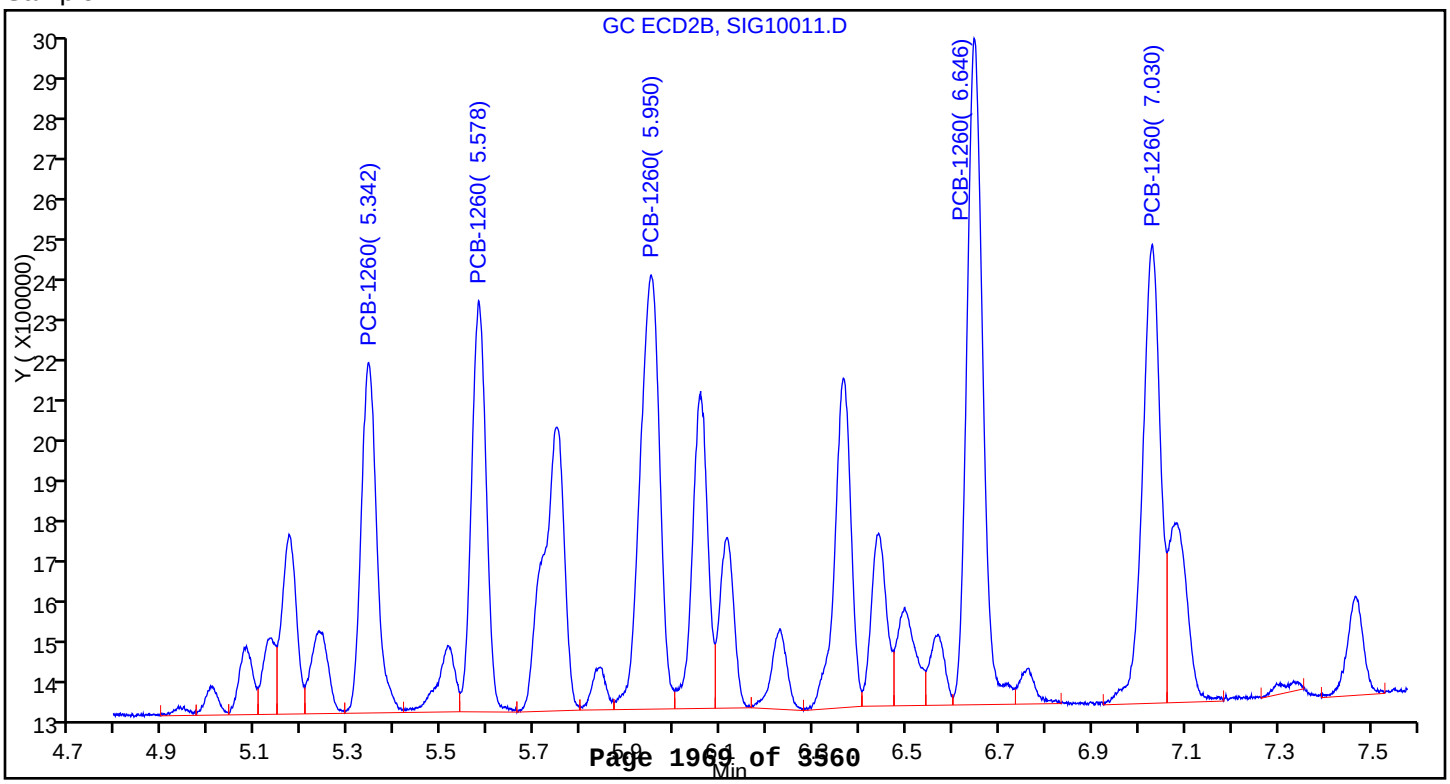
Injection Date:	16-Apr-2015 12:29:43	Instrument ID:	A2HP10
Lims ID:	MRL		
Client ID:			
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 4
Injection Vol:	1.0 uL	Dil. Factor:	1.0000
Method:	PCB10	Limit Group:	GC 8082A ICAL
Column:		Detector	GC ecd2b

10 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MRL 240-176718/13

Matrix: Solid Lab File ID: SIG10020.D

Analysis Method: 8082 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 04/16/2015 14:48

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
11104-28-2	Aroclor-1221	0.00020	U	0.050	0.00020	0.013
12674-11-2	Aroclor-1016	0.0512		0.050	0.00020	0.017
11141-16-5	Aroclor-1232	0.00020	U	0.050	0.00020	0.016
53469-21-9	Aroclor-1242	0.00040	U	0.050	0.00040	0.022
12672-29-6	Aroclor-1248	0.00020	U	0.050	0.00020	0.010
11097-69-1	Aroclor-1254	0.00020	U	0.050	0.00020	0.016
11096-82-5	Aroclor-1260	0.0540		0.050	0.00020	0.017

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	178	^	50-150
2051-24-3	DCB Decachlorobiphenyl	118		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10020.D
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 16-Apr-2015 14:48:59 ALS Bottle#: 20 Worklist Smp#: 13
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-013
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 17-Apr-2015 08:25:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total							
1		1.000				ND	
$ 2 Tetrachloro-m-xylene							
1	1.433	1.436	-0.003	3349228	0.002500	0.004452	
2	1.833	1.833	0.000	2009052	0.002500	0.002686	
						RPD = 49.49	
3 PCB-1221							
1		1.599				ND	
1		1.731					
1		1.768					
2		2.155					
2		2.303					
2		2.366					
4 PCB-1232							
1		1.767				ND	
1		2.106					
1		2.565					
1		2.700					
1		3.128					
2		2.365					
2		2.808					
2		3.301					
2		3.449					
2		4.095					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1		1.769				ND	
1		2.107					
1		2.564					
1		2.701					
1		3.127					
2		2.366					
2		2.809					
2		3.303					
2		3.449					
2		4.097					
6 PCB-1016							
1	1.768	1.769	-0.001	650500	0.0500	0.0504	
1	2.108	2.108	0.000	1267084	0.0500	0.0543	
1	2.563	2.566	-0.003	2553294	0.0500	0.0521	
1	2.701	2.701	0.000	1101145	0.0500	0.0503	
1	3.128	3.128	0.000	1083546	0.0500	0.0491	
		Average of Peak Amounts =				0.0512	
2	2.368	2.366	0.002	793169	0.0500	0.0553	
2	2.808	2.809	-0.001	1482211	0.0500	0.0542	
2	3.302	3.302	0.000	2785875	0.0500	0.0512	
2	3.450	3.449	0.001	1262344	0.0500	0.0515	
2	3.963	3.964	-0.001	1123049	0.0500	0.0572	
		Average of Peak Amounts =				0.0539	
						RPD = 5.01	
7 PCB-1248							
1		2.106				ND	
1		2.562					
1		3.127					
1		3.757					
1		4.222					
2		2.807					
2		3.302					
2		4.095					
2		4.427					
2		5.128					
8 PCB-1254							
1		3.526				ND	
1		3.809					
1		4.220					
1		4.519					
1		5.012					
2		4.422					
2		4.642					
2		5.128					
2		5.382					
2		5.954					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1		4.419				ND	
1		4.725					
1		5.140					
1		5.735					
1		6.073					
2		5.580					
2		6.056					
2		6.366					
2		6.646					
2		7.029					
10 PCB-1260							
1	4.418	4.420	-0.002	1582088	0.0500	0.0526	
1	4.720	4.721	-0.001	2910702	0.0500	0.0545	
1	5.012	5.011	0.001	2726873	0.0500	0.0545	
1	5.733	5.736	-0.003	3754691	0.0500	0.0531	
1	6.026	6.026	0.000	1940982	0.0500	0.0554	
		Average of Peak Amounts =				0.0540	
2	5.342	5.341	0.001	1881601	0.0500	0.0522	
2	5.579	5.579	0.000	2019103	0.0500	0.0531	
2	5.952	5.949	0.003	2810259	0.0500	0.0510	
2	6.647	6.647	0.000	3396720	0.0500	0.0486	
2	7.028	7.030	-0.002	2705365	0.0500	0.0530	
		Average of Peak Amounts =				0.0516	
						RPD = 4.60	
11 PCB-1268							
1		6.074				ND	
1		6.114					
1		6.314					
1		6.700					
1		7.001					
2		7.028					
2		7.076					
2		7.340					
2		7.659					
2		8.004					
$ 12 DCB Decachlorobiphenyl							
1	7.199	7.199	0.000	1744852	0.002500	0.002954	
2	8.273	8.271	0.002	1923811	0.002500	0.002981	
						RPD = 0.92	

Reagents:

SG1660@.05PPM_00012 Amount Added: 1.00 Units: mL

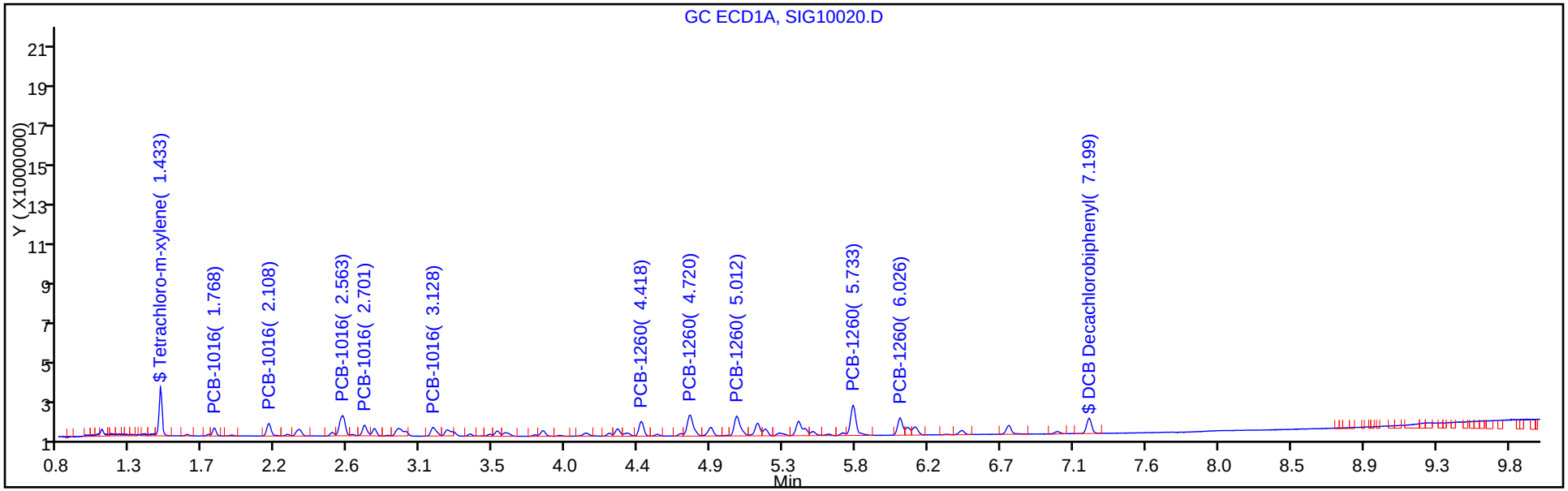
Report Date: 17-Apr-2015 08:30:42 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

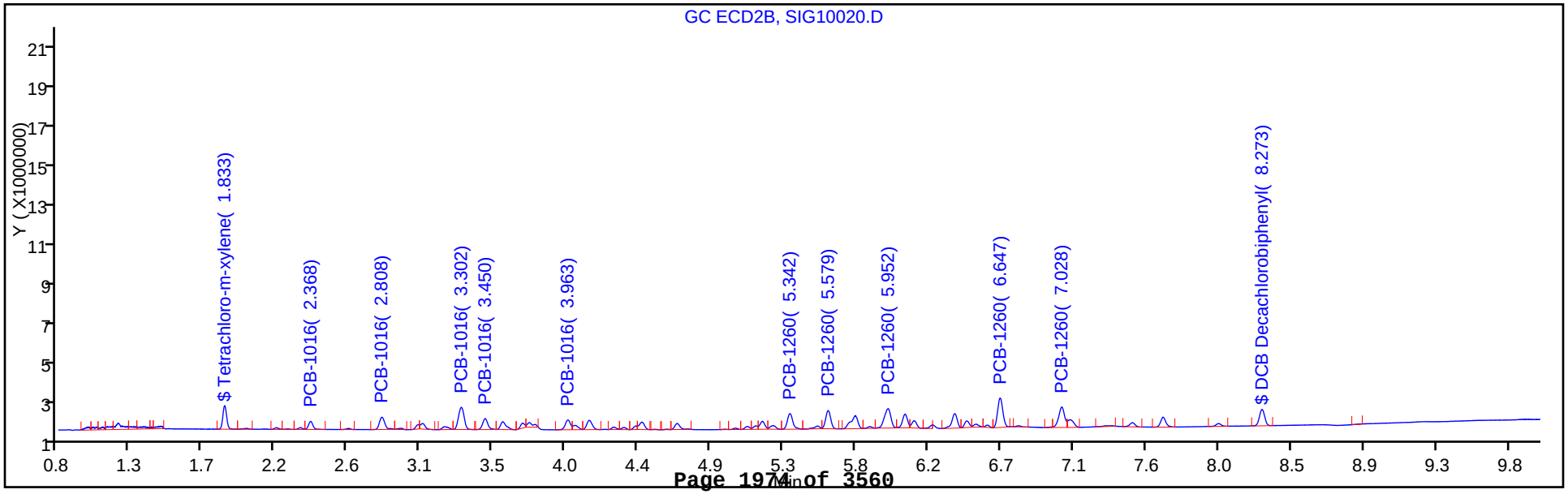
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10020.D

Injection Date:	16-Apr-2015 14:48:59	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	MRL			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 17-Apr-2015 08:30:42 Chrom Revision: 2.2 13-Mar-2015 11:20:44

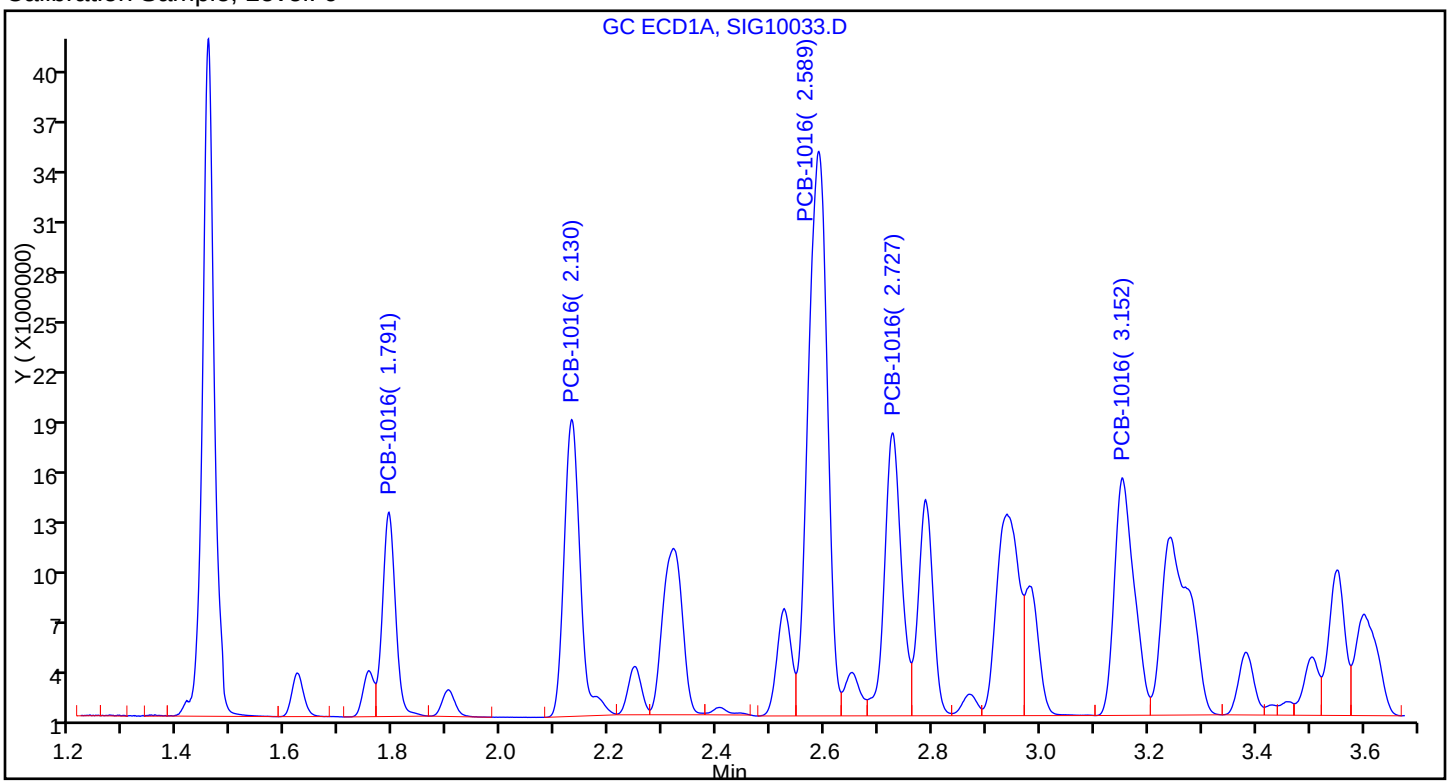
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10020.D

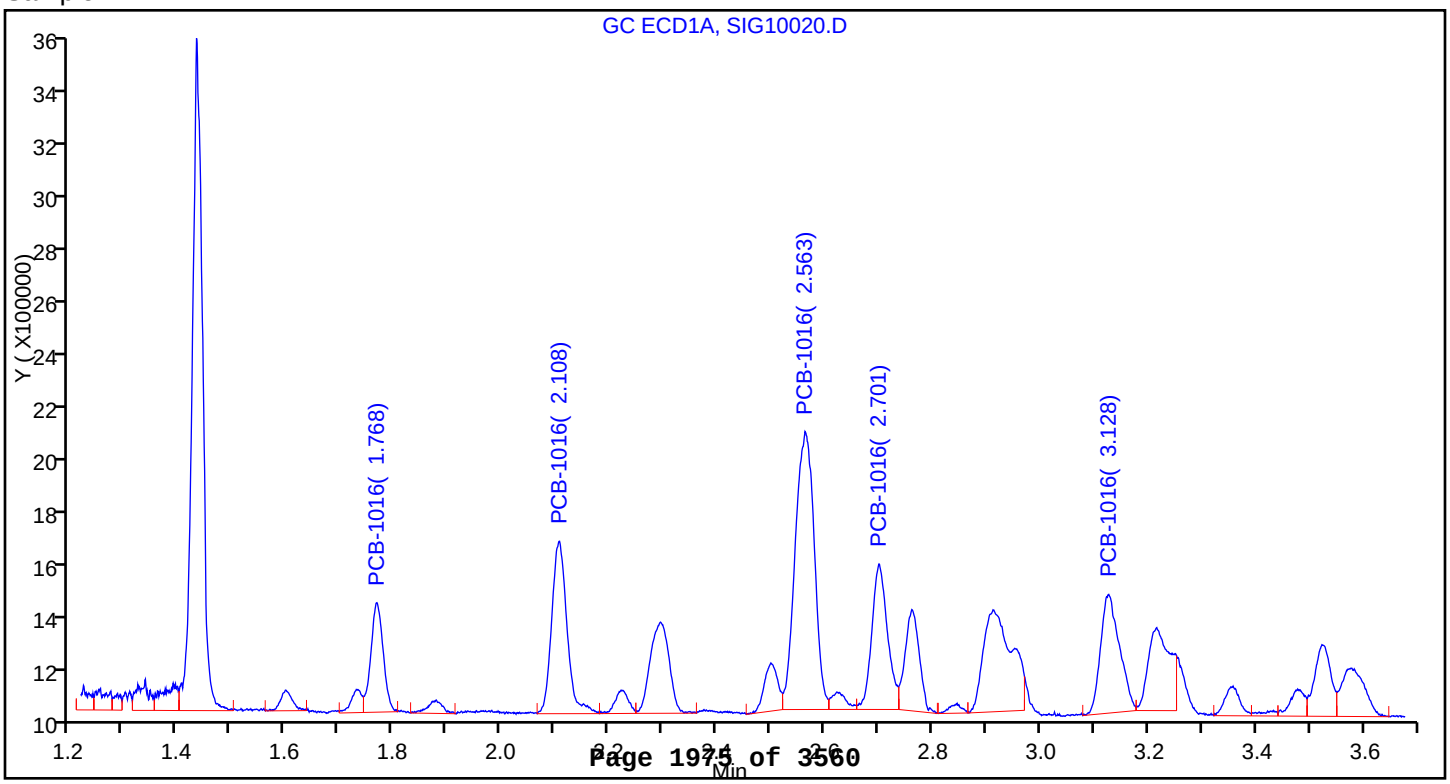
Injection Date:	16-Apr-2015 14:48:59	Instrument ID:	A2HP10		
Lims ID:	MRL				
Client ID:					
Operator ID:		ALS Bottle#:	20	Worklist Smp#:	13
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	PCB10	Limit Group:	GC 8082A ICAL		
Column:		Detector	GC ECD1A		

6 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 6



Sample



Report Date: 17-Apr-2015 08:30:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

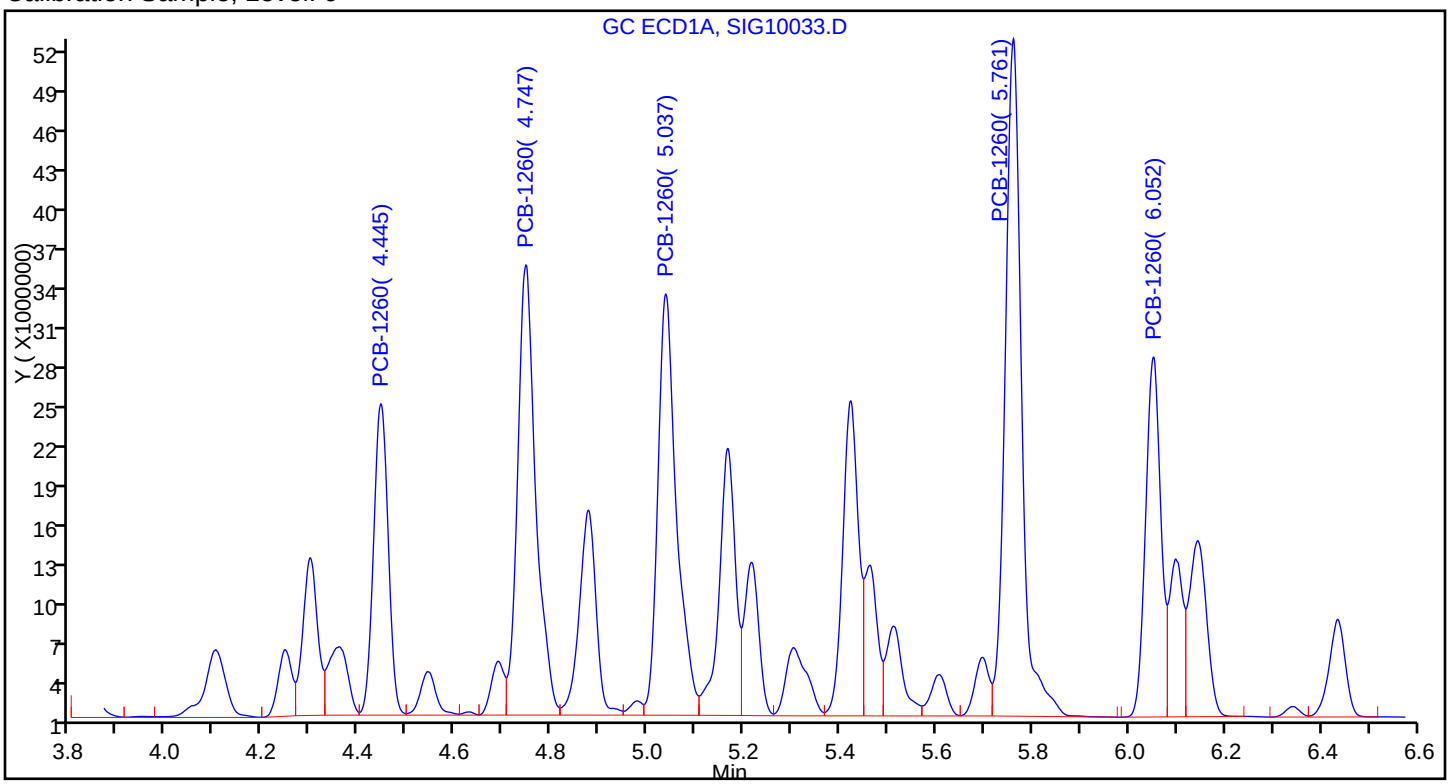
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10020.D

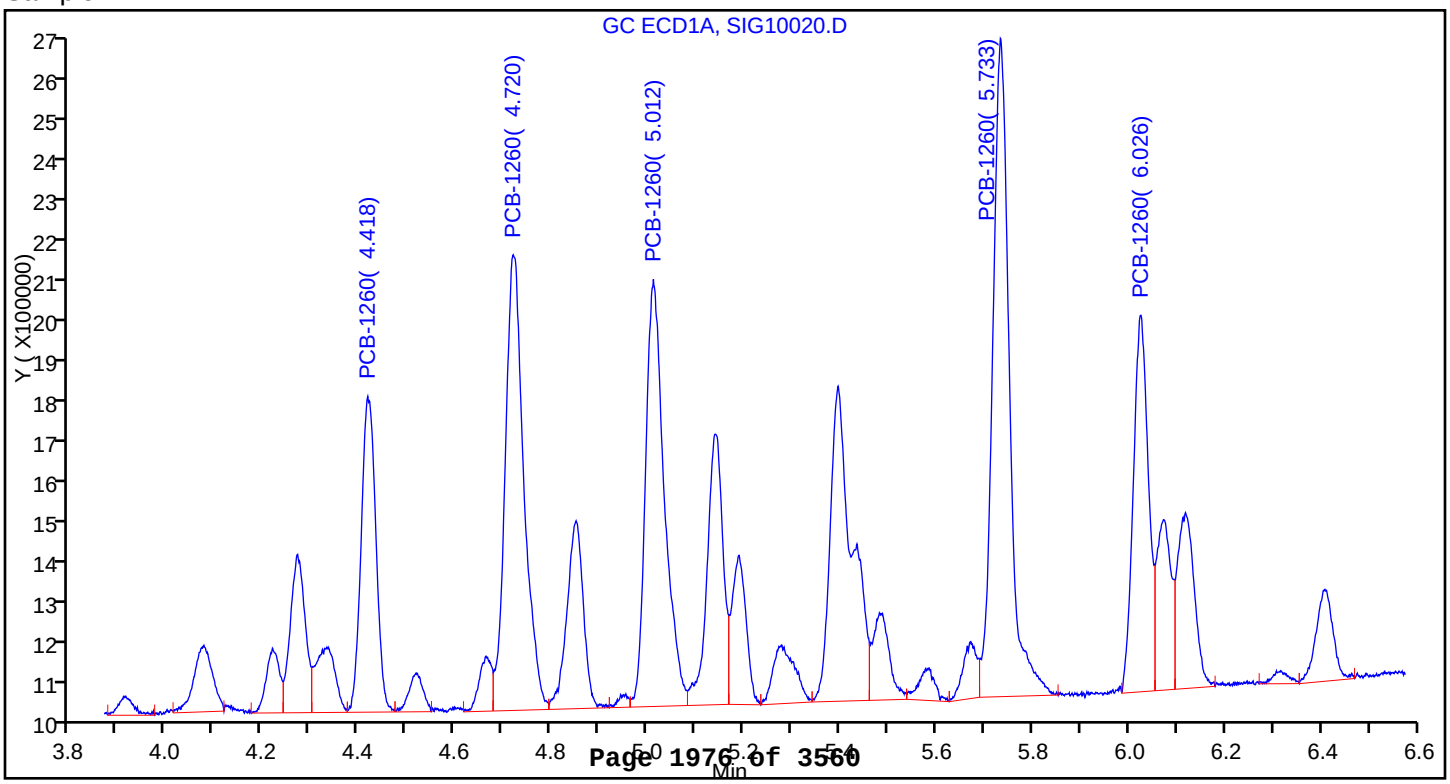
Injection Date:	16-Apr-2015 14:48:59	Instrument ID:	A2HP10
Lims ID:	MRL		
Client ID:			
Operator ID:		ALS Bottle#:	20 Worklist Smp#: 13
Injection Vol:	1.0 uL	Dil. Factor:	1.0000
Method:	PCB10	Limit Group:	GC 8082A ICAL
Column:		Detector	GC ECD1A

10 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49171-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-176718/13

Matrix: Solid | Lab File ID: SIG10020.D

Analysis Method: 8082 | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 04/16/2015 14:48

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 176718 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
11104-28-2	*Aroclor-1221*	*0.00020*	*U*	*0.050*	0.00020	*0.013*
12674-11-2	*Aroclor-1016*	*0.0539*		*0.050*	0.00020	*0.017*
11141-16-5	*Aroclor-1232*	*0.00020*	*U*	*0.050*	0.00020	*0.016*
53469-21-9	*Aroclor-1242*	*0.00040*	*U*	*0.050*	0.00040	*0.022*
12672-29-6	*Aroclor-1248*	*0.00020*	*U*	*0.050*	0.00020	*0.010*
11097-69-1	*Aroclor-1254*	*0.00020*	*U*	*0.050*	0.00020	*0.016*
11096-82-5	*Aroclor-1260*	*0.0516*		*0.050*	0.00020	*0.017*

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	107		50-150
2051-24-3	DCB Decachlorobiphenyl	119		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10020.D
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 16-Apr-2015 14:48:59 ALS Bottle#: 20 Worklist Smp#: 13
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 240-0042633-013
Operator ID: Instrument ID: A2HP10

Method: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\PCB10.m
Limit Group: GC 8082A ICAL
Last Update: 17-Apr-2015 08:30:24 Calib Date: 30-Mar-2015 23:10:59
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A2HP10\20150330-42050.b\SIG10033.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ecd2b
Process Host: XAWRK035

First Level Reviewer: hassl Date: 17-Apr-2015 08:25:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
S 1 Polychlorinated biphenyls, Total							
1		1.000				ND	
$ 2 Tetrachloro-m-xylene							
1	1.433	1.436	-0.003	3349228	0.002500	0.004452	
2	1.833	1.833	0.000	2009052	0.002500	0.002686	
						RPD = 49.49	
3 PCB-1221							
1		1.599				ND	
1		1.731					
1		1.768					
2		2.155					
2		2.303					
2		2.366					
4 PCB-1232							
1		1.767				ND	
1		2.106					
1		2.565					
1		2.700					
1		3.128					
2		2.365					
2		2.808					
2		3.301					
2		3.449					
2		4.095					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
5 PCB-1242							
1		1.769				ND	
1		2.107					
1		2.564					
1		2.701					
1		3.127					
2		2.366					
2		2.809					
2		3.303					
2		3.449					
2		4.097					
6 PCB-1016							
1	1.768	1.769	-0.001	650500	0.0500	0.0504	
1	2.108	2.108	0.000	1267084	0.0500	0.0543	
1	2.563	2.566	-0.003	2553294	0.0500	0.0521	
1	2.701	2.701	0.000	1101145	0.0500	0.0503	
1	3.128	3.128	0.000	1083546	0.0500	0.0491	
		Average of Peak Amounts =				0.0512	
2	2.368	2.366	0.002	793169	0.0500	0.0553	
2	2.808	2.809	-0.001	1482211	0.0500	0.0542	
2	3.302	3.302	0.000	2785875	0.0500	0.0512	
2	3.450	3.449	0.001	1262344	0.0500	0.0515	
2	3.963	3.964	-0.001	1123049	0.0500	0.0572	
		Average of Peak Amounts =				0.0539	
						RPD = 5.01	
7 PCB-1248							
1		2.106				ND	
1		2.562					
1		3.127					
1		3.757					
1		4.222					
2		2.807					
2		3.302					
2		4.095					
2		4.427					
2		5.128					
8 PCB-1254							
1		3.526				ND	
1		3.809					
1		4.220					
1		4.519					
1		5.012					
2		4.422					
2		4.642					
2		5.128					
2		5.382					
2		5.954					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
9 PCB-1262							
1		4.419				ND	
1		4.725					
1		5.140					
1		5.735					
1		6.073					
2		5.580					
2		6.056					
2		6.366					
2		6.646					
2		7.029					
10 PCB-1260							
1	4.418	4.420	-0.002	1582088	0.0500	0.0526	
1	4.720	4.721	-0.001	2910702	0.0500	0.0545	
1	5.012	5.011	0.001	2726873	0.0500	0.0545	
1	5.733	5.736	-0.003	3754691	0.0500	0.0531	
1	6.026	6.026	0.000	1940982	0.0500	0.0554	
		Average of Peak Amounts =				0.0540	
2	5.342	5.341	0.001	1881601	0.0500	0.0522	
2	5.579	5.579	0.000	2019103	0.0500	0.0531	
2	5.952	5.949	0.003	2810259	0.0500	0.0510	
2	6.647	6.647	0.000	3396720	0.0500	0.0486	
2	7.028	7.030	-0.002	2705365	0.0500	0.0530	
		Average of Peak Amounts =				0.0516	
						RPD = 4.60	
11 PCB-1268							
1		6.074				ND	
1		6.114					
1		6.314					
1		6.700					
1		7.001					
2		7.028					
2		7.076					
2		7.340					
2		7.659					
2		8.004					
$ 12 DCB Decachlorobiphenyl							
1	7.199	7.199	0.000	1744852	0.002500	0.002954	
2	8.273	8.271	0.002	1923811	0.002500	0.002981	
						RPD = 0.92	

Reagents:

SG1660@.05PPM_00012 Amount Added: 1.00 Units: mL

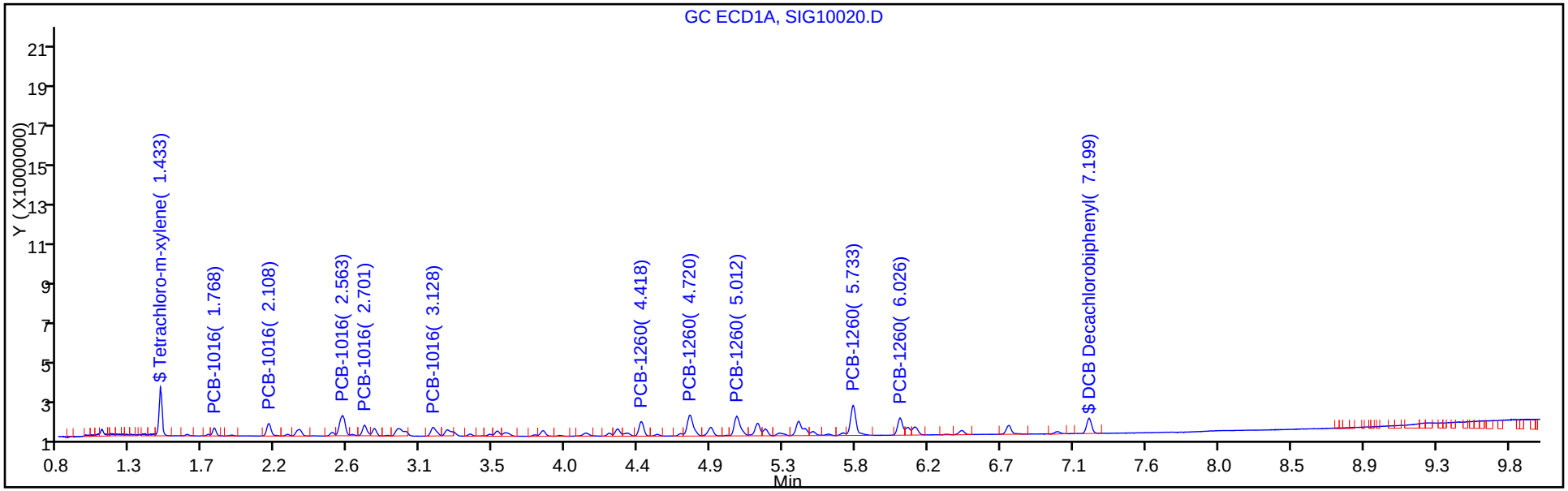
Report Date: 17-Apr-2015 08:30:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Canton

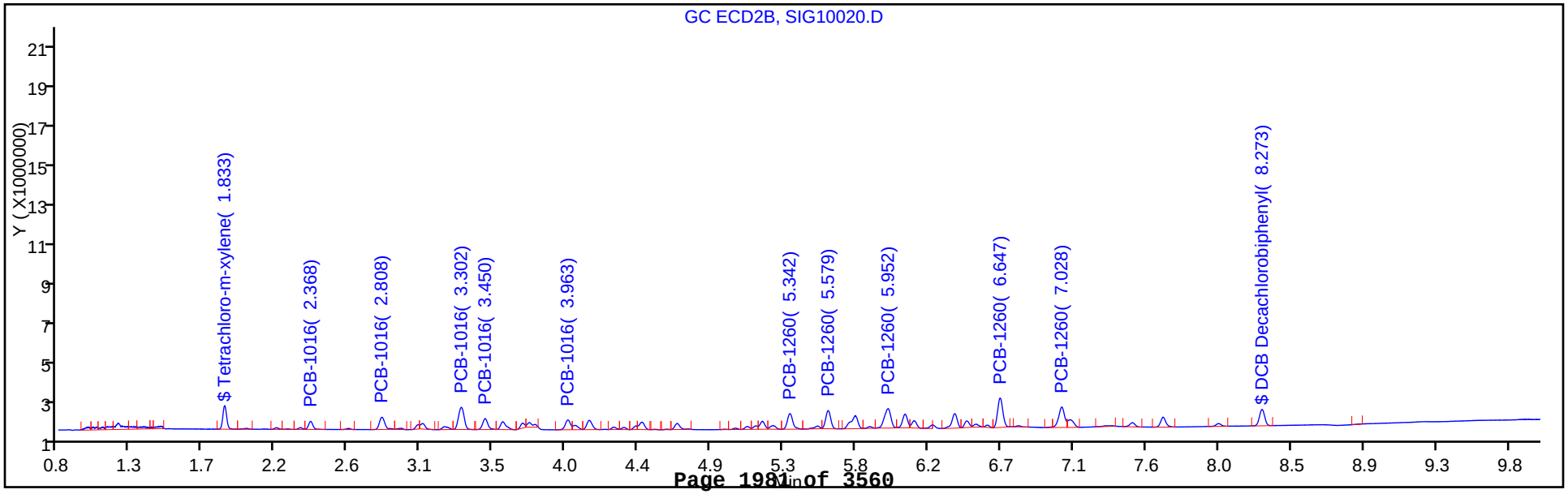
Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10020.D

Injection Date:	16-Apr-2015 14:48:59	Instrument ID:	A2HP10	Operator ID:	
Lims ID:	MRL			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB10	Limit Group:	GC 8082A ICAL		

Y Scaling: Method Defined: Set to Absolute Y Value



Y Scaling: Method Defined: Set to Absolute Y Value



Report Date: 17-Apr-2015 08:30:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

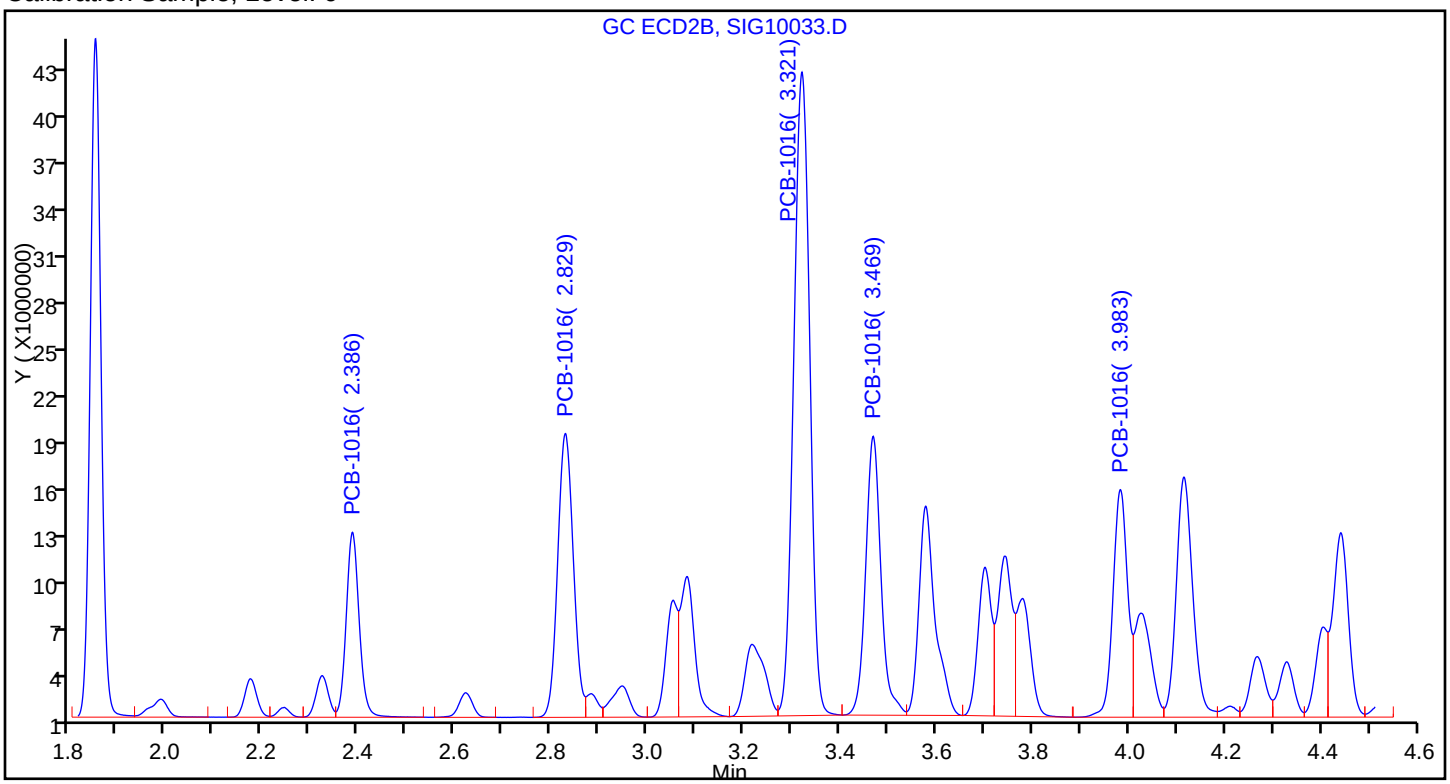
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10020.D

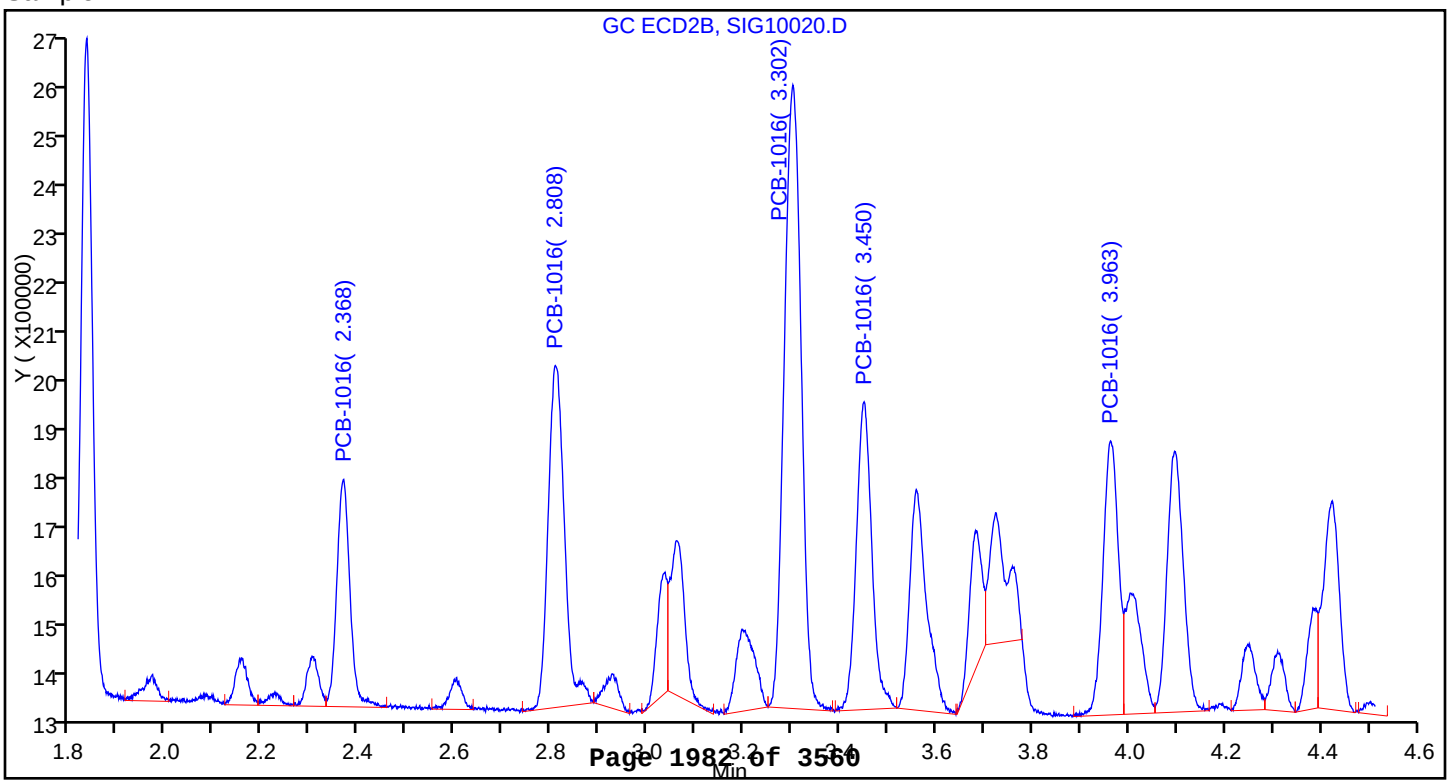
Injection Date:	16-Apr-2015 14:48:59	Instrument ID:	A2HP10		
Lims ID:	MRL				
Client ID:					
Operator ID:		ALS Bottle#:	20	Worklist Smp#:	13
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	PCB10	Limit Group:	GC 8082A ICAL		
Column:		Detector	GC ecd2b		

6 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 6



Sample



Report Date: 17-Apr-2015 08:30:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

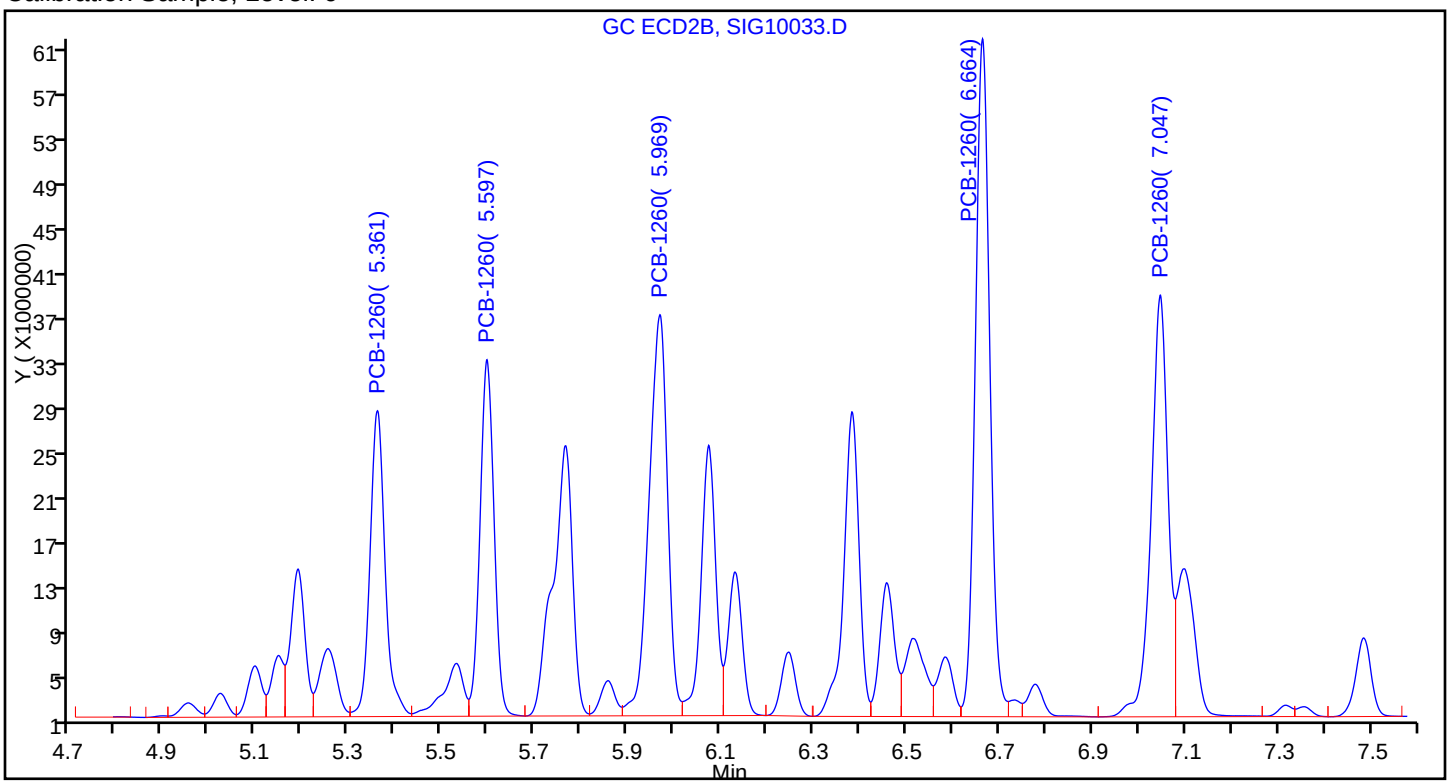
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A2HP10\20150416-42633.b\SIG10020.D

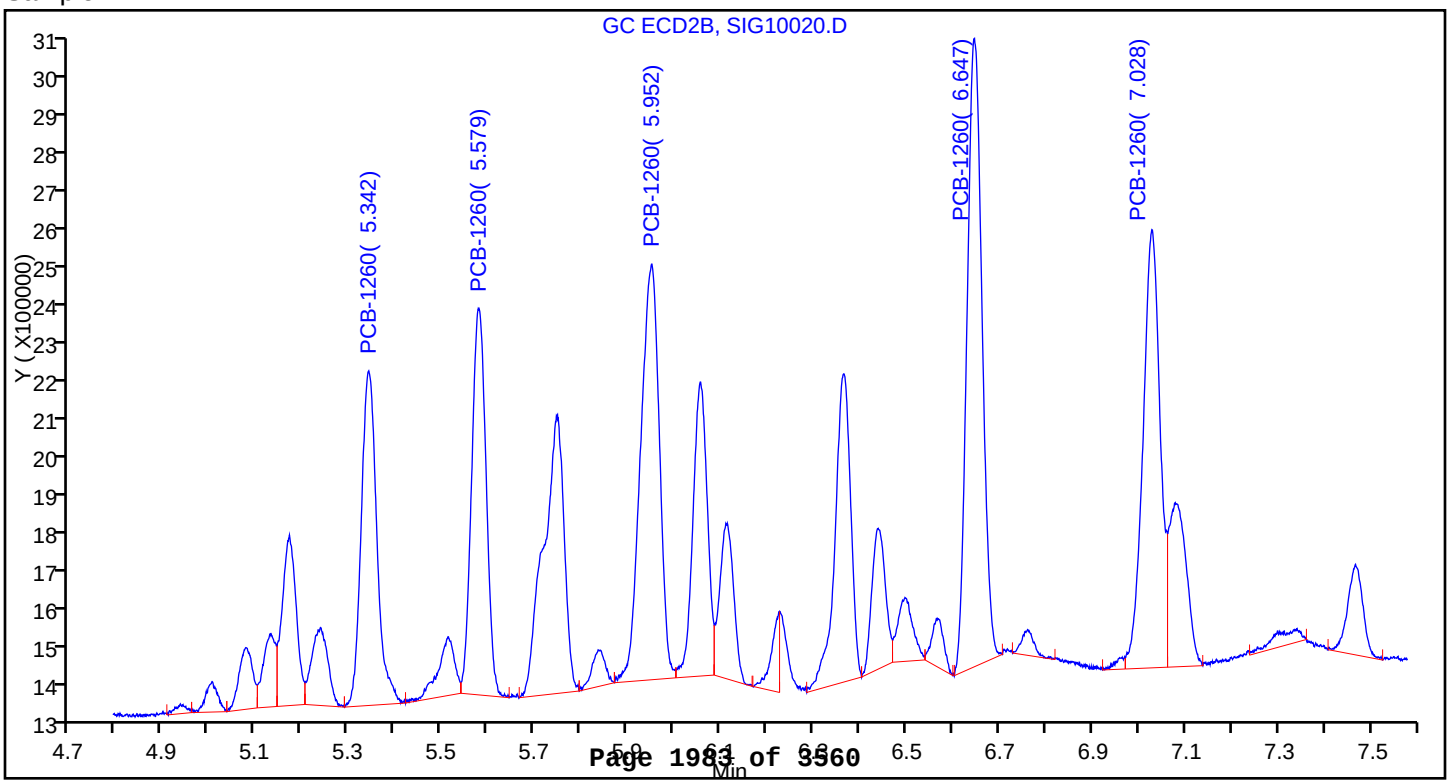
Injection Date:	16-Apr-2015 14:48:59	Instrument ID:	A2HP10
Lims ID:	MRL		
Client ID:			
Operator ID:		ALS Bottle#:	20 Worklist Smp#: 13
Injection Vol:	1.0 uL	Dil. Factor:	1.0000
Method:	PCB10	Limit Group:	GC 8082A ICAL
Column:		Detector	GC ecd2b

10 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP10 Start Date: 03/30/2015 15:41

Analysis Batch Number: 174339 End Date: 03/31/2015 01:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD005 240-174339/4 IC		03/30/2015 15:41	1	SIG10004.D	CLP-1 0.53(mm)
STD005 240-174339/4 IC		03/30/2015 15:41	1	SIG10004.D	CLP-2 0.53(mm)
STD01 240-174339/5 IC		03/30/2015 15:57	1	SIG10005.D	CLP-1 0.53(mm)
STD01 240-174339/5 IC		03/30/2015 15:57	1	SIG10005.D	CLP-2 0.53(mm)
STD02 240-174339/6 IC		03/30/2015 16:12	1	SIG10006.D	CLP-1 0.53(mm)
STD02 240-174339/6 IC		03/30/2015 16:12	1	SIG10006.D	CLP-2 0.53(mm)
STD05 240-174339/7 IC		03/30/2015 16:27	1	SIG10007.D	CLP-1 0.53(mm)
STD05 240-174339/7 IC		03/30/2015 16:27	1	SIG10007.D	CLP-2 0.53(mm)
STD1 240-174339/8 IC		03/30/2015 16:43	1	SIG10008.D	CLP-1 0.53(mm)
STD1 240-174339/8 IC		03/30/2015 16:43	1	SIG10008.D	CLP-2 0.53(mm)
STD2 240-174339/9 IC		03/30/2015 16:58	1	SIG10009.D	CLP-1 0.53(mm)
STD2 240-174339/9 IC		03/30/2015 16:58	1	SIG10009.D	CLP-2 0.53(mm)
STD005 240-174339/10 IC		03/30/2015 17:14	1	SIG10010.D	CLP-1 0.53(mm)
STD005 240-174339/10 IC		03/30/2015 17:14	1	SIG10010.D	CLP-2 0.53(mm)
STD01 240-174339/11 IC		03/30/2015 17:29	1	SIG10011.D	CLP-1 0.53(mm)
STD01 240-174339/11 IC		03/30/2015 17:29	1	SIG10011.D	CLP-2 0.53(mm)
STD02 240-174339/12 IC		03/30/2015 17:45	1	SIG10012.D	CLP-1 0.53(mm)
STD02 240-174339/12 IC		03/30/2015 17:45	1	SIG10012.D	CLP-2 0.53(mm)
STD05 240-174339/13 IC		03/30/2015 18:00	1	SIG10013.D	CLP-1 0.53(mm)
STD05 240-174339/13 IC		03/30/2015 18:00	1	SIG10013.D	CLP-2 0.53(mm)
STD1 240-174339/14 IC		03/30/2015 18:16	1	SIG10014.D	CLP-1 0.53(mm)
STD1 240-174339/14 IC		03/30/2015 18:16	1	SIG10014.D	CLP-2 0.53(mm)
STD2 240-174339/15 IC		03/30/2015 18:31	1	SIG10015.D	CLP-1 0.53(mm)
STD2 240-174339/15 IC		03/30/2015 18:31	1	SIG10015.D	CLP-2 0.53(mm)
STD005 240-174339/16 IC		03/30/2015 18:47	1	SIG10016.D	CLP-1 0.53(mm)
STD005 240-174339/16 IC		03/30/2015 18:47	1	SIG10016.D	CLP-2 0.53(mm)
STD01 240-174339/17 IC		03/30/2015 19:02	1	SIG10017.D	CLP-1 0.53(mm)
STD01 240-174339/17 IC		03/30/2015 19:02	1	SIG10017.D	CLP-2 0.53(mm)
STD02 240-174339/18 IC		03/30/2015 19:18	1	SIG10018.D	CLP-1 0.53(mm)
STD02 240-174339/18 IC		03/30/2015 19:18	1	SIG10018.D	CLP-2 0.53(mm)
STD05 240-174339/19 IC		03/30/2015 19:33	1	SIG10019.D	CLP-1 0.53(mm)
STD05 240-174339/19 IC		03/30/2015 19:33	1	SIG10019.D	CLP-2 0.53(mm)
STD1 240-174339/20 IC		03/30/2015 19:49	1	SIG10020.D	CLP-1 0.53(mm)

8082

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP10 Start Date: 03/30/2015 15:41

Analysis Batch Number: 174339 End Date: 03/31/2015 01:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-174339/20 IC		03/30/2015 19:49	1	SIG10020.D	CLP-2 0.53(mm)
STD2 240-174339/21 IC		03/30/2015 20:05	1	SIG10021.D	CLP-1 0.53(mm)
STD2 240-174339/21 IC		03/30/2015 20:05	1	SIG10021.D	CLP-2 0.53(mm)
STD005 240-174339/22 IC		03/30/2015 20:20	1	SIG10022.D	CLP-1 0.53(mm)
STD005 240-174339/22 IC		03/30/2015 20:20	1	SIG10022.D	CLP-2 0.53(mm)
STD01 240-174339/23 IC		03/30/2015 20:36	1	SIG10023.D	CLP-1 0.53(mm)
STD01 240-174339/23 IC		03/30/2015 20:36	1	SIG10023.D	CLP-2 0.53(mm)
STD02 240-174339/24 IC		03/30/2015 20:51	1	SIG10024.D	CLP-1 0.53(mm)
STD02 240-174339/24 IC		03/30/2015 20:51	1	SIG10024.D	CLP-2 0.53(mm)
STD05 240-174339/25 IC		03/30/2015 21:07	1	SIG10025.D	CLP-1 0.53(mm)
STD05 240-174339/25 IC		03/30/2015 21:07	1	SIG10025.D	CLP-2 0.53(mm)
STD1 240-174339/26 IC		03/30/2015 21:22	1	SIG10026.D	CLP-1 0.53(mm)
STD1 240-174339/26 IC		03/30/2015 21:22	1	SIG10026.D	CLP-2 0.53(mm)
STD2 240-174339/27 IC		03/30/2015 21:38	1	SIG10027.D	CLP-1 0.53(mm)
STD2 240-174339/27 IC		03/30/2015 21:38	1	SIG10027.D	CLP-2 0.53(mm)
STD005 240-174339/28 IC		03/30/2015 21:53	1	SIG10028.D	CLP-1 0.53(mm)
STD005 240-174339/28 IC		03/30/2015 21:53	1	SIG10028.D	CLP-2 0.53(mm)
STD01 240-174339/29 IC		03/30/2015 22:09	1	SIG10029.D	CLP-1 0.53(mm)
STD01 240-174339/29 IC		03/30/2015 22:09	1	SIG10029.D	CLP-2 0.53(mm)
STD02 240-174339/30 IC		03/30/2015 22:24	1	SIG10030.D	CLP-1 0.53(mm)
STD02 240-174339/30 IC		03/30/2015 22:24	1	SIG10030.D	CLP-2 0.53(mm)
STD05 240-174339/31 ICRT		03/30/2015 22:40	1	SIG10031.D	CLP-1 0.53(mm)
STD05 240-174339/31 ICRT		03/30/2015 22:40	1	SIG10031.D	CLP-2 0.53(mm)
STD1 240-174339/32 IC		03/30/2015 22:55	1	SIG10032.D	CLP-1 0.53(mm)
STD1 240-174339/32 IC		03/30/2015 22:55	1	SIG10032.D	CLP-2 0.53(mm)
STD2 240-174339/33 IC		03/30/2015 23:10	1	SIG10033.D	CLP-1 0.53(mm)
STD2 240-174339/33 IC		03/30/2015 23:10	1	SIG10033.D	CLP-2 0.53(mm)
ICV 240-174339/34		03/30/2015 23:26	1	SIG10034.D	CLP-1 0.53(mm)
ICV 240-174339/34		03/30/2015 23:26	1	SIG10034.D	CLP-2 0.53(mm)
ICV 240-174339/35		03/30/2015 23:41	1	SIG10035.D	CLP-1 0.53(mm)
ICV 240-174339/35		03/30/2015 23:41	1	SIG10035.D	CLP-2 0.53(mm)
ICV 240-174339/36		03/30/2015 23:57	1	SIG10036.D	CLP-1 0.53(mm)
ICV 240-174339/36		03/30/2015 23:57	1	SIG10036.D	CLP-2 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP10 Start Date: 03/30/2015 15:41

Analysis Batch Number: 174339 End Date: 03/31/2015 01:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ICV 240-174339/37		03/31/2015 00:12	1	SIG10037.D	CLP-1 0.53(mm)
ICV 240-174339/37		03/31/2015 00:12	1	SIG10037.D	CLP-2 0.53(mm)
ICV 240-174339/38		03/31/2015 00:28	1	SIG10038.D	CLP-1 0.53(mm)
ICV 240-174339/38		03/31/2015 00:28	1	SIG10038.D	CLP-2 0.53(mm)
ICV 240-174339/39		03/31/2015 00:43	1	SIG10039.D	CLP-1 0.53(mm)
ICV 240-174339/39		03/31/2015 00:43	1	SIG10039.D	CLP-2 0.53(mm)
ICV 240-174339/40		03/31/2015 00:59	1		CLP-1 0.53(mm)
ICV 240-174339/40		03/31/2015 00:59	1		CLP-2 0.53(mm)
ICV 240-174339/41		03/31/2015 01:14	1		CLP-1 0.53(mm)
ICV 240-174339/41		03/31/2015 01:14	1		CLP-2 0.53(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: A2HP10 Start Date: 04/16/2015 12:14

Analysis Batch Number: 176718 End Date: 04/16/2015 17:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-176718/3 CCVRT		04/16/2015 12:14	1	SIG10010.D	CLP-1 0.53(mm)
CCV 240-176718/3 CCVRT		04/16/2015 12:14	1	SIG10010.D	CLP-2 0.53(mm)
MRL 240-176718/4		04/16/2015 12:29	1	SIG10011.D	CLP-1 0.53(mm)
MRL 240-176718/4		04/16/2015 12:29	1	SIG10011.D	CLP-2 0.53(mm)
ZZZZZ		04/16/2015 12:45	1		CLP-1 0.53(mm)
ZZZZZ		04/16/2015 12:45	1		CLP-2 0.53(mm)
ZZZZZ		04/16/2015 13:00	1		CLP-1 0.53(mm)
ZZZZZ		04/16/2015 13:00	1		CLP-2 0.53(mm)
ZZZZZ		04/16/2015 13:16	1		CLP-1 0.53(mm)
ZZZZZ		04/16/2015 13:16	1		CLP-2 0.53(mm)
240-49171-6	079SB-0352M-0001-SO	04/16/2015 13:31	1	SIG10015.D	CLP-1 0.53(mm)
240-49171-6	079SB-0352M-0001-SO	04/16/2015 13:31	1	SIG10015.D	CLP-2 0.53(mm)
240-49171-8	079SB-0353M-0001-SO	04/16/2015 13:47	1	SIG10016.D	CLP-1 0.53(mm)
240-49171-8	079SB-0353M-0001-SO	04/16/2015 13:47	1	SIG10016.D	CLP-2 0.53(mm)
240-49171-10	079SB-0354M-0001-SO	04/16/2015 14:02	1	SIG10017.D	CLP-1 0.53(mm)
240-49171-10	079SB-0354M-0001-SO	04/16/2015 14:02	1	SIG10017.D	CLP-2 0.53(mm)
MB 240-176299/12-A		04/16/2015 14:18	1	SIG10018.D	CLP-1 0.53(mm)
MB 240-176299/12-A		04/16/2015 14:18	1	SIG10018.D	CLP-2 0.53(mm)
LCS 240-176299/13-A		04/16/2015 14:33	1	SIG10019.D	CLP-1 0.53(mm)
LCS 240-176299/13-A		04/16/2015 14:33	1	SIG10019.D	CLP-2 0.53(mm)
MRL 240-176718/13		04/16/2015 14:48	1	SIG10020.D	CLP-1 0.53(mm)
MRL 240-176718/13		04/16/2015 14:48	1	SIG10020.D	CLP-2 0.53(mm)
CCV 240-176718/14		04/16/2015 15:04	1	SIG10021.D	CLP-1 0.53(mm)
CCV 240-176718/14		04/16/2015 15:04	1	SIG10021.D	CLP-2 0.53(mm)
ZZZZZ		04/16/2015 16:21	1		CLP-1 0.53(mm)
ZZZZZ		04/16/2015 16:21	1		CLP-2 0.53(mm)
ZZZZZ		04/16/2015 16:37	1		CLP-1 0.53(mm)
ZZZZZ		04/16/2015 16:37	1		CLP-2 0.53(mm)
ZZZZZ		04/16/2015 16:52	1		CLP-1 0.53(mm)
ZZZZZ		04/16/2015 16:52	1		CLP-2 0.53(mm)
CCV 240-176718/22		04/16/2015 17:08	1		CLP-1 0.53(mm)
CCV 240-176718/22		04/16/2015 17:08	1		CLP-2 0.53(mm)

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176299 Batch Start Date: 04/14/15 11:10 Batch Analyst: Earle, Steve

Batch Method: 3540C Batch End Date: 04/15/15 03:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	EX10PPMSPK 00016	EX2/.2SURRW 00053	AnalysisComment	
240-49171-A-6-A	079SB-0352M-0001 -SO	3540C, 8082	T	29.52 g	10 mL		1 mL	assoc w/176300	
240-49171-A-8-A	079SB-0353M-0001 -SO	3540C, 8082	T	30.26 g	10 mL		1 mL	assoc w/176300	
240-49171-A-10-A	079SB-0354M-0001 -SO	3540C, 8082	T	29.64 g	10 mL		1 mL	assoc w/176300	
MB 240-176299/12		3540C, 8082		30 g	10 mL		1 mL	assoc w/176300	
LCS 240-176299/13		3540C, 8082		30 g	10 mL	1 mL	1 mL		

Batch Notes	
Acid used for Clean Up Reagent	1826627
Balance ID	1339912
Na2SO4 Lot Number	1942694
Prep Solvent Lot #	1928228

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8330
Nitroguanidine

Nitroguanidine (HPLC) by Method 8330

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 320-0021236-006-1.d

Lab ID: LCS 320-71482/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Nitroguanidine	1.00	0.815	82	72-121	M

Column to be used to flag recovery and RPD values

FORM III 8330 Modified

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab File ID: 320-0021236-005-1.d Lab Sample ID: MB 320-71482/1-A

Matrix: Solid Date Extracted: 04/18/2015 14:00

Instrument ID: PDA1 Date Analyzed: 04/22/2015 15:40

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-71482/2-A	320-0021236-006-1.d	04/22/2015 15:57
079SB-0352M-0001-SO	240-49171-6	320-0021236-010-1.d	04/22/2015 17:08
079SB-0353M-0001-SO	240-49171-8	320-0021236-011-1.d	04/22/2015 17:26
079SB-0354M-0001-SO	240-49171-10	320-0021236-012-1.d	04/22/2015 17:44

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO Lab Sample ID: 240-49171-6

Matrix: Solid Lab File ID: 320-0021236-010-1.d

Analysis Method: 8330 Modified Date Collected: 04/08/2015 10:27

Extraction Method: Sieve/Ultrasoni Date Extracted: 04/18/2015 14:00

Sample wt/vol: 2.02(g) Date Analyzed: 04/22/2015 17:08

Con. Extract Vol.: 10.00(mL) Dilution Factor: 1

Injection Volume: 50(uL) GC Column: Luna NH2 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 71845 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
556-88-7	Nitroguanidine	0.040	U	0.25	0.040	0.020

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-010-1.d				
Lims ID:	240-49171-C-6-B	Lab Sample ID:	320-49171-6		
Client ID:	079SB-0352M-0001-SO				
Sample Type:	Client				
Inject. Date:	22-Apr-2015 17:08:00	ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	50.0 ul	Dil. Factor:	1.0000		
Sample Info:	320-0021236-010 Analysis				
Misc. Info.:	none SAMPLE				
Operator ID:	YPH	Instrument ID:	PDA1		
Method:	\\SACChrom\ChromData\PDA1\20150422-21236.b\NGu Primary.m				
Limit Group:	LC 8330 Ngu ICAL				
Last Update:	23-Apr-2015 09:06:59	Calib Date:	10-Apr-2015 19:22:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d				
Column 1 :	Luna 5u NH2 100A (4.60 mm)		Det: UV-VIS		
Process Host:	XAWRK026				
First Level Reviewer: huangyun		Date:	23-Apr-2015 09:59:48		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags

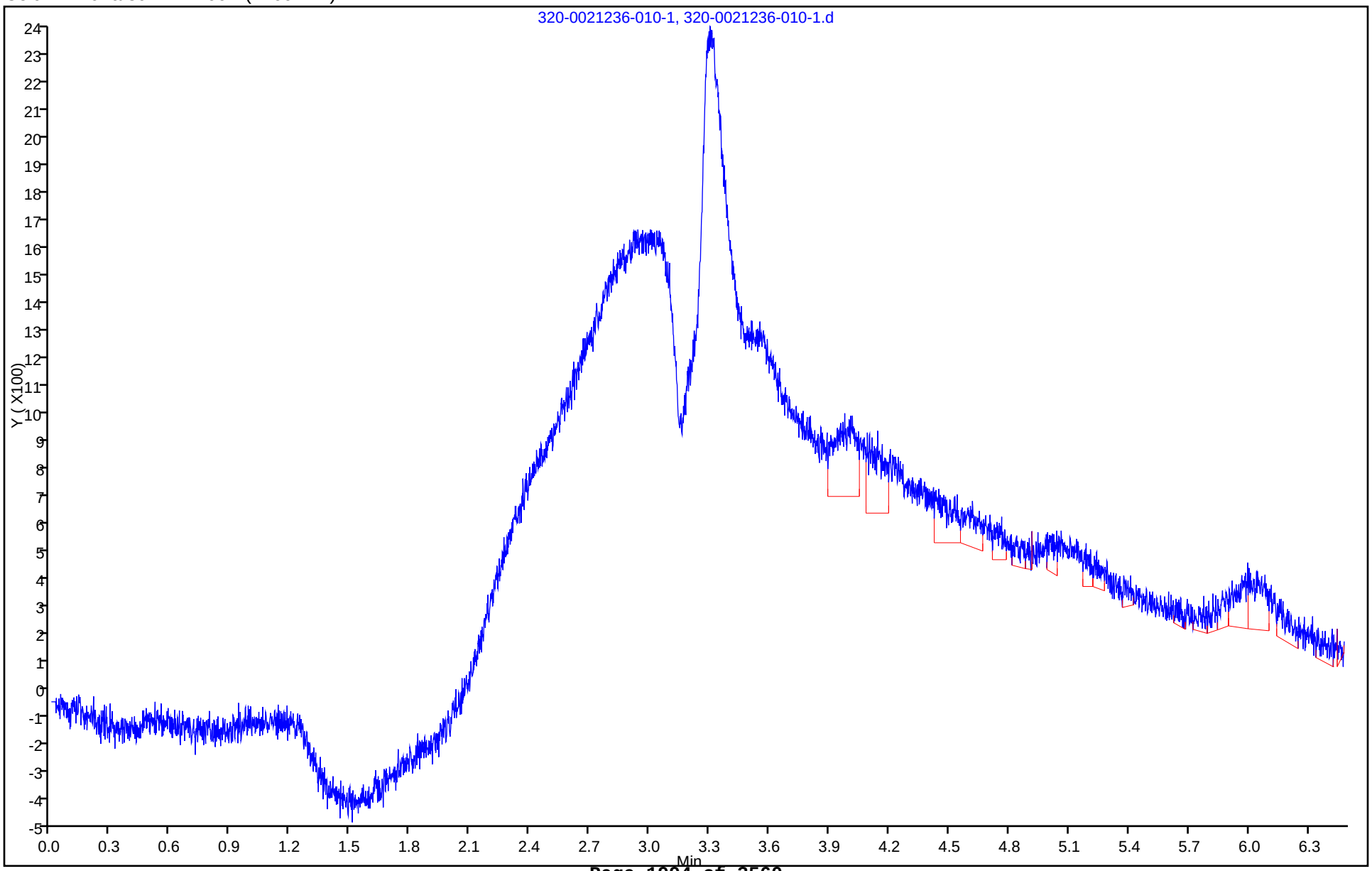
Report Date: 23-Apr-2015 09:59:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-010-1.d

Injection Date:	22-Apr-2015 17:08:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	240-49171-C-6-B	Lab Sample ID:	320-49171-6	Worklist Smp#:	10
Client ID:	079SB-0352M-0001-SO				
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO Lab Sample ID: 240-49171-8

Matrix: Solid Lab File ID: 320-0021236-011-1.d

Analysis Method: 8330 Modified Date Collected: 04/08/2015 09:57

Extraction Method: Sieve/Ultrasoni Date Extracted: 04/18/2015 14:00

Sample wt/vol: 2.04(g) Date Analyzed: 04/22/2015 17:26

Con. Extract Vol.: 10.00(mL) Dilution Factor: 1

Injection Volume: 50(uL) GC Column: Luna NH2 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 71845 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
556-88-7	Nitroguanidine	0.039	U	0.25	0.039	0.020

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-011-1.d				
Lims ID:	240-49171-C-8-B	Lab Sample ID:	320-49171-8		
Client ID:	079SB-0353M-0001-SO				
Sample Type:	Client				
Inject. Date:	22-Apr-2015 17:26:00	ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	50.0 ul	Dil. Factor:	1.0000		
Sample Info:	320-0021236-011 Analysis				
Misc. Info.:	none SAMPLE				
Operator ID:	YPH	Instrument ID:	PDA1		
Method:	\\SACChrom\ChromData\PDA1\20150422-21236.b\NGu Primary.m				
Limit Group:	LC 8330 Ngu ICAL				
Last Update:	23-Apr-2015 09:06:59	Calib Date:	10-Apr-2015 19:22:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d				
Column 1 :	Luna 5u NH2 100A (4.60 mm)		Det: UV-VIS		
Process Host:	XAWRK026				
First Level Reviewer: huangyun		Date:	23-Apr-2015 10:00:03		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags

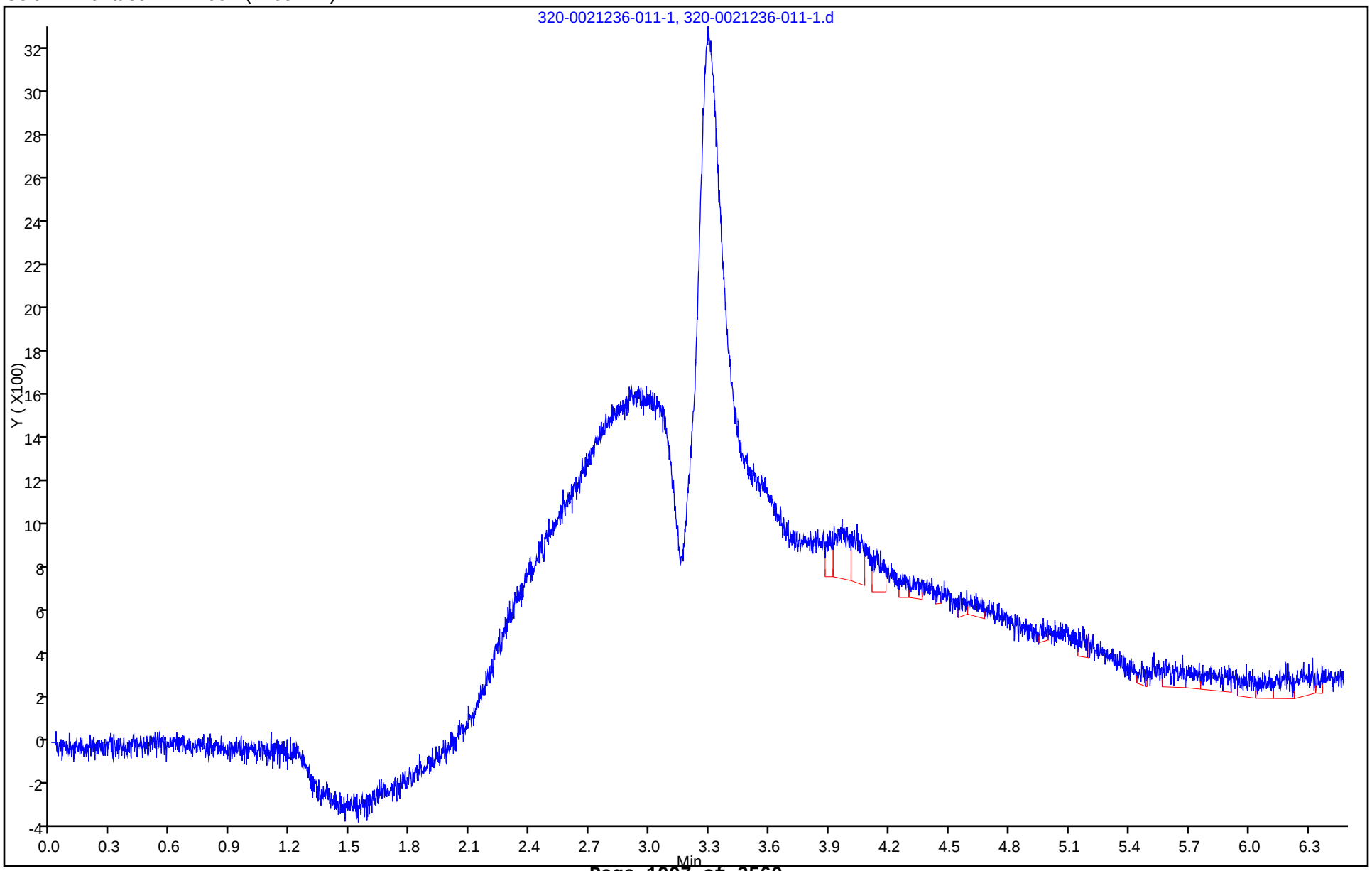
Report Date: 23-Apr-2015 10:00:03 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-011-1.d

Injection Date:	22-Apr-2015 17:26:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	240-49171-C-8-B	Lab Sample ID:	320-49171-8	Worklist Smp#:	11
Client ID:	079SB-0353M-0001-SO				
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0354M-0001-SO Lab Sample ID: 240-49171-10

Matrix: Solid Lab File ID: 320-0021236-012-1.d

Analysis Method: 8330 Modified Date Collected: 04/08/2015 11:30

Extraction Method: Sieve/Ultrasoni Date Extracted: 04/18/2015 14:00

Sample wt/vol: 2.02(g) Date Analyzed: 04/22/2015 17:44

Con. Extract Vol.: 10.00(mL) Dilution Factor: 1

Injection Volume: 50(uL) GC Column: Luna NH2 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 71845 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
556-88-7	Nitroguanidine	0.040	U	0.25	0.040	0.020

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-012-1.d				
Lims ID:	240-49171-C-10-B	Lab Sample ID:	320-49171-10		
Client ID:	079SB-0354M-0001-SO				
Sample Type:	Client				
Inject. Date:	22-Apr-2015 17:44:00	ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	50.0 ul	Dil. Factor:	1.0000		
Sample Info:	320-0021236-012 Analysis				
Misc. Info.:	none SAMPLE				
Operator ID:	YPH	Instrument ID:	PDA1		
Method:	\\SACChrom\ChromData\PDA1\20150422-21236.b\NGu Primary.m				
Limit Group:	LC 8330 Ngu ICAL				
Last Update:	23-Apr-2015 10:06:50	Calib Date:	10-Apr-2015 19:22:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d				
Column 1 :	Luna 5u NH2 100A (4.60 mm)		Det: UV-VIS		
Process Host:	XAWRK026				
First Level Reviewer: huangyun		Date:	23-Apr-2015 10:10:18		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags

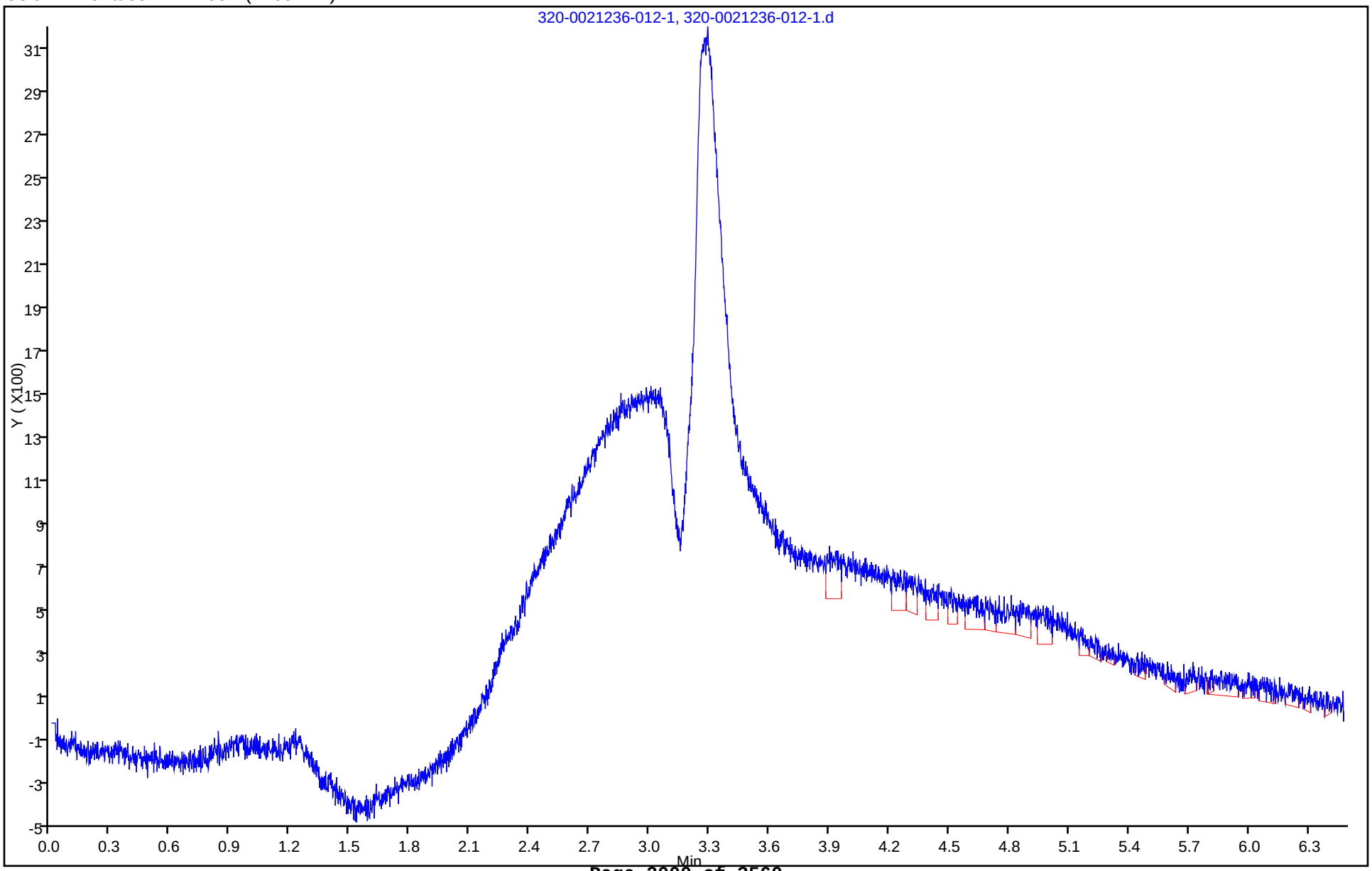
Report Date: 23-Apr-2015 10:10:18 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-012-1.d

Injection Date:	22-Apr-2015 17:44:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	240-49171-C-10-B	Lab Sample ID:	320-49171-10	Worklist Smp#:	12
Client ID:	079SB-0354M-0001-SO				
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 70867

SDG No.:

Instrument ID: PDA1 GC Column: Luna NH2 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2015 17:35 Calibration End Date: 04/10/2015 19:22 Calibration ID: 12871

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD02 320-70867/43	STD02-1.d
Level 2	STD03 320-70867/5	320-0020944-005-1.d
Level 3	STD04 320-70867/6	320-0020944-006-1.d
Level 4	STD05 320-70867/7	320-0020944-007-1.d
Level 5	STD06 320-70867/8	320-0020944-008-1.d
Level 6	STD07 320-70867/9	320-0020944-009-1.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Nitroguanidine	4.237	4.250	4.237	4.213	4.233	4.240					3.963 - 4.463	4.235

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 70867

SDG No.:

Instrument ID: PDA1 GC Column: Luna NH2 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2015 17:35 Calibration End Date: 04/10/2015 19:22 Calibration ID: 12871

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD02 320-70867/43	STD02-1.d
Level 2	STD03 320-70867/5	320-0020944-005-1.d
Level 3	STD04 320-70867/6	320-0020944-006-1.d
Level 4	STD05 320-70867/7	320-0020944-007-1.d
Level 5	STD06 320-70867/8	320-0020944-008-1.d
Level 6	STD07 320-70867/9	320-0020944-009-1.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Nitroguanidine	27.200 23.976	25.640 22.980	25.800	24.460	Ave		25.0093333				6.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 70867

SDG No.:

Instrument ID: PDA1 GC Column: Luna NH2 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2015 17:35 Calibration End Date: 04/10/2015 19:22 Calibration ID: 12871

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD02 320-70867/43	STD02-1.d
Level 2	STD03 320-70867/5	320-0020944-005-1.d
Level 3	STD04 320-70867/6	320-0020944-006-1.d
Level 4	STD05 320-70867/7	320-0020944-007-1.d
Level 5	STD06 320-70867/8	320-0020944-008-1.d
Level 6	STD07 320-70867/9	320-0020944-009-1.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Nitroguanidine	Ave	544 22980	1282	2580	4892	11988	20.0 1000	50.0	100	200	500

Curve Type Legend:
Ave = Average by Height

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-005-1.d			
Lims ID:	std03			
Client ID:				
Sample Type:	IC	Calib Level:	3	
Inject. Date:	10-Apr-2015 17:35:00	ALS Bottle#:	0	Worklist Smp#: 5
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	
Sample Info:	320-0020944-005 Analysis			
Misc. Info.:	none STD			
Operator ID:	YPH	Instrument ID:	PDA1	
Sublist:	chrom-NGu Primary*sub1			
Method:	\\SACChrom\ChromData\PDA1\20150410-20944.b\NGu Primary.m			
Limit Group:	LC 8330 Ngu ICAL			
Last Update:	13-Apr-2015 10:47:34	Calib Date:	10-Apr-2015 19:22:00	
Integrator:	Falcon			
Quant Method:	External Standard	Quant By:	Initial Calibration	
Last ICal File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d			
Column 1 :	Luna 5u NH2 100A (4.60 mm)		Det: UV-VIS	
Process Host:	XAWRK053			

First Level Reviewer: huangyun Date: 13-Apr-2015 10:19:02

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						M
4.250	4.213	0.037	1282H	50.0	51.3	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HPNQL3_00007 Amount Added: 1.00 Units: mL

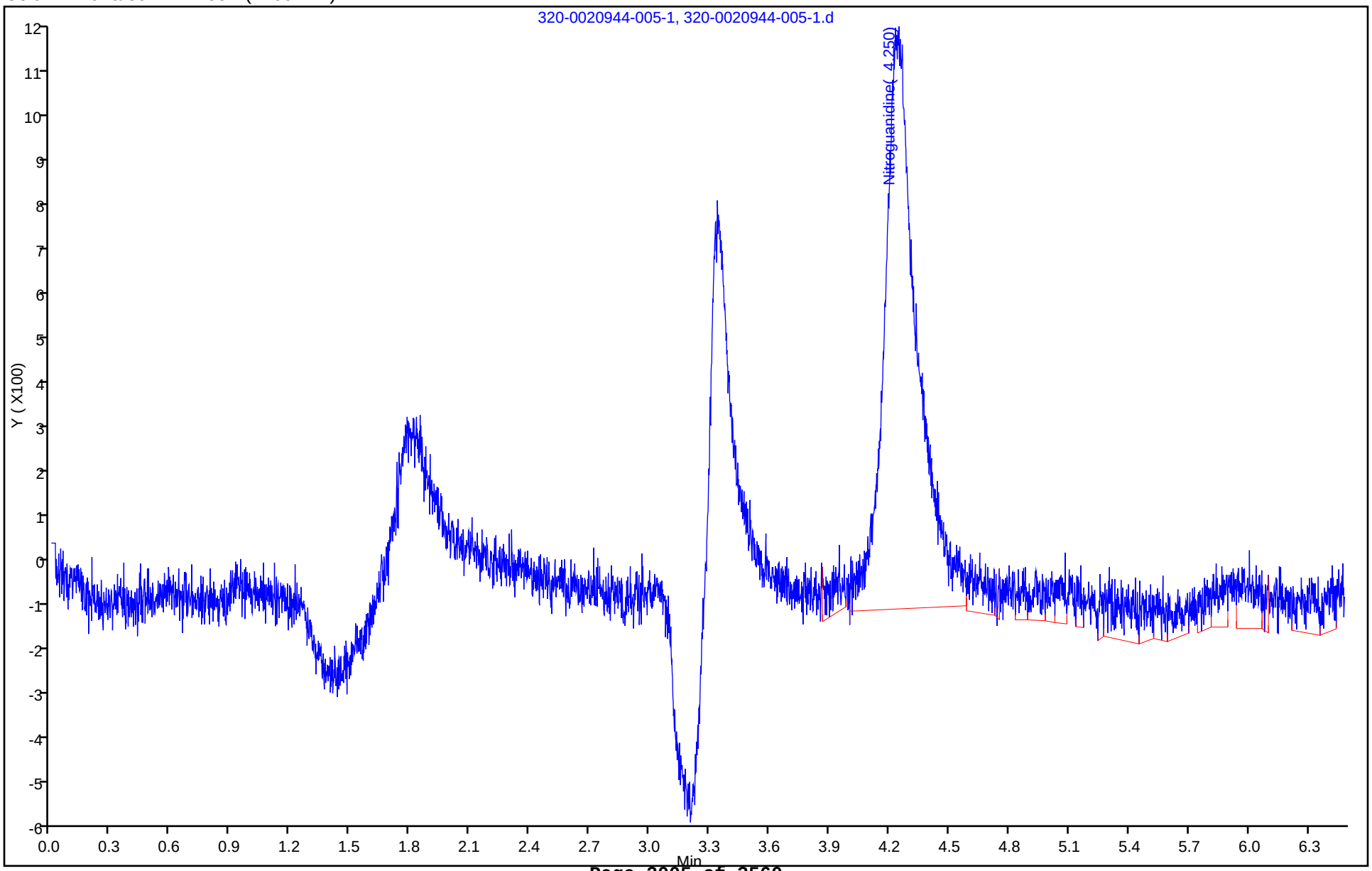
Report Date: 13-Apr-2015 10:47:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-005-1.d

Injection Date:	10-Apr-2015 17:35:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	std03			Worklist Smp#:	5
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



Manual Integration/User Assign Peak Report

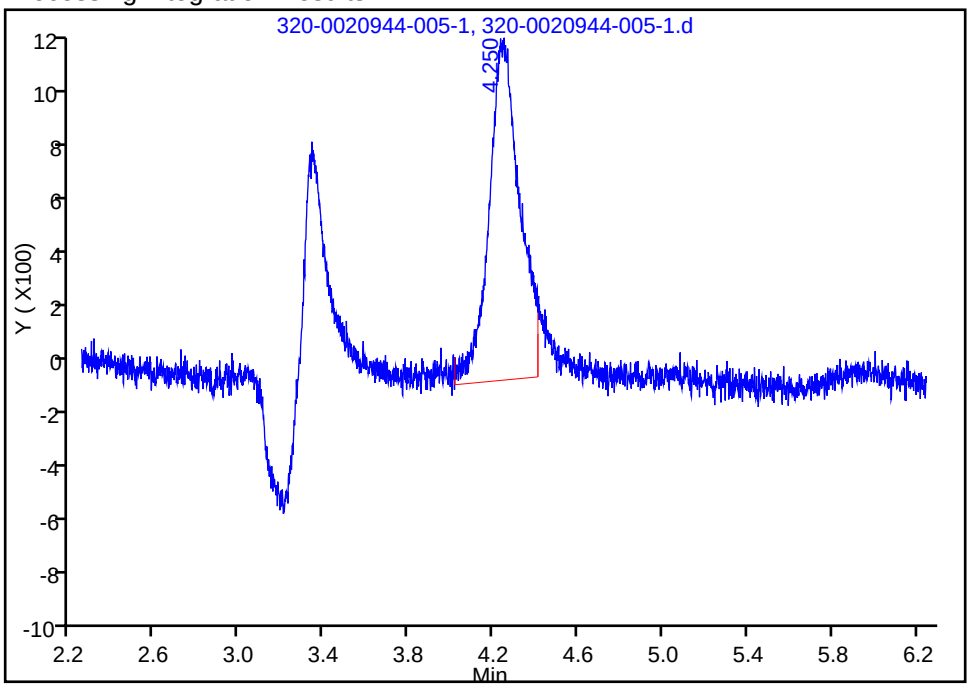
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-005-1.d
Injection Date: 10-Apr-2015 17:35:00 Instrument ID: PDA1
Lims ID: std03
Client ID:
Operator ID: YPH ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 50.0 ul Dil. Factor: 1.0000
Method: NGu Primary Limit Group: LC 8330 Ngu ICAL
Column: Luna 5u NH2 100A (4.60 mm) Detector UV-VIS

1 Nitroguanidine, CAS: 556-88-7

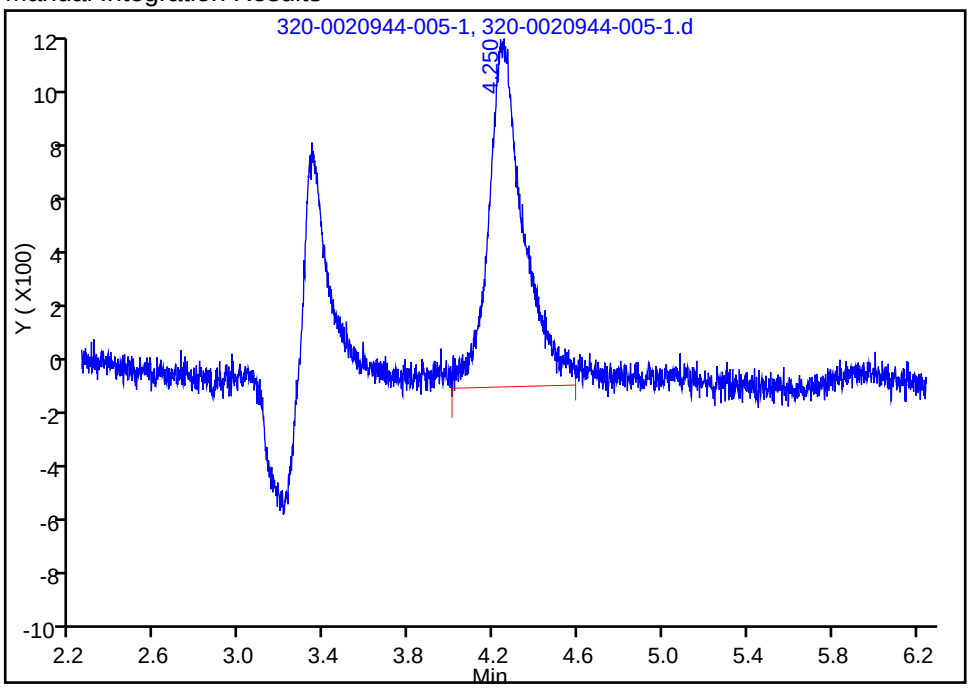
Processing Integration Results

RT: 4.25
Height: 1260
Amount: 50.529355
Amount Units: ng/ml



Manual Integration Results

RT: 4.25
Height: 1282
Amount: 51.260863
Amount Units: ng/ml



Reviewer: huangyun, 13-Apr-2015 10:21:20
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-006-1.d
Lims ID: std04
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 10-Apr-2015 17:53:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 50.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020944-006 Analysis
Misc. Info.: none SAMPLE
Operator ID: YPH Instrument ID: PDA1
Sublist: chrom-NGu Primary*sub1

Method: \\SACChrom\ChromData\PDA1\20150410-20944.b\NGu Primary.m
Limit Group: LC 8330 Ngu ICAL
Last Update: 13-Apr-2015 10:47:34 Calib Date: 10-Apr-2015 19:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d

Column 1 : Luna 5u NH2 100A (4.60 mm) Det: UV-VIS
Process Host: XAWRK053

First Level Reviewer: huangyun Date: 13-Apr-2015 10:31:30

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						
4.237	4.213	0.024	2580H	100.0	103.2	

Reagents:

HPNQL4_00009 Amount Added: 1.00 Units: mL

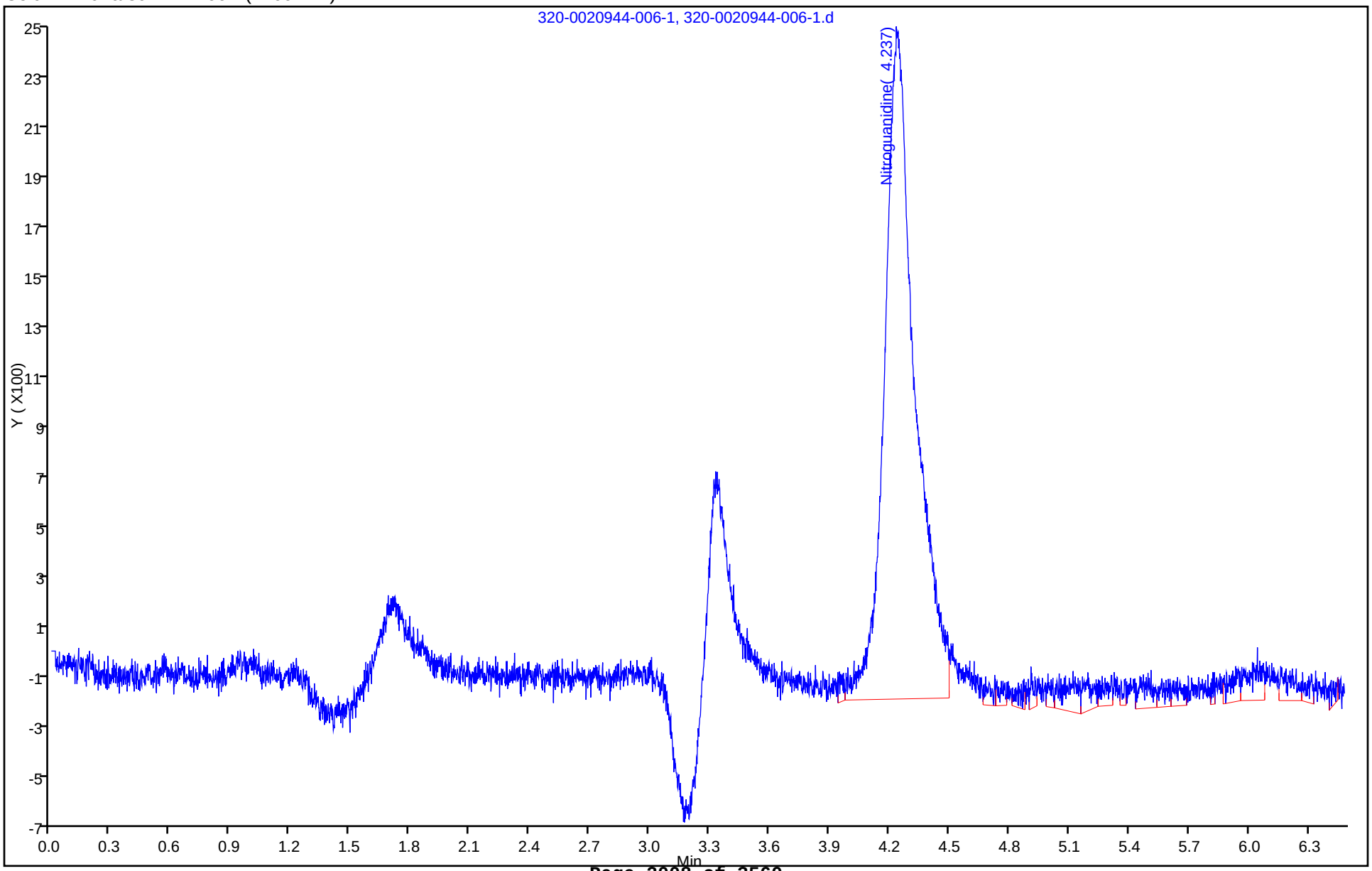
Report Date: 13-Apr-2015 10:47:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-006-1.d

Injection Date:	10-Apr-2015 17:53:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	std04			Worklist Smp#:	6
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-007-1.d
Lims ID: std05
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Apr-2015 18:11:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 50.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020944-007 Analysis
Misc. Info.: none SAMPLE
Operator ID: YPH Instrument ID: PDA1
Sublist: chrom-NGu Primary*sub1

Method: \\SACChrom\ChromData\PDA1\20150410-20944.b\NGu Primary.m
Limit Group: LC 8330 Ngu ICAL
Last Update: 13-Apr-2015 10:47:35 Calib Date: 10-Apr-2015 19:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d

Column 1 : Luna 5u NH2 100A (4.60 mm) Det: UV-VIS
Process Host: XAWRK053

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						
4.213	4.213	0.000	4892H	200.0	195.6	

Reagents:

HPNQL5_00008 Amount Added: 1.00 Units: mL

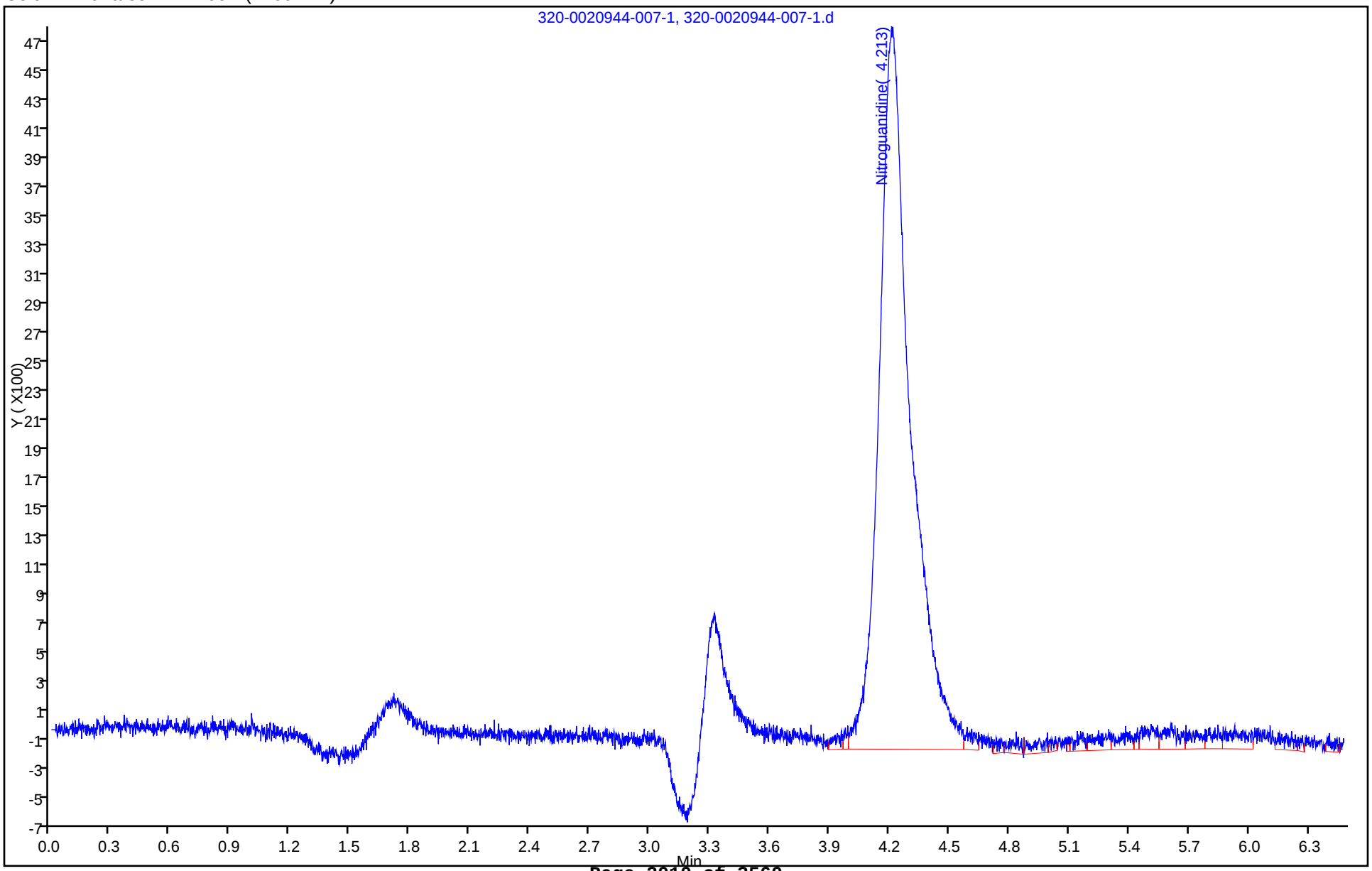
Report Date: 13-Apr-2015 10:47:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-007-1.d

Injection Date:	10-Apr-2015 18:11:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	std05			Worklist Smp#:	7
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-008-1.d
Lims ID: std06
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Apr-2015 18:29:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 50.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020944-008 Analysis
Misc. Info.: none SAMPLE
Operator ID: YPH Instrument ID: PDA1
Sublist: chrom-NGu Primary*sub1

Method: \\SACChrom\ChromData\PDA1\20150410-20944.b\NGu Primary.m
Limit Group: LC 8330 Ngu ICAL
Last Update: 13-Apr-2015 10:47:36 Calib Date: 10-Apr-2015 19:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d

Column 1 : Luna 5u NH2 100A (4.60 mm) Det: UV-VIS
Process Host: XAWRK053

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						
4.233	4.213	0.020	11988H	500.0	479.3	

Reagents:

HPNQL6_00007 Amount Added: 1.00 Units: mL

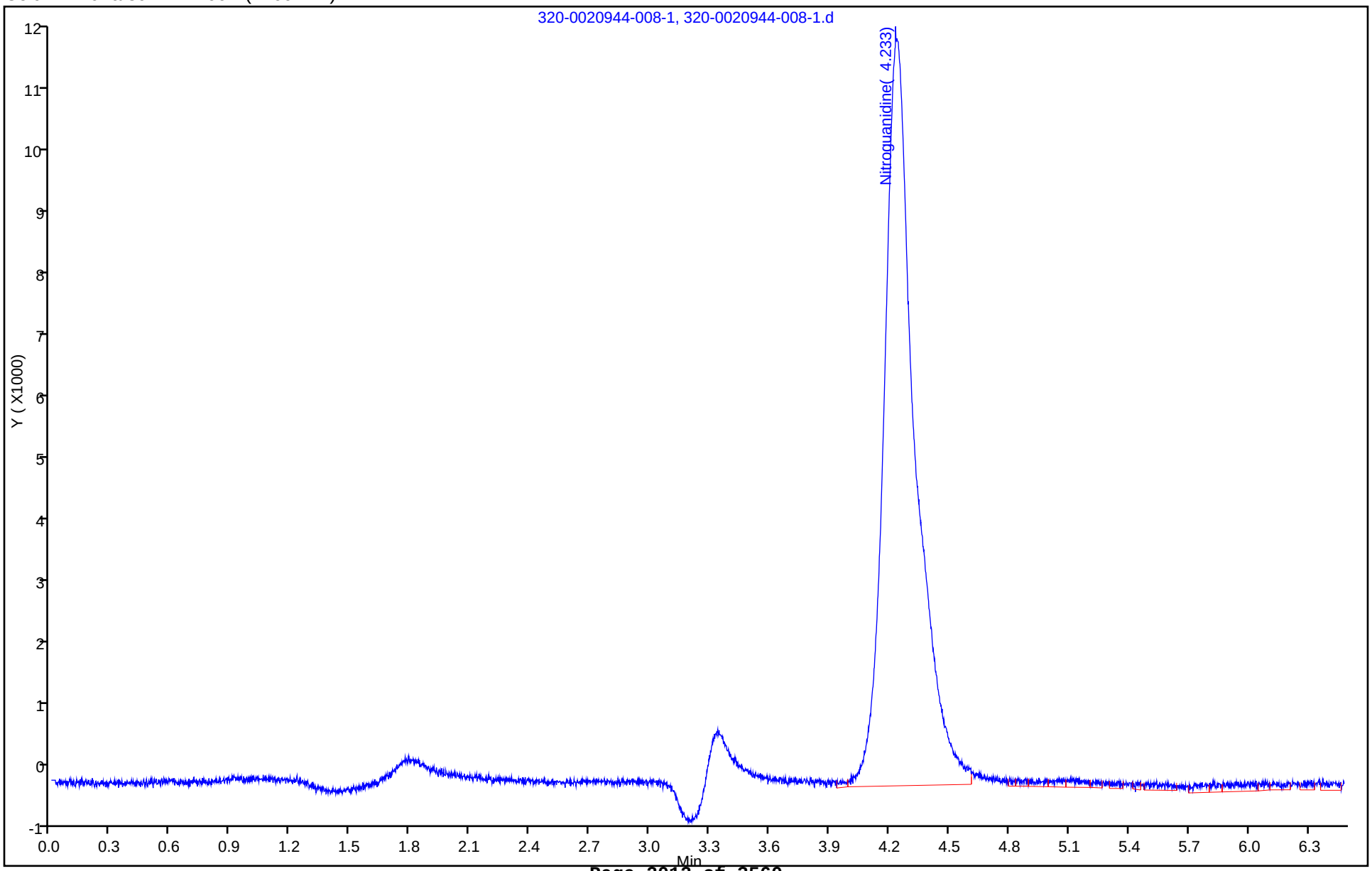
Report Date: 13-Apr-2015 10:47:36 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-008-1.d

Injection Date:	10-Apr-2015 18:29:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	std06			Worklist Smp#:	8
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-009-1.d
Lims ID: std07
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 10-Apr-2015 18:46:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 50.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020944-009 Analysis
Misc. Info.: none SAMPLE
Operator ID: YPH Instrument ID: PDA1
Sublist: chrom-NGu Primary*sub1

Method: \\SACChrom\ChromData\PDA1\20150410-20944.b\NGu Primary.m
Limit Group: LC 8330 Ngu ICAL
Last Update: 13-Apr-2015 10:50:11 Calib Date: 10-Apr-2015 19:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d

Column 1 : Luna 5u NH2 100A (4.60 mm) Det: UV-VIS
Process Host: XAWRK053

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						
4.240	4.213	0.027	22980H	1000.0	918.9	

Reagents:

HPNQL7_00007 Amount Added: 1.00 Units: mL

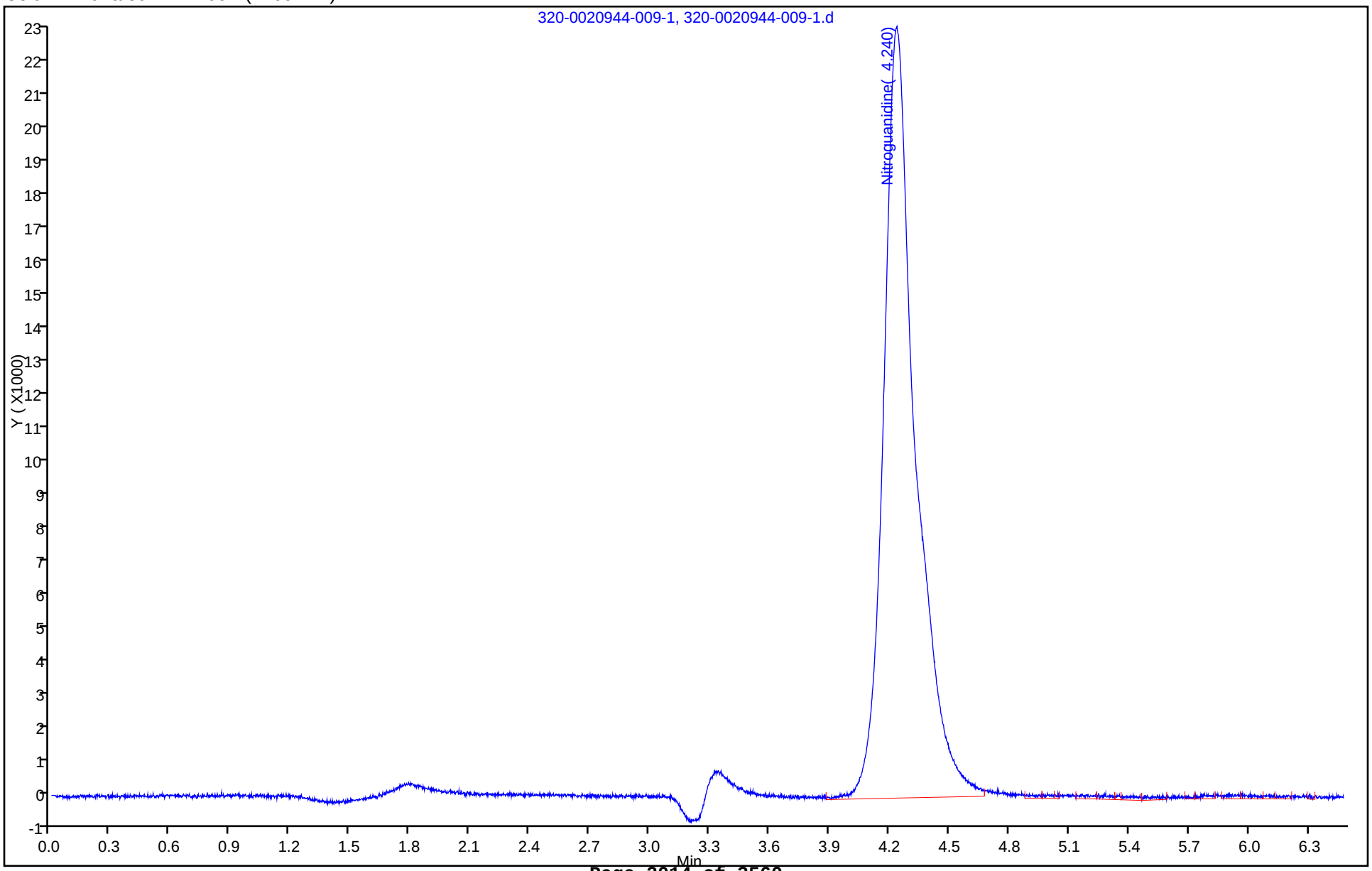
Report Date: 13-Apr-2015 10:50:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-009-1.d

Injection Date:	10-Apr-2015 18:46:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	std07			Worklist Smp#:	9
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d
Lims ID: std02
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Apr-2015 19:22:00 ALS Bottle#: 0 Worklist Smp#: 43
Injection Vol: 50.0 ul Dil. Factor: 1.0000
Sample Info: STD02 Analysis
Misc. Info.: none STD
Operator ID: YPH Instrument ID: PDA1
Sublist: chrom-NGu Primary*sub1

Method: \\SACChrom\ChromData\PDA1\20150410-20944.b\NGu Primary.m
Limit Group: LC 8330 Ngu ICAL
Last Update: 13-Apr-2015 10:47:36 Calib Date: 10-Apr-2015 19:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d

Column 1 : Luna 5u NH2 100A (4.60 mm) Det: UV-VIS
Process Host: XAWRK053

First Level Reviewer: huangyun Date: 13-Apr-2015 10:20:45

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						M
4.237	4.213	0.024	544H	20.0	21.8	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

HPNQL2_00008 Amount Added: 1.00 Units: mL

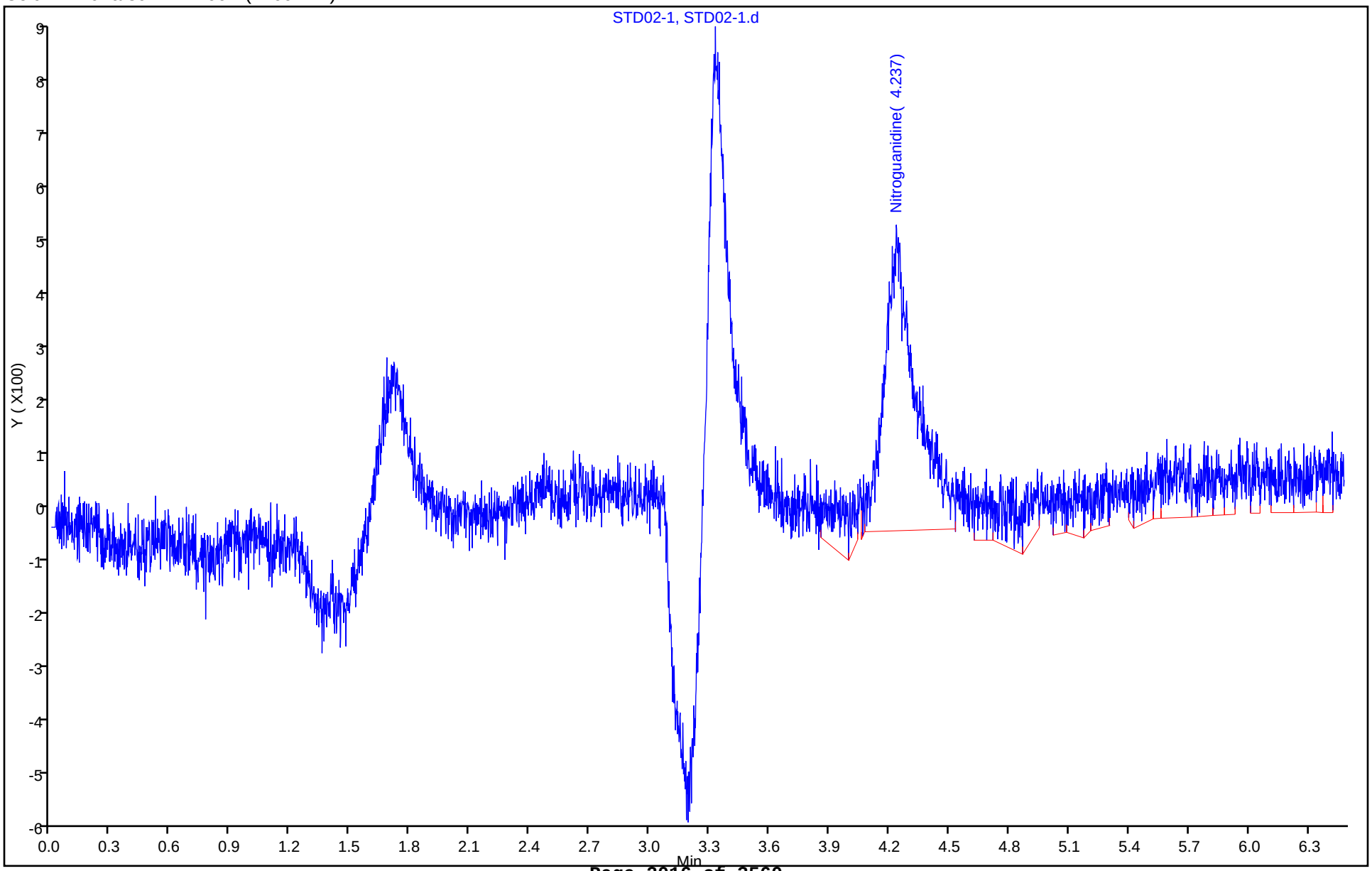
Report Date: 13-Apr-2015 10:47:36 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d

Injection Date:	10-Apr-2015 19:22:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	std02			Worklist Smp#:	43
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



Manual Integration/User Assign Peak Report

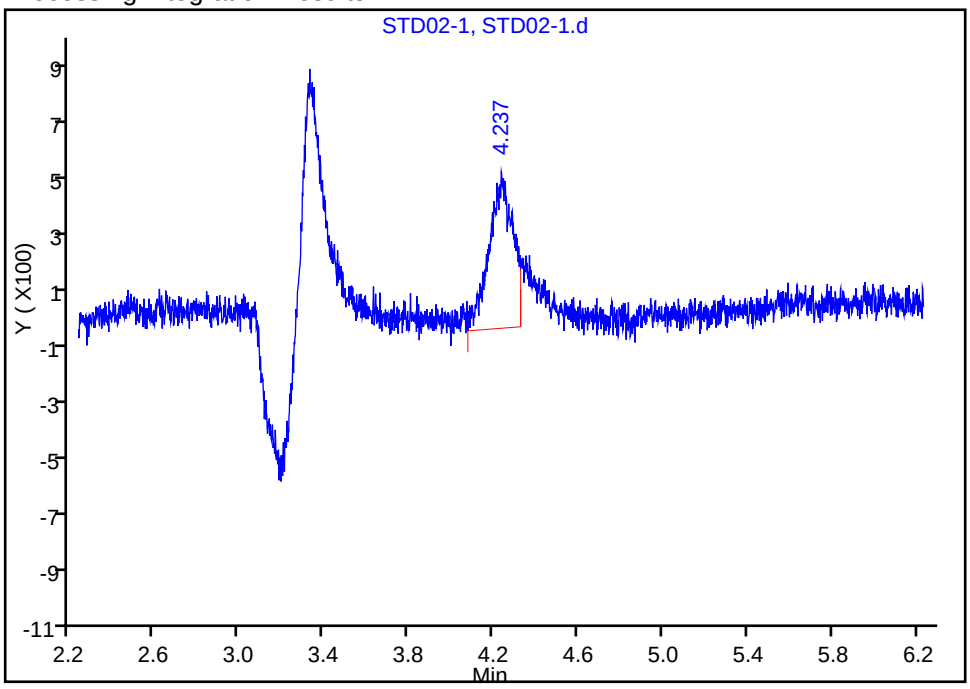
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d				
Injection Date:	10-Apr-2015 19:22:00	Instrument ID:	PDA1		
Lims ID:	std02				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	0	Worklist Smp#:	43
Injection Vol:	50.0 ul	Dil. Factor:	1.0000		
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		
Column:	Luna 5u NH2 100A (4.60 mm)	Detector	UV-VIS		

1 Nitroguanidine, CAS: 556-88-7

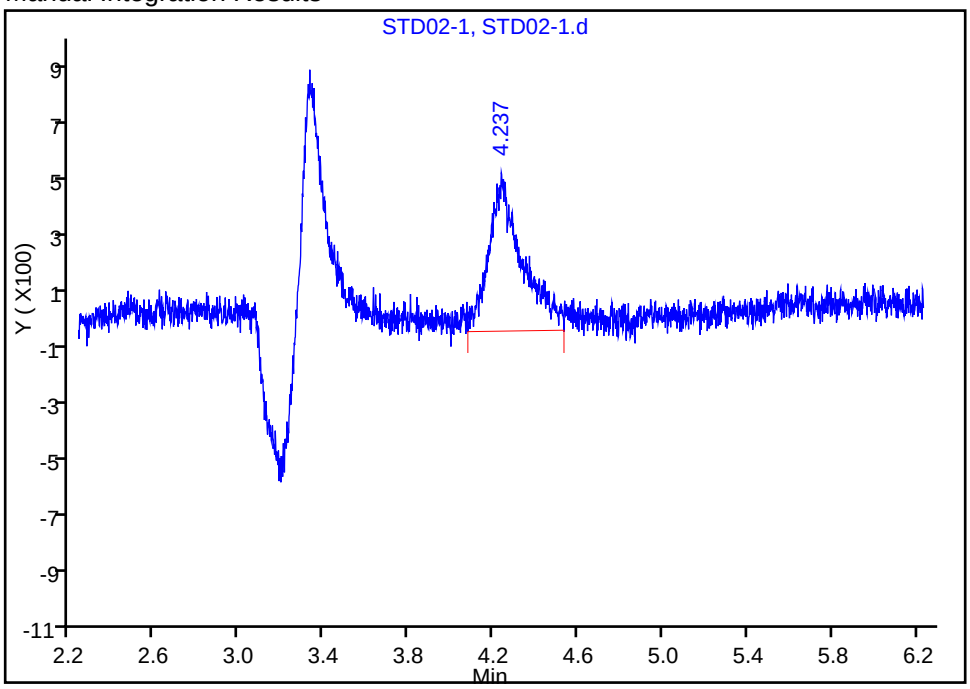
Processing Integration Results

RT: 4.24
Height: 537
Amount: 21.585626
Amount Units: ng/ml



Manual Integration Results

RT: 4.24
Height: 544
Amount: 21.751879
Amount Units: ng/ml



Reviewer: huangyun, 13-Apr-2015 10:20:45
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 320-70867/11 Calibration Date: 04/10/2015 19:40

Instrument ID: PDA1 Calib Start Date: 04/10/2015 17:35

GC Column: Luna NH2 ID: 4.60(mm) Calib End Date: 04/10/2015 19:22

Lab File ID: 320-0020944-011-1.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Nitroguanidine	Ave	25.01	21.84		437	500	-12.7	15.0

FORM VII 8330 Modified

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 320-70867/11 Calibration Date: 04/10/2015 19:40

Instrument ID: PDA1 Calib Start Date: 04/10/2015 17:35

GC Column: Luna NH2 ID: 4.60(mm) Calib End Date: 04/10/2015 19:22

Lab File ID: 320-0020944-011-1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Nitroguanidine	4.26	3.96	4.46

Form VII 8330 Modified

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-011-1.d				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	10-Apr-2015 19:40:00	ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	50.0 ul	Dil. Factor:	1.0000		
Sample Info:	320-0020944-011 Analysis				
Misc. Info.:	none SAMPLE				
Operator ID:	YPH	Instrument ID:	PDA1		
Sublist:					
Method:	\\SACChrom\ChromData\PDA1\20150410-20944.b\NGu Primary.m				
Limit Group:	LC 8330 Ngu ICAL				
Last Update:	13-Apr-2015 16:49:20	Calib Date:	10-Apr-2015 19:22:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d				
Column 1 :	Luna 5u NH2 100A (4.60 mm)		Det: UV-VIS		
Process Host:	XAWRK002				
First Level Reviewer: pagem		Date:	14-Apr-2015 13:55:44		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						
4.258	4.213	0.045	10921	H 500.0	436.7	

Reagents:

HPNQIC_00007 Amount Added: 1.00 Units: mL

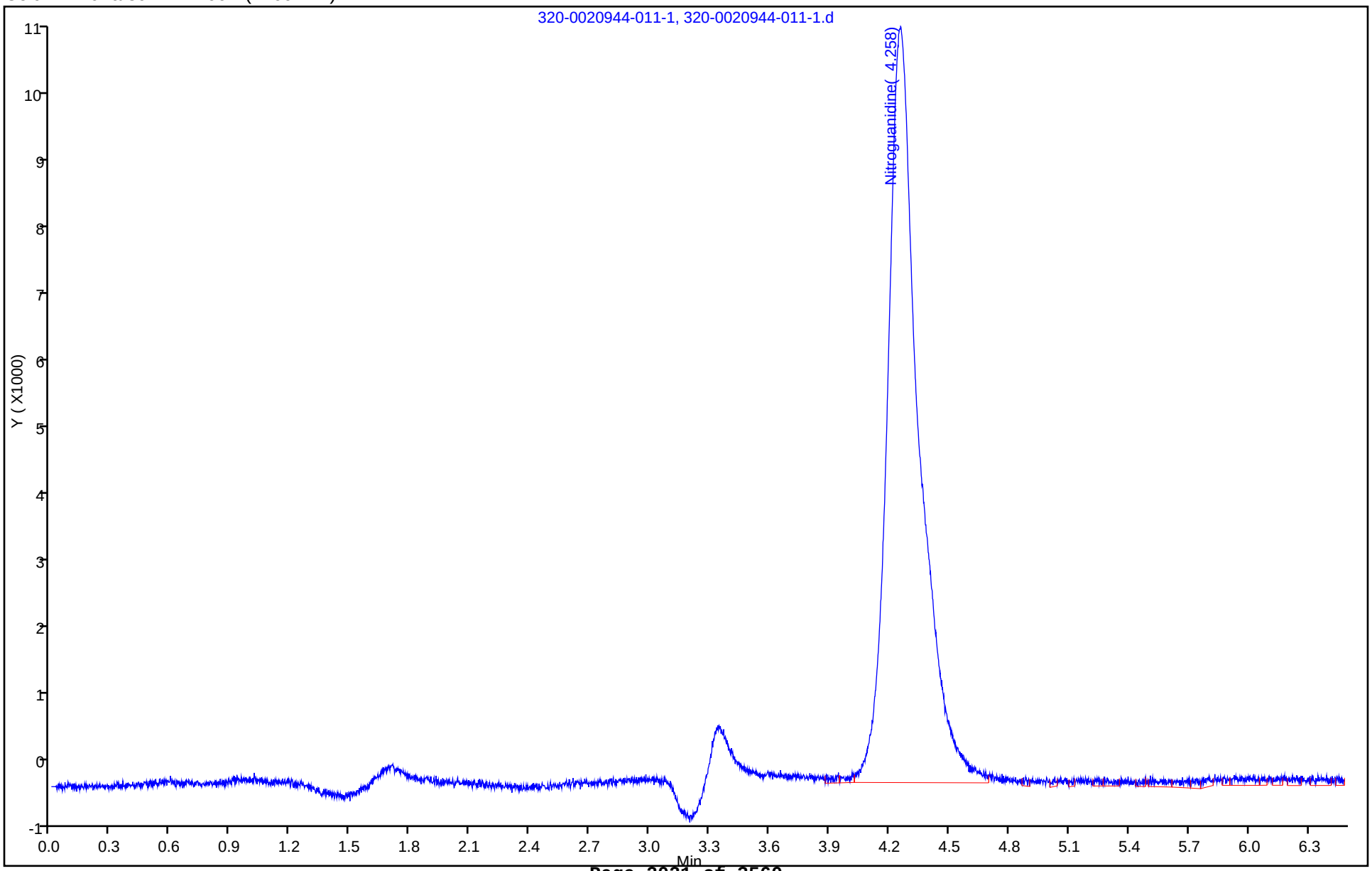
Report Date: 14-Apr-2015 13:55:44 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-011-1.d

Injection Date:	10-Apr-2015 19:40:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	ICV			Worklist Smp#:	11
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 320-70867/12 Calibration Date: 04/10/2015 19:57

Instrument ID: PDA1 Calib Start Date: 04/10/2015 17:35

GC Column: Luna NH2 ID: 4.60(mm) Calib End Date: 04/10/2015 19:22

Lab File ID: 320-0020944-012-1.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Nitroguanidine	Ave	25.01	25.25		20.2	20.0	1.0	

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 320-70867/12 Calibration Date: 04/10/2015 19:57

Instrument ID: PDA1 Calib Start Date: 04/10/2015 17:35

GC Column: Luna NH2 ID: 4.60(mm) Calib End Date: 04/10/2015 19:22

Lab File ID: 320-0020944-012-1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Nitroguanidine	4.26	3.96	4.46

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-012-1.d
Lims ID: LODV
Client ID:
Sample Type: LODV
Inject. Date: 10-Apr-2015 19:57:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 50.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020944-012 Analysis
Misc. Info.: none SAMPLE
Operator ID: YPH Instrument ID: PDA1

Method: \\SACChrom\ChromData\PDA1\20150410-20944.b\NGu Primary.m
Limit Group: LC 8330 Ngu ICAL
Last Update: 13-Apr-2015 16:49:20 Calib Date: 10-Apr-2015 19:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d

Column 1 : Luna 5u NH2 100A (4.60 mm) Det: UV-VIS
Process Host: XAWRK002

First Level Reviewer: huangyun Date: 13-Apr-2015 10:36:13

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						M
4.263	4.213	0.050	505H	20.0	20.2	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

HPNQL2_00008 Amount Added: 1.00 Units: mL

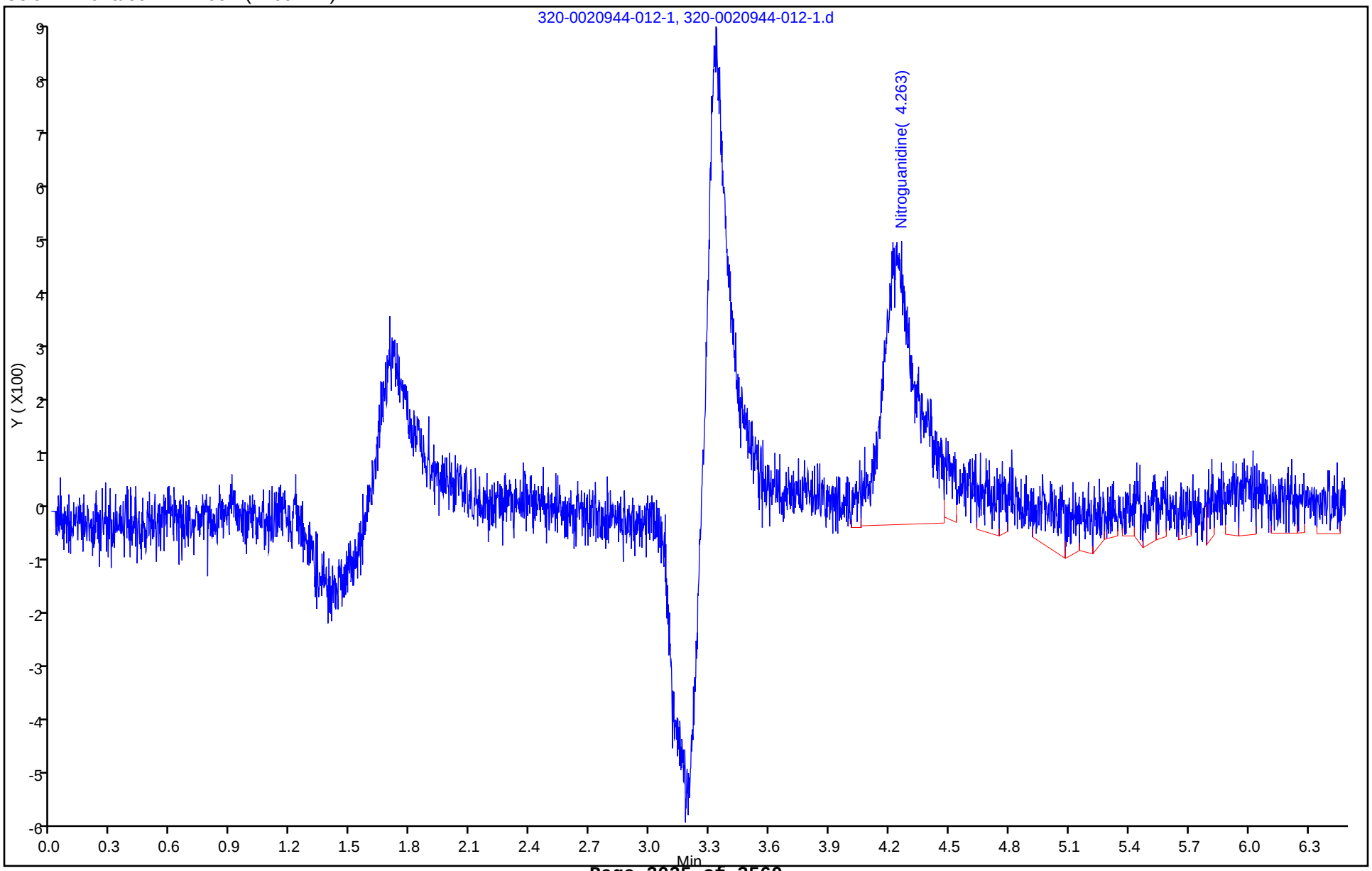
Report Date: 14-Apr-2015 13:55:56 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-012-1.d

Injection Date:	10-Apr-2015 19:57:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	LODV			Worklist Smp#:	12
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



Manual Integration/User Assign Peak Report

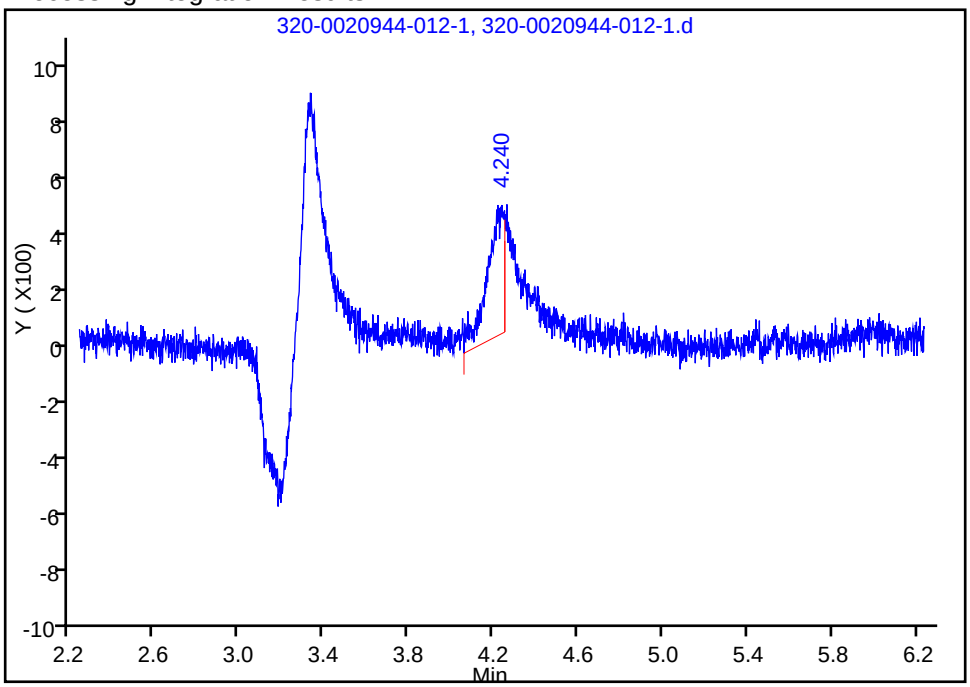
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150410-20944.b\320-0020944-012-1.d
Injection Date: 10-Apr-2015 19:57:00 Instrument ID: PDA1
Lims ID: LODV
Client ID:
Operator ID: YPH ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 50.0 ul Dil. Factor: 1.0000
Method: NGu Primary Limit Group: LC 8330 Ngu ICAL
Column: Luna 5u NH2 100A (4.60 mm) Detector UV-VIS

1 Nitroguanidine, CAS: 556-88-7

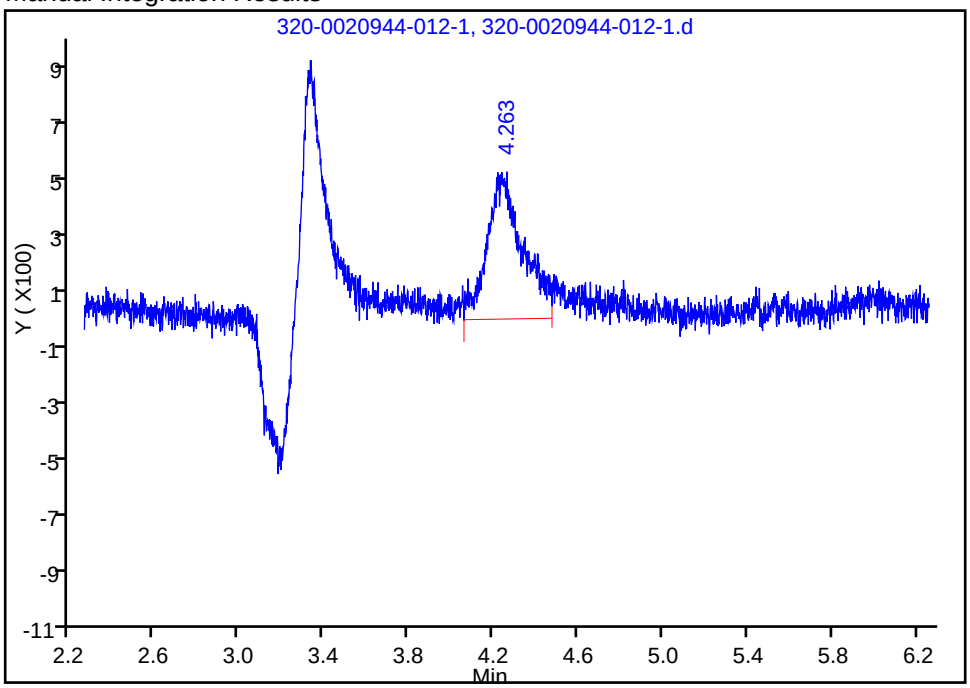
Processing Integration Results

RT: 4.24
Height: 442
Amount: 17.673402
Amount Units: ng/ml



Manual Integration Results

RT: 4.26
Height: 505
Amount: 20.192461
Amount Units: ng/ml



Reviewer: huangyun, 13-Apr-2015 10:36:13
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCVL 320-71845/3 Calibration Date: 04/22/2015 15:04

Instrument ID: PDA1 Calib Start Date: 04/10/2015 17:35

GC Column: Luna NH2 ID: 4.60(mm) Calib End Date: 04/10/2015 19:22

Lab File ID: 320-0021236-003-1.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Nitroguanidine	Ave	25.01	24.30		19.4	20.0	-2.8	30.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCVL 320-71845/3 Calibration Date: 04/22/2015 15:04

Instrument ID: PDA1 Calib Start Date: 04/10/2015 17:35

GC Column: Luna NH2 ID: 4.60(mm) Calib End Date: 04/10/2015 19:22

Lab File ID: 320-0021236-003-1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Nitroguanidine	4.15	3.90	4.40

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-003-1.d				
Lims ID:	CCVL				
Client ID:					
Sample Type:	CCVL				
Inject. Date:	22-Apr-2015 15:04:00	ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	50.0 ul	Dil. Factor:	1.0000		
Sample Info:	320-0021236-003 Analysis				
Misc. Info.:	none PRIMER				
Operator ID:	YPH	Instrument ID:	PDA1		
Sublist:	chrom-NGu Primary*sub1				
Method:	\\SACChrom\ChromData\PDA1\20150422-21236.b\NGu Primary.m				
Limit Group:	LC 8330 Ngu ICAL				
Last Update:	22-Apr-2015 16:12:21	Calib Date:	10-Apr-2015 19:22:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d				
Column 1 :	Luna 5u NH2 100A (4.60 mm)		Det: UV-VIS		
Process Host:	XAWRK013				

First Level Reviewer: huangyun Date: 22-Apr-2015 16:12:21

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						M
4.150	4.150	0.000	486H	20.0	19.4	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HPNQL2_00008 Amount Added: 1.00 Units: mL

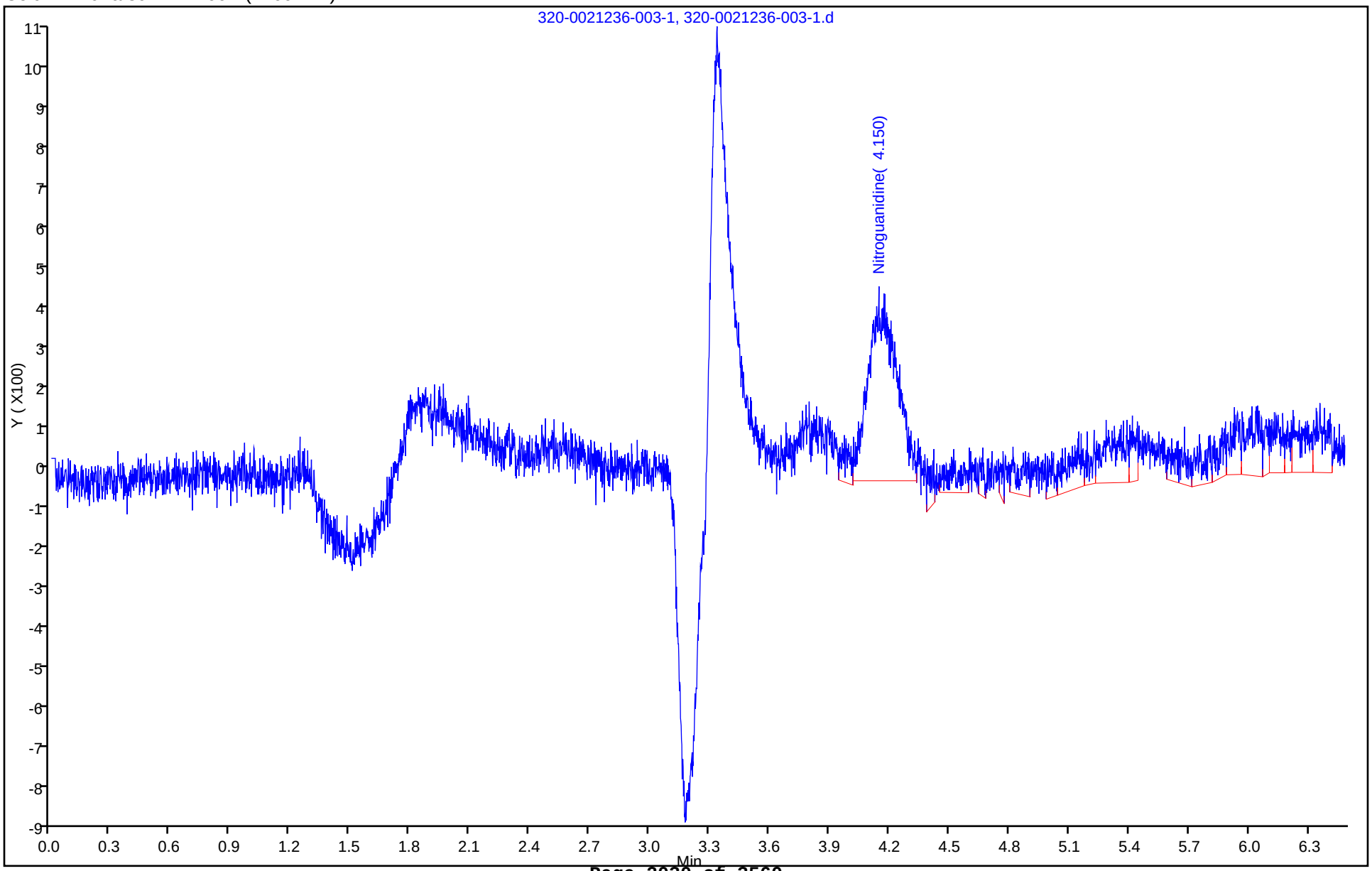
Report Date: 22-Apr-2015 16:12:21 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-003-1.d

Injection Date:	22-Apr-2015 15:04:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	CCVL			Worklist Smp#:	3
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



Manual Integration/User Assign Peak Report

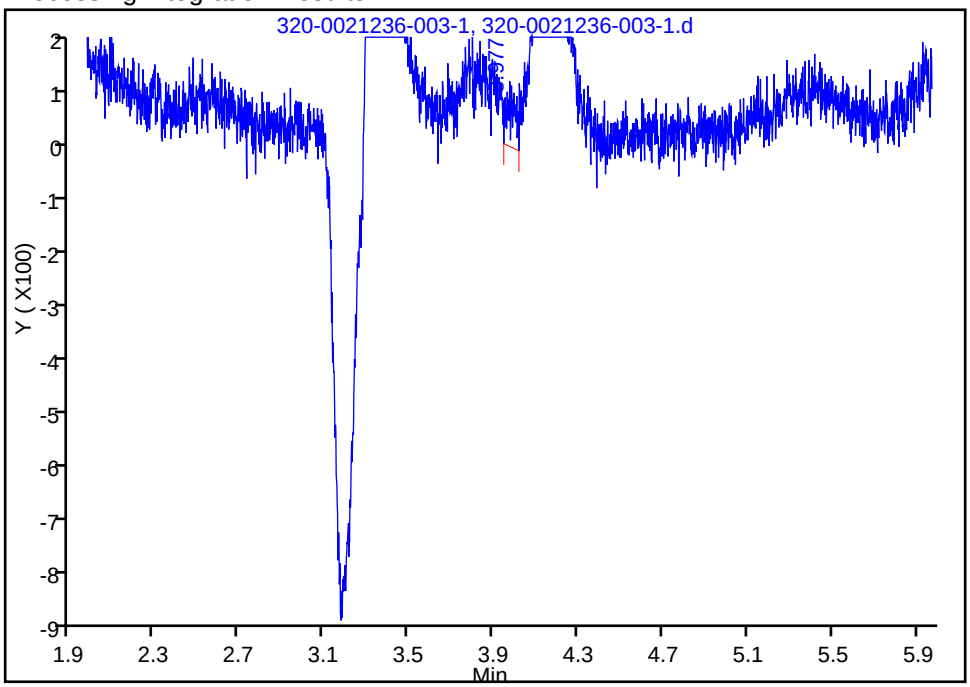
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-003-1.d
Injection Date: 22-Apr-2015 15:04:00 Instrument ID: PDA1
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 50.0 ul Dil. Factor: 1.0000
Method: NGu Primary Limit Group: LC 8330 Ngu ICAL
Column: Luna 5u NH2 100A (4.60 mm) Detector UV-VIS

1 Nitroguanidine, CAS: 556-88-7

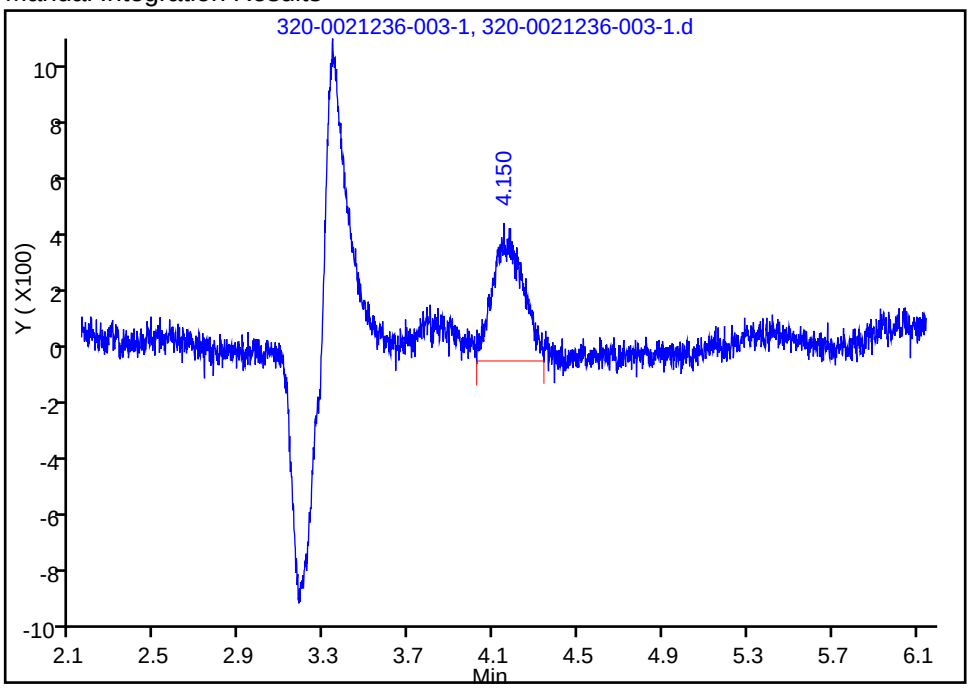
Processing Integration Results

RT: 3.98
Height: 117
Amount: 4.678253
Amount Units: ng/ml



Manual Integration Results

RT: 4.15
Height: 486
Amount: 19.432745
Amount Units: ng/ml



Reviewer: huangyun, 22-Apr-2015 15:22:46
Audit Action: Manually Integrated
Audit Reason: Wrong Peak

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 320-71845/4 Calibration Date: 04/22/2015 15:22

Instrument ID: PDA1 Calib Start Date: 04/10/2015 17:35

GC Column: Luna NH2 ID: 4.60(mm) Calib End Date: 04/10/2015 19:22

Lab File ID: 320-0021236-004-1.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Nitroguanidine	Ave	25.01	22.77		182	200	-9.0	15.0

FORM VII 8330 Modified

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 320-71845/4 Calibration Date: 04/22/2015 15:22

Instrument ID: PDA1 Calib Start Date: 04/10/2015 17:35

GC Column: Luna NH2 ID: 4.60(mm) Calib End Date: 04/10/2015 19:22

Lab File ID: 320-0021236-004-1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Nitroguanidine	4.20	3.95	4.45

Form VII 8330 Modified

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-004-1.d				
Lims ID:	CCV 05				
Client ID:					
Sample Type:	CCVRT				
Inject. Date:	22-Apr-2015 15:22:00	ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	50.0 ul	Dil. Factor:	1.0000		
Sample Info:	320-0021236-004 Analysis				
Misc. Info.:	none PRIMER				
Operator ID:	YPH	Instrument ID:	PDA1		
Sublist:	chrom-NGu Primary*sub1				
Method:	\\SACChrom\ChromData\PDA1\20150422-21236.b\NGu Primary.m				
Limit Group:	LC 8330 Ngu ICAL				
Last Update:	22-Apr-2015 16:12:02	Calib Date:	10-Apr-2015 19:22:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d				
Column 1 :	Luna 5u NH2 100A (4.60 mm)		Det: UV-VIS		
Process Host:	XAWRK013				
First Level Reviewer: huangyun		Date:	22-Apr-2015 16:12:02		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						
4.200	4.200	0.000	4554H	200.0	182.1	

Reagents:

HPNQL5_00008 Amount Added: 1.00 Units: mL

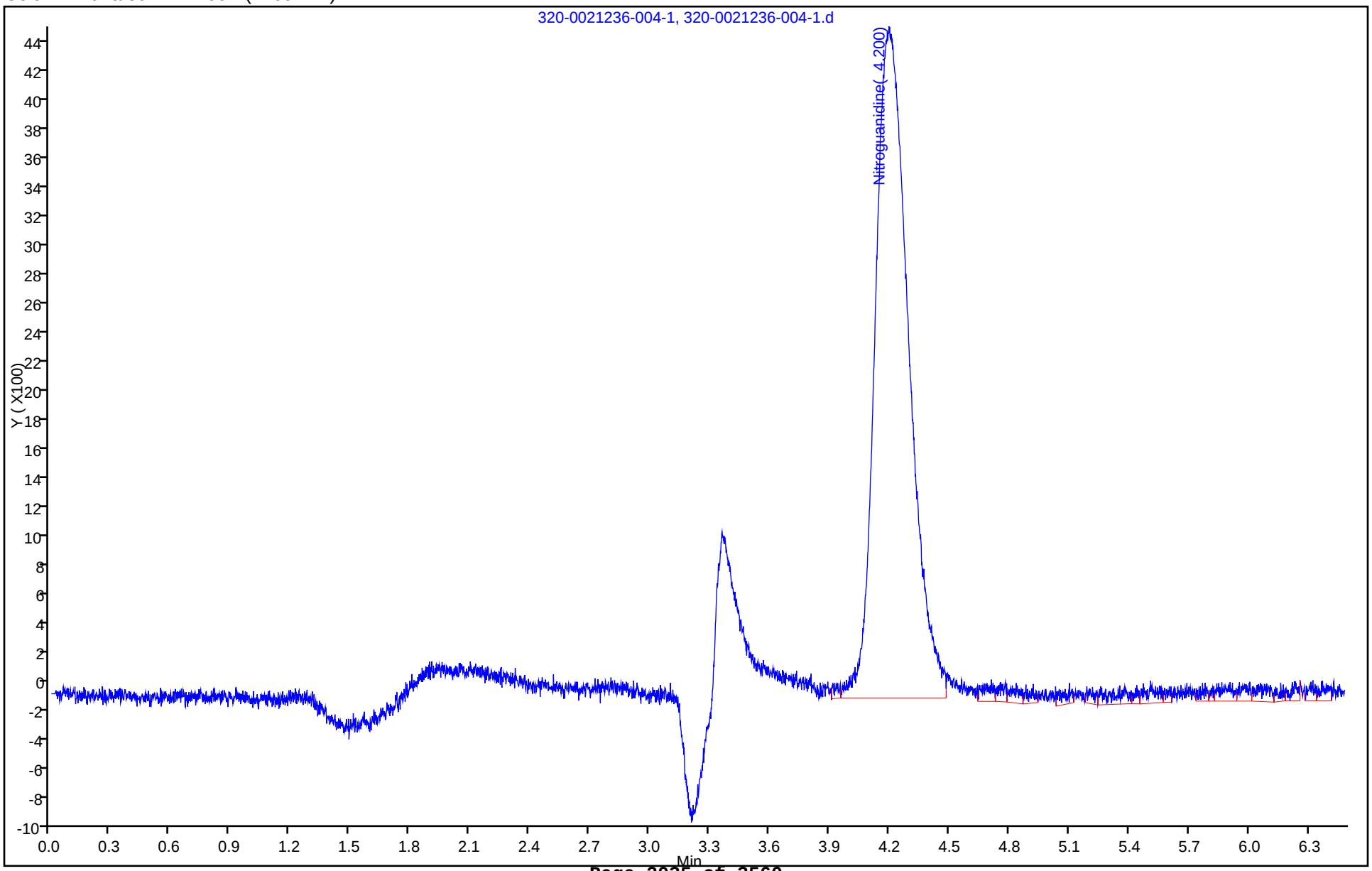
Report Date: 22-Apr-2015 16:12:02 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-004-1.d

Injection Date:	22-Apr-2015 15:22:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	CCV 05			Worklist Smp#:	4
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 320-71845/16 Calibration Date: 04/22/2015 18:55

Instrument ID: PDA1 Calib Start Date: 04/10/2015 17:35

GC Column: Luna NH2 ID: 4.60(mm) Calib End Date: 04/10/2015 19:22

Lab File ID: 320-0021236-016-1.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Nitroguanidine	Ave	25.01	23.92		95.6	100	-4.4	15.0

FORM VII 8330 Modified

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 320-71845/16 Calibration Date: 04/22/2015 18:55

Instrument ID: PDA1 Calib Start Date: 04/10/2015 17:35

GC Column: Luna NH2 ID: 4.60(mm) Calib End Date: 04/10/2015 19:22

Lab File ID: 320-0021236-016-1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Nitroguanidine	4.15	3.90	4.40

Form VII 8330 Modified

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-016-1.d
Lims ID: CCV 04
Client ID:
Sample Type: CCV
Inject. Date: 22-Apr-2015 18:55:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 50.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021236-016 Analysis
Misc. Info.: none SAMPLE
Operator ID: YPH Instrument ID: PDA1
Sublist: chrom-NGu Primary*sub1

Method: \\SACChrom\ChromData\PDA1\20150422-21236.b\NGu Primary.m
Limit Group: LC 8330 Ngu ICAL
Last Update: 23-Apr-2015 09:06:04 Calib Date: 10-Apr-2015 19:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d

Column 1 : Luna 5u NH2 100A (4.60 mm) Det: UV-VIS
Process Host: XAWRK026

First Level Reviewer: huangyun Date: 23-Apr-2015 09:06:04

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						
4.150	4.150	0.000	2392H	100.0	95.6	

Reagents:

HPNQL4_00009 Amount Added: 1.00 Units: mL

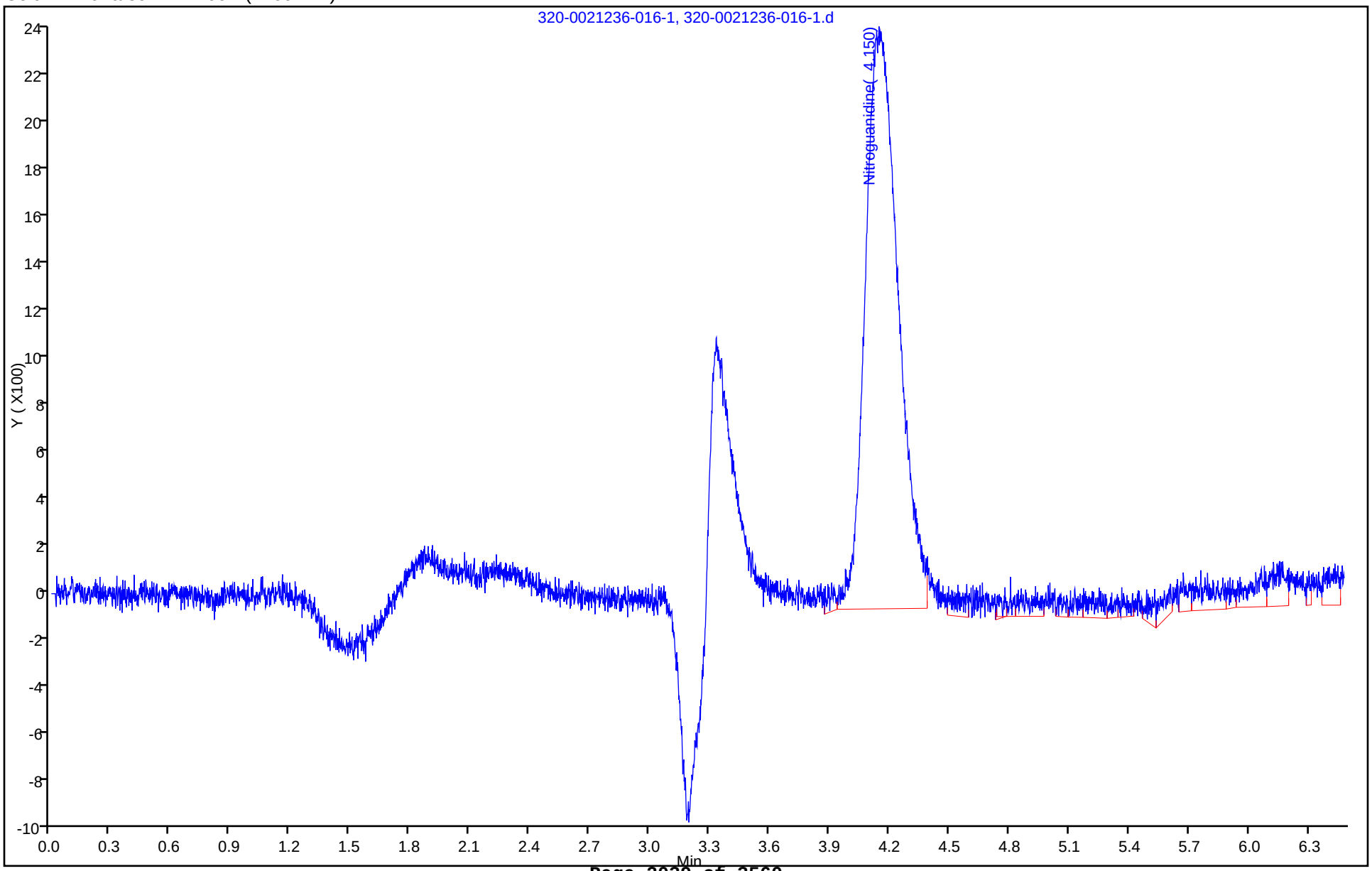
Report Date: 23-Apr-2015 09:06:05 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-016-1.d

Injection Date:	22-Apr-2015 18:55:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	CCV 04			Worklist Smp#:	16
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCVL 320-71845/17 Calibration Date: 04/22/2015 19:13

Instrument ID: PDA1 Calib Start Date: 04/10/2015 17:35

GC Column: Luna NH2 ID: 4.60(mm) Calib End Date: 04/10/2015 19:22

Lab File ID: 320-0021236-017-1.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Nitroguanidine	Ave	25.01	27.10		21.7	20.0	8.4	30.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCVL 320-71845/17 Calibration Date: 04/22/2015 19:13

Instrument ID: PDA1 Calib Start Date: 04/10/2015 17:35

GC Column: Luna NH2 ID: 4.60(mm) Calib End Date: 04/10/2015 19:22

Lab File ID: 320-0021236-017-1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Nitroguanidine	4.13	3.88	4.38

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-017-1.d				
Lims ID:	CCVL				
Client ID:					
Sample Type:	CCVL				
Inject. Date:	22-Apr-2015 19:13:00	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	50.0 ul	Dil. Factor:	1.0000		
Sample Info:	320-0021236-017 Analysis				
Misc. Info.:	none SAMPLE				
Operator ID:	YPH	Instrument ID:	PDA1		
Sublist:	chrom-NGu Primary*sub1				
Method:	\\SACChrom\ChromData\PDA1\20150422-21236.b\NGu Primary.m				
Limit Group:	LC 8330 Ngu ICAL				
Last Update:	23-Apr-2015 09:06:59	Calib Date:	10-Apr-2015 19:22:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d				
Column 1 :	Luna 5u NH2 100A (4.60 mm)		Det: UV-VIS		
Process Host:	XAWRK026				

First Level Reviewer: huangyun Date: 23-Apr-2015 09:06:59

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						M
4.133	4.133	0.000	542H	20.0	21.7	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HPNQL2_00008 Amount Added: 1.00 Units: mL

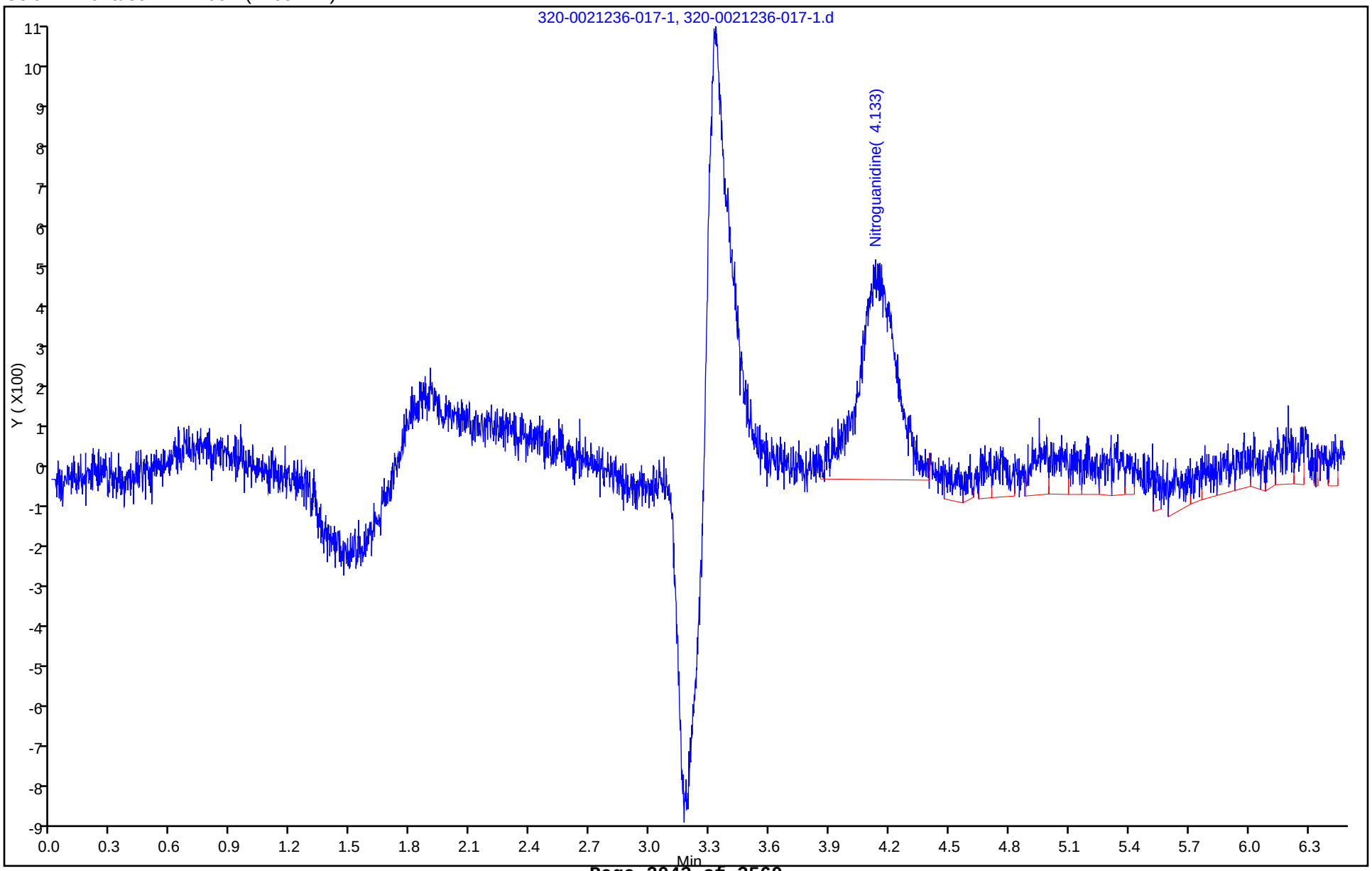
Report Date: 23-Apr-2015 09:06:59 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-017-1.d

Injection Date:	22-Apr-2015 19:13:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	CCVL			Worklist Smp#:	17
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



Manual Integration/User Assign Peak Report

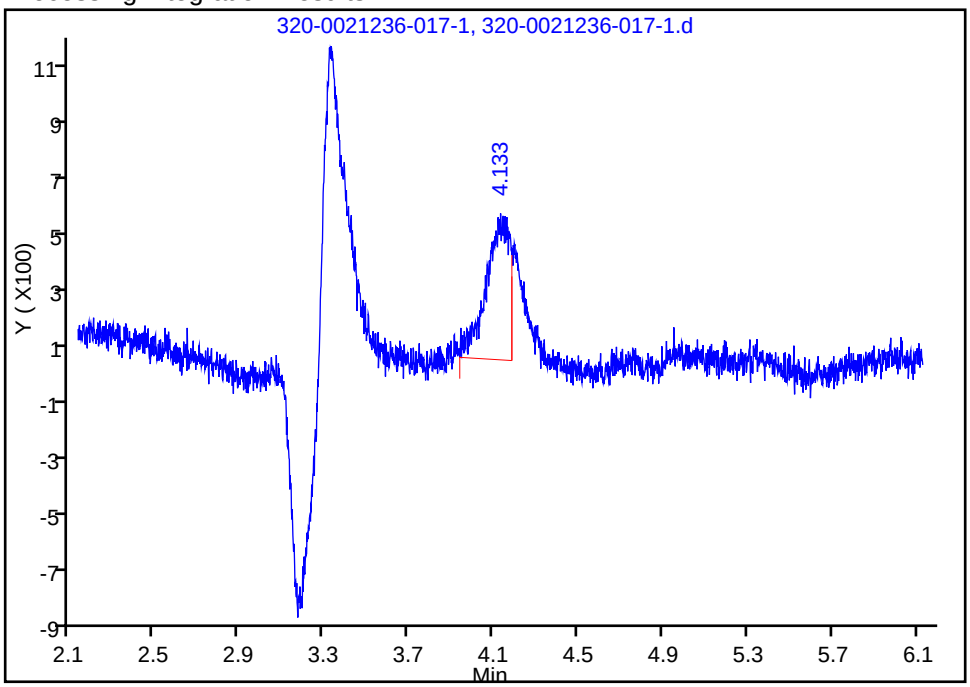
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-017-1.d
Injection Date: 22-Apr-2015 19:13:00 Instrument ID: PDA1
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 50.0 ul Dil. Factor: 1.0000
Method: NGu Primary Limit Group: LC 8330 Ngu ICAL
Column: Luna 5u NH2 100A (4.60 mm) Detector UV-VIS

1 Nitroguanidine, CAS: 556-88-7

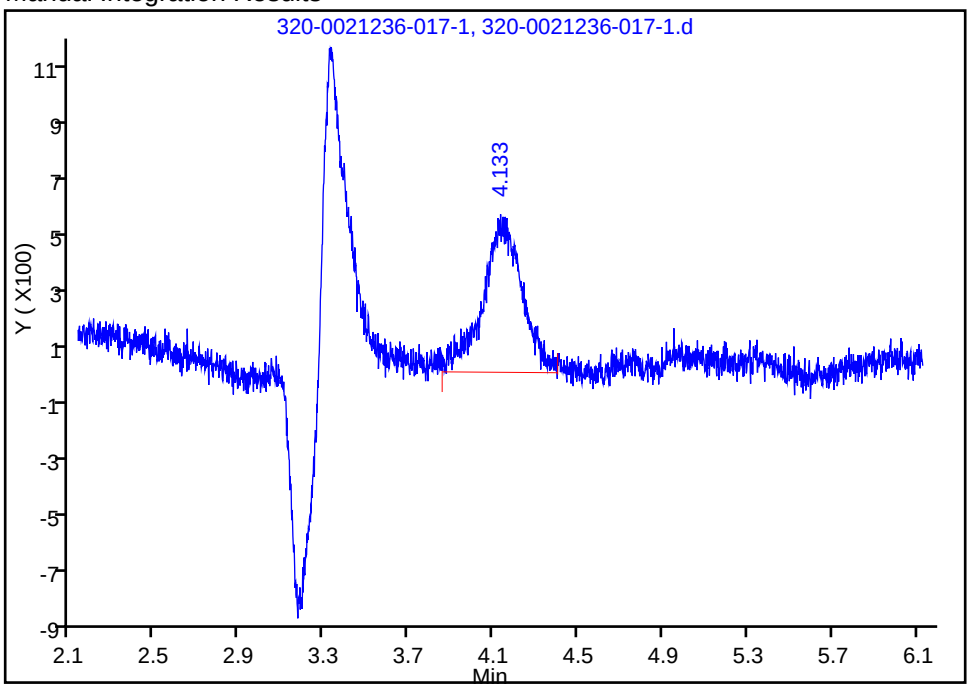
Processing Integration Results

RT: 4.13
Height: 503
Amount: 20.112491
Amount Units: ng/ml



Manual Integration Results

RT: 4.13
Height: 542
Amount: 21.671909
Amount Units: ng/ml



Reviewer: huangyun, 23-Apr-2015 09:06:59
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 320-71482/1-A

Matrix: Solid Lab File ID: 320-0021236-005-1.d

Analysis Method: 8330 Modified Date Collected:

Extraction Method: Sieve/Ultrasoni Date Extracted: 04/18/2015 14:00

Sample wt/vol: 2.00(g) Date Analyzed: 04/22/2015 15:40

Con. Extract Vol.: 10.00(mL) Dilution Factor: 1

Injection Volume: 50(uL) GC Column: Luna NH2 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 71845 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
556-88-7	Nitroguanidine	0.040	U	0.25	0.040	0.020

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-005-1.d				
Lims ID:	MB 320-71482/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	22-Apr-2015 15:40:00	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	50.0 ul	Dil. Factor:	1.0000		
Sample Info:	320-0021236-005 Analysis				
Misc. Info.:	none PRIMER				
Operator ID:	YPH	Instrument ID:	PDA1		
Method:	\\SACChrom\ChromData\PDA1\20150422-21236.b\NGu Primary.m				
Limit Group:	LC 8330 Ngu ICAL				
Last Update:	22-Apr-2015 16:12:21	Calib Date:	10-Apr-2015 19:22:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d				
Column 1 :	Luna 5u NH2 100A (4.60 mm)		Det: UV-VIS		
Process Host:	XAWRK013				
First Level Reviewer: huangyun		Date:	22-Apr-2015 16:12:41		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags

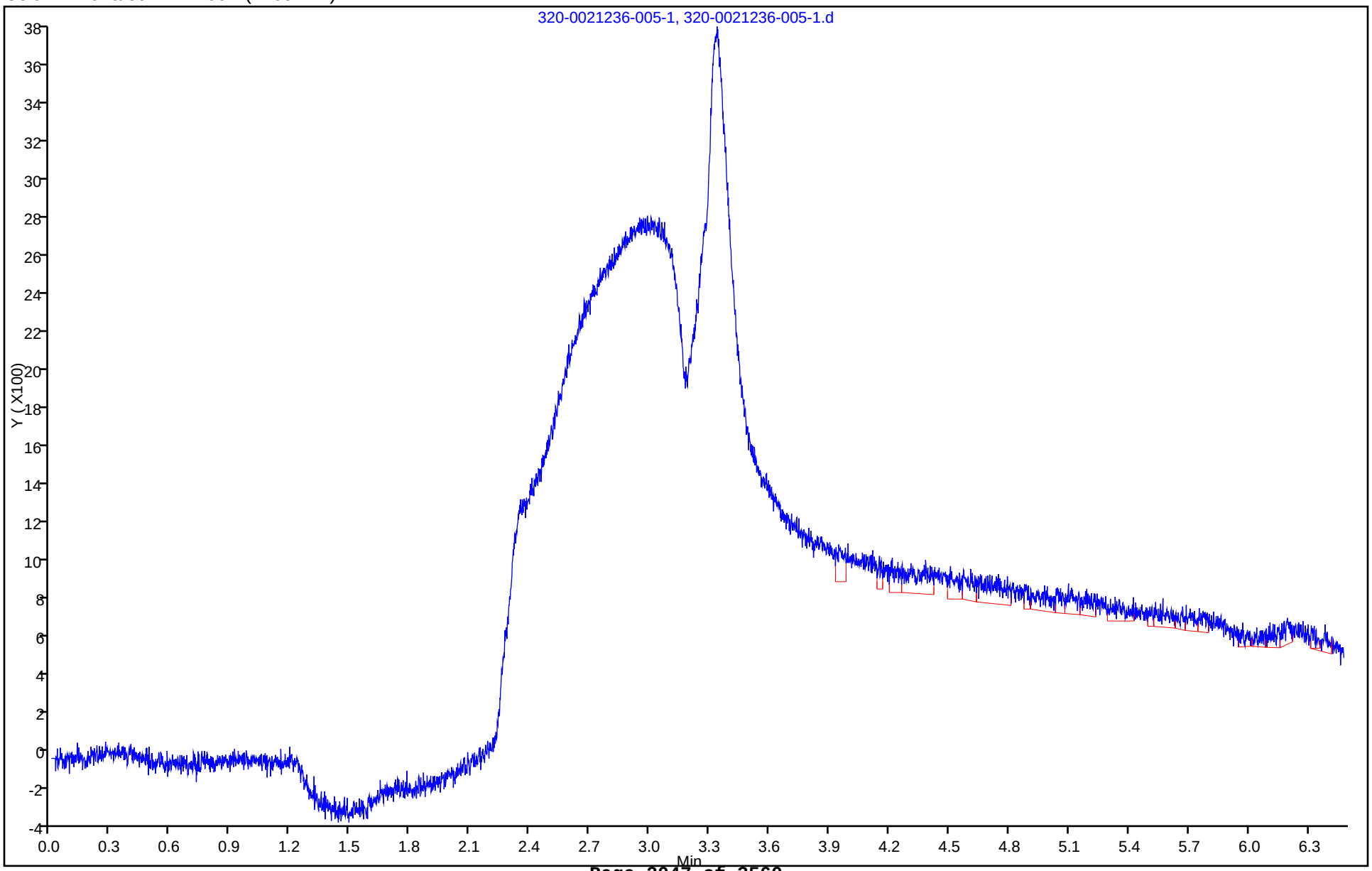
Report Date: 22-Apr-2015 16:12:41 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-005-1.d

Injection Date:	22-Apr-2015 15:40:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	MB 320-71482/1-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 320-71482/2-A

Matrix: Solid Lab File ID: 320-0021236-006-1.d

Analysis Method: 8330 Modified Date Collected:

Extraction Method: Sieve/Ultrasoni Date Extracted: 04/18/2015 14:00

Sample wt/vol: 2.00(g) Date Analyzed: 04/22/2015 15:57

Con. Extract Vol.: 10.00(mL) Dilution Factor: 1

Injection Volume: 50(uL) GC Column: Luna NH2 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 71845 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
556-88-7	Nitroguanidine	0.815	M	0.25	0.040	0.020

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-006-1.d				
Lims ID:	LCS 320-71482/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	22-Apr-2015 15:57:00	ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	50.0 ul	Dil. Factor:	1.0000		
Sample Info:	320-0021236-006 Analysis				
Misc. Info.:	none STD				
Operator ID:	YPH	Instrument ID:	PDA1		
Method:	\\SACChrom\ChromData\PDA1\20150422-21236.b\NGu Primary.m				
Limit Group:	LC 8330 Ngu ICAL				
Last Update:	22-Apr-2015 16:14:17	Calib Date:	10-Apr-2015 19:22:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACChrom\ChromData\PDA1\20150410-20944.b\STD02-1.d				
Column 1 :	Luna 5u NH2 100A (4.60 mm)		Det: UV-VIS		
Process Host:	XAWRK013				

First Level Reviewer: huangyun Date: 22-Apr-2015 16:14:17

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
1 Nitroguanidine						M
4.160	4.200	-0.040	4078H	200.0	163.1	M

QC Flag Legend

Review Flags
M - Manually Integrated

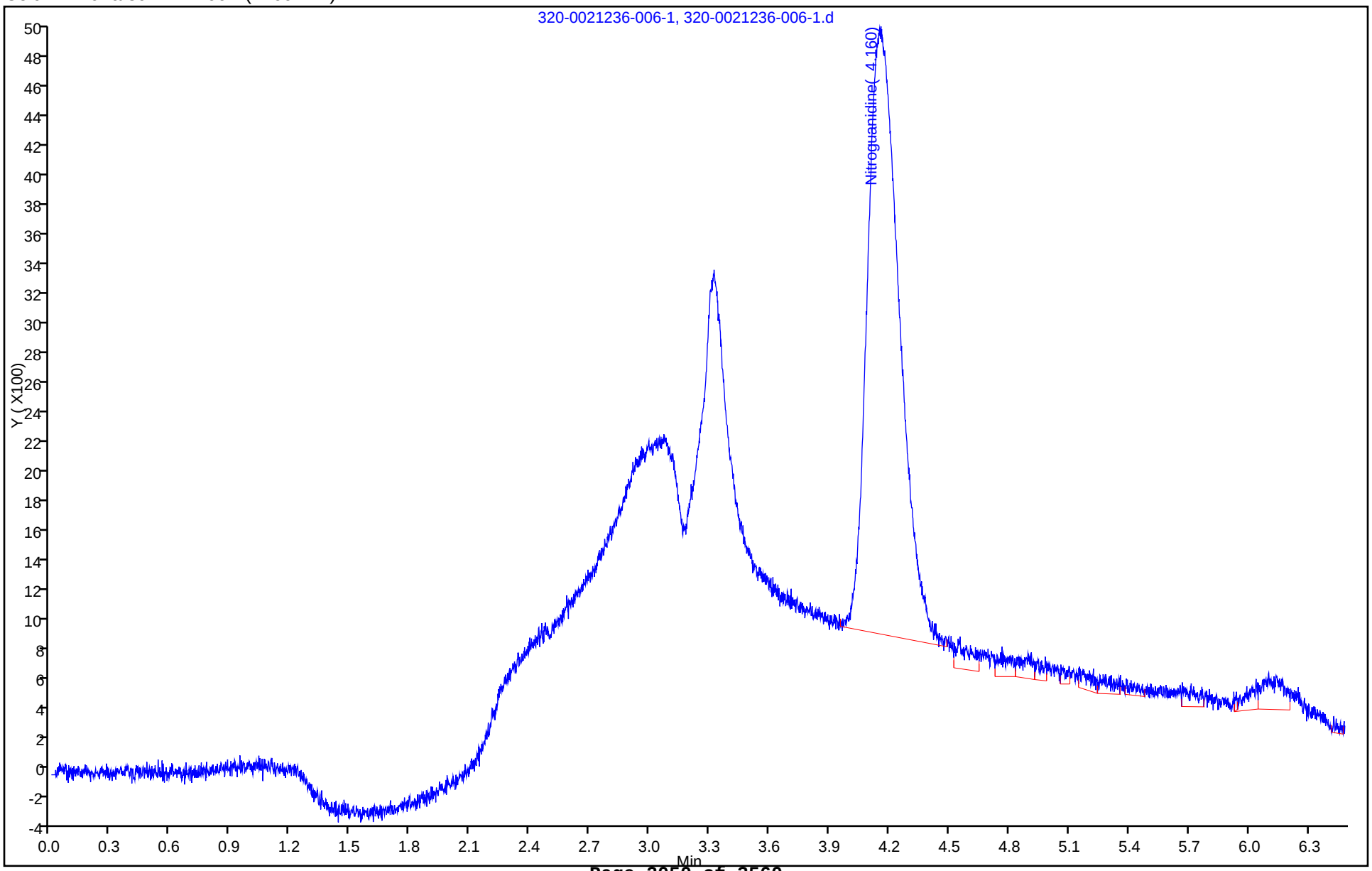
Report Date: 22-Apr-2015 16:14:17 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-006-1.d

Injection Date:	22-Apr-2015 15:57:00	Instrument ID:	PDA1	Operator ID:	YPH
Lims ID:	LCS 320-71482/2-A			Worklist Smp#:	6
Client ID:					
Injection Vol:	50.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	NGu Primary	Limit Group:	LC 8330 Ngu ICAL		

Column: Luna 5u NH2 100A (4.60 mm)



Manual Integration/User Assign Peak Report

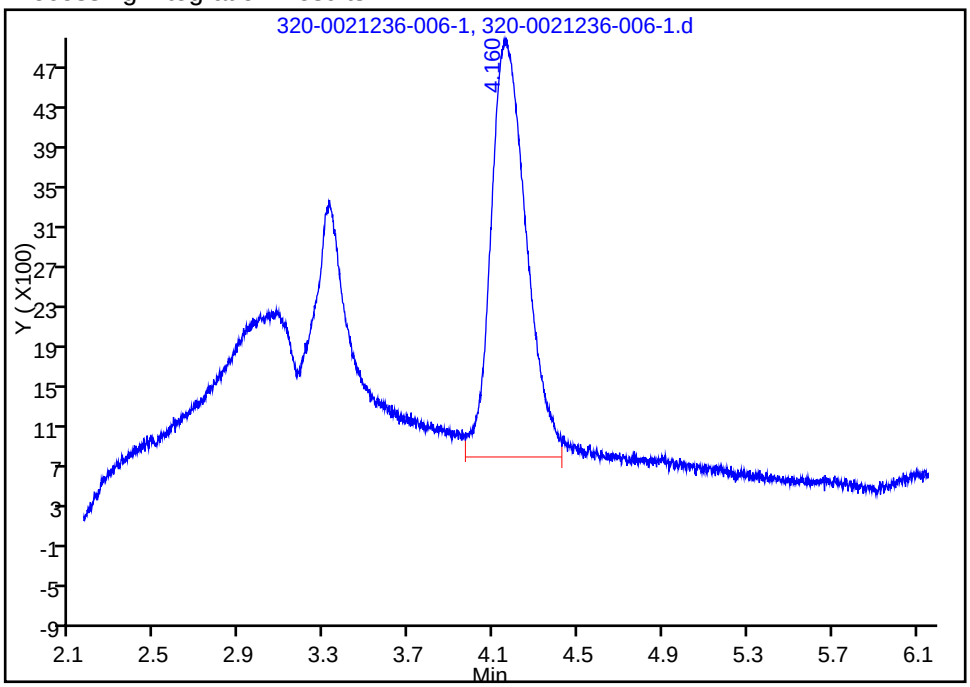
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\PDA1\20150422-21236.b\320-0021236-006-1.d
Injection Date: 22-Apr-2015 15:57:00 Instrument ID: PDA1
Lims ID: LCS 320-71482/2-A
Client ID:
Operator ID: YPH ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 50.0 ul Dil. Factor: 1.0000
Method: NGu Primary Limit Group: LC 8330 Ngu ICAL
Column: Luna 5u NH2 100A (4.60 mm) Detector UV-VIS

1 Nitroguanidine, CAS: 556-88-7

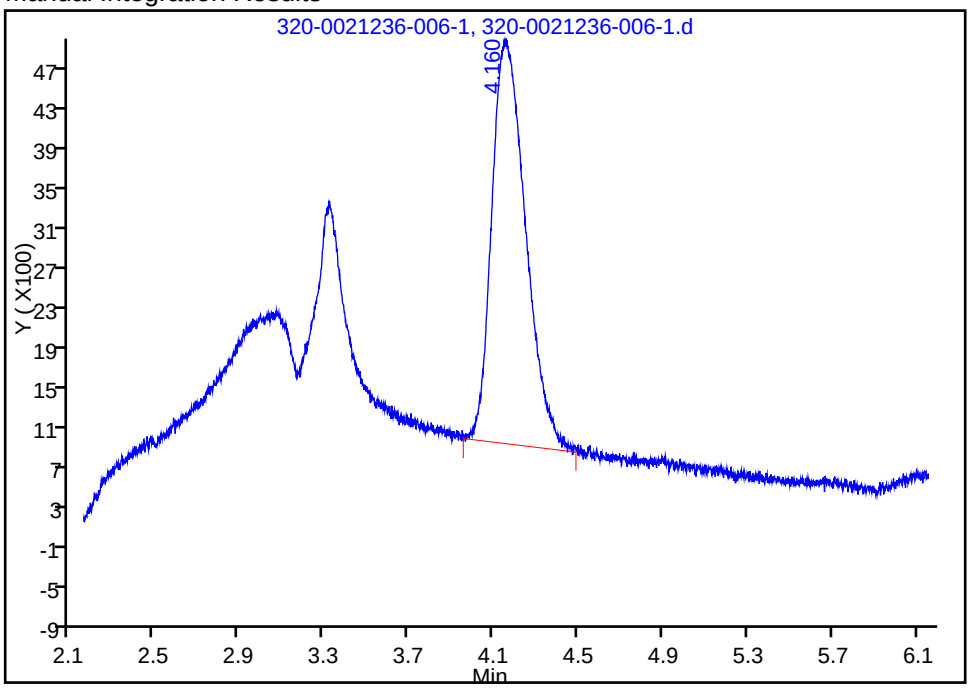
Processing Integration Results

RT: 4.16
Height: 4219
Amount: 168.6970
Amount Units: ng/ml



Manual Integration Results

RT: 4.16
Height: 4078
Amount: 163.0591
Amount Units: ng/ml



Reviewer: huangyun, 22-Apr-2015 16:14:17
Audit Action: Manually Integrated
Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: PDA1 Start Date: 04/10/2015 17:35

Analysis Batch Number: 70867 End Date: 04/10/2015 19:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD03 320-70867/5 IC		04/10/2015 17:35	1	320-0020944-005 -1.d	Luna NH2 4.6(mm)
STD04 320-70867/6 IC		04/10/2015 17:53	1	320-0020944-006 -1.d	Luna NH2 4.6(mm)
STD05 320-70867/7 IC		04/10/2015 18:11	1	320-0020944-007 -1.d	Luna NH2 4.6(mm)
STD06 320-70867/8 IC		04/10/2015 18:29	1	320-0020944-008 -1.d	Luna NH2 4.6(mm)
STD07 320-70867/9 IC		04/10/2015 18:46	1	320-0020944-009 -1.d	Luna NH2 4.6(mm)
STD02 320-70867/43 IC		04/10/2015 19:22	1	STD02-1.d	Luna NH2 4.6(mm)
ICV 320-70867/11		04/10/2015 19:40	1	320-0020944-011 -1.d	Luna NH2 4.6(mm)
LODV 320-70867/12		04/10/2015 19:57	1	320-0020944-012 -1.d	Luna NH2 4.6(mm)

8330 Modified

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: PDA1 Start Date: 04/22/2015 15:04

Analysis Batch Number: 71845 End Date: 04/22/2015 19:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVL 320-71845/3		04/22/2015 15:04	1	320-0021236-003 -1.d	Luna NH2 4.6(mm)
CCV 320-71845/4 CCVRT		04/22/2015 15:22	1	320-0021236-004 -1.d	Luna NH2 4.6(mm)
MB 320-71482/1-A		04/22/2015 15:40	1	320-0021236-005 -1.d	Luna NH2 4.6(mm)
LCS 320-71482/2-A		04/22/2015 15:57	1	320-0021236-006 -1.d	Luna NH2 4.6(mm)
ZZZZZ		04/22/2015 16:15	1		Luna NH2 4.6(mm)
ZZZZZ		04/22/2015 16:33	1		Luna NH2 4.6(mm)
ZZZZZ		04/22/2015 16:51	1		Luna NH2 4.6(mm)
240-49171-6	079SB-0352M-0001-SO	04/22/2015 17:08	1	320-0021236-010 -1.d	Luna NH2 4.6(mm)
240-49171-8	079SB-0353M-0001-SO	04/22/2015 17:26	1	320-0021236-011 -1.d	Luna NH2 4.6(mm)
240-49171-10	079SB-0354M-0001-SO	04/22/2015 17:44	1	320-0021236-012 -1.d	Luna NH2 4.6(mm)
ZZZZZ		04/22/2015 18:02	1		Luna NH2 4.6(mm)
ZZZZZ		04/22/2015 18:19	1		Luna NH2 4.6(mm)
ZZZZZ		04/22/2015 18:37	1		Luna NH2 4.6(mm)
CCV 320-71845/16		04/22/2015 18:55	1	320-0021236-016 -1.d	Luna NH2 4.6(mm)
CCVL 320-71845/17		04/22/2015 19:13	1	320-0021236-017 -1.d	Luna NH2 4.6(mm)

8330 Modified

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Batch Number: 71482 Batch Start Date: 04/20/15 14:50 Batch Analyst: Arauz, Horacio J

Batch Method: Sieve/Ultrasoni Batch End Date: 04/21/15 10:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	HPNQSP 00018			
MB 320-71482/1		Sieve/Ultrasoni, 8330 Modified		2.00 g	10.00 mL				
LCS 320-71482/2		Sieve/Ultrasoni, 8330 Modified		2.00 g	10.00 mL	40 uL			
240-49171-C-6	079SB-0352M-0001-SO	Sieve/Ultrasoni, 8330 Modified	T	2.02 g	10.00 mL				
240-49171-C-8	079SB-0353M-0001-SO	Sieve/Ultrasoni, 8330 Modified	T	2.04 g	10.00 mL				
240-49171-C-10	079SB-0354M-0001-SO	Sieve/Ultrasoni, 8330 Modified	T	2.02 g	10.00 mL				

Batch Notes	
Calcium Chloride Reagent ID	397482
Date of Clean up	4-21-15
Analyst performed Clean Up	HJA
Filter Lot #	R4NA21509
Filter Type	.45um Millipore
Pipette ID	EC15219
Pipette ID for Solvent	11-Z-0728
Person's name who witnessed reagent drop	SNE
Blank Sand Lot #	FISHER 142675
Solvent Name	1.3g/l CaCL2
Sonication End Date	4-21-15
Sonication Start Date	4-20-15
Sonication Start Time	15:00
Sonication Stop Time	09:00
SOP Number	WS-LC-0010
Maximum Temperature	24 Degrees C
Minimum Temperature	11 Degrees C

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Batch Number: 71482 Batch Start Date: 04/20/15 14:50 Batch Analyst: Arauz, Horacio J

Batch Method: Sieve/Ultrasoni Batch End Date: 04/21/15 10:45

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Due 4/24
L4

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

HPLC/LCMS Data Review Checklist

Job Number(s): 240-49071, 49171, 49233 Work List ID(s): 21236

Extraction Batch: 71482 Analysis Batch(es): 71845

Delivery Rank 4 Due Date: 4/24/2015

A. Calibration/Instrument Run QC	1st Level	2nd Level	N/A
1. ICAL locked in Chrom and TALS? ICAL Batch# 70867	✓	✓	
2. ICAL, CCV Frequency & Criteria met.	✓	✓	
• $RF_{average}$ criteria appropriate for the method.	✓	✓	
• Linear Regression criteria appropriate if required ($r \geq 0.995$).	✓		✓
• Quadratic fit criteria appropriate if required ($r^2 \geq 0.990$).	✓		✓
• For Linear Regression and Quadratic fit – Does the y-intercept support ½ the reporting limit as described in CA-Q-S-005?	✓		✓
• All curve points show calculated concentrations.	✓	✓	
3. Peaks correctly ID'd by data system.	✓	✓	
5. Tune check frequency & criteria met and Tune check report attached.			✓
B. QA/QC			
1. Are all QC samples properly linked in TALS?	✓	✓	
2. Method blank, LCS/LCSD and MS/SD frequencies met.	✓	✓	
3. LCS/LCSD and MB data are within control limits. If not, NCM is present.	✓	✓	
4. Are MS/MSD recoveries and RPD within control limits?	✓	✓	
5. Holding Times were met for prep and analytical.	✓	✓	
6. IS/Surrogate recoveries meet criteria or properly noted.			✓
C. Sample Analysis			
1. Was correct analysis performed and were project instructions followed?	✓	✓	
2. If required, are compounds within RT windows?	✓	✓	
3. If required, are positive hits confirmed and >40% RPD flagged?			✓
4. Manual Integrations reviewed and appropriate.	✓	✓	
5. All analytes correctly reported. (Primary, secondary, acceptable status)	✓	✓	
6. Correct reporting limits used. (based on client request, prep factors, and dilutions)	✓	✓	
D. Documentation			
1. Are all non-conformances documented/attached? NCM#			✓
2. Do results make sense (e.g. dilutions, etc.)?	✓	✓	
3. Have all flags been reviewed for appropriateness?	✓	✓	
4. For level 3 and 4 reports, have forms and raw data been reviewed?		✓	
5. Was QC Checker run for this job?	✓	✓	

Upon completion of this checklist, the reviewer must scan and attach the checklist to the TALS job.

1st Level (Analyst): YPH Date: 4/23/2015

2nd Level Reviewer: V. Duhuta Date: 4/27/15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento

GC/HPLC ICAL Review Checklist

Instrument ID: PDA1 Method: Ngu Primary

Work List ID: 20944 Analysis Batch(es): 70867.

Analytes Included in this ICAL: Nitroguanidine (ICAL 4/10/2015)

ICAL Review	1st Level	2nd Level	N/A
1. Method locked in Chrom.	✓	✓	
2. ICAL is set as most recent method in Chrom.	✓	✓	
3. PEM meets measurements for 8081			✓
4. Alkane Marker included for 8015 TPH and RT windows set correctly			✓
5. Standards used in ICAL are correct	✓	✓	
6. No analytes have saturated peaks	✓	✓	
7. All peaks correctly identified and within retention time windows	✓	✓	
8. Manual integrations reviewed and appropriate	✓	✓	
9. All analytes meet %RSD or linear regression requirements	✓	✓	
10. Any levels dropped are reviewed and appropriate			✓
11. ICV meets requirements and is run after the ICAL	✓	✓	
12. RFs are calculated correctly. Perform Manual calculation	✓	✓	
13. ICAL meets requirements stated in SOP	✓	✓	
13. Chromatograms are uploaded/reviewed in ?TALs	✓	✓	
14. ICAL is locked in TALs.		✓	

Curve Valid for:	Yes	No	Criteria
Standard SOP	✓		RSD ≤20%, r≥ 0.995 (intercept <1/2RL for 8081,8082, NQ) and (<RL for 8330) and r>0.990 (intercept <RL for 8015), ICV≤15%, PEM ≤15%
DOD QSM V3,V4, V5	✓		RSD ≤20%, r≥ 0.995, ICV≤20%, PEM ≤15%
8330B DoD5	✓		RSD ≤15%, r≥ 0.99, ICV≤20%

1st Level Reviewer: YPH Date: 4/13/2015.

2nd Level Reviewer: V. Pikart Date: 4/14/15

Comments:

TestAmerica Laboratories
Worklist Report

Worklist Name: Ngu 04-22-2015 Worklist Number: 21236
Instrument Name: PDA1 Chrom Method: NGu Primary
Injection Volume: 50.00 Units: ul
Analysis Type: Semi VOA
Batch Directory: \\SACChrom\ChromData\PDA1\20150422-21236.b
Upload Directory: \\CORPTALSAPP02\320-WS-RawData\Organics\LC\PDA1

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
320-0021236-001	# 1 Primer		Client		sv	1.000000	mL	1.000000
320-0021236-002	# 2 Primer		Client		sv	1.000000	mL	1.000000
320-0021236-003	# 3 CCVL	HPNQL2_00008	CCVL		sv	1.000000	mL	1.000000
320-0021236-004	# 4 CCV 05	HPNQL5_00008	CCVRT		sv	1.000000	mL	1.000000
320-0021236-005	# 5 MB 320-71482/1-A		MB		sv	1.000000	mL	1.000000
320-0021236-006	# 6 LCS 320-71482/2-A		LCS		sv	1.000000	mL	1.000000
320-0021236-007	# 7 240-49071-E-2-D		Client		sv	1.000000	mL	1.000000
320-0021236-008	# 8 240-49071-E-2-E MS		MS		sv	1.000000	mL	1.000000
320-0021236-009	# 9 240-49071-E-2-F MSD		MSD		sv	1.000000	mL	1.000000
320-0021236-010	#10 240-49171-C-6-B		Client		sv	1.000000	mL	1.000000
320-0021236-011	#11 240-49171-C-8-B		Client		sv	1.000000	mL	1.000000
320-0021236-012	#12 240-49171-C-10-B		Client		sv	1.000000	mL	1.000000
320-0021236-013	#13 240-49233-C-4-B		Client		sv	1.000000	mL	1.000000
320-0021236-014	#14 240-49233-C-6-B		Client		sv	1.000000	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
320-0021236-015	#15 240-49233-C-8-B		Client		sv	1.000000	mL	1.000000
320-0021236-016	#16 CCV 04	HPNQL4_00009	CCV		sv	1.000000	mL	1.000000
320-0021236-017	#17 CCVL	HPNQL2_00008	CCVL		sv	1.000000	mL	1.000000

Solid SW-846-3500 Analysis Sheet

BA

(To Accompany Samples to Instruments)

Batch Number: 320-71482

Analyst: Arauz, Horacio J

Batch Open: 4/20/2015 2:50:00PM

Method Code: 320-8330_P_2g-320

Batch End: 4-21-15 1045

Sieve and Ultrasonic Water Bath Extraction (Explosives)

	Input Sample Lab ID (Analytical Method)	SDG	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	MB~320-71482/1 N/A	N/A	2.00 g	10.00 mL	N/A	N/A	N/A		MB 320-71482/1-A
2	LCS~320-71482/2 N/A	N/A	2.00 g	10.00 mL	N/A	N/A	N/A		LCS 320-71482/2-A
3	240-49071-E-2 (8330_NGu)	CC 79 Area 8	2.03 g	10.00 mL	4/24/15	12_Days	4		240-49071-E-2-D
4	240-49071-E-2~MS (8330_NGu)	CC 79 Area 8	2.00 g	10.00 mL	4/24/15	12_Days	4		240-49071-E-2-E MS
5	240-49071-E-2~MSD (8330_NGu)	CC 79 Area 8	2.00 g	10.00 mL	4/24/15	12_Days	4		240-49071-E-2-F MSD
6	240-49171-C-6 (8330_NGu)	N/A	2.02 g	10.00 mL	4/27/15	12_Days	4		240-49171-C-6-B
7	240-49171-C-8 (8330_NGu)	N/A	2.04 g	10.00 mL	4/27/15	12_Days	4		240-49171-C-8-B
8	240-49171-C-10 (8330_NGu)	N/A	2.02 g	10.00 mL	4/27/15	12_Days	4		240-49171-C-10-B
9	240-49233-C-4 (8330_NGu)	N/A	2.04 g	10.00 mL	4/28/15	12_Days	4		240-49233-C-4-B
10	240-49233-C-6 (8330_NGu)	N/A	2.00 g	10.00 mL	4/28/15	12_Days	4		240-49233-C-6-B
11	240-49233-C-8 (8330_NGu)	N/A	2.00 g	10.00 mL	4/28/15	12_Days	4		240-49233-C-8-B

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Solid SW-846-3500 Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-71482

Analyst: Arauz, Horacio J

Batch Open: 4/20/2015 2:50:00PM

Method Code: 320-8330_P_2g-320

Batch End:

Batch Notes

Balance ID	NA
Blank Sand Lot #	FISHER 142675
Solvent Name	1.3g/l CaCL2
Solvent Lot #	NA
Filter Type	.45um Millipore
Filter Lot #	R4NA21509
Pipette ID	EC15219
Person's name who witnessed reagent drop	SNE
Pipette ID for Solvent	11-Z-0728
Sonication Start Date	4-20-15
Sonication Start Time	15:00
Sonication End Date	4-21-15
Sonication Stop Time	09:00
Minimum Temperature	11
Maximum Temperature	24
Minumum Temperature	NA
Calcium Chloride Reagent ID	397482
Date Sample was Dried	NA
Date Sample was Ground	NA
Date Dilution Performed	NA
Analytst performing Dilution	NA

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Solid SW-846-3500 Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-71482 Analyst: Arauz, Horacio J Batch Open: 4/20/2015 2:50:00PM

Method Code: 320-8330_P_2g-320 Batch End:

Date of Clean up	4-21-15
Analyst performed Clean Up	HJA
SOP Number	WS-LC-0010
Batch Comment	

Comments

240-49071-E-2	Method Comments: samples have been dried
240-49071-E-2~MS	Method Comments: samples have been dried
240-49071-E-2~MSD	Method Comments: samples have been dried
240-49171-C-6	Method Comments: samples have been dried
240-49171-C-8	Method Comments: samples have been dried
240-49171-C-10	Method Comments: samples have been dried
240-49233-C-4	Method Comments: samples have been dried
240-49233-C-6	Method Comments: samples have been dried
240-49233-C-8	Method Comments: samples have been dried

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Solid SW-846-3500 Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-71482 Analyst: Arauz, Horacio J Batch Open: 4/20/2015 2:50:00PM

Method Code: 320-8330_P_2g-320 Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness
LCS 320-71482/2	HPNQSP_00018	40 uL	10.00 mL	HJA 4-20-15	SNE 4/20/15
240-49071-E-2 MS	HPNQSP_00018	40 uL	10.00 mL	↓	↓
240-49071-E-2 MSD	HPNQSP_00018	40 uL	10.00 mL	↓	↓

Other Reagents:

Reagent	Amount/Units	Lot#:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Preparation Data Review Checklist

Preparation Batch Number(s): 320-71482 Test: NQ-S

Earliest Holding Time: 4-22-15

Sample List Tab	1st Level Reviewer	2nd Level Reviewer
Samples identified to the correct method	✓	✓
All necessary NCMs filed (including holding time)	NA	NA
Method/sample/login/QAS checked and correct	✓	✓
Worksheet Tab	1st Level Reviewer	2nd Level Reviewer
All samples properly preserved	NA	NA
Weights in anticipated range and not targeted	✓	✓
All additional test requirements performed, documented, and uploaded to TALS correctly (e.g. final amount, initial amount, turbidity, and CI Check)	✓	✓
The pH is transcribed correctly in TALS	NA	NA
All additional information transcribed into TALS is correct and raw data is attached	✓	✓
Comments are transcribed correctly in TALS	✓	✓
Reagents Tab	1st Level Reviewer	2nd Level Reviewer
All necessary reagents not expired and entered into TALS	✓	✓
All spike amounts correct and added to necessary samples and QC	✓	✓
Batch Information	1st Level Reviewer	2nd Level Reviewer
Date and time accurate and entered into TALS correctly	✓	✓
All necessary 'batch information' complete and entered into TALS correctly	✓	✓

1st Level Reviewer: HJA Date: 4-21-15

2nd Level Reviewer: SNE Date: 4/21/15

Comments:

Method 8330B

Nitroaromatics and Nitramines (HPLC) by Method 8330B

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Synergi C18 ID: 4.6 (mm) GC Column (2): Zorbax CN 4.6 (mm)

Client Sample ID	Lab Sample ID	DNT1 #	DNT2 #
079SB-0352M-0001-SO	240-49171-6	90	
079SB-0352M-0001-SO	240-49171-6		101
079SB-0353M-0001-SO	240-49171-8	90	
079SB-0353M-0001-SO	240-49171-8		99
079SB-0354M-0001-SO	240-49171-10	90	
	MB 320-71481/1-A	90	
	LCS 320-71481/2-A	92	

	QC LIMITS
DNT = 3,4-Dinitrotoluene	78-118

Column to be used to flag recovery values

FORM II 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: W000006.D

Lab ID: LCS 320-71481/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
2-Amino-4,6-dinitrotoluene	0.500	0.465	93	79-119	
4-Amino-2,6-dinitrotoluene	0.500	0.460	92	81-121	
1,3-Dinitrobenzene	0.500	0.471	94	81-121	
2,4-Dinitrotoluene	0.500	0.470	94	79-119	
2,6-Dinitrotoluene	0.500	0.469	94	79-119	
HMX	0.500	0.463	93	80-120	
Nitrobenzene	0.500	0.475	95	80-120	
Nitroglycerin	1.00	1.00	100	76-116	
2-Nitrotoluene	0.500	0.471	94	78-118	
3-Nitrotoluene	0.500	0.470	94	77-117	
4-Nitrotoluene	0.500	0.471	94	78-118	
PETN	1.00	0.975	98	76-116	
RDX	0.500	0.463	93	82-122	
Tetryl	0.500	0.472	94	63-120	
1,3,5-Trinitrobenzene	0.500	0.468	94	81-121	
2,4,6-Trinitrotoluene	0.500	0.470	94	65-105	

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: MB 320-71481/1-A

Matrix: Solid Date Extracted: 04/18/2015 14:00

Lab File ID:(1) W000005.D Lab File ID:(2)

Date Analyzed:(1) 04/23/2015 18:16 Date Analyzed:(2)

Instrument ID:(1) LC10 Instrument ID:(2) LC9

GC Column:(1) Synergi C18 ID: 4.6(mm) GC Column:(2) Zorbax CN ID: 4.6(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 320-71481/2-A	04/23/2015 19:00	
079SB-0352M-0001-SO	240-49171-6	04/23/2015 21:54	04/28/2015 16:46
079SB-0353M-0001-SO	240-49171-8	04/23/2015 22:38	04/28/2015 17:52
079SB-0354M-0001-SO	240-49171-10	04/23/2015 23:22	

FORM VIII
HPLC/IC ANALYTICAL SEQUENCE

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Sample No.: CCV 320-71988/4 Date Analyzed: 04/23/2015 17:33

Instrument ID: LC10 GC Column: Synergi C18 ID: 4.6(mm)

Lab File ID (Standard): W000004.D Heated Purge: (Y/N) N

Calibration ID: 12193

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				DNT RT #		
CONTINUING CALIBRATION SURROGATE				16.65		
UPPER LIMIT				16.90		
LOWER LIMIT				16.40		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 320-71988/4 CCVRT		04/23/2015 17:33	W000004.D	16.65		
MB 320-71481/1-A		04/23/2015 18:16	W000005.D	16.66		
LCS 320-71481/2-A		04/23/2015 19:00	W000006.D	16.66		
240-49171-6	079SB-0352M-0001-SO	04/23/2015 21:54	W000010.D	16.65		
240-49171-8	079SB-0353M-0001-SO	04/23/2015 22:38	W000011.D	16.64		
240-49171-10	079SB-0354M-0001-SO	04/23/2015 23:22	W000012.D	16.65		
CCV 320-71988/23		04/24/2015 03:00	W000017.D	16.65		
CCVL 320-71988/24		04/24/2015 03:43	W000018.D	16.61		

DNT = 3,4-Dinitrotoluene

DNT RT Limit = ± 0.25 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8330B

FORM VIII
HPLC/IC ANALYTICAL SEQUENCE

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Sample No.: CCV 320-72338/4 Date Analyzed: 04/28/2015 14:33

Instrument ID: LC9 GC Column: Zorbax CN ID: 4.6(mm)

Lab File ID (Standard): ZB000004.D Heated Purge: (Y/N) N

Calibration ID: 11278

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				DNT RT #		
CONTINUING CALIBRATION SURROGATE				36.65		
UPPER LIMIT				36.90		
LOWER LIMIT				36.40		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 320-72338/4 CCVRT		04/28/2015 14:33	ZB000004.D	36.65		
240-49171-6	079SB-0352M-0001-SO	04/28/2015 16:46	ZB000006.D	36.60		
240-49171-8	079SB-0353M-0001-SO	04/28/2015 17:52	ZB000007.D	36.60		

DNT = 3,4-Dinitrotoluene

DNT RT Limit = ± 0.25 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8330B

FORM VIII
HPLC/IC ANALYTICAL SEQUENCE

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Sample No.: CCV 320-72338/8 Date Analyzed: 04/28/2015 18:59

Instrument ID: LC9 GC Column: Zorbax CN ID: 4.6(mm)

Lab File ID (Standard): ZB000008.D Heated Purge: (Y/N) N

Calibration ID: 11278

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				DNT RT #		
CONTINUING CALIBRATION SURROGATE				36.58		
UPPER LIMIT				36.83		
LOWER LIMIT				36.33		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 320-72338/8 CCVRT		04/28/2015 18:59	ZB000008.D	36.58		
CCVL 320-72338/9		04/28/2015 20:06	ZB000009.D	36.60		

DNT = 3,4-Dinitrotoluene

DNT RT Limit = ± 0.25 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8330B

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO | Lab Sample ID: 240-49171-6

Matrix: Solid | Lab File ID: W000010.D

Analysis Method: 8330B | Date Collected: 04/08/2015 10:27

Extraction Method: 8330B | Date Extracted: 04/18/2015 14:00

Sample wt/vol: 10.03(g) | Date Analyzed: 04/23/2015 21:54

Con. Extract Vol.: 80.00(mL) | Dilution Factor: 1

Injection Volume: 500(uL) | GC Column: Synergi C18 ID: 4.6(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 71988 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.25	0.050	0.012
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.25	0.050	0.010
99-65-0	1,3-Dinitrobenzene	0.050	U	0.25	0.050	0.0042
121-14-2	2,4-Dinitrotoluene	0.050	U	0.25	0.050	0.0053
606-20-2	2,6-Dinitrotoluene	0.050	U M	0.25	0.050	0.0073
2691-41-0	HMX	0.050	U	0.25	0.050	0.012
98-95-3	Nitrobenzene	0.050	U	0.25	0.050	0.018
55-63-0	Nitroglycerin	0.25	U	0.50	0.25	0.015
88-72-2	2-Nitrotoluene	0.050	U	0.25	0.050	0.013
99-08-1	3-Nitrotoluene	0.050	U	0.25	0.050	0.015
99-99-0	4-Nitrotoluene	0.050	U	0.25	0.050	0.018
78-11-5	PETN	0.25	U	0.50	0.25	0.025
121-82-4	RDX	0.050	U	0.25	0.050	0.012
479-45-8	Tetryl	0.050	U	0.25	0.050	0.010
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.25	0.050	0.010
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.25	0.050	0.019

CAS NO.	SURROGATE	%REC	Q	LIMITS
610-39-9	3,4-Dinitrotoluene	90		78-118

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\LC10\20150423-21275.b\W000010.D				
Lims ID:	240-49171-C-6-A	Lab Sample ID:	320-49171-6		
Client ID:	079SB-0352M-0001-SO				
Sample Type:	Client				
Inject. Date:	23-Apr-2015 21:54:52	ALS Bottle#:	18	Worklist Smp#:	10
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Sample Info:	320-0021275-010				
Operator ID:	YPH	Instrument ID:	LC10		
Method:	\\SACChrom\ChromData\LC10\20150423-21275.b\8330_LC10.m				
Limit Group:	LC 8330B ICAL				
Last Update:	27-Apr-2015 14:06:51	Calib Date:	11-Mar-2015 20:09:31		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D				
Column 1 :	Synergi Hydro-RP C18 (4.60 mm)		Det: LC mwd1A, 250 nm		
Process Host:	XAWRK017				

First Level Reviewer: huangyun Date: 28-Apr-2015 10:42:46

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
$ 30 3,4-Dinitrotoluene						
1	16.645	16.651	-0.006	3753H	56.0	
2	16.224	16.224	0.000	0H	0	
12 2,6-Dinitrotoluene						M
1	18.635	18.644	-0.009	141H	1.96	M

QC Flag Legend

Review Flags
M - Manually Integrated

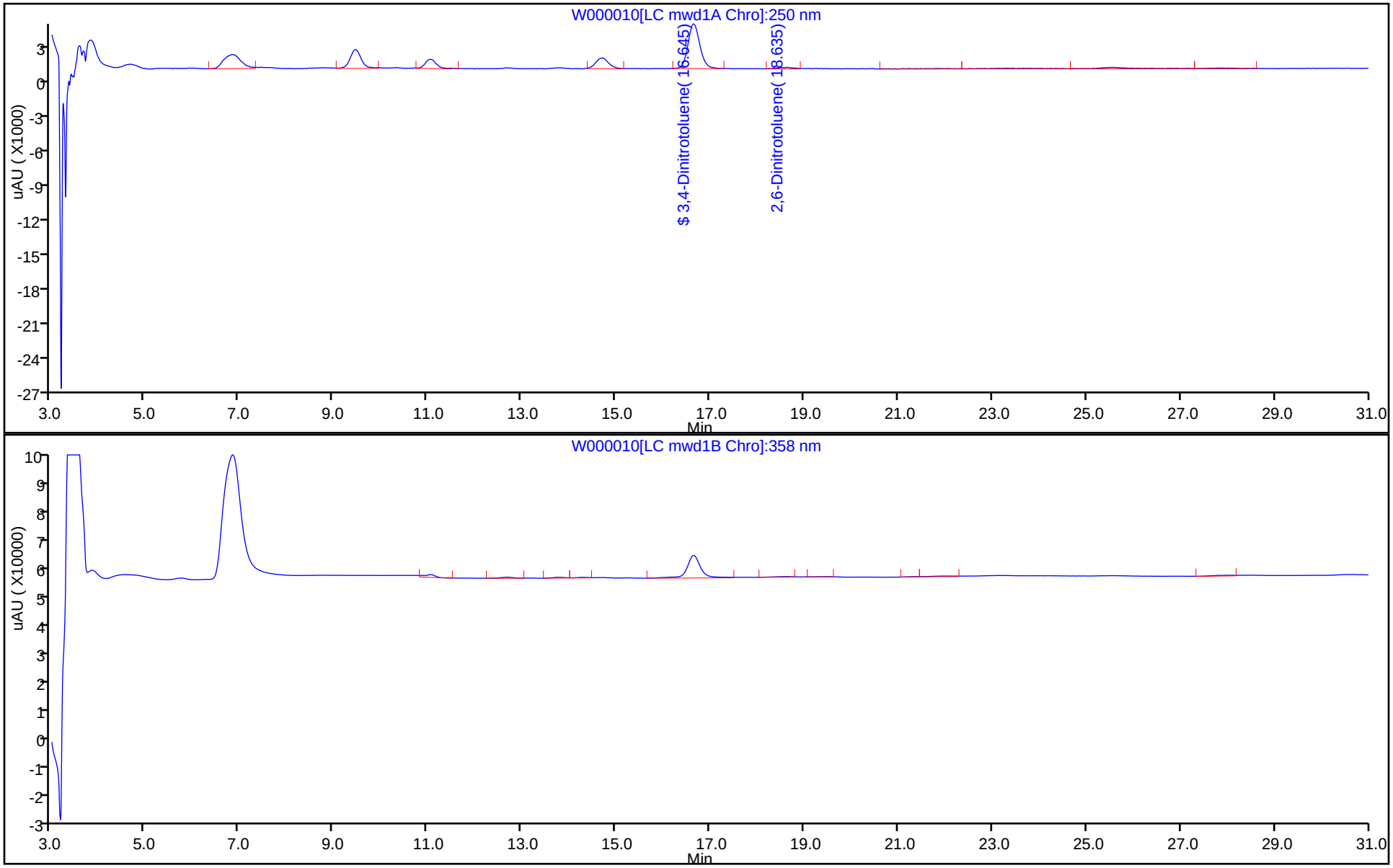
Report Date: 28-Apr-2015 10:42:46 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000010.D

Injection Date:	23-Apr-2015 21:54:52	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	240-49171-C-6-A	Lab Sample ID:	320-49171-6	Worklist Smp#:	10
Client ID:	079SB-0352M-0001-SO				
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)



Manual Integration/User Assign Peak Report

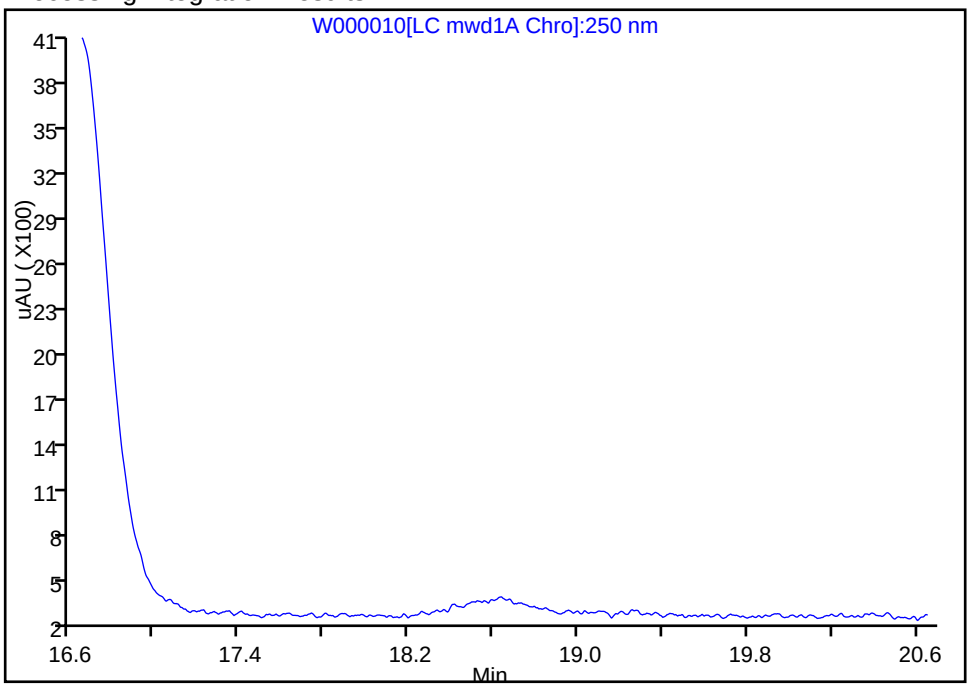
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150423-21275.b\W000010.D				
Injection Date:	23-Apr-2015 21:54:52	Instrument ID:	LC10		
Lims ID:	240-49171-C-6-A	Lab Sample ID:	320-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	YPH	ALS Bottle#:	18	Worklist Smp#:	10
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

12 2,6-Dinitrotoluene, CAS: 606-20-2

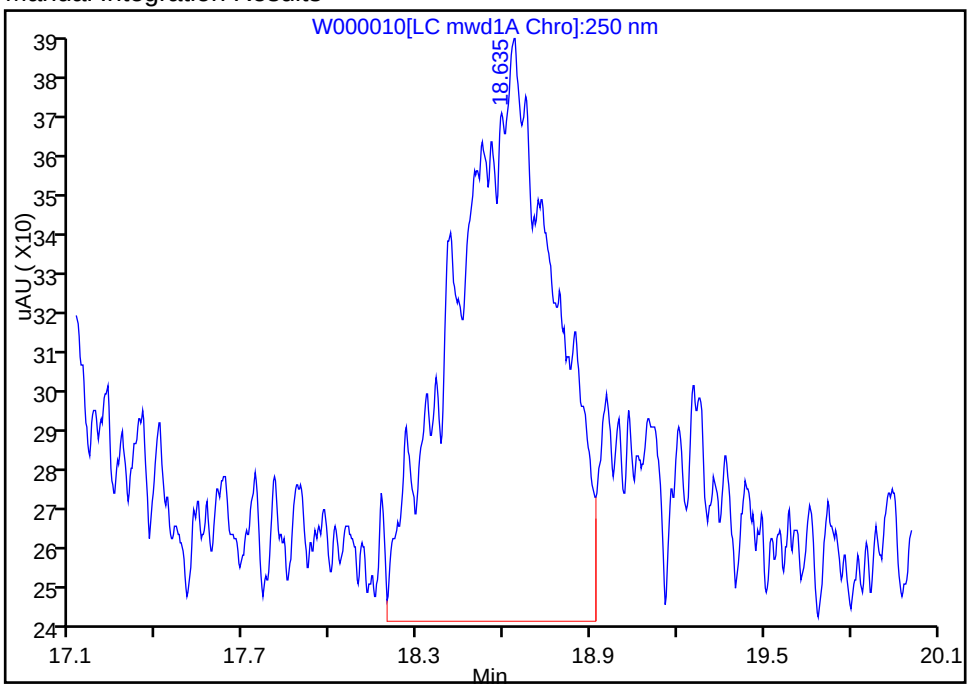
Not Detected
Expected RT: 18.64

Processing Integration Results



Manual Integration Results

RT: 18.63
Height: 141
Amount: 1.959920
Amount Units: ng/ml



Reviewer: huangyun, 24-Apr-2015 17:00:17
Audit Action: Manually Integrated/Assigned Compound ID
Audit Reason: Peak not integrated

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0352M-0001-SO Lab Sample ID: 240-49171-6

Matrix: Solid Lab File ID: ZB000006.D

Analysis Method: 8330B Date Collected: 04/08/2015 10:27

Extraction Method: 8330B Date Extracted: 04/18/2015 14:00

Sample wt/vol: 10.03(g) Date Analyzed: 04/28/2015 16:46

Con. Extract Vol.: 80.00(mL) Dilution Factor: 1

Injection Volume: 500(uL) GC Column: Zorbax CN ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 72338 Units: mg/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
610-39-9	3,4-Dinitrotoluene	101		78-118

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000006.D
Lims ID: 240-49171-C-6-A Lab Sample ID: 320-49171-6
Client ID: 079SB-0352M-0001-SO
Sample Type: Client
Inject. Date: 28-Apr-2015 16:46:12 ALS Bottle#: 12 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021367-006
Operator ID: YPH Instrument ID: LC9

Method: \\SACChrom\ChromData\LC9\20150428-21367.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 29-Apr-2015 09:17:58 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK021

First Level Reviewer: huangyun Date: 29-Apr-2015 09:17:58

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
5 1,3-Dinitrobenzene						
1	24.203	24.185	0.018	155H	1.47	
13 2,4-Dinitrotoluene						
1	31.457	31.388	0.069	976H	10.6	
$ 17 3,4-Dinitrotoluene						
1	36.600	36.648	-0.048	2977H	62.8	
20 Nitroglycerin						M
2	43.010	43.048	-0.038	456H	5.15	M

QC Flag Legend

Review Flags
M - Manually Integrated

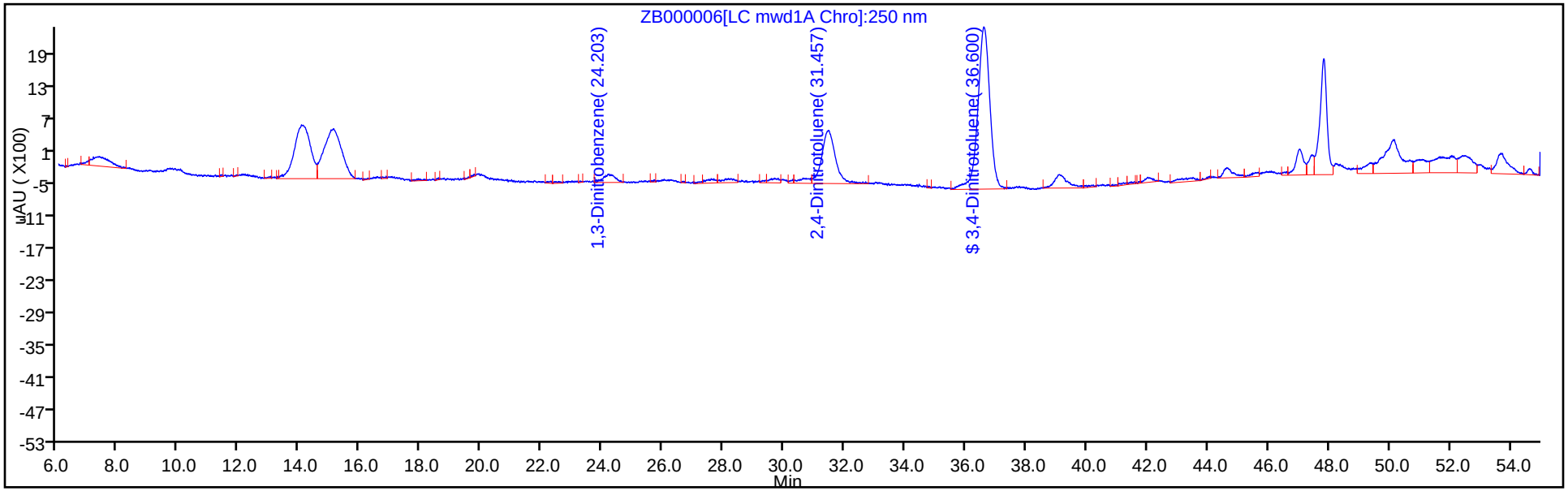
Report Date: 29-Apr-2015 09:17:58 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

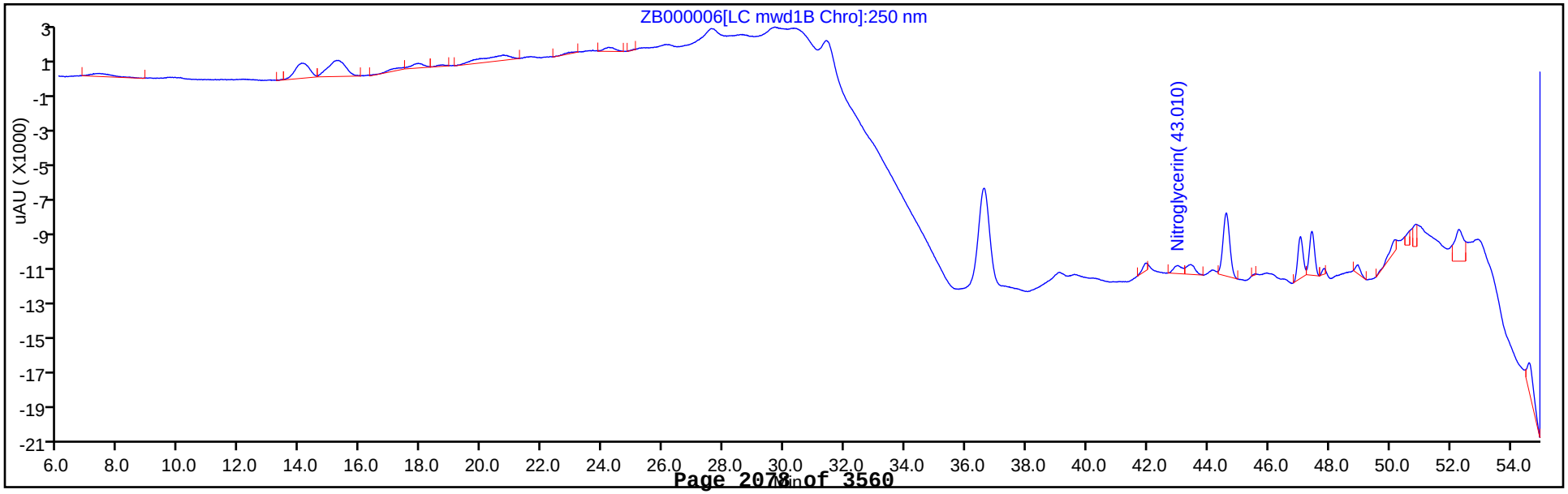
Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000006.D

Injection Date:	28-Apr-2015 16:46:12	Instrument ID:	LC9	Operator ID:	YPH
Lims ID:	240-49171-C-6-A	Lab Sample ID:	320-49171-6	Worklist Smp#:	6
Client ID:	079SB-0352M-0001-SO				
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

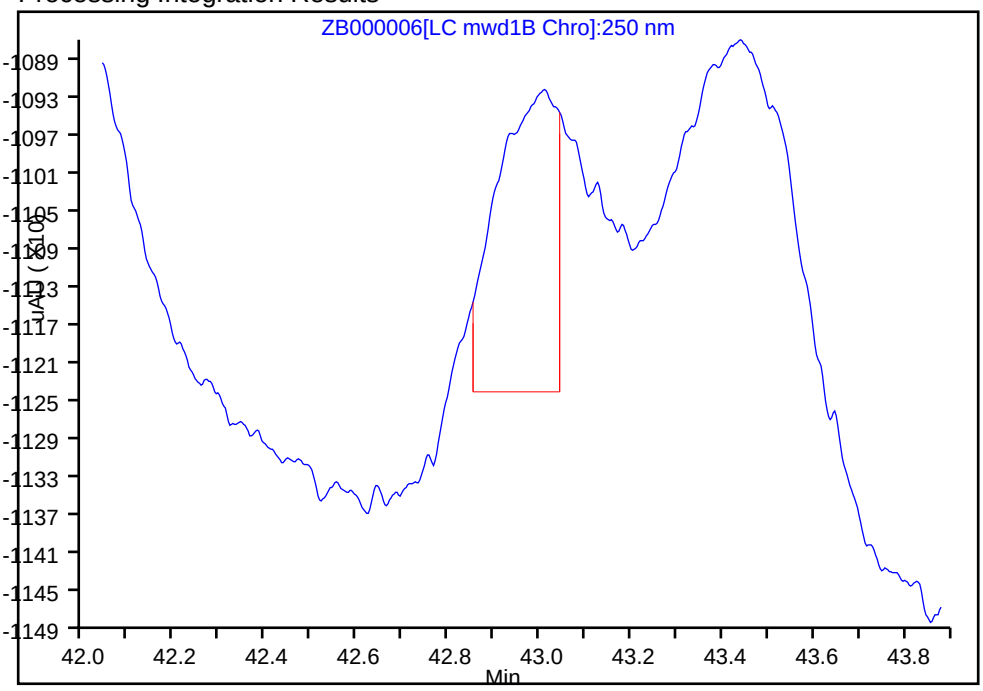
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC9\20150428-21367.b\ZB000006.D				
Injection Date:	28-Apr-2015 16:46:12	Instrument ID:	LC9		
Lims ID:	240-49171-C-6-A	Lab Sample ID:	320-49171-6		
Client ID:	079SB-0352M-0001-SO				
Operator ID:	YPH	ALS Bottle#:	12	Worklist Smp#:	6
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		
Column:	Zorbax Cyano CN (4.60 mm)	Detector	LC mwd1B, 358 nm		

20 Nitroglycerin, CAS: 55-63-0

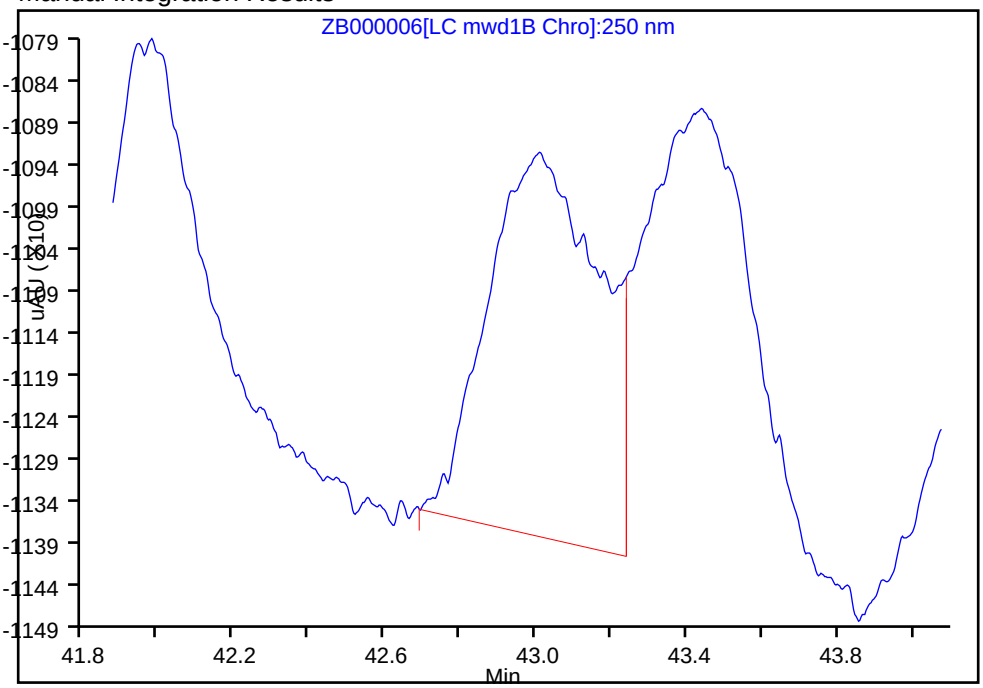
Processing Integration Results

RT: 43.01
Height: 316
Amount: 3.570353
Amount Units: ng/ml



Manual Integration Results

RT: 43.01
Height: 456
Amount: 5.152154
Amount Units: ng/ml



Reviewer: huangyun, 29-Apr-2015 09:17:58
Audit Action: Split an Integrated Peak
Audit Reason: Incomplete Integration

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento | Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO | Lab Sample ID: 240-49171-8

Matrix: Solid | Lab File ID: W000011.D

Analysis Method: 8330B | Date Collected: 04/08/2015 09:57

Extraction Method: 8330B | Date Extracted: 04/18/2015 14:00

Sample wt/vol: 10.00(g) | Date Analyzed: 04/23/2015 22:38

Con. Extract Vol.: 80.00(mL) | Dilution Factor: 1

Injection Volume: 500(uL) | GC Column: Synergi C18 ID: 4.6(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 71988 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.25	0.050	0.013
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.25	0.050	0.010
99-65-0	1,3-Dinitrobenzene	0.050	U	0.25	0.050	0.0042
121-14-2	2,4-Dinitrotoluene	0.050	U	0.25	0.050	0.0053
606-20-2	2,6-Dinitrotoluene	0.050	U M	0.25	0.050	0.0073
2691-41-0	HMX	0.050	U	0.25	0.050	0.012
98-95-3	Nitrobenzene	0.050	U	0.25	0.050	0.018
55-63-0	Nitroglycerin	0.25	U	0.50	0.25	0.015
88-72-2	2-Nitrotoluene	0.050	U	0.25	0.050	0.013
99-08-1	3-Nitrotoluene	0.050	U	0.25	0.050	0.016
99-99-0	4-Nitrotoluene	0.050	U	0.25	0.050	0.018
78-11-5	PETN	0.25	U	0.50	0.25	0.025
121-82-4	RDX	0.050	U	0.25	0.050	0.012
479-45-8	Tetryl	0.050	U	0.25	0.050	0.010
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.25	0.050	0.010
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.25	0.050	0.019

CAS NO.	SURROGATE	%REC	Q	LIMITS
610-39-9	3,4-Dinitrotoluene	90		78-118

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000011.D
Lims ID: 240-49171-C-8-A Lab Sample ID: 320-49171-8
Client ID: 079SB-0353M-0001-SO
Sample Type: Client
Inject. Date: 23-Apr-2015 22:38:30 ALS Bottle#: 19 Worklist Smp#: 11
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021275-011
Operator ID: YPH Instrument ID: LC10

Method: \\SACChrom\ChromData\LC10\20150423-21275.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 24-Apr-2015 17:01:20 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK021

First Level Reviewer: huangyun Date: 24-Apr-2015 17:01:20

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
$ 30 3,4-Dinitrotoluene						
1	16.644	16.651	-0.007	3788H	56.5	
2	16.224	16.224	0.000	0H	0	
12 2,6-Dinitrotoluene						M
1	18.581	18.644	-0.063	105H	1.46	M

QC Flag Legend

Review Flags
M - Manually Integrated

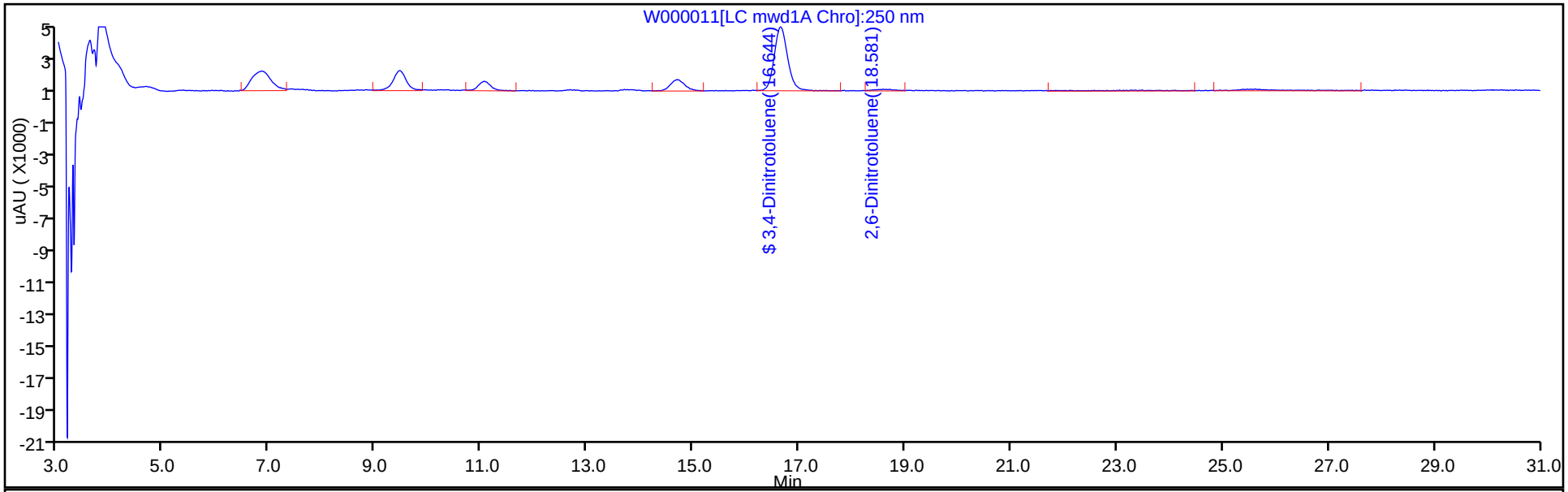
Report Date: 24-Apr-2015 17:01:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

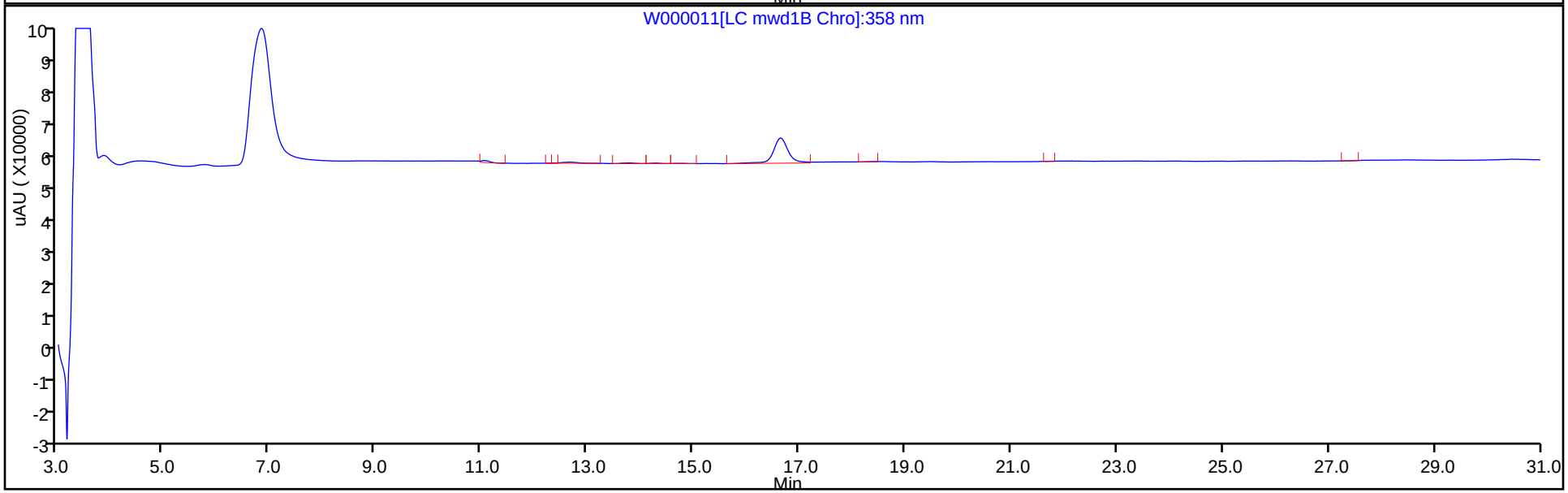
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000011.D

Injection Date:	23-Apr-2015 22:38:30	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	240-49171-C-8-A	Lab Sample ID:	320-49171-8	Worklist Smp#:	11
Client ID:	079SB-0353M-0001-SO				
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)





Manual Integration/User Assign Peak Report

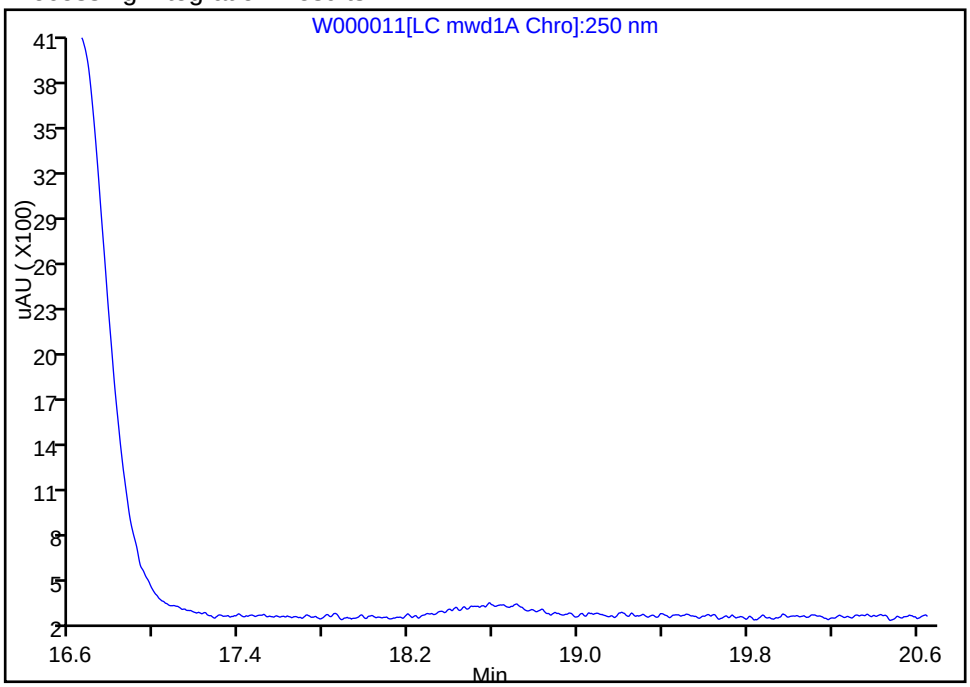
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150423-21275.b\W000011.D				
Injection Date:	23-Apr-2015 22:38:30	Instrument ID:	LC10		
Lims ID:	240-49171-C-8-A	Lab Sample ID:	320-49171-8		
Client ID:	079SB-0353M-0001-SO				
Operator ID:	YPH	ALS Bottle#:	19	Worklist Smp#:	11
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

12 2,6-Dinitrotoluene, CAS: 606-20-2

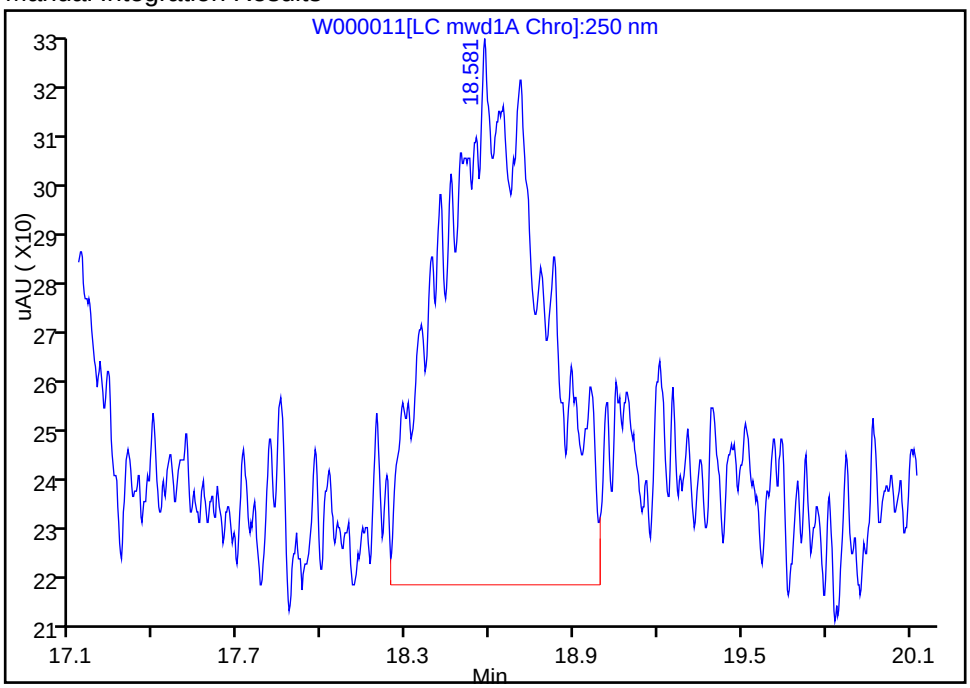
Not Detected
Expected RT: 18.64

Processing Integration Results



Manual Integration Results

RT: 18.58
Height: 105
Amount: 1.459515
Amount Units: ng/ml



Reviewer: huangyun, 24-Apr-2015 17:01:20
Audit Action: Manually Integrated/Assigned Compound ID
Audit Reason: Peak not integrated

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0353M-0001-SO Lab Sample ID: 240-49171-8

Matrix: Solid Lab File ID: ZB000007.D

Analysis Method: 8330B Date Collected: 04/08/2015 09:57

Extraction Method: 8330B Date Extracted: 04/18/2015 14:00

Sample wt/vol: 10.00(g) Date Analyzed: 04/28/2015 17:52

Con. Extract Vol.: 80.00(mL) Dilution Factor: 1

Injection Volume: 500(uL) GC Column: Zorbax CN ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 72338 Units: mg/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
610-39-9	3,4-Dinitrotoluene	99		78-118

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000007.D
Lims ID: 240-49171-C-8-A Lab Sample ID: 320-49171-8
Client ID: 079SB-0353M-0001-SO
Sample Type: Client
Inject. Date: 28-Apr-2015 17:52:50 ALS Bottle#: 13 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021367-007
Operator ID: YPH Instrument ID: LC9

Method: \\SACChrom\ChromData\LC9\20150428-21367.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 29-Apr-2015 09:19:48 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK021

First Level Reviewer: huangyun Date: 29-Apr-2015 09:19:48

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
5 1,3-Dinitrobenzene						
1	24.261	24.185	0.076	169	H 1.60	
13 2,4-Dinitrotoluene						
1	31.491	31.388	0.103	653	H 7.12	
$ 17 3,4-Dinitrotoluene						
1	36.598	36.648	-0.050	2938	H 62.0	

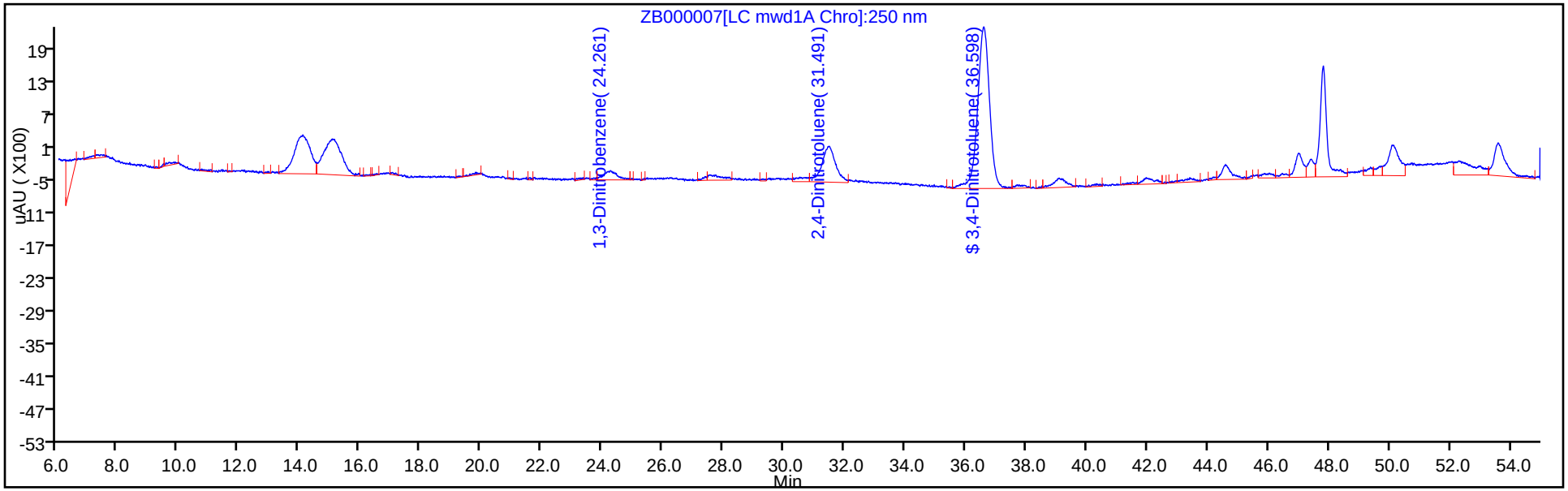
Report Date: 29-Apr-2015 09:19:48 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

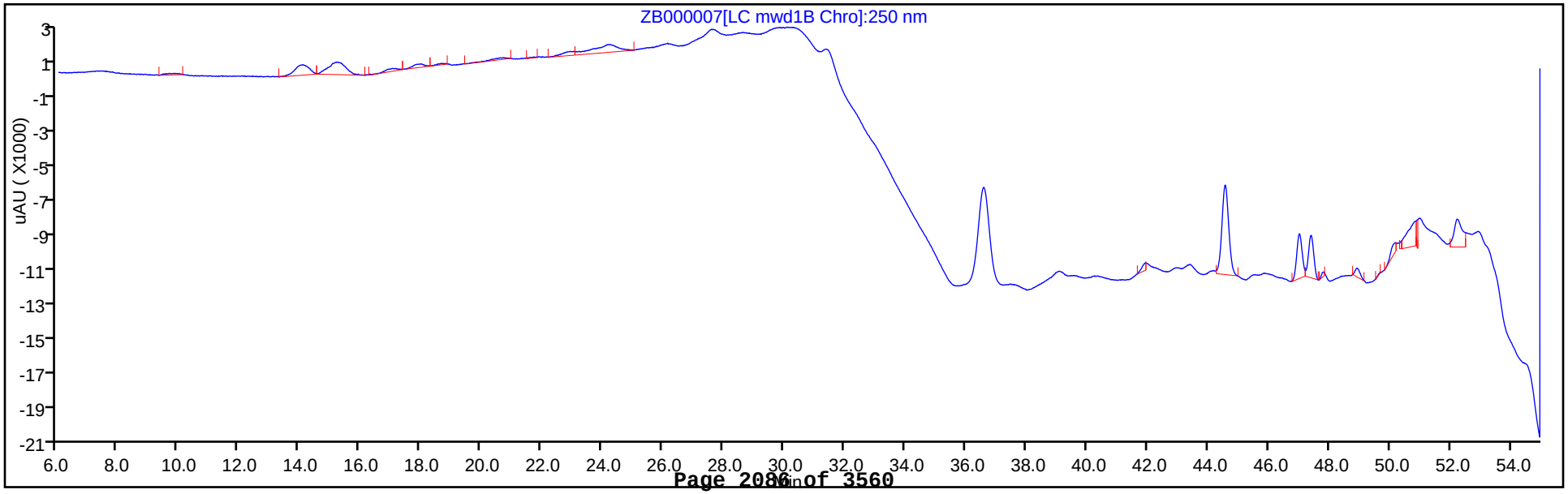
Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000007.D

Injection Date:	28-Apr-2015 17:52:50	Instrument ID:	LC9	Operator ID:	YPH
Lims ID:	240-49171-C-8-A	Lab Sample ID:	320-49171-8	Worklist Smp#:	7
Client ID:	079SB-0353M-0001-SO				
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Client Sample ID: 079SB-0354M-0001-SO Lab Sample ID: 240-49171-10

Matrix: Solid Lab File ID: W000012.D

Analysis Method: 8330B Date Collected: 04/08/2015 11:30

Extraction Method: 8330B Date Extracted: 04/18/2015 14:00

Sample wt/vol: 10.01(g) Date Analyzed: 04/23/2015 23:22

Con. Extract Vol.: 80.00(mL) Dilution Factor: 1

Injection Volume: 500(uL) GC Column: Synergi C18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 71988 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.25	0.050	0.012
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.25	0.050	0.010
99-65-0	1,3-Dinitrobenzene	0.050	U	0.25	0.050	0.0042
121-14-2	2,4-Dinitrotoluene	0.050	U	0.25	0.050	0.0053
606-20-2	2,6-Dinitrotoluene	0.050	U	0.25	0.050	0.0073
2691-41-0	HMX	0.050	U	0.25	0.050	0.012
98-95-3	Nitrobenzene	0.050	U	0.25	0.050	0.018
55-63-0	Nitroglycerin	0.25	U	0.50	0.25	0.015
88-72-2	2-Nitrotoluene	0.050	U	0.25	0.050	0.013
99-08-1	3-Nitrotoluene	0.050	U	0.25	0.050	0.015
99-99-0	4-Nitrotoluene	0.050	U	0.25	0.050	0.018
78-11-5	PETN	0.25	U	0.50	0.25	0.025
121-82-4	RDX	0.050	U	0.25	0.050	0.012
479-45-8	Tetryl	0.050	U	0.25	0.050	0.010
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.25	0.050	0.010
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.25	0.050	0.019

CAS NO.	SURROGATE	%REC	Q	LIMITS
610-39-9	3,4-Dinitrotoluene	90		78-118

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\LC10\20150423-21275.b\W000012.D				
Lims ID:	240-49171-C-10-A	Lab Sample ID:	320-49171-10		
Client ID:	079SB-0354M-0001-SO				
Sample Type:	Client				
Inject. Date:	23-Apr-2015 23:22:10	ALS Bottle#:	20	Worklist Smp#:	12
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Sample Info:	320-0021275-012				
Operator ID:	YPH	Instrument ID:	LC10		
Method:	\\SACChrom\ChromData\LC10\20150423-21275.b\8330_LC10.m				
Limit Group:	LC 8330B ICAL				
Last Update:	24-Apr-2015 17:02:01	Calib Date:	11-Mar-2015 20:09:31		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D				
Column 1 :	Synergi Hydro-RP C18 (4.60 mm)		Det: LC mwd1A, 250 nm		
Process Host:	XAWRK021				

First Level Reviewer: huangyun Date: 24-Apr-2015 17:02:01

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
$ 30 3,4-Dinitrotoluene						
1	16.650	16.651	-0.001	3774H	56.3	
2	16.224	16.224	0.000	0H	0	

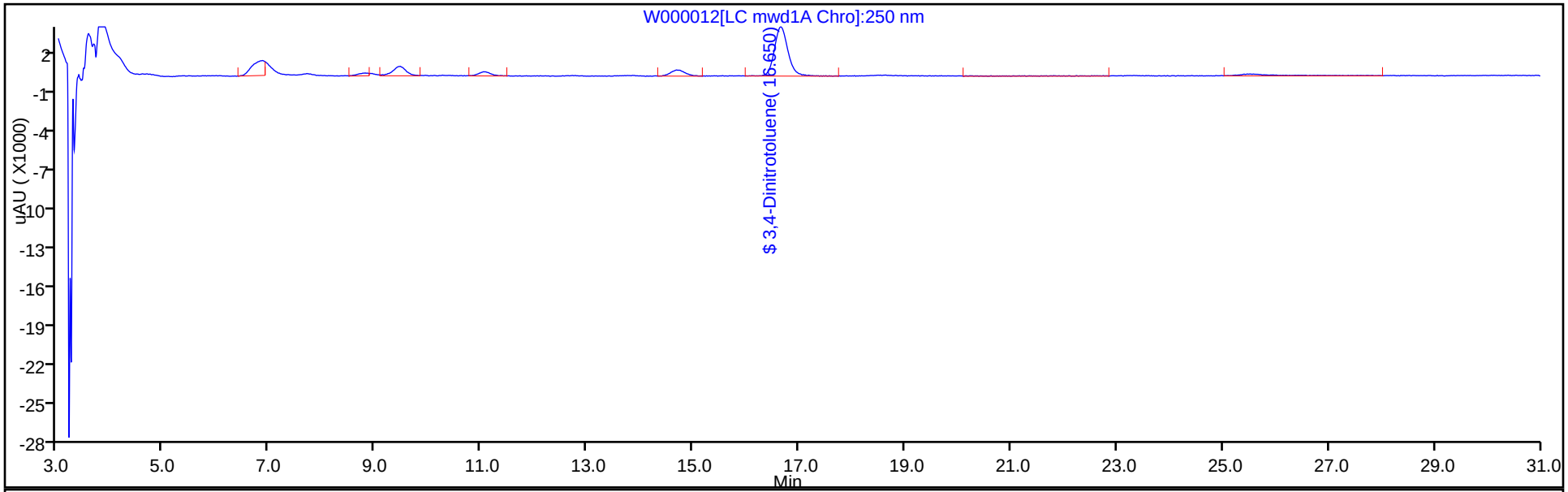
Report Date: 24-Apr-2015 17:02:01 Chrom Revision: 2.2 09-Apr-2015 10:05:40

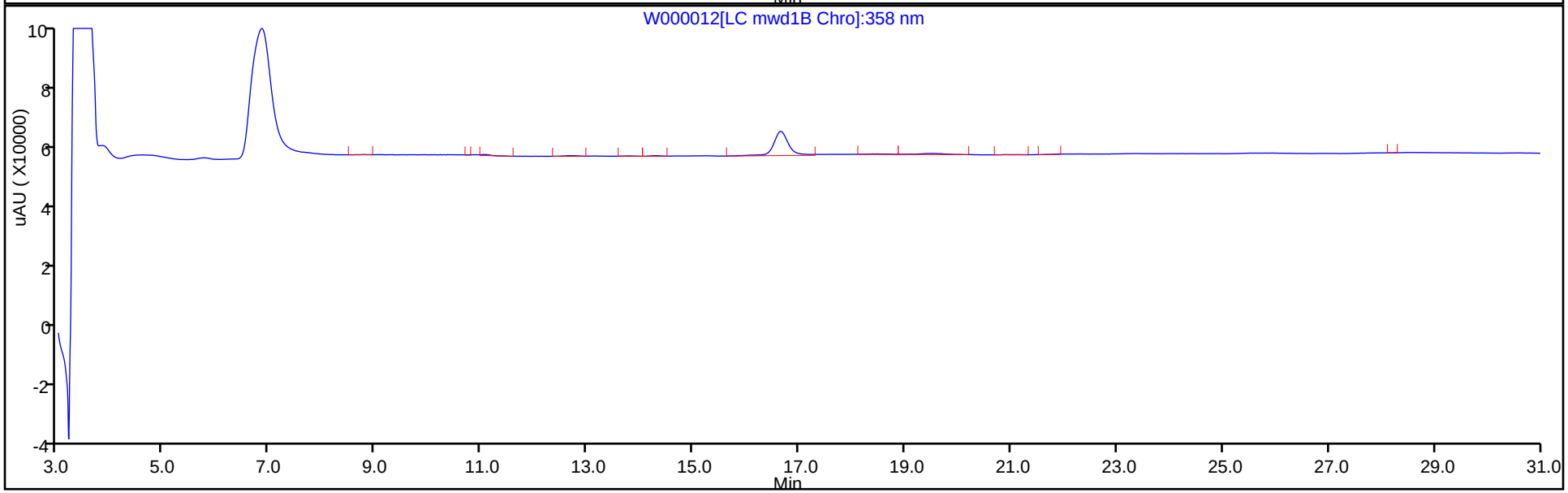
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000012.D

Injection Date:	23-Apr-2015 23:22:10	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	240-49171-C-10-A	Lab Sample ID:	320-49171-10	Worklist Smp#:	12
Client ID:	079SB-0354M-0001-SO				
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)





FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 67883

SDG No.:

Instrument ID: LC10 GC Column: Synergi C18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2015 15:47 Calibration End Date: 03/11/2015 20:09 Calibration ID: 12193

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-67883/4	J000007.D
Level 2	IC 320-67883/5	J000008.D
Level 3	IC 320-67883/6	J000009.D
Level 4	IC 320-67883/7	J000010.D
Level 5	IC 320-67883/8	J000011.D
Level 6	IC 320-67883/9	J000012.D
Level 7	IC 320-67883/10	J000013.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
HMX	5.154	5.152	5.154	5.149	5.149	5.146	5.137				4.899 - 5.399	5.149
RDX	7.407	7.405	7.404	7.406	7.405	7.396	7.377				7.156 - 7.656	7.400
Ethylene glycol dinitrate	+++++	+++++	8.051	8.056	8.055	8.046	8.030				7.806 - 8.306	8.048
Picric acid	+++++	8.612	8.591	8.579	8.569	8.516	8.460				8.329 - 8.829	8.555
1,3,5-Trinitrobenzene	9.620	9.622	9.621	9.623	9.622	9.613	9.597				9.373 - 9.873	9.617
1,3-Dinitrobenzene	12.210	12.212	12.204	12.209	12.209	12.199	12.180				11.959 - 12.459	12.203
3,5-Dinitroaniline	12.930	12.928	12.924	12.929	12.925	12.919	12.900				12.679 - 13.179	12.922
Tetryl	13.440	13.462	13.447	13.449	13.445	13.449	13.434				13.199 - 13.699	13.447
Nitrobenzene	13.937	13.925	13.937	13.939	13.932	13.926	13.904				13.689 - 14.189	13.929
Nitroglycerin	+++++	+++++	14.744	14.749	14.742	14.746	14.727				14.499 - 14.999	14.742
2,4,6-Trinitrotoluene	15.427	15.452	15.441	15.443	15.435	15.443	15.424				15.193 - 15.693	15.438
4-Amino-2,6-dinitrotoluene	16.087	16.092	16.084	16.093	16.082	16.089	16.064				15.843 - 16.343	16.084
2-Amino-4,6-dinitrotoluene	16.920	16.945	16.941	16.949	16.935	16.943	16.914				16.699 - 17.199	16.935
2,6-Dinitrotoluene	18.497	18.525	18.537	18.526	18.512	18.526	18.497				18.276 - 18.776	18.517
2,4-Dinitrotoluene	19.064	19.068	19.077	19.093	19.079	19.086	19.057				18.843 - 19.343	19.075
2-Nitrotoluene	22.414	22.438	22.431	22.463	22.452	22.459	22.424				22.213 - 22.713	22.440
4-Nitrotoluene	24.054	24.068	24.074	24.083	24.089	24.093	24.057				23.833 - 24.333	24.074
3-Nitrotoluene	25.844	25.842	25.834	25.843	25.845	25.853	25.817				25.593 - 26.093	25.840
PETN		+++++	28.334	28.309	28.302	28.326	28.304				28.059 - 28.559	28.315
3,4-Dinitrotoluene	16.527	16.525	16.531	16.539	16.529	16.536	16.517				16.289 - 16.789	16.529

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 67883

SDG No.:

Instrument ID: LC10 GC Column: Synergi C18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2015 15:47 Calibration End Date: 03/11/2015 20:09 Calibration ID: 12193

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-67883/4	J000007.D
Level 2	IC 320-67883/5	J000008.D
Level 3	IC 320-67883/6	J000009.D
Level 4	IC 320-67883/7	J000010.D
Level 5	IC 320-67883/8	J000011.D
Level 6	IC 320-67883/9	J000012.D
Level 7	IC 320-67883/10	J000013.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
HMX	167.00 143.18	149.60 150.42	143.30 132.72	143.54	Ave		147.107571				7.1		20.0			
RDX	121.40 97.200	109.00 99.700	99.350 83.334	99.720	Ave		101.386286				11.5		20.0			
Ethylene glycol dinitrate	+++++ 123.64	+++++ 124.51	126.45 105.84	122.92	Ave		120.671000				7.0		20.0			
Picric acid	+++++ 136.38	129.55 133.02	131.78 117.19	136.17	Ave		130.681167				5.4		20.0			
1,3,5-Trinitrobenzene	219.60 189.07	201.50 197.44	191.25 172.03	190.38	Ave		194.466714				7.4		20.0			
1,3-Dinitrobenzene	214.60 181.38	195.70 187.98	183.15 162.39	182.56	Ave		186.822857				8.5		20.0			
3,5-Dinitroaniline	140.20 119.60	128.60 124.12	120.80 107.18	120.56	Ave		123.007286				8.1		20.0			
Tetryl	123.60 107.25	113.80 113.60	108.65 102.94	107.16	Ave		110.999286				6.1		20.0			
Nitrobenzene	98.400 81.410	88.800 84.615	83.000 73.490	81.600	Ave		84.4735714				9.1		20.0			
Nitroglycerin	+++++ 77.150	+++++ 78.790	80.100 72.308	74.820	Ave		76.6336000				4.1		20.0			
2,4,6-Trinitrotoluene	129.20 109.70	116.30 115.70	110.75 104.35	109.58	Ave		113.653286				7.0		20.0			
4-Amino-2,6-dinitrotoluene	105.00 88.190	94.800 92.310	90.200 81.802	88.300	Ave		91.5145714				7.9		20.0			
2-Amino-4,6-dinitrotoluene	116.20 98.600	106.40 103.23	100.10 91.586	98.840	Ave		102.135857				7.5		20.0			
2,6-Dinitrotoluene	83.400 69.310	72.300 72.860	70.900 65.362	69.460	Ave		71.9417143				7.8		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 67883

SDG No.:

Instrument ID: LC10 GC Column: Synergi C18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2015 15:47 Calibration End Date: 03/11/2015 20:09 Calibration ID: 12193

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
2,4-Dinitrotoluene	134.80 114.42	119.30 120.39	116.40 107.92	114.76	Ave		118.283857				7.0		20.0			
2-Nitrotoluene	61.800 49.990	54.800 52.760	50.550 47.366	49.580	Ave		52.4065714				9.1		20.0			
4-Nitrotoluene	73.000 60.310	64.700 63.975	60.950 57.646	60.120	Ave		62.9572857				8.0		20.0			
3-Nitrotoluene	69.800 56.050	61.200 59.705	57.300 54.058	56.380	Ave		59.2132857				8.8		20.0			
PETN	 44.750	+++++ 45.925	44.800 43.490	43.240	Ave		44.4410000				2.5		20.0			
3,4-Dinitrotoluene	76.400 64.360	71.200 66.360	66.150 61.356	63.420	Ave		67.0351429				7.7		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 67883

SDG No.:

Instrument ID: LC10 GC Column: Synergi C18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2015 15:47 Calibration End Date: 03/11/2015 20:09 Calibration ID: 12193

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 320-67883/4	J000007.D
Level 2	IC 320-67883/5	J000008.D
Level 3	IC 320-67883/6	J000009.D
Level 4	IC 320-67883/7	J000010.D
Level 5	IC 320-67883/8	J000011.D
Level 6	IC 320-67883/9	J000012.D
Level 7	IC 320-67883/10	J000013.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
HMX	Ave	835 30083	1496 66359	2866	7177	14318	5.00 200	10.0 500	20.0	50.0	100
RDX	Ave	607 19940	1090 41667	1987	4986	9720	5.00 200	10.0 500	20.0	50.0	100
Ethylene glycol dinitrate	Ave	+++++ 24901	+++++ 52920	2529	6146	12364	+++++ 200	+++++ 500	20.0	50.0	100
Picric acid	Ave	+++++ 66509	2591 117189	6589	13617	27276	+++++ 500	20.0 1000	50.0	100	200
1,3,5-Trinitrobenzene	Ave	1098 39487	2015 86016	3825	9519	18907	5.00 200	10.0 500	20.0	50.0	100
1,3-Dinitrobenzene	Ave	1073 37596	1957 81195	3663	9128	18138	5.00 200	10.0 500	20.0	50.0	100
3,5-Dinitroaniline	Ave	701 24823	1286 53588	2416	6028	11960	5.00 200	10.0 500	20.0	50.0	100
Tetryl	Ave	618 22719	1138 51470	2173	5358	10725	5.00 200	10.0 500	20.0	50.0	100
Nitrobenzene	Ave	492 16923	888 36745	1660	4080	8141	5.00 200	10.0 500	20.0	50.0	100
Nitroglycerin	Ave	+++++ 15758	+++++ 36154	1602	3741	7715	+++++ 200	+++++ 500	20.0	50.0	100
2,4,6-Trinitrotoluene	Ave	646 23139	1163 52174	2215	5479	10970	5.00 200	10.0 500	20.0	50.0	100
4-Amino-2,6-dinitrotoluene	Ave	525 18462	948 40901	1804	4415	8819	5.00 200	10.0 500	20.0	50.0	100
2-Amino-4,6-dinitrotoluene	Ave	581 20645	1064 45793	2002	4942	9860	5.00 200	10.0 500	20.0	50.0	100
2,6-Dinitrotoluene	Ave	417 14572	723 32681	1418	3473	6931	5.00 200	10.0 500	20.0	50.0	100
2,4-Dinitrotoluene	Ave	674 24077	1193 53961	2328	5738	11442	5.00 200	10.0 500	20.0	50.0	100

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 67883

SDG No.:

Instrument ID: LC10 GC Column: Synergi C18 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/11/2015 15:47 Calibration End Date: 03/11/2015 20:09 Calibration ID: 12193

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
2-Nitrotoluene	Ave	309 10552	548 23683	1011	2479	4999	5.00 200	10.0 500	20.0	50.0	100
4-Nitrotoluene	Ave	365 12795	647 28823	1219	3006	6031	5.00 200	10.0 500	20.0	50.0	100
3-Nitrotoluene	Ave	349 11941	612 27029	1146	2819	5605	5.00 200	10.0 500	20.0	50.0	100
PETN	Ave	 9185	+++++ 21745	896	2162	4475	 200	+++++ 500	20.0	50.0	100
3,4-Dinitrotoluene	Ave	382 13272	712 30678	1323	3171	6436	5.00 200	10.0 500	20.0	50.0	100

Curve Type Legend:
Ave = Average by Height

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000007.D
Lims ID: IC 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 11-Mar-2015 15:47:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020096-004
Operator ID: YPH Instrument ID: LC10
Sublist: chrom-8330_LC10*sub1

Method: \\SACChrom\ChromData\LC10\20150311-20096.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 12-Mar-2015 11:12:20 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK019

First Level Reviewer: phant Date: 12-Mar-2015 06:16:20

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.154	5.149	0.005	835H	5.00	5.68	
19 RDX							M
1	7.407	7.406	0.001	607H	5.00	5.99	M
3 Ethylene glycol dinitrate							
2	8.054	8.056	-0.002	753H	5.00	6.24	
10 2,4,6-Trinitrophenol							
2	8.610	8.579	0.031	1410H	10.0	10.8	
1	8.607	8.579	0.028	996H	10.0	10.8	
27 1,3,5-Trinitrobenzene							
1	9.620	9.623	-0.003	1098H	5.00	5.65	
24 1,3-Dinitrobenzene							
1	12.210	12.209	0.001	1073H	5.00	5.74	
9 3,5-Dinitroaniline							
1	12.930	12.929	0.001	701H	5.00	5.70	
20 Tetryl							
1	13.440	13.449	-0.009	618H	5.00	5.57	
5 Nitrobenzene							
1	13.937	13.939	-0.002	492H	5.00	5.82	
7 Nitroglycerin							
2	14.744	14.749	-0.005	474H	5.00	6.19	
25 2,4,6-Trinitrotoluene							
1	15.427	15.443	-0.016	646H	5.00	5.68	
26 4-Amino-2,6-dinitrotoluene							
1	16.087	16.093	-0.006	525H	5.00	5.74	
$ 30 3,4-Dinitrotoluene							M
1	16.527	16.539	-0.012	382H	5.00	5.70	
2	16.504	16.539	-0.035	834H	5.00	6.21	M
6 2-Amino-4,6-dinitrotoluene							
1	16.920	16.949	-0.029	581H	5.00	5.69	
12 2,6-Dinitrotoluene							M
1	18.497	18.526	-0.029	417H	5.00	5.80	M

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
23 2,4-Dinitrotoluene							M
1	19.064	19.093	-0.029	674H	5.00	5.70	M
16 o-Nitrotoluene							M
1	22.414	22.463	-0.049	309H	5.00	5.90	M
15 p-Nitrotoluene							M
1	24.054	24.083	-0.029	365H	5.00	5.80	M
8 m-Nitrotoluene							M
1	25.844	25.843	0.001	349H	5.00	5.89	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L1_00021 Amount Added: 1.00 Units: mL

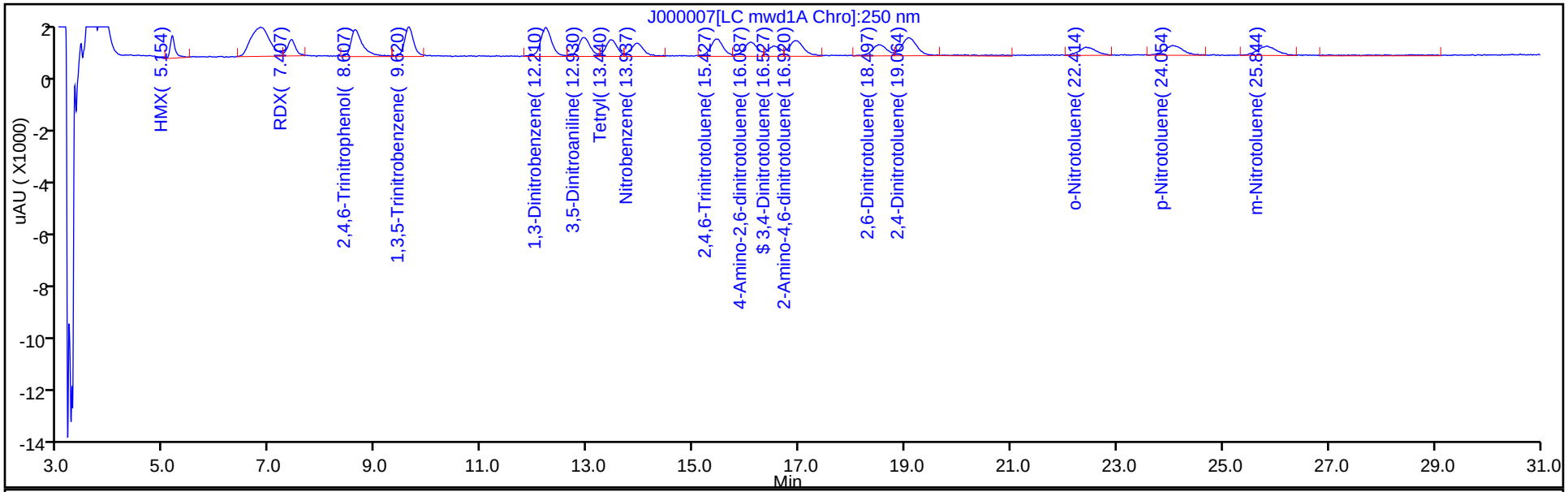
Report Date: 12-Mar-2015 11:12:21 Chrom Revision: 2.2 06-Mar-2015 13:13:48

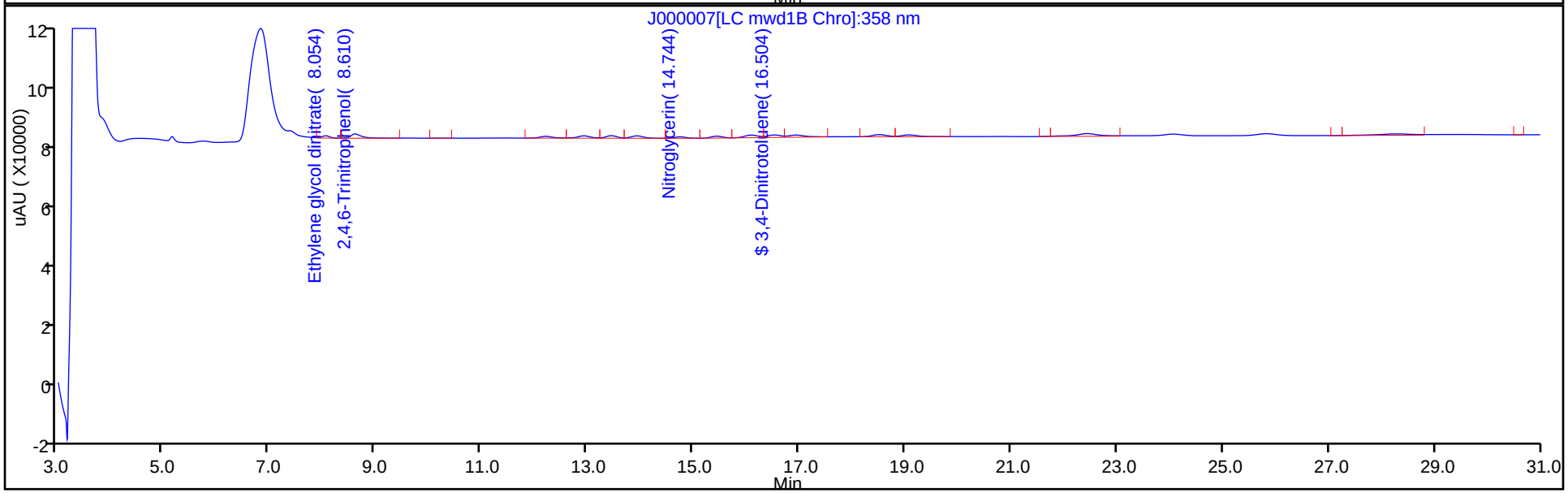
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000007.D

Injection Date:	11-Mar-2015 15:47:30	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	IC 1			Worklist Smp#:	4
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)





Manual Integration/User Assign Peak Report

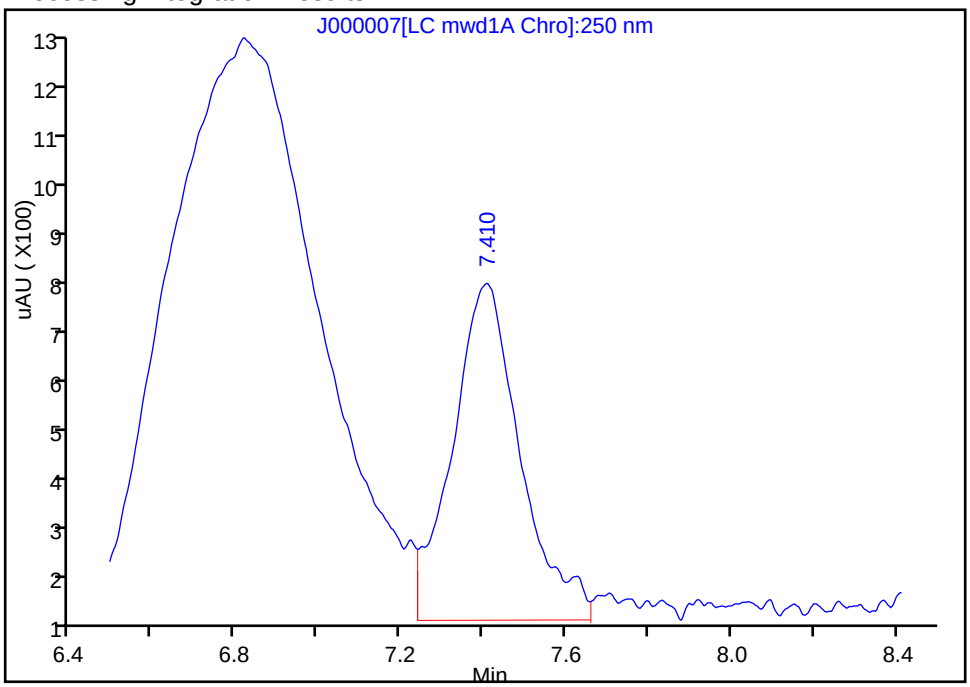
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000007.D
Injection Date: 11-Mar-2015 15:47:30 Instrument ID: LC10
Lims ID: IC 1
Client ID:
Operator ID: YPH ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

19 RDX, CAS: 121-82-4

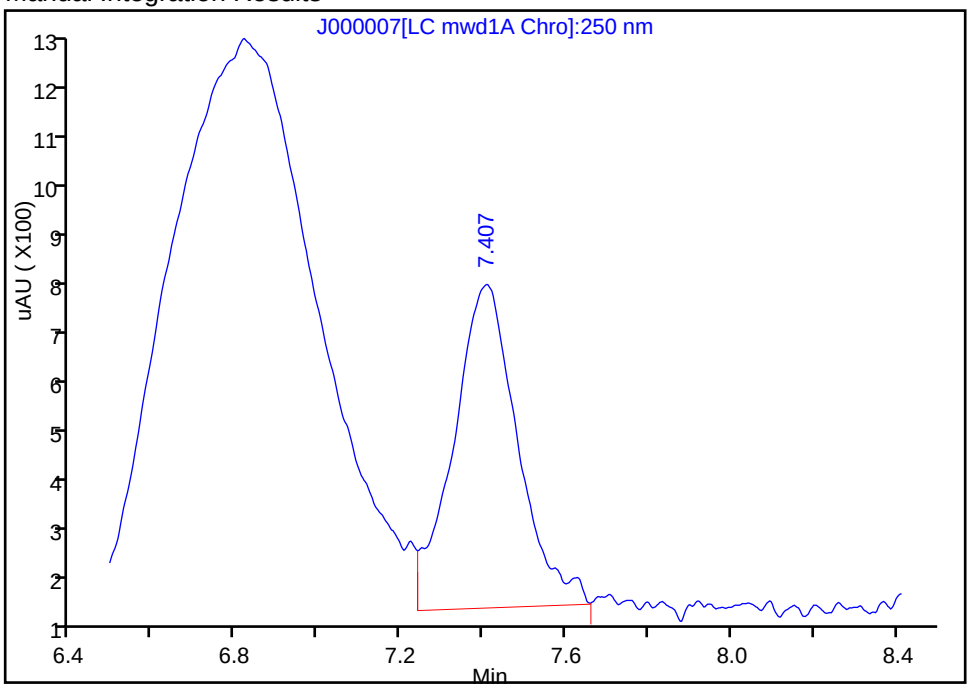
Processing Integration Results

RT: 7.41
Height: 632
Amount: 6.189975
Amount Units: ng/ml



Manual Integration Results

RT: 7.41
Height: 607
Amount: 5.987003
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:49:40
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

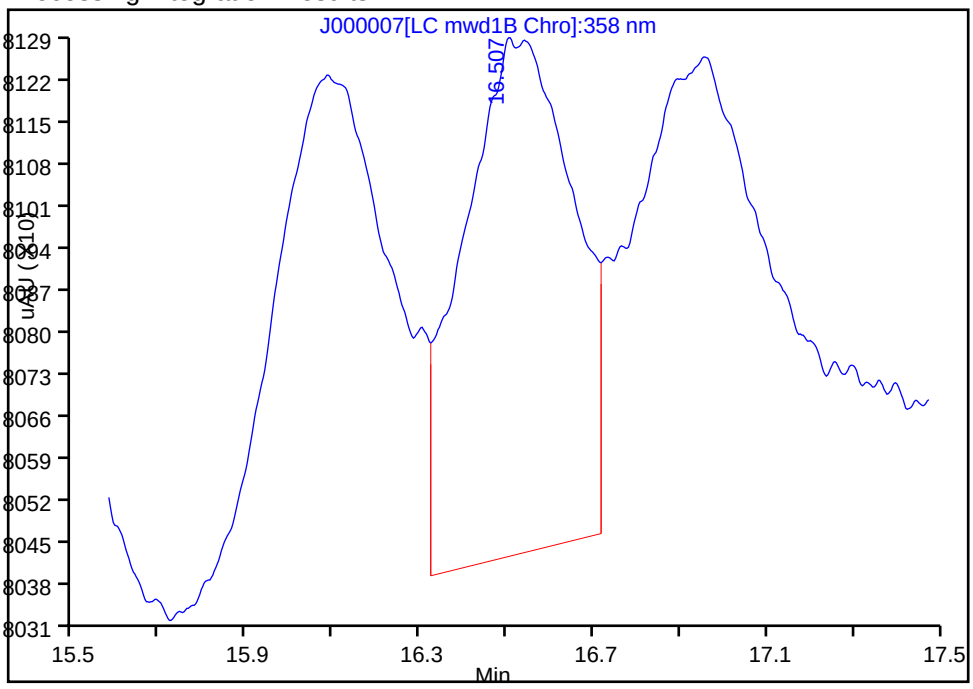
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000007.D
Injection Date: 11-Mar-2015 15:47:30 Instrument ID: LC10
Lims ID: IC 1
Client ID:
Operator ID: YPH ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

$ 30 3,4-Dinitrotoluene, CAS: 610-39-9

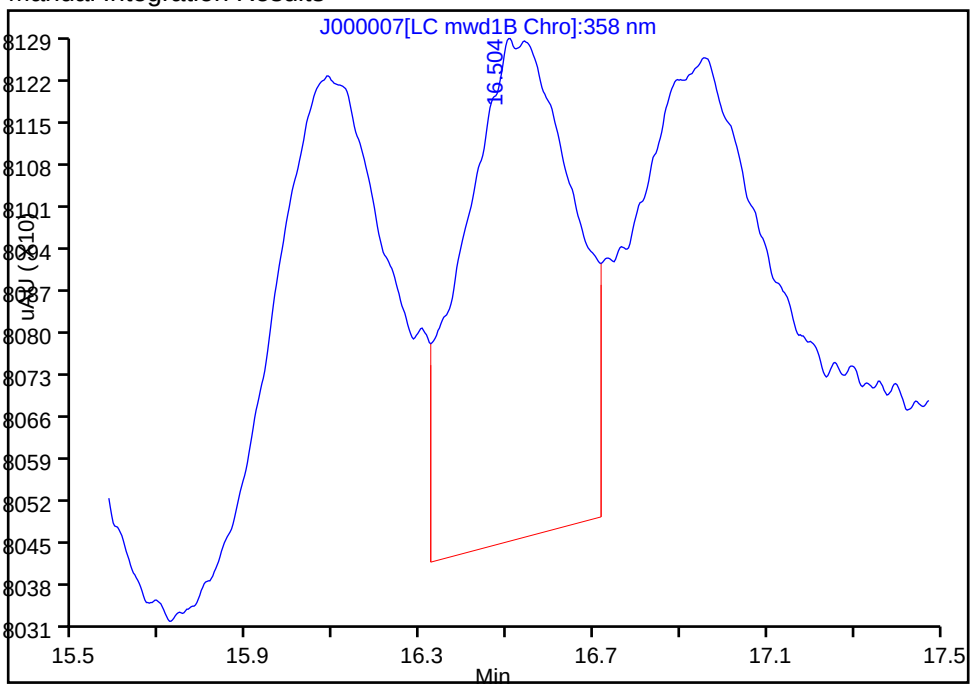
Processing Integration Results

RT: 16.51
Height: 860
Amount: 6.369750
Amount Units: ng/ml



Manual Integration Results

RT: 16.50
Height: 834
Amount: 6.211352
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:49:40
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

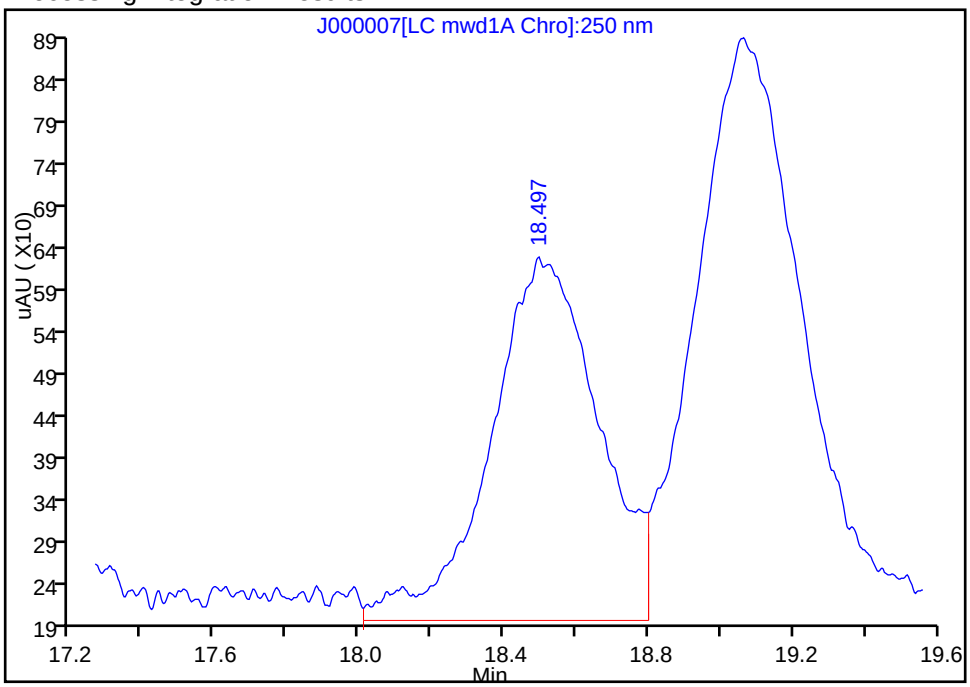
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000007.D
Injection Date: 11-Mar-2015 15:47:30 Instrument ID: LC10
Lims ID: IC 1
Client ID:
Operator ID: YPH ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

12 2,6-Dinitrotoluene, CAS: 606-20-2

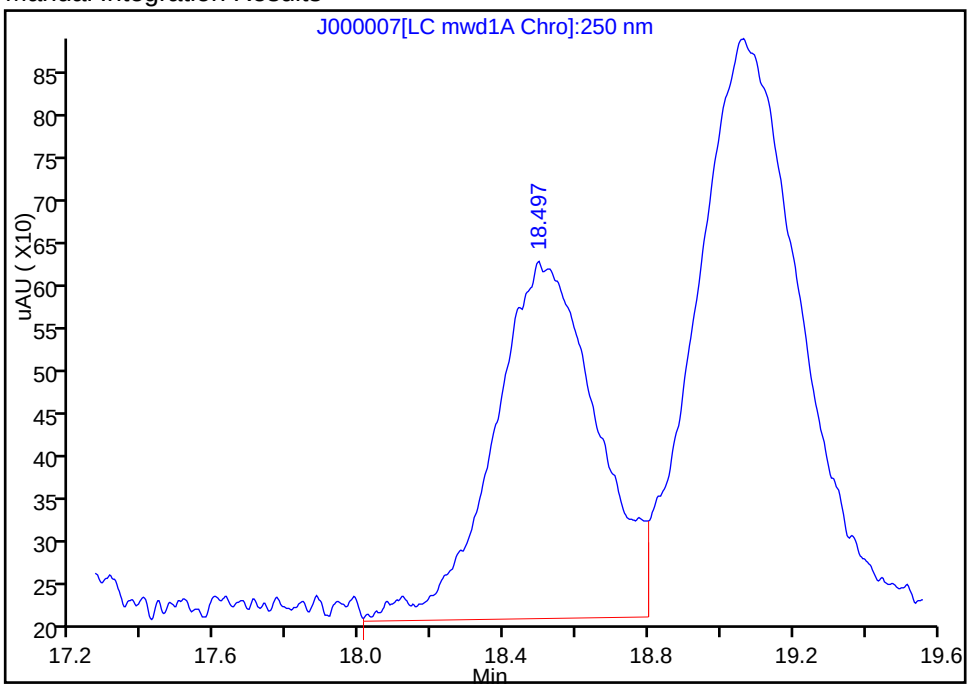
Processing Integration Results

RT: 18.50
Height: 431
Amount: 5.957835
Amount Units: ng/ml



Manual Integration Results

RT: 18.50
Height: 417
Amount: 5.796359
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:49:40
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

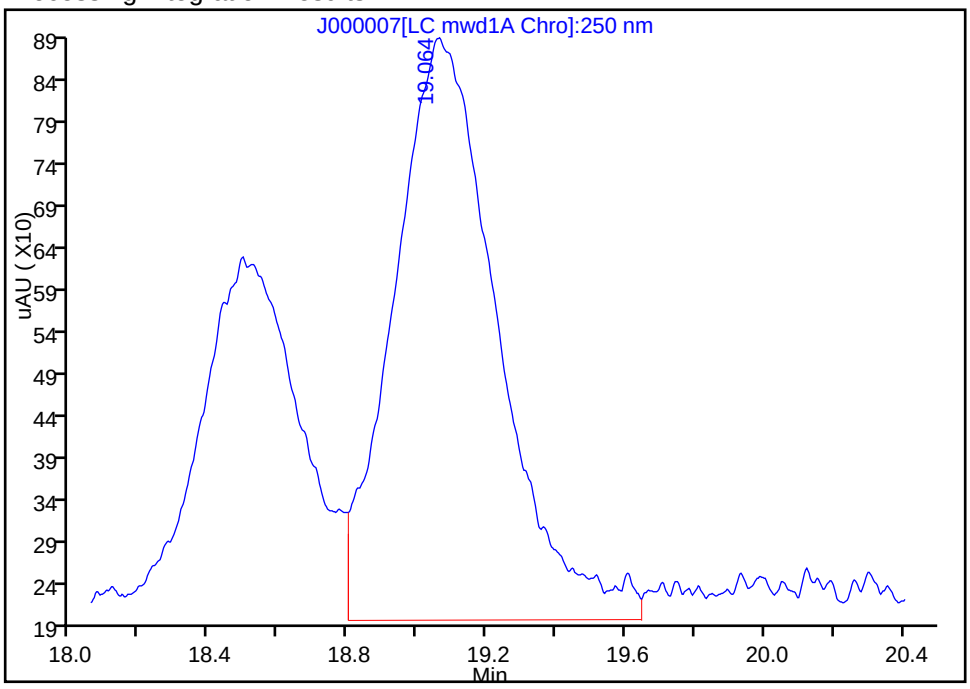
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000007.D
Injection Date: 11-Mar-2015 15:47:30 Instrument ID: LC10
Lims ID: IC 1
Client ID:
Operator ID: YPH ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

23 2,4-Dinitrotoluene, CAS: 121-14-2

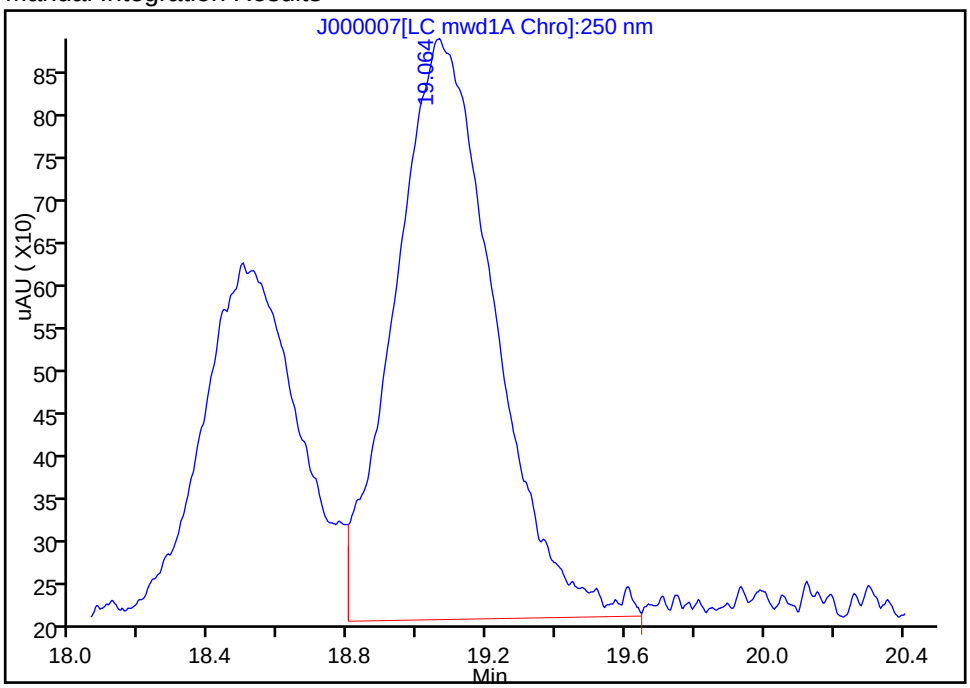
Processing Integration Results

RT: 19.06
Height: 691
Amount: 5.817988
Amount Units: ng/ml



Manual Integration Results

RT: 19.06
Height: 674
Amount: 5.698157
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:49:40
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

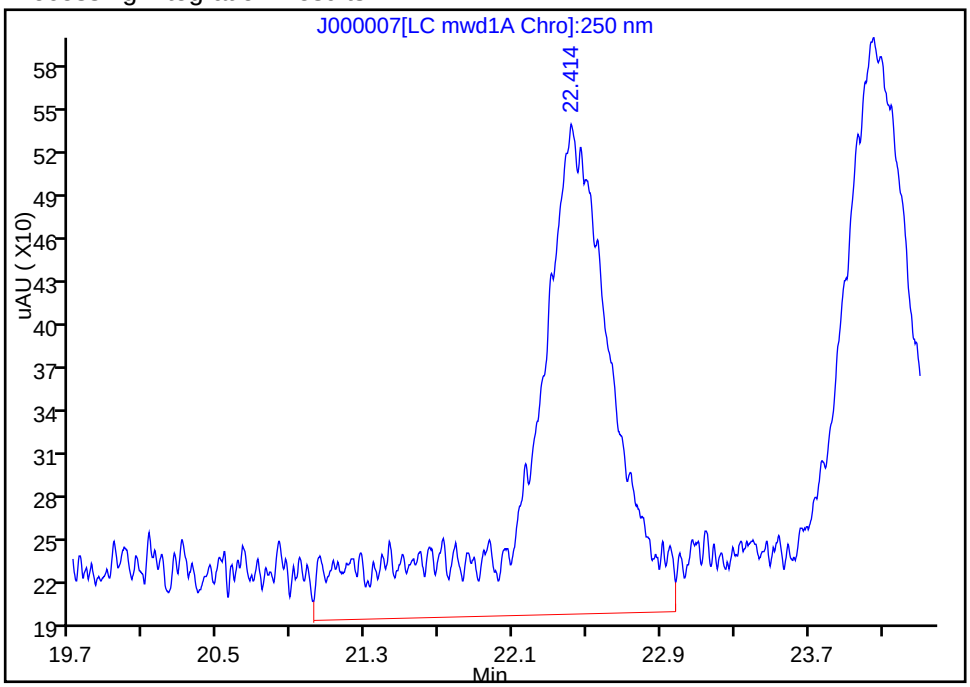
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000007.D
Injection Date: 11-Mar-2015 15:47:30 Instrument ID: LC10
Lims ID: IC 1
Client ID:
Operator ID: YPH ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

16 o-Nitrotoluene, CAS: 88-72-2

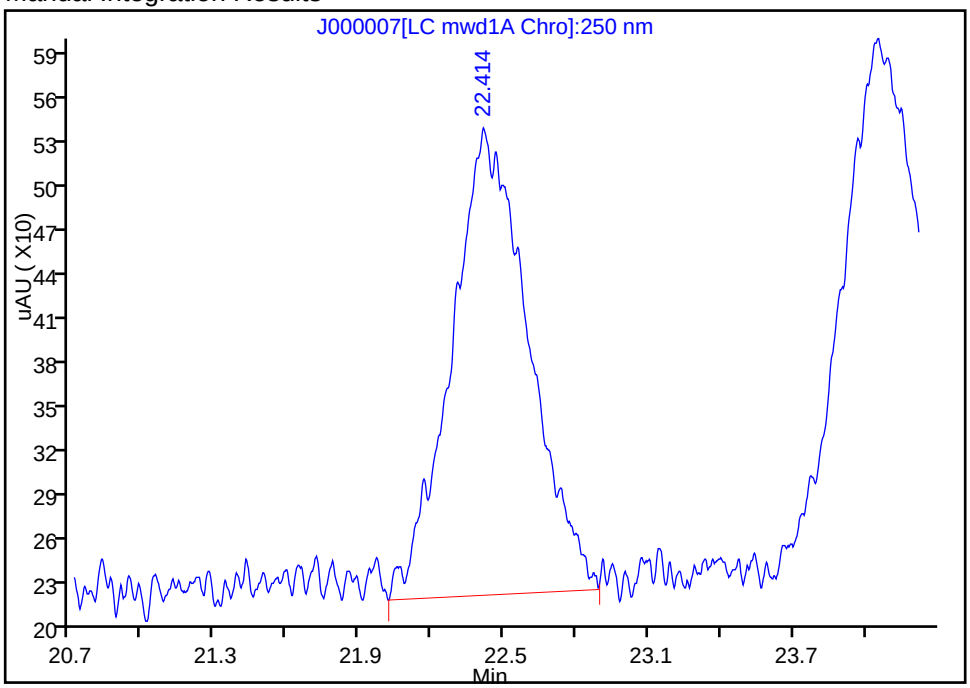
Processing Integration Results

RT: 22.41
Height: 335
Amount: 6.302984
Amount Units: ng/ml



Manual Integration Results

RT: 22.41
Height: 309
Amount: 5.896207
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:49:40
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

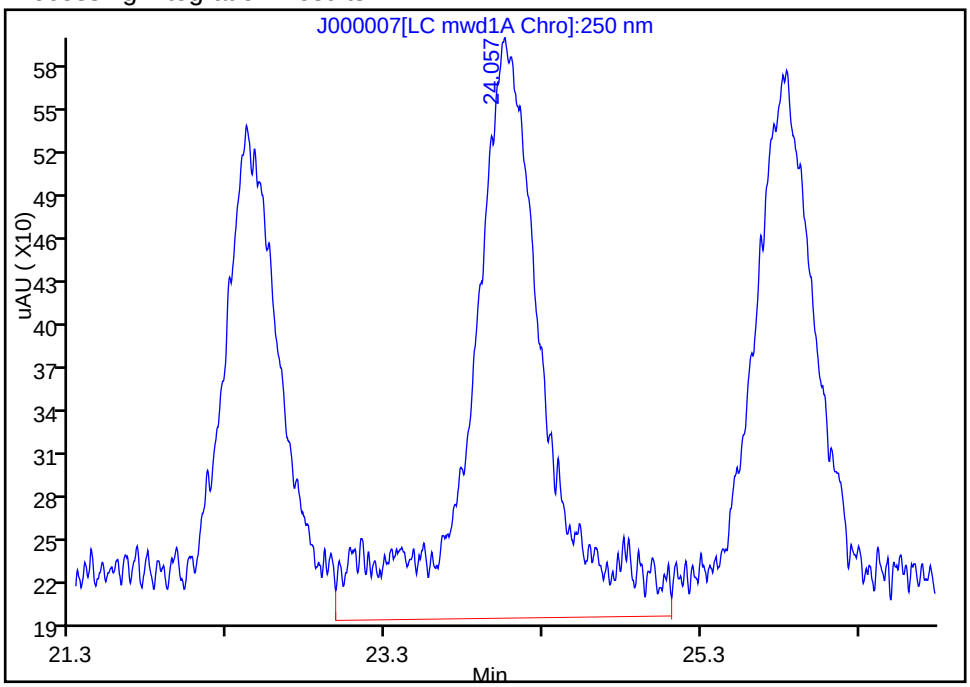
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000007.D
Injection Date: 11-Mar-2015 15:47:30 Instrument ID: LC10
Lims ID: IC 1
Client ID:
Operator ID: YPH ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

15 p-Nitrotoluene, CAS: 99-99-0

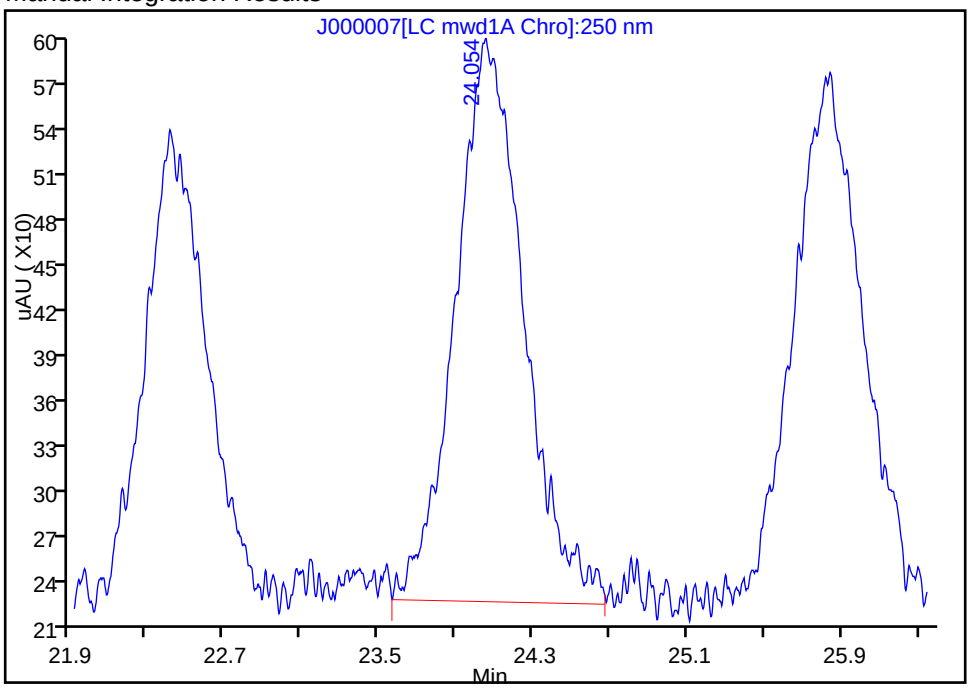
Processing Integration Results

RT: 24.06
Height: 391
Amount: 5.164403
Amount Units: ng/ml



Manual Integration Results

RT: 24.05
Height: 365
Amount: 5.797582
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:49:40
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

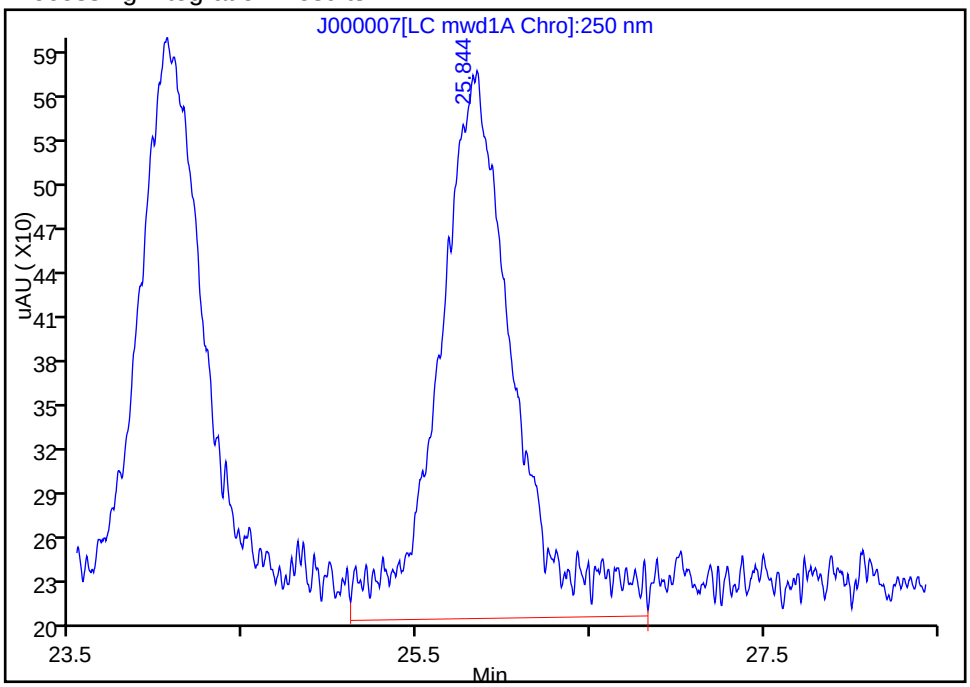
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000007.D
Injection Date: 11-Mar-2015 15:47:30 Instrument ID: LC10
Lims ID: IC 1
Client ID:
Operator ID: YPH ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

8 m-Nitrotoluene, CAS: 99-08-1

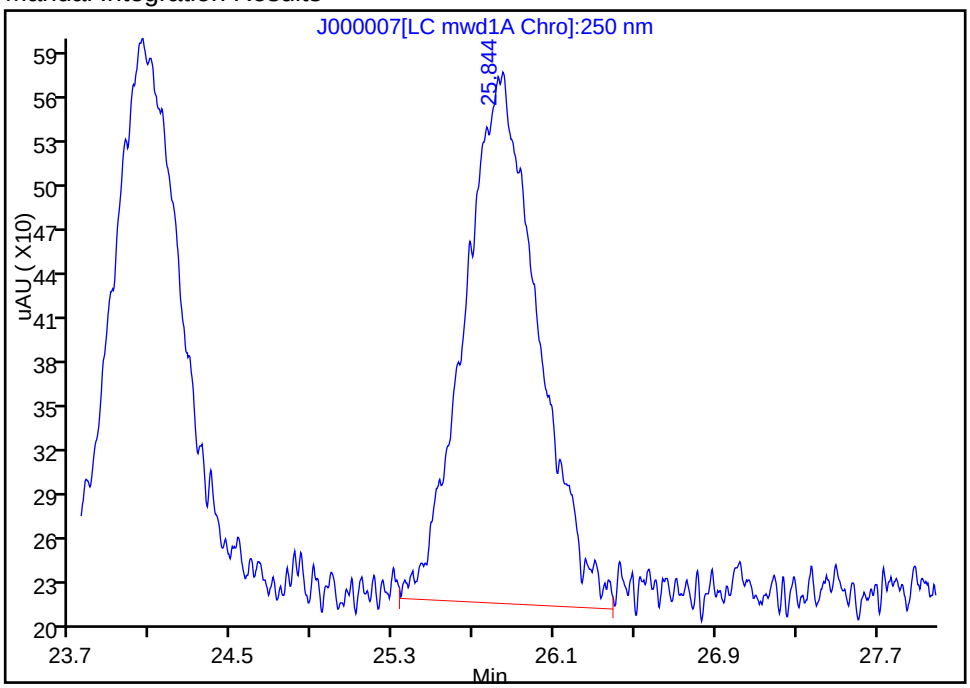
Processing Integration Results

RT: 25.84
Height: 366
Amount: 6.130756
Amount Units: ng/ml



Manual Integration Results

RT: 25.84
Height: 349
Amount: 5.893948
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:49:40
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000008.D
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 11-Mar-2015 16:31:10 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020096-005
Operator ID: YPH Instrument ID: LC10
Sublist: chrom-8330_LC10*sub1

Method: \\SACChrom\ChromData\LC10\20150311-20096.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 12-Mar-2015 11:12:23 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK019

First Level Reviewer: phant Date: 12-Mar-2015 06:16:14

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.152	5.149	0.003	1496H	10.0	10.2	
19 RDX							M
1	7.405	7.406	-0.001	1090H	10.0	10.8	M
3 Ethylene glycol dinitrate							
2	8.055	8.056	-0.001	1385H	10.0	11.5	
10 2,4,6-Trinitrophenol							
2	8.612	8.579	0.033	2591H	20.0	19.8	
1	8.612	8.579	0.033	1837H	20.0	20.0	
27 1,3,5-Trinitrobenzene							
1	9.622	9.623	-0.001	2015H	10.0	10.4	
24 1,3-Dinitrobenzene							
1	12.212	12.209	0.003	1957H	10.0	10.5	
9 3,5-Dinitroaniline							
1	12.928	12.929	-0.001	1286H	10.0	10.5	
20 Tetryl							
1	13.462	13.449	0.013	1138H	10.0	10.3	
5 Nitrobenzene							
1	13.925	13.939	-0.014	888H	10.0	10.5	
7 Nitroglycerin							
2	14.748	14.749	-0.001	856H	10.0	11.2	
25 2,4,6-Trinitrotoluene							
1	15.452	15.443	0.009	1163H	10.0	10.2	
26 4-Amino-2,6-dinitrotoluene							
1	16.092	16.093	-0.001	948H	10.0	10.4	
$ 30 3,4-Dinitrotoluene							M
1	16.525	16.539	-0.014	712H	10.0	10.6	
2	16.532	16.539	-0.007	1546H	10.0	11.5	M
6 2-Amino-4,6-dinitrotoluene							
1	16.945	16.949	-0.004	1064H	10.0	10.4	
12 2,6-Dinitrotoluene							
1	18.525	18.526	-0.001	723H	10.0	10.0	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
23 2,4-Dinitrotoluene							
1	19.068	19.093	-0.025	1193H	10.0	10.1	
16 o-Nitrotoluene							M
1	22.438	22.463	-0.025	548H	10.0	10.5	M
15 p-Nitrotoluene							M
1	24.068	24.083	-0.015	647H	10.0	10.3	M
8 m-Nitrotoluene							M
1	25.842	25.843	-0.001	612H	10.0	10.3	M
21 PETN							M
2	28.298	28.309	-0.011	480H	10.0	10.8	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L2_00015 Amount Added: 1.00 Units: mL

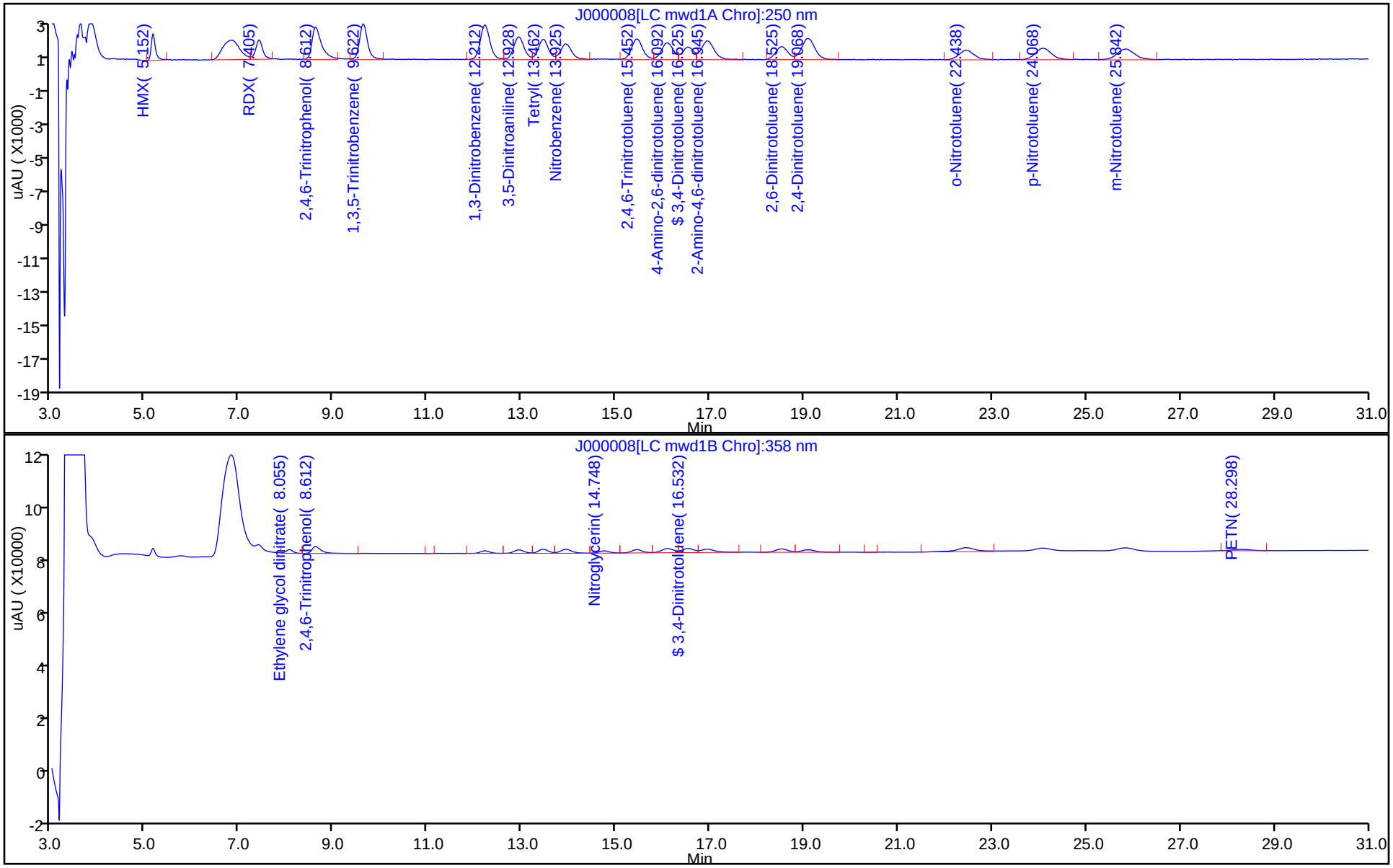
Report Date: 12-Mar-2015 11:12:24 Chrom Revision: 2.2 06-Mar-2015 13:13:48

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000008.D

Injection Date:	11-Mar-2015 16:31:10	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	IC 2			Worklist Smp#:	5
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)



Manual Integration/User Assign Peak Report

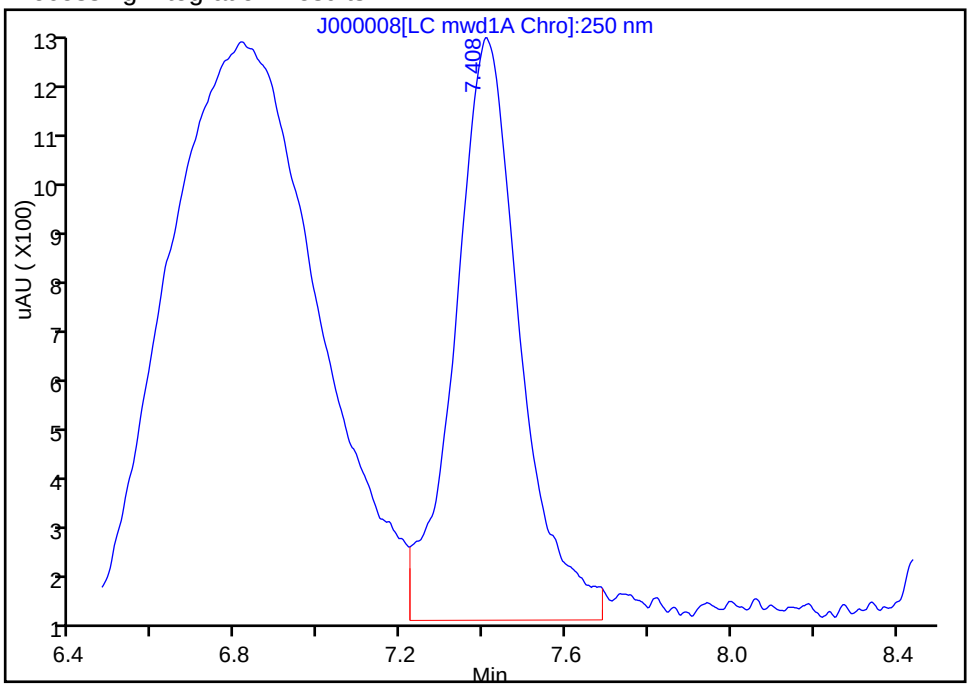
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000008.D
Injection Date: 11-Mar-2015 16:31:10 Instrument ID: LC10
Lims ID: IC 2
Client ID:
Operator ID: YPH ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

19 RDX, CAS: 121-82-4

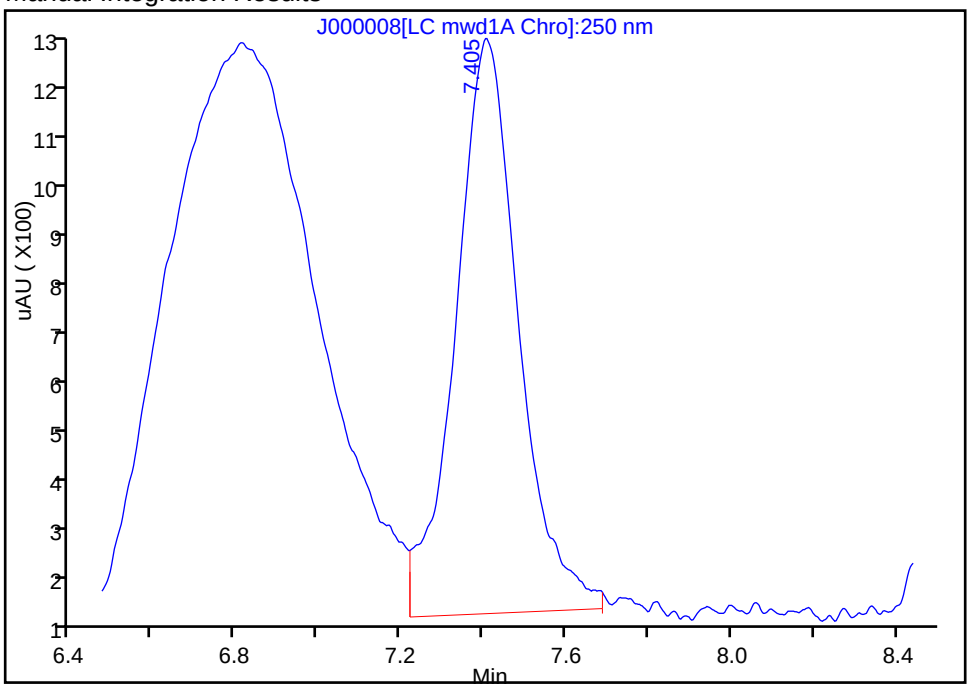
Processing Integration Results

RT: 7.41
Height: 1110
Amount: 10.898930
Amount Units: ng/ml



Manual Integration Results

RT: 7.40
Height: 1090
Amount: 10.750961
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:31:25
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

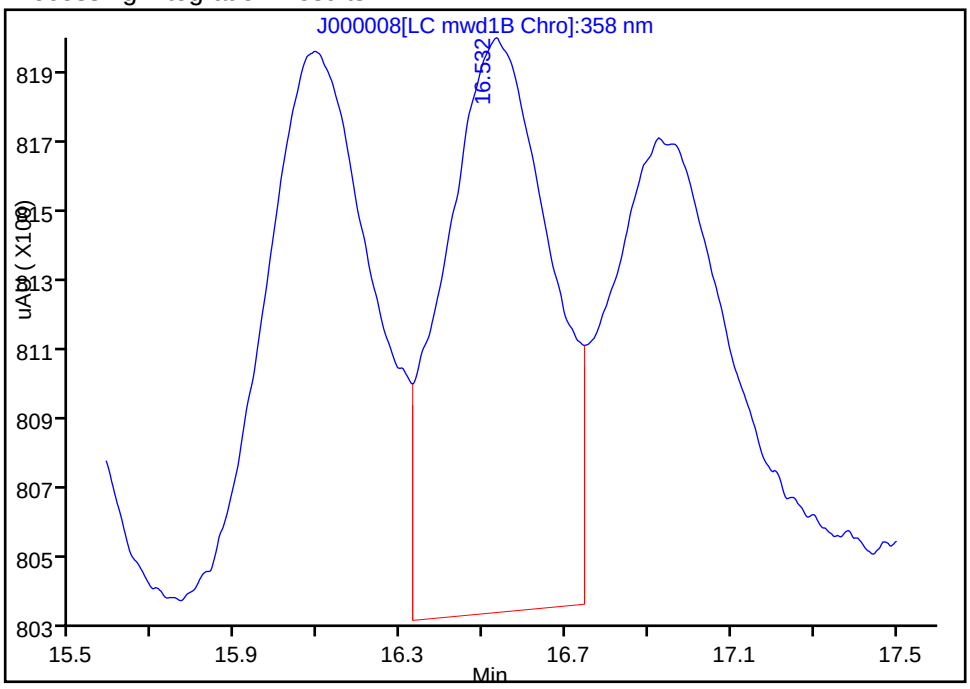
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000008.D
Injection Date: 11-Mar-2015 16:31:10 Instrument ID: LC10
Lims ID: IC 2
Client ID:
Operator ID: YPH ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

$ 30 3,4-Dinitrotoluene, CAS: 610-39-9

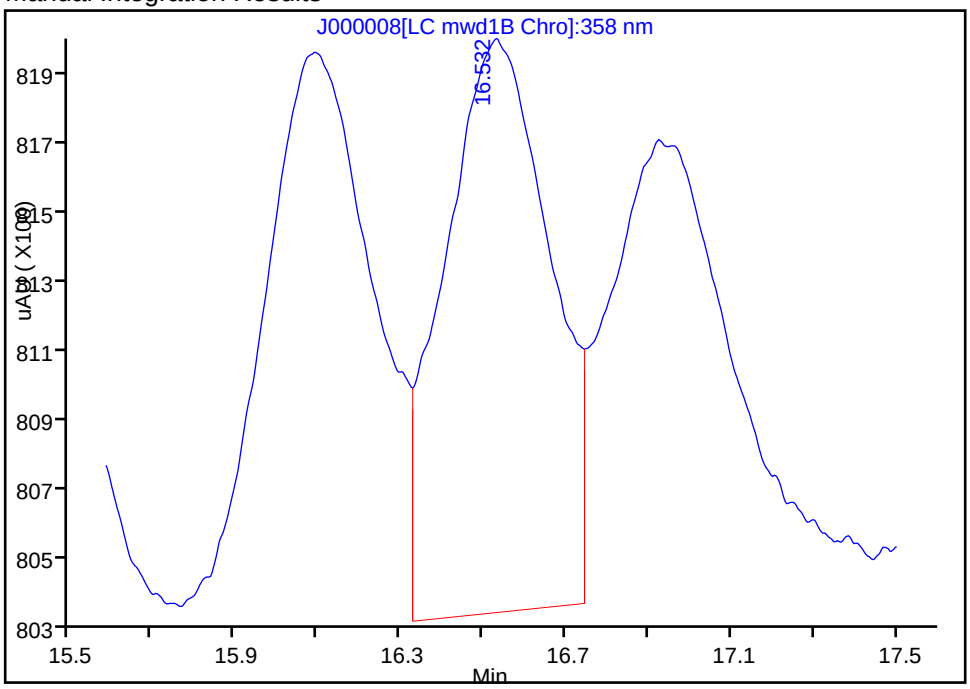
Processing Integration Results

RT: 16.53
Height: 1562
Amount: 11.549691
Amount Units: ng/ml



Manual Integration Results

RT: 16.53
Height: 1546
Amount: 11.514089
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:28:12
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

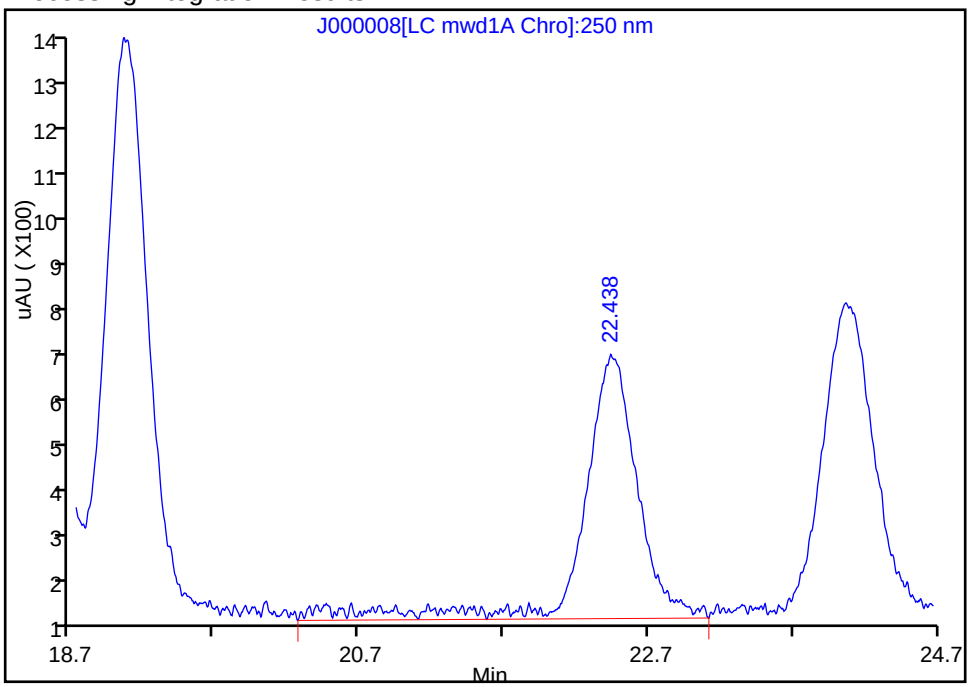
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000008.D
Injection Date: 11-Mar-2015 16:31:10 Instrument ID: LC10
Lims ID: IC 2
Client ID:
Operator ID: YPH ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

16 o-Nitrotoluene, CAS: 88-72-2

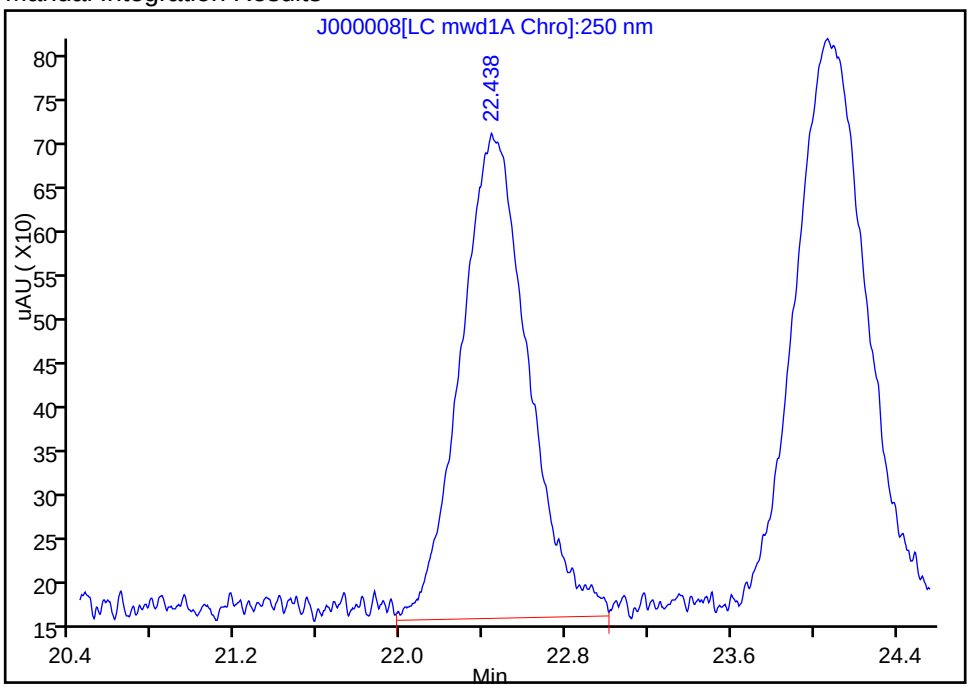
Processing Integration Results

RT: 22.44
Height: 550
Amount: 10.445182
Amount Units: ng/ml



Manual Integration Results

RT: 22.44
Height: 548
Amount: 10.456704
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:31:25
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

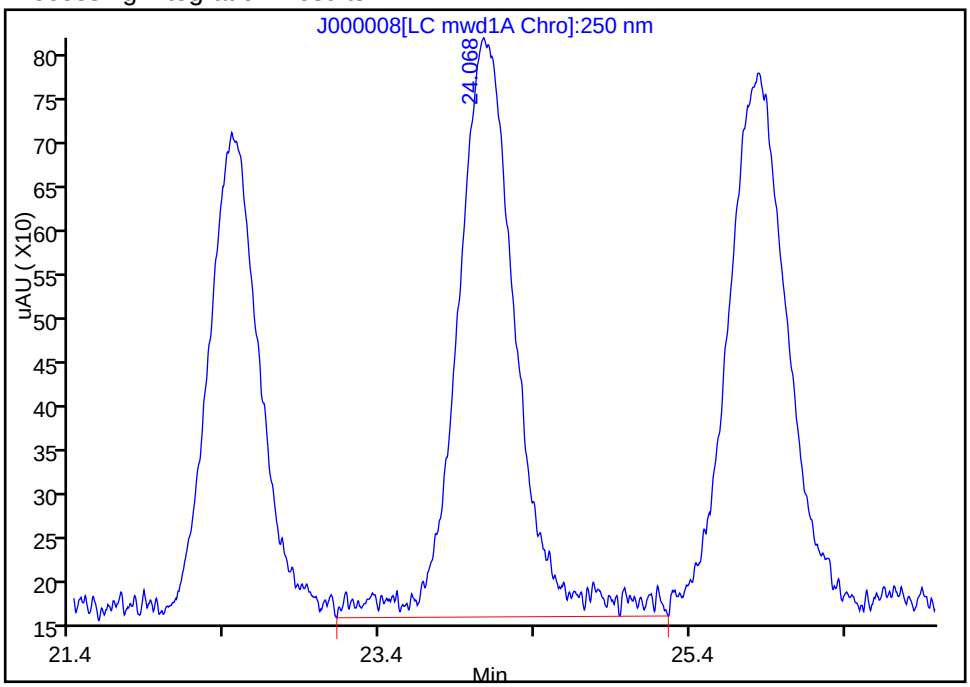
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000008.D				
Injection Date:	11-Mar-2015 16:31:10	Instrument ID:	LC10		
Lims ID:	IC 2				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

15 p-Nitrotoluene, CAS: 99-99-0

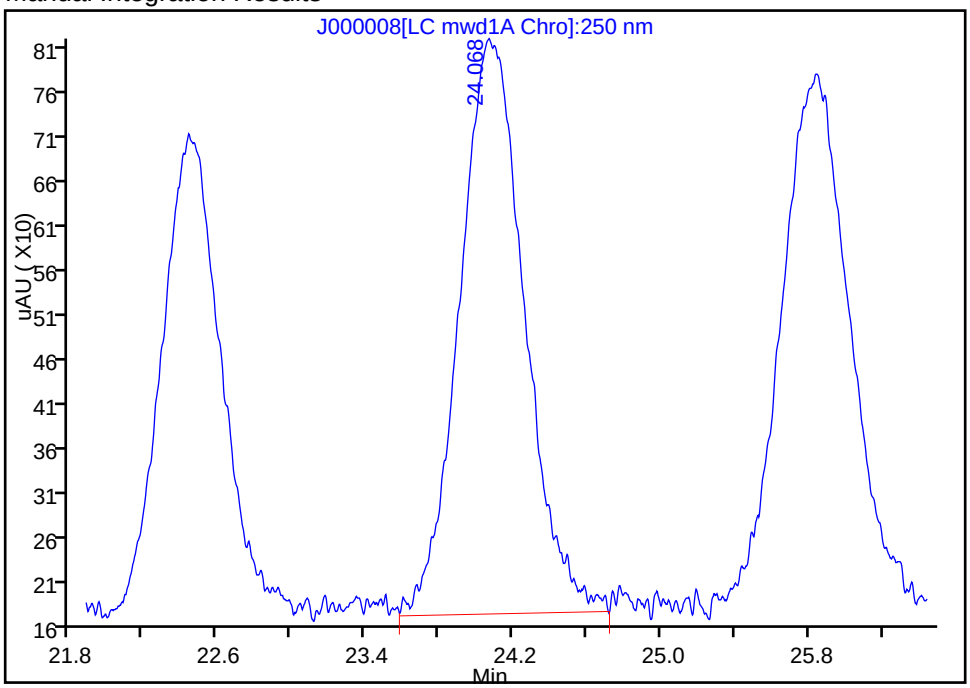
Processing Integration Results

RT: 24.07
Height: 655
Amount: 9.919489
Amount Units: ng/ml



Manual Integration Results

RT: 24.07
Height: 647
Amount: 10.276809
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:31:25
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

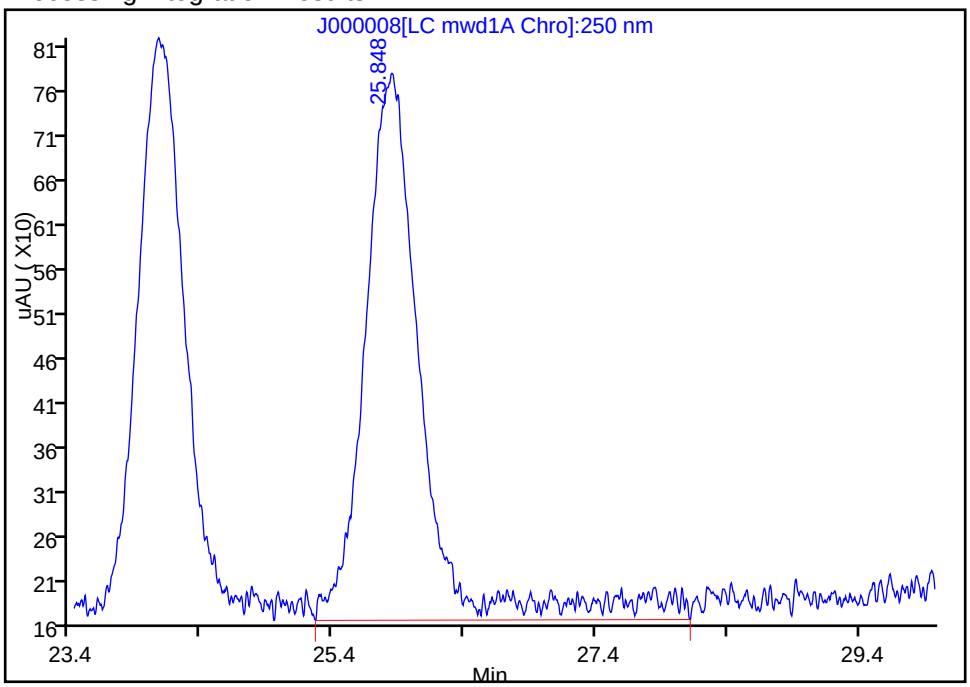
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000008.D
Injection Date: 11-Mar-2015 16:31:10 Instrument ID: LC10
Lims ID: IC 2
Client ID:
Operator ID: YPH ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

8 m-Nitrotoluene, CAS: 99-08-1

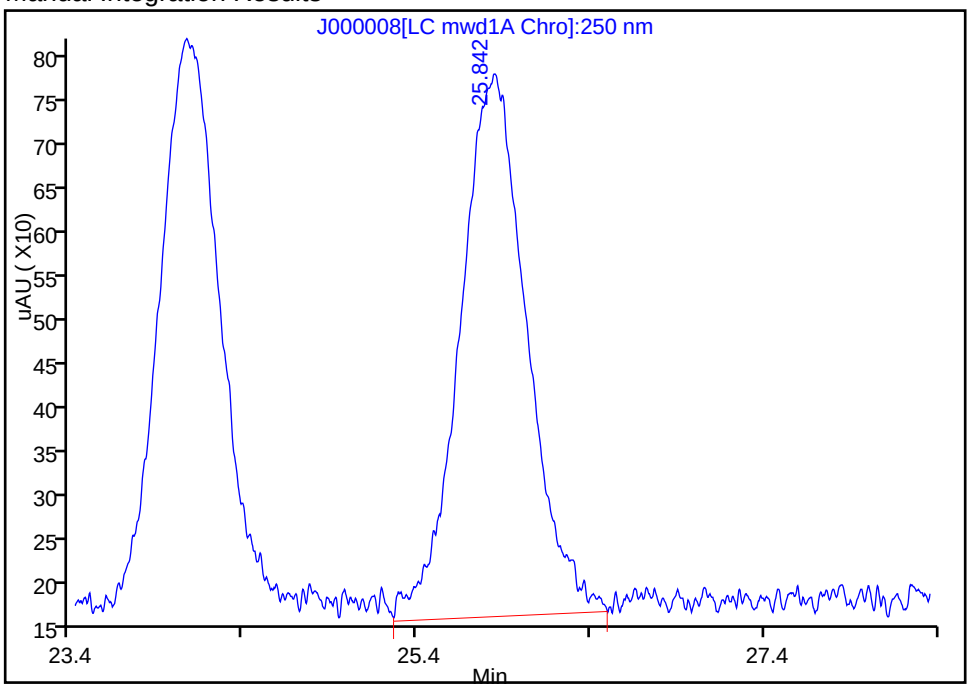
Processing Integration Results

RT: 25.85
Height: 613
Amount: 10.336820
Amount Units: ng/ml



Manual Integration Results

RT: 25.84
Height: 612
Amount: 10.335518
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:31:25
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

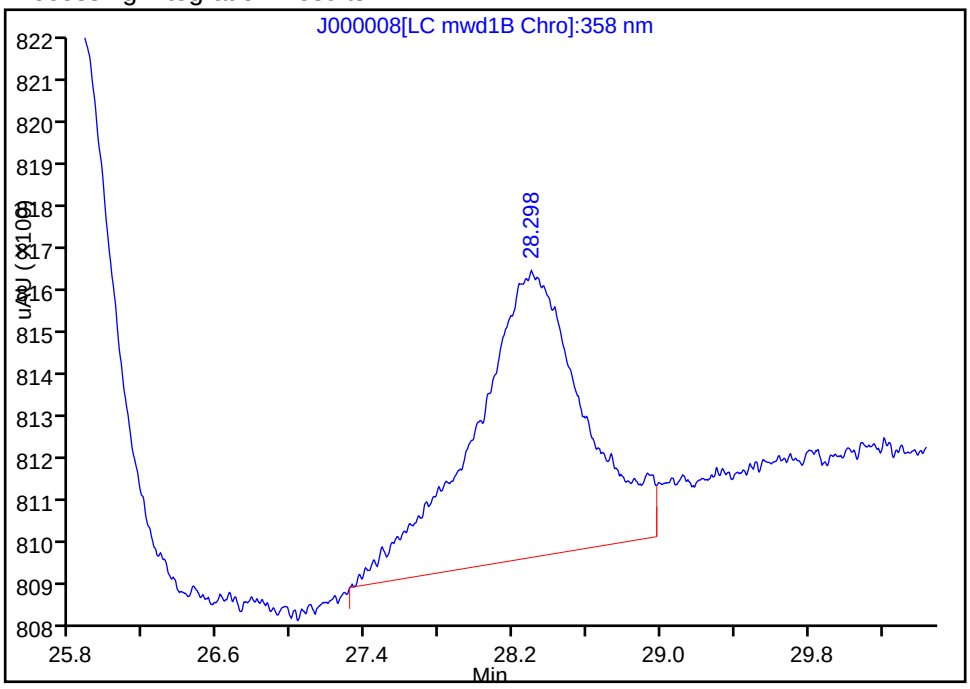
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000008.D
Injection Date: 11-Mar-2015 16:31:10 Instrument ID: LC10
Lims ID: IC 2
Client ID:
Operator ID: YPH ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

21 PETN, CAS: 78-11-5

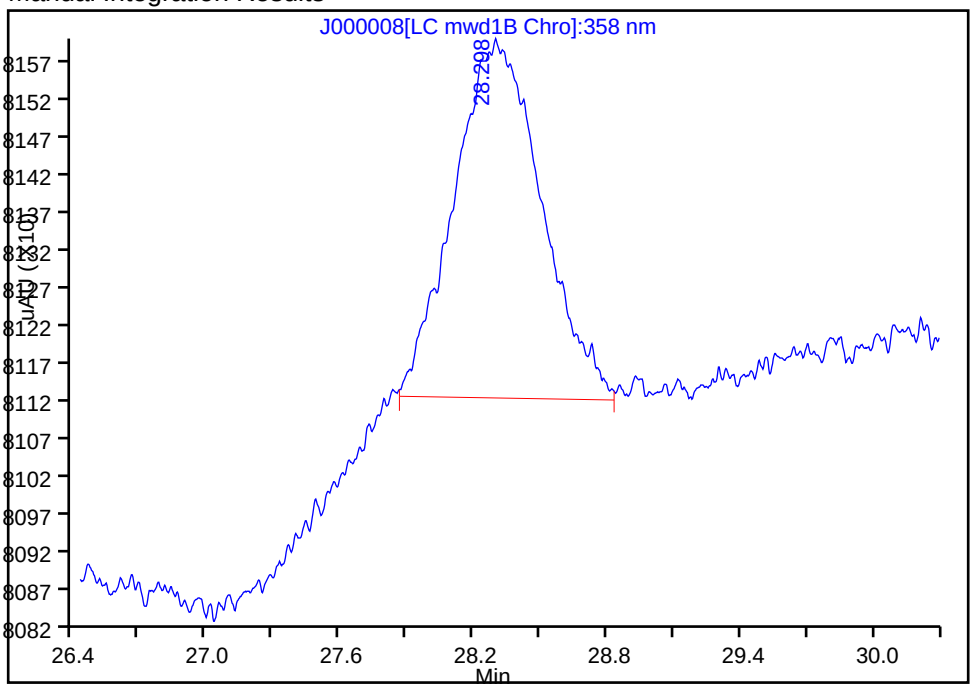
Processing Integration Results

RT: 28.30
Height: 638
Amount: 11.845997
Amount Units: ng/ml



Manual Integration Results

RT: 28.30
Height: 480
Amount: 10.800837
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:18:45
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000009.D
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 11-Mar-2015 17:14:50 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020096-006
Operator ID: YPH Instrument ID: LC10
Sublist: chrom-8330_LC10*sub1

Method: \\SACChrom\ChromData\LC10\20150311-20096.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 12-Mar-2015 11:12:26 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK019

First Level Reviewer: phant Date: 12-Mar-2015 06:16:08

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.154	5.149	0.005	2866H	20.0	19.5	
19 RDX							M
1	7.404	7.406	-0.002	1987H	20.0	19.6	M
3 Ethylene glycol dinitrate							
2	8.051	8.056	-0.005	2529H	20.0	21.0	
10 2,4,6-Trinitrophenol							
2	8.591	8.579	0.012	6589H	50.0	50.4	
1	8.591	8.579	0.012	4565H	50.0	49.7	
27 1,3,5-Trinitrobenzene							
1	9.621	9.623	-0.002	3825H	20.0	19.7	
24 1,3-Dinitrobenzene							
1	12.204	12.209	-0.005	3663H	20.0	19.6	
9 3,5-Dinitroaniline							
1	12.924	12.929	-0.005	2416H	20.0	19.6	
20 Tetryl							
1	13.447	13.449	-0.002	2173H	20.0	19.6	
5 Nitrobenzene							
1	13.937	13.939	-0.002	1660H	20.0	19.7	
7 Nitroglycerin							
2	14.744	14.749	-0.005	1602H	20.0	20.9	
25 2,4,6-Trinitrotoluene							
1	15.441	15.443	-0.002	2215H	20.0	19.5	
26 4-Amino-2,6-dinitrotoluene							
1	16.084	16.093	-0.009	1804H	20.0	19.7	
$ 30 3,4-Dinitrotoluene							M
1	16.531	16.539	-0.008	1323H	20.0	19.7	
2	16.527	16.539	-0.012	2613H	20.0	19.5	M
6 2-Amino-4,6-dinitrotoluene							
1	16.941	16.949	-0.008	2002H	20.0	19.6	
12 2,6-Dinitrotoluene							
1	18.537	18.526	0.011	1418H	20.0	19.7	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
23 2,4-Dinitrotoluene							
1	19.077	19.093	-0.016	2328H	20.0	19.7	
16 o-Nitrotoluene							M
1	22.431	22.463	-0.032	1011H	20.0	19.3	M
15 p-Nitrotoluene							M
1	24.074	24.083	-0.009	1219H	20.0	19.4	M
8 m-Nitrotoluene							M
1	25.834	25.843	-0.009	1146H	20.0	19.4	M
21 PETN							M
2	28.334	28.309	0.025	896H	20.0	20.2	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L3_00016 Amount Added: 1.00 Units: mL

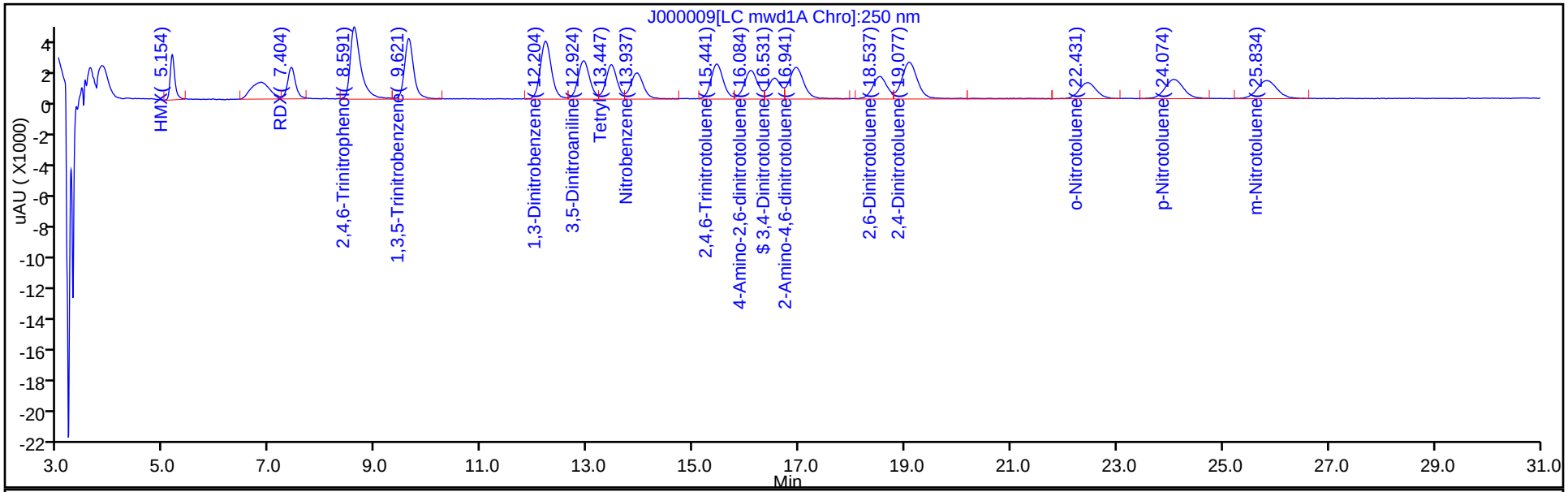
Report Date: 12-Mar-2015 11:12:27 Chrom Revision: 2.2 06-Mar-2015 13:13:48

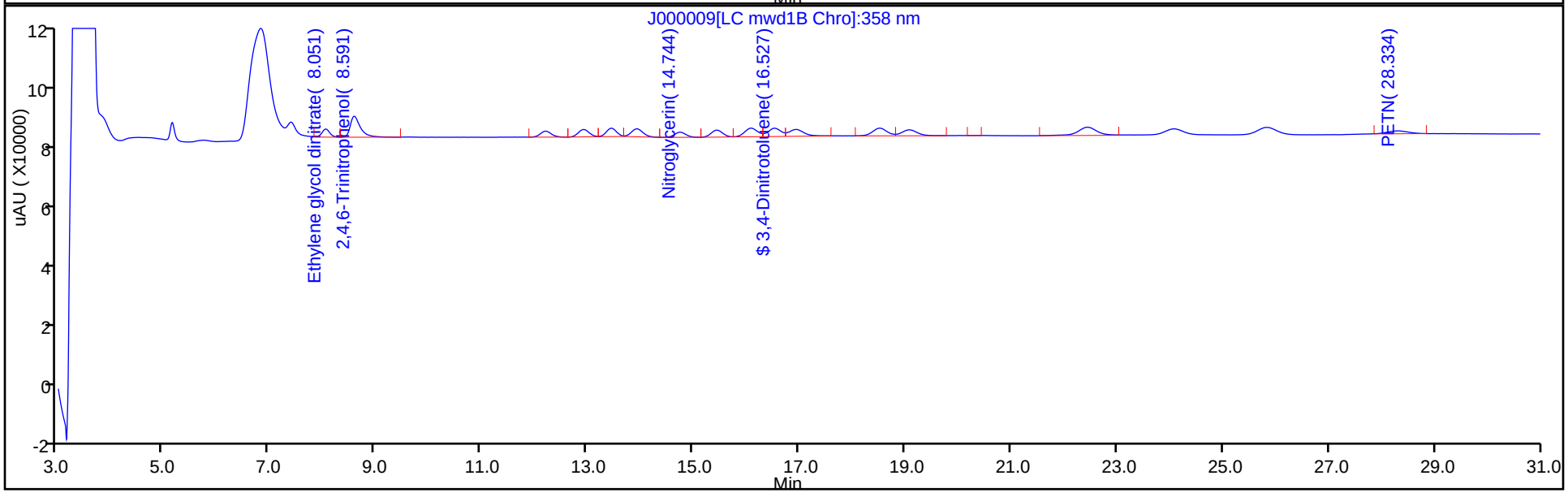
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000009.D

Injection Date:	11-Mar-2015 17:14:50	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	IC 3			Worklist Smp#:	6
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)





Manual Integration/User Assign Peak Report

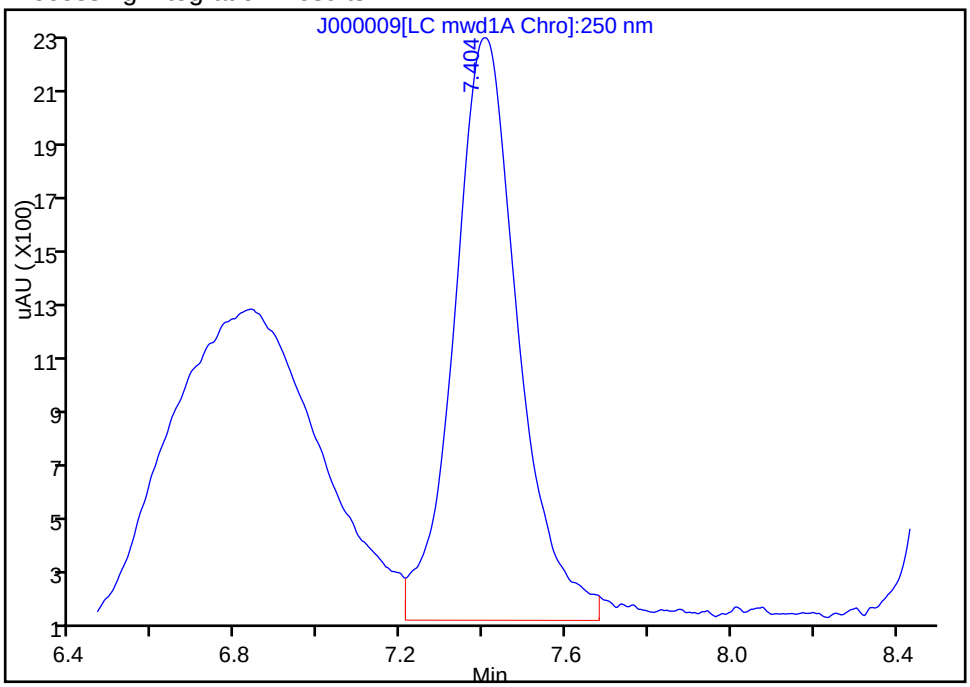
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000009.D
Injection Date: 11-Mar-2015 17:14:50 Instrument ID: LC10
Lims ID: IC 3
Client ID:
Operator ID: YPH ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

19 RDX, CAS: 121-82-4

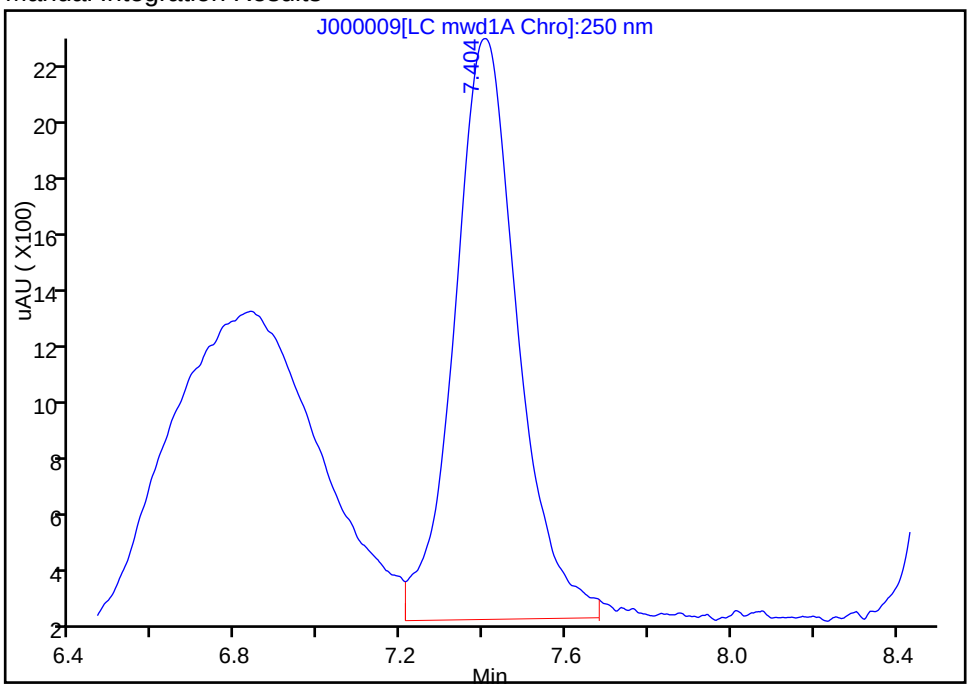
Processing Integration Results

RT: 7.40
Height: 2003
Amount: 19.722498
Amount Units: ng/ml



Manual Integration Results

RT: 7.40
Height: 1987
Amount: 19.598311
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:38:32
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

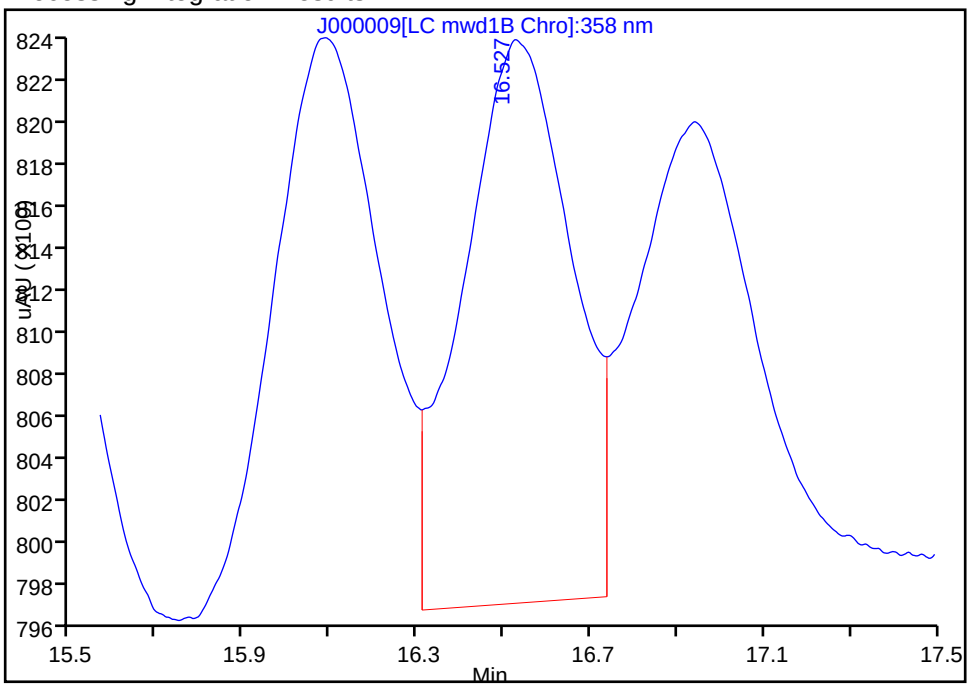
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000009.D
Injection Date: 11-Mar-2015 17:14:50 Instrument ID: LC10
Lims ID: IC 3
Client ID:
Operator ID: YPH ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

$ 30 3,4-Dinitrotoluene, CAS: 610-39-9

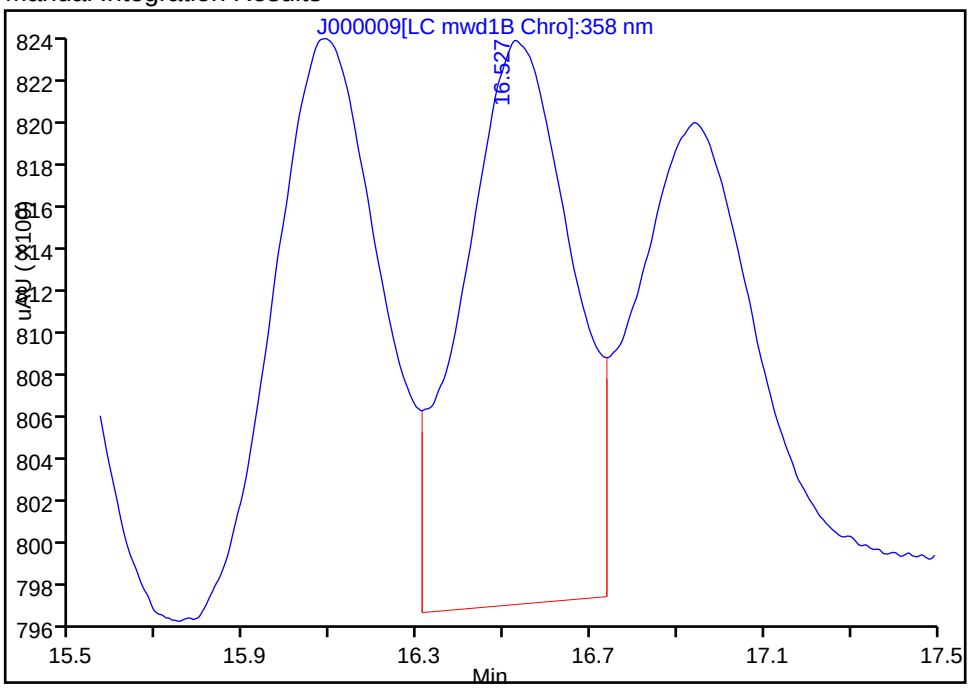
Processing Integration Results

RT: 16.53
Height: 2611
Amount: 19.308213
Amount Units: ng/ml



Manual Integration Results

RT: 16.53
Height: 2613
Amount: 19.460747
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:27:50
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

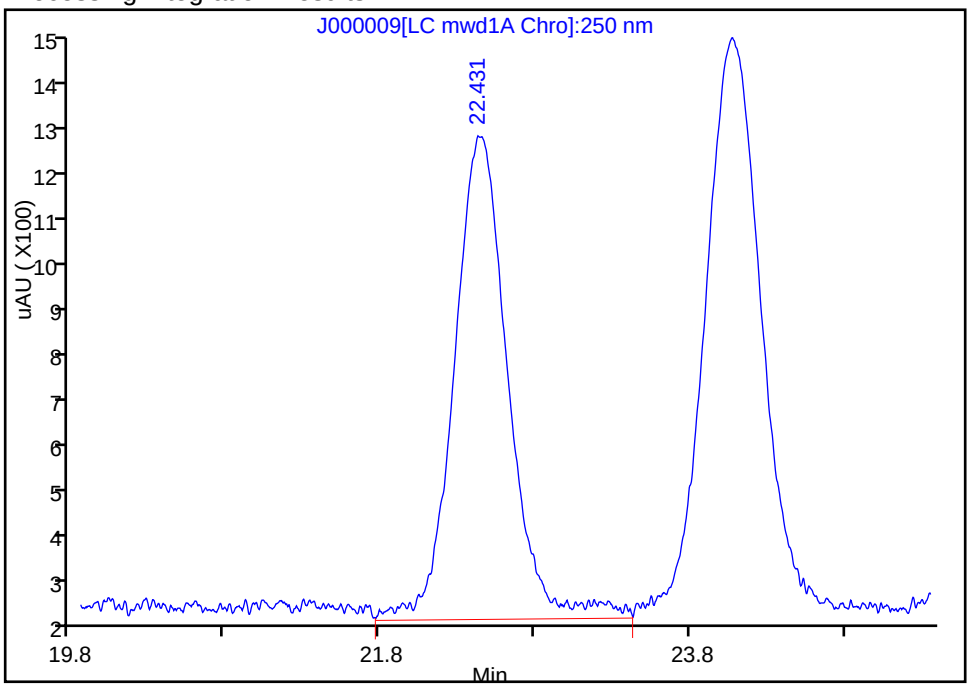
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000009.D
Injection Date: 11-Mar-2015 17:14:50 Instrument ID: LC10
Lims ID: IC 3
Client ID:
Operator ID: YPH ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

16 o-Nitrotoluene, CAS: 88-72-2

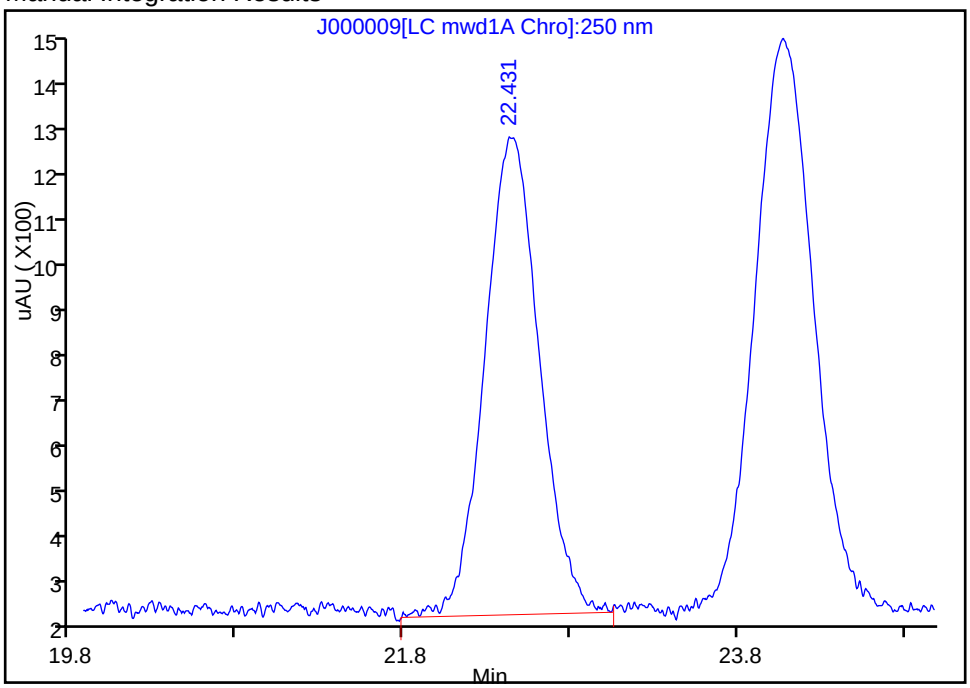
Processing Integration Results

RT: 22.43
Height: 1027
Amount: 19.514592
Amount Units: ng/ml



Manual Integration Results

RT: 22.43
Height: 1011
Amount: 19.291474
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:39:40
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

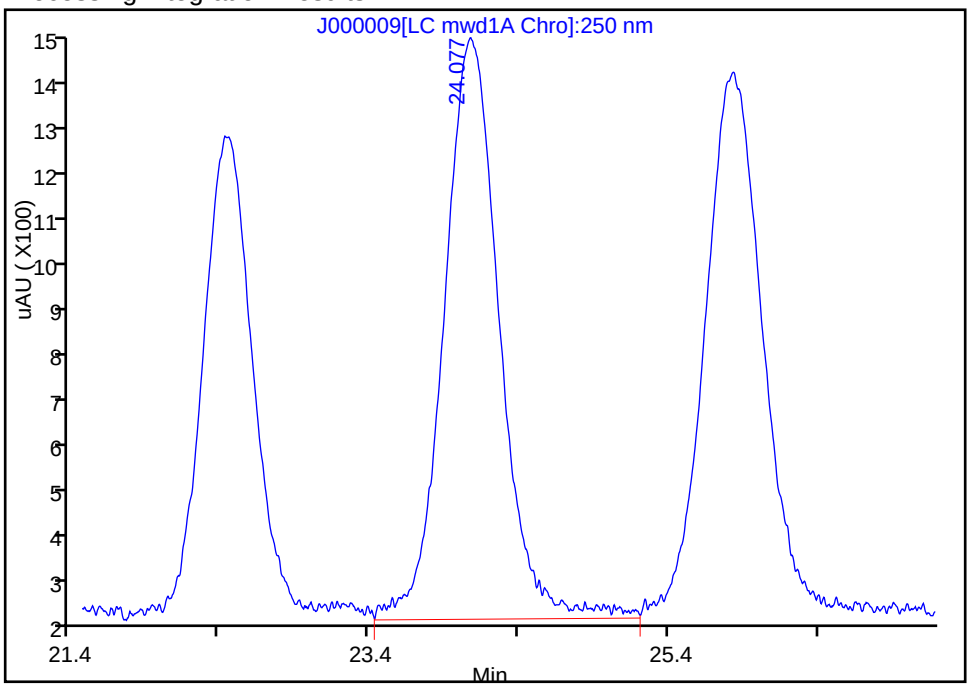
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000009.D
Injection Date: 11-Mar-2015 17:14:50 Instrument ID: LC10
Lims ID: IC 3
Client ID:
Operator ID: YPH ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

15 p-Nitrotoluene, CAS: 99-99-0

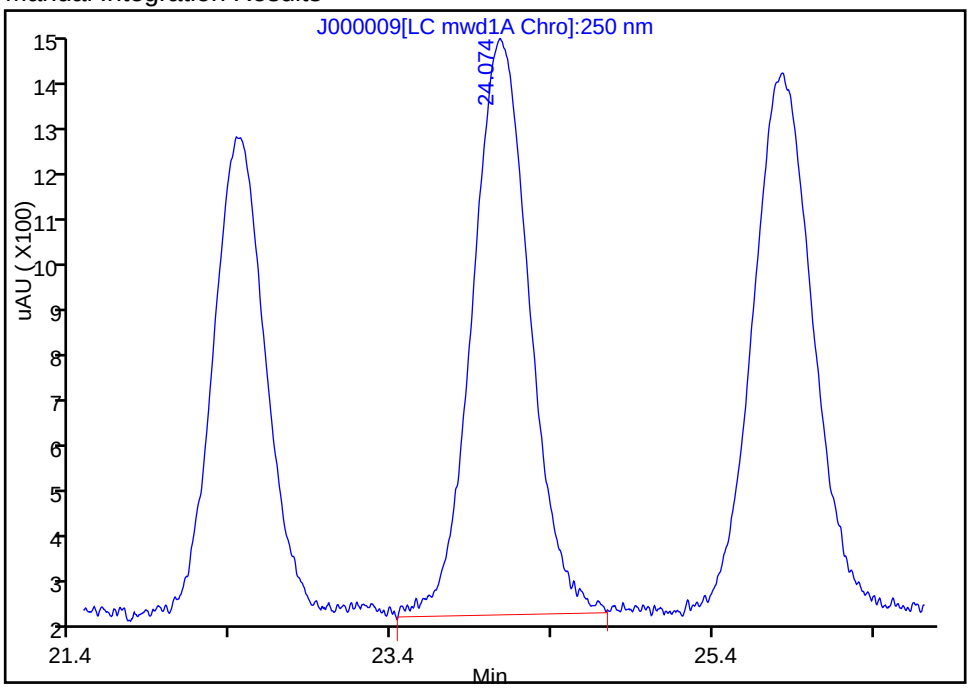
Processing Integration Results

RT: 24.08
Height: 1230
Amount: 19.583324
Amount Units: ng/ml



Manual Integration Results

RT: 24.07
Height: 1219
Amount: 19.362334
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:39:40
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

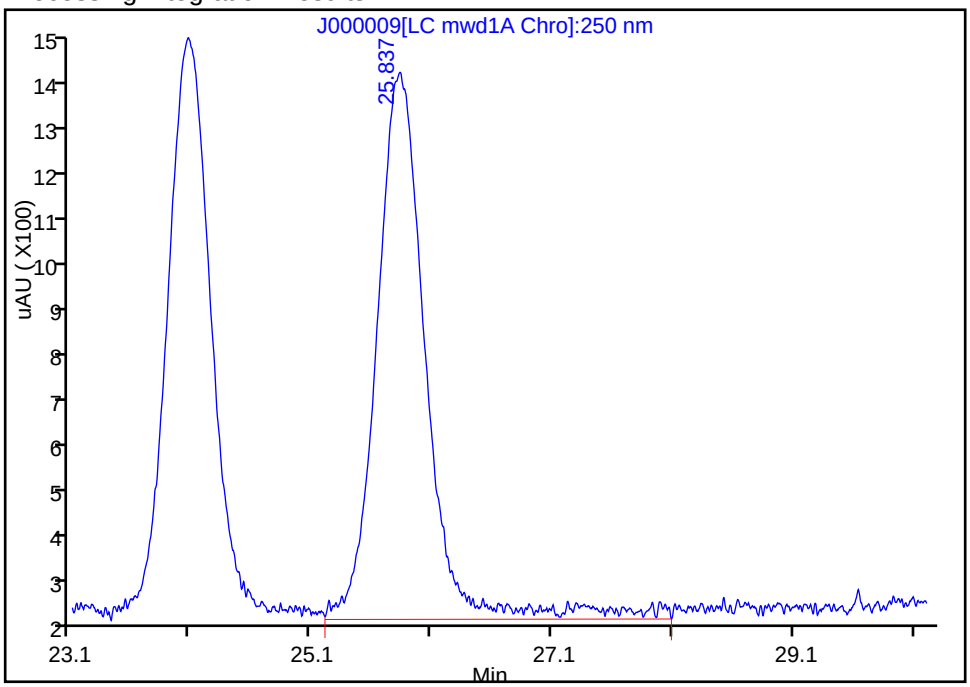
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000009.D
Injection Date: 11-Mar-2015 17:14:50 Instrument ID: LC10
Lims ID: IC 3
Client ID:
Operator ID: YPH ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

8 m-Nitrotoluene, CAS: 99-08-1

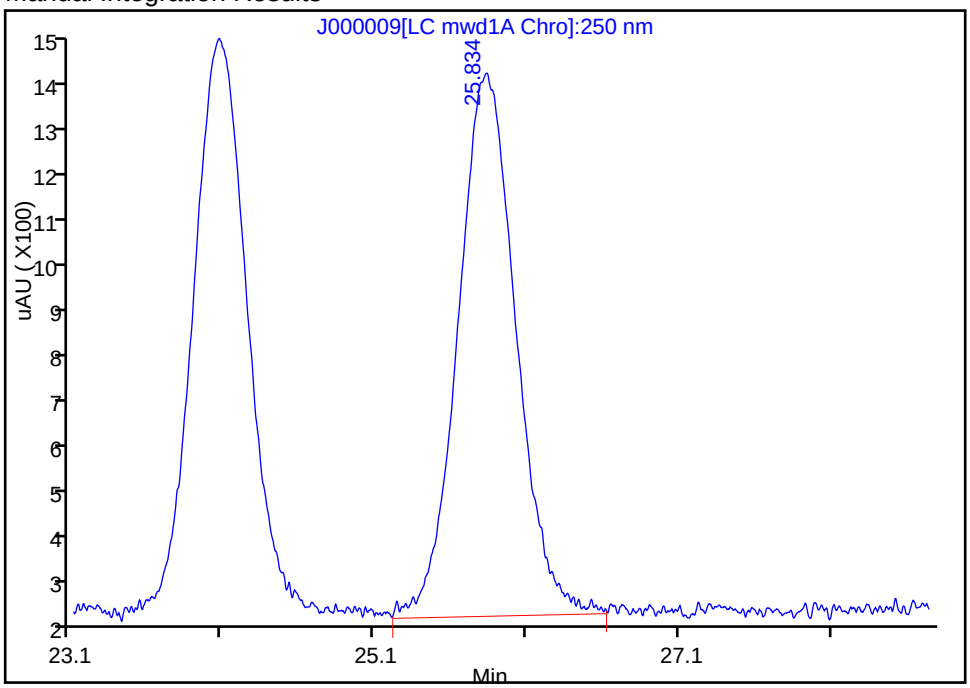
Processing Integration Results

RT: 25.84
Height: 1154
Amount: 19.464216
Amount Units: ng/ml



Manual Integration Results

RT: 25.83
Height: 1146
Amount: 19.353765
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:39:40
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

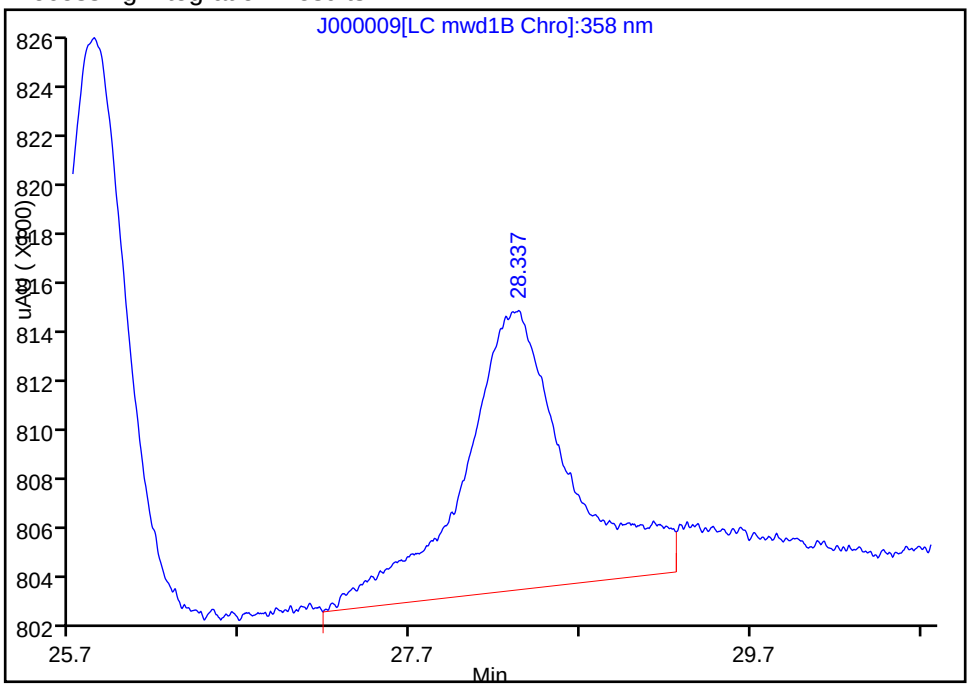
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000009.D
Injection Date: 11-Mar-2015 17:14:50 Instrument ID: LC10
Lims ID: IC 3
Client ID:
Operator ID: YPH ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

21 PETN, CAS: 78-11-5

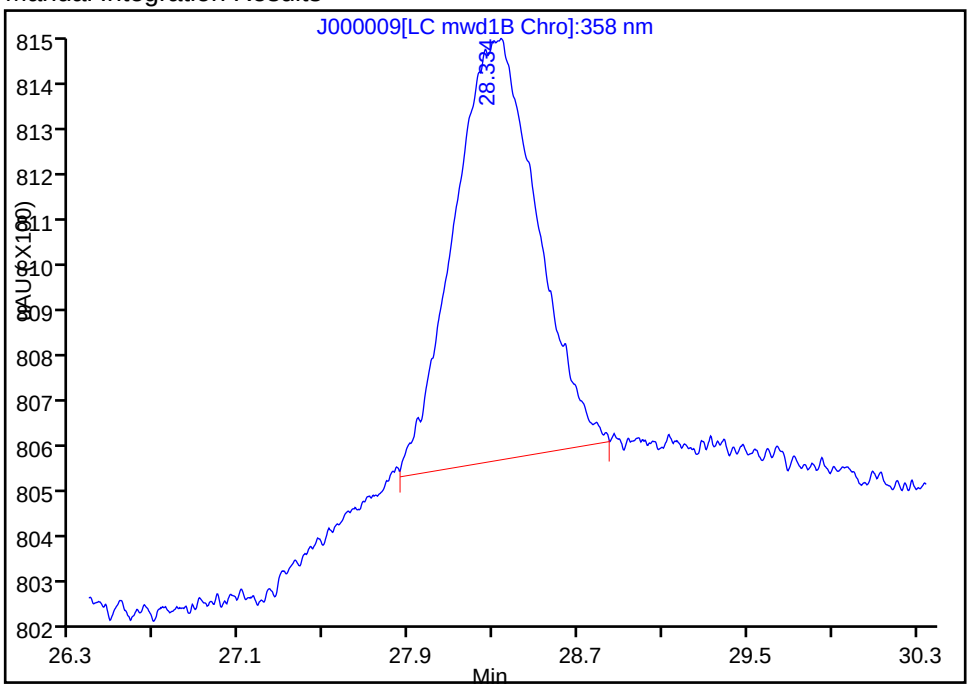
Processing Integration Results

RT: 28.34
Height: 1117
Amount: 19.839941
Amount Units: ng/ml



Manual Integration Results

RT: 28.33
Height: 896
Amount: 20.161563
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:17:06
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000010.D
Lims ID: IC 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 11-Mar-2015 17:58:29 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020096-007
Operator ID: YPH Instrument ID: LC10
Sublist: chrom-8330_LC10*sub1

Method: \\SACChrom\ChromData\LC10\20150311-20096.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 12-Mar-2015 11:12:29 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK019

First Level Reviewer: phant Date: 12-Mar-2015 06:15:05

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.149	5.149	0.000	7177H	50.0	48.8	
19 RDX							
1	7.406	7.406	0.000	4986H	50.0	49.2	
3 Ethylene glycol dinitrate							
2	8.056	8.056	0.000	6146H	50.0	50.9	
10 2,4,6-Trinitrophenol							
2	8.579	8.579	0.000	13617H	100.0	104.2	
1	8.579	8.579	0.000	9376H	100.0	102.0	
27 1,3,5-Trinitrobenzene							
1	9.623	9.623	0.000	9519H	50.0	48.9	
24 1,3-Dinitrobenzene							
1	12.209	12.209	0.000	9128H	50.0	48.9	
9 3,5-Dinitroaniline							
1	12.929	12.929	0.000	6028H	50.0	49.0	
20 Tetryl							
1	13.449	13.449	0.000	5358H	50.0	48.3	
5 Nitrobenzene							
1	13.939	13.939	0.000	4080H	50.0	48.3	
7 Nitroglycerin							
2	14.749	14.749	0.000	3741H	50.0	48.8	
25 2,4,6-Trinitrotoluene							
1	15.443	15.443	0.000	5479H	50.0	48.2	
26 4-Amino-2,6-dinitrotoluene							
1	16.093	16.093	0.000	4415H	50.0	48.2	
$ 30 3,4-Dinitrotoluene							M
1	16.539	16.539	0.000	3171H	50.0	47.3	
2	16.539	16.539	0.000	6157H	50.0	45.9	M
6 2-Amino-4,6-dinitrotoluene							
1	16.949	16.949	0.000	4942H	50.0	48.4	
12 2,6-Dinitrotoluene							
1	18.526	18.526	0.000	3473H	50.0	48.3	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
23 2,4-Dinitrotoluene							
1	19.093	19.093	0.000	5738H	50.0	48.5	
16 o-Nitrotoluene							M
1	22.463	22.463	0.000	2479H	50.0	47.3	M
15 p-Nitrotoluene							M
1	24.083	24.083	0.000	3006H	50.0	47.7	M
8 m-Nitrotoluene							M
1	25.843	25.843	0.000	2819H	50.0	47.6	M
21 PETN							M
2	28.309	28.309	0.000	2162H	50.0	48.6	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L4_00024 Amount Added: 1.00 Units: mL

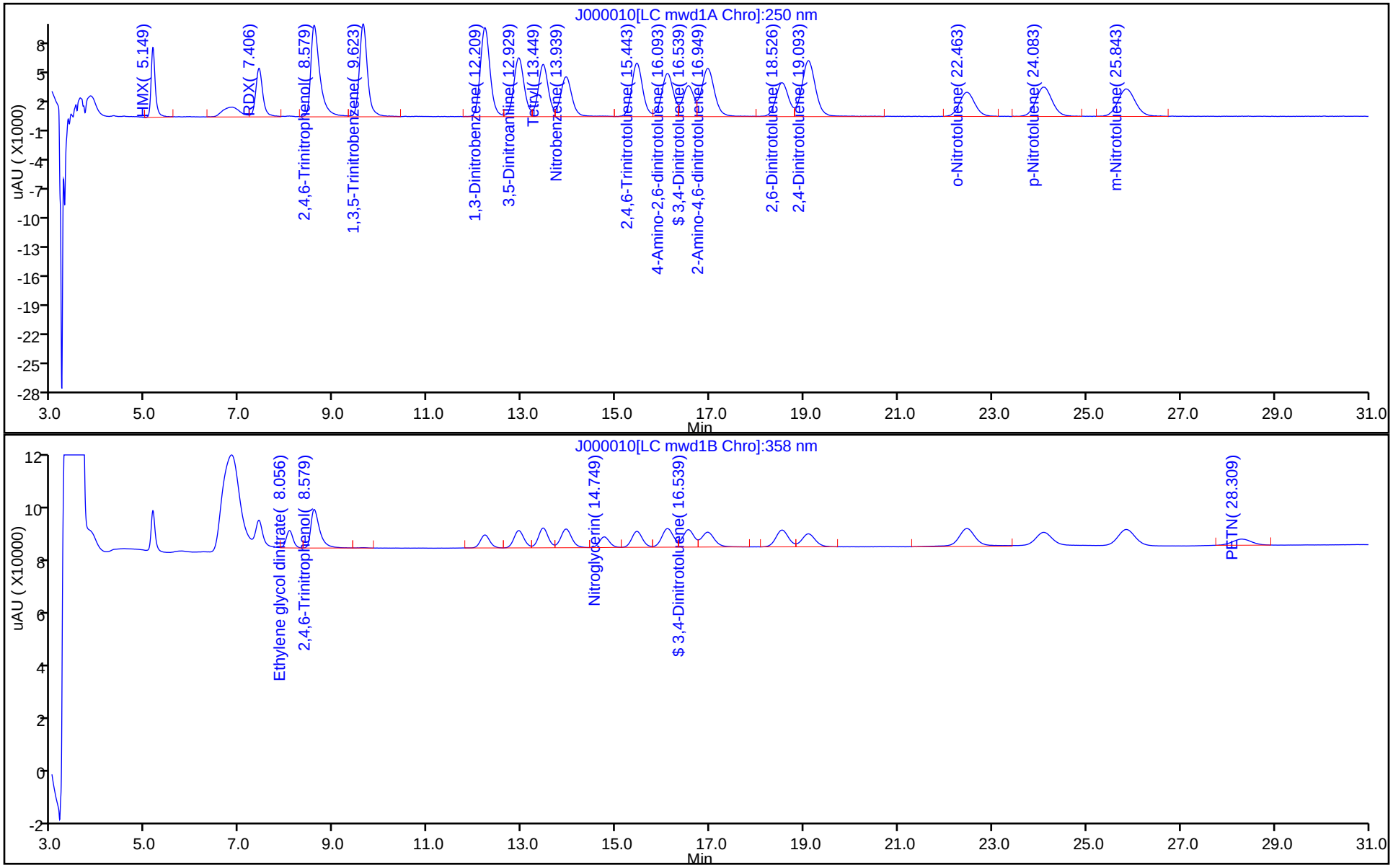
Report Date: 12-Mar-2015 11:12:29 Chrom Revision: 2.2 06-Mar-2015 13:13:48

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000010.D

Injection Date:	11-Mar-2015 17:58:29	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	IC 4			Worklist Smp#:	7
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)



Manual Integration/User Assign Peak Report

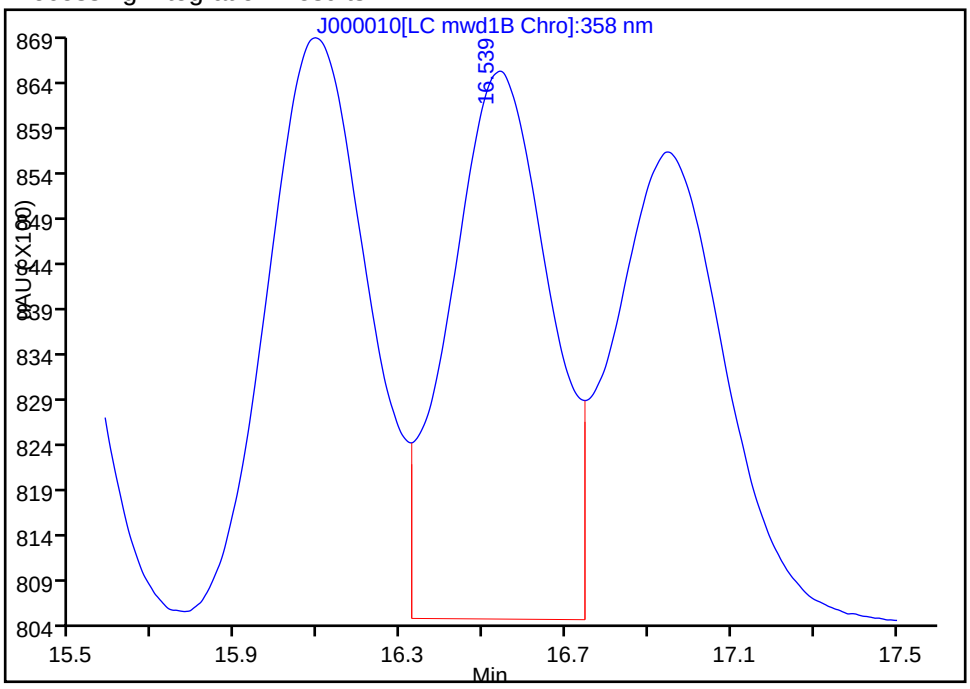
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000010.D
Injection Date: 11-Mar-2015 17:58:29 Instrument ID: LC10
Lims ID: IC 4
Client ID:
Operator ID: YPH ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

$ 30 3,4-Dinitrotoluene, CAS: 610-39-9

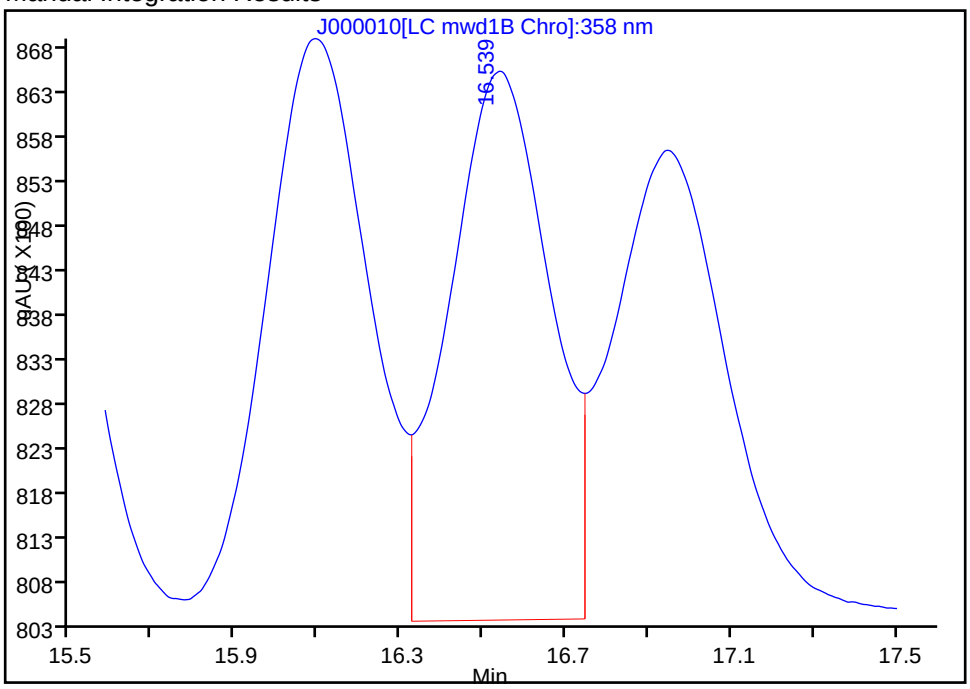
Processing Integration Results

RT: 16.54
Height: 6013
Amount: 44.601531
Amount Units: ng/ml



Manual Integration Results

RT: 16.54
Height: 6157
Amount: 45.855268
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:27:21
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

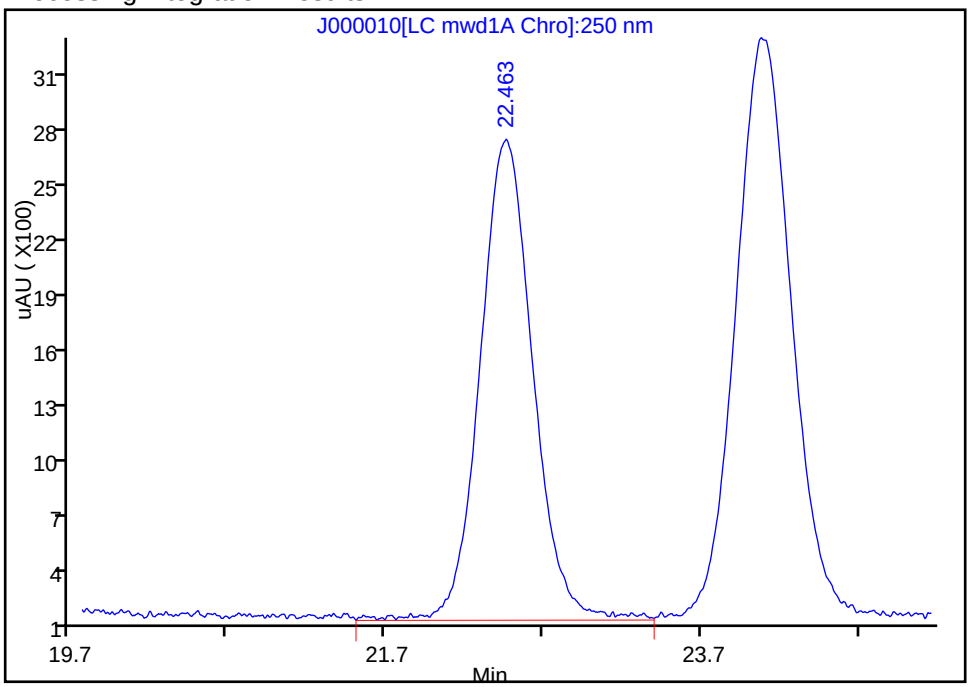
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000010.D				
Injection Date:	11-Mar-2015 17:58:29	Instrument ID:	LC10		
Lims ID:	IC 4				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

16 o-Nitrotoluene, CAS: 88-72-2

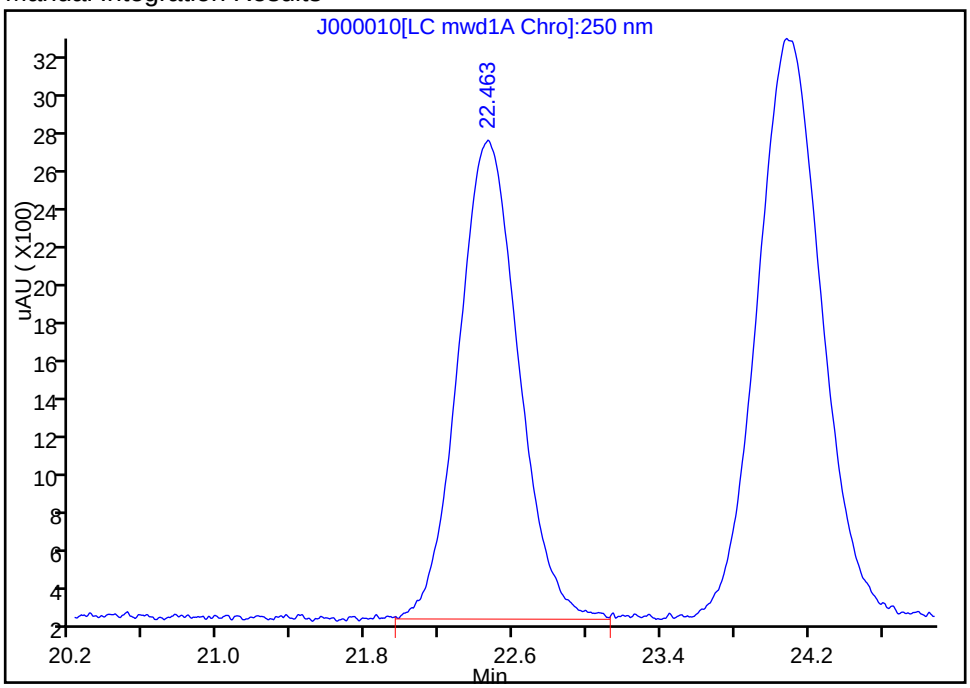
Processing Integration Results

RT: 22.46
Height: 2491
Amount: 47.435873
Amount Units: ng/ml



Manual Integration Results

RT: 22.46
Height: 2479
Amount: 47.303228
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:40:45
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

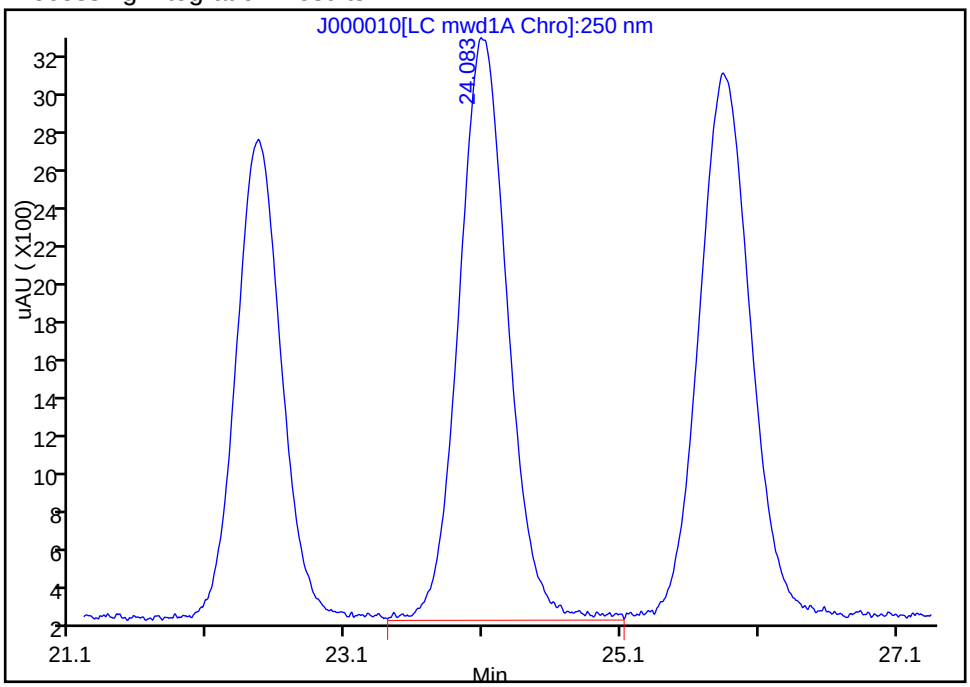
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000010.D				
Injection Date:	11-Mar-2015 17:58:29	Instrument ID:	LC10		
Lims ID:	IC 4				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

15 p-Nitrotoluene, CAS: 99-99-0

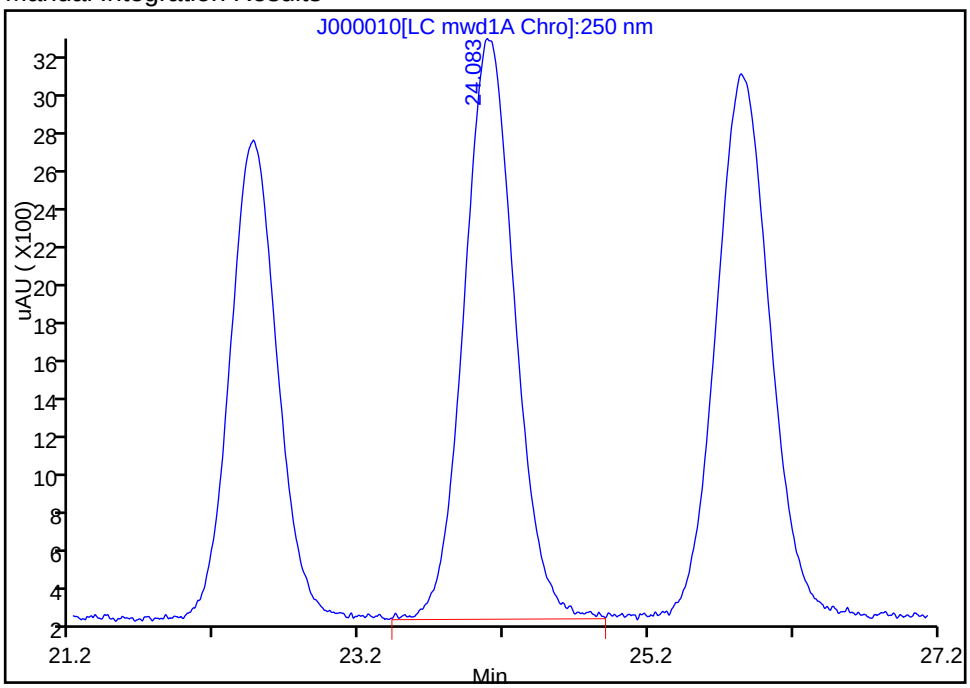
Processing Integration Results

RT: 24.08
Height: 3016
Amount: 49.582412
Amount Units: ng/ml



Manual Integration Results

RT: 24.08
Height: 3006
Amount: 47.746658
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:40:45
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

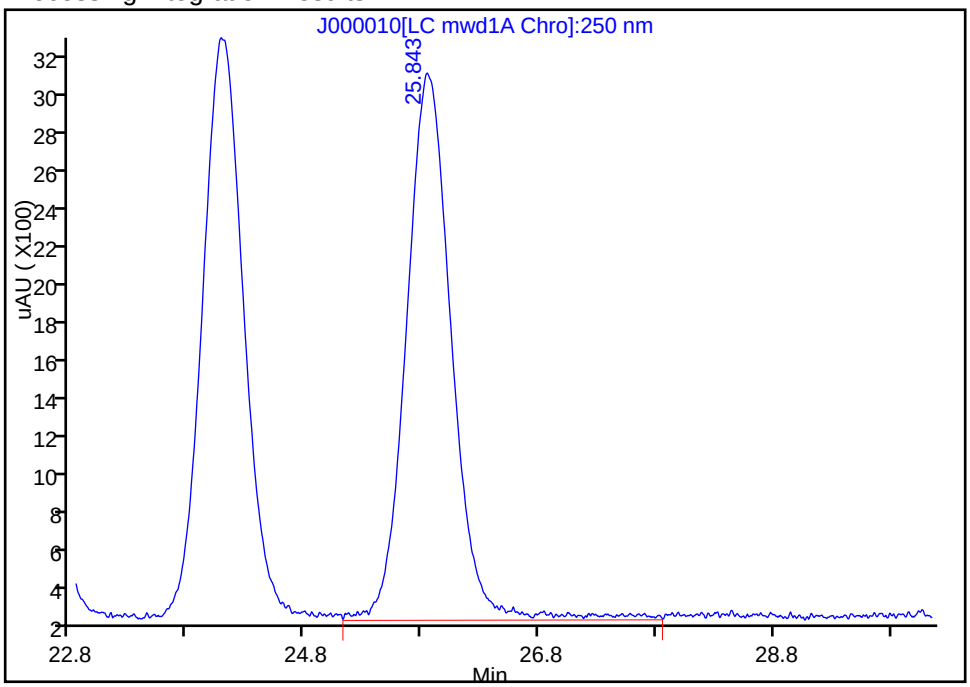
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000010.D
Injection Date: 11-Mar-2015 17:58:29 Instrument ID: LC10
Lims ID: IC 4
Client ID:
Operator ID: YPH ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

8 m-Nitrotoluene, CAS: 99-08-1

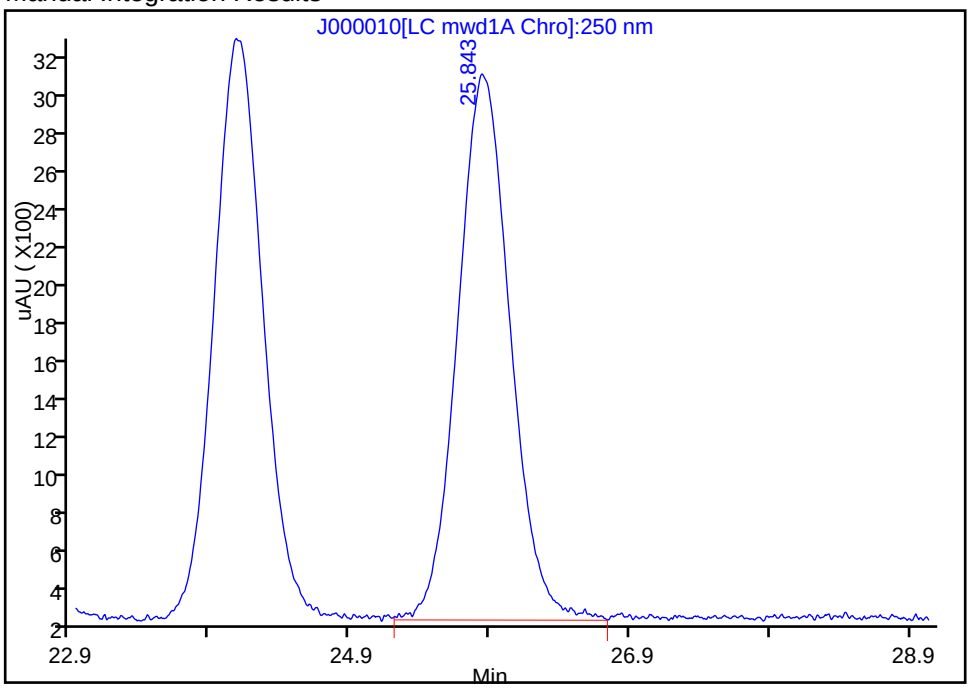
Processing Integration Results

RT: 25.84
Height: 2831
Amount: 47.795802
Amount Units: ng/ml



Manual Integration Results

RT: 25.84
Height: 2819
Amount: 47.607559
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:40:45
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

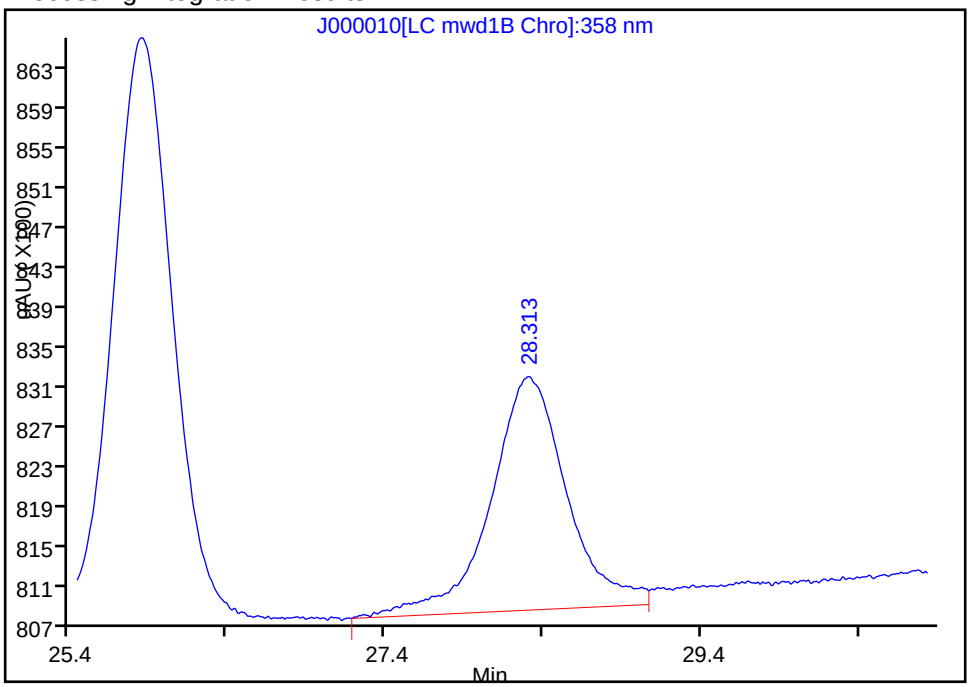
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000010.D
Injection Date: 11-Mar-2015 17:58:29 Instrument ID: LC10
Lims ID: IC 4
Client ID:
Operator ID: YPH ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

21 PETN, CAS: 78-11-5

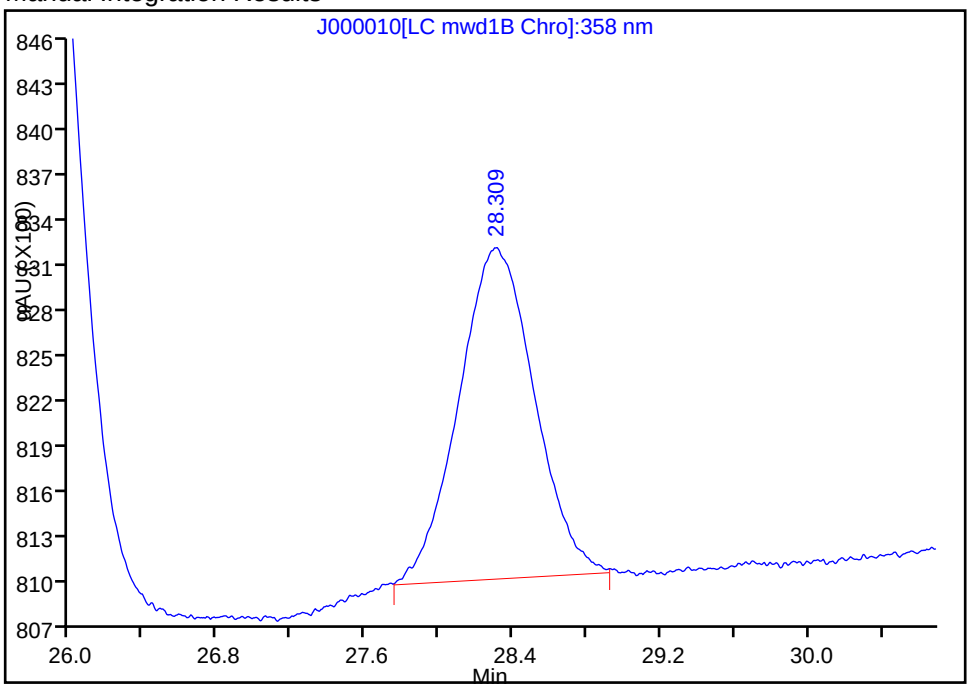
Processing Integration Results

RT: 28.31
Height: 2334
Amount: 42.651950
Amount Units: ng/ml



Manual Integration Results

RT: 28.31
Height: 2162
Amount: 48.648770
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:17:23
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000011.D
Lims ID: IC 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 11-Mar-2015 18:42:11 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020096-008
Operator ID: YPH Instrument ID: LC10
Sublist: chrom-8330_LC10*sub1

Method: \\SACChrom\ChromData\LC10\20150311-20096.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 12-Mar-2015 11:12:31 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK019

First Level Reviewer: phant Date: 12-Mar-2015 06:15:20

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.149	5.149	0.000	14318H	100.0	97.3	
19 RDX							
1	7.405	7.406	-0.001	9720H	100.0	95.9	
3 Ethylene glycol dinitrate							
2	8.055	8.056	-0.001	12364H	100.0	102.5	
10 2,4,6-Trinitrophenol							
2	8.569	8.579	-0.010	27276H	200.0	208.7	
1	8.569	8.579	-0.010	18729H	200.0	203.8	
27 1,3,5-Trinitrobenzene							
1	9.622	9.623	-0.001	18907H	100.0	97.2	
24 1,3-Dinitrobenzene							
1	12.209	12.209	0.000	18138H	100.0	97.1	
9 3,5-Dinitroaniline							
1	12.925	12.929	-0.004	11960H	100.0	97.2	
20 Tetryl							
1	13.445	13.449	-0.004	10725H	100.0	96.6	
5 Nitrobenzene							
1	13.932	13.939	-0.007	8141H	100.0	96.4	
7 Nitroglycerin							
2	14.742	14.749	-0.007	7715H	100.0	100.7	
25 2,4,6-Trinitrotoluene							
1	15.435	15.443	-0.008	10970H	100.0	96.5	
26 4-Amino-2,6-dinitrotoluene							
1	16.082	16.093	-0.011	8819H	100.0	96.4	
$ 30 3,4-Dinitrotoluene							M
1	16.529	16.539	-0.010	6436H	100.0	96.0	
2	16.525	16.539	-0.014	12335H	100.0	91.9	M
6 2-Amino-4,6-dinitrotoluene							
1	16.935	16.949	-0.014	9860H	100.0	96.5	
12 2,6-Dinitrotoluene							
1	18.512	18.526	-0.014	6931H	100.0	96.3	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
23 2,4-Dinitrotoluene							
1	19.079	19.093	-0.014	11442H	100.0	96.7	
16 o-Nitrotoluene							M
1	22.452	22.463	-0.011	4999H	100.0	95.4	M
15 p-Nitrotoluene							M
1	24.089	24.083	0.006	6031H	100.0	95.8	M
8 m-Nitrotoluene							M
1	25.845	25.843	0.002	5605H	100.0	94.7	M
21 PETN							M
2	28.302	28.309	-0.007	4475H	100.0	100.7	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L5_00033 Amount Added: 1.00 Units: mL

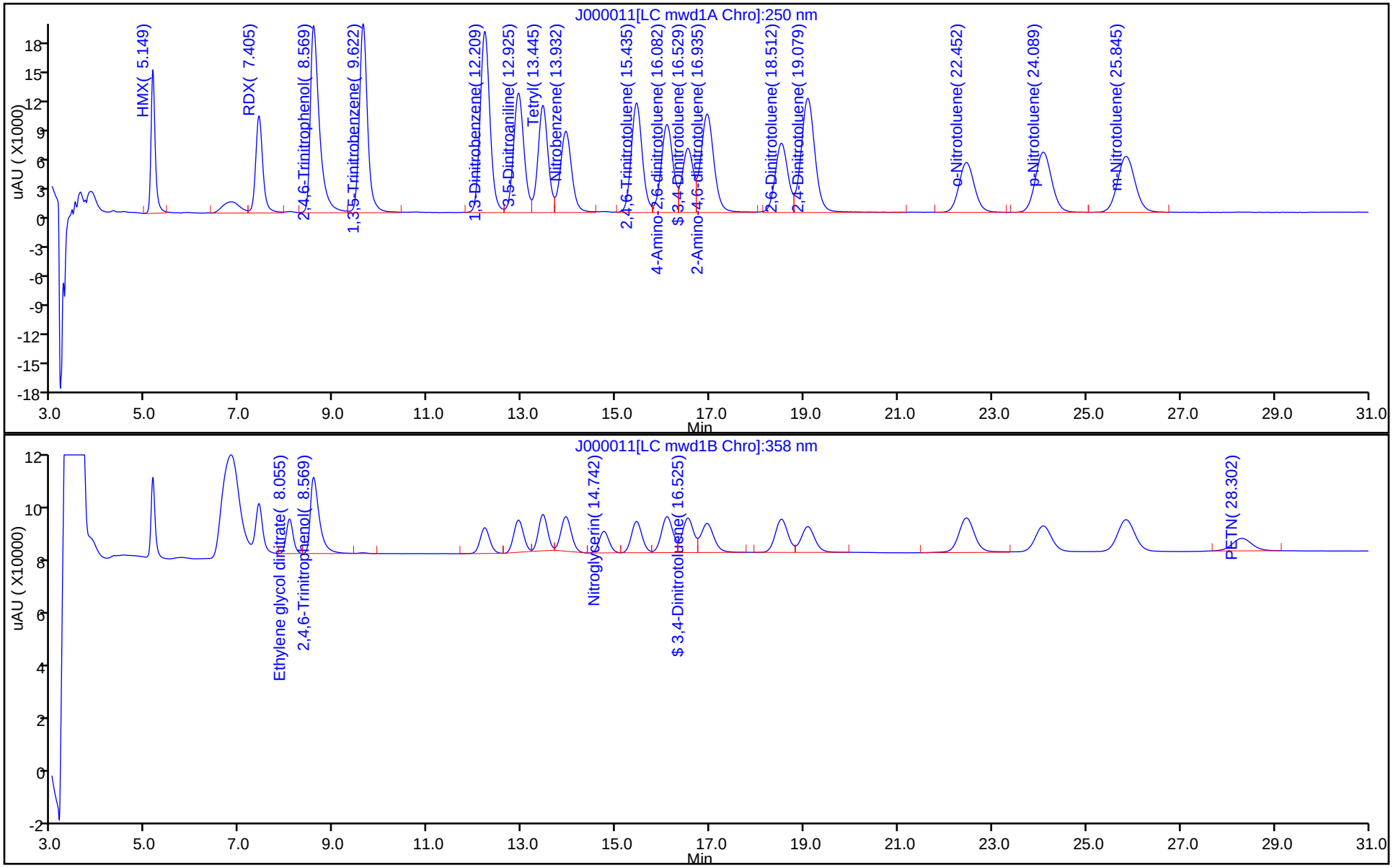
Report Date: 12-Mar-2015 11:12:31 Chrom Revision: 2.2 06-Mar-2015 13:13:48

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000011.D

Injection Date:	11-Mar-2015 18:42:11	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	IC 5			Worklist Smp#:	8
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)



Manual Integration/User Assign Peak Report

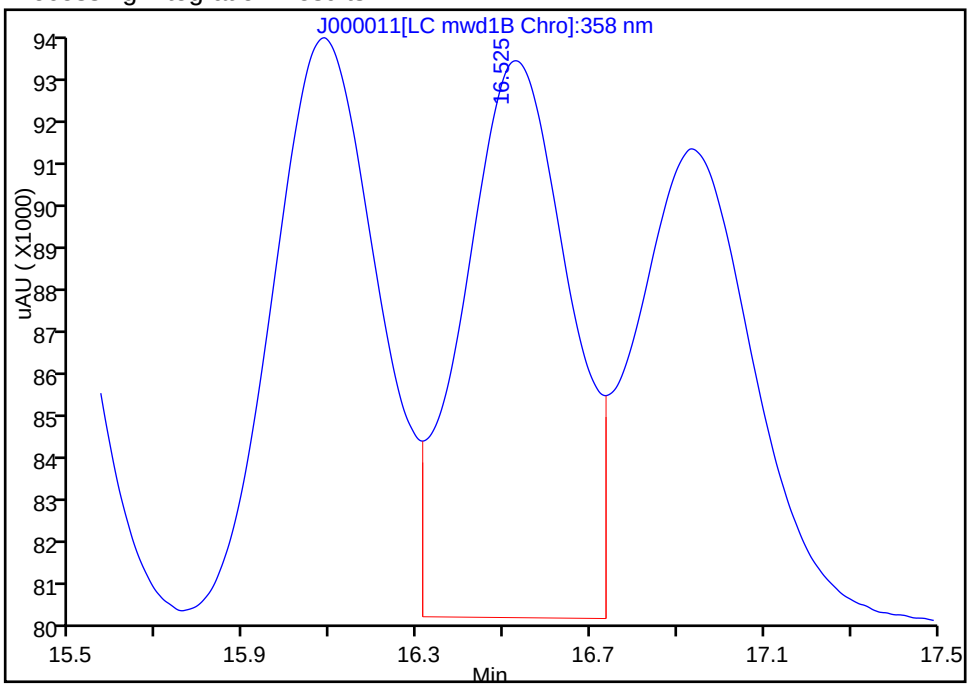
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000011.D
Injection Date: 11-Mar-2015 18:42:11 Instrument ID: LC10
Lims ID: IC 5
Client ID:
Operator ID: YPH ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

$ 30 3,4-Dinitrotoluene, CAS: 610-39-9

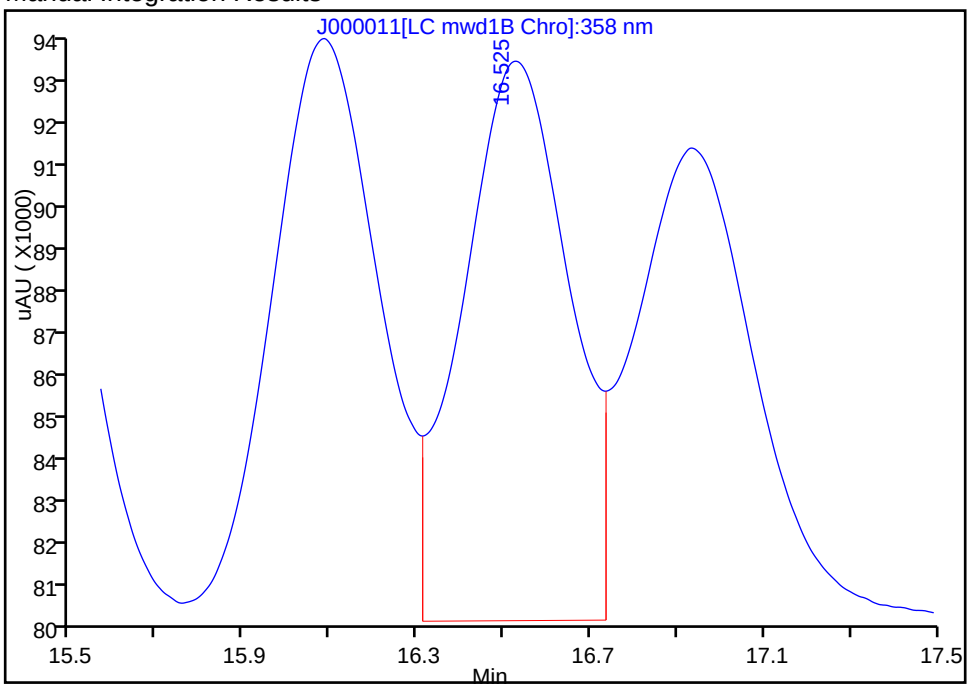
Processing Integration Results

RT: 16.53
Height: 12099
Amount: 89.969533
Amount Units: ng/ml



Manual Integration Results

RT: 16.53
Height: 12335
Amount: 91.866938
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:26:35
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

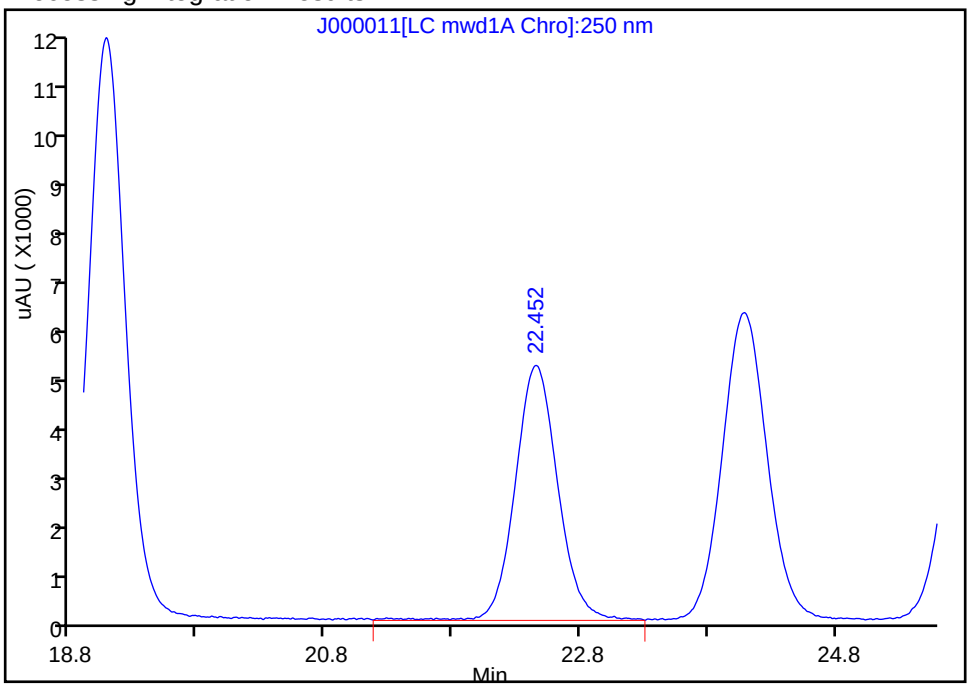
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000011.D				
Injection Date:	11-Mar-2015 18:42:11	Instrument ID:	LC10		
Lims ID:	IC 5				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

16 o-Nitrotoluene, CAS: 88-72-2

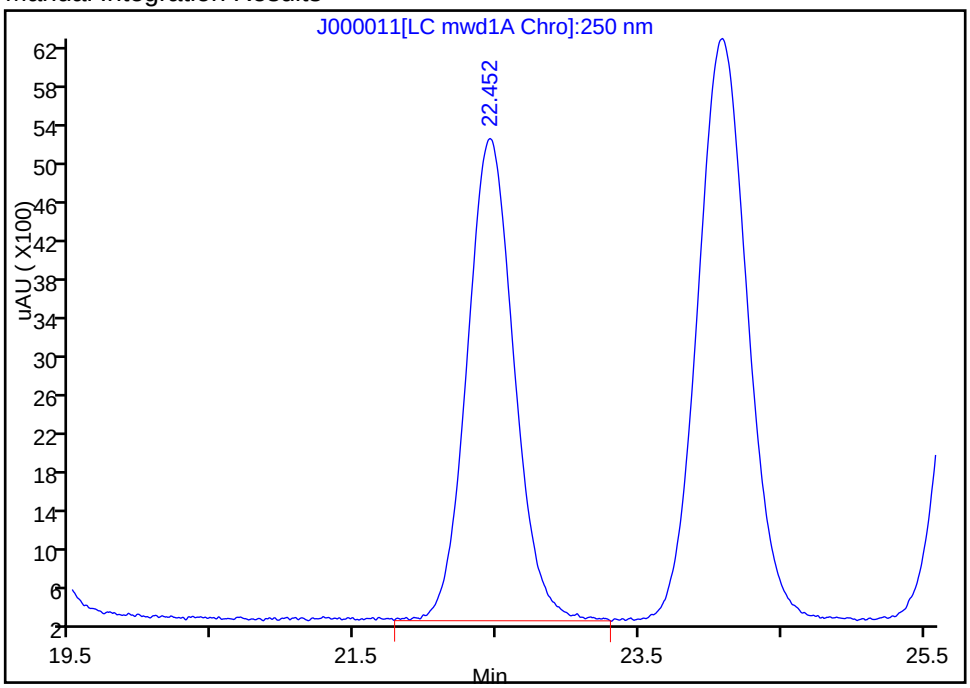
Processing Integration Results

RT: 22.45
Height: 5007
Amount: 95.410112
Amount Units: ng/ml



Manual Integration Results

RT: 22.45
Height: 4999
Amount: 95.388801
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:41:35
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

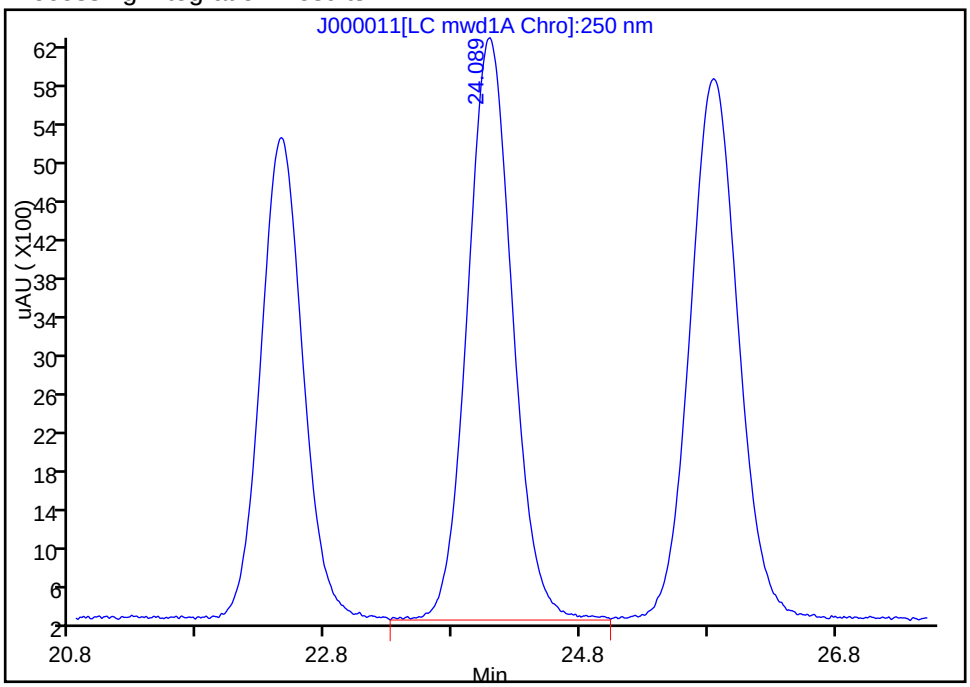
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000011.D
Injection Date: 11-Mar-2015 18:42:11 Instrument ID: LC10
Lims ID: IC 5
Client ID:
Operator ID: YPH ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

15 p-Nitrotoluene, CAS: 99-99-0

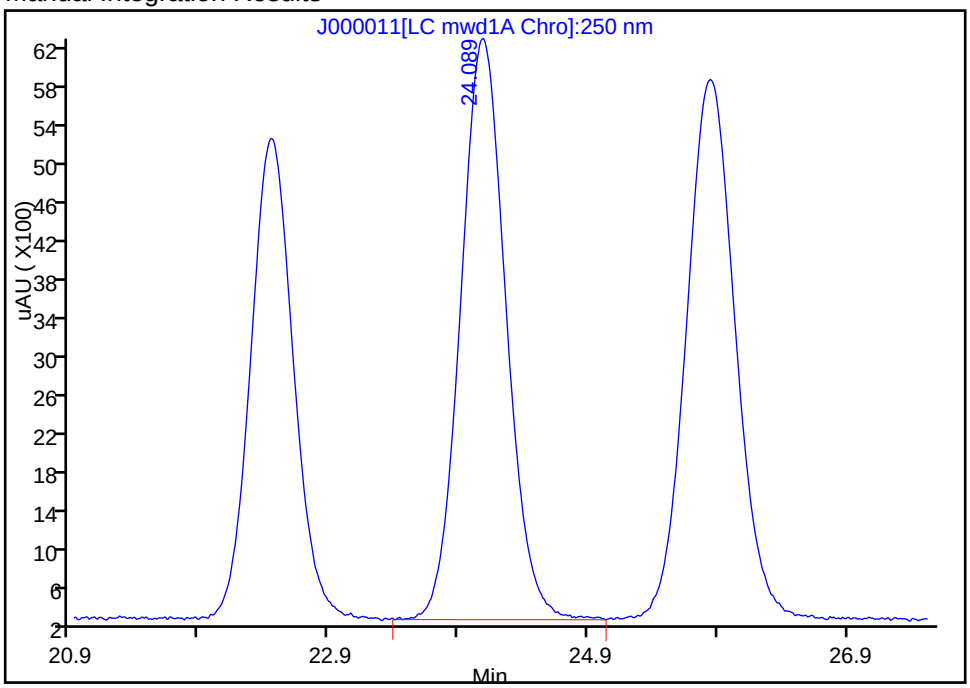
Processing Integration Results

RT: 24.09
Height: 6043
Amount: 100.4476
Amount Units: ng/ml



Manual Integration Results

RT: 24.09
Height: 6031
Amount: 95.795108
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:41:35
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

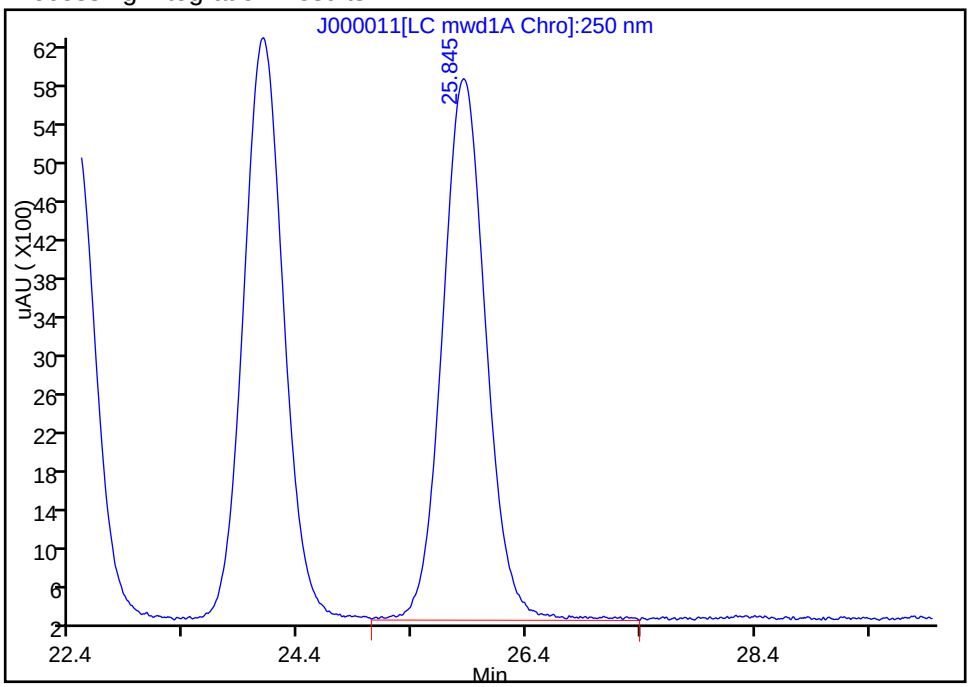
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000011.D
Injection Date: 11-Mar-2015 18:42:11 Instrument ID: LC10
Lims ID: IC 5
Client ID:
Operator ID: YPH ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

8 m-Nitrotoluene, CAS: 99-08-1

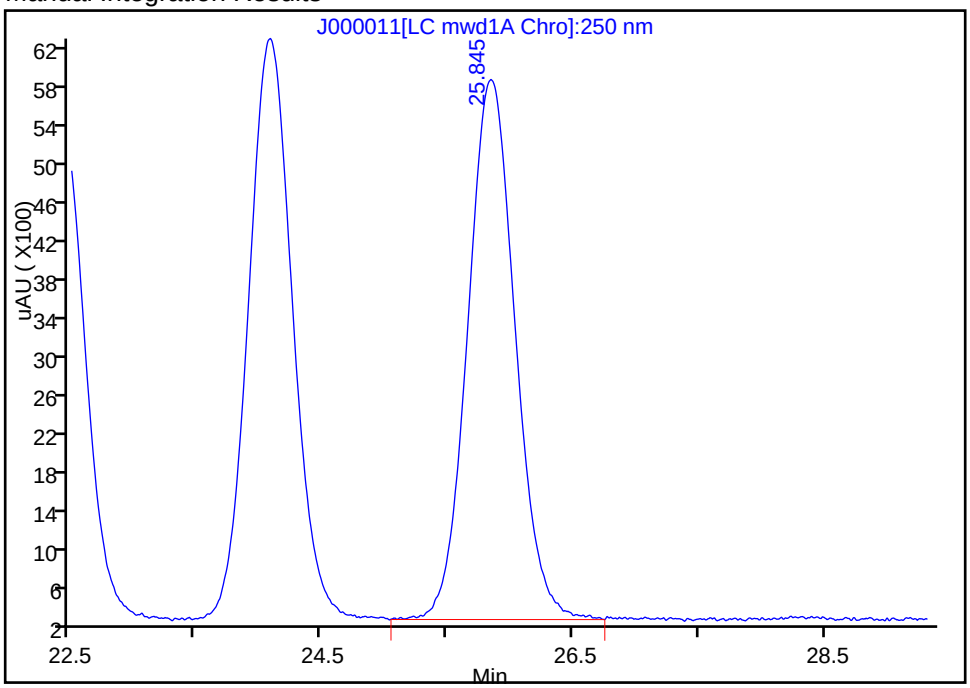
Processing Integration Results

RT: 25.85
Height: 5620
Amount: 94.937473
Amount Units: ng/ml



Manual Integration Results

RT: 25.85
Height: 5605
Amount: 94.657811
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:41:35
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

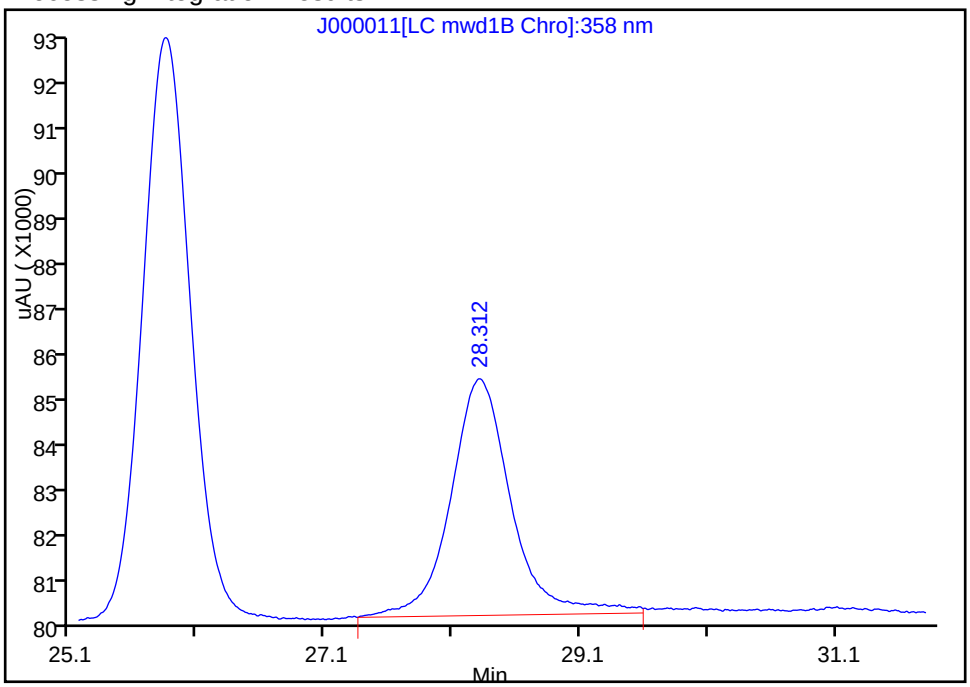
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000011.D
Injection Date: 11-Mar-2015 18:42:11 Instrument ID: LC10
Lims ID: IC 5
Client ID:
Operator ID: YPH ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

21 PETN, CAS: 78-11-5

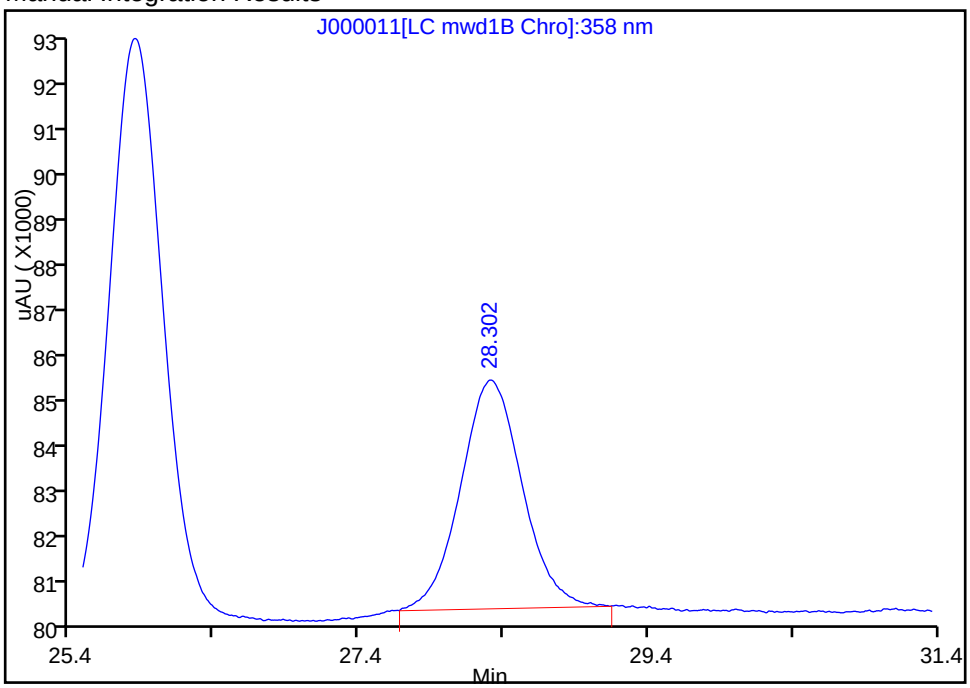
Processing Integration Results

RT: 28.31
Height: 4636
Amount: 85.486837
Amount Units: ng/ml



Manual Integration Results

RT: 28.30
Height: 4475
Amount: 100.6953
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:17:41
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000012.D
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 11-Mar-2015 19:25:50 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020096-009
Operator ID: YPH Instrument ID: LC10
Sublist: chrom-8330_LC10*sub1

Method: \\SACChrom\ChromData\LC10\20150311-20096.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 12-Mar-2015 11:12:33 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK019

First Level Reviewer: phant Date: 12-Mar-2015 06:15:26

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.146	5.149	-0.003	30083H	200.0	204.5	
19 RDX							
1	7.396	7.406	-0.010	19940H	200.0	196.7	
3 Ethylene glycol dinitrate							
2	8.046	8.056	-0.010	24901H	200.0	206.4	
10 2,4,6-Trinitrophenol							
2	8.516	8.579	-0.063	66509H	500.0	508.9	
1	8.516	8.579	-0.063	45711H	500.0	497.5	
27 1,3,5-Trinitrobenzene							
1	9.613	9.623	-0.010	39487H	200.0	203.1	
24 1,3-Dinitrobenzene							
1	12.199	12.209	-0.010	37596H	200.0	201.2	
9 3,5-Dinitroaniline							
1	12.919	12.929	-0.010	24823H	200.0	201.8	
20 Tetryl							
1	13.449	13.449	0.000	22719H	200.0	204.7	
5 Nitrobenzene							
1	13.926	13.939	-0.013	16923H	200.0	200.3	
7 Nitroglycerin							
2	14.746	14.749	-0.003	15758H	200.0	205.6	
25 2,4,6-Trinitrotoluene							
1	15.443	15.443	0.000	23139H	200.0	203.6	
26 4-Amino-2,6-dinitrotoluene							
1	16.089	16.093	-0.004	18462H	200.0	201.7	
$ 30 3,4-Dinitrotoluene							M
1	16.536	16.539	-0.003	13272H	200.0	198.0	
2	16.536	16.539	-0.003	25174H	200.0	187.5	M
6 2-Amino-4,6-dinitrotoluene							
1	16.943	16.949	-0.006	20645H	200.0	202.1	
12 2,6-Dinitrotoluene							
1	18.526	18.526	0.000	14572H	200.0	202.6	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
23 2,4-Dinitrotoluene							
1	19.086	19.093	-0.007	24077H	200.0	203.6	
16 o-Nitrotoluene							M
1	22.459	22.463	-0.004	10552H	200.0	201.3	M
15 p-Nitrotoluene							M
1	24.093	24.083	0.010	12795H	200.0	203.2	M
8 m-Nitrotoluene							M
1	25.853	25.843	0.010	11941H	200.0	201.7	M
21 PETN							M
2	28.326	28.309	0.017	9185H	200.0	206.7	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L6_00027 Amount Added: 1.00 Units: mL

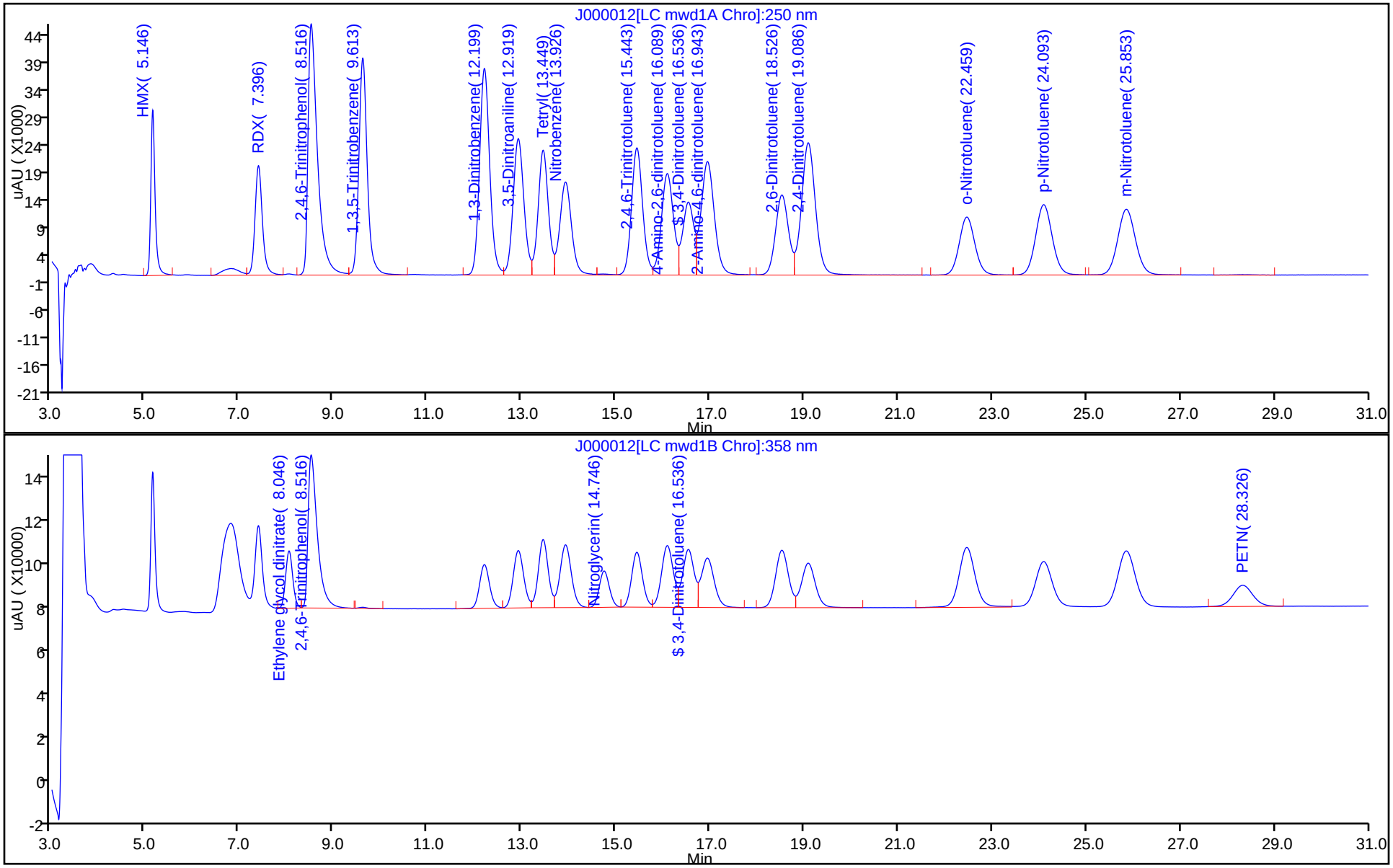
Report Date: 12-Mar-2015 11:12:34 Chrom Revision: 2.2 06-Mar-2015 13:13:48

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000012.D

Injection Date:	11-Mar-2015 19:25:50	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	IC 6			Worklist Smp#:	9
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)



Manual Integration/User Assign Peak Report

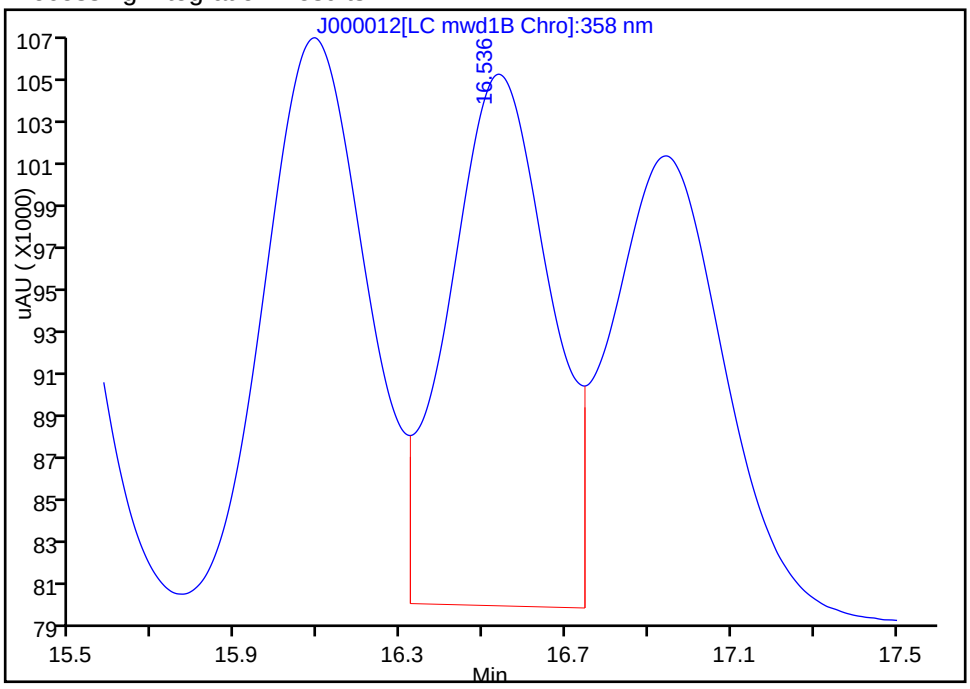
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000012.D
Injection Date: 11-Mar-2015 19:25:50 Instrument ID: LC10
Lims ID: IC 6
Client ID:
Operator ID: YPH ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

$ 30 3,4-Dinitrotoluene, CAS: 610-39-9

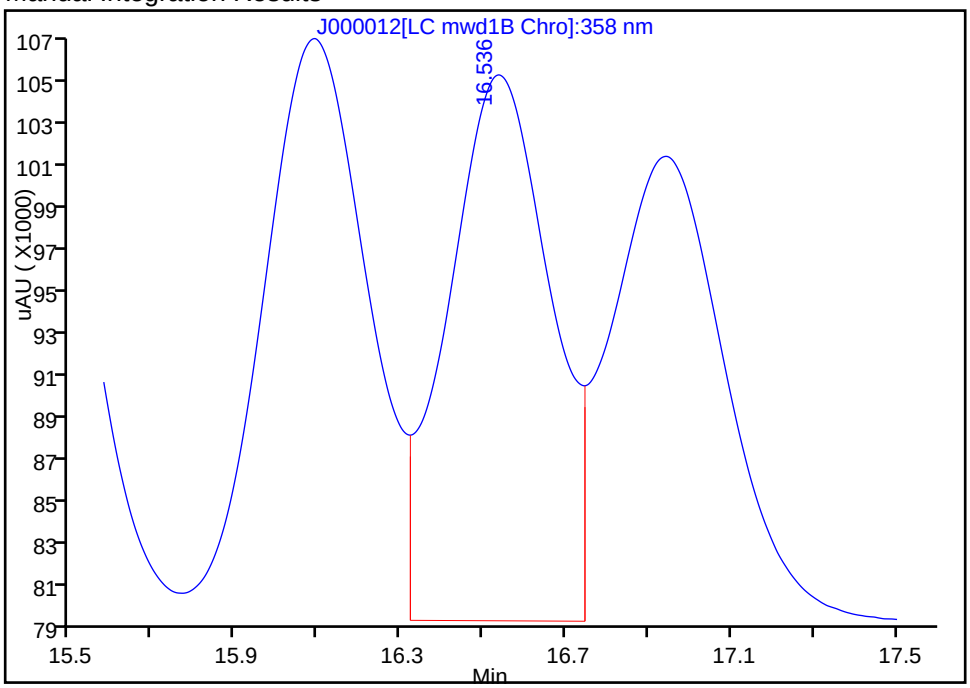
Processing Integration Results

RT: 16.54
Height: 24439
Amount: 183.3036
Amount Units: ng/ml



Manual Integration Results

RT: 16.54
Height: 25174
Amount: 187.4875
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:25:31
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

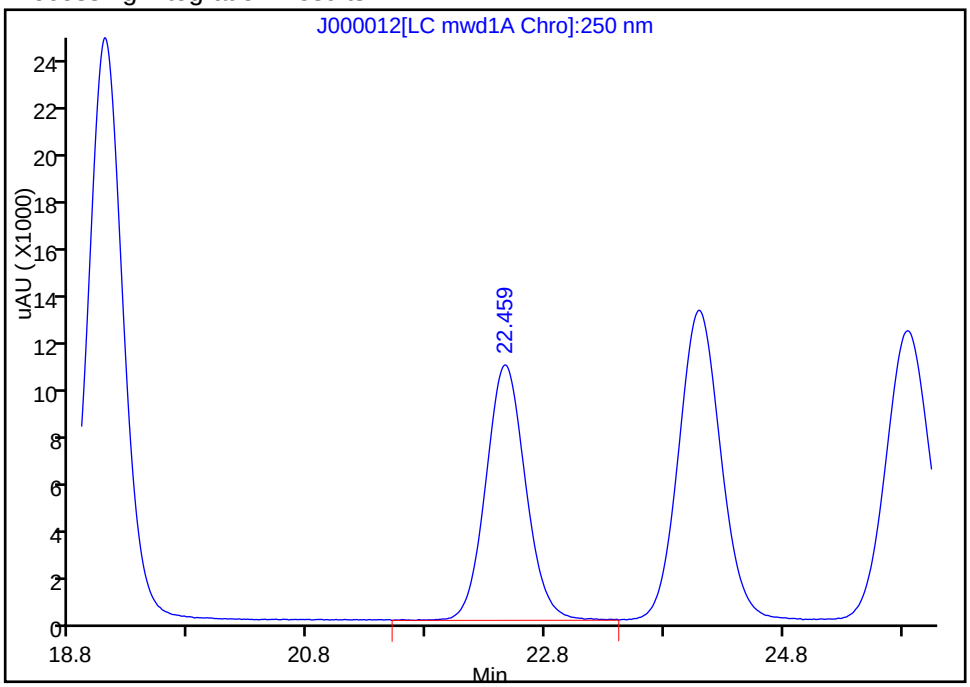
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000012.D				
Injection Date:	11-Mar-2015 19:25:50	Instrument ID:	LC10		
Lims ID:	IC 6				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

16 o-Nitrotoluene, CAS: 88-72-2

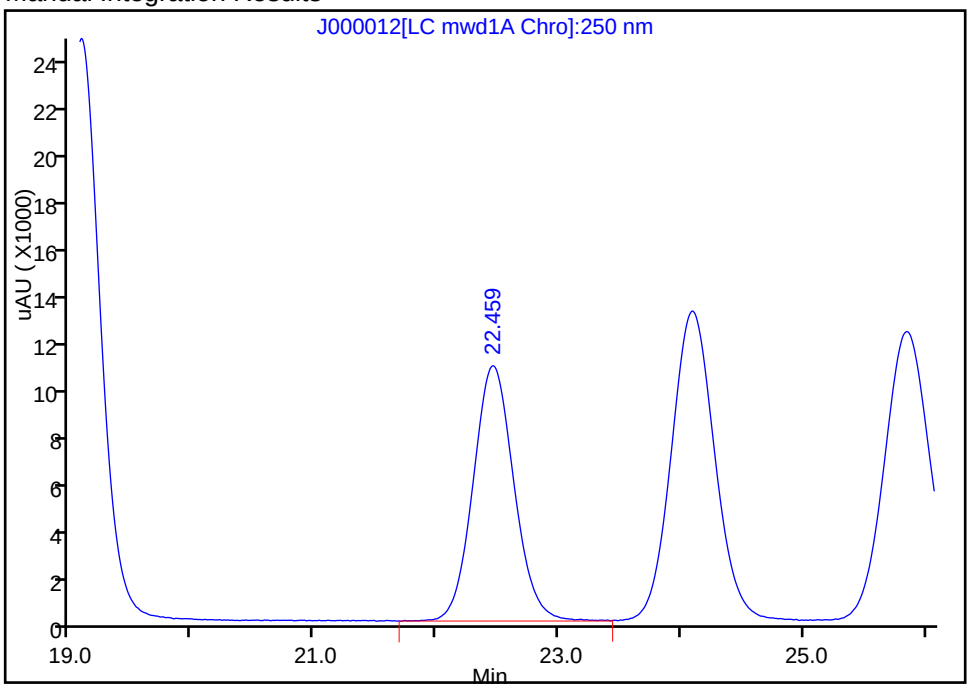
Processing Integration Results

RT: 22.46
Height: 10557
Amount: 201.2111
Amount Units: ng/ml



Manual Integration Results

RT: 22.46
Height: 10552
Amount: 201.3488
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:42:22
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

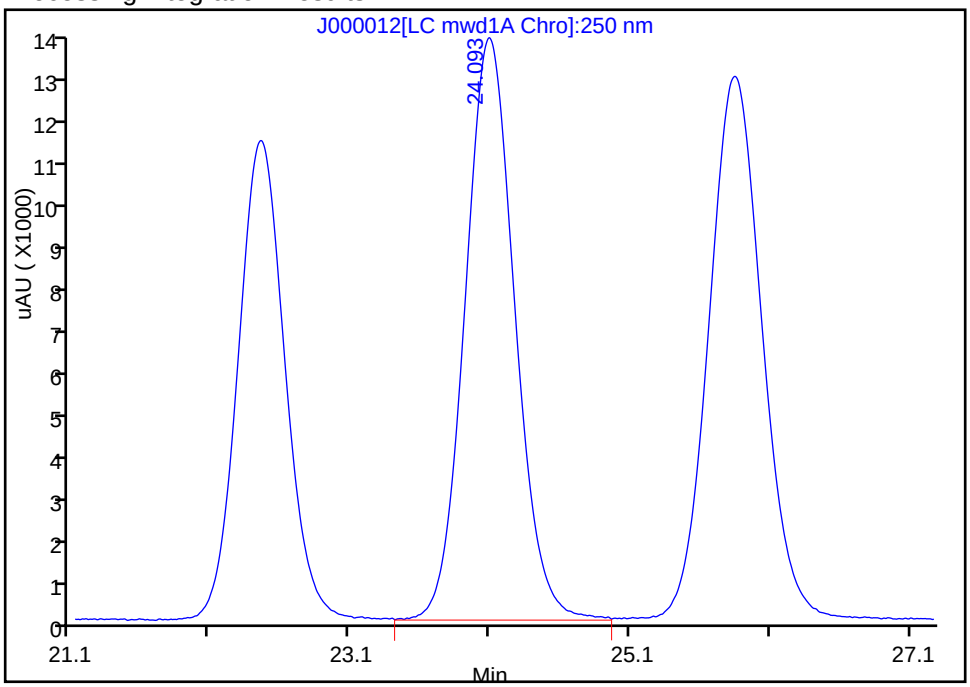
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000012.D
Injection Date: 11-Mar-2015 19:25:50 Instrument ID: LC10
Lims ID: IC 6
Client ID:
Operator ID: YPH ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

15 p-Nitrotoluene, CAS: 99-99-0

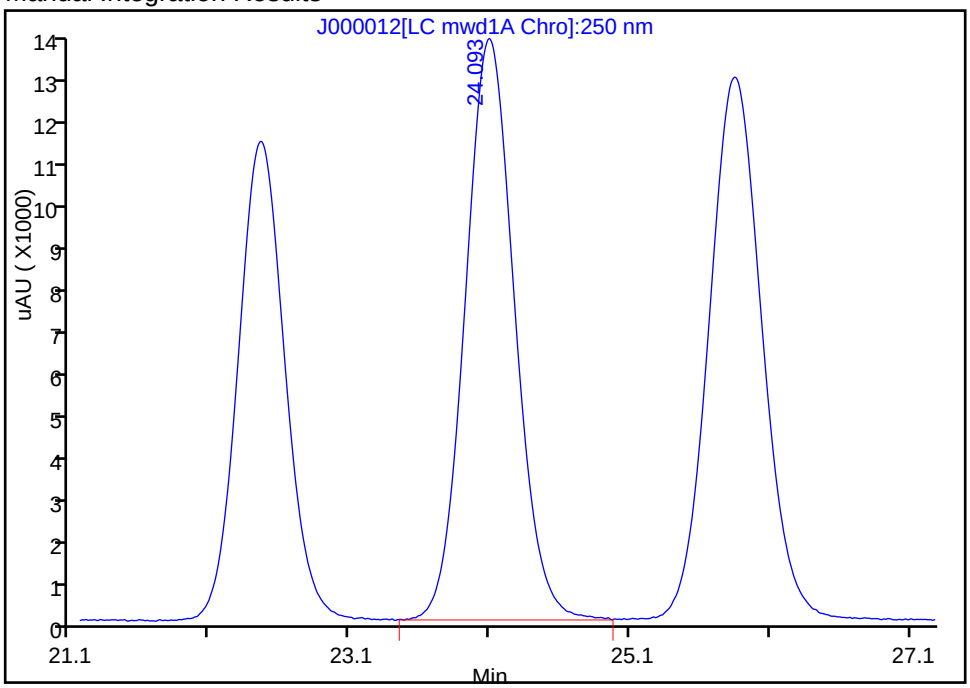
Processing Integration Results

RT: 24.09
Height: 12816
Amount: 214.2850
Amount Units: ng/ml



Manual Integration Results

RT: 24.09
Height: 12795
Amount: 203.2330
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:42:22
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

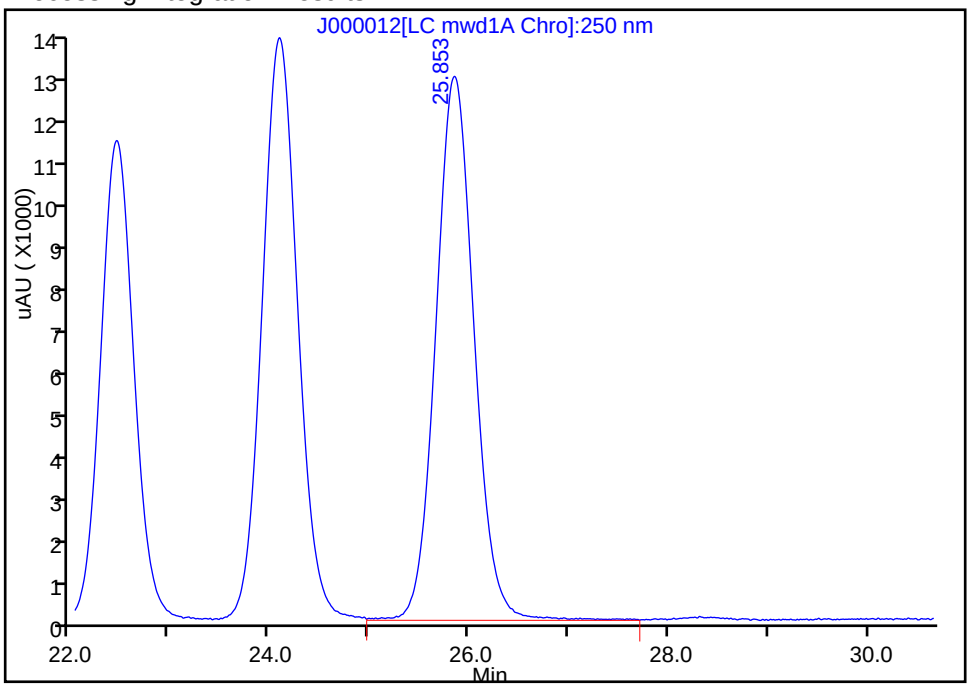
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000012.D				
Injection Date:	11-Mar-2015 19:25:50	Instrument ID:	LC10		
Lims ID:	IC 6				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

8 m-Nitrotoluene, CAS: 99-08-1

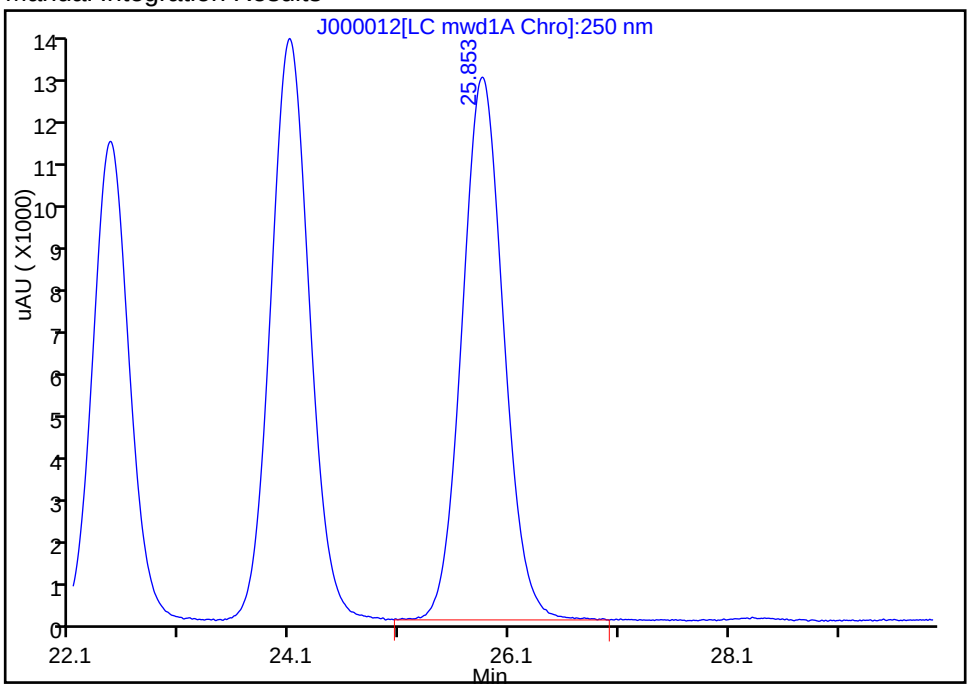
Processing Integration Results

RT: 25.85
Height: 11968
Amount: 202.2461
Amount Units: ng/ml



Manual Integration Results

RT: 25.85
Height: 11941
Amount: 201.6608
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:42:22
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

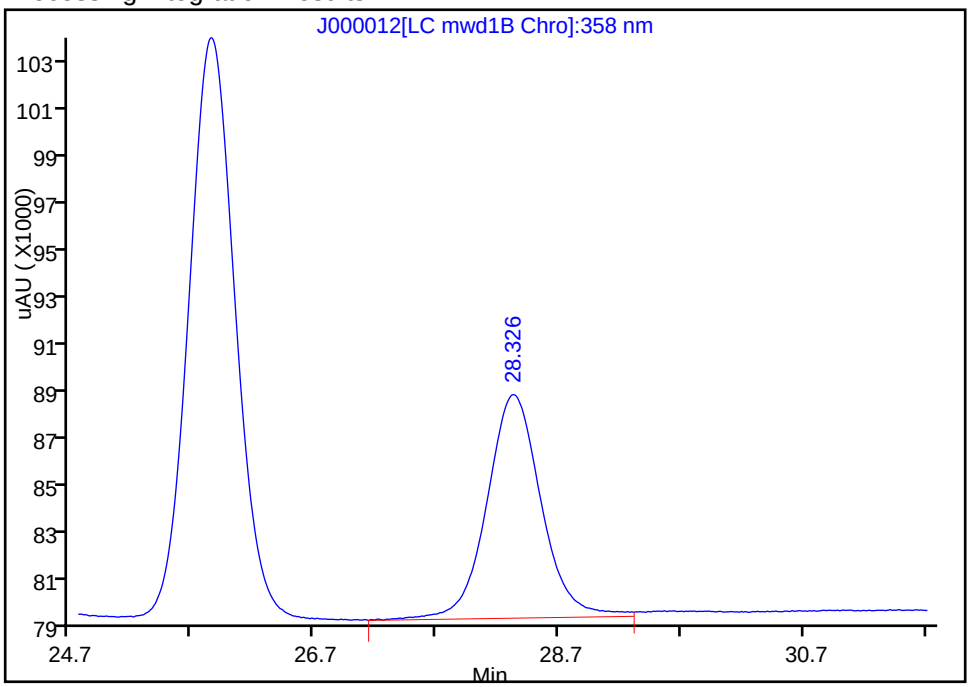
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000012.D
Injection Date: 11-Mar-2015 19:25:50 Instrument ID: LC10
Lims ID: IC 6
Client ID:
Operator ID: YPH ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

21 PETN, CAS: 78-11-5

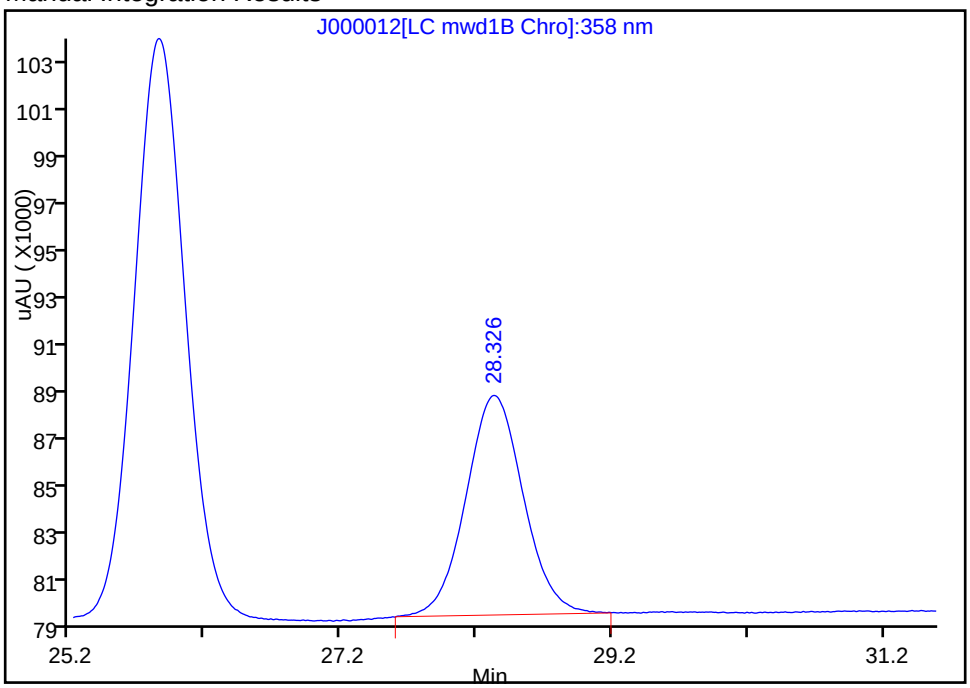
Processing Integration Results

RT: 28.33
Height: 9352
Amount: 173.1834
Amount Units: ng/ml



Manual Integration Results

RT: 28.33
Height: 9185
Amount: 206.6785
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:18:03
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 11-Mar-2015 20:09:31 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020096-010
Operator ID: YPH Instrument ID: LC10
Sublist: chrom-8330_LC10*sub1

Method: \\SACChrom\ChromData\LC10\20150311-20096.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 12-Mar-2015 11:12:35 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK019

First Level Reviewer: phant Date: 12-Mar-2015 06:15:32

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.137	5.149	-0.012	66359H	500.0	451.1	
19 RDX							M
1	7.377	7.406	-0.029	41667H	500.0	411.0	M
3 Ethylene glycol dinitrate							
2	8.030	8.056	-0.026	52920H	500.0	438.5	
10 2,4,6-Trinitrophenol							
2	8.460	8.579	-0.119	117189H	1000.0	896.8	
1	8.460	8.579	-0.119	81577H	1000.0	887.9	
27 1,3,5-Trinitrobenzene							
1	9.597	9.623	-0.026	86016H	500.0	442.3	
24 1,3-Dinitrobenzene							
1	12.180	12.209	-0.029	81195H	500.0	434.6	
9 3,5-Dinitroaniline							
1	12.900	12.929	-0.029	53588H	500.0	435.6	
20 Tetryl							
1	13.434	13.449	-0.015	51470H	500.0	463.7	
5 Nitrobenzene							
1	13.904	13.939	-0.035	36745H	500.0	435.0	
7 Nitroglycerin							
2	14.727	14.749	-0.022	36154H	500.0	471.8	
25 2,4,6-Trinitrotoluene							
1	15.424	15.443	-0.019	52174H	500.0	459.1	
26 4-Amino-2,6-dinitrotoluene							
1	16.064	16.093	-0.029	40901H	500.0	446.9	
$ 30 3,4-Dinitrotoluene							M
1	16.517	16.539	-0.022	30678H	500.0	457.6	
2	16.517	16.539	-0.022	57741H	500.0	430.0	M
6 2-Amino-4,6-dinitrotoluene							
1	16.914	16.949	-0.035	45793H	500.0	448.4	
12 2,6-Dinitrotoluene							
1	18.497	18.526	-0.029	32681H	500.0	454.3	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
23 2,4-Dinitrotoluene							
1	19.057	19.093	-0.036	53961H	500.0	456.2	
16 o-Nitrotoluene							
1	22.424	22.463	-0.039	23683H	500.0	451.9	
15 p-Nitrotoluene							
1	24.057	24.083	-0.026	28823H	500.0	457.8	
8 m-Nitrotoluene							
1	25.817	25.843	-0.026	27029H	500.0	456.5	
21 PETN							M
2	28.304	28.309	-0.005	21745H	500.0	489.3	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L7_00018 Amount Added: 1.00 Units: mL

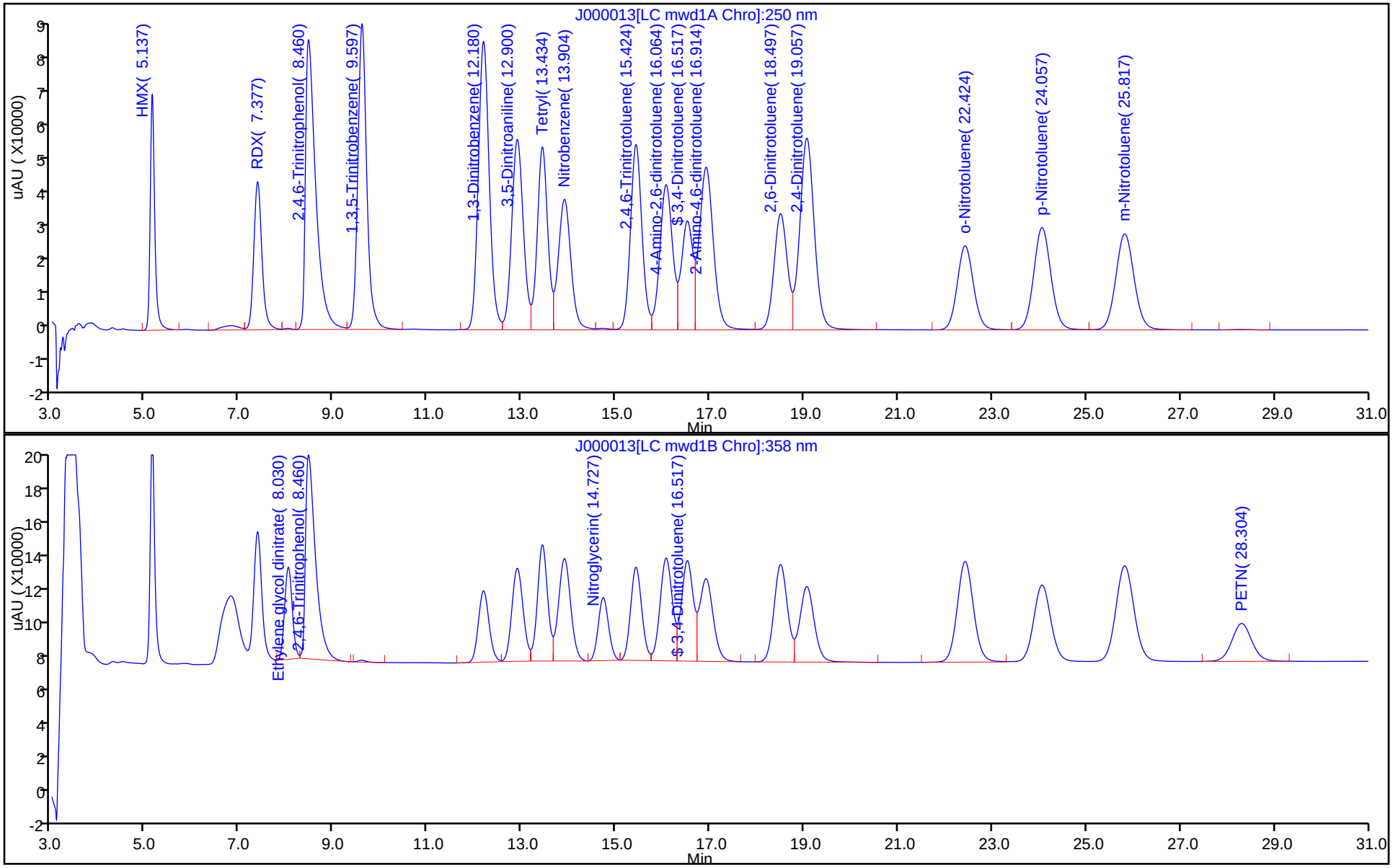
Report Date: 12-Mar-2015 11:12:36 Chrom Revision: 2.2 06-Mar-2015 13:13:48

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Injection Date:	11-Mar-2015 20:09:31	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	IC 7			Worklist Smp#:	10
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)



Manual Integration/User Assign Peak Report

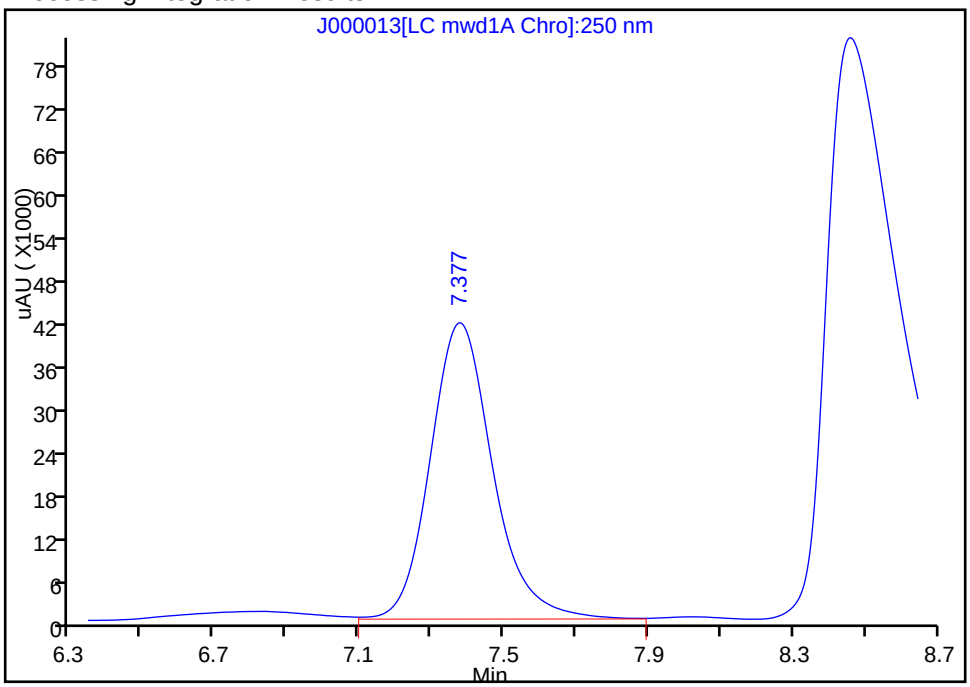
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D				
Injection Date:	11-Mar-2015 20:09:31	Instrument ID:	LC10		
Lims ID:	IC 7				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

19 RDX, CAS: 121-82-4

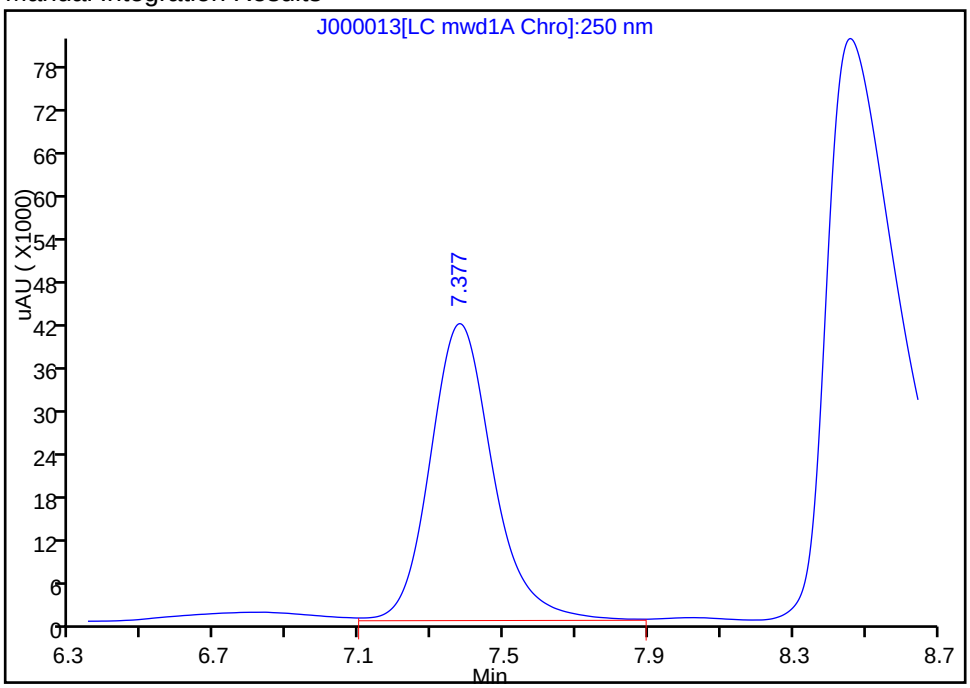
Processing Integration Results

RT: 7.38
Height: 41572
Amount: 409.7990
Amount Units: ng/ml



Manual Integration Results

RT: 7.38
Height: 41667
Amount: 410.9727
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:47:57
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

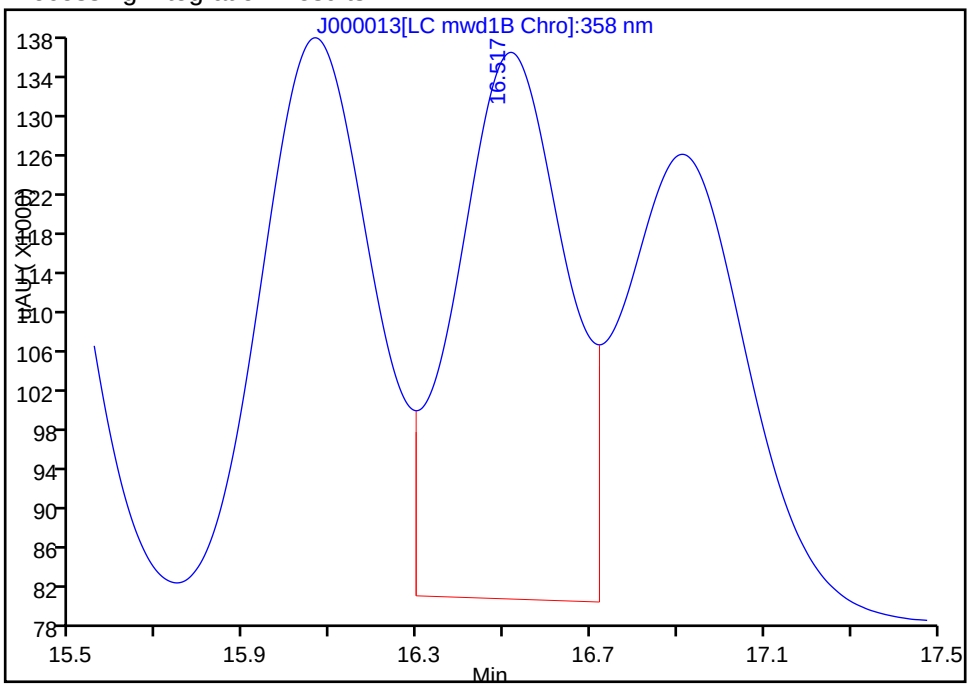
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D
Injection Date: 11-Mar-2015 20:09:31 Instrument ID: LC10
Lims ID: IC 7
Client ID:
Operator ID: YPH ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

$ 30 3,4-Dinitrotoluene, CAS: 610-39-9

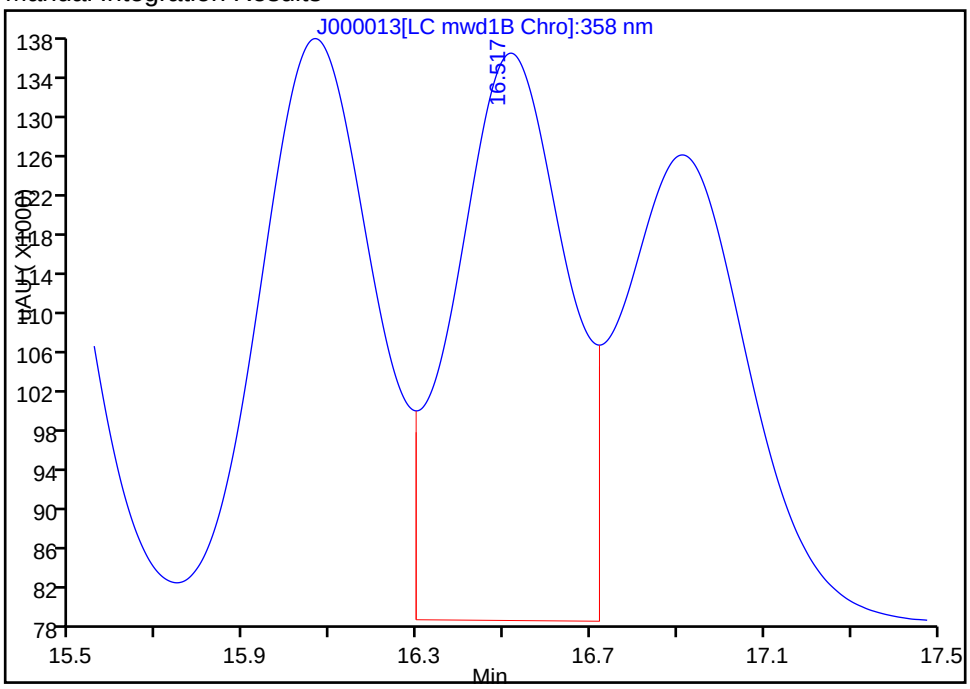
Processing Integration Results

RT: 16.52
Height: 55541
Amount: 414.9487
Amount Units: ng/ml



Manual Integration Results

RT: 16.52
Height: 57741
Amount: 430.0356
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:25:52
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

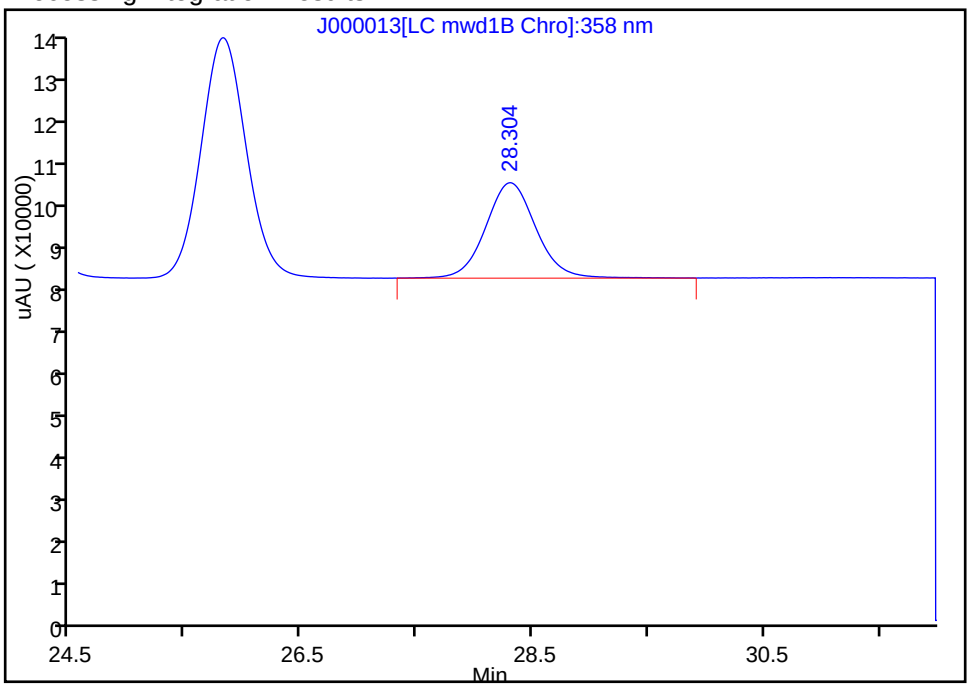
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D
Injection Date: 11-Mar-2015 20:09:31 Instrument ID: LC10
Lims ID: IC 7
Client ID:
Operator ID: YPH ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

21 PETN, CAS: 78-11-5

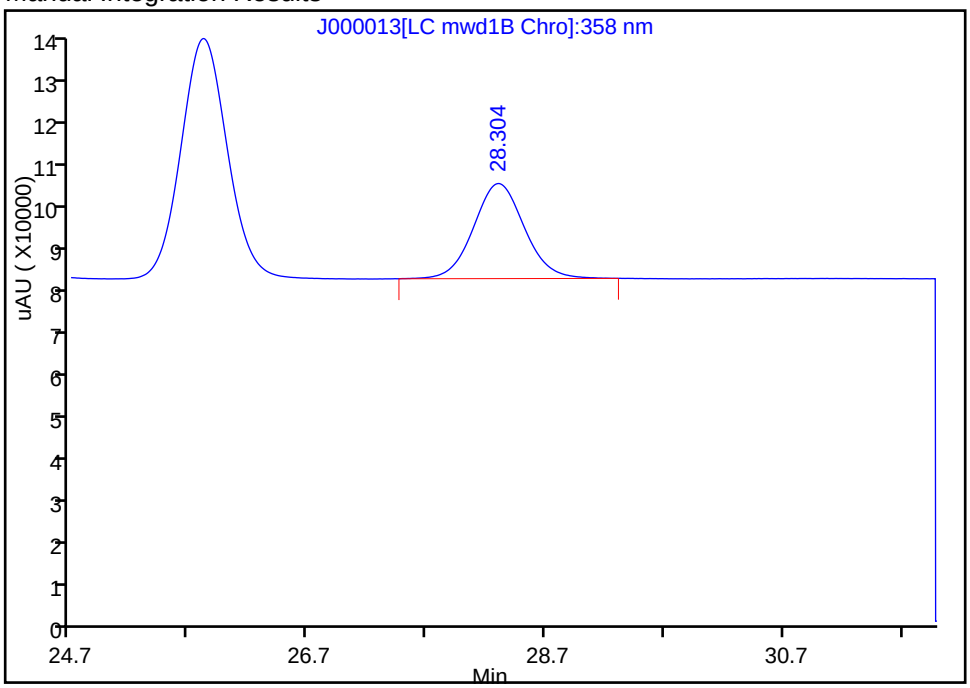
Processing Integration Results

RT: 28.30
Height: 21827
Amount: 405.0943
Amount Units: ng/ml



Manual Integration Results

RT: 28.30
Height: 21745
Amount: 489.3004
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:18:18
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 63675

SDG No.:

Instrument ID: LC9 GC Column: Zorbax CN ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/23/2015 14:34 Calibration End Date: 01/23/2015 21:15 Calibration ID: 11278

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 320-63675/4	W000004.D
Level 2	STD2 320-63675/5	W000005.D
Level 3	STD3 320-63675/6	W000006.D
Level 4	STD4 320-63675/7	W000007.D
Level 5	STD5 320-63675/8	W000008.D
Level 6	STD6 320-63675/9	W000009.D
Level 7	STD7 320-63675/10	W000010.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
Nitrobenzene	21.583	21.570	21.569	21.586	21.558	21.544	21.482				21.336 - 21.836	21.556
Ethylene glycol dinitrate	+++++	22.760	22.783	22.772	22.761	22.747	22.706				22.522 - 23.022	22.755
1,3-Dinitrobenzene	24.400	24.390	24.403	24.432	24.411	24.394	24.346				24.182 - 24.682	24.397
1,3,5-Trinitrobenzene	26.837	26.874	26.853	26.886	26.861	26.851	26.799				26.636 - 27.136	26.852
2-Nitrotoluene	28.200	28.194	28.196	28.226	28.201	28.187	28.119				27.976 - 28.476	28.189
4-Nitrotoluene	28.200	28.194	28.196	28.226	28.201	28.187	28.119				27.976 - 28.476	28.189
3-Nitrotoluene	28.747	28.750	28.776	28.802	28.771	28.757	28.686				28.552 - 29.052	28.756
3,5-Dinitroaniline	30.263	30.294	30.299	30.326	30.308	30.294	30.229				30.076 - 30.576	30.288
RDX	30.920	30.914	30.923	30.969	30.945	30.931	30.862				30.719 - 31.219	30.923
2,4-Dinitrotoluene	31.683	31.667	31.683	31.709	31.691	31.681	31.612				31.459 - 31.959	31.675
2,6-Dinitrotoluene	32.537	32.587	32.599	32.616	32.581	32.574	32.502				32.366 - 32.866	32.571
2-Amino-4,6-dinitrotoluene	34.790	34.817	34.829	34.879	34.845	34.831	34.762				34.629 - 35.129	34.822
4-Amino-2,6-dinitrotoluene	35.227	35.227	35.263	35.302	35.271	35.257	35.162				35.052 - 35.552	35.244
2,4,6-Trinitrotoluene	38.813	38.817	38.829	38.852	38.831	38.824	38.769				38.602 - 39.102	38.819
HMX	40.863	40.920	40.926	40.939	40.924	40.914	40.879				40.689 - 41.189	40.909
Nitroglycerin	+++++	43.287	43.286	43.315	43.298	43.304	43.259				43.065 - 43.565	43.292
Tetryl	44.970	45.010	45.019	45.042	45.031	45.034	44.979				44.792 - 45.292	45.012
PETN	+++++	51.543	51.556	51.585	51.574	51.574	51.549				51.335 - 51.835	51.564
3,4-Dinitrotoluene	36.940	36.953	36.976	37.005	36.978	36.964	36.895				36.755 - 37.255	36.959

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 63675

SDG No.:

Instrument ID: LC9 GC Column: Zorbax CN ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/23/2015 14:34 Calibration End Date: 01/23/2015 21:15 Calibration ID: 11278

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 320-63675/4	W000004.D
Level 2	STD2 320-63675/5	W000005.D
Level 3	STD3 320-63675/6	W000006.D
Level 4	STD4 320-63675/7	W000007.D
Level 5	STD5 320-63675/8	W000008.D
Level 6	STD6 320-63675/9	W000009.D
Level 7	STD7 320-63675/10	W000010.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
Nitrobenzene	55.000 49.200	45.700 46.175	49.300 43.610	48.820	Ave		48.2578571				7.6		20.0			
Ethylene glycol dinitrate	+++++ 52.960	73.400 50.635	57.150 48.026	55.080	Lin2	231.492304	48.9936565							0.9970		0.9900
1,3-Dinitrobenzene	117.00 104.41	109.50 99.365	110.20 95.020	103.70	Ave		105.599286				6.9		20.0			
1,3,5-Trinitrobenzene	97.000 82.720	91.100 79.275	87.050 77.236	81.460	Ave		85.1201429				8.3		20.0			
2-Nitrotoluene	77.600 64.490	62.300 61.070	64.950 58.748	64.040	Ave		64.7425714				9.4		20.0			
4-Nitrotoluene	77.600 64.490	62.300 61.070	64.950 58.748	64.040	Ave		64.7425714				9.4		20.0			
3-Nitrotoluene	52.400 37.500	40.500 35.655	38.400 34.274	37.640	Lin2	80.4644183	35.0327529							0.9970		0.9900
3,5-Dinitroaniline	101.60 82.870	93.800 78.610	88.350 75.924	81.280	Ave		86.0620000				11.0		20.0			
RDX	71.000 47.360	57.300 44.745	51.950 43.146	46.880	Lin2	133.220607	44.4035178							0.9990		0.9900
2,4-Dinitrotoluene	106.80 89.910	94.200 85.790	93.400 83.436	88.260	Ave		91.6851429				8.4		20.0			
2,6-Dinitrotoluene	65.800 53.490	55.700 51.100	56.250 49.982	52.900	Ave		55.0317143				9.6		20.0			
2-Amino-4,6-dinitrotoluene	90.400 77.070	82.300 73.855	81.000 72.672	74.940	Ave		78.8910000				7.9		20.0			
4-Amino-2,6-dinitrotoluene	75.000 64.410	69.400 62.350	67.800 62.056	61.420	Ave		66.0622857				7.5		20.0			
2,4,6-Trinitrotoluene	84.600 75.650	82.800 75.215	80.850 71.834	74.700	Ave		77.9498571				6.1		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 63675

SDG No.:

Instrument ID: LC9 GC Column: Zorbax CN ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/23/2015 14:34 Calibration End Date: 01/23/2015 21:15 Calibration ID: 11278

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
HMX	66.000 58.480	62.400 56.480	61.300 54.984	57.820	Ave		59.6377143				6.4		20.0			
Nitroglycerin	+++++ 81.680	104.80 79.990	101.60 78.170	84.800	Ave		88.5066667				13.0		20.0			
Tetryl	128.60 112.40	124.20 112.71	121.80 109.41	109.32	Ave		116.919857				6.7		20.0			
PETN	+++++ 132.51	134.20 133.08	149.90 129.70	129.32	Ave		134.784667				5.7		20.0			
3,4-Dinitrotoluene	55.800 44.690	50.800 43.680	47.750 43.222	45.640	Ave		47.3688571				9.6		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 63675

SDG No.:

Instrument ID: LC9 GC Column: Zorbax CN ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/23/2015 14:34 Calibration End Date: 01/23/2015 21:15 Calibration ID: 11278

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 320-63675/4	W000004.D
Level 2	STD2 320-63675/5	W000005.D
Level 3	STD3 320-63675/6	W000006.D
Level 4	STD4 320-63675/7	W000007.D
Level 5	STD5 320-63675/8	W000008.D
Level 6	STD6 320-63675/9	W000009.D
Level 7	STD7 320-63675/10	W000010.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Nitrobenzene	Ave	275 9235	457 21805	986	2441	4920	5.00 200	10.0 500	20.0	50.0	100
Ethylene glycol dinitrate	Lin2	+++++ 10127	734 24013	1143	2754	5296	+++++ 200	10.0 500	20.0	50.0	100
1,3-Dinitrobenzene	Ave	585 19873	1095 47510	2204	5185	10441	5.00 200	10.0 500	20.0	50.0	100
1,3,5-Trinitrobenzene	Ave	485 15855	911 38618	1741	4073	8272	5.00 200	10.0 500	20.0	50.0	100
2-Nitrotoluene	Ave	388 12214	623 29374	1299	3202	6449	5.00 200	10.0 500	20.0	50.0	100
4-Nitrotoluene	Ave	388 12214	623 29374	1299	3202	6449	5.00 200	10.0 500	20.0	50.0	100
3-Nitrotoluene	Lin2	262 7131	405 17137	768	1882	3750	5.00 200	10.0 500	20.0	50.0	100
3,5-Dinitroaniline	Ave	508 15722	938 37962	1767	4064	8287	5.00 200	10.0 500	20.0	50.0	100
RDX	Lin2	355 8949	573 21573	1039	2344	4736	5.00 200	10.0 500	20.0	50.0	100
2,4-Dinitrotoluene	Ave	534 17158	942 41718	1868	4413	8991	5.00 200	10.0 500	20.0	50.0	100
2,6-Dinitrotoluene	Ave	329 10220	557 24991	1125	2645	5349	5.00 200	10.0 500	20.0	50.0	100
2-Amino-4,6-dinitrotoluene	Ave	452 14771	823 36336	1620	3747	7707	5.00 200	10.0 500	20.0	50.0	100
4-Amino-2,6-dinitrotoluene	Ave	375 12470	694 31028	1356	3071	6441	5.00 200	10.0 500	20.0	50.0	100
2,4,6-Trinitrotoluene	Ave	423 15043	828 35917	1617	3735	7565	5.00 200	10.0 500	20.0	50.0	100
HMX	Ave	330 11296	624 27492	1226	2891	5848	5.00 200	10.0 500	20.0	50.0	100

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1 Analy Batch No.: 63675

SDG No.:

Instrument ID: LC9 GC Column: Zorbax CN ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/23/2015 14:34 Calibration End Date: 01/23/2015 21:15 Calibration ID: 11278

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Nitroglycerin	Ave	+++++ 15998	1048 39085	2032	4240	8168	+++++ 200	10.0 500	20.0	50.0	100
Tetryl	Ave	643 22541	1242 54707	2436	5466	11240	5.00 200	10.0 500	20.0	50.0	100
PETN	Ave	+++++ 26616	1342 64849	2998	6466	13251	+++++ 200	10.0 500	20.0	50.0	100
3,4-Dinitrotoluene	Ave	279 8736	508 21611	955	2282	4469	5.00 200	10.0 500	20.0	50.0	100

Curve Type Legend:

Ave = Average by Height
Lin2 = Linear 1/conc^2 by height

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000004.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 23-Jan-2015 14:34:45 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0018933-004
Operator ID: TQP Instrument ID: LC9
Sublist: chrom-LC9_Conf_8330*sub1

Method: \\SACChrom\ChromData\LC9\20150123-18933.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 26-Jan-2015 12:47:23 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK031

First Level Reviewer: phant Date: 26-Jan-2015 10:13:37

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							
1	21.583	21.586	-0.003	275H	5.00	5.70	
4 Ethylene glycol dinitrate							
2	22.793	22.772	0.021	435H	5.00	4.15	
5 1,3-Dinitrobenzene							
1	24.400	24.432	-0.032	585H	5.00	5.54	
7 1,3,5-Trinitrobenzene							
1	26.837	26.886	-0.049	485H	5.00	5.70	
9 p-Nitrotoluene							
1	28.200	28.226	-0.026	388H	5.00	5.99	
8 o-Nitrotoluene							
1	28.200	28.226	-0.026	388H	5.00	5.99	
10 m-Nitrotoluene							
1	28.747	28.802	-0.055	262H	5.00	5.18	
11 3,5-Dinitroaniline							
1	30.263	30.326	-0.063	508H	5.00	5.90	
12 RDX							
1	30.920	30.969	-0.049	355H	5.00	4.99	
13 2,4-Dinitrotoluene							
1	31.683	31.709	-0.026	534H	5.00	5.82	
14 2,6-Dinitrotoluene							
1	32.537	32.616	-0.079	329H	5.00	5.98	
15 2-Amino-4,6-dinitrotoluene							M
1	34.790	34.879	-0.089	452H	5.00	5.73	M
16 4-Amino-2,6-dinitrotoluene							M
1	35.227	35.302	-0.075	375H	5.00	5.68	M
$ 17 3,4-Dinitrotoluene							
1	36.940	37.005	-0.065	279H	5.00	5.89	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
18 2,4,6-Trinitrotoluene							
1	38.813	38.852	-0.039	423H	5.00	5.43	
19 HMX							
1	40.863	40.939	-0.076	330H	5.00	5.53	
20 Nitroglycerin							
2	43.247	43.315	-0.068	386H	5.00	4.36	
21 Tetryl							
1	44.970	45.042	-0.072	643H	5.00	5.50	
22 PETN							
2	51.533	51.585	-0.052	972H	5.00	7.21	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L1_00019 Amount Added: 1.00 Units: mL

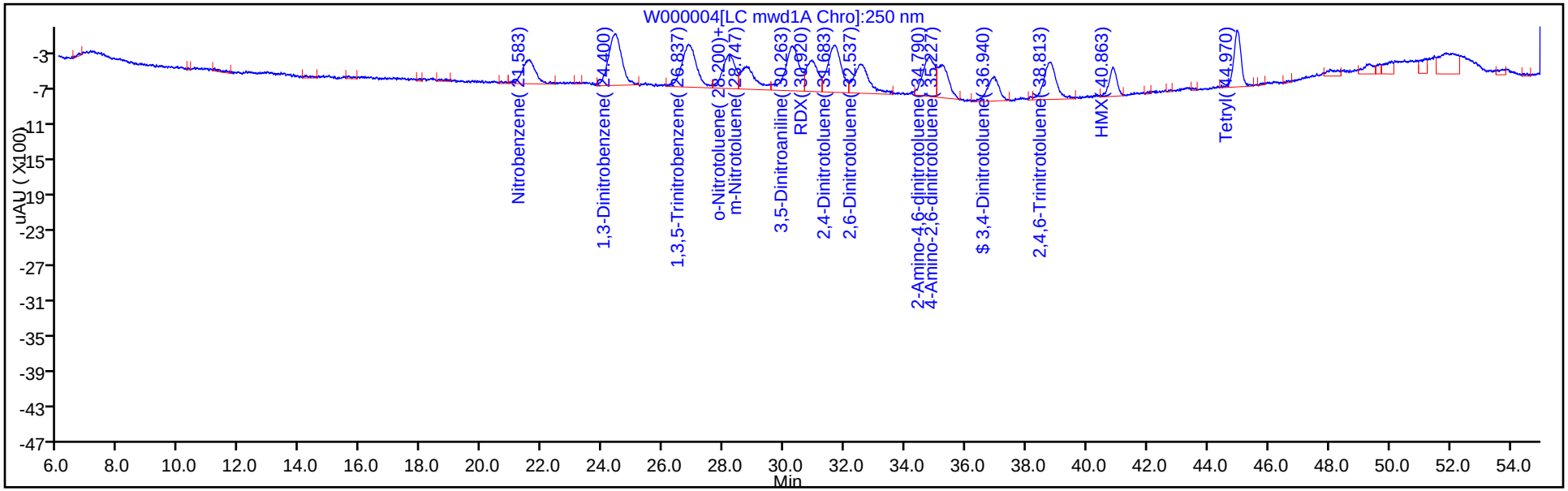
Report Date: 26-Jan-2015 12:47:23 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Sacramento

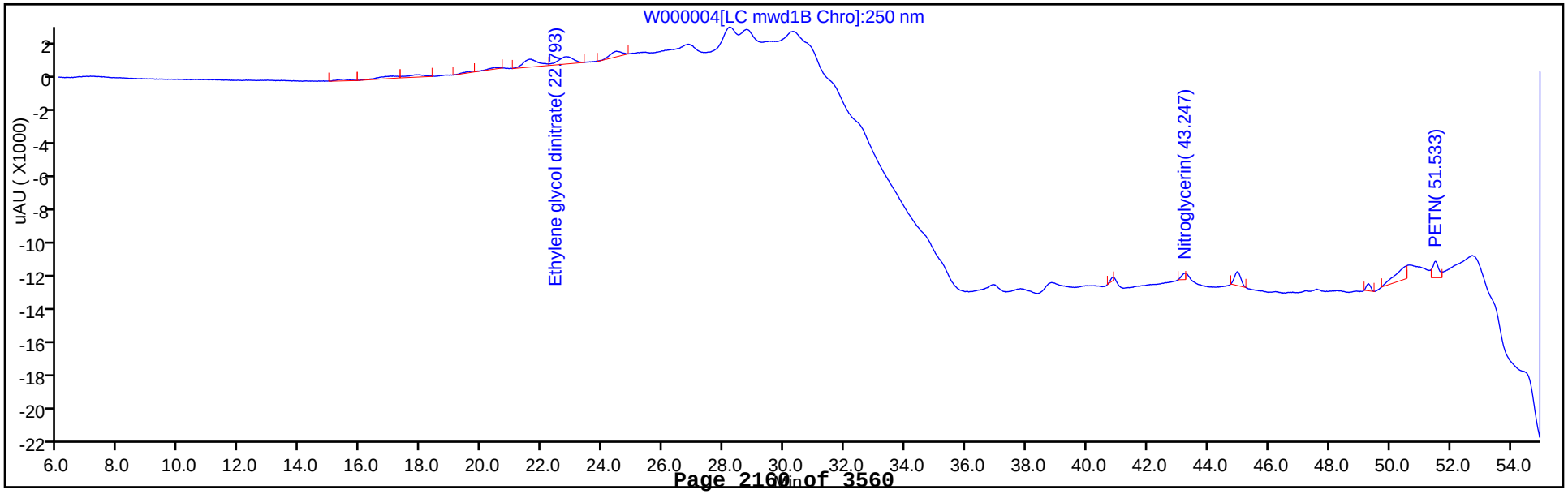
Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000004.D

Injection Date:	23-Jan-2015 14:34:45	Instrument ID:	LC9	Operator ID:	TQP
Lims ID:	STD1			Worklist Smp#:	4
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

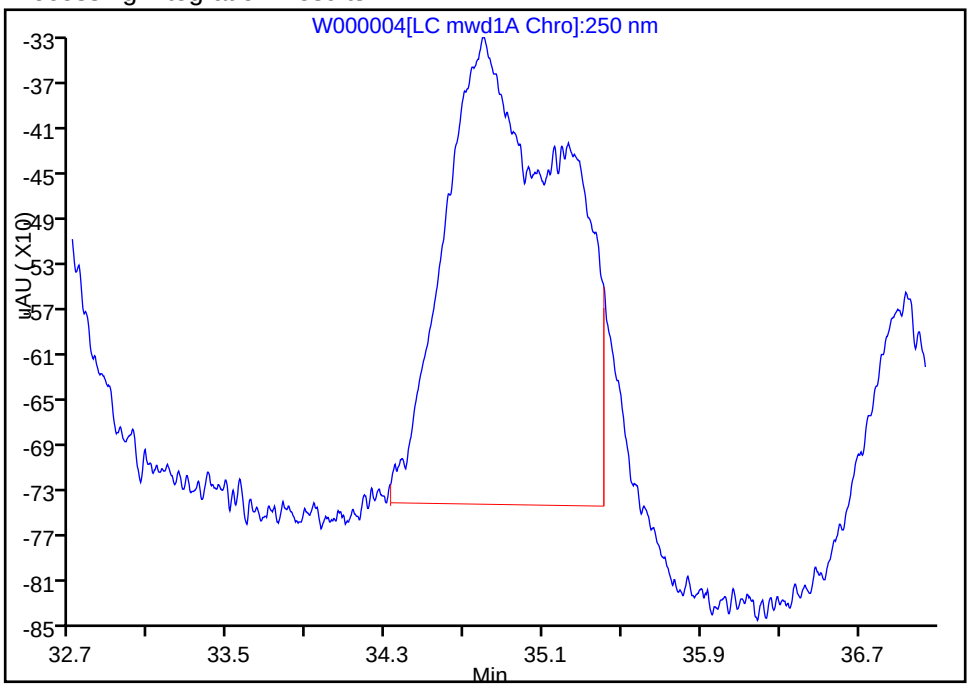
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000004.D
Injection Date: 23-Jan-2015 14:34:45 Instrument ID: LC9
Lims ID: STD1
Client ID:
Operator ID: TQP ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

15 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

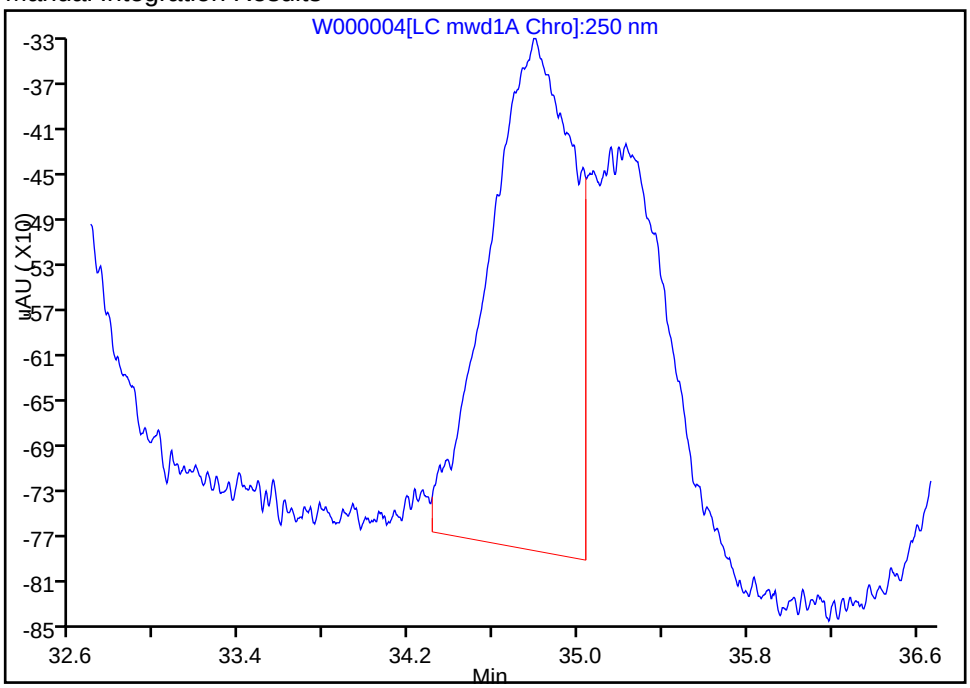
Processing Integration Results

RT: 34.80
Height: 412
Amount: 5.355051
Amount Units: ng/ml



Manual Integration Results

RT: 34.79
Height: 452
Amount: 5.729424
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:15:24
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

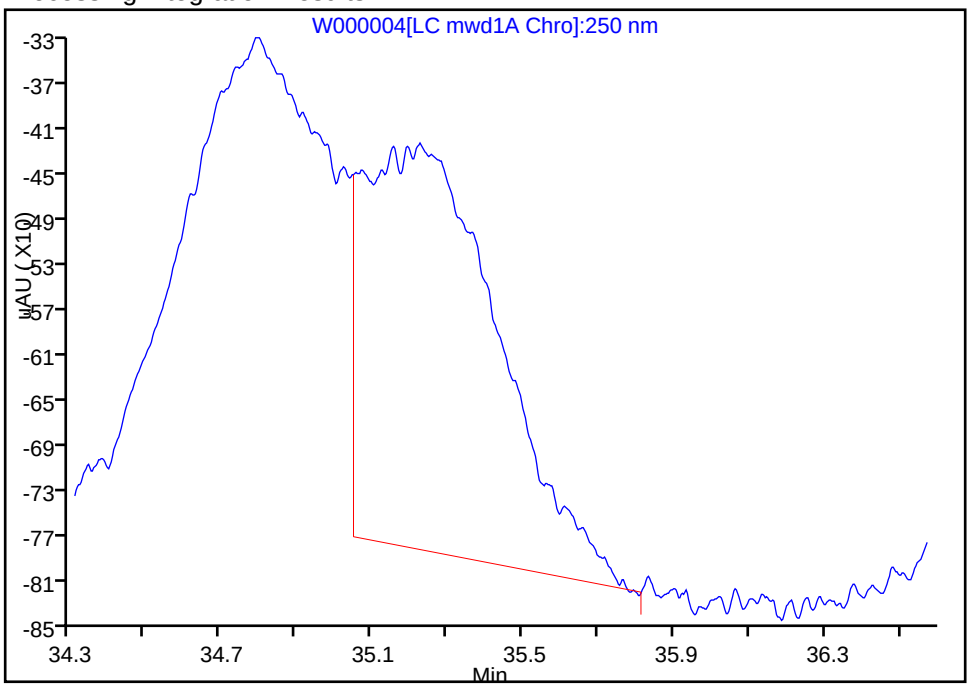
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000004.D
Injection Date: 23-Jan-2015 14:34:45 Instrument ID: LC9
Lims ID: STD1
Client ID:
Operator ID: TQP ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

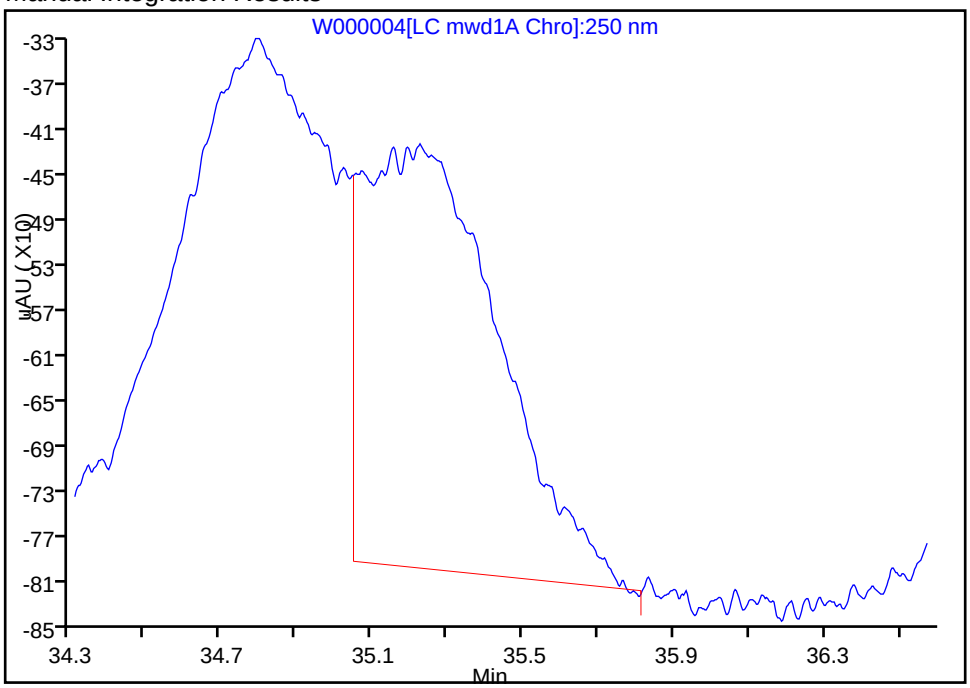
Processing Integration Results

RT: 35.23
Height: 359
Amount: 5.555040
Amount Units: ng/ml



Manual Integration Results

RT: 35.23
Height: 375
Amount: 5.676461
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:15:24
Audit Action: Assigned New Baseline
Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000005.D
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 23-Jan-2015 15:41:25 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0018933-005
Operator ID: TQP Instrument ID: LC9
Sublist: chrom-LC9_Conf_8330*sub1

Method: \\SACChrom\ChromData\LC9\20150123-18933.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 26-Jan-2015 12:47:24 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK031

First Level Reviewer: phant Date: 26-Jan-2015 10:13:44

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							
1	21.570	21.586	-0.016	457H	10.0	9.47	
4 Ethylene glycol dinitrate							M
2	22.760	22.772	-0.012	734H	10.0	10.3	M
5 1,3-Dinitrobenzene							
1	24.390	24.432	-0.042	1095H	10.0	10.4	
7 1,3,5-Trinitrobenzene							
1	26.874	26.886	-0.012	911H	10.0	10.7	
9 p-Nitrotoluene							
1	28.194	28.226	-0.032	623H	10.0	9.62	
8 o-Nitrotoluene							
1	28.194	28.226	-0.032	623H	10.0	9.62	
10 m-Nitrotoluene							
1	28.750	28.802	-0.052	405H	10.0	9.26	
11 3,5-Dinitroaniline							
1	30.294	30.326	-0.032	938H	10.0	10.9	
12 RDX							
1	30.914	30.969	-0.055	573H	10.0	9.90	
13 2,4-Dinitrotoluene							
1	31.667	31.709	-0.042	942H	10.0	10.3	
14 2,6-Dinitrotoluene							
1	32.587	32.616	-0.029	557H	10.0	10.1	
15 2-Amino-4,6-dinitrotoluene							M
1	34.817	34.879	-0.062	823H	10.0	10.4	M
16 4-Amino-2,6-dinitrotoluene							M
1	35.227	35.302	-0.075	694H	10.0	10.5	M
$ 17 3,4-Dinitrotoluene							
1	36.953	37.005	-0.052	508H	10.0	10.7	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
18 2,4,6-Trinitrotoluene							
1	38.817	38.852	-0.035	828H	10.0	10.6	
19 HMX							
1	40.920	40.939	-0.019	624H	10.0	10.5	
20 Nitroglycerin							M
2	43.287	43.315	-0.028	1048H	10.0	11.8	M
21 Tetryl							
1	45.010	45.042	-0.032	1242H	10.0	10.6	
22 PETN							M
2	51.543	51.585	-0.042	1342H	10.0	9.96	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L2_00013 Amount Added: 1.00 Units: mL

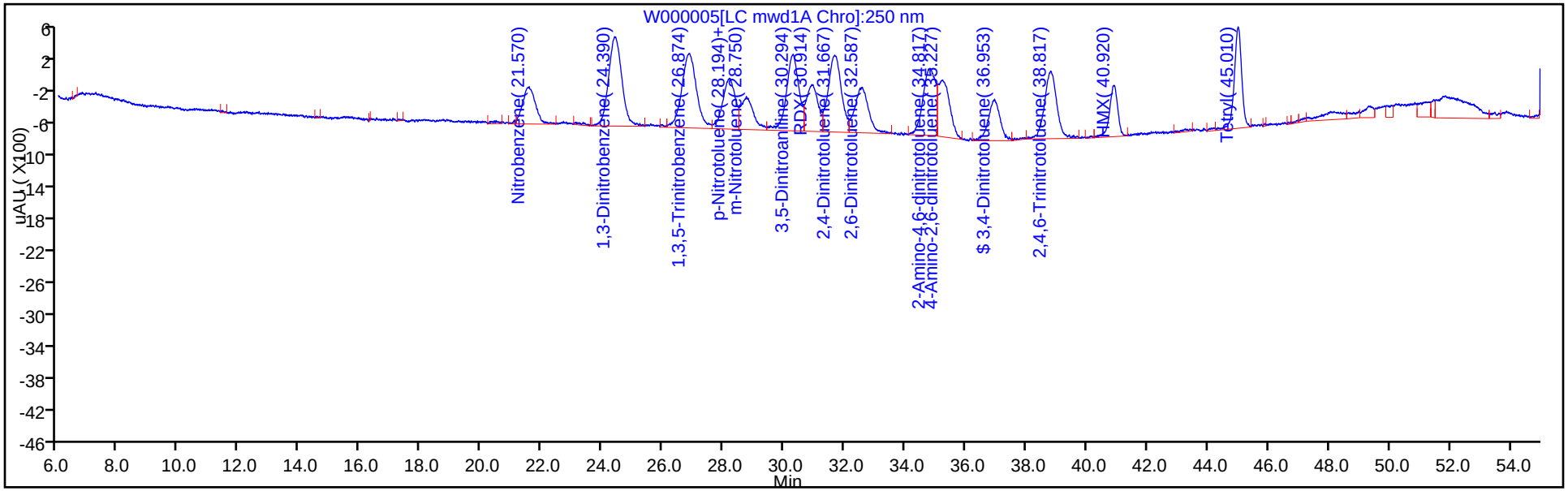
Report Date: 26-Jan-2015 12:47:25 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Sacramento

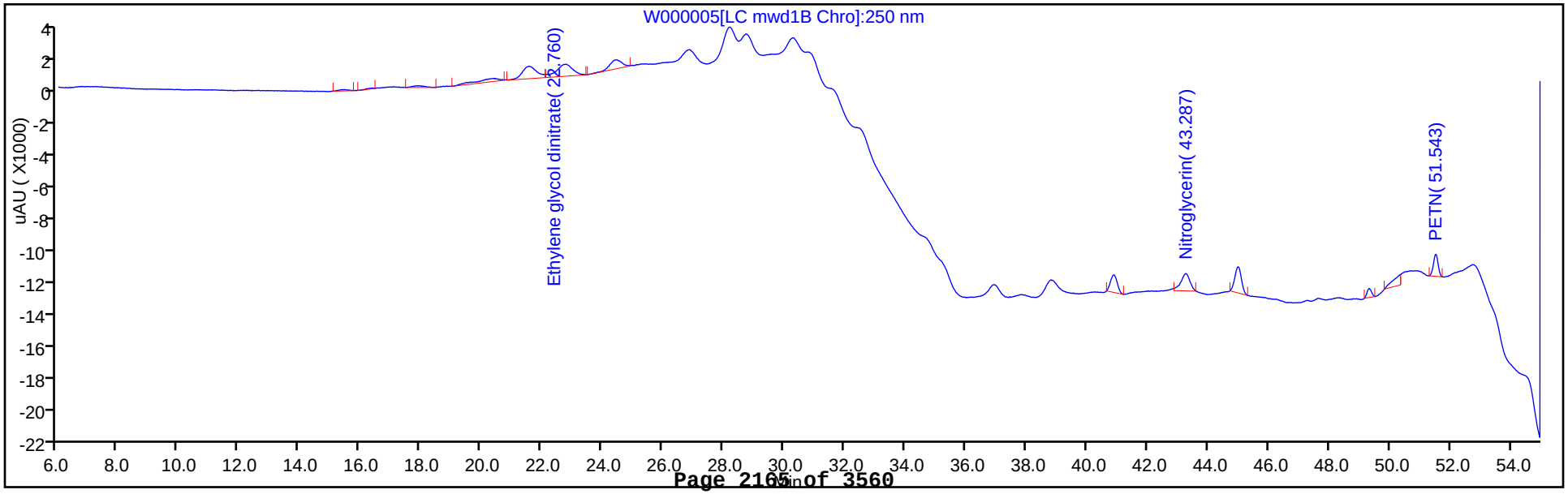
Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000005.D

Injection Date:	23-Jan-2015 15:41:25	Instrument ID:	LC9	Operator ID:	TQP
Lims ID:	STD2			Worklist Smp#:	5
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

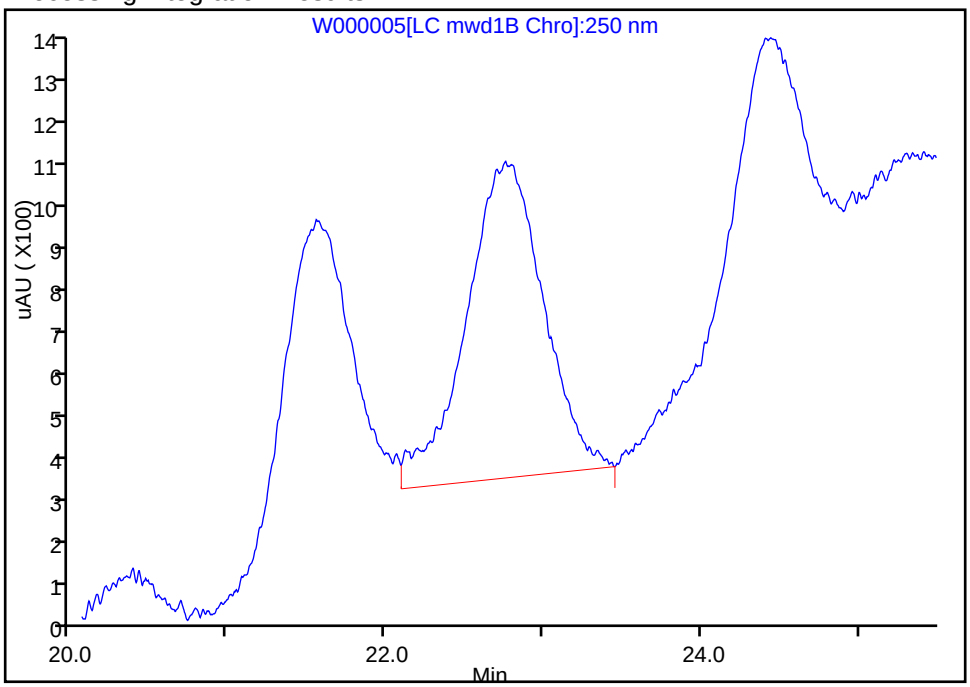
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000005.D
Injection Date: 23-Jan-2015 15:41:25 Instrument ID: LC9
Lims ID: STD2
Client ID:
Operator ID: TQP ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1B, 358 nm

4 Ethylene glycol dinitrate, CAS: 628-96-6

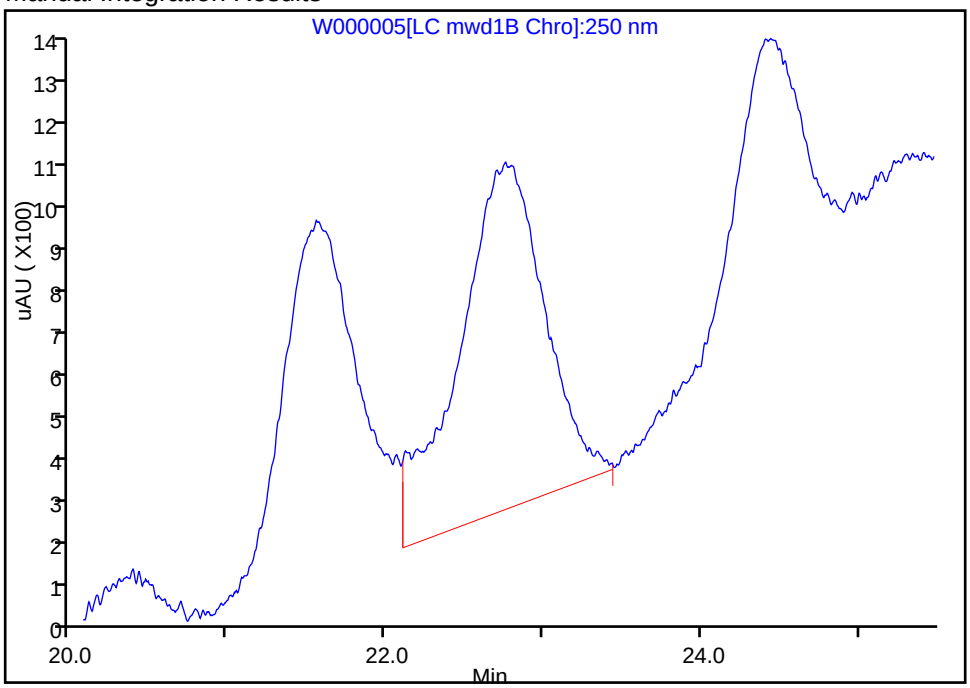
Processing Integration Results

RT: 22.76
Height: 670
Amount: 10.027065
Amount Units: ng/ml



Manual Integration Results

RT: 22.76
Height: 734
Amount: 10.256587
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:27:10
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

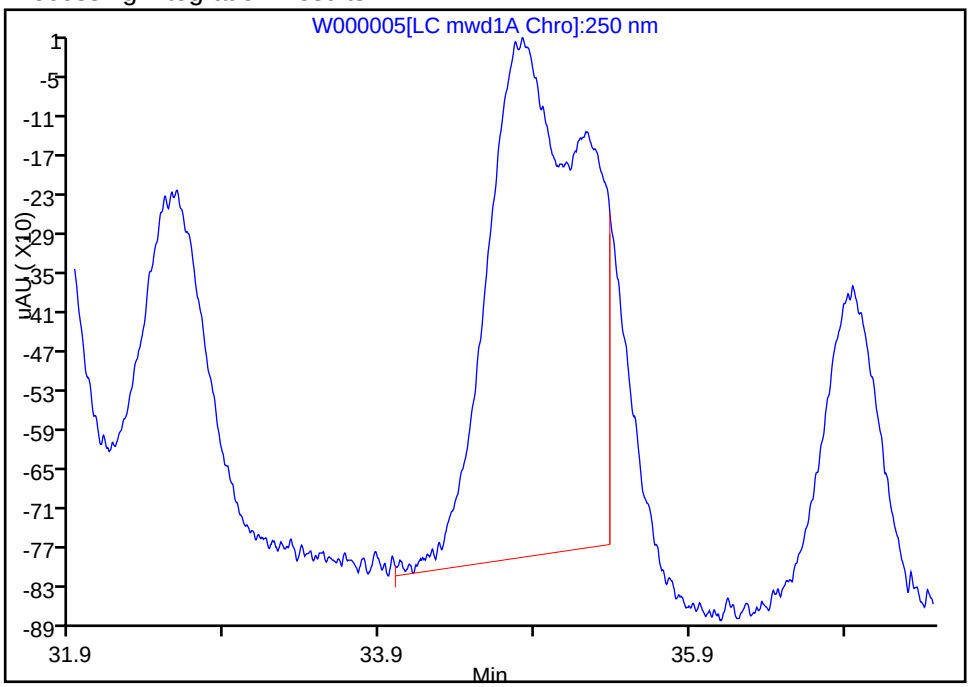
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000005.D
Injection Date: 23-Jan-2015 15:41:25 Instrument ID: LC9
Lims ID: STD2
Client ID:
Operator ID: TQP ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

15 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

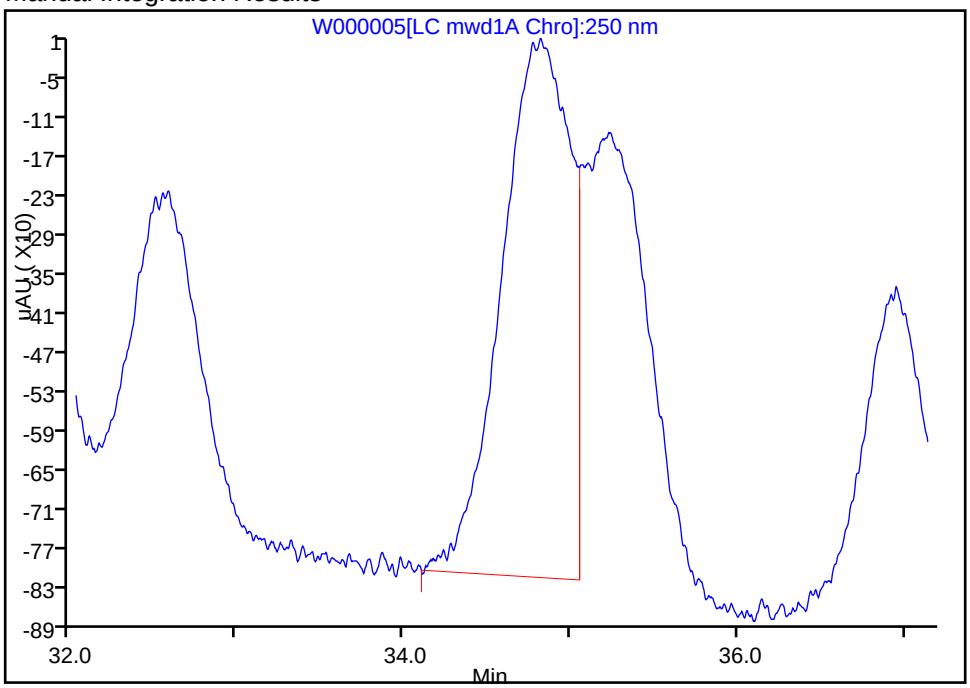
Processing Integration Results

RT: 34.82
Height: 793
Amount: 10.156306
Amount Units: ng/ml



Manual Integration Results

RT: 34.82
Height: 823
Amount: 10.432115
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:16:37
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

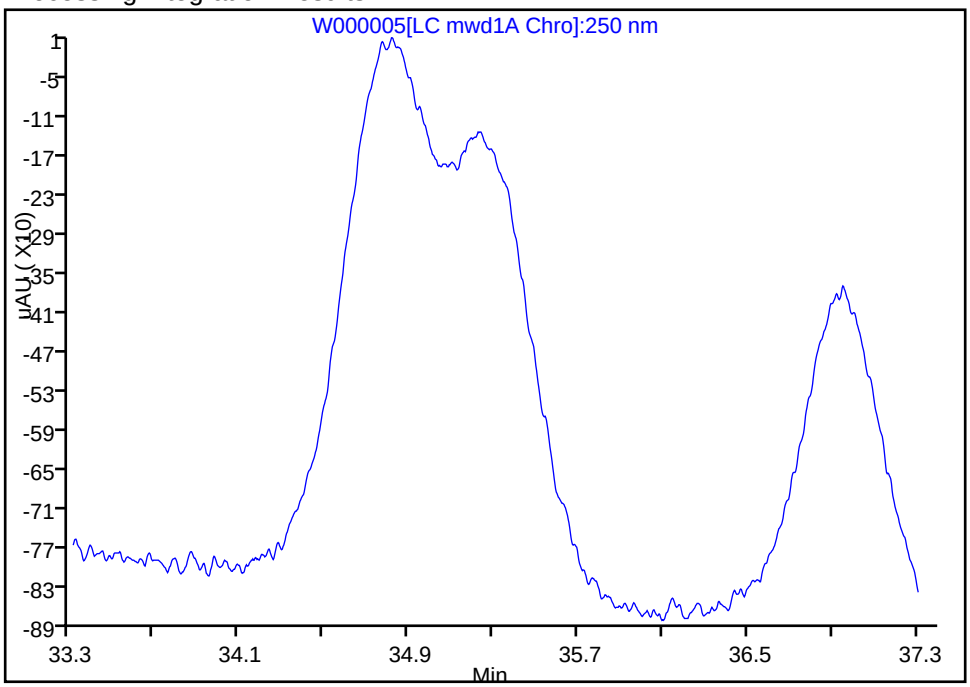
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000005.D
Injection Date: 23-Jan-2015 15:41:25 Instrument ID: LC9
Lims ID: STD2
Client ID:
Operator ID: TQP ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

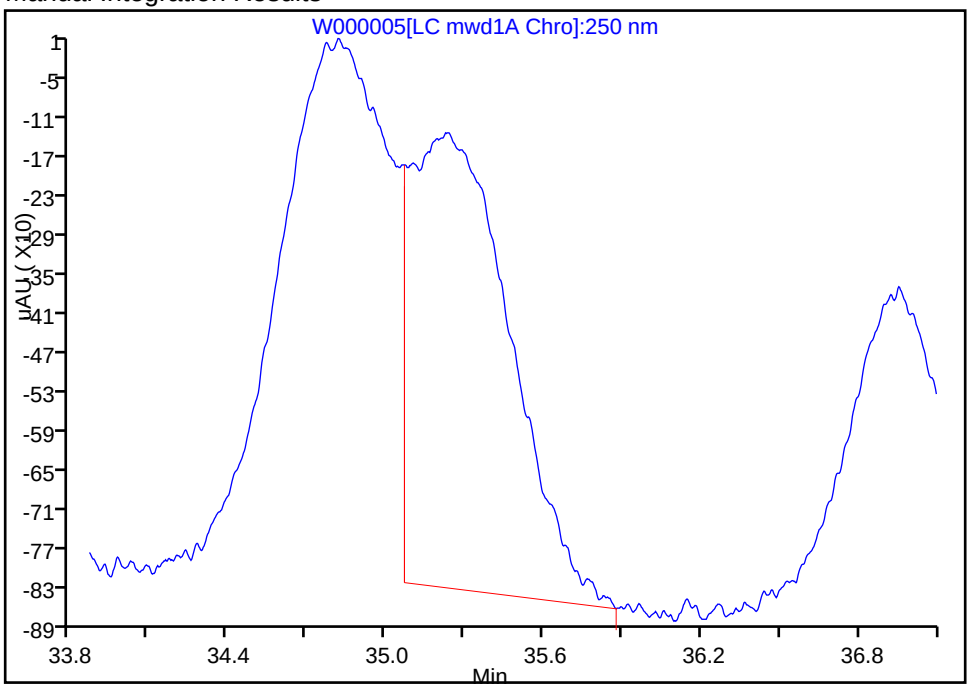
Not Detected
Expected RT: 35.30

Processing Integration Results



Manual Integration Results

RT: 35.23
Height: 694
Amount: 10.505237
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:16:37
Audit Action: Manually Integrated/Assigned Compound ID
Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

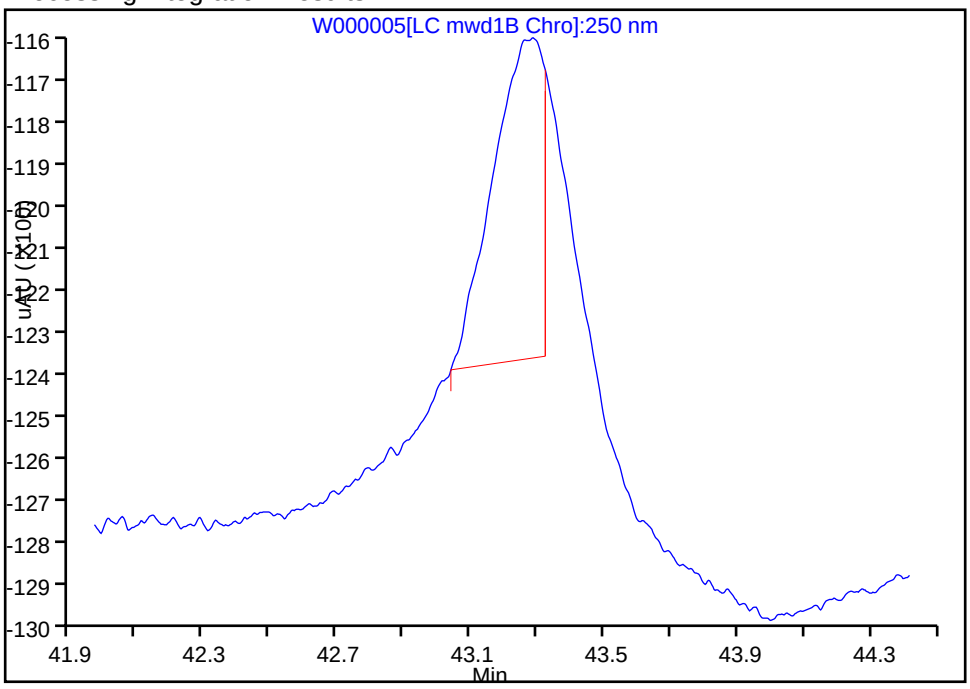
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000005.D
Injection Date: 23-Jan-2015 15:41:25 Instrument ID: LC9
Lims ID: STD2
Client ID:
Operator ID: TQP ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1B, 358 nm

20 Nitroglycerin, CAS: 55-63-0

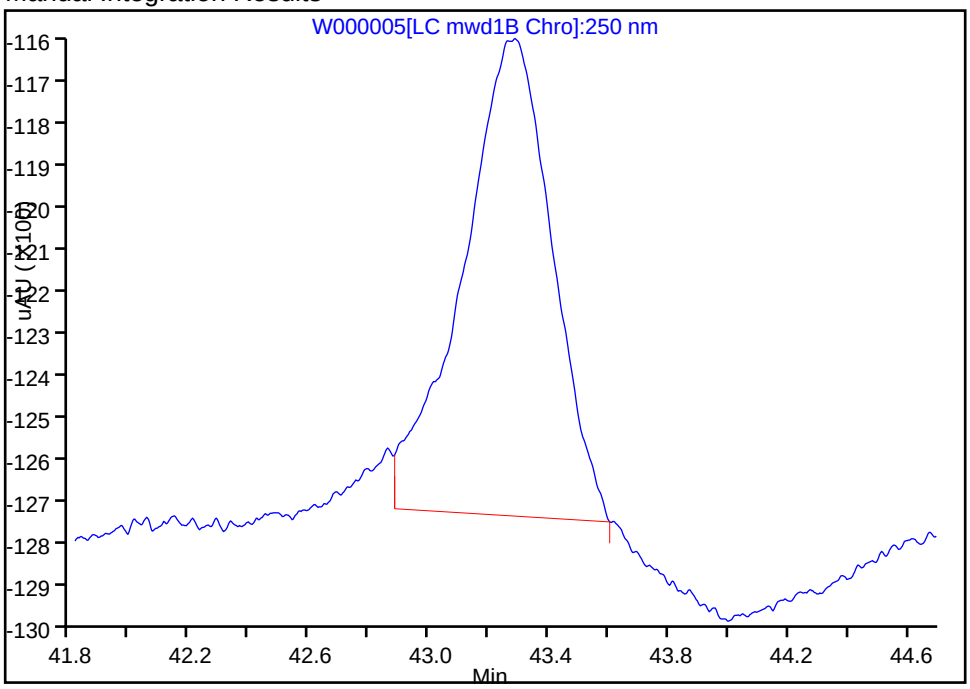
Processing Integration Results

RT: 43.26
Height: 700
Amount: 8.544922
Amount Units: ng/ml



Manual Integration Results

RT: 43.29
Height: 1048
Amount: 11.840916
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:16:37
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

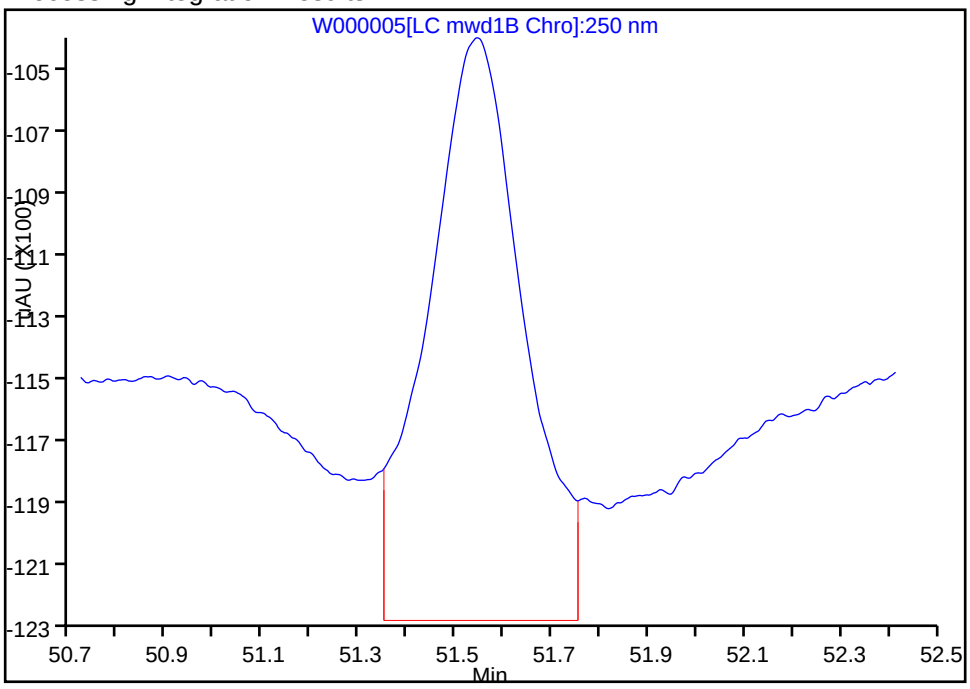
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000005.D
Injection Date: 23-Jan-2015 15:41:25 Instrument ID: LC9
Lims ID: STD2
Client ID:
Operator ID: TQP ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1B, 358 nm

22 PETN, CAS: 78-11-5

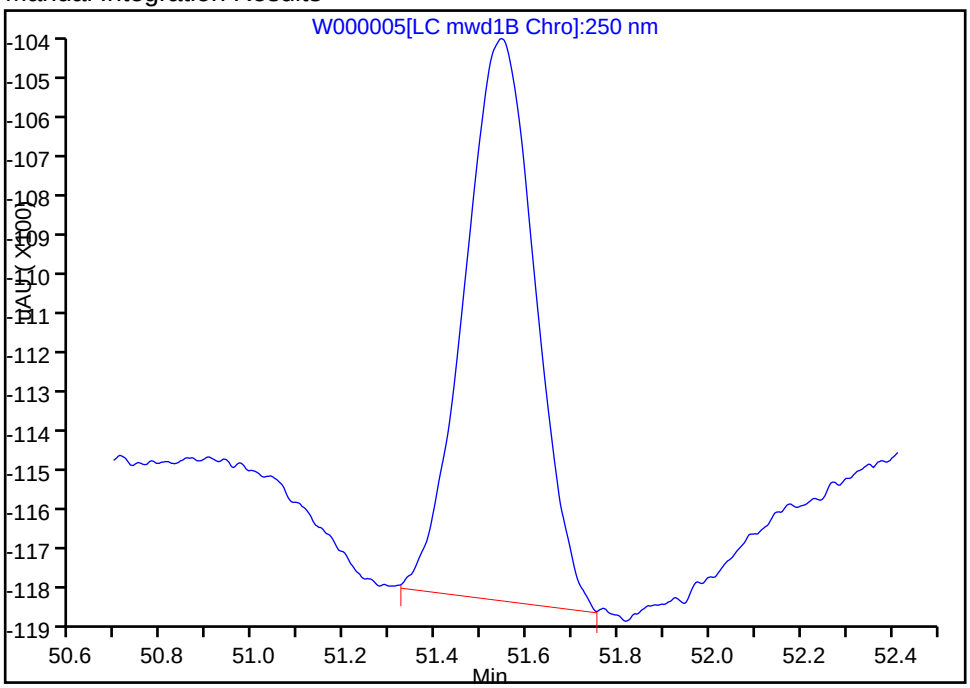
Processing Integration Results

RT: 51.54
Height: 1721
Amount: 11.436866
Amount Units: ng/ml



Manual Integration Results

RT: 51.54
Height: 1342
Amount: 9.956622
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:16:37
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000006.D
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 23-Jan-2015 16:48:06 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0018933-006
Operator ID: TQP Instrument ID: LC9
Sublist: chrom-LC9_Conf_8330*sub1

Method: \\SACChrom\ChromData\LC9\20150123-18933.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 26-Jan-2015 12:47:26 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK031

First Level Reviewer: phant Date: 26-Jan-2015 10:13:55

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							
1	21.569	21.586	-0.017	986H	20.0	20.4	
4 Ethylene glycol dinitrate							
2	22.783	22.772	0.011	1143H	20.0	18.6	
5 1,3-Dinitrobenzene							
1	24.403	24.432	-0.029	2204H	20.0	20.9	
7 1,3,5-Trinitrobenzene							
1	26.853	26.886	-0.033	1741H	20.0	20.5	
9 p-Nitrotoluene							
1	28.196	28.226	-0.030	1299H	20.0	20.1	
8 o-Nitrotoluene							
1	28.196	28.226	-0.030	1299H	20.0	20.1	
10 m-Nitrotoluene							
1	28.776	28.802	-0.026	768H	20.0	19.6	
11 3,5-Dinitroaniline							
1	30.299	30.326	-0.027	1767H	20.0	20.5	
12 RDX							
1	30.923	30.969	-0.046	1039H	20.0	20.4	
13 2,4-Dinitrotoluene							
1	31.683	31.709	-0.026	1868H	20.0	20.4	
14 2,6-Dinitrotoluene							
1	32.599	32.616	-0.017	1125H	20.0	20.4	
15 2-Amino-4,6-dinitrotoluene							M
1	34.829	34.879	-0.050	1620H	20.0	20.5	M
16 4-Amino-2,6-dinitrotoluene							M
1	35.263	35.302	-0.039	1356H	20.0	20.5	M
$ 17 3,4-Dinitrotoluene							
1	36.976	37.005	-0.029	955H	20.0	20.2	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
18 2,4,6-Trinitrotoluene							
1	38.829	38.852	-0.023	1617H	20.0	20.7	
19 HMX							
1	40.926	40.939	-0.013	1226H	20.0	20.6	
20 Nitroglycerin							
2	43.286	43.315	-0.029	2032H	20.0	23.0	
21 Tetryl							
1	45.019	45.042	-0.023	2436H	20.0	20.8	
22 PETN							M
2	51.556	51.585	-0.029	2998H	20.0	22.2	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L3_00014 Amount Added: 1.00 Units: mL

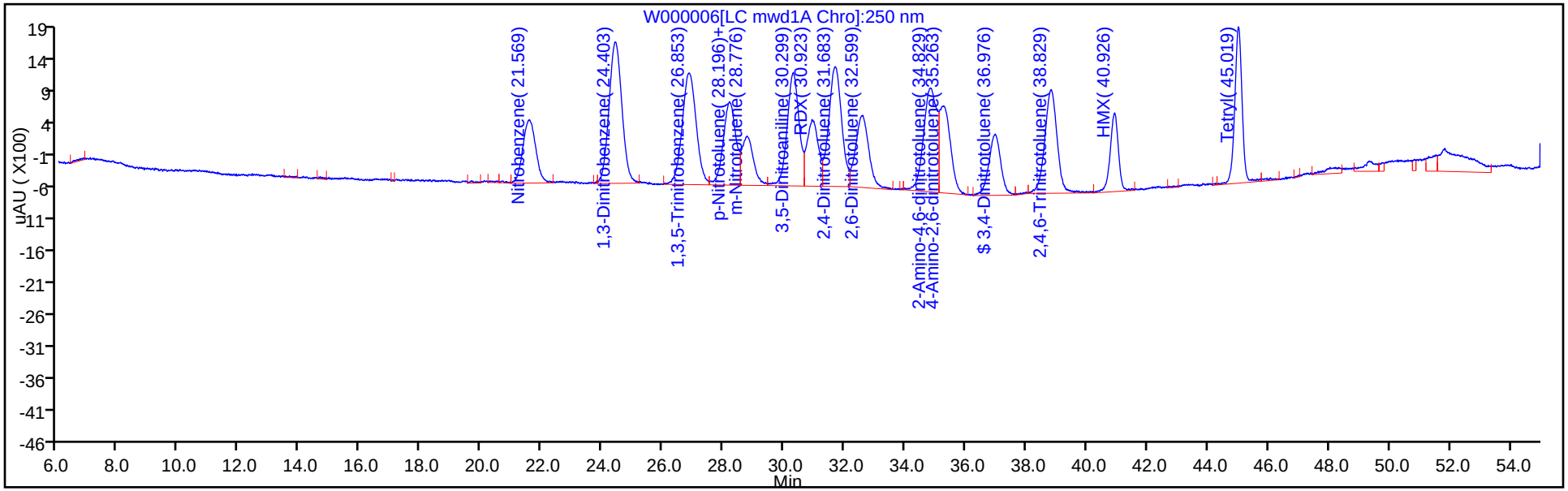
Report Date: 26-Jan-2015 12:47:27 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Sacramento

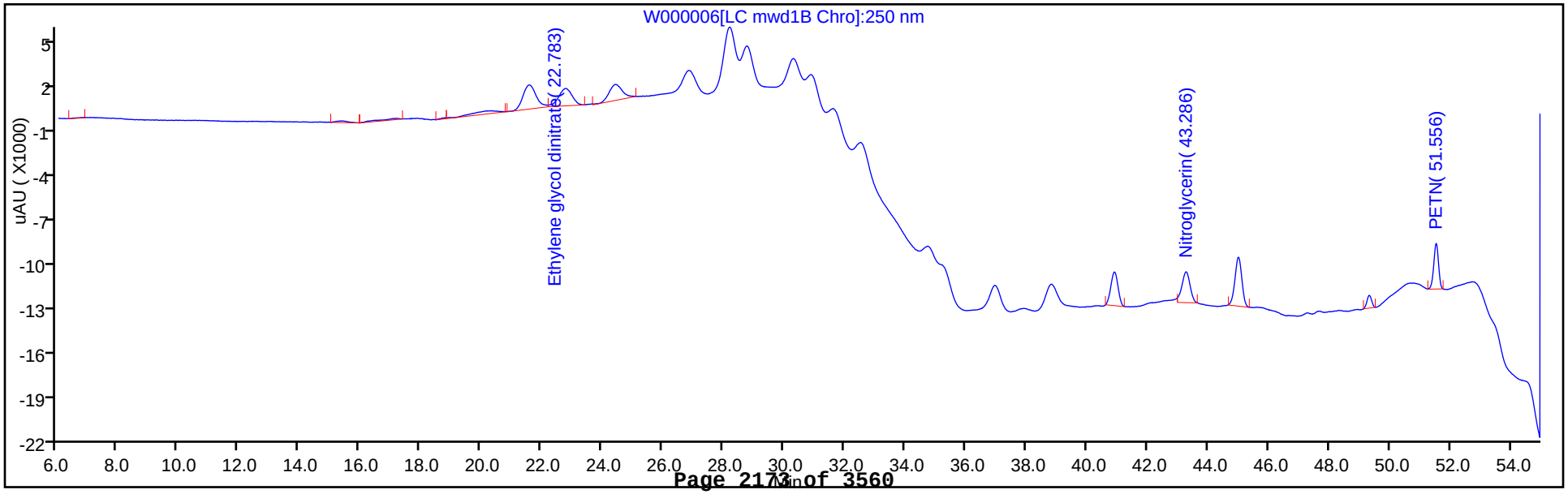
Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000006.D

Injection Date:	23-Jan-2015 16:48:06	Instrument ID:	LC9	Operator ID:	TQP
Lims ID:	STD3			Worklist Smp#:	6
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

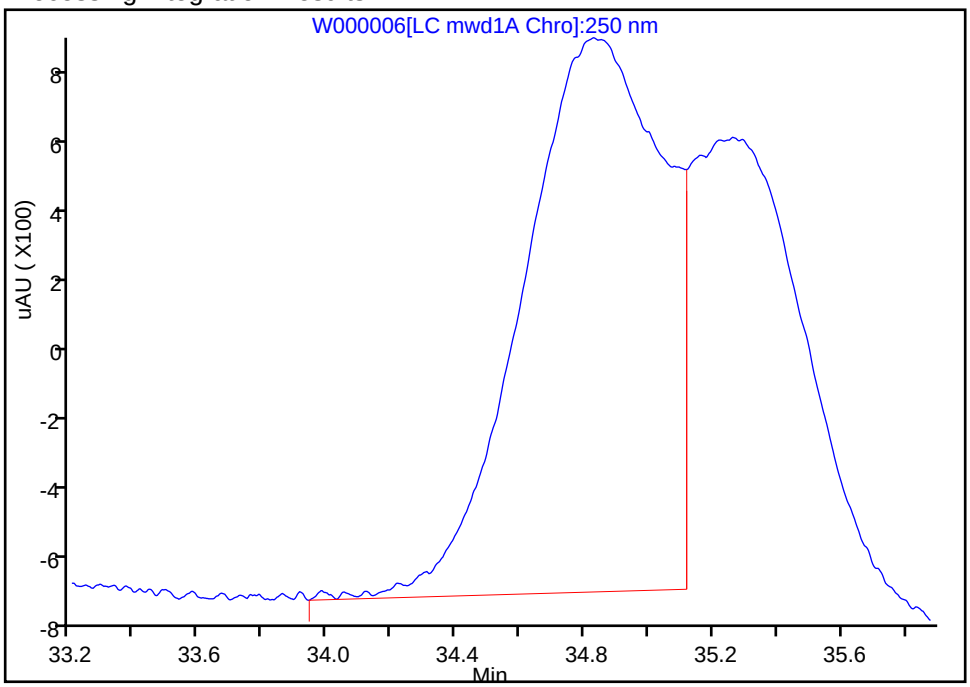
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000006.D
Injection Date: 23-Jan-2015 16:48:06 Instrument ID: LC9
Lims ID: STD3
Client ID:
Operator ID: TQP ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

15 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

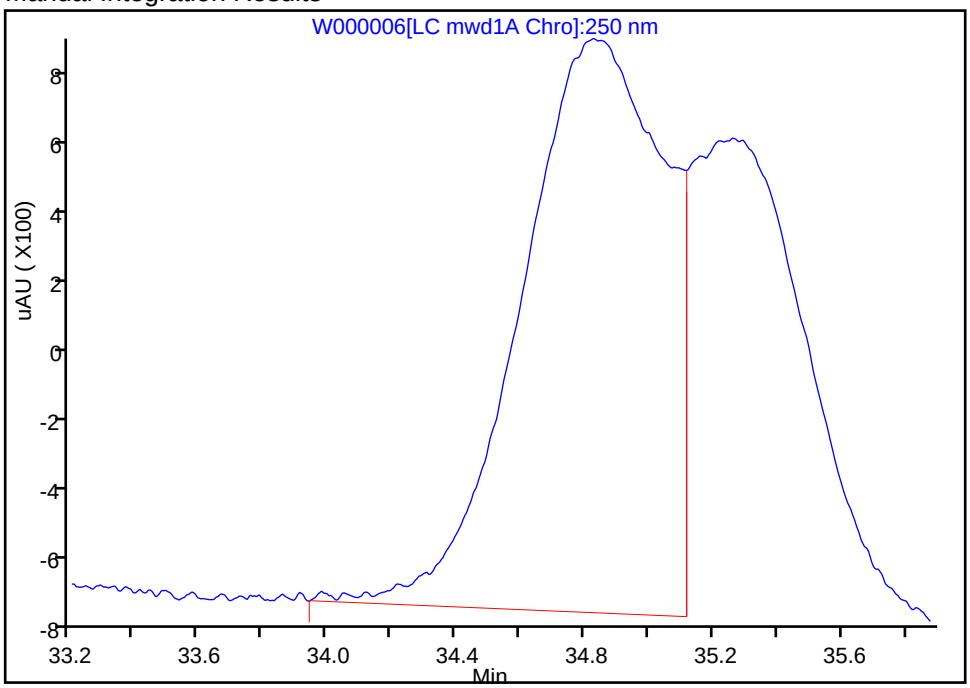
Processing Integration Results

RT: 34.83
Height: 1564
Amount: 19.925851
Amount Units: ng/ml



Manual Integration Results

RT: 34.83
Height: 1620
Amount: 20.534662
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:26:42
Audit Action: Assigned New Baseline
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

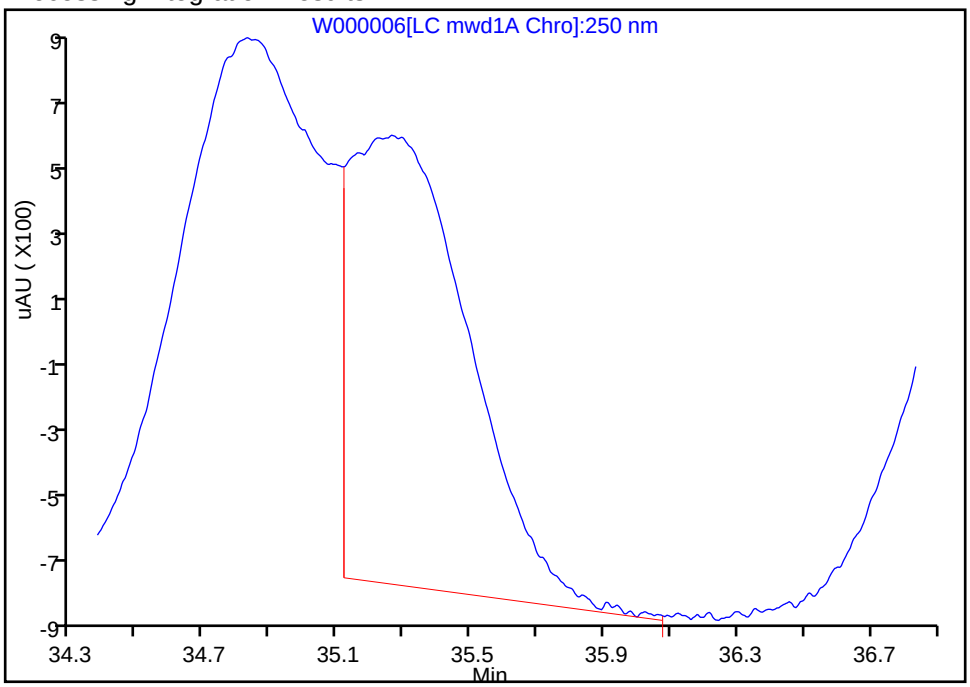
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000006.D
Injection Date: 23-Jan-2015 16:48:06 Instrument ID: LC9
Lims ID: STD3
Client ID:
Operator ID: TQP ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

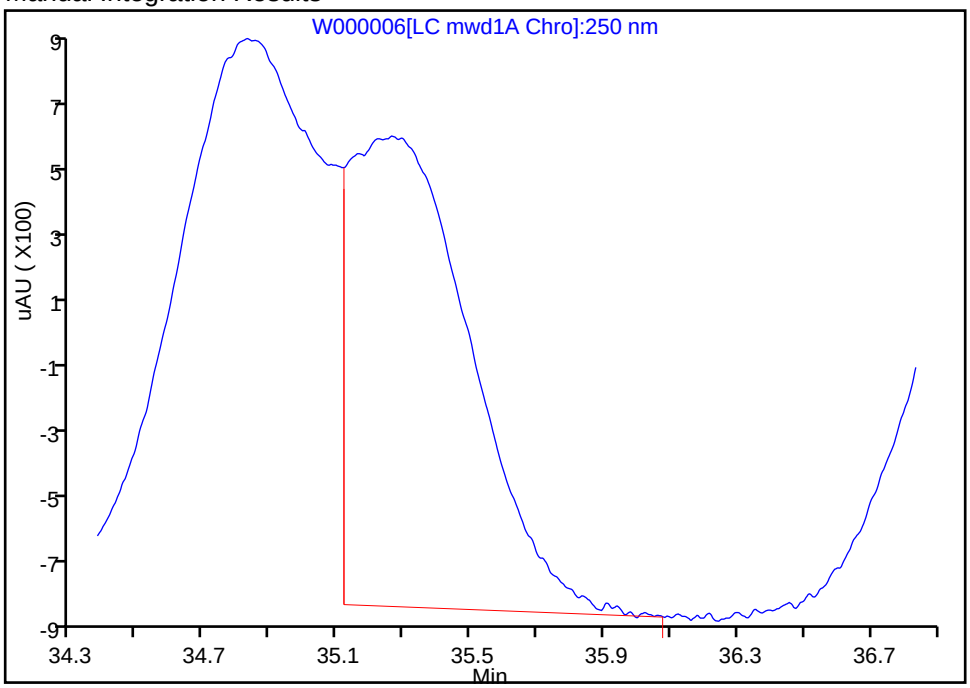
Processing Integration Results

RT: 35.26
Height: 1294
Amount: 19.719769
Amount Units: ng/ml



Manual Integration Results

RT: 35.26
Height: 1356
Amount: 20.526084
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:26:42
Audit Action: Assigned New Baseline
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

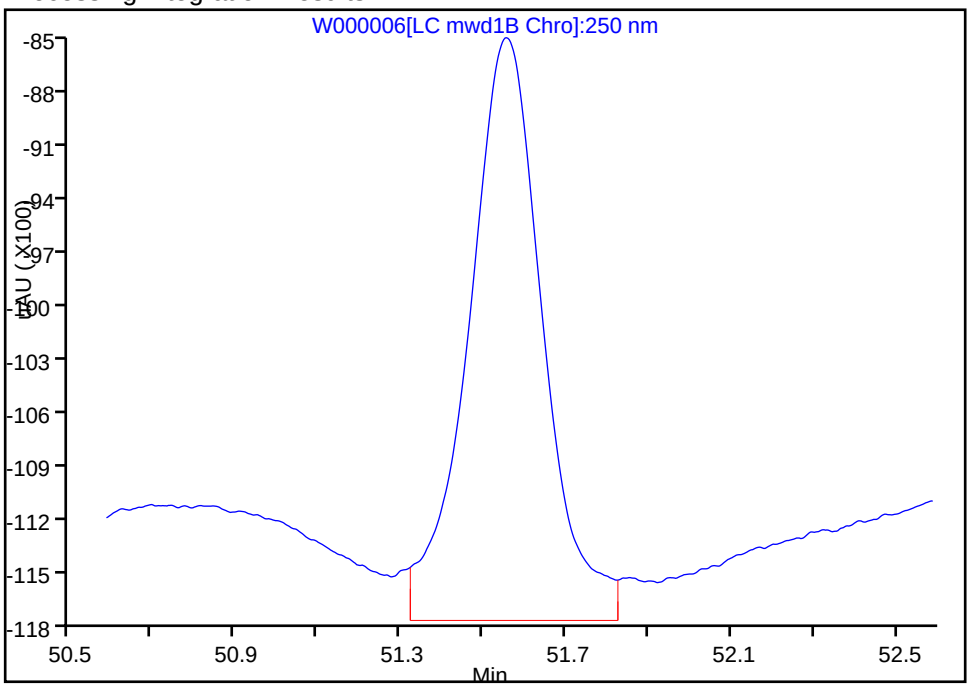
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000006.D
Injection Date: 23-Jan-2015 16:48:06 Instrument ID: LC9
Lims ID: STD3
Client ID:
Operator ID: TQP ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1B, 358 nm

22 PETN, CAS: 78-11-5

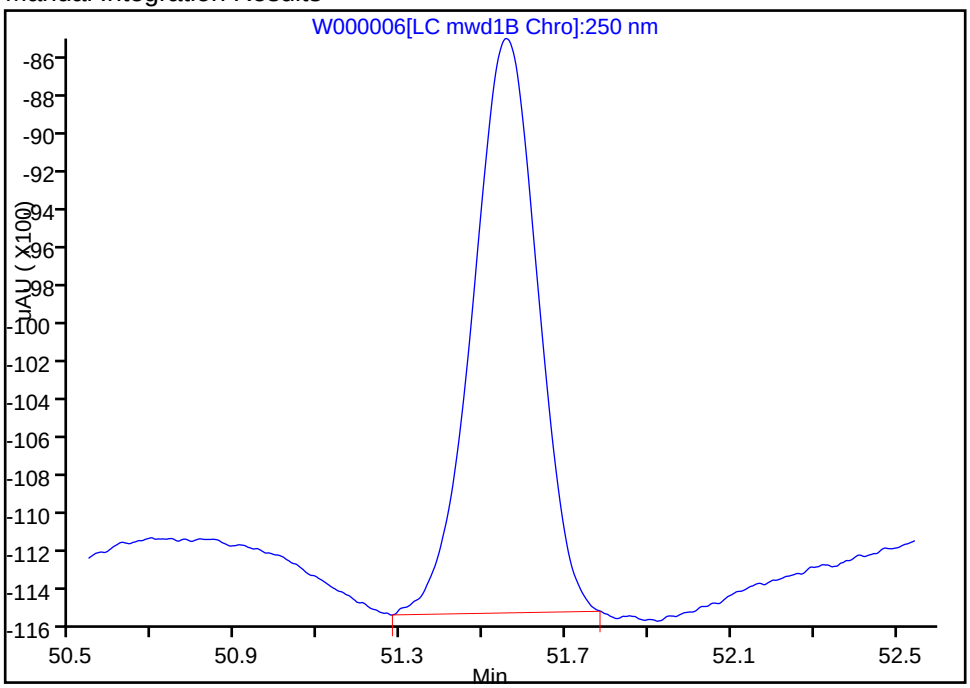
Processing Integration Results

RT: 51.56
Height: 3253
Amount: 22.415534
Amount Units: ng/ml



Manual Integration Results

RT: 51.56
Height: 2998
Amount: 22.242886
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:26:42
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000007.D
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 23-Jan-2015 17:54:49 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0018933-007
Operator ID: TQP Instrument ID: LC9
Sublist: chrom-LC9_Conf_8330*sub1

Method: \\SACChrom\ChromData\LC9\20150123-18933.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 26-Jan-2015 12:47:28 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK031

First Level Reviewer: phant Date: 26-Jan-2015 10:03:15

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							
1	21.586	21.586	0.000	2441H	50.0	50.6	
4 Ethylene glycol dinitrate							
2	22.772	22.772	0.000	2754H	50.0	51.5	
5 1,3-Dinitrobenzene							
1	24.432	24.432	0.000	5185H	50.0	49.1	
7 1,3,5-Trinitrobenzene							
1	26.886	26.886	0.000	4073H	50.0	47.9	
9 p-Nitrotoluene							
1	28.226	28.226	0.000	3202H	50.0	49.5	
8 o-Nitrotoluene							
1	28.226	28.226	0.000	3202H	50.0	49.5	
10 m-Nitrotoluene							
1	28.802	28.802	0.000	1882H	50.0	51.4	
11 3,5-Dinitroaniline							
1	30.326	30.326	0.000	4064H	50.0	47.2	
12 RDX							
1	30.969	30.969	0.000	2344H	50.0	49.8	
13 2,4-Dinitrotoluene							
1	31.709	31.709	0.000	4413H	50.0	48.1	
14 2,6-Dinitrotoluene							
1	32.616	32.616	0.000	2645H	50.0	48.1	
15 2-Amino-4,6-dinitrotoluene							M
1	34.879	34.879	0.000	3747H	50.0	47.5	M
16 4-Amino-2,6-dinitrotoluene							
1	35.302	35.302	0.000	3071H	50.0	46.5	
$ 17 3,4-Dinitrotoluene							
1	37.005	37.005	0.000	2282H	50.0	48.2	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
18 2,4,6-Trinitrotoluene							
1	38.852	38.852	0.000	3735H	50.0	47.9	
19 HMX							
1	40.939	40.939	0.000	2891H	50.0	48.5	
20 Nitroglycerin							
2	43.315	43.315	0.000	4240H	50.0	47.9	
21 Tetryl							
1	45.042	45.042	0.000	5466H	50.0	46.7	
22 PETN							M
2	51.585	51.585	0.000	6466H	50.0	48.0	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L4_00023 Amount Added: 1.00 Units: mL

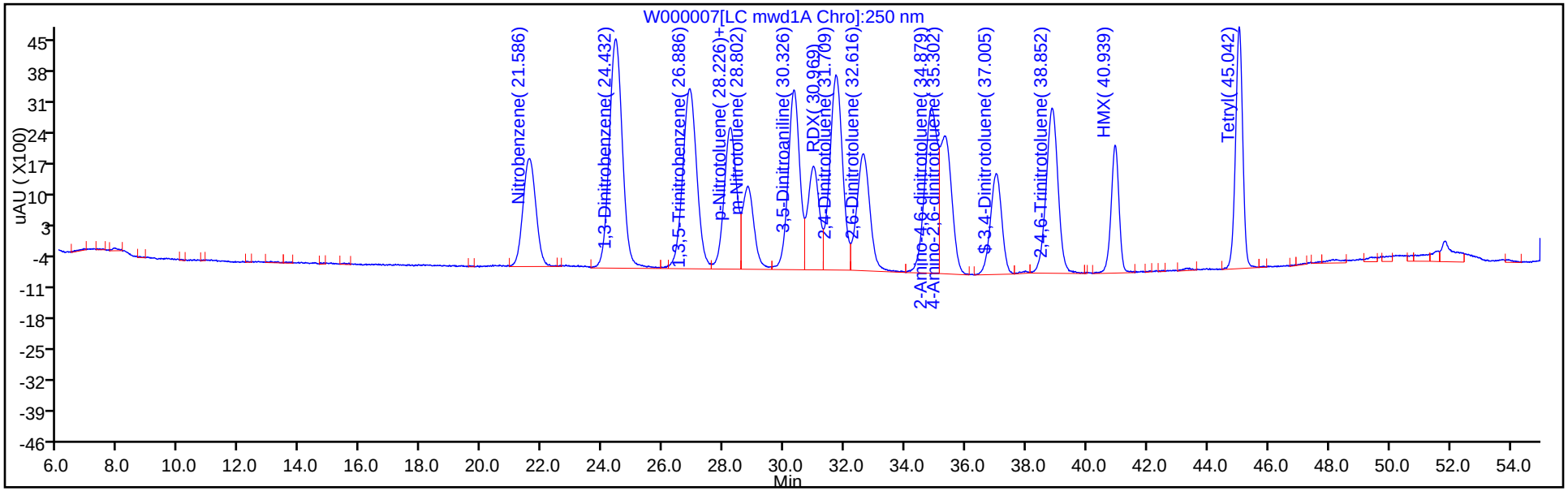
Report Date: 26-Jan-2015 12:47:28 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Sacramento

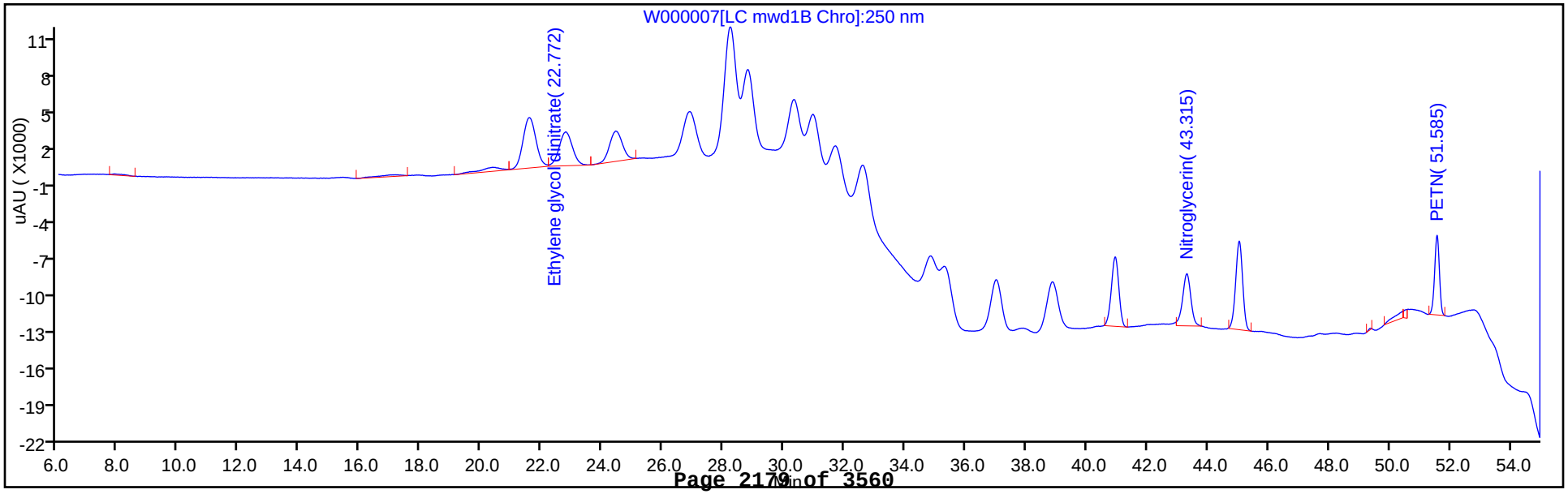
Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000007.D

Injection Date:	23-Jan-2015 17:54:49	Instrument ID:	LC9	Operator ID:	TQP
Lims ID:	STD4			Worklist Smp#:	7
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

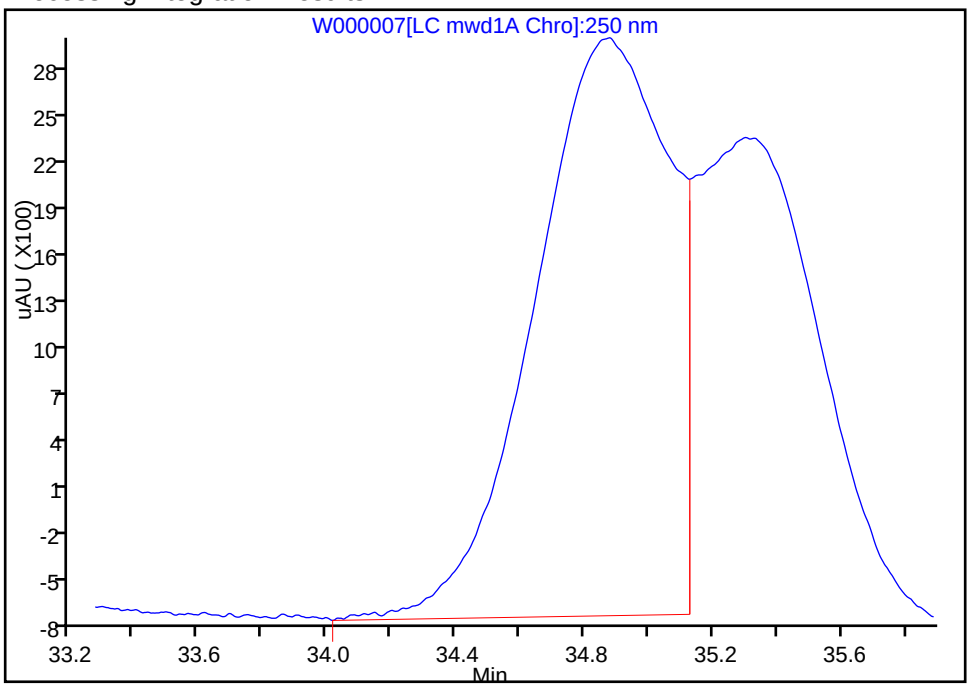
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000007.D
Injection Date: 23-Jan-2015 17:54:49 Instrument ID: LC9
Lims ID: STD4
Client ID:
Operator ID: TQP ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

15 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

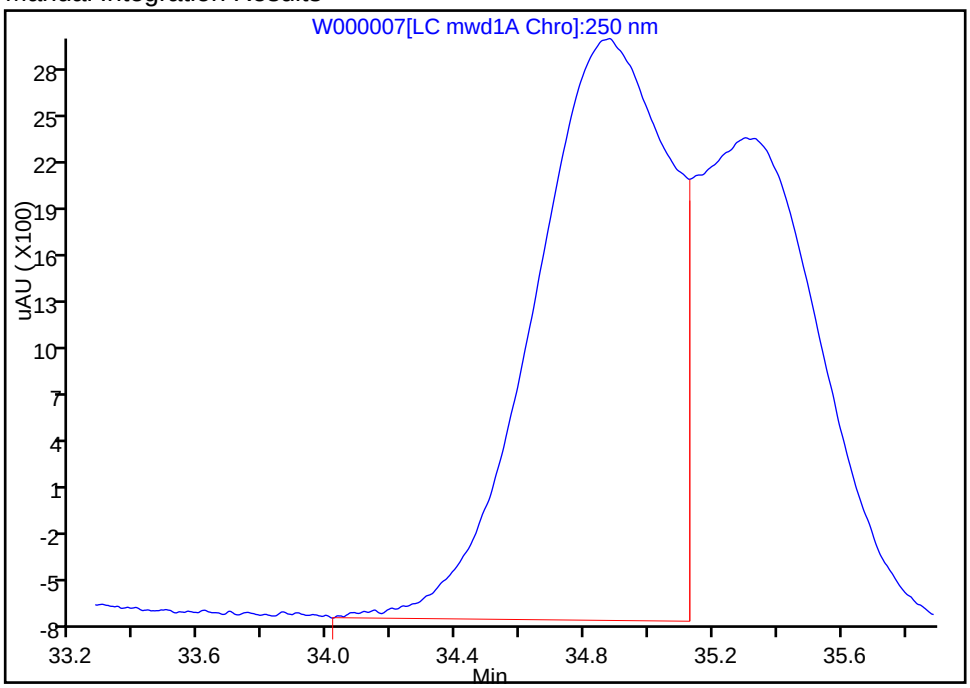
Processing Integration Results

RT: 34.88
Height: 3702
Amount: 47.002106
Amount Units: ng/ml



Manual Integration Results

RT: 34.88
Height: 3747
Amount: 47.495912
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:25:54
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

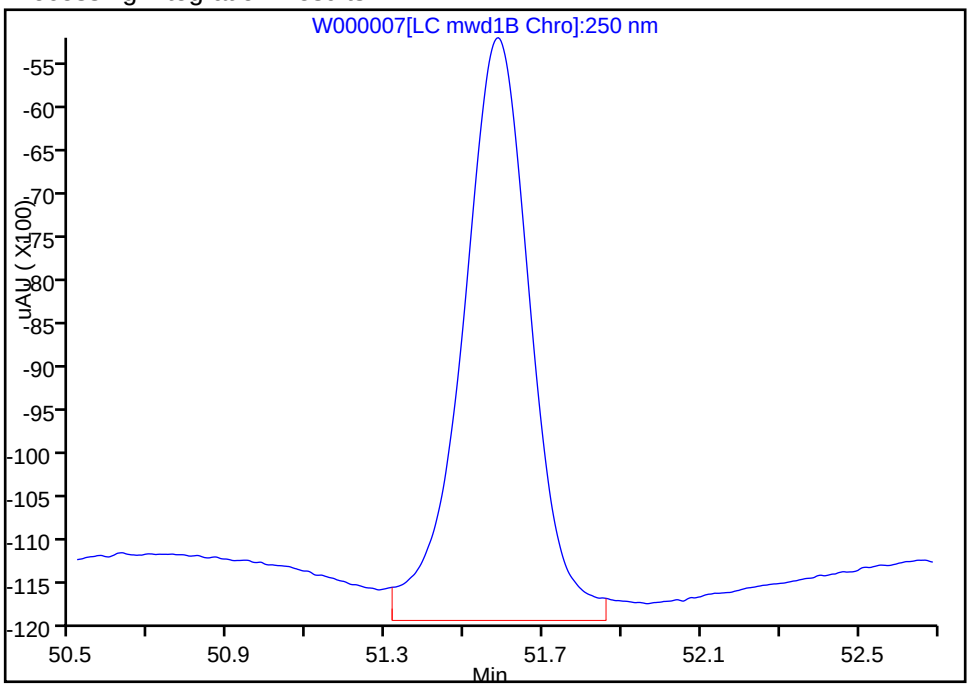
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000007.D
Injection Date: 23-Jan-2015 17:54:49 Instrument ID: LC9
Lims ID: STD4
Client ID:
Operator ID: TQP ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1B, 358 nm

22 PETN, CAS: 78-11-5

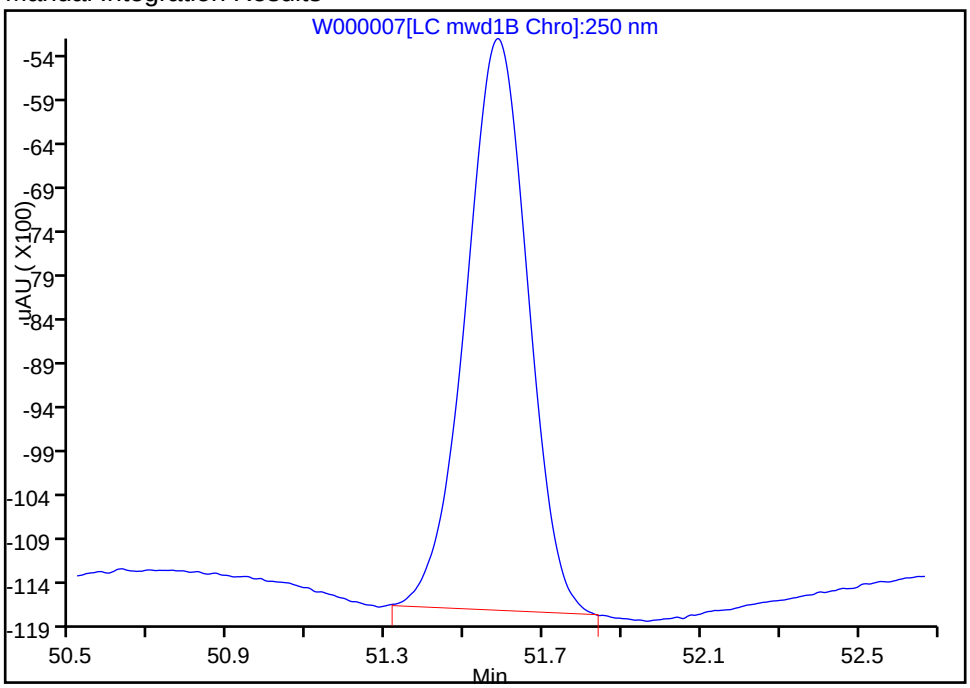
Processing Integration Results

RT: 51.59
Height: 6785
Amount: 47.069585
Amount Units: ng/ml



Manual Integration Results

RT: 51.59
Height: 6466
Amount: 47.972816
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:25:54
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000008.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 23-Jan-2015 19:01:32 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0018933-008
Operator ID: TQP Instrument ID: LC9
Sublist: chrom-LC9_Conf_8330*sub1

Method: \\SACChrom\ChromData\LC9\20150123-18933.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 26-Jan-2015 12:47:30 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK031

First Level Reviewer: phant Date: 26-Jan-2015 10:03:36

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							
1	21.558	21.586	-0.028	4920H	100.0	102.0	
4 Ethylene glycol dinitrate							
2	22.761	22.772	-0.011	5296H	100.0	103.4	
5 1,3-Dinitrobenzene							
1	24.411	24.432	-0.021	10441H	100.0	98.9	
7 1,3,5-Trinitrobenzene							
1	26.861	26.886	-0.025	8272H	100.0	97.2	
9 p-Nitrotoluene							
1	28.201	28.226	-0.025	6449H	100.0	99.6	
8 o-Nitrotoluene							
1	28.201	28.226	-0.025	6449H	100.0	99.6	
10 m-Nitrotoluene							
1	28.771	28.802	-0.031	3750H	100.0	104.7	
11 3,5-Dinitroaniline							
1	30.308	30.326	-0.018	8287H	100.0	96.3	
12 RDX							
1	30.945	30.969	-0.024	4736H	100.0	103.7	
13 2,4-Dinitrotoluene							
1	31.691	31.709	-0.018	8991H	100.0	98.1	
14 2,6-Dinitrotoluene							
1	32.581	32.616	-0.035	5349H	100.0	97.2	
15 2-Amino-4,6-dinitrotoluene							
1	34.845	34.879	-0.034	7707H	100.0	97.7	
16 4-Amino-2,6-dinitrotoluene							
1	35.271	35.302	-0.031	6441H	100.0	97.5	
$ 17 3,4-Dinitrotoluene							
1	36.978	37.005	-0.027	4469H	100.0	94.3	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
18 2,4,6-Trinitrotoluene							
1	38.831	38.852	-0.021	7565H	100.0	97.0	
19 HMX							
1	40.924	40.939	-0.015	5848H	100.0	98.1	
20 Nitroglycerin							
2	43.298	43.315	-0.017	8168H	100.0	92.3	
21 Tetryl							
1	45.031	45.042	-0.011	11240H	100.0	96.1	
22 PETN							M
2	51.574	51.585	-0.011	13251H	100.0	98.3	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L5_00032 Amount Added: 1.00 Units: mL

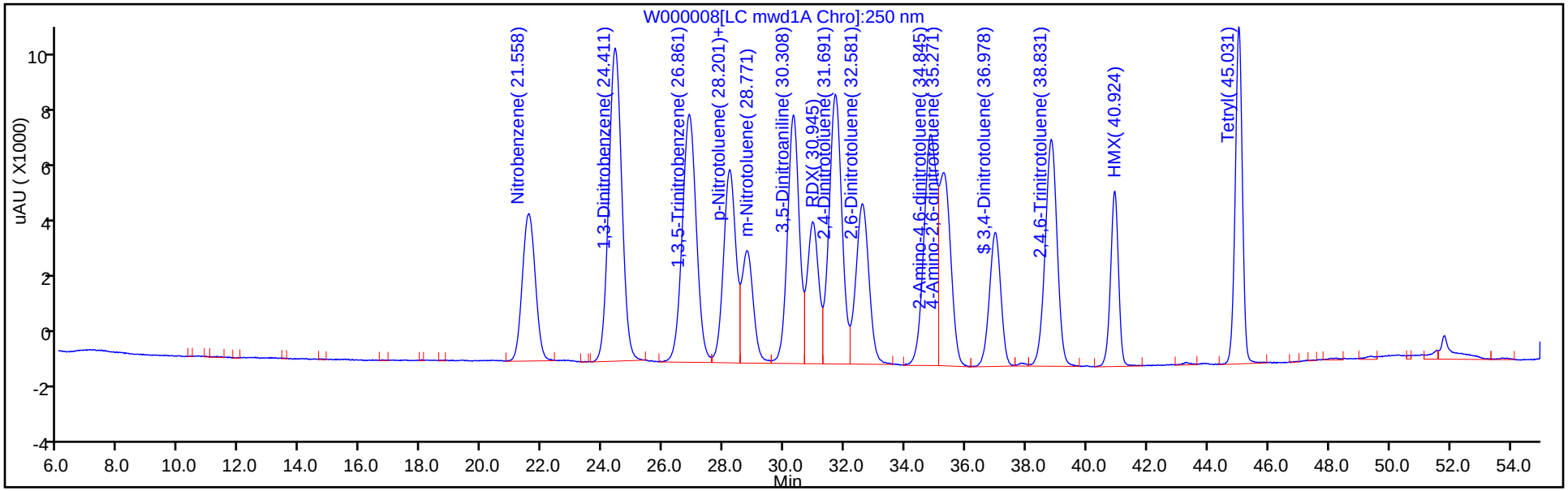
Report Date: 26-Jan-2015 12:47:30 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Sacramento

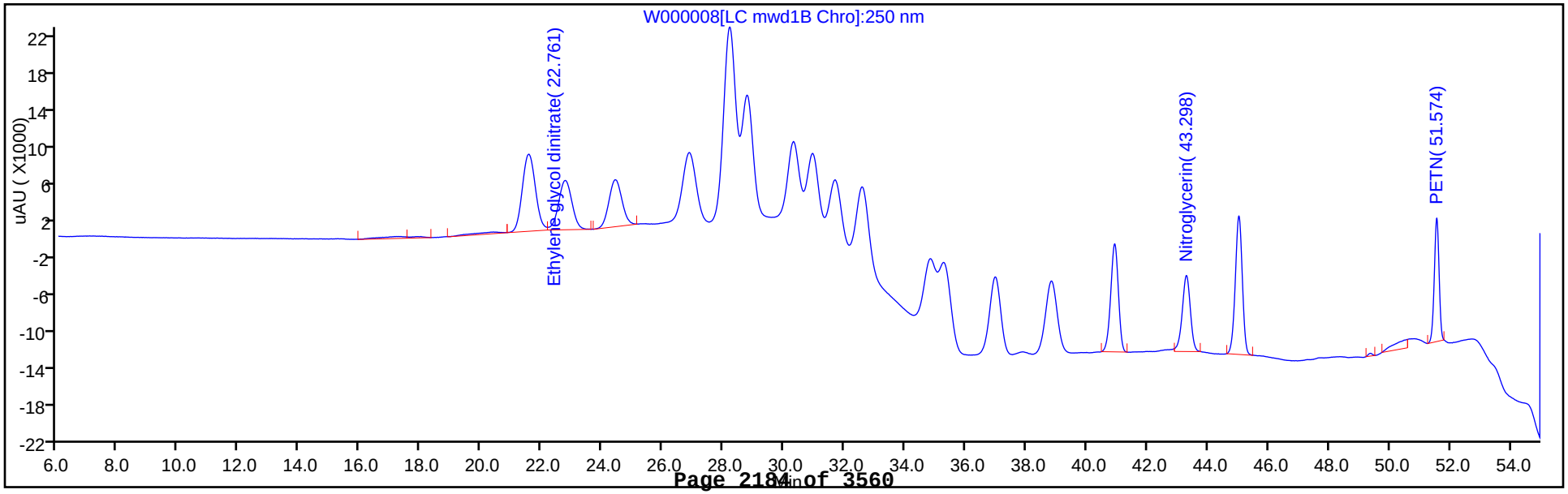
Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000008.D

Injection Date:	23-Jan-2015 19:01:32	Instrument ID:	LC9	Operator ID:	TQP
Lims ID:	STD5			Worklist Smp#:	8
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

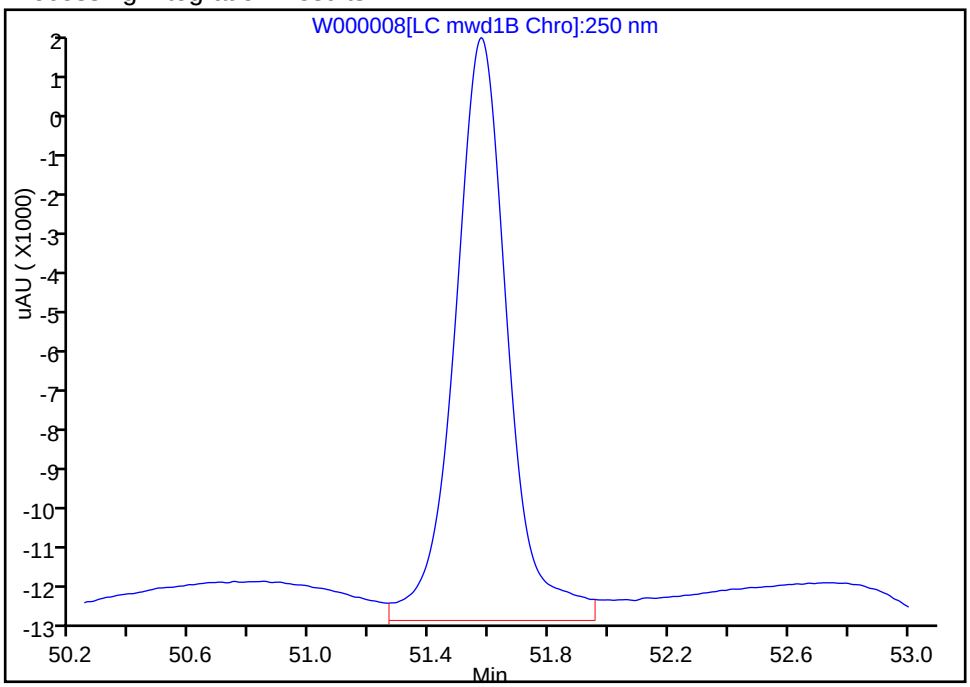
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000008.D
Injection Date: 23-Jan-2015 19:01:32 Instrument ID: LC9
Lims ID: STD5
Client ID:
Operator ID: TQP ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1B, 358 nm

22 PETN, CAS: 78-11-5

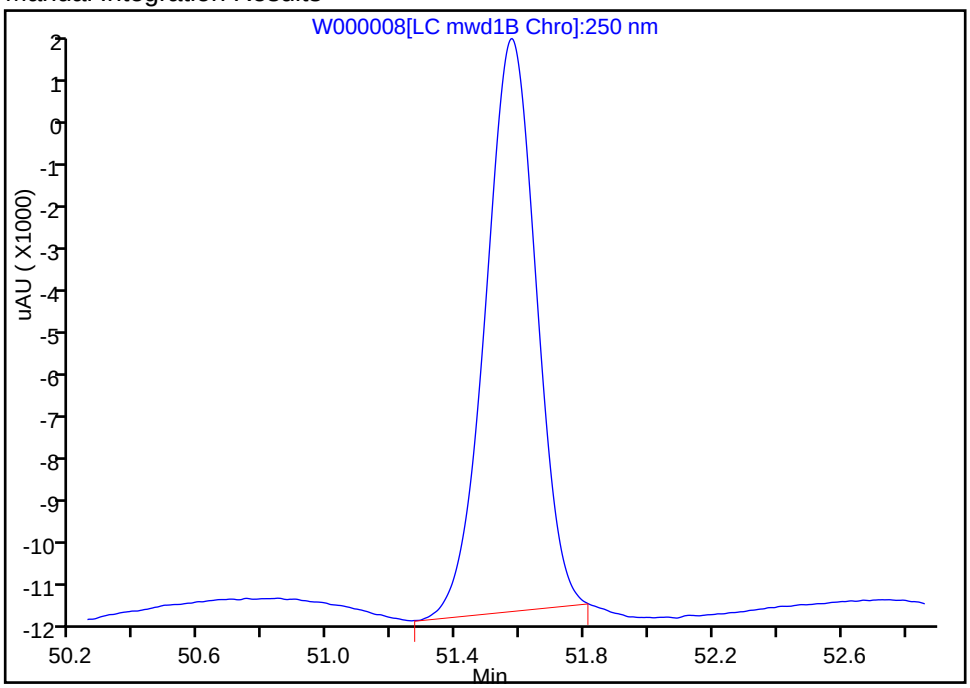
Processing Integration Results

RT: 51.57
Height: 13876
Amount: 96.272479
Amount Units: ng/ml



Manual Integration Results

RT: 51.57
Height: 13251
Amount: 98.312370
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:25:07
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000009.D
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 23-Jan-2015 20:08:16 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0018933-009
Operator ID: TQP Instrument ID: LC9
Sublist: chrom-LC9_Conf_8330*sub1

Method: \\SACChrom\ChromData\LC9\20150123-18933.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 26-Jan-2015 12:47:31 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK031

First Level Reviewer: phant Date: 26-Jan-2015 10:03:54

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							
1	21.544	21.586	-0.042	9235H	200.0	191.4	
4 Ethylene glycol dinitrate							
2	22.747	22.772	-0.025	10127H	200.0	202.0	
5 1,3-Dinitrobenzene							
1	24.394	24.432	-0.038	19873H	200.0	188.2	
7 1,3,5-Trinitrobenzene							
1	26.851	26.886	-0.035	15855H	200.0	186.3	
9 p-Nitrotoluene							
1	28.187	28.226	-0.039	12214H	200.0	188.7	
8 o-Nitrotoluene							
1	28.187	28.226	-0.039	12214H	200.0	188.7	
10 m-Nitrotoluene							
1	28.757	28.802	-0.045	7131H	200.0	201.3	
11 3,5-Dinitroaniline							
1	30.294	30.326	-0.032	15722H	200.0	182.7	
12 RDX							
1	30.931	30.969	-0.038	8949H	200.0	198.5	
13 2,4-Dinitrotoluene							
1	31.681	31.709	-0.028	17158H	200.0	187.1	
14 2,6-Dinitrotoluene							
1	32.574	32.616	-0.042	10220H	200.0	185.7	
15 2-Amino-4,6-dinitrotoluene							
1	34.831	34.879	-0.048	14771H	200.0	187.2	
16 4-Amino-2,6-dinitrotoluene							
1	35.257	35.302	-0.045	12470H	200.0	188.8	
$ 17 3,4-Dinitrotoluene							
1	36.964	37.005	-0.041	8736H	200.0	184.4	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
18 2,4,6-Trinitrotoluene							
1	38.824	38.852	-0.028	15043H	200.0	193.0	
19 HMX							
1	40.914	40.939	-0.025	11296H	200.0	189.4	
20 Nitroglycerin							
2	43.304	43.315	-0.011	15998H	200.0	180.8	
21 Tetryl							
1	45.034	45.042	-0.008	22541H	200.0	192.8	
22 PETN							M
2	51.574	51.585	-0.011	26616H	200.0	197.5	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L6_00026 Amount Added: 1.00 Units: mL

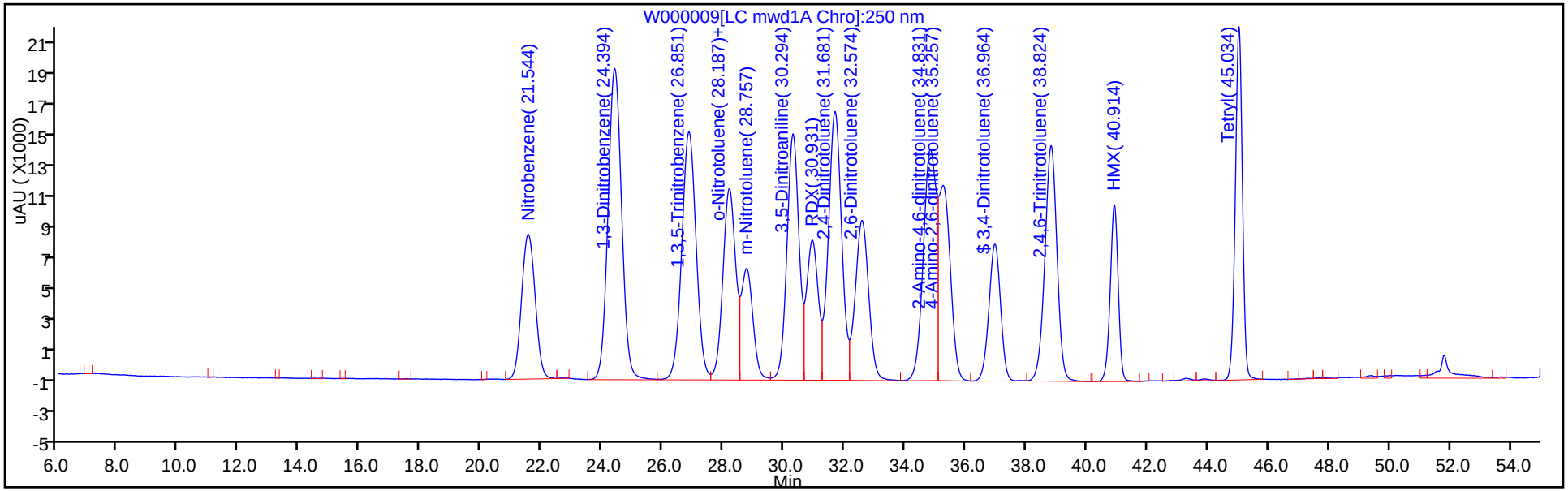
Report Date: 26-Jan-2015 12:47:32 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Sacramento

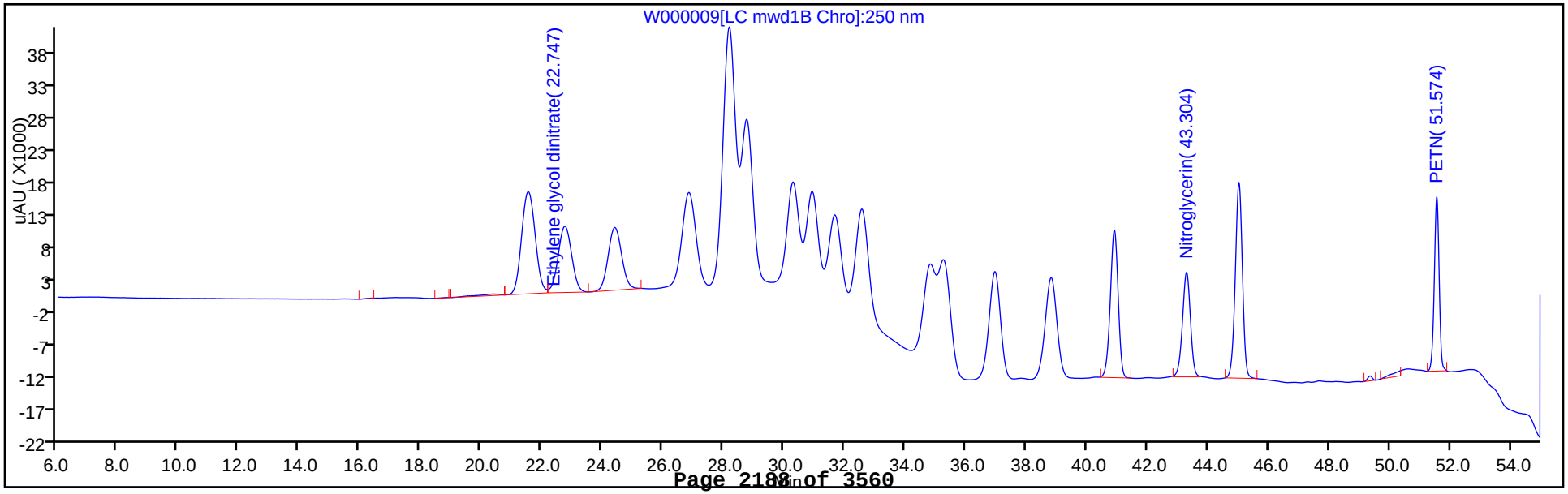
Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000009.D

Injection Date:	23-Jan-2015 20:08:16	Instrument ID:	LC9	Operator ID:	TQP
Lims ID:	STD6			Worklist Smp#:	9
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

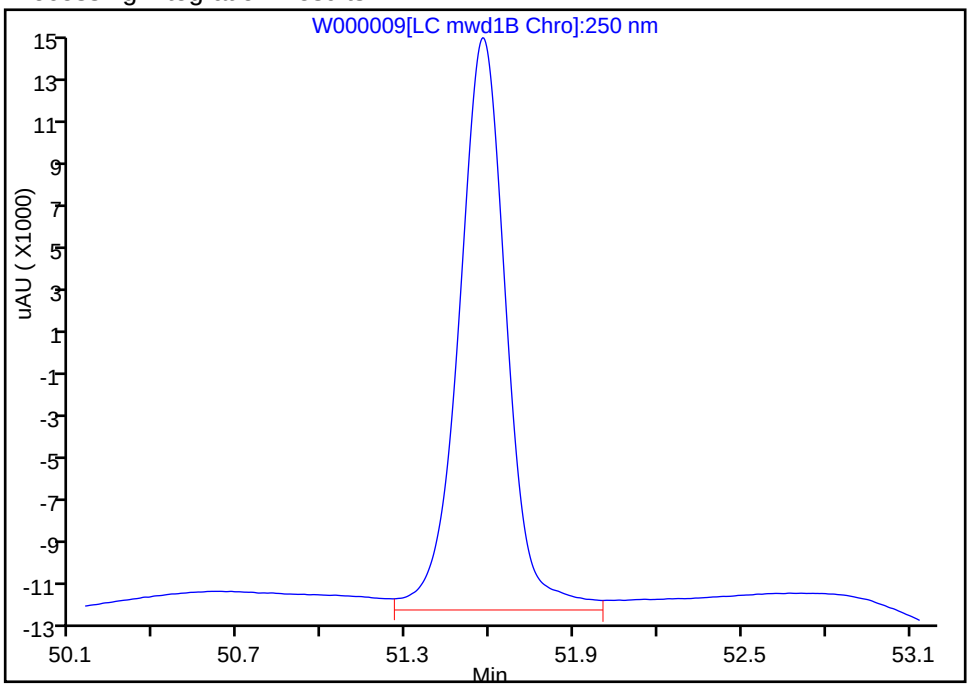
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000009.D
Injection Date: 23-Jan-2015 20:08:16 Instrument ID: LC9
Lims ID: STD6
Client ID:
Operator ID: TQP ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1B, 358 nm

22 PETN, CAS: 78-11-5

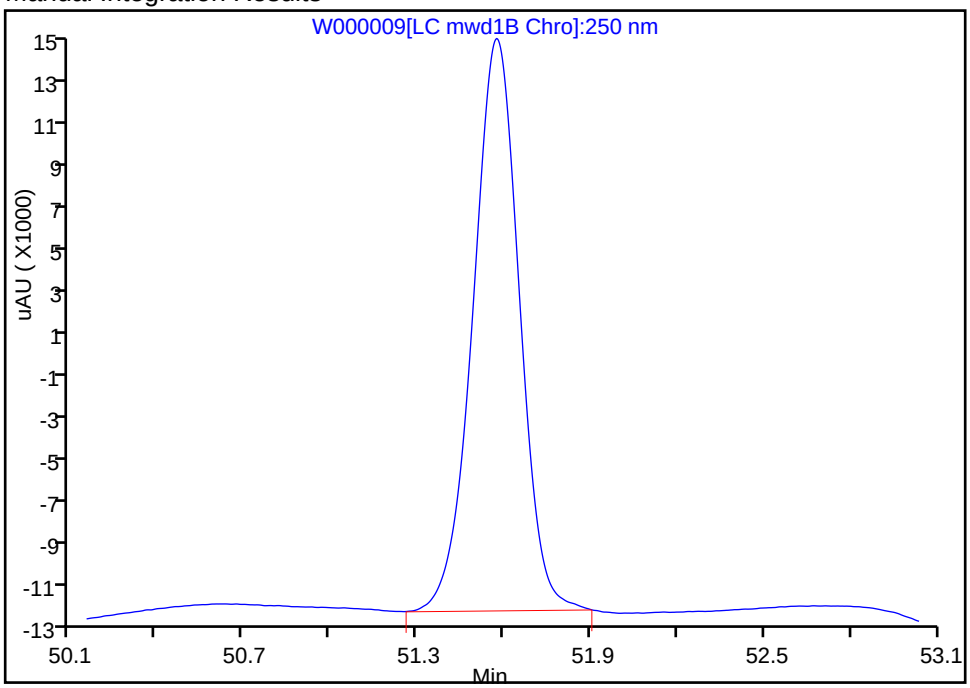
Processing Integration Results

RT: 51.57
Height: 27177
Amount: 189.1151
Amount Units: ng/ml



Manual Integration Results

RT: 51.57
Height: 26616
Amount: 197.4705
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:24:40
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D
Lims ID: STD7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 23-Jan-2015 21:15:02 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0018933-010
Operator ID: TQP Instrument ID: LC9
Sublist: chrom-LC9_Conf_8330*sub1

Method: \\SACChrom\ChromData\LC9\20150123-18933.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 26-Jan-2015 12:47:33 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK031

First Level Reviewer: phant Date: 26-Jan-2015 10:04:11

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							
1	21.482	21.586	-0.104	21805H	500.0	451.8	
4 Ethylene glycol dinitrate							
2	22.706	22.772	-0.066	24013H	500.0	485.4	
5 1,3-Dinitrobenzene							
1	24.346	24.432	-0.086	47510H	500.0	449.9	
7 1,3,5-Trinitrobenzene							
1	26.799	26.886	-0.087	38618H	500.0	453.7	
9 p-Nitrotoluene							
1	28.119	28.226	-0.107	29374H	500.0	453.7	
8 o-Nitrotoluene							
1	28.119	28.226	-0.107	29374H	500.0	453.7	
10 m-Nitrotoluene							
1	28.686	28.802	-0.116	17137H	500.0	486.9	
11 3,5-Dinitroaniline							
1	30.229	30.326	-0.097	37962H	500.0	441.1	
12 RDX							
1	30.862	30.969	-0.107	21573H	500.0	482.8	
13 2,4-Dinitrotoluene							
1	31.612	31.709	-0.097	41718H	500.0	455.0	
14 2,6-Dinitrotoluene							
1	32.502	32.616	-0.114	24991H	500.0	454.1	
15 2-Amino-4,6-dinitrotoluene							
1	34.762	34.879	-0.117	36336H	500.0	460.6	
16 4-Amino-2,6-dinitrotoluene							
1	35.162	35.302	-0.140	31028H	500.0	469.7	
$ 17 3,4-Dinitrotoluene							
1	36.895	37.005	-0.110	21611H	500.0	456.2	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
18 2,4,6-Trinitrotoluene							
1	38.769	38.852	-0.083	35917H	500.0	460.8	
19 HMX							
1	40.879	40.939	-0.060	27492H	500.0	461.0	
20 Nitroglycerin							
2	43.259	43.315	-0.056	39085H	500.0	441.6	
21 Tetryl							
1	44.979	45.042	-0.063	54707H	500.0	467.9	
22 PETN							M
2	51.549	51.585	-0.036	64849H	500.0	481.1	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330L7_00016 Amount Added: 1.00 Units: mL

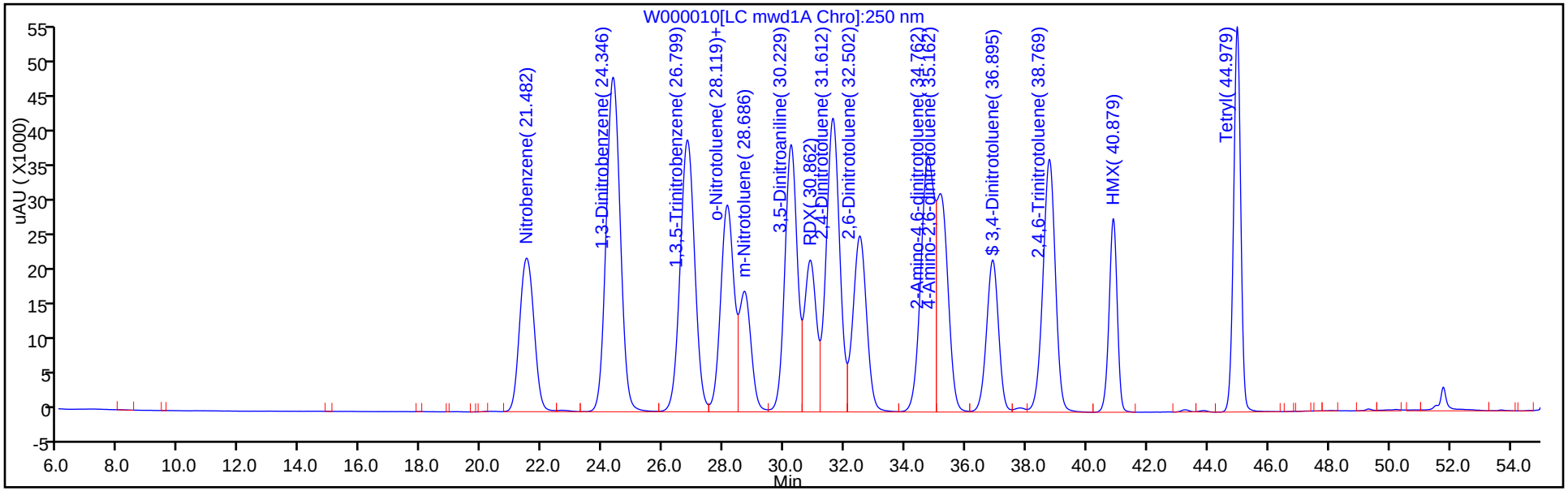
Report Date: 26-Jan-2015 12:47:33 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Sacramento

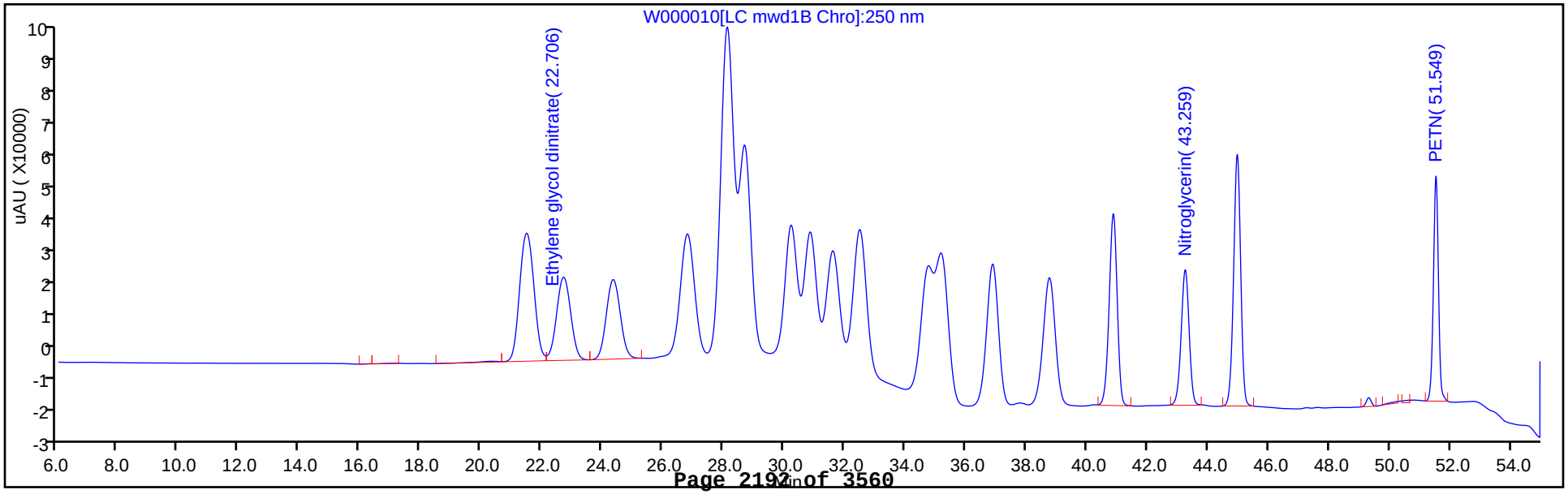
Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Injection Date:	23-Jan-2015 21:15:02	Instrument ID:	LC9	Operator ID:	TQP
Lims ID:	STD7			Worklist Smp#:	10
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

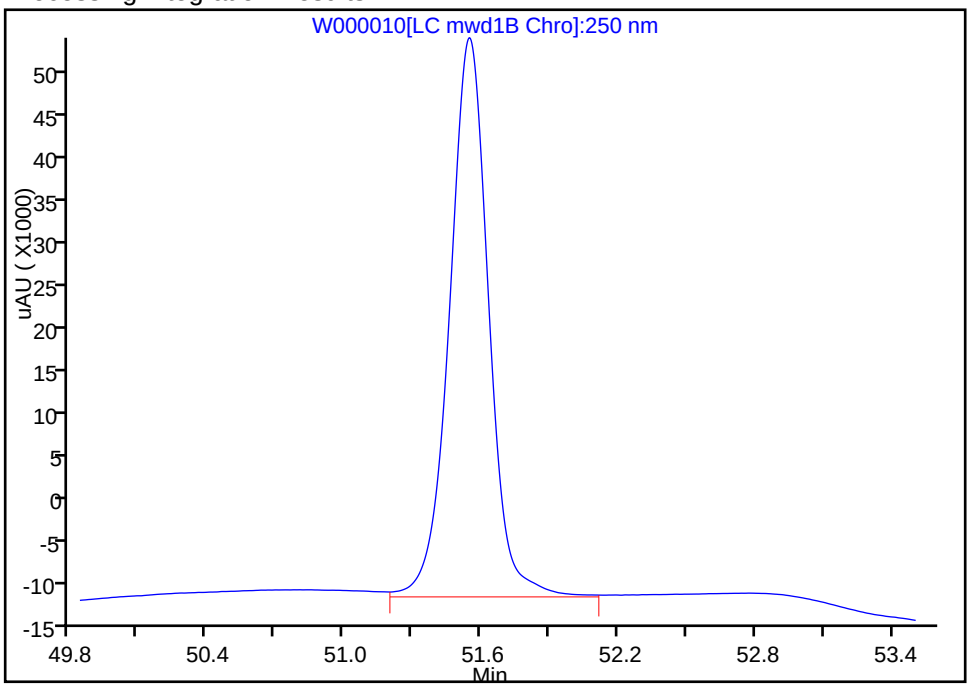
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D
Injection Date: 23-Jan-2015 21:15:02 Instrument ID: LC9
Lims ID: STD7
Client ID:
Operator ID: TQP ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1B, 358 nm

22 PETN, CAS: 78-11-5

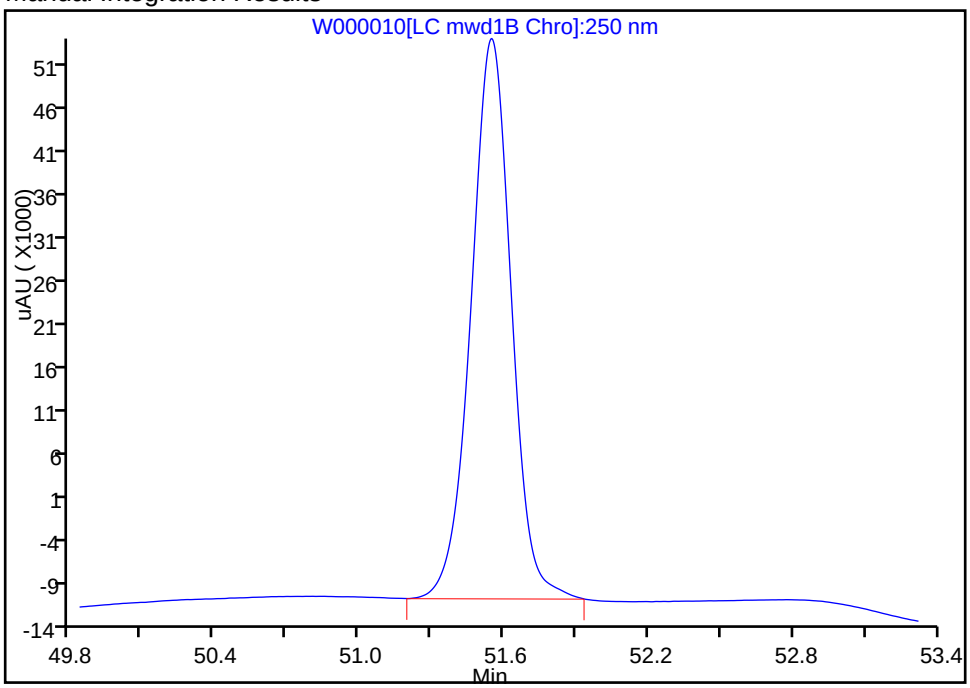
Processing Integration Results

RT: 51.55
Height: 65381
Amount: 434.0495
Amount Units: ng/ml



Manual Integration Results

RT: 51.55
Height: 64849
Amount: 481.1304
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:04:11
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 320-67883/12 Calibration Date: 03/11/2015 21:36

Instrument ID: LC10 Calib Start Date: 03/11/2015 15:47

GC Column: Synergi C18 ID: 4.60(mm) Calib End Date: 03/11/2015 20:09

Lab File ID: J000015.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	147.1	153.2		208	200	4.2	20.0
RDX	Ave	101.4	101.4		200	200	0.0	20.0
Ethylene glycol dinitrate	Ave	120.7	117.5		195	200	-2.6	20.0
Picric acid	Ave	130.7	122.9		470	500	-6.0	20.0
1,3,5-Trinitrobenzene	Ave	194.5	192.2		198	200	-1.1	20.0
1,3-Dinitrobenzene	Ave	186.8	188.0		201	200	0.6	20.0
3,5-Dinitroaniline	Ave	123.0	114.9		187	200	-6.6	20.0
Tetryl	Ave	111.0	116.3		210	200	4.8	20.0
Nitrobenzene	Ave	84.47	85.70		203	200	1.4	20.0
Nitroglycerin	Ave	76.63	75.99		198	200	-0.8	20.0
2,4,6-Trinitrotoluene	Ave	113.7	119.5		210	200	5.1	20.0
4-Amino-2,6-dinitrotoluene	Ave	91.51	91.47		200	200	-0.0	20.0
2-Amino-4,6-dinitrotoluene	Ave	102.1	101.8		199	200	-0.4	20.0
2,6-Dinitrotoluene	Ave	71.94	73.30		204	200	1.9	20.0
2,4-Dinitrotoluene	Ave	118.3	119.3		202	200	0.9	20.0
2-Nitrotoluene	Ave	52.41	51.47		196	200	-1.8	20.0
4-Nitrotoluene	Ave	62.96	61.65		196	200	-2.1	20.0
3-Nitrotoluene	Ave	59.21	61.46		208	200	3.8	20.0
PETN	Ave	44.44	43.56		196	200	-2.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 320-67883/12 Calibration Date: 03/11/2015 21:36

Instrument ID: LC10 Calib Start Date: 03/11/2015 15:47

GC Column: Synergi C18 ID: 4.60(mm) Calib End Date: 03/11/2015 20:09

Lab File ID: J000015.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	5.15	4.90	5.40
RDX	7.40	7.16	7.66
Ethylene glycol dinitrate	8.05	7.81	8.31
Picric acid	8.52	8.33	8.83
1,3,5-Trinitrobenzene	9.62	9.37	9.87
1,3-Dinitrobenzene	12.20	11.96	12.46
3,5-Dinitroaniline	12.92	12.68	13.18
Tetryl	13.44	13.20	13.70
Nitrobenzene	13.92	13.69	14.19
Nitroglycerin	14.74	14.50	15.00
2,4,6-Trinitrotoluene	15.44	15.19	15.69
4-Amino-2,6-dinitrotoluene	16.08	15.84	16.34
2-Amino-4,6-dinitrotoluene	16.94	16.70	17.20
2,6-Dinitrotoluene	18.52	18.28	18.78
2,4-Dinitrotoluene	19.08	18.84	19.34
2-Nitrotoluene	22.45	22.21	22.71
4-Nitrotoluene	24.08	23.83	24.33
3-Nitrotoluene	25.84	25.59	26.09
PETN	28.31	28.06	28.56

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000015.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 11-Mar-2015 21:36:48 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020096-012
Operator ID: YPH Instrument ID: LC10
Sublist:

Method: \\SACChrom\ChromData\LC10\20150311-20096.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 12-Mar-2015 11:03:41 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK019

First Level Reviewer: phant Date: 12-Mar-2015 06:15:46

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.148	5.149	-0.001	30648H	200.0	208.3	
19 RDX							
1	7.398	7.406	-0.008	20278H	200.0	200.0	
3 Ethylene glycol dinitrate							
2	8.048	8.056	-0.008	23507H	200.0	194.8	
10 2,4,6-Trinitrophenol							
2	8.522	8.579	-0.057	61435H	500.0	470.1	
1	8.522	8.579	-0.057	42152H	500.0	458.8	
27 1,3,5-Trinitrobenzene							
1	9.615	9.623	-0.008	38448H	200.0	197.7	
24 1,3-Dinitrobenzene							
1	12.202	12.209	-0.007	37590H	200.0	201.2	
9 3,5-Dinitroaniline							
1	12.922	12.929	-0.007	22978H	200.0	186.8	
20 Tetryl							
1	13.442	13.449	-0.007	23257H	200.0	209.5	
5 Nitrobenzene							
1	13.922	13.939	-0.017	17139H	200.0	202.9	
7 Nitroglycerin							
2	14.739	14.749	-0.010	15198H	200.0	198.3	
25 2,4,6-Trinitrotoluene							
1	15.435	15.443	-0.008	23898H	200.0	210.3	
26 4-Amino-2,6-dinitrotoluene							
1	16.082	16.093	-0.011	18293H	200.0	199.9	
6 2-Amino-4,6-dinitrotoluene							
1	16.942	16.949	-0.007	20352H	200.0	199.3	
12 2,6-Dinitrotoluene							
1	18.519	18.526	-0.007	14659H	200.0	203.8	
23 2,4-Dinitrotoluene							
1	19.079	19.093	-0.014	23862H	200.0	201.7	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
16 o-Nitrotoluene							
1	22.449	22.463	-0.014	10293H	200.0	196.4	
15 p-Nitrotoluene							
1	24.079	24.083	-0.004	12330H	200.0	195.8	
8 m-Nitrotoluene							
1	25.842	25.843	-0.001	12292H	200.0	207.6	
21 PETN							M
2	28.309	28.309	0.000	8711H	200.0	196.0	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330IC_00028 Amount Added: 1.00 Units: mL

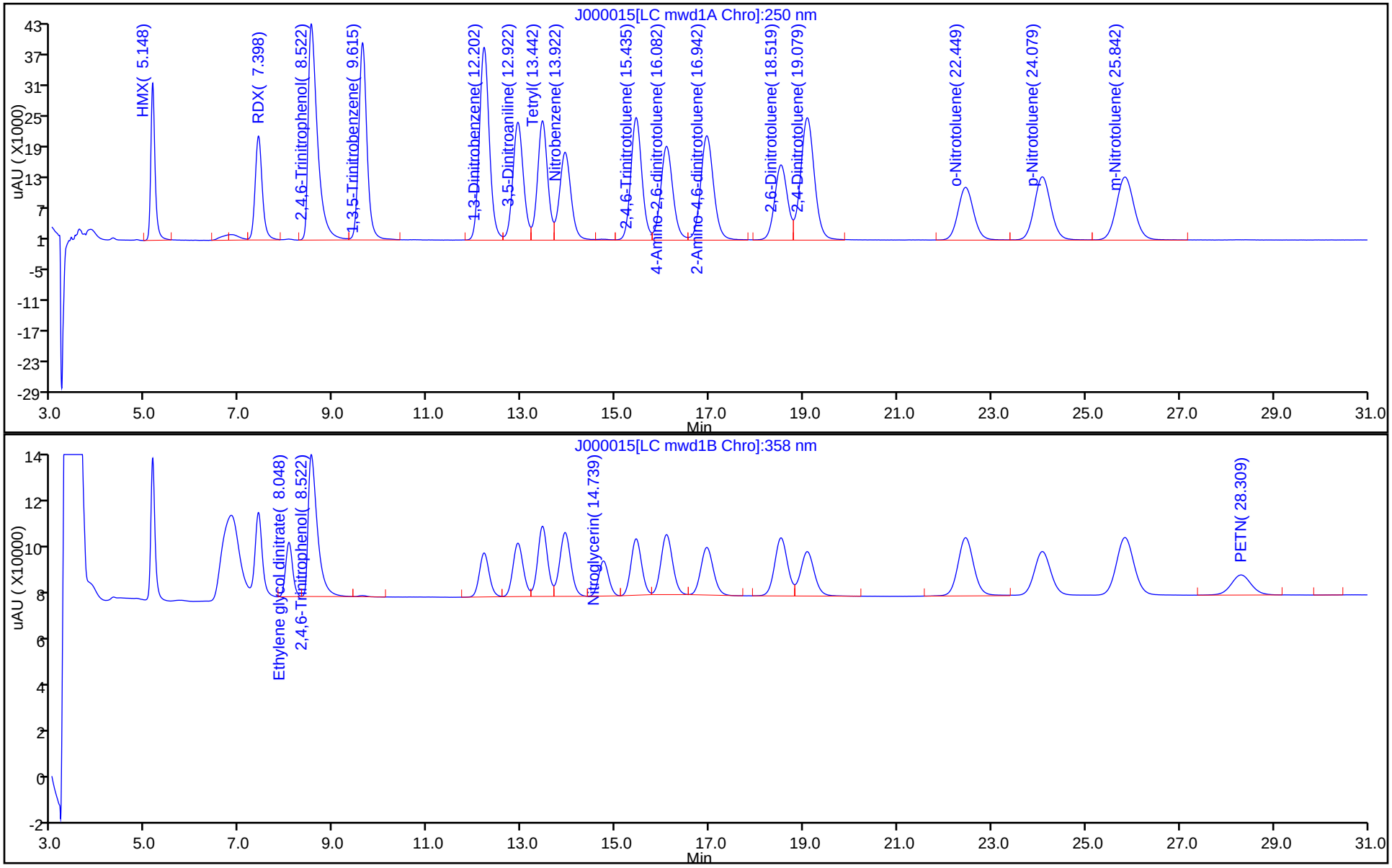
Report Date: 12-Mar-2015 11:04:14 Chrom Revision: 2.2 06-Mar-2015 13:13:48

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000015.D

Injection Date:	11-Mar-2015 21:36:48	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)



Manual Integration/User Assign Peak Report

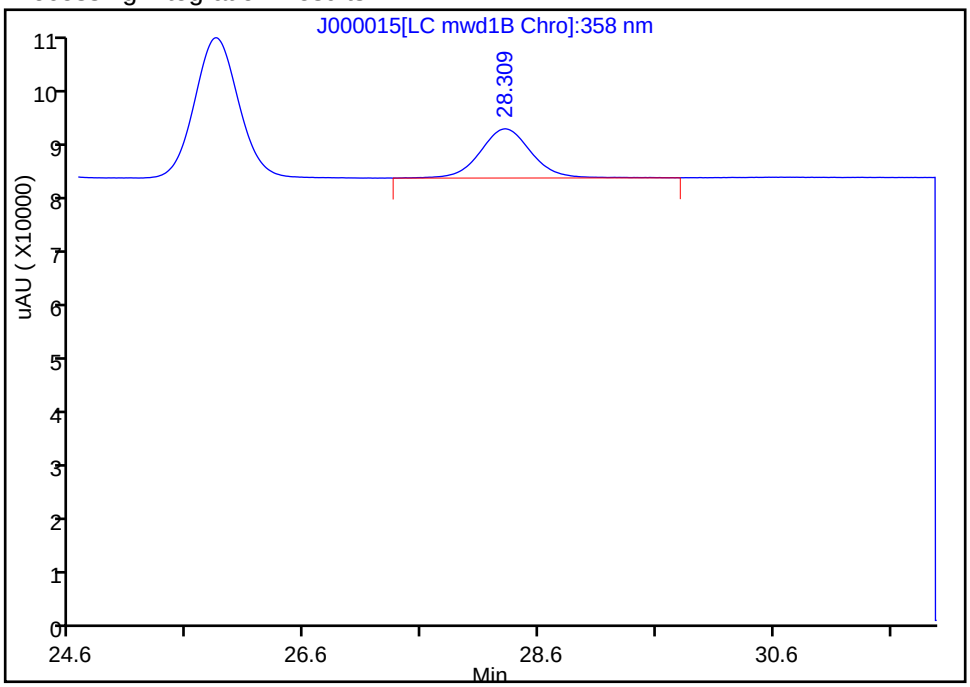
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000015.D
Injection Date: 11-Mar-2015 21:36:48 Instrument ID: LC10
Lims ID: ICV
Client ID:
Operator ID: YPH ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

21 PETN, CAS: 78-11-5

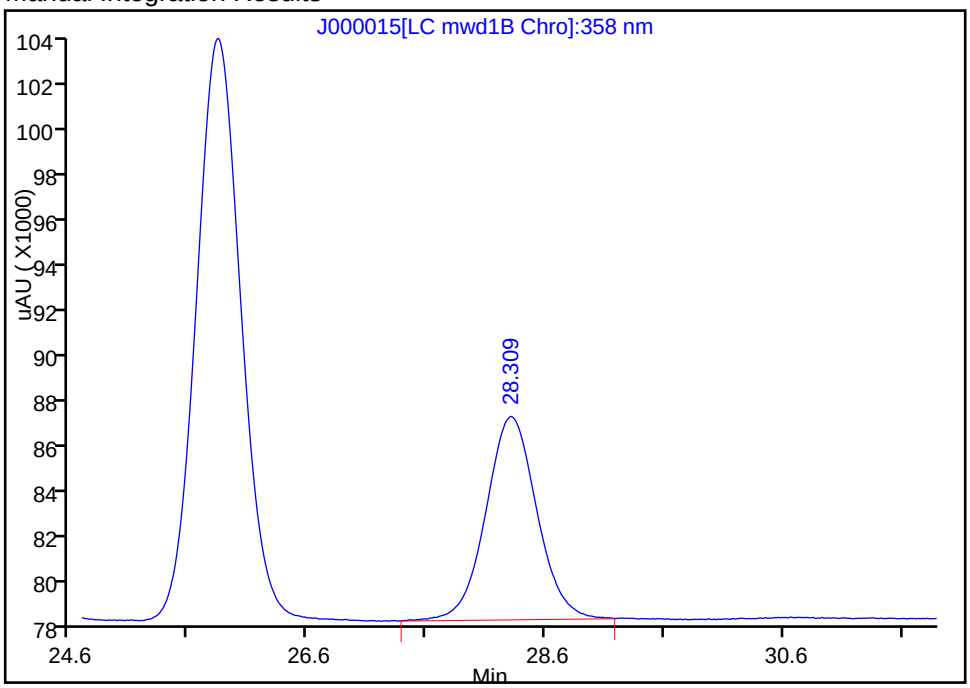
Processing Integration Results

RT: 28.31
Height: 8747
Amount: 194.2303
Amount Units: ng/ml



Manual Integration Results

RT: 28.31
Height: 8711
Amount: 196.0127
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:43:30
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 320-67883/13 Calibration Date: 03/11/2015 22:20

Instrument ID: LC10 Calib Start Date: 03/11/2015 15:47

GC Column: Synergi C18 ID: 4.60(mm) Calib End Date: 03/11/2015 20:09

Lab File ID: J000016.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	147.1	147.0		5.00	5.00	-0.0	
RDX	Ave	101.4	117.2		5.78	5.00	15.6	
Ethylene glycol dinitrate	Ave	120.7	123.9		20.5	20.0	2.6	
Picric acid	Ave	130.7	135.5		20.7	20.0	3.7	
1,3,5-Trinitrobenzene	Ave	194.5	208.2		5.35	5.00	7.1	
1,3-Dinitrobenzene	Ave	186.8	201.2		5.38	5.00	7.7	
3,5-Dinitroaniline	Ave	123.0	130.8		5.32	5.00	6.3	
Tetryl	Ave	111.0	126.0		5.68	5.00	13.5	
Nitrobenzene	Ave	84.47	92.20		5.46	5.00	9.1	
Nitroglycerin	Ave	76.63	81.50		21.3	20.0	6.4	
2,4,6-Trinitrotoluene	Ave	113.7	123.4		5.43	5.00	8.6	
4-Amino-2,6-dinitrotoluene	Ave	91.51	90.60		4.95	5.00	-1.0	
2-Amino-4,6-dinitrotoluene	Ave	102.1	105.2		5.15	5.00	3.0	
2,6-Dinitrotoluene	Ave	71.94	77.80		5.41	5.00	8.1	
2,4-Dinitrotoluene	Ave	118.3	131.2		5.55	5.00	10.9	
2-Nitrotoluene	Ave	52.41	56.80		5.42	5.00	8.4	
4-Nitrotoluene	Ave	62.96	67.40		5.35	5.00	7.1	
3-Nitrotoluene	Ave	59.21	65.20		5.51	5.00	10.1	
PETN	Ave	44.44	45.05		20.3	20.0	1.4	
3,4-Dinitrotoluene	Ave	67.04	70.20		5.24	5.00	4.7	

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 320-67883/13 Calibration Date: 03/11/2015 22:20

Instrument ID: LC10 Calib Start Date: 03/11/2015 15:47

GC Column: Synergi C18 ID: 4.60(mm) Calib End Date: 03/11/2015 20:09

Lab File ID: J000016.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	5.15	4.90	5.40
RDX	7.40	7.16	7.66
Ethylene glycol dinitrate	8.05	7.81	8.31
Picric acid	8.63	8.33	8.83
1,3,5-Trinitrobenzene	9.62	9.37	9.87
1,3-Dinitrobenzene	12.21	11.96	12.46
3,5-Dinitroaniline	12.92	12.68	13.18
Tetryl	13.47	13.20	13.70
Nitrobenzene	13.94	13.69	14.19
Nitroglycerin	14.76	14.50	15.00
2,4,6-Trinitrotoluene	15.44	15.19	15.69
4-Amino-2,6-dinitrotoluene	16.11	15.84	16.34
2-Amino-4,6-dinitrotoluene	16.95	16.70	17.20
2,6-Dinitrotoluene	18.51	18.28	18.78
2,4-Dinitrotoluene	19.10	18.84	19.34
2-Nitrotoluene	22.47	22.21	22.71
4-Nitrotoluene	24.08	23.83	24.33
3-Nitrotoluene	25.88	25.59	26.09
PETN	28.37	28.06	28.56
3,4-Dinitrotoluene	16.55	16.29	16.79

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D
Lims ID: LODV
Client ID:
Sample Type: LODV
Inject. Date: 11-Mar-2015 22:20:25 ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0020096-013
Operator ID: YPH Instrument ID: LC10

Method: \\SACChrom\ChromData\LC10\20150311-20096.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 12-Mar-2015 11:04:20 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK019

First Level Reviewer: phant Date: 12-Mar-2015 06:15:58

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.154	5.149	0.005	735H	5.00	5.00	
19 RDX							
1	7.404	7.406	-0.002	586H	5.00	5.78	
3 Ethylene glycol dinitrate							
2	8.054	8.056	-0.002	2477H	20.0	20.5	
10 2,4,6-Trinitrophenol							
2	8.627	8.579	0.048	2710H	20.0	20.7	
1	8.624	8.579	0.045	1904H	20.0	20.7	
27 1,3,5-Trinitrobenzene							
1	9.624	9.623	0.001	1041H	5.00	5.35	
24 1,3-Dinitrobenzene							M
1	12.211	12.209	0.002	1006H	5.00	5.38	M
9 3,5-Dinitroaniline							M
1	12.921	12.929	-0.008	654H	5.00	5.32	M
20 Tetryl							M
1	13.468	13.449	0.019	630H	5.00	5.68	M
5 Nitrobenzene							M
1	13.944	13.939	0.005	461H	5.00	5.46	M
7 Nitroglycerin							
2	14.764	14.749	0.015	1630H	20.0	21.3	
25 2,4,6-Trinitrotoluene							M
1	15.444	15.443	0.001	617H	5.00	5.43	M
26 4-Amino-2,6-dinitrotoluene							M
1	16.108	16.093	0.015	453H	5.00	4.95	M
$ 30 3,4-Dinitrotoluene							M
1	16.554	16.539	0.015	351H	5.00	5.24	M
2	16.558	16.539	0.019	726H	5.00	5.41	
6 2-Amino-4,6-dinitrotoluene							M
1	16.951	16.949	0.002	526H	5.00	5.15	M
12 2,6-Dinitrotoluene							M
1	18.511	18.526	-0.015	389H	5.00	5.41	M

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
23 2,4-Dinitrotoluene							M
1	19.098	19.093	0.005	656H	5.00	5.55	M
16 o-Nitrotoluene							M
1	22.468	22.463	0.005	284H	5.00	5.42	M
15 p-Nitrotoluene							M
1	24.081	24.083	-0.002	337H	5.00	5.35	M
8 m-Nitrotoluene							M
1	25.878	25.843	0.035	326H	5.00	5.51	M
21 PETN							M
2	28.368	28.309	0.059	901H	20.0	20.3	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330ICL_00019 Amount Added: 1.00 Units: mL

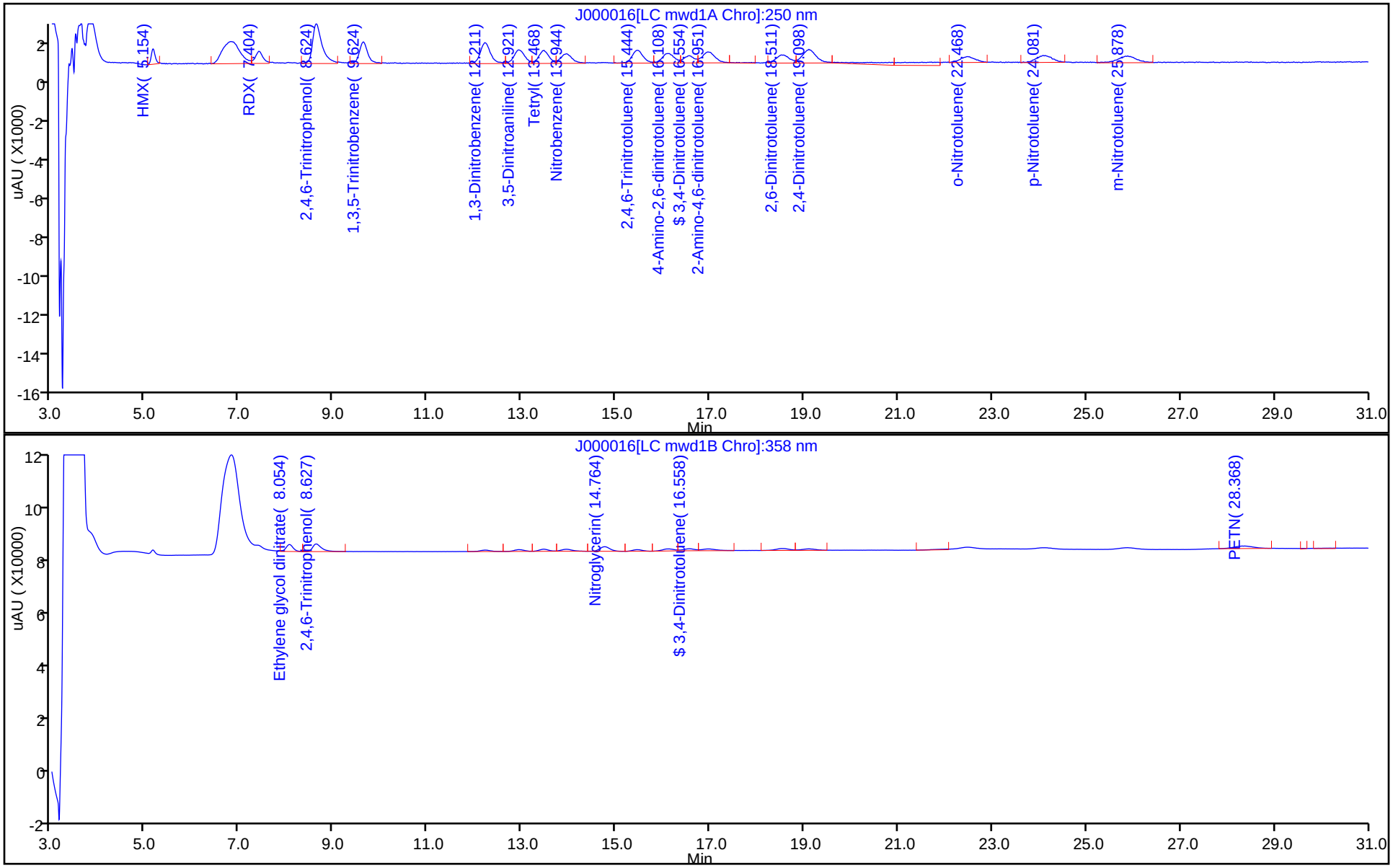
Report Date: 12-Mar-2015 11:04:22 Chrom Revision: 2.2 06-Mar-2015 13:13:48

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D

Injection Date:	11-Mar-2015 22:20:25	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	LODV			Worklist Smp#:	13
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)



Manual Integration/User Assign Peak Report

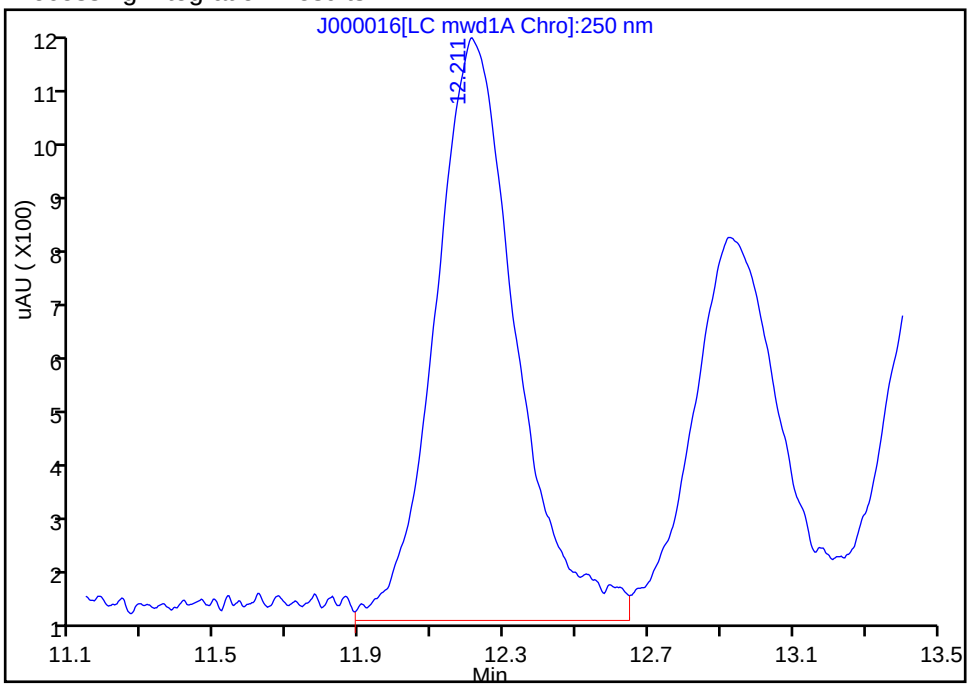
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D
Injection Date: 11-Mar-2015 22:20:25 Instrument ID: LC10
Lims ID: LODV
Client ID:
Operator ID: YPH ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

24 1,3-Dinitrobenzene, CAS: 99-65-0

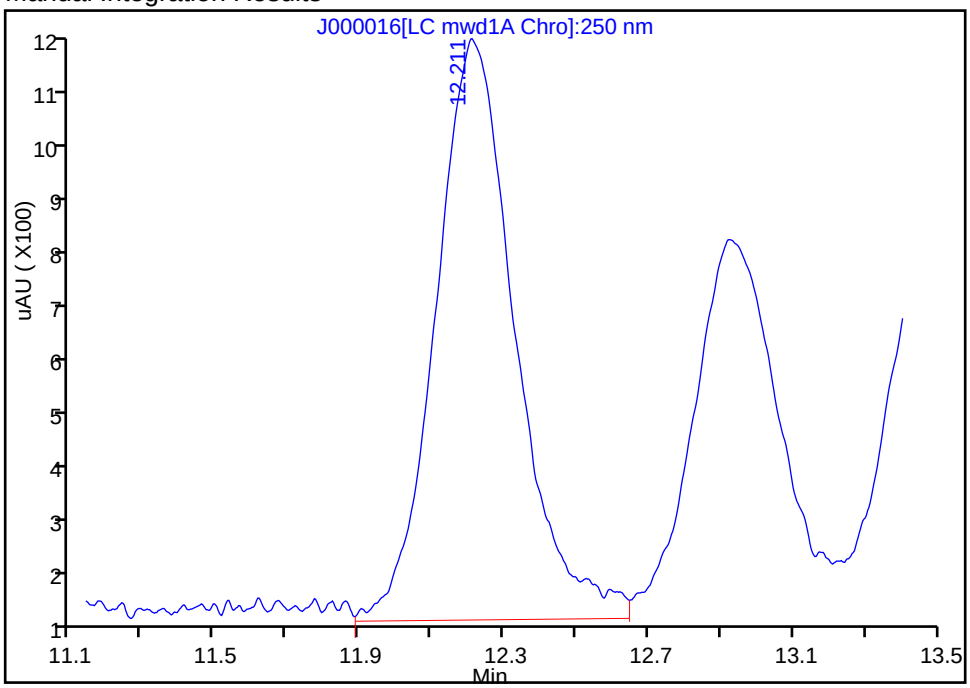
Processing Integration Results

RT: 12.21
Height: 1015
Amount: 5.432954
Amount Units: ng/ml



Manual Integration Results

RT: 12.21
Height: 1006
Amount: 5.384780
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

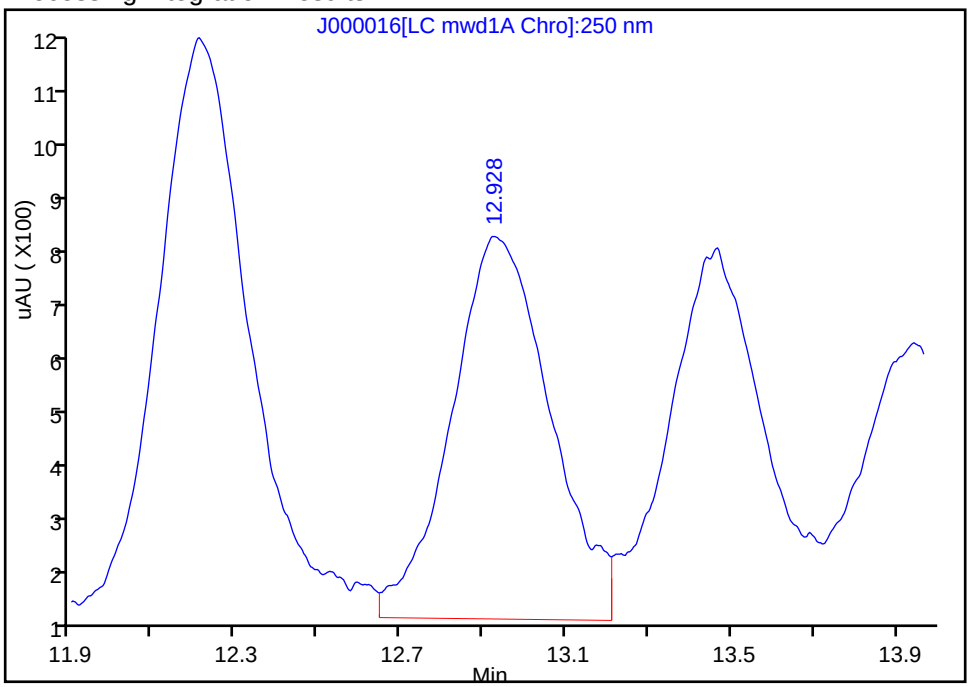
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D
Injection Date: 11-Mar-2015 22:20:25 Instrument ID: LC10
Lims ID: LODV
Client ID:
Operator ID: YPH ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

9 3,5-Dinitroaniline, CAS: 618-87-1

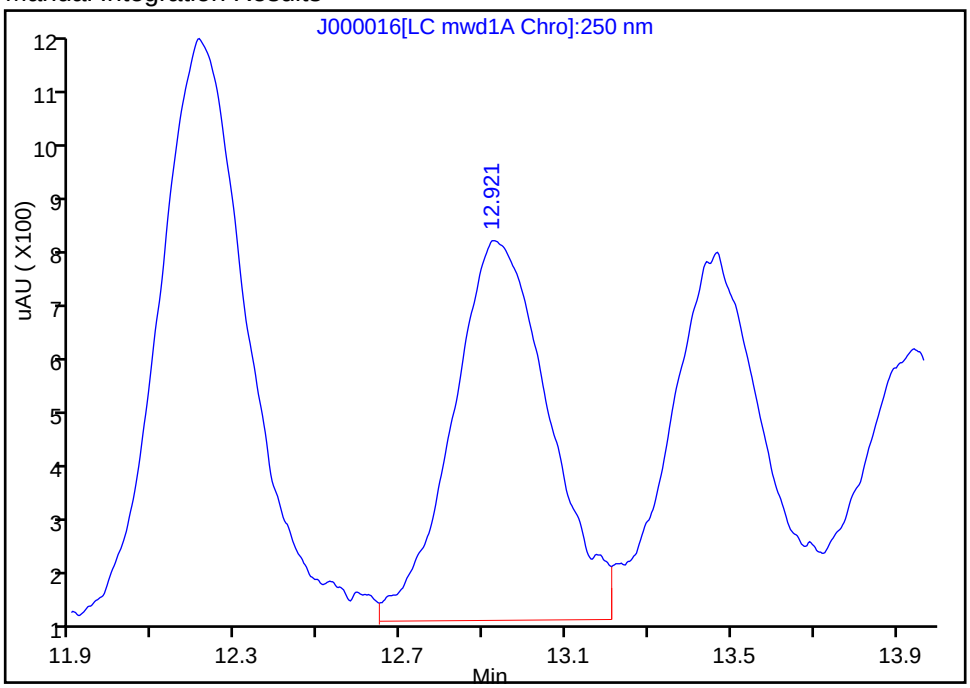
Processing Integration Results

RT: 12.93
Height: 670
Amount: 5.446832
Amount Units: ng/ml



Manual Integration Results

RT: 12.92
Height: 654
Amount: 5.316758
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

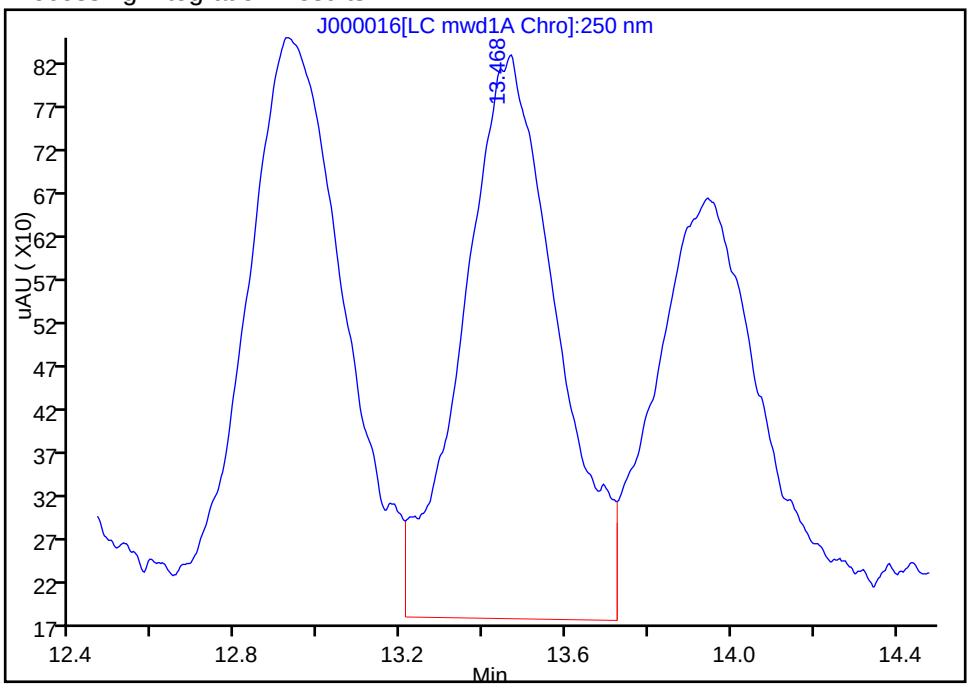
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D				
Injection Date:	11-Mar-2015 22:20:25	Instrument ID:	LC10		
Lims ID:	LODV				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	12	Worklist Smp#:	13
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

20 Tetryl, CAS: 479-45-8

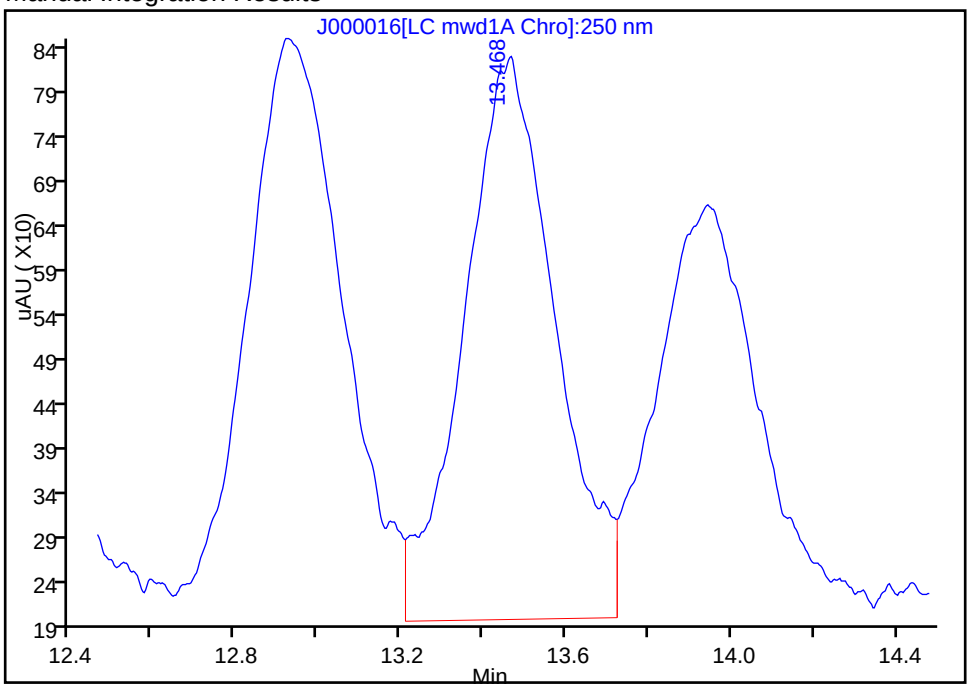
Processing Integration Results

RT: 13.47
Height: 654
Amount: 5.891930
Amount Units: ng/ml



Manual Integration Results

RT: 13.47
Height: 630
Amount: 5.675712
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

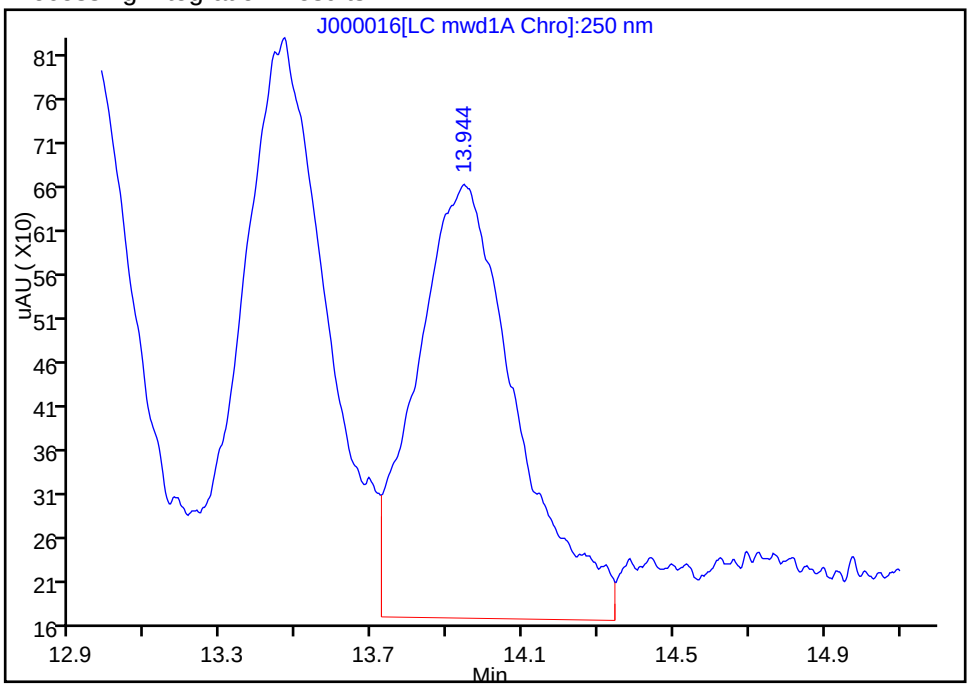
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D
Injection Date: 11-Mar-2015 22:20:25 Instrument ID: LC10
Lims ID: LODV
Client ID:
Operator ID: YPH ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

5 Nitrobenzene, CAS: 98-95-3

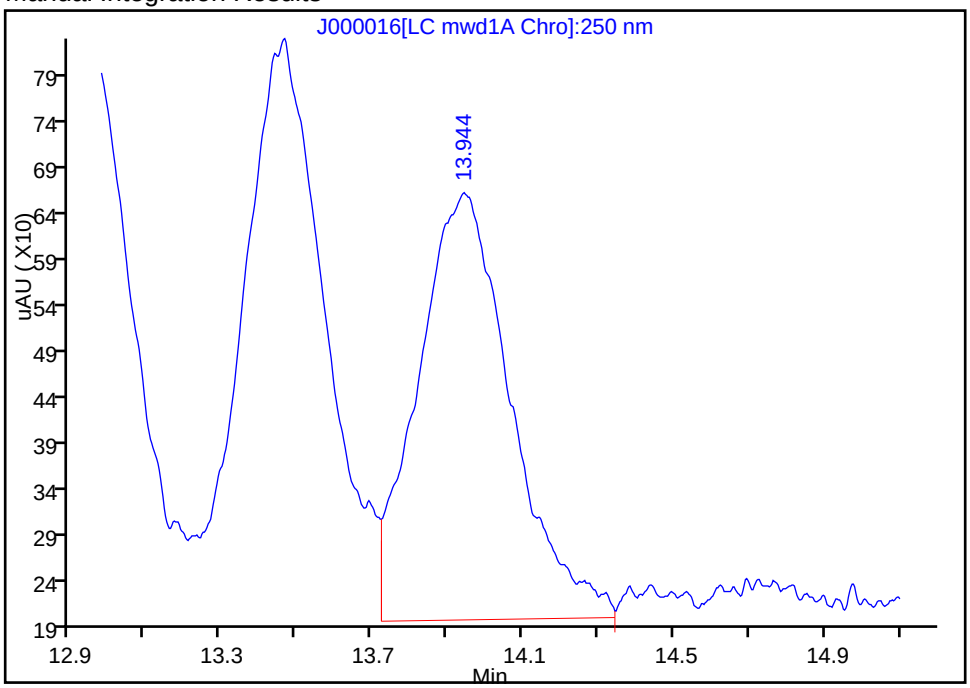
Processing Integration Results

RT: 13.94
Height: 492
Amount: 5.824307
Amount Units: ng/ml



Manual Integration Results

RT: 13.94
Height: 461
Amount: 5.457328
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Assigned New Baseline
Audit Reason: Baseline

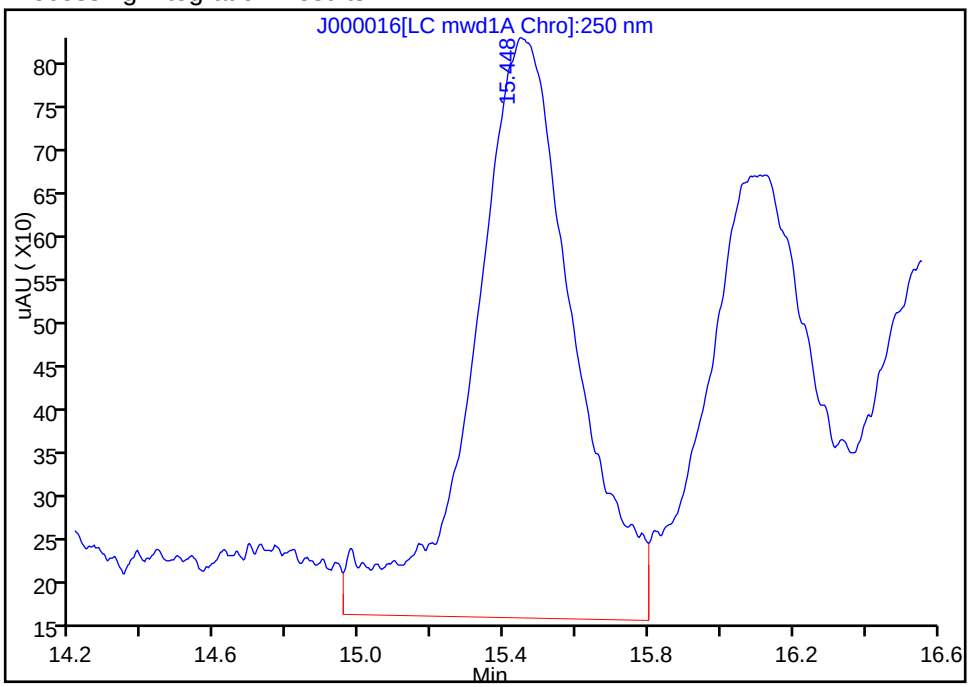
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D
Injection Date: 11-Mar-2015 22:20:25 Instrument ID: LC10
Lims ID: LODV
Client ID:
Operator ID: YPH ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

25 2,4,6-Trinitrotoluene, CAS: 118-96-7

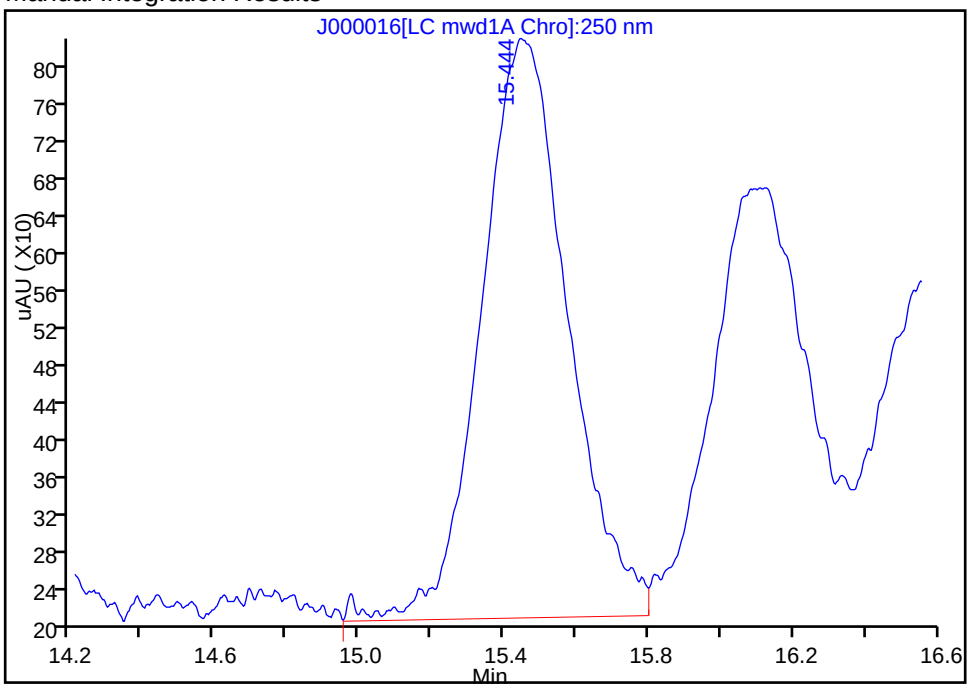
Processing Integration Results

RT: 15.45
Height: 672
Amount: 5.912720
Amount Units: ng/ml



Manual Integration Results

RT: 15.44
Height: 617
Amount: 5.428792
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

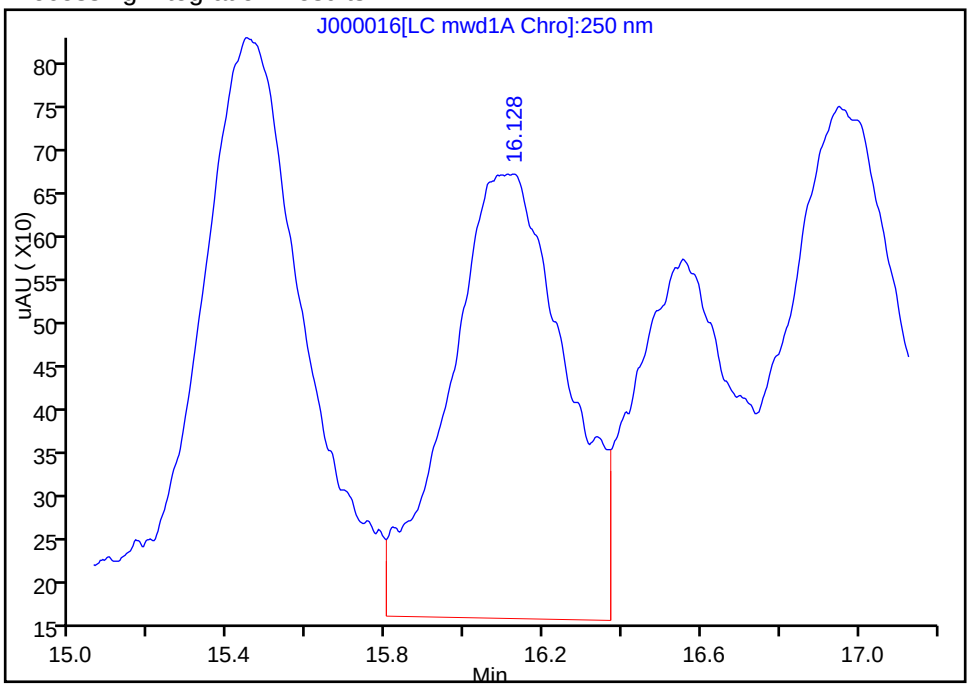
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D
Injection Date: 11-Mar-2015 22:20:25 Instrument ID: LC10
Lims ID: LODV
Client ID:
Operator ID: YPH ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

26 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

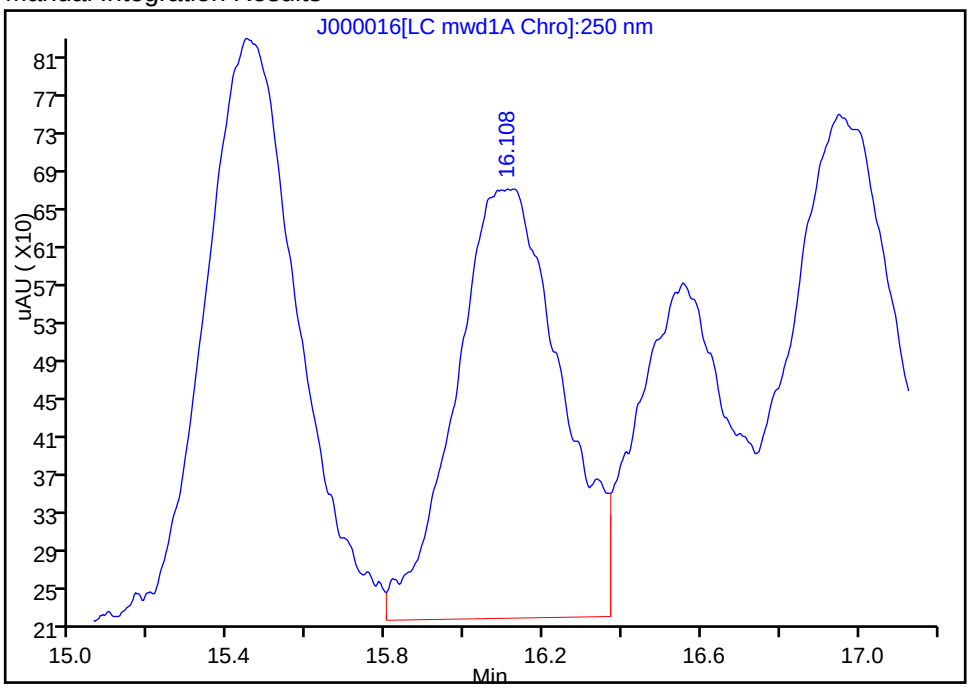
Processing Integration Results

RT: 16.13
Height: 518
Amount: 5.660301
Amount Units: ng/ml



Manual Integration Results

RT: 16.11
Height: 453
Amount: 4.950031
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

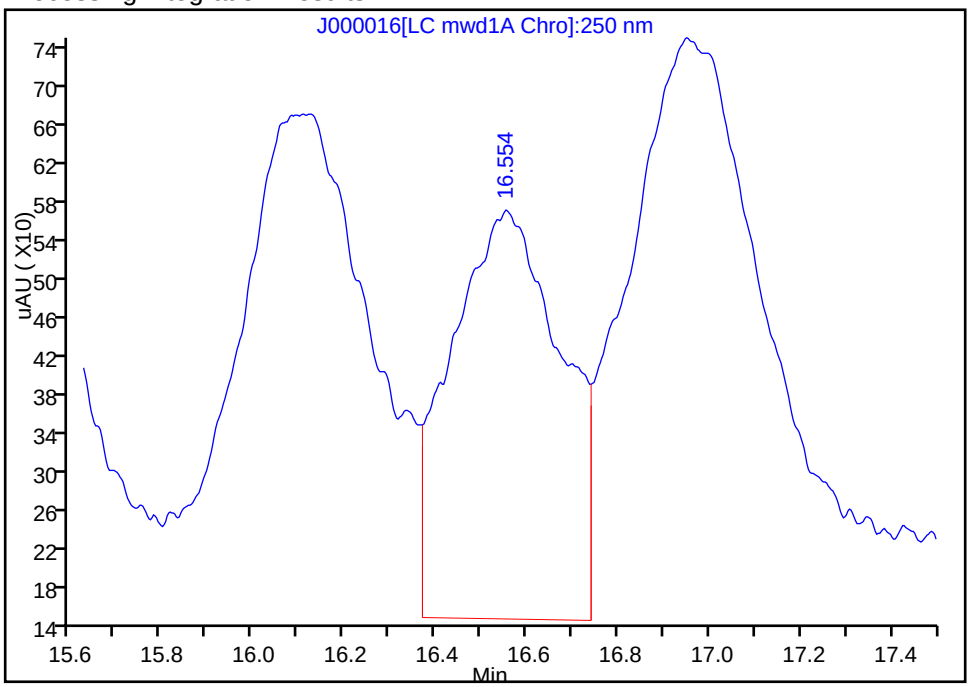
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D
Injection Date: 11-Mar-2015 22:20:25 Instrument ID: LC10
Lims ID: LODV
Client ID:
Operator ID: YPH ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

$ 30 3,4-Dinitrotoluene, CAS: 610-39-9

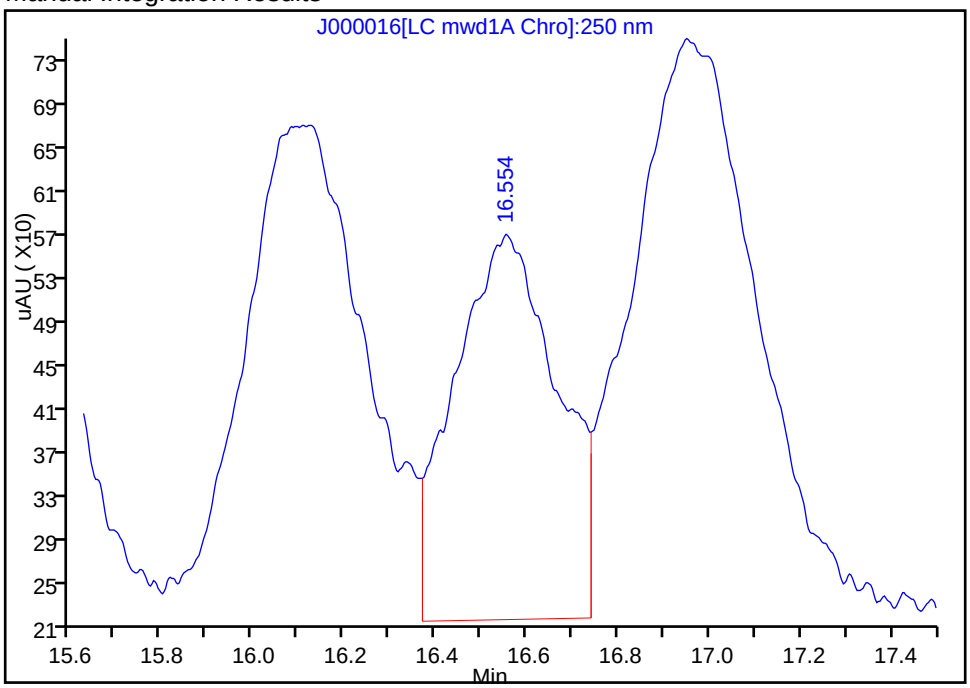
Processing Integration Results

RT: 16.55
Height: 423
Amount: 6.310123
Amount Units: ng/ml



Manual Integration Results

RT: 16.55
Height: 351
Amount: 5.236060
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

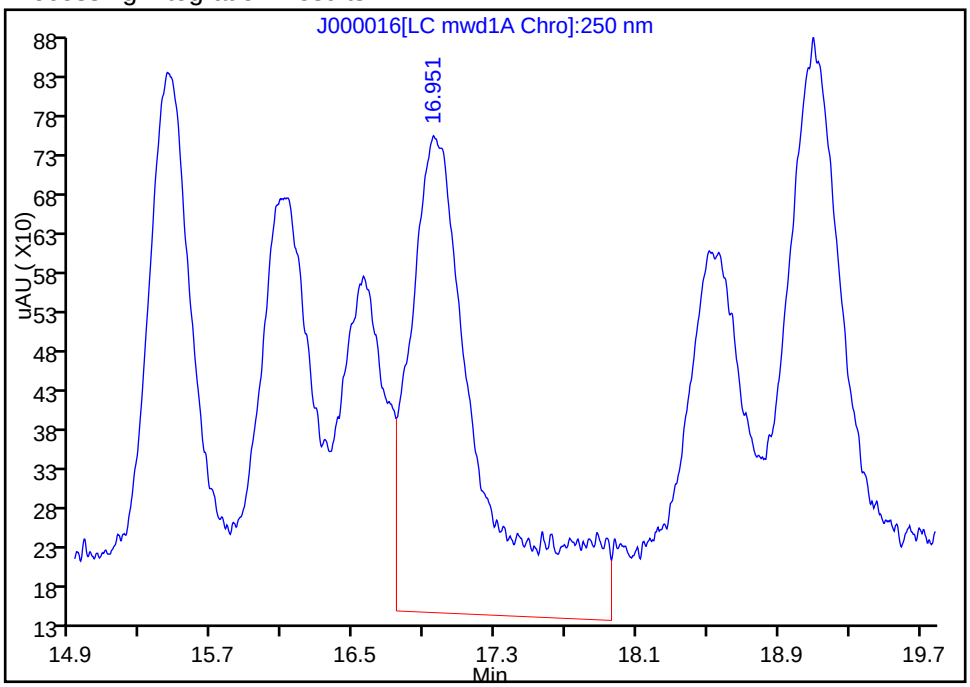
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D
Injection Date: 11-Mar-2015 22:20:25 Instrument ID: LC10
Lims ID: LODV
Client ID:
Operator ID: YPH ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

6 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

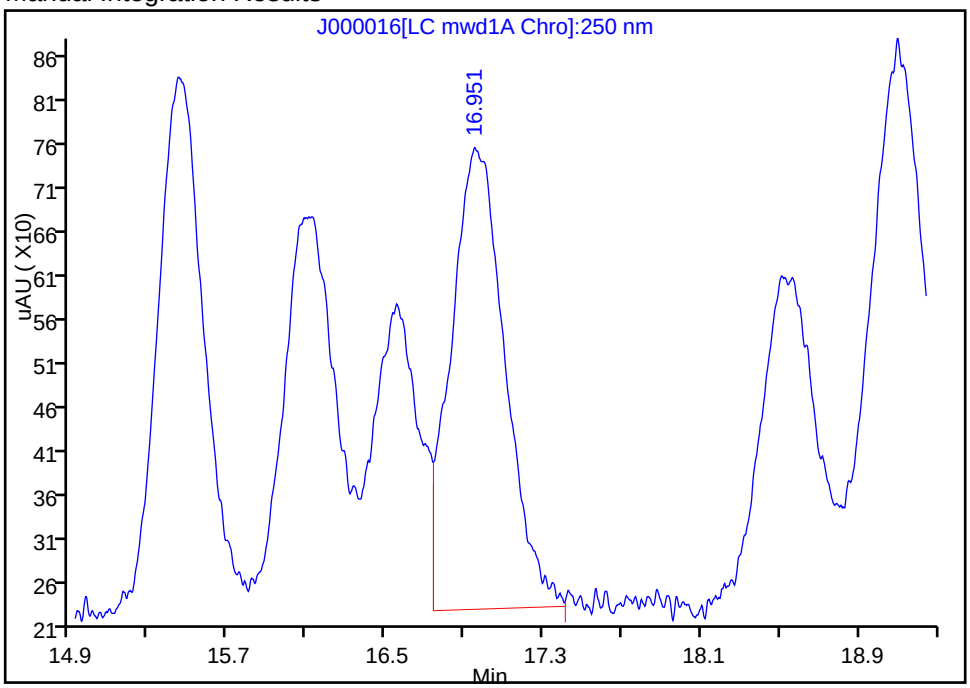
Processing Integration Results

RT: 16.95
Height: 605
Amount: 5.923483
Amount Units: ng/ml



Manual Integration Results

RT: 16.95
Height: 526
Amount: 5.150003
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

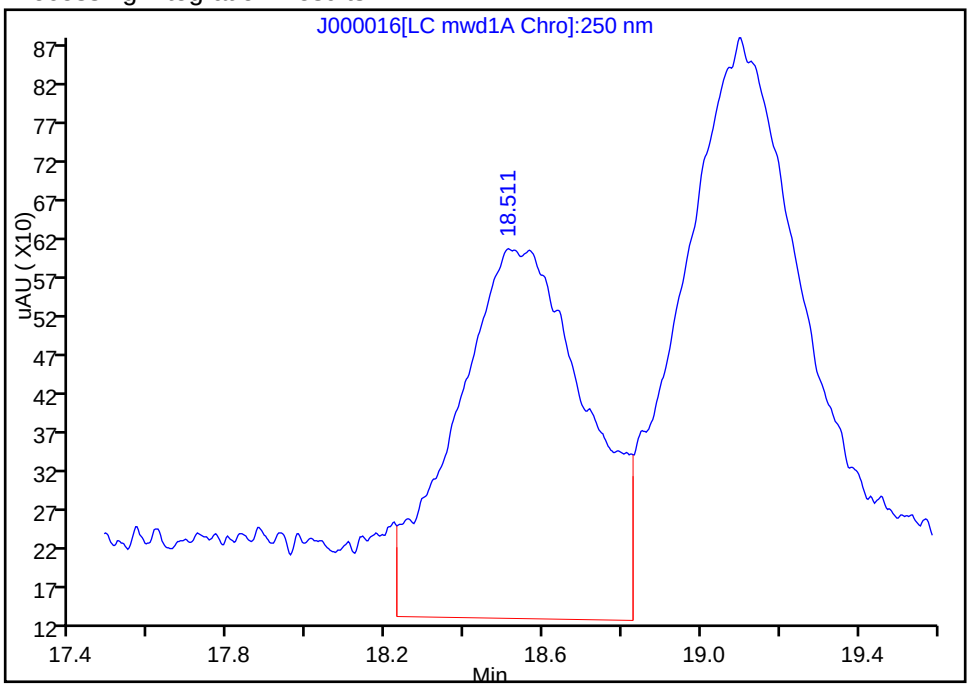
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D				
Injection Date:	11-Mar-2015 22:20:25	Instrument ID:	LC10		
Lims ID:	LODV				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	12	Worklist Smp#:	13
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

12 2,6-Dinitrotoluene, CAS: 606-20-2

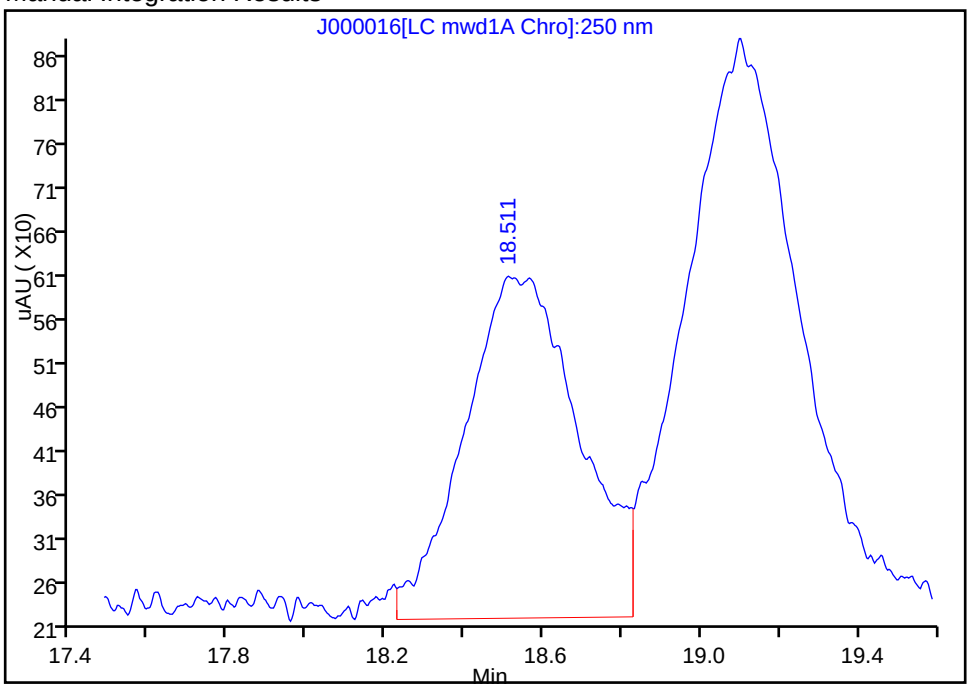
Processing Integration Results

RT: 18.51
Height: 474
Amount: 6.583438
Amount Units: ng/ml



Manual Integration Results

RT: 18.51
Height: 389
Amount: 5.407155
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

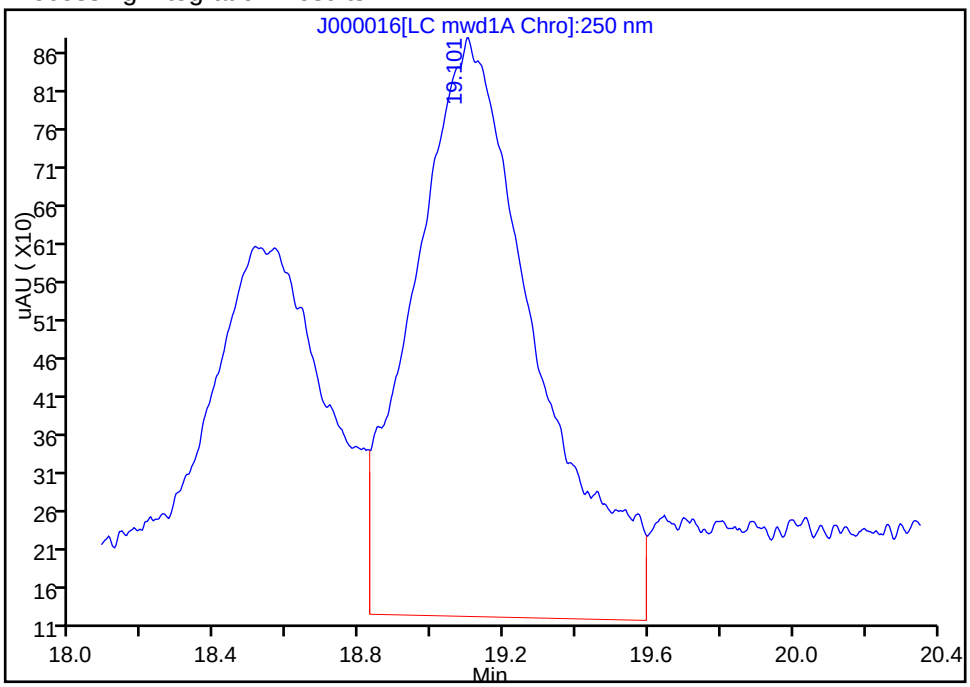
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D
Injection Date: 11-Mar-2015 22:20:25 Instrument ID: LC10
Lims ID: LODV
Client ID:
Operator ID: YPH ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

23 2,4-Dinitrotoluene, CAS: 121-14-2

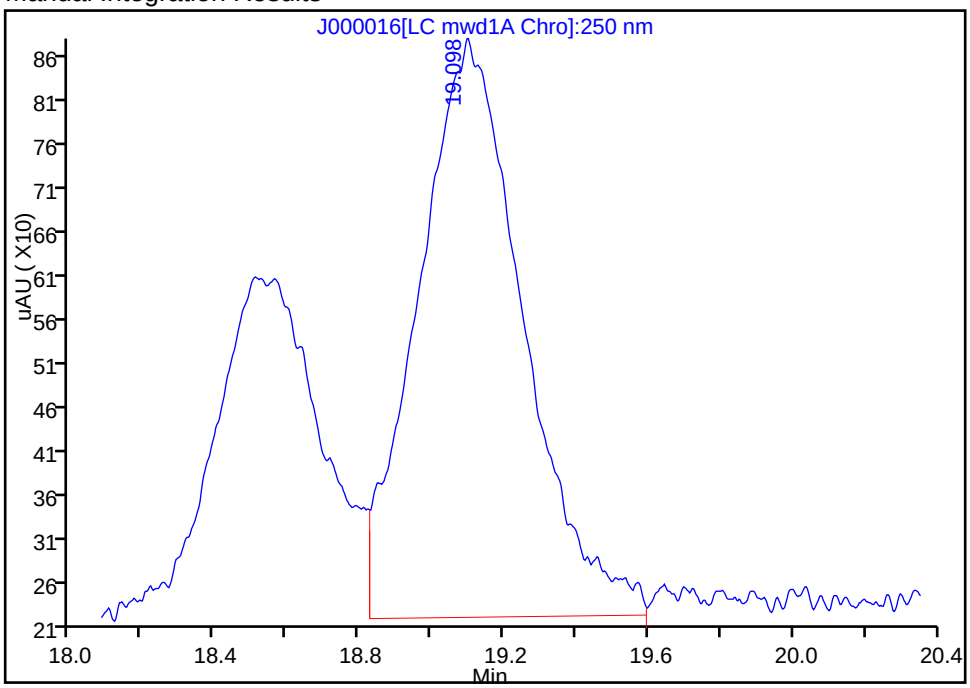
Processing Integration Results

RT: 19.10
Height: 749
Amount: 6.329167
Amount Units: ng/ml



Manual Integration Results

RT: 19.10
Height: 656
Amount: 5.545981
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

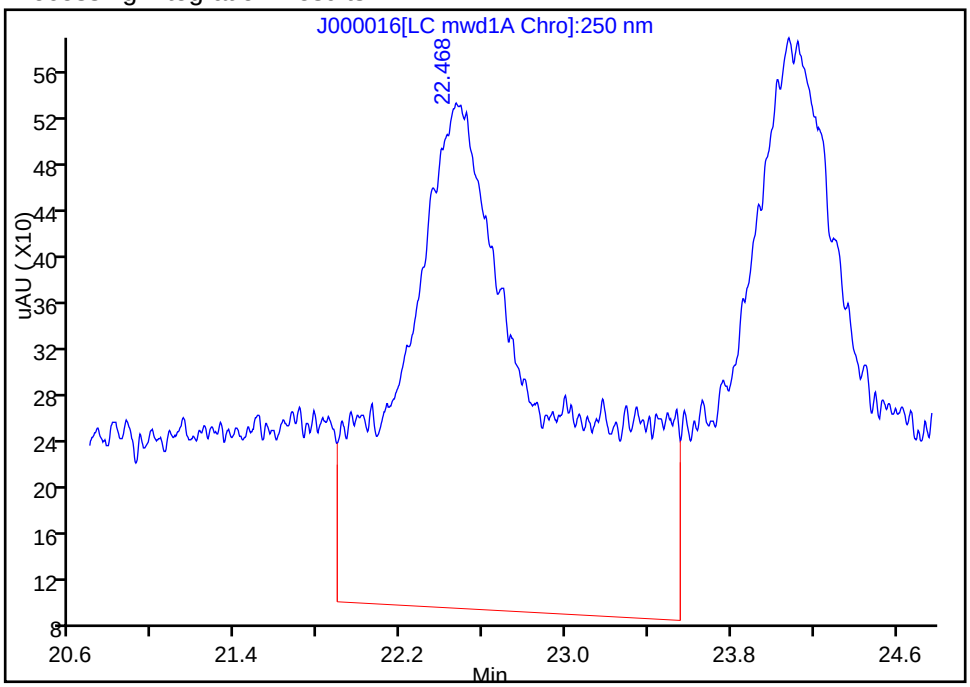
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D				
Injection Date:	11-Mar-2015 22:20:25	Instrument ID:	LC10		
Lims ID:	LODV				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	12	Worklist Smp#:	13
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

16 o-Nitrotoluene, CAS: 88-72-2

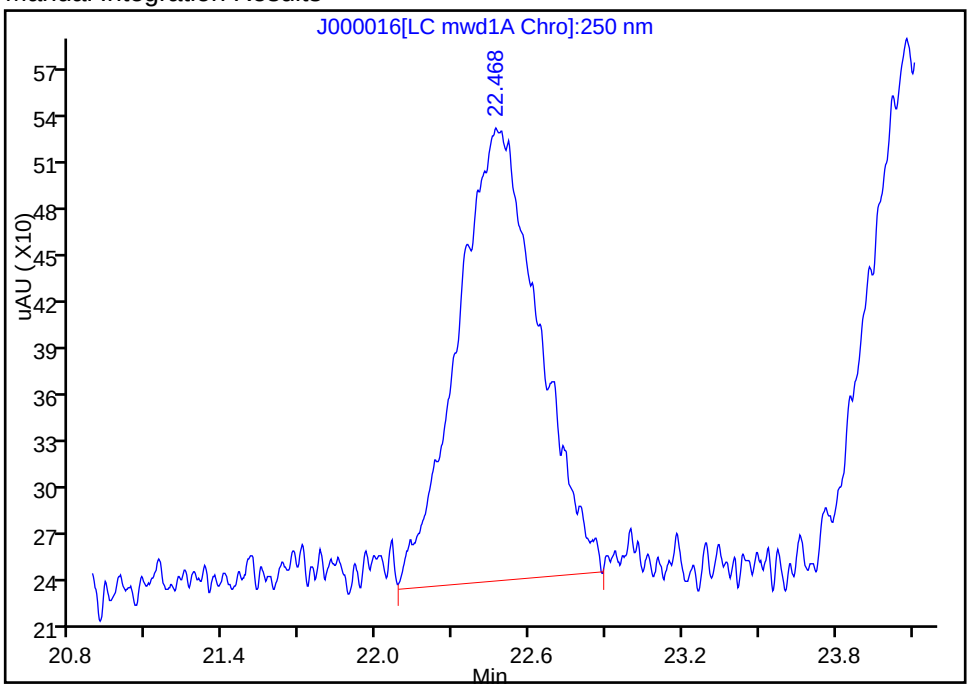
Processing Integration Results

RT: 22.47
Height: 434
Amount: 8.272384
Amount Units: ng/ml



Manual Integration Results

RT: 22.47
Height: 284
Amount: 5.419168
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

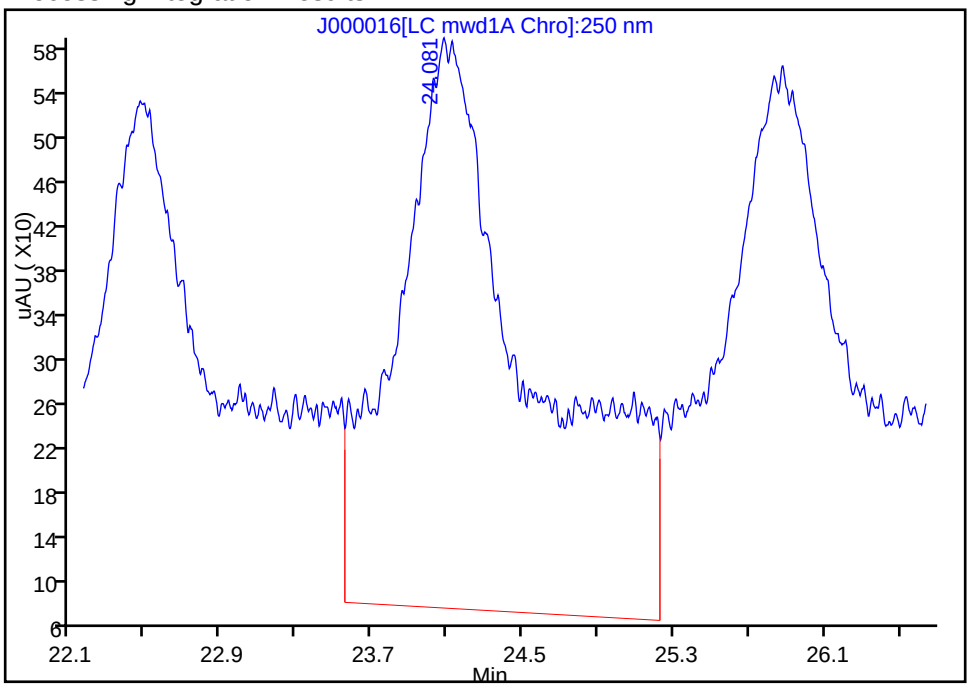
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D
Injection Date: 11-Mar-2015 22:20:25 Instrument ID: LC10
Lims ID: LODV
Client ID:
Operator ID: YPH ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

15 p-Nitrotoluene, CAS: 99-99-0

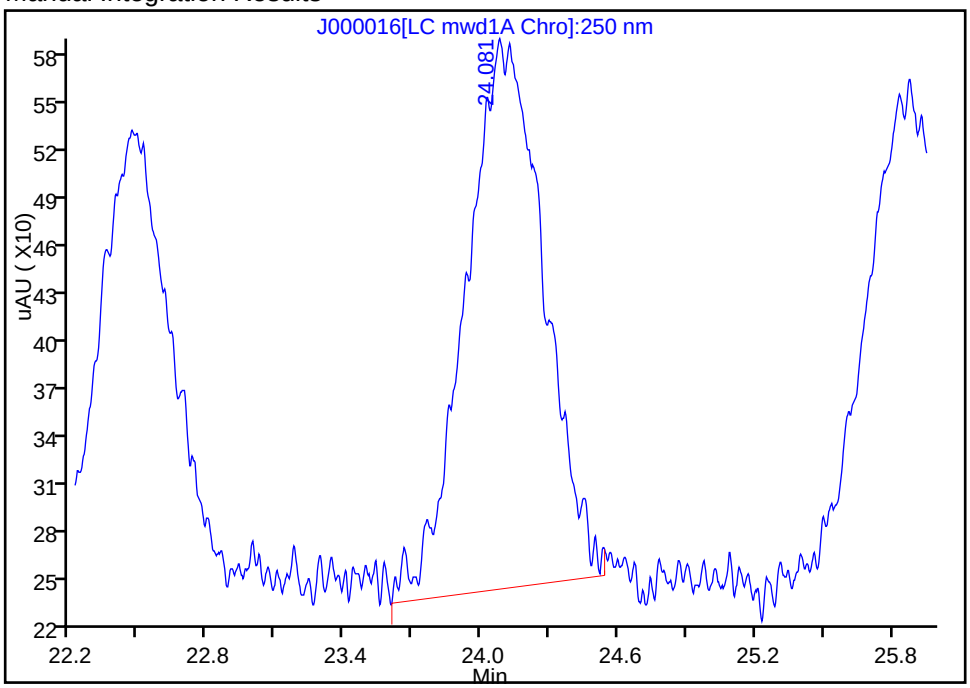
Processing Integration Results

RT: 24.08
Height: 506
Amount: 7.460973
Amount Units: ng/ml



Manual Integration Results

RT: 24.08
Height: 337
Amount: 5.352836
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

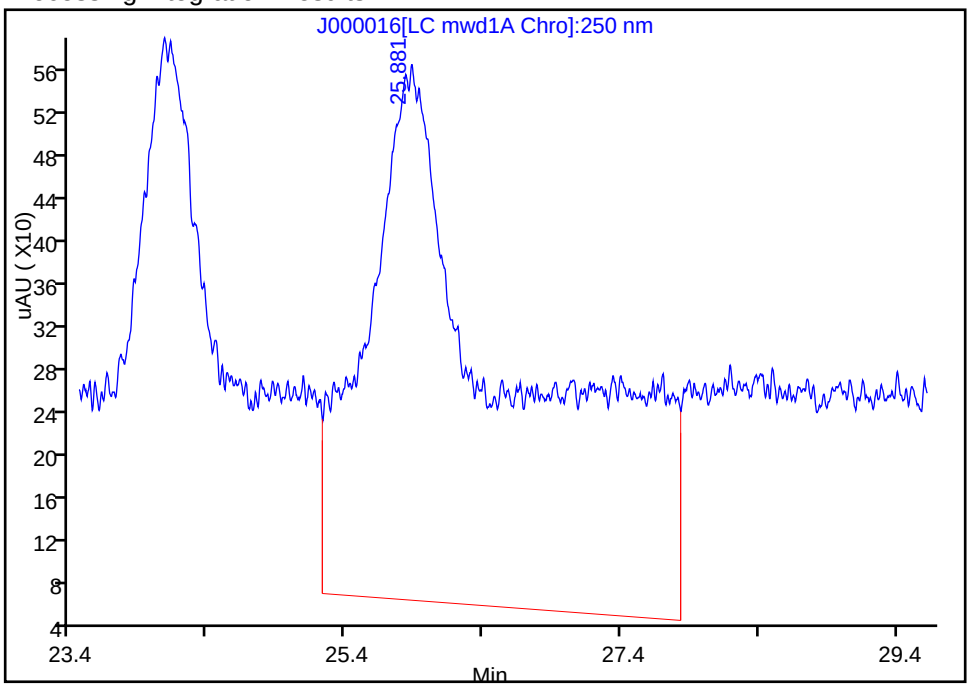
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D
Injection Date: 11-Mar-2015 22:20:25 Instrument ID: LC10
Lims ID: LODV
Client ID:
Operator ID: YPH ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

8 m-Nitrotoluene, CAS: 99-08-1

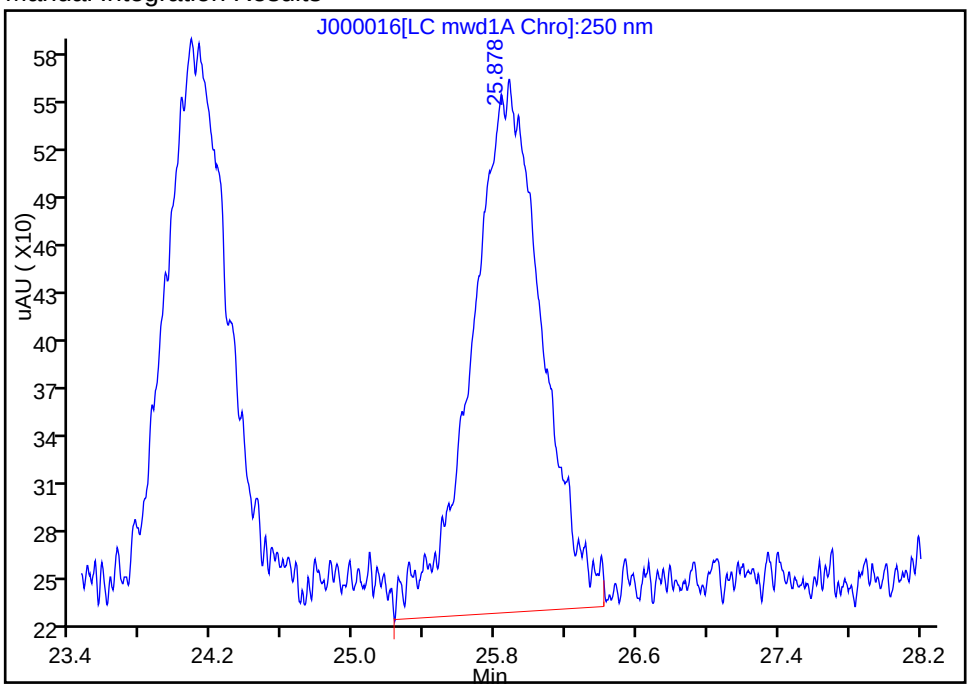
Processing Integration Results

RT: 25.88
Height: 498
Amount: 8.418399
Amount Units: ng/ml



Manual Integration Results

RT: 25.88
Height: 326
Amount: 5.505521
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

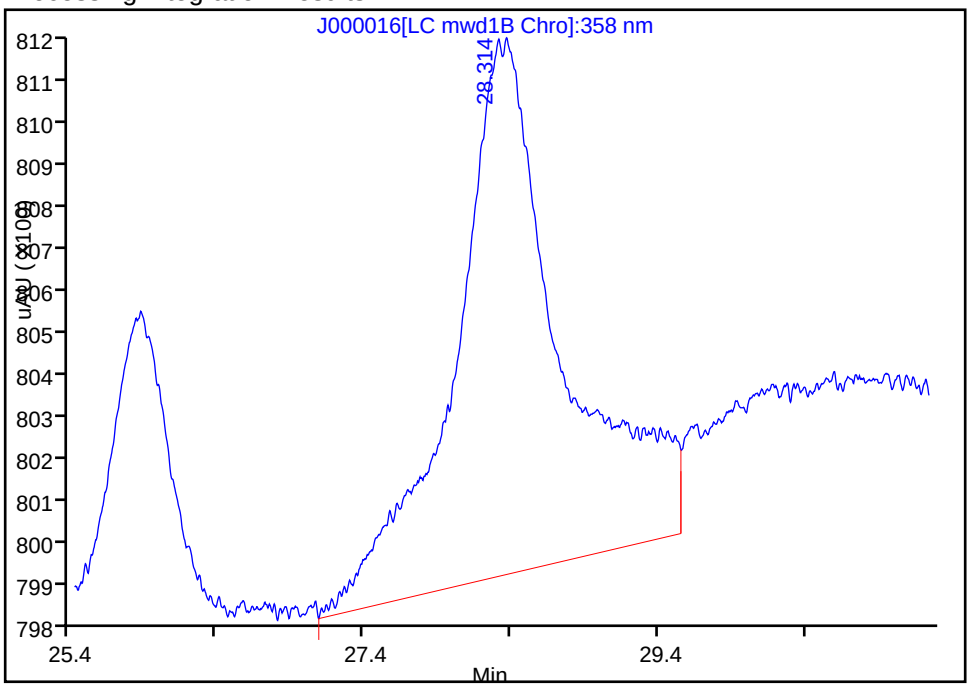
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000016.D
Injection Date: 11-Mar-2015 22:20:25 Instrument ID: LC10
Lims ID: LODV
Client ID:
Operator ID: YPH ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Detector LC mwd1B, 358 nm

21 PETN, CAS: 78-11-5

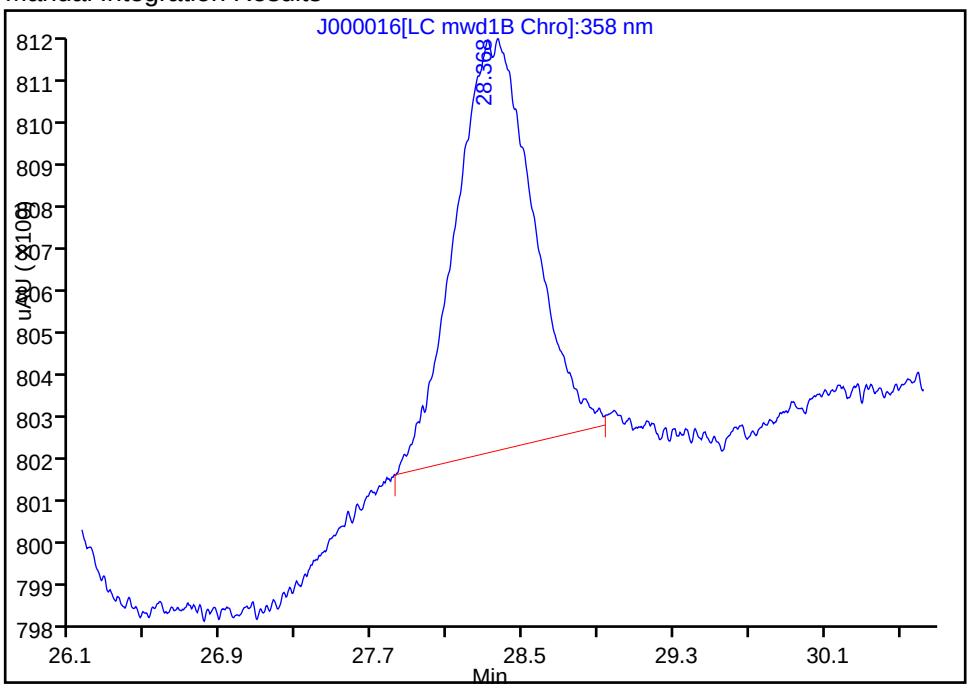
Processing Integration Results

RT: 28.31
Height: 1175
Amount: 26.091301
Amount Units: ng/ml



Manual Integration Results

RT: 28.37
Height: 901
Amount: 20.274071
Amount Units: ng/ml



Reviewer: phant, 12-Mar-2015 06:46:27
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCVL 320-71988/3 Calibration Date: 04/23/2015 16:49

Instrument ID: LC10 Calib Start Date: 03/11/2015 15:47

GC Column: Synergi C18 ID: 4.60(mm) Calib End Date: 03/11/2015 20:09

Lab File ID: W000003.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	147.1	128.2		4.36	5.00	-12.9	30.0
RDX	Ave	101.4	96.60		4.76	5.00	-4.7	30.0
Ethylene glycol dinitrate	Ave	120.7	113.4		18.8	20.0	-6.1	30.0
Picric acid	Ave	130.7	115.3		17.6	20.0	-11.8	30.0
1,3,5-Trinitrobenzene	Ave	194.5	172.4		4.43	5.00	-11.3	30.0
1,3-Dinitrobenzene	Ave	186.8	171.0		4.58	5.00	-8.5	30.0
3,5-Dinitroaniline	Ave	123.0	113.2		4.60	5.00	-8.0	30.0
Tetryl	Ave	111.0	109.4		4.93	5.00	-1.4	30.0
Nitrobenzene	Ave	84.47	86.20		5.10	5.00	2.0	30.0
Nitroglycerin	Ave	76.63	73.30		19.1	20.0	-4.4	30.0
2,4,6-Trinitrotoluene	Ave	113.7	104.6		4.60	5.00	-8.0	30.0
4-Amino-2,6-dinitrotoluene	Ave	91.51	81.20		4.44	5.00	-11.3	30.0
2-Amino-4,6-dinitrotoluene	Ave	102.1	94.40		4.62	5.00	-7.6	30.0
2,6-Dinitrotoluene	Ave	71.94	65.60		4.56	5.00	-8.8	30.0
2,4-Dinitrotoluene	Ave	118.3	105.0		4.44	5.00	-11.2	30.0
2-Nitrotoluene	Ave	52.41	48.40		4.62	5.00	-7.6	30.0
4-Nitrotoluene	Ave	62.96	57.00		4.53	5.00	-9.5	30.0
3-Nitrotoluene	Ave	59.21	56.20		4.75	5.00	-5.1	30.0
PETN	Ave	44.44	46.40		20.9	20.0	4.4	30.0
3,4-Dinitrotoluene	Ave	67.04	69.60		5.19	5.00	3.8	30.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCVL 320-71988/3 Calibration Date: 04/23/2015 16:49

Instrument ID: LC10 Calib Start Date: 03/11/2015 15:47

GC Column: Synergi C18 ID: 4.60(mm) Calib End Date: 03/11/2015 20:09

Lab File ID: W000003.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	5.19	4.94	5.44
RDX	7.46	7.21	7.71
Ethylene glycol dinitrate	8.10	7.85	8.35
Picric acid	8.68	8.43	8.93
1,3,5-Trinitrobenzene	9.68	9.43	9.93
1,3-Dinitrobenzene	12.29	12.04	12.54
3,5-Dinitroaniline	13.02	12.77	13.27
Tetryl	13.54	13.29	13.79
Nitrobenzene	14.03	13.78	14.28
Nitroglycerin	14.84	14.59	15.09
2,4,6-Trinitrotoluene	15.53	15.28	15.78
4-Amino-2,6-dinitrotoluene	16.23	15.98	16.48
2-Amino-4,6-dinitrotoluene	17.11	16.86	17.36
2,6-Dinitrotoluene	18.62	18.37	18.87
2,4-Dinitrotoluene	19.23	18.98	19.48
2-Nitrotoluene	22.58	22.33	22.83
4-Nitrotoluene	24.21	23.96	24.46
3-Nitrotoluene	26.01	25.76	26.26
PETN	28.49	28.24	28.74
3,4-Dinitrotoluene	16.66	16.41	16.91

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000003.D
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 23-Apr-2015 16:49:40 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021275-003
Operator ID: YPH Instrument ID: LC10
Sublist: chrom-8330_LC10*sub1

Method: \\SACChrom\ChromData\LC10\20150423-21275.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 23-Apr-2015 17:37:55 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK026

First Level Reviewer: huangyun Date: 23-Apr-2015 17:37:55

	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
	11 HMX							
	1	5.188	5.188	0.000	641H	5.00	4.36	
	19 RDX							
	1	7.458	7.458	0.000	483H	5.00	4.76	
	3 Ethylene glycol dinitrate							
	2	8.101	8.101	0.000	2267H	20.0	18.8	
	10 2,4,6-Trinitrophenol							
	2	8.678	8.678	0.000	2305H	20.0	17.6	
	1	8.678	8.678	0.000	1599H	20.0	17.4	
	27 1,3,5-Trinitrobenzene							
	1	9.675	9.675	0.000	862H	5.00	4.43	
	24 1,3-Dinitrobenzene							
	1	12.292	12.292	0.000	855H	5.00	4.58	
	9 3,5-Dinitroaniline							
	1	13.022	13.022	0.000	566H	5.00	4.60	
	20 Tetryl							
	1	13.542	13.542	0.000	547H	5.00	4.93	
	5 Nitrobenzene							
	1	14.032	14.032	0.000	431H	5.00	5.10	
	7 Nitroglycerin							
	2	14.835	14.835	0.000	1466H	20.0	19.1	
	25 2,4,6-Trinitrotoluene							M
	1	15.532	15.532	0.000	523H	5.00	4.60	M
	26 4-Amino-2,6-dinitrotoluene							M
	1	16.225	16.225	0.000	406H	5.00	4.44	M
$	30 3,4-Dinitrotoluene							M
	1	16.658	16.658	0.000	348H	5.00	5.19	M
	2	16.238	16.238	0.000	742H	5.00	5.53	
	6 2-Amino-4,6-dinitrotoluene							M
	1	17.112	17.112	0.000	472H	5.00	4.62	M
	12 2,6-Dinitrotoluene							M
	1	18.622	18.622	0.000	328H	5.00	4.56	M

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
23 2,4-Dinitrotoluene							M
1	19.225	19.225	0.000	525H	5.00	4.44	M
16 o-Nitrotoluene							M
1	22.582	22.582	0.000	242H	5.00	4.62	M
15 p-Nitrotoluene							M
1	24.212	24.212	0.000	285H	5.00	4.53	M
8 m-Nitrotoluene							M
1	26.008	26.008	0.000	281H	5.00	4.75	M
21 PETN							
2	28.488	28.488	0.000	928H	20.0	20.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330ICL_00025 Amount Added: 1.00 Units: mL

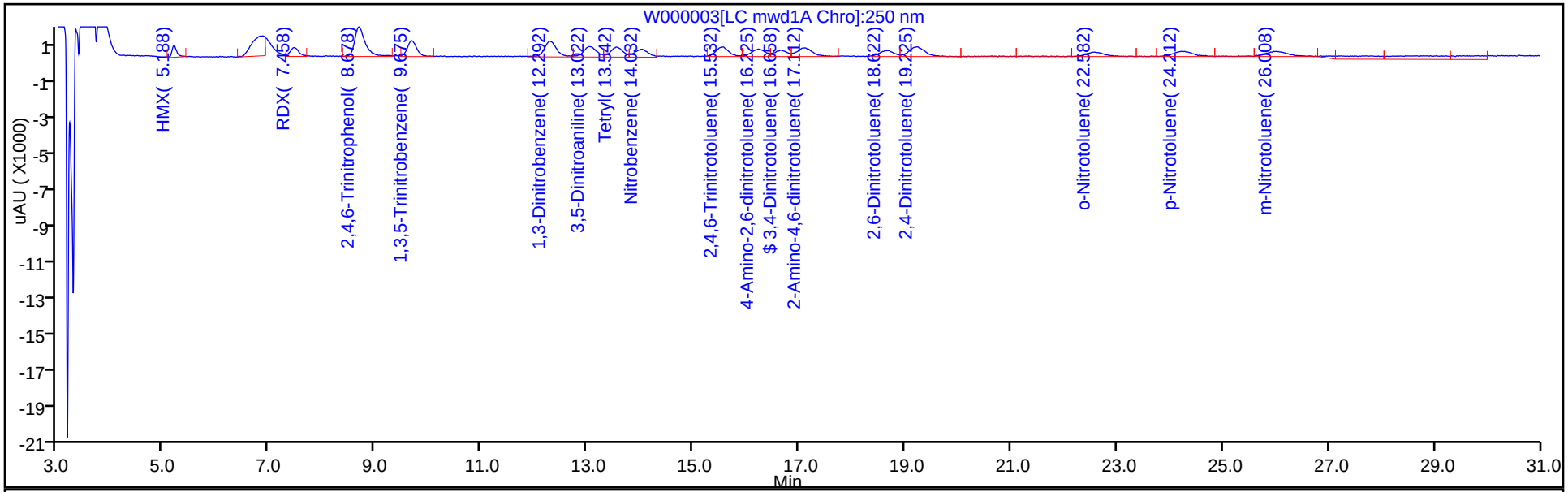
Report Date: 23-Apr-2015 17:37:55 Chrom Revision: 2.2 09-Apr-2015 10:05:40

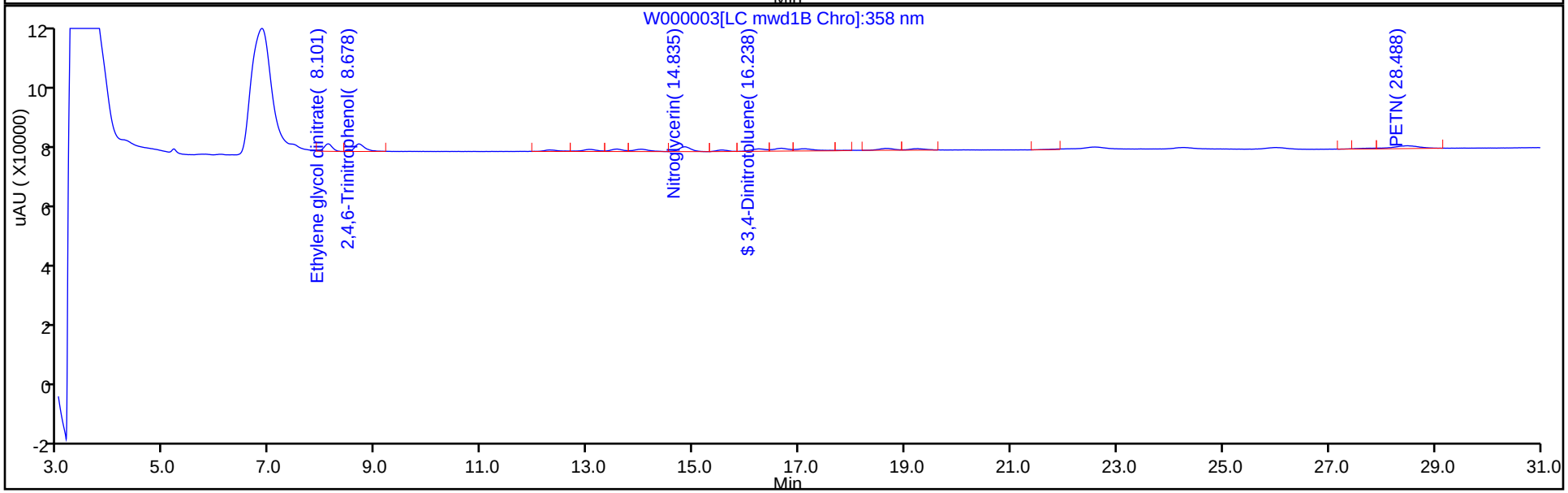
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000003.D

Injection Date:	23-Apr-2015 16:49:40	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	CCVL			Worklist Smp#:	3
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)





Manual Integration/User Assign Peak Report

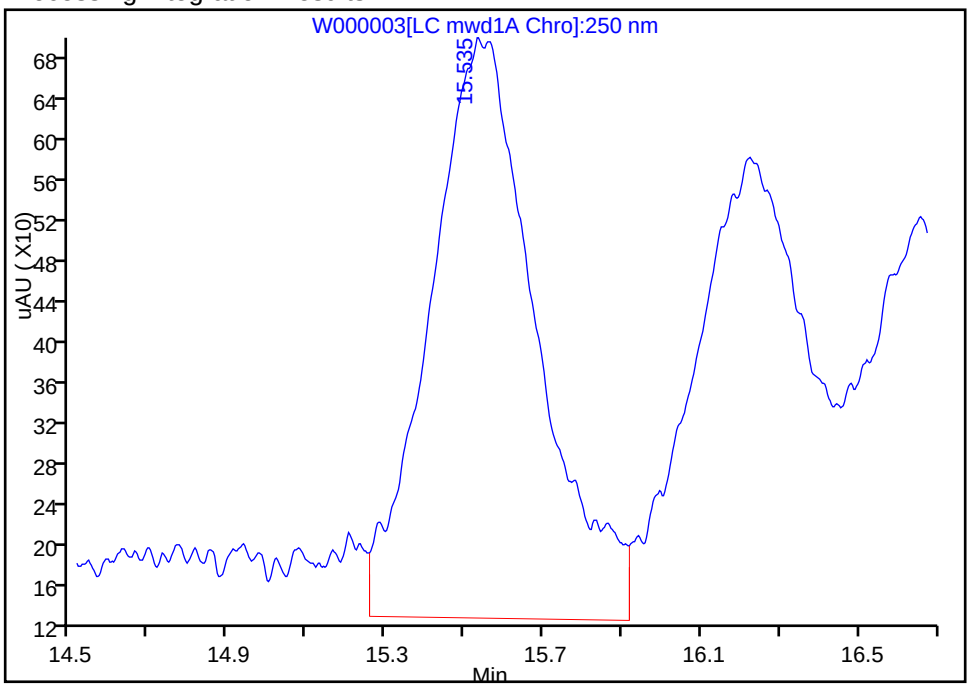
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150423-21275.b\W000003.D				
Injection Date:	23-Apr-2015 16:49:40	Instrument ID:	LC10		
Lims ID:	CCVL				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

25 2,4,6-Trinitrotoluene, CAS: 118-96-7

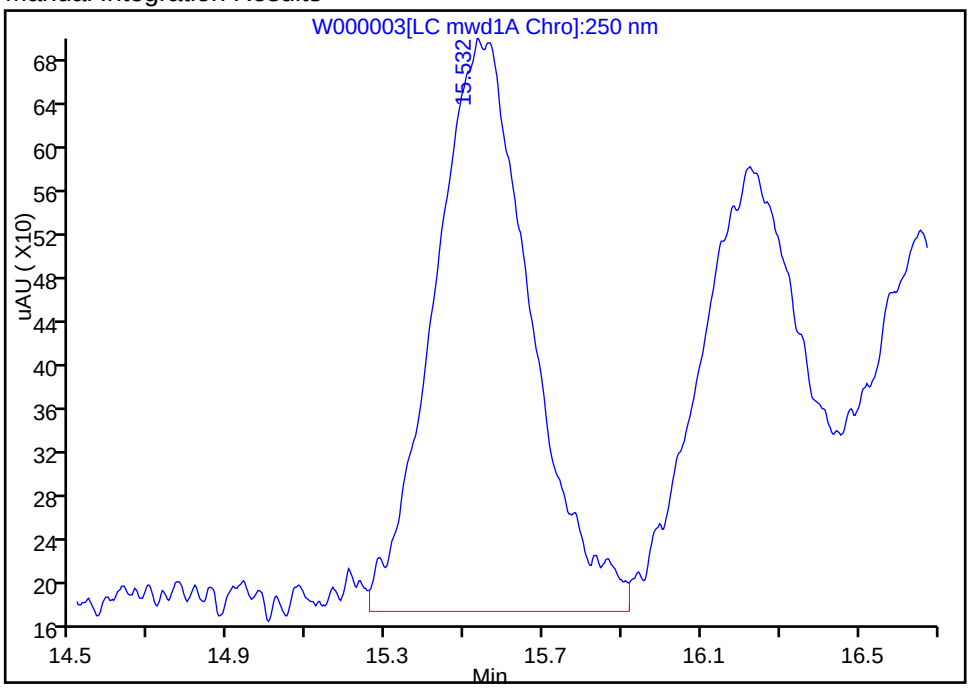
Processing Integration Results

RT: 15.53
Height: 568
Amount: 4.997656
Amount Units: ng/ml



Manual Integration Results

RT: 15.53
Height: 523
Amount: 4.601715
Amount Units: ng/ml



Reviewer: huangyun, 23-Apr-2015 17:37:55
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

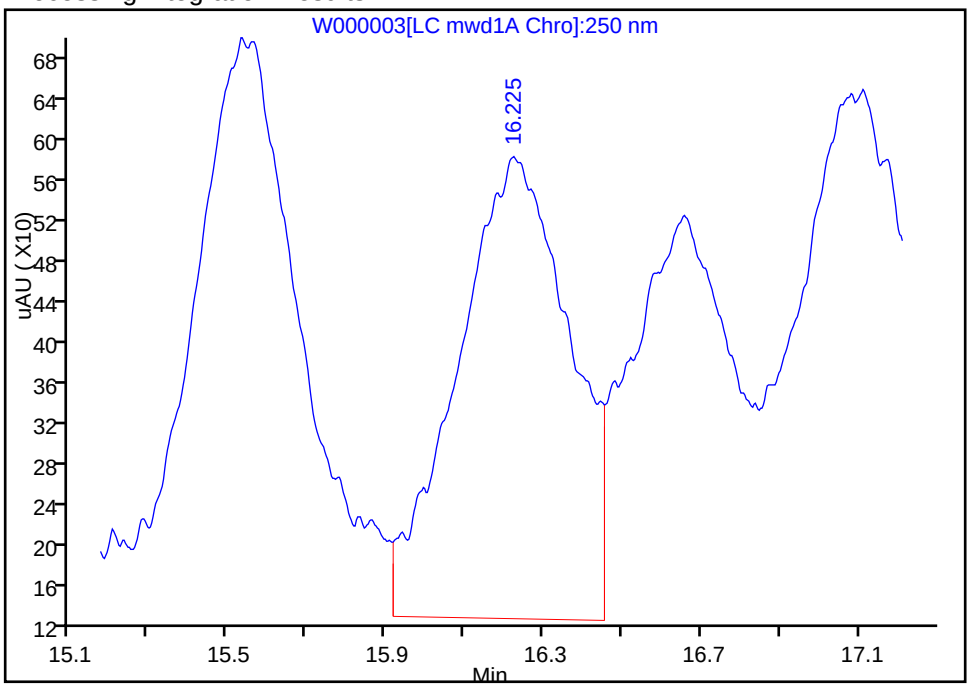
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000003.D
Injection Date: 23-Apr-2015 16:49:40 Instrument ID: LC10
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

26 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

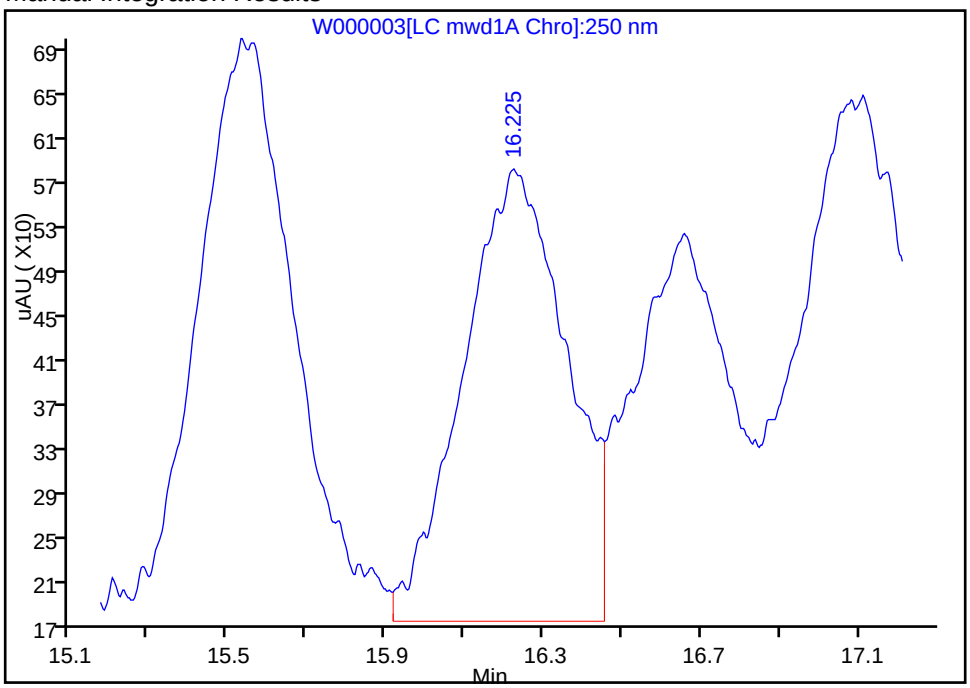
Processing Integration Results

RT: 16.22
Height: 456
Amount: 4.982813
Amount Units: ng/ml



Manual Integration Results

RT: 16.22
Height: 406
Amount: 4.436452
Amount Units: ng/ml



Reviewer: huangyun, 23-Apr-2015 17:37:55
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

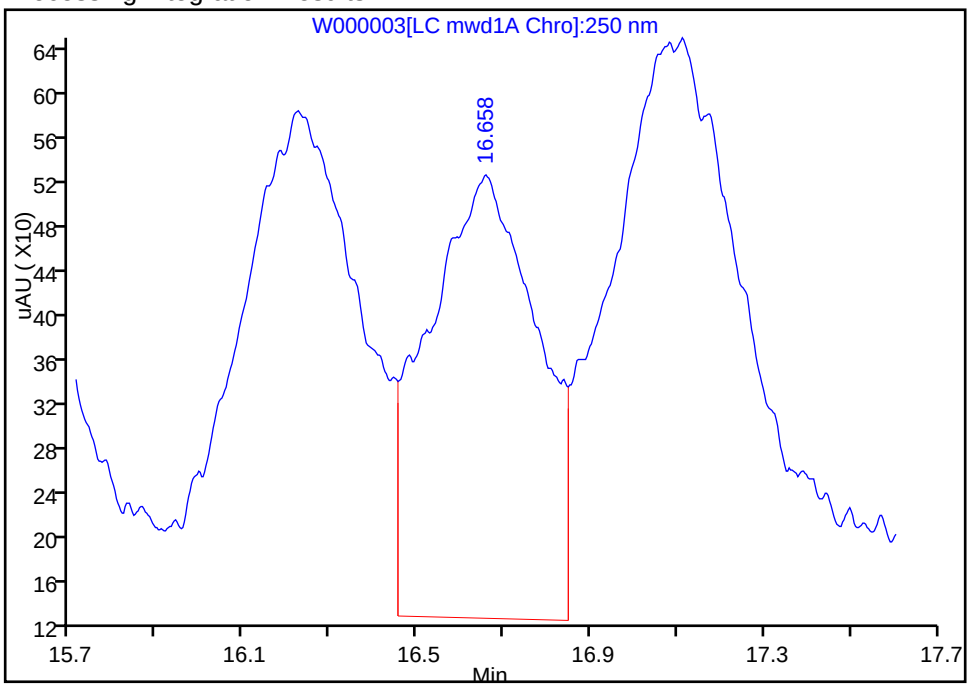
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000003.D
Injection Date: 23-Apr-2015 16:49:40 Instrument ID: LC10
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

$ 30 3,4-Dinitrotoluene, CAS: 610-39-9

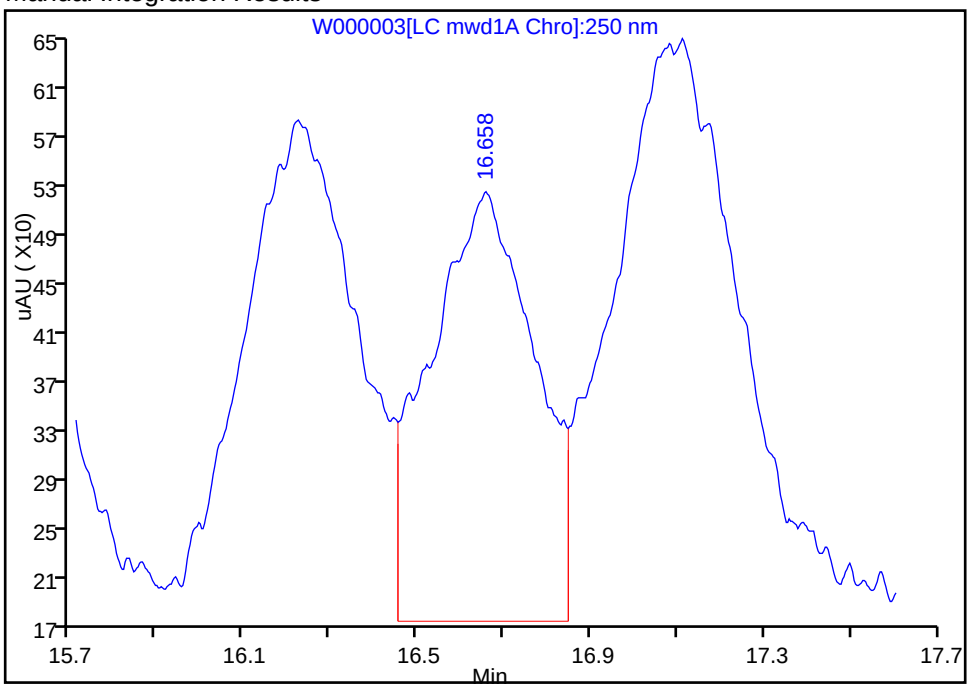
Processing Integration Results

RT: 16.66
Height: 402
Amount: 5.996855
Amount Units: ng/ml



Manual Integration Results

RT: 16.66
Height: 348
Amount: 5.191307
Amount Units: ng/ml



Reviewer: huangyun, 23-Apr-2015 17:37:55
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

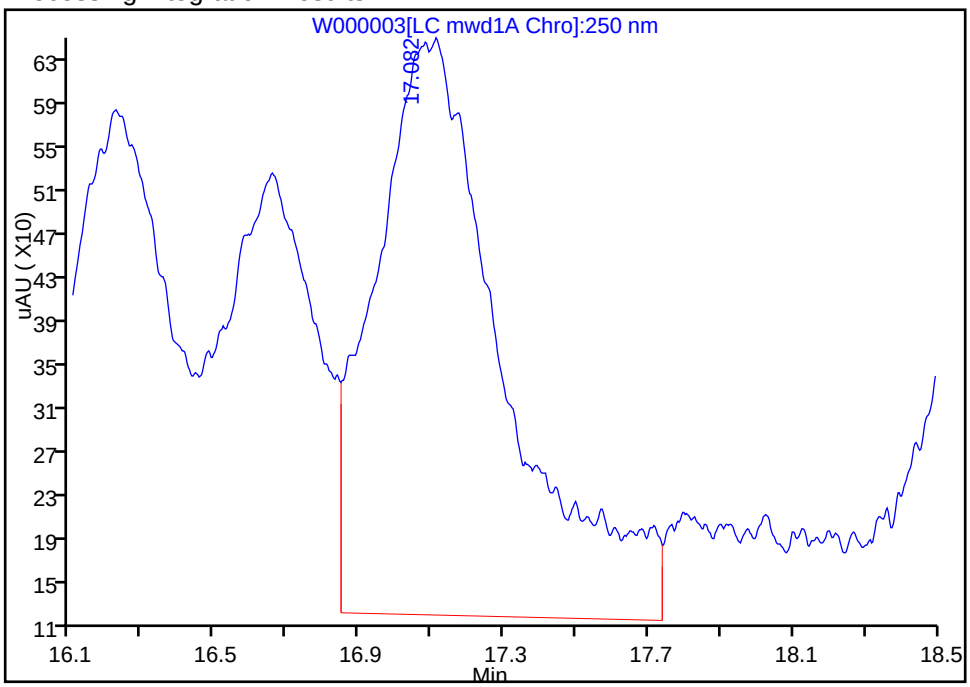
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150423-21275.b\W000003.D				
Injection Date:	23-Apr-2015 16:49:40	Instrument ID:	LC10		
Lims ID:	CCVL				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

6 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

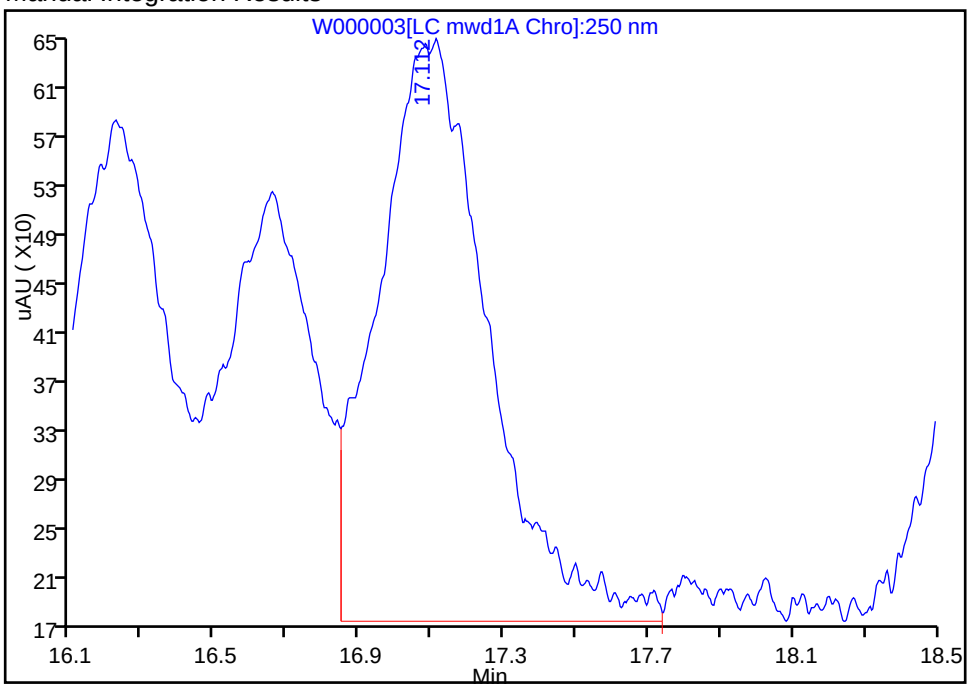
Processing Integration Results

RT: 17.08
Height: 525
Amount: 5.140212
Amount Units: ng/ml



Manual Integration Results

RT: 17.11
Height: 472
Amount: 4.621296
Amount Units: ng/ml



Reviewer: huangyun, 23-Apr-2015 17:37:55
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

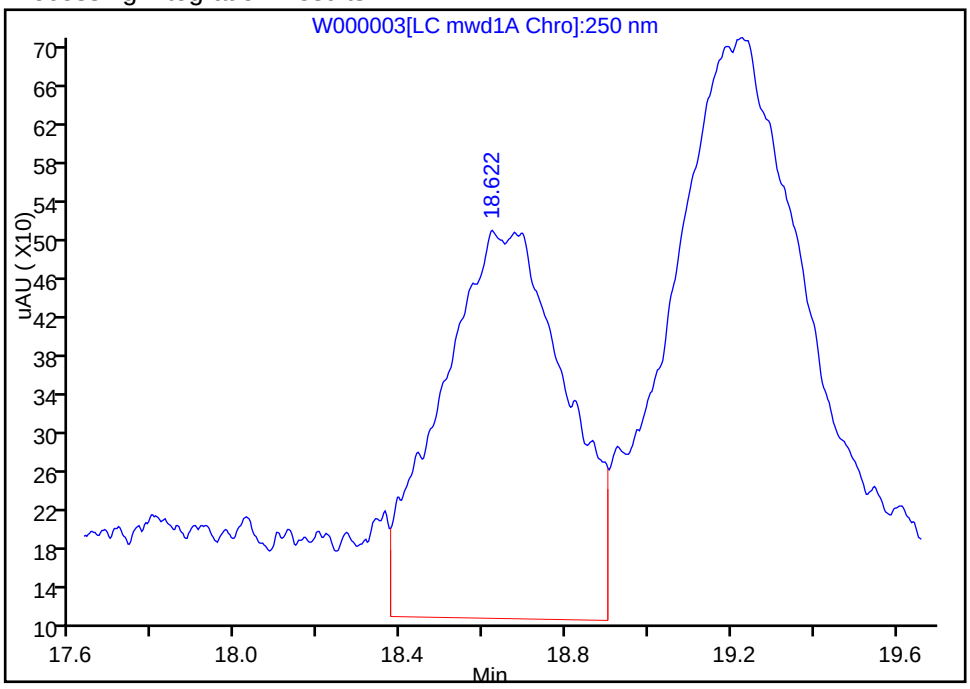
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000003.D
Injection Date: 23-Apr-2015 16:49:40 Instrument ID: LC10
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

12 2,6-Dinitrotoluene, CAS: 606-20-2

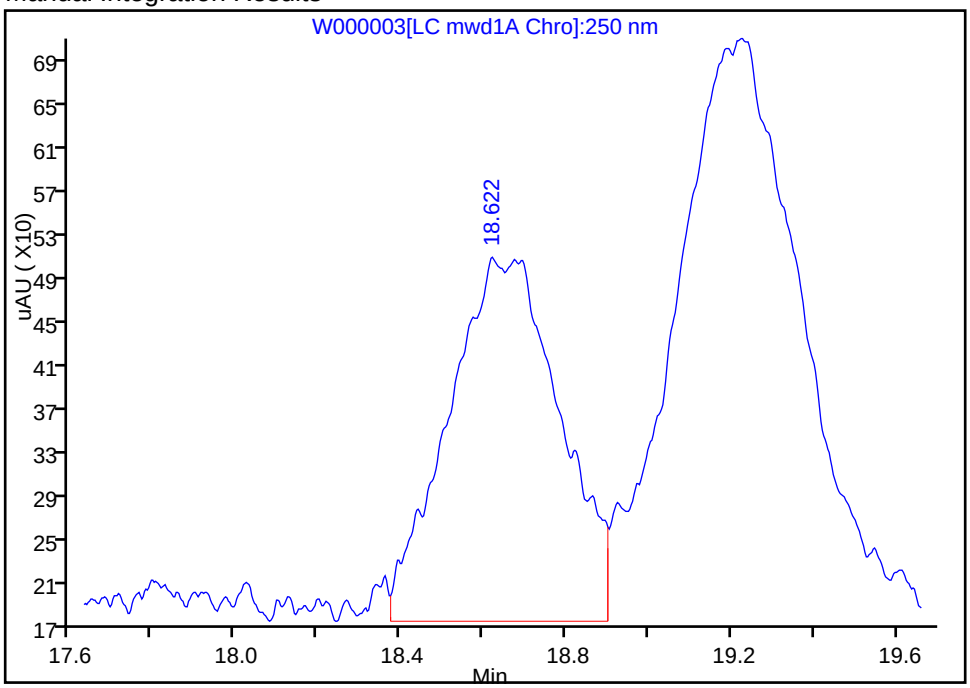
Processing Integration Results

RT: 18.62
Height: 397
Amount: 5.518356
Amount Units: ng/ml



Manual Integration Results

RT: 18.62
Height: 328
Amount: 4.559246
Amount Units: ng/ml



Reviewer: huangyun, 23-Apr-2015 17:37:55
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

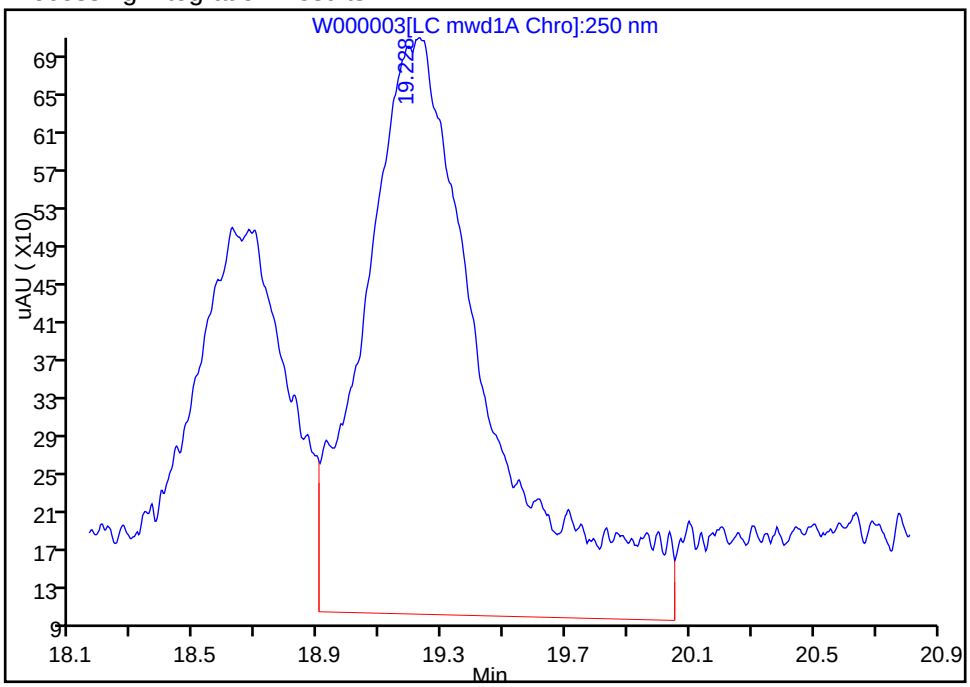
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000003.D
Injection Date: 23-Apr-2015 16:49:40 Instrument ID: LC10
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

23 2,4-Dinitrotoluene, CAS: 121-14-2

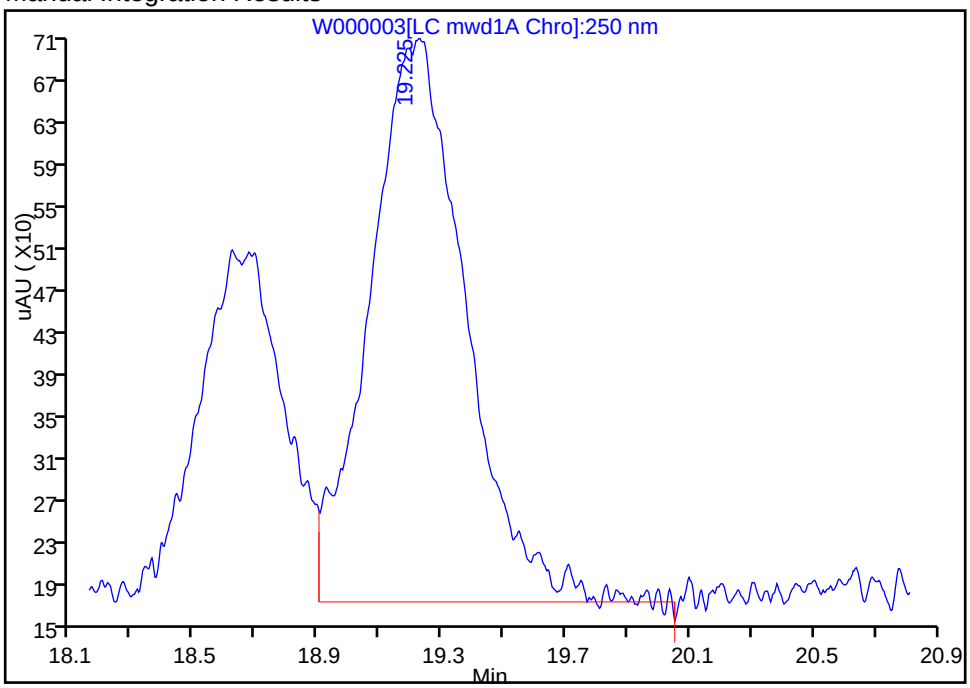
Processing Integration Results

RT: 19.23
Height: 599
Amount: 5.064089
Amount Units: ng/ml



Manual Integration Results

RT: 19.22
Height: 525
Amount: 4.438475
Amount Units: ng/ml



Reviewer: huangyun, 23-Apr-2015 17:37:55
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

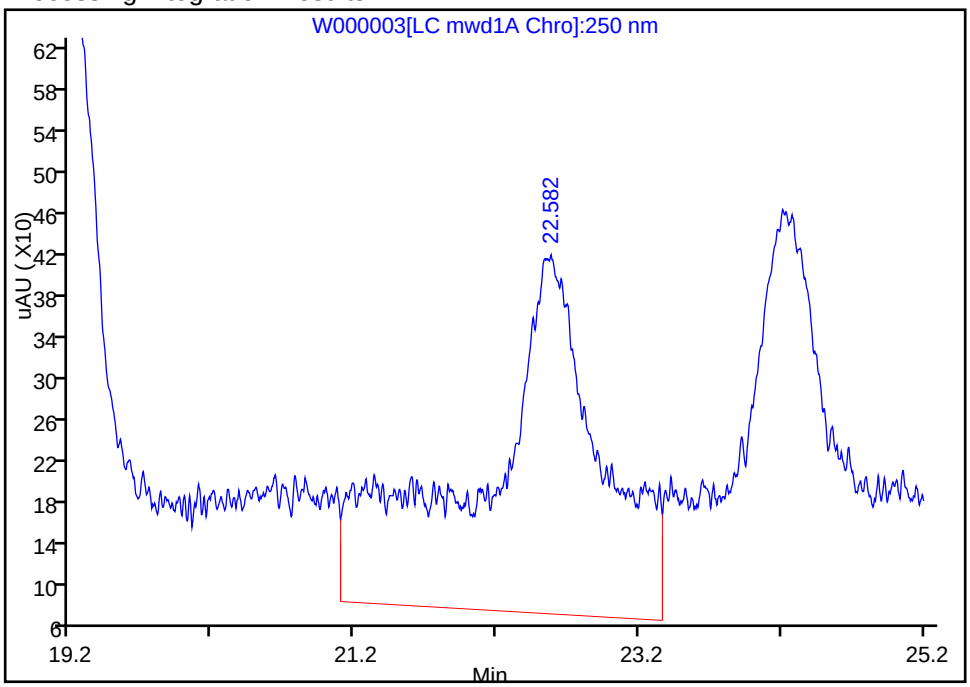
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000003.D
Injection Date: 23-Apr-2015 16:49:40 Instrument ID: LC10
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: 8330_LC10 Limit Group: LC 8330B ICAL
Column: Synergi Hydro-RP C18 (4.60 mm) Detector LC mwd1A, 250 nm

16 o-Nitrotoluene, CAS: 88-72-2

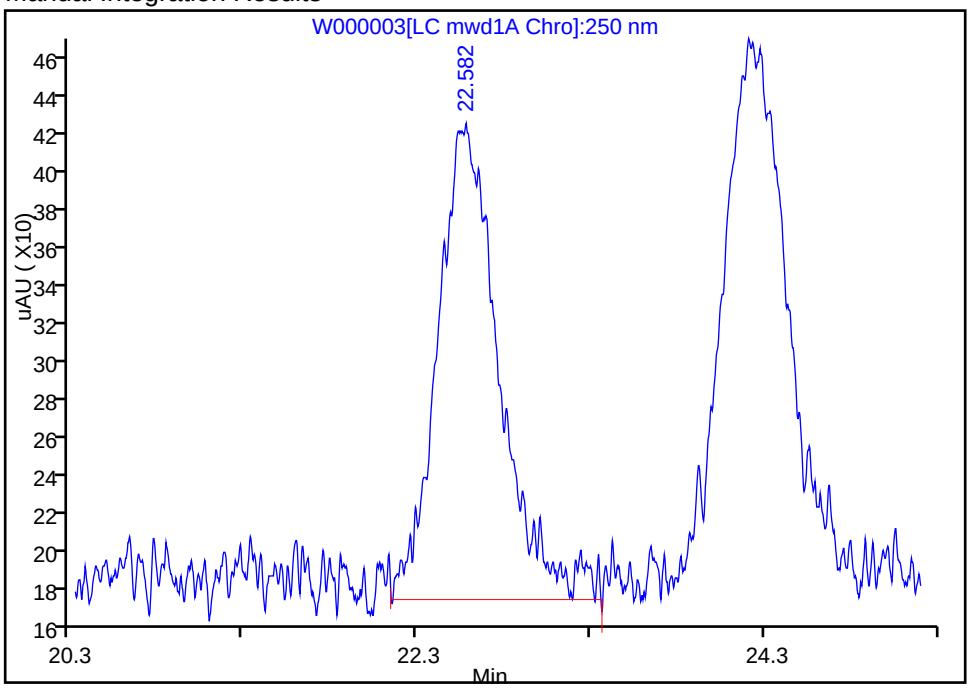
Processing Integration Results

RT: 22.58
Height: 343
Amount: 6.544981
Amount Units: ng/ml



Manual Integration Results

RT: 22.58
Height: 242
Amount: 4.617742
Amount Units: ng/ml



Reviewer: huangyun, 23-Apr-2015 17:37:55
Audit Action: Split an Integrated Peak
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

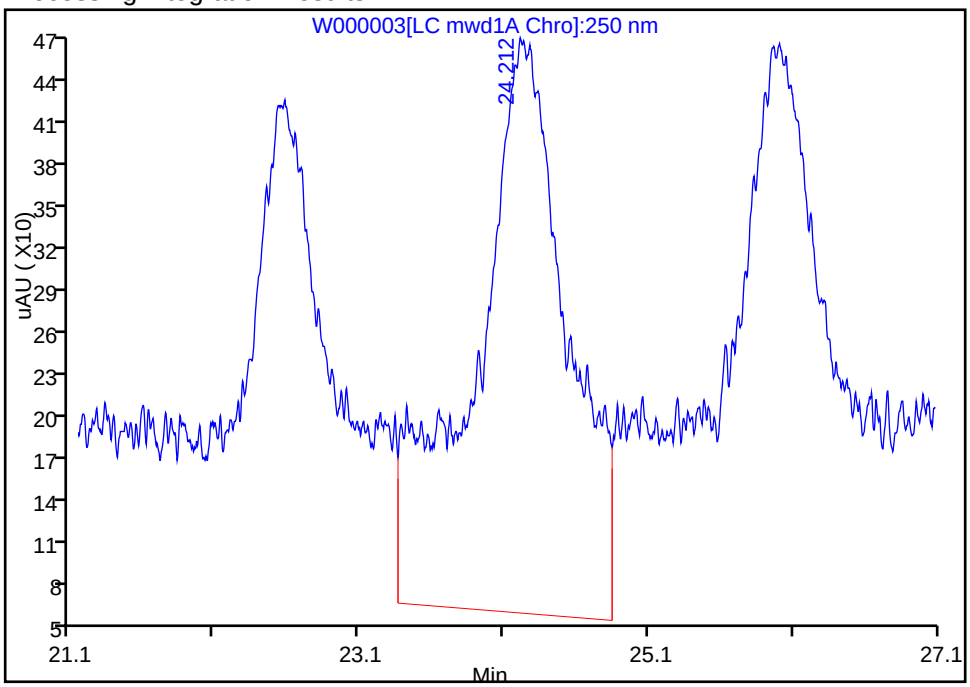
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150423-21275.b\W000003.D				
Injection Date:	23-Apr-2015 16:49:40	Instrument ID:	LC10		
Lims ID:	CCVL				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

15 p-Nitrotoluene, CAS: 99-99-0

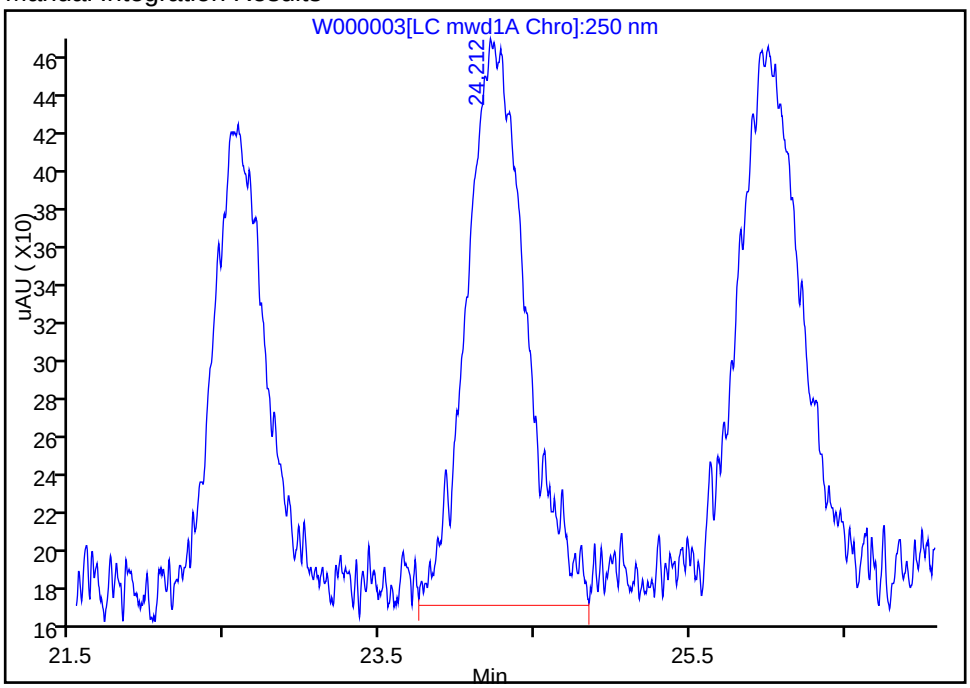
Processing Integration Results

RT: 24.21
Height: 399
Amount: 6.337630
Amount Units: ng/ml



Manual Integration Results

RT: 24.21
Height: 285
Amount: 4.526879
Amount Units: ng/ml



Reviewer: huangyun, 23-Apr-2015 17:37:55
Audit Action: Split an Integrated Peak
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

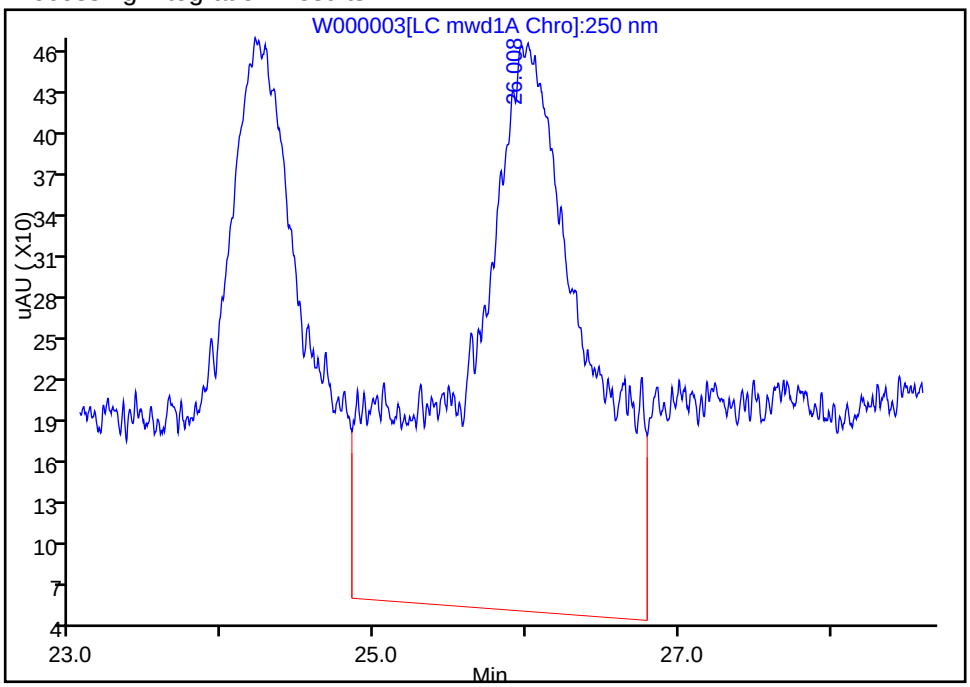
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC10\20150423-21275.b\W000003.D				
Injection Date:	23-Apr-2015 16:49:40	Instrument ID:	LC10		
Lims ID:	CCVL				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		
Column:	Synergi Hydro-RP C18 (4.60 mm)	Detector	LC mwd1A, 250 nm		

8 m-Nitrotoluene, CAS: 99-08-1

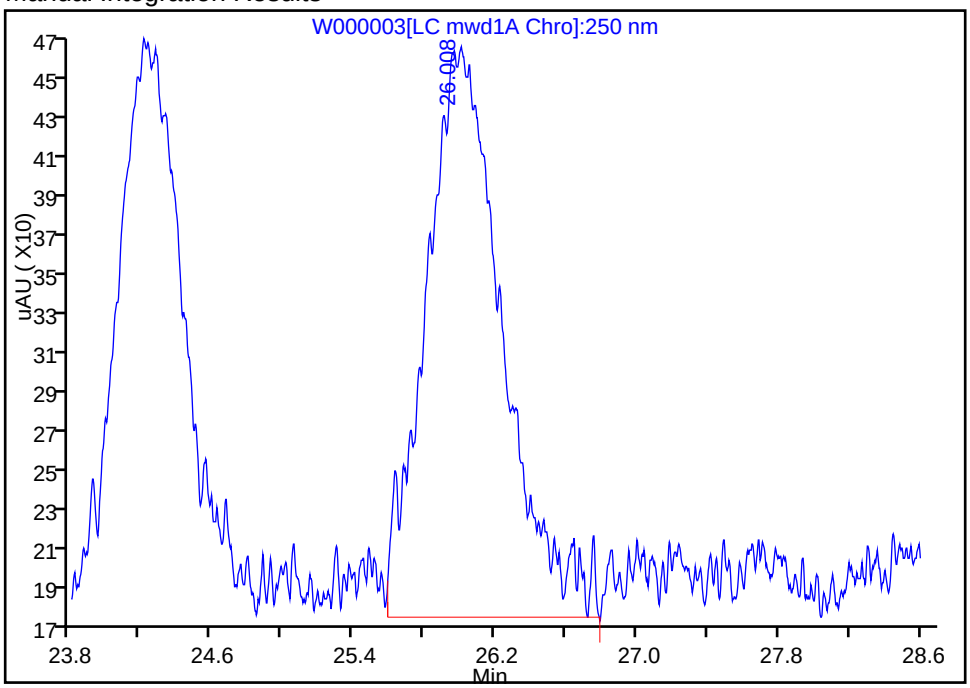
Processing Integration Results

RT: 26.01
Height: 410
Amount: 6.924122
Amount Units: ng/ml



Manual Integration Results

RT: 26.01
Height: 281
Amount: 4.745557
Amount Units: ng/ml



Reviewer: huangyun, 23-Apr-2015 17:37:55
Audit Action: Split an Integrated Peak
Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 320-71988/4 Calibration Date: 04/23/2015 17:33

Instrument ID: LC10 Calib Start Date: 03/11/2015 15:47

GC Column: Synergi C18 ID: 4.60(mm) Calib End Date: 03/11/2015 20:09

Lab File ID: W000004.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	147.1	125.1		85.0	100	-15.0	20.0
RDX	Ave	101.4	83.94		82.8	100	-17.2	20.0
Ethylene glycol dinitrate	Ave	120.7	106.0		87.8	100	-12.2	20.0
Picric acid	Ave	130.7	126.1		193	200	-3.5	20.0
1,3,5-Trinitrobenzene	Ave	194.5	166.5		85.6	100	-14.4	20.0
1,3-Dinitrobenzene	Ave	186.8	160.3		85.8	100	-14.2	20.0
3,5-Dinitroaniline	Ave	123.0	104.3		84.8	100	-15.2	20.0
Tetryl	Ave	111.0	98.81		89.0	100	-11.0	20.0
Nitrobenzene	Ave	84.47	73.63		87.2	100	-12.8	20.0
Nitroglycerin	Ave	76.63	69.34		90.5	100	-9.5	20.0
2,4,6-Trinitrotoluene	Ave	113.7	101.1		89.0	100	-11.0	20.0
4-Amino-2,6-dinitrotoluene	Ave	91.51	76.85		84.0	100	-16.0	20.0
2-Amino-4,6-dinitrotoluene	Ave	102.1	87.64		85.8	100	-14.2	20.0
2,6-Dinitrotoluene	Ave	71.94	62.39		86.7	100	-13.3	20.0
2,4-Dinitrotoluene	Ave	118.3	102.8		86.9	100	-13.1	20.0
2-Nitrotoluene	Ave	52.41	45.92		87.6	100	-12.4	20.0
4-Nitrotoluene	Ave	62.96	55.25		87.8	100	-12.2	20.0
3-Nitrotoluene	Ave	59.21	51.84		87.5	100	-12.5	20.0
PETN	Ave	44.44	37.09		83.5	100	-16.5	20.0
3,4-Dinitrotoluene	Ave	67.04	56.80		84.7	100	-15.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 320-71988/4 Calibration Date: 04/23/2015 17:33

Instrument ID: LC10 Calib Start Date: 03/11/2015 15:47

GC Column: Synergi C18 ID: 4.60(mm) Calib End Date: 03/11/2015 20:09

Lab File ID: W000004.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	5.18	4.93	5.43
RDX	7.45	7.20	7.70
Ethylene glycol dinitrate	8.09	7.84	8.34
Picric acid	8.63	8.38	8.88
1,3,5-Trinitrobenzene	9.67	9.42	9.92
1,3-Dinitrobenzene	12.28	12.03	12.53
3,5-Dinitroaniline	13.03	12.78	13.28
Tetryl	13.54	13.29	13.79
Nitrobenzene	14.00	13.75	14.25
Nitroglycerin	14.82	14.57	15.07
2,4,6-Trinitrotoluene	15.53	15.28	15.78
4-Amino-2,6-dinitrotoluene	16.22	15.97	16.47
2-Amino-4,6-dinitrotoluene	17.09	16.84	17.34
2,6-Dinitrotoluene	18.64	18.39	18.89
2,4-Dinitrotoluene	19.21	18.96	19.46
2-Nitrotoluene	22.58	22.33	22.83
4-Nitrotoluene	24.22	23.97	24.47
3-Nitrotoluene	25.99	25.74	26.24
PETN	28.45	28.20	28.70
3,4-Dinitrotoluene	16.65	16.40	16.90

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000004.D
Lims ID: CCV 05
Client ID:
Sample Type: CCVRT
Inject. Date: 23-Apr-2015 17:33:15 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021275-004
Operator ID: YPH Instrument ID: LC10
Sublist: chrom-8330_LC10*sub1

Method: \\SACChrom\ChromData\LC10\20150423-21275.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 24-Apr-2015 09:51:49 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK021

First Level Reviewer: huangyun Date: 24-Apr-2015 09:51:49

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.181	5.181	0.000	12506H	100.0	85.0	
19 RDX							
1	7.454	7.454	0.000	8394H	100.0	82.8	
3 Ethylene glycol dinitrate							
2	8.091	8.091	0.000	10597H	100.0	87.8	
10 2,4,6-Trinitrophenol							
2	8.631	8.631	0.000	25221H	200.0	193.0	
1	8.631	8.631	0.000	17207H	200.0	187.3	
27 1,3,5-Trinitrobenzene							
1	9.671	9.671	0.000	16647H	100.0	85.6	
24 1,3-Dinitrobenzene							
1	12.281	12.281	0.000	16032H	100.0	85.8	
9 3,5-Dinitroaniline							
1	13.031	13.031	0.000	10432H	100.0	84.8	
20 Tetryl							
1	13.541	13.541	0.000	9881H	100.0	89.0	
5 Nitrobenzene							
1	14.004	14.004	0.000	7363H	100.0	87.2	
7 Nitroglycerin							
2	14.824	14.824	0.000	6934H	100.0	90.5	
25 2,4,6-Trinitrotoluene							
1	15.534	15.534	0.000	10114H	100.0	89.0	
26 4-Amino-2,6-dinitrotoluene							
1	16.224	16.224	0.000	7685H	100.0	84.0	
$ 30 3,4-Dinitrotoluene							
1	16.651	16.651	0.000	5680H	100.0	84.7	
2	16.224	16.224	0.000	10911H	100.0	81.3	
6 2-Amino-4,6-dinitrotoluene							
1	17.091	17.091	0.000	8764H	100.0	85.8	
12 2,6-Dinitrotoluene							
1	18.644	18.644	0.000	6239H	100.0	86.7	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
23 2,4-Dinitrotoluene							
1	19.211	19.211	0.000	10284H	100.0	86.9	
16 o-Nitrotoluene							
1	22.578	22.578	0.000	4592H	100.0	87.6	
15 p-Nitrotoluene							
1	24.224	24.224	0.000	5525H	100.0	87.8	
8 m-Nitrotoluene							
1	25.988	25.988	0.000	5184H	100.0	87.5	
21 PETN							
2	28.448	28.448	0.000	3709H	100.0	83.5	

Reagents:

hp8330l5_00035 Amount Added: 1.00 Units: mL

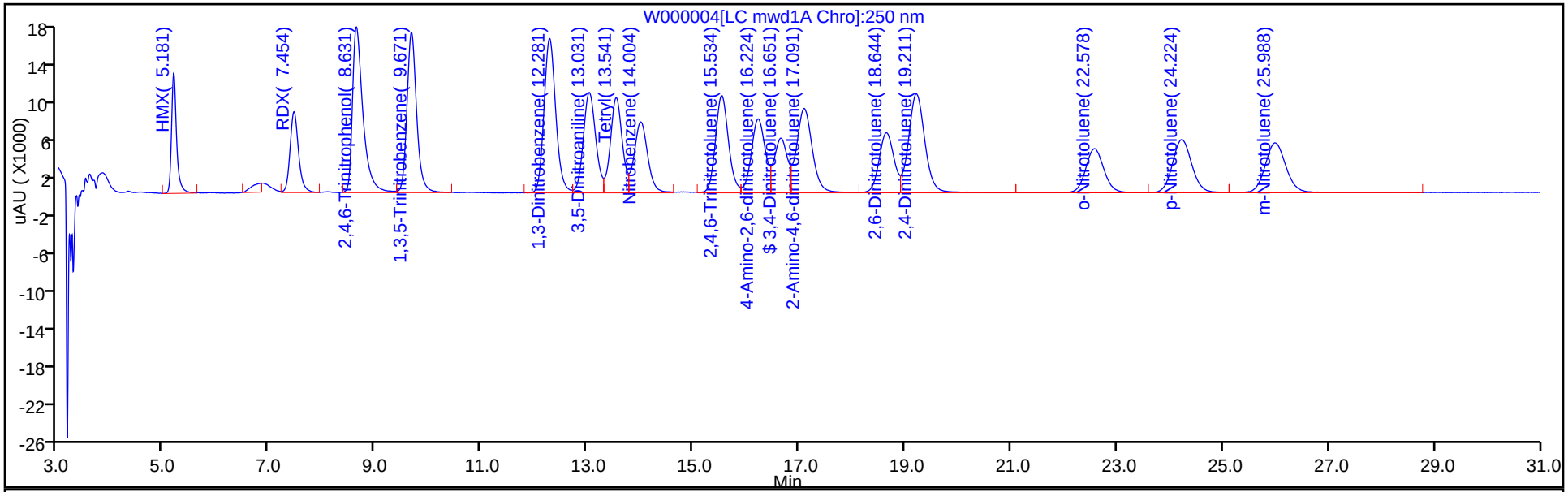
Report Date: 24-Apr-2015 09:51:51 Chrom Revision: 2.2 09-Apr-2015 10:05:40

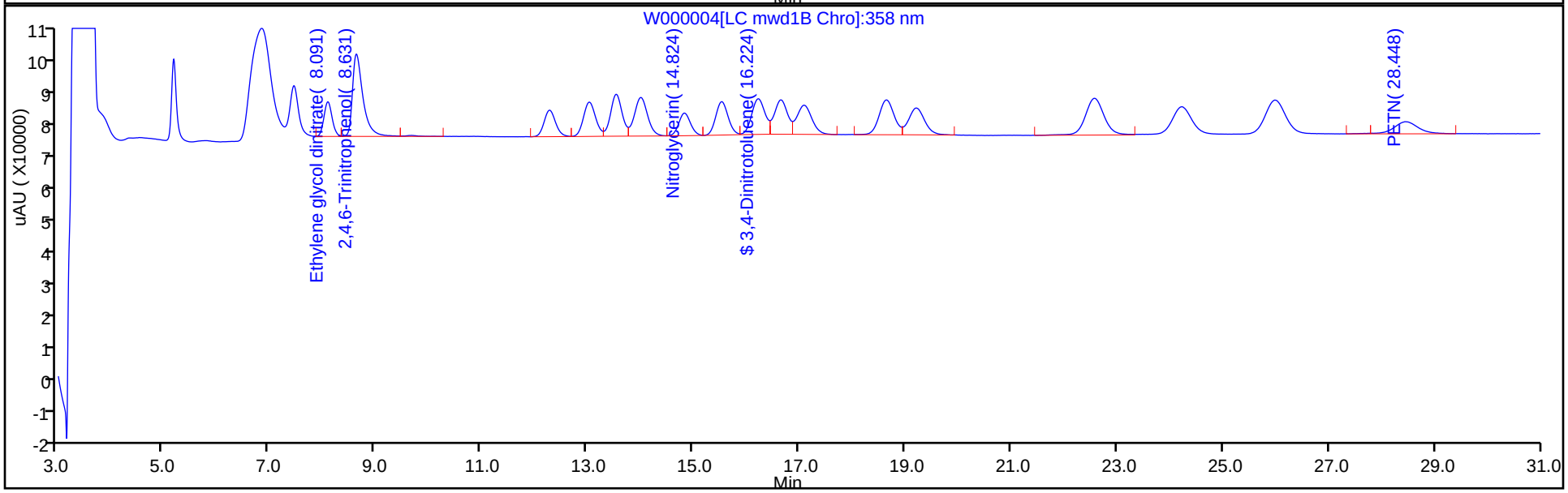
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000004.D

Injection Date:	23-Apr-2015 17:33:15	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	CCV 05			Worklist Smp#:	4
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)





FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 320-71988/23 Calibration Date: 04/24/2015 03:00

Instrument ID: LC10 Calib Start Date: 03/11/2015 15:47

GC Column: Synergi C18 ID: 4.60(mm) Calib End Date: 03/11/2015 20:09

Lab File ID: W000017.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	147.1	125.8		42.8	50.0	-14.5	20.0
RDX	Ave	101.4	85.68		42.3	50.0	-15.5	20.0
Ethylene glycol dinitrate	Ave	120.7	107.9		44.7	50.0	-10.6	20.0
Picric acid	Ave	130.7	129.4		99.0	100	-1.0	20.0
1,3,5-Trinitrobenzene	Ave	194.5	168.2		43.2	50.0	-13.5	20.0
1,3-Dinitrobenzene	Ave	186.8	162.1		43.4	50.0	-13.2	20.0
3,5-Dinitroaniline	Ave	123.0	105.1		42.7	50.0	-14.6	20.0
Tetryl	Ave	111.0	99.10		44.6	50.0	-10.7	20.0
Nitrobenzene	Ave	84.47	74.64		44.2	50.0	-11.6	20.0
Nitroglycerin	Ave	76.63	67.44		44.0	50.0	-12.0	20.0
2,4,6-Trinitrotoluene	Ave	113.7	101.6		44.7	50.0	-10.6	20.0
4-Amino-2,6-dinitrotoluene	Ave	91.51	77.12		42.1	50.0	-15.7	20.0
2-Amino-4,6-dinitrotoluene	Ave	102.1	88.08		43.1	50.0	-13.8	20.0
2,6-Dinitrotoluene	Ave	71.94	62.52		43.5	50.0	-13.1	20.0
2,4-Dinitrotoluene	Ave	118.3	103.2		43.6	50.0	-12.8	20.0
2-Nitrotoluene	Ave	52.41	46.22		44.1	50.0	-11.8	20.0
4-Nitrotoluene	Ave	62.96	55.66		44.2	50.0	-11.6	20.0
3-Nitrotoluene	Ave	59.21	52.40		44.2	50.0	-11.5	20.0
PETN	Ave	44.44	38.10		42.9	50.0	-14.3	20.0
3,4-Dinitrotoluene	Ave	67.04	57.52		42.9	50.0	-14.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 320-71988/23 Calibration Date: 04/24/2015 03:00

Instrument ID: LC10 Calib Start Date: 03/11/2015 15:47

GC Column: Synergi C18 ID: 4.60(mm) Calib End Date: 03/11/2015 20:09

Lab File ID: W000017.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	5.18	4.93	5.43
RDX	7.45	7.20	7.70
Ethylene glycol dinitrate	8.09	7.84	8.34
Picric acid	8.65	8.40	8.90
1,3,5-Trinitrobenzene	9.67	9.42	9.92
1,3-Dinitrobenzene	12.28	12.03	12.53
3,5-Dinitroaniline	13.03	12.78	13.28
Tetryl	13.54	13.29	13.79
Nitrobenzene	14.00	13.75	14.25
Nitroglycerin	14.82	14.57	15.07
2,4,6-Trinitrotoluene	15.53	15.28	15.78
4-Amino-2,6-dinitrotoluene	16.21	15.96	16.46
2-Amino-4,6-dinitrotoluene	17.09	16.84	17.34
2,6-Dinitrotoluene	18.63	18.38	18.88
2,4-Dinitrotoluene	19.20	18.95	19.45
2-Nitrotoluene	22.57	22.32	22.82
4-Nitrotoluene	24.21	23.96	24.46
3-Nitrotoluene	25.99	25.74	26.24
PETN	28.46	28.21	28.71
3,4-Dinitrotoluene	16.65	16.40	16.90

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000017.D
Lims ID: CCV 04
Client ID:
Sample Type: CCV
Inject. Date: 24-Apr-2015 03:00:03 ALS Bottle#: 4 Worklist Smp#: 23
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021275-023
Operator ID: YPH Instrument ID: LC10
Sublist: chrom-8330_LC10*sub1

Method: \\SACChrom\ChromData\LC10\20150423-21275.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 24-Apr-2015 09:52:46 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK021

First Level Reviewer: huangyun Date: 24-Apr-2015 09:52:46

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.183	5.183	0.000	6292H	50.0	42.8	
19 RDX							
1	7.453	7.453	0.000	4284H	50.0	42.3	
3 Ethylene glycol dinitrate							
2	8.089	8.089	0.000	5395H	50.0	44.7	
10 2,4,6-Trinitrophenol							
2	8.649	8.649	0.000	12942H	100.0	99.0	
1	8.649	8.649	0.000	8821H	100.0	96.0	
27 1,3,5-Trinitrobenzene							
1	9.669	9.669	0.000	8410H	50.0	43.2	
24 1,3-Dinitrobenzene							
1	12.280	12.280	0.000	8105H	50.0	43.4	
9 3,5-Dinitroaniline							
1	13.030	13.030	0.000	5253H	50.0	42.7	
20 Tetryl							
1	13.540	13.540	0.000	4955H	50.0	44.6	
5 Nitrobenzene							
1	14.000	14.000	0.000	3732H	50.0	44.2	
7 Nitroglycerin							
2	14.823	14.823	0.000	3372H	50.0	44.0	
25 2,4,6-Trinitrotoluene							
1	15.526	15.526	0.000	5079H	50.0	44.7	
26 4-Amino-2,6-dinitrotoluene							
1	16.213	16.213	0.000	3856H	50.0	42.1	
$ 30 3,4-Dinitrotoluene							
1	16.646	16.646	0.000	2876H	50.0	42.9	
2	16.213	16.213	0.000	5644H	50.0	42.0	
6 2-Amino-4,6-dinitrotoluene							
1	17.090	17.090	0.000	4404H	50.0	43.1	
12 2,6-Dinitrotoluene							
1	18.633	18.633	0.000	3126H	50.0	43.5	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
23 2,4-Dinitrotoluene							
1	19.203	19.203	0.000	5159H	50.0	43.6	
16 o-Nitrotoluene							
1	22.573	22.573	0.000	2311H	50.0	44.1	
15 p-Nitrotoluene							
1	24.210	24.210	0.000	2783H	50.0	44.2	
8 m-Nitrotoluene							
1	25.986	25.986	0.000	2620H	50.0	44.2	
21 PETN							
2	28.463	28.463	0.000	1905H	50.0	42.9	

Reagents:

hp8330l4_00026 Amount Added: 1.00 Units: mL

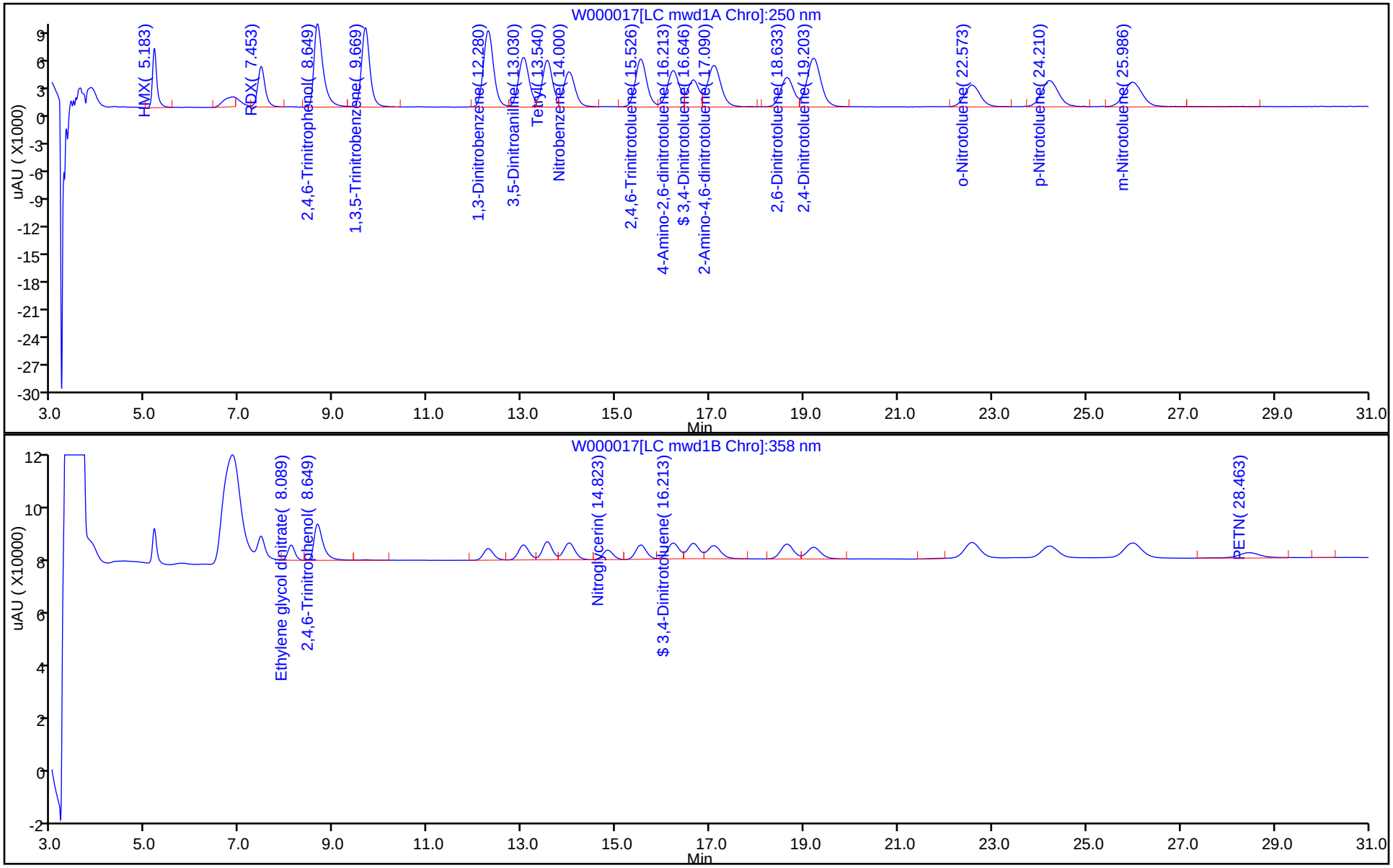
Report Date: 24-Apr-2015 09:52:46 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000017.D

Injection Date:	24-Apr-2015 03:00:03	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	CCV 04			Worklist Smp#:	23
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCVL 320-71988/24 Calibration Date: 04/24/2015 03:43

Instrument ID: LC10 Calib Start Date: 03/11/2015 15:47

GC Column: Synergi C18 ID: 4.60(mm) Calib End Date: 03/11/2015 20:09

Lab File ID: W000018.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	147.1	131.4		4.47	5.00	-10.7	30.0
RDX	Ave	101.4	102.0		5.03	5.00	0.6	30.0
Ethylene glycol dinitrate	Ave	120.7	113.9		18.9	20.0	-5.6	30.0
Picric acid	Ave	130.7	118.8		18.2	20.0	-9.1	30.0
1,3,5-Trinitrobenzene	Ave	194.5	170.8		4.39	5.00	-12.2	30.0
1,3-Dinitrobenzene	Ave	186.8	167.8		4.49	5.00	-10.2	30.0
3,5-Dinitroaniline	Ave	123.0	110.4		4.49	5.00	-10.2	30.0
Tetryl	Ave	111.0	108.0		4.86	5.00	-2.7	30.0
Nitrobenzene	Ave	84.47	80.00		4.74	5.00	-5.3	30.0
Nitroglycerin	Ave	76.63	76.00		19.8	20.0	-0.8	30.0
2,4,6-Trinitrotoluene	Ave	113.7	110.8		4.87	5.00	-2.5	30.0
4-Amino-2,6-dinitrotoluene	Ave	91.51	83.80		4.58	5.00	-8.4	30.0
2-Amino-4,6-dinitrotoluene	Ave	102.1	93.40		4.57	5.00	-8.6	30.0
2,6-Dinitrotoluene	Ave	71.94	67.80		4.71	5.00	-5.8	30.0
2,4-Dinitrotoluene	Ave	118.3	110.0		4.65	5.00	-7.0	30.0
2-Nitrotoluene	Ave	52.41	52.00		4.96	5.00	-0.8	30.0
4-Nitrotoluene	Ave	62.96	65.20		5.18	5.00	3.6	30.0
3-Nitrotoluene	Ave	59.21	60.00		5.07	5.00	1.3	30.0
PETN	Ave	44.44	49.65		22.3	20.0	11.7	30.0
3,4-Dinitrotoluene	Ave	67.04	64.80		4.83	5.00	-3.3	30.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCVL 320-71988/24 Calibration Date: 04/24/2015 03:43

Instrument ID: LC10 Calib Start Date: 03/11/2015 15:47

GC Column: Synergi C18 ID: 4.60(mm) Calib End Date: 03/11/2015 20:09

Lab File ID: W000018.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	5.18	4.93	5.43
RDX	7.46	7.21	7.71
Ethylene glycol dinitrate	8.09	7.84	8.34
Picric acid	8.69	8.44	8.94
1,3,5-Trinitrobenzene	9.67	9.42	9.92
1,3-Dinitrobenzene	12.28	12.03	12.53
3,5-Dinitroaniline	13.04	12.79	13.29
Tetryl	13.54	13.29	13.79
Nitrobenzene	14.01	13.76	14.26
Nitroglycerin	14.81	14.56	15.06
2,4,6-Trinitrotoluene	15.52	15.27	15.77
4-Amino-2,6-dinitrotoluene	16.20	15.95	16.45
2-Amino-4,6-dinitrotoluene	17.05	16.80	17.30
2,6-Dinitrotoluene	18.61	18.36	18.86
2,4-Dinitrotoluene	19.16	18.91	19.41
2-Nitrotoluene	22.60	22.35	22.85
4-Nitrotoluene	24.20	23.95	24.45
3-Nitrotoluene	25.96	25.71	26.21
PETN	28.47	28.22	28.72
3,4-Dinitrotoluene	16.61	16.36	16.86

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000018.D
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 24-Apr-2015 03:43:39 ALS Bottle#: 2 Worklist Smp#: 24
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021275-024
Operator ID: YPH Instrument ID: LC10
Sublist: chrom-8330_LC10*sub1

Method: \\SACChrom\ChromData\LC10\20150423-21275.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 24-Apr-2015 11:46:02 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK021

First Level Reviewer: huangyun Date: 24-Apr-2015 11:46:02

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.180	5.180	0.000	657H	5.00	4.47	
19 RDX							
1	7.457	7.457	0.000	510H	5.00	5.03	
3 Ethylene glycol dinitrate							
2	8.093	8.093	0.000	2278H	20.0	18.9	
10 2,4,6-Trinitrophenol							
2	8.693	8.693	0.000	2375H	20.0	18.2	
1	8.680	8.680	0.000	1633H	20.0	17.8	
27 1,3,5-Trinitrobenzene							
1	9.667	9.667	0.000	854H	5.00	4.39	
24 1,3-Dinitrobenzene							
1	12.277	12.277	0.000	839H	5.00	4.49	
9 3,5-Dinitroaniline							
1	13.040	13.040	0.000	552H	5.00	4.49	
20 Tetryl							
1	13.540	13.540	0.000	540H	5.00	4.86	
5 Nitrobenzene							
1	14.010	14.010	0.000	400H	5.00	4.74	
7 Nitroglycerin							
2	14.810	14.810	0.000	1520H	20.0	19.8	
25 2,4,6-Trinitrotoluene							
1	15.520	15.520	0.000	554H	5.00	4.87	
26 4-Amino-2,6-dinitrotoluene							
1	16.204	16.204	0.000	419H	5.00	4.58	
$ 30 3,4-Dinitrotoluene							
1	16.614	16.614	0.000	324H	5.00	4.83	
2	16.247	16.247	0.000	690H	5.00	5.14	
6 2-Amino-4,6-dinitrotoluene							
1	17.054	17.054	0.000	467H	5.00	4.57	
12 2,6-Dinitrotoluene							
1	18.607	18.607	0.000	339H	5.00	4.71	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
23 2,4-Dinitrotoluene							
1	19.164	19.164	0.000	550H	5.00	4.65	
16 o-Nitrotoluene							
1	22.604	22.604	0.000	260H	5.00	4.96	
15 p-Nitrotoluene							
1	24.197	24.197	0.000	326H	5.00	5.18	
8 m-Nitrotoluene							
1	25.960	25.960	0.000	300H	5.00	5.07	
21 PETN							
2	28.470	28.470	0.000	993H	20.0	22.3	

Reagents:

HP8330ICL_00025 Amount Added: 1.00 Units: mL

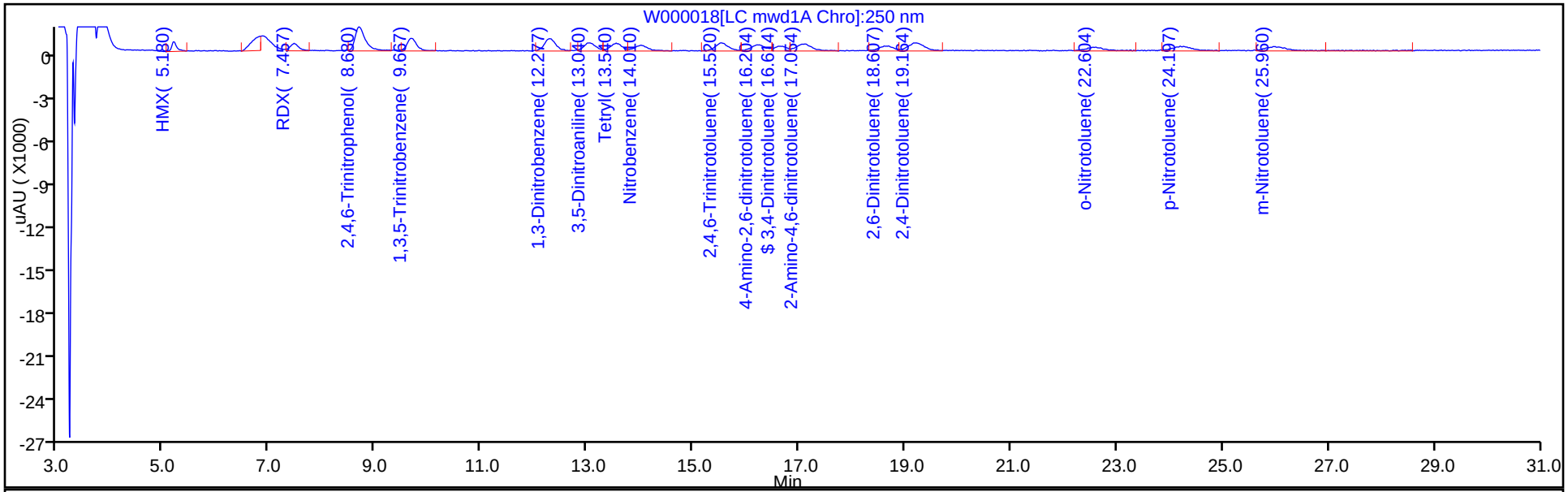
Report Date: 24-Apr-2015 11:46:02 Chrom Revision: 2.2 09-Apr-2015 10:05:40

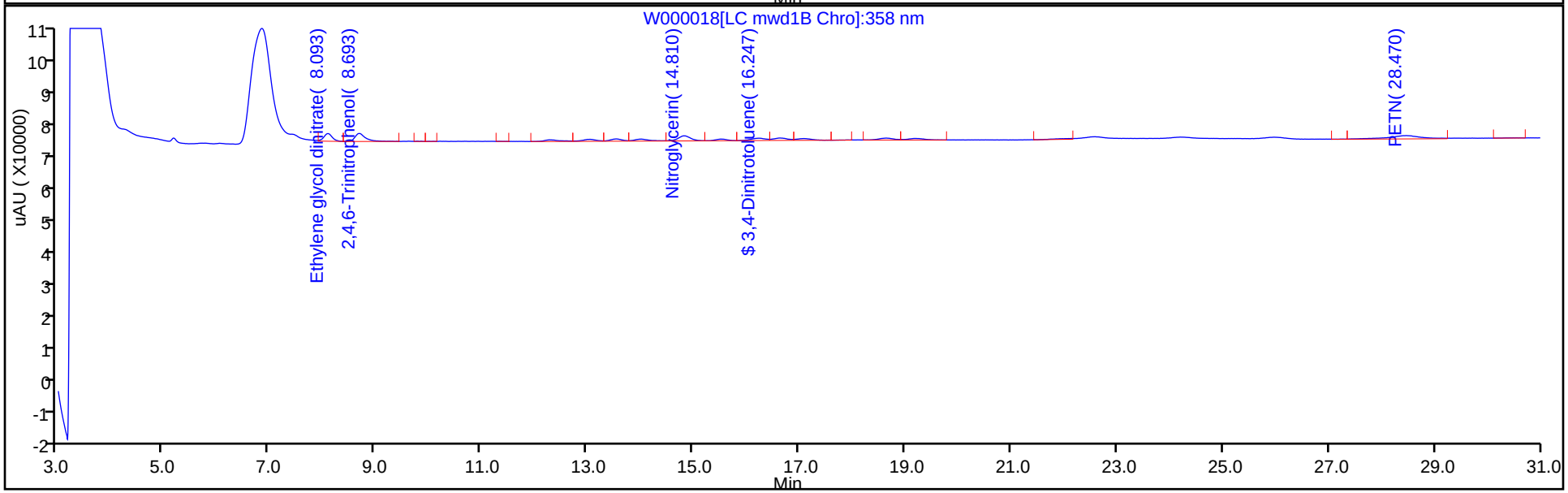
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000018.D

Injection Date:	24-Apr-2015 03:43:39	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	CCVL			Worklist Smp#:	24
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)





FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 320-63675/12 Calibration Date: 01/23/2015 23:28

Instrument ID: LC9 Calib Start Date: 01/23/2015 14:34

GC Column: Zorbax CN ID: 4.60(mm) Calib End Date: 01/23/2015 21:15

Lab File ID: W000012.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Nitrobenzene	Ave	48.26	48.96		203	200	1.4	20.0
Ethylene glycol dinitrate	Lin2		48.69		194	200	-3.0	20.0
1,3-Dinitrobenzene	Ave	105.6	103.4		196	200	-2.1	20.0
1,3,5-Trinitrobenzene	Ave	85.12	80.01		188	200	-6.0	20.0
2-Nitrotoluene	Ave	64.74	61.64		190	200	-4.8	20.0
4-Nitrotoluene	Ave	64.74	61.64		190	200	-4.8	20.0
3-Nitrotoluene	Lin2		37.89		214	200	7.0	20.0
3,5-Dinitroaniline	Ave	86.06	80.86		188	200	-6.0	20.0
RDX	Lin2		47.24		210	200	4.9	20.0
2,4-Dinitrotoluene	Ave	91.69	88.20		192	200	-3.8	20.0
2,6-Dinitrotoluene	Ave	55.03	53.46		194	200	-2.9	20.0
2-Amino-4,6-dinitrotoluene	Ave	78.89	75.91		192	200	-3.8	20.0
4-Amino-2,6-dinitrotoluene	Ave	66.06	64.27		195	200	-2.7	20.0
2,4,6-Trinitrotoluene	Ave	77.95	77.38		199	200	-0.7	20.0
HMX	Ave	59.64	59.09		198	200	-0.9	20.0
Nitroglycerin	Ave	88.51	85.46		193	200	-3.4	20.0
Tetryl	Ave	116.9	114.4		196	200	-2.1	20.0
PETN	Ave	134.8	132.0		196	200	-2.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICV 320-63675/12 Calibration Date: 01/23/2015 23:28

Instrument ID: LC9 Calib Start Date: 01/23/2015 14:34

GC Column: Zorbax CN ID: 4.60(mm) Calib End Date: 01/23/2015 21:15

Lab File ID: W000012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Nitrobenzene	21.54	21.34	21.84
Ethylene glycol dinitrate	22.75	22.52	23.02
1,3-Dinitrobenzene	24.39	24.18	24.68
1,3,5-Trinitrobenzene	26.83	26.64	27.14
2-Nitrotoluene	28.17	27.98	28.48
4-Nitrotoluene	28.17	27.98	28.48
3-Nitrotoluene	28.74	28.55	29.05
3,5-Dinitroaniline	30.27	30.08	30.58
RDX	30.91	30.72	31.22
2,4-Dinitrotoluene	31.65	31.46	31.96
2,6-Dinitrotoluene	32.55	32.37	32.87
2-Amino-4,6-dinitrotoluene	34.81	34.63	35.13
4-Amino-2,6-dinitrotoluene	35.24	35.05	35.55
2,4,6-Trinitrotoluene	38.81	38.60	39.10
HMX	40.91	40.69	41.19
Nitroglycerin	43.28	43.07	43.57
Tetryl	45.02	44.79	45.29
PETN	51.57	51.34	51.84

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000012.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 23-Jan-2015 23:28:27 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0018933-012
Operator ID: TQP Instrument ID: LC9
Sublist:

Method: \\SACChrom\ChromData\LC9\20150123-18933.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 26-Jan-2015 12:47:33 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK031

First Level Reviewer: phant Date: 26-Jan-2015 10:04:28

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							
1	21.538	21.586	-0.048	9791H	200.0	202.9	
4 Ethylene glycol dinitrate							
2	22.745	22.772	-0.027	9738H	200.0	194.0	
5 1,3-Dinitrobenzene							
1	24.388	24.432	-0.044	20679H	200.0	195.8	
7 1,3,5-Trinitrobenzene							
1	26.828	26.886	-0.058	16002H	200.0	188.0	
9 p-Nitrotoluene							
1	28.165	28.226	-0.061	12327H	200.0	190.4	
8 o-Nitrotoluene							
1	28.165	28.226	-0.061	12327H	200.0	190.4	
10 m-Nitrotoluene							
1	28.735	28.802	-0.067	7577H	200.0	214.0	
11 3,5-Dinitroaniline							
1	30.272	30.326	-0.054	16172H	200.0	187.9	
12 RDX							
1	30.905	30.969	-0.064	9447H	200.0	209.8	
13 2,4-Dinitrotoluene							
1	31.652	31.709	-0.057	17640H	200.0	192.4	
14 2,6-Dinitrotoluene							
1	32.545	32.616	-0.071	10691H	200.0	194.3	
15 2-Amino-4,6-dinitrotoluene							
1	34.808	34.879	-0.071	15181H	200.0	192.4	
16 4-Amino-2,6-dinitrotoluene							
1	35.242	35.302	-0.060	12854H	200.0	194.6	
18 2,4,6-Trinitrotoluene							
1	38.805	38.852	-0.047	15475H	200.0	198.5	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
19 HMX							
1	40.905	40.939	-0.034	11817H	200.0	198.1	
20 Nitroglycerin							
2	43.282	43.315	-0.033	17092H	200.0	193.1	
21 Tetryl							
1	45.022	45.042	-0.020	22883H	200.0	195.7	
22 PETN							M
2	51.565	51.585	-0.020	26403H	200.0	195.9	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330IC_00025 Amount Added: 1.00 Units: mL

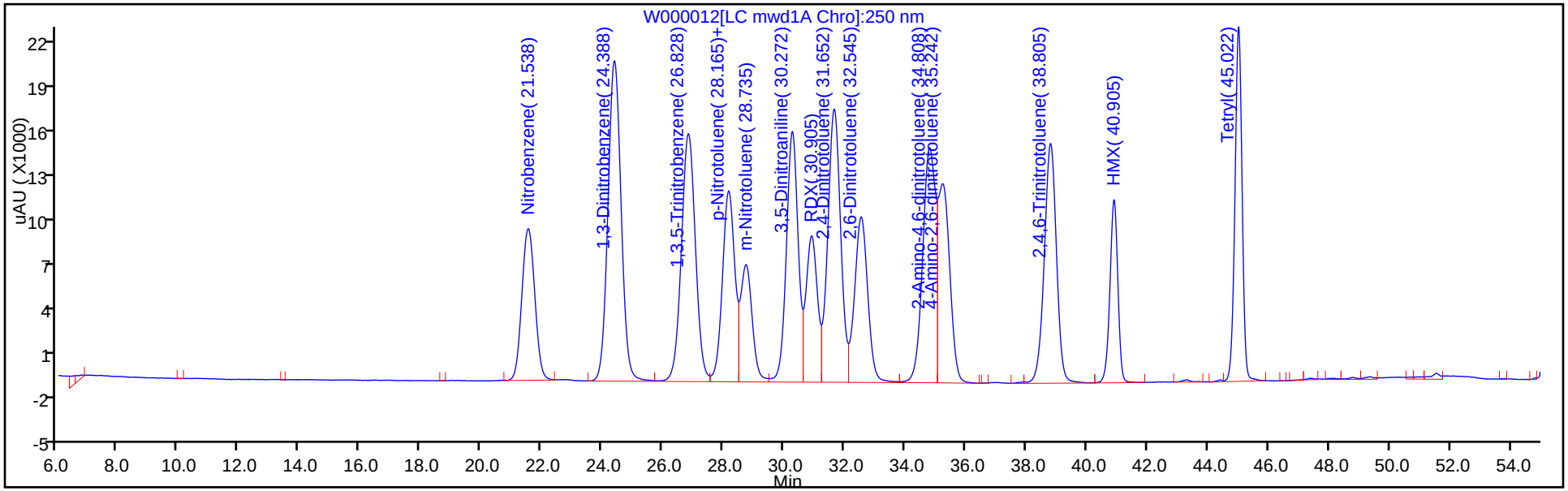
Report Date: 26-Jan-2015 12:47:36 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Sacramento

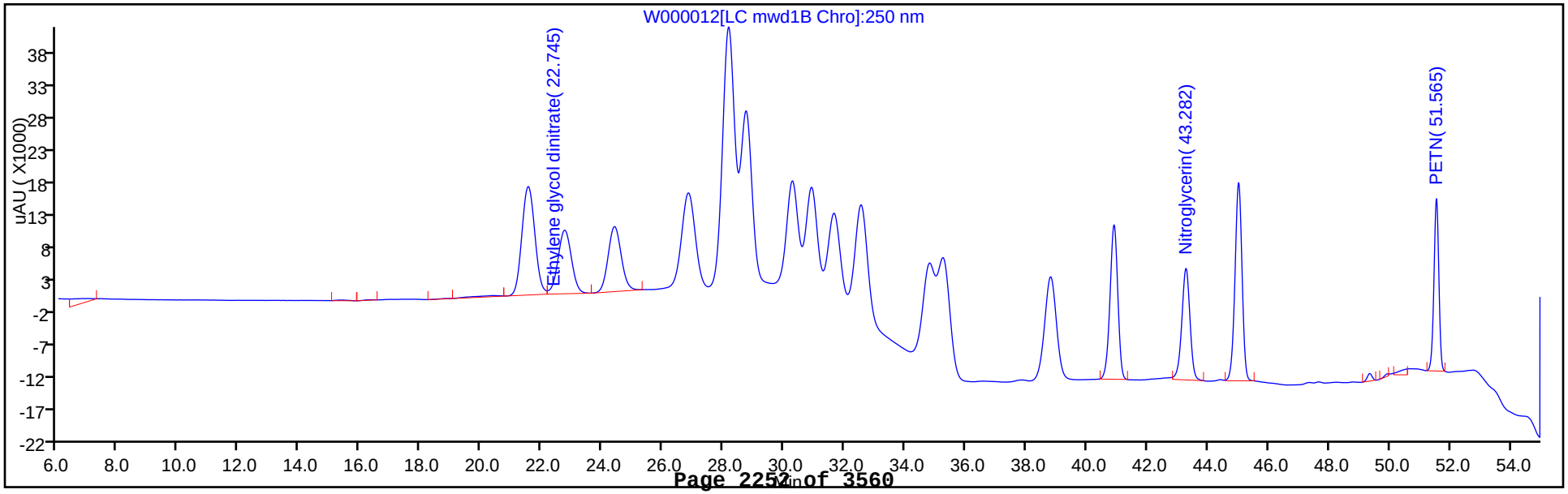
Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000012.D

Injection Date:	23-Jan-2015 23:28:27	Instrument ID:	LC9	Operator ID:	TQP
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

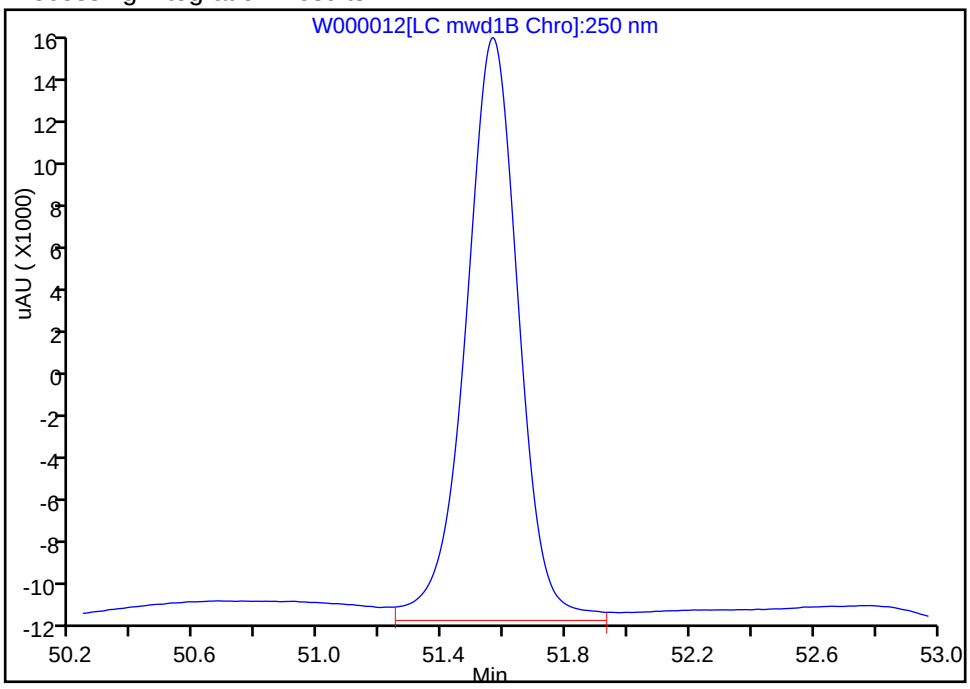
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000012.D
Injection Date: 23-Jan-2015 23:28:27 Instrument ID: LC9
Lims ID: ICV
Client ID:
Operator ID: TQP ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1B, 358 nm

22 PETN, CAS: 78-11-5

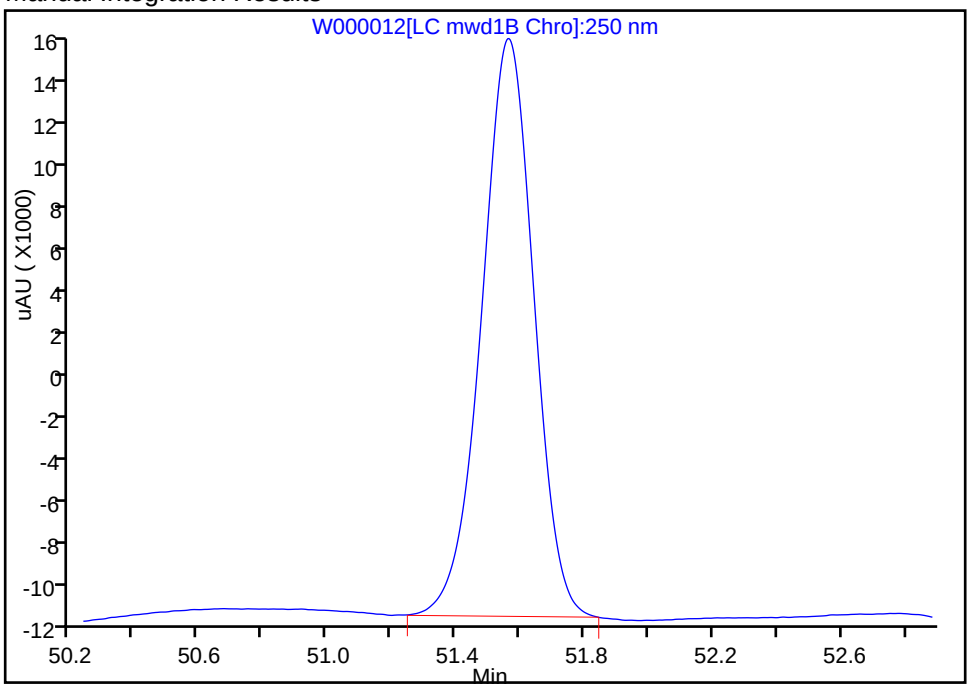
Processing Integration Results

RT: 51.56
Height: 26956
Amount: 179.1355
Amount Units: ng/ml



Manual Integration Results

RT: 51.56
Height: 26403
Amount: 195.8902
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:04:28
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 320-63675/13 Calibration Date: 01/24/2015 00:35

Instrument ID: LC9 Calib Start Date: 01/23/2015 14:34

GC Column: Zorbax CN ID: 4.60(mm) Calib End Date: 01/23/2015 21:15

Lab File ID: W000013.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Nitrobenzene	Ave	48.26	53.60		5.55	5.00	11.1	
Ethylene glycol dinitrate	Lin2		60.95		20.2	20.0	0.8	
1,3-Dinitrobenzene	Ave	105.6	113.8		5.39	5.00	7.8	
1,3,5-Trinitrobenzene	Ave	85.12	87.60		5.15	5.00	2.9	
2-Nitrotoluene	Ave	64.74	72.40		5.59	5.00	11.8	
4-Nitrotoluene	Ave	64.74	72.40		5.59	5.00	11.8	
3-Nitrotoluene	Lin2		46.80		4.38	5.00	-12.3	
3,5-Dinitroaniline	Ave	86.06	99.40		5.77	5.00	15.5	
RDX	Lin2		68.00		4.66	5.00	-6.9	
2,4-Dinitrotoluene	Ave	91.69	103.4		5.64	5.00	12.8	
2,6-Dinitrotoluene	Ave	55.03	64.40		5.85	5.00	17.0	
2-Amino-4,6-dinitrotoluene	Ave	78.89	89.60		5.68	5.00	13.6	
4-Amino-2,6-dinitrotoluene	Ave	66.06	74.60		5.65	5.00	12.9	
2,4,6-Trinitrotoluene	Ave	77.95	84.60		5.43	5.00	8.5	
HMX	Ave	59.64	64.40		5.40	5.00	8.0	
Nitroglycerin	Ave	88.51	97.35		22.0	20.0	10.0	
Tetryl	Ave	116.9	128.6		5.50	5.00	10.0	
PETN	Ave	134.8	131.6		19.5	20.0	-2.4	
3,4-Dinitrotoluene	Ave	47.37	52.60		5.55	5.00	11.0	

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: LODV 320-63675/13 Calibration Date: 01/24/2015 00:35

Instrument ID: LC9 Calib Start Date: 01/23/2015 14:34

GC Column: Zorbax CN ID: 4.60(mm) Calib End Date: 01/23/2015 21:15

Lab File ID: W000013.D

Analyte	RT	RT WINDOW	
		FROM	TO
Nitrobenzene	21.53	21.34	21.84
Ethylene glycol dinitrate	22.76	22.52	23.02
1,3-Dinitrobenzene	24.41	24.18	24.68
1,3,5-Trinitrobenzene	26.87	26.64	27.14
2-Nitrotoluene	28.14	27.98	28.48
4-Nitrotoluene	28.14	27.98	28.48
3-Nitrotoluene	28.71	28.55	29.05
3,5-Dinitroaniline	30.30	30.08	30.58
RDX	30.92	30.72	31.22
2,4-Dinitrotoluene	31.68	31.46	31.96
2,6-Dinitrotoluene	32.54	32.37	32.87
2-Amino-4,6-dinitrotoluene	34.78	34.63	35.13
4-Amino-2,6-dinitrotoluene	35.19	35.05	35.55
2,4,6-Trinitrotoluene	38.80	38.60	39.10
HMX	40.91	40.69	41.19
Nitroglycerin	43.26	43.07	43.57
Tetryl	44.98	44.79	45.29
PETN	51.53	51.34	51.84
3,4-Dinitrotoluene	36.97	36.76	37.26

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000013.D
Lims ID: LODV
Client ID:
Sample Type: LODV
Inject. Date: 24-Jan-2015 00:35:09 ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0018933-013
Operator ID: TQP Instrument ID: LC9

Method: \\SACChrom\ChromData\LC9\20150123-18933.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 26-Jan-2015 12:47:33 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK031

First Level Reviewer: phant Date: 26-Jan-2015 10:04:45

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							
1	21.529	21.586	-0.057	268H	5.00	5.55	
4 Ethylene glycol dinitrate							
2	22.763	22.772	-0.009	1219H	20.0	20.2	
5 1,3-Dinitrobenzene							
1	24.406	24.432	-0.026	569H	5.00	5.39	
7 1,3,5-Trinitrobenzene							M
1	26.873	26.886	-0.013	438H	5.00	5.15	M
9 p-Nitrotoluene							
1	28.139	28.226	-0.087	362H	5.00	5.59	
8 o-Nitrotoluene							
1	28.139	28.226	-0.087	362H	5.00	5.59	
10 m-Nitrotoluene							
1	28.713	28.802	-0.089	234H	5.00	4.38	
11 3,5-Dinitroaniline							
1	30.299	30.326	-0.027	497H	5.00	5.77	
12 RDX							
1	30.919	30.969	-0.050	340H	5.00	4.66	
13 2,4-Dinitrotoluene							
1	31.683	31.709	-0.026	517H	5.00	5.64	
14 2,6-Dinitrotoluene							
1	32.536	32.616	-0.080	322H	5.00	5.85	
15 2-Amino-4,6-dinitrotoluene							M
1	34.783	34.879	-0.096	448H	5.00	5.68	M
16 4-Amino-2,6-dinitrotoluene							M
1	35.193	35.302	-0.109	373H	5.00	5.65	M
$ 17 3,4-Dinitrotoluene							
1	36.969	37.005	-0.036	263H	5.00	5.55	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
18 2,4,6-Trinitrotoluene							
1	38.799	38.852	-0.053	423H	5.00	5.43	
19 HMX							
1	40.906	40.939	-0.033	322H	5.00	5.40	
20 Nitroglycerin							
2	43.263	43.315	-0.052	1947H	20.0	22.0	
21 Tetryl							
1	44.983	45.042	-0.059	643H	5.00	5.50	
22 PETN							M
2	51.533	51.585	-0.052	2631H	20.0	19.5	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330ICL_00019 Amount Added: 1.00 Units: mL

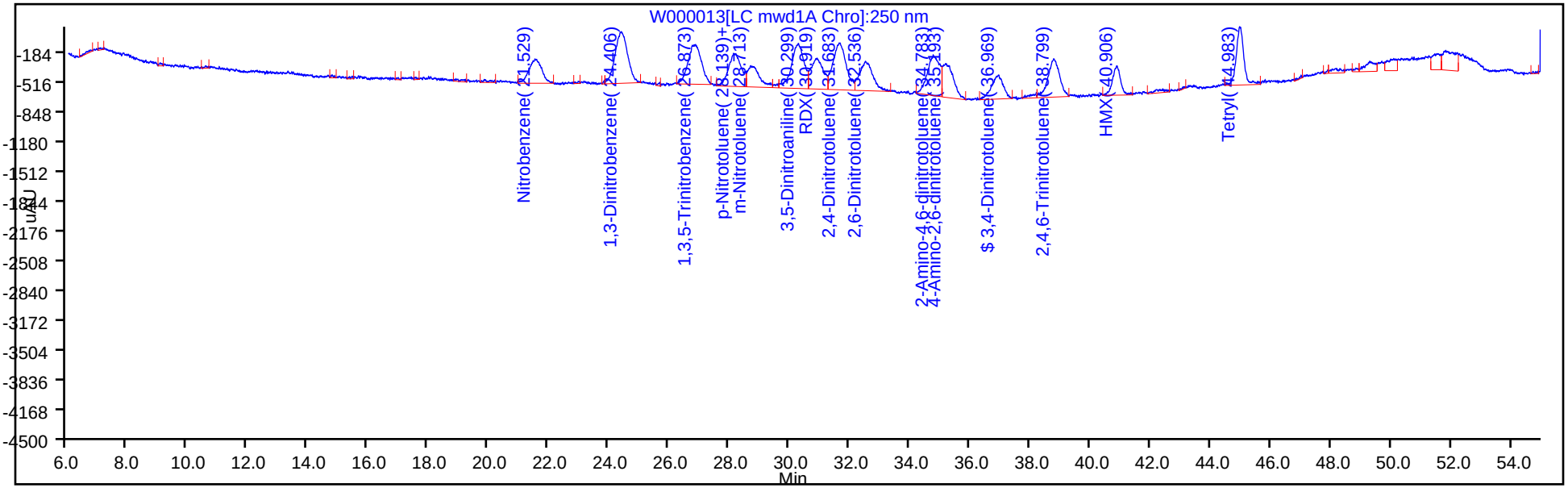
Report Date: 26-Jan-2015 12:47:37 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Sacramento

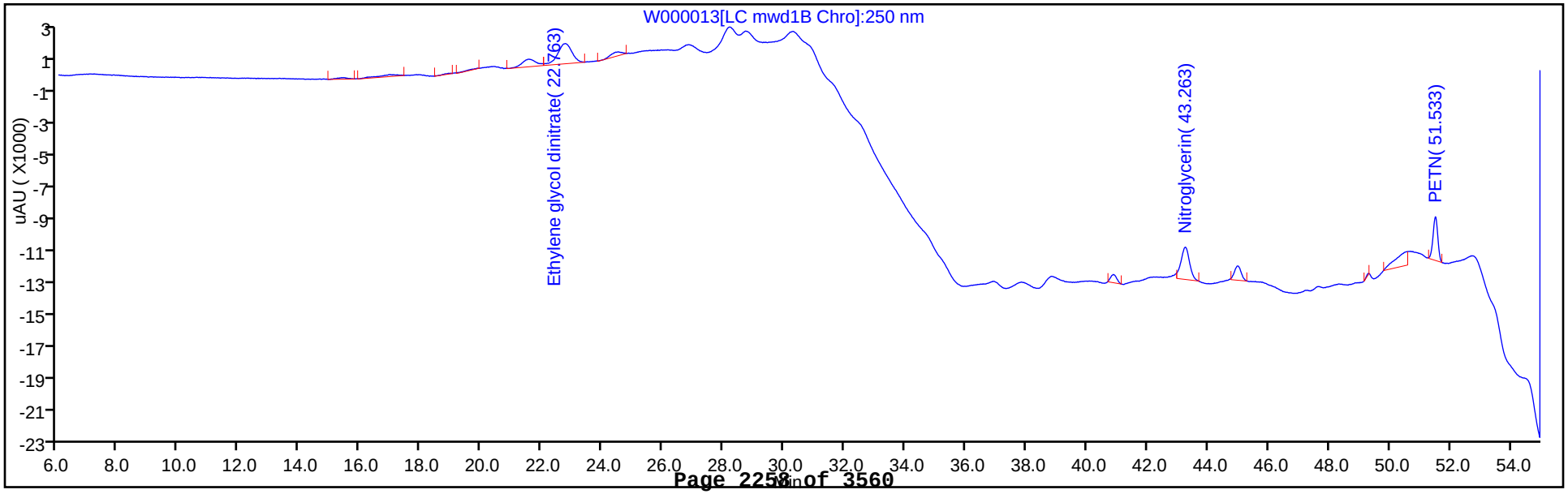
Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000013.D

Injection Date:	24-Jan-2015 00:35:09	Instrument ID:	LC9	Operator ID:	TQP
Lims ID:	LODV			Worklist Smp#:	13
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

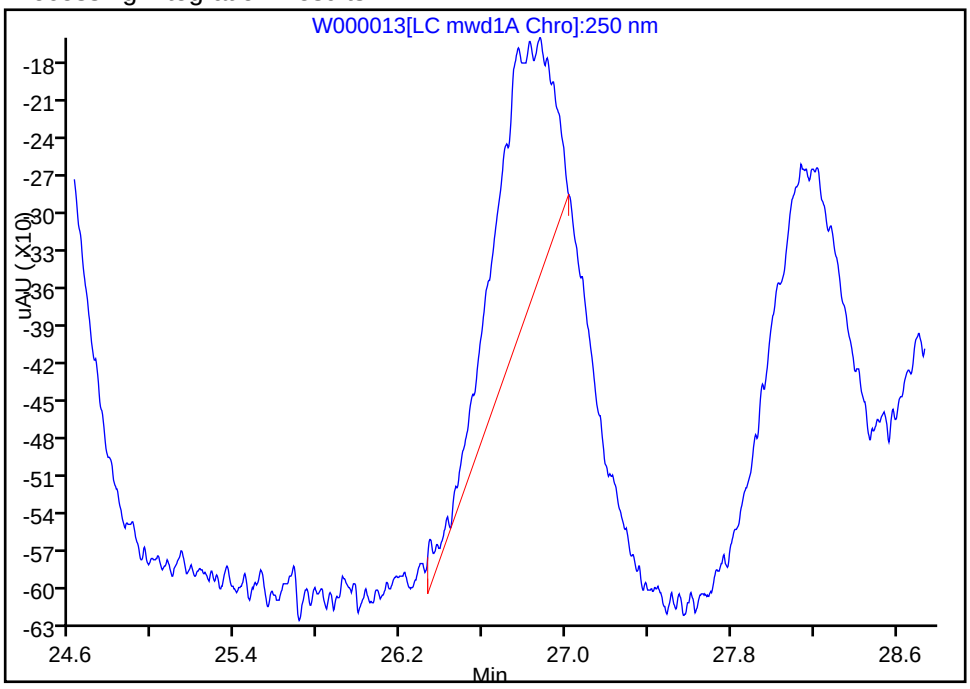
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC9\20150123-18933.b\W000013.D				
Injection Date:	24-Jan-2015 00:35:09	Instrument ID:	LC9		
Lims ID:	LODV				
Client ID:					
Operator ID:	TQP	ALS Bottle#:	12	Worklist Smp#:	13
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		
Column:	Zorbax Cyano CN (4.60 mm)	Detector	LC mwd1A, 250 nm		

7 1,3,5-Trinitrobenzene, CAS: 99-35-4

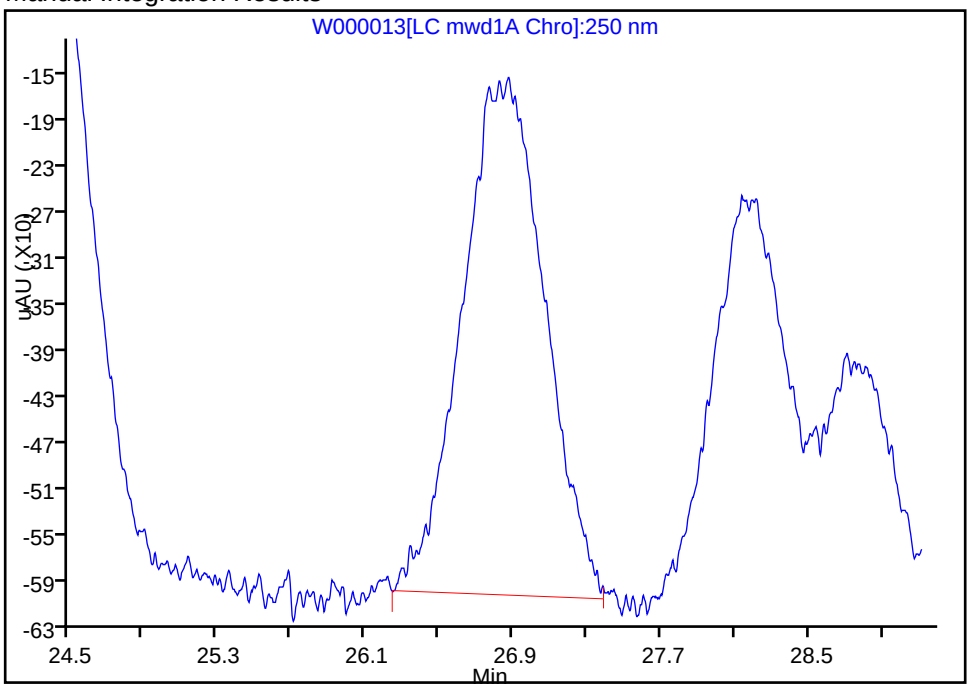
Processing Integration Results

RT: 26.77
Height: 228
Amount: 2.678567
Amount Units: ng/ml



Manual Integration Results

RT: 26.87
Height: 438
Amount: 5.145668
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:19:51
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

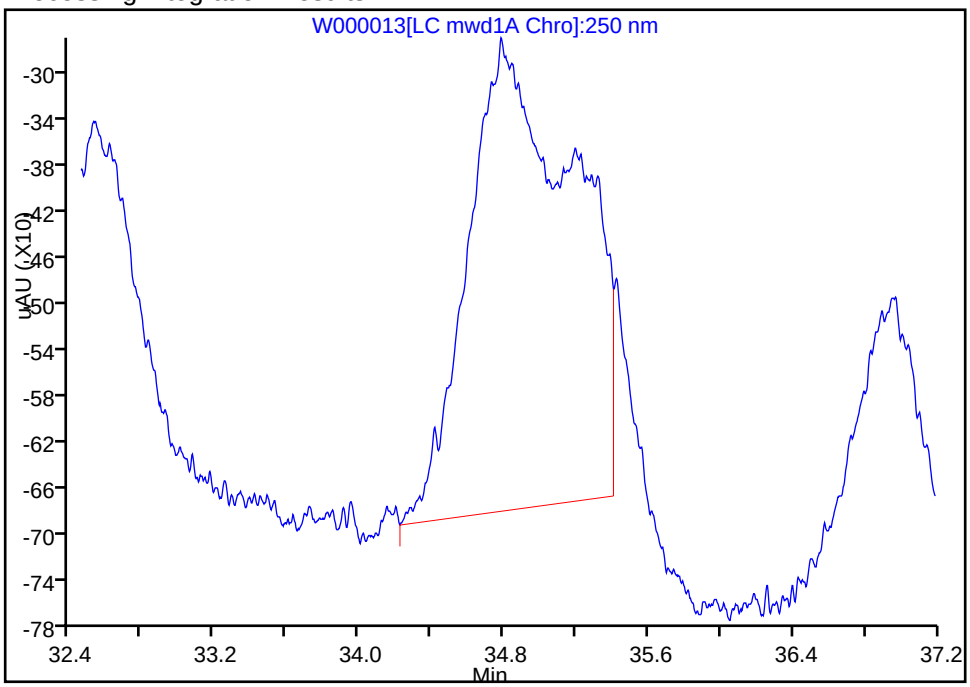
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000013.D
Injection Date: 24-Jan-2015 00:35:09 Instrument ID: LC9
Lims ID: LODV
Client ID:
Operator ID: TQP ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

15 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

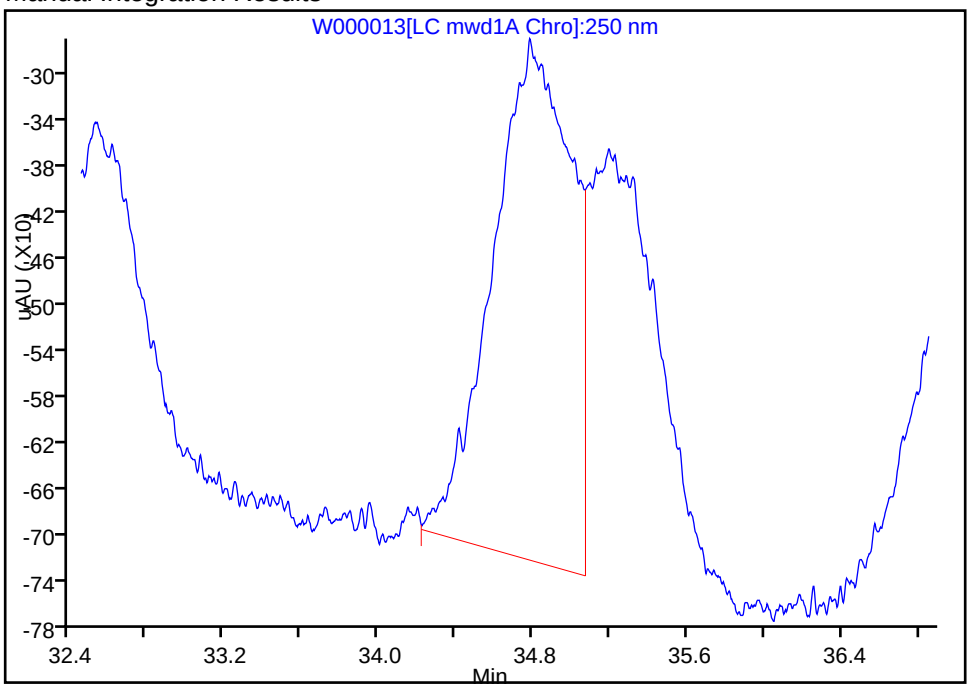
Processing Integration Results

RT: 34.78
Height: 407
Amount: 5.157896
Amount Units: ng/ml



Manual Integration Results

RT: 34.78
Height: 448
Amount: 5.678721
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:19:51
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

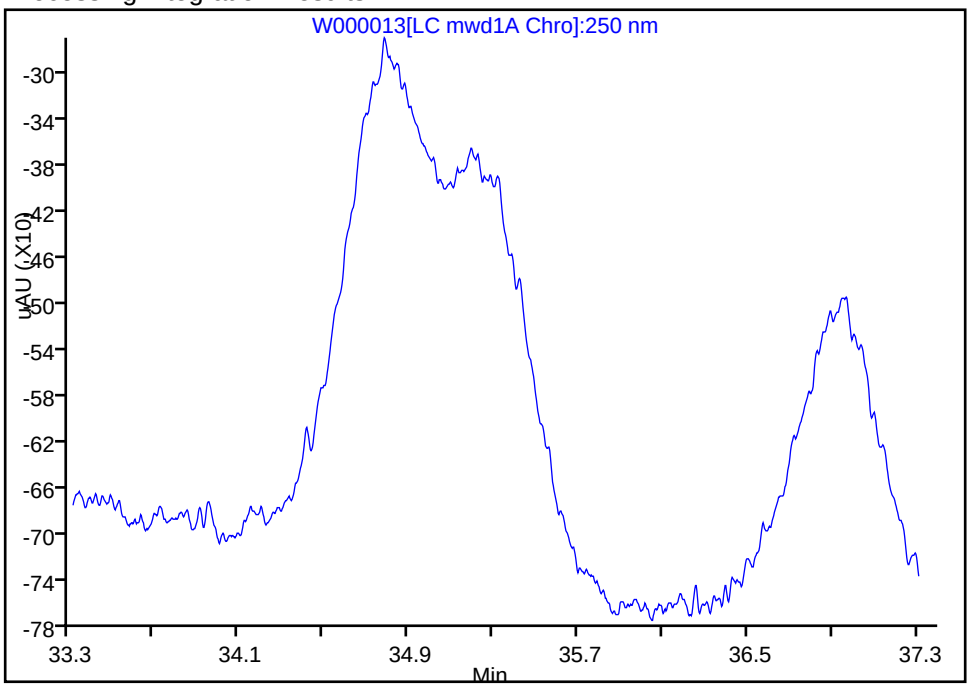
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000013.D
Injection Date: 24-Jan-2015 00:35:09 Instrument ID: LC9
Lims ID: LODV
Client ID:
Operator ID: TQP ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

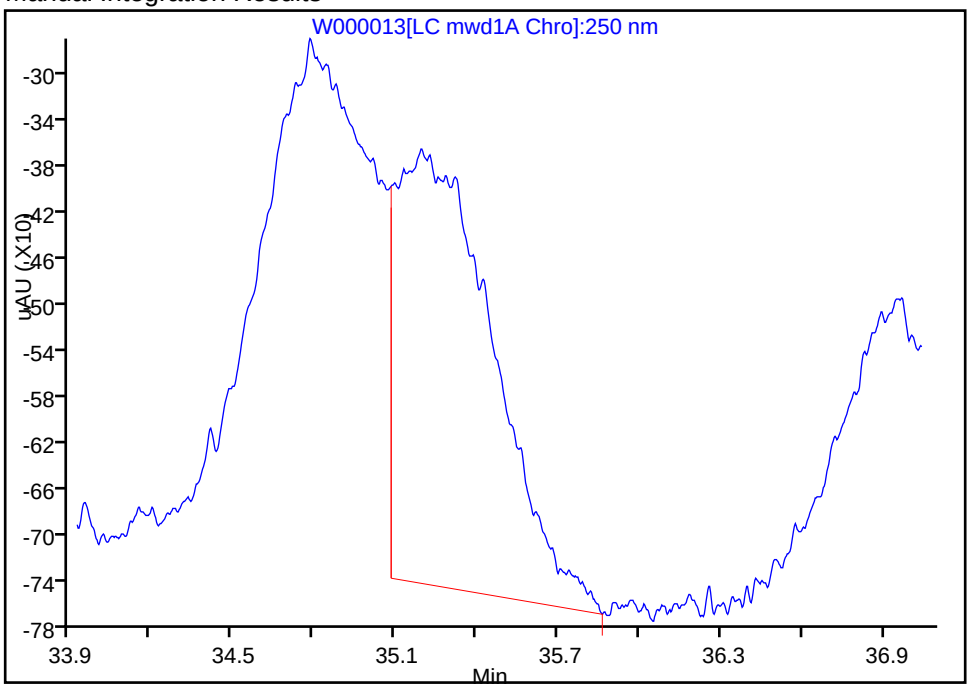
Not Detected
Expected RT: 35.30

Processing Integration Results



Manual Integration Results

RT: 35.19
Height: 373
Amount: 5.646187
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:19:51
Audit Action: Manually Integrated/Assigned Compound ID
Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

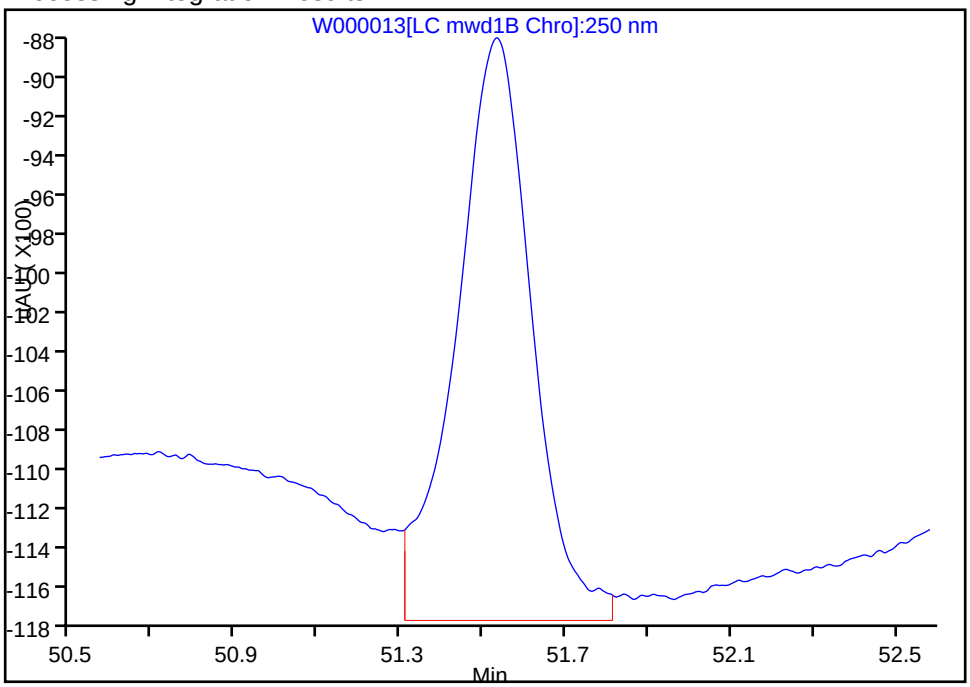
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000013.D
Injection Date: 24-Jan-2015 00:35:09 Instrument ID: LC9
Lims ID: LODV
Client ID:
Operator ID: TQP ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1B, 358 nm

22 PETN, CAS: 78-11-5

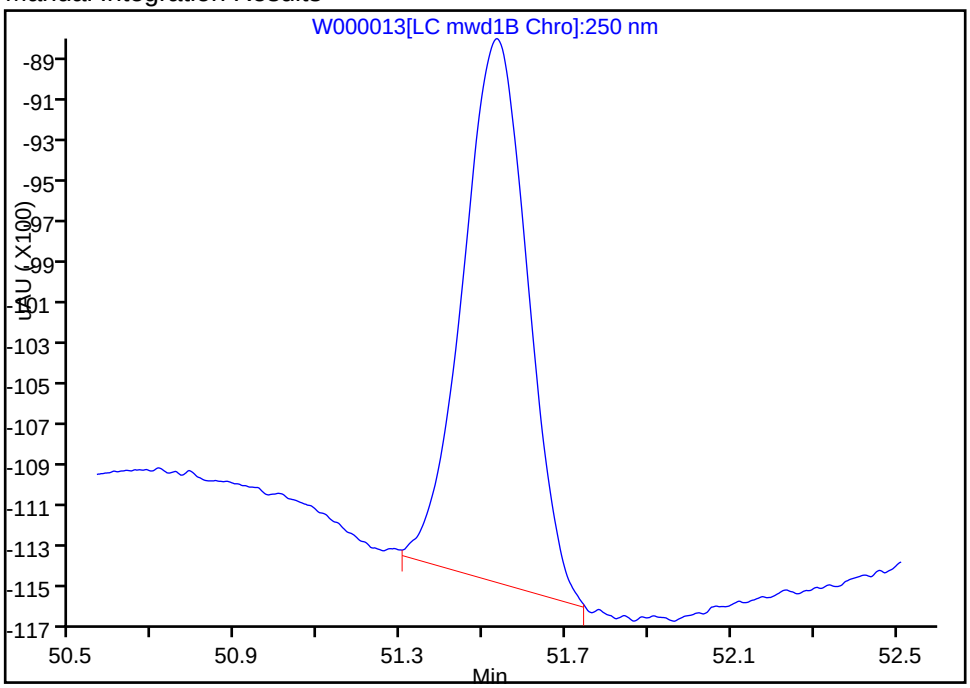
Processing Integration Results

RT: 51.53
Height: 2924
Amount: 19.431375
Amount Units: ng/ml



Manual Integration Results

RT: 51.53
Height: 2631
Amount: 19.520025
Amount Units: ng/ml



Reviewer: phant, 26-Jan-2015 10:04:45
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCVL 320-72338/3 Calibration Date: 04/28/2015 13:26

Instrument ID: LC9 Calib Start Date: 01/23/2015 14:34

GC Column: Zorbax CN ID: 4.60(mm) Calib End Date: 01/23/2015 21:15

Lab File ID: ZB000003.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Nitrobenzene	Ave	48.26	53.40		5.53	5.00	10.7	30.0
Ethylene glycol dinitrate	Lin2		53.55		17.1	20.0	-14.3	30.0
1,3-Dinitrobenzene	Ave	105.6	104.8		4.96	5.00	-0.8	30.0
1,3,5-Trinitrobenzene	Ave	85.12	81.40		4.78	5.00	-4.4	30.0
2-Nitrotoluene	Ave	64.74	67.00		5.17	5.00	3.5	30.0
4-Nitrotoluene	Ave	64.74	67.00		5.17	5.00	3.5	30.0
3,5-Dinitroaniline	Ave	86.06	85.20		4.95	5.00	-1.0	30.0
RDX	Lin2		59.80		3.73	5.00	-25.3	30.0
2,4-Dinitrotoluene	Ave	91.69	94.40		5.15	5.00	3.0	30.0
2,6-Dinitrotoluene	Ave	55.03	57.00		5.18	5.00	3.6	30.0
2-Amino-4,6-dinitrotoluene	Ave	78.89	77.00		4.88	5.00	-2.4	30.0
4-Amino-2,6-dinitrotoluene	Ave	66.06	68.60		5.19	5.00	3.8	30.0
2,4,6-Trinitrotoluene	Ave	77.95	76.60		4.91	5.00	-1.7	30.0
HMX	Ave	59.64	60.20		5.05	5.00	0.9	30.0
Nitroglycerin	Ave	88.51	83.95		19.0	20.0	-5.1	30.0
Tetryl	Ave	116.9	113.8		4.87	5.00	-2.7	30.0
PETN	Ave	134.8	109.9		16.3	20.0	-18.5	30.0
3,4-Dinitrotoluene	Ave	47.37	56.40		5.95	5.00	19.1	30.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCVL 320-72338/3 Calibration Date: 04/28/2015 13:26

Instrument ID: LC9 Calib Start Date: 01/23/2015 14:34

GC Column: Zorbax CN ID: 4.60(mm) Calib End Date: 01/23/2015 21:15

Lab File ID: ZB000003.D

Analyte	RT	RT WINDOW	
		FROM	TO
Nitrobenzene	21.40	21.15	21.65
Ethylene glycol dinitrate	22.62	22.37	22.87
1,3-Dinitrobenzene	24.21	23.96	24.46
1,3,5-Trinitrobenzene	26.64	26.39	26.89
2-Nitrotoluene	27.95	27.70	28.20
4-Nitrotoluene	27.95	27.70	28.20
3,5-Dinitroaniline	30.05	29.80	30.30
RDX	30.67	30.42	30.92
2,4-Dinitrotoluene	31.45	31.20	31.70
2,6-Dinitrotoluene	32.24	31.99	32.49
2-Amino-4,6-dinitrotoluene	34.50	34.25	34.75
4-Amino-2,6-dinitrotoluene	34.93	34.68	35.18
2,4,6-Trinitrotoluene	38.54	38.29	38.79
HMX	40.71	40.46	40.96
Nitroglycerin	43.08	42.83	43.33
Tetryl	44.83	44.58	45.08
PETN	51.33	51.08	51.58
3,4-Dinitrotoluene	36.67	36.42	36.92

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000003.D
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 28-Apr-2015 13:26:22 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021367-003
Operator ID: YPH Instrument ID: LC9
Sublist: chrom-LC9_Conf_8330*sub1

Method: \\SACChrom\ChromData\LC9\20150428-21367.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 28-Apr-2015 16:16:29 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK017

First Level Reviewer: huangyun Date: 28-Apr-2015 16:16:29

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							M
1	21.395	21.395	0.000	267H	5.00	5.53	M
4 Ethylene glycol dinitrate							
2	22.615	22.615	0.000	1071H	20.0	17.1	
5 1,3-Dinitrobenzene							
1	24.205	24.205	0.000	524H	5.00	4.96	
7 1,3,5-Trinitrobenzene							
1	26.638	26.638	0.000	407H	5.00	4.78	
9 p-Nitrotoluene							
1	27.948	27.948	0.000	335H	5.00	5.17	
8 o-Nitrotoluene							
1	27.948	27.948	0.000	335H	5.00	5.17	
10 m-Nitrotoluene							
1	28.468	28.468	0.000	187H	5.00	3.04	
11 3,5-Dinitroaniline							
1	30.045	30.045	0.000	426H	5.00	4.95	
12 RDX							
1	30.672	30.672	0.000	299H	5.00	3.73	
13 2,4-Dinitrotoluene							
1	31.445	31.445	0.000	472H	5.00	5.15	
14 2,6-Dinitrotoluene							
1	32.242	32.242	0.000	285H	5.00	5.18	
15 2-Amino-4,6-dinitrotoluene							M
1	34.498	34.498	0.000	385H	5.00	4.88	M
16 4-Amino-2,6-dinitrotoluene							M
1	34.925	34.925	0.000	343H	5.00	5.19	M
$ 17 3,4-Dinitrotoluene							
1	36.671	36.671	0.000	282H	5.00	5.95	
18 2,4,6-Trinitrotoluene							
1	38.538	38.538	0.000	383H	5.00	4.91	
19 HMX							
1	40.705	40.705	0.000	301H	5.00	5.05	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
20 Nitroglycerin							
2	43.081	43.081	0.000	1679H	20.0	19.0	
21 Tetryl							
1	44.828	44.828	0.000	569H	5.00	4.87	
22 PETN							M
2	51.328	51.328	0.000	2198H	20.0	16.3	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330icl_00025 Amount Added: 1.00 Units: mL

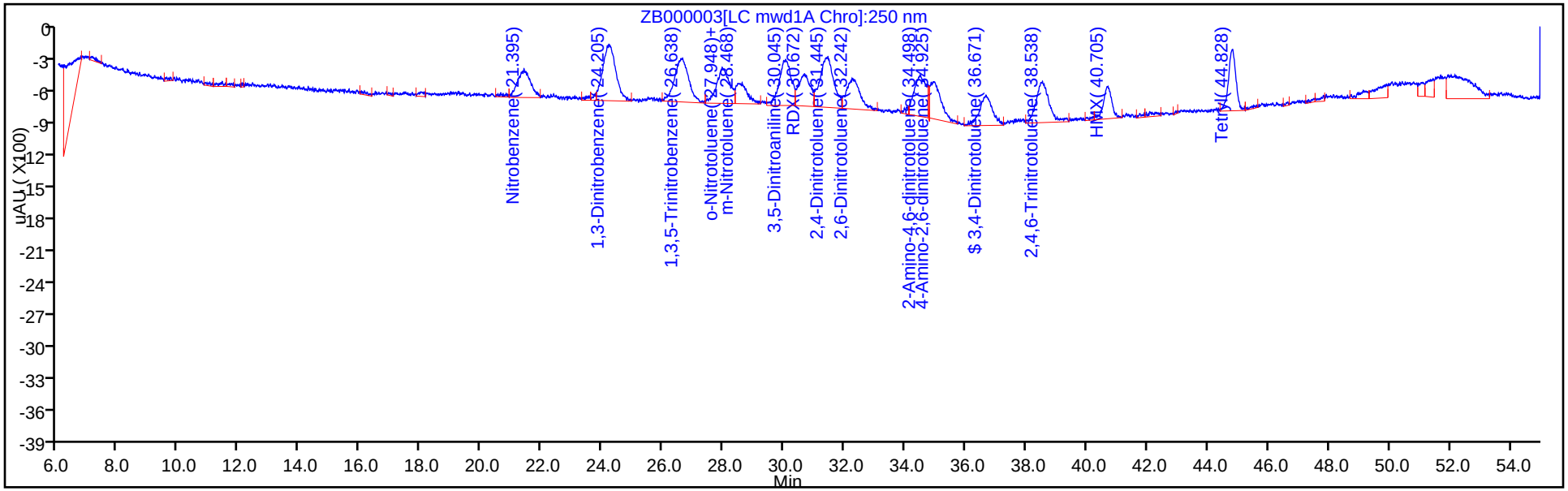
Report Date: 28-Apr-2015 16:16:30 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

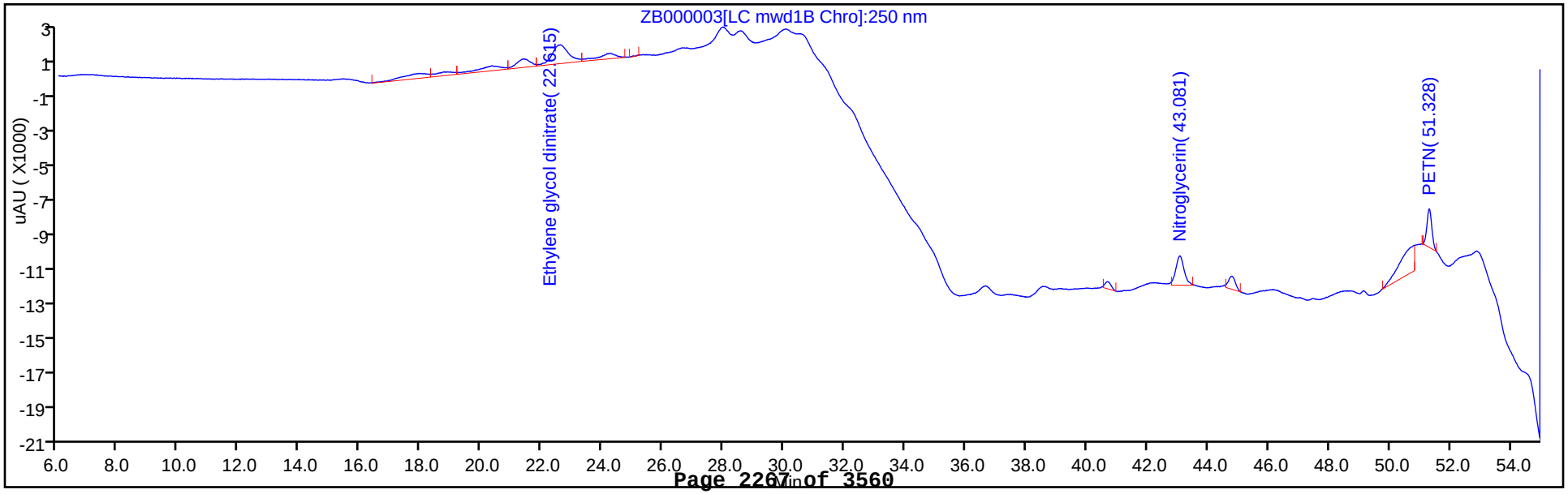
Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000003.D

Injection Date:	28-Apr-2015 13:26:22	Instrument ID:	LC9	Operator ID:	YPH
Lims ID:	CCVL			Worklist Smp#:	3
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

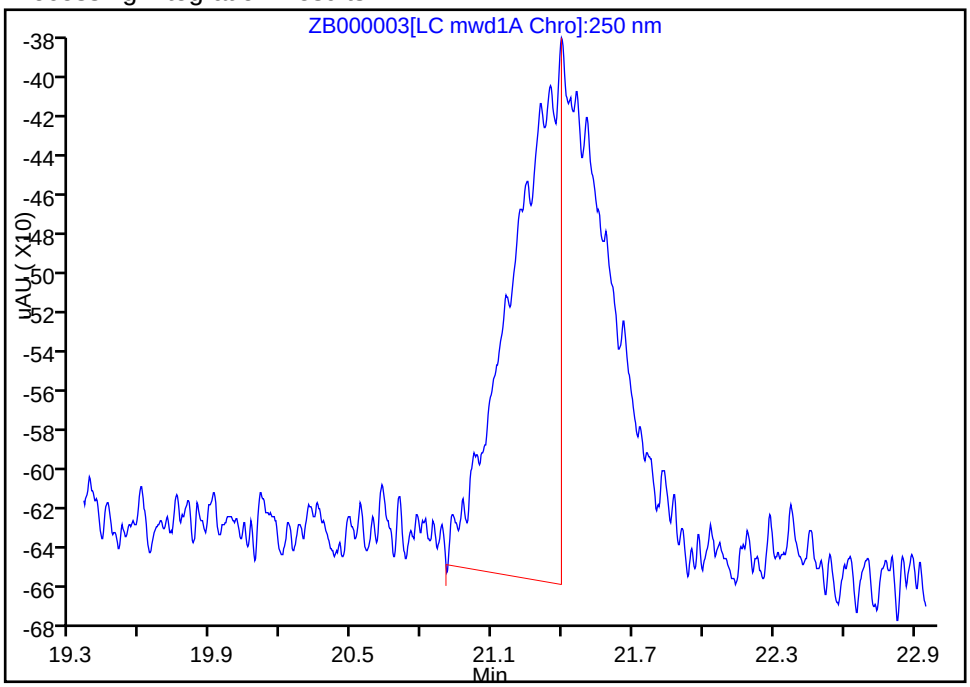
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000003.D
Injection Date: 28-Apr-2015 13:26:22 Instrument ID: LC9
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

3 Nitrobenzene, CAS: 98-95-3

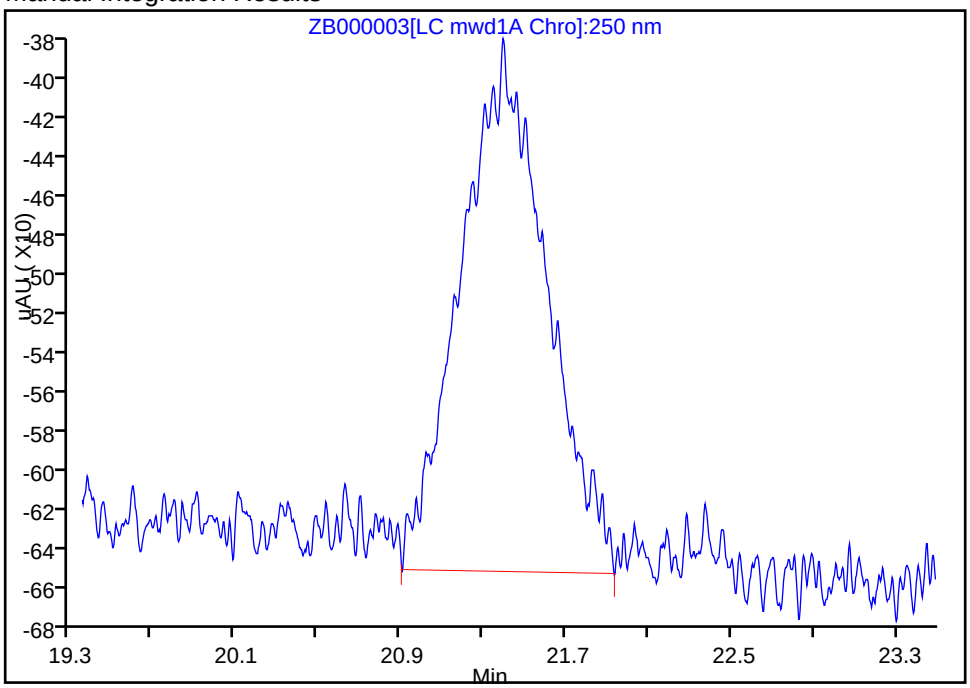
Processing Integration Results

RT: 21.39
Height: 274
Amount: 5.677832
Amount Units: ng/ml



Manual Integration Results

RT: 21.39
Height: 267
Amount: 5.532778
Amount Units: ng/ml



Reviewer: huangyun, 28-Apr-2015 14:59:15
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

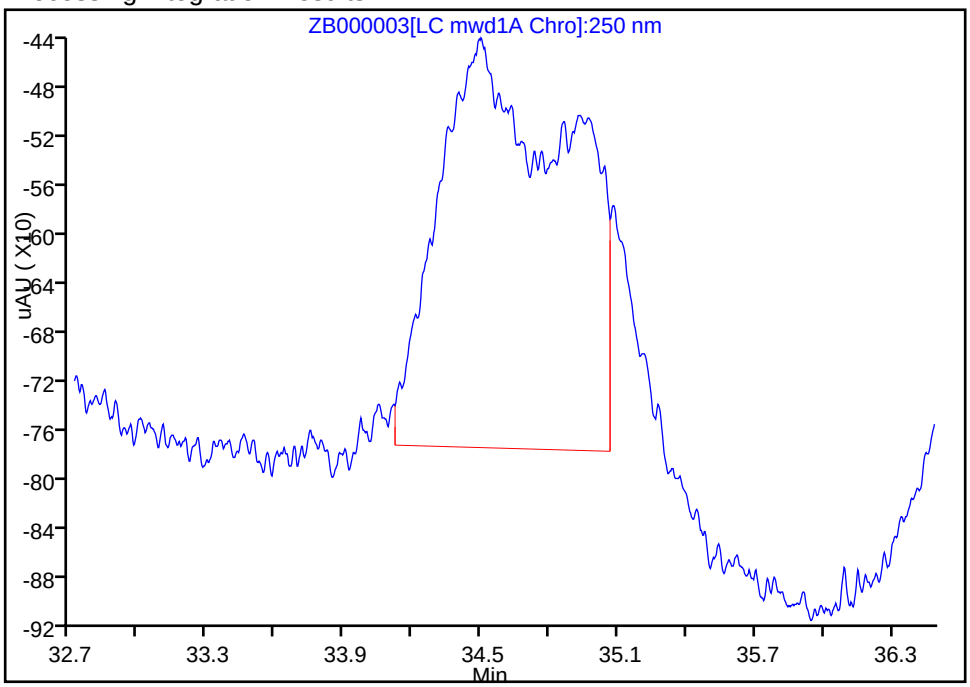
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000003.D
Injection Date: 28-Apr-2015 13:26:22 Instrument ID: LC9
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

15 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

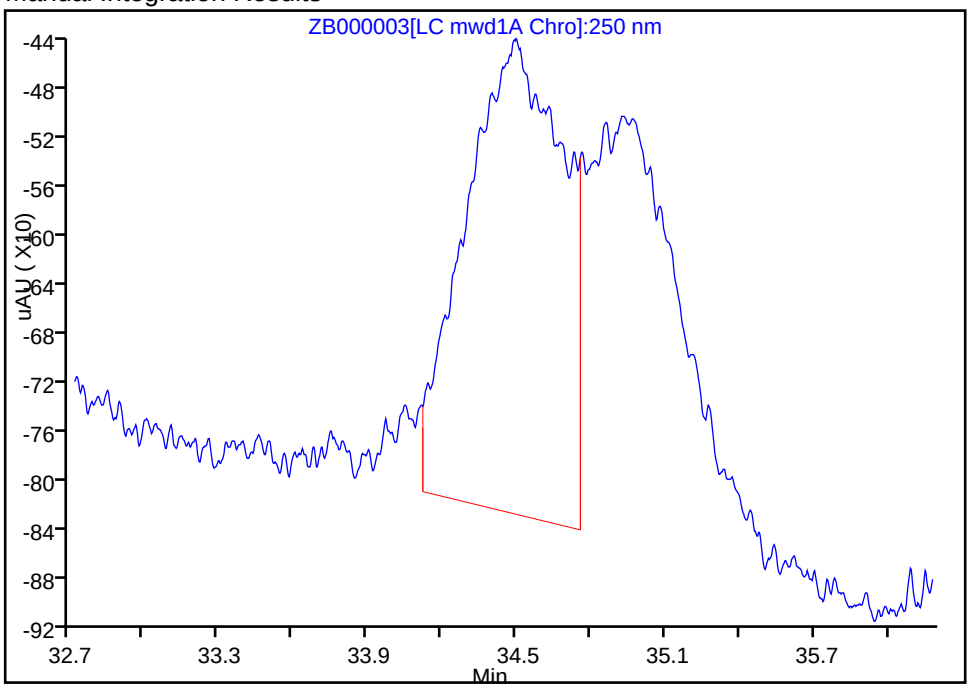
Processing Integration Results

RT: 34.50
Height: 331
Amount: 4.195662
Amount Units: ng/ml



Manual Integration Results

RT: 34.50
Height: 385
Amount: 4.880151
Amount Units: ng/ml



Reviewer: huangyun, 28-Apr-2015 14:59:15
Audit Action: Split an Integrated Peak
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

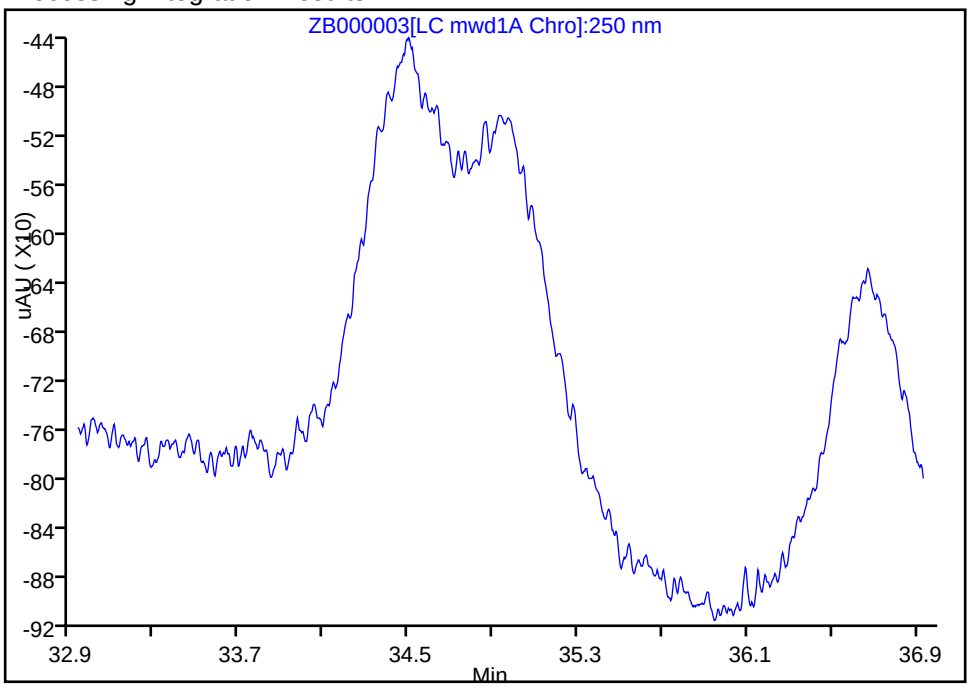
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000003.D
Injection Date: 28-Apr-2015 13:26:22 Instrument ID: LC9
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

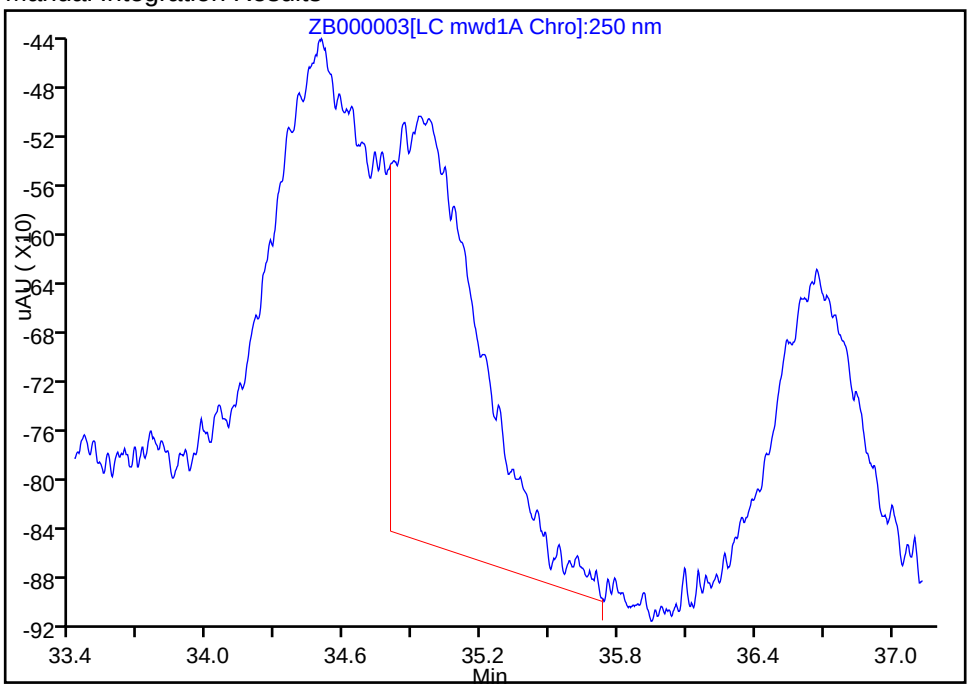
Not Detected
Expected RT: 34.92

Processing Integration Results



Manual Integration Results

RT: 34.92
Height: 343
Amount: 5.192070
Amount Units: ng/ml



Reviewer: huangyun, 28-Apr-2015 14:59:15
Audit Action: Manually Integrated/Assigned Compound ID
Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

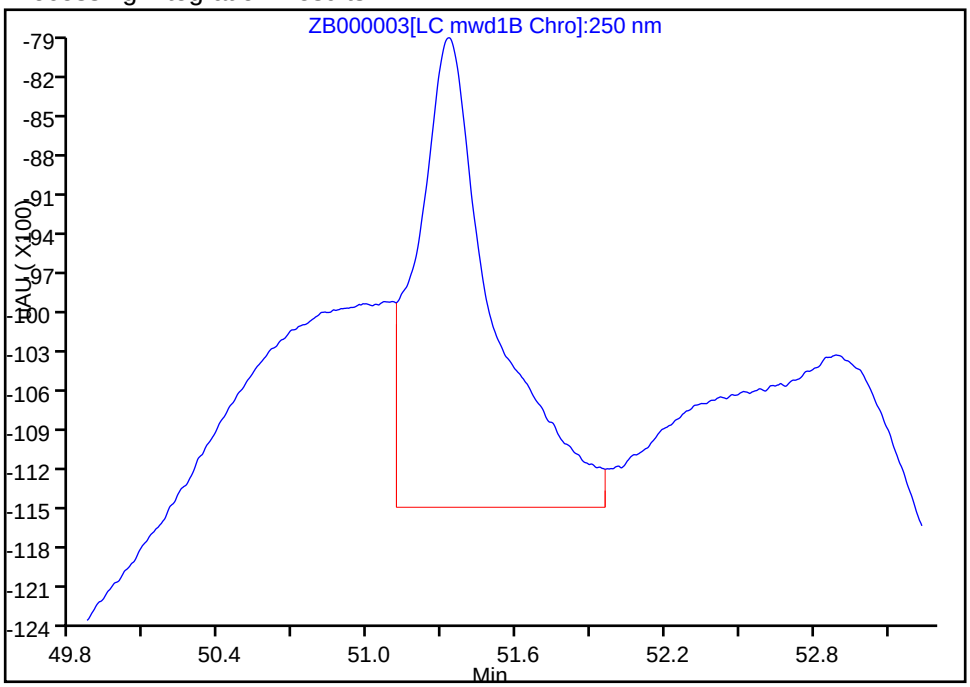
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000003.D
Injection Date: 28-Apr-2015 13:26:22 Instrument ID: LC9
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1B, 358 nm

22 PETN, CAS: 78-11-5

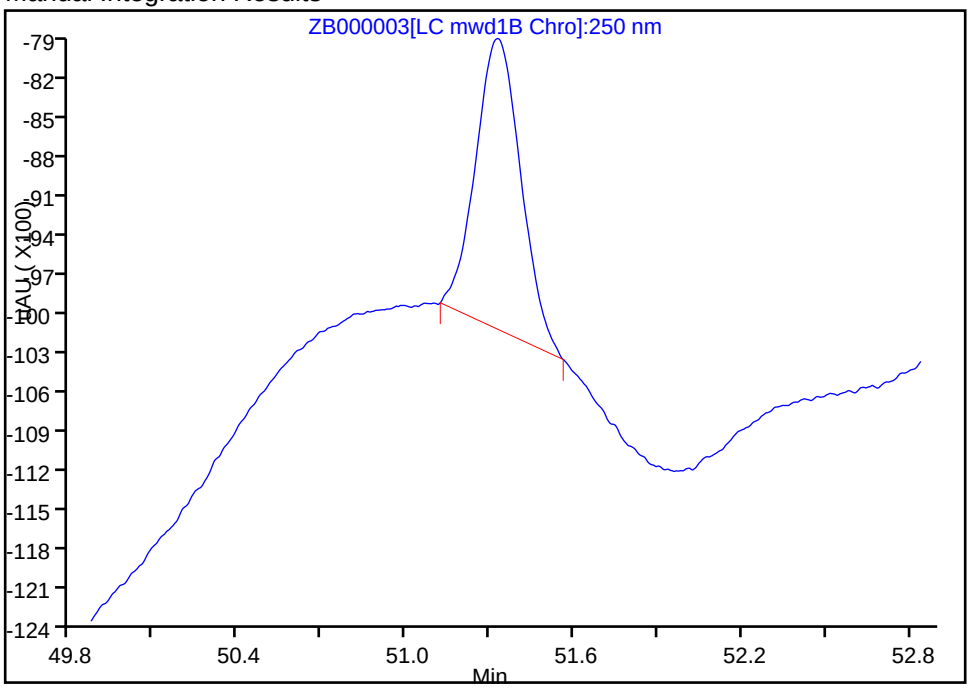
Processing Integration Results

RT: 51.33
Height: 3560
Amount: 26.412500
Amount Units: ng/ml



Manual Integration Results

RT: 51.33
Height: 2198
Amount: 16.307493
Amount Units: ng/ml



Reviewer: huangyun, 28-Apr-2015 14:59:15
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 320-72338/4 Calibration Date: 04/28/2015 14:33

Instrument ID: LC9 Calib Start Date: 01/23/2015 14:34

GC Column: Zorbax CN ID: 4.60(mm) Calib End Date: 01/23/2015 21:15

Lab File ID: ZB000004.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Nitrobenzene	Ave	48.26	44.97		93.2	100	-6.8	20.0
Ethylene glycol dinitrate	Lin2		48.45		94.2	100	-5.8	20.0
1,3-Dinitrobenzene	Ave	105.6	95.98		90.9	100	-9.1	20.0
1,3,5-Trinitrobenzene	Ave	85.12	76.44		89.8	100	-10.2	20.0
2-Nitrotoluene	Ave	64.74	59.57		92.0	100	-8.0	20.0
4-Nitrotoluene	Ave	64.74	59.57		92.0	100	-8.0	20.0
3-Nitrotoluene	Lin2		34.81		97.1	100	-2.9	20.0
3,5-Dinitroaniline	Ave	86.06	76.10		88.4	100	-11.6	20.0
RDX	Lin2		45.20		98.8	100	-1.2	20.0
2,4-Dinitrotoluene	Ave	91.69	84.80		92.5	100	-7.5	20.0
2,6-Dinitrotoluene	Ave	55.03	50.65		92.0	100	-8.0	20.0
2-Amino-4,6-dinitrotoluene	Ave	78.89	71.39		90.5	100	-9.5	20.0
4-Amino-2,6-dinitrotoluene	Ave	66.06	61.27		92.7	100	-7.3	20.0
2,4,6-Trinitrotoluene	Ave	77.95	71.20		91.3	100	-8.7	20.0
HMX	Ave	59.64	55.19		92.5	100	-7.5	20.0
Nitroglycerin	Ave	88.51	77.79		87.9	100	-12.1	20.0
Tetryl	Ave	116.9	110.1		94.2	100	-5.8	20.0
PETN	Ave	134.8	115.6		85.8	100	-14.2	20.0
3,4-Dinitrotoluene	Ave	47.37	41.76		88.2	100	-11.8	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 320-72338/4 Calibration Date: 04/28/2015 14:33

Instrument ID: LC9 Calib Start Date: 01/23/2015 14:34

GC Column: Zorbax CN ID: 4.60(mm) Calib End Date: 01/23/2015 21:15

Lab File ID: ZB000004.D

Analyte	RT	RT WINDOW	
		FROM	TO
Nitrobenzene	21.38	21.13	21.63
Ethylene glycol dinitrate	22.53	22.28	22.78
1,3-Dinitrobenzene	24.19	23.94	24.44
1,3,5-Trinitrobenzene	26.58	26.33	26.83
2-Nitrotoluene	27.96	27.71	28.21
4-Nitrotoluene	27.96	27.71	28.21
3-Nitrotoluene	28.52	28.27	28.77
3,5-Dinitroaniline	30.03	29.78	30.28
RDX	30.65	30.40	30.90
2,4-Dinitrotoluene	31.39	31.14	31.64
2,6-Dinitrotoluene	32.25	32.00	32.50
2-Amino-4,6-dinitrotoluene	34.48	34.23	34.73
4-Amino-2,6-dinitrotoluene	34.91	34.66	35.16
2,4,6-Trinitrotoluene	38.50	38.25	38.75
HMX	40.69	40.44	40.94
Nitroglycerin	43.05	42.80	43.30
Tetryl	44.80	44.55	45.05
PETN	51.30	51.05	51.55
3,4-Dinitrotoluene	36.65	36.40	36.90

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000004.D
Lims ID: CCV 05
Client ID:
Sample Type: CCVRT
Inject. Date: 28-Apr-2015 14:33:00 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021367-004
Operator ID: YPH Instrument ID: LC9
Sublist: chrom-LC9_Conf_8330*sub1

Method: \\SACChrom\ChromData\LC9\20150428-21367.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 28-Apr-2015 17:07:04 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK017

First Level Reviewer: huangyun Date: 28-Apr-2015 17:07:04

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							
1	21.382	21.382	0.000	4497H	100.0	93.2	
4 Ethylene glycol dinitrate							
2	22.532	22.532	0.000	4845H	100.0	94.2	
5 1,3-Dinitrobenzene							
1	24.185	24.185	0.000	9598H	100.0	90.9	
7 1,3,5-Trinitrobenzene							
1	26.582	26.582	0.000	7644H	100.0	89.8	
9 p-Nitrotoluene							
1	27.958	27.958	0.000	5957H	100.0	92.0	
8 o-Nitrotoluene							
1	27.958	27.958	0.000	5957H	100.0	92.0	
10 m-Nitrotoluene							
1	28.522	28.522	0.000	3481H	100.0	97.1	
11 3,5-Dinitroaniline							
1	30.025	30.025	0.000	7610H	100.0	88.4	
12 RDX							
1	30.648	30.648	0.000	4520H	100.0	98.8	
13 2,4-Dinitrotoluene							
1	31.388	31.388	0.000	8480H	100.0	92.5	
14 2,6-Dinitrotoluene							
1	32.252	32.252	0.000	5065H	100.0	92.0	
15 2-Amino-4,6-dinitrotoluene							
1	34.482	34.482	0.000	7139H	100.0	90.5	
16 4-Amino-2,6-dinitrotoluene							
1	34.905	34.905	0.000	6127H	100.0	92.7	
$ 17 3,4-Dinitrotoluene							
1	36.648	36.648	0.000	4176H	100.0	88.2	
18 2,4,6-Trinitrotoluene							
1	38.501	38.501	0.000	7120H	100.0	91.3	
19 HMX							
1	40.685	40.685	0.000	5519H	100.0	92.5	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
20 Nitroglycerin							
2	43.048	43.048	0.000	7779H	100.0	87.9	
21 Tetryl							
1	44.795	44.795	0.000	11013H	100.0	94.2	
22 PETN							M
2	51.301	51.301	0.000	11558H	100.0	85.8	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

hp8330L5_00035 Amount Added: 1.00 Units: mL

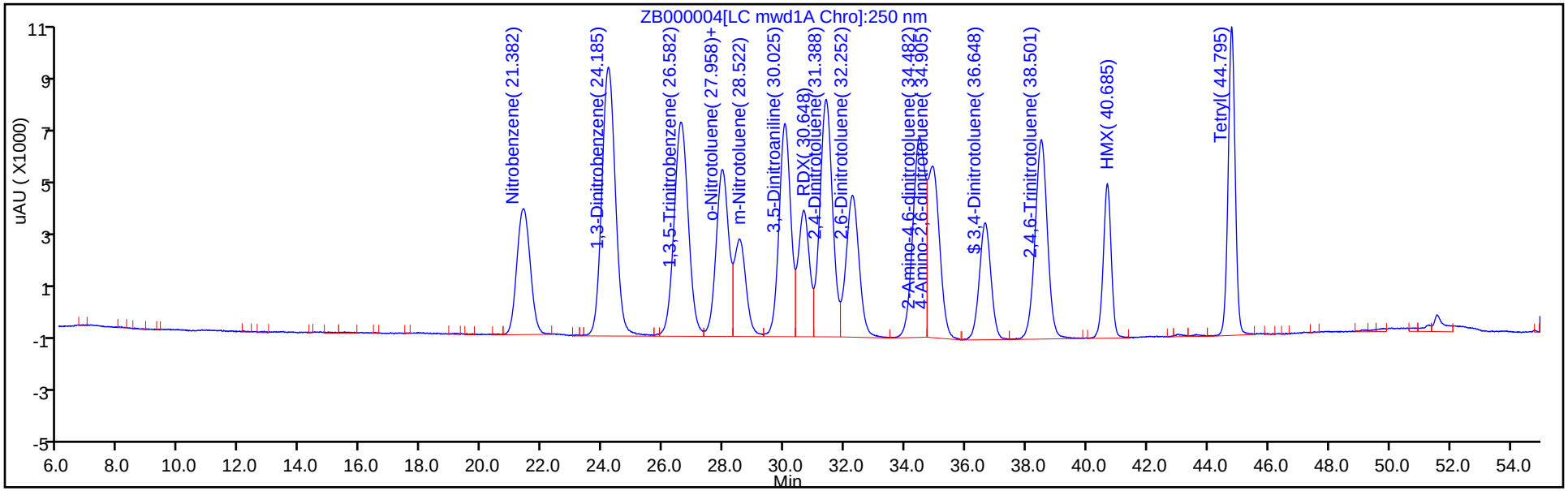
Report Date: 28-Apr-2015 17:07:05 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

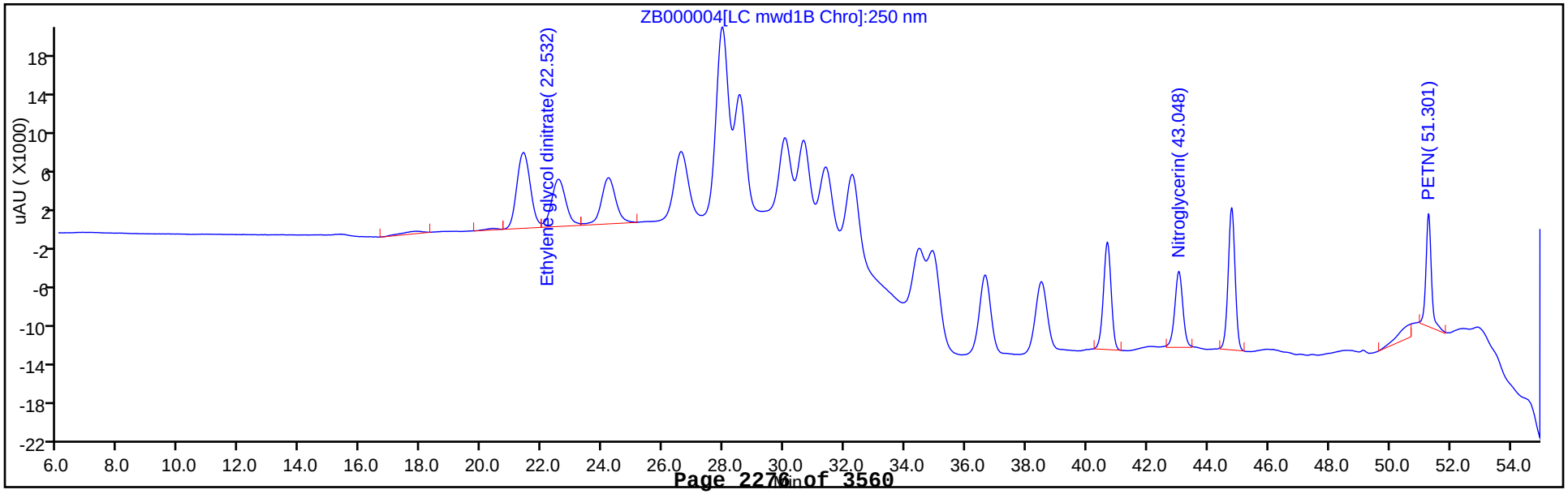
Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000004.D

Injection Date:	28-Apr-2015 14:33:00	Instrument ID:	LC9	Operator ID:	YPH
Lims ID:	CCV 05			Worklist Smp#:	4
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

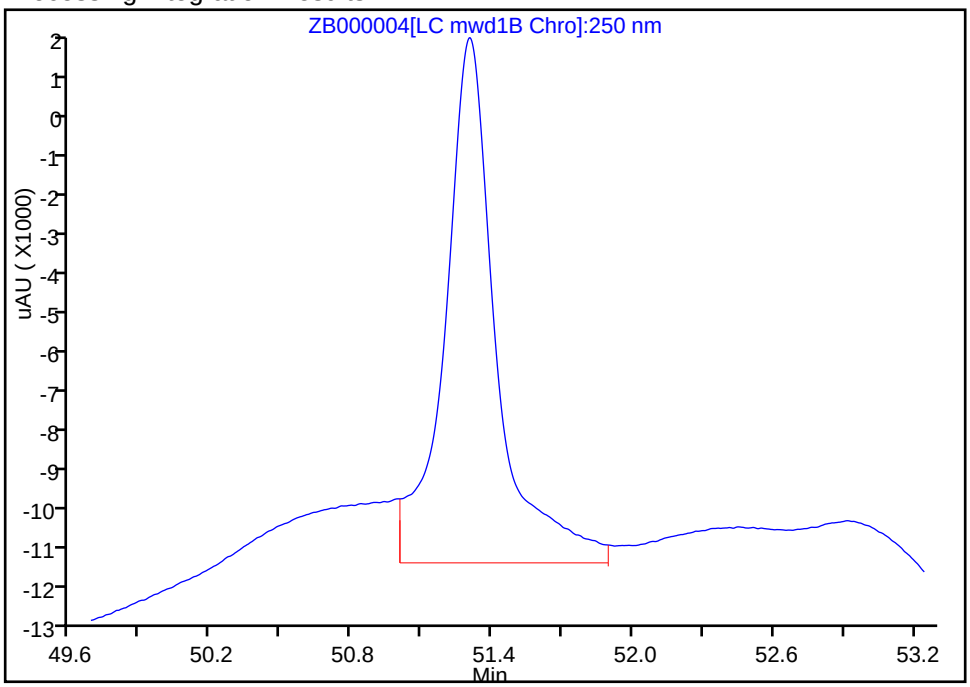
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC9\20150428-21367.b\ZB000004.D				
Injection Date:	28-Apr-2015 14:33:00	Instrument ID:	LC9		
Lims ID:	CCV 05				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		
Column:	Zorbax Cyano CN (4.60 mm)	Detector	LC mwd1B, 358 nm		

22 PETN, CAS: 78-11-5

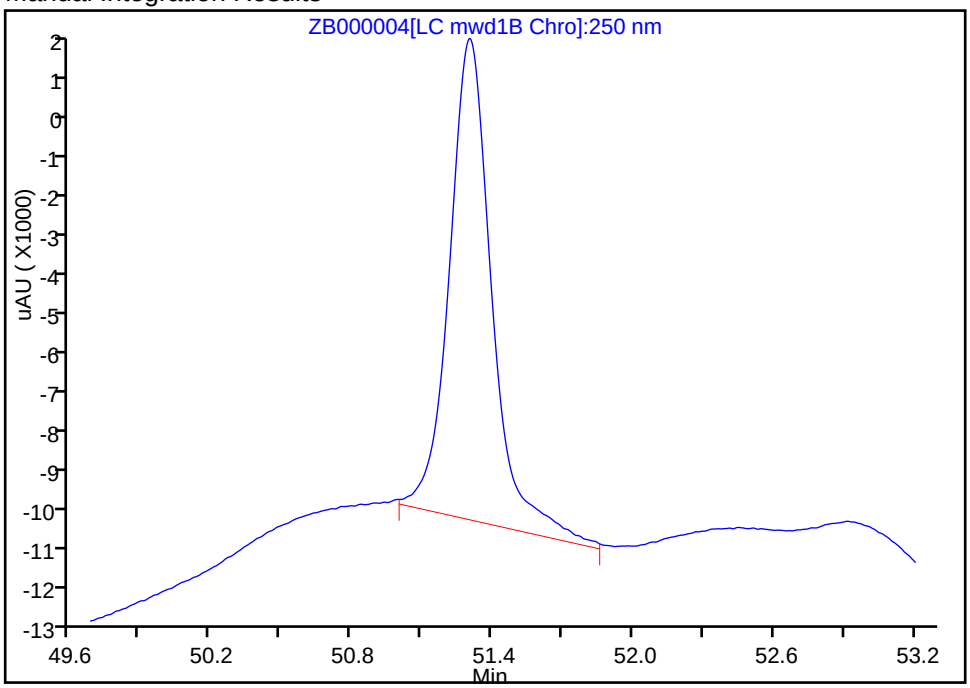
Processing Integration Results

RT: 51.30
Height: 12608
Amount: 93.541798
Amount Units: ng/ml



Manual Integration Results

RT: 51.30
Height: 11558
Amount: 85.751594
Amount Units: ng/ml



Reviewer: huangyun, 28-Apr-2015 15:59:38
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 320-72338/8 Calibration Date: 04/28/2015 18:59

Instrument ID: LC9 Calib Start Date: 01/23/2015 14:34

GC Column: Zorbax CN ID: 4.60(mm) Calib End Date: 01/23/2015 21:15

Lab File ID: ZB000008.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Nitrobenzene	Ave	48.26	46.28		48.0	50.0	-4.1	20.0
Ethylene glycol dinitrate	Lin2		50.44		46.8	50.0	-6.5	20.0
1,3-Dinitrobenzene	Ave	105.6	97.26		46.1	50.0	-7.9	20.0
1,3,5-Trinitrobenzene	Ave	85.12	77.40		45.5	50.0	-9.1	20.0
2-Nitrotoluene	Ave	64.74	60.56		46.8	50.0	-6.5	20.0
4-Nitrotoluene	Ave	64.74	60.56		46.8	50.0	-6.5	20.0
3-Nitrotoluene	Lin2		35.50		48.4	50.0	-3.3	20.0
3,5-Dinitroaniline	Ave	86.06	77.18		44.8	50.0	-10.3	20.0
RDX	Lin2		46.84		49.7	50.0	-0.5	20.0
2,4-Dinitrotoluene	Ave	91.69	86.14		47.0	50.0	-6.0	20.0
2,6-Dinitrotoluene	Ave	55.03	51.82		47.1	50.0	-5.8	20.0
2-Amino-4,6-dinitrotoluene	Ave	78.89	72.48		45.9	50.0	-8.1	20.0
4-Amino-2,6-dinitrotoluene	Ave	66.06	62.16		47.0	50.0	-5.9	20.0
2,4,6-Trinitrotoluene	Ave	77.95	71.58		45.9	50.0	-8.2	20.0
HMX	Ave	59.64	54.48		45.7	50.0	-8.6	20.0
Nitroglycerin	Ave	88.51	75.96		42.9	50.0	-14.2	20.0
Tetryl	Ave	116.9	109.0		46.6	50.0	-6.8	20.0
PETN	Ave	134.8	129.2		47.9	50.0	-4.1	20.0
3,4-Dinitrotoluene	Ave	47.37	41.84		44.2	50.0	-11.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCV 320-72338/8 Calibration Date: 04/28/2015 18:59

Instrument ID: LC9 Calib Start Date: 01/23/2015 14:34

GC Column: Zorbax CN ID: 4.60(mm) Calib End Date: 01/23/2015 21:15

Lab File ID: ZB000008.D

Analyte	RT	RT WINDOW	
		FROM	TO
Nitrobenzene	21.36	21.11	21.61
Ethylene glycol dinitrate	22.51	22.26	22.76
1,3-Dinitrobenzene	24.15	23.90	24.40
1,3,5-Trinitrobenzene	26.55	26.30	26.80
2-Nitrotoluene	27.91	27.66	28.16
4-Nitrotoluene	27.91	27.66	28.16
3-Nitrotoluene	28.48	28.23	28.73
3,5-Dinitroaniline	29.97	29.72	30.22
RDX	30.58	30.33	30.83
2,4-Dinitrotoluene	31.32	31.07	31.57
2,6-Dinitrotoluene	32.20	31.95	32.45
2-Amino-4,6-dinitrotoluene	34.40	34.15	34.65
4-Amino-2,6-dinitrotoluene	34.84	34.59	35.09
2,4,6-Trinitrotoluene	38.45	38.20	38.70
HMX	40.63	40.38	40.88
Nitroglycerin	43.01	42.76	43.26
Tetryl	44.76	44.51	45.01
PETN	51.28	51.03	51.53
3,4-Dinitrotoluene	36.58	36.33	36.83

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000008.D
Lims ID: CCV 04
Client ID:
Sample Type: CCVRT
Inject. Date: 28-Apr-2015 18:59:28 ALS Bottle#: 4 Worklist Smp#: 8
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021367-008
Operator ID: YPH Instrument ID: LC9
Sublist: chrom-LC9_Conf_8330*sub1

Method: \\SACChrom\ChromData\LC9\20150428-21367.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 29-Apr-2015 09:12:30 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK021

First Level Reviewer: huangyun Date: 29-Apr-2015 09:12:30

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							
1	21.356	21.356	0.000	2314H	50.0	48.0	
4 Ethylene glycol dinitrate							
2	22.510	22.510	0.000	2522H	50.0	46.8	
5 1,3-Dinitrobenzene							
1	24.146	24.146	0.000	4863H	50.0	46.1	
7 1,3,5-Trinitrobenzene							
1	26.553	26.553	0.000	3870H	50.0	45.5	
9 p-Nitrotoluene							
1	27.906	27.906	0.000	3028H	50.0	46.8	
8 o-Nitrotoluene							
1	27.906	27.906	0.000	3028H	50.0	46.8	
10 m-Nitrotoluene							
1	28.483	28.483	0.000	1775H	50.0	48.4	
11 3,5-Dinitroaniline							
1	29.973	29.973	0.000	3859H	50.0	44.8	
12 RDX							
1	30.580	30.580	0.000	2342H	50.0	49.7	
13 2,4-Dinitrotoluene							
1	31.320	31.320	0.000	4307H	50.0	47.0	
14 2,6-Dinitrotoluene							
1	32.200	32.200	0.000	2591H	50.0	47.1	
15 2-Amino-4,6-dinitrotoluene							
1	34.403	34.403	0.000	3624H	50.0	45.9	
16 4-Amino-2,6-dinitrotoluene							
1	34.836	34.836	0.000	3108H	50.0	47.0	
$ 17 3,4-Dinitrotoluene							
1	36.579	36.579	0.000	2092H	50.0	44.2	
18 2,4,6-Trinitrotoluene							
1	38.453	38.453	0.000	3579H	50.0	45.9	
19 HMX							
1	40.629	40.629	0.000	2724H	50.0	45.7	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
20 Nitroglycerin							
2	43.006	43.006	0.000	3798H	50.0	42.9	
21 Tetryl							
1	44.756	44.756	0.000	5451H	50.0	46.6	
22 PETN							
2	51.279	51.279	0.000	6460H	50.0	47.9	

Reagents:

HP8330L4_00026 Amount Added: 1.00 Units: mL

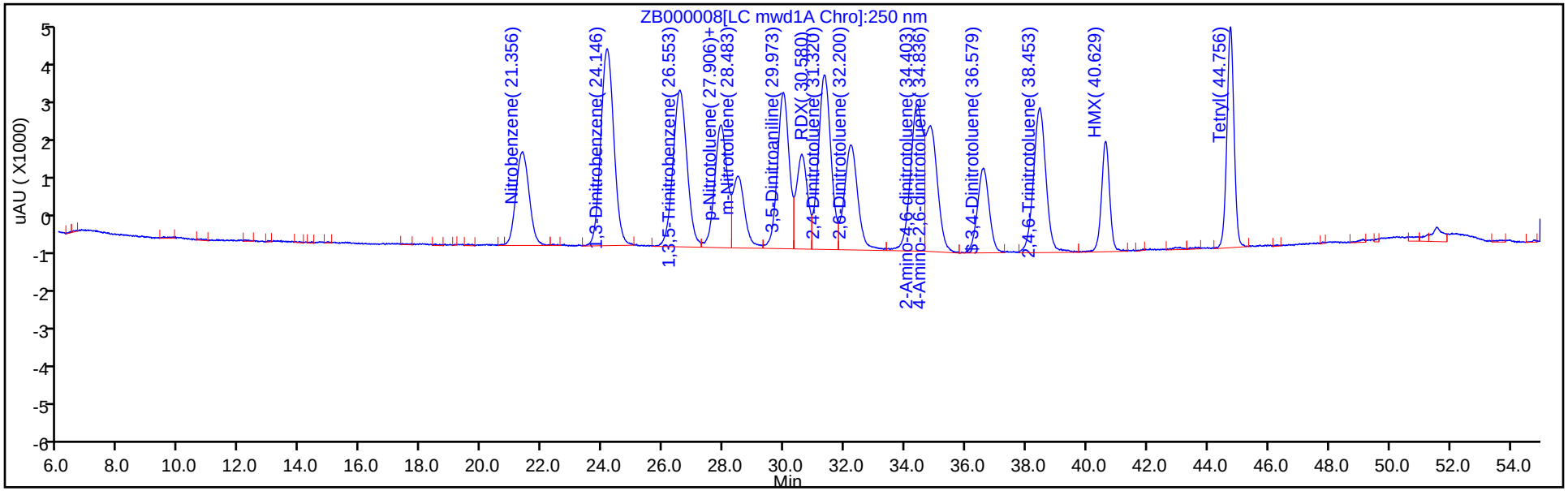
Report Date: 29-Apr-2015 09:12:33 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

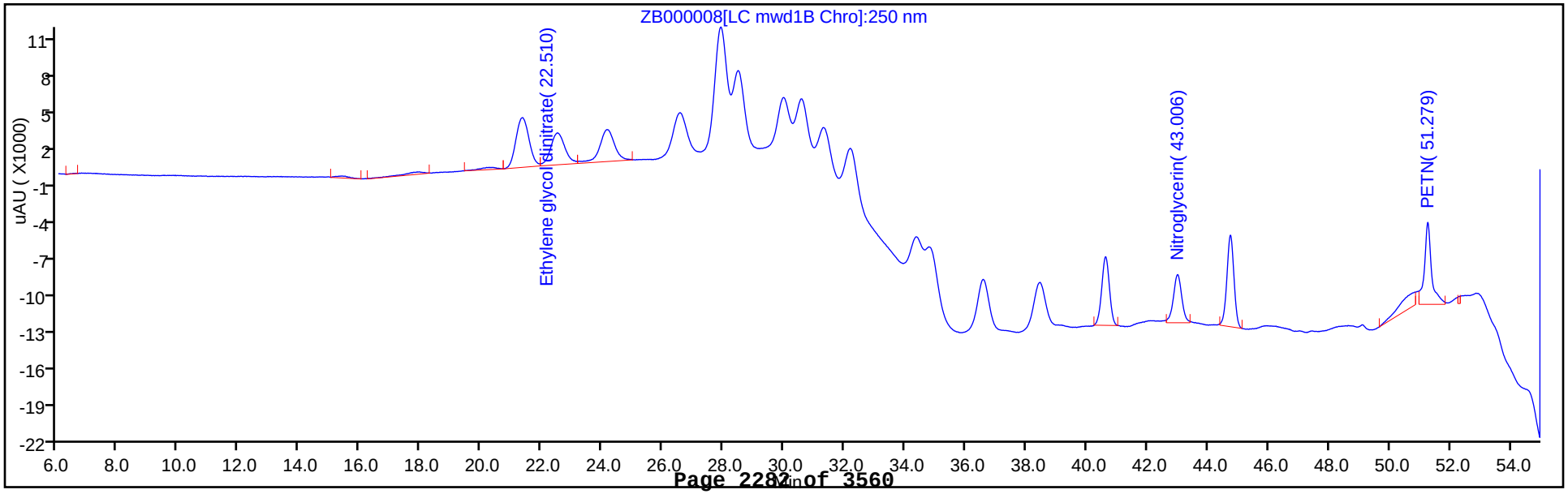
Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000008.D

Injection Date:	28-Apr-2015 18:59:28	Instrument ID:	LC9	Operator ID:	YPH
Lims ID:	CCV 04			Worklist Smp#:	8
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCVL 320-72338/9 Calibration Date: 04/28/2015 20:06

Instrument ID: LC9 Calib Start Date: 01/23/2015 14:34

GC Column: Zorbax CN ID: 4.60(mm) Calib End Date: 01/23/2015 21:15

Lab File ID: ZB000009.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Nitrobenzene	Ave	48.26	49.00		5.08	5.00	1.5	30.0
Ethylene glycol dinitrate	Lin2		46.55		14.3	20.0	-28.6	30.0
1,3-Dinitrobenzene	Ave	105.6	102.6		4.86	5.00	-2.8	30.0
1,3,5-Trinitrobenzene	Ave	85.12	84.20		4.95	5.00	-1.1	30.0
2-Nitrotoluene	Ave	64.74	59.60		4.60	5.00	-7.9	30.0
4-Nitrotoluene	Ave	64.74	59.60		4.60	5.00	-7.9	30.0
3,5-Dinitroaniline	Ave	86.06	85.60		4.97	5.00	-0.5	30.0
RDX	Lin2		61.40		3.91	5.00	-21.7	30.0
2,4-Dinitrotoluene	Ave	91.69	98.40		5.37	5.00	7.3	30.0
2,6-Dinitrotoluene	Ave	55.03	59.00		5.36	5.00	7.2	30.0
2-Amino-4,6-dinitrotoluene	Ave	78.89	81.40		5.16	5.00	3.2	30.0
4-Amino-2,6-dinitrotoluene	Ave	66.06	69.40		5.25	5.00	5.1	30.0
2,4,6-Trinitrotoluene	Ave	77.95	74.40		4.77	5.00	-4.6	30.0
HMX	Ave	59.64	61.60		5.16	5.00	3.3	30.0
Nitroglycerin	Ave	88.51	83.75		18.9	20.0	-5.4	30.0
Tetryl	Ave	116.9	115.0		4.92	5.00	-1.6	30.0
PETN	Ave	134.8	115.7		17.2	20.0	-14.2	30.0
3,4-Dinitrotoluene	Ave	47.37	54.20		5.72	5.00	14.4	30.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Lab Sample ID: CCVL 320-72338/9 Calibration Date: 04/28/2015 20:06

Instrument ID: LC9 Calib Start Date: 01/23/2015 14:34

GC Column: Zorbax CN ID: 4.60(mm) Calib End Date: 01/23/2015 21:15

Lab File ID: ZB000009.D

Analyte	RT	RT WINDOW	
		FROM	TO
Nitrobenzene	21.32	21.07	21.57
Ethylene glycol dinitrate	22.51	22.26	22.76
1,3-Dinitrobenzene	24.09	23.84	24.34
1,3,5-Trinitrobenzene	26.55	26.30	26.80
2-Nitrotoluene	27.89	27.64	28.14
4-Nitrotoluene	27.89	27.64	28.14
3,5-Dinitroaniline	29.93	29.68	30.18
RDX	30.57	30.32	30.82
2,4-Dinitrotoluene	31.33	31.08	31.58
2,6-Dinitrotoluene	32.17	31.92	32.42
2-Amino-4,6-dinitrotoluene	34.37	34.12	34.62
4-Amino-2,6-dinitrotoluene	34.77	34.59	35.09
2,4,6-Trinitrotoluene	38.45	38.20	38.70
HMX	40.62	40.37	40.87
Nitroglycerin	42.99	42.74	43.24
Tetryl	44.75	44.50	45.00
PETN	51.26	51.01	51.51
3,4-Dinitrotoluene	36.60	36.35	36.85

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000009.D
Lims ID: CCVL
Client ID:
Sample Type: CCVL
Inject. Date: 28-Apr-2015 20:06:03 ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021367-009
Operator ID: YPH Instrument ID: LC9
Sublist: chrom-LC9_Conf_8330*sub1

Method: \\SACChrom\ChromData\LC9\20150428-21367.b\LC9_Conf_8330.m
Limit Group: LC 8330B ICAL
Last Update: 29-Apr-2015 09:15:53 Calib Date: 23-Jan-2015 21:15:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC9\20150123-18933.b\W000010.D

Column 1 : Zorbax Cyano CN (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK021

First Level Reviewer: huangyun Date: 29-Apr-2015 09:15:53

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
3 Nitrobenzene							M
1	21.319	21.319	0.000	245H	5.00	5.08	M
4 Ethylene glycol dinitrate							
2	22.509	22.509	0.000	931H	20.0	14.3	
5 1,3-Dinitrobenzene							
1	24.093	24.093	0.000	513H	5.00	4.86	
7 1,3,5-Trinitrobenzene							
1	26.546	26.546	0.000	421H	5.00	4.95	
9 p-Nitrotoluene							
1	27.886	27.886	0.000	298H	5.00	4.60	
8 o-Nitrotoluene							
1	27.886	27.886	0.000	298H	5.00	4.60	
10 m-Nitrotoluene							M
1	28.456	28.483	-0.027	186H	5.00	3.01	M
11 3,5-Dinitroaniline							
1	29.929	29.929	0.000	428H	5.00	4.97	
12 RDX							
1	30.566	30.566	0.000	307H	5.00	3.91	
13 2,4-Dinitrotoluene							
1	31.326	31.326	0.000	492H	5.00	5.37	
14 2,6-Dinitrotoluene							
1	32.169	32.169	0.000	295H	5.00	5.36	
15 2-Amino-4,6-dinitrotoluene							M
1	34.369	34.369	0.000	407H	5.00	5.16	M
16 4-Amino-2,6-dinitrotoluene							M
1	34.773	34.836	-0.063	347H	5.00	5.25	M
$ 17 3,4-Dinitrotoluene							
1	36.603	36.603	0.000	271H	5.00	5.72	
18 2,4,6-Trinitrotoluene							
1	38.446	38.446	0.000	372H	5.00	4.77	
19 HMX							
1	40.619	40.619	0.000	308H	5.00	5.16	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
20 Nitroglycerin							
2	42.993	42.993	0.000	1675H	20.0	18.9	
21 Tetryl							
1	44.746	44.746	0.000	575H	5.00	4.92	
22 PETN							M
2	51.263	51.263	0.000	2314H	20.0	17.2	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

HP8330icl_00025 Amount Added: 1.00 Units: mL

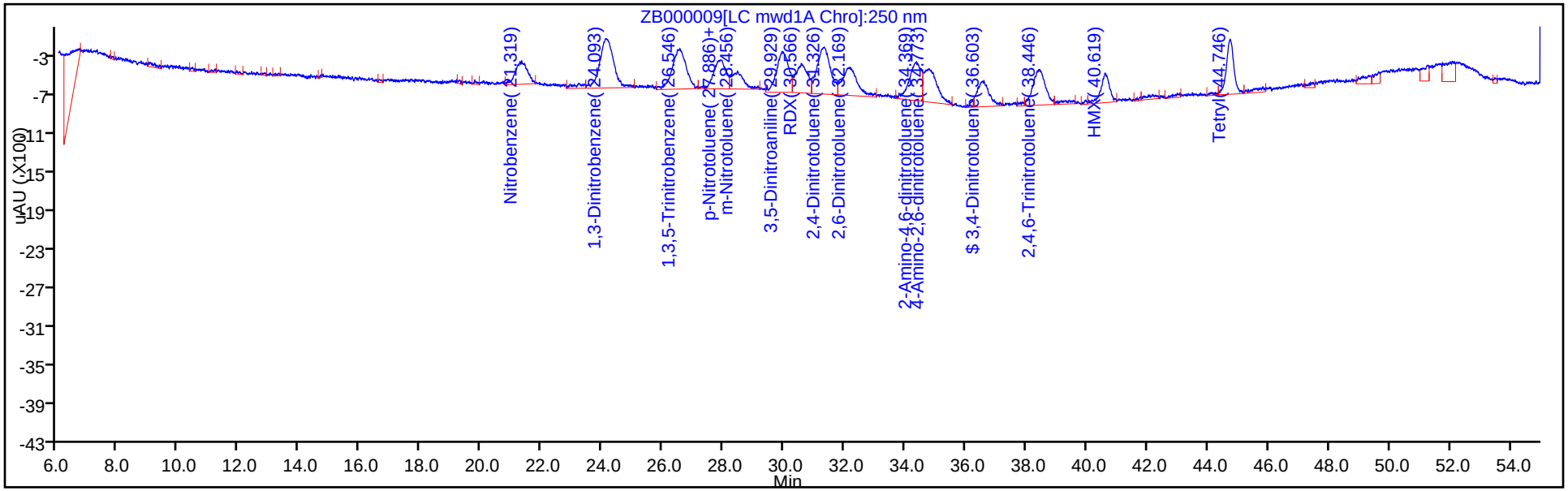
Report Date: 29-Apr-2015 09:15:54 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

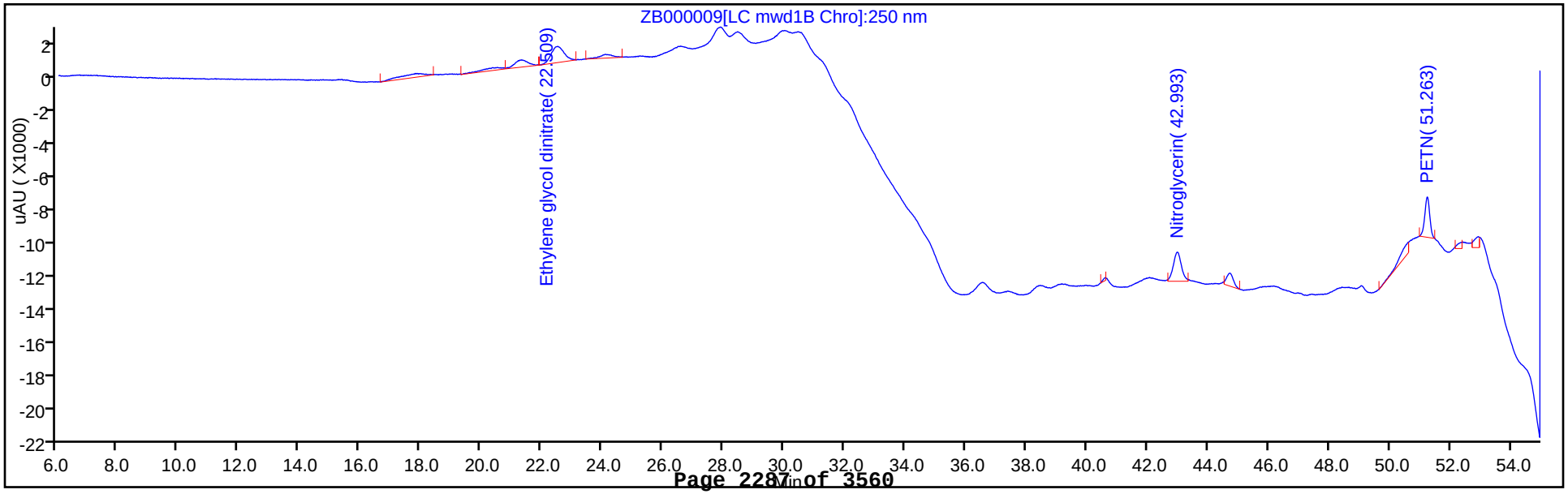
Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000009.D

Injection Date:	28-Apr-2015 20:06:03	Instrument ID:	LC9	Operator ID:	YPH
Lims ID:	CCVL			Worklist Smp#:	9
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		

Column: Zorbax Cyano CN (4.60 mm)



Column: Zorbax Cyano CN (4.60 mm)



Manual Integration/User Assign Peak Report

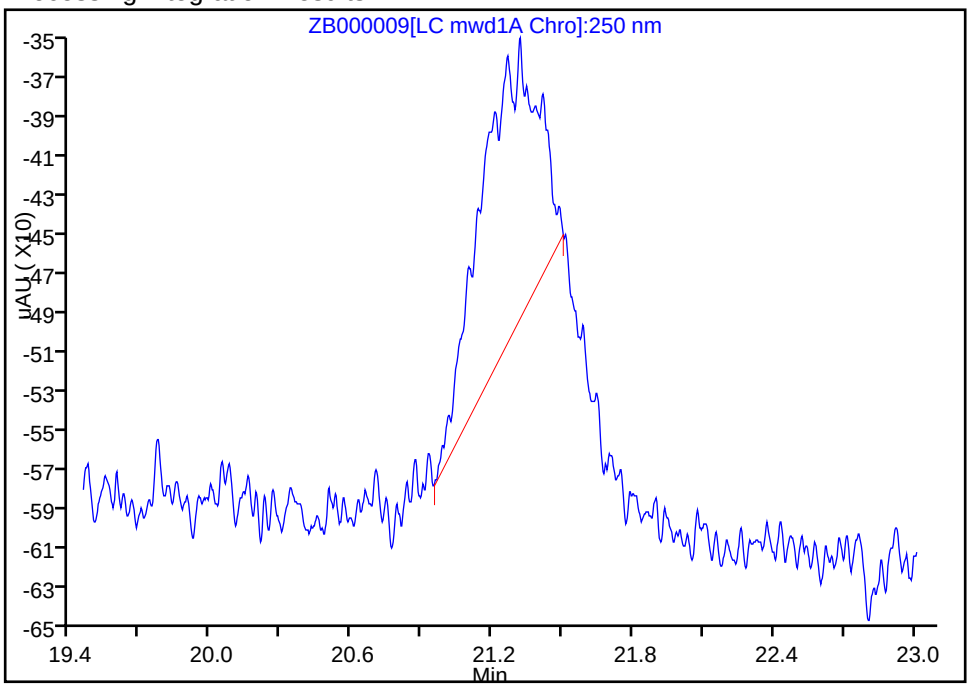
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000009.D
Injection Date: 28-Apr-2015 20:06:03 Instrument ID: LC9
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

3 Nitrobenzene, CAS: 98-95-3

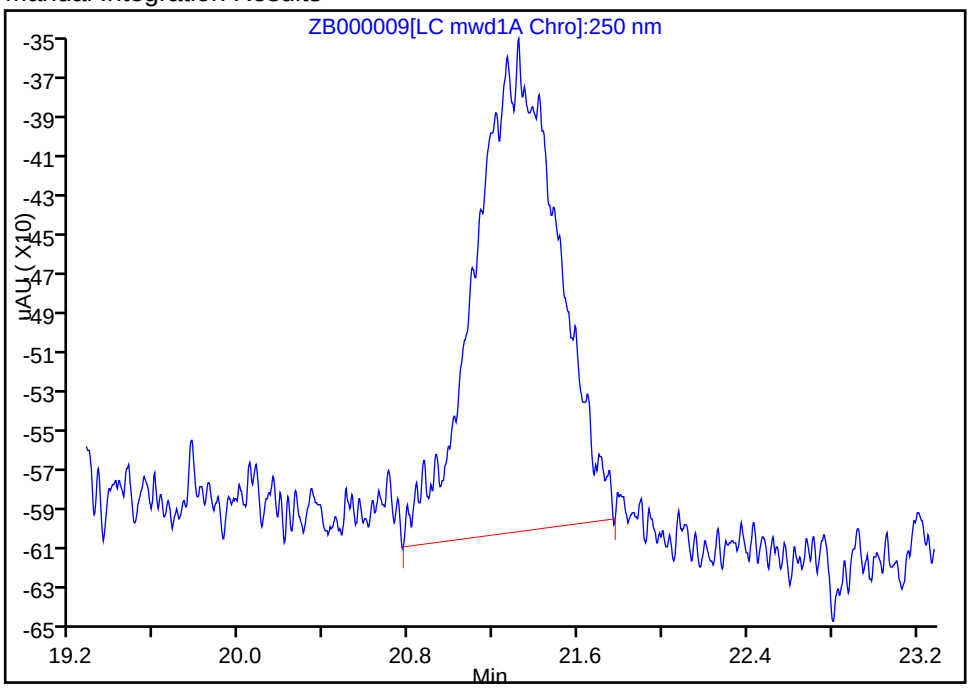
Processing Integration Results

RT: 21.27
Height: 142
Amount: 2.942526
Amount Units: ng/ml



Manual Integration Results

RT: 21.32
Height: 245
Amount: 5.076893
Amount Units: ng/ml



Reviewer: huangyun, 29-Apr-2015 09:15:53
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

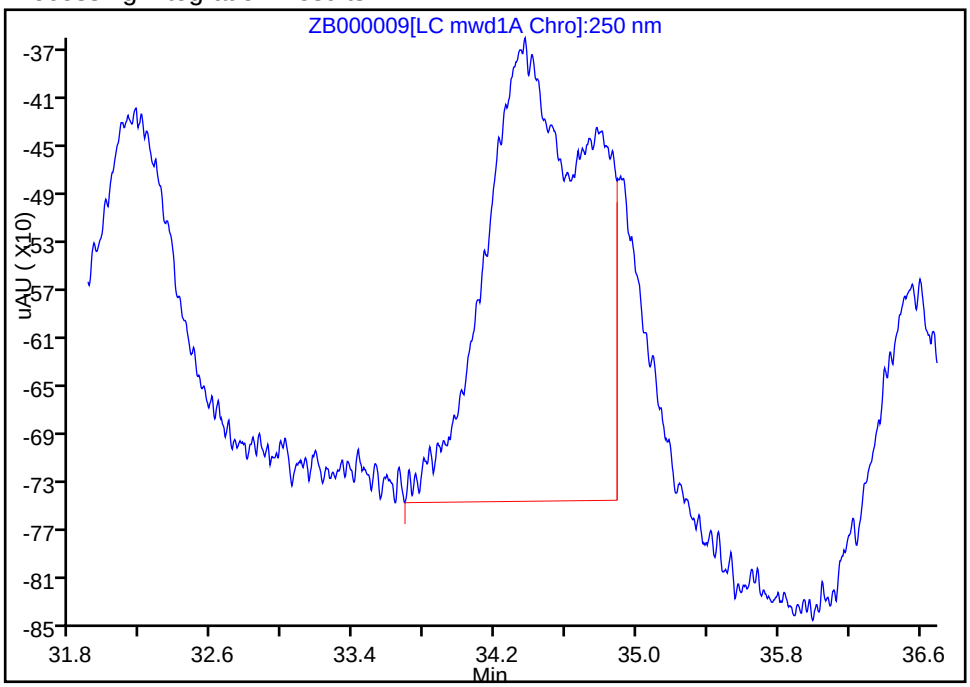
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000009.D
Injection Date: 28-Apr-2015 20:06:03 Instrument ID: LC9
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

15 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

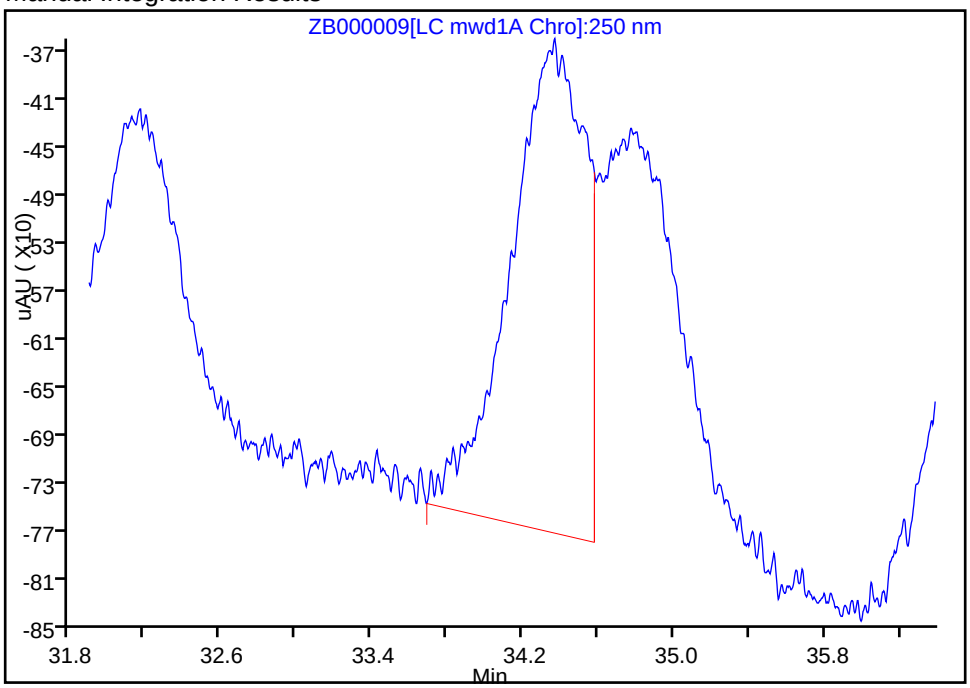
Processing Integration Results

RT: 34.37
Height: 381
Amount: 4.829448
Amount Units: ng/ml



Manual Integration Results

RT: 34.37
Height: 407
Amount: 5.159017
Amount Units: ng/ml



Reviewer: huangyun, 29-Apr-2015 09:15:53
Audit Action: Split an Integrated Peak
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

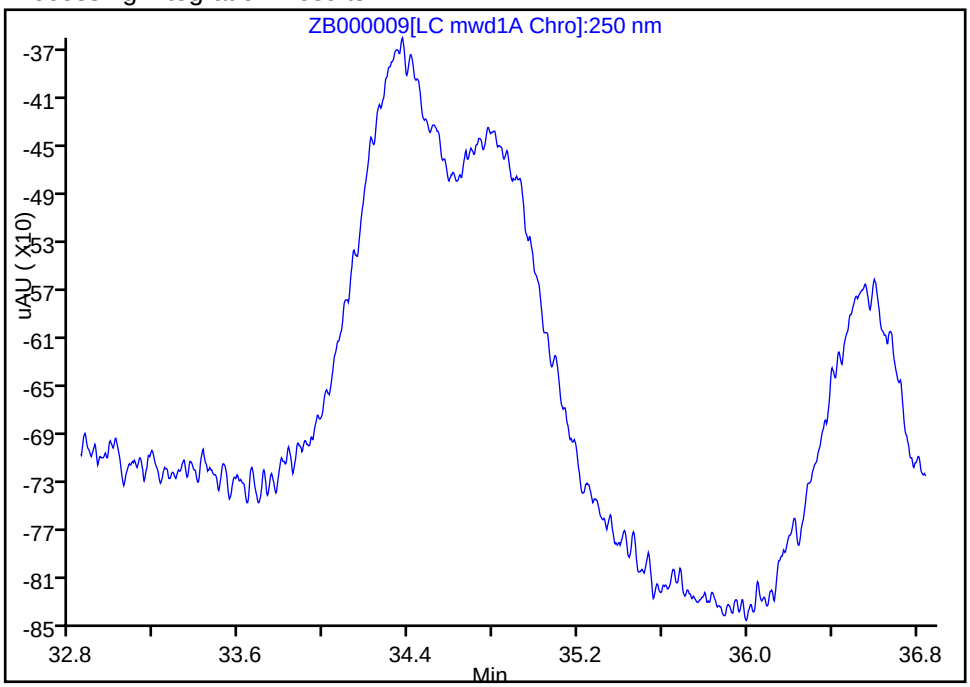
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC9\20150428-21367.b\ZB000009.D
Injection Date: 28-Apr-2015 20:06:03 Instrument ID: LC9
Lims ID: CCVL
Client ID:
Operator ID: YPH ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Method: LC9_Conf_8330 Limit Group: LC 8330B ICAL
Column: Zorbax Cyano CN (4.60 mm) Detector LC mwd1A, 250 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

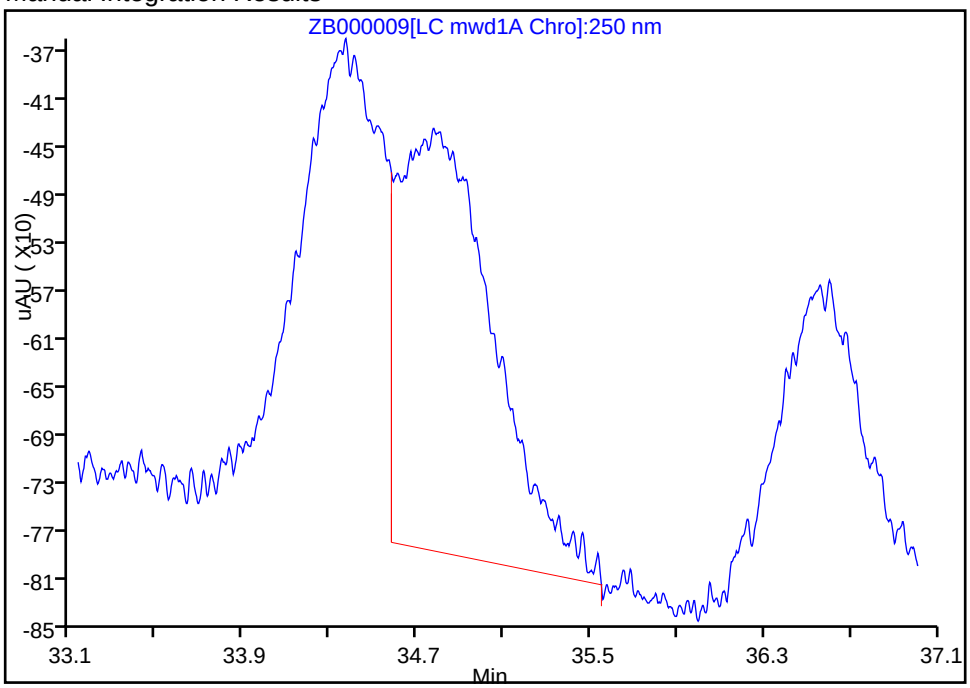
Not Detected
Expected RT: 34.84

Processing Integration Results



Manual Integration Results

RT: 34.77
Height: 347
Amount: 5.252619
Amount Units: ng/ml



Reviewer: huangyun, 29-Apr-2015 09:15:53
Audit Action: Manually Integrated/Assigned Compound ID
Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

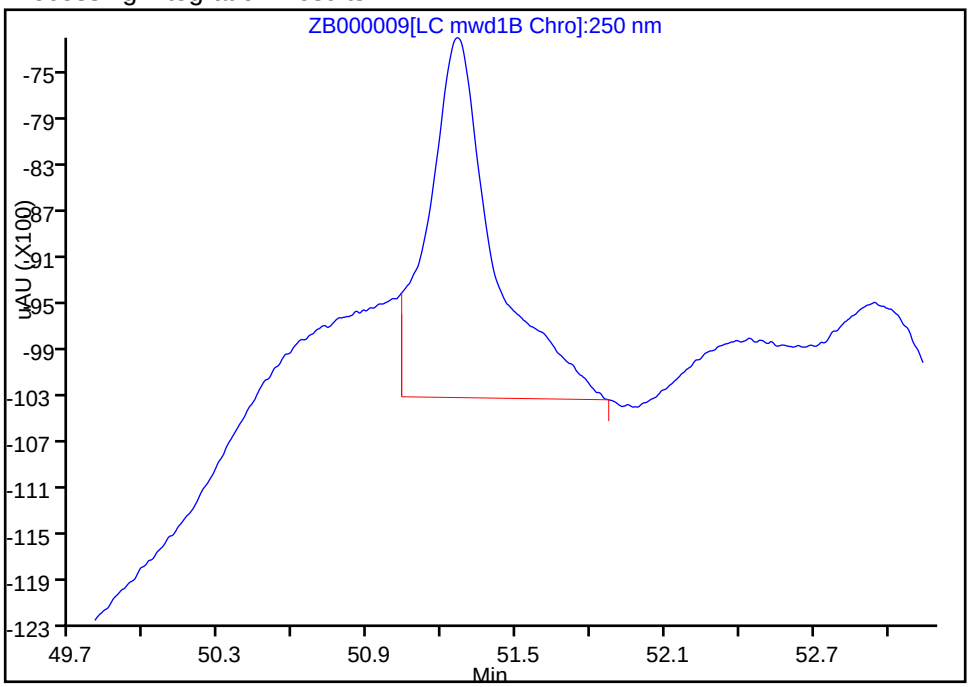
TestAmerica Sacramento

Data File:	\\SACChrom\ChromData\LC9\20150428-21367.b\ZB000009.D				
Injection Date:	28-Apr-2015 20:06:03	Instrument ID:	LC9		
Lims ID:	CCVL				
Client ID:					
Operator ID:	YPH	ALS Bottle#:	2	Worklist Smp#:	9
Injection Vol:	500.0 ul	Dil. Factor:	1.0000		
Method:	LC9_Conf_8330	Limit Group:	LC 8330B ICAL		
Column:	Zorbax Cyano CN (4.60 mm)	Detector	LC mwd1B, 358 nm		

22 PETN, CAS: 78-11-5

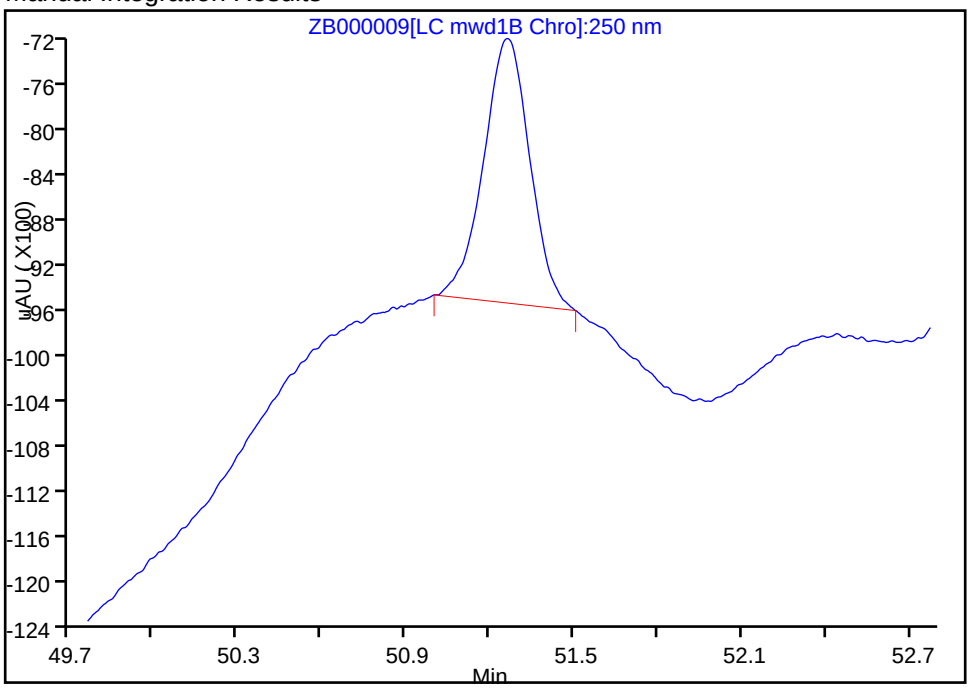
Processing Integration Results

RT: 51.26
Height: 3092
Amount: 22.940295
Amount Units: ng/ml



Manual Integration Results

RT: 51.26
Height: 2314
Amount: 17.168125
Amount Units: ng/ml



Reviewer: huangyun, 29-Apr-2015 09:15:53
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 320-71481/1-A

Matrix: Solid Lab File ID: W000005.D

Analysis Method: 8330B Date Collected:

Extraction Method: 8330B Date Extracted: 04/18/2015 14:00

Sample wt/vol: 10.00(g) Date Analyzed: 04/23/2015 18:16

Con. Extract Vol.: 80.00(mL) Dilution Factor: 1

Injection Volume: 500(uL) GC Column: Synergi C18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 71988 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	0.050	U	0.25	0.050	0.013
19406-51-0	4-Amino-2,6-dinitrotoluene	0.050	U	0.25	0.050	0.010
99-65-0	1,3-Dinitrobenzene	0.050	U	0.25	0.050	0.0042
121-14-2	2,4-Dinitrotoluene	0.050	U	0.25	0.050	0.0053
606-20-2	2,6-Dinitrotoluene	0.050	U	0.25	0.050	0.0073
2691-41-0	HMX	0.050	U	0.25	0.050	0.012
98-95-3	Nitrobenzene	0.050	U	0.25	0.050	0.018
55-63-0	Nitroglycerin	0.25	U	0.50	0.25	0.015
88-72-2	2-Nitrotoluene	0.050	U	0.25	0.050	0.013
99-08-1	3-Nitrotoluene	0.050	U	0.25	0.050	0.016
99-99-0	4-Nitrotoluene	0.050	U	0.25	0.050	0.018
78-11-5	PETN	0.25	U	0.50	0.25	0.025
121-82-4	RDX	0.050	U	0.25	0.050	0.012
479-45-8	Tetryl	0.050	U	0.25	0.050	0.010
99-35-4	1,3,5-Trinitrobenzene	0.050	U	0.25	0.050	0.010
118-96-7	2,4,6-Trinitrotoluene	0.050	U	0.25	0.050	0.019

CAS NO.	SURROGATE	%REC	Q	LIMITS
610-39-9	3,4-Dinitrotoluene	90		78-118

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\SACChrom\ChromData\LC10\20150423-21275.b\W000005.D			
Lims ID:	MB 320-71481/1-A			
Client ID:				
Sample Type:	MB			
Inject. Date:	23-Apr-2015 18:16:51	ALS Bottle#:	13	Worklist Smp#: 5
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	
Sample Info:	320-0021275-005			
Operator ID:	YPH	Instrument ID:	LC10	
Method:	\\SACChrom\ChromData\LC10\20150423-21275.b\8330_LC10.m			
Limit Group:	LC 8330B ICAL			
Last Update:	24-Apr-2015 16:50:23	Calib Date:	11-Mar-2015 20:09:31	
Integrator:	Falcon			
Quant Method:	External Standard	Quant By:	Initial Calibration	
Last ICal File:	\\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D			
Column 1 :	Synergi Hydro-RP C18 (4.60 mm)		Det: LC mwd1A, 250 nm	
Process Host:	XAWRK021			

First Level Reviewer: huangyun Date: 24-Apr-2015 16:50:23

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
$ 30 3,4-Dinitrotoluene							
1	16.659	16.651	0.008	3768H	62.5	56.2	
2	16.224	16.224	0.000	0H	62.5	0	

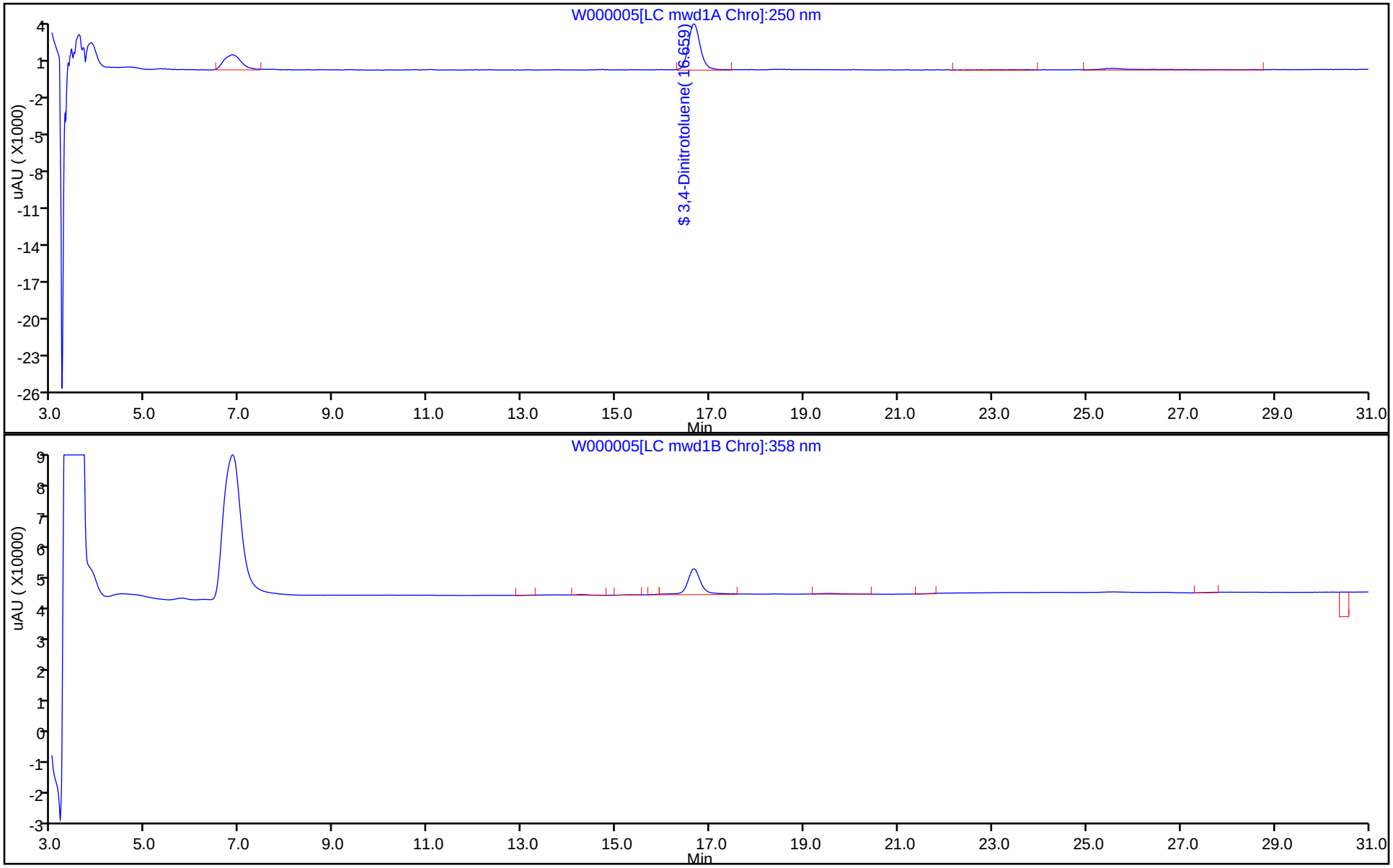
Report Date: 24-Apr-2015 16:50:23 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000005.D

Injection Date:	23-Apr-2015 18:16:51	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	MB 320-71481/1-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 320-71481/2-A

Matrix: Solid Lab File ID: W000006.D

Analysis Method: 8330B Date Collected:

Extraction Method: 8330B Date Extracted: 04/18/2015 14:00

Sample wt/vol: 10.00(g) Date Analyzed: 04/23/2015 19:00

Con. Extract Vol.: 80.00(mL) Dilution Factor: 1

Injection Volume: 500(uL) GC Column: Synergi C18 ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 71988 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	0.465		0.25	0.050	0.013
19406-51-0	4-Amino-2,6-dinitrotoluene	0.460		0.25	0.050	0.010
99-65-0	1,3-Dinitrobenzene	0.471		0.25	0.050	0.0042
121-14-2	2,4-Dinitrotoluene	0.470		0.25	0.050	0.0053
606-20-2	2,6-Dinitrotoluene	0.469		0.25	0.050	0.0073
2691-41-0	HMX	0.463		0.25	0.050	0.012
98-95-3	Nitrobenzene	0.475		0.25	0.050	0.018
55-63-0	Nitroglycerin	1.00		0.50	0.25	0.015
88-72-2	2-Nitrotoluene	0.471		0.25	0.050	0.013
99-08-1	3-Nitrotoluene	0.470		0.25	0.050	0.016
99-99-0	4-Nitrotoluene	0.471		0.25	0.050	0.018
78-11-5	PETN	0.975		0.50	0.25	0.025
121-82-4	RDX	0.463		0.25	0.050	0.012
479-45-8	Tetryl	0.472		0.25	0.050	0.010
99-35-4	1,3,5-Trinitrobenzene	0.468		0.25	0.050	0.010
118-96-7	2,4,6-Trinitrotoluene	0.470		0.25	0.050	0.019

CAS NO.	SURROGATE	%REC	Q	LIMITS
610-39-9	3,4-Dinitrotoluene	92		78-118

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000006.D
Lims ID: LCS 320-71481/2-A
Client ID:
Sample Type: LCS
Inject. Date: 23-Apr-2015 19:00:28 ALS Bottle#: 14 Worklist Smp#: 6
Injection Vol: 500.0 ul Dil. Factor: 1.0000
Sample Info: 320-0021275-006
Operator ID: YPH Instrument ID: LC10

Method: \\SACChrom\ChromData\LC10\20150423-21275.b\8330_LC10.m
Limit Group: LC 8330B ICAL
Last Update: 24-Apr-2015 16:50:23 Calib Date: 11-Mar-2015 20:09:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\SACChrom\ChromData\LC10\20150311-20096.b\J000013.D

Column 1 : Synergi Hydro-RP C18 (4.60 mm) Det: LC mwd1A, 250 nm
Process Host: XAWRK021

First Level Reviewer: huangyun Date: 24-Apr-2015 16:50:53

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
11 HMX							
1	5.188	5.181	0.007	8509H	62.5	57.8	
19 RDX							
1	7.461	7.454	0.007	5862H	62.5	57.8	
27 1,3,5-Trinitrobenzene							
1	9.681	9.671	0.010	11386H	62.5	58.5	
24 1,3-Dinitrobenzene							
1	12.298	12.281	0.017	10991H	62.5	58.8	
9 3,5-Dinitroaniline							
1	13.048	13.031	0.017	7143H	62.5	58.1	
20 Tetryl							
1	13.554	13.541	0.013	6544H	62.5	59.0	
5 Nitrobenzene							
1	14.018	14.004	0.014	5017H	62.5	59.4	
7 Nitroglycerin							
2	14.838	14.824	0.014	9596H	125.0	125.2	
25 2,4,6-Trinitrotoluene							
1	15.541	15.534	0.007	6676H	62.5	58.7	
26 4-Amino-2,6-dinitrotoluene							
1	16.231	16.224	0.007	5264H	62.5	57.5	
$ 30 3,4-Dinitrotoluene							
1	16.658	16.651	0.007	3873H	62.5	57.8	
2	16.231	16.224	0.007	7525H	62.5	56.0	
6 2-Amino-4,6-dinitrotoluene							
1	17.101	17.091	0.010	5939H	62.5	58.1	
12 2,6-Dinitrotoluene							
1	18.651	18.644	0.007	4222H	62.5	58.7	
23 2,4-Dinitrotoluene							
1	19.221	19.211	0.010	6950H	62.5	58.8	
16 o-Nitrotoluene							
1	22.584	22.578	0.006	3083H	62.5	58.8	
15 p-Nitrotoluene							
1	24.241	24.224	0.017	3704H	62.5	58.8	

Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
8 m-Nitrotoluene							
1	25.994	25.988	0.006	3481H	62.5	58.8	
21 PETN							
2	28.461	28.448	0.013	5418H	125.0	121.9	

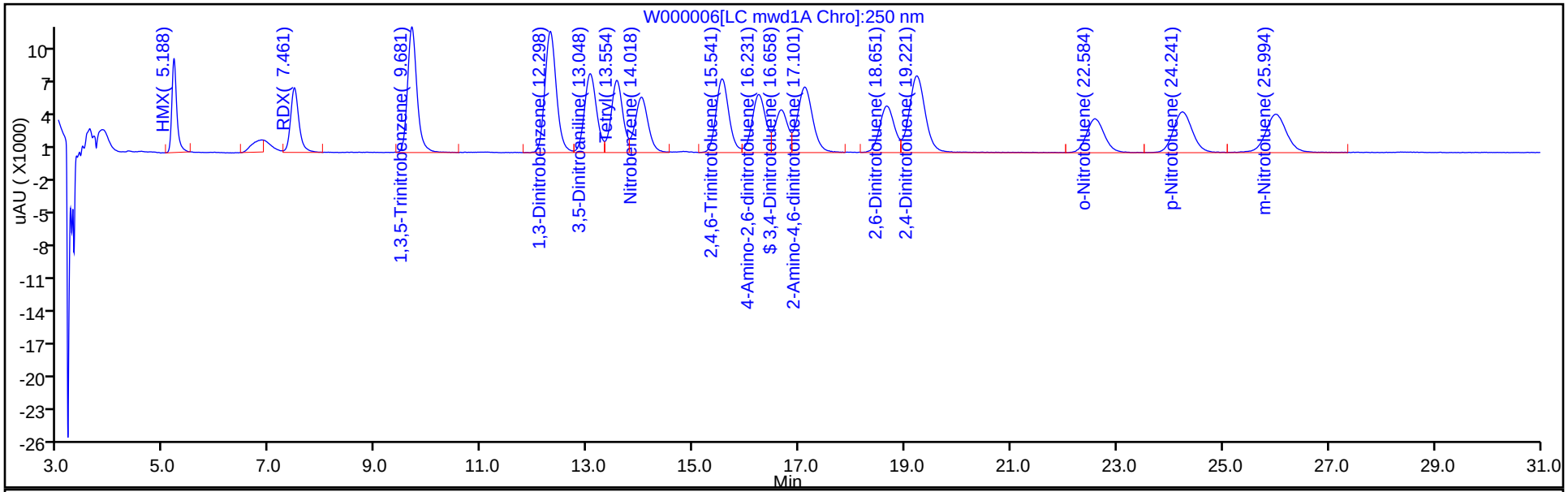
Report Date: 24-Apr-2015 16:50:53 Chrom Revision: 2.2 09-Apr-2015 10:05:40

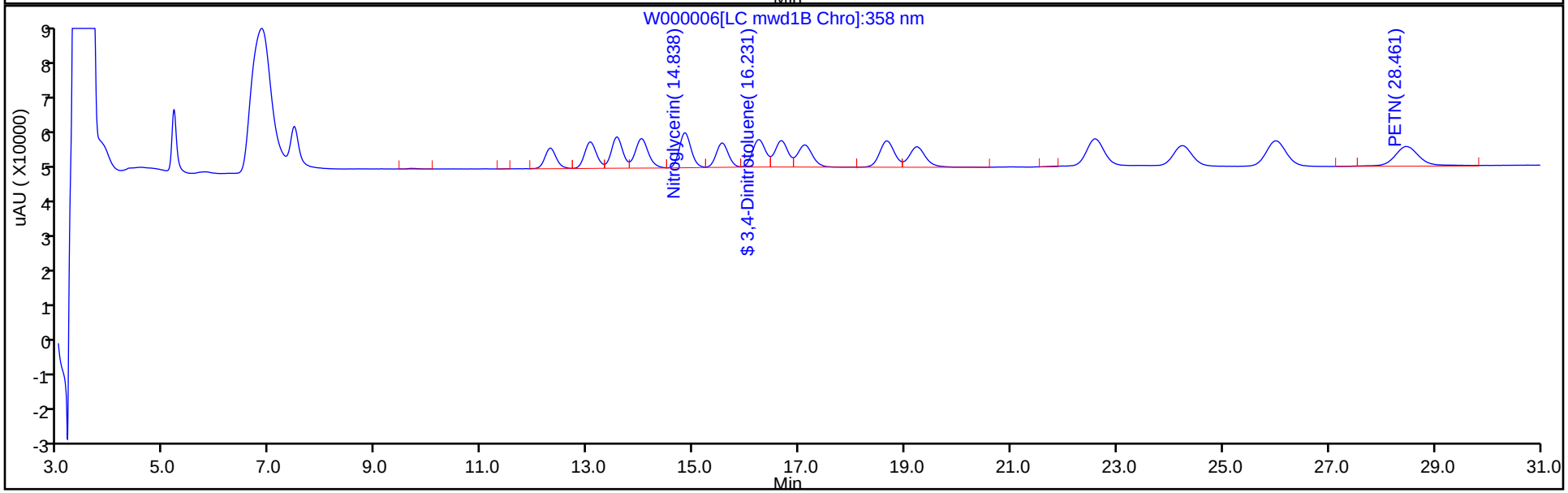
TestAmerica Sacramento

Data File: \\SACChrom\ChromData\LC10\20150423-21275.b\W000006.D

Injection Date:	23-Apr-2015 19:00:28	Instrument ID:	LC10	Operator ID:	YPH
Lims ID:	LCS 320-71481/2-A			Worklist Smp#:	6
Client ID:					
Injection Vol:	500.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_LC10	Limit Group:	LC 8330B ICAL		

Column: Synergi Hydro-RP C18 (4.60 mm)





HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: LC9 Start Date: 01/23/2015 13:28

Analysis Batch Number: 63675 End Date: 01/24/2015 00:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		01/23/2015 13:28	1		Zorbax CN 4.6(mm)
STD1 320-63675/4 IC		01/23/2015 14:34	1	W000004.D	Zorbax CN 4.6(mm)
STD2 320-63675/5 IC		01/23/2015 15:41	1	W000005.D	Zorbax CN 4.6(mm)
STD3 320-63675/6 IC		01/23/2015 16:48	1	W000006.D	Zorbax CN 4.6(mm)
STD4 320-63675/7 IC		01/23/2015 17:54	1	W000007.D	Zorbax CN 4.6(mm)
STD5 320-63675/8 IC		01/23/2015 19:01	1	W000008.D	Zorbax CN 4.6(mm)
STD6 320-63675/9 IC		01/23/2015 20:08	1	W000009.D	Zorbax CN 4.6(mm)
STD7 320-63675/10 IC		01/23/2015 21:15	1	W000010.D	Zorbax CN 4.6(mm)
ZZZZZ		01/23/2015 22:21	1		Zorbax CN 4.6(mm)
ICV 320-63675/12		01/23/2015 23:28	1	W000012.D	Zorbax CN 4.6(mm)
LODV 320-63675/13		01/24/2015 00:35	1	W000013.D	Zorbax CN 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: LC10 Start Date: 03/11/2015 15:03

Analysis Batch Number: 67883 End Date: 03/11/2015 22:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/11/2015 15:03	1		Synergi C18 4.6(mm)
IC 320-67883/4		03/11/2015 15:47	1	J000007.D	Synergi C18 4.6(mm)
IC 320-67883/5		03/11/2015 16:31	1	J000008.D	Synergi C18 4.6(mm)
IC 320-67883/6		03/11/2015 17:14	1	J000009.D	Synergi C18 4.6(mm)
IC 320-67883/7		03/11/2015 17:58	1	J000010.D	Synergi C18 4.6(mm)
IC 320-67883/8		03/11/2015 18:42	1	J000011.D	Synergi C18 4.6(mm)
IC 320-67883/9		03/11/2015 19:25	1	J000012.D	Synergi C18 4.6(mm)
IC 320-67883/10		03/11/2015 20:09	1	J000013.D	Synergi C18 4.6(mm)
ZZZZZ		03/11/2015 20:53	1		Synergi C18 4.6(mm)
ICV 320-67883/12		03/11/2015 21:36	1	J000015.D	Synergi C18 4.6(mm)
LODV 320-67883/13		03/11/2015 22:20	1	J000016.D	Synergi C18 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: LC10 Start Date: 04/23/2015 16:49

Analysis Batch Number: 71988 End Date: 04/24/2015 03:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVL 320-71988/3		04/23/2015 16:49	1	W000003.D	Synergi C18 4.6(mm)
CCV 320-71988/4 CCVRT		04/23/2015 17:33	1	W000004.D	Synergi C18 4.6(mm)
MB 320-71481/1-A		04/23/2015 18:16	1	W000005.D	Synergi C18 4.6(mm)
LCS 320-71481/2-A		04/23/2015 19:00	1	W000006.D	Synergi C18 4.6(mm)
ZZZZZ		04/23/2015 19:44	1		Synergi C18 4.6(mm)
ZZZZZ		04/23/2015 20:27	1		Synergi C18 4.6(mm)
ZZZZZ		04/23/2015 21:11	1		Synergi C18 4.6(mm)
240-49171-6	079SB-0352M-0001-SO	04/23/2015 21:54	1	W000010.D	Synergi C18 4.6(mm)
240-49171-8	079SB-0353M-0001-SO	04/23/2015 22:38	1	W000011.D	Synergi C18 4.6(mm)
240-49171-10	079SB-0354M-0001-SO	04/23/2015 23:22	1	W000012.D	Synergi C18 4.6(mm)
ZZZZZ		04/24/2015 00:05	1		Synergi C18 4.6(mm)
ZZZZZ		04/24/2015 00:49	1		Synergi C18 4.6(mm)
ZZZZZ		04/24/2015 01:32	1		Synergi C18 4.6(mm)
ZZZZZ		04/24/2015 02:16	10		Synergi C18 4.6(mm)
CCV 320-71988/23		04/24/2015 03:00	1	W000017.D	Synergi C18 4.6(mm)
CCVL 320-71988/24		04/24/2015 03:43	1	W000018.D	Synergi C18 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: LC9 Start Date: 04/28/2015 13:26

Analysis Batch Number: 72338 End Date: 04/28/2015 20:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVL 320-72338/3		04/28/2015 13:26	1	ZB000003.D	Zorbax CN 4.6(mm)
CCV 320-72338/4 CCVRT		04/28/2015 14:33	1	ZB000004.D	Zorbax CN 4.6(mm)
240-49171-6	079SB-0352M-0001-SO	04/28/2015 16:46	1	ZB000006.D	Zorbax CN 4.6(mm)
240-49171-8	079SB-0353M-0001-SO	04/28/2015 17:52	1	ZB000007.D	Zorbax CN 4.6(mm)
CCV 320-72338/8 CCVRT		04/28/2015 18:59	1	ZB000008.D	Zorbax CN 4.6(mm)
CCVL 320-72338/9		04/28/2015 20:06	1	ZB000009.D	Zorbax CN 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Batch Number: 71481 Batch Start Date: 04/18/15 14:00 Batch Analyst: Reed, Jonathan E

Batch Method: 8330B Batch End Date: 04/20/15 10:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	HP34DNTSU 00039	HP8330SP 00051	HPNGPETNSP 00026	
MB 320-71481/1		8330B, 8330B		10.00 g	80.00 mL	100 uL			
LCS 320-71481/2		8330B, 8330B		10.00 g	80.00 mL	100 uL	100 uL	200 uL	
240-49171-C-6	079SB-0352M-0001-SO	8330B, 8330B	T	10.03 g	80.00 mL	100 uL			
240-49171-C-8	079SB-0353M-0001-SO	8330B, 8330B	T	10.00 g	80.00 mL	100 uL			
240-49171-C-10	079SB-0354M-0001-SO	8330B, 8330B	T	10.01 g	80.00 mL	100 uL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Batch Number: 71481 Batch Start Date: 04/18/15 14:00 Batch Analyst: Reed, Jonathan E

Batch Method: 8330B Batch End Date: 04/20/15 10:15

Batch Notes	
Balance ID	QA-070
Calcium Chloride Reagent ID	1.3g/l C:Chl_00004
Person's name who did the concentration	SNE
Date of Clean up	4/20/15
Analyst performed Clean Up	SNE
Diluting Solvent Lot #	1.3g/l C:Chl_00004
Date Dilution Performed	4/20/14
Analytst performing Dilution	SNE
Filter Lot #	MILLIPORE: R4NA21509
Filter Type	PTFE 0.45um 25mm
Minumum Temperature	11C
Pipette ID	EC15219
Pipette ID for Solvent	08-Z0243
Prep Solvent Volume Used	20.00mL mL
Person's name who witnessed reagent drop	CHERYL HYTREK
Blank Sand Lot #	FISHER: 142675
Solvent Lot #	0.1%HOAC/ACN_00014
Solvent Name	0.1%HOAC/ACN_00014
Sonication Start Time	14:40 4/18/15
Sonication Stop Time	08:40 4/19/15
SOP Number	WS-LC-0009
Maximum Temperature	25C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

HPLC/LCMS Data Review Checklist

Job Number(s): 240-49171

Work List ID(s): 21275(LC10), 21367(LC9)

Extraction Batch: 71481

Analysis Batch(es): 71988, 72338

Delivery Rank: 4

Due Date: 4/27/2015

A. Calibration/Instrument Run QC	1st Level	2nd Level	N/A
1. ICAL locked in Chrom and TALS? ICAL Batch# 67883, 63675	✓	✓	
2. ICAL, CCV Frequency & Criteria met.	✓	✓	
• $RF_{average}$ criteria appropriate for the method.	✓	✓	
• Linear Regression criteria appropriate if required ($r \geq 0.995$).	✓	✓	
• Quadratic fit criteria appropriate if required ($r^2 \geq 0.990$).	✓		✓
• For Linear Regression and Quadratic fit – Does the y-intercept support ½ the reporting limit as described in CA-Q-S-005?	✓	✓	
• All curve points show calculated concentrations.	✓	✓	
3. Peaks correctly ID'd by data system.	✓	✓	
5. Tune check frequency & criteria met and Tune check report attached.			✓
B. QA/QC			
1. Are all QC samples properly linked in TALS?	✓	✓	
2. Method blank, LCS/LCSD and MS/SD frequencies met.	✓	✓	
3. LCS/LCSD and MB data are within control limits. If not, NCM is present.	✓	✓	
4. Are MS/MSD recoveries and RPD within control limits?	✓	✓	
5. Holding Times were met for prep and analytical.	✓	✓	
6. IS/Surrogate recoveries meet criteria or properly noted.	✓	✓	
C. Sample Analysis			
1. Was correct analysis performed and were project instructions followed?	✓	✓	
2. If required, are compounds within RT windows?	✓	✓	
3. If required, are positive hits confirmed and >40% RPD flagged?	✓	✓	
4. Manual Integrations reviewed and appropriate.	✓	✓	
5. All analytes correctly reported. (Primary, secondary, acceptable status)	✓	✓	
6. Correct reporting limits used. (based on client request, prep factors, and dilutions)	✓	✓	
D. Documentation			
1. Are all non-conformances documented/attached? NCM#			✓
2. Do results make sense (e.g. dilutions, etc.)?	✓	✓	
3. Have all flags been reviewed for appropriateness?	✓	✓	
4. For level 3 and 4 reports, have forms and raw data been reviewed?		✓	
5. Was QC Checker run for this job?	✓	✓	

**Upon completion of this checklist, the reviewer must scan and attach the checklist to the TALS job.*

1st Level (Analyst): YPH Date: 4/29/2015

2nd Level Reviewer: V. Dhaul Date: 4/29/15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento

GC/HPLC ICAL Review Checklist

Instrument ID: LC10 Method: 8330A/B

Work List ID: 20096 Analysis Batch(es): 67883(8330B), 67884(8330A) 67885(P) 67886(B-DOD5)

Analytes Included in this ICAL: 8330+3,5-DNA, NG, PETN, EGDN (ICAL 3/11/2015)

ICAL Review	1st Level	2nd Level	N/A
1. Method locked in Chrom.	✓	✓	
2. ICAL is set as most recent method in Chrom.	✓	✓	
3. PEM meets measurements for 8081			✓
4. Alkane Marker included for 8015 TPH and RT windows set correctly			✓
5. Standards used in ICAL are correct	✓	✓	
6. No analytes have saturated peaks	✓	✓	
7. All peaks correctly identified and within retention time windows	✓	✓	
8. Manual integrations reviewed and appropriate	✓	✓	
9. All analytes meet %RSD or linear regression requirements	✓	✓	
10. Any levels dropped are reviewed and appropriate	✓	✓	
11. ICV meets requirements and is run after the ICAL	✓	✓	
12. RFs are calculated correctly. Perform Manual calculation	✓	✓	
13. ICAL meets requirements stated in SOP	✓	✓	
13. Chromatograms are uploaded/reviewed in ?TALs	✓	✓	
14. ICAL is locked in TALs.		✓	

Curve Valid for:	Yes	No	Criteria
Standard SOP	✓		RSD ≤20%, r≥ 0.995 (intercept <1/2RL for 8081,8082, NQ) and (<RL for 8330) and r>0.990 (intercept <RL for 8015), ICV≤15%, PEM ≤15%
DOD QSM V3,V4, V5	✓		RSD ≤20%, r≥ 0.995, ICV≤20%, PEM ≤15%
8330B DoD5	✓		RSD ≤15%, r≥ 0.99, ICV≤20%

1st Level Reviewer: YPH 3/12/2015 Date: 3/12/2015

2nd Level Reviewer: MWell Date: 3/17/2015

Comments:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

GC/HPLC ICAL Review Checklist

Instrument ID: LC 9 Method: 8330A/B

Work List ID: 18933 Analysis Batch(es): 63674(A) 63675(B) 63676(P) 63677(DOD5)

Analytes Included in this ICAL: 8330+3,5-DNA, NG, PETN, EGDN

(ICal 1/23/15)

ICAL Review	1st Level	2nd Level	N/A
1. Method locked in Chrom.	✓	✓	
2. ICAL is set as most recent method in Chrom.	✓	✓	
3. PEM meets requirements for 8081.		✓	✓
4. Alkane Marker included for 8015 TPH and RT windows set correctly.		✓	✓
5. Standards used in ICAL are current.	✓	✓	
6. No analytes have saturated peaks.	✓	✓	
7. All peaks correctly identified and within retention time windows.	✓	✓	
8. Manual Integrations reviewed and appropriate.	✓	✓	
9. All analytes meet %RSD or linear regression requirements.	✓	✓	
10. Any levels dropped are reviewed and appropriate.	✓	✓	
11. ICV meets requirements and is run after the ICAL.	✓	✓	
12. RFs are calculated correctly. Perform Manual calculation.	✓	✓	
13. ICAL meets requirements stated in SOP.	✓	✓	
14. Chromatograms are uploaded/reviewed in TALs.	✓	✓	
15. ICAL is locked in TALs.		✓	

Curve Valid for:	Yes	No	Criteria
Standard SOP	✓		RSD ≤20%, r≥ 0.995 (intercept <1/2RL for 8081,8082, NQ) and (<RL for 8330) and r>0.990 (intercept <RL for 8015), ICV≤15%, PEM ≤15%
DOD QSM V3,V4	✓		RSD ≤20%, r≥ 0.995, ICV≤20%, PEM ≤15%
AFCEE 3.1	✓		RSD ≤20%, r≥ 0.995, ICV≤15%, PEM ≤15%
AFCEE 4.0	✓		RSD ≤20%, r≥ 0.995, ICV≤20% (8081, 8082, 8015) and ICV≤25% (8330), PEM ≤15%

1st Level Reviewer: [signature] Date: 1/26/15

2nd Level Reviewer: YPH / J.N.Mart Date: 1/26/2015

Comments:

TestAmerica Laboratories
Worklist Report

Worklist Name: 04-23-2015 8330 Worklist Number: 21275
Instrument Name: LC10 Chrom Method: 8330_LC10
Injection Volume: 500.0 Units: ul
Analysis Type: Semi VOA
Batch Directory: \\SACChrom\ChromData\LC10\20150423-21275.b
Upload Directory: \\CORPTALSAPP02\320-WS-RawData\Organics\LC\LC10

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
320-0021275-001	# 1 Primer		Client		sv	1.000000	mL	1.000000
320-0021275-002	# 2 Primer		Client		sv	1.000000	mL	1.000000
320-0021275-003	# 3 CCVL	HP8330ICL_00025	CCVL		sv	1.000000	mL	1.000000
320-0021275-004	# 4 CCV 05	hp8330I5_00035	CCVRT		sv	1.000000	mL	1.000000
320-0021275-005	# 5 MB 320-71481/1-A		MB		sv	1.000000	mL	1.000000
320-0021275-006	# 6 LCS 320-71481/2-A		LCS		sv	1.000000	mL	1.000000
320-0021275-007	# 7 240-49071-E-2-A		Client		sv	1.000000	mL	1.000000
320-0021275-008	# 8 240-49071-E-2-B MS		MS		sv	1.000000	mL	1.000000
320-0021275-009	# 9 240-49071-E-2-C MSD		MSD		sv	1.000000	mL	1.000000
320-0021275-010	#10 240-49171-C-6-A		Client		sv	1.000000	mL	1.000000
320-0021275-011	#11 240-49171-C-8-A		Client		sv	1.000000	mL	1.000000
320-0021275-012	#12 240-49171-C-10-A		Client		sv	1.000000	mL	1.000000
320-0021275-014	#14 240-49233-C-4-A		Client		sv	1.000000	mL	1.000000
320-0021275-015	#15 240-49233-C-6-A		Client		sv	1.000000	mL	1.000000

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
320-0021275-016	#16 240-49233-C-8-A		Client		sv	1.000000	mL	1.000000
320-0021275-017	#17 240-49236-G-3-A		Client		sv	1.000000	mL	10.00
320-0021275-023	#23 CCV 04	hp8330I4_00026	CCV		sv	1.000000	mL	1.000000
320-0021275-024	#24 CCVL	HP8330ICL_00025	CCVL		sv	1.000000	mL	1.000000

TestAmerica Laboratories
Worklist Report

Worklist Name: 04-28-2015 8330 Worklist Number: 21367
Instrument Name: LC9 Chrom Method: LC9_Conf_8330
Injection Volume: 500.0 Units: ul
Analysis Type: Semi VOA
Batch Directory: \\SACChrom\ChromData\LC9\20150428-21367.b
Upload Directory: \\CORPTALSAPP02\320-WS-RawData\Organics\LC\LC9

Worklist ID	Lims ID	Sample Reagents	Sample Type	Cal Lvl	Fraction	Initial Vol/Wt	Vol/Wt Units	Dilution Factor
320-0021367-001	# 1 Primer		Client		sv	1.000000	mL	1.000000
320-0021367-002	# 2 Primer		Client		sv	1.000000	mL	1.000000
320-0021367-003	# 3 CCVL	HP8330icl_00025	CCVL		sv	1.000000	mL	1.000000
320-0021367-004	# 4 CCV 05	hp8330L5_00035	CCVRT		sv	1.000000	mL	1.000000
320-0021367-005	# 5 EB		EB		sv	1.000000	mL	1.000000
320-0021367-006	# 6 240-49171-C-6-A		Client		sv	1.000000	mL	1.000000
320-0021367-007	# 7 240-49171-C-8-A		Client		sv	1.000000	mL	1.000000
320-0021367-008	# 8 CCV 04	HP8330L4_00026	CCVRT		sv	1.000000	mL	1.000000
320-0021367-009	# 9 CCVL	HP8330icl_00025	CCVL		sv	1.000000	mL	1.000000
320-0021367-010	#10 480-78091-M-1-A		Client		sv	1.000000	mL	1.000000
320-0021367-011	#11 320-12596-A-1-A		Client		sv	1.000000	mL	1.000000

XT

Solid SW-846-3500 Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-71481

Method Code: 320-8330B_Sonc_10g-320

Analyst: Reed, Jonathan E

Batch Open: 4/18/2015 2:00:00PM

Batch End: 4/20/2015 10:15:00AM

Sonication Extraction (Explosives)

	Input Sample Lab ID (Analytical Method)	SDG	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	MB~320-71481/1 N/A	N/A	10.00 g	80.00 mL	N/A	N/A	N/A		MB 320-71481/1-A
2	LCS~320-71481/2 N/A	N/A	10.00 g	80.00 mL	N/A	N/A	N/A		LCS 320-71481/2-A
3	240-49071-E-2 (8330B)	CC 79 Area 8	9.97 g	80.00 mL	4/24/15	12_Days	4		240-49071-E-2-A
4	240-49071-E-2~MS (8330B)	CC 79 Area 8	10.00 g	80.00 mL	4/24/15	12_Days	4		240-49071-E-2-B MS
5	240-49071-E-2~MSD (8330B)	CC 79 Area 8	9.97 g	80.00 mL	4/24/15	12_Days	4		240-49071-E-2-C MSD
6	240-49171-C-6 (8330B)	N/A	10.03 g	80.00 mL	4/27/15	12_Days	4		240-49171-C-6-A
7	240-49171-C-8 (8330B)	N/A	10.00 g	80.00 mL	4/27/15	12_Days	4		240-49171-C-8-A
8	240-49171-C-10 (8330B)	N/A	10.01 g	80.00 mL	4/27/15	12_Days	4		240-49171-C-10-A
9	240-49233-C-4 (8330B)	N/A	10.05 g	80.00 mL	4/28/15	12_Days	4		240-49233-C-4-A
10	240-49233-C-6 (8330B)	N/A	10.08 g	80.00 mL	4/28/15	12_Days	4		240-49233-C-6-A
11	240-49233-C-8 (8330B)	N/A	10.04 g	80.00 mL	4/28/15	12_Days	4		240-49233-C-8-A

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Solid SW-846-3500 Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-71481

Analyst: Reed, Jonathan E

Batch Open: 4/18/2015 2:00:00PM

Method Code: 320-8330B_Sonc_10g-320

Batch End: 4/20/2015 10:15:00AM

Batch Notes

Acid used for pH adjustment	NA
Base used for pH adjustment	NA
Solvent Name	0.1%HOAC/ACN_00014
Solvent Lot #	0.1%HOAC/ACN_00014
Prep Solvent Volume Used	20.00mL
Person's name who witnessed reagent drop	CHERYL HYTREK
Person's name who did the concentration	SNE
Balance ID	QA-070
Blank Sand Lot #	FISHER: 142675
Pipette ID for Solvent	08-Z0243
Pipette ID	EC15219
Sonication Start Time	14:40 4/18/15
Sonication Stop Time	08:40 4/19/15
Minumum Temperature	11C
Maximum Temperature	25C
Filter Type	PTFE 0.45um 25mm
Filter Lot #	MILLIPORE: R4NA21509
Calcium Chloride Reagent ID	1.3g/l C:Chl_00004
Diluting Solvent Lot #	1.3g/l C:Chl_00004
Date Dilution Performed	4/20/14

Solid SW-846-3500 Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-71481

Analyst: Reed, Jonathan E

Batch Open: 4/18/2015 2:00:00PM

Method Code: 320-8330B_Sonc_10g-320

Batch End: 4/20/2015 10:15:00AM

Analytst performing Dilution	SNE
Date Sample was Dried	NA
Date Sample was Ground	NA
Date of Clean up	4/20/15
Analyst performed Clean Up	SNE
SOP Number	WS-LC-0009
Batch Comment	NA

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Comments

240-49071-E-2	Method Comments: samples have been dried
240-49071-E-2~MS	Method Comments: samples have been dried
240-49071-E-2~MSD	Method Comments: samples have been dried
240-49171-C-6	Method Comments: samples have been dried
240-49171-C-8	Method Comments: samples have been dried
240-49171-C-10	Method Comments: samples have been dried
240-49233-C-4	Method Comments: samples have been dried
240-49233-C-6	Method Comments: samples have been dried
240-49233-C-8	Method Comments: samples have been dried

Solid SW-846-3500 Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-71481

Analyst: Reed, Jonathan E

Batch Open: 4/18/2015 2:00:00PM

Method Code: 320-8330B_Sonc_10g-320

Batch End:

Batch Notes

Acid used for pH adjustment	
Base used for pH adjustment	
Solvent Name	0.1% HOAC/ACN - 00014
Solvent Lot #	
Prep Solvent Volume Used	
Person's name who witnessed reagent drop	
Person's name who did the concentration	
Balance ID	
Blank Sand Lot #	142675
Pipette ID for Solvent	
Pipette ID	
Sonication Start Time	14:40 4/18/15
Sonication Stop Time	
Minumum Temperature	11 °C
Maximum Temperature	25 °C
Filter Type	
Filter Lot #	RANA21509
Calcium Chloride Reagent ID	1.3g/L CaCl - 00004
Diluting Solvent Lot #	
Date Dilution Performed	4/20/15

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Solid SW-846-3500 Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-71481

Analyst: Reed, Jonathan E

Batch Open: 4/18/2015 2:00:00PM

Method Code: 320-8330B_Sonc_10g-320

Batch End:

Analytst performing Dilution	SNE
Date Sample was Dried	
Date Sample was Ground	
Date of Clean up	4/20/15
Analyst performed Clean Up	SNE
SOP Number	
Batch Comment	

Page 2315 of 3560

Comments

240-49071-E-2	Method Comments: samples have been dried
240-49071-E-2~MS	Method Comments: samples have been dried
240-49071-E-2~MSD	Method Comments: samples have been dried
240-49171-C-6	Method Comments: samples have been dried
240-49171-C-8	Method Comments: samples have been dried
240-49171-C-10	Method Comments: samples have been dried
240-49233-C-4	Method Comments: samples have been dried
240-49233-C-6	Method Comments: samples have been dried
240-49233-C-8	Method Comments: samples have been dried

Solid SW-846-3500 Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-71481

Analyst: Reed, Jonathan E

Batch Open: 4/18/2015 2:00:00PM

Method Code: 320-8330B_Sonc_10g-320

Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness
MB 320-71481/1	HP34DNTSU_00039	100.00 uL	80.00 mL	4/18/15	CH 4-18-15
LCS 320-71481/2	HP34DNTSU_00039	100.00 uL	80.00 mL		
LCS 320-71481/2	HP8330SP_00051	100.00 uL	80.00 mL		
LCS 320-71481/2	HPNGPETNSP_00026	200.00 uL	80.00 mL		
240-49071-E-2	HP34DNTSU_00039	100.00 uL	80.00 mL		
240-49071-E-2 MS	HP34DNTSU_00039	100.00 uL	80.00 mL		
240-49071-E-2 MS	HP8330SP_00051	100.00 uL	80.00 mL		
240-49071-E-2 MS	HPNGPETNSP_00026	200.00 uL	80.00 mL		
240-49071-E-2 MSD	HP34DNTSU_00039	100.00 uL	80.00 mL		
240-49071-E-2 MSD	HP8330SP_00051	100.00 uL	80.00 mL		
240-49071-E-2 MSD	HPNGPETNSP_00026	200.00 uL	80.00 mL		
240-49171-C-6	HP34DNTSU_00039	100.00 uL	80.00 mL		
240-49171-C-8	HP34DNTSU_00039	100.00 uL	80.00 mL		
240-49171-C-10	HP34DNTSU_00039	100.00 uL	80.00 mL		
240-49233-C-4	HP34DNTSU_00039	100.00 uL	80.00 mL		
240-49233-C-6	HP34DNTSU_00039	100.00 uL	80.00 mL		
240-49233-C-8	HP34DNTSU_00039	100.00 uL	80.00 mL		

Solid SW-846-3500 Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-71481

Analyst: Reed, Jonathan E

Batch Open: 4/18/2015 2:00:00PM

Method Code: 320-8330B_Sonc_10g-320

Batch End: 4/20/2015 10:15:00AM

Other Reagents:

Reagent	Amount/Units	Lot#:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Preparation Data Review Checklist

Preparation Batch Number(s): 71481 Test: 8330B

Earliest Holding Time: 4/20/15 Standard

Sample List Tab	1st Level Reviewer	2nd Level Reviewer
Samples identified to the correct method	✓	✓
All necessary NCMs filed (including holding time)	NA	NA
Method/sample/login/QAS checked and correct	✓	✓
Worksheet Tab	**1st Level Reviewer**	**2nd Level Reviewer**
All samples properly preserved	NA	NA
Weights in anticipated range and not targeted	✓	✓
All additional test requirements performed, documented, and uploaded to TALS correctly (e.g. final amount, initial amount, turbidity, and CI Check)	✓	✓
The pH is transcribed correctly in TALS	NA	NA
All additional information transcribed into TALS is correct and raw data is attached	✓	✓
Comments are transcribed correctly in TALS	✓	✓
Reagents Tab	**1st Level Reviewer**	**2nd Level Reviewer**
All necessary reagents not expired and entered into TALS	✓	✓
All spike amounts correct and added to necessary samples and QC	✓	✓
Batch Information	**1st Level Reviewer**	**2nd Level Reviewer**
Date and time accurate and entered into TALS correctly	✓	✓
All necessary 'batch information' complete and entered into TALS correctly	✓	✓

1st Level Reviewer: [signature] Date: 4/20/15

2nd Level Reviewer: MJA Date: 4-20-15

Comments:

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG No.:

Project: RVAAP - ECC

Client Sample ID	Lab Sample ID
079SB-0339M-0001, 0002-SO	240-49171-1
079SB-0340M-0001-SO	240-49171-2
079SB-0341M-0001, 0002-SO	240-49171-3
079SB-0351M-0001-SO	240-49171-4
079SB-0352M-0001-SO	240-49171-6
079SB-0353M-0001-SO	240-49171-8
079SB-0354M-0001-SO	240-49171-10
079SB-0357M-0001-SO	240-49171-11
079SB-0355M-0001-SO	240-49171-13
079SB-0356M-0001-SO	240-49171-14
079SB-0358M-0001-SO	240-49171-15
079SB-0359M-0001-SO	240-49171-16
079SB-0360M-0001-SO	240-49171-17
079SB-0361M-0001-SO	240-49171-18
079SB-0362-0001-SO	240-49171-19
079SB-0363M-0001-SO	240-49171-20
079SB-0364M-0001-SO	240-49171-21

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0339M-0001, 0002-SO
Lab Sample ID: 240-49171-1
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 11:06
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.0

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	6500	18	3.5	0.55	mg/Kg		J D	2	6020
Antimony	0.13	0.35	0.13	0.012	mg/Kg	J	J D	2	6020
Arsenic	13	0.89	0.13	0.023	mg/Kg		D	2	6020
Barium	56	0.89	0.27	0.20	mg/Kg		D J	2	6020
Beryllium	0.54	0.18	0.089	0.0098	mg/Kg		D	2	6020
Cadmium	0.11	0.35	0.0089	0.0033	mg/Kg	J	D	2	6020
Calcium	110	350	89	20	mg/Kg	J	D	2	6020
Chromium	16	0.89	0.40	0.053	mg/Kg		D	2	6020
Cobalt	10	0.18	0.013	0.0015	mg/Kg		D	2	6020
Copper	10	0.71	0.27	0.086	mg/Kg		D	2	6020
Iron	36000	890	270	28	mg/Kg		D J	20	6020
Lead	12	0.53	0.18	0.040	mg/Kg		D	2	6020
Magnesium	1300	180	22	3.5	mg/Kg		D	2	6020
Manganese	1400	8.9	3.5	1.1	mg/Kg		D J	20	6020
Nickel	15	0.89	0.22	0.035	mg/Kg		D	2	6020
Potassium	580	180	8.9	4.3	mg/Kg		D	2	6020
Selenium	0.92	0.89	0.053	0.035	mg/Kg		D	2	6020
Silver	0.017	0.18	0.044	0.0012	mg/Kg	J	D	2	6020
Sodium	22	180	35	7.7	mg/Kg	J	D	2	6020
Thallium	0.15	0.35	0.13	0.017	mg/Kg	J	D	2	6020
Vanadium	19	0.89	0.089	0.033	mg/Kg		D	2	6020
Zinc	35	7.1	1.8	0.44	mg/Kg		D	2	6020
Mercury	0.039	0.12	0.039	0.016	mg/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0340M-0001-SO
Lab Sample ID: 240-49171-2
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 00:00
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.7

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	19	3.9	0.60	mg/Kg		D	2	6020
Antimony	0.18	0.39	0.15	0.014	mg/Kg	J	D	2	6020
Arsenic	15	0.97	0.15	0.025	mg/Kg		D	2	6020
Barium	75	0.97	0.29	0.21	mg/Kg		D	2	6020
Beryllium	0.67	0.19	0.097	0.011	mg/Kg		D	2	6020
Cadmium	0.15	0.39	0.0097	0.0036	mg/Kg	J	D	2	6020
Calcium	180	390	97	21	mg/Kg	J	D	2	6020
Chromium	20	0.97	0.44	0.058	mg/Kg		D	2	6020
Cobalt	9.4	0.19	0.015	0.0017	mg/Kg		D	2	6020
Copper	17	0.78	0.29	0.095	mg/Kg		D	2	6020
Iron	36000	970	290	31	mg/Kg		D	20	6020
Lead	17	0.58	0.19	0.044	mg/Kg		D	2	6020
Magnesium	2300	190	24	3.9	mg/Kg		D	2	6020
Manganese	660	9.7	3.9	1.2	mg/Kg		D	20	6020
Nickel	20	0.97	0.24	0.038	mg/Kg		D	2	6020
Potassium	1000	190	9.7	4.8	mg/Kg		D	2	6020
Selenium	1.3	0.97	0.058	0.039	mg/Kg		D	2	6020
Silver	0.017	0.19	0.049	0.0014	mg/Kg	J	D	2	6020
Sodium	32	190	39	8.5	mg/Kg	J	D	2	6020
Thallium	0.20	0.39	0.15	0.019	mg/Kg	J	D	2	6020
Vanadium	23	0.97	0.097	0.036	mg/Kg		D	2	6020
Zinc	50	7.8	1.9	0.49	mg/Kg		D	2	6020
Mercury	0.026	0.10	0.034	0.015	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0341M-0001, 0002-SO
Lab Sample ID: 240-49171-3
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 11:30
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	8400	20	3.9	0.61	mg/Kg		J D	2	6020
Antimony	0.14	0.39	0.15	0.014	mg/Kg	J	J D	2	6020
Arsenic	43	0.98	0.15	0.026	mg/Kg		D	2	6020
Barium	60	0.98	0.29	0.22	mg/Kg		J D	2	6020
Beryllium	0.51	0.20	0.098	0.011	mg/Kg		D	2	6020
Cadmium	0.11	0.39	0.0098	0.0036	mg/Kg	J	D	2	6020
Calcium	98	390	98	22	mg/Kg	U		2	6020
Chromium	15	0.98	0.44	0.059	mg/Kg		D	2	6020
Cobalt	7.5	0.20	0.015	0.0017	mg/Kg		D	2	6020
Copper	20	0.78	0.29	0.095	mg/Kg		D	2	6020
Iron	20000	98	29	3.1	mg/Kg		J D	2	6020
Lead	76	5.9	2.0	0.44	mg/Kg		D	20	6020
Magnesium	2200	200	25	3.9	mg/Kg		D	2	6020
Manganese	2500	9.8	3.9	1.2	mg/Kg		D J	20	6020
Nickel	19	0.98	0.25	0.038	mg/Kg		D	2	6020
Potassium	3000	200	9.8	4.8	mg/Kg		J D	2	6020
Selenium	0.81	0.98	0.059	0.039	mg/Kg	J	D	2	6020
Silver	0.017	0.20	0.049	0.0014	mg/Kg	J	D	2	6020
Sodium	370	200	39	8.5	mg/Kg		D	2	6020
Thallium	0.11	0.39	0.15	0.019	mg/Kg	J	D	2	6020
Vanadium	15	0.98	0.098	0.036	mg/Kg		D	2	6020
Zinc	45	7.8	2.0	0.49	mg/Kg		D	2	6020
Mercury	0.037	0.11	0.037	0.016	mg/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0351M-0001-SO
Lab Sample ID: 240-49171-4
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 00:00
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 99.0

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	7300	16	3.3	0.51	mg/Kg		D	2	6020
Antimony	0.067	0.33	0.12	0.011	mg/Kg	J	D	2	6020
Arsenic	33	0.82	0.12	0.021	mg/Kg		D	2	6020
Barium	56	0.82	0.25	0.18	mg/Kg		D	2	6020
Beryllium	0.47	0.16	0.082	0.0090	mg/Kg		D	2	6020
Cadmium	0.090	0.33	0.0082	0.0030	mg/Kg	J	D	2	6020
Calcium	22	330	82	18	mg/Kg	J	D	2	6020
Chromium	13	0.82	0.37	0.049	mg/Kg		D	2	6020
Cobalt	7.0	0.16	0.012	0.0014	mg/Kg		D	2	6020
Copper	16	0.66	0.25	0.080	mg/Kg		D	2	6020
Iron	20000	820	250	26	mg/Kg		D	20	6020
Lead	66	0.49	0.16	0.037	mg/Kg		D	2	6020
Magnesium	2000	160	21	3.3	mg/Kg		D	2	6020
Manganese	1100	8.2	3.3	0.99	mg/Kg		D	20	6020
Nickel	17	0.82	0.21	0.032	mg/Kg		D	2	6020
Potassium	2700	160	8.2	4.0	mg/Kg		D	2	6020
Selenium	0.62	0.82	0.049	0.033	mg/Kg	J	D	2	6020
Silver	0.013	0.16	0.041	0.0011	mg/Kg	J	D	2	6020
Sodium	300	160	33	7.1	mg/Kg		D	2	6020
Thallium	0.094	0.33	0.12	0.016	mg/Kg	J	D	2	6020
Vanadium	13	0.82	0.082	0.030	mg/Kg		D	2	6020
Zinc	40	6.6	1.6	0.41	mg/Kg		D	2	6020
Mercury	0.018	0.089	0.029	0.012	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0352M-0001-SO
Lab Sample ID: 240-49171-6
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 10:27
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	12000	440	87	14	mg/Kg		D	50	6020
Antimony	0.088	0.35	0.13	0.012	mg/Kg	J	D	2	6020
Arsenic	11	0.87	0.13	0.023	mg/Kg		D	2	6020
Barium	82	0.87	0.26	0.19	mg/Kg		D	2	6020
Beryllium	0.70	0.17	0.087	0.0096	mg/Kg		D	2	6020
Cadmium	0.13	0.35	0.0087	0.0032	mg/Kg	J	D	2	6020
Calcium	150	350	87	19	mg/Kg	J	D	2	6020
Chromium	19	0.87	0.39	0.052	mg/Kg		D	2	6020
Cobalt	10	0.17	0.013	0.0015	mg/Kg		D	2	6020
Copper	13	0.70	0.26	0.085	mg/Kg		D	2	6020
Iron	25000	2200	660	70	mg/Kg		D	50	6020
Lead	16	0.52	0.17	0.039	mg/Kg		D	2	6020
Magnesium	1900	170	22	3.5	mg/Kg		D	2	6020
Manganese	820	22	8.7	2.6	mg/Kg		D	50	6020
Nickel	16	0.87	0.22	0.034	mg/Kg		D	2	6020
Potassium	670	170	8.7	4.3	mg/Kg		D	2	6020
Selenium	1.0	0.87	0.052	0.035	mg/Kg		D	2	6020
Silver	0.031	0.17	0.044	0.0012	mg/Kg	J	D	2	6020
Sodium	30	170	35	7.6	mg/Kg	J	D	2	6020
Thallium	0.15	0.35	0.13	0.017	mg/Kg	J	D	2	6020
Vanadium	23	0.87	0.087	0.032	mg/Kg		D	2	6020
Zinc	49	7.0	1.7	0.44	mg/Kg		D	2	6020
Mercury	0.040	0.12	0.038	0.016	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0353M-0001-SO
Lab Sample ID: 240-49171-8
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 09:57
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.6

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	16000	480	97	15	mg/Kg		D	50	6020
Antimony	0.12	0.39	0.14	0.014	mg/Kg	J	D	2	6020
Arsenic	11	0.97	0.14	0.025	mg/Kg		D	2	6020
Barium	87	0.97	0.29	0.21	mg/Kg		D	2	6020
Beryllium	0.76	0.19	0.097	0.011	mg/Kg		D	2	6020
Cadmium	0.19	0.39	0.0097	0.0036	mg/Kg	J	D	2	6020
Calcium	250	390	97	21	mg/Kg	J	D	2	6020
Chromium	18	0.97	0.43	0.058	mg/Kg		D	2	6020
Cobalt	10	0.19	0.014	0.0016	mg/Kg		D	2	6020
Copper	16	0.77	0.29	0.094	mg/Kg		D	2	6020
Iron	31000	2400	720	77	mg/Kg		D	50	6020
Lead	13	0.58	0.19	0.043	mg/Kg		D	2	6020
Magnesium	2100	190	24	3.9	mg/Kg		D	2	6020
Manganese	710	24	9.7	2.9	mg/Kg		D	50	6020
Nickel	21	0.97	0.24	0.038	mg/Kg		D	2	6020
Potassium	780	190	9.7	4.7	mg/Kg		D	2	6020
Selenium	1.2	0.97	0.058	0.039	mg/Kg		D	2	6020
Silver	0.023	0.19	0.048	0.0014	mg/Kg	J	D	2	6020
Sodium	29	190	39	8.4	mg/Kg	J	D	2	6020
Thallium	0.17	0.39	0.14	0.018	mg/Kg	J	D	2	6020
Vanadium	25	0.97	0.097	0.036	mg/Kg		D	2	6020
Zinc	57	7.7	1.9	0.48	mg/Kg		D	2	6020
Mercury	0.038	0.10	0.034	0.015	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0354M-0001-SO
Lab Sample ID: 240-49171-10
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 11:30
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	6000	460	92	14	mg/Kg		D	50	6020
Antimony	0.046	0.37	0.14	0.013	mg/Kg	J	D	2	6020
Arsenic	11	0.92	0.14	0.024	mg/Kg		D	2	6020
Barium	34	0.92	0.28	0.20	mg/Kg		D	2	6020
Beryllium	0.34	0.18	0.092	0.010	mg/Kg		D	2	6020
Cadmium	0.080	0.37	0.0092	0.0034	mg/Kg	J	D	2	6020
Calcium	130	370	92	20	mg/Kg	J	D	2	6020
Chromium	17	0.92	0.41	0.055	mg/Kg		D	2	6020
Cobalt	5.9	0.18	0.014	0.0016	mg/Kg		D	2	6020
Copper	5.2	0.74	0.28	0.089	mg/Kg		D	2	6020
Iron	16000	2300	690	74	mg/Kg		D	50	6020
Lead	7.1	0.55	0.18	0.041	mg/Kg		D	2	6020
Magnesium	1100	180	23	3.7	mg/Kg		D	2	6020
Manganese	280	0.92	0.37	0.11	mg/Kg		D	2	6020
Nickel	12	0.92	0.23	0.036	mg/Kg		D	2	6020
Potassium	510	180	9.2	4.5	mg/Kg		D	2	6020
Selenium	0.53	0.92	0.055	0.037	mg/Kg	J	D	2	6020
Silver	0.019	0.18	0.046	0.0013	mg/Kg	J	D	2	6020
Sodium	22	180	37	8.0	mg/Kg	J	D	2	6020
Thallium	0.081	0.37	0.14	0.017	mg/Kg	J	D	2	6020
Vanadium	15	0.92	0.092	0.034	mg/Kg		D	2	6020
Zinc	30	7.4	1.8	0.46	mg/Kg		D	2	6020
Mercury	0.022	0.11	0.036	0.015	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0357M-0001-SO
Lab Sample ID: 240-49171-11
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 09:12
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.6

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	9100	17	3.3	0.52	mg/Kg		D	2	6020
Antimony	0.095	0.33	0.12	0.012	mg/Kg	J	D	2	6020
Arsenic	13	0.83	0.12	0.022	mg/Kg		D	2	6020
Barium	66	0.83	0.25	0.18	mg/Kg		D	2	6020
Beryllium	0.41	0.17	0.083	0.0091	mg/Kg		D	2	6020
Cadmium	0.11	0.33	0.0083	0.0031	mg/Kg	J	D	2	6020
Calcium	840	330	83	18	mg/Kg		D	2	6020
Chromium	14	0.83	0.37	0.050	mg/Kg		D	2	6020
Cobalt	6.5	0.17	0.012	0.0014	mg/Kg		D	2	6020
Copper	8.0	0.66	0.25	0.081	mg/Kg		D	2	6020
Iron	15000	830	250	27	mg/Kg		D	20	6020
Lead	8.0	0.50	0.17	0.037	mg/Kg		D	2	6020
Magnesium	1400	170	21	3.3	mg/Kg		D	2	6020
Manganese	770	8.3	3.3	1.0	mg/Kg		D	20	6020
Nickel	17	0.83	0.21	0.032	mg/Kg		D	2	6020
Potassium	600	170	8.3	4.1	mg/Kg		D	2	6020
Selenium	0.85	0.83	0.050	0.033	mg/Kg		D	2	6020
Silver	0.024	0.17	0.042	0.0012	mg/Kg	J	D	2	6020
Sodium	52	170	33	7.2	mg/Kg	J	D	2	6020
Thallium	0.15	0.33	0.12	0.016	mg/Kg	J	D	2	6020
Vanadium	18	0.83	0.083	0.031	mg/Kg		D	2	6020
Zinc	40	6.6	1.7	0.42	mg/Kg		D	2	6020
Mercury	0.048	0.10	0.035	0.015	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0355M-0001-SO
Lab Sample ID: 240-49171-13
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 13:30
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 99.0

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	5800	15	3.1	0.47	mg/Kg		D	2	6020
Antimony	0.058	0.31	0.11	0.011	mg/Kg	J	D	2	6020
Arsenic	15	0.77	0.11	0.020	mg/Kg		D	2	6020
Barium	34	0.77	0.23	0.17	mg/Kg		D	2	6020
Beryllium	0.31	0.15	0.077	0.0084	mg/Kg		D	2	6020
Cadmium	0.10	0.31	0.0077	0.0028	mg/Kg	J	D	2	6020
Calcium	130	310	77	17	mg/Kg	J	D	2	6020
Chromium	11	0.77	0.34	0.046	mg/Kg		D	2	6020
Cobalt	5.6	0.15	0.011	0.0013	mg/Kg		D	2	6020
Copper	6.2	0.61	0.23	0.074	mg/Kg		D	2	6020
Iron	16000	770	230	24	mg/Kg		D	20	6020
Lead	7.1	0.46	0.15	0.034	mg/Kg		D	2	6020
Magnesium	770	150	19	3.1	mg/Kg		D	2	6020
Manganese	320	7.7	3.1	0.92	mg/Kg		D	20	6020
Nickel	13	0.77	0.19	0.030	mg/Kg		D	2	6020
Potassium	390	150	7.7	3.7	mg/Kg		D	2	6020
Selenium	0.52	0.77	0.046	0.031	mg/Kg	J	D	2	6020
Silver	0.014	0.15	0.038	0.0011	mg/Kg	J	D	2	6020
Sodium	13	150	31	6.7	mg/Kg	J	D	2	6020
Thallium	0.093	0.31	0.11	0.015	mg/Kg	J	D	2	6020
Vanadium	10	0.77	0.077	0.028	mg/Kg		D	2	6020
Zinc	38	6.1	1.5	0.38	mg/Kg		D	2	6020
Mercury	0.020	0.11	0.036	0.015	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0356M-0001-SO
Lab Sample ID: 240-49171-14
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 13:10
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	6200	15	3.1	0.48	mg/Kg		D	2	6020
Antimony	0.14	0.31	0.12	0.011	mg/Kg	J	D	2	6020
Arsenic	77	0.77	0.12	0.020	mg/Kg		D	2	6020
Barium	47	0.77	0.23	0.17	mg/Kg		D	2	6020
Beryllium	0.37	0.15	0.077	0.0084	mg/Kg		D	2	6020
Cadmium	0.20	0.31	0.0077	0.0028	mg/Kg	J	D	2	6020
Calcium	170	310	77	17	mg/Kg	J	D	2	6020
Chromium	12	0.77	0.35	0.046	mg/Kg		D	2	6020
Cobalt	18	0.15	0.012	0.0013	mg/Kg		D	2	6020
Copper	9.4	0.61	0.23	0.074	mg/Kg		D	2	6020
Iron	17000	770	230	25	mg/Kg		D	20	6020
Lead	12	0.46	0.15	0.035	mg/Kg		D	2	6020
Magnesium	1300	150	19	3.1	mg/Kg		D	2	6020
Manganese	490	7.7	3.1	0.92	mg/Kg		D	20	6020
Nickel	20	0.77	0.19	0.030	mg/Kg		D	2	6020
Potassium	630	150	7.7	3.8	mg/Kg		D	2	6020
Selenium	0.67	0.77	0.046	0.031	mg/Kg	J	D	2	6020
Silver	0.045	0.15	0.038	0.0011	mg/Kg	J	D	2	6020
Sodium	24	150	31	6.7	mg/Kg	J	D	2	6020
Thallium	0.18	0.31	0.12	0.015	mg/Kg	J	D	2	6020
Vanadium	14	0.77	0.077	0.028	mg/Kg		D	2	6020
Zinc	94	6.1	1.5	0.38	mg/Kg		D	2	6020
Mercury	0.034	0.095	0.031	0.013	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0358M-0001-SO
Lab Sample ID: 240-49171-15
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 14:41
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	15	2.9	0.45	mg/Kg		D	2	6020
Antimony	0.14	0.29	0.11	0.010	mg/Kg	J	D	2	6020
Arsenic	14	0.73	0.11	0.019	mg/Kg		D	2	6020
Barium	54	0.73	0.22	0.16	mg/Kg		D	2	6020
Beryllium	0.54	0.15	0.073	0.0080	mg/Kg		D	2	6020
Cadmium	0.16	0.29	0.0073	0.0027	mg/Kg	J	D	2	6020
Calcium	270	290	73	16	mg/Kg	J	D	2	6020
Chromium	20	0.73	0.33	0.044	mg/Kg		D	2	6020
Cobalt	8.3	0.15	0.011	0.0012	mg/Kg		D	2	6020
Copper	20	0.58	0.22	0.071	mg/Kg		D	2	6020
Iron	30000	730	220	23	mg/Kg		D	20	6020
Lead	16	0.44	0.15	0.033	mg/Kg		D	2	6020
Magnesium	2200	150	18	2.9	mg/Kg		D	2	6020
Manganese	420	7.3	2.9	0.88	mg/Kg		D	20	6020
Nickel	21	0.73	0.18	0.028	mg/Kg		D	2	6020
Potassium	720	150	7.3	3.6	mg/Kg		D	2	6020
Selenium	0.94	0.73	0.044	0.029	mg/Kg		D	2	6020
Silver	0.019	0.15	0.036	0.0010	mg/Kg	J	D	2	6020
Sodium	26	150	29	6.3	mg/Kg	J	D	2	6020
Thallium	0.18	0.29	0.11	0.014	mg/Kg	J	D	2	6020
Vanadium	20	0.73	0.073	0.027	mg/Kg		D	2	6020
Zinc	61	5.8	1.5	0.36	mg/Kg		D	2	6020
Mercury	0.027	0.10	0.034	0.014	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0359M-0001-SO
Lab Sample ID: 240-49171-16
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 15:00
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	8200	19	3.7	0.58	mg/Kg		D	2	6020
Antimony	0.095	0.37	0.14	0.013	mg/Kg	J	D	2	6020
Arsenic	11	0.93	0.14	0.024	mg/Kg		D	2	6020
Barium	61	0.93	0.28	0.21	mg/Kg		D	2	6020
Beryllium	0.56	0.19	0.093	0.010	mg/Kg		D	2	6020
Cadmium	0.12	0.37	0.0093	0.0035	mg/Kg	J	D	2	6020
Calcium	620	370	93	21	mg/Kg		D	2	6020
Chromium	14	0.93	0.42	0.056	mg/Kg		D	2	6020
Cobalt	8.9	0.19	0.014	0.0016	mg/Kg		D	2	6020
Copper	16	0.75	0.28	0.091	mg/Kg		D	2	6020
Iron	24000	930	280	30	mg/Kg		D	20	6020
Lead	14	0.56	0.19	0.042	mg/Kg		D	2	6020
Magnesium	2500	190	23	3.7	mg/Kg		D	2	6020
Manganese	550	9.3	3.7	1.1	mg/Kg		D	20	6020
Nickel	19	0.93	0.23	0.036	mg/Kg		D	2	6020
Potassium	920	190	9.3	4.6	mg/Kg		D	2	6020
Selenium	0.82	0.93	0.056	0.037	mg/Kg	J	D	2	6020
Silver	0.019	0.19	0.047	0.0013	mg/Kg	J	D	2	6020
Sodium	39	190	37	8.1	mg/Kg	J	D	2	6020
Thallium	0.15	0.37	0.14	0.018	mg/Kg	J	D	2	6020
Vanadium	17	0.93	0.093	0.035	mg/Kg		D	2	6020
Zinc	53	7.5	1.9	0.47	mg/Kg		D	2	6020
Mercury	0.021	0.11	0.035	0.015	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0360M-0001-SO
Lab Sample ID: 240-49171-17
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 16:28
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.0

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	17	3.5	0.54	mg/Kg		D	2	6020
Antimony	0.094	0.35	0.13	0.012	mg/Kg	J	D	2	6020
Arsenic	13	0.87	0.13	0.023	mg/Kg		D	2	6020
Barium	91	0.87	0.26	0.19	mg/Kg		D	2	6020
Beryllium	0.68	0.17	0.087	0.0096	mg/Kg		D	2	6020
Cadmium	0.18	0.35	0.0087	0.0032	mg/Kg	J	D	2	6020
Calcium	870	350	87	19	mg/Kg		D	2	6020
Chromium	16	0.87	0.39	0.052	mg/Kg		D	2	6020
Cobalt	9.8	0.17	0.013	0.0015	mg/Kg		D	2	6020
Copper	17	0.70	0.26	0.085	mg/Kg		D	2	6020
Iron	31000	870	260	28	mg/Kg		D	20	6020
Lead	14	0.52	0.17	0.039	mg/Kg		D	2	6020
Magnesium	2300	170	22	3.5	mg/Kg		D	2	6020
Manganese	780	8.7	3.5	1.0	mg/Kg		D	20	6020
Nickel	18	0.87	0.22	0.034	mg/Kg		D	2	6020
Potassium	910	170	8.7	4.3	mg/Kg		D	2	6020
Selenium	1.1	0.87	0.052	0.035	mg/Kg		D	2	6020
Silver	0.034	0.17	0.044	0.0012	mg/Kg	J	D	2	6020
Sodium	34	170	35	7.6	mg/Kg	J	D	2	6020
Thallium	0.16	0.35	0.13	0.017	mg/Kg	J	D	2	6020
Vanadium	21	0.87	0.087	0.032	mg/Kg		D	2	6020
Zinc	55	7.0	1.7	0.44	mg/Kg		D	2	6020
Mercury	0.031	0.097	0.032	0.014	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0361M-0001-SO
Lab Sample ID: 240-49171-18
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 16:41
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.1

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	10000	18	3.6	0.56	mg/Kg		D	2	6020
Antimony	0.075	0.36	0.14	0.013	mg/Kg	J	D	2	6020
Arsenic	12	0.90	0.14	0.023	mg/Kg		D	2	6020
Barium	66	0.90	0.27	0.20	mg/Kg		D	2	6020
Beryllium	0.62	0.18	0.090	0.0099	mg/Kg		D	2	6020
Cadmium	0.16	0.36	0.0090	0.0033	mg/Kg	J	D	2	6020
Calcium	740	360	90	20	mg/Kg		D	2	6020
Chromium	16	0.90	0.41	0.054	mg/Kg		D	2	6020
Cobalt	9.3	0.18	0.014	0.0015	mg/Kg		D	2	6020
Copper	17	0.72	0.27	0.088	mg/Kg		D	2	6020
Iron	26000	900	270	29	mg/Kg		D	20	6020
Lead	13	0.54	0.18	0.041	mg/Kg		D	2	6020
Magnesium	2600	180	23	3.6	mg/Kg		D	2	6020
Manganese	500	9.0	3.6	1.1	mg/Kg		D	20	6020
Nickel	20	0.90	0.23	0.035	mg/Kg		D	2	6020
Potassium	800	180	9.0	4.4	mg/Kg		D	2	6020
Selenium	0.86	0.90	0.054	0.036	mg/Kg	J	D	2	6020
Silver	0.027	0.18	0.045	0.0013	mg/Kg	J	D	2	6020
Sodium	35	180	36	7.9	mg/Kg	J	D	2	6020
Thallium	0.17	0.36	0.14	0.017	mg/Kg	J	D	2	6020
Vanadium	20	0.90	0.090	0.033	mg/Kg		D	2	6020
Zinc	75	7.2	1.8	0.45	mg/Kg		D	2	6020
Mercury	0.024	0.090	0.030	0.013	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0362-0001-SO
Lab Sample ID: 240-49171-19
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 16:53
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 88.3

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	1200	22	4.4	0.68	mg/Kg		D	2	6020
Antimony	0.038	0.44	0.17	0.015	mg/Kg	J	D	2	6020
Arsenic	4.3	1.1	0.17	0.029	mg/Kg		D	2	6020
Barium	6.1	1.1	0.33	0.24	mg/Kg		D	2	6020
Beryllium	0.10	0.22	0.11	0.012	mg/Kg	J	D	2	6020
Cadmium	0.026	0.44	0.011	0.0041	mg/Kg	J	D	2	6020
Calcium	79	440	110	24	mg/Kg	J	D	2	6020
Chromium	2.8	1.1	0.50	0.066	mg/Kg		D	2	6020
Cobalt	1.2	0.22	0.017	0.0019	mg/Kg		D	2	6020
Copper	1.7	0.88	0.33	0.11	mg/Kg		D	2	6020
Iron	3500	110	33	3.5	mg/Kg		D	2	6020
Lead	1.9	0.66	0.22	0.050	mg/Kg		D	2	6020
Magnesium	190	220	28	4.4	mg/Kg	J	D	2	6020
Manganese	29	1.1	0.44	0.13	mg/Kg		D	2	6020
Nickel	3.5	1.1	0.28	0.043	mg/Kg		D	2	6020
Potassium	210	220	11	5.4	mg/Kg	J	D	2	6020
Selenium	0.18	1.1	0.066	0.044	mg/Kg	J	D	2	6020
Silver	0.0024	0.22	0.055	0.0015	mg/Kg	J	D	2	6020
Sodium	20	220	44	9.6	mg/Kg	J	D	2	6020
Thallium	0.033	0.44	0.17	0.021	mg/Kg	J	D	2	6020
Vanadium	3.1	1.1	0.11	0.041	mg/Kg		D	2	6020
Zinc	29	8.8	2.2	0.55	mg/Kg		D	2	6020
Mercury	0.036	0.11	0.036	0.015	mg/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0363M-0001-SO
Lab Sample ID: 240-49171-20
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 15:37
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	12000	20	4.0	0.62	mg/Kg		D	2	6020
Antimony	0.095	0.40	0.15	0.014	mg/Kg	J	D	2	6020
Arsenic	14	0.99	0.15	0.026	mg/Kg		D	2	6020
Barium	84	0.99	0.30	0.22	mg/Kg		D	2	6020
Beryllium	0.73	0.20	0.099	0.011	mg/Kg		D	2	6020
Cadmium	0.15	0.40	0.0099	0.0037	mg/Kg	J	D	2	6020
Calcium	1500	400	99	22	mg/Kg		D	2	6020
Chromium	20	0.99	0.45	0.060	mg/Kg		D	2	6020
Cobalt	13	0.20	0.015	0.0017	mg/Kg		D	2	6020
Copper	21	0.79	0.30	0.096	mg/Kg		D	2	6020
Iron	28000	990	300	32	mg/Kg		D	20	6020
Lead	13	0.60	0.20	0.045	mg/Kg		D	2	6020
Magnesium	3600	200	25	4.0	mg/Kg		D	2	6020
Manganese	550	9.9	4.0	1.2	mg/Kg		D	20	6020
Nickel	30	0.99	0.25	0.039	mg/Kg		D	2	6020
Potassium	1300	200	9.9	4.9	mg/Kg		D	2	6020
Selenium	0.98	0.99	0.060	0.040	mg/Kg	J	D	2	6020
Silver	0.021	0.20	0.050	0.0014	mg/Kg	J	D	2	6020
Sodium	56	200	40	8.6	mg/Kg	J	D	2	6020
Thallium	0.20	0.40	0.15	0.019	mg/Kg	J	D	2	6020
Vanadium	22	0.99	0.099	0.037	mg/Kg		D	2	6020
Zinc	66	7.9	2.0	0.50	mg/Kg		D	2	6020
Mercury	0.023	0.099	0.033	0.014	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SB-0364M-0001-SO
Lab Sample ID: 240-49171-21
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 00:00
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	12000	18	3.6	0.56	mg/Kg		D	2	6020
Antimony	0.12	0.36	0.13	0.013	mg/Kg	J	D	2	6020
Arsenic	16	0.90	0.13	0.023	mg/Kg		D	2	6020
Barium	75	0.90	0.27	0.20	mg/Kg		D	2	6020
Beryllium	0.67	0.18	0.090	0.0099	mg/Kg		D	2	6020
Cadmium	0.17	0.36	0.0090	0.0033	mg/Kg	J	D	2	6020
Calcium	1800	360	90	20	mg/Kg		D	2	6020
Chromium	22	0.90	0.40	0.054	mg/Kg		D	2	6020
Cobalt	14	0.18	0.013	0.0015	mg/Kg		D	2	6020
Copper	23	0.72	0.27	0.087	mg/Kg		D	2	6020
Iron	28000	900	270	29	mg/Kg		D	20	6020
Lead	14	0.54	0.18	0.040	mg/Kg		D	2	6020
Magnesium	3400	180	22	3.6	mg/Kg		D	2	6020
Manganese	520	9.0	3.6	1.1	mg/Kg		D	20	6020
Nickel	29	0.90	0.22	0.035	mg/Kg		D	2	6020
Potassium	1400	180	9.0	4.4	mg/Kg		D	2	6020
Selenium	1.4	0.90	0.054	0.036	mg/Kg		D	2	6020
Silver	0.024	0.18	0.045	0.0013	mg/Kg	J	D	2	6020
Sodium	57	180	36	7.8	mg/Kg	J	D	2	6020
Thallium	0.19	0.36	0.13	0.017	mg/Kg	J	D	2	6020
Vanadium	22	0.90	0.090	0.033	mg/Kg		D	2	6020
Zinc	70	7.2	1.8	0.45	mg/Kg		D	2	6020
Mercury	0.017	0.10	0.033	0.014	mg/Kg	J		1	7471A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-177115/7 04/20/2015 10:44				CCV 240-177115/118 04/20/2015 18:03				CCV 240-177115/130 04/20/2015 18:48			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	206		200	103	247		250	99	249		250	100
Antimony	38.3		40.0	96	52.9		50.0	106	52.7		50.0	105
Arsenic	39.0		40.0	97	49.6		50.0	99	47.8		50.0	96
Barium	41.3		40.0	103	52.7		50.0	105	52.7		50.0	105
Beryllium	41.0		40.0	102	46.9		50.0	94	46.4		50.0	93
Cadmium	41.7		40.0	104	50.6		50.0	101	49.3		50.0	99
Calcium	20100		20000	100	25000		25000	100	24800		25000	99
Cobalt	40.9		40.0	102	47.7		50.0	95	46.6		50.0	93
Copper	42.0		40.0	105	47.2		50.0	94	46.4		50.0	93
Iron	10400		10000	104	12700		12500	101	12700		12500	102
Lead	40.3		40.0	101	48.3		50.0	97	48.4		50.0	97
Magnesium	20800		20000	104	25200		25000	101	25100		25000	100
Manganese	205		200	103	250		250	100	252		250	101
Potassium	20800		20000	104	25900		25000	104	26000		25000	104
Selenium	42.2		40.0	106	49.4		50.0	99	47.9		50.0	96
Silver	41.8		40.0	104	49.6		50.0	99	48.9		50.0	98
Sodium	20800		20000	104	24800		25000	99	25200		25000	101
Thallium	39.0		40.0	97	46.7		50.0	93	47.1		50.0	94
Vanadium	41.2		40.0	103	50.6		50.0	101	51.1		50.0	102
Zinc	42.4		40.0	106	49.0		50.0	98	47.3		50.0	95
Chromium	41.8		40.0	105	49.9		50.0	100	50.3		50.0	101
Nickel	42.3		40.0	106	47.7		50.0	95	46.5		50.0	93

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-177115/140 04/20/2015 19:27				CCV 240-177115/152 04/20/2015 20:12				CCV 240-177115/164 04/20/2015 20:58			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	249		250	99	251		250	100	253		250	101
Antimony	53.0		50.0	106	53.1		50.0	106	53.5		50.0	107
Arsenic	49.7		50.0	99	49.4		50.0	99	49.2		50.0	98
Barium	53.0		50.0	106	52.7		50.0	105	53.4		50.0	107
Beryllium	47.6		50.0	95	47.3		50.0	95	46.0		50.0	92
Cadmium	51.9		50.0	104	52.9		50.0	106	52.2		50.0	104
Calcium	24900		25000	100	25400		25000	102	25400		25000	102
Cobalt	48.4		50.0	97	47.4		50.0	95	47.2		50.0	94
Copper	47.9		50.0	96	47.4		50.0	95	47.0		50.0	94
Iron	12900		12500	103	13300		12500	106	13200		12500	105
Lead	48.5		50.0	97	48.3		50.0	97	48.8		50.0	98
Magnesium	25200		25000	101	25400		25000	102	25500		25000	102
Manganese	253		250	101	261		250	104	260		250	104
Potassium	25700		25000	103	26200		25000	105	26300		25000	105
Selenium	48.9		50.0	98	48.7		50.0	97	49.3		50.0	99
Silver	52.3		50.0	105	51.8		50.0	104	51.5		50.0	103
Sodium	25300		25000	101	25500		25000	102	25500		25000	102
Thallium	46.7		50.0	93	47.1		50.0	94	47.0		50.0	94
Vanadium	51.8		50.0	104	52.3		50.0	105	51.6		50.0	103
Zinc	49.0		50.0	98	49.2		50.0	98	48.5		50.0	97
Chromium	50.7		50.0	101	52.0		50.0	104	51.6		50.0	103
Nickel	48.1		50.0	96	47.4		50.0	95	47.2		50.0	94

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-177351/7 04/21/2015 18:08				CCV 240-177351/48 04/21/2015 20:45				CCV 240-177351/60 04/21/2015 21:30			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	201		200	100	244		250	98	238		250	95
Chromium	41.8		40.0	104	53.0		50.0	106	51.8		50.0	104
Iron	10500		10000	105	13400		12500	107	13000		12500	104
Manganese	213		200	106	273		250	109	251		250	100
Nickel	41.1		40.0	103	47.1		50.0	94	47.0		50.0	94
Antimony	37.3		40.0	93	54.1		50.0	108	53.7		50.0	107
Arsenic	38.8		40.0	97	46.6		50.0	93	46.7		50.0	93
Barium	40.4		40.0	101	51.6		50.0	103	51.4		50.0	103
Beryllium	40.2		40.0	100	46.8		50.0	94	46.7		50.0	93
Cadmium	41.1		40.0	103	50.4		50.0	101	49.7		50.0	99
Calcium	20300		20000	102	25300		25000	101	24700		25000	99
Cobalt	39.9		40.0	100	46.8		50.0	94	46.4		50.0	93
Copper	40.9		40.0	102	47.7		50.0	95	47.2		50.0	94
Lead	39.8		40.0	100	48.7		50.0	97	48.9		50.0	98
Magnesium	21200		20000	106	26400		25000	105	25500		25000	102
Potassium	21000		20000	105	25700		25000	103	25300		25000	101
Selenium	40.9		40.0	102	45.8		50.0	92	45.4		50.0	91
Silver	41.1		40.0	103	50.6		50.0	101	49.5		50.0	99
Sodium	20800		20000	104	26500		25000	106	25800		25000	103
Thallium	38.2		40.0	95	51.2		50.0	102	50.3		50.0	101
Vanadium	41.5		40.0	104	52.3		50.0	105	51.5		50.0	103
Zinc	40.8		40.0	102	47.2		50.0	94	46.5		50.0	93

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-177351/72 04/21/2015 22:15				CCV 240-177351/84 04/21/2015 23:00				CCV 240-177351/89 04/21/2015 23:19			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	240		250	96	246		250	98	247		250	99
Chromium	52.0		50.0	104	53.0		50.0	106	53.6		50.0	107
Iron	13100		12500	105	13400		12500	108	13600		12500	109
Manganese	262		250	105	263		250	105	266		250	107
Nickel	48.3		50.0	97	47.7		50.0	95	48.2		50.0	96
Antimony	53.5		50.0	107	53.5		50.0	107	53.4		50.0	107
Arsenic	47.8		50.0	96	46.7		50.0	93	47.4		50.0	95
Barium	51.1		50.0	102	51.2		50.0	102	51.1		50.0	102
Beryllium	49.3		50.0	99	49.2		50.0	98	49.5		50.0	99
Cadmium	49.2		50.0	98	48.9		50.0	98	49.4		50.0	99
Calcium	24600		25000	99	25300		25000	101	25700		25000	103
Cobalt	48.0		50.0	96	47.5		50.0	95	47.4		50.0	95
Copper	48.6		50.0	97	48.2		50.0	96	48.3		50.0	97
Lead	48.7		50.0	97	48.7		50.0	97	48.6		50.0	97
Magnesium	25600		25000	102	26400		25000	106	26400		25000	106
Potassium	25500		25000	102	25800		25000	103	26200		25000	105
Selenium	46.7		50.0	93					45.6		50.0	91
Silver	49.7		50.0	99	49.5		50.0	99	49.7		50.0	99
Sodium	25600		25000	102	26200		25000	105	26600		25000	106
Thallium	51.3		50.0	103	51.1		50.0	102	51.9		50.0	104
Vanadium	51.5		50.0	103	52.9		50.0	106	53.6		50.0	107
Zinc	47.4		50.0	95	47.4		50.0	95	47.3		50.0	95

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-177559/7 04/22/2015 15:15				CCV 240-177559/24 04/22/2015 16:19				CCV 240-177559/36 04/22/2015 17:03			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	205		200	103	241		250	96	246		250	98
Antimony	41.6		40.0	104	50.6		50.0	101	50.9		50.0	102
Arsenic	39.7		40.0	99	49.6		50.0	99	47.5		50.0	95
Barium	40.8		40.0	102	49.6		50.0	99	49.4		50.0	99
Beryllium	39.0		40.0	98	47.3		50.0	95	45.7		50.0	91
Cadmium	40.9		40.0	102	50.4		50.0	101	49.2		50.0	98
Calcium	20100		20000	100	24000		25000	96	24200		25000	97
Chromium	41.0		40.0	103	49.7		50.0	99	50.5		50.0	101
Cobalt	40.1		40.0	100	49.1		50.0	98	47.4		50.0	95
Copper	41.5		40.0	104	49.6		50.0	99	48.4		50.0	97
Iron	10300		10000	103	12300		12500	99	12600		12500	101
Magnesium	20800		20000	104	24700		25000	99	25000		25000	100
Nickel	40.7		40.0	102	49.5		50.0	99	47.5		50.0	95
Potassium	20700		20000	104	24500		25000	98	24600		25000	98
Selenium	41.5		40.0	104	49.8		50.0	100	46.4		50.0	93
Silver	41.2		40.0	103	50.3		50.0	101	49.7		50.0	99
Sodium	20900		20000	104	25100		25000	100	25200		25000	101
Thallium	37.2		40.0	93	47.7		50.0	95	46.0		50.0	92
Vanadium	41.1		40.0	103	49.4		50.0	99	49.6		50.0	99
Zinc	42.0		40.0	105	48.7		50.0	97	47.1		50.0	94
Lead	39.1		40.0	98	47.6		50.0	95	47.7		50.0	95
Manganese	201		200	100	239		250	96	243		250	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-177559/48 04/22/2015 17:49				CCV 240-177559/60 04/22/2015 18:34				CCV 240-177559/65 04/22/2015 18:53			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	251		250	100	250		250	100	252		250	101
Antimony	51.2		50.0	102	51.7		50.0	103	51.3		50.0	103
Arsenic	47.5		50.0	95	47.8		50.0	96	51.1		50.0	102
Barium	50.6		50.0	101	50.4		50.0	101	50.5		50.0	101
Beryllium	46.5		50.0	93	46.8		50.0	94	47.4		50.0	95
Cadmium	50.1		50.0	100	50.3		50.0	101	53.7		50.0	107
Calcium	24700		25000	99	24600		25000	99	24800		25000	99
Chromium	51.6		50.0	103	51.0		50.0	102	51.4		50.0	103
Cobalt	46.8		50.0	94	47.2		50.0	94	49.9		50.0	100
Copper	47.6		50.0	95	47.4		50.0	95	50.3		50.0	101
Iron	13100		12500	105	12900		12500	103	13000		12500	104
Magnesium	25400		25000	102	24900		25000	100	25000		25000	100
Nickel	47.1		50.0	94	46.8		50.0	94	49.8		50.0	100
Potassium	25100		25000	100	25200		25000	101	25200		25000	101
Selenium	46.9		50.0	94	47.3		50.0	95	51.5		50.0	103
Silver	50.2		50.0	100	50.4		50.0	101	53.6		50.0	107
Sodium	25400		25000	102	25000		25000	100	25100		25000	100
Thallium	46.9		50.0	94	45.7		50.0	91	46.1		50.0	92
Vanadium	50.9		50.0	102	51.2		50.0	102	50.9		50.0	102
Zinc	47.5		50.0	95	47.7		50.0	95	50.6		50.0	101
Lead	48.6		50.0	97	47.1		50.0	94	47.7		50.0	95
Manganese	249		250	100	248		250	99	249		250	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-177559/77 04/22/2015 19:39											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	253		250	101								
Antimony	51.7		50.0	103								
Arsenic	51.3		50.0	103								
Barium	51.0		50.0	102								
Beryllium	48.7		50.0	97								
Cadmium	54.1		50.0	108								
Calcium	24800		25000	99								
Chromium	51.9		50.0	104								
Cobalt	50.0		50.0	100								
Copper	50.8		50.0	102								
Iron	13100		12500	105								
Magnesium	25200		25000	101								
Nickel	49.7		50.0	99								
Potassium	25300		25000	101								
Selenium	51.1		50.0	102								
Silver	53.9		50.0	108								
Sodium	25500		25000	102								
Thallium	46.3		50.0	93								
Vanadium	51.4		50.0	103								
Zinc	50.3		50.0	101								
Lead	47.9		50.0	96								
Manganese	251		250	101								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-177880/7 04/24/2015 09:22				CCV 240-177880/62 04/24/2015 14:06				CCV 240-177880/74 04/24/2015 14:51			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	10200		10000	102	12900		12500	103	12700		12500	102
Manganese	208		200	104	256		250	102	255		250	102
Aluminum	203		200	101	244		250	98	242		250	97
Antimony	43.8		40.0	110	53.1		50.0	106	52.1		50.0	104
Arsenic	39.7		40.0	99	47.9		50.0	96	47.7		50.0	95
Barium	40.1		40.0	100	52.2		50.0	104	51.3		50.0	103
Beryllium	39.7		40.0	99	46.9		50.0	94	48.1		50.0	96
Cadmium	40.5		40.0	101	51.2		50.0	102	50.2		50.0	100
Calcium	20100		20000	100	25200		25000	101	24800		25000	99
Chromium	41.1		40.0	103	51.5		50.0	103	50.5		50.0	101
Cobalt	40.2		40.0	101	46.7		50.0	93	45.9		50.0	92
Copper	40.6		40.0	101	46.7		50.0	93	46.1		50.0	92
Lead	39.6		40.0	99	49.4		50.0	99	47.7		50.0	95
Magnesium	20600		20000	103	24900		25000	99	24400		25000	98
Nickel	40.8		40.0	102	46.1		50.0	92	45.7		50.0	91
Potassium	20600		20000	103	25400		25000	102	25100		25000	100
Selenium	42.1		40.0	105	48.4		50.0	97	48.2		50.0	96
Silver	41.0		40.0	103	50.6		50.0	101	49.5		50.0	99
Sodium	20300		20000	102	25000		25000	100	24400		25000	97
Thallium	39.2		40.0	98	51.0		50.0	102	51.4		50.0	103
Vanadium	40.7		40.0	102	51.2		50.0	102	50.5		50.0	101
Zinc	41.1		40.0	103	47.2		50.0	94	46.7		50.0	93

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-177880/83 04/24/2015 15:26				CCV 240-177880/95 04/24/2015 16:11				CCV 240-177880/107 04/24/2015 16:57			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	12600		12500	101	12700		12500	101	12800		12500	103
Manganese	255		250	102	256		250	103	252		250	101
Aluminum	236		250	95	241		250	96	241		250	97
Antimony	52.1		50.0	104	51.7		50.0	103	52.1		50.0	104
Arsenic	49.1		50.0	98	48.0		50.0	96	47.8		50.0	96
Barium	51.5		50.0	103	51.2		50.0	102	51.1		50.0	102
Beryllium	50.0		50.0	100	48.1		50.0	96	47.8		50.0	96
Cadmium	50.2		50.0	100	49.7		50.0	99	50.5		50.0	101
Calcium	24600		25000	98	24800		25000	99	24900		25000	100
Chromium	50.1		50.0	100	50.5		50.0	101	50.3		50.0	101
Cobalt	47.4		50.0	95	46.3		50.0	93	46.3		50.0	93
Copper	47.3		50.0	95	46.7		50.0	93	46.2		50.0	92
Lead	47.9		50.0	96	47.4		50.0	95	47.8		50.0	96
Magnesium	24000		25000	96	24600		25000	98	24800		25000	99
Nickel	46.7		50.0	93	46.0		50.0	92	45.8		50.0	92
Potassium	25100		25000	100	25300		25000	101	25200		25000	101
Selenium	49.1		50.0	98	48.0		50.0	96	48.1		50.0	96
Silver	49.9		50.0	100	49.3		50.0	99	49.9		50.0	100
Sodium	24100		25000	96	24400		25000	98	24600		25000	99
Thallium	51.0		50.0	102	50.1		50.0	100	48.1		50.0	96
Vanadium	50.7		50.0	101	50.2		50.0	100	51.0		50.0	102
Zinc	47.9		50.0	96	47.0		50.0	94	47.5		50.0	95

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-178191/7 04/27/2015 14:23				CCV 240-178191/24 04/27/2015 15:27				CCV 240-178191/35 04/27/2015 16:09			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	10400		10000	104	12700		12500	101	12400		12500	99
Manganese	196		200	98	248		250	99	248		250	99
Aluminum	208		200	104	247		250	99	246		250	98
Antimony	44.1		40.0	110	51.2		50.0	102	51.4		50.0	103
Arsenic	40.3		40.0	101	50.2		50.0	100	49.7		50.0	99
Barium	41.0		40.0	102	50.1		50.0	100	50.0		50.0	100
Beryllium	41.1		40.0	103	48.0		50.0	96	48.0		50.0	96
Cadmium	41.5		40.0	104	49.9		50.0	100	50.0		50.0	100
Calcium	19800		20000	99	24000		25000	96	23800		25000	95
Chromium	41.0		40.0	102	50.2		50.0	100	49.1		50.0	98
Cobalt	40.2		40.0	100	50.2		50.0	100	49.5		50.0	99
Copper	41.0		40.0	103	50.6		50.0	101	49.9		50.0	100
Lead	40.2		40.0	100	49.0		50.0	98	49.0		50.0	98
Magnesium	21100		20000	105	25000		25000	100	24900		25000	100
Nickel	41.3		40.0	103	50.1		50.0	100	49.7		50.0	99
Potassium	20800		20000	104	24900		25000	99	24600		25000	98
Selenium	41.9		40.0	105	50.6		50.0	101	49.8		50.0	100
Silver	41.4		40.0	104	50.7		50.0	101	50.4		50.0	101
Sodium	21000		20000	105	25000		25000	100	24900		25000	100
Thallium	38.3		40.0	96	51.6		50.0	103	50.2		50.0	100
Vanadium	40.6		40.0	102	50.2		50.0	100	48.5		50.0	97
Zinc	41.2		40.0	103	50.4		50.0	101	49.7		50.0	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-178352/7 04/28/2015 11:55				CCV 240-178352/12 04/28/2015 12:14				CCV 240-178352/24 04/28/2015 12:59			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Lead	39.6		40.0	99	48.7		50.0	97	48.4		50.0	97
Aluminum	202		200	101	259		250	103	253		250	101
Arsenic	40.0		40.0	100	49.8		50.0	100	51.1		50.0	102
Barium	41.0		40.0	103	50.0		50.0	100	50.0		50.0	100
Beryllium	41.0		40.0	102	48.1		50.0	96	46.0		50.0	92
Cadmium	41.2		40.0	103	50.8		50.0	102	50.7		50.0	101
Calcium	20000		20000	100	25300		25000	101	25300		25000	101
Cobalt	40.3		40.0	101	49.6		50.0	99	50.8		50.0	102
Copper	41.5		40.0	104	50.1		50.0	100	51.2		50.0	102
Iron	10100		10000	101	12500		12500	100	12700		12500	101
Magnesium	20200		20000	101	25200		25000	101	25300		25000	101
Manganese	205		200	103	254		250	101	259		250	103
Nickel	41.6		40.0	104	49.7		50.0	99	50.9		50.0	102
Potassium	20400		20000	102	25600		25000	102	25700		25000	103
Selenium	41.8		40.0	104	50.2		50.0	100	51.3		50.0	103
Silver	41.6		40.0	104	51.0		50.0	102	50.9		50.0	102
Sodium	20300		20000	102	25200		25000	101	25300		25000	101
Zinc	42.1		40.0	105	49.9		50.0	100	51.0		50.0	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-178352/36 04/28/2015 13:44											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Lead	49.2		50.0	98								
Aluminum	254		250	102								
Arsenic	50.0		50.0	100								
Barium	50.4		50.0	101								
Beryllium	50.7		50.0	101								
Cadmium	50.4		50.0	101								
Calcium	26000		25000	104								
Cobalt	49.7		50.0	99								
Copper	50.5		50.0	101								
Iron	12300		12500	98								
Magnesium	25300		25000	101								
Manganese	258		250	103								
Nickel	50.4		50.0	101								
Potassium	25500		25000	102								
Selenium	49.8		50.0	100								
Silver	50.8		50.0	102								
Sodium	25300		25000	101								
Zinc	49.9		50.0	100								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00881

Analyte	ICV 240-176499/7-A 04/16/2015 08:27				CCV 240-176499/10-A 04/16/2015 09:06				CCV 240-176499/10-A 04/16/2015 09:31			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.77		5.00	95	4.96		5.00	99	5.12		5.00	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00881

Analyte	CCV 240-176499/10-A 04/16/2015 09:55				CCV 240-176499/10-A 04/16/2015 10:15							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.18		5.00	104	5.14		5.00	103				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00885

Analyte	ICV 240-177030/7-A 04/20/2015 09:56				CCV 240-177030/10-A 04/20/2015 10:58				CCV 240-177030/10-A 04/20/2015 11:23			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.75		5.00	95	5.06		5.00	101	5.09		5.00	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00885

Analyte	CCV 240-177030/10-A 04/20/2015 11:49											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.06		5.00	101								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00885

Analyte	ICV 240-177030/7-A 04/21/2015 08:31				CCV 240-177030/10-A 04/21/2015 10:52				CCV 240-177030/10-A 04/21/2015 11:16			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.73		5.00	95	5.16		5.00	103	5.16		5.00	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177115/10 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	50.6	J	101	70-130
Antimony	2.00	2.06		103	70-130
Arsenic	5.00	4.96	J	99	70-130
Barium	5.00	4.98	J	100	70-130
Beryllium	1.00	0.864	J	86	70-130
Cadmium	1.00	1.04	J	104	70-130
Calcium	1000	1020	J	102	70-130
Chromium	2.00	2.14		107	70-130
Cobalt	1.00	1.05		105	70-130
Copper	2.00	2.03	J	101	70-130
Iron	100	107	J	107	70-130
Lead	1.00	1.05		105	70-130
Magnesium	1000	1080		108	70-130
Manganese	5.00	5.31		106	70-130
Nickel	2.00	2.08	J	104	70-130
Potassium	1000	1050		105	70-130
Selenium	5.00	5.27		105	70-130
Silver	1.00	1.05		105	70-130
Sodium	1000	1080		108	70-130
Thallium	2.00	1.95	J	98	70-130
Vanadium	5.00	5.26		105	70-130
Zinc	20.0	20.2	J	101	70-130

Lab Sample ID: CRI 240-177115/142 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	50.8	J	102	70-130
Antimony	2.00	1.86	J	93	70-130
Arsenic	5.00	4.71	J	94	70-130
Barium	5.00	5.39		108	70-130
Beryllium	1.00	0.916	J	92	70-130
Cadmium	1.00	1.07	J	107	70-130
Calcium	1000	1020	J	102	70-130
Chromium	2.00	3.94		197	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177115/142 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cobalt	1.00	0.938	J	94	70-130
Copper	2.00	1.68	J	84	70-130
Iron	100	117	J	117	70-130
Lead	1.00	1.06		106	70-130
Magnesium	1000	1040		104	70-130
Manganese	5.00	5.63		113	70-130
Nickel	2.00	2.69	J	134	70-130
Potassium	1000	1050		105	70-130
Selenium	5.00	4.87	J	97	70-130
Silver	1.00	0.990	J	99	70-130
Sodium	1000	1080		108	70-130
Thallium	2.00	1.90	J	95	70-130
Vanadium	5.00	5.41		108	70-130
Zinc	20.0	18.7	J	93	70-130

Lab Sample ID: CRI 240-177115/175 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	49.8	J	100	70-130
Antimony	2.00	1.87	J	93	70-130
Arsenic	5.00	4.83	J	97	70-130
Barium	5.00	5.37		107	70-130
Beryllium	1.00	0.919	J	92	70-130
Cadmium	1.00	1.04	J	104	70-130
Calcium	1000	1030	J	103	70-130
Chromium	2.00	3.94		197	70-130
Cobalt	1.00	0.967	J	97	70-130
Copper	2.00	1.74	J	87	70-130
Iron	100	141	J	141	70-130
Lead	1.00	1.03		103	70-130
Magnesium	1000	1010		101	70-130
Manganese	5.00	6.95		139	70-130
Nickel	2.00	2.71	J	136	70-130
Potassium	1000	1040		104	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177115/175 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Selenium	5.00	4.85	J	97	70-130
Silver	1.00	1.05		105	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	1.87	J	94	70-130
Vanadium	5.00	5.20		104	70-130
Zinc	20.0	19.4	J	97	70-130

Lab Sample ID: CRI 240-177351/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	38.5	J	77	70-130
Antimony	2.00	2.32		116	70-130
Arsenic	5.00	5.02		100	70-130
Barium	5.00	4.96	J	99	70-130
Beryllium	1.00	0.967	J	97	70-130
Cadmium	1.00	0.990	J	99	70-130
Calcium	1000	1030	J	103	70-130
Chromium	2.00	2.12		106	70-130
Cobalt	1.00	0.981	J	98	70-130
Copper	2.00	2.01	J	100	70-130
Iron	100	107	J	107	70-130
Lead	1.00	1.04		104	70-130
Magnesium	1000	1090		109	70-130
Manganese	5.00	5.26		105	70-130
Nickel	2.00	2.01	J	100	70-130
Potassium	1000	1040		104	70-130
Selenium	5.00	5.16		103	70-130
Silver	1.00	1.04		104	70-130
Sodium	1000	1070		107	70-130
Thallium	2.00	1.89	J	95	70-130
Vanadium	5.00	5.16		103	70-130
Zinc	20.0	20.2	J	101	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177351/91 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	38.6	J	77	70-130
Antimony	2.00	2.01		100	70-130
Arsenic	5.00	4.85	J	97	70-130
Barium	5.00	5.11		102	70-130
Beryllium	1.00	1.02		102	70-130
Cadmium	1.00	1.02	J	102	70-130
Calcium	1000	1030	J	103	70-130
Chromium	2.00	2.20		110	70-130
Cobalt	1.00	0.987	J	99	70-130
Copper	2.00	1.84	J	92	70-130
Iron	100	112	J	112	70-130
Lead	1.00	1.04		104	70-130
Magnesium	1000	1090		109	70-130
Manganese	5.00	5.25		105	70-130
Nickel	2.00	2.06	J	103	70-130
Potassium	1000	1050		105	70-130
Selenium	5.00	4.83	J	97	70-130
Silver	1.00	1.06		106	70-130
Sodium	1000	1110		111	70-130
Thallium	2.00	1.88	J	94	70-130
Vanadium	5.00	5.24		105	70-130
Zinc	20.0	19.7	J	99	70-130

Lab Sample ID: CRI 240-177559/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	51.2	J	102	70-130
Antimony	2.00	2.34		117	70-130
Arsenic	5.00	5.07		101	70-130
Barium	5.00	5.02		100	70-130
Beryllium	1.00	0.901	J	90	70-130
Cadmium	1.00	1.03	J	103	70-130
Calcium	1000	1020	J	102	70-130
Chromium	2.00	2.14		107	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177559/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cobalt	1.00	1.03		103	70-130
Copper	2.00	2.13	J	106	70-130
Iron	100	106	J	106	70-130
Lead	1.00	1.02		102	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	5.11		102	70-130
Nickel	2.00	2.12	J	106	70-130
Potassium	1000	1050		105	70-130
Selenium	5.00	5.36		107	70-130
Silver	1.00	1.07		107	70-130
Sodium	1000	1070		107	70-130
Thallium	2.00	1.88	J	94	70-130
Vanadium	5.00	5.43		109	70-130
Zinc	20.0	20.7	J	103	70-130

Lab Sample ID: CRI 240-177559/67 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	51.7	J	103	70-130
Chromium	2.00	2.21		110	70-130
Nickel	2.00	1.94	J	97	70-130

Lab Sample ID: CRI 240-177559/88 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	52.0	J	104	70-130
Antimony	2.00	2.10		105	70-130
Arsenic	5.00	5.22		104	70-130
Barium	5.00	5.12		102	70-130
Beryllium	1.00	0.934	J	93	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177559/88 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cadmium	1.00	1.11	J	111	70-130
Calcium	1000	1030	J	103	70-130
Chromium	2.00	2.18		109	70-130
Cobalt	1.00	1.07		107	70-130
Copper	2.00	2.19	J	109	70-130
Iron	100	118	J	118	70-130
Lead	1.00	1.08		108	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	6.16		123	70-130
Nickel	2.00	2.12	J	106	70-130
Potassium	1000	1050		105	70-130
Selenium	5.00	5.30		106	70-130
Silver	1.00	1.16		116	70-130
Sodium	1000	1070		107	70-130
Thallium	2.00	1.90	J	95	70-130
Vanadium	5.00	5.47		109	70-130
Zinc	20.0	21.1	J	106	70-130

Lab Sample ID: CRI 240-177880/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	48.1	J	96	70-130
Antimony	2.00	2.20		110	70-130
Arsenic	5.00	5.11		102	70-130
Barium	5.00	4.94	J	99	70-130
Beryllium	1.00	1.04		104	70-130
Cadmium	1.00	1.04	J	104	70-130
Calcium	1000	1020	J	102	70-130
Chromium	2.00	2.13		106	70-130
Cobalt	1.00	1.01		101	70-130
Copper	2.00	2.01	J	101	70-130
Iron	100	109	J	109	70-130
Lead	1.00	1.04		104	70-130
Magnesium	1000	1080		108	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177880/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Manganese	5.00	5.21		104	70-130
Nickel	2.00	2.06	J	103	70-130
Potassium	1000	1080		108	70-130
Selenium	5.00	5.26		105	70-130
Silver	1.00	1.03		103	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	2.05		102	70-130
Vanadium	5.00	5.33		107	70-130
Zinc	20.0	20.6	J	103	70-130

Lab Sample ID: CRI 240-177880/85 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	46.8	J	94	70-130
Antimony	2.00	2.06		103	70-130
Arsenic	5.00	4.90	J	98	70-130
Barium	5.00	5.16		103	70-130
Beryllium	1.00	0.987	J	99	70-130
Cadmium	1.00	1.09	J	109	70-130
Calcium	1000	1030	J	103	70-130
Chromium	2.00	2.14		107	70-130
Cobalt	1.00	0.957	J	96	70-130
Copper	2.00	1.85	J	93	70-130
Iron	100	112	J	112	70-130
Lead	1.00	1.04		104	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	5.22		104	70-130
Nickel	2.00	1.94	J	97	70-130
Potassium	1000	1070		107	70-130
Selenium	5.00	5.14		103	70-130
Silver	1.00	1.06		106	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	2.06		103	70-130
Vanadium	5.00	5.30		106	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177880/85 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Zinc	20.0	19.4	J	97	70-130

Lab Sample ID: CRI 240-177880/118 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	46.9	J	94	70-130
Antimony	2.00	2.10		105	70-130
Arsenic	5.00	4.66	J	93	70-130
Barium	5.00	4.97	J	99	70-130
Beryllium	1.00	0.940	J	94	70-130
Cadmium	1.00	1.08	J	108	70-130
Calcium	1000	1050	J	105	70-130
Chromium	2.00	2.14		107	70-130
Cobalt	1.00	0.911	J	91	70-130
Copper	2.00	1.79	J	89	70-130
Iron	100	113	J	113	70-130
Lead	1.00	1.01		101	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	5.23		105	70-130
Nickel	2.00	1.85	J	93	70-130
Potassium	1000	1080		108	70-130
Selenium	5.00	4.77	J	95	70-130
Silver	1.00	1.03		103	70-130
Sodium	1000	1080		108	70-130
Thallium	2.00	2.02		101	70-130
Vanadium	5.00	5.15		103	70-130
Zinc	20.0	19.0	J	95	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-178191/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	49.2	J	98	70-130
Antimony	2.00	2.08		104	70-130
Arsenic	5.00	4.98	J	100	70-130
Barium	5.00	5.03		101	70-130
Beryllium	1.00	0.930	J	93	70-130
Cadmium	1.00	1.02	J	102	70-130
Calcium	1000	991	J	99	70-130
Chromium	2.00	2.08		104	70-130
Cobalt	1.00	0.996	J	100	70-130
Copper	2.00	1.86	J	93	70-130
Iron	100	106	J	106	70-130
Lead	1.00	1.01		101	70-130
Magnesium	1000	1040		104	70-130
Manganese	5.00	4.80	J	96	70-130
Nickel	2.00	1.95	J	98	70-130
Potassium	1000	1020		102	70-130
Selenium	5.00	5.29		106	70-130
Silver	1.00	0.999	J	100	70-130
Sodium	1000	1080		108	70-130
Thallium	2.00	1.88	J	94	70-130
Vanadium	5.00	5.19		104	70-130
Zinc	20.0	19.8	J	99	70-130

Lab Sample ID: CRI 240-178191/37 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	50.3	J	101	70-130
Antimony	2.00	2.09		105	70-130
Arsenic	5.00	5.02		100	70-130
Barium	5.00	4.84	J	97	70-130
Beryllium	1.00	0.997	J	100	70-130
Cadmium	1.00	0.995	J	100	70-130
Calcium	1000	989	J	99	70-130
Chromium	2.00	2.13		107	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-178191/37 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cobalt	1.00	1.04		104	70-130
Copper	2.00	1.80	J	90	70-130
Iron	100	109	J	109	70-130
Lead	1.00	1.13		113	70-130
Magnesium	1000	1050		105	70-130
Manganese	5.00	4.95	J	99	70-130
Nickel	2.00	1.82	J	91	70-130
Potassium	1000	1020		102	70-130
Selenium	5.00	5.20		104	70-130
Silver	1.00	1.06		106	70-130
Sodium	1000	1090		109	70-130
Thallium	2.00	1.88	J	94	70-130
Vanadium	5.00	5.24		105	70-130
Zinc	20.0	19.7	J	99	70-130

Lab Sample ID: CRI 240-178352/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	51.4	J	103	70-130
Antimony	2.00	2.36		118	70-130
Arsenic	5.00	4.91	J	98	70-130
Barium	5.00	4.90	J	98	70-130
Beryllium	1.00	0.890	J	89	70-130
Cadmium	1.00	1.03	J	103	70-130
Calcium	1000	1010	J	101	70-130
Chromium	2.00	2.18		109	70-130
Cobalt	1.00	1.00		100	70-130
Copper	2.00	1.93	J	96	70-130
Iron	100	98.7	J	99	70-130
Lead	1.00	1.05		105	70-130
Magnesium	1000	1050		105	70-130
Manganese	5.00	4.88	J	98	70-130
Nickel	2.00	2.06	J	103	70-130
Potassium	1000	1050		105	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-178352/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Selenium	5.00	4.98	J	100	70-130
Silver	1.00	1.04		104	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	1.88	J	94	70-130
Vanadium	5.00	5.26		105	70-130
Zinc	20.0	20.2	J	101	70-130

Lab Sample ID: CRI 240-178352/40 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	52.0	J	104	70-130
Antimony	2.00	1.95	J	98	70-130
Arsenic	5.00	4.92	J	98	70-130
Barium	5.00	4.86	J	97	70-130
Beryllium	1.00	0.853	J	85	70-130
Cadmium	1.00	1.03	J	103	70-130
Calcium	1000	1040	J	104	70-130
Chromium	2.00	2.18		109	70-130
Cobalt	1.00	1.00		100	70-130
Copper	2.00	1.83	J	92	70-130
Iron	100	99.3	J	99	70-130
Lead	1.00	1.04		104	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	4.77	J	95	70-130
Nickel	2.00	1.91	J	96	70-130
Potassium	1000	1060		106	70-130
Selenium	5.00	5.05		101	70-130
Silver	1.00	1.04		104	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	1.85	J	93	70-130
Vanadium	5.00	5.32		106	70-130
Zinc	20.0	20.5	J	102	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 7471A Instrument ID: H4

Lab Sample ID: CRA 240-176499/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00881

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.198	J	99	

Lab Sample ID: CRA 240-176499/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00881

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.205		103	

Lab Sample ID: CRA 240-177030/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00885

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.205		103	

Lab Sample ID: CRA 240-177030/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00885

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.201		100	

Lab Sample ID: CRA 240-177030/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00885

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.196	J	98	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Method: 7471A Instrument ID: H4

Lab Sample ID: CRA 240-177030/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00885

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.195	J	98	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-177115/8 04/20/2015 10:48		CCB 240-177115/119 04/20/2015 18:07		CCB 240-177115/131 04/20/2015 18:52		CCB 240-177115/141 04/20/2015 19:30	
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	60	U	60	U	9.84	J	9.57	J
Antimony	2.0	1.14	J	0.166	J	0.50	U	0.50	U
Arsenic	5.0	1.0	U	1.0	U	1.0	U	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	0.50	U	0.100	J	0.0720	J	0.0560	J
Cadmium	2.0	0.40	U	0.103	J	0.40	U	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Cobalt	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Iron	150	100	U	100	U	18.1	J	17.4	J
Lead	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Magnesium	1000	300	U	300	U	300	U	300	U
Manganese	5.0	3.0	U	3.0	U	3.0	U	3.0	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.50	U	0.321	J	0.50	U	0.50	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	400	U	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	40	20	U	20	U	20	U	20	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-177115/153 04/20/2015 20:16		CCB 240-177115/165 04/20/2015 21:02					
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	9.21	J	10.1	J				
Antimony	2.0	0.50	U	0.50	U				
Arsenic	5.0	1.0	U	1.0	U				
Barium	5.0	4.0	U	4.0	U				
Beryllium	1.0	0.112	J	0.50	U				
Cadmium	2.0	0.40	U	0.40	U				
Calcium	2000	1000	U	1000	U				
Cobalt	1.0	0.0240	J	0.0280	J				
Copper	4.0	4.0	U	4.0	U				
Iron	150	24.5	J	35.9	J				
Lead	1.0	0.50	U	0.50	U				
Magnesium	1000	300	U	300	U				
Manganese	5.0	1.41	J	1.43	J				
Potassium	1000	50	U	50	U				
Selenium	5.0	0.50	U	0.50	U				
Silver	1.0	0.25	U	0.25	U				
Sodium	1000	400	U	400	U				
Thallium	2.0	1.0	U	1.0	U				
Vanadium	5.0	1.5	U	1.5	U				
Zinc	40	20	U	20	U				
Chromium	2.0	1.5	U	1.5	U				
Nickel	5.0	1.5	U	1.5	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-177351/8 04/21/2015 18:12		CCB 240-177351/49 04/21/2015 20:48		CCB 240-177351/61 04/21/2015 21:34		CCB 240-177351/73 04/21/2015 22:19	
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	60	U	60	U	60	U	60	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Iron	150	100	U	100	U	100	U	100	U
Manganese	5.0	3.0	U	3.0	U	3.0	U	3.0	U
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Antimony	2.0	1.38	J	0.302	J	0.274	J	0.254	J
Arsenic	5.0	1.0	U	0.216	J	0.188	J	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	0.50	U	0.0550	J	0.0630	J	0.50	U
Cadmium	2.0	0.40	U	0.40	U	0.40	U	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Cobalt	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Lead	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Magnesium	1000	300	U	300	U	300	U	300	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.50	U	0.50	U	0.50	U	0.50	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	71.0	J	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	40	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-177351/85 04/21/2015 23:04		CCB 240-177351/90 04/21/2015 23:23					
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	60	U	60	U				
Chromium	2.0	1.5	U	1.5	U				
Iron	150	20.1	J	19.6	J				
Manganese	5.0	3.0	U	3.0	U				
Nickel	5.0	1.5	U	1.5	U				
Antimony	2.0	0.223	J	0.259	J				
Arsenic	5.0	1.0	U	1.0	U				
Barium	5.0	4.0	U	4.0	U				
Beryllium	1.0	0.50	U	0.50	U				
Cadmium	2.0	0.40	U	0.40	U				
Calcium	2000	1000	U	1000	U				
Cobalt	1.0	0.20	U	0.20	U				
Copper	4.0	4.0	U	4.0	U				
Lead	1.0	0.50	U	0.50	U				
Magnesium	1000	300	U	300	U				
Potassium	1000	50	U	50	U				
Selenium	5.0	0.50	U	0.50	U				
Silver	1.0	0.25	U	0.25	U				
Sodium	1000	400	U	400	U				
Thallium	2.0	1.0	U	1.0	U				
Vanadium	5.0	1.5	U	1.5	U				
Zinc	40	20	U	20	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-177559/8 04/22/2015 15:19		CCB 240-177559/25 04/22/2015 16:23		CCB 240-177559/37 04/22/2015 17:07		CCB 240-177559/49 04/22/2015 17:53	
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	60	U	60	U	60	U	60	U
Antimony	2.0	1.06	J	0.674	J	0.648	J	0.538	J
Arsenic	5.0	1.0	U	0.195	J	1.0	U	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	0.50	U	0.120	J	0.140	J	0.50	U
Cadmium	2.0	0.40	U	0.40	U	0.40	U	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Cobalt	1.0	0.20	U	0.0500	J	0.0370	J	0.20	U
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Iron	150	100	U	21.6	J	31.5	J	33.5	J
Magnesium	1000	300	U	300	U	300	U	300	U
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.331	J	0.264	J	0.50	U	0.50	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	118	J	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	40	20	U	20	U	20	U	20	U
Lead	1.0	0.50	U	0.125	J	0.50	U	0.50	U
Manganese	5.0	3.0	U	3.0	U	3.0	U	3.0	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-177559/61 04/22/2015 18:38		CCB 240-177559/66 04/22/2015 18:57		CCB 240-177559/78 04/22/2015 19:42			
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	60	U	60	U	60	U		
Antimony	2.0	0.582	J	0.579	J	0.559	J		
Arsenic	5.0	1.0	U	1.0	U	1.0	U		
Barium	5.0	4.0	U	4.0	U	4.0	U		
Beryllium	1.0	0.50	U	0.50	U	0.0590	J		
Cadmium	2.0	0.40	U	0.40	U	0.40	U		
Calcium	2000	1000	U	1000	U	1000	U		
Chromium	2.0	1.5	U	1.5	U	1.5	U		
Cobalt	1.0	0.20	U	0.20	U	0.0260	J		
Copper	4.0	4.0	U	4.0	U	4.0	U		
Iron	150	36.7	J	38.4	J	31.8	J		
Magnesium	1000	300	U	300	U	300	U		
Nickel	5.0	1.5	U	1.5	U	1.5	U		
Potassium	1000	50	U	50	U	50	U		
Selenium	5.0	0.50	U	0.50	U	0.50	U		
Silver	1.0	0.25	U	0.25	U	0.25	U		
Sodium	1000	400	U	400	U	400	U		
Thallium	2.0	1.0	U	1.0	U	1.0	U		
Vanadium	5.0	1.5	U	1.5	U	1.5	U		
Zinc	40	20	U	20	U	20	U		
Lead	1.0	0.50	U	0.50	U	0.50	U		
Manganese	5.0	1.10	J	3.0	U	1.21	J		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-177880/8 04/24/2015 09:26		CCB 240-177880/63 04/24/2015 14:10		CCB 240-177880/75 04/24/2015 14:55		CCB 240-177880/84 04/24/2015 15:29	
		Found	C	Found	C	Found	C	Found	C
Iron	150	19.4	J	17.7	J	22.4	J	23.7	J
Manganese	5.0	3.0	U	3.0	U	3.0	U	3.0	U
Aluminum	60	60	U	60	U	60	U	60	U
Antimony	2.0	0.522	J	0.552	J	0.523	J	0.497	J
Arsenic	5.0	1.0	U	1.0	U	1.0	U	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	0.50	U	0.0660	J	0.103	J	0.0780	J
Cadmium	2.0	0.40	U	0.40	U	0.40	U	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Cobalt	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Lead	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Magnesium	1000	300	U	300	U	300	U	300	U
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.50	U	0.50	U	0.50	U	0.50	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	400	U	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	40	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-177880/96 04/24/2015 16:15		CCB 240-177880/108 04/24/2015 17:00					
		Found	C	Found	C	Found	C	Found	C
Iron	150	24.2	J	23.0	J				
Manganese	5.0	3.0	U	3.0	U				
Aluminum	60	60	U	60	U				
Antimony	2.0	0.545	J	0.518	J				
Arsenic	5.0	1.0	U	1.0	U				
Barium	5.0	4.0	U	4.0	U				
Beryllium	1.0	0.0730	J	0.0600	J				
Cadmium	2.0	0.40	U	0.0670	J				
Calcium	2000	1000	U	1000	U				
Chromium	2.0	1.5	U	1.5	U				
Cobalt	1.0	0.20	U	0.20	U				
Copper	4.0	4.0	U	4.0	U				
Lead	1.0	0.50	U	0.50	U				
Magnesium	1000	300	U	300	U				
Nickel	5.0	1.5	U	1.5	U				
Potassium	1000	50	U	50	U				
Selenium	5.0	0.50	U	0.50	U				
Silver	1.0	0.25	U	0.25	U				
Sodium	1000	400	U	400	U				
Thallium	2.0	1.0	U	1.0	U				
Vanadium	5.0	1.5	U	1.5	U				
Zinc	40	20	U	20	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-178191/8 04/27/2015 14:27		CCB 240-178191/25 04/27/2015 15:31		CCB 240-178191/36 04/27/2015 16:13			
		Found	C	Found	C	Found	C	Found	C
Iron	150	20.4	J	25.3	J	27.2	J		
Manganese	5.0	3.0	U	3.0	U	3.0	U		
Aluminum	60	60	U	60	U	60	U		
Antimony	2.0	0.487	J	0.436	J	0.518	J		
Arsenic	5.0	1.0	U	1.0	U	1.0	U		
Barium	5.0	4.0	U	4.0	U	4.0	U		
Beryllium	1.0	0.50	U	0.50	U	0.135	J		
Cadmium	2.0	0.40	U	0.40	U	0.40	U		
Calcium	2000	1000	U	1000	U	1000	U		
Chromium	2.0	1.5	U	1.5	U	1.5	U		
Cobalt	1.0	0.20	U	0.20	U	0.0280	J		
Copper	4.0	4.0	U	4.0	U	4.0	U		
Lead	1.0	0.50	U	0.50	U	0.162	J		
Magnesium	1000	300	U	300	U	300	U		
Nickel	5.0	1.5	U	1.5	U	1.5	U		
Potassium	1000	50	U	50	U	50	U		
Selenium	5.0	0.50	U	0.50	U	0.50	U		
Silver	1.0	0.25	U	0.25	U	0.25	U		
Sodium	1000	400	U	400	U	400	U		
Thallium	2.0	1.0	U	1.0	U	1.0	U		
Vanadium	5.0	1.5	U	1.5	U	1.5	U		
Zinc	40	20	U	20	U	20	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-178352/8 04/28/2015 11:58		CCB 240-178352/13 04/28/2015 12:17		CCB 240-178352/25 04/28/2015 13:02		CCB 240-178352/37 04/28/2015 13:48	
		Found	C	Found	C	Found	C	Found	C
Lead	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Aluminum	60	60	U	60	U	60	U	60	U
Antimony	2.0	1.73	J	0.456	J	0.348	J	0.319	J
Arsenic	5.0	1.0	U	1.0	U	1.0	U	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	0.50	U	0.50	U	0.129	J	0.50	U
Cadmium	2.0	0.40	U	0.40	U	0.40	U	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Cobalt	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Iron	150	100	U	19.2	J	17.0	J	18.0	J
Magnesium	1000	300	U	300	U	300	U	300	U
Manganese	5.0	3.0	U	3.0	U	3.0	U	3.0	U
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.50	U	0.50	U	0.50	U	0.50	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	400	U	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	40	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-176499/8-A 04/16/2015 08:29		CCB 240-176499/11-A 04/16/2015 09:08		CCB 240-176499/11-A 04/16/2015 09:33		CCB 240-176499/11-A 04/16/2015 09:57	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-176499/11-A 04/16/2015 10:17							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-177030/8-A 04/20/2015 09:58		CCB 240-177030/11-A 04/20/2015 11:00		CCB 240-177030/11-A 04/20/2015 11:25		CCB 240-177030/11-A 04/20/2015 11:51	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-177030/8-A 04/21/2015 08:33		CCB 240-177030/11-A 04/21/2015 10:54		CCB 240-177030/11-A 04/21/2015 11:18			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U		

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-176562/1-A ^2

Instrument Code: I10 Batch No.: 177115

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	1.27	J	D	6020_DoD
7440-36-0	Antimony	0.0204	J	D	6020_DoD
7440-38-2	Arsenic	0.0692	J	D	6020_DoD
7440-39-3	Barium	0.229	J	D	6020_DoD
7440-41-7	Beryllium	0.0212	J	D	6020_DoD
7440-43-9	Cadmium	0.0232	J	D	6020_DoD
7440-70-2	Calcium	100	U		6020_DoD
7440-48-4	Cobalt	0.00940	J	D	6020_DoD
7440-50-8	Copper	0.30	U		6020_DoD
7439-89-6	Iron	30	U		6020_DoD
7439-92-1	Lead	0.0474	J	D	6020_DoD
7439-95-4	Magnesium	6.19	J	D	6020_DoD
7439-96-5	Manganese	0.40	U		6020_DoD
7440-09-7	Potassium	8.46	J	D	6020_DoD
7782-49-2	Selenium	0.0650	J	D	6020_DoD
7440-22-4	Silver	0.050	U		6020_DoD
7440-23-5	Sodium	11.5	J	D	6020_DoD
7440-28-0	Thallium	0.15	U		6020_DoD
7440-62-2	Vanadium	0.0582	J	D	6020_DoD
7440-66-6	Zinc	2.0	U		6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-176698/1-A ^2

Instrument Code: I10 Batch No.: 177115

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	5.48	J	D	6020_DoD
7440-36-0	Antimony	0.0160	J	D	6020_DoD
7440-38-2	Arsenic	0.101	J	D	6020_DoD
7440-39-3	Barium	0.30	U		6020_DoD
7440-41-7	Beryllium	0.0162	J	D	6020_DoD
7440-43-9	Cadmium	0.00860	J	D	6020_DoD
7440-70-2	Calcium	26.1	J	D	6020_DoD
7440-48-4	Cobalt	0.0196	J	D	6020_DoD
7440-50-8	Copper	0.30	U		6020_DoD
7439-92-1	Lead	0.0506	J	D	6020_DoD
7439-95-4	Magnesium	7.60	J	D	6020_DoD
7440-09-7	Potassium	8.33	J	D	6020_DoD
7782-49-2	Selenium	0.0960	J	D	6020_DoD
7440-22-4	Silver	0.00180	J	D	6020_DoD
7440-23-5	Sodium	9.54	J	D	6020_DoD
7440-28-0	Thallium	0.0656	J	D	6020_DoD
7440-62-2	Vanadium	0.0556	J	D	6020_DoD
7440-66-6	Zinc	0.673	J	D	6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-176562/1-A ^2

Instrument Code: I10 Batch No.: 177351

CAS No.	Analyte	Concentration	C	Q	Method
7440-47-3	Chromium	0.176	J	D	6020_DoD
7440-02-0	Nickel	0.0396	J	D	6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-176698/1-A ^2

Instrument Code: I10 Batch No.: 177559

CAS No.	Analyte	Concentration	C	Q	Method
7440-47-3	Chromium	0.164	J	D	6020_DoD
7440-02-0	Nickel	0.0558	J	D	6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-177128/1-A ^2

Instrument Code: I10 Batch No.: 177559

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	4.0	U		6020_DoD
7440-36-0	Antimony	0.0474	J	D	6020_DoD
7440-38-2	Arsenic	0.0316	J	D	6020_DoD
7440-39-3	Barium	0.30	U		6020_DoD
7440-41-7	Beryllium	0.10	U		6020_DoD
7440-43-9	Cadmium	0.010	U		6020_DoD
7440-70-2	Calcium	100	U		6020_DoD
7440-47-3	Chromium	0.163	J	D	6020_DoD
7440-48-4	Cobalt	0.00320	J	D	6020_DoD
7440-50-8	Copper	0.308	J	D	6020_DoD
7439-89-6	Iron	5.93	J	D	6020_DoD
7439-95-4	Magnesium	6.13	J	D	6020_DoD
7440-02-0	Nickel	0.25	U		6020_DoD
7440-09-7	Potassium	10	U		6020_DoD
7782-49-2	Selenium	0.060	U		6020_DoD
7440-22-4	Silver	0.050	U		6020_DoD
7440-23-5	Sodium	40	U		6020_DoD
7440-28-0	Thallium	0.15	U		6020_DoD
7440-62-2	Vanadium	0.0472	J	D	6020_DoD
7440-66-6	Zinc	0.612	J	D	6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-176698/1-A ^2

Instrument Code: I10 Batch No.: 177880

CAS No.	Analyte	Concentration	C	Q	Method
7439-89-6	Iron	4.34	J	D	6020_DoD
7439-96-5	Manganese	0.40	U		6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-177128/1-A ^2

Instrument Code: I10 Batch No.: 177880

CAS No.	Analyte	Concentration	C	Q	Method
7439-96-5	Manganese	0.40	U		6020_DoD

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-177128/1-A ^2

Instrument Code: I10 Batch No.: 178352

CAS No.	Analyte	Concentration	C	Q	Method
7439-92-1	Lead	0.102	J	D	6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-176570/1-A

Instrument Code: H4 Batch No.: 176708

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.033	U		7471_DOD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-176711/1-A

Instrument Code: H4 Batch No.: 177149

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.033	U		7471_DOD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-177137/1-A

Instrument Code: H4 Batch No.: 177294

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.033	U		7471_DOD

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICSA 240-177115/11 Instrument ID: I10

Lab File ID: 011ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**50000**	**47667**	**95**
Antimony		**0.218**	
Arsenic		**0.0610**	
Barium		**0.0600**	
Beryllium		**0.0120**	
Cadmium		**0.119**	
Calcium	**50000**	**49075**	**98**
Cobalt		**0.0260**	
Copper		**0.336**	
Iron	**50000**	**49433**	**99**
Lead		**0.100**	
Magnesium	**50000**	**49308**	**99**
Manganese		**0.357**	
Potassium	**50000**	**49452**	**99**
Selenium		**0.0850**	
Silver		**0.0080**	
Sodium	**50000**	**48900**	**98**
Thallium		**0.0030**	
Vanadium		**0.0290**	
Zinc		**1.02**	
Boron		*0.906*	
Chromium		*0.665*	
Molybdenum	*1000*	*1075*	*107*
Nickel		*0.115*	
Strontium		*0.336*	
Ti	*1000*	*989*	*99*
Tin		*0.320*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICSAB 240-177115/12 Instrument ID: I10

Lab File ID: 012ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**50000**	**47834**	**96**
Antimony	**100**	**106**	**106**
Arsenic	**100**	**105**	**105**
Barium	**100**	**104**	**104**
Beryllium	**100**	**111**	**111**
Cadmium	**100**	**106**	**106**
Calcium	**50000**	**50013**	**100**
Cobalt	**100**	**104**	**104**
Copper	**100**	**104**	**104**
Iron	**50000**	**49899**	**100**
Lead	**100**	**103**	**103**
Magnesium	**50000**	**49743**	**99**
Manganese	**100**	**100**	**100**
Potassium	**50000**	**49468**	**99**
Selenium	**100**	**106**	**106**
Silver	**100**	**103**	**103**
Sodium	**50000**	**49722**	**99**
Thallium	**100**	**102**	**102**
Vanadium	**100**	**101**	**101**
Zinc	**100**	**106**	**106**
Boron	*100*	*116*	*116*
Chromium	*100*	*101*	*101*
Molybdenum	*1100*	*1188*	*108*
Nickel	*100*	*105*	*105*
Strontium	*100*	*105*	*105*
Ti	*1100*	*1097*	*100*
Tin	*100*	*100*	*100*
Tungsten	*100*	*99.0*	*99*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICSA 240-177351/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**50000**	**48700**	**97**
Chromium		**0.651**	
Iron	**50000**	**49594**	**99**
Manganese		**0.342**	
Nickel		**0.0910**	
Antimony		*0.316*	
Arsenic		*0.0930*	
Barium		*0.0450*	
Beryllium		*0.0110*	
Boron		*1.54*	
Cadmium		*0.0450*	
Calcium	*50000*	*49501*	*99*
Cobalt		*0.0290*	
Copper		*0.194*	
Lead		*0.0990*	
Magnesium	*50000*	*49208*	*98*
Molybdenum	*1000*	*1051*	*105*
Potassium	*50000*	*48809*	*98*
Selenium		*0.146*	
Silver		*0.0150*	
Sodium	*50000*	*48418*	*97*
Strontium		*0.336*	
Thallium		*0.0060*	
Ti	*1000*	*994*	*99*
Tin		*0.373*	
Vanadium		*-0.0450*	
Zinc		*0.581*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICSAB 240-177351/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**50000**	**49729**	**99**
Chromium	**100**	**104**	**104**
Iron	**50000**	**51803**	**104**
Manganese	**100**	**101**	**101**
Nickel	**100**	**99.2**	**99**
Antimony	*100*	*107*	*107*
Arsenic	*100*	*99.1*	*99*
Barium	*100*	*103*	*103*
Beryllium	*100*	*107*	*107*
Boron	*100*	*110*	*110*
Cadmium	*100*	*101*	*101*
Calcium	*50000*	*50086*	*100*
Cobalt	*100*	*99.1*	*99*
Copper	*100*	*98.7*	*99*
Lead	*100*	*103*	*103*
Magnesium	*50000*	*51098*	*102*
Molybdenum	*1100*	*1171*	*106*
Potassium	*50000*	*49761*	*100*
Selenium	*100*	*99.7*	*100*
Silver	*100*	*100*	*100*
Sodium	*50000*	*49793*	*100*
Strontium	*100*	*99.4*	*99*
Thallium	*100*	*101*	*101*
Ti	*1100*	*1124*	*102*
Tin	*100*	*101*	*101*
Tungsten	*100*	*106*	*106*
Vanadium	*100*	*102*	*102*
Zinc	*100*	*98.9*	*99*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICSA 240-177559/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**50000**	**45805**	**92**
Antimony		**0.296**	
Arsenic		**0.314**	
Barium		**0.0520**	
Beryllium		**0.0100**	
Cadmium		**0.0480**	
Calcium	**50000**	**48824**	**98**
Chromium		**0.639**	
Cobalt		**0.0340**	
Copper		**0.340**	
Iron	**50000**	**47490**	**95**
Magnesium	**50000**	**47896**	**96**
Nickel		**0.100**	
Potassium	**50000**	**47596**	**95**
Selenium		**0.485**	
Silver		**0.0100**	
Sodium	**50000**	**47575**	**95**
Thallium		**0.0120**	
Vanadium		**0.0630**	
Zinc		**0.0880**	
Manganese		*0.417*	
Molybdenum	*1000*	*1062*	*106*
Strontium		*0.342*	
Ti	*1000*	*963*	*96*
Tin		*0.434*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICSAB 240-177559/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**50000**	**47367**	**95**
Antimony	**100**	**104**	**104**
Arsenic	**100**	**101**	**101**
Barium	**100**	**99.9**	**100**
Beryllium	**100**	**101**	**101**
Cadmium	**100**	**101**	**101**
Calcium	**50000**	**49369**	**99**
Chromium	**100**	**100**	**100**
Cobalt	**100**	**99.1**	**99**
Copper	**100**	**98.2**	**98**
Iron	**50000**	**49442**	**99**
Magnesium	**50000**	**49322**	**99**
Nickel	**100**	**97.8**	**98**
Potassium	**50000**	**49182**	**98**
Selenium	**100**	**102**	**102**
Silver	**100**	**99.7**	**100**
Sodium	**50000**	**49210**	**98**
Thallium	**100**	**101**	**101**
Vanadium	**100**	**99.2**	**99**
Zinc	**100**	**98.8**	**99**
Boron	*100*	*101*	*101*
Lead	*100*	*100*	*100*
Manganese	*100*	*97.3*	*97*
Molybdenum	*1100*	*1195*	*109*
Strontium	*100*	*99.2*	*99*
Ti	*1100*	*1082*	*98*
Tin	*100*	*98.7*	*99*
Tungsten	*100*	*102*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICSA 240-177880/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Iron	**50000**	**47084**	**94**
Manganese		**0.324**	
Aluminum	*50000*	*44548*	*89*
Antimony		*0.275*	
Arsenic		*0.0960*	
Barium		*0.0330*	
Beryllium		*0.0370*	
Boron		*0.854*	
Cadmium		*-0.0090*	
Calcium	*50000*	*48547*	*97*
Chromium		*0.640*	
Cobalt		*0.0320*	
Copper		*0.233*	
Magnesium	*50000*	*46830*	*94*
Molybdenum	*1000*	*1024*	*102*
Nickel		*0.111*	
Potassium	*50000*	*47217*	*94*
Selenium		*0.186*	
Silver		*0.0150*	
Sodium	*50000*	*46893*	*94*
Strontium		*0.338*	
Thallium		*0.0070*	
Ti	*1000*	*954*	*95*
Tin		*0.376*	
Vanadium		*0.0100*	
Zinc		*-0.0740*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICSAB 240-177880/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Iron	**50000**	**49769**	**100**
Manganese	**100**	**100.0**	**100**
Aluminum	*50000*	*46452*	*93*
Antimony	*100*	*107*	*107*
Arsenic	*100*	*100*	*100*
Barium	*100*	*101*	*101*
Beryllium	*100*	*103*	*103*
Boron	*100*	*102*	*102*
Cadmium	*100*	*99.8*	*100*
Calcium	*50000*	*49399*	*99*
Chromium	*100*	*101*	*101*
Cobalt	*100*	*99.5*	*100*
Copper	*100*	*98.4*	*98*
Lead	*100*	*101*	*101*
Magnesium	*50000*	*49499*	*99*
Molybdenum	*1100*	*1150*	*105*
Nickel	*100*	*98.3*	*98*
Potassium	*50000*	*49333*	*99*
Selenium	*100*	*102*	*102*
Silver	*100*	*99.7*	*100*
Sodium	*50000*	*48906*	*98*
Strontium	*100*	*99.2*	*99*
Thallium	*100*	*101*	*101*
Ti	*1100*	*1090*	*99*
Tin	*100*	*100*	*100*
Tungsten	*100*	*104*	*104*
Vanadium	*100*	*99.8*	*100*
Zinc	*100*	*98.3*	*98*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICSA 240-178191/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Iron	**50000**	**47614**	**95**
Manganese		**0.315**	
Aluminum	*50000*	*46087*	*92*
Antimony		*0.246*	
Arsenic		*0.138*	
Barium		*0.0660*	
Beryllium		*0.0230*	
Boron		*1.43*	
Cadmium		*0.0090*	
Calcium	*50000*	*48244*	*96*
Chromium		*0.626*	
Cobalt		*0.0270*	
Copper		*0.210*	
Magnesium	*50000*	*47957*	*96*
Molybdenum	*1000*	*1094*	*109*
Nickel		*-0.0660*	
Potassium	*50000*	*46905*	*94*
Selenium		*0.0700*	
Silver		*0.0100*	
Sodium	*50000*	*47600*	*95*
Strontium		*0.345*	
Thallium		*0.0100*	
Ti	*1000*	*962*	*96*
Tin		*0.665*	
Vanadium		*0.0200*	
Zinc		*-0.532*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICSAB 240-178191/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Iron	**50000**	**50605**	**101**
Manganese	**100**	**96.3**	**96**
Aluminum	*50000*	*47953*	*96*
Antimony	*100*	*108*	*108*
Arsenic	*100*	*100*	*100*
Barium	*100*	*102*	*102*
Beryllium	*100*	*101*	*101*
Boron	*100*	*103*	*103*
Cadmium	*100*	*101*	*101*
Calcium	*50000*	*49907*	*100*
Chromium	*100*	*101*	*101*
Cobalt	*100*	*99.7*	*100*
Copper	*100*	*98.9*	*99*
Lead	*100*	*102*	*102*
Magnesium	*50000*	*50125*	*100*
Molybdenum	*1100*	*1206*	*110*
Nickel	*100*	*100*	*100*
Potassium	*50000*	*49116*	*98*
Selenium	*100*	*101*	*101*
Silver	*100*	*100*	*100*
Sodium	*50000*	*49573*	*99*
Strontium	*100*	*100*	*100*
Thallium	*100*	*101*	*101*
Ti	*1100*	*1097*	*100*
Tin	*100*	*99.6*	*100*
Tungsten	*100*	*104*	*104*
Vanadium	*100*	*98.7*	*99*
Zinc	*100*	*99.8*	*100*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICSA 240-178352/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Lead		**0.133**	
Aluminum	*50000*	*48426*	*97*
Antimony		*0.278*	
Arsenic		*0.121*	
Barium		*0.0740*	
Beryllium		*-0.0020*	
Boron		*0.916*	
Cadmium		*0.0630*	
Calcium	*50000*	*50740*	*101*
Chromium		*0.718*	
Cobalt		*0.0300*	
Copper		*0.205*	
Iron	*50000*	*50198*	*100*
Magnesium	*50000*	*50355*	*101*
Manganese		*0.274*	
Molybdenum	*1000*	*1111*	*111*
Nickel		*0.0830*	
Potassium	*50000*	*50083*	*100*
Selenium		*0.115*	
Silver		*0.0140*	
Sodium	*50000*	*50018*	*100*
Strontium		*0.351*	
Thallium		*0.0090*	
Ti	*1000*	*1023*	*102*
Tin		*0.232*	
Vanadium		*-0.0130*	
Zinc		*1.26*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Lab Sample ID: ICSAB 240-178352/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Lead	**100**	**103**	**103**
Aluminum	*50000*	*48015*	*96*
Antimony	*100*	*107*	*107*
Arsenic	*100*	*99.8*	*100*
Barium	*100*	*103*	*103*
Beryllium	*100*	*114*	*114*
Cadmium	*100*	*102*	*102*
Calcium	*50000*	*50805*	*102*
Chromium	*100*	*103*	*103*
Cobalt	*100*	*99.0*	*99*
Copper	*100*	*99.1*	*99*
Iron	*50000*	*48800*	*98*
Magnesium	*50000*	*50210*	*100*
Manganese	*100*	*94.7*	*95*
Molybdenum	*1100*	*1189*	*108*
Nickel	*100*	*98.8*	*99*
Potassium	*50000*	*49705*	*99*
Selenium	*100*	*101*	*101*
Silver	*100*	*101*	*101*
Sodium	*50000*	*49424*	*99*
Strontium	*100*	*99.4*	*99*
Thallium	*100*	*101*	*101*
Ti	*1100*	*1128*	*103*
Tin	*100*	*102*	*102*
Tungsten	*100*	*98.1*	*98*
Vanadium	*100*	*101*	*101*
Zinc	*100*	*99.0*	*99*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: 079SB-0339M-0001, 0002-SO MS
Lab ID: 240-49171-1 MS
Lab Name: TestAmerica Canton
Job No.: 240-49171-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 98.0

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	8410		6500		887	211	70-130	4 D	6020
Antimony	2.91		0.13	J	8.87	31	75-125	J D	6020
Arsenic	21.4		13		8.87	94	23-131	D	6020
Barium	64.5		56		8.87	98	10-199	4 D	6020
Beryllium	9.10		0.54		8.87	96	58-112	D	6020
Cadmium	8.45		0.11	J	8.87	94	58-110	D	6020
Calcium	884		110	J	887	87	70-130	D	6020
Chromium	24.9		16		8.87	101	10-199	D	6020
Cobalt	18.6		10		8.87	94	55-110	D	6020
Copper	18.0		10		8.87	89	10-199	D	6020
Iron	38400		36000		887	260	70-130	D 4	6020
Lead	21.6		12		8.87	106	10-199	D	6020
Magnesium	2170		1300		887	97	70-130	D	6020
Manganese	1430		1400		8.87	-205	10-199	D 4	6020
Nickel	22.6		15		8.87	86	10-176	D	6020
Potassium	1300		580		887	82	70-130	D	6020
Selenium	8.36		0.92		8.87	84	39-116	D	6020
Silver	8.44		0.017	J	8.87	95	75-125	D	6020
Sodium	810		22	J	887	89	70-130	D	6020
Thallium	7.45		0.15	J	8.87	82	82-110	D	6020
Vanadium	29.8		19		8.87	116	39-129	D	6020
Zinc	44.2		35		8.87	102	10-199	D	6020
Mercury	0.219		0.039	U	0.196	112	80-120		7471A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: 079SB-0341M-0001, 0002-SO MS Lab ID: 240-49171-3 MS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

% Solids: 98.9

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	8680		8400		981	32	70-130	4 D	6020
Antimony	3.35		0.14	J	9.81	33	75-125	J D	6020
Arsenic	46.1		43		9.81	35	23-131	4 D	6020
Barium	63.7		60		9.81	36	10-199	4 D	6020
Beryllium	9.45		0.51		9.81	91	58-112	D	6020
Cadmium	9.62		0.11	J	9.81	97	58-110	D	6020
Calcium	856		98	U	981	87	70-130	D	6020
Chromium	23.0		15		9.81	79	10-199	D	6020
Cobalt	15.8		7.5		9.81	85	55-110	D	6020
Copper	26.3		20		9.81	68	10-199	D	6020
Iron	19200		20000		981	-48	70-130	4 D	6020
Lead	81.3		76		9.81	58	10-199	D 4	6020
Magnesium	2910		2200		981	76	70-130	D	6020
Manganese	2010		2500		9.81	-4464	10-199	D 4	6020
Nickel	26.2		19		9.81	71	10-176	D	6020
Potassium	3570		3000		981	56	70-130	J D	6020
Selenium	8.43		0.81	J	9.81	78	39-116	D	6020
Silver	9.86		0.017	J	9.81	100	75-125	D	6020
Sodium	1220		370		981	87	70-130	D	6020
Thallium	8.18		0.11	J	9.81	82	82-110	D	6020
Vanadium	22.6		15		9.81	79	39-129	D	6020
Zinc	47.3		45		9.81	22	10-199	4 D	6020
Mercury	0.200		0.037	U	0.187	107	80-120		7471A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: 079SB-0339M-0001, 0002-SO PDS Lab ID: 240-49171-1 PDS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	7980		6500		1770	81	80-120	D	6020
Antimony	20.1		0.13	J	17.7	113	80-120	D	6020
Arsenic	190		13		177	100	80-120	D	6020
Barium	276		56		177	124	80-120	D J	6020
Beryllium	197		0.54		177	111	80-120	D	6020
Cadmium	195		0.11	J	177	110	80-120	D	6020
Calcium	1710		110	J	1770	90	80-120	D	6020
Chromium	185		16		177	95	80-120	D	6020
Cobalt	192		10		177	102	80-120	D	6020
Copper	194		10		177	103	80-120	D	6020
Iron	52400		36000		17700	92	80-120	D	6020
Lead	213		12		177	113	80-120	D	6020
Magnesium	3020		1300		1770	96	80-120	D	6020
Manganese	3120		1400		1770	94	80-120	D	6020
Nickel	197		15		177	102	80-120	D	6020
Potassium	2330		580		1770	99	80-120	D	6020
Selenium	175		0.92		177	98	80-120	D	6020
Silver	19.4		0.017	J	17.7	109	80-120	D	6020
Sodium	1750		22	J	1770	97	80-120	D	6020
Thallium	48.3		0.15	J	44.3	109	80-120	D	6020
Vanadium	202		19		177	103	80-120	D	6020
Zinc	211		35		177	99	80-120	D	6020

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: 079SB-0341M-0001, 0002-SO PDS Lab ID: 240-49171-3 PDS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	10200		8400		1960	93	80-120	D	6020
Antimony	21.7		0.14	J	19.6	110	80-120	D	6020
Arsenic	232		43		196	97	80-120	D	6020
Barium	298		60		196	121	80-120	D J	6020
Beryllium	191		0.51		196	97	80-120	D	6020
Cadmium	210		0.11	J	196	107	80-120	D	6020
Calcium	1730		98	U	1960	88	80-120	D	6020
Chromium	210		15		196	99	80-120	D	6020
Cobalt	214		7.5		196	105	80-120	D	6020
Copper	232		20		196	108	80-120	D	6020
Iron	21400		20000		1960	92	80-120	D	6020
Lead	2140		76		1960	105	80-120	D	6020
Magnesium	4080		2200		1960	97	80-120	D	6020
Manganese	4160		2500		1960	87	80-120	D	6020
Nickel	234		19		196	109	80-120	D	6020
Potassium	4900		3000		1960	96	80-120	D	6020
Selenium	185		0.81	J	196	94	80-120	D	6020
Silver	21.8		0.017	J	19.6	111	80-120	D	6020
Sodium	2280		370		1960	97	80-120	D	6020
Thallium	49.9		0.11	J	49.1	102	80-120	D	6020
Vanadium	209		15		196	99	80-120	D	6020
Zinc	234		45		196	96	80-120	D	6020

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

6-IN
DUPLICATES
METALS

Client ID: 079SB-0339M-0001, 0002-SO DU Lab ID: 240-49171-1 DU

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

% Solids for Sample: 98.0 % Solids for Duplicate: 98.1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	18	6500		7650		16	D	6020
Antimony	0.35	0.13	J	0.173	J	26	D	6020
Arsenic	0.89	13		12.7		3	D	6020
Barium	0.89	56		55.5		0.5	D	6020
Beryllium	0.18	0.54		0.592		9	D	6020
Cadmium	0.35	0.11	J	0.126	J	16	D	6020
Calcium	350	110	J	118	J	7	D	6020
Chromium	0.89	16		17.9		12	D	6020
Cobalt	0.18	10		9.03		13	D	6020
Copper	0.71	10		10.2		1	D	6020
Iron	890	36000		37000		2	D	6020
Lead	0.53	12		12.6		4	D	6020
Magnesium	180	1300		1380		5	D	6020
Manganese	8.9	1400		1230		16	D	6020
Nickel	0.89	15		15.3		3	D	6020
Potassium	180	580		672		15	D	6020
Selenium	0.89	0.92		1.04		12	D	6020
Silver	0.18	0.017	J	0.0177	J	5	D	6020
Sodium	180	22	J	22.6	J	5	D	6020
Thallium	0.35	0.15	J	0.201	J	30	D	6020
Vanadium	0.89	19		20.5		5	D	6020
Zinc	7.1	35		36.3		3	D	6020
Mercury	0.12	0.039	U	0.0198	J	NC		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

6-IN
DUPLICATES
METALS

Client ID: 079SB-0341M-0001, 0002-SO DU Lab ID: 240-49171-3 DU

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

% Solids for Sample: 98.9 % Solids for Duplicate: 98.8

Matrix: Solid Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	20	8400		7580		10	D	6020
Antimony	0.39	0.14	J	0.196	J	35	D	6020
Arsenic	0.98	43		39.8		7	D	6020
Barium	0.98	60		54.0		11	D	6020
Beryllium	0.20	0.51		0.472		7	D	6020
Cadmium	0.39	0.11	J	0.121	J	11	D	6020
Calcium	390	98	U	57.8	J	NC	D	6020
Chromium	0.98	15		14.6		4	D	6020
Cobalt	0.20	7.5		7.05		6	D	6020
Copper	0.79	20		15.8		22	J D	6020
Iron	98	20000		19100		3	D	6020
Lead	5.9	76		46.9		47	D J	6020
Magnesium	200	2200		2020		7	D	6020
Manganese	9.8	2500		1130		73	D J	6020
Nickel	0.98	19		17.8		7	D	6020
Potassium	200	3000		2800		7	D	6020
Selenium	0.98	0.81	J	0.823	J	1	D	6020
Silver	0.20	0.017	J	0.0161	J	6	D	6020
Sodium	200	370		352		6	D	6020
Thallium	0.39	0.11	J	0.159	J	36	D	6020
Vanadium	0.98	15		13.7		8	D	6020
Zinc	7.9	45		38.3		16	D	6020
Mercury	0.11	0.037	U	0.037	U	NC		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-176562/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49171-1

Sample Matrix: Solid LCS Source: MTICPMS2_00020

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	1000	998		100	80	120	D	6020
Antimony	10.0	10.4		104	68	113	D	6020
Arsenic	100	90.5		90	73	110	D	6020
Barium	100	105		105	70	110	D	6020
Beryllium	100	103		103	79	110	D	6020
Cadmium	100	95.4		95	74	110	D	6020
Calcium	1000	964		96	80	120	D	6020
Cobalt	100	94.4		94	74	110	D	6020
Copper	100	96.0		96	73	110	D	6020
Iron	1000	1050		105	80	120	D	6020
Lead	100	96.8		97	75	110	D	6020
Magnesium	1000	1030		103	80	120	D	6020
Manganese	100	104		104	80	120	D	6020
Potassium	1000	1070		107	80	120	D	6020
Selenium	100	89.0		89	65	110	D	6020
Silver	10.0	9.96		100	60	114	D	6020
Sodium	1000	1040		104	80	120	D	6020
Thallium	25.0	23.8		95	71	110	D	6020
Vanadium	100	106		106	72	110	D	6020
Zinc	100	90.2		90	72	113	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-176698/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49171-1

Sample Matrix: Solid LCS Source: MTICPMS2_00020

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	1000	950		95	80	120	D	6020
Antimony	10.0	10.1		101	68	113	D	6020
Arsenic	100	87.9		88	73	110	D	6020
Barium	100	103		103	70	110	D	6020
Beryllium	100	101		101	79	110	D	6020
Cadmium	100	95.2		95	74	110	D	6020
Calcium	1000	910		91	80	120	D	6020
Cobalt	100	92.1		92	74	110	D	6020
Copper	100	94.3		94	73	110	D	6020
Lead	100	95.9		96	75	110	D	6020
Magnesium	1000	1000		100	80	120	D	6020
Potassium	1000	1020		102	80	120	D	6020
Selenium	100	87.4		87	65	110	D	6020
Silver	10.0	9.84		98	60	114	D	6020
Sodium	1000	1010		101	80	120	D	6020
Thallium	25.0	23.6		94	71	110	D	6020
Vanadium	100	103		103	72	110	D	6020
Zinc	100	88.9		89	72	113	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-176562/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49171-1

Sample Matrix: Solid LCS Source: MTICPMSA_00022

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Chromium	100	103		103	70	110	D	6020
Nickel	100	95.3		95	75	110	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-176698/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49171-1

Sample Matrix: Solid LCS Source: MTICPMSA_00022

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Chromium	100	98.6		99	70	110	D	6020
Nickel	100	89.2		89	75	110	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-177128/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49171-1

Sample Matrix: Solid LCS Source: MTICPMS2_00020

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	1000	950		95	80	120	D	6020
Antimony	10.0	9.83		98	68	113	D	6020
Arsenic	100	88.2		88	73	110	D	6020
Barium	100	96.9		97	70	110	D	6020
Beryllium	100	96.8		97	79	110	D	6020
Cadmium	100	98.9		99	74	110	D	6020
Calcium	1000	910		91	80	120	D	6020
Chromium	100	101		101	70	110	D	6020
Cobalt	100	98.8		99	74	110	D	6020
Copper	100	101		101	73	110	D	6020
Iron	1000	1020		102	80	120	D	6020
Magnesium	1000	986		99	80	120	D	6020
Nickel	100	94.9		95	75	110	D	6020
Potassium	1000	993		99	80	120	D	6020
Selenium	100	84.2		84	65	110	D	6020
Silver	10.0	10.5		105	60	114	D	6020
Sodium	1000	966		97	80	120	D	6020
Thallium	25.0	24.3		97	71	110	D	6020
Vanadium	100	99.9		100	72	110	D	6020
Zinc	100	91.4		91	72	113	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-177128/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49171-1

Sample Matrix: Solid LCS Source: MTICPMSA_00022

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Manganese	100	100		100	80	120	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-176698/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49171-1

Sample Matrix: Solid LCS Source: MTICPMS2_00020

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Iron	1000	987		99	80	120	D	6020
Manganese	100	99.0		99	80	120	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-177128/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49171-1

Sample Matrix: Solid LCS Source: MTICPMSA_00022

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Lead	100	97.8		98	75	110	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-176570/2-A

Lab Name: TestAmerica Canton Job No.: 240-49171-1

Sample Matrix: Solid LCS Source: MTHGCALW_00881

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.836		100	80	120		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-176711/2-A

Lab Name: TestAmerica Canton Job No.: 240-49171-1

Sample Matrix: Solid LCS Source: MTHGCALW_00883

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.839		101	80	120		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-177137/2-A

Lab Name: TestAmerica Canton Job No.: 240-49171-1

Sample Matrix: Solid LCS Source: MTHGCALW_00885

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.825		99	80	120		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 240-49171-1

SDG No:

Lab Name: TestAmerica Canton Job No: 240-49171-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	6500		6950		6.2	D	6020
Antimony	0.13	J	0.67	U	NC		6020
Arsenic	13		13.1		NC	D	6020
Barium	56		55.9		0.14	D	6020
Beryllium	0.54		0.553	J	NC	D	6020
Cadmium	0.11	J	0.125	J	NC	D	6020
Calcium	110	J	110	J	NC	D	6020
Chromium	16		16.3		NC	D	6020
Cobalt	10		10.2		1.1	D	6020
Copper	10		10.2		NC	D	6020
Iron	36000		38000		NC	D	6020
Lead	12		12.0		NC	D	6020
Magnesium	1300		1380		NC	D	6020
Manganese	1400		1510		4.6	D	6020
Nickel	15		15.1		NC	D	6020
Potassium	580		586	J	NC	D	6020
Selenium	0.92		0.996	J	NC	D	6020
Silver	0.017	J	0.0133	J	NC	D	6020
Sodium	22	J	180	U	NC		6020
Thallium	0.15	J	0.147	J	NC	D	6020
Vanadium	19		20.4		NC	D	6020
Zinc	35		36.5		NC	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 240-49171-3

SDG No:

Lab Name: TestAmerica Canton Job No: 240-49171-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	8400		9330		11	V D	6020
Antimony	0.14	J	0.131	J	NC	D	6020
Arsenic	43		44.3		NC	D	6020
Barium	60		60.3		0.18	D	6020
Beryllium	0.51		0.473	J	NC	D	6020
Cadmium	0.11	J	0.152	J	NC	D	6020
Calcium	98	U	490	U	NC		6020
Chromium	15		16.4		NC	D	6020
Cobalt	7.5		7.47		NC	D	6020
Copper	20		19.8		NC	D	6020
Iron	20000		21400		8.8	D	6020
Lead	76		74.3		NC	D	6020
Magnesium	2200		2380		NC	D	6020
Manganese	2500		2420		1.1	D	6020
Nickel	19		19.3		NC	D	6020
Potassium	3000		3350		NC	D	6020
Selenium	0.81	J	0.767	J	NC	D	6020
Silver	0.017	J	0.0137	J	NC	D	6020
Sodium	370		373	J	NC	D	6020
Thallium	0.11	J	0.115	J	NC	D	6020
Vanadium	15		16.1		NC	D	6020
Zinc	45		47.5		NC	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: I10

Method: 6020 DL Date: 09/15/2014 17:22

Prep Method: 3050B

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Aluminum	27.00	20	0.62
Antimony	121.00	0.4	0.014
Arsenic	75.00	1	0.026
Barium	137.00	1	0.22
Beryllium	9.00	0.2	0.011
Cadmium	111.00	0.4	0.0037
Calcium	43.00	400	22
Chromium	52.00	1	0.06
Cobalt	59.00	0.2	0.0017
Copper	65.00	0.8	0.097
Iron	56.00	100	3.2
Lead	208.00	0.6	0.045
Magnesium	25.00	200	4
Manganese	55.00	1	0.12
Nickel	60.00	1	0.039
Potassium	39.00	200	4.9
Selenium	78.00	1	0.04
Silver	107.00	0.2	0.0014
Sodium	23.00	200	8.7
Thallium	205.00	0.4	0.019
Vanadium	51.00	1	0.037
Zinc	66.00	8	0.5

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: I10

Method: 6020 XMDL Date: 09/15/2014 17:24

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum	27.00	60	9
Antimony	121.00	2	0.16
Arsenic	75.00	5	0.18
Barium	137.00	5	1.1
Beryllium	9.00	1	0.053
Cadmium	111.00	2	0.061
Calcium	43.00	2000	240
Chromium	52.00	2	0.2
Cobalt	59.00	1	0.021
Copper	65.00	4	0.75
Iron	56.00	150	16
Lead	208.00	1	0.11
Magnesium	25.00	1000	48
Manganese	55.00	5	1.1
Nickel	60.00	5	0.23
Potassium	39.00	1000	30
Selenium	78.00	5	0.25
Silver	107.00	1	0.02
Sodium	23.00	1000	68
Thallium	205.00	2	0.074
Vanadium	51.00	5	0.23
Zinc	66.00	40	7.3

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: I10

Method: 6020 DL Date: 09/15/2014 17:22

Prep Method: 3050B

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Aluminum	27.00	20	0.62
Antimony	121.00	0.4	0.014
Arsenic	75.00	1	0.026
Barium	137.00	1	0.22
Beryllium	9.00	0.2	0.011
Cadmium	111.00	0.4	0.0037
Calcium	43.00	400	22
Chromium	52.00	1	0.06
Cobalt	59.00	0.2	0.0017
Copper	65.00	0.8	0.097
Iron	56.00	100	3.2
Lead	208.00	0.6	0.045
Magnesium	25.00	200	4
Manganese	55.00	1	0.12
Nickel	60.00	1	0.039
Potassium	39.00	200	4.9
Selenium	78.00	1	0.04
Silver	107.00	0.2	0.0014
Sodium	23.00	200	8.7
Thallium	205.00	0.4	0.019
Vanadium	51.00	1	0.037
Zinc	66.00	8	0.5

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: I10

Method: 6020 XMDL Date: 09/15/2014 17:24

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum	27.00	60	9
Antimony	121.00	2	0.16
Arsenic	75.00	5	0.18
Barium	137.00	5	1.1
Beryllium	9.00	1	0.053
Cadmium	111.00	2	0.061
Calcium	43.00	2000	240
Chromium	52.00	2	0.2
Cobalt	59.00	1	0.021
Copper	65.00	4	0.75
Iron	56.00	150	16
Lead	208.00	1	0.11
Magnesium	25.00	1000	48
Manganese	55.00	5	1.1
Nickel	60.00	5	0.23
Potassium	39.00	1000	30
Selenium	78.00	5	0.25
Silver	107.00	1	0.02
Sodium	23.00	1000	68
Thallium	205.00	2	0.074
Vanadium	51.00	5	0.23
Zinc	66.00	40	7.3

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471A DL Date: 02/16/2010 09:46

Prep Method: 7471A

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Mercury	253.7	0.1	0.014

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471A XMDL Date: 09/17/2014 14:14

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.09

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471A DL Date: 02/16/2010 09:46

Prep Method: 7471A

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Mercury	253.7	0.1	0.014

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471A XMDL Date: 09/17/2014 14:14

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.09

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-49171-1

SDG No.:

Instrument ID: I10 Date: 10/20/2014 13:19

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Aluminum		200000	6020
Antimony		300	6020
Arsenic		10000	6020
Barium		10000	6020
Beryllium		10000	6020
Cadmium		4000	6020
Calcium		500000	6020
Chromium		10000	6020
Cobalt		10000	6020
Copper		10000	6020
Iron		200000	6020
Lead		4000	6020
Magnesium		500000	6020
Manganese		10000	6020
Nickel		10000	6020
Potassium		500000	6020
Selenium		10000	6020
Silver		300	6020
Sodium		500000	6020
Thallium		5000	6020
Vanadium		10000	6020
Zinc		10000	6020

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-49171-1

SDG No.:

Instrument ID: H4 Date: 12/10/2013 15:55

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		10	7471A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-176562/1-A ^2	04/15/2015 11:42	176562	1.00		100
LCS 240-176562/2-A ^2	04/15/2015 11:42	176562	1.00		100
240-49171-19	04/15/2015 11:42	176562	1.03		100
240-49171-6	04/15/2015 11:42	176562	1.17		100
240-49171-8	04/15/2015 11:42	176562	1.06		100
240-49171-10	04/15/2015 11:42	176562	1.10		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-176698/1-A ^2	04/16/2015 09:59	176698	1.00		100
LCS 240-176698/2-A ^2	04/16/2015 09:59	176698	1.00		100
240-49171-1	04/16/2015 09:59	176698	1.15		100
240-49171-1 DU	04/16/2015 09:59	176698	1.15		100
240-49171-1 MS	04/16/2015 09:59	176698	1.15		100
240-49171-2	04/16/2015 09:59	176698	1.05		100
240-49171-4	04/16/2015 09:59	176698	1.23		100
240-49171-11	04/16/2015 09:59	176698	1.22		100
240-49171-13	04/16/2015 09:59	176698	1.32		100
240-49171-14	04/16/2015 09:59	176698	1.32		100
240-49171-15	04/16/2015 09:59	176698	1.40		100
240-49171-16	04/16/2015 09:59	176698	1.09		100
240-49171-17	04/16/2015 09:59	176698	1.17		100
240-49171-18	04/16/2015 09:59	176698	1.13		100
240-49171-20	04/16/2015 09:59	176698	1.03		100
240-49171-21	04/16/2015 09:59	176698	1.14		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-177128/1-A ^2	04/20/2015 12:52	177128	1.00		100
LCS 240-177128/2-A ^2	04/20/2015 12:52	177128	1.00		100
240-49171-3	04/20/2015 12:52	177128	1.03		100
240-49171-3 DU	04/20/2015 12:52	177128	1.03		100
240-49171-3 MS	04/20/2015 12:52	177128	1.03		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-176570/1-A	04/15/2015 15:00	176570	0.60		100
LCS 240-176570/2-A	04/15/2015 15:00	176570	0.60		100
240-49171-19	04/15/2015 15:00	176570	0.62		100
240-49171-6	04/15/2015 15:00	176570	0.53		100
240-49171-8	04/15/2015 15:00	176570	0.59		100
240-49171-10	04/15/2015 15:00	176570	0.56		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-176711/1-A	04/16/2015 14:45	176711	0.60		100
LCS 240-176711/2-A	04/16/2015 14:45	176711	0.60		100
240-49171-1	04/16/2015 14:45	176711	0.52		100
240-49171-1 DU	04/16/2015 14:45	176711	0.52		100
240-49171-1 MS	04/16/2015 14:45	176711	0.52		100
240-49171-2	04/16/2015 14:45	176711	0.59		100
240-49171-4	04/16/2015 14:45	176711	0.68		100
240-49171-11	04/16/2015 14:45	176711	0.58		100
240-49171-13	04/16/2015 14:45	176711	0.56		100
240-49171-14	04/16/2015 14:45	176711	0.64		100
240-49171-15	04/16/2015 14:45	176711	0.60		100
240-49171-16	04/16/2015 14:45	176711	0.57		100
240-49171-17	04/16/2015 14:45	176711	0.63		100
240-49171-18	04/16/2015 14:45	176711	0.68		100
240-49171-20	04/16/2015 14:45	176711	0.62		100
240-49171-21	04/16/2015 14:45	176711	0.61		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-177137/1-A	04/20/2015 15:40	177137	0.60		100
LCS 240-177137/2-A	04/20/2015 15:40	177137	0.60		100
240-49171-3	04/20/2015 15:40	177137	0.54		100
240-49171-3 DU	04/20/2015 15:40	177137	0.54		100
240-49171-3 MS	04/20/2015 15:40	177137	0.54		100

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/20/2015 10:21 End Date: 04/20/2015 21:48

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cu	Fe	K	Mg	Mn	Na	Pb	Sb	Se	Tl	V	Zn						
ZZZZZZ			10:21																										
ICIS 240-177115/2			10:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD1 240-177115/3 IC	1		10:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD2 240-177115/4 IC	1		10:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD3 240-177115/5 IC	1		10:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD4 240-177115/6 IC	1		10:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICV 240-177115/7	1		10:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICB 240-177115/8	1		10:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			10:51																										
CRI 240-177115/10	1		10:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSA 240-177115/11	1		10:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSAB 240-177115/12	1		11:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCV 240-177115/13			11:08																										
CCB 240-177115/14			11:12																										
ZZZZZZ			11:16																										
ZZZZZZ			11:19																										
CCV 240-177115/17			11:23																										
CCB 240-177115/18			11:27																										
ZZZZZZ			11:31																										
ZZZZZZ			11:35																										
ZZZZZZ			11:39																										
ZZZZZZ			11:42																										
ZZZZZZ			11:46																										
CCV 240-177115/24			11:50																										
CCB 240-177115/25			11:54																										
ZZZZZZ			12:15																										
ZZZZZZ			12:19																										
CCV 240-177115/28			12:23																										
CCB 240-177115/29			12:27																										
ZZZZZZ			12:31																										
ZZZZZZ			12:35																										
ZZZZZZ			12:39																										
ZZZZZZ			12:42																										
ZZZZZZ			12:46																										
ZZZZZZ			12:50																										
ZZZZZZ			12:54																										
ZZZZZZ			12:57																										
ZZZZZZ			13:01																										
CCV 240-177115/39			13:05																										
CCB 240-177115/40			13:09																										
CRI 240-177115/41			13:13																										
ZZZZZZ			13:16																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/20/2015 10:21 End Date: 04/20/2015 21:48

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cu	Fe	K	Mg	Mn	Na	Pb	Sb	Se	Tl	V	Zn							
ZZZZZZ			13:20																											
ZZZZZZ			13:24																											
ZZZZZZ			13:28																											
ZZZZZZ			13:31																											
ZZZZZZ			13:35																											
ZZZZZZ			13:39																											
ZZZZZZ			13:43																											
ZZZZZZ			13:46																											
CCV 240-177115/51			13:50																											
CCB 240-177115/52			13:54																											
ZZZZZZ			13:58																											
ZZZZZZ			14:01																											
ZZZZZZ			14:05																											
ZZZZZZ			14:09																											
ZZZZZZ			14:12																											
ZZZZZZ			14:16																											
ZZZZZZ			14:20																											
ZZZZZZ			14:24																											
ZZZZZZ			14:27																											
ZZZZZZ			14:31																											
CCV 240-177115/63			14:35																											
CCB 240-177115/64			14:39																											
ZZZZZZ			14:43																											
ZZZZZZ			14:46																											
ZZZZZZ			14:50																											
CCV 240-177115/68			14:54																											
CCB 240-177115/69			14:58																											
CRI 240-177115/70			15:02																											
ZZZZZZ			15:06																											
ZZZZZZ			15:09																											
ZZZZZZ			15:13																											
ZZZZZZ			15:17																											
ZZZZZZ			15:21																											
ZZZZZZ			15:25																											
ZZZZZZ			15:29																											
ZZZZZZ			15:33																											
ZZZZZZ			15:36																											
CCV 240-177115/80			15:40																											
CCB 240-177115/81			15:44																											
ZZZZZZ			15:48																											
ZZZZZZ			15:51																											
ZZZZZZ			15:55																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/20/2015 10:21 End Date: 04/20/2015 21:48

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cu	Fe	K	Mg	Mn	Na	Pb	Sb	Se	Tl	V	Zn							
ZZZZZZ			15:59																											
ZZZZZZ			16:03																											
ZZZZZZ			16:06																											
ZZZZZZ			16:10																											
ZZZZZZ			16:14																											
ZZZZZZ			16:18																											
ZZZZZZ			16:21																											
CCV 240-177115/92			16:25																											
CCB 240-177115/93			16:29																											
ZZZZZZ			16:33																											
ZZZZZZ			16:36																											
ZZZZZZ			16:40																											
ZZZZZZ			16:44																											
ZZZZZZ			16:48																											
ZZZZZZ			16:52																											
ZZZZZZ			16:55																											
ZZZZZZ			16:59																											
ZZZZZZ			17:02																											
ZZZZZZ			17:06																											
CCV 240-177115/104			17:10																											
CCB 240-177115/105			17:14																											
ZZZZZZ			17:18																											
ZZZZZZ			17:21																											
ZZZZZZ			17:25																											
ZZZZZZ			17:29																											
ZZZZZZ			17:32																											
ZZZZZZ			17:36																											
ZZZZZZ			17:40																											
ZZZZZZ			17:44																											
ZZZZZZ			17:47																											
ZZZZZZ			17:51																											
CCV 240-177115/116			17:55																											
CCB 240-177115/117			17:59																											
CCV 240-177115/118	1		18:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177115/119	1		18:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CRI 240-177115/120			18:11																											
MB 240-176562/1-A ^2	2	T	18:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
LCS 240-176562/2-A ^2	2	T	18:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			18:22																											
ZZZZZZ			18:26																											
ZZZZZZ			18:30																											
ZZZZZZ			18:33																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/20/2015 10:21 End Date: 04/20/2015 21:48

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cu	Fe	K	Mg	Mn	Na	Pb	Sb	Se	Tl	V	Zn						
ZZZZZZ			18:37																										
ZZZZZZ			18:41																										
ZZZZZZ			18:45																										
CCV 240-177115/130	1		18:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177115/131	1		18:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			18:56																										
ZZZZZZ			19:00																										
ZZZZZZ			19:04																										
ZZZZZZ			19:08																										
240-49171-19	2	T	19:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-49171-6	2	T	19:15	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-8	2	T	19:19	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-10	2	T	19:23	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X						
CCV 240-177115/140	1		19:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177115/141	1		19:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CRI 240-177115/142	1		19:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
MB 240-176698/1-A ^2	2	T	19:38	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
LCS 240-176698/2-A ^2	2	T	19:42	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-1	2	T	19:46	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-1 SD	10	T	19:50	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-1 PDS	2	T	19:53	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-1 DU	2	T	19:57	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-1 MS	2	T	20:01	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-2	2	T	20:05	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-4	2	T	20:08	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
CCV 240-177115/152	1		20:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177115/153	1		20:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-49171-11	2	T	20:20	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-13	2	T	20:24	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-14	2	T	20:27	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-15	2	T	20:31	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-16	2	T	20:35	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-17	2	T	20:39	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-18	2	T	20:43	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-20	2	T	20:47	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
240-49171-21	2	T	20:50	X		X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X						
ZZZZZZ			20:54																										
CCV 240-177115/164	1		20:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177115/165	1		21:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			21:06																										
ZZZZZZ			21:10																										
ZZZZZZ			21:13																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/20/2015 10:21 End Date: 04/20/2015 21:48

Lab Sample Id	D/F	Type	Time	Analytes																											
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cu	Fe	K	Mg	Mn	Na	Pb	Sb	Se	Tl	V	Zn								
ZZZZZZ			21:17																												
ZZZZZZ			21:21																												
ZZZZZZ			21:25																												
ZZZZZZ			21:29																												
CCV 240-177115/173			21:32																												
CCB 240-177115/174			21:36																												
CRI 240-177115/175	1		21:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCV 240-177115/176			21:44																												
CCB 240-177115/177			21:48																												

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/21/2015 17:45 End Date: 04/21/2015 23:53

Lab Sample Id	D/F	Type	Time	Analytes																										
				Al	Cr	Fe	Mn	Ni																						
ZZZZZZ			17:45																											
ICIS 240-177351/2			17:49	X	X	X	X	X																						
STD1 240-177351/3 IC	1		17:53	X	X	X	X	X																						
STD2 240-177351/4 IC	1		17:57	X	X	X	X	X																						
STD3 240-177351/5 IC	1		18:00	X	X	X	X	X																						
STD4 240-177351/6 IC	1		18:04	X	X	X	X	X																						
ICV 240-177351/7	1		18:08	X	X	X	X	X																						
ICB 240-177351/8	1		18:12	X	X	X	X	X																						
CRI 240-177351/9	1		18:16	X	X	X	X	X																						
ICSA 240-177351/10	1		18:20	X	X	X	X	X																						
ICSAB 240-177351/11	1		18:23	X	X	X	X	X																						
CCV 240-177351/12			18:27																											
CCB 240-177351/13			18:31																											
ZZZZZZ			18:38																											
ZZZZZZ			18:42																											
ZZZZZZ			18:46																											
ZZZZZZ			18:49																											
ZZZZZZ			18:53																											
ZZZZZZ			18:56																											
ZZZZZZ			19:00																											
ZZZZZZ			19:04																											
ZZZZZZ			19:07																											
ZZZZZZ			19:11																											
CCV 240-177351/24			19:15																											
CCB 240-177351/25			19:18																											
ZZZZZZ			19:22																											
RINSE 240-177351/27			19:26																											
ZZZZZZ			19:30																											
ZZZZZZ			19:33																											
ZZZZZZ			19:37																											
ZZZZZZ			19:41																											
ZZZZZZ			19:44																											
ZZZZZZ			19:48																											
ZZZZZZ			19:52																											
ZZZZZZ			19:55																											
CCV 240-177351/36			19:59																											
CCB 240-177351/37			20:03																											
ZZZZZZ			20:07																											
ZZZZZZ			20:11																											
ZZZZZZ			20:14																											
ZZZZZZ			20:18																											
ZZZZZZ			20:22																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/21/2015 17:45 End Date: 04/21/2015 23:53

Lab Sample Id	D/F	Type	Time	Analytes																									
				Al	Cr	Fe	Mn	Ni																					
ZZZZZZ			20:26																										
ZZZZZZ			20:30																										
ZZZZZZ			20:33																										
ZZZZZZ			20:37																										
ZZZZZZ			20:41																										
CCV 240-177351/48	1		20:45	X	X	X	X	X																					
CCB 240-177351/49	1		20:48	X	X	X	X	X																					
CRI 240-177351/50			20:52																										
ZZZZZZ			20:56																										
ZZZZZZ			20:59																										
ZZZZZZ			21:03																										
ZZZZZZ			21:07																										
ZZZZZZ			21:11																										
ZZZZZZ			21:15																										
ZZZZZZ			21:18																										
ZZZZZZ			21:22																										
ZZZZZZ			21:26																										
CCV 240-177351/60	1		21:30	X	X	X	X	X																					
CCB 240-177351/61	1		21:34	X	X	X	X	X																					
ZZZZZZ			21:37																										
ZZZZZZ			21:41																										
ZZZZZZ			21:45																										
240-49171-6	50	T	21:49	X		X	X																						
240-49171-8	50	T	21:53	X		X	X																						
240-49171-10	50	T	21:57	X		X																							
MB 240-176562/1-A ^2	2	T	22:00		X			X																					
LCS 240-176562/2-A ^2	2	T	22:04		X			X																					
ZZZZZZ			22:08																										
ZZZZZZ			22:12																										
CCV 240-177351/72	1		22:15	X	X	X	X	X																					
CCB 240-177351/73	1		22:19	X	X	X	X	X																					
ZZZZZZ			22:23																										
ZZZZZZ			22:27																										
ZZZZZZ			22:30																										
ZZZZZZ			22:34																										
ZZZZZZ			22:38																										
ZZZZZZ			22:41																										
ZZZZZZ			22:45																										
ZZZZZZ			22:49																										
240-49171-19	2	T	22:53		X			X																					
240-49171-6	2	T	22:56		X			X																					
CCV 240-177351/84	1		23:00	X	X	X	X	X																					

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/21/2015 17:45 End Date: 04/21/2015 23:53

Lab Sample Id	D/F	Type	Time	Analytes																									
				Al	Cr	Fe	Mn	Ni																					
CCB 240-177351/85	1		23:04	X	X	X	X	X																					
240-49171-8	2	T	23:08		X			X																					
240-49171-10	2	T	23:12		X			X																					
ZZZZZZ			23:15																										
CCV 240-177351/89	1		23:19	X	X	X	X	X																					
CCB 240-177351/90	1		23:23	X	X	X	X	X																					
CRI 240-177351/91	1		23:27	X	X	X	X	X																					
ZZZZZZ			23:31																										
ZZZZZZ			23:34																										
ZZZZZZ			23:38																										
ZZZZZZ			23:42																										
ZZZZZZ			23:46																										
CCV 240-177351/97			23:49																										
CCB 240-177351/98			23:53																										

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/22/2015 14:52 End Date: 04/22/2015 20:28

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Na	Ni	Sb	Se	Tl	V	Zn						
ZZZZZZ			14:52																										
ICIS 240-177559/2			14:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD1 240-177559/3 IC	1		15:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD2 240-177559/4 IC	1		15:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD3 240-177559/5 IC	1		15:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD4 240-177559/6 IC	1		15:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICV 240-177559/7	1		15:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICB 240-177559/8	1		15:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CRI 240-177559/9	1		15:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSA 240-177559/10	1		15:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSAB 240-177559/11	1		15:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCV 240-177559/12			15:34																										
CCB 240-177559/13			15:38																										
ZZZZZZ			15:42																										
ZZZZZZ			15:46																										
ZZZZZZ			15:49																										
ZZZZZZ			15:53																										
ZZZZZZ			15:57																										
ZZZZZZ			16:00																										
ZZZZZZ			16:04																										
ZZZZZZ			16:08																										
ZZZZZZ			16:11																										
ZZZZZZ			16:15																										
CCV 240-177559/24	1		16:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177559/25	1		16:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			16:26																										
ZZZZZZ			16:30																										
ZZZZZZ			16:34																										
ZZZZZZ			16:37																										
ZZZZZZ			16:41																										
ZZZZZZ			16:45																										
ZZZZZZ			16:48																										
MB 240-176698/1-A ^2	2	T	16:52									X						X											
LCS 240-176698/2-A ^2	2	T	16:56									X						X											
240-49171-1	2	T	17:00		X							X						X											
CCV 240-177559/36	1		17:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177559/37	1		17:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-49171-1 SD	10	T	17:11		X							X						X											
240-49171-1 PDS	2	T	17:15		X							X						X											
240-49171-1 DU	2	T	17:18		X							X						X											
240-49171-1 MS	2	T	17:22		X							X						X											
240-49171-2	2	T	17:26		X							X						X											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/22/2015 14:52 End Date: 04/22/2015 20:28

Lab Sample Id	D/F	Type	Time	Analytes																											
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Na	Ni	Sb	Se	Tl	V	Zn								
240-49171-4	2	T	17:30		X							X						X													
240-49171-11	2	T	17:34		X							X						X													
240-49171-13	2	T	17:37		X							X						X													
240-49171-14	2	T	17:41		X							X						X													
240-49171-15	2	T	17:45		X							X						X													
CCV 240-177559/48	1		17:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 240-177559/49	1		17:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
240-49171-16	2	T	17:56		X							X						X													
240-49171-17	2	T	18:00		X							X						X													
240-49171-18	2	T	18:04		X							X						X													
240-49171-20	2	T	18:08		X							X						X													
240-49171-21	2	T	18:12		X							X						X													
ZZZZZZ			18:15																												
ZZZZZZ			18:19																												
ZZZZZZ			18:23																												
ZZZZZZ			18:27																												
ZZZZZZ			18:30																												
CCV 240-177559/60	1		18:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 240-177559/61	1		18:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			18:42																												
ZZZZZZ			18:46																												
ZZZZZZ			18:49																												
CCV 240-177559/65	1		18:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 240-177559/66	1		18:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CRI 240-177559/67	1		19:01		X							X						X													
MB 240-177128/1-A ^2	2	T	19:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
LCS 240-177128/2-A ^2	2	T	19:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
240-49171-3	2	T	19:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
240-49171-3 SD	10	T	19:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
240-49171-3 PDS	2	T	19:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
240-49171-3 DU	2	T	19:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
240-49171-3 MS	2	T	19:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			19:31																												
ZZZZZZ			19:35																												
CCV 240-177559/77	1		19:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 240-177559/78	1		19:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			19:46																												
ZZZZZZ			19:50																												
ZZZZZZ			19:54																												
ZZZZZZ			19:58																												
ZZZZZZ			20:01																												
ZZZZZZ			20:05																												

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/22/2015 14:52 End Date: 04/22/2015 20:28

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Na	Ni	Sb	Se	Tl	V	Zn							
ZZZZZZ			20:09																											
CCV 240-177559/86			20:13																											
CCB 240-177559/87			20:17																											
CRI 240-177559/88	1		20:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCV 240-177559/89			20:24																											
CCB 240-177559/90			20:28																											

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																									
				Fe	Mn																								
ZZZZZZ			08:59																										
ICIS 240-177880/2			09:03	X	X																								
STD1 240-177880/3 IC	1		09:07	X	X																								
STD2 240-177880/4 IC	1		09:10	X	X																								
STD3 240-177880/5 IC	1		09:14	X	X																								
STD4 240-177880/6 IC	1		09:18	X	X																								
ICV 240-177880/7	1		09:22	X	X																								
ICB 240-177880/8	1		09:26	X	X																								
CRI 240-177880/9	1		09:30	X	X																								
ICSA 240-177880/10	1		09:33	X	X																								
ICSAB 240-177880/11	1		09:37	X	X																								
CCV 240-177880/12			09:41																										
CCB 240-177880/13			09:45																										
ZZZZZZ			10:21																										
ZZZZZZ			10:26																										
ZZZZZZ			10:30																										
ZZZZZZ			10:33																										
ZZZZZZ			10:37																										
ZZZZZZ			10:41																										
ZZZZZZ			10:44																										
ZZZZZZ			11:24																										
ZZZZZZ			11:28																										
ZZZZZZ			11:32																										
ZZZZZZ			11:36																										
ZZZZZZ			11:39																										
ZZZZZZ			11:43																										
CCV 240-177880/27			11:52																										
CCB 240-177880/28			11:56																										
ZZZZZZ			12:00																										
ZZZZZZ			12:04																										
CCV 240-177880/31			12:07																										
CCB 240-177880/32			12:11																										
CCV 240-177880/33			12:17																										
CCB 240-177880/34			12:21																										
ZZZZZZ			12:25																										
ZZZZZZ			12:29																										
CCV 240-177880/37			12:33																										
CCB 240-177880/38			12:36																										
ZZZZZZ			12:40																										
ZZZZZZ			12:44																										
ZZZZZZ			12:48																										
ZZZZZZ			12:51																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																									
				Fe	Mn																								
ZZZZZZ			12:55																										
ZZZZZZ			12:59																										
ZZZZZZ			13:03																										
ZZZZZZ			13:06																										
ZZZZZZ			13:10																										
ZZZZZZ			13:13																										
CCV 240-177880/49			13:17																										
CCB 240-177880/50			13:21																										
ZZZZZZ			13:25																										
ZZZZZZ			13:28																										
ZZZZZZ			13:32																										
ZZZZZZ			13:36																										
ZZZZZZ			13:40																										
ZZZZZZ			13:43																										
ZZZZZZ			13:47																										
ZZZZZZ			13:51																										
CCV 240-177880/59			13:55																										
CCB 240-177880/60			13:59																										
CRI 240-177880/61			14:03																										
CCV 240-177880/62	1		14:06	X	X																								
CCB 240-177880/63	1		14:10	X	X																								
ZZZZZZ			14:14																										
MB 240-177128/1-A ^2	2	T	14:18		X																								
LCS 240-177128/2-A ^2	2	T	14:21		X																								
240-49171-3	20	T	14:25		X																								
240-49171-3 SD	100	T	14:29		X																								
240-49171-3 PDS	20	T	14:33		X																								
240-49171-3 DU	20	T	14:36		X																								
240-49171-3 MS	20	T	14:40		X																								
ZZZZZZ			14:44																										
ZZZZZZ			14:48																										
CCV 240-177880/74	1		14:51	X	X																								
CCB 240-177880/75	1		14:55	X	X																								
ZZZZZZ			14:59																										
ZZZZZZ			15:03																										
ZZZZZZ			15:07																										
ZZZZZZ			15:11																										
ZZZZZZ			15:14																										
ZZZZZZ			15:18																										
ZZZZZZ			15:22																										
CCV 240-177880/83	1		15:26	X	X																								
CCB 240-177880/84	1		15:29	X	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																									
				Fe	Mn																								
CRI 240-177880/85	1		15:33	X	X																								
MB 240-176698/1-A ^2	2	T	15:37	X	X																								
LCS 240-176698/2-A ^2	2	T	15:41	X	X																								
240-49171-1	20	T	15:45	X	X																								
240-49171-1 SD	100	T	15:48	X	X																								
240-49171-1 PDS	20	T	15:52	X	X																								
240-49171-1 DU	20	T	15:56	X	X																								
240-49171-1 MS	20	T	16:00	X	X																								
240-49171-2	20	T	16:03	X	X																								
240-49171-4	20	T	16:07	X	X																								
CCV 240-177880/95	1		16:11	X	X																								
CCB 240-177880/96	1		16:15	X	X																								
240-49171-11	20	T	16:19	X	X																								
240-49171-13	20	T	16:22	X	X																								
240-49171-14	20	T	16:26	X	X																								
240-49171-15	20	T	16:30	X	X																								
240-49171-16	20	T	16:34	X	X																								
240-49171-17	20	T	16:38	X	X																								
ZZZZZZ			16:41																										
240-49171-20	20	T	16:45	X	X																								
240-49171-21	20	T	16:49	X	X																								
ZZZZZZ			16:53																										
CCV 240-177880/107	1		16:57	X	X																								
CCB 240-177880/108	1		17:00	X	X																								
ZZZZZZ			17:04																										
ZZZZZZ			17:08																										
ZZZZZZ			17:12																										
ZZZZZZ			17:16																										
ZZZZZZ			17:19																										
ZZZZZZ			17:23																										
ZZZZZZ			17:27																										
CCV 240-177880/116			17:31																										
CCB 240-177880/117			17:35																										
CRI 240-177880/118	1		17:39	X	X																								
ZZZZZZ			17:42																										
ZZZZZZ			17:46																										
ZZZZZZ			17:50																										
ZZZZZZ			17:54																										
ZZZZZZ			17:57																										
ZZZZZZ			18:01																										
ZZZZZZ			18:04																										
ZZZZZZ			18:08																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																								
				Fe	Mn																							
ZZZZZZ			18:12																									
CCV 240-177880/128			18:15																									
CCB 240-177880/129			18:19																									
ZZZZZZ			18:23																									
ZZZZZZ			18:27																									
ZZZZZZ			18:30																									
ZZZZZZ			18:34																									
ZZZZZZ			18:38																									
ZZZZZZ			18:42																									
ZZZZZZ			18:46																									
ZZZZZZ			18:49																									
ZZZZZZ			18:53																									
ZZZZZZ			18:57																									
CCV 240-177880/140			19:01																									
CCB 240-177880/141			19:05																									
ZZZZZZ			19:09																									
CCV 240-177880/143			19:13																									
CCB 240-177880/144			19:16																									
CRI 240-177880/145			19:20																									
ZZZZZZ			19:24																									
ZZZZZZ			19:28																									
ZZZZZZ			19:32																									
ZZZZZZ			19:35																									
ZZZZZZ			19:39																									
ZZZZZZ			19:43																									
ZZZZZZ			19:46																									
ZZZZZZ			19:50																									
ZZZZZZ			19:54																									
CCV 240-177880/155			19:57																									
CCB 240-177880/156			20:01																									
ZZZZZZ			20:05																									
ZZZZZZ			20:09																									
ZZZZZZ			20:13																									
ZZZZZZ			20:16																									
ZZZZZZ			20:20																									
ZZZZZZ			20:24																									
ZZZZZZ			20:28																									
ZZZZZZ			20:32																									
ZZZZZZ			20:35																									
ZZZZZZ			20:39																									
CCV 240-177880/167			20:43																									
CCB 240-177880/168			20:47																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																									
				Fe	Mn																								
ZZZZZZ			20:51																										
ZZZZZZ			20:54																										
ZZZZZZ			20:58																										
ZZZZZZ			21:02																										
ZZZZZZ			21:06																										
ZZZZZZ			21:10																										
ZZZZZZ			21:13																										
CCV 240-177880/176			21:17																										
CCB 240-177880/177			21:21																										
CRI 240-177880/178			21:25																										
ZZZZZZ			21:29																										
ZZZZZZ			21:33																										
ZZZZZZ			21:36																										
ZZZZZZ			21:40																										
ZZZZZZ			21:44																										
ZZZZZZ			21:47																										
ZZZZZZ			21:51																										
ZZZZZZ			21:55																										
ZZZZZZ			21:58																										
CCV 240-177880/188			22:02																										
CCB 240-177880/189			22:06																										
ZZZZZZ			22:10																										
ZZZZZZ			22:14																										
ZZZZZZ			22:17																										
ZZZZZZ			22:21																										
ZZZZZZ			22:25																										
ZZZZZZ			22:28																										
ZZZZZZ			22:32																										
ZZZZZZ			22:36																										
ZZZZZZ			22:40																										
ZZZZZZ			22:44																										
CCV 240-177880/200			22:47																										
CCB 240-177880/201			22:51																										
ZZZZZZ			22:55																										
ZZZZZZ			22:59																										
ZZZZZZ			23:03																										
ZZZZZZ			23:06																										
ZZZZZZ			23:10																										
ZZZZZZ			23:14																										
CCV 240-177880/208			23:18																										
CCB 240-177880/209			23:22																										
CRI 240-177880/210			23:26																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																								
				Fe	Mn																							
CCV 240-177880/211			23:29																									
CCB 240-177880/212			23:33																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/27/2015 14:00 End Date: 04/27/2015 22:08

Lab Sample Id	D/F	Type	Time	Analytes																										
				Fe	Mn																									
ZZZZZZ			14:00																											
ICIS 240-178191/2			14:04	X	X																									
STD1 240-178191/3 IC	1		14:08	X	X																									
STD2 240-178191/4 IC	1		14:11	X	X																									
STD3 240-178191/5 IC	1		14:15	X	X																									
STD4 240-178191/6 IC	1		14:19	X	X																									
ICV 240-178191/7	1		14:23	X	X																									
ICB 240-178191/8	1		14:27	X	X																									
CRI 240-178191/9	1		14:31	X	X																									
ICSA 240-178191/10	1		14:35	X	X																									
ICSAB 240-178191/11	1		14:38	X	X																									
CCV 240-178191/12			14:42																											
CCB 240-178191/13			14:46																											
ZZZZZZ			14:50																											
ZZZZZZ			14:54																											
ZZZZZZ			14:57																											
ZZZZZZ			15:01																											
ZZZZZZ			15:05																											
ZZZZZZ			15:08																											
ZZZZZZ			15:12																											
ZZZZZZ			15:16																											
ZZZZZZ			15:20																											
ZZZZZZ			15:24																											
CCV 240-178191/24	1		15:27	X	X																									
CCB 240-178191/25	1		15:31	X	X																									
ZZZZZZ			15:35																											
ZZZZZZ			15:39																											
ZZZZZZ			15:43																											
ZZZZZZ			15:46																											
ZZZZZZ			15:50																											
ZZZZZZ			15:54																											
240-49171-18	20	T	15:58	X	X																									
ZZZZZZ			16:02																											
ZZZZZZ			16:05																											
CCV 240-178191/35	1		16:09	X	X																									
CCB 240-178191/36	1		16:13	X	X																									
CRI 240-178191/37	1		16:16	X	X																									
CCV 240-178191/38			16:34																											
CCB 240-178191/39			16:38																											
ZZZZZZ			16:42																											
ZZZZZZ			16:45																											
ZZZZZZ			16:49																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/27/2015 14:00 End Date: 04/27/2015 22:08

Lab Sample Id	D/F	Type	Time	Analytes																								
				Fe	Mn																							
ZZZZZZ			16:53																									
CCV 240-178191/44			16:57																									
CCB 240-178191/45			17:00																									
ZZZZZZ			17:04																									
ZZZZZZ			17:08																									
ZZZZZZ			17:12																									
ZZZZZZ			17:16																									
ZZZZZZ			17:20																									
ZZZZZZ			17:24																									
ZZZZZZ			17:28																									
ZZZZZZ			17:31																									
ZZZZZZ			17:35																									
ZZZZZZ			17:39																									
CCV 240-178191/56			17:43																									
CCB 240-178191/57			17:47																									
ZZZZZZ			17:51																									
ZZZZZZ			17:55																									
ZZZZZZ			17:58																									
ZZZZZZ			18:02																									
CCV 240-178191/62			18:06																									
CCB 240-178191/63			18:09																									
ZZZZZZ			18:13																									
ZZZZZZ			18:17																									
ZZZZZZ			18:21																									
ZZZZZZ			18:25																									
ZZZZZZ			18:28																									
CCV 240-178191/69			18:32																									
CCB 240-178191/70			18:36																									
CRI 240-178191/71			18:40																									
ZZZZZZ			18:44																									
ZZZZZZ			18:48																									
ZZZZZZ			18:51																									
ZZZZZZ			18:55																									
ZZZZZZ			18:59																									
ZZZZZZ			19:02																									
ZZZZZZ			19:06																									
ZZZZZZ			19:10																									
ZZZZZZ			19:14																									
CCV 240-178191/81			19:17																									
CCB 240-178191/82			19:21																									
ZZZZZZ			19:25																									
ZZZZZZ			19:29																									

FORM XIII-IN

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/27/2015 14:00 End Date: 04/27/2015 22:08

Lab Sample Id	D/F	Type	Time	Analytes																									
				Fe	Mn																								
ZZZZZZ			19:33																										
ZZZZZZ			19:36																										
ZZZZZZ			19:40																										
ZZZZZZ			19:44																										
ZZZZZZ			19:48																										
ZZZZZZ			19:52																										
ZZZZZZ			19:55																										
CCV 240-178191/92			19:59																										
CCB 240-178191/93			20:03																										
CRI 240-178191/94			20:07																										
ZZZZZZ			20:11																										
ZZZZZZ			20:15																										
ZZZZZZ			20:18																										
ZZZZZZ			20:22																										
ZZZZZZ			20:26																										
ZZZZZZ			20:30																										
ZZZZZZ			20:33																										
ZZZZZZ			20:37																										
ZZZZZZ			20:41																										
CCV 240-178191/104			20:44																										
CCB 240-178191/105			20:48																										
ZZZZZZ			20:52																										
ZZZZZZ			20:56																										
CCV 240-178191/108			21:00																										
CCB 240-178191/109			21:03																										
CRI 240-178191/110			21:07																										
ZZZZZZ			21:11																										
ZZZZZZ			21:15																										
ZZZZZZ			21:19																										
ZZZZZZ			21:22																										
ZZZZZZ			21:26																										
ZZZZZZ			21:30																										
ZZZZZZ			21:33																										
ZZZZZZ			21:37																										
ZZZZZZ			21:41																										
CCV 240-178191/120			21:45																										
CCB 240-178191/121			21:49																										
ZZZZZZ			21:52																										
ZZZZZZ			21:56																										
ZZZZZZ			22:00																										
CCV 240-178191/125			22:04																										
CCB 240-178191/126			22:08																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/27/2015 14:00 End Date: 04/27/2015 22:08

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/28/2015 11:32 End Date: 04/28/2015 15:42

Lab Sample Id	D/F	Type	Time	Analytes																								
				Pb																								
ZZZZZZ			11:32																									
ICIS 240-178352/2			11:36	X																								
STD1 240-178352/3 IC			11:39	X																								
STD2 240-178352/4 IC			11:43	X																								
STD3 240-178352/5 IC			11:47	X																								
STD4 240-178352/6 IC	1		11:51	X																								
ICV 240-178352/7	1		11:55	X																								
ICB 240-178352/8	1		11:58	X																								
CRI 240-178352/9	1		12:02	X																								
ICSA 240-178352/10	1		12:06	X																								
ICSAB 240-178352/11	1		12:10	X																								
CCV 240-178352/12	1		12:14	X																								
CCB 240-178352/13	1		12:17	X																								
ZZZZZZ			12:21																									
ZZZZZZ			12:25																									
MB 240-177128/1-A ^2	2	T	12:29	X																								
LCS 240-177128/2-A ^2	2	T	12:33	X																								
240-49171-3	20	T	12:36	X																								
240-49171-3 SD	100	T	12:40	X																								
240-49171-3 PDS	20	T	12:44	X																								
240-49171-3 DU	20	T	12:47	X																								
240-49171-3 MS	20	T	12:51	X																								
ZZZZZZ			12:55																									
CCV 240-178352/24	1		12:59	X																								
CCB 240-178352/25	1		13:02	X																								
ZZZZZZ			13:06																									
ZZZZZZ			13:10																									
ZZZZZZ			13:14																									
ZZZZZZ			13:18																									
ZZZZZZ			13:21																									
ZZZZZZ			13:25																									
ZZZZZZ			13:29																									
ZZZZZZ			13:33																									
ZZZZZZ			13:37																									
ZZZZZZ			13:40																									
CCV 240-178352/36	1		13:44	X																								
CCB 240-178352/37	1		13:48	X																								
CCV 240-178352/38			13:52																									
CCB 240-178352/39			13:56																									
CRI 240-178352/40	1		13:59	X																								
ZZZZZZ			14:03																									
ZZZZZZ			14:07																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/28/2015 11:32 End Date: 04/28/2015 15:42

Lab Sample Id	D/F	Type	Time	Analytes																								
				Pb																								
ZZZZZZ			14:11																									
CCV 240-178352/44			14:15																									
CCB 240-178352/45			14:18																									
ZZZZZZ			14:22																									
ZZZZZZ			14:26																									
ZZZZZZ			14:30																									
ZZZZZZ			14:33																									
ZZZZZZ			14:37																									
ZZZZZZ			14:41																									
ZZZZZZ			14:45																									
ZZZZZZ			14:48																									
ZZZZZZ			14:52																									
ZZZZZZ			14:56																									
CCV 240-178352/56			15:00																									
CCB 240-178352/57			15:03																									
ZZZZZZ			15:07																									
ZZZZZZ			15:11																									
ZZZZZZ			15:15																									
ZZZZZZ			15:19																									
ZZZZZZ			15:22																									
ZZZZZZ			15:26																									
ZZZZZZ			15:30																									
CCV 240-178352/65			15:34																									
CCB 240-178352/66			15:38																									
CRI 240-178352/67			15:42																									

Prep Types:
T = Total/NA

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/16/2015 08:15 End Date: 04/16/2015 10:17

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
IC 240-176499/1-A			08:15	X
IC 240-176499/2-A			08:16	X
IC 240-176499/3-A			08:19	X
IC 240-176499/4-A			08:21	X
IC 240-176499/5-A			08:23	X
IC 240-176499/6-A			08:25	X
ICV 240-176499/7-A	1		08:27	X
ICB 240-176499/8-A	1		08:29	X
CRA 240-176499/9-A	1		08:31	X
CCV 240-176499/10-A	1		09:06	X
CCB 240-176499/11-A	1		09:08	X
ZZZZZZ			09:11	
ZZZZZZ			09:13	
ZZZZZZ			09:15	
ZZZZZZ			09:17	
ZZZZZZ			09:19	
ZZZZZZ			09:21	
ZZZZZZ			09:23	
MB 240-176570/1-A	1	T	09:25	X
LCS 240-176570/2-A	1	T	09:27	X
ZZZZZZ			09:29	
CCV 240-176499/10-A	1		09:31	X
CCB 240-176499/11-A	1		09:33	X
ZZZZZZ			09:35	
ZZZZZZ			09:37	
ZZZZZZ			09:39	
ZZZZZZ			09:40	
ZZZZZZ			09:42	
ZZZZZZ			09:44	
ZZZZZZ			09:47	
ZZZZZZ			09:48	
240-49171-19	1	T	09:51	X
240-49171-6	1	T	09:52	X
CCV 240-176499/10-A	1		09:55	X
CCB 240-176499/11-A	1		09:57	X
240-49171-8	1	T	10:00	X
240-49171-10	1	T	10:02	X
ZZZZZZ			10:03	
ZZZZZZ			10:05	
ZZZZZZ			10:08	
ZZZZZZ			10:09	
ZZZZZZ			10:11	

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/16/2015 08:15 End Date: 04/16/2015 10:17

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
CRA 240-176499/9-A	1		10:13	X																								
CCV 240-176499/10-A	1		10:15	X																								
CCB 240-176499/11-A	1		10:17	X																								

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/20/2015 09:43 End Date: 04/20/2015 15:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
IC 240-177030/1-A			09:43	X																								
IC 240-177030/2-A			09:45	X																								
IC 240-177030/3-A			09:47	X																								
IC 240-177030/4-A			09:49	X																								
IC 240-177030/5-A			09:51	X																								
IC 240-177030/6-A			09:53	X																								
ICV 240-177030/7-A	1		09:56	X																								
ICB 240-177030/8-A	1		09:58	X																								
CRA 240-177030/9-A	1		10:00	X																								
CCV 240-177030/10-A			10:07																									
CCB 240-177030/11-A			10:10																									
ZZZZZZ			10:13																									
ZZZZZZ			10:15																									
ZZZZZZ			10:18																									
ZZZZZZ			10:20																									
ZZZZZZ			10:22																									
ZZZZZZ			10:24																									
ZZZZZZ			10:26																									
ZZZZZZ			10:28																									
ZZZZZZ			10:30																									
ZZZZZZ			10:33																									
CCV 240-177030/10-A			10:34																									
CCB 240-177030/11-A			10:36																									
ZZZZZZ			10:38																									
ZZZZZZ			10:40																									
ZZZZZZ			10:42																									
ZZZZZZ			10:44																									
ZZZZZZ			10:46																									
ZZZZZZ			10:48																									
ZZZZZZ			10:50																									
ZZZZZZ			10:52																									
ZZZZZZ			10:54																									
ZZZZZZ			10:56																									
CCV 240-177030/10-A	1		10:58	X																								
CCB 240-177030/11-A	1		11:00	X																								
ZZZZZZ			11:02																									
ZZZZZZ			11:04																									
ZZZZZZ			11:06																									
ZZZZZZ			11:09																									
MB 240-176711/1-A	1	T	11:11	X																								
LCS 240-176711/2-A	1	T	11:13	X																								
240-49171-1	1	T	11:15	X																								

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/20/2015 09:43 End Date: 04/20/2015 15:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
240-49171-1 DU	1	T	11:17	X																								
240-49171-1 MS	1	T	11:19	X																								
240-49171-2	1	T	11:21	X																								
CCV 240-177030/10-A	1		11:23	X																								
CCB 240-177030/11-A	1		11:25	X																								
240-49171-4	1	T	11:27	X																								
240-49171-11	1	T	11:30	X																								
240-49171-13	1	T	11:32	X																								
240-49171-14	1	T	11:34	X																								
240-49171-15	1	T	11:36	X																								
240-49171-16	1	T	11:38	X																								
240-49171-17	1	T	11:40	X																								
240-49171-18	1	T	11:42	X																								
240-49171-20	1	T	11:44	X																								
240-49171-21	1	T	11:46	X																								
CCV 240-177030/10-A	1		11:49	X																								
CCB 240-177030/11-A	1		11:51	X																								
ZZZZZZ			11:53																									
ZZZZZZ			11:55																									
ZZZZZZ			11:57																									
ZZZZZZ			11:59																									
ZZZZZZ			12:00																									
ZZZZZZ			12:02																									
ZZZZZZ			12:04																									
ZZZZZZ			12:06																									
CRA 240-177030/9-A	1		12:08	X																								
CCV 240-177030/10-A			12:10																									
CCB 240-177030/11-A			12:12																									
CCV 240-177030/10-A			12:21																									
CCB 240-177030/11-A			12:23																									
ZZZZZZ			12:25																									
ZZZZZZ			12:27																									
ZZZZZZ			12:29																									
ZZZZZZ			12:32																									
ZZZZZZ			12:34																									
ZZZZZZ			12:36																									
ZZZZZZ			12:38																									
ZZZZZZ			12:40																									
ZZZZZZ			12:42																									
ZZZZZZ			12:44																									
CCV 240-177030/10-A			12:46																									
CCB 240-177030/11-A			12:48																									

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/20/2015 09:43 End Date: 04/20/2015 15:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			12:50																									
ZZZZZZ			12:52																									
ZZZZZZ			12:54																									
ZZZZZZ			12:55																									
ZZZZZZ			12:57																									
ZZZZZZ			12:59																									
ZZZZZZ			13:01																									
ZZZZZZ			13:03																									
ZZZZZZ			13:06																									
ZZZZZZ			13:07																									
CCV 240-177030/10-A			13:09																									
CCB 240-177030/11-A			13:11																									
ZZZZZZ			13:13																									
ZZZZZZ			13:15																									
ZZZZZZ			13:17																									
ZZZZZZ			13:19																									
ZZZZZZ			13:21																									
ZZZZZZ			13:23																									
ZZZZZZ			13:25																									
ZZZZZZ			13:27																									
ZZZZZZ			13:29																									
CCV 240-177030/10-A			13:31																									
CCB 240-177030/11-A			13:33																									
CCV 240-177030/10-A			13:51																									
CCB 240-177030/11-A			13:53																									
ZZZZZZ			13:55																									
ZZZZZZ			13:57																									
ZZZZZZ			13:59																									
ZZZZZZ			14:01																									
ZZZZZZ			14:03																									
ZZZZZZ			14:05																									
ZZZZZZ			14:08																									
ZZZZZZ			14:10																									
ZZZZZZ			14:12																									
ZZZZZZ			14:14																									
CCV 240-177030/10-A			14:17																									
CCB 240-177030/11-A			14:19																									
ZZZZZZ			14:21																									
ZZZZZZ			14:24																									
ZZZZZZ			14:26																									
ZZZZZZ			14:28																									
ZZZZZZ			14:30																									

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/20/2015 09:43 End Date: 04/20/2015 15:44

Lab Sample Id	D/F	Type	Time	Analytes																									
				Hg																									
ZZZZZZ			14:33																										
ZZZZZZ			14:34																										
ZZZZZZ			14:36																										
ZZZZZZ			14:39																										
ZZZZZZ			14:42																										
CCV 240-177030/10-A			14:44																										
CCB 240-177030/11-A			14:46																										
ZZZZZZ			14:48																										
ZZZZZZ			14:50																										
ZZZZZZ			14:53																										
ZZZZZZ			14:55																										
CCV 240-177030/10-A			14:57																										
CCB 240-177030/11-A			14:59																										
CCV 240-177030/10-A			15:05																										
CCB 240-177030/11-A			15:07																										
ZZZZZZ			15:09																										
ZZZZZZ			15:11																										
ZZZZZZ			15:13																										
ZZZZZZ			15:15																										
ZZZZZZ			15:17																										
ZZZZZZ			15:19																										
ZZZZZZ			15:21																										
ZZZZZZ			15:23																										
ZZZZZZ			15:25																										
ZZZZZZ			15:27																										
CCV 240-177030/10-A			15:29																										
CCB 240-177030/11-A			15:31																										
ZZZZZZ			15:33																										
ZZZZZZ			15:36																										
ZZZZZZ			15:38																										
ZZZZZZ			15:40																										
CCV 240-177030/10-A			15:42																										
CCB 240-177030/11-A			15:44																										

Prep Types:
T = Total/NA

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
IC 240-177030/1-A			08:18	X
IC 240-177030/2-A			08:21	X
IC 240-177030/3-A			08:23	X
IC 240-177030/4-A			08:25	X
IC 240-177030/5-A			08:27	X
IC 240-177030/6-A			08:29	X
ICV 240-177030/7-A	1		08:31	X
ICB 240-177030/8-A	1		08:33	X
CRA 240-177030/9-A	1		08:35	X
CCV 240-177030/10-A			08:52	
CCB 240-177030/11-A			08:54	
ZZZZZZ			08:56	
ZZZZZZ			08:57	
ZZZZZZ			09:00	
ZZZZZZ			09:02	
ZZZZZZ			09:04	
ZZZZZZ			09:07	
ZZZZZZ			09:09	
ZZZZZZ			09:12	
ZZZZZZ			09:14	
ZZZZZZ			09:17	
CCV 240-177030/10-A			09:19	
CCB 240-177030/11-A			09:21	
ZZZZZZ			09:23	
ZZZZZZ			09:25	
ZZZZZZ			09:27	
ZZZZZZ			09:30	
ZZZZZZ			09:32	
ZZZZZZ			09:34	
ZZZZZZ			09:36	
ZZZZZZ			09:39	
ZZZZZZ			09:40	
ZZZZZZ			09:42	
CCV 240-177030/10-A			09:45	
CCB 240-177030/11-A			09:47	
ZZZZZZ			09:48	
ZZZZZZ			09:51	
ZZZZZZ			09:53	
ZZZZZZ			09:55	
CCV 240-177030/10-A			09:57	
CCB 240-177030/11-A			09:59	
CCV 240-177030/10-A			10:02	

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
CCB 240-177030/11-A			10:04																									
ZZZZZZ			10:06																									
ZZZZZZ			10:08																									
ZZZZZZ			10:11																									
ZZZZZZ			10:13																									
ZZZZZZ			10:15																									
ZZZZZZ			10:17																									
ZZZZZZ			10:18																									
ZZZZZZ			10:20																									
ZZZZZZ			10:23																									
ZZZZZZ			10:25																									
CCV 240-177030/10-A			10:27																									
CCB 240-177030/11-A			10:29																									
ZZZZZZ			10:31																									
ZZZZZZ			10:33																									
ZZZZZZ			10:35																									
ZZZZZZ			10:38																									
ZZZZZZ			10:40																									
ZZZZZZ			10:42																									
ZZZZZZ			10:44																									
ZZZZZZ			10:45																									
ZZZZZZ			10:47																									
ZZZZZZ			10:50																									
CCV 240-177030/10-A	1		10:52	X																								
CCB 240-177030/11-A	1		10:54	X																								
ZZZZZZ			10:56																									
ZZZZZZ			10:58																									
ZZZZZZ			11:00																									
ZZZZZZ			11:02																									
MB 240-177137/1-A	1	T	11:04	X																								
LCS 240-177137/2-A	1	T	11:06	X																								
240-49171-3	1	T	11:08	X																								
240-49171-3 DU	1	T	11:10	X																								
240-49171-3 MS	1	T	11:12	X																								
ZZZZZZ			11:14																									
CCV 240-177030/10-A	1		11:16	X																								
CCB 240-177030/11-A	1		11:18	X																								
ZZZZZZ			11:20																									
ZZZZZZ			11:21																									
ZZZZZZ			11:23																									
ZZZZZZ			11:25																									
ZZZZZZ			11:27																									

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			11:29																									
ZZZZZZ			11:31																									
ZZZZZZ			11:33																									
ZZZZZZ			11:35																									
ZZZZZZ			11:37																									
CCV 240-177030/10-A			11:39																									
CCB 240-177030/11-A			11:41																									
ZZZZZZ			11:43																									
ZZZZZZ			11:45																									
ZZZZZZ			11:48																									
ZZZZZZ			11:51																									
ZZZZZZ			11:53																									
ZZZZZZ			11:54																									
ZZZZZZ			11:56																									
CRA 240-177030/9-A	1		11:58	X																								
CCV 240-177030/10-A			12:00																									
CCB 240-177030/11-A			12:02																									
CCV 240-177030/10-A			12:06																									
CCB 240-177030/11-A			12:07																									
ZZZZZZ			12:09																									
ZZZZZZ			12:11																									
ZZZZZZ			12:13																									
ZZZZZZ			12:16																									
ZZZZZZ			12:18																									
ZZZZZZ			12:20																									
ZZZZZZ			12:22																									
ZZZZZZ			12:24																									
ZZZZZZ			12:26																									
ZZZZZZ			12:28																									
CCV 240-177030/10-A			12:31																									
CCB 240-177030/11-A			12:33																									
ZZZZZZ			12:34																									
ZZZZZZ			12:37																									
ZZZZZZ			12:39																									
ZZZZZZ			12:41																									
ZZZZZZ			12:43																									
CCV 240-177030/10-A			12:45																									
CCB 240-177030/11-A			12:47																									
CCV 240-177030/10-A			13:13																									
CCB 240-177030/11-A			13:14																									
ZZZZZZ			13:16																									
ZZZZZZ			13:19																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
ZZZZZZ			13:21	
ZZZZZZ			13:22	
ZZZZZZ			13:24	
ZZZZZZ			13:26	
ZZZZZZ			13:28	
ZZZZZZ			13:30	
ZZZZZZ			13:32	
ZZZZZZ			13:34	
CCV 240-177030/10-A			13:36	
CCB 240-177030/11-A			13:38	
ZZZZZZ			13:40	
ZZZZZZ			13:42	
ZZZZZZ			13:44	
ZZZZZZ			13:47	
ZZZZZZ			13:49	
ZZZZZZ			13:51	
ZZZZZZ			13:53	
ZZZZZZ			13:55	
ZZZZZZ			13:58	
ZZZZZZ			14:00	
CCV 240-177030/10-A			14:02	
CCB 240-177030/11-A			14:04	
ZZZZZZ			14:06	
ZZZZZZ			14:08	
ZZZZZZ			14:10	
ZZZZZZ			14:12	
CCV 240-177030/10-A			14:14	
CCB 240-177030/11-A			14:16	
CCV 240-177030/10-A			14:30	
CCB 240-177030/11-A			14:32	
ZZZZZZ			14:34	
ZZZZZZ			14:36	
ZZZZZZ			14:37	
ZZZZZZ			14:39	
ZZZZZZ			14:41	
ZZZZZZ			14:44	
ZZZZZZ			14:46	
ZZZZZZ			14:48	
ZZZZZZ			14:50	
ZZZZZZ			14:52	
CCV 240-177030/10-A			14:54	
CCB 240-177030/11-A			14:56	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								

Prep Types:
T = Total/NA

FORM XIII-IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/20/2015 End Date: 04/20/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-177115/3 IC	10:29	102		102		100		98		99	
STD2 240-177115/4 IC	10:32	99		104		101		95		96	
STD3 240-177115/5 IC	10:36	97		103		101		94		96	
STD4 240-177115/6 IC	10:40	100		104		99		102		101	
ICV 240-177115/7	10:44	100		105		104		98		99	
ICB 240-177115/8	10:48	104		102		106		103		104	
CRI 240-177115/10	10:55	103		106		105		103		104	
ICSA 240-177115/11	10:59	92		101		96		88		93	
ICSAB 240-177115/12	11:04	92		101		96		90		94	
CCV 240-177115/118	18:03	91		100		104		95		99	
CCB 240-177115/119	18:07	92		96		104		102		102	
MB 240-176562/1-A ^2	18:14	91		94		98		97		97	
LCS 240-176562/2-A ^:	18:18	88		92		96		93		92	
CCV 240-177115/130	18:48	90		98		102		98		99	
CCB 240-177115/131	18:52	92		96		104		103		103	
240-49171-19	19:11	89		96		101		100		98	
240-49171-6	19:15	90		103		105		98		97	
240-49171-8	19:19	86		96		99		89		91	
240-49171-10	19:23	82		88		91		85		89	
CCV 240-177115/140	19:27	82		89		94		86		92	
CCB 240-177115/141	19:30	83		89		94		96		97	
CRI 240-177115/142	19:34	87		92		96		96		98	
MB 240-176698/1-A ^2	19:38	83		89		92		91		93	
LCS 240-176698/2-A ^:	19:42	83		88		91		89		90	
240-49171-1	19:46	83		94		96		86		90	
240-49171-1 SD	19:50	80		88		91		86		91	
240-49171-1 PDS	19:53	79		88		94		81		83	
240-49171-1 DU	19:57	81		92		97		83		88	
240-49171-1 MS	20:01	77		89		93		83		87	
240-49171-2	20:05	78		91		96		84		88	
240-49171-4	20:08	78		88		92		83		87	
CCV 240-177115/152	20:12	78		85		90		85		92	
CCB 240-177115/153	20:16	79		86		91		89		94	
240-49171-11	20:20	77		89		92		83		89	
240-49171-13	20:24	77		86		91		84		88	
240-49171-14	20:27	77		88		92		83		87	
240-49171-15	20:31	77		90		95		82		87	
240-49171-16	20:35	75		88		90		82		87	
240-49171-17	20:39	76		88		93		82		87	
240-49171-18	20:43	76		87		91		82		87	
240-49171-20	20:47	74		87		92		82		87	
240-49171-21	20:50	76		87		91		80		85	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/20/2015 End Date: 04/20/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
CCV 240-177115/164	20:58	74		80		85		81		87	
CCB 240-177115/165	21:02	72		77		84		82		86	
CRI 240-177115/175	21:40	72		80		83		83		89	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/20/2015 End Date: 04/20/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-177115/3 IC	10:29	99		100		100					
STD2 240-177115/4 IC	10:32	98		100		96					
STD3 240-177115/5 IC	10:36	98		98		93					
STD4 240-177115/6 IC	10:40	100		102		101					
ICV 240-177115/7	10:44	101		103		101					
ICB 240-177115/8	10:48	104		104		104					
CRI 240-177115/10	10:55	103		103		104					
ICSA 240-177115/11	10:59	96		98		91					
ICSAB 240-177115/12	11:04	97		100		94					
CCV 240-177115/118	18:03	102		103		102					
CCB 240-177115/119	18:07	102		106		105					
MB 240-176562/1-A ^2	18:14	100		101		105					
LCS 240-176562/2-A ^2	18:18	99		101		101					
CCV 240-177115/130	18:48	104		106		103					
CCB 240-177115/131	18:52	106		107		108					
240-49171-19	19:11	105		106		105					
240-49171-6	19:15	105		107		104					
240-49171-8	19:19	103		104		101					
240-49171-10	19:23	98		100		97					
CCV 240-177115/140	19:27	100		102		100					
CCB 240-177115/141	19:30	101		103		103					
CRI 240-177115/142	19:34	101		102		103					
MB 240-176698/1-A ^2	19:38	99		102		102					
LCS 240-176698/2-A ^2	19:42	99		101		100					
240-49171-1	19:46	101		102		99					
240-49171-1 SD	19:50	99		100		101					
240-49171-1 PDS	19:53	97		99		87					
240-49171-1 DU	19:57	99		100		94					
240-49171-1 MS	20:01	99		100		96					
240-49171-2	20:05	101		103		97					
240-49171-4	20:08	98		99		96					
CCV 240-177115/152	20:12	99		101		99					
CCB 240-177115/153	20:16	98		101		103					
240-49171-11	20:20	99		100		97					
240-49171-13	20:24	98		99		97					
240-49171-14	20:27	99		100		96					
240-49171-15	20:31	98		101		95					
240-49171-16	20:35	99		100		96					
240-49171-17	20:39	98		100		97					
240-49171-18	20:43	100		101		96					
240-49171-20	20:47	100		101		95					
240-49171-21	20:50	102		101		96					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/20/2015 End Date: 04/20/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
CCV 240-177115/164	20:58	95		98		94					
CCB 240-177115/165	21:02	92		94		92					
CRI 240-177115/175	21:40	95		98		98					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/21/2015 End Date: 04/21/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-177351/3 IC	17:53	100		106		103		101		102	
STD2 240-177351/4 IC	17:57	102		108		104		99		99	
STD3 240-177351/5 IC	18:00	101		105		106		98		97	
STD4 240-177351/6 IC	18:04	99		106		100		106		103	
ICV 240-177351/7	18:08	101		105		103		102		100	
ICB 240-177351/8	18:12	105		104		107		107		104	
CRI 240-177351/9	18:16	104		109		108		108		106	
ICSA 240-177351/10	18:20	86		98		91		90		92	
ICSAB 240-177351/11	18:23	85		94		92		91		91	
CCV 240-177351/48	20:45	81		85		88		90		86	
CCB 240-177351/49	20:48	82		86		91		96		92	
CCV 240-177351/60	21:30	83		90		91		93		89	
CCB 240-177351/61	21:34	82		88		91		98		93	
240-49171-19	21:45	84		87		91		95		91	
240-49171-6	21:49	86		92		94		98		93	
240-49171-8	21:53	86		93		94		98		94	
240-49171-10	21:57	87		92		94		99		94	
MB 240-176562/1-A ^2	22:00	86		90		92		95		90	
LCS 240-176562/2-A ^2	22:04	85		89		91		94		87	
CCV 240-177351/72	22:15	91		100		102		101		97	
CCB 240-177351/73	22:19	96		99		105		106		102	
240-49171-19	22:53	88		98		101		104		97	
240-49171-6	22:56	94		103		110		101		96	
CCV 240-177351/84	23:00	88		97		98		101		95	
CCB 240-177351/85	23:04	91		94		100		105		98	
240-49171-8	23:08	94		108		110		103		97	
240-49171-10	23:12	97		108		114		108		101	
CCV 240-177351/89	23:19	87		95		99		101		95	
CCB 240-177351/90	23:23	88		93		99		104		97	
CRI 240-177351/91	23:27	90		97		100		102		98	

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/21/2015 End Date: 04/21/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-177351/3 IC	17:53	101		102		100					
STD2 240-177351/4 IC	17:57	102		103		97					
STD3 240-177351/5 IC	18:00	102		103		96					
STD4 240-177351/6 IC	18:04	104		106		105					
ICV 240-177351/7	18:08	103		105		100					
ICB 240-177351/8	18:12	104		105		104					
CRI 240-177351/9	18:16	104		106		104					
ICSA 240-177351/10	18:20	96		98		93					
ICSAB 240-177351/11	18:23	97		98		92					
CCV 240-177351/48	20:45	96		97		94					
CCB 240-177351/49	20:48	98		101		100					
CCV 240-177351/60	21:30	95		99		93					
CCB 240-177351/61	21:34	98		101		100					
240-49171-19	21:45	97		99		99					
240-49171-6	21:49	98		100		100					
240-49171-8	21:53	99		102		100					
240-49171-10	21:57	99		101		103					
MB 240-176562/1-A ^2	22:00	97		100		98					
LCS 240-176562/2-A ^2	22:04	97		100		95					
CCV 240-177351/72	22:15	102		105		99					
CCB 240-177351/73	22:19	105		107		105					
240-49171-19	22:53	105		106		103					
240-49171-6	22:56	105		107		99					
CCV 240-177351/84	23:00	103		104		99					
CCB 240-177351/85	23:04	103		104		101					
240-49171-8	23:08	106		108		101					
240-49171-10	23:12	109		110		102					
CCV 240-177351/89	23:19	103		107		99					
CCB 240-177351/90	23:23	102		103		102					
CRI 240-177351/91	23:27	102		104		103					

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/22/2015 End Date: 04/22/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-177559/3 IC	15:00	98		101		97		99		98	
STD2 240-177559/4 IC	15:04	98		100		98		95		94	
STD3 240-177559/5 IC	15:08	101		101		102		94		93	
STD4 240-177559/6 IC	15:11	100		103		100		103		100	
ICV 240-177559/7	15:15	103		102		101		99		96	
ICB 240-177559/8	15:19	102		100		101		102		100	
CRI 240-177559/9	15:23	101		102		101		102		100	
ICSA 240-177559/10	15:27	86		95		89		87		88	
ICSAB 240-177559/11	15:30	85		91		89		87		88	
CCV 240-177559/24	16:19	94		101		98		98		95	
CCB 240-177559/25	16:23	97		95		97		102		98	
MB 240-176698/1-A ^2	16:52	87		93		90		95		92	
LCS 240-176698/2-A ^2	16:56	82		87		85		89		84	
240-49171-1	17:00	86		97		95		92		88	
CCV 240-177559/36	17:03	86		90		87		91		87	
CCB 240-177559/37	17:07	87		86		89		95		92	
240-49171-1 SD	17:11	88		97		91		95		92	
240-49171-1 PDS	17:15	81		94		89		87		82	
240-49171-1 DU	17:18	84		92		92		87		84	
240-49171-1 MS	17:22	79		88		88		84		81	
240-49171-2	17:26	81		90		92		86		84	
240-49171-4	17:30	79		84		85		84		80	
240-49171-11	17:34	78		85		85		84		82	
240-49171-13	17:37	78		84		85		86		82	
240-49171-14	17:41	80		88		88		87		84	
240-49171-15	17:45	82		91		94		87		84	
CCV 240-177559/48	17:49	77		83		82		87		84	
CCB 240-177559/49	17:53	80		82		83		92		88	
240-49171-16	17:56	77		86		85		84		82	
240-49171-17	18:00	77		86		88		84		81	
240-49171-18	18:04	75		83		85		83		80	
240-49171-20	18:08	75		83		84		78		80	
240-49171-21	18:12	74		84		85		78		79	
CCV 240-177559/60	18:34	72		79		78		82		81	
CCB 240-177559/61	18:38	71		76		78		87		83	
CCV 240-177559/65	18:53	69		76		76		75		79	
CCB 240-177559/66	18:57	71		75		78		85		83	
CRI 240-177559/67	19:01	72		79		79		86		84	
MB 240-177128/1-A ^2	19:05	68		75		73		76		78	
LCS 240-177128/2-A ^2	19:09	65		74		73		73		75	
240-49171-3	19:12	68		79		78		72		76	
240-49171-3 SD	19:16	69		76		76		75		79	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/22/2015 End Date: 04/22/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
240-49171-3 PDS	19:20	67		76		74		69		71	
240-49171-3 DU	19:23	65		72		74		69		72	
240-49171-3 MS	19:27	65		71		73		67		71	
CCV 240-177559/77	19:39	67		73		73		72		76	
CCB 240-177559/78	19:42	69		73		76		77		79	
CRI 240-177559/88	20:20	68		73		72		74		78	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/22/2015 End Date: 04/22/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-177559/3 IC	15:00	99		99		97					
STD2 240-177559/4 IC	15:04	97		98		93					
STD3 240-177559/5 IC	15:08	98		98		91					
STD4 240-177559/6 IC	15:11	100		100		98					
ICV 240-177559/7	15:15	99		99		95					
ICB 240-177559/8	15:19	100		100		99					
CRI 240-177559/9	15:23	100		100		99					
ICSA 240-177559/10	15:27	94		93		89					
ICSAB 240-177559/11	15:30	95		94		90					
CCV 240-177559/24	16:19	101		101		97					
CCB 240-177559/25	16:23	101		101		99					
MB 240-176698/1-A ^2	16:52	98		98		95					
LCS 240-176698/2-A ^2	16:56	94		94		91					
240-49171-1	17:00	98		99		92					
CCV 240-177559/36	17:03	96		97		92					
CCB 240-177559/37	17:07	96		96		95					
240-49171-1 SD	17:11	98		98		95					
240-49171-1 PDS	17:15	98		96		88					
240-49171-1 DU	17:18	95		96		89					
240-49171-1 MS	17:22	93		93		86					
240-49171-2	17:26	95		96		89					
240-49171-4	17:30	92		92		86					
240-49171-11	17:34	93		92		87					
240-49171-13	17:37	93		92		87					
240-49171-14	17:41	95		94		89					
240-49171-15	17:45	96		96		88					
CCV 240-177559/48	17:49	93		93		87					
CCB 240-177559/49	17:53	93		94		92					
240-49171-16	17:56	92		92		86					
240-49171-17	18:00	93		93		87					
240-49171-18	18:04	91		92		86					
240-49171-20	18:08	91		91		84					
240-49171-21	18:12	92		92		85					
CCV 240-177559/60	18:34	89		90		87					
CCB 240-177559/61	18:38	89		90		88					
CCV 240-177559/65	18:53	87		87		83					
CCB 240-177559/66	18:57	89		88		87					
CRI 240-177559/67	19:01	89		90		88					
MB 240-177128/1-A ^2	19:05	86		85		85					
LCS 240-177128/2-A ^2	19:09	84		85		82					
240-49171-3	19:12	87		87		82					
240-49171-3 SD	19:16	87		87		85					

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/22/2015 End Date: 04/22/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
240-49171-3 PDS	19:20	85		84		79					
240-49171-3 DU	19:23	83		83		78					
240-49171-3 MS	19:27	82		82		77					
CCV 240-177559/77	19:39	85		86		81					
CCB 240-177559/78	19:42	86		86		85					
CRI 240-177559/88	20:20	85		84		83					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/24/2015 End Date: 04/24/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-177880/3 IC	09:07	94		99		94		97		96	
STD2 240-177880/4 IC	09:10	94		97		94		91		91	
STD3 240-177880/5 IC	09:14	95		95		97		91		91	
STD4 240-177880/6 IC	09:18	92		97		93		97		96	
ICV 240-177880/7	09:22	98		98		100		95		95	
ICB 240-177880/8	09:26	100		96		100		101		100	
CRI 240-177880/9	09:30	92		102		92		103		101	
ICSA 240-177880/10	09:33	81		94		86		87		88	
ICSAB 240-177880/11	09:37	79		88		85		85		87	
CCV 240-177880/62	14:06	69		75		77		80		80	
CCB 240-177880/63	14:10	69		73		77		84		83	
MB 240-177128/1-A ^2	14:18	64		70		71		79		78	
LCS 240-177128/2-A ^:	14:21	63		70		70		78		75	
240-49171-3	14:25	70		76		78		84		83	
240-49171-3 SD	14:29	71		75		80		84		84	
240-49171-3 PDS	14:33	66		76		74		80		78	
240-49171-3 DU	14:36	69		73		77		81		82	
240-49171-3 MS	14:40	71		78		80		86		85	
CCV 240-177880/74	14:51	71		80		80		84		84	
CCB 240-177880/75	14:55	73		76		79		88		88	
CCV 240-177880/83	15:26	75		86		84		86		87	
CCB 240-177880/84	15:29	76		81		84		91		90	
CRI 240-177880/85	15:33	77		84		85		91		90	
MB 240-176698/1-A ^2	15:37	71		79		79		85		84	
LCS 240-176698/2-A ^:	15:41	67		72		72		79		76	
240-49171-1	15:45	75		81		82		87		86	
240-49171-1 SD	15:48	74		80		81		88		88	
240-49171-1 PDS	15:52	68		80		77		82		80	
240-49171-1 DU	15:56	71		78		81		85		84	
240-49171-1 MS	16:00	76		84		86		88		88	
240-49171-2	16:03	77		87		88		92		91	
240-49171-4	16:07	77		87		89		93		91	
CCV 240-177880/95	16:11	72		81		80		84		84	
CCB 240-177880/96	16:15	73		76		79		87		86	
240-49171-11	16:19	76		81		83		87		85	
240-49171-13	16:22	78		85		87		91		90	
240-49171-14	16:26	80		88		90		93		92	
240-49171-15	16:30	82		86		92		88		89	
240-49171-16	16:34	80		90		90		95		94	
240-49171-17	16:38	78		88		86		92		91	
240-49171-20	16:45	72		82		80		85		85	
240-49171-21	16:49	71		79		79		84		84	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/24/2015 End Date: 04/24/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
CCV 240-177880/107	16:57	67		74		73		77		78	
CCB 240-177880/108	17:00	68		71		73		81		81	
CRI 240-177880/118	17:39	69		74		73		82		81	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/24/2015 End Date: 04/24/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-177880/3 IC	09:07	97		98		97					
STD2 240-177880/4 IC	09:10	96		97		93					
STD3 240-177880/5 IC	09:14	96		96		91					
STD4 240-177880/6 IC	09:18	98		98		99					
ICV 240-177880/7	09:22	98		98		95					
ICB 240-177880/8	09:26	100		100		100					
CRI 240-177880/9	09:30	101		101		100					
ICSA 240-177880/10	09:33	93		94		90					
ICSAB 240-177880/11	09:37	92		93		90					
CCV 240-177880/62	14:06	88		90		87					
CCB 240-177880/63	14:10	89		90		91					
MB 240-177128/1-A ^2	14:18	87		88		93					
LCS 240-177128/2-A ^:	14:21	87		88		89					
240-49171-3	14:25	91		93		94					
240-49171-3 SD	14:29	90		92		94					
240-49171-3 PDS	14:33	89		90		90					
240-49171-3 DU	14:36	90		91		92					
240-49171-3 MS	14:40	92		93		94					
CCV 240-177880/74	14:51	92		94		91					
CCB 240-177880/75	14:55	93		93		95					
CCV 240-177880/83	15:26	95		96		92					
CCB 240-177880/84	15:29	94		95		96					
CRI 240-177880/85	15:33	95		96		97					
MB 240-176698/1-A ^2	15:37	89		91		97					
LCS 240-176698/2-A ^:	15:41	88		88		90					
240-49171-1	15:45	92		94		95					
240-49171-1 SD	15:48	93		95		96					
240-49171-1 PDS	15:52	89		91		90					
240-49171-1 DU	15:56	91		92		93					
240-49171-1 MS	16:00	92		94		95					
240-49171-2	16:03	96		98		98					
240-49171-4	16:07	96		98		98					
CCV 240-177880/95	16:11	90		92		90					
CCB 240-177880/96	16:15	91		92		93					
240-49171-11	16:19	91		93		94					
240-49171-13	16:22	95		96		97					
240-49171-14	16:26	96		98		99					
240-49171-15	16:30	91		91		93					
240-49171-16	16:34	97		99		99					
240-49171-17	16:38	96		97		97					
240-49171-20	16:45	92		93		93					
240-49171-21	16:49	90		91		93					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/24/2015 End Date: 04/24/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
CCV 240-177880/107	16:57	86		88		85					
CCB 240-177880/108	17:00	86		87		89					
CRI 240-177880/118	17:39	86		88		89					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/27/2015 End Date: 04/27/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-178191/3 IC	14:08	96		102		98		98		98	
STD2 240-178191/4 IC	14:11	94		103		96		94		95	
STD3 240-178191/5 IC	14:15	91		97		94		90		91	
STD4 240-178191/6 IC	14:19	92		96		91		96		95	
ICV 240-178191/7	14:23	94		98		97		93		94	
ICB 240-178191/8	14:27	97		95		97		99		98	
CRI 240-178191/9	14:31	97		100		98		99		99	
ICSA 240-178191/10	14:35	81		94		85		83		87	
ICSAB 240-178191/11	14:38	80		88		83		83		84	
CCV 240-178191/24	15:27	95		105		100		98		98	
CCB 240-178191/25	15:31	98		98		101		102		102	
240-49171-18	15:58	112		120		118		114		112	
240-49171-18	16:05	93		93		96		97		96	
CCV 240-178191/35	16:09	88		97		92		91		91	
CCB 240-178191/36	16:13	92		91		92		96		95	
CRI 240-178191/37	16:16	93		97		96		98		98	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/27/2015 End Date: 04/27/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-178191/3 IC	14:08	100		99		99					
STD2 240-178191/4 IC	14:11	99		98		96					
STD3 240-178191/5 IC	14:15	96		97		92					
STD4 240-178191/6 IC	14:19	98		96		99					
ICV 240-178191/7	14:23	99		98		96					
ICB 240-178191/8	14:27	100		100		100					
CRI 240-178191/9	14:31	100		100		101					
ICSA 240-178191/10	14:35	92		92		90					
ICSAB 240-178191/11	14:38	92		91		89					
CCV 240-178191/24	15:27	103		103		98					
CCB 240-178191/25	15:31	103		101		102					
240-49171-18	15:58	111		110		109					
240-49171-18	16:05	99		99		100					
CCV 240-178191/35	16:09	97		97		93					
CCB 240-178191/36	16:13	97		97		98					
CRI 240-178191/37	16:16	100		99		101					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/28/2015 End Date: 04/28/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD4 240-178352/6 IC	11:51	105				99		113		112	
ICV 240-178352/7	11:55	102		105		102		96		98	
ICB 240-178352/8	11:58	102		108		104		107		107	
CRI 240-178352/9	12:02	105		103		104		102		102	
ICSA 240-178352/10	12:06	84		92		86		84		87	
ICSAB 240-178352/11	12:10	82		86		85		83		85	
CCV 240-178352/12	12:14	104		102		106		97		98	
CCB 240-178352/13	12:17	99		103		103		104		103	
MB 240-177128/1-A ^2	12:29	89		89		88		90		90	
LCS 240-177128/2-A ^2	12:33	84		89		84		89		88	
240-49171-3	12:36	105		105		108		103		103	
240-49171-3 SD	12:40	101		100		105		100		101	
240-49171-3 PDS	12:44	90		105		93		97		97	
240-49171-3 DU	12:47	94		92		95		93		94	
240-49171-3 MS	12:51	99		99		102		98		97	
CCV 240-178352/24	12:59	105		110		105		100		102	
CCB 240-178352/25	13:02	107		100		108		101		101	
240-49171-18	13:37	111		114		117		109		107	
240-49171-18	13:40	111		112		115		109		108	
CCV 240-178352/36	13:44	110		100		111		95		96	
CCB 240-178352/37	13:48	99		103		100		103		103	
CRI 240-178352/40	13:59	98		97		98		98		99	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 04/28/2015 End Date: 04/28/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD4 240-178352/6 IC	11:51	109		108		107					
ICV 240-178352/7	11:55	100		101		97					
ICB 240-178352/8	11:58	105		104		103					
CRI 240-178352/9	12:02	102		102		102					
ICSA 240-178352/10	12:06	93		93		90					
ICSAB 240-178352/11	12:10	92		92		89					
CCV 240-178352/12	12:14	101		102		98					
CCB 240-178352/13	12:17	104		103		102					
MB 240-177128/1-A ^2	12:29	93		95		100					
LCS 240-177128/2-A ^2	12:33	96		95		95					
240-49171-3	12:36	104		104		102					
240-49171-3 SD	12:40	102		101		102					
240-49171-3 PDS	12:44	100		100		97					
240-49171-3 DU	12:47	97		96		98					
240-49171-3 MS	12:51	101		100		99					
CCV 240-178352/24	12:59	104		103		98					
CCB 240-178352/25	13:02	101		100		100					
240-49171-18	13:37	107		107		107					
240-49171-18	13:40	107		106		106					
CCV 240-178352/36	13:44	99		100		95					
CCB 240-178352/37	13:48	102		102		101					
CRI 240-178352/40	13:59	98		100		99					

MTMSCCBDILH20-192 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/20/15 Analyst: AS Instrument: I10

Review Items A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV*: = 90 – 110%) (*CCV*: 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

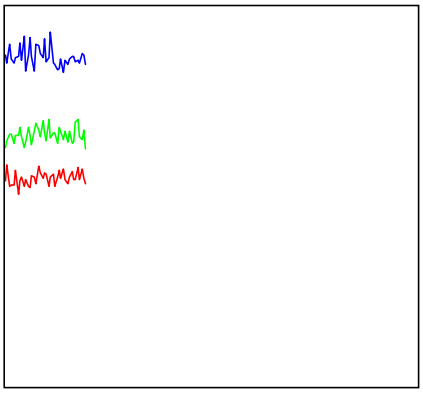
Level I Analyst: Anjali Sharma Date: 4/20/15 Time: 10:21 – 11:54
Level I Analyst: [signature] Date: 4/22/15 Time: 12:15 - 21:48

Level II Reviewer: [signature] Date: 4/20/15 Time: 10:21 - 11:54
Level II Reviewer: [signature] Date: 04/22/2015 Time: 10:21 - 21:48

Comments:

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	2676	2738.7	3.22
89	5000	3124	3309.1	3.11
205	5000	4243	4339.8	2.96
156/140	1	0.385 %	0.605 %	28.72
70/140	2	1.130 %	1.054 %	19.83
115	200	42	47.2	37.88
63	500	349	335.9	7.57
60	50	30	27.6	23.31
121	50	21	10.9	41.42
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

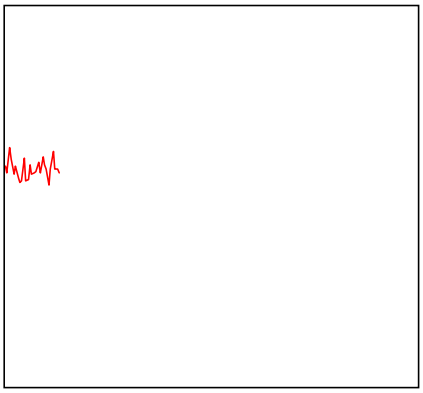
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	15.00	L/min
MU./Dil. Gas	0.55	L/min	Ar Gas Tank Press	5.98E+2	kPa			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1122	1142.2	4.30
51	50	43	34.7	20.79
52	200	152	130.1	11.15
51/59	5	3.831 %	3.040 %	20.85
52/59	20	13.544 %	11.413 %	12.10
7	50	12	12.7	34.09
89	2000	987	968.1	4.69
205	5000	2637	2699.8	2.23
6	20	0	1.0	120.89
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	14.96	L/min
MU./Dil. Gas	0.55	L/min	Ar Gas Tank Press	5.99E+2	kPa			

US EPA Tune Check Sample Report

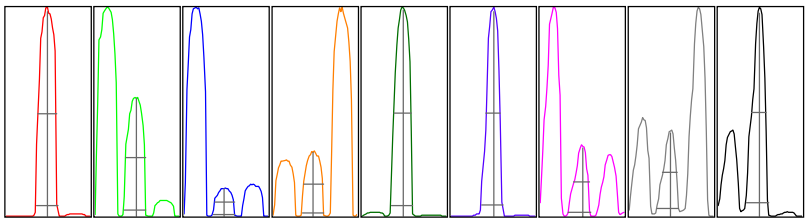
Batch Folder D:\Analytical Runs\I10042015A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	38955	0.57	5.00	
24	116148	0.70	5.00	
25	15543	0.46	5.00	
26	17843	1.11	5.00	
59	121722	0.31	5.00	
115	177741	0.47	5.00	
206	67089	0.73	5.00	
207	59450	0.80	5.00	
208	141248	0.69	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	38879	38729	39235	39138	38793
24	117215	116559	116280	115461	115225
25	15626	15604	15473	15536	15473
26	18178	17828	17816	17706	17687
59	121286	121564	122263	121555	121942
115	178829	176828	176965	178198	177885
206	67780	66533	66753	67055	67321
207	60273	59204	59323	59384	59069
208	142385	140451	142008	141271	140124

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6273	9.00	8.9 - 9.1		0.752	0.850	
24	18643	24.00	23.9 - 24.1		0.783	0.850	
25	2474	24.95	24.9 - 25.1		0.788	0.850	
26	2829	25.95	25.9 - 26.1		0.789	0.850	
59	20345	59.00	58.9 - 59.1		0.785	0.850	
115	33723	115.05	114.9 - 115.1		0.751	0.850	
206	12822	206.05	205.9 - 206.1		0.763	0.850	
207	11267	207.00	206.9 - 207.1		0.766	0.850	
208	27545	208.00	207.9 - 208.1		0.785	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

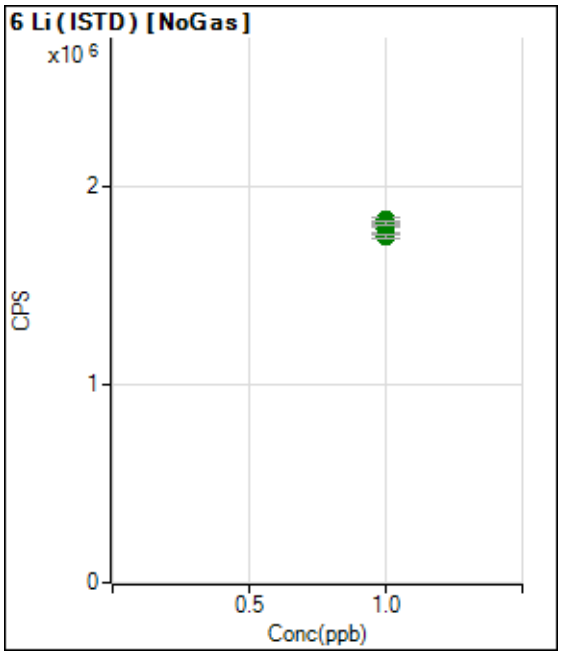
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

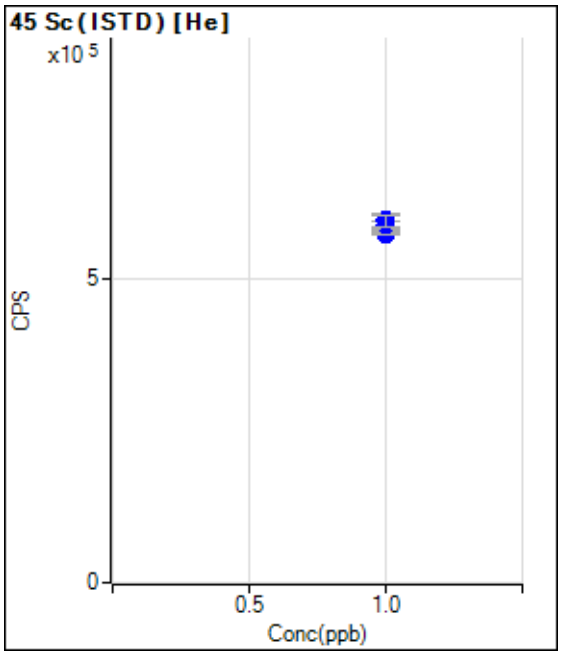
Calibration for 017_CCV.d

Batch Folder: D:\Analytical Runs\I10042015B.b\
Analysis File: I10042015B.batch.bin
DA Date-Time: 4/20/2015 11:54:19 AM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

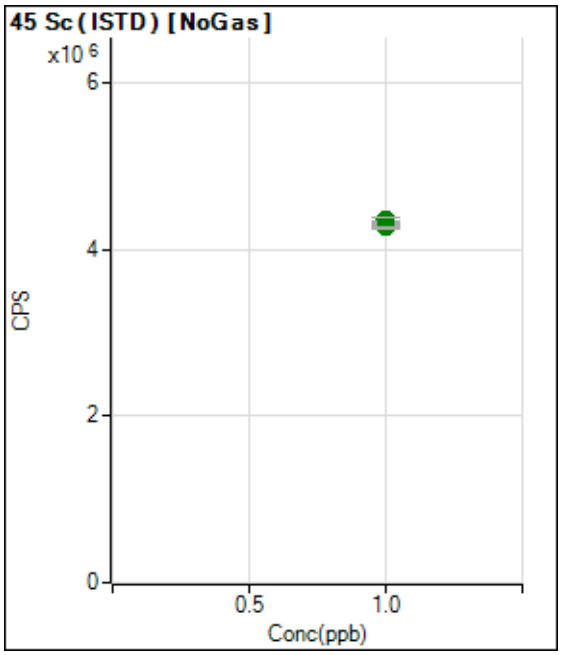
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/20/2015 10:25:17 AM
2	003CALS.d	STD1-1906323	4/20/2015 10:29:07 AM
3	004CALS.d	STD2-1904110	4/20/2015 10:32:55 AM
4	005CALS.d	STD3-1906333	4/20/2015 10:36:43 AM
5	006CALS.d	STD4-1906536	4/20/2015 10:40:29 AM



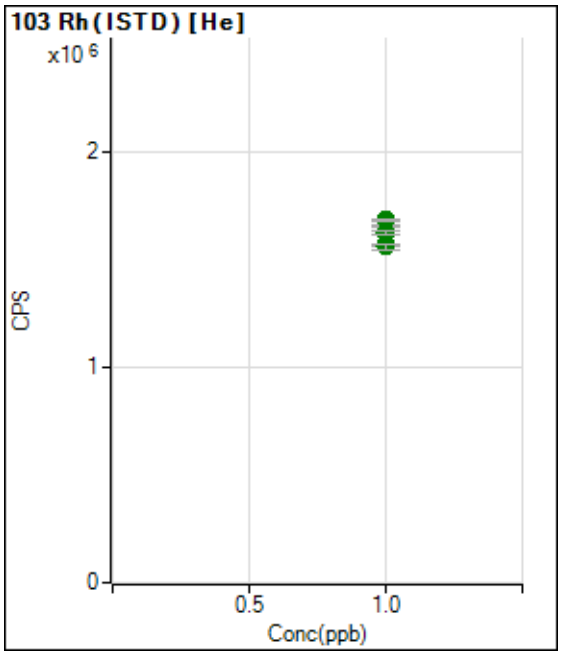
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1803796.89		A	1.2
2	☐	1.000		1829983.13		A	1.2
3	☐	1.000		1782193.55		A	1.6
4	☐	1.000		1742537.93		A	1.0
5	☐	1.000		1809459.47		A	1.0



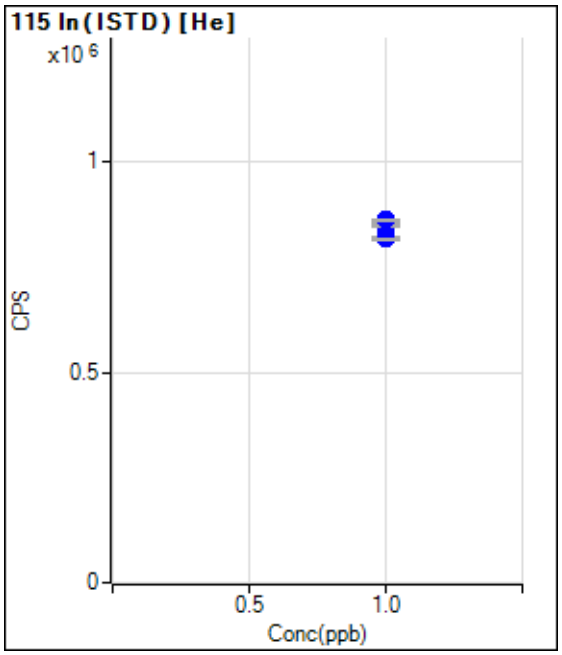
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		574766.30		P	0.8
2	☐	1.000		588684.67		P	2.5
3	☐	1.000		597812.59		P	4.0
4	☐	1.000		589733.43		P	2.3
5	☐	1.000		595610.05		P	3.0



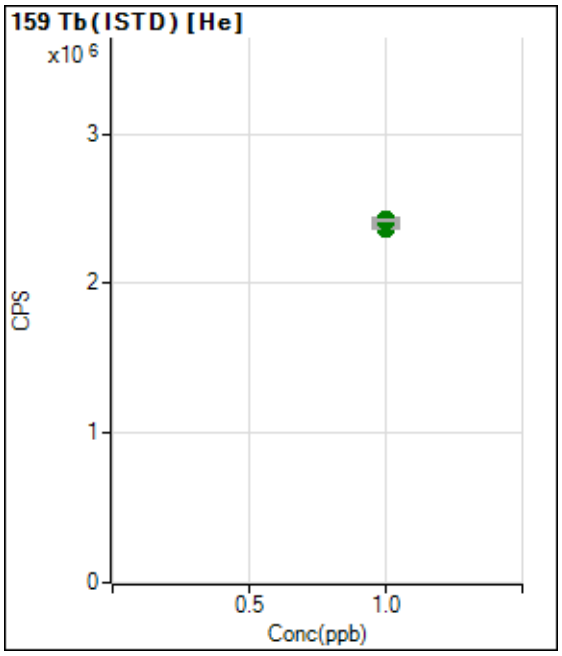
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4296856.77		A	0.3
2	☐	1.000		4298089.13		A	0.5
3	☐	1.000		4333353.30		A	0.1
4	☐	1.000		4352110.38		A	1.8
5	☐	1.000		4264431.08		A	0.5



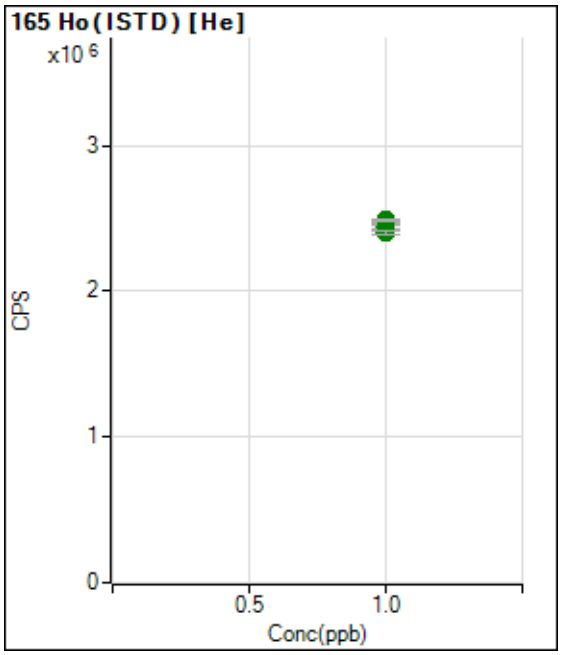
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1652712.47		A	1.0
2	☐	1.000		1620297.75		A	1.3
3	☐	1.000		1565924.42		A	0.5
4	☐	1.000		1556491.19		A	2.0
5	☐	1.000		1681733.06		A	0.4



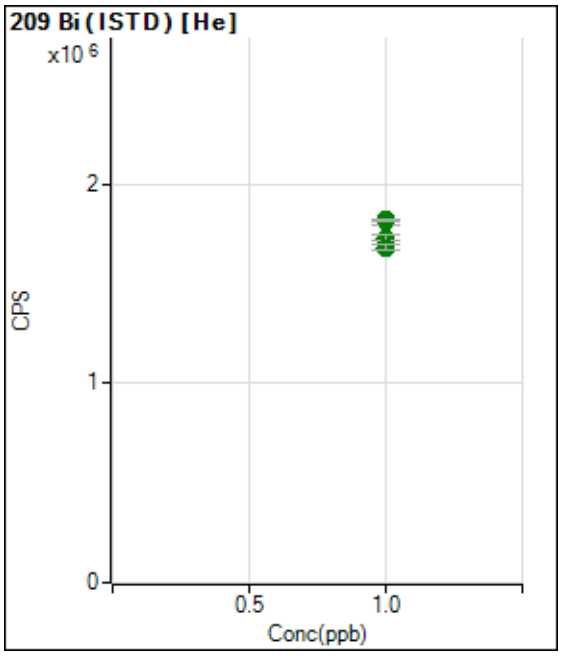
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		852389.20		P	0.8
2	☐	1.000		847101.31		P	0.4
3	☐	1.000		820615.51		P	0.6
4	☐	1.000		815922.78		P	0.5
5	☐	1.000		861709.70		P	0.7



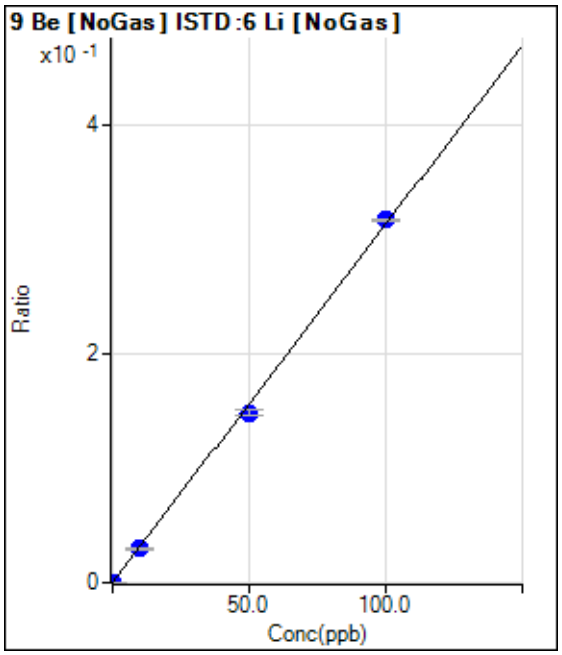
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2425956.29		A	1.3
2	☐	1.000		2406371.22		A	1.5
3	☐	1.000		2383879.77		A	1.2
4	☐	1.000		2370841.99		A	0.8
5	☐	1.000		2422876.64		A	0.7



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2452679.83		A	1.7
2	☐	1.000		2463165.67		A	0.9
3	☐	1.000		2444894.69		A	1.4
4	☐	1.000		2398504.97		A	0.8
5	☐	1.000		2489280.81		A	0.3



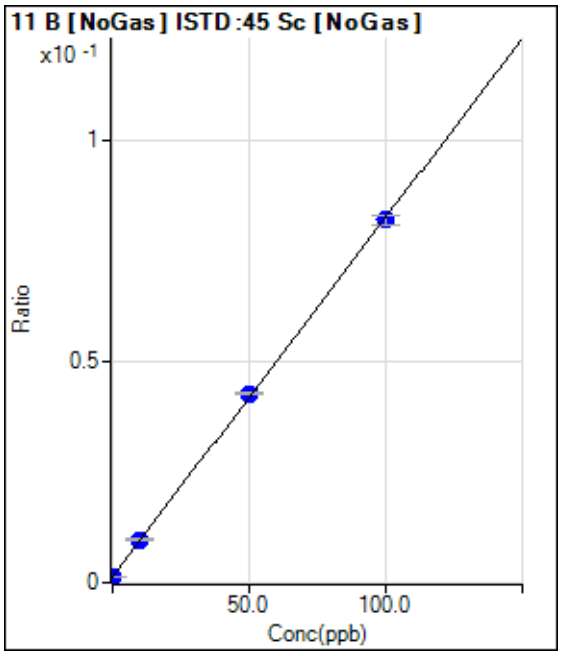
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1810472.84		A	1.3
2	☐	1.000		1809267.22		A	1.7
3	☐	1.000		1729560.25		A	2.0
4	☐	1.000		1682428.75		A	1.6
5	☐	1.000		1820015.13		A	0.7



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.70	0.0000	P	173.2
2	☐	10.000	9.493	54361.39	0.0297	P	5.6
3	☐	50.000	47.431	264560.43	0.1485	P	3.0
4	☐	100.000	101.335	552758.80	0.3172	P	0.5
5	☐			103.71	0.0001	P	17.4

y = 0.0031 * x + 2.0263E-006
R = 0.9994
DL = 0.003363
BEC = 0.0006473

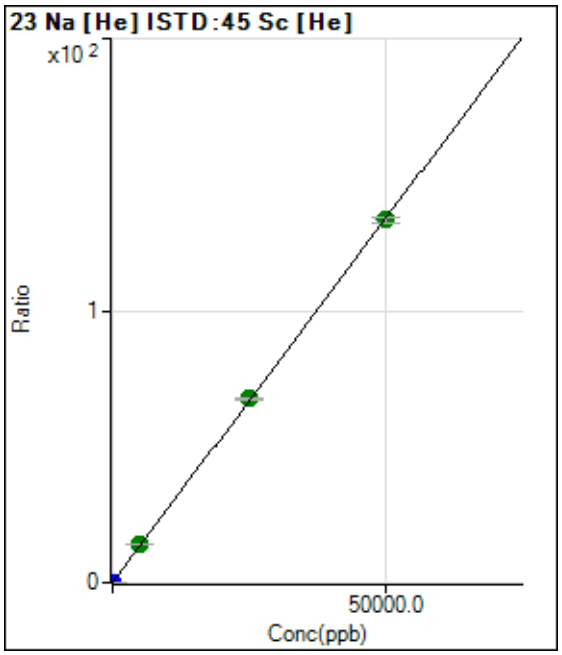
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5845.61	0.0014	P	7.2
2	☐	10.000	10.375	42104.10	0.0098	P	2.8
3	☐	50.000	51.094	185912.75	0.0429	P	1.4
4	☐			8795.10	0.0020	P	1.7
5	☐	100.000	99.415	350463.83	0.0822	P	2.7

y = 8.1306E-004 * x + 0.0014
R = 0.9999
DL = 0.359
BEC = 1.673

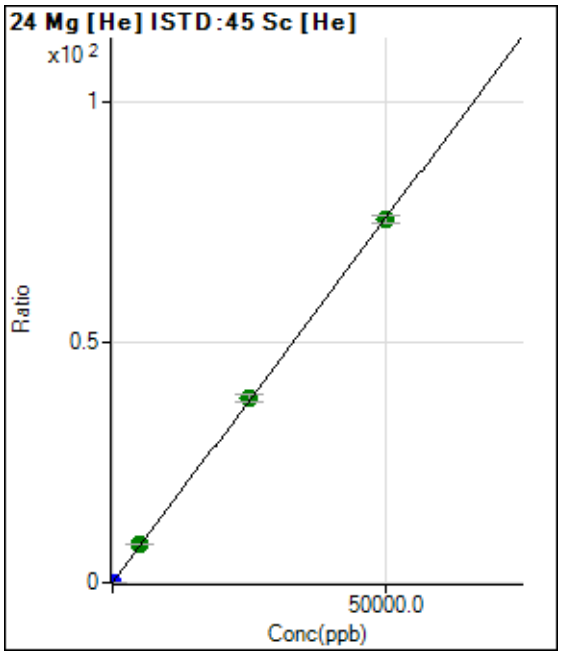
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33509.39	0.0583	P	5.1
2	☐	5000.000	5254.690	8305773.52	14.1169	A	3.4
3	☐	25000.000	25229.736	40367945.62	67.5589	A	1.8
4	☐	50000.000	49859.663	78687391.32	133.4548	A	1.4
5	☐			51450.97	0.0863	P	6.1

y = 0.0027 * x + 0.0583
R = 1.0000
DL = 3.336
BEC = 21.79

Weight: <None>
Min Conc: <None>

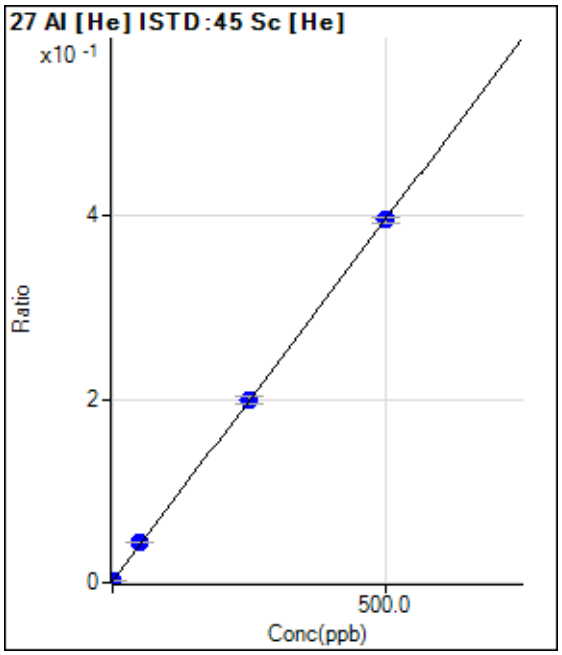


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	926.00	0.0016	P	2.4
2	☐	5000.000	5290.034	4722367.29	8.0264	A	3.5
3	☐	25000.000	25330.341	22951103.26	38.4268	A	3.4
4	☐	50000.000	49805.826	44543324.15	75.5552	A	2.1
5	☐			6953.57	0.0116	P	19.0

y = 0.0015 * x + 0.0016
R = 1.0000
DL = 0.07731
BEC = 1.062

Weight: <None>
Min Conc: <None>

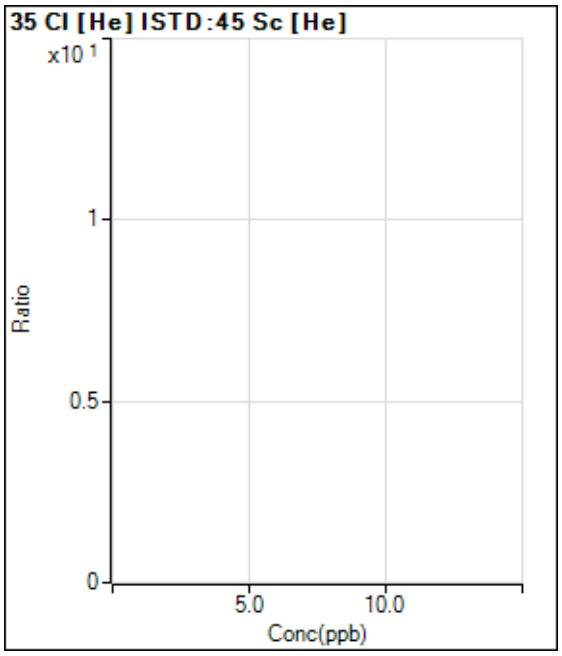
Calibration for 017_CCV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	748.92	0.0013	P	3.3
2	☐	50.000	54.305	25975.05	0.0441	P	2.8
3	☐	250.000	250.431	118769.83	0.1989	P	3.7
4	☐	500.000	499.354	233035.80	0.3952	P	1.6
5	☐			2339.07	0.0039	P	3.5

y = 7.8891E-004 * x + 0.0013
R = 1.0000
DL = 0.1646
BEC = 1.651

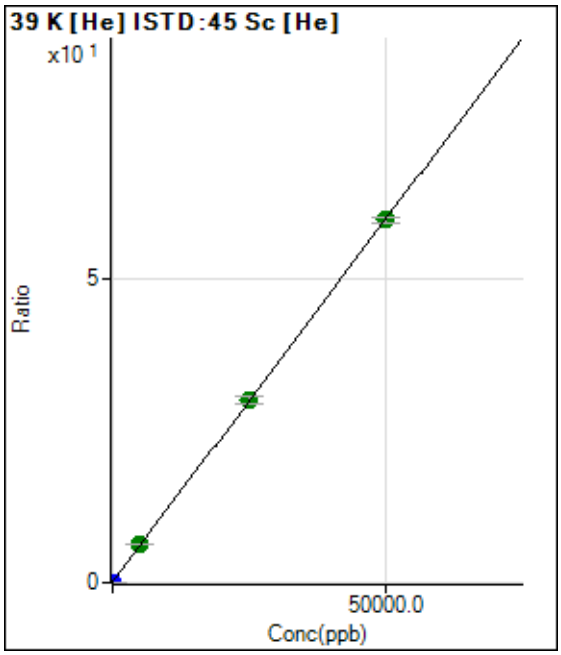
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			13317558.27	23.1714	A	1.2
2	☐			13306259.19	22.6098	A	1.9
3	☐			13738800.84	23.0067	A	4.1
4	☐			13733662.88	23.2947	A	2.0
5	☐			13788611.95	23.1636	A	3.0

Excluded

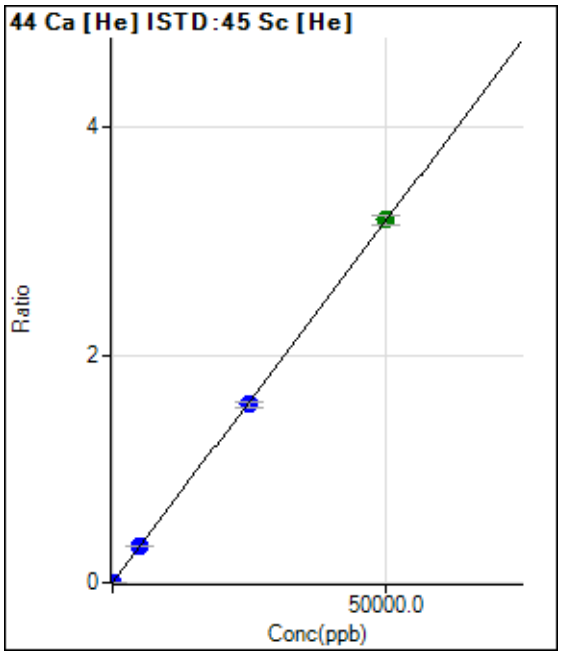
Calibration for 017_CCV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64779.15	0.1127	P	0.1
2	☐	5000.000	5227.338	3730768.02	6.3381	A	1.3
3	☐	25000.000	25071.484	17899162.71	29.9709	A	3.7
4	☐	50000.000	49941.524	35133648.61	59.5891	A	1.6
5	☐			74501.09	0.1251	P	1.6

y = 0.0012 * x + 0.1127
R = 1.0000
DL = 0.2061
BEC = 94.64

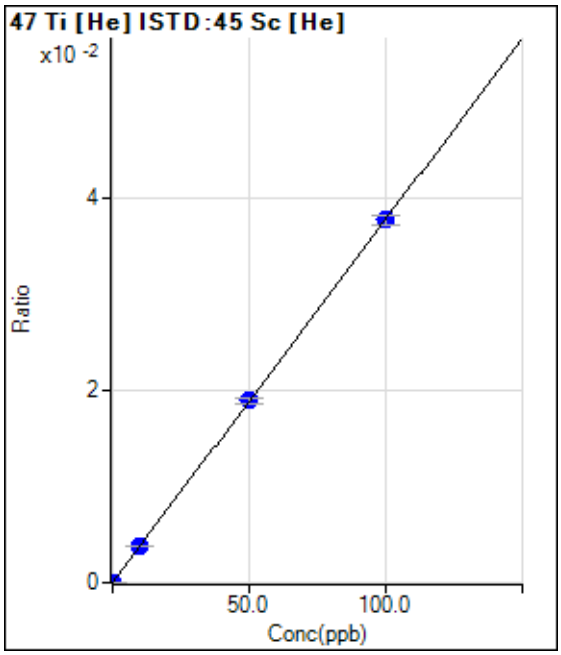
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	574.55	0.0010	P	5.4
2	☐	5000.000	5038.607	188854.50	0.3209	P	1.4
3	☐	25000.000	24635.115	934803.66	1.5650	P	3.0
4	☐	50000.000	50178.582	1878505.18	3.1866	A	2.7
5	☐			1412.29	0.0024	P	5.0

y = 6.3485E-005 * x + 9.9986E-004
R = 1.0000
DL = 2.534
BEC = 15.75

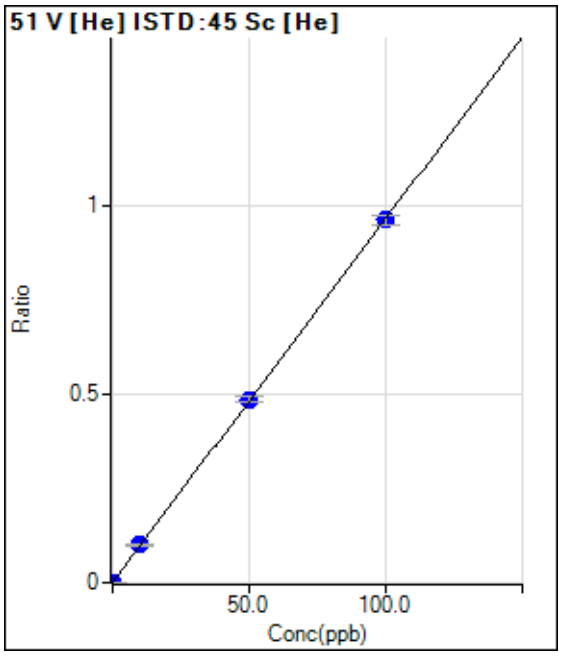
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.2
2	☐	10.000	9.998	2224.61	0.0038	P	3.6
3	☐	50.000	50.088	11311.41	0.0189	P	3.1
4	☐			23.34	0.0000	P	47.0
5	☐	100.000	99.956	22495.20	0.0378	P	2.5

y = 3.7802E-004 * x + 1.9224E-006
R = 1.0000
DL = 0.02643
BEC = 0.005086

Weight: <None>
Min Conc: <None>

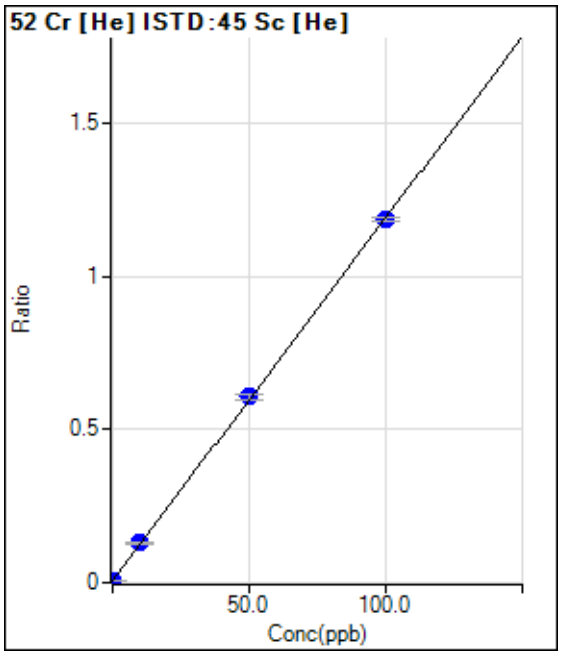


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	264.79	0.0005	P	182.4
2	☐	10.000	10.390	59298.95	0.1008	P	4.7
3	☐	50.000	50.381	290945.49	0.4870	P	2.8
4	☐	100.000	99.770	568327.17	0.9641	P	2.6
5	☐			584.23	0.0010	P	100.3

y = 0.0097 * x + 4.5623E-004
R = 1.0000
DL = 0.2585
BEC = 0.04724

Weight: <None>
Min Conc: <None>

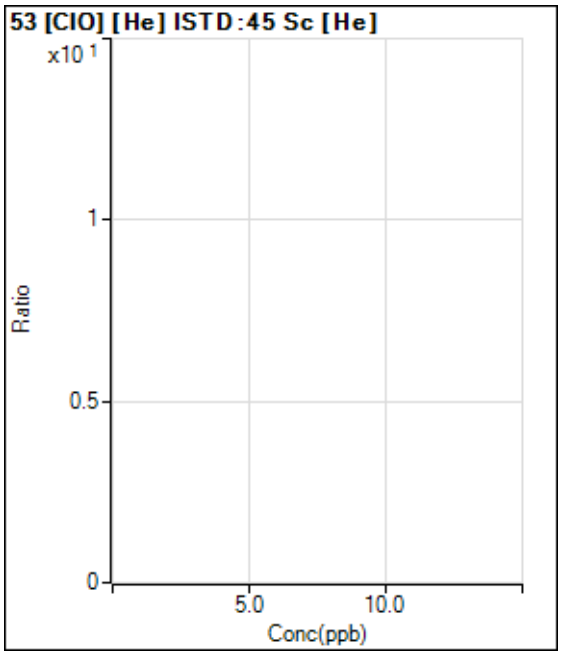
Calibration for 017_CCV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3008.07	0.0052	P	4.9
2	☐	10.000	10.531	76509.00	0.1300	P	2.1
3	☐	50.000	50.821	362777.56	0.6074	P	3.3
4	☐	100.000	99.537	698462.14	1.1846	P	1.2
5	☐			3163.65	0.0053	P	1.4

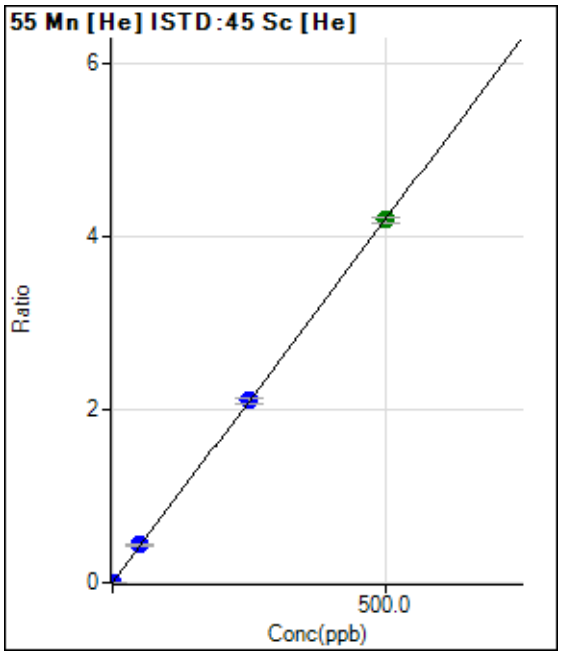
y = 0.0118 * x + 0.0052
R = 0.9999
DL = 0.06547
BEC = 0.4418

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			929.72	0.0016	P	20.9
2	☐			9451.07	0.0160	P	3.4
3	☐			44868.20	0.0751	P	4.4
4	☐			84923.37	0.1440	P	1.3
5	☐			640.78	0.0011	P	25.2

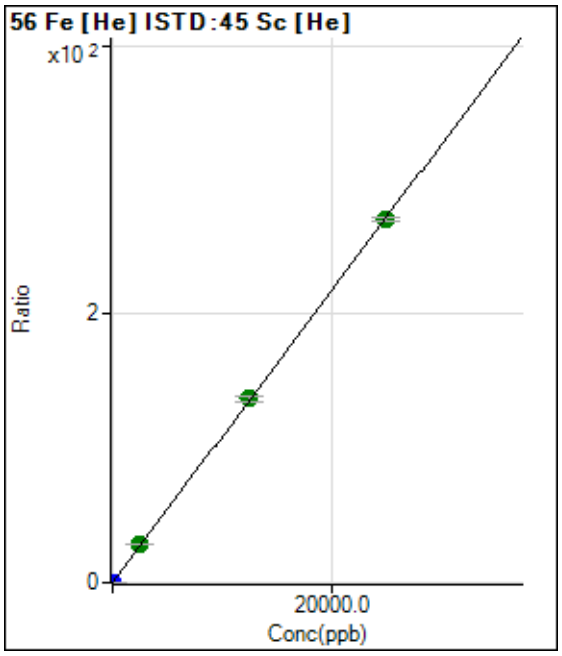
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	167.78	0.0003	P	11.3
2	☐	50.000	51.842	255892.60	0.4348	P	2.3
3	☐	250.000	251.149	1257657.31	2.1055	P	3.1
4	☐	500.000	499.241	2467533.30	4.1851	A	1.4
5	☐			780.03	0.0013	P	20.3

y = 0.0084 * x + 2.9200E-004
R = 1.0000
DL = 0.01179
BEC = 0.03483

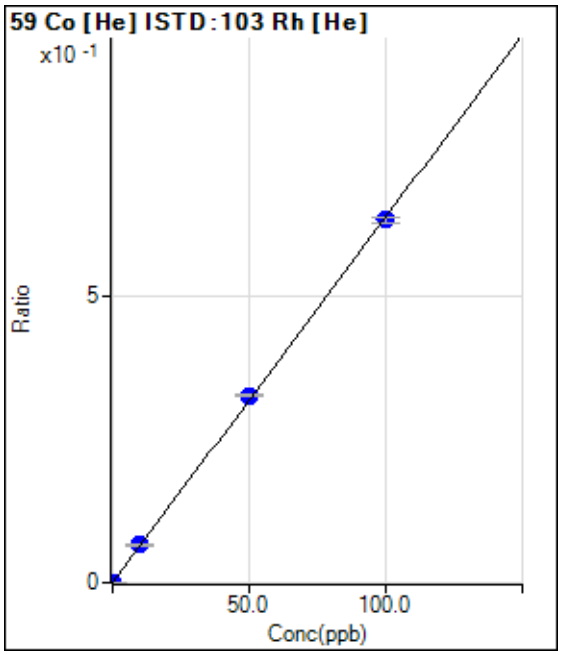
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6091.12	0.0106	P	3.4
2	☐	2500.000	2615.834	16713658.78	28.3945	A	0.6
3	☐	12500.000	12662.444	82076887.85	137.4083	A	3.3
4	☐	25000.000	24907.195	159363620.33	270.2737	A	1.1
5	☐			156745.49	0.2616	P	29.5

y = 0.0109 * x + 0.0106
R = 1.0000
DL = 0.1004
BEC = 0.9765

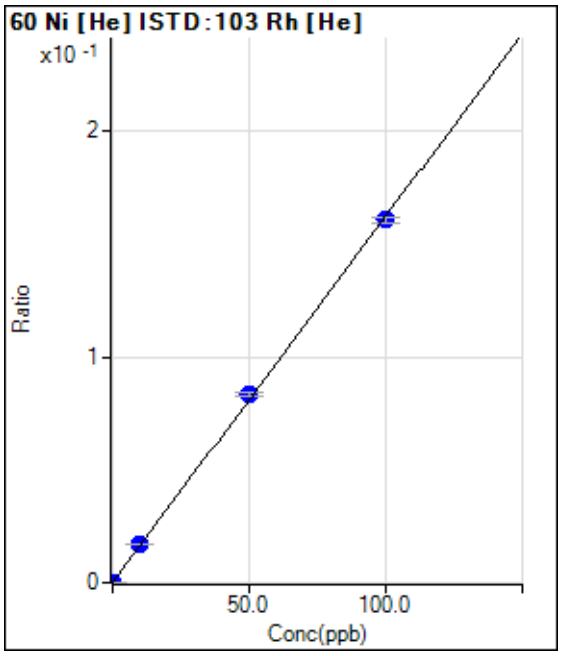
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	54.44	0.0000	P	37.5
2	☐	10.000	10.268	106199.60	0.0656	P	1.4
3	☐	50.000	51.277	512381.01	0.3272	P	1.4
4	☐	100.000	99.335	986451.91	0.6339	P	1.3
5	☐			173.34	0.0001	P	30.4

y = 0.0064 * x + 3.2979E-005
R = 0.9999
DL = 0.00581
BEC = 0.005169

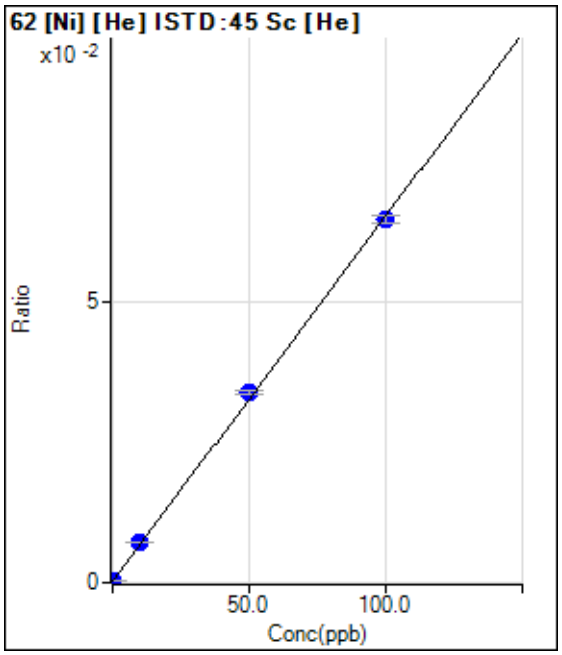
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	95.56	0.0001	P	57.0
2	☐	10.000	10.448	27565.71	0.0170	P	0.8
3	☐	50.000	51.677	131388.63	0.0839	P	1.9
4	☐	100.000	99.117	250363.12	0.1609	P	1.7
5	☐			251.12	0.0001	P	9.6

y = 0.0016 * x + 5.7991E-005
R = 0.9998
DL = 0.06111
BEC = 0.03574

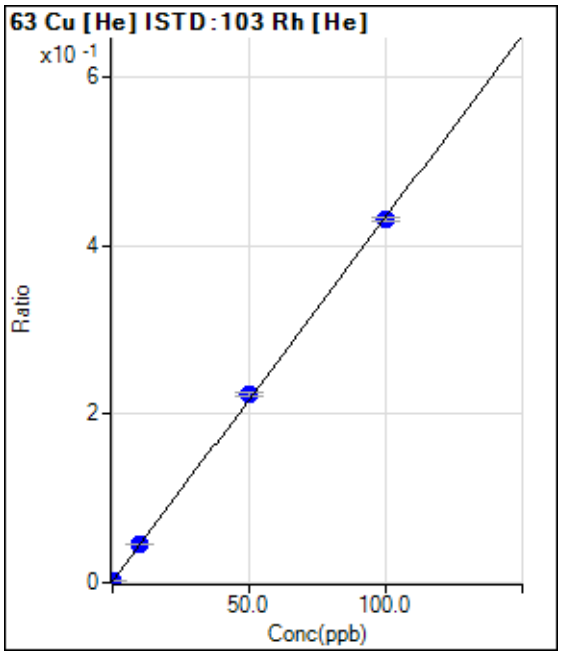
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.11	0.0002	P	21.9
2	☐	10.000	10.708	4211.66	0.0072	P	2.3
3	☐	50.000	51.776	20229.39	0.0339	P	2.6
4	☐	100.000	99.041	38083.66	0.0646	P	2.0
5	☐			151.12	0.0003	P	17.5

y = 6.5028E-004 * x + 1.9313E-004
R = 0.9997
DL = 0.1952
BEC = 0.297

Weight: <None>
Min Conc: <None>

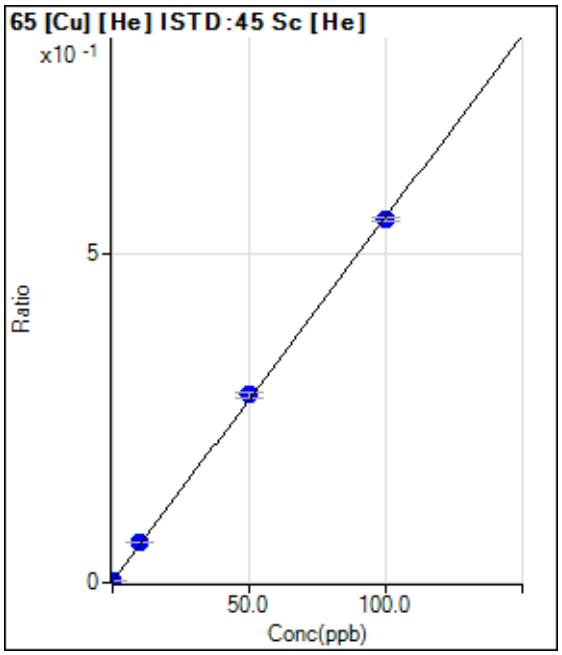


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2489.10	0.0015	P	4.6
2	☐	10.000	10.394	75327.95	0.0465	P	1.1
3	☐	50.000	51.334	350202.36	0.2237	P	2.0
4	☐	100.000	99.294	671068.15	0.4312	P	1.0
5	☐			3062.53	0.0018	P	2.4

y = 0.0043 * x + 0.0015
R = 0.9998
DL = 0.04755
BEC = 0.348

Weight: <None>
Min Conc: <None>

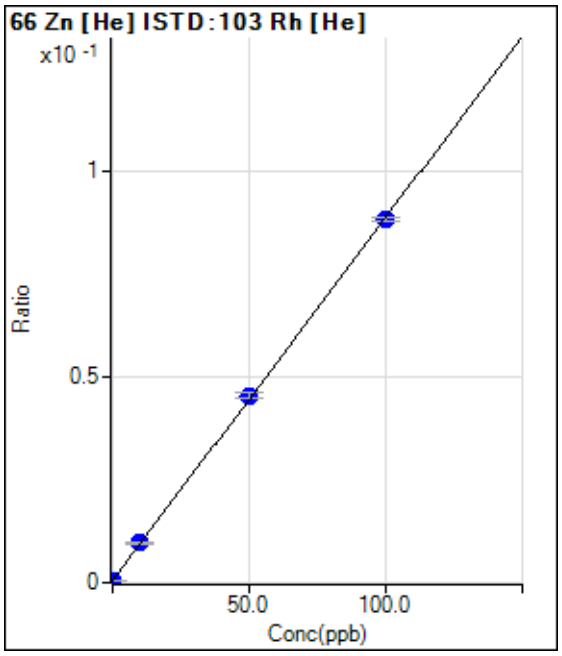
Calibration for 017_CCV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1071.16	0.0019	P	7.5
2	☐	10.000	10.830	36473.84	0.0620	P	3.1
3	☐	50.000	51.213	170970.41	0.2862	P	2.5
4	☐	100.000	99.310	326181.73	0.5532	P	1.2
5	☐			1393.41	0.0023	P	1.4

y = 0.0056 * x + 0.0019
R = 0.9999
DL = 0.07546
BEC = 0.3357

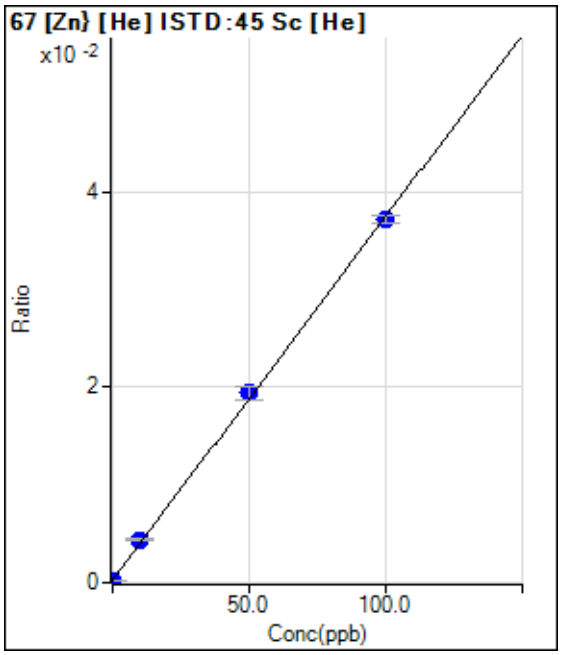
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	847.81	0.0005	P	10.1
2	☐	10.000	10.374	15620.29	0.0096	P	2.6
3	☐	50.000	51.083	71190.50	0.0455	P	2.6
4	☐	100.000	99.421	136960.26	0.0880	P	1.0
5	☐			2756.92	0.0016	P	1.0

y = 8.8000E-004 * x + 5.1281E-004
R = 0.9999
DL = 0.1768
BEC = 0.5827

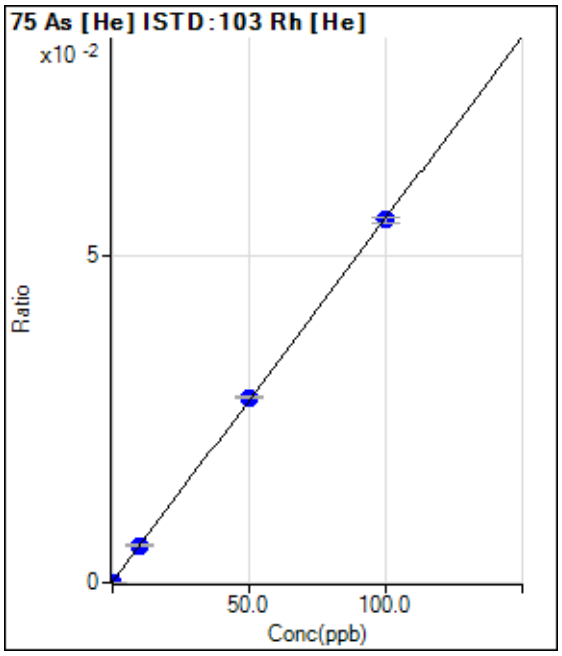
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	138.89	0.0002	P	4.3
2	☐	10.000	11.180	2592.45	0.0044	P	4.0
3	☐	50.000	51.458	11578.33	0.0194	P	6.3
4	☐	100.000	99.153	21907.98	0.0372	P	2.1
5	☐			387.79	0.0007	P	18.5

y = 3.7232E-004 * x + 2.4170E-004
R = 0.9998
DL = 0.08392
BEC = 0.6492

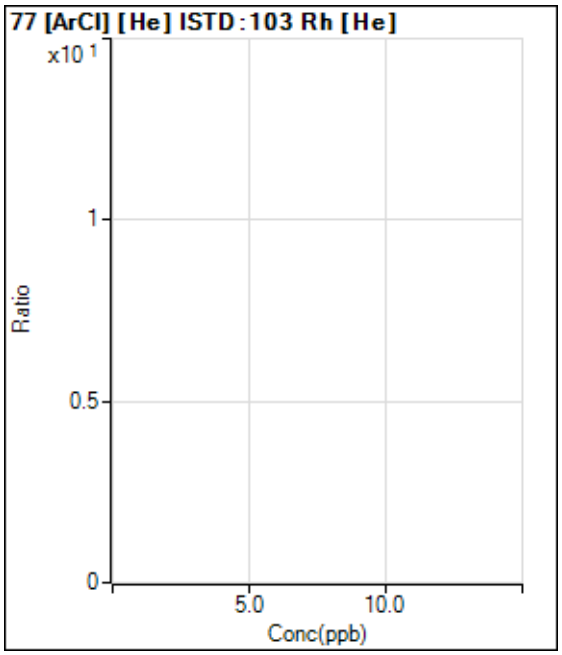
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	196.89	0.0001	P	10.6
2	☐	10.000	10.079	9289.18	0.0057	P	1.4
3	☐	50.000	50.822	44515.56	0.0284	P	1.2
4	☐	100.000	99.581	86503.94	0.0556	P	1.8
5	☐			179.23	0.0001	P	8.3

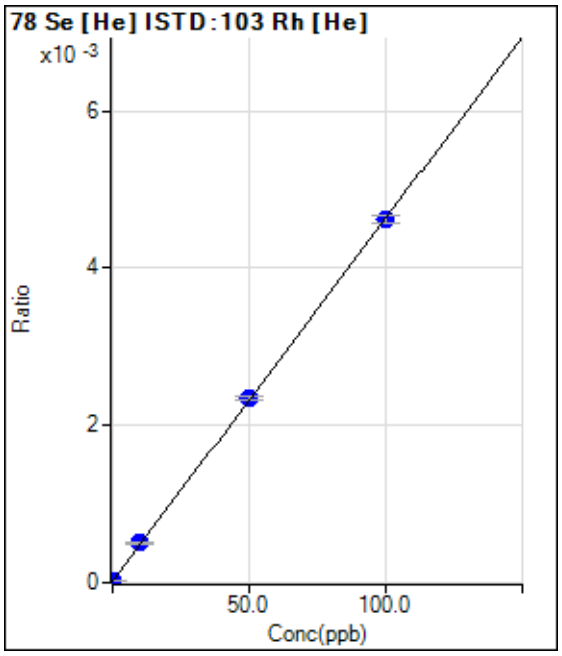
y = 5.5703E-004 * x + 1.1921E-004
R = 0.9999
DL = 0.06779
BEC = 0.214

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			29.63	0.0000	P	22.4
2	☐			262.98	0.0002	P	30.4
3	☐			1203.82	0.0008	P	3.2
4	☐			2144.67	0.0014	P	5.0
5	☐			44.45	0.0000	P	65.8

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	29.69	0.0000	P	16.4
2	☐	10.000	10.563	818.10	0.0005	P	4.6
3	☐	50.000	50.587	3680.98	0.0024	P	1.4
4	☐	100.000	99.650	7178.73	0.0046	P	2.1
5	☐			33.83	0.0000	P	13.0

y = 4.6114E-005 * x + 1.7980E-005

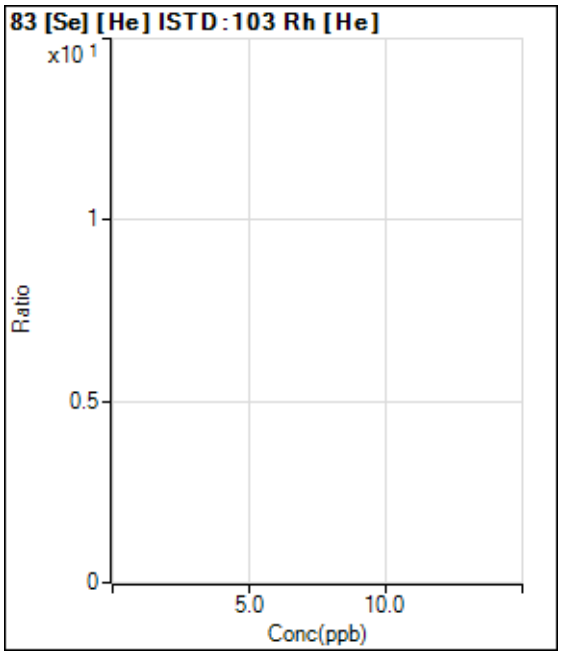
R = 1.0000

DL = 0.1916

BEC = 0.3899

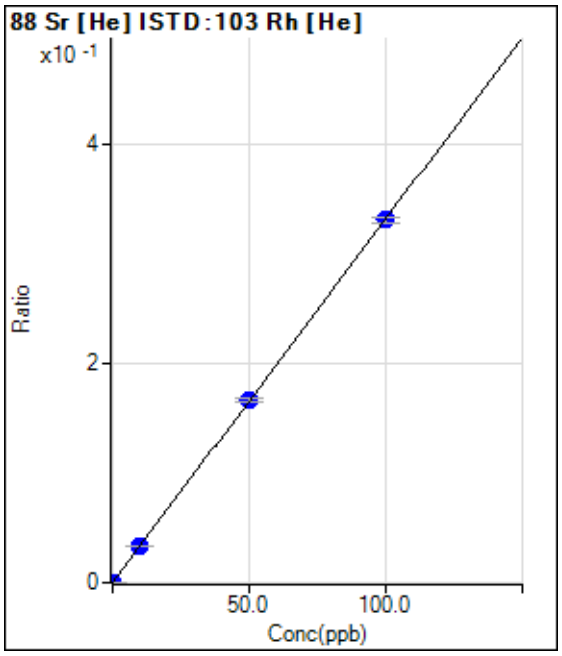
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			208.08	0.0001	P	3.0
2	☐			199.66	0.0001	P	6.8
3	☐			198.32	0.0001	P	2.3
4	☐			212.12	0.0001	P	9.7
5	☐			208.42	0.0001	P	16.6

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	142.23	0.0001	P	22.0
2	☐	10.000	10.030	54009.08	0.0333	P	0.9
3	☐	50.000	50.340	261429.42	0.1670	P	1.6
4	☐	100.000	99.827	515085.29	0.3310	P	1.7
5	☐			148.89	0.0001	P	16.0

y = 0.0033 * x + 8.6169E-005

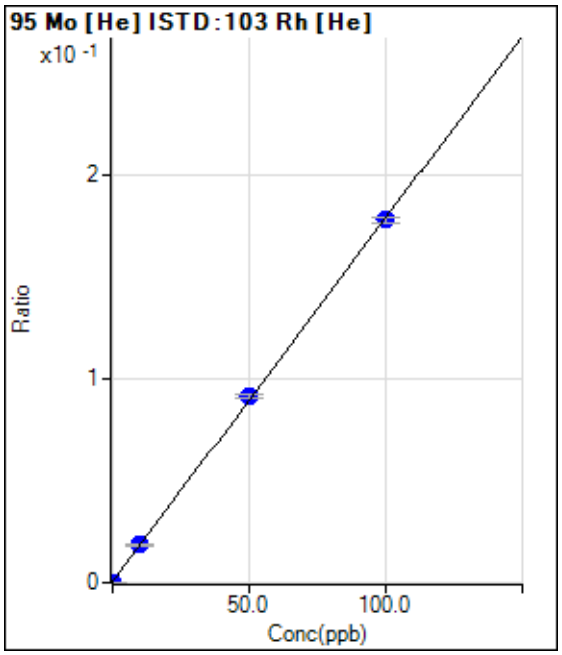
R = 1.0000

DL = 0.01713

BEC = 0.02599

Weight: <None>

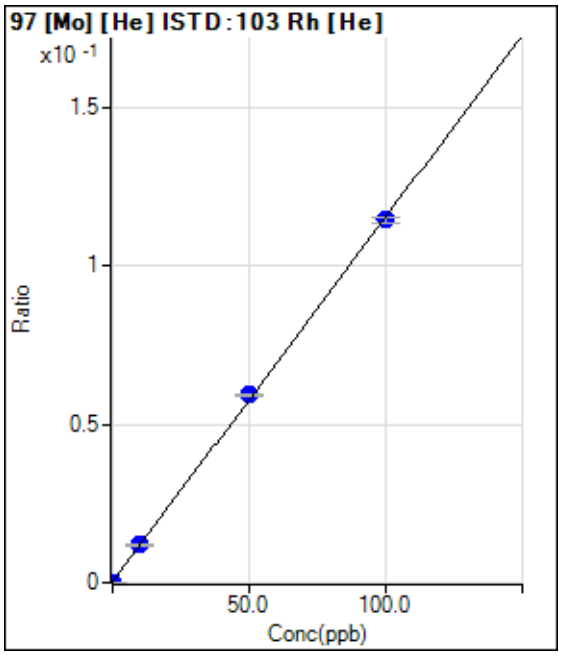
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	695.58	0.0004	P	7.7
2	☐	10.000	10.168	30097.13	0.0186	P	3.6
3	☐	50.000	50.923	143084.08	0.0914	P	2.2
4	☐			2521.33	0.0016	P	15.9
5	☐	100.000	99.522	299628.89	0.1782	P	1.6

y = 0.0018 * x + 4.2079E-004
R = 0.9999
DL = 0.05472
BEC = 0.2356

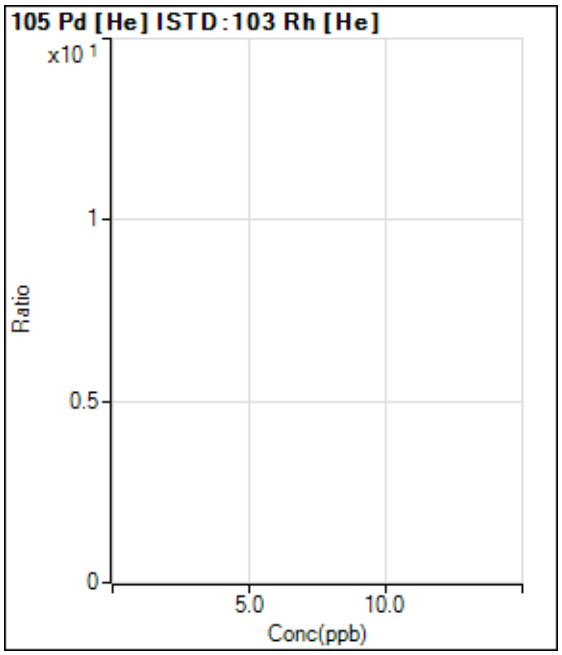
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	448.17	0.0003	P	13.0
2	☐	10.000	10.156	19359.72	0.0119	P	2.2
3	☐	50.000	51.346	92874.07	0.0593	P	1.5
4	☐			1622.38	0.0010	P	10.6
5	☐	100.000	99.312	192497.01	0.1145	P	1.7

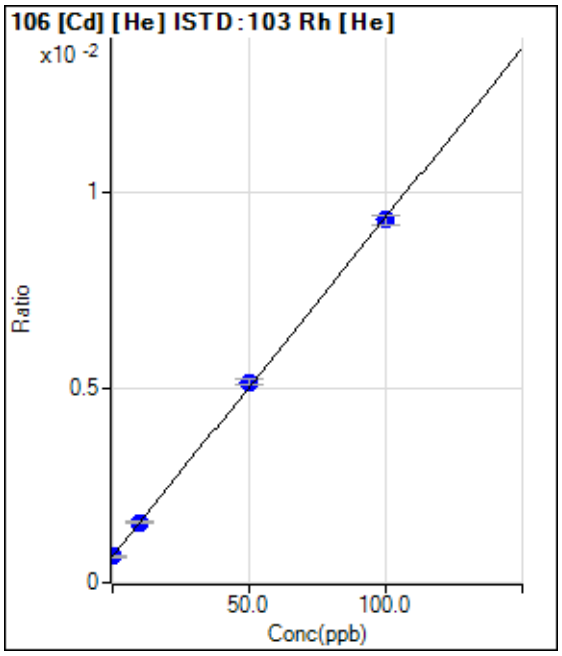
y = 0.0011 * x + 2.7132E-004
R = 0.9998
DL = 0.09188
BEC = 0.236

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1074.17	0.0006	P	10.0
2	☐			1129.73	0.0007	P	8.1
3	☐			1207.51	0.0008	P	1.9
4	☐			1211.22	0.0008	P	9.5
5	☐			1148.24	0.0007	P	17.2

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1110.48	0.0007	P	5.6
2	☐	10.000	9.930	2485.04	0.0015	P	2.7
3	☐	50.000	51.420	8043.97	0.0051	P	2.8
4	☐	100.000	99.297	14462.92	0.0093	P	2.8
5	☐			1160.99	0.0007	P	7.5

y = 8.6849E-005 * x + 6.7167E-004

R = 0.9998

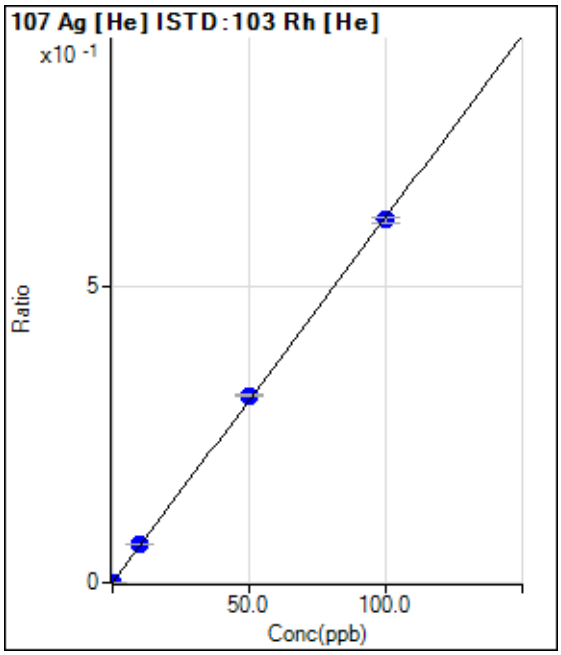
DL = 1.297

BEC = 7.734

Weight: <None>

Min Conc: <None>

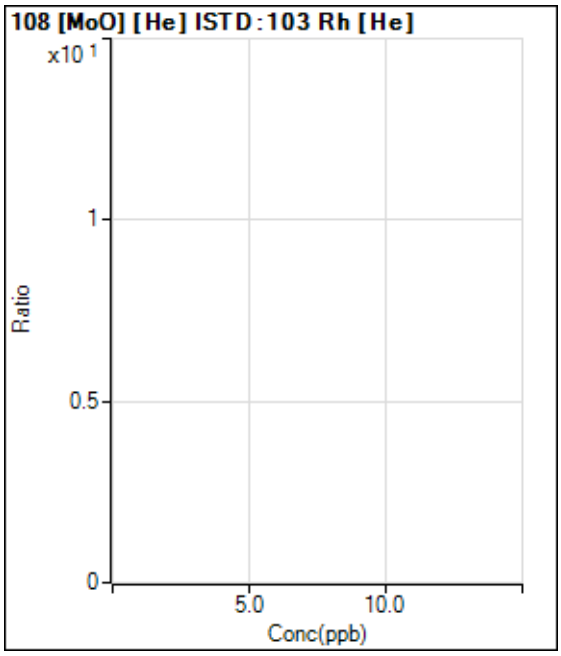
Calibration for 017_CCV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	32.22	0.0000	P	36.6
2	☐	10.000	10.371	103935.16	0.0642	P	1.9
3	☐	50.000	51.220	496033.94	0.3168	P	1.1
4	☐	100.000	99.353	956216.56	0.6145	P	1.4
5	☐			237.79	0.0001	P	22.5

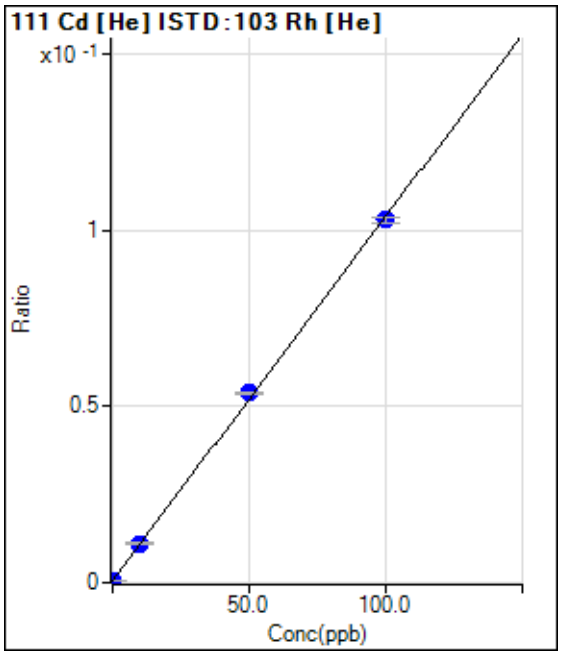
y = 0.0062 * x + 1.9521E-005
R = 0.9999
DL = 0.003468
BEC = 0.003157

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			7.41	0.0000	P	173.2
2	☐			1185.28	0.0007	P	1.7
3	☐			5364.06	0.0034	P	8.5
4	☐			10273.98	0.0066	P	5.8
5	☐			144.45	0.0001	P	34.9

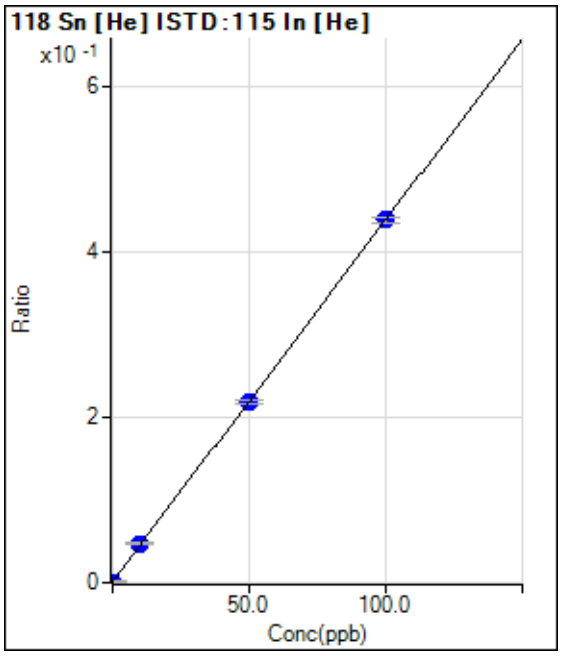
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	850.22	0.0005	P	5.0
2	☐	10.000	10.297	18064.48	0.0112	P	1.5
3	☐	50.000	51.615	84288.22	0.0538	P	1.3
4	☐	100.000	99.163	160190.11	0.1029	P	1.8
5	☐			873.75	0.0005	P	9.7

y = 0.0010 * x + 5.1428E-004
R = 0.9998
DL = 0.07421
BEC = 0.4979

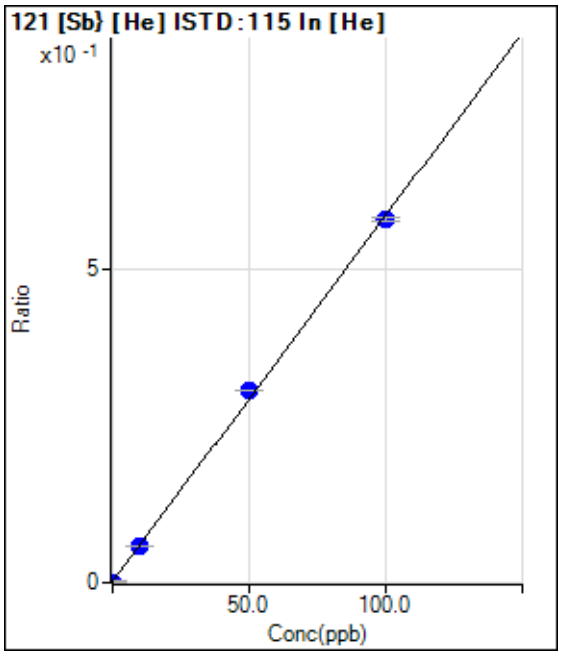
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	863.67	0.0010	P	77.2
2	☐	10.000	10.641	40323.00	0.0476	P	0.8
3	☐	50.000	49.690	179339.46	0.2185	P	2.1
4	☐			1874.27	0.0023	P	11.3
5	☐	100.000	100.091	378485.42	0.4392	P	1.7

y = 0.0044 * x + 0.0010
R = 1.0000
DL = 0.5379
BEC = 0.2323

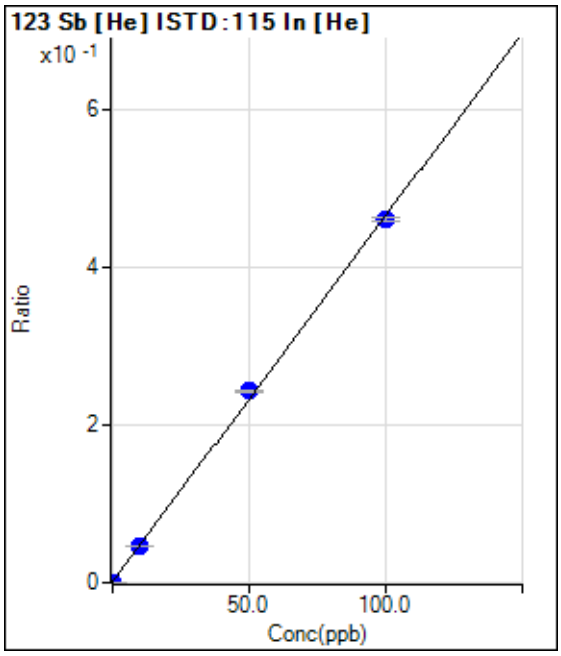
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1270.07	0.0015	P	10.9
2	☐	10.000	9.844	50036.10	0.0591	P	1.9
3	☐	50.000	52.256	252037.16	0.3071	P	0.5
4	☐			2603.57	0.0032	P	4.7
5	☐	100.000	98.888	499688.10	0.5799	P	1.1

y = 0.0058 * x + 0.0015
R = 0.9995
DL = 0.08319
BEC = 0.2546

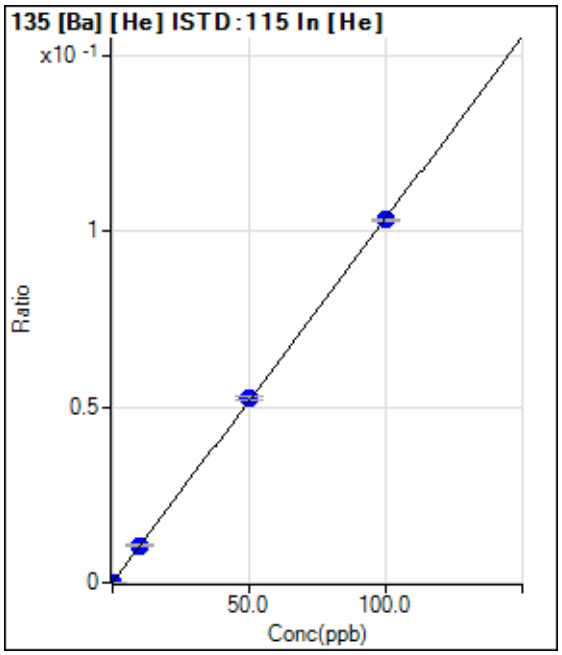
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	897.81	0.0011	P	2.6
2	☐	10.000	9.890	39777.24	0.0470	P	0.1
3	☐	50.000	52.138	199442.64	0.2430	P	0.4
4	☐			2011.26	0.0025	P	5.4
5	☐	100.000	98.942	396610.21	0.4603	P	1.0

y = 0.0046 * x + 0.0011
R = 0.9996
DL = 0.01776
BEC = 0.2269

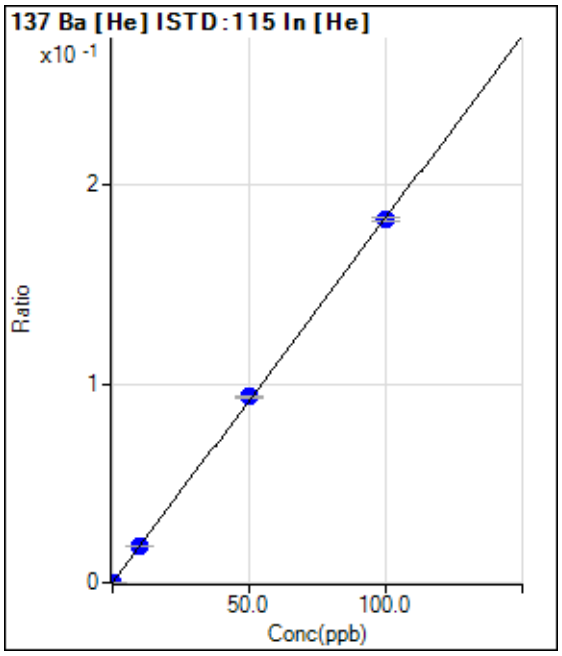
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24.45	0.0000	P	27.8
2	☐	10.000	10.268	9028.08	0.0107	P	1.9
3	☐	50.000	50.618	43024.61	0.0524	P	1.6
4	☐	100.000	99.664	84200.88	0.1032	P	0.8
5	☐			46.67	0.0001	P	56.9

y = 0.0010 * x + 2.8640E-005
R = 1.0000
DL = 0.02304
BEC = 0.02767

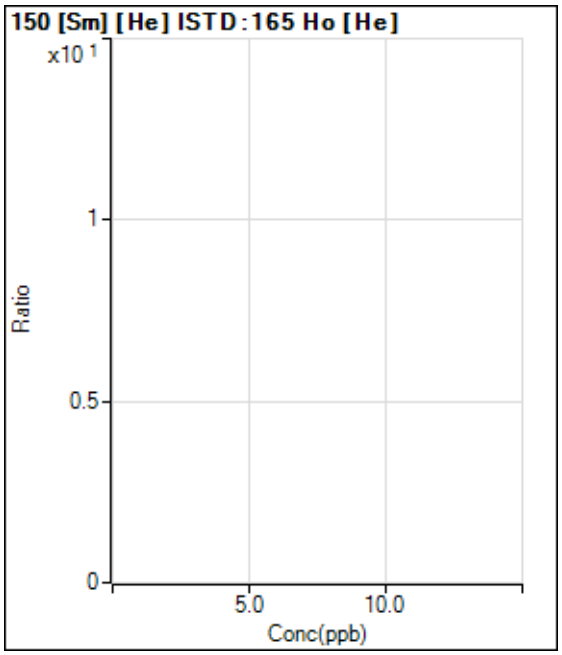
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	42.7
2	☐	10.000	10.158	15805.34	0.0187	P	1.5
3	☐	50.000	50.931	76712.62	0.0935	P	1.3
4	☐	100.000	99.519	149033.97	0.1827	P	0.9
5	☐			108.89	0.0001	P	32.1

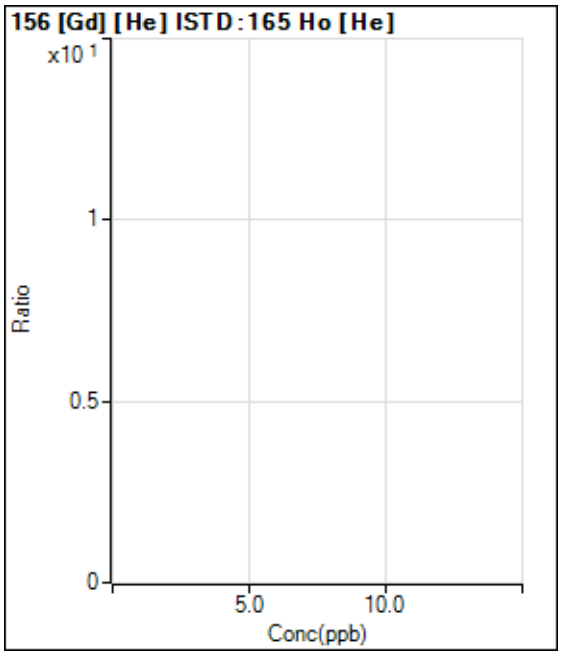
y = 0.0018 * x + 1.5621E-005
R = 0.9999
DL = 0.01092
BEC = 0.008512

Weight: <None>
Min Conc: <None>



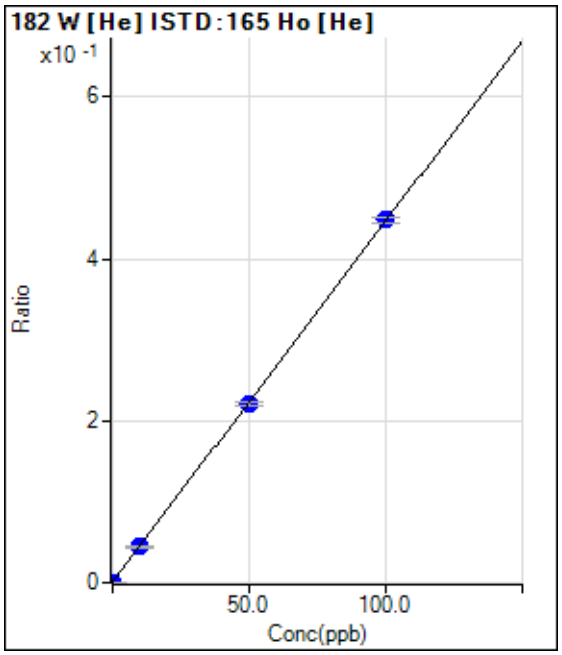
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			8.00	0.0000	P	113.8
2	☐			4.67	0.0000	P	98.8
3	☐			7.33	0.0000	P	79.5
4	☐			11.33	0.0000	P	36.4
5	☐			3.33	0.0000	P	91.5

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			10.67	0.0000	P	9.4
2	☐			8.00	0.0000	P	49.9
3	☐			12.67	0.0000	P	25.2
4	☐			23.33	0.0000	P	30.7
5	☐			12.00	0.0000	P	57.9

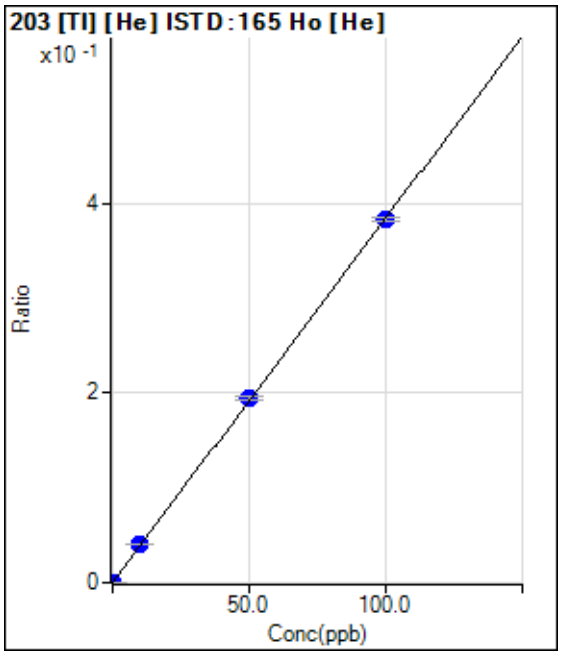
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2685.55	0.0011	P	3.2
2	☐	10.000	9.638	108334.51	0.0440	P	2.5
3	☐	50.000	49.208	537979.96	0.2201	P	1.9
4	☐			11093.20	0.0046	P	14.2
5	☐	100.000	100.432	1115299.47	0.4480	P	1.5

y = 0.0045 * x + 0.0011
R = 0.9999
DL = 0.02365
BEC = 0.246

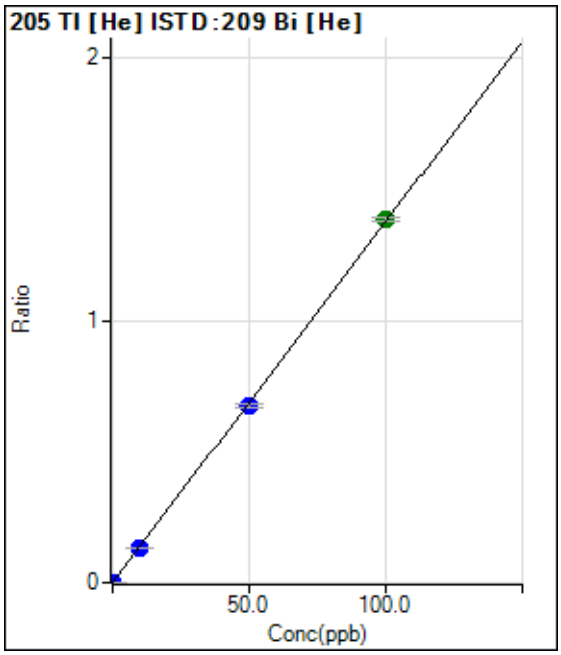
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	159.27	0.0001	P	45.8
2	☐	10.000	10.595	100381.30	0.0408	P	1.6
3	☐	50.000	50.600	475267.21	0.1944	P	1.6
4	☐	100.000	99.641	917907.78	0.3827	P	1.2
5	☐			1437.17	0.0006	P	13.6

y = 0.0038 * x + 6.4689E-005
R = 1.0000
DL = 0.02314
BEC = 0.01684

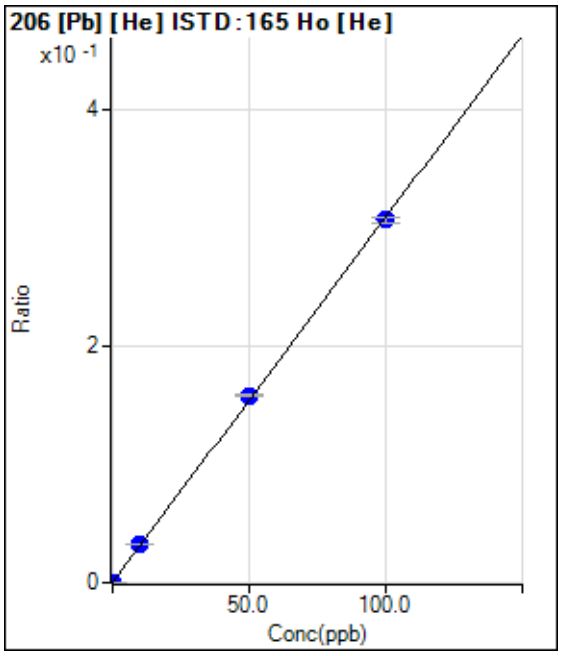
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	396.68	0.0002	P	9.7
2	☐	10.000	9.729	242680.86	0.1341	P	0.8
3	☐	50.000	48.996	1166609.26	0.6747	P	2.1
4	☐	100.000	100.529	2328363.66	1.3841	A	1.0
5	☐			2518.02	0.0014	P	22.6

y = 0.0138 * x + 2.1922E-004
R = 0.9999
DL = 0.004643
BEC = 0.01593

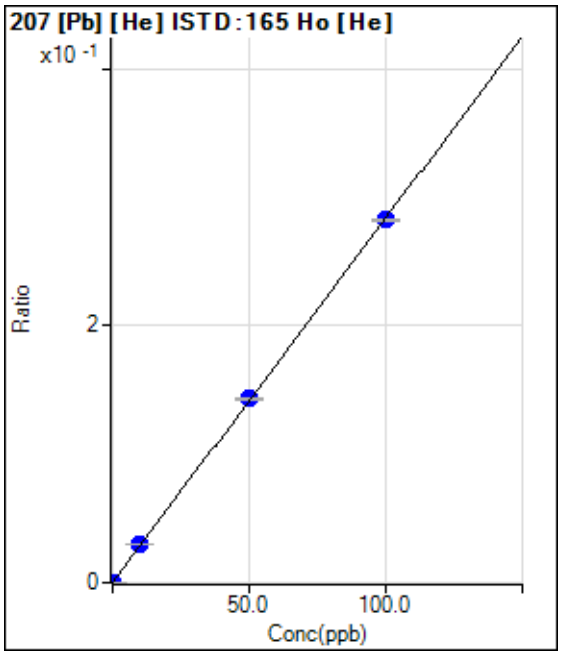
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	232.23	0.0001	P	19.9
2	☐	10.000	10.521	80072.52	0.0325	P	0.0
3	☐	50.000	51.141	385419.91	0.1577	P	1.0
4	☐	100.000	99.378	734533.63	0.3063	P	1.3
5	☐			412.23	0.0002	P	10.0

y = 0.0031 * x + 9.4829E-005
R = 0.9999
DL = 0.01842
BEC = 0.03078

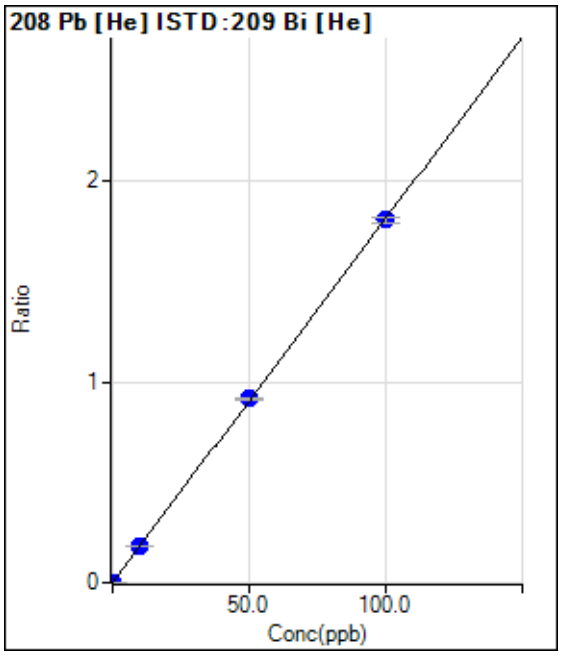
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	208.89	0.0001	P	7.8
2	☐	10.000	10.526	73731.49	0.0299	P	0.8
3	☐	50.000	50.629	351194.74	0.1437	P	1.2
4	☐	100.000	99.633	677846.48	0.2826	P	0.7
5	☐			367.79	0.0001	P	13.4

y = 0.0028 * x + 8.5230E-005
R = 1.0000
DL = 0.007045
BEC = 0.03006

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	886.69	0.0005	P	8.8
2	☐	10.000	10.055	330383.93	0.1826	P	0.8
3	☐	50.000	50.496	1582566.99	0.9152	P	1.4
4	☐	100.000	99.746	3040136.13	1.8073	P	1.4
5	☐			1635.61	0.0009	P	8.3

y = 0.0181 * x + 4.9001E-004
R = 1.0000
DL = 0.007179
BEC = 0.02705

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:21:26-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	37	123.76
B	11	45	2	NoGas	6338	0.08
Na	23	45	1	He	35728	0.00
Mg	24	45	1	He	1037	2.07
Al	27	45	1	He	909	0.27
K	39	45	1	He	65051	0.00
Ca	44	45	1	He	547	2.02
Ti	47	45	1	He	11	412.30
V	51	45	1	He	290	60.25
Cr	52	45	1	He	3050	0.09
Mn	55	45	1	He	188	23.47
Fe	56	45	1	He	16236	0.13
Co	59	103	1	He	39	12.71
Ni	60	103	1	He	81	7.74
Cu	63	103	1	He	2405	0.10
Zn	66	103	1	He	816	1.33
As	75	103	1	He	174	9.30
Se	78	103	1	He	33	44.40
Sr	88	103	1	He	134	17.13
Mo	95	103	1	He	6436	0.49
Ag	107	103	1	He	17	432.78
Cd	111	103	1	He	841	0.32
Sn	118	115	1	He	722	2.40
Sb	123	115	1	He	1014	1.04
Ba	137	115	1	He	27	214.81
W	182	165	1	He	2937	0.31
Tl	205	209	1	He	424	1.68
Pb	208	209	1	He	887	1.20

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1769055	1.62
Sc	45	1	He	573396	0.75
Sc	45	2	NoGas	4318826	0.63
Rh	103	1	He	1618667	1.87
In	115	1	He	840916	0.36
Tb	159	1	He	2408243	0.83
Ho	165	1	He	2439408	1.85
Bi	209	1	He	1797343	2.47

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:25:17-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	4	4677.00
B	11	45	2	NoGas	5846	0.13
Na	23	45	1	He	33509	0.02
Mg	24	45	1	He	926	0.33
Al	27	45	1	He	749	0.55
K	39	45	1	He	64779	0.00
Ca	44	45	1	He	575	0.82
Ti	47	45	1	He	1	15604.06
V	51	45	1	He	265	68.20
Cr	52	45	1	He	3008	0.15
Mn	55	45	1	He	168	6.52
Fe	56	45	1	He	6091	0.07
Co	59	103	1	He	54	67.79
Ni	60	103	1	He	96	58.68
Cu	63	103	1	He	2489	0.19
Zn	66	103	1	He	848	1.26
As	75	103	1	He	197	4.93
Se	78	103	1	He	30	52.45
Sr	88	103	1	He	142	14.77
Mo	95	103	1	He	696	1.17
Ag	107	103	1	He	32	112.75
Cd	111	103	1	He	850	0.70
Sn	118	115	1	He	864	8.85
Sb	123	115	1	He	898	0.35
Ba	137	115	1	He	13	324.76
W	182	165	1	He	2686	0.17
Tl	205	209	1	He	397	2.23
Pb	208	209	1	He	887	0.91

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1803797	1.24
Sc	45	1	He	574766	0.80
Sc	45	2	NoGas	4296857	0.28
Rh	103	1	He	1652712	0.98
In	115	1	He	852389	0.75
Tb	159	1	He	2425956	1.35
Ho	165	1	He	2452680	1.70
Bi	209	1	He	1810473	1.35

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:29:07-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	54361	0.01
B	11	2	NoGas	42104	0.01
Na	23	1	He	8305774	0.00
Mg	24	1	He	4722367	0.00
Al	27	1	He	25975	0.00
K	39	1	He	3730768	0.00
Ca	44	1	He	188855	0.00
Ti	47	1	He	2225	0.06
V	51	1	He	59299	0.00
Cr	52	1	He	76509	0.00
Mn	55	1	He	255893	0.00
Fe	56	1	He	16713659	0.00
Co	59	1	He	106200	0.00
Ni	60	1	He	27566	0.01
Cu	63	1	He	75328	0.00
Zn	66	1	He	15620	0.01
As	75	1	He	9289	0.00
Se	78	1	He	818	0.41
Sr	88	1	He	54009	0.00
Mo	95	1	He	30097	0.01
Ag	107	1	He	103935	0.00
Cd	111	1	He	18064	0.00
Sn	118	1	He	40323	0.00
Sb	123	1	He	39777	0.00
Ba	137	1	He	15805	0.01
W	182	1	He	108335	0.00
Tl	205	1	He	242681	0.00
Pb	208	1	He	330384	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1829983	1.25	1803797	101.45	30	120	
Sc	45	1	He	588685	2.48	574766	102.42	30	120	
Sc	45	2	NoGas	4298089	0.50	4296857	100.03	30	120	
Rh	103	1	He	1620298	1.28	1652712	98.04	30	120	
In	115	1	He	847101	0.44	852389	99.38	30	120	
Tb	159	1	He	2406371	1.55	2425956	99.19	30	120	
Ho	165	1	He	2463166	0.85	2452680	100.43	30	120	
Bi	209	1	He	1809267	1.68	1810473	99.93	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:32:55-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	264560	0.00
B	11	2	NoGas	185913	0.00
Na	23	1	He	40367946	0.00
Mg	24	1	He	22951103	0.00
Al	27	1	He	118770	0.00
K	39	1	He	17899163	0.00
Ca	44	1	He	934804	0.00
Ti	47	1	He	11311	0.01
V	51	1	He	290945	0.00
Cr	52	1	He	362778	0.00
Mn	55	1	He	1257657	0.00
Fe	56	1	He	82076888	0.00
Co	59	1	He	512381	0.00
Ni	60	1	He	131389	0.00
Cu	63	1	He	350202	0.00
Zn	66	1	He	71190	0.00
As	75	1	He	44516	0.00
Se	78	1	He	3681	0.03
Sr	88	1	He	261429	0.00
Mo	95	1	He	143084	0.00
Ag	107	1	He	496034	0.00
Cd	111	1	He	84288	0.00
Sn	118	1	He	179339	0.00
Sb	123	1	He	199443	0.00
Ba	137	1	He	76713	0.00
W	182	1	He	537980	0.00
Tl	205	1	He	1166609	0.00
Pb	208	1	He	1582567	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1782194	1.59	1803797	98.80	30	120	
Sc	45	1	He	597813	4.04	574766	104.01	30	120	
Sc	45	2	NoGas	4333353	0.11	4296857	100.85	30	120	
Rh	103	1	He	1565924	0.54	1652712	94.75	30	120	
In	115	1	He	820616	0.59	852389	96.27	30	120	
Tb	159	1	He	2383880	1.20	2425956	98.27	30	120	
Ho	165	1	He	2444895	1.41	2452680	99.68	30	120	
Bi	209	1	He	1729560	1.96	1810473	95.53	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:36:43-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	552759	0.00
B	11	2	NoGas	8795	0.03
Na	23	1	He	78687391	0.00
Mg	24	1	He	44543324	0.00
Al	27	1	He	233036	0.00
K	39	1	He	35133649	0.00
Ca	44	1	He	1878505	0.00
Ti	47	1	He	23	212.03
V	51	1	He	568327	0.00
Cr	52	1	He	698462	0.00
Mn	55	1	He	2467533	0.00
Fe	56	1	He	159363620	0.00
Co	59	1	He	986452	0.00
Ni	60	1	He	250363	0.00
Cu	63	1	He	671068	0.00
Zn	66	1	He	136960	0.00
As	75	1	He	86504	0.00
Se	78	1	He	7179	0.01
Sr	88	1	He	515085	0.00
Mo	95	1	He	2521	0.71
Ag	107	1	He	956217	0.00
Cd	111	1	He	160190	0.00
Sn	118	1	He	1874	0.59
Sb	123	1	He	2011	0.25
Ba	137	1	He	149034	0.00
W	182	1	He	11093	0.12
Tl	205	1	He	2328364	0.00
Pb	208	1	He	3040136	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1742538	0.95	1803797	96.60	30	120	
Sc	45	1	He	589733	2.32	574766	102.60	30	120	
Sc	45	2	NoGas	4352110	1.80	4296857	101.29	30	120	
Rh	103	1	He	1556491	2.05	1652712	94.18	30	120	
In	115	1	He	815923	0.48	852389	95.72	30	120	
Tb	159	1	He	2370842	0.83	2425956	97.73	30	120	
Ho	165	1	He	2398505	0.81	2452680	97.79	30	120	
Bi	209	1	He	1682429	1.64	1810473	92.93	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:40:29-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	104	15.78
B	11	2	NoGas	350464	0.00
Na	23	1	He	51451	0.02
Mg	24	1	He	6954	0.32
Al	27	1	He	2339	0.24
K	39	1	He	74501	0.00
Ca	44	1	He	1412	0.38
Ti	47	1	He	22495	0.00
V	51	1	He	584	16.75
Cr	52	1	He	3164	0.10
Mn	55	1	He	780	2.96
Fe	56	1	He	156745	0.02
Co	59	1	He	173	17.61
Ni	60	1	He	251	3.97
Cu	63	1	He	3063	0.09
Zn	66	1	He	2757	0.05
As	75	1	He	179	4.46
Se	78	1	He	34	39.14
Sr	88	1	He	149	10.88
Mo	95	1	He	299629	0.00
Ag	107	1	He	238	9.44
Cd	111	1	He	874	1.11
Sn	118	1	He	378485	0.00
Sb	123	1	He	396610	0.00
Ba	137	1	He	109	30.06
W	182	1	He	1115299	0.00
Tl	205	1	He	2518	0.93
Pb	208	1	He	1636	0.55

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1809459	1.04	1803797	100.31	30	120	
Sc	45	1	He	595610	3.05	574766	103.63	30	120	
Sc	45	2	NoGas	4264431	0.55	4296857	99.25	30	120	
Rh	103	1	He	1681733	0.43	1652712	101.76	30	120	
In	115	1	He	861710	0.74	852389	101.09	30	120	
Tb	159	1	He	2422877	0.68	2425956	99.87	30	120	
Ho	165	1	He	2489281	0.34	2452680	101.49	30	120	
Bi	209	1	He	1820015	0.70	1810473	100.53	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:44:19-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	40.965	1.605	230876	0.61	40	102.4	89.5	110.5	
B	11	45	NoGas	45.370	1.287	170418	0.84	40	113.4	89.5	110.5	ICV Failed
Na	23	45	He	20795.316	1.676	33581053	0.97	20000	104.0	89.5	110.5	
Mg	24	45	He	20805.660	1.284	19031299	0.73	20000	104.0	89.5	110.5	
Al	27	45	He	206.303	1.209	98922	0.83	200	103.2	89.5	110.5	
K	39	45	He	20829.253	2.095	15024729	1.62	20000	104.1	89.5	110.5	
Ca	44	45	He	20086.972	0.584	769535	0.35	20000	100.4	89.5	110.5	
Ti	47	45	He	42.257	2.065	9633	1.51	40	105.6	89.5	110.5	
V	51	45	He	41.190	1.421	240167	1.89	40	103.0	89.5	110.5	
Cr	52	45	He	41.828	0.567	301986	0.57	40	104.6	89.5	110.5	
Mn	55	45	He	205.489	0.544	1038796	0.43	200	102.7	89.5	110.5	
Fe	56	45	He	10360.675	0.701	67794453	0.55	10000	103.6	89.5	110.5	
Co	59	103	He	40.900	1.658	420531	1.12	40	102.2	89.5	110.5	
Ni	60	103	He	42.303	2.218	110687	1.78	40	105.8	89.5	110.5	
Cu	63	103	He	41.961	0.491	295006	0.53	40	104.9	89.5	110.5	
Zn	66	103	He	42.373	0.631	60907	0.36	40	105.9	89.5	110.5	
As	75	103	He	38.994	0.557	35189	0.15	40	97.5	89.5	110.5	
Se	78	103	He	42.244	1.122	3168	1.52	40	105.6	89.5	110.5	
Sr	88	103	He	41.708	0.268	222908	0.29	40	104.3	89.5	110.5	
Mo	95	103	He	42.867	1.729	124048	2.03	40	107.2	89.5	110.5	
Ag	107	103	He	41.783	1.228	416376	0.77	40	104.5	89.5	110.5	
Cd	111	103	He	41.701	0.762	70231	0.34	40	104.3	89.5	110.5	
Sn	118	115	He	40.842	0.285	152100	0.48	40	102.1	89.5	110.5	
Sb	123	115	He	38.278	1.488	151174	1.90	40	95.7	89.5	110.5	
Ba	137	115	He	41.258	0.589	64062	1.06	40	103.1	89.5	110.5	
W	182	165	He	38.736	1.039	437847	1.42	40	96.8	89.5	110.5	
Tl	205	209	He	38.983	2.080	976920	0.35	40	97.5	89.5	110.5	
Pb	208	209	He	40.332	2.151	1330335	0.42	40	100.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1800589	1.38	1803797	99.82	30	120	
Sc	45	He	603000	0.88	574766	104.91	30	120	
Sc	45	NoGas	4456082	1.67	4296857	103.71	30	120	
Rh	103	He	1611284	0.55	1652712	97.49	30	120	
In	115	He	845874	0.48	852389	99.24	30	120	
Tb	159	He	2454423	0.98	2425956	101.17	30	120	
Ho	165	He	2523947	0.68	2452680	102.91	30	120	
Bi	209	He	1820352	2.42	1810473	100.55	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:48:07-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.065	24.4	16	24.8	20	
W	182	1	He	0.924	11.0	13332	10.3	10	
Ca	44	1	He	0.873	218.1	621	13.4	1000	
Na	23	1	He	4.822	52.2	41774	7.3	400	
Mg	24	1	He	2.282	33.9	2971	21.1	1000	
K	39	1	He	8.026	24.2	71820	0.7	1000	
V	51	1	He	0.011	694.5	327	126.7	2	
Cr	52	1	He	-0.008	-186.6	3019	4.9	2	
Mn	55	1	He	0.044	22.4	387	12.1	2	
Fe	56	1	He	12.742	33.3	87092	28.9	50	
Co	59	1	He	0.002	52.7	73	12.0	1	
Ni	60	1	He	-0.003	-101.0	91	8.4	2	
Cu	63	1	He	-0.011	-34.5	2474	1.7	2	
Zn	66	1	He	-0.093	-30.3	731	6.3	20	
As	75	1	He	-0.005	-387.9	197	10.1	2	
Se	78	1	He	-0.097	-41.0	23	13.6	2	
Sr	88	1	He	0.003	181.8	162	17.7	10	
Mo	95	1	He	0.603	22.7	2538	16.4	2	
Ag	107	1	He	0.004	63.6	76	35.9	0.2	
Cd	111	1	He	0.020	121.9	907	4.1	0.2	
Ba	137	1	He	0.016	64.1	40	41.7	5	
Sn	118	1	He	0.339	5.3	2222	3.1	10	
Tl	205	1	He	0.031	18.5	1207	11.7	0.5	
Pb	208	1	He	0.008	64.2	1199	14.3	1	
Al	27	1	He	3.511	6.7	2394	5.8	50	
Sb	123	1	He	1.144	17.4	5658	14.7	1	ICB Failed
B	11	2	NoGas	1.720	6.6	12575	2.8	20	
Be	9	2	NoGas	0.004	89.8	30	78.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1875044	0.26	1803797	103.95	30	120	
Sc	45	1	He	587571	2.16	574766	102.23	30	120	
Sc	45	2	NoGas	4558911	0.87	4296857	106.10	30	120	
Rh	103	1	He	1694640	0.62	1652712	102.54	30	120	
In	115	1	He	888773	0.18	852389	104.27	30	120	

Tb	159	1	He	2511691	0.78	2425956	103.53	30	120	
Ho	165	1	He	2559212	1.70	2452680	104.34	30	120	
Bi	209	1	He	1878525	0.79	1810473	103.76	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	XCRI-1912660
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:51:57-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.771	0.771	8.192	4527	7.19	1	77.1	69.5	130.5	
B	11	2	NoGas	18.995	18.995	2.194	75449	1.05	20	95.0	69.5	130.5	
Na	23	1	He	1093.029	1093.029	1.599	1826107	0.45	1000	109.3	69.5	130.5	
Mg	24	1	He	1082.098	1082.098	1.201	1006047	0.90	1000	108.2	69.5	130.5	
Al	27	1	He	53.980	53.980	0.349	26874	1.50	50	108.0	69.5	130.5	
K	39	1	He	1063.572	1063.572	1.618	844506	0.57	1000	106.4	69.5	130.5	
Ca	44	1	He	1035.093	1035.093	2.574	40846	2.22	1000	103.5	69.5	130.5	
Ti	47	1	He	10.408	10.408	1.427	2410	1.23	10	104.1	69.5	130.5	
V	51	1	He	5.416	5.416	0.762	32315	2.45	5	108.3	69.5	130.5	
Cr	52	1	He	2.110	2.110	2.464	18516	3.10	2	105.5	69.5	130.5	
Mn	55	1	He	5.267	5.267	4.091	27202	2.79	5	105.3	69.5	130.5	
Fe	56	1	He	107.243	107.243	0.986	719018	1.36	100	107.2	69.5	130.5	
Co	59	1	He	1.021	1.021	0.322	11297	0.68	1	102.1	69.5	130.5	
Ni	60	1	He	2.107	2.107	2.881	5997	1.97	2	105.3	69.5	130.5	
Cu	63	1	He	2.054	2.054	3.254	17935	1.84	2	102.7	69.5	130.5	
Zn	66	1	He	21.027	21.027	2.084	32806	1.15	20	105.1	69.5	130.5	
As	75	1	He	5.004	5.004	4.785	5013	3.64	5	100.1	69.5	130.5	
Se	78	1	He	5.008	5.008	4.359	429	3.40	5	100.2	69.5	130.5	
Sr	88	1	He	9.826	9.826	2.542	56338	1.94	10	98.3	69.5	130.5	
Mo	95	1	He	10.346	10.346	2.664	32603	1.68	10	103.5	69.5	130.5	
Ag	107	1	He	1.031	1.031	0.360	11033	1.36	1	103.1	69.5	130.5	
Cd	111	1	He	1.035	1.035	4.114	2731	2.65	1	103.5	69.5	130.5	
Sn	118	1	He	9.741	9.741	2.572	39053	2.48	10	97.4	69.5	130.5	
Sb	123	1	He	2.255	2.255	3.570	10303	3.19	2	112.7	69.5	130.5	
Ba	137	1	He	5.125	5.125	2.006	8427	2.05	5	102.5	69.5	130.5	
W	182	1	He	9.909	9.909	3.027	115587	2.36	10	99.1	69.5	130.5	
Tl	205	1	He	1.945	1.945	0.449	51140	1.06	2	97.2	69.5	130.5	
Pb	208	1	He	1.018	1.018	1.354	35872	0.29	1	101.8	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1875342	1.04	1803797	103.97	30	120	
Sc	45	1	He	612363	1.84	574766	106.54	30	120	
Sc	45	2	NoGas	4491024	2.03	4296857	104.52	30	120	
Rh	103	1	He	1725327	1.00	1652712	104.39	30	120	
In	115	1	He	894477	0.07	852389	104.94	30	120	
Tb	159	1	He	2490587	1.23	2425956	102.66	30	120	
Ho	165	1	He	2558230	1.23	2452680	104.30	30	120	
Bi	209	1	He	1894755	1.09	1810473	104.66	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	010CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:55:45-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.864	0.864	5.977	5034	6.10	1	86.4	69.5	130.5	
B	11	2	NoGas	20.277	20.277	2.601	80459	1.70	20	101.4	69.5	130.5	
Na	23	1	He	1082.374	1082.374	0.735	1797738	0.80	1000	108.2	69.5	130.5	
Mg	24	1	He	1076.324	1076.324	0.629	994587	0.63	1000	107.6	69.5	130.5	
Al	27	1	He	50.620	50.620	0.625	25097	1.71	50	101.2	69.5	130.5	
K	39	1	He	1051.718	1051.718	1.760	830739	0.51	1000	105.2	69.5	130.5	
Ca	44	1	He	1018.514	1018.514	1.269	39955	0.22	1000	101.9	69.5	130.5	
Ti	47	1	He	10.517	10.517	2.873	2420	1.81	10	105.2	69.5	130.5	
V	51	1	He	5.259	5.259	0.958	31192	1.97	5	105.2	69.5	130.5	
Cr	52	1	He	2.144	2.144	1.472	18645	1.06	2	107.2	69.5	130.5	
Mn	55	1	He	5.314	5.314	1.742	27286	2.19	5	106.3	69.5	130.5	
Fe	56	1	He	106.639	106.639	0.703	710614	0.70	100	106.6	69.5	130.5	
Co	59	1	He	1.052	1.052	2.449	11483	1.39	1	105.2	69.5	130.5	
Ni	60	1	He	2.078	2.078	2.089	5841	1.05	2	103.9	69.5	130.5	
Cu	63	1	He	2.029	2.029	1.801	17513	0.52	2	101.4	69.5	130.5	
Zn	66	1	He	20.233	20.233	1.286	31193	0.58	20	101.2	69.5	130.5	
As	75	1	He	4.959	4.959	2.001	4907	0.88	5	99.2	69.5	130.5	
Se	78	1	He	5.265	5.265	6.605	444	5.39	5	105.3	69.5	130.5	
Sr	88	1	He	9.777	9.777	1.164	55338	0.12	10	97.8	69.5	130.5	
Mo	95	1	He	10.532	10.532	1.755	32749	0.90	10	105.3	69.5	130.5	
Ag	107	1	He	1.054	1.054	1.797	11136	0.75	1	105.4	69.5	130.5	
Cd	111	1	He	1.039	1.039	2.111	2704	1.60	1	103.9	69.5	130.5	
Sn	118	1	He	9.889	9.889	3.545	39146	3.47	10	98.9	69.5	130.5	
Sb	123	1	He	2.061	2.061	4.285	9379	3.53	2	103.0	69.5	130.5	
Ba	137	1	He	4.979	4.979	0.821	8088	1.06	5	99.6	69.5	130.5	
W	182	1	He	10.116	10.116	3.077	116750	1.53	10	101.2	69.5	130.5	
Tl	205	1	He	1.953	1.953	2.828	50895	1.09	2	97.7	69.5	130.5	
Pb	208	1	He	1.046	1.046	4.419	36473	2.44	1	104.6	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1860202	0.65	1803797	103.13	30	120	
Sc	45	1	He	608582	1.25	574766	105.88	30	120	
Sc	45	2	NoGas	4508914	0.75	4296857	104.94	30	120	
Rh	103	1	He	1703021	1.04	1652712	103.04	30	120	
In	115	1	He	883492	0.34	852389	103.65	30	120	
Tb	159	1	He	2493784	1.34	2425956	102.80	30	120	
Ho	165	1	He	2532687	1.51	2452680	103.26	30	120	
Bi	209	1	He	1878254	1.91	1810473	103.74	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	011ICSA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:59:37-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.012	29.7	67	28.9	1	
B	11	45	2	NoGas	0.906	11.2	8680	4.1	20	
Na	23	45	1	He	48899.721	4.6	75663828	0.5	75200	
Mg	24	45	1	He	49308.370	4.8	43237583	0.3	75200	
Al	27	45	1	He	47667.175	4.6	21739361	0.5	75200	
K	39	45	1	He	49452.379	3.4	34125213	1.8	75200	
Ca	44	45	1	He	49074.734	5.0	1801510	1.6	75200	
Ti	47	45	1	He	989.188	4.1	216202	1.0	1505	
V	51	45	1	He	0.029	572.9	407	217.6	4	
Cr	52	45	1	He	0.665	8.6	7581	1.4	4	
Mn	55	45	1	He	0.357	5.7	1900	0.8	4	
Fe	56	45	1	He	49432.637	4.4	310102370	1.0	75200	
Co	59	103	1	He	0.026	5.1	286	3.8	2	
Ni	60	103	1	He	0.115	13.4	356	11.3	4	
Cu	63	103	1	He	0.336	1.9	4308	2.1	4	
Zn	66	103	1	He	1.015	5.6	2045	2.7	10	
As	75	103	1	He	0.061	84.5	223	19.1	4	
Se	78	103	1	He	0.085	145.4	32	26.1	4	
Sr	88	103	1	He	0.336	7.2	1746	8.1	20	
Mo	95	103	1	He	1074.771	2.6	2792445	2.7	1505	
Ag	107	103	1	He	0.008	11.0	97	6.9	1	
Cd	111	103	1	He	0.119	46.7	926	7.6	1	
Sn	118	115	1	He	0.320	15.4	1919	9.0	20	
Sb	123	115	1	He	0.218	11.6	1638	5.6	1	
Ba	137	115	1	He	0.060	28.6	100	25.2	2	
W	182	165	1	He	0.275	14.5	5583	7.3	20	
Tl	205	209	1	He	0.003	122.8	422	18.2	1	
Pb	208	209	1	He	0.100	1.4	3779	0.5	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1663903	0.65	1803797	92.24	30	120	
Sc	45	1	He	579008	5.21	574766	100.74	30	120	
Sc	45	2	NoGas	4139083	1.16	4296857	96.33	30	120	
Rh	103	1	He	1454480	1.71	1652712	88.01	30	120	
In	115	1	He	793250	0.23	852389	93.06	30	120	
Tb	159	1	He	2331791	1.13	2425956	96.12	30	120	
Ho	165	1	He	2408673	0.72	2452680	98.21	30	120	
Bi	209	1	He	1643463	0.67	1810473	90.78	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	012ICAB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:04:36-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	110.524	2.123	576296	1.96	100	110.5	79.5	120.5	
B	11	45	2	NoGas	116.481	0.645	397951	2.23	100	116.5	79.5	120.5	
Na	23	45	1	He	49722.182	5.040	76840101	0.60	50000	99.4	79.5	120.5	
Mg	24	45	1	He	49742.960	4.510	43576156	0.77	50000	99.5	79.5	120.5	
Al	27	45	1	He	47833.884	4.121	21794703	0.39	50000	95.7	79.5	120.5	
K	39	45	1	He	49467.828	4.942	34081673	1.30	50000	98.9	79.5	120.5	
Ca	44	45	1	He	50012.837	3.861	1834470	1.19	50000	100.0	79.5	120.5	
Ti	47	45	1	He	1097.078	4.668	239473	0.49	1100	99.7	79.5	120.5	
V	51	45	1	He	100.543	4.525	561018	0.06	100	100.5	79.5	120.5	
Cr	52	45	1	He	101.480	4.748	697295	0.35	100	101.5	79.5	120.5	
Mn	55	45	1	He	100.102	4.137	484761	0.34	100	100.1	79.5	120.5	
Fe	56	45	1	He	49899.187	4.385	312681570	0.10	50000	99.8	79.5	120.5	
Co	59	103	1	He	104.365	1.568	985989	0.78	100	104.4	79.5	120.5	
Ni	60	103	1	He	104.976	1.513	252277	0.58	100	105.0	79.5	120.5	
Cu	63	103	1	He	103.575	1.497	665828	0.46	100	103.6	79.5	120.5	
Zn	66	103	1	He	105.734	1.910	138514	1.02	100	105.7	79.5	120.5	
As	75	103	1	He	104.869	1.344	86662	0.31	100	104.9	79.5	120.5	
Se	78	103	1	He	106.356	1.587	7288	0.74	100	106.4	79.5	120.5	
Sr	88	103	1	He	105.046	1.778	515656	0.87	100	105.0	79.5	120.5	
Mo	95	103	1	He	1187.610	1.129	3141395	1.54	1100	108.0	79.5	120.5	
Ag	107	103	1	He	103.004	1.433	943145	0.42	100	103.0	79.5	120.5	
Cd	111	103	1	He	105.831	1.518	162609	0.90	100	105.8	79.5	120.5	
Sn	118	115	1	He	100.152	1.437	350361	1.33	100	100.2	79.5	120.5	
Sb	123	115	1	He	106.343	1.013	394335	0.85	100	106.3	79.5	120.5	
Ba	137	115	1	He	103.974	0.508	152144	0.33	100	104.0	79.5	120.5	
W	182	165	1	He	99.019	1.407	1077620	0.14	100	99.0	79.5	120.5	
Tl	205	209	1	He	102.342	1.354	2397189	1.53	100	102.3	79.5	120.5	
Pb	208	209	1	He	102.533	1.387	3160447	0.70	100	102.5	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1665825	1.58	1803797	92.35	30	120	
Sc	45	1	He	578252	4.55	574766	100.61	30	120	
Sc	45	2	NoGas	4142398	2.04	4296857	96.41	30	120	
Rh	103	1	He	1480677	1.04	1652712	89.59	30	120	
In	115	1	He	797267	0.18	852389	93.53	30	120	
Tb	159	1	He	2355384	0.55	2425956	97.09	30	120	
Ho	165	1	He	2439765	1.31	2452680	99.47	30	120	
Bi	209	1	He	1701344	0.79	1810473	93.97	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	013_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:08:20-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.225	2.425	261374	2.81	50	96.5	89.5	110.5	
B	11	45	2	NoGas	53.743	2.374	191061	3.04	50	107.5	89.5	110.5	
Na	23	45	1	He	25852.707	2.209	40235570	0.86	25000	103.4	89.5	110.5	
Mg	24	45	1	He	26017.402	2.763	22937867	0.58	25000	104.1	89.5	110.5	
Al	27	45	1	He	259.046	2.219	119536	0.40	250	103.6	89.5	110.5	
K	39	45	1	He	25513.553	2.352	17724977	0.25	25000	102.1	89.5	110.5	
Ca	44	45	1	He	25138.273	2.432	928102	0.21	25000	100.6	89.5	110.5	
Ti	47	45	1	He	52.979	3.785	11638	1.66	50	106.0	89.5	110.5	
V	51	45	1	He	51.610	1.146	290022	1.17	50	103.2	89.5	110.5	
Cr	52	45	1	He	51.995	1.440	361150	1.22	50	104.0	89.5	110.5	
Mn	55	45	1	He	257.081	2.132	1252656	0.44	250	102.8	89.5	110.5	
Fe	56	45	1	He	12931.990	2.048	81566581	0.83	12500	103.5	89.5	110.5	
Co	59	103	1	He	49.813	4.036	510104	0.57	50	99.6	89.5	110.5	
Ni	60	103	1	He	50.118	3.456	130610	0.07	50	100.2	89.5	110.5	
Cu	63	103	1	He	50.242	4.031	351314	0.66	50	100.5	89.5	110.5	
Zn	66	103	1	He	50.821	4.076	72589	0.84	50	101.6	89.5	110.5	
As	75	103	1	He	49.534	3.588	44473	0.44	50	99.1	89.5	110.5	
Se	78	103	1	He	50.456	4.039	3763	1.46	50	100.9	89.5	110.5	
Sr	88	103	1	He	49.815	3.436	265163	0.77	50	99.6	89.5	110.5	
Mo	95	103	1	He	76.495	9.731	219633	6.21	50	153.0	89.5	110.5	CCV Failed
Ag	107	103	1	He	50.853	3.948	504702	0.52	50	101.7	89.5	110.5	
Cd	111	103	1	He	50.776	3.781	84994	0.35	50	101.6	89.5	110.5	
Sn	118	115	1	He	50.506	0.665	184281	0.27	50	101.0	89.5	110.5	
Sb	123	115	1	He	53.192	0.104	205697	0.60	50	106.4	89.5	110.5	
Ba	137	115	1	He	51.332	0.072	78173	0.51	50	102.7	89.5	110.5	
W	182	165	1	He	51.559	0.845	569157	1.00	50	103.1	89.5	110.5	
Tl	205	209	1	He	48.485	0.067	1193984	0.73	50	97.0	89.5	110.5	
Pb	208	209	1	He	50.075	0.673	1622945	0.08	50	100.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1731215	0.41	1803797	95.98	30	120	
Sc	45	1	He	581408	2.33	574766	101.16	30	120	
Sc	45	2	NoGas	4239984	0.73	4296857	98.68	30	120	
Rh	103	1	He	1606171	3.43	1652712	97.18	30	120	
In	115	1	He	829658	0.50	852389	97.33	30	120	
Tb	159	1	He	2438423	1.00	2425956	100.51	30	120	
Ho	165	1	He	2468805	0.49	2452680	100.66	30	120	
Bi	209	1	He	1788372	0.75	1810473	98.78	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	014_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:12:10-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.011	45.9	67	44.1	1	
B	11	45	2	NoGas	1.448	8.4	10763	3.0	20	
Na	23	45	1	He	10.355	20.6	48245	4.6	400	
Mg	24	45	1	He	4.438	36.0	4668	26.9	1000	
Al	27	45	1	He	1.844	25.1	1546	11.3	50	
K	39	45	1	He	14.728	38.1	73084	3.0	1000	
Ca	44	45	1	He	3.764	85.0	696	17.5	1000	
Ti	47	45	1	He	0.256	23.9	56	25.0	20	
V	51	45	1	He	0.019	918.8	356	273.6	2	
Cr	52	45	1	He	0.007	163.4	2985	0.8	2	
Mn	55	45	1	He	0.018	57.5	247	17.6	2	
Fe	56	45	1	He	18.650	27.3	119188	23.9	50	
Co	59	103	1	He	0.007	46.6	131	26.0	1	
Ni	60	103	1	He	0.018	45.6	147	15.9	2	
Cu	63	103	1	He	-0.018	-8.5	2387	0.6	2	
Zn	66	103	1	He	0.027	229.4	898	9.2	20	
As	75	103	1	He	-0.018	-85.1	183	6.5	2	
Se	78	103	1	He	0.008	1158.9	31	23.5	2	
Sr	88	103	1	He	0.005	49.9	173	8.4	10	
Mo	95	103	1	He	4.338	10.2	13662	8.9	2	CCB Failed
Ag	107	103	1	He	0.007	10.3	108	6.4	0.2	
Cd	111	103	1	He	0.008	309.6	874	4.6	0.2	
Sn	118	115	1	He	0.370	18.4	2274	11.4	10	
Sb	123	115	1	He	0.273	4.9	2001	2.9	1	
Ba	137	115	1	He	0.011	47.1	31	27.0	5	
W	182	165	1	He	1.086	19.9	14745	15.6	10	
Tl	205	209	1	He	0.050	19.8	1681	14.6	0.5	
Pb	208	209	1	He	0.011	45.1	1273	12.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1788417	2.49	1803797	99.15	30	120	
Sc	45	1	He	561517	2.03	574766	97.69	30	120	
Sc	45	2	NoGas	4242354	1.28	4296857	98.73	30	120	
Rh	103	1	He	1673248	1.10	1652712	101.24	30	120	
In	115	1	He	863146	0.38	852389	101.26	30	120	
Tb	159	1	He	2456728	0.96	2425956	101.27	30	120	
Ho	165	1	He	2490020	0.60	2452680	101.52	30	120	
Bi	209	1	He	1853457	0.91	1810473	102.37	30	120	

Sample Report

Sample Table

Sample Name	LIN 2
Data File Name	015SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:16:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.061	3.061	1.93	17012	0.02	10000	
B	11	45	2	NoGas	11.858	11.858	2.28	50121	0.02	300	
Na	23	45	1	He	120.183	120.183	2.78	243944	0.05	500000	
Mg	24	45	1	He	7435.125	7435.125	1.43	7245908	0.10	500000	
Al	27	45	1	He	38687.656	38687.656	2.30	19602610	0.20	200000	
K	39	45	1	He	3184.621	3184.621	0.69	2508724	0.13	500000	
Ca	44	45	1	He	628.842	628.842	4.34	26275	2.39	500000	
Ti	47	45	1	He	329.204	329.204	0.97	79940	0.41	2500	
V	51	45	1	He	110.212	110.212	1.29	684071	0.02	10000	
Cr	52	45	1	He	94.299	94.299	1.62	720992	0.01	10000	
Mn	55	45	1	He	7717.550	7717.550	1.56	41554453	0.02	10000	
Fe	56	45	1	He	195732.989	195732.989	2.33	1364036035	0.01	200000	
Co	59	103	1	He	60.540	60.540	1.43	633251	0.01	10000	
Ni	60	103	1	He	91.634	91.634	1.25	243825	0.04	10000	
Cu	63	103	1	He	60.839	60.839	0.67	434052	0.01	10000	
Zn	66	103	1	He	204.714	204.714	1.68	296128	0.07	10000	
As	75	103	1	He	73.865	73.865	0.77	67643	0.11	10000	
Se	78	103	1	He	5.025	5.025	7.07	409	1.23	10000	
Sr	88	103	1	He	21.855	21.855	0.91	118913	0.02	10000	
Mo	95	103	1	He	9.907	9.907	1.87	29702	0.03	2000	
Ag	107	103	1	He	0.091	0.091	2.51	958	0.01	300	
Cd	111	103	1	He	0.547	0.547	6.64	1769	0.03	4000	
Sn	118	115	1	He	17.678	17.678	2.89	65594	0.03	2000	
Sb	123	115	1	He	1.035	1.035	9.71	4899	0.02	300	
Ba	137	115	1	He	304.437	304.437	0.32	467360	0.07	10000	
W	182	165	1	He	0.535	0.535	9.14	8873	0.01	2500	
Tl	205	209	1	He	0.809	0.809	1.10	20887	0.00	5000	
Pb	208	209	1	He	69.044	69.044	1.79	2300013	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1774961	0.31	1803797	98.40	30	120	
Sc	45	1	He	642438	2.04	574766	111.77	30	120	
Sc	45	2	NoGas	4555411	1.31	4296857	106.02	30	120	
Rh	103	1	He	1639351	1.31	1652712	99.19	30	120	
In	115	1	He	836463	0.76	852389	98.13	30	120	
Tb	159	1	He	2517791	0.64	2425956	103.79	30	120	
Ho	165	1	He	2553262	1.19	2452680	104.10	30	120	
Bi	209	1	He	1838786	2.13	1810473	101.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	BLANK
Data File Name	016_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:19:53-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.571	6.3	2767	5.6	1	
B	11	45	2	NoGas	2.957	9.2	13706	5.6	20	
Na	23	45	1	He	28.371	1.4	69315	1.4	400	
Mg	24	45	1	He	1630.488	2.7	1278062	1.0	1000	Blank Failed
Al	27	45	1	He	8279.169	1.3	3374000	0.6	50	Blank Failed
K	39	45	1	He	651.591	1.0	459009	1.0	1000	
Ca	44	45	1	He	132.218	1.9	4852	1.2	1000	
Ti	47	45	1	He	69.559	0.9	13583	1.8	20	Blank Failed
V	51	45	1	He	22.530	0.8	112628	1.1	2	Blank Failed
Cr	52	45	1	He	20.066	1.8	125487	0.3	2	Blank Failed
Mn	55	45	1	He	1658.479	1.3	7180059	0.6	2	Blank Failed
Fe	56	45	1	He	41793.746	1.1	234227777	0.8	50	Blank Failed
Co	59	103	1	He	11.970	0.3	109026	0.9	1	Blank Failed
Ni	60	103	1	He	18.014	1.7	41786	0.8	2	Blank Failed
Cu	63	103	1	He	12.261	0.6	77856	0.9	2	Blank Failed
Zn	66	103	1	He	42.181	1.9	53691	1.0	20	Blank Failed
As	75	103	1	He	14.561	0.5	11743	0.7	2	Blank Failed
Se	78	103	1	He	0.944	10.5	88	6.9	2	
Sr	88	103	1	He	4.254	1.9	20244	2.7	10	
Mo	95	103	1	He	1.846	3.4	5306	3.3	2	
Ag	107	103	1	He	0.020	32.4	202	29.0	0.2	
Cd	111	103	1	He	0.105	10.8	888	2.8	0.2	
Sn	118	115	1	He	3.373	1.9	11704	1.7	10	
Sb	123	115	1	He	0.182	1.9	1407	0.9	1	
Ba	137	115	1	He	61.185	0.9	83280	0.8	5	Blank Failed
W	182	165	1	He	0.070	39.2	3275	8.7	10	
Tl	205	209	1	He	0.161	2.4	4045	2.3	0.5	
Pb	208	209	1	He	14.353	2.9	432795	1.0	1	Blank Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1545848	2.94	1803797	85.70	30	120	
Sc	45	1	He	516554	1.88	574766	89.87	30	120	
Sc	45	2	NoGas	3641954	1.70	4296857	84.76	30	120	
Rh	103	1	He	1426887	0.98	1652712	86.34	30	120	
In	115	1	He	741560	0.24	852389	87.00	30	120	
Tb	159	1	He	2263899	1.89	2425956	93.32	30	120	
Ho	165	1	He	2330877	0.12	2452680	95.03	30	120	
Bi	209	1	He	1662485	2.94	1810473	91.83	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	017_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:23:44-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.835	3.532	218134	2.34	50	91.7	89.5	110.5	
B	11	45	2	NoGas	51.677	1.845	160197	1.43	50	103.4	89.5	110.5	
Na	23	45	1	He	25724.312	2.623	35484959	1.03	25000	102.9	89.5	110.5	
Mg	24	45	1	He	25636.297	3.807	20029243	0.64	25000	102.5	89.5	110.5	
Al	27	45	1	He	250.535	2.564	102492	0.95	250	100.2	89.5	110.5	
K	39	45	1	He	25167.075	3.297	15495805	0.55	25000	100.7	89.5	110.5	
Ca	44	45	1	He	24660.498	3.108	806925	0.43	25000	98.6	89.5	110.5	
Ti	47	45	1	He	49.817	5.237	9697	2.46	50	99.6	89.5	110.5	
V	51	45	1	He	50.571	4.734	251726	1.40	50	101.1	89.5	110.5	
Cr	52	45	1	He	51.573	3.414	317422	0.27	50	103.1	89.5	110.5	
Mn	55	45	1	He	255.401	3.009	1102900	0.37	250	102.2	89.5	110.5	
Fe	56	45	1	He	12876.573	3.544	71967057	0.19	12500	103.0	89.5	110.5	
Co	59	103	1	He	50.318	0.939	452525	0.58	50	100.6	89.5	110.5	
Ni	60	103	1	He	50.428	2.002	115394	1.57	50	100.9	89.5	110.5	
Cu	63	103	1	He	51.297	1.743	314956	1.36	50	102.6	89.5	110.5	
Zn	66	103	1	He	51.218	1.261	64242	1.19	50	102.4	89.5	110.5	
As	75	103	1	He	49.760	1.226	39230	0.82	50	99.5	89.5	110.5	
Se	78	103	1	He	50.058	2.171	3278	1.39	50	100.1	89.5	110.5	
Sr	88	103	1	He	49.668	0.399	232154	0.50	50	99.3	89.5	110.5	
Mo	95	103	1	He	51.852	3.317	131128	3.83	50	103.7	89.5	110.5	
Ag	107	103	1	He	51.941	0.776	452719	0.36	50	103.9	89.5	110.5	
Cd	111	103	1	He	52.349	1.156	76927	0.40	50	104.7	89.5	110.5	
Sn	118	115	1	He	50.660	2.049	166232	2.50	50	101.3	89.5	110.5	
Sb	123	115	1	He	53.102	0.868	184662	0.61	50	106.2	89.5	110.5	
Ba	137	115	1	He	50.923	0.904	69735	0.37	50	101.8	89.5	110.5	
W	182	165	1	He	49.789	1.852	518291	1.06	50	99.6	89.5	110.5	
Tl	205	209	1	He	50.649	0.286	1122247	0.62	50	101.3	89.5	110.5	
Pb	208	209	1	He	52.256	0.302	1523914	0.83	50	104.5	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1520695	1.41	1803797	84.31	30	120	
Sc	45	1	He	515454	3.42	574766	89.68	30	120	
Sc	45	2	NoGas	3693378	0.80	4296857	85.96	30	120	
Rh	103	1	He	1409341	0.81	1652712	85.27	30	120	
In	115	1	He	746084	0.53	852389	87.53	30	120	
Tb	159	1	He	2261577	0.29	2425956	93.22	30	120	
Ho	165	1	He	2328023	1.43	2452680	94.92	30	120	
Bi	209	1	He	1609126	0.54	1810473	88.88	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	018_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:27:36-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.008	112.0	41	103.3	1	
B	11	45	2	NoGas	1.153	8.8	8558	2.9	20	
Na	23	45	1	He	7.427	12.5	39031	2.1	400	
Mg	24	45	1	He	2.389	21.4	2611	13.7	1000	
Al	27	45	1	He	1.460	16.1	1226	6.8	50	
K	39	45	1	He	19.837	14.3	68080	1.4	1000	
Ca	44	45	1	He	2.649	40.0	583	5.8	1000	
Ti	47	45	1	He	0.113	36.9	22	34.7	20	
V	51	45	1	He	0.021	446.3	330	135.6	2	
Cr	52	45	1	He	0.007	258.7	2655	2.9	2	
Mn	55	45	1	He	0.185	21.3	921	16.9	2	
Fe	56	45	1	He	19.205	24.1	109193	21.8	50	
Co	59	103	1	He	0.005	49.5	101	24.7	1	
Ni	60	103	1	He	-0.002	-200.1	82	9.4	2	
Cu	63	103	1	He	0.015	12.9	2341	1.0	2	
Zn	66	103	1	He	-0.010	-266.4	751	4.5	20	
As	75	103	1	He	-0.037	-40.9	147	9.4	2	
Se	78	103	1	He	0.066	102.9	31	15.6	2	
Sr	88	103	1	He	0.004	140.8	147	18.0	10	
Mo	95	103	1	He	0.832	21.2	2840	16.3	2	
Ag	107	103	1	He	0.002	99.4	47	37.1	0.2	
Cd	111	103	1	He	0.000	-62476.3	766	4.1	0.2	
Sn	118	115	1	He	0.200	17.4	1482	8.8	10	
Sb	123	115	1	He	0.186	20.7	1499	8.9	1	
Ba	137	115	1	He	0.019	80.0	39	55.1	5	
W	182	165	1	He	0.836	17.5	11423	13.6	10	
Tl	205	209	1	He	0.039	26.3	1315	17.8	0.5	
Pb	208	209	1	He	0.016	3.8	1341	1.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1540364	0.52	1803797	85.40	30	120	
Sc	45	1	He	499468	1.12	574766	86.90	30	120	
Sc	45	2	NoGas	3724923	0.80	4296857	86.69	30	120	
Rh	103	1	He	1489356	0.79	1652712	90.12	30	120	
In	115	1	He	781890	0.83	852389	91.73	30	120	
Tb	159	1	He	2290537	1.88	2425956	94.42	30	120	
Ho	165	1	He	2373285	0.41	2452680	96.76	30	120	
Bi	209	1	He	1730085	1.32	1810473	95.56	30	120	

Sample Report

Sample Table

Sample Name	240-49214-b-4 RAW
Data File Name	019SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:31:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.008	0.008	97.81	44	0.02	10000	
B	11	45	2	NoGas	28.938	28.938	1.36	82602	0.04	300	
Na	23	45	1	He	29578.952	29578.952	8.23	29069430	0.10	500000	
Mg	24	45	1	He	11478.239	11478.239	8.70	6390132	0.18	500000	
Al	27	45	1	He	2.993	2.993	13.34	1346	0.22	200000	
K	39	45	1	He	2424.269	2424.269	8.66	1101046	0.22	500000	
Ca	44	45	1	He	68993.117	68993.117	9.38	1607044	4.29	500000	
Ti	47	45	1	He	0.204	0.204	14.65	29	0.71	2500	
V	51	45	1	He	0.135	0.135	22.86	646	0.02	10000	
Cr	52	45	1	He	0.018	0.018	168.03	2002	0.00	10000	
Mn	55	45	1	He	0.672	0.672	6.19	2178	0.03	10000	
Fe	56	45	1	He	9.373	9.373	7.34	41258	0.02	200000	
Co	59	103	1	He	0.103	0.103	14.93	1030	0.01	10000	
Ni	60	103	1	He	0.233	0.233	17.04	651	0.04	10000	
Cu	63	103	1	He	0.214	0.214	7.47	3628	0.01	10000	
Zn	66	103	1	He	0.794	0.794	14.76	1807	0.04	10000	
As	75	103	1	He	0.213	0.213	13.30	355	0.06	10000	
Se	78	103	1	He	0.170	0.170	54.42	38	0.44	10000	
Sr	88	103	1	He	93.649	93.649	2.09	463383	0.02	10000	
Mo	95	103	1	He	15.222	15.222	7.78	41179	0.04	2000	
Ag	107	103	1	He	0.003	0.003	65.72	56	0.01	300	
Cd	111	103	1	He	0.022	0.022	45.03	801	0.00	4000	
Sn	118	115	1	He	-0.163	-0.163	-0.35	241	-0.07	2000	
Sb	123	115	1	He	0.319	0.319	14.91	1990	0.02	300	
Ba	137	115	1	He	72.018	72.018	8.03	103827	0.07	10000	
W	182	165	1	He	248.491	248.491	2.07	2722891	0.01	2500	
Tl	205	209	1	He	0.032	0.032	21.78	487	0.01	5000	
Pb	208	209	1	He	0.084	0.084	17.89	1486	0.01	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1610468	1.18	1803797	89.28	30	120	
Sc	45	1	He	368770	8.46	574766	64.16	30	120	
Sc	45	2	NoGas	3319068	0.62	4296857	77.24	30	120	
Rh	103	1	He	1492683	1.93	1652712	90.32	30	120	
In	115	1	He	788106	6.26	852389	92.46	30	120	
Tb	159	1	He	2402791	2.16	2425956	99.05	30	120	
Ho	165	1	He	2459462	1.42	2452680	100.28	30	120	
Bi	209	1	He	743339	7.61	1810473	41.06	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176862/1-a
Data File Name	020_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:35:20-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.005	121.4	26	107.9	1	
B	11	45	2	NoGas	4.215	5.2	17190	4.6	20	
Na	23	45	1	He	70.872	3.6	127048	2.3	400	
Mg	24	45	1	He	59.216	5.1	46838	2.9	1000	
Al	27	45	1	He	5.430	2.3	2864	2.8	50	
K	39	45	1	He	46.226	15.6	85903	0.8	1000	
Ca	44	45	1	He	197.410	6.5	6928	1.9	1000	
Ti	47	45	1	He	0.162	34.4	32	31.6	20	
V	51	45	1	He	0.203	86.7	1256	71.9	2	
Cr	52	45	1	He	1.098	2.5	9363	6.2	2	
Mn	55	45	1	He	0.357	9.9	1680	4.8	2	
Fe	56	45	1	He	17.065	2.1	100396	4.7	50	
Co	59	103	1	He	0.007	25.8	113	15.6	1	
Ni	60	103	1	He	0.167	5.3	468	3.6	2	
Cu	63	103	1	He	1.084	9.7	8831	6.6	2	
Zn	66	103	1	He	6.259	2.6	8580	1.7	20	
As	75	103	1	He	0.344	3.3	443	2.1	2	
Se	78	103	1	He	0.068	190.9	30	27.5	2	
Sr	88	103	1	He	0.386	8.8	1947	8.2	10	
Mo	95	103	1	He	1.379	25.5	4106	21.0	2	
Ag	107	103	1	He	0.000	-50.3	24	7.9	0.2	
Cd	111	103	1	He	-0.012	-246.2	715	5.6	0.2	
Sn	118	115	1	He	0.620	10.2	2774	6.8	10	
Sb	123	115	1	He	0.386	10.7	2116	6.6	1	
Ba	137	115	1	He	0.939	1.1	1293	1.1	5	
W	182	165	1	He	21.408	23.4	221072	23.2	10	Blank Failed
Tl	205	209	1	He	0.011	10.2	639	4.3	0.5	
Pb	208	209	1	He	0.139	6.2	5188	5.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1562757	2.04	1803797	86.64	30	120	
Sc	45	1	He	512870	4.59	574766	89.23	30	120	
Sc	45	2	NoGas	3589745	0.90	4296857	83.54	30	120	
Rh	103	1	He	1425311	0.89	1652712	86.24	30	120	
In	115	1	He	743617	0.62	852389	87.24	30	120	
Tb	159	1	He	2201295	1.62	2425956	90.74	30	120	
Ho	165	1	He	2293927	0.30	2452680	93.53	30	120	
Bi	209	1	He	1727727	2.48	1810473	95.43	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176862/2-a
Data File Name	021_LCS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:39:09-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1021.217	1021.217	4.124	4865319	2.21	1000	102.1	79.5	120.5	
B	11	2	NoGas	126.871	126.871	1.142	373085	0.68	100	126.9	79.5	120.5	LCS Failed
Na	23	1	He	10463.892	10463.892	3.081	13989874	1.81	10000	104.6	79.5	120.5	
Mg	24	1	He	10353.980	10353.980	1.905	7834380	1.06	10000	103.5	79.5	120.5	
Al	27	1	He	9465.293	9465.293	1.096	3725935	2.67	10000	94.7	79.5	120.5	
K	39	1	He	9950.713	9950.713	1.592	5966699	0.77	10000	99.5	79.5	120.5	
Ca	44	1	He	9624.847	9624.847	1.405	305263	0.98	10000	96.2	79.5	120.5	
Ti	47	1	He	100.468	100.468	0.983	18947	2.20	100	100.5	79.5	120.5	
V	51	1	He	993.447	993.447	1.794	4785592	0.55	1000	99.3	79.5	120.5	
Cr	52	1	He	1016.538	1016.538	2.168	6009206	0.53	1000	101.7	79.5	120.5	
Mn	55	1	He	1004.315	1004.315	3.058	4197917	0.74	1000	100.4	79.5	120.5	
Fe	56	1	He	10336.654	10336.654	1.709	55945024	0.70	10000	103.4	79.5	120.5	
Co	59	1	He	985.877	985.877	1.817	8665185	1.59	1000	98.6	79.5	120.5	
Ni	60	1	He	1017.188	1017.188	0.899	2273721	1.26	1000	101.7	79.5	120.5	
Cu	63	1	He	1011.315	1011.315	0.972	6030643	1.16	1000	101.1	79.5	120.5	
Zn	66	1	He	990.864	990.864	0.530	1201816	0.47	1000	99.1	79.5	120.5	
As	75	1	He	942.804	942.804	0.211	723587	0.65	1000	94.3	79.5	120.5	
Se	78	1	He	971.239	971.239	0.417	61720	0.70	1000	97.1	79.5	120.5	
Sr	88	1	He	979.396	979.396	0.214	4472263	0.65	1000	97.9	79.5	120.5	
Mo	95	1	He	107.004	107.004	0.618	263841	0.18	100	107.0	79.5	120.5	
Ag	107	1	He	103.464	103.464	1.178	881409	1.00	100	103.5	79.5	120.5	
Cd	111	1	He	1017.685	1017.685	0.203	1448729	0.56	1000	101.8	79.5	120.5	
Sn	118	1	He	1055.371	1055.371	1.666	3258825	1.54	1000	105.5	79.5	120.5	
Sb	123	1	He	102.289	102.289	0.531	335537	0.65	100	102.3	79.5	120.5	
Ba	137	1	He	997.521	997.521	1.012	1290984	0.51	1000	99.8	79.5	120.5	
W	182	1	He	102.278	102.278	0.459	1036578	0.63	100	102.3	79.5	120.5	
Tl	205	1	He	247.190	247.190	0.963	5340216	1.14	250	98.9	79.5	120.5	
Pb	208	1	He	1014.066	1014.066	0.169	28826383	0.30	1000	101.4	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1522762	2.10	1803797	84.42	30	120	
Sc	45	1	He	498876	2.34	574766	86.80	30	120	
Sc	45	2	NoGas	3569975	1.15	4296857	83.08	30	120	
Rh	103	1	He	1377496	0.44	1652712	83.35	30	120	
In	115	1	He	705215	0.70	852389	82.73	30	120	
Tb	159	1	He	2227901	0.83	2425956	91.84	30	120	
Ho	165	1	He	2272050	1.08	2452680	92.64	30	120	
Bi	209	1	He	1569295	0.40	1810473	86.68	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176862/1-a
Data File Name	022_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:42:48-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.111	30.7	533	28.9	1	
B	11	45	2	NoGas	5.431	2.3	20568	3.4	20	
Na	23	45	1	He	69.264	3.8	122066	1.3	400	
Mg	24	45	1	He	61.332	1.1	47447	2.6	1000	
Al	27	45	1	He	4.300	9.5	2351	4.6	50	
K	39	45	1	He	48.889	5.1	85667	1.5	1000	
Ca	44	45	1	He	199.841	5.6	6859	4.6	1000	
Ti	47	45	1	He	0.264	43.1	51	42.4	20	
V	51	45	1	He	0.111	138.6	755	95.8	2	
Cr	52	45	1	He	1.113	1.4	9234	1.7	2	
Mn	55	45	1	He	0.429	11.1	1955	13.0	2	
Fe	56	45	1	He	17.323	3.9	99597	6.1	50	
Co	59	103	1	He	0.101	9.9	972	9.1	1	
Ni	60	103	1	He	0.330	4.6	851	4.3	2	
Cu	63	103	1	He	1.246	9.4	9906	7.1	2	
Zn	66	103	1	He	6.864	0.8	9410	0.9	20	
As	75	103	1	He	0.497	9.2	569	6.1	2	
Se	78	103	1	He	0.504	11.1	59	6.6	2	
Sr	88	103	1	He	0.431	8.3	2175	7.5	10	
Mo	95	103	1	He	0.704	12.9	2410	9.5	2	
Ag	107	103	1	He	0.010	34.9	118	26.3	0.2	
Cd	111	103	1	He	0.203	28.4	1039	7.8	0.2	Blank Failed
Sn	118	115	1	He	1.848	21.7	6757	19.0	10	
Sb	123	115	1	He	0.674	7.9	3104	5.7	1	
Ba	137	115	1	He	1.085	6.1	1489	5.9	5	
W	182	165	1	He	2.142	5.1	24112	2.9	10	
Tl	205	209	1	He	0.187	31.3	4671	28.2	0.5	
Pb	208	209	1	He	0.243	15.7	8192	13.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1527820	2.20	1803797	84.70	30	120	
Sc	45	1	He	501317	2.65	574766	87.22	30	120	
Sc	45	2	NoGas	3560094	1.69	4296857	82.85	30	120	
Rh	103	1	He	1435938	0.47	1652712	86.88	30	120	
In	115	1	He	742133	0.23	852389	87.07	30	120	
Tb	159	1	He	2237654	1.78	2425956	92.24	30	120	
Ho	165	1	He	2270264	2.04	2452680	92.56	30	120	
Bi	209	1	He	1674636	3.30	1810473	92.50	30	120	

Sample Report

Sample Table

Sample Name	240-49214-b-4-c
Data File Name	023SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:46:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.042	0.042	26.74	207	0.02	10000	
B	11	45	2	NoGas	32.016	32.016	0.65	99074	0.03	300	
Na	23	45	1	He	20488.236	20488.236	2.48	27182449	0.08	500000	
Mg	24	45	1	He	8014.370	8014.370	3.59	6022005	0.13	500000	
Al	27	45	1	He	7.132	7.132	2.41	3433	0.21	200000	
K	39	45	1	He	1611.788	1611.788	1.99	1006732	0.16	500000	
Ca	44	45	1	He	45115.306	45115.306	2.78	1419185	3.18	500000	
Ti	47	45	1	He	0.251	0.251	44.28	48	0.53	2500	
V	51	45	1	He	0.411	0.411	57.57	2191	0.02	10000	
Cr	52	45	1	He	1.251	1.251	5.68	9934	0.01	10000	
Mn	55	45	1	He	0.660	0.660	11.30	2882	0.02	10000	
Fe	56	45	1	He	7.842	7.842	2.58	47405	0.02	200000	
Co	59	103	1	He	0.149	0.149	7.32	1362	0.01	10000	
Ni	60	103	1	He	0.468	0.468	6.71	1129	0.04	10000	
Cu	63	103	1	He	1.137	1.137	4.81	8875	0.01	10000	
Zn	66	103	1	He	4.504	4.504	2.09	6180	0.07	10000	
As	75	103	1	He	0.907	0.907	2.62	862	0.11	10000	
Se	78	103	1	He	0.233	0.233	3.29	40	0.59	10000	
Sr	88	103	1	He	89.905	89.905	0.36	411609	0.02	10000	
Mo	95	103	1	He	26.321	26.321	0.99	65492	0.04	2000	
Ag	107	103	1	He	0.006	0.006	81.37	74	0.01	300	
Cd	111	103	1	He	0.042	0.042	166.08	769	0.01	4000	
Sn	118	115	1	He	0.742	0.742	9.33	3078	0.02	2000	
Sb	123	115	1	He	0.936	0.936	1.95	3896	0.02	300	
Ba	137	115	1	He	69.376	69.376	1.36	91908	0.08	10000	
W	182	165	1	He	419.245	419.245	1.04	4265468	0.01	2500	
Tl	205	209	1	He	0.032	0.032	7.29	1054	0.00	5000	
Pb	208	209	1	He	0.069	0.069	12.57	2746	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1542984	1.48	1803797	85.54	30	120	
Sc	45	1	He	495515	2.09	574766	86.21	30	120	
Sc	45	2	NoGas	3616941	0.22	4296857	84.18	30	120	
Rh	103	1	He	1380763	0.69	1652712	83.55	30	120	
In	115	1	He	721796	0.47	852389	84.68	30	120	
Tb	159	1	He	2195525	0.90	2425956	90.50	30	120	
Ho	165	1	He	2285058	1.07	2452680	93.17	30	120	
Bi	209	1	He	1584624	0.40	1810473	87.53	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	024_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:50:31-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.516	2.192	237932	3.34	50	93.0	89.5	110.5	
B	11	45	2	NoGas	52.634	2.442	175447	1.47	50	105.3	89.5	110.5	
Na	23	45	1	He	25616.060	2.658	37949572	0.52	25000	102.5	89.5	110.5	
Mg	24	45	1	He	25495.275	3.188	21396286	0.59	25000	102.0	89.5	110.5	
Al	27	45	1	He	248.641	2.259	109258	1.22	250	99.5	89.5	110.5	
K	39	45	1	He	25079.458	2.817	16586378	0.21	25000	100.3	89.5	110.5	
Ca	44	45	1	He	24715.180	2.692	868631	0.23	25000	98.9	89.5	110.5	
Ti	47	45	1	He	50.422	4.367	10543	1.76	50	100.8	89.5	110.5	
V	51	45	1	He	51.002	2.342	272799	0.65	50	102.0	89.5	110.5	
Cr	52	45	1	He	51.395	2.388	339816	0.56	50	102.8	89.5	110.5	
Mn	55	45	1	He	252.886	2.326	1173015	0.60	250	101.2	89.5	110.5	
Fe	56	45	1	He	12918.178	2.524	77562781	1.19	12500	103.3	89.5	110.5	
Co	59	103	1	He	50.748	1.936	480324	1.14	50	101.5	89.5	110.5	
Ni	60	103	1	He	50.810	2.056	122369	1.22	50	101.6	89.5	110.5	
Cu	63	103	1	He	51.354	1.199	331860	0.43	50	102.7	89.5	110.5	
Zn	66	103	1	He	51.527	2.870	68014	2.37	50	103.1	89.5	110.5	
As	75	103	1	He	50.482	0.918	41887	0.60	50	101.0	89.5	110.5	
Se	78	103	1	He	51.996	2.358	3583	1.99	50	104.0	89.5	110.5	
Sr	88	103	1	He	50.413	1.335	247994	0.49	50	100.8	89.5	110.5	
Mo	95	103	1	He	51.702	1.431	137604	1.68	50	103.4	89.5	110.5	
Ag	107	103	1	He	52.507	1.173	481683	0.68	50	105.0	89.5	110.5	
Cd	111	103	1	He	52.411	0.490	81065	0.79	50	104.8	89.5	110.5	
Sn	118	115	1	He	50.093	1.407	173918	1.13	50	100.2	89.5	110.5	
Sb	123	115	1	He	52.533	1.194	193308	0.83	50	105.1	89.5	110.5	
Ba	137	115	1	He	51.054	0.717	73980	0.76	50	102.1	89.5	110.5	
W	182	165	1	He	53.701	0.334	585698	1.54	50	107.4	89.5	110.5	
Tl	205	209	1	He	49.174	2.968	1156283	0.87	50	98.3	89.5	110.5	
Pb	208	209	1	He	50.819	2.474	1572878	0.30	50	101.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1633705	1.25	1803797	90.57	30	120	
Sc	45	1	He	553547	2.96	574766	96.31	30	120	
Sc	45	2	NoGas	3974103	1.27	4296857	92.49	30	120	
Rh	103	1	He	1483353	0.85	1652712	89.75	30	120	
In	115	1	He	789448	0.48	852389	92.62	30	120	
Tb	159	1	He	2360098	0.34	2425956	97.29	30	120	
Ho	165	1	He	2439601	1.23	2452680	99.47	30	120	
Bi	209	1	He	1708419	2.35	1810473	94.36	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:54:22-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.028	16.4	152	15.2	1	
B	11	45	2	NoGas	1.575	17.5	10681	8.8	20	
Na	23	45	1	He	5.036	27.8	38422	3.9	400	
Mg	24	45	1	He	2.197	19.3	2645	11.7	1000	
Al	27	45	1	He	0.900	33.1	1079	12.7	50	
K	39	45	1	He	13.784	10.1	69154	0.8	1000	
Ca	44	45	1	He	2.200	34.4	611	5.2	1000	
Ti	47	45	1	He	0.105	7.8	22	8.7	20	
V	51	45	1	He	0.033	91.3	418	38.6	2	
Cr	52	45	1	He	0.000	-57446.9	2804	7.0	2	
Mn	55	45	1	He	0.043	10.6	348	5.5	2	
Fe	56	45	1	He	13.338	32.9	82989	29.4	50	
Co	59	103	1	He	0.005	42.3	109	23.0	1	
Ni	60	103	1	He	0.006	89.6	110	13.9	2	
Cu	63	103	1	He	0.002	1089.1	2436	7.5	2	
Zn	66	103	1	He	0.007	498.7	833	6.4	20	
As	75	103	1	He	-0.023	-59.4	171	5.6	2	
Se	78	103	1	He	0.071	54.5	34	8.3	2	
Sr	88	103	1	He	0.009	61.1	189	17.7	10	
Mo	95	103	1	He	0.671	25.7	2602	19.8	2	
Ag	107	103	1	He	0.004	40.6	72	21.3	0.2	
Cd	111	103	1	He	-0.002	-1410.5	822	4.9	0.2	
Sn	118	115	1	He	0.234	22.9	1689	12.0	10	
Sb	123	115	1	He	0.250	7.0	1831	3.8	1	
Ba	137	115	1	He	0.021	47.4	46	34.6	5	
W	182	165	1	He	1.794	10.2	21994	8.9	10	
Tl	205	209	1	He	0.044	8.8	1491	5.7	0.5	
Pb	208	209	1	He	0.020	27.5	1557	11.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1707924	0.85	1803797	94.68	30	120	
Sc	45	1	He	535624	1.28	574766	93.19	30	120	
Sc	45	2	NoGas	4045138	1.73	4296857	94.14	30	120	
Rh	103	1	He	1606323	1.61	1652712	97.19	30	120	
In	115	1	He	826938	0.86	852389	97.01	30	120	
Tb	159	1	He	2390257	0.81	2425956	98.53	30	120	
Ho	165	1	He	2423193	1.61	2452680	98.80	30	120	
Bi	209	1	He	1823342	0.82	1810473	100.71	30	120	

Sample Report

Sample Table

Sample Name	LIN 2
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:15:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.015	0.015	8.35	81	0.02	10000	
B	11	45	2	NoGas	0.740	0.740	17.25	7720	0.01	300	
Na	23	45	1	He	-0.458	-0.458	-199.83	32378	0.00	500000	
Mg	24	45	1	He	0.057	0.057	132.55	967	0.01	500000	
Al	27	45	1	He	9.652	9.652	0.46	5067	0.19	200000	
K	39	45	1	He	2.898	2.898	138.17	65928	0.00	500000	
Ca	44	45	1	He	0.945	0.945	23.81	603	0.16	500000	
Ti	47	45	1	He	298.148	298.148	3.45	63967	0.47	2500	
V	51	45	1	He	-0.040	-0.040	-154.48	47	-0.09	10000	
Cr	52	45	1	He	-0.040	-0.040	-48.64	2698	0.00	10000	
Mn	55	45	1	He	0.068	0.068	25.68	487	0.01	10000	
Fe	56	45	1	He	0.075	0.075	85.40	6470	0.00	200000	
Co	59	103	1	He	0.009	0.009	37.20	136	0.01	10000	
Ni	60	103	1	He	0.060	0.060	23.18	241	0.02	10000	
Cu	63	103	1	He	-0.075	-0.075	-16.65	1832	0.00	10000	
Zn	66	103	1	He	0.168	0.168	28.25	1026	0.02	10000	
As	75	103	1	He	-0.022	-0.022	-100.63	166	-0.01	10000	
Se	78	103	1	He	-0.001	-0.001	-9362.61	28	0.00	10000	
Sr	88	103	1	He	-0.001	-0.001	-861.88	129	0.00	10000	
Mo	95	103	1	He	295.076	295.076	0.71	818420	0.04	2000	
Ag	107	103	1	He	309.990	309.990	0.93	2974897	0.01	300	>LDR
Cd	111	103	1	He	0.861	0.861	13.95	2177	0.04	4000	
Sn	118	115	1	He	299.941	299.941	0.87	1076909	0.03	2000	
Sb	123	115	1	He	248.726	248.726	3.74	946605	0.03	300	
Ba	137	115	1	He	0.144	0.144	5.65	230	0.06	10000	
W	182	165	1	He	311.460	311.460	1.72	3327136	0.01	2500	
Tl	205	209	1	He	0.000	0.000	-62.01	388	0.00	5000	
Pb	208	209	1	He	0.006	0.006	39.16	1084	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1658320	0.53	1803797	91.93	30	120	
Sc	45	1	He	568220	5.33	574766	98.86	30	120	
Sc	45	2	NoGas	3934103	1.84	4296857	91.56	30	120	
Rh	103	1	He	1551682	0.89	1652712	93.89	30	120	
In	115	1	He	819490	1.27	852389	96.14	30	120	
Tb	159	1	He	2328348	0.75	2425956	95.98	30	120	
Ho	165	1	He	2398783	1.19	2452680	97.80	30	120	
Bi	209	1	He	1820572	1.07	1810473	100.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	BLANK
Data File Name	028_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:19:41-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.009	73.9	52	68.9	1	
B	11	45	2	NoGas	0.144	89.4	5812	6.3	20	
Na	23	45	1	He	0.469	132.7	31172	1.2	400	
Mg	24	45	1	He	-0.475	-11.9	467	10.4	1000	
Al	27	45	1	He	9.644	2.9	4666	3.1	50	
K	39	45	1	He	6.394	38.4	63017	3.9	1000	
Ca	44	45	1	He	16.348	8.5	1067	3.6	1000	
Ti	47	45	1	He	0.272	54.9	54	52.1	20	
V	51	45	1	He	0.039	18.1	437	9.5	2	
Cr	52	45	1	He	0.009	127.4	2795	1.0	2	
Mn	55	45	1	He	0.178	5.4	933	2.8	2	
Fe	56	45	1	He	-0.047	-57.9	5280	3.1	50	
Co	59	103	1	He	0.001	91.5	63	18.2	1	
Ni	60	103	1	He	0.017	95.5	131	30.5	2	
Cu	63	103	1	He	-0.060	-6.1	1919	1.1	2	
Zn	66	103	1	He	0.859	8.8	1953	5.3	20	
As	75	103	1	He	-0.055	-116.6	136	40.8	2	
Se	78	103	1	He	-0.037	-130.5	25	14.0	2	
Sr	88	103	1	He	0.003	86.7	149	9.3	10	
Mo	95	103	1	He	4.774	15.4	13778	14.5	2	Blank Failed
Ag	107	103	1	He	0.021	24.8	227	21.4	0.2	
Cd	111	103	1	He	0.000	8053.4	792	1.2	0.2	
Sn	118	115	1	He	1.119	7.3	4756	6.4	10	
Sb	123	115	1	He	7.969	21.1	30601	20.9	1	Blank Failed
Ba	137	115	1	He	0.023	34.8	47	25.8	5	
W	182	165	1	He	3.428	14.3	38960	14.1	10	
Tl	205	209	1	He	-0.004	-40.4	292	14.3	0.5	
Pb	208	209	1	He	0.000	15138.8	872	7.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1660894	0.77	1803797	92.08	30	120	
Sc	45	1	He	523629	1.65	574766	91.10	30	120	
Sc	45	2	NoGas	3936636	0.94	4296857	91.62	30	120	
Rh	103	1	He	1540110	0.15	1652712	93.19	30	120	
In	115	1	He	804036	0.42	852389	94.33	30	120	
Tb	159	1	He	2337884	1.71	2425956	96.37	30	120	
Ho	165	1	He	2381142	0.80	2452680	97.08	30	120	
Bi	209	1	He	1779493	0.74	1810473	98.29	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	029_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:23:32-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.520	3.299	245583	3.65	50	93.0	89.5	110.5	
B	11	45	2	NoGas	51.492	2.053	174649	2.75	50	103.0	89.5	110.5	
Na	23	45	1	He	25755.478	3.667	38030344	0.37	25000	103.0	89.5	110.5	
Mg	24	45	1	He	25921.702	3.129	21687573	0.56	25000	103.7	89.5	110.5	
Al	27	45	1	He	252.964	2.720	110793	1.04	250	101.2	89.5	110.5	
K	39	45	1	He	25495.072	2.931	16808272	0.65	25000	102.0	89.5	110.5	
Ca	44	45	1	He	25157.706	3.084	881391	0.31	25000	100.6	89.5	110.5	
Ti	47	45	1	He	52.769	3.996	11000	0.68	50	105.5	89.5	110.5	
V	51	45	1	He	50.867	3.048	271238	1.90	50	101.7	89.5	110.5	
Cr	52	45	1	He	51.354	3.531	338430	0.75	50	102.7	89.5	110.5	
Mn	55	45	1	He	254.796	3.077	1178068	0.30	250	101.9	89.5	110.5	
Fe	56	45	1	He	12953.331	3.185	77521321	0.22	12500	103.6	89.5	110.5	
Co	59	103	1	He	50.530	0.801	478202	0.72	50	101.1	89.5	110.5	
Ni	60	103	1	He	50.838	1.383	122414	0.18	50	101.7	89.5	110.5	
Cu	63	103	1	He	51.156	1.541	330516	0.47	50	102.3	89.5	110.5	
Zn	66	103	1	He	51.239	1.593	67636	2.25	50	102.5	89.5	110.5	
As	75	103	1	He	50.758	1.275	42105	0.18	50	101.5	89.5	110.5	
Se	78	103	1	He	52.001	1.740	3583	0.36	50	104.0	89.5	110.5	
Sr	88	103	1	He	50.576	2.041	248729	0.80	50	101.2	89.5	110.5	
Mo	95	103	1	He	52.745	1.692	140334	1.73	50	105.5	89.5	110.5	
Ag	107	103	1	He	51.753	1.358	474658	0.06	50	103.5	89.5	110.5	
Cd	111	103	1	He	52.210	1.502	80735	0.23	50	104.4	89.5	110.5	
Sn	118	115	1	He	49.672	1.466	172940	1.35	50	99.3	89.5	110.5	
Sb	123	115	1	He	55.156	1.544	203470	1.15	50	110.3	89.5	110.5	
Ba	137	115	1	He	50.394	2.103	73219	1.64	50	100.8	89.5	110.5	
W	182	165	1	He	50.320	1.426	539759	1.22	50	100.6	89.5	110.5	
Tl	205	209	1	He	48.973	4.206	1144816	0.75	50	97.9	89.5	110.5	
Pb	208	209	1	He	50.479	3.399	1553403	0.70	50	101.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1686338	1.57	1803797	93.49	30	120	
Sc	45	1	He	551902	3.43	574766	96.02	30	120	
Sc	45	2	NoGas	4040222	1.60	4296857	94.03	30	120	
Rh	103	1	He	1483119	1.41	1652712	89.74	30	120	
In	115	1	He	791609	0.46	852389	92.87	30	120	
Tb	159	1	He	2358420	1.13	2425956	97.22	30	120	
Ho	165	1	He	2398719	0.44	2452680	97.80	30	120	
Bi	209	1	He	1699299	3.48	1810473	93.86	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	030_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:27:23-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.018	61.4	96	58.1	1	
B	11	45	2	NoGas	1.177	10.4	9332	3.9	20	
Na	23	45	1	He	2.356	39.0	34764	3.0	400	
Mg	24	45	1	He	0.943	65.9	1634	30.1	1000	
Al	27	45	1	He	0.638	11.7	972	4.3	50	
K	39	45	1	He	11.716	18.9	68169	1.0	1000	
Ca	44	45	1	He	0.315	822.4	549	16.1	1000	
Ti	47	45	1	He	0.049	82.4	11	75.5	20	
V	51	45	1	He	0.091	41.1	716	27.3	2	
Cr	52	45	1	He	-0.006	-895.7	2777	11.3	2	
Mn	55	45	1	He	0.012	51.0	213	12.8	2	
Fe	56	45	1	He	9.622	32.5	61787	28.5	50	
Co	59	103	1	He	0.002	85.2	77	26.5	1	
Ni	60	103	1	He	0.005	40.8	106	4.8	2	
Cu	63	103	1	He	-0.074	-15.4	1901	4.2	2	
Zn	66	103	1	He	-0.001	-1835.6	821	4.2	20	
As	75	103	1	He	-0.045	-39.9	151	10.7	2	
Se	78	103	1	He	0.061	79.0	33	10.8	2	
Sr	88	103	1	He	0.001	299.8	144	12.7	10	
Mo	95	103	1	He	0.959	24.9	3424	19.9	2	
Ag	107	103	1	He	0.007	28.6	97	19.2	0.2	
Cd	111	103	1	He	0.013	165.5	846	4.0	0.2	
Sn	118	115	1	He	0.440	15.4	2423	9.8	10	
Sb	123	115	1	He	1.268	7.5	5711	6.2	1	CCB Failed
Ba	137	115	1	He	0.010	90.3	28	48.5	5	
W	182	165	1	He	1.129	16.7	14793	13.8	10	
Tl	205	209	1	He	0.032	22.1	1187	15.7	0.5	
Pb	208	209	1	He	0.009	34.5	1186	9.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1690080	1.49	1803797	93.70	30	120	
Sc	45	1	He	538291	1.06	574766	93.65	30	120	
Sc	45	2	NoGas	4028241	1.92	4296857	93.75	30	120	
Rh	103	1	He	1604725	0.15	1652712	97.10	30	120	
In	115	1	He	823231	0.31	852389	96.58	30	120	
Tb	159	1	He	2387734	0.88	2425956	98.42	30	120	
Ho	165	1	He	2417889	0.14	2452680	98.58	30	120	
Bi	209	1	He	1793356	0.94	1810473	99.05	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	lb 240-176803/1-d@10
Data File Name	031_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:31:20-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.017	52.0	93	50.0	1	
B	11	45	2	NoGas	2.845	6.2	15225	3.4	20	
Na	23	45	1	He	154217.073	0.8	230387295	0.9	400	Blank Failed
Mg	24	45	1	He	5.166	6.9	5275	6.1	1000	
Al	27	45	1	He	11.547	0.9	5813	1.2	50	
K	39	45	1	He	28.861	11.2	82115	2.8	1000	
Ca	44	45	1	He	117.951	5.3	4738	3.9	1000	
Ti	47	45	1	He	0.079	64.8	18	60.3	20	
V	51	45	1	He	0.025	76.2	390	26.0	2	
Cr	52	45	1	He	0.317	8.6	5019	4.1	2	
Mn	55	45	1	He	0.255	9.2	1355	8.5	2	
Fe	56	45	1	He	10.513	1.5	69610	1.9	50	
Co	59	103	1	He	0.007	18.3	119	11.3	1	
Ni	60	103	1	He	0.372	7.1	984	5.8	2	
Cu	63	103	1	He	0.575	1.3	5940	1.8	2	
Zn	66	103	1	He	2.579	12.2	4135	9.3	20	
As	75	103	1	He	-0.002	-628.2	175	8.4	2	
Se	78	103	1	He	0.130	43.8	36	11.9	2	
Sr	88	103	1	He	0.344	7.5	1821	6.8	10	
Mo	95	103	1	He	0.617	6.3	2265	3.6	2	
Ag	107	103	1	He	0.010	31.4	118	23.6	0.2	
Cd	111	103	1	He	0.056	20.2	851	2.5	0.2	
Sn	118	115	1	He	0.208	19.4	1559	9.2	10	
Sb	123	115	1	He	0.867	4.1	4106	3.2	1	
Ba	137	115	1	He	0.954	5.2	1429	5.0	5	
W	182	165	1	He	0.340	10.2	6294	4.3	10	
Tl	205	209	1	He	0.004	54.3	478	10.5	0.5	
Pb	208	209	1	He	0.185	1.9	6720	2.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1680864	0.63	1803797	93.18	30	120	
Sc	45	1	He	558311	0.76	574766	97.14	30	120	
Sc	45	2	NoGas	4144906	0.59	4296857	96.46	30	120	
Rh	103	1	He	1486996	0.98	1652712	89.97	30	120	
In	115	1	He	808893	0.26	852389	94.90	30	120	
Tb	159	1	He	2352053	1.05	2425956	96.95	30	120	
Ho	165	1	He	2415370	2.24	2452680	98.48	30	120	
Bi	209	1	He	1751328	2.32	1810473	96.73	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176851/2-a10
Data File Name	032_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:35:13-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.019	58.9	107	57.0	1	
B	11	45	2	NoGas	0.547	8.8	7509	3.0	20	
Na	23	45	1	He	21.812	14.7	65253	8.1	400	
Mg	24	45	1	He	-0.381	-1.3	578	0.0	1000	
Al	27	45	1	He	8.197	3.3	4344	2.0	50	
K	39	45	1	He	6.207	6.7	67158	1.1	1000	
Ca	44	45	1	He	4.662	46.3	725	10.4	1000	
Ti	47	45	1	He	0.016	150.9	4	114.6	20	
V	51	45	1	He	0.040	339.6	473	155.5	2	
Cr	52	45	1	He	0.125	18.7	3755	4.3	2	
Mn	55	45	1	He	0.069	24.5	486	16.2	2	
Fe	56	45	1	He	3.176	3.3	25197	3.0	50	
Co	59	103	1	He	0.000	304.9	58	24.0	1	
Ni	60	103	1	He	0.010	26.9	120	5.6	2	
Cu	63	103	1	He	0.046	237.3	2743	28.7	2	
Zn	66	103	1	He	0.568	3.6	1628	3.4	20	
As	75	103	1	He	-0.002	-1208.5	189	12.6	2	
Se	78	103	1	He	-0.018	-465.6	28	22.1	2	
Sr	88	103	1	He	0.001	113.8	146	7.4	10	
Mo	95	103	1	He	-0.027	-93.1	597	10.3	2	
Ag	107	103	1	He	0.002	121.1	56	53.8	0.2	
Cd	111	103	1	He	0.011	109.4	845	2.9	0.2	
Sn	118	115	1	He	0.088	83.0	1170	22.3	10	
Sb	123	115	1	He	0.598	9.1	3199	6.6	1	
Ba	137	115	1	He	0.024	40.5	50	30.5	5	
W	182	165	1	He	0.174	15.8	4649	7.4	10	
Tl	205	209	1	He	-0.003	-37.0	333	6.9	0.5	
Pb	208	209	1	He	0.013	22.6	1318	7.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1719855	0.02	1803797	95.35	30	120	
Sc	45	1	He	559193	0.73	574766	97.29	30	120	
Sc	45	2	NoGas	4159884	0.93	4296857	96.81	30	120	
Rh	103	1	He	1606999	2.04	1652712	97.23	30	120	
In	115	1	He	835275	0.59	852389	97.99	30	120	
Tb	159	1	He	2399693	0.94	2425956	98.92	30	120	
Ho	165	1	He	2488815	0.97	2452680	101.47	30	120	
Bi	209	1	He	1827082	0.52	1810473	100.92	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176851/3-a@10
Data File Name	033_LCS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:39:04-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	101.610	101.610	1.109	540411	1.60	1000	10.2	79.5	120.5	LCS Failed
B	11	2	NoGas	13.531	13.531	2.181	51064	2.51	100	13.5	79.5	120.5	LCS Failed
Na	23	1	He	152633.288	152633.288	1.332	227392443	1.24	10000	1526.3	79.5	120.5	LCS Failed
Mg	24	1	He	1069.106	1069.106	1.671	903834	1.41	10000	10.7	79.5	120.5	LCS Failed
Al	27	1	He	1051.279	1051.279	1.377	462475	1.03	10000	10.5	79.5	120.5	LCS Failed
K	39	1	He	1067.110	1067.110	2.221	770225	0.84	10000	10.7	79.5	120.5	LCS Failed
Ca	44	1	He	1055.472	1055.472	1.970	37861	1.34	10000	10.6	79.5	120.5	LCS Failed
Ti	47	1	He	10.970	10.970	4.922	2310	5.15	100	11.0	79.5	120.5	LCS Failed
V	51	1	He	103.828	103.828	1.287	558568	1.08	1000	10.4	79.5	120.5	LCS Failed
Cr	52	1	He	105.106	105.106	1.448	696245	0.99	1000	10.5	79.5	120.5	LCS Failed
Mn	55	1	He	103.510	103.510	1.416	483227	0.99	1000	10.4	79.5	120.5	LCS Failed
Fe	56	1	He	1065.130	1065.130	2.399	6439505	0.09	10000	10.7	79.5	120.5	LCS Failed
Co	59	1	He	104.219	104.219	1.215	989918	1.22	1000	10.4	79.5	120.5	LCS Failed
Ni	60	1	He	103.808	103.808	1.361	250822	1.54	1000	10.4	79.5	120.5	LCS Failed
Cu	63	1	He	104.420	104.420	1.118	674880	1.35	1000	10.4	79.5	120.5	LCS Failed
Zn	66	1	He	106.385	106.385	1.481	140115	1.34	1000	10.6	79.5	120.5	LCS Failed
As	75	1	He	103.550	103.550	1.942	86040	2.35	1000	10.4	79.5	120.5	LCS Failed
Se	78	1	He	106.815	106.815	2.331	7359	2.72	1000	10.7	79.5	120.5	LCS Failed
Sr	88	1	He	103.133	103.133	1.461	509031	1.86	1000	10.3	79.5	120.5	LCS Failed
Mo	95	1	He	10.968	10.968	2.582	29788	2.68	100	11.0	79.5	120.5	LCS Failed
Ag	107	1	He	10.465	10.465	1.659	96361	1.63	100	10.5	79.5	120.5	LCS Failed
Cd	111	1	He	106.320	106.320	1.058	164241	1.43	1000	10.6	79.5	120.5	LCS Failed
Sn	118	1	He	102.173	102.173	1.308	358680	1.11	1000	10.2	79.5	120.5	LCS Failed
Sb	123	1	He	10.898	10.898	1.795	41319	2.74	100	10.9	79.5	120.5	LCS Failed
Ba	137	1	He	103.052	103.052	1.239	151337	1.71	1000	10.3	79.5	120.5	LCS Failed
W	182	1	He	9.971	9.971	0.620	110530	1.86	100	10.0	79.5	120.5	LCS Failed
Tl	205	1	He	23.751	23.751	1.524	570442	1.07	250	9.5	79.5	120.5	LCS Failed
Pb	208	1	He	102.075	102.075	1.391	3224726	1.02	1000	10.2	79.5	120.5	LCS Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1698998	1.42	1803797	94.19	30	120	
Sc	45	1	He	556870	2.36	574766	96.89	30	120	
Sc	45	2	NoGas	4130465	0.57	4296857	96.13	30	120	
Rh	103	1	He	1488575	1.10	1652712	90.07	30	120	
In	115	1	He	800171	1.70	852389	93.87	30	120	
Tb	159	1	He	2359317	1.87	2425956	97.25	30	120	
Ho	165	1	He	2431030	1.54	2452680	99.12	30	120	
Bi	209	1	He	1744000	2.43	1810473	96.33	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-e@10
Data File Name	034SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:42:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.018	0.018	24.40	100	0.02	10000	
B	11	45	2	NoGas	12.051	12.051	1.95	49121	0.02	300	
Na	23	45	1	He	152841.175	152841.175	1.74	230966317	0.07	500000	
Mg	24	45	1	He	2231.584	2231.584	1.32	1912812	0.12	500000	
Al	27	45	1	He	11.379	11.379	0.72	5807	0.20	200000	
K	39	45	1	He	101.922	101.922	3.56	132230	0.08	500000	
Ca	44	45	1	He	133449.920	133449.920	0.14	4785783	2.79	500000	
Ti	47	45	1	He	0.157	0.157	46.18	34	0.46	2500	
V	51	45	1	He	1.432	1.432	3.69	8070	0.02	10000	
Cr	52	45	1	He	0.170	0.170	21.99	4092	0.00	10000	
Mn	55	45	1	He	1881.152	1881.152	0.66	8906061	0.02	10000	
Fe	56	45	1	He	1.574	1.574	18.12	15620	0.01	200000	
Co	59	103	1	He	1.004	1.004	2.81	9614	0.01	10000	
Ni	60	103	1	He	2.277	2.277	3.00	5609	0.04	10000	
Cu	63	103	1	He	0.238	0.238	2.37	3788	0.01	10000	
Zn	66	103	1	He	1.331	1.331	6.90	2515	0.05	10000	
As	75	103	1	He	0.163	0.163	4.29	314	0.05	10000	
Se	78	103	1	He	0.204	0.204	35.79	41	0.50	10000	
Sr	88	103	1	He	2915.294	2915.294	1.18	14431121	0.02	10000	
Mo	95	103	1	He	0.134	0.134	19.35	984	0.01	2000	
Ag	107	103	1	He	0.002	0.002	100.93	47	0.00	300	
Cd	111	103	1	He	0.093	0.093	14.31	912	0.01	4000	
Sn	118	115	1	He	0.707	0.707	12.22	3338	0.02	2000	
Sb	123	115	1	He	0.417	0.417	5.94	2427	0.02	300	
Ba	137	115	1	He	1.240	1.240	1.45	1860	0.07	10000	
W	182	165	1	He	0.264	0.264	7.51	5535	0.00	2500	
Tl	205	209	1	He	0.020	0.020	36.62	847	0.00	5000	
Pb	208	209	1	He	0.018	0.018	29.06	1380	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1760524	1.49	1803797	97.60	30	120	
Sc	45	1	He	564819	1.22	574766	98.27	30	120	
Sc	45	2	NoGas	4401855	0.85	4296857	102.44	30	120	
Rh	103	1	He	1493540	2.65	1652712	90.37	30	120	
In	115	1	He	811715	1.12	852389	95.23	30	120	
Tb	159	1	He	2382040	1.83	2425956	98.19	30	120	
Ho	165	1	He	2441411	1.78	2452680	99.54	30	120	
Bi	209	1	He	1709283	1.35	1810473	94.41	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111357-a-2-e@50
Data File Name	035SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:46:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.007	0.007	68.69	41	0.02	10000	
B	11	45	2	NoGas	2.146	2.146	7.09	13135	0.02	300	
Na	23	45	1	He	31152.450	31152.450	0.11	47396885	0.07	500000	
Mg	24	45	1	He	441.000	441.000	0.52	381053	0.12	500000	
Al	27	45	1	He	9.469	9.469	4.47	4984	0.19	200000	
K	39	45	1	He	25.118	25.118	10.67	81025	0.03	500000	
Ca	44	45	1	He	26436.258	26436.258	0.44	954293	2.77	500000	
Ti	47	45	1	He	0.062	0.062	75.73	14	0.43	2500	
V	51	45	1	He	0.223	0.223	40.96	1486	0.01	10000	
Cr	52	45	1	He	0.045	0.045	43.29	3277	0.00	10000	
Mn	55	45	1	He	389.981	389.981	1.94	1857453	0.02	10000	
Fe	56	45	1	He	0.158	0.158	36.84	6990	0.00	200000	
Co	59	103	1	He	0.198	0.198	1.31	2060	0.01	10000	
Ni	60	103	1	He	0.451	0.451	8.95	1255	0.04	10000	
Cu	63	103	1	He	-0.014	-0.014	-140.67	2297	0.00	10000	
Zn	66	103	1	He	0.226	0.226	23.97	1131	0.02	10000	
As	75	103	1	He	0.033	0.033	32.08	219	0.02	10000	
Se	78	103	1	He	0.002	0.002	2477.86	29	0.01	10000	
Sr	88	103	1	He	572.858	572.858	0.35	3017411	0.02	10000	
Mo	95	103	1	He	-0.094	-0.094	-14.02	402	-0.02	2000	
Ag	107	103	1	He	0.000	0.000	1207.98	32	0.00	300	
Cd	111	103	1	He	0.054	0.054	36.95	906	0.01	4000	
Sn	118	115	1	He	0.111	0.111	29.44	1256	0.01	2000	
Sb	123	115	1	He	0.198	0.198	11.73	1647	0.01	300	
Ba	137	115	1	He	0.245	0.245	15.91	389	0.06	10000	
W	182	165	1	He	0.096	0.096	24.49	3767	0.00	2500	
Tl	205	209	1	He	-0.001	-0.001	-310.76	367	0.00	5000	
Pb	208	209	1	He	0.005	0.005	30.59	1038	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1729087	0.59	1803797	95.86	30	120	
Sc	45	1	He	568268	1.79	574766	98.87	30	120	
Sc	45	2	NoGas	4230438	0.88	4296857	98.45	30	120	
Rh	103	1	He	1588966	1.16	1652712	96.14	30	120	
In	115	1	He	835306	0.67	852389	98.00	30	120	
Tb	159	1	He	2429937	0.59	2425956	100.16	30	120	
Ho	165	1	He	2478541	1.66	2452680	101.05	30	120	
Bi	209	1	He	1813732	1.08	1810473	100.18	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111357-a-2-e@10
Data File Name	036SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:50:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1123.212	1123.212	0.52	5868346	0.02	10000	
B	11	45	2	NoGas	131.743	131.743	1.76	448173	0.03	300	
Na	23	45	1	He	158275.279	158275.279	3.41	232885939	0.07	500000	
Mg	24	45	1	He	12434.062	12434.062	3.73	10372012	0.12	500000	
Al	27	45	1	He	10161.649	10161.649	4.71	4407561	0.23	200000	
K	39	45	1	He	10422.981	10422.981	4.88	6885273	0.15	500000	
Ca	44	45	1	He	139299.843	139299.843	3.40	4863447	2.86	500000	
Ti	47	45	1	He	104.358	104.358	4.92	21686	0.48	2500	
V	51	45	1	He	1043.763	1043.763	3.61	5543522	0.02	10000	
Cr	52	45	1	He	1022.183	1022.183	4.13	6661429	0.02	10000	
Mn	55	45	1	He	2821.415	2821.415	3.26	13005478	0.02	10000	
Fe	56	45	1	He	10387.029	10387.029	3.43	61981711	0.02	200000	
Co	59	103	1	He	1059.106	1059.106	0.34	9463869	0.01	10000	
Ni	60	103	1	He	1078.857	1078.857	0.71	2451629	0.04	10000	
Cu	63	103	1	He	1039.676	1039.676	0.28	6302761	0.02	10000	
Zn	66	103	1	He	1033.769	1033.769	0.10	1274683	0.08	10000	
As	75	103	1	He	1066.602	1066.602	0.24	832185	0.13	10000	
Se	78	103	1	He	1085.876	1085.876	0.51	70150	1.55	10000	
Sr	88	103	1	He	4022.232	4022.232	0.72	18671942	0.02	10000	
Mo	95	103	1	He	110.865	110.865	2.19	277892	0.04	2000	
Ag	107	103	1	He	104.937	104.937	0.82	908838	0.01	300	
Cd	111	103	1	He	1089.582	1089.582	2.04	1576837	0.07	4000	
Sn	118	115	1	He	1104.527	1104.527	0.79	3647990	0.03	2000	
Sb	123	115	1	He	105.167	105.167	0.45	368959	0.03	300	
Ba	137	115	1	He	1034.687	1034.687	0.05	1432303	0.07	10000	
W	182	165	1	He	98.727	98.727	1.41	1048185	0.01	2500	
Tl	205	209	1	He	263.703	263.703	1.77	5728340	0.00	5000	
Pb	208	209	1	He	1076.344	1076.344	1.82	30765444	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1668975	0.16	1803797	92.53	30	120	
Sc	45	1	He	550342	3.66	574766	95.75	30	120	
Sc	45	2	NoGas	4131710	0.37	4296857	96.16	30	120	
Rh	103	1	He	1400401	0.14	1652712	84.73	30	120	
In	115	1	He	754278	0.52	852389	88.49	30	120	
Tb	159	1	He	2362573	0.35	2425956	97.39	30	120	
Ho	165	1	He	2380069	1.83	2452680	97.04	30	120	
Bi	209	1	He	1578154	1.08	1810473	87.17	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-f ms@10
Data File Name	037SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:54:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	105.538	105.538	1.43	558218	0.02	10000	
B	11	45	2	NoGas	24.120	24.120	2.91	89217	0.03	300	
Na	23	45	1	He	153297.825	153297.825	0.81	232515620	0.07	500000	
Mg	24	45	1	He	3246.528	3246.528	0.81	2792521	0.12	500000	
Al	27	45	1	He	1036.939	1036.939	0.53	464445	0.22	200000	
K	39	45	1	He	1134.128	1134.128	1.47	829499	0.14	500000	
Ca	44	45	1	He	134586.339	134586.339	1.37	4843902	2.78	500000	
Ti	47	45	1	He	10.687	10.687	5.33	2291	0.47	2500	
V	51	45	1	He	104.233	104.233	1.25	570915	0.02	10000	
Cr	52	45	1	He	102.007	102.007	0.70	688057	0.01	10000	
Mn	55	45	1	He	1955.423	1955.423	0.80	9291040	0.02	10000	
Fe	56	45	1	He	1059.117	1059.117	0.44	6520176	0.02	200000	
Co	59	103	1	He	104.839	104.839	0.68	986660	0.01	10000	
Ni	60	103	1	He	105.930	105.930	0.74	253587	0.04	10000	
Cu	63	103	1	He	103.940	103.940	1.45	665614	0.02	10000	
Zn	66	103	1	He	105.069	105.069	0.84	137121	0.08	10000	
As	75	103	1	He	106.141	106.141	0.40	87374	0.12	10000	
Se	78	103	1	He	109.184	109.184	1.02	7452	1.47	10000	
Sr	88	103	1	He	3048.245	3048.245	0.29	14902969	0.02	10000	
Mo	95	103	1	He	12.951	12.951	0.76	34738	0.04	2000	
Ag	107	103	1	He	10.435	10.435	2.01	95208	0.01	300	
Cd	111	103	1	He	104.610	104.610	0.25	160125	0.07	4000	
Sn	118	115	1	He	105.201	105.201	1.74	374677	0.03	2000	
Sb	123	115	1	He	11.211	11.211	2.03	43094	0.03	300	
Ba	137	115	1	He	100.958	100.958	1.08	150416	0.07	10000	
W	182	165	1	He	11.527	11.527	4.13	128647	0.01	2500	
Tl	205	209	1	He	24.237	24.237	1.70	566205	0.00	5000	
Pb	208	209	1	He	101.555	101.555	0.64	3121190	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1689510	1.07	1803797	93.66	30	120	
Sc	45	1	He	566836	0.41	574766	98.62	30	120	
Sc	45	2	NoGas	4255014	1.05	4296857	99.03	30	120	
Rh	103	1	He	1474866	0.50	1652712	89.24	30	120	
In	115	1	He	811756	0.08	852389	95.23	30	120	
Tb	159	1	He	2383950	0.91	2425956	98.27	30	120	
Ho	165	1	He	2455930	0.69	2452680	100.13	30	120	
Bi	209	1	He	1696413	2.17	1810473	93.70	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-g msd@10
Data File Name	038SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:57:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	103.577	103.577	2.22	549315	0.02	10000	
B	11	45	2	NoGas	23.981	23.981	2.28	87944	0.03	300	
Na	23	45	1	He	158057.038	158057.038	1.43	234293768	0.07	500000	
Mg	24	45	1	He	3350.247	3350.247	1.93	2816164	0.12	500000	
Al	27	45	1	He	1048.977	1048.977	1.32	459167	0.23	200000	
K	39	45	1	He	1144.717	1144.717	1.57	817651	0.14	500000	
Ca	44	45	1	He	136410.818	136410.818	0.68	4798344	2.84	500000	
Ti	47	45	1	He	10.570	10.570	9.12	2214	0.48	2500	
V	51	45	1	He	103.838	103.838	0.84	555885	0.02	10000	
Cr	52	45	1	He	103.199	103.199	0.97	680303	0.02	10000	
Mn	55	45	1	He	2033.559	2033.559	1.64	9443096	0.02	10000	
Fe	56	45	1	He	1061.033	1061.033	1.68	6383666	0.02	200000	
Co	59	103	1	He	106.091	106.091	0.53	969250	0.01	10000	
Ni	60	103	1	He	107.573	107.573	1.00	249998	0.04	10000	
Cu	63	103	1	He	105.519	105.519	0.57	655920	0.02	10000	
Zn	66	103	1	He	106.394	106.394	1.71	134778	0.08	10000	
As	75	103	1	He	106.916	106.916	0.26	85437	0.13	10000	
Se	78	103	1	He	109.413	109.413	2.24	7249	1.51	10000	
Sr	88	103	1	He	3188.768	3188.768	0.61	15133988	0.02	10000	
Mo	95	103	1	He	11.702	11.702	2.10	30527	0.04	2000	
Ag	107	103	1	He	10.485	10.485	0.41	92866	0.01	300	
Cd	111	103	1	He	105.848	105.848	0.40	157272	0.07	4000	
Sn	118	115	1	He	103.782	103.782	1.01	359653	0.03	2000	
Sb	123	115	1	He	10.995	10.995	1.37	41136	0.03	300	
Ba	137	115	1	He	102.583	102.583	1.62	148701	0.07	10000	
W	182	165	1	He	10.052	10.052	0.86	111519	0.01	2500	
Tl	205	209	1	He	24.350	24.350	1.82	557144	0.00	5000	
Pb	208	209	1	He	102.510	102.510	3.15	3084779	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1694012	0.86	1803797	93.91	30	120	
Sc	45	1	He	554051	1.46	574766	96.40	30	120	
Sc	45	2	NoGas	4216430	0.97	4296857	98.13	30	120	
Rh	103	1	He	1431719	0.28	1652712	86.63	30	120	
In	115	1	He	789823	0.37	852389	92.66	30	120	
Tb	159	1	He	2353732	1.08	2425956	97.02	30	120	
Ho	165	1	He	2433463	0.67	2452680	99.22	30	120	
Bi	209	1	He	1661348	1.41	1810473	91.76	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176851/3-a@10
Data File Name	039_LCS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:01:44-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1180.541	1180.541	2.719	5759506	1.19	1000	118.1	79.5	120.5	
B	11	2	NoGas	150.816	150.816	1.515	485769	0.42	100	150.8	79.5	120.5	LCS Failed
Na	23	1	He	1500747.454	1500747.454	1.280	2133557071	0.78	10000	15007.5	79.5	120.5	LCS Failed
Mg	24	1	He	10700.591	10700.591	0.677	8626686	1.00	10000	107.0	79.5	120.5	
Al	27	1	He	10337.429	10337.429	0.825	4334265	0.66	10000	103.4	79.5	120.5	
K	39	1	He	10643.195	10643.195	1.228	6795026	0.43	10000	106.4	79.5	120.5	
Ca	44	1	He	10279.484	10279.484	1.133	347301	0.74	10000	102.8	79.5	120.5	
Ti	47	1	He	106.444	106.444	2.051	21383	2.02	100	106.4	79.5	120.5	
V	51	1	He	1055.626	1055.626	0.944	5417883	0.49	1000	105.6	79.5	120.5	
Cr	52	1	He	1032.598	1032.598	0.379	6504413	1.40	1000	103.3	79.5	120.5	
Mn	55	1	He	1018.477	1018.477	0.761	4536677	0.68	1000	101.8	79.5	120.5	
Fe	56	1	He	10327.741	10327.741	1.454	59552691	0.97	10000	103.3	79.5	120.5	
Co	59	1	He	1095.741	1095.741	1.023	8971614	1.27	1000	109.6	79.5	120.5	
Ni	60	1	He	1115.191	1115.191	0.653	2322033	0.96	1000	111.5	79.5	120.5	
Cu	63	1	He	1085.197	1085.197	1.387	6027855	1.49	1000	108.5	79.5	120.5	
Zn	66	1	He	1078.699	1078.699	0.373	1218696	0.55	1000	107.9	79.5	120.5	
As	75	1	He	1175.858	1175.858	0.679	840588	0.37	1000	117.6	79.5	120.5	
Se	78	1	He	1263.240	1263.240	1.562	74769	1.33	1000	126.3	79.5	120.5	LCS Failed
Sr	88	1	He	1171.440	1171.440	1.607	4982743	1.57	1000	117.1	79.5	120.5	
Mo	95	1	He	125.385	125.385	0.459	287898	0.27	100	125.4	79.5	120.5	LCS Failed
Ag	107	1	He	105.873	105.873	0.883	840174	0.87	100	105.9	79.5	120.5	
Cd	111	1	He	1079.111	1079.111	0.529	1430904	0.36	1000	107.9	79.5	120.5	
Sn	118	1	He	1122.265	1122.265	0.791	3461871	0.82	1000	112.2	79.5	120.5	
Sb	123	1	He	109.693	109.693	1.201	359392	0.57	100	109.7	79.5	120.5	
Ba	137	1	He	1069.389	1069.389	1.038	1382584	0.46	1000	106.9	79.5	120.5	
W	182	1	He	102.482	102.482	0.372	1031753	1.01	100	102.5	79.5	120.5	
Tl	205	1	He	261.419	261.419	0.588	5251564	1.22	250	104.6	79.5	120.5	
Pb	208	1	He	1074.447	1074.447	0.797	28399619	0.14	1000	107.4	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1558934	1.67	1803797	86.43	30	120	
Sc	45	1	He	531420	1.38	574766	92.46	30	120	
Sc	45	2	NoGas	3918790	1.91	4296857	91.20	30	120	
Rh	103	1	He	1283151	0.31	1652712	77.64	30	120	
In	115	1	He	704498	0.66	852389	82.65	30	120	
Tb	159	1	He	2163312	0.09	2425956	89.17	30	120	
Ho	165	1	He	2256979	1.38	2452680	92.02	30	120	
Bi	209	1	He	1459227	0.66	1810473	80.60	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	040_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:05:26-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.540	4.864	265392	2.23	50	97.1	89.5	110.5	
B	11	45	2	NoGas	52.367	2.721	188473	1.39	50	104.7	89.5	110.5	
Na	23	45	1	He	25748.965	2.338	39270976	0.50	25000	103.0	89.5	110.5	
Mg	24	45	1	He	25915.595	3.433	22388757	1.22	25000	103.7	89.5	110.5	
Al	27	45	1	He	258.242	2.401	116779	0.11	250	103.3	89.5	110.5	
K	39	45	1	He	25993.985	3.309	17693591	1.04	25000	104.0	89.5	110.5	
Ca	44	45	1	He	25026.431	2.239	905516	0.22	25000	100.1	89.5	110.5	
Ti	47	45	1	He	51.010	4.526	10982	3.24	50	102.0	89.5	110.5	
V	51	45	1	He	50.891	2.222	280218	0.49	50	101.8	89.5	110.5	
Cr	52	45	1	He	50.955	2.593	346831	0.39	50	101.9	89.5	110.5	
Mn	55	45	1	He	253.493	2.492	1210389	0.21	250	101.4	89.5	110.5	
Fe	56	45	1	He	12886.000	2.894	79637897	0.51	12500	103.1	89.5	110.5	
Co	59	103	1	He	50.178	3.062	488005	0.17	50	100.4	89.5	110.5	
Ni	60	103	1	He	50.153	3.563	124100	0.53	50	100.3	89.5	110.5	
Cu	63	103	1	He	50.665	3.142	336434	0.14	50	101.3	89.5	110.5	
Zn	66	103	1	He	51.636	2.866	70036	0.41	50	103.3	89.5	110.5	
As	75	103	1	He	51.054	1.790	43535	1.47	50	102.1	89.5	110.5	
Se	78	103	1	He	52.545	2.154	3721	1.81	50	105.1	89.5	110.5	
Sr	88	103	1	He	51.376	2.766	259695	0.49	50	102.8	89.5	110.5	
Mo	95	103	1	He	52.082	1.803	142462	2.12	50	104.2	89.5	110.5	
Ag	107	103	1	He	50.902	2.790	479814	0.44	50	101.8	89.5	110.5	
Cd	111	103	1	He	52.183	3.046	82932	0.22	50	104.4	89.5	110.5	
Sn	118	115	1	He	51.466	1.822	184329	1.54	50	102.9	89.5	110.5	
Sb	123	115	1	He	52.321	0.491	198643	0.65	50	104.6	89.5	110.5	
Ba	137	115	1	He	50.101	1.153	74903	1.33	50	100.2	89.5	110.5	
W	182	165	1	He	49.618	0.981	545539	1.30	50	99.2	89.5	110.5	
Tl	205	209	1	He	47.794	1.012	1164183	0.78	50	95.6	89.5	110.5	
Pb	208	209	1	He	49.320	0.328	1581193	0.24	50	98.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1748074	2.75	1803797	96.91	30	120	
Sc	45	1	He	569786	2.45	574766	99.13	30	120	
Sc	45	2	NoGas	4290450	1.24	4296857	99.85	30	120	
Rh	103	1	He	1525047	3.27	1652712	92.28	30	120	
In	115	1	He	814484	0.27	852389	95.55	30	120	
Tb	159	1	He	2391371	1.16	2425956	98.57	30	120	
Ho	165	1	He	2458477	0.97	2452680	100.24	30	120	
Bi	209	1	He	1768968	0.54	1810473	97.71	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	041_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:09:16-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.047	39.3	267	41.7	1	
B	11	45	2	NoGas	1.914	5.6	12586	4.8	20	
Na	23	45	1	He	87.437	6.3	163297	4.3	400	
Mg	24	45	1	He	0.923	48.3	1682	21.9	1000	
Al	27	45	1	He	7.287	1.3	3942	1.7	50	
K	39	45	1	He	3.913	68.8	65592	2.1	1000	
Ca	44	45	1	He	5.995	7.4	772	1.6	1000	
Ti	47	45	1	He	0.069	35.8	16	32.7	20	
V	51	45	1	He	0.047	41.4	506	20.0	2	
Cr	52	45	1	He	0.042	57.8	3204	4.3	2	
Mn	55	45	1	He	0.084	5.4	556	3.3	2	
Fe	56	45	1	He	12.177	33.5	79657	30.3	50	
Co	59	103	1	He	0.019	1.9	252	1.5	1	
Ni	60	103	1	He	0.013	84.9	129	20.9	2	
Cu	63	103	1	He	0.118	34.5	3310	8.7	2	
Zn	66	103	1	He	0.436	10.7	1473	4.9	20	
As	75	103	1	He	-0.023	-97.5	174	12.3	2	
Se	78	103	1	He	0.105	17.6	37	4.3	2	
Sr	88	103	1	He	0.051	23.4	419	16.2	10	
Mo	95	103	1	He	0.749	26.0	2889	20.1	2	
Ag	107	103	1	He	0.005	20.4	79	12.9	0.2	
Cd	111	103	1	He	0.125	20.2	1057	2.9	0.2	
Sn	118	115	1	He	0.709	16.3	3519	11.9	10	
Sb	123	115	1	He	0.434	10.7	2619	6.7	1	
Ba	137	115	1	He	0.039	15.8	74	12.9	5	
W	182	165	1	He	1.007	18.2	13840	14.6	10	
Tl	205	209	1	He	0.059	24.4	1916	18.4	0.5	
Pb	208	209	1	He	0.048	7.0	2530	3.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1774176	3.39	1803797	98.36	30	120	
Sc	45	1	He	558939	0.76	574766	97.25	30	120	
Sc	45	2	NoGas	4314480	1.84	4296857	100.41	30	120	
Rh	103	1	He	1643202	1.24	1652712	99.42	30	120	
In	115	1	He	853873	0.42	852389	100.17	30	120	
Tb	159	1	He	2407580	0.84	2425956	99.24	30	120	
Ho	165	1	He	2481647	0.07	2452680	101.18	30	120	
Bi	209	1	He	1854076	0.97	1810473	102.41	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	042CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:13:08-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.904	0.904	3.079	5075	4.97	1	90.4	69.5	130.5	
B	11	2	NoGas	20.290	20.290	1.369	77648	1.51	20	101.5	69.5	130.5	
Na	23	1	He	1146.883	1146.883	0.547	1824489	0.70	1000	114.7	69.5	130.5	
Mg	24	1	He	1071.153	1071.153	0.672	949077	0.23	1000	107.1	69.5	130.5	
Al	27	1	He	52.355	52.355	0.431	24861	0.46	50	104.7	69.5	130.5	
K	39	1	He	1055.997	1055.997	0.861	799591	0.65	1000	105.6	69.5	130.5	
Ca	44	1	He	1037.850	1037.850	2.125	39031	2.33	1000	103.8	69.5	130.5	
Ti	47	1	He	11.049	11.049	4.184	2438	3.76	10	110.5	69.5	130.5	
V	51	1	He	5.035	5.035	0.986	28643	0.53	5	100.7	69.5	130.5	
Cr	52	1	He	2.315	2.315	2.793	19059	2.62	2	115.7	69.5	130.5	
Mn	55	1	He	5.287	5.287	3.133	26030	3.45	5	105.7	69.5	130.5	
Fe	56	1	He	107.358	107.358	1.419	685928	1.37	100	107.4	69.5	130.5	
Co	59	1	He	1.002	1.002	3.353	10513	2.51	1	100.2	69.5	130.5	
Ni	60	1	He	2.225	2.225	3.650	6002	2.47	2	111.3	69.5	130.5	
Cu	63	1	He	2.105	2.105	3.616	17366	1.81	2	105.2	69.5	130.5	
Zn	66	1	He	20.614	20.614	1.538	30524	0.31	20	103.1	69.5	130.5	
As	75	1	He	4.984	4.984	1.015	4739	2.29	5	99.7	69.5	130.5	
Se	78	1	He	5.635	5.635	3.212	455	3.46	5	112.7	69.5	130.5	
Sr	88	1	He	9.902	9.902	1.300	53855	0.32	10	99.0	69.5	130.5	
Mo	95	1	He	10.430	10.430	0.932	31175	0.78	10	104.3	69.5	130.5	
Ag	107	1	He	1.055	1.055	1.429	10706	0.71	1	105.5	69.5	130.5	
Cd	111	1	He	1.074	1.074	2.620	2658	0.79	1	107.4	69.5	130.5	
Sn	118	1	He	10.479	10.479	3.522	40227	3.20	10	104.8	69.5	130.5	
Sb	123	1	He	2.076	2.076	5.038	9170	4.99	2	103.8	69.5	130.5	
Ba	137	1	He	5.141	5.141	1.589	8109	2.00	5	102.8	69.5	130.5	
W	182	1	He	9.973	9.973	3.055	113376	2.23	10	99.7	69.5	130.5	
Tl	205	1	He	1.959	1.959	1.473	50397	1.41	2	98.0	69.5	130.5	
Pb	208	1	He	1.067	1.067	3.303	36725	3.36	1	106.7	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1791672	2.04	1803797	99.33	30	120	
Sc	45	1	He	583517	0.46	574766	101.52	30	120	
Sc	45	2	NoGas	4348117	0.25	4296857	101.19	30	120	
Rh	103	1	He	1636646	1.35	1652712	99.03	30	120	
In	115	1	He	857951	0.46	852389	100.65	30	120	
Tb	159	1	He	2435256	1.07	2425956	100.38	30	120	
Ho	165	1	He	2493469	0.77	2452680	101.66	30	120	
Bi	209	1	He	1853699	0.32	1810473	102.39	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176863/1-a@2
Data File Name	043_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:16:58-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.057	31.8	326	31.7	1	
B	11	45	2	NoGas	2.334	9.4	13813	4.4	20	
Na	23	45	1	He	81.286	2.1	155595	2.1	400	
Mg	24	45	1	He	32.923	0.8	29087	1.3	1000	
Al	27	45	1	He	10.374	2.5	5352	1.8	50	
K	39	45	1	He	21.388	7.5	77952	0.3	1000	
Ca	44	45	1	He	192.191	4.1	7446	2.9	1000	
Ti	47	45	1	He	0.370	32.6	80	32.5	20	
V	51	45	1	He	0.373	53.2	2283	46.5	2	
Cr	52	45	1	He	1.681	2.9	14186	1.1	2	
Mn	55	45	1	He	1.116	4.8	5444	4.4	2	
Fe	56	45	1	He	17.026	2.2	110234	3.2	50	
Co	59	103	1	He	0.029	20.8	343	18.1	1	
Ni	60	103	1	He	0.242	3.0	710	2.5	2	
Cu	63	103	1	He	0.982	8.7	9070	6.0	2	
Zn	66	103	1	He	4.264	6.2	6719	5.0	20	
As	75	103	1	He	0.362	9.4	505	5.3	2	
Se	78	103	1	He	0.144	42.4	39	11.2	2	
Sr	88	103	1	He	0.396	8.4	2207	8.4	10	
Mo	95	103	1	He	0.220	37.5	1282	17.5	2	
Ag	107	103	1	He	0.001	192.9	42	52.6	0.2	
Cd	111	103	1	He	0.151	2.0	1057	0.5	0.2	
Sn	118	115	1	He	22.138	2.7	80762	2.4	10	Blank Failed
Sb	123	115	1	He	0.341	22.0	2174	12.9	1	
Ba	137	115	1	He	0.821	3.7	1256	3.5	5	
W	182	165	1	He	0.546	12.2	8584	9.7	10	
Tl	205	209	1	He	0.060	25.8	1949	20.9	0.5	
Pb	208	209	1	He	0.351	6.8	12747	7.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1803396	0.86	1803797	99.98	30	120	
Sc	45	1	He	564216	1.25	574766	98.16	30	120	
Sc	45	2	NoGas	4242019	1.79	4296857	98.72	30	120	
Rh	103	1	He	1575630	0.59	1652712	95.34	30	120	
In	115	1	He	824714	0.46	852389	96.75	30	120	
Tb	159	1	He	2406862	0.08	2425956	99.21	30	120	
Ho	165	1	He	2432842	1.33	2452680	99.19	30	120	
Bi	209	1	He	1859649	0.77	1810473	102.72	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176863/3-a@2
Data File Name	044LCSS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:20:48-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	546.624	546.624	3.057	2924885	0.97	500	109.3	78.6	110.5	
B	11	2	NoGas	62.891	62.891	2.098	212827	2.58	50	125.8	79.5	120.5	LCSS Failed
Na	23	1	He	5267.811	5267.811	0.818	7703521	1.74	5000	105.4	79.5	120.5	
Mg	24	1	He	5340.941	5340.941	1.387	4410679	1.08	5000	106.8	79.5	120.5	
Al	27	1	He	5091.250	5091.250	0.812	2187062	1.69	5000	101.8	79.5	120.5	
K	39	1	He	5205.907	5205.907	1.483	3436158	2.08	5000	104.1	79.5	120.5	
Ca	44	1	He	5061.663	5061.663	1.440	175443	1.03	5000	101.2	79.5	120.5	
Ti	47	1	He	51.232	51.232	1.450	10542	1.31	50	102.5	79.5	120.5	
V	51	1	He	520.872	520.872	0.997	2738596	1.56	500	104.2	71.5	110.5	
Cr	52	1	He	523.030	523.030	0.548	3376557	2.54	500	104.6	69.5	110.5	
Mn	55	1	He	529.104	529.104	1.414	2414156	1.30	500	105.8	79.5	120.5	
Fe	56	1	He	5306.679	5306.679	1.139	31348690	1.58	5000	106.1	79.5	120.5	
Co	59	1	He	491.095	491.095	2.651	4753952	0.56	500	98.2	73.9	110.5	
Ni	60	1	He	487.972	487.972	1.447	1201577	1.39	500	97.6	74.9	110.5	
Cu	63	1	He	508.504	508.504	3.236	3340461	1.31	500	101.7	72.6	110.5	
Zn	66	1	He	481.933	481.933	2.532	644193	0.80	500	96.4	71.5	113.4	
As	75	1	He	467.017	467.017	1.853	394890	0.86	500	93.4	73.4	110.5	
Se	78	1	He	471.029	471.029	1.974	32986	1.69	500	94.2	64.6	110.5	
Sr	88	1	He	508.804	508.804	2.268	2559044	0.80	500	101.8	79.5	120.5	
Mo	95	1	He	53.953	53.953	1.921	146850	0.78	50	107.9	29.5	140.5	
Ag	107	1	He	50.645	50.645	1.778	475255	0.92	50	101.3	59.5	114.5	
Cd	111	1	He	490.690	490.690	1.704	769830	0.99	500	98.1	73.5	110.5	
Sn	118	1	He	558.275	558.275	0.237	1901228	0.13	500	111.7	79.5	120.5	
Sb	123	1	He	50.320	50.320	0.756	182422	0.64	50	100.6	67.5	113.4	
Ba	137	1	He	495.249	495.249	0.425	706765	0.29	500	99.0	69.5	110.5	
W	182	1	He	48.935	48.935	0.934	526725	1.00	50	97.9	74.6	125.4	
Tl	205	1	He	120.157	120.157	1.643	2897840	1.16	125	96.1	70.6	110.5	
Pb	208	1	He	486.935	486.935	0.724	15452682	0.95	500	97.4	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1710007	2.05	1803797	94.80	30	120	
Sc	45	1	He	544410	2.48	574766	94.72	30	120	
Sc	45	2	NoGas	4054027	0.81	4296857	94.35	30	120	
Rh	103	1	He	1517786	2.70	1652712	91.84	30	120	
In	115	1	He	777598	0.26	852389	91.23	30	120	
Tb	159	1	He	2330696	0.75	2425956	96.07	30	120	
Ho	165	1	He	2406665	0.36	2452680	98.12	30	120	
Bi	209	1	He	1752004	1.67	1810473	96.77	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-j@2
Data File Name	045SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:24:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.143	1.143	6.60	5664	0.02	10000	
B	11	45	2	NoGas	21.146	21.146	1.25	121162	0.02	300	
Na	23	45	1	He	811.573	811.573	0.92	2014877	0.04	500000	
Mg	24	45	1	He	2819.857	2819.857	1.33	3866874	0.07	500000	
Al	27	45	1	He	17706.894	17706.894	0.90	12625012	0.14	200000	
K	39	45	1	He	124.628	124.628	3.63	235954	0.05	500000	
Ca	44	45	1	He	787165.533	787165.533	1.29	45161652	1.74	500000	>LDR
Ti	47	45	1	He	44672.256	44672.256	1.32	15259694	0.29	2500	>LDR
V	51	45	1	He	3694.843	3694.843	1.52	32246935	0.01	10000	
Cr	52	45	1	He	1651.828	1651.828	2.19	17689022	0.01	10000	
Mn	55	45	1	He	5450.127	5450.127	1.08	41283339	0.01	10000	
Fe	56	45	1	He	198513.944	198513.944	0.85	1946565469	0.01	200000	
Co	59	103	1	He	45.318	45.318	0.58	372666	0.01	10000	
Ni	60	103	1	He	93.912	93.912	1.38	196435	0.05	10000	
Cu	63	103	1	He	129.763	129.763	0.60	725562	0.02	10000	
Zn	66	103	1	He	592.883	592.883	1.01	672969	0.09	10000	
As	75	103	1	He	17.218	17.218	1.20	12513	0.14	10000	
Se	78	103	1	He	5.095	5.095	6.45	326	1.56	10000	
Sr	88	103	1	He	28060.450	28060.450	1.10	119860271	0.02	10000	>LDR
Mo	95	103	1	He	19.910	19.910	1.35	46369	0.04	2000	
Ag	107	103	1	He	1.830	1.830	7.90	14612	0.01	300	
Cd	111	103	1	He	9.005	9.005	5.79	12650	0.07	4000	
Sn	118	115	1	He	75.530	75.530	0.81	239508	0.03	2000	
Sb	123	115	1	He	1.005	1.005	0.24	4128	0.02	300	
Ba	137	115	1	He	62.881	62.881	1.94	83345	0.08	10000	
W	182	165	1	He	37.282	37.282	1.38	380253	0.01	2500	
Tl	205	209	1	He	0.212	0.212	15.21	4544	0.00	5000	
Pb	208	209	1	He	110.881	110.881	0.45	2913467	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1581593	1.62	1803797	87.68	30	120	
Sc	45	1	He	903727	1.12	574766	157.23	30	120	ISTD Failed
Sc	45	2	NoGas	6531167	1.33	4296857	152.00	30	120	ISTD Failed
Rh	103	1	He	1288657	0.82	1652712	77.97	30	120	
In	115	1	He	722126	0.19	852389	84.72	30	120	
Tb	159	1	He	2210046	2.05	2425956	91.10	30	120	
Ho	165	1	He	2277071	0.91	2452680	92.84	30	120	
Bi	209	1	He	1450223	0.38	1810473	80.10	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111357-a-2-j@10
Data File Name	046SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:28:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.263	0.263	3.62	1311	0.02	10000	
B	11	45	2	NoGas	6.750	6.750	2.61	30341	0.02	300	
Na	23	45	1	He	260.979	260.979	0.78	457752	0.06	500000	
Mg	24	45	1	He	870.336	870.336	0.64	799841	0.11	500000	
Al	27	45	1	He	5545.922	5545.922	1.21	2648157	0.21	200000	
K	39	45	1	He	38.953	38.953	9.48	96254	0.04	500000	
Ca	44	45	1	He	242934.059	242934.059	1.29	9332495	2.60	500000	
Ti	47	45	1	He	13914.419	13914.419	1.66	3182436	0.44	2500	>LDR
V	51	45	1	He	1171.678	1171.678	2.10	6847179	0.02	10000	
Cr	52	45	1	He	527.872	527.872	0.74	3787498	0.01	10000	
Mn	55	45	1	He	1723.812	1723.812	1.08	8742989	0.02	10000	
Fe	56	45	1	He	64108.917	64108.917	0.76	420929281	0.02	200000	
Co	59	103	1	He	8.845	8.845	0.65	81993	0.01	10000	
Ni	60	103	1	He	18.663	18.663	1.63	44055	0.04	10000	
Cu	63	103	1	He	25.967	25.967	0.94	165340	0.02	10000	
Zn	66	103	1	He	121.547	121.547	0.68	156043	0.08	10000	
As	75	103	1	He	2.909	2.909	2.19	2526	0.12	10000	
Se	78	103	1	He	0.856	0.856	7.27	83	1.03	10000	
Sr	88	103	1	He	5237.359	5237.359	0.92	25207120	0.02	10000	
Mo	95	103	1	He	3.599	3.599	3.61	9944	0.04	2000	
Ag	107	103	1	He	0.318	0.318	1.58	2887	0.01	300	
Cd	111	103	1	He	1.570	1.570	11.85	3103	0.05	4000	
Sn	118	115	1	He	15.029	15.029	2.87	51846	0.03	2000	
Sb	123	115	1	He	0.239	0.239	12.67	1679	0.01	300	
Ba	137	115	1	He	13.015	13.015	1.31	18544	0.07	10000	
W	182	165	1	He	7.669	7.669	0.75	86822	0.01	2500	
Tl	205	209	1	He	0.035	0.035	7.94	1248	0.00	5000	
Pb	208	209	1	He	20.995	20.995	0.11	673296	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1586930	0.59	1803797	87.98	30	120	
Sc	45	1	He	605098	0.93	574766	105.28	30	120	
Sc	45	2	NoGas	4429995	0.77	4296857	103.10	30	120	
Rh	103	1	He	1451890	0.49	1652712	87.85	30	120	
In	115	1	He	775890	1.07	852389	91.03	30	120	
Tb	159	1	He	2381427	0.34	2425956	98.16	30	120	
Ho	165	1	He	2464880	0.45	2452680	100.50	30	120	
Bi	209	1	He	1768118	0.27	1810473	97.66	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-j@2
Data File Name	047SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:31:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.045	1.045	5.38	4627	0.02	10000	
B	11	45	2	NoGas	20.219	20.219	0.48	107404	0.02	300	
Na	23	45	1	He	818.727	818.727	1.41	1941545	0.04	500000	
Mg	24	45	1	He	2820.090	2820.090	0.99	3695097	0.08	500000	
Al	27	45	1	He	17151.717	17151.717	0.94	11684310	0.15	200000	
K	39	45	1	He	122.264	122.264	3.05	223024	0.05	500000	
Ca	44	45	1	He	778765.557	778765.557	1.63	42686900	1.82	500000	>LDR
Ti	47	45	1	He	44478.002	44478.002	1.42	14516773	0.31	2500	>LDR
V	51	45	1	He	3728.224	3728.224	1.34	31089928	0.01	10000	
Cr	52	45	1	He	1667.698	1667.698	1.28	17065163	0.01	10000	
Mn	55	45	1	He	5414.027	5414.027	0.42	39184185	0.01	10000	
Fe	56	45	1	He	199405.669	199405.669	0.36	1868187730	0.01	200000	
Co	59	103	1	He	45.223	45.223	0.89	364765	0.01	10000	
Ni	60	103	1	He	93.377	93.377	0.76	191581	0.05	10000	
Cu	63	103	1	He	129.375	129.375	0.64	709534	0.02	10000	
Zn	66	103	1	He	585.548	585.548	0.43	651928	0.09	10000	
As	75	103	1	He	16.593	16.593	0.96	11833	0.14	10000	
Se	78	103	1	He	4.370	4.370	4.03	277	1.58	10000	
Sr	88	103	1	He	27043.881	27043.881	1.91	113306338	0.02	10000	>LDR
Mo	95	103	1	He	19.400	19.400	1.50	44326	0.04	2000	
Ag	107	103	1	He	2.214	2.214	0.76	17328	0.01	300	
Cd	111	103	1	He	10.848	10.848	2.15	14813	0.07	4000	
Sn	118	115	1	He	75.698	75.698	1.72	229413	0.03	2000	
Sb	123	115	1	He	0.913	0.913	1.78	3652	0.03	300	
Ba	137	115	1	He	64.428	64.428	0.49	81617	0.08	10000	
W	182	165	1	He	38.643	38.643	0.94	388219	0.01	2500	
Tl	205	209	1	He	0.124	0.124	11.23	2716	0.00	5000	
Pb	208	209	1	He	112.023	112.023	0.54	2868180	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1413045	0.26	1803797	78.34	30	120	
Sc	45	1	He	863418	0.37	574766	150.22	30	120	ISTD Failed
Sc	45	2	NoGas	6034112	0.38	4296857	140.43	30	120	ISTD Failed
Rh	103	1	He	1263931	0.25	1652712	76.48	30	120	
In	115	1	He	690185	0.59	852389	80.97	30	120	
Tb	159	1	He	2173236	0.90	2425956	89.58	30	120	
Ho	165	1	He	2243293	0.62	2452680	91.46	30	120	
Bi	209	1	He	1413134	0.18	1810473	78.05	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-j@10
Data File Name	048SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:35:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.237	0.237	4.66	1096	0.02	10000	
B	11	45	2	NoGas	6.408	6.408	2.42	27184	0.02	300	
Na	23	45	1	He	261.446	261.446	0.82	436170	0.06	500000	
Mg	24	45	1	He	869.063	869.063	0.14	759749	0.11	500000	
Al	27	45	1	He	5440.408	5440.408	1.10	2471234	0.22	200000	
K	39	45	1	He	40.223	40.223	3.02	92446	0.04	500000	
Ca	44	45	1	He	238429.139	238429.139	1.46	8713138	2.74	500000	
Ti	47	45	1	He	13732.917	13732.917	1.77	2987896	0.46	2500	>LDR
V	51	45	1	He	1185.742	1185.742	0.07	6592036	0.02	10000	
Cr	52	45	1	He	539.328	539.328	1.05	3680971	0.01	10000	
Mn	55	45	1	He	1714.507	1714.507	1.31	8272114	0.02	10000	
Fe	56	45	1	He	63613.230	63613.230	1.38	397292633	0.02	200000	
Co	59	103	1	He	8.801	8.801	1.43	79718	0.01	10000	
Ni	60	103	1	He	18.221	18.221	2.28	42026	0.04	10000	
Cu	63	103	1	He	25.645	25.645	1.16	159576	0.02	10000	
Zn	66	103	1	He	118.510	118.510	0.31	148678	0.08	10000	
As	75	103	1	He	2.781	2.781	1.98	2367	0.12	10000	
Se	78	103	1	He	0.791	0.791	19.46	77	1.02	10000	
Sr	88	103	1	He	5112.913	5112.913	1.41	24044544	0.02	10000	
Mo	95	103	1	He	3.581	3.581	1.93	9671	0.04	2000	
Ag	107	103	1	He	0.317	0.317	8.35	2806	0.01	300	
Cd	111	103	1	He	1.589	1.589	7.08	3059	0.05	4000	
Sn	118	115	1	He	15.152	15.152	0.98	50416	0.03	2000	
Sb	123	115	1	He	0.178	0.178	16.98	1407	0.01	300	
Ba	137	115	1	He	12.818	12.818	1.71	17623	0.07	10000	
W	182	165	1	He	7.700	7.700	1.41	83894	0.01	2500	
Tl	205	209	1	He	0.024	0.024	6.38	918	0.00	5000	
Pb	208	209	1	He	21.514	21.514	2.30	655538	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1471874	2.62	1803797	81.60	30	120	
Sc	45	1	He	575589	0.47	574766	100.14	30	120	
Sc	45	2	NoGas	4137730	1.02	4296857	96.30	30	120	
Rh	103	1	He	1418670	0.11	1652712	85.84	30	120	
In	115	1	He	748604	0.54	852389	87.82	30	120	
Tb	159	1	He	2318206	0.18	2425956	95.56	30	120	
Ho	165	1	He	2372269	0.84	2452680	96.72	30	120	
Bi	209	1	He	1680675	2.41	1810473	92.83	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-j@2
Data File Name	049SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:39:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.187	1.187	8.94	4956	0.02	10000	
B	11	45	2	NoGas	19.846	19.846	3.01	98471	0.02	300	
Na	23	45	1	He	825.274	825.274	1.47	1839582	0.04	500000	
Mg	24	45	1	He	2833.932	2833.932	0.99	3490989	0.08	500000	
Al	27	45	1	He	16844.074	16844.074	1.31	10787690	0.16	200000	
K	39	45	1	He	122.339	122.339	1.45	209755	0.06	500000	
Ca	44	45	1	He	772882.872	772882.872	0.91	39830014	1.94	500000	>LDR
Ti	47	45	1	He	44166.021	44166.021	1.32	13552353	0.33	2500	>LDR
V	51	45	1	He	3734.148	3734.148	1.00	29275970	0.01	10000	
Cr	52	45	1	He	1692.062	1692.062	0.38	16278779	0.01	10000	
Mn	55	45	1	He	5398.330	5398.330	1.08	36731325	0.01	10000	
Fe	56	45	1	He	199700.915	199700.915	1.13	1758950615	0.01	200000	
Co	59	103	1	He	44.608	44.608	0.11	345143	0.01	10000	
Ni	60	103	1	He	92.867	92.867	0.22	182774	0.05	10000	
Cu	63	103	1	He	127.612	127.612	0.39	671374	0.02	10000	
Zn	66	103	1	He	575.355	575.355	0.28	614495	0.09	10000	
As	75	103	1	He	15.997	15.997	1.14	10948	0.15	10000	
Se	78	103	1	He	4.282	4.282	4.30	261	1.64	10000	
Sr	88	103	1	He	26458.186	26458.186	0.68	106335947	0.02	10000	>LDR
Mo	95	103	1	He	19.414	19.414	0.39	42553	0.05	2000	
Ag	107	103	1	He	2.226	2.226	2.12	16715	0.01	300	
Cd	111	103	1	He	10.225	10.225	7.18	13428	0.08	4000	
Sn	118	115	1	He	76.503	76.503	1.19	219149	0.03	2000	
Sb	123	115	1	He	0.814	0.814	4.05	3151	0.03	300	
Ba	137	115	1	He	64.004	64.004	0.75	76638	0.08	10000	
W	182	165	1	He	38.248	38.248	1.81	367382	0.01	2500	
Tl	205	209	1	He	0.108	0.108	3.00	2310	0.00	5000	
Pb	208	209	1	He	111.399	111.399	0.40	2726503	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1332912	0.46	1803797	73.89	30	120	
Sc	45	1	He	811779	0.87	574766	141.24	30	120	ISTD Failed
Sc	45	2	NoGas	5628807	1.23	4296857	131.00	30	120	ISTD Failed
Rh	103	1	He	1212444	0.38	1652712	73.36	30	120	
In	115	1	He	652363	0.27	852389	76.53	30	120	
Tb	159	1	He	2065113	0.48	2425956	85.13	30	120	
Ho	165	1	He	2144946	1.24	2452680	87.45	30	120	
Bi	209	1	He	1350873	0.52	1810473	74.61	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111357-a-2-j@2
Data File Name	050SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:43:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1059.722	1059.722	1.21	4402547	0.02	10000	
B	11	45	2	NoGas	89.475	89.475	1.68	415821	0.02	300	
Na	23	45	1	He	7156.648	7156.648	1.19	15341000	0.05	500000	
Mg	24	45	1	He	8849.688	8849.688	0.98	10725134	0.08	500000	
Al	27	45	1	He	22147.273	22147.273	1.40	13957203	0.16	200000	
K	39	45	1	He	6112.783	6112.783	0.60	5905430	0.10	500000	
Ca	44	45	1	He	778113.591	778113.591	0.16	39462145	1.97	500000	>LDR
Ti	47	45	1	He	43937.982	43937.982	0.67	13268249	0.33	2500	>LDR
V	51	45	1	He	4382.348	4382.348	1.38	33809767	0.01	10000	
Cr	52	45	1	He	2284.416	2284.416	0.47	21625502	0.01	10000	
Mn	55	45	1	He	5914.191	5914.191	1.18	39600081	0.01	10000	
Fe	56	45	1	He	204324.841	204324.841	1.41	1771002739	0.01	200000	>LDR
Co	59	103	1	He	1085.025	1085.025	1.34	8478439	0.01	10000	
Ni	60	103	1	He	1163.190	1163.190	1.39	2311551	0.05	10000	
Cu	63	103	1	He	1152.947	1152.947	2.04	6111482	0.02	10000	
Zn	66	103	1	He	1582.331	1582.331	2.35	1705785	0.09	10000	
As	75	103	1	He	1059.533	1059.533	0.59	722943	0.15	10000	
Se	78	103	1	He	1070.342	1070.342	0.39	60471	1.77	10000	
Sr	88	103	1	He	26859.094	26859.094	1.03	109036031	0.02	10000	>LDR
Mo	95	103	1	He	139.783	139.783	0.59	306279	0.05	2000	
Ag	107	103	1	He	105.053	105.053	1.13	795655	0.01	300	
Cd	111	103	1	He	1011.867	1011.867	0.90	1280620	0.08	4000	
Sn	118	115	1	He	1206.690	1206.690	1.52	3385196	0.04	2000	
Sb	123	115	1	He	107.135	107.135	0.67	319253	0.03	300	
Ba	137	115	1	He	1092.336	1092.336	0.15	1284413	0.09	10000	
W	182	165	1	He	140.500	140.500	0.85	1360581	0.01	2500	
Tl	205	209	1	He	275.741	275.741	0.73	5066416	0.01	5000	
Pb	208	209	1	He	1215.633	1215.633	0.41	29389987	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1327234	1.12	1803797	73.58	30	120	
Sc	45	1	He	798846	1.10	574766	138.99	30	120	ISTD Failed
Sc	45	2	NoGas	5610672	0.51	4296857	130.58	30	120	ISTD Failed
Rh	103	1	He	1224743	1.24	1652712	74.11	30	120	
In	115	1	He	640700	0.28	852389	75.17	30	120	
Tb	159	1	He	2086862	1.10	2425956	86.02	30	120	
Ho	165	1	He	2172217	0.43	2452680	88.57	30	120	
Bi	209	1	He	1334678	0.65	1810473	73.72	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-k ms@2
Data File Name	051SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:46:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	526.443	526.443	1.74	2188379	0.02	10000	
B	11	45	2	NoGas	53.818	53.818	0.30	252247	0.02	300	
Na	23	45	1	He	3981.577	3981.577	0.71	8533863	0.05	500000	
Mg	24	45	1	He	5656.745	5656.745	0.68	6838357	0.08	500000	
Al	27	45	1	He	18856.999	18856.999	1.60	11852845	0.16	200000	
K	39	45	1	He	3086.446	3086.446	0.46	3018587	0.10	500000	
Ca	44	45	1	He	803470.563	803470.563	1.51	40644872	1.98	500000	>LDR
Ti	47	45	1	He	43231.215	43231.215	0.75	13020955	0.33	2500	>LDR
V	51	45	1	He	3965.121	3965.121	1.14	30514915	0.01	10000	
Cr	52	45	1	He	1950.083	1950.083	0.62	18414681	0.01	10000	
Mn	55	45	1	He	5496.904	5496.904	2.25	36709232	0.01	10000	
Fe	56	45	1	He	200259.253	200259.253	0.78	1731396767	0.01	200000	>LDR
Co	59	103	1	He	562.670	562.670	1.04	4459399	0.01	10000	
Ni	60	103	1	He	584.263	584.263	1.06	1177632	0.05	10000	
Cu	63	103	1	He	634.265	634.265	0.50	3410955	0.02	10000	
Zn	66	103	1	He	993.062	993.062	0.80	1086027	0.09	10000	
As	75	103	1	He	508.980	508.980	0.41	352286	0.14	10000	
Se	78	103	1	He	510.836	510.836	1.43	29281	1.74	10000	
Sr	88	103	1	He	26301.579	26301.579	1.12	108287749	0.02	10000	>LDR
Mo	95	103	1	He	76.188	76.188	0.47	169537	0.04	2000	
Ag	107	103	1	He	51.613	51.613	0.21	396478	0.01	300	
Cd	111	103	1	He	494.007	494.007	0.70	634428	0.08	4000	
Sn	118	115	1	He	629.026	629.026	1.80	1797558	0.03	2000	
Sb	123	115	1	He	45.541	45.541	1.66	138603	0.03	300	
Ba	137	115	1	He	558.561	558.561	1.38	668907	0.08	10000	
W	182	165	1	He	68.909	68.909	0.80	673644	0.01	2500	
Tl	205	209	1	He	135.005	135.005	0.45	2498211	0.01	5000	
Pb	208	209	1	He	650.045	650.045	0.21	15827355	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1328048	1.16	1803797	73.63	30	120	
Sc	45	1	He	796815	1.59	574766	138.63	30	120	ISTD Failed
Sc	45	2	NoGas	5590893	1.19	4296857	130.12	30	120	ISTD Failed
Rh	103	1	He	1242050	0.49	1652712	75.15	30	120	
In	115	1	He	652613	1.58	852389	76.56	30	120	
Tb	159	1	He	2116942	0.66	2425956	87.26	30	120	
Ho	165	1	He	2188985	0.66	2452680	89.25	30	120	
Bi	209	1	He	1344111	0.47	1810473	74.24	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	052_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:50:19-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.523	3.587	228206	1.17	50	91.0	89.5	110.5	
B	11	45	2	NoGas	53.647	1.673	182629	0.16	50	107.3	89.5	110.5	
Na	23	45	1	He	28058.160	0.136	38882048	1.19	25000	112.2	89.5	110.5	CCV Failed
Mg	24	45	1	He	27685.742	0.874	21736059	0.67	25000	110.7	89.5	110.5	CCV Failed
Al	27	45	1	He	255.816	0.275	105123	0.88	250	102.3	89.5	110.5	
K	39	45	1	He	26796.612	0.724	16574973	1.41	25000	107.2	89.5	110.5	
Ca	44	45	1	He	25916.511	0.929	852027	1.09	25000	103.7	89.5	110.5	
Ti	47	45	1	He	103.353	6.950	20211	5.85	50	206.7	89.5	110.5	CCV Failed
V	51	45	1	He	55.229	0.530	276299	0.56	50	110.5	89.5	110.5	
Cr	52	45	1	He	55.469	1.834	342803	0.74	50	110.9	89.5	110.5	CCV Failed
Mn	55	45	1	He	267.717	1.848	1161428	0.79	250	107.1	89.5	110.5	
Fe	56	45	1	He	13980.863	1.491	78511632	0.41	12500	111.8	89.5	110.5	CCV Failed
Co	59	103	1	He	48.043	2.817	491021	0.78	50	96.1	89.5	110.5	
Ni	60	103	1	He	48.089	2.439	125075	1.15	50	96.2	89.5	110.5	
Cu	63	103	1	He	48.885	2.676	341230	0.89	50	97.8	89.5	110.5	
Zn	66	103	1	He	48.633	2.707	69364	0.28	50	97.3	89.5	110.5	
As	75	103	1	He	47.002	3.033	42120	0.44	50	94.0	89.5	110.5	
Se	78	103	1	He	45.733	2.419	3407	0.32	50	91.5	89.5	110.5	
Sr	88	103	1	He	49.005	2.216	260391	2.85	50	98.0	89.5	110.5	
Mo	95	103	1	He	51.387	2.903	147672	1.36	50	102.8	89.5	110.5	
Ag	107	103	1	He	50.321	3.084	498420	1.02	50	100.6	89.5	110.5	
Cd	111	103	1	He	50.039	1.716	83619	1.10	50	100.1	89.5	110.5	
Sn	118	115	1	He	51.701	0.474	178316	0.65	50	103.4	89.5	110.5	
Sb	123	115	1	He	54.264	0.482	198356	0.47	50	108.5	89.5	110.5	
Ba	137	115	1	He	52.661	1.367	75812	1.12	50	105.3	89.5	110.5	
W	182	165	1	He	51.144	2.002	571471	1.37	50	102.3	89.5	110.5	
Tl	205	209	1	He	49.167	1.795	1187699	0.43	50	98.3	89.5	110.5	
Pb	208	209	1	He	50.496	1.300	1605543	0.45	50	101.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1602330	2.55	1803797	88.83	30	120	
Sc	45	1	He	517552	1.08	574766	90.05	30	120	
Sc	45	2	NoGas	4061027	1.51	4296857	94.51	30	120	
Rh	103	1	He	1602318	2.60	1652712	96.95	30	120	
In	115	1	He	784319	0.28	852389	92.01	30	120	
Tb	159	1	He	2446425	1.95	2425956	100.84	30	120	
Ho	165	1	He	2499075	0.83	2452680	101.89	30	120	
Bi	209	1	He	1754592	1.40	1810473	96.91	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	053_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:54:09-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.079	1.9	433	2.6	1	
B	11	45	2	NoGas	2.668	4.2	15455	1.0	20	
Na	23	45	1	He	22.883	3.5	67583	1.6	400	
Mg	24	45	1	He	1.145	23.4	1893	12.0	1000	
Al	27	45	1	He	7.605	2.6	4129	2.3	50	
K	39	45	1	He	6.357	30.2	68013	1.8	1000	
Ca	44	45	1	He	40.276	4.2	2011	2.8	1000	
Ti	47	45	1	He	6.330	11.2	1355	11.5	20	
V	51	45	1	He	0.216	45.5	1439	37.5	2	
Cr	52	45	1	He	0.081	20.5	3506	3.3	2	
Mn	55	45	1	He	0.339	5.3	1772	4.6	2	
Fe	56	45	1	He	18.377	12.1	118734	11.3	50	
Co	59	103	1	He	0.017	14.3	248	9.5	1	
Ni	60	103	1	He	0.007	60.5	122	9.6	2	
Cu	63	103	1	He	-0.039	-29.9	2365	2.1	2	
Zn	66	103	1	He	0.427	16.4	1572	5.6	20	
As	75	103	1	He	0.094	22.2	303	5.1	2	
Se	78	103	1	He	0.071	57.8	38	10.8	2	
Sr	88	103	1	He	0.619	9.5	3782	7.5	10	
Mo	95	103	1	He	0.693	22.8	2931	15.8	2	
Ag	107	103	1	He	0.005	74.1	88	44.0	0.2	
Cd	111	103	1	He	0.064	32.5	1028	2.7	0.2	
Sn	118	115	1	He	0.436	12.2	2523	8.2	10	
Sb	123	115	1	He	0.379	10.9	2422	6.2	1	
Ba	137	115	1	He	0.026	29.2	54	21.5	5	
W	182	165	1	He	1.001	13.2	14351	10.2	10	
Tl	205	209	1	He	0.067	14.3	2164	12.3	0.5	
Pb	208	209	1	He	0.034	9.9	2093	6.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1739593	0.86	1803797	96.44	30	120	
Sc	45	1	He	565487	0.22	574766	98.39	30	120	
Sc	45	2	NoGas	4380268	1.60	4296857	101.94	30	120	
Rh	103	1	He	1769845	1.80	1652712	107.09	30	120	
In	115	1	He	861503	0.67	852389	101.07	30	120	
Tb	159	1	He	2536549	0.40	2425956	104.56	30	120	
Ho	165	1	He	2587277	0.54	2452680	105.49	30	120	
Bi	209	1	He	1889898	0.74	1810473	104.39	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-I msd@2
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:58:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	534.427	534.427	0.70	2327804	0.02	10000	
B	11	45	2	NoGas	53.929	53.929	0.88	259650	0.02	300	
Na	23	45	1	He	4003.013	4003.013	1.03	8562597	0.05	500000	
Mg	24	45	1	He	5670.677	5670.677	0.79	6841611	0.08	500000	
Al	27	45	1	He	18802.148	18802.148	1.25	11795828	0.16	200000	
K	39	45	1	He	3198.061	3198.061	1.84	3118117	0.10	500000	
Ca	44	45	1	He	789209.056	789209.056	0.96	39841152	1.98	500000	>LDR
Ti	47	45	1	He	42291.452	42291.452	0.56	12712339	0.33	2500	>LDR
V	51	45	1	He	3854.099	3854.099	1.45	29599512	0.01	10000	
Cr	52	45	1	He	1899.438	1899.438	1.52	17899277	0.01	10000	
Mn	55	45	1	He	5234.739	5234.739	1.32	34891420	0.02	10000	
Fe	56	45	1	He	191674.271	191674.271	0.50	1653825072	0.01	200000	
Co	59	103	1	He	562.963	562.963	0.55	4497769	0.01	10000	
Ni	60	103	1	He	583.300	583.300	0.53	1185145	0.05	10000	
Cu	63	103	1	He	635.430	635.430	0.64	3444748	0.02	10000	
Zn	66	103	1	He	985.002	985.002	0.92	1085931	0.09	10000	
As	75	103	1	He	518.456	518.456	0.96	361724	0.14	10000	
Se	78	103	1	He	528.900	528.900	0.33	30560	1.73	10000	
Sr	88	103	1	He	25295.257	25295.257	0.19	104985485	0.02	10000	>LDR
Mo	95	103	1	He	76.733	76.733	0.58	172129	0.04	2000	
Ag	107	103	1	He	51.879	51.879	0.29	401729	0.01	300	
Cd	111	103	1	He	500.641	500.641	0.53	648104	0.08	4000	
Sn	118	115	1	He	629.584	629.584	1.17	1827202	0.03	2000	
Sb	123	115	1	He	46.811	46.811	1.35	144678	0.03	300	
Ba	137	115	1	He	565.874	565.874	0.40	688247	0.08	10000	
W	182	165	1	He	70.530	70.530	1.57	697713	0.01	2500	
Tl	205	209	1	He	133.981	133.981	0.93	2569057	0.01	5000	
Pb	208	209	1	He	637.795	637.795	0.93	16091236	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1391394	0.29	1803797	77.14	30	120	
Sc	45	1	He	795174	0.23	574766	138.35	30	120	ISTD Failed
Sc	45	2	NoGas	5743711	0.61	4296857	133.67	30	120	ISTD Failed
Rh	103	1	He	1252064	0.74	1652712	75.76	30	120	
In	115	1	He	662709	0.52	852389	77.75	30	120	
Tb	159	1	He	2156106	0.54	2425956	88.88	30	120	
Ho	165	1	He	2215055	0.75	2452680	90.31	30	120	
Bi	209	1	He	1392807	0.49	1810473	76.93	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-3-e@2
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:01:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.038	1.038	12.10	4312	0.02	10000	
B	11	45	2	NoGas	23.050	23.050	0.31	111002	0.02	300	
Na	23	45	1	He	608.376	608.376	0.12	1333335	0.05	500000	
Mg	24	45	1	He	3728.411	3728.411	1.13	4473975	0.08	500000	
Al	27	45	1	He	16143.579	16143.579	1.06	10072690	0.16	200000	
K	39	45	1	He	128.580	128.580	0.88	210229	0.06	500000	
Ca	44	45	1	He	589194.017	589194.017	0.06	29582101	1.99	500000	>LDR
Ti	47	45	1	He	42297.817	42297.817	0.36	12645198	0.33	2500	>LDR
V	51	45	1	He	3615.180	3615.180	0.26	27613392	0.01	10000	
Cr	52	45	1	He	1643.698	1643.698	0.29	15405674	0.01	10000	
Mn	55	45	1	He	4897.584	4897.584	0.44	32466380	0.02	10000	
Fe	56	45	1	He	188103.063	188103.063	0.61	1614133589	0.01	200000	
Co	59	103	1	He	38.327	38.327	0.18	311854	0.01	10000	
Ni	60	103	1	He	79.527	79.527	0.62	164605	0.05	10000	
Cu	63	103	1	He	110.977	110.977	0.42	614242	0.02	10000	
Zn	66	103	1	He	514.373	514.373	0.90	577775	0.09	10000	
As	75	103	1	He	12.937	12.937	0.49	9340	0.14	10000	
Se	78	103	1	He	3.221	3.221	4.33	212	1.52	10000	
Sr	88	103	1	He	22396.271	22396.271	0.49	94656476	0.02	10000	>LDR
Mo	95	103	1	He	17.288	17.288	1.18	39904	0.04	2000	
Ag	107	103	1	He	1.757	1.757	1.50	13879	0.01	300	
Cd	111	103	1	He	8.358	8.358	3.78	11663	0.07	4000	
Sn	118	115	1	He	61.539	61.539	0.67	182927	0.03	2000	
Sb	123	115	1	He	0.823	0.823	0.72	3295	0.02	300	
Ba	137	115	1	He	58.361	58.361	0.60	72463	0.08	10000	
W	182	165	1	He	31.425	31.425	2.17	316210	0.01	2500	
Tl	205	209	1	He	0.217	0.217	12.13	4593	0.00	5000	
Pb	208	209	1	He	92.440	92.440	0.38	2395275	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1328417	1.81	1803797	73.65	30	120	
Sc	45	1	He	790841	0.56	574766	137.59	30	120	ISTD Failed
Sc	45	2	NoGas	5522134	0.49	4296857	128.52	30	120	ISTD Failed
Rh	103	1	He	1275006	0.20	1652712	77.15	30	120	
In	115	1	He	676450	0.38	852389	79.36	30	120	
Tb	159	1	He	2167521	0.40	2425956	89.35	30	120	
Ho	165	1	He	2244211	2.07	2452680	91.50	30	120	
Bi	209	1	He	1430094	0.39	1810473	78.99	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-4-e@2
Data File Name	056SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:05:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.061	1.061	6.28	4382	0.02	10000	
B	11	45	2	NoGas	18.105	18.105	1.85	89269	0.02	300	
Na	23	45	1	He	552.474	552.474	1.11	1203089	0.05	500000	
Mg	24	45	1	He	2965.555	2965.555	0.68	3523905	0.08	500000	
Al	27	45	1	He	16361.135	16361.135	1.19	10108054	0.16	200000	
K	39	45	1	He	118.827	118.827	1.25	199066	0.06	500000	
Ca	44	45	1	He	593233.491	593233.491	0.33	29491819	2.01	500000	>LDR
Ti	47	45	1	He	43738.924	43738.924	0.16	12947234	0.34	2500	>LDR
V	51	45	1	He	3751.568	3751.568	0.66	28373456	0.01	10000	
Cr	52	45	1	He	1700.950	1700.950	0.46	15785293	0.01	10000	
Mn	55	45	1	He	4960.891	4960.891	0.88	32561948	0.02	10000	
Fe	56	45	1	He	187070.285	187070.285	0.47	1589495439	0.01	200000	
Co	59	103	1	He	37.368	37.368	0.34	304254	0.01	10000	
Ni	60	103	1	He	81.597	81.597	0.10	169000	0.05	10000	
Cu	63	103	1	He	115.707	115.707	1.24	640735	0.02	10000	
Zn	66	103	1	He	519.798	519.798	1.03	584237	0.09	10000	
As	75	103	1	He	12.665	12.665	2.14	9152	0.14	10000	
Se	78	103	1	He	2.899	2.899	0.29	194	1.50	10000	
Sr	88	103	1	He	21678.249	21678.249	0.98	91681776	0.02	10000	>LDR
Mo	95	103	1	He	17.165	17.165	2.71	39650	0.04	2000	
Ag	107	103	1	He	2.062	2.062	1.02	16291	0.01	300	
Cd	111	103	1	He	9.284	9.284	4.90	12889	0.07	4000	
Sn	118	115	1	He	63.086	63.086	0.61	187844	0.03	2000	
Sb	123	115	1	He	0.742	0.742	5.39	3047	0.02	300	
Ba	137	115	1	He	54.850	54.850	1.18	68224	0.08	10000	
W	182	165	1	He	35.765	35.765	2.45	356361	0.01	2500	
Tl	205	209	1	He	0.140	0.140	3.71	3071	0.00	5000	
Pb	208	209	1	He	95.148	95.148	0.17	2471041	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1319121	1.53	1803797	73.13	30	120	
Sc	45	1	He	783058	0.38	574766	136.24	30	120	ISTD Failed
Sc	45	2	NoGas	5551579	0.87	4296857	129.20	30	120	ISTD Failed
Rh	103	1	He	1275849	0.69	1652712	77.20	30	120	
In	115	1	He	677661	0.39	852389	79.50	30	120	
Tb	159	1	He	2168879	1.91	2425956	89.40	30	120	
Ho	165	1	He	2224127	1.22	2452680	90.68	30	120	
Bi	209	1	He	1433345	0.36	1810473	79.17	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-5-e@2
Data File Name	057SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:09:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.496	2.496	2.08	11823	0.02	10000	
B	11	45	2	NoGas	51.822	51.822	1.04	179744	0.03	300	
Na	23	45	1	He	1278.848	1278.848	1.65	1818041	0.07	500000	
Mg	24	45	1	He	9880.426	9880.426	1.24	7831616	0.13	500000	
Al	27	45	1	He	42099.926	42099.926	1.23	17353930	0.24	200000	
K	39	45	1	He	2788.811	2788.811	2.98	1794295	0.16	500000	
Ca	44	45	1	He	65043.380	65043.380	1.00	2158312	3.01	500000	
Ti	47	45	1	He	1127.178	1127.178	0.54	222658	0.51	2500	
V	51	45	1	He	187.074	187.074	0.43	944337	0.02	10000	
Cr	52	45	1	He	220.925	220.925	0.29	1370526	0.02	10000	
Mn	55	45	1	He	2054.405	2054.405	1.58	8996922	0.02	10000	
Fe	56	45	1	He	206518.247	206518.247	0.68	1170968167	0.02	200000	>LDR
Co	59	103	1	He	28.361	28.361	2.50	263739	0.01	10000	
Ni	60	103	1	He	98.413	98.413	2.95	232745	0.04	10000	
Cu	63	103	1	He	429.891	429.891	3.56	2712385	0.02	10000	
Zn	66	103	1	He	1580.583	1580.583	2.22	2027761	0.08	10000	
As	75	103	1	He	43.481	43.481	2.70	35464	0.12	10000	
Se	78	103	1	He	3.715	3.715	3.70	276	1.35	10000	
Sr	88	103	1	He	1400.276	1400.276	3.28	6762298	0.02	10000	
Mo	95	103	1	He	12.952	12.952	1.01	34344	0.04	2000	
Ag	107	103	1	He	3.018	3.018	2.51	27229	0.01	300	
Cd	111	103	1	He	6.655	6.655	3.64	10769	0.06	4000	
Sn	118	115	1	He	451.445	451.445	0.44	1450677	0.03	2000	
Sb	123	115	1	He	9.941	9.941	1.24	34626	0.03	300	
Ba	137	115	1	He	543.696	543.696	0.28	732071	0.07	10000	
W	182	165	1	He	5.430	5.430	0.74	61744	0.01	2500	
Tl	205	209	1	He	0.431	0.431	5.74	10261	0.00	5000	
Pb	208	209	1	He	1470.645	1470.645	3.40	44442037	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1513009	1.80	1803797	83.88	30	120	
Sc	45	1	He	522526	1.55	574766	90.91	30	120	
Sc	45	2	NoGas	4132783	1.06	4296857	96.18	30	120	
Rh	103	1	He	1458035	3.80	1652712	88.22	30	120	
In	115	1	He	733675	1.19	852389	86.07	30	120	
Tb	159	1	He	2333748	3.44	2425956	96.20	30	120	
Ho	165	1	He	2444335	2.82	2452680	99.66	30	120	
Bi	209	1	He	1669802	4.03	1810473	92.23	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-6-e@2
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:12:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.809	0.809	3.66	3752	0.02	10000	
B	11	45	2	NoGas	15.590	15.590	0.71	55424	0.03	300	
Na	23	45	1	He	1071.210	1071.210	1.74	1514699	0.07	500000	
Mg	24	45	1	He	4079.386	4079.386	0.03	3206373	0.13	500000	
Al	27	45	1	He	22800.070	22800.070	0.89	9317848	0.24	200000	
K	39	45	1	He	921.205	921.205	1.07	626673	0.15	500000	
Ca	44	45	1	He	72616.321	72616.321	1.46	2388617	3.04	500000	
Ti	47	45	1	He	565.467	565.467	0.80	110728	0.51	2500	
V	51	45	1	He	114.856	114.856	0.25	574857	0.02	10000	
Cr	52	45	1	He	90.052	90.052	0.24	555399	0.02	10000	
Mn	55	45	1	He	325.499	325.499	1.23	1413438	0.02	10000	
Fe	56	45	1	He	34652.209	34652.209	1.43	194769543	0.02	200000	
Co	59	103	1	He	3.751	3.751	1.59	35082	0.01	10000	
Ni	60	103	1	He	18.566	18.566	0.93	44185	0.04	10000	
Cu	63	103	1	He	284.334	284.334	2.33	1803255	0.02	10000	
Zn	66	103	1	He	185.681	185.681	2.32	239920	0.08	10000	
As	75	103	1	He	9.837	9.837	0.67	8196	0.12	10000	
Se	78	103	1	He	2.726	2.726	5.33	210	1.30	10000	
Sr	88	103	1	He	1582.434	1582.434	0.75	7678989	0.02	10000	
Mo	95	103	1	He	2.429	2.429	0.28	6967	0.03	2000	
Ag	107	103	1	He	1.341	1.341	2.29	12168	0.01	300	
Cd	111	103	1	He	0.866	0.866	7.71	2063	0.04	4000	
Sn	118	115	1	He	66.929	66.929	1.90	219903	0.03	2000	
Sb	123	115	1	He	0.861	0.861	4.88	3776	0.02	300	
Ba	137	115	1	He	122.979	122.979	0.83	168832	0.07	10000	
W	182	165	1	He	0.718	0.718	4.65	10230	0.01	2500	
Tl	205	209	1	He	0.246	0.246	2.05	6195	0.00	5000	
Pb	208	209	1	He	163.565	163.565	0.88	5091665	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1480539	1.03	1803797	82.08	30	120	
Sc	45	1	He	518002	0.40	574766	90.12	30	120	
Sc	45	2	NoGas	3948750	1.08	4296857	91.90	30	120	
Rh	103	1	He	1463962	1.11	1652712	88.58	30	120	
In	115	1	He	748015	0.98	852389	87.76	30	120	
Tb	159	1	He	2349214	1.11	2425956	96.84	30	120	
Ho	165	1	He	2386279	1.61	2452680	97.29	30	120	
Bi	209	1	He	1718339	0.76	1810473	94.91	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111357-a-2-j@50
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:16:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.077	0.077	25.60	389	0.02	10000	
B	11	45	2	NoGas	2.303	2.303	3.14	13528	0.02	300	
Na	23	45	1	He	75.711	75.711	1.89	145519	0.05	500000	
Mg	24	45	1	He	198.795	198.795	0.50	169139	0.12	500000	
Al	27	45	1	He	1210.733	1210.733	0.99	533587	0.23	200000	
K	39	45	1	He	13.634	13.634	10.16	71932	0.02	500000	
Ca	44	45	1	He	56498.808	56498.808	1.07	2001673	2.82	500000	
Ti	47	45	1	He	3017.129	3017.129	0.28	636299	0.47	2500	>LDR
V	51	45	1	He	277.560	277.560	0.79	1495772	0.02	10000	
Cr	52	45	1	He	120.440	120.440	0.79	799019	0.02	10000	
Mn	55	45	1	He	409.573	409.573	0.92	1915505	0.02	10000	
Fe	56	45	1	He	14723.828	14723.828	0.45	89138639	0.02	200000	
Co	59	103	1	He	1.670	1.670	1.66	17835	0.01	10000	
Ni	60	103	1	He	3.556	3.556	3.23	9725	0.04	10000	
Cu	63	103	1	He	5.067	5.067	1.48	39105	0.01	10000	
Zn	66	103	1	He	25.263	25.263	1.05	37950	0.07	10000	
As	75	103	1	He	0.516	0.516	6.35	679	0.08	10000	
Se	78	103	1	He	0.231	0.231	20.47	48	0.48	10000	
Sr	88	103	1	He	980.772	980.772	1.60	5424899	0.02	10000	
Mo	95	103	1	He	0.485	0.485	10.77	2148	0.02	2000	
Ag	107	103	1	He	0.019	0.019	15.20	228	0.01	300	
Cd	111	103	1	He	0.121	0.121	28.93	1066	0.01	4000	
Sn	118	115	1	He	3.162	3.162	4.24	12279	0.03	2000	
Sb	123	115	1	He	-0.036	-0.036	-71.22	733	0.00	300	
Ba	137	115	1	He	2.670	2.670	3.16	4063	0.07	10000	
W	182	165	1	He	1.340	1.340	2.65	17733	0.01	2500	
Tl	205	209	1	He	0.010	0.010	15.91	666	0.00	5000	
Pb	208	209	1	He	4.157	4.157	1.66	142098	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1588343	2.70	1803797	88.06	30	120	
Sc	45	1	He	557889	0.70	574766	97.06	30	120	
Sc	45	2	NoGas	4184894	0.70	4296857	97.39	30	120	
Rh	103	1	He	1668618	0.63	1652712	100.96	30	120	
In	115	1	He	826344	0.37	852389	96.94	30	120	
Tb	159	1	He	2495076	2.04	2425956	102.85	30	120	
Ho	165	1	He	2512189	1.23	2452680	102.43	30	120	
Bi	209	1	He	1875236	1.60	1810473	103.58	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111357-a-2-j@10
Data File Name	060SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:20:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1078.227	1078.227	2.90	4955215	0.02	10000	
B	11	45	2	NoGas	108.133	108.133	1.65	388261	0.03	300	
Na	23	45	1	He	9721.912	9721.912	0.89	14911008	0.07	500000	
Mg	24	45	1	He	10243.012	10243.012	0.59	8888556	0.12	500000	
Al	27	45	1	He	13770.843	13770.843	1.10	6214381	0.22	200000	
K	39	45	1	He	9227.919	9227.919	1.18	6350047	0.15	500000	
Ca	44	45	1	He	247439.013	247439.013	0.58	8985583	2.75	500000	
Ti	47	45	1	He	13772.160	13772.160	0.80	2977818	0.46	2500	>LDR
V	51	45	1	He	2123.566	2123.566	0.93	11731703	0.02	10000	
Cr	52	45	1	He	1477.805	1477.805	0.56	10017762	0.01	10000	
Mn	55	45	1	He	2607.099	2607.099	0.65	12499715	0.02	10000	
Fe	56	45	1	He	72313.060	72313.060	0.30	448812489	0.02	200000	
Co	59	103	1	He	1029.677	1029.677	1.02	9289992	0.01	10000	
Ni	60	103	1	He	1075.458	1075.458	0.61	2467517	0.04	10000	
Cu	63	103	1	He	1048.872	1048.872	0.40	6419817	0.02	10000	
Zn	66	103	1	He	1083.498	1083.498	0.96	1348924	0.08	10000	
As	75	103	1	He	997.971	997.971	0.25	786175	0.13	10000	
Se	78	103	1	He	972.230	972.230	0.37	63418	1.53	10000	
Sr	88	103	1	He	6122.770	6122.770	1.32	28695468	0.02	10000	
Mo	95	103	1	He	115.412	115.412	1.69	292033	0.04	2000	
Ag	107	103	1	He	104.457	104.457	0.36	913407	0.01	300	
Cd	111	103	1	He	1020.338	1020.338	0.18	1490903	0.07	4000	
Sn	118	115	1	He	1144.157	1144.157	1.21	3659081	0.03	2000	
Sb	123	115	1	He	106.296	106.296	0.33	361088	0.03	300	
Ba	137	115	1	He	1064.023	1064.023	0.65	1426238	0.07	10000	
W	182	165	1	He	107.448	107.448	2.38	1151378	0.01	2500	
Tl	205	209	1	He	261.602	261.602	4.94	5801672	0.00	5000	
Pb	208	209	1	He	1088.903	1088.903	3.96	31785142	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1468633	1.97	1803797	81.42	30	120	
Sc	45	1	He	571973	0.55	574766	99.51	30	120	
Sc	45	2	NoGas	4349225	1.08	4296857	101.22	30	120	
Rh	103	1	He	1413921	0.69	1652712	85.55	30	120	
In	115	1	He	730369	0.51	852389	85.68	30	120	
Tb	159	1	He	2341259	0.24	2425956	96.51	30	120	
Ho	165	1	He	2403484	2.82	2452680	97.99	30	120	
Bi	209	1	He	1613242	4.24	1810473	89.11	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-k ms@10
Data File Name	061SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:24:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	104.762	104.762	2.20	474513	0.02	10000	
B	11	45	2	NoGas	15.711	15.711	2.40	60637	0.03	300	
Na	23	45	1	He	1233.598	1233.598	0.44	1933769	0.06	500000	
Mg	24	45	1	He	1764.203	1764.203	0.74	1541789	0.11	500000	
Al	27	45	1	He	5930.195	5930.195	1.57	2694292	0.22	200000	
K	39	45	1	He	912.361	912.361	0.46	690477	0.13	500000	
Ca	44	45	1	He	245560.682	245560.682	0.81	8976326	2.74	500000	
Ti	47	45	1	He	13178.057	13178.057	1.18	2868189	0.46	2500	>LDR
V	51	45	1	He	1210.097	1210.097	0.41	6729337	0.02	10000	
Cr	52	45	1	He	596.540	596.540	0.85	4072463	0.01	10000	
Mn	55	45	1	He	1677.565	1677.565	0.28	8096320	0.02	10000	
Fe	56	45	1	He	61320.103	61320.103	0.13	383095034	0.02	200000	
Co	59	103	1	He	106.671	106.671	0.29	966436	0.01	10000	
Ni	60	103	1	He	116.481	116.481	0.47	268443	0.04	10000	
Cu	63	103	1	He	122.836	122.836	0.54	756869	0.02	10000	
Zn	66	103	1	He	207.896	207.896	0.89	260478	0.08	10000	
As	75	103	1	He	96.970	96.970	0.90	76863	0.13	10000	
Se	78	103	1	He	94.533	94.533	2.32	6215	1.52	10000	
Sr	88	103	1	He	5180.024	5180.024	0.95	24379367	0.02	10000	
Mo	95	103	1	He	15.445	15.445	1.31	39767	0.04	2000	
Ag	107	103	1	He	10.412	10.412	0.27	91452	0.01	300	
Cd	111	103	1	He	102.650	102.650	0.43	151275	0.07	4000	
Sn	118	115	1	He	119.874	119.874	0.98	394981	0.03	2000	
Sb	123	115	1	He	9.472	9.472	2.70	33816	0.03	300	
Ba	137	115	1	He	112.457	112.457	1.01	155050	0.07	10000	
W	182	165	1	He	14.651	14.651	1.94	158110	0.01	2500	
Tl	205	209	1	He	23.991	23.991	4.46	556106	0.00	5000	
Pb	208	209	1	He	121.127	121.127	4.46	3692933	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1447338	2.12	1803797	80.24	30	120	
Sc	45	1	He	575750	0.33	574766	100.17	30	120	
Sc	45	2	NoGas	4290755	1.08	4296857	99.86	30	120	
Rh	103	1	He	1419824	0.64	1652712	85.91	30	120	
In	115	1	He	751191	0.42	852389	88.13	30	120	
Tb	159	1	He	2329869	0.33	2425956	96.04	30	120	
Ho	165	1	He	2385111	0.41	2452680	97.25	30	120	
Bi	209	1	He	1684774	4.03	1810473	93.06	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-l msd@10
Data File Name	062SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:27:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	105.068	105.068	1.01	474359	0.02	10000	
B	11	45	2	NoGas	15.578	15.578	0.81	59006	0.03	300	
Na	23	45	1	He	1243.279	1243.279	2.28	1896018	0.07	500000	
Mg	24	45	1	He	1777.311	1777.311	1.36	1511304	0.12	500000	
Al	27	45	1	He	5802.675	5802.675	1.68	2565587	0.23	200000	
K	39	45	1	He	943.363	943.363	0.60	692558	0.14	500000	
Ca	44	45	1	He	236546.799	236546.799	0.21	8413943	2.81	500000	
Ti	47	45	1	He	12878.474	12878.474	1.53	2727296	0.47	2500	>LDR
V	51	45	1	He	1183.004	1183.004	1.28	6401351	0.02	10000	
Cr	52	45	1	He	583.788	583.788	0.69	3878243	0.02	10000	
Mn	55	45	1	He	1610.475	1610.475	0.73	7563139	0.02	10000	
Fe	56	45	1	He	59091.184	59091.184	0.70	359221212	0.02	200000	
Co	59	103	1	He	106.587	106.587	0.41	954216	0.01	10000	
Ni	60	103	1	He	116.205	116.205	0.66	264631	0.04	10000	
Cu	63	103	1	He	122.371	122.371	0.40	745059	0.02	10000	
Zn	66	103	1	He	203.617	203.617	1.37	252098	0.08	10000	
As	75	103	1	He	97.413	97.413	0.75	76294	0.13	10000	
Se	78	103	1	He	94.049	94.049	2.32	6110	1.54	10000	
Sr	88	103	1	He	4908.508	4908.508	1.10	22827527	0.02	10000	
Mo	95	103	1	He	14.323	14.323	1.64	36480	0.04	2000	
Ag	107	103	1	He	10.598	10.598	0.16	91980	0.01	300	
Cd	111	103	1	He	103.283	103.283	0.36	150399	0.07	4000	
Sn	118	115	1	He	118.462	118.462	0.63	384530	0.03	2000	
Sb	123	115	1	He	9.449	9.449	1.15	33230	0.03	300	
Ba	137	115	1	He	113.243	113.243	1.41	153794	0.07	10000	
W	182	165	1	He	14.048	14.048	2.62	152314	0.01	2500	
Tl	205	209	1	He	24.647	24.647	2.91	556003	0.00	5000	
Pb	208	209	1	He	123.647	123.647	2.42	3669153	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1442252	1.73	1803797	79.96	30	120	
Sc	45	1	He	560253	0.79	574766	97.47	30	120	
Sc	45	2	NoGas	4206816	0.33	4296857	97.90	30	120	
Rh	103	1	He	1402979	0.60	1652712	84.89	30	120	
In	115	1	He	740003	0.85	852389	86.82	30	120	
Tb	159	1	He	2311569	0.78	2425956	95.28	30	120	
Ho	165	1	He	2394389	0.98	2452680	97.62	30	120	
Bi	209	1	He	1638410	2.19	1810473	90.50	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-3-e@10
Data File Name	063SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:31:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.288	0.288	13.10	1326	0.02	10000	
B	11	45	2	NoGas	6.873	6.873	4.50	29313	0.02	300	
Na	23	45	1	He	184.760	184.760	1.42	311410	0.06	500000	
Mg	24	45	1	He	1089.618	1089.618	1.23	932346	0.12	500000	
Al	27	45	1	He	4976.179	4976.179	0.70	2212955	0.22	200000	
K	39	45	1	He	40.764	40.764	3.71	90867	0.04	500000	
Ca	44	45	1	He	176218.883	176218.883	0.88	6304834	2.79	500000	
Ti	47	45	1	He	12757.285	12757.285	0.67	2717575	0.47	2500	>LDR
V	51	45	1	He	1080.627	1080.627	1.20	5881752	0.02	10000	
Cr	52	45	1	He	495.703	495.703	0.15	3312573	0.01	10000	
Mn	55	45	1	He	1474.410	1474.410	1.51	6964666	0.02	10000	
Fe	56	45	1	He	57433.001	57433.001	0.51	351186919	0.02	200000	
Co	59	103	1	He	7.471	7.471	1.20	67809	0.01	10000	
Ni	60	103	1	He	15.741	15.741	3.00	36389	0.04	10000	
Cu	63	103	1	He	21.996	21.996	0.45	137444	0.02	10000	
Zn	66	103	1	He	106.258	106.258	0.39	133642	0.08	10000	
As	75	103	1	He	2.451	2.451	2.72	2110	0.12	10000	
Se	78	103	1	He	0.781	0.781	7.00	77	1.02	10000	
Sr	88	103	1	He	4398.098	4398.098	1.00	20723189	0.02	10000	
Mo	95	103	1	He	3.320	3.320	0.87	9027	0.04	2000	
Ag	107	103	1	He	0.249	0.249	5.71	2220	0.01	300	
Cd	111	103	1	He	1.172	1.172	12.31	2451	0.05	4000	
Sn	118	115	1	He	12.722	12.722	1.01	42762	0.03	2000	
Sb	123	115	1	He	0.132	0.132	14.65	1257	0.01	300	
Ba	137	115	1	He	11.503	11.503	0.71	15929	0.07	10000	
W	182	165	1	He	6.284	6.284	0.53	69565	0.01	2500	
Tl	205	209	1	He	0.071	0.071	14.76	2036	0.00	5000	
Pb	208	209	1	He	17.374	17.374	1.60	537570	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1471531	2.15	1803797	81.58	30	120	
Sc	45	1	He	563512	0.33	574766	98.04	30	120	
Sc	45	2	NoGas	4217895	1.11	4296857	98.16	30	120	
Rh	103	1	He	1421431	0.13	1652712	86.01	30	120	
In	115	1	He	754012	0.82	852389	88.46	30	120	
Tb	159	1	He	2327851	0.51	2425956	95.96	30	120	
Ho	165	1	He	2393732	0.92	2452680	97.60	30	120	
Bi	209	1	He	1705598	1.23	1810473	94.21	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	064_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:35:21-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.380	1.882	223424	2.29	50	90.8	89.5	110.5	
B	11	45	2	NoGas	49.476	1.860	168522	2.11	50	99.0	89.5	110.5	
Na	23	45	1	He	27469.003	0.924	38235593	0.68	25000	109.9	89.5	110.5	
Mg	24	45	1	He	27038.595	0.712	21323701	0.44	25000	108.2	89.5	110.5	
Al	27	45	1	He	250.511	0.088	103421	0.87	250	100.2	89.5	110.5	
K	39	45	1	He	26862.484	0.922	16689519	0.77	25000	107.4	89.5	110.5	
Ca	44	45	1	He	25610.221	0.303	845760	0.68	25000	102.4	89.5	110.5	
Ti	47	45	1	He	74.415	3.486	14623	2.75	50	148.8	89.5	110.5	CCV Failed
V	51	45	1	He	54.618	1.192	274465	0.65	50	109.2	89.5	110.5	
Cr	52	45	1	He	54.317	1.411	337269	0.62	50	108.6	89.5	110.5	
Mn	55	45	1	He	262.650	0.893	1144673	0.58	250	105.1	89.5	110.5	
Fe	56	45	1	He	13595.127	1.380	76692739	1.00	12500	108.8	89.5	110.5	
Co	59	103	1	He	49.034	2.521	481359	0.25	50	98.1	89.5	110.5	
Ni	60	103	1	He	48.840	2.490	122001	0.17	50	97.7	89.5	110.5	
Cu	63	103	1	He	49.300	2.405	330524	0.83	50	98.6	89.5	110.5	
Zn	66	103	1	He	49.570	2.046	67900	1.11	50	99.1	89.5	110.5	
As	75	103	1	He	47.726	2.252	41082	0.45	50	95.5	89.5	110.5	
Se	78	103	1	He	46.294	2.752	3312	0.55	50	92.6	89.5	110.5	
Sr	88	103	1	He	48.517	2.023	247565	1.17	50	97.0	89.5	110.5	
Mo	95	103	1	He	51.619	3.111	142467	1.23	50	103.2	89.5	110.5	
Ag	107	103	1	He	51.383	2.674	488854	0.34	50	102.8	89.5	110.5	
Cd	111	103	1	He	51.822	2.165	83140	0.51	50	103.6	89.5	110.5	
Sn	118	115	1	He	51.384	1.849	178320	1.42	50	102.8	89.5	110.5	
Sb	123	115	1	He	53.366	1.399	196291	0.72	50	106.7	89.5	110.5	
Ba	137	115	1	He	51.784	1.346	75012	1.01	50	103.6	89.5	110.5	
W	182	165	1	He	51.005	1.622	552934	1.32	50	102.0	89.5	110.5	
Tl	205	209	1	He	48.308	0.953	1177216	0.47	50	96.6	89.5	110.5	
Pb	208	209	1	He	49.515	1.348	1588083	0.54	50	99.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1572664	0.47	1803797	87.19	30	120	
Sc	45	1	He	519876	0.78	574766	90.45	30	120	
Sc	45	2	NoGas	4052086	0.31	4296857	94.30	30	120	
Rh	103	1	He	1538941	2.40	1652712	93.12	30	120	
In	115	1	He	789202	0.68	852389	92.59	30	120	
Tb	159	1	He	2383980	0.45	2425956	98.27	30	120	
Ho	165	1	He	2424597	1.37	2452680	98.86	30	120	
Bi	209	1	He	1769783	0.83	1810473	97.75	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	065_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:39:11-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.062	20.9	315	18.1	1	
B	11	45	2	NoGas	1.514	6.2	10792	2.7	20	
Na	23	45	1	He	18.395	9.1	57788	2.7	400	
Mg	24	45	1	He	0.918	61.2	1611	26.9	1000	
Al	27	45	1	He	6.933	5.9	3640	3.6	50	
K	39	45	1	He	7.455	37.7	65363	1.2	1000	
Ca	44	45	1	He	12.341	16.0	960	8.4	1000	
Ti	47	45	1	He	2.650	6.2	540	7.5	20	
V	51	45	1	He	0.104	55.2	787	38.7	2	
Cr	52	45	1	He	0.004	463.8	2839	3.5	2	
Mn	55	45	1	He	0.129	19.2	740	14.6	2	
Fe	56	45	1	He	11.112	16.5	70457	14.0	50	
Co	59	103	1	He	0.004	12.6	96	7.3	1	
Ni	60	103	1	He	0.002	563.6	102	30.3	2	
Cu	63	103	1	He	-0.106	-9.9	1745	2.3	2	
Zn	66	103	1	He	0.433	12.9	1490	5.1	20	
As	75	103	1	He	0.165	13.8	352	5.9	2	
Se	78	103	1	He	0.213	28.0	46	11.9	2	
Sr	88	103	1	He	0.208	12.8	1292	9.9	10	
Mo	95	103	1	He	0.638	12.0	2602	8.7	2	
Ag	107	103	1	He	0.002	62.8	58	29.0	0.2	
Cd	111	103	1	He	0.042	45.1	930	2.9	0.2	
Sn	118	115	1	He	0.408	9.1	2337	6.0	10	
Sb	123	115	1	He	0.227	15.8	1758	8.0	1	
Ba	137	115	1	He	0.033	34.2	63	27.3	5	
W	182	165	1	He	0.864	20.6	12465	15.6	10	
Tl	205	209	1	He	0.048	17.2	1620	12.4	0.5	
Pb	208	209	1	He	0.026	8.1	1765	3.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1614146	2.43	1803797	89.49	30	120	
Sc	45	1	He	537742	1.52	574766	93.56	30	120	
Sc	45	2	NoGas	4165235	1.08	4296857	96.94	30	120	
Rh	103	1	He	1667236	2.08	1652712	100.88	30	120	
In	115	1	He	833613	0.28	852389	97.80	30	120	
Tb	159	1	He	2468774	1.64	2425956	101.76	30	120	
Ho	165	1	He	2524028	1.50	2452680	102.91	30	120	
Bi	209	1	He	1848137	0.48	1810473	102.08	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-4-e@10
Data File Name	066SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:43:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.214	0.214	13.39	1011	0.02	10000	
B	11	45	2	NoGas	5.461	5.461	4.02	24825	0.02	300	
Na	23	45	1	He	164.960	164.960	1.04	291337	0.06	500000	
Mg	24	45	1	He	855.069	855.069	0.93	757288	0.11	500000	
Al	27	45	1	He	5070.762	5070.762	0.17	2333214	0.22	200000	
K	39	45	1	He	37.766	37.766	2.69	91943	0.04	500000	
Ca	44	45	1	He	176045.945	176045.945	1.42	6516160	2.70	500000	
Ti	47	45	1	He	13170.887	13170.887	1.85	2902496	0.45	2500	>LDR
V	51	45	1	He	1129.456	1129.456	0.46	6360448	0.02	10000	
Cr	52	45	1	He	511.423	511.423	0.81	3535810	0.01	10000	
Mn	55	45	1	He	1482.308	1482.308	0.65	7244304	0.02	10000	
Fe	56	45	1	He	55620.727	55620.727	1.08	351867995	0.02	200000	
Co	59	103	1	He	7.467	7.467	0.64	68243	0.01	10000	
Ni	60	103	1	He	16.417	16.417	1.34	38207	0.04	10000	
Cu	63	103	1	He	23.378	23.378	2.04	146951	0.02	10000	
Zn	66	103	1	He	110.425	110.425	1.32	139810	0.08	10000	
As	75	103	1	He	2.502	2.502	5.04	2165	0.12	10000	
Se	78	103	1	He	0.726	0.726	15.18	74	0.99	10000	
Sr	88	103	1	He	4385.454	4385.454	1.10	20805933	0.02	10000	
Mo	95	103	1	He	3.176	3.176	1.57	8722	0.04	2000	
Ag	107	103	1	He	0.184	0.184	14.05	1658	0.01	300	
Cd	111	103	1	He	0.974	0.974	11.15	2175	0.04	4000	
Sn	118	115	1	He	12.634	12.634	3.03	43334	0.03	2000	
Sb	123	115	1	He	0.146	0.146	36.77	1331	0.01	300	
Ba	137	115	1	He	10.966	10.966	0.36	15493	0.07	10000	
W	182	165	1	He	6.616	6.616	2.73	73560	0.01	2500	
Tl	205	209	1	He	0.043	0.043	6.08	1373	0.00	5000	
Pb	208	209	1	He	18.420	18.420	2.96	562035	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1507396	1.94	1803797	83.57	30	120	
Sc	45	1	He	583056	1.33	574766	101.44	30	120	
Sc	45	2	NoGas	4279839	0.48	4296857	99.60	30	120	
Rh	103	1	He	1431229	0.57	1652712	86.60	30	120	
In	115	1	He	769238	0.79	852389	90.24	30	120	
Tb	159	1	He	2342516	0.81	2425956	96.56	30	120	
Ho	165	1	He	2409342	1.69	2452680	98.23	30	120	
Bi	209	1	He	1682870	2.95	1810473	92.95	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-5-e@10
Data File Name	067SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:46:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.522	0.522	8.05	2523	0.02	10000	
B	11	45	2	NoGas	10.519	10.519	2.02	38994	0.03	300	
Na	23	45	1	He	267.966	267.966	1.26	402914	0.07	500000	
Mg	24	45	1	He	2117.859	2117.859	0.72	1670764	0.13	500000	
Al	27	45	1	He	8994.933	8994.933	0.44	3689056	0.24	200000	
K	39	45	1	He	564.412	564.412	2.03	407977	0.14	500000	
Ca	44	45	1	He	13347.079	13347.079	0.94	440924	3.03	500000	
Ti	47	45	1	He	239.111	239.111	0.57	46982	0.51	2500	
V	51	45	1	He	38.684	38.684	1.73	194414	0.02	10000	
Cr	52	45	1	He	45.077	45.077	1.44	280299	0.02	10000	
Mn	55	45	1	He	438.662	438.662	0.24	1911379	0.02	10000	
Fe	56	45	1	He	43605.009	43605.009	1.05	245926968	0.02	200000	
Co	59	103	1	He	5.450	5.450	1.19	54829	0.01	10000	
Ni	60	103	1	He	18.965	18.965	2.23	48559	0.04	10000	
Cu	63	103	1	He	80.404	80.404	0.81	550379	0.01	10000	
Zn	66	103	1	He	306.818	306.818	1.15	426048	0.07	10000	
As	75	103	1	He	8.543	8.543	1.39	7682	0.11	10000	
Se	78	103	1	He	0.731	0.731	15.20	81	0.90	10000	
Sr	88	103	1	He	271.712	271.712	3.78	1418683	0.02	10000	
Mo	95	103	1	He	2.267	2.267	1.64	7042	0.03	2000	
Ag	107	103	1	He	0.610	0.610	2.28	5972	0.01	300	
Cd	111	103	1	He	1.484	1.484	1.71	3225	0.05	4000	
Sn	118	115	1	He	89.628	89.628	1.96	307650	0.03	2000	
Sb	123	115	1	He	1.934	1.934	1.07	7843	0.02	300	
Ba	137	115	1	He	108.492	108.492	1.46	155716	0.07	10000	
W	182	165	1	He	1.148	1.148	4.38	15200	0.01	2500	
Tl	205	209	1	He	0.089	0.089	3.19	2651	0.00	5000	
Pb	208	209	1	He	289.970	289.970	1.60	9642706	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1542377	1.35	1803797	85.51	30	120	
Sc	45	1	He	519786	1.14	574766	90.43	30	120	
Sc	45	2	NoGas	3933334	0.73	4296857	91.54	30	120	
Rh	103	1	He	1575044	0.78	1652712	95.30	30	120	
In	115	1	He	782050	0.67	852389	91.75	30	120	
Tb	159	1	He	2373624	0.56	2425956	97.84	30	120	
Ho	165	1	He	2449846	0.48	2452680	99.88	30	120	
Bi	209	1	He	1835921	1.26	1810473	101.41	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-6-e@10
Data File Name	068SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:50:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.160	0.160	5.52	785	0.02	10000	
B	11	45	2	NoGas	3.395	3.395	9.31	16349	0.02	300	
Na	23	45	1	He	226.723	226.723	0.81	346032	0.07	500000	
Mg	24	45	1	He	835.677	835.677	0.36	660595	0.13	500000	
Al	27	45	1	He	4949.286	4949.286	1.66	2032651	0.24	200000	
K	39	45	1	He	201.104	201.104	1.48	183299	0.11	500000	
Ca	44	45	1	He	14508.277	14508.277	0.25	479882	3.02	500000	
Ti	47	45	1	He	119.664	119.664	2.10	23542	0.51	2500	
V	51	45	1	He	24.207	24.207	0.19	121915	0.02	10000	
Cr	52	45	1	He	18.654	18.654	1.44	117747	0.02	10000	
Mn	55	45	1	He	65.799	65.799	0.64	287200	0.02	10000	
Fe	56	45	1	He	7329.021	7329.021	1.69	41392151	0.02	200000	
Co	59	103	1	He	0.727	0.727	1.07	7427	0.01	10000	
Ni	60	103	1	He	3.562	3.562	1.10	9287	0.04	10000	
Cu	63	103	1	He	53.335	53.335	0.88	369534	0.01	10000	
Zn	66	103	1	He	38.146	38.146	0.57	54214	0.07	10000	
As	75	103	1	He	1.928	1.928	0.54	1898	0.10	10000	
Se	78	103	1	He	0.560	0.560	15.18	70	0.80	10000	
Sr	88	103	1	He	322.101	322.101	1.03	1698534	0.02	10000	
Mo	95	103	1	He	0.344	0.344	4.71	1646	0.02	2000	
Ag	107	103	1	He	0.260	0.260	4.05	2588	0.01	300	
Cd	111	103	1	He	0.213	0.213	22.29	1167	0.02	4000	
Sn	118	115	1	He	13.805	13.805	2.23	48953	0.03	2000	
Sb	123	115	1	He	0.092	0.092	18.64	1179	0.01	300	
Ba	137	115	1	He	24.648	24.648	0.72	36047	0.07	10000	
W	182	165	1	He	0.188	0.188	19.58	4775	0.00	2500	
Tl	205	209	1	He	0.054	0.054	8.05	1771	0.00	5000	
Pb	208	209	1	He	31.662	31.662	0.08	1050899	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1559225	0.58	1803797	86.44	30	120	
Sc	45	1	He	520447	0.58	574766	90.55	30	120	
Sc	45	2	NoGas	3968212	0.49	4296857	92.35	30	120	
Rh	103	1	He	1590792	1.14	1652712	96.25	30	120	
In	115	1	He	796606	0.30	852389	93.46	30	120	
Tb	159	1	He	2370330	1.78	2425956	97.71	30	120	
Ho	165	1	He	2472211	1.16	2452680	100.80	30	120	
Bi	209	1	He	1830814	0.53	1810473	101.12	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	069_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:54:26-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.161	3.075	227864	2.34	50	90.3	89.5	110.5	
B	11	45	2	NoGas	50.010	2.449	172876	2.38	50	100.0	89.5	110.5	
Na	23	45	1	He	26879.862	1.466	39185035	0.26	25000	107.5	89.5	110.5	
Mg	24	45	1	He	26668.971	1.430	22026499	0.15	25000	106.7	89.5	110.5	
Al	27	45	1	He	247.565	1.486	107043	0.78	250	99.0	89.5	110.5	
K	39	45	1	He	26342.897	1.278	17142103	0.71	25000	105.4	89.5	110.5	
Ca	44	45	1	He	25459.410	0.951	880554	0.61	25000	101.8	89.5	110.5	
Ti	47	45	1	He	59.636	2.122	12278	3.17	50	119.3	89.5	110.5	CCV Failed
V	51	45	1	He	54.063	0.885	284549	0.94	50	108.1	89.5	110.5	
Cr	52	45	1	He	53.440	1.381	347576	0.47	50	106.9	89.5	110.5	
Mn	55	45	1	He	259.518	1.471	1184496	0.17	250	103.8	89.5	110.5	
Fe	56	45	1	He	13371.996	0.938	79006244	0.75	12500	107.0	89.5	110.5	
Co	59	103	1	He	48.318	1.315	495582	0.58	50	96.6	89.5	110.5	
Ni	60	103	1	He	48.284	2.027	126012	1.07	50	96.6	89.5	110.5	
Cu	63	103	1	He	48.405	0.677	339125	1.30	50	96.8	89.5	110.5	
Zn	66	103	1	He	48.849	3.717	69896	1.89	50	97.7	89.5	110.5	
As	75	103	1	He	47.498	1.048	42719	1.35	50	95.0	89.5	110.5	
Se	78	103	1	He	46.767	1.873	3495	1.84	50	93.5	89.5	110.5	
Sr	88	103	1	He	47.574	1.850	253593	0.80	50	95.1	89.5	110.5	
Mo	95	103	1	He	51.077	2.200	147288	0.46	50	102.2	89.5	110.5	
Ag	107	103	1	He	50.305	1.134	500071	0.64	50	100.6	89.5	110.5	
Cd	111	103	1	He	50.468	1.525	84616	1.42	50	100.9	89.5	110.5	
Sn	118	115	1	He	51.572	1.065	183540	1.12	50	103.1	89.5	110.5	
Sb	123	115	1	He	53.090	0.479	200271	0.84	50	106.2	89.5	110.5	
Ba	137	115	1	He	52.501	0.596	77989	0.13	50	105.0	89.5	110.5	
W	182	165	1	He	49.285	1.286	552171	0.88	50	98.6	89.5	110.5	
Tl	205	209	1	He	48.663	1.184	1192118	0.14	50	97.3	89.5	110.5	
Pb	208	209	1	He	49.781	0.887	1605131	0.65	50	99.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1612029	0.82	1803797	89.37	30	120	
Sc	45	1	He	544513	1.50	574766	94.74	30	120	
Sc	45	2	NoGas	4114009	0.51	4296857	95.74	30	120	
Rh	103	1	He	1607510	1.76	1652712	97.26	30	120	
In	115	1	He	809313	0.68	852389	94.95	30	120	
Tb	159	1	He	2449654	1.34	2425956	100.98	30	120	
Ho	165	1	He	2505225	0.77	2452680	102.14	30	120	
Bi	209	1	He	1779235	1.28	1810473	98.27	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	070_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:58:17-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.037	27.7	189	25.6	1	
B	11	45	2	NoGas	1.258	3.5	9885	0.7	20	
Na	23	45	1	He	17.344	7.7	56788	2.8	400	
Mg	24	45	1	He	0.980	72.4	1678	34.0	1000	
Al	27	45	1	He	6.295	2.3	3400	1.3	50	
K	39	45	1	He	7.320	19.2	65868	1.2	1000	
Ca	44	45	1	He	5.875	46.2	744	12.1	1000	
Ti	47	45	1	He	0.975	6.3	201	6.9	20	
V	51	45	1	He	0.096	87.9	751	59.0	2	
Cr	52	45	1	He	0.018	174.4	2954	7.4	2	
Mn	55	45	1	He	0.089	26.0	562	18.2	2	
Fe	56	45	1	He	9.757	19.9	63142	17.5	50	
Co	59	103	1	He	0.006	81.9	117	43.2	1	
Ni	60	103	1	He	0.000	1016.9	99	12.8	2	
Cu	63	103	1	He	-0.112	-16.8	1716	7.2	2	
Zn	66	103	1	He	0.467	18.5	1556	7.6	20	
As	75	103	1	He	0.098	10.4	293	4.1	2	
Se	78	103	1	He	0.125	31.4	40	6.9	2	
Sr	88	103	1	He	0.094	9.1	671	7.9	10	
Mo	95	103	1	He	0.648	14.1	2659	10.7	2	
Ag	107	103	1	He	0.003	52.9	67	26.0	0.2	
Cd	111	103	1	He	0.034	34.6	925	2.7	0.2	
Sn	118	115	1	He	0.326	6.0	2045	3.0	10	
Sb	123	115	1	He	0.187	24.9	1608	11.4	1	
Ba	137	115	1	He	0.025	34.1	52	25.8	5	
W	182	165	1	He	0.784	16.0	11686	11.6	10	
Tl	205	209	1	He	0.036	16.1	1331	11.4	0.5	
Pb	208	209	1	He	0.018	17.1	1539	6.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1604701	1.56	1803797	88.96	30	120	
Sc	45	1	He	542486	0.68	574766	94.38	30	120	
Sc	45	2	NoGas	4148603	0.94	4296857	96.55	30	120	
Rh	103	1	He	1684049	0.80	1652712	101.90	30	120	
In	115	1	He	837292	0.46	852389	98.23	30	120	
Tb	159	1	He	2480584	0.91	2425956	102.25	30	120	
Ho	165	1	He	2551975	0.61	2452680	104.05	30	120	
Bi	209	1	He	1877441	0.39	1810473	103.70	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	071CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:02:09-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.918	0.918	6.951	4786	6.24	1	91.8	69.5	130.5	
B	11	2	NoGas	18.797	18.797	1.488	70106	1.02	20	94.0	69.5	130.5	
Na	23	1	He	1131.123	1131.123	1.981	1700259	1.68	1000	113.1	69.5	130.5	
Mg	24	1	He	1077.990	1077.990	1.026	902291	0.66	1000	107.8	69.5	130.5	
Al	27	1	He	50.727	50.727	2.079	22779	2.24	50	101.5	69.5	130.5	
K	39	1	He	1068.406	1068.406	0.572	763524	0.83	1000	106.8	69.5	130.5	
Ca	44	1	He	1037.578	1037.578	0.196	36862	0.58	1000	103.8	69.5	130.5	
Ti	47	1	He	11.757	11.757	4.311	2451	4.71	10	117.6	69.5	130.5	
V	51	1	He	5.434	5.434	2.481	29180	2.06	5	108.7	69.5	130.5	
Cr	52	1	He	3.141	3.141	1.295	23399	0.95	2	157.0	69.5	130.5	6020A CR1 Failed
Mn	55	1	He	5.512	5.512	0.831	25628	1.18	5	110.2	69.5	130.5	
Fe	56	1	He	116.170	116.170	0.829	700686	0.50	100	116.2	69.5	130.5	
Co	59	1	He	0.985	0.985	4.154	10643	5.32	1	98.5	69.5	130.5	
Ni	60	1	He	2.463	2.463	1.760	6829	1.86	2	123.1	69.5	130.5	
Cu	63	1	He	1.822	1.822	1.246	15820	1.04	2	91.1	69.5	130.5	
Zn	66	1	He	19.379	19.379	0.574	29592	1.69	20	96.9	69.5	130.5	
As	75	1	He	4.610	4.610	1.362	4526	0.54	5	92.2	69.5	130.5	
Se	78	1	He	4.673	4.673	1.557	393	2.78	5	93.5	69.5	130.5	
Sr	88	1	He	9.344	9.344	1.393	52319	0.66	10	93.4	69.5	130.5	
Mo	95	1	He	9.916	9.916	0.864	30545	1.85	10	99.2	69.5	130.5	
Ag	107	1	He	1.019	1.019	1.130	10651	0.80	1	101.9	69.5	130.5	
Cd	111	1	He	1.007	1.007	2.388	2619	3.40	1	100.7	69.5	130.5	
Sn	118	1	He	10.282	10.282	2.077	38845	2.38	10	102.8	69.5	130.5	
Sb	123	1	He	1.990	1.990	2.083	8683	2.28	2	99.5	69.5	130.5	
Ba	137	1	He	5.107	5.107	2.467	7923	2.70	5	102.1	69.5	130.5	
W	182	1	He	9.598	9.598	0.507	112931	0.79	10	96.0	69.5	130.5	
Tl	205	1	He	1.978	1.978	1.101	50993	0.86	2	98.9	69.5	130.5	
Pb	208	1	He	1.073	1.073	0.640	37037	0.88	1	107.3	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1665752	1.92	1803797	92.35	30	120	
Sc	45	1	He	551240	0.40	574766	95.91	30	120	
Sc	45	2	NoGas	4212441	0.82	4296857	98.04	30	120	
Rh	103	1	He	1684609	1.80	1652712	101.93	30	120	
In	115	1	He	843911	0.46	852389	99.01	30	120	
Tb	159	1	He	2491240	0.85	2425956	102.69	30	120	
Ho	165	1	He	2578089	0.96	2452680	105.11	30	120	
Bi	209	1	He	1858153	0.26	1810473	102.63	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-1-a@2
Data File Name	072SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:06:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.261	1.261	2.49	6201	0.02	10000	
B	11	45	2	NoGas	2.440	2.440	4.46	13769	0.02	300	
Na	23	45	1	He	296.912	296.912	0.49	462315	0.06	500000	
Mg	24	45	1	He	261.147	261.147	0.48	215677	0.12	500000	
Al	27	45	1	He	8540.584	8540.584	0.81	3653861	0.23	200000	
K	39	45	1	He	725.265	725.265	0.40	529442	0.14	500000	
Ca	44	45	1	He	333.308	333.308	1.52	12015	2.77	500000	
Ti	47	45	1	He	131.429	131.429	2.83	26937	0.49	2500	
V	51	45	1	He	46.210	46.210	1.07	242230	0.02	10000	
Cr	52	45	1	He	36.138	36.138	0.65	234997	0.02	10000	
Mn	55	45	1	He	82.210	82.210	0.42	373813	0.02	10000	
Fe	56	45	1	He	88661.842	88661.842	0.91	521635250	0.02	200000	
Co	59	103	1	He	7.081	7.081	2.27	69184	0.01	10000	
Ni	60	103	1	He	3.591	3.591	0.59	9007	0.04	10000	
Cu	63	103	1	He	105.602	105.602	1.79	701598	0.02	10000	
Zn	66	103	1	He	69.305	69.305	3.39	94082	0.07	10000	
As	75	103	1	He	8.702	8.702	2.81	7598	0.11	10000	
Se	78	103	1	He	2.101	2.101	9.23	176	1.20	10000	
Sr	88	103	1	He	5.947	5.947	4.63	30282	0.02	10000	
Mo	95	103	1	He	3.157	3.157	2.17	9273	0.03	2000	
Ag	107	103	1	He	0.029	0.029	12.40	300	0.01	300	
Cd	111	103	1	He	0.232	0.232	9.98	1154	0.02	4000	
Sn	118	115	1	He	16.893	16.893	4.46	57494	0.03	2000	
Sb	123	115	1	He	0.218	0.218	20.03	1585	0.01	300	
Ba	137	115	1	He	41.761	41.761	1.17	58799	0.07	10000	
W	182	165	1	He	0.506	0.506	11.61	8177	0.01	2500	
Tl	205	209	1	He	0.295	0.295	1.84	7701	0.00	5000	
Pb	208	209	1	He	24.021	24.021	2.22	783190	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1570437	2.65	1803797	87.06	30	120	
Sc	45	1	He	542213	0.81	574766	94.34	30	120	
Sc	45	2	NoGas	4117762	1.53	4296857	95.83	30	120	
Rh	103	1	He	1530656	2.60	1652712	92.61	30	120	
In	115	1	He	767078	0.92	852389	89.99	30	120	
Tb	159	1	He	2384003	1.43	2425956	98.27	30	120	
Ho	165	1	He	2445205	1.61	2452680	99.70	30	120	
Bi	209	1	He	1798413	1.63	1810473	99.33	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-2-a@2
Data File Name	073SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:09:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.555	1.555	11.10	7431	0.02	10000	
B	11	45	2	NoGas	4.957	4.957	7.10	22863	0.02	300	
Na	23	45	1	He	1222.094	1222.094	1.37	1956166	0.06	500000	
Mg	24	45	1	He	1081.704	1081.704	0.48	965574	0.11	500000	
Al	27	45	1	He	12729.164	12729.164	0.79	5904077	0.22	200000	
K	39	45	1	He	3141.426	3141.426	1.78	2265177	0.14	500000	
Ca	44	45	1	He	509.813	509.813	0.80	19614	2.60	500000	
Ti	47	45	1	He	237.965	237.965	0.70	52882	0.45	2500	
V	51	45	1	He	240.862	240.862	0.39	1367968	0.02	10000	
Cr	52	45	1	He	104.305	104.305	1.47	729481	0.01	10000	
Mn	55	45	1	He	54.592	54.592	1.57	269143	0.02	10000	
Fe	56	45	1	He	91820.152	91820.152	1.01	585676297	0.02	200000	
Co	59	103	1	He	2.631	2.631	3.21	26129	0.01	10000	
Ni	60	103	1	He	4.507	4.507	5.29	11448	0.04	10000	
Cu	63	103	1	He	33.041	33.041	1.57	224546	0.01	10000	
Zn	66	103	1	He	24.913	24.913	1.20	34871	0.07	10000	
As	75	103	1	He	3.026	3.026	2.54	2804	0.11	10000	
Se	78	103	1	He	5.476	5.476	5.56	420	1.30	10000	
Sr	88	103	1	He	12.981	12.981	1.62	67006	0.02	10000	
Mo	95	103	1	He	0.360	0.360	7.36	1653	0.02	2000	
Ag	107	103	1	He	0.020	0.020	11.83	224	0.01	300	
Cd	111	103	1	He	0.864	0.864	3.10	2187	0.04	4000	
Sn	118	115	1	He	17.224	17.224	1.31	59349	0.03	2000	
Sb	123	115	1	He	0.348	0.348	4.62	2071	0.02	300	
Ba	137	115	1	He	94.097	94.097	0.71	134136	0.07	10000	
W	182	165	1	He	0.198	0.198	7.62	5105	0.00	2500	
Tl	205	209	1	He	0.544	0.544	3.86	13563	0.00	5000	
Pb	208	209	1	He	42.624	42.624	0.73	1358591	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1527612	1.44	1803797	84.69	30	120	
Sc	45	1	He	587900	2.04	574766	102.29	30	120	
Sc	45	2	NoGas	4241264	0.40	4296857	98.71	30	120	
Rh	103	1	He	1554548	2.95	1652712	94.06	30	120	
In	115	1	He	776660	0.79	852389	91.12	30	120	
Tb	159	1	He	2485686	0.79	2425956	102.46	30	120	
Ho	165	1	He	2582571	1.24	2452680	105.30	30	120	
Bi	209	1	He	1758533	0.32	1810473	97.13	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-3-a@2
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:13:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.591	0.591	10.07	2871	0.02	10000	
B	11	45	2	NoGas	2.159	2.159	3.23	12879	0.02	300	
Na	23	45	1	He	586.049	586.049	0.36	882600	0.07	500000	
Mg	24	45	1	He	1668.745	1668.745	2.91	1375035	0.12	500000	
Al	27	45	1	He	33952.907	33952.907	0.63	14538209	0.23	200000	
K	39	45	1	He	1253.568	1253.568	0.48	871436	0.14	500000	
Ca	44	45	1	He	1778.020	1778.020	0.73	61804	2.88	500000	
Ti	47	45	1	He	214.439	214.439	1.63	43992	0.49	2500	
V	51	45	1	He	190.911	190.911	0.38	1000983	0.02	10000	
Cr	52	45	1	He	60.672	60.672	0.20	392999	0.02	10000	
Mn	55	45	1	He	70.329	70.329	0.31	320109	0.02	10000	
Fe	56	45	1	He	59555.703	59555.703	1.14	350708919	0.02	200000	
Co	59	103	1	He	5.242	5.242	2.41	49581	0.01	10000	
Ni	60	103	1	He	9.548	9.548	3.29	23026	0.04	10000	
Cu	63	103	1	He	43.830	43.830	2.21	283125	0.02	10000	
Zn	66	103	1	He	32.250	32.250	1.70	42798	0.08	10000	
As	75	103	1	He	8.932	8.932	1.61	7546	0.12	10000	
Se	78	103	1	He	2.034	2.034	11.56	165	1.23	10000	
Sr	88	103	1	He	7.882	7.882	4.15	38810	0.02	10000	
Mo	95	103	1	He	2.735	2.735	1.60	7861	0.03	2000	
Ag	107	103	1	He	0.020	0.020	14.44	212	0.01	300	
Cd	111	103	1	He	0.287	0.287	19.57	1202	0.02	4000	
Sn	118	115	1	He	16.509	16.509	0.63	56048	0.03	2000	
Sb	123	115	1	He	0.218	0.218	10.00	1580	0.01	300	
Ba	137	115	1	He	92.160	92.160	1.68	129327	0.07	10000	
W	182	165	1	He	0.196	0.196	21.31	4716	0.00	2500	
Tl	205	209	1	He	0.582	0.582	2.43	14289	0.00	5000	
Pb	208	209	1	He	31.214	31.214	1.73	981940	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1550391	0.86	1803797	85.95	30	120	
Sc	45	1	He	542743	1.24	574766	94.43	30	120	
Sc	45	2	NoGas	4133994	0.83	4296857	96.21	30	120	
Rh	103	1	He	1481554	2.90	1652712	89.64	30	120	
In	115	1	He	764702	1.63	852389	89.71	30	120	
Tb	159	1	He	2352794	1.12	2425956	96.98	30	120	
Ho	165	1	He	2394898	2.17	2452680	97.64	30	120	
Bi	209	1	He	1735620	2.26	1810473	95.87	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-4-a@2
Data File Name	075SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:17:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.733	0.733	1.03	3367	0.02	10000	
B	11	45	2	NoGas	2.363	2.363	7.65	12942	0.02	300	
Na	23	45	1	He	290.962	290.962	1.04	443693	0.07	500000	
Mg	24	45	1	He	150.200	150.200	1.21	121673	0.12	500000	
Al	27	45	1	He	7309.844	7309.844	1.11	3058754	0.24	200000	
K	39	45	1	He	1570.264	1570.264	0.71	1051396	0.15	500000	
Ca	44	45	1	He	164.881	164.881	1.56	6081	2.71	500000	
Ti	47	45	1	He	215.432	215.432	2.08	43183	0.50	2500	
V	51	45	1	He	95.176	95.176	1.17	487701	0.02	10000	
Cr	52	45	1	He	26.261	26.261	1.34	167770	0.02	10000	
Mn	55	45	1	He	86.252	86.252	1.63	383538	0.02	10000	
Fe	56	45	1	He	38369.394	38369.394	1.15	220779356	0.02	200000	
Co	59	103	1	He	1.511	1.511	0.33	14306	0.01	10000	
Ni	60	103	1	He	2.384	2.384	3.94	5803	0.04	10000	
Cu	63	103	1	He	30.820	30.820	0.43	199390	0.02	10000	
Zn	66	103	1	He	35.734	35.734	1.62	47242	0.08	10000	
As	75	103	1	He	10.165	10.165	1.16	8546	0.12	10000	
Se	78	103	1	He	3.218	3.218	6.17	246	1.31	10000	
Sr	88	103	1	He	9.201	9.201	1.54	45215	0.02	10000	
Mo	95	103	1	He	1.914	1.914	4.51	5674	0.03	2000	
Ag	107	103	1	He	0.054	0.054	11.10	527	0.01	300	
Cd	111	103	1	He	0.411	0.411	8.22	1388	0.03	4000	
Sn	118	115	1	He	17.608	17.608	1.18	58836	0.03	2000	
Sb	123	115	1	He	0.263	0.263	15.77	1713	0.02	300	
Ba	137	115	1	He	59.823	59.823	1.06	82719	0.07	10000	
W	182	165	1	He	0.053	0.053	72.94	3289	0.00	2500	
Tl	205	209	1	He	0.287	0.287	5.19	7051	0.00	5000	
Pb	208	209	1	He	51.003	51.003	1.80	1563207	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1466392	1.38	1803797	81.29	30	120	
Sc	45	1	He	530278	0.47	574766	92.26	30	120	
Sc	45	2	NoGas	3944061	0.67	4296857	91.79	30	120	
Rh	103	1	He	1478270	0.25	1652712	89.45	30	120	
In	115	1	He	753318	0.30	852389	88.38	30	120	
Tb	159	1	He	2424072	3.97	2425956	99.92	30	120	
Ho	165	1	He	2477215	3.88	2452680	101.00	30	120	
Bi	209	1	He	1691415	1.27	1810473	93.42	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-5-a@2
Data File Name	076SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:21:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.865	3.865	1.71	18061	0.02	10000	
B	11	45	2	NoGas	3.353	3.353	2.14	17935	0.02	300	
Na	23	45	1	He	797.126	797.126	0.54	1284666	0.06	500000	
Mg	24	45	1	He	54999.045	54999.045	0.75	48920972	0.11	500000	
Al	27	45	1	He	79557.995	79557.995	1.09	36801433	0.22	200000	
K	39	45	1	He	9081.979	9081.979	0.60	6408245	0.14	500000	
Ca	44	45	1	He	12298.736	12298.736	0.17	458402	2.68	500000	
Ti	47	45	1	He	2700.753	2700.753	0.80	598620	0.45	2500	>LDR
V	51	45	1	He	266.536	266.536	0.43	1509703	0.02	10000	
Cr	52	45	1	He	1093.574	1093.574	1.11	7600198	0.01	10000	
Mn	55	45	1	He	2018.579	2018.579	1.25	9921257	0.02	10000	
Fe	56	45	1	He	121203.409	121203.409	0.48	771144787	0.02	200000	
Co	59	103	1	He	91.606	91.606	1.06	811625	0.01	10000	
Ni	60	103	1	He	298.110	298.110	0.04	671738	0.04	10000	
Cu	63	103	1	He	208.579	208.579	0.49	1255369	0.02	10000	
Zn	66	103	1	He	221.390	221.390	1.20	271222	0.08	10000	
As	75	103	1	He	9.139	9.139	0.58	7234	0.13	10000	
Se	78	103	1	He	3.283	3.283	0.74	235	1.40	10000	
Sr	88	103	1	He	51.453	51.453	0.51	236937	0.02	10000	
Mo	95	103	1	He	1.624	1.624	2.57	4612	0.04	2000	
Ag	107	103	1	He	0.060	0.060	5.64	542	0.01	300	
Cd	111	103	1	He	0.653	0.653	10.11	1650	0.04	4000	
Sn	118	115	1	He	17.644	17.644	2.65	56536	0.03	2000	
Sb	123	115	1	He	0.165	0.165	7.93	1313	0.01	300	
Ba	137	115	1	He	492.559	492.559	0.84	653000	0.08	10000	
W	182	165	1	He	0.359	0.359	7.98	6446	0.01	2500	
Tl	205	209	1	He	0.790	0.790	0.91	17492	0.00	5000	
Pb	208	209	1	He	64.717	64.717	0.62	1849932	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1492500	1.32	1803797	82.74	30	120	
Sc	45	1	He	586357	0.69	574766	102.02	30	120	
Sc	45	2	NoGas	4388766	1.74	4296857	102.14	30	120	
Rh	103	1	He	1388513	0.60	1652712	84.01	30	120	
In	115	1	He	722394	0.78	852389	84.75	30	120	
Tb	159	1	He	2348383	0.69	2425956	96.80	30	120	
Ho	165	1	He	2393825	0.86	2452680	97.60	30	120	
Bi	209	1	He	1577458	0.60	1810473	87.13	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-b
Data File Name	077SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:25:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.035	0.035	19.90	167	0.02	10000	
B	11	45	2	NoGas	45.569	45.569	1.74	144440	0.03	300	
Na	23	45	1	He	261697.783	261697.783	1.27	345379920	0.08	500000	
Mg	24	45	1	He	22549.998	22549.998	1.07	16873647	0.13	500000	
Al	27	45	1	He	19.192	19.192	8.06	8111	0.24	200000	
K	39	45	1	He	7314.416	7314.416	1.98	4352370	0.17	500000	
Ca	44	45	1	He	59399.891	59399.891	0.25	1860564	3.19	500000	
Ti	47	45	1	He	2.444	2.444	11.37	457	0.54	2500	
V	51	45	1	He	0.343	0.343	36.96	1859	0.02	10000	
Cr	52	45	1	He	1.275	1.275	0.70	10032	0.01	10000	
Mn	55	45	1	He	8967.892	8967.892	1.07	37078520	0.02	10000	
Fe	56	45	1	He	16290.255	16290.255	1.10	87193334	0.02	200000	
Co	59	103	1	He	593.384	593.384	0.59	5133748	0.01	10000	
Ni	60	103	1	He	32.799	32.799	0.81	72239	0.05	10000	
Cu	63	103	1	He	3.691	3.691	2.17	23699	0.02	10000	
Zn	66	103	1	He	24.180	24.180	1.89	29545	0.08	10000	
As	75	103	1	He	0.953	0.953	4.53	881	0.11	10000	
Se	78	103	1	He	0.340	0.340	21.81	46	0.74	10000	
Sr	88	103	1	He	213.380	213.380	0.44	959144	0.02	10000	
Mo	95	103	1	He	1.294	1.294	4.84	3704	0.03	2000	
Ag	107	103	1	He	0.003	0.003	36.24	53	0.01	300	
Cd	111	103	1	He	0.152	0.152	21.71	910	0.02	4000	
Sn	118	115	1	He	0.387	0.387	8.85	1956	0.02	2000	
Sb	123	115	1	He	0.157	0.157	16.72	1286	0.01	300	
Ba	137	115	1	He	164.625	164.625	0.88	217905	0.08	10000	
W	182	165	1	He	0.057	0.057	78.86	3156	0.00	2500	
Tl	205	209	1	He	0.558	0.558	3.36	12112	0.00	5000	
Pb	208	209	1	He	0.226	0.226	4.56	7021	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1480468	1.85	1803797	82.08	30	120	
Sc	45	1	He	493259	0.29	574766	85.82	30	120	
Sc	45	2	NoGas	3760878	1.20	4296857	87.53	30	120	
Rh	103	1	He	1355874	0.53	1652712	82.04	30	120	
In	115	1	He	721215	0.39	852389	84.61	30	120	
Tb	159	1	He	2268202	0.58	2425956	93.50	30	120	
Ho	165	1	He	2336361	0.80	2452680	95.26	30	120	
Bi	209	1	He	1533362	0.54	1810473	84.69	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49409-g-6-b@5
Data File Name	078SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:29:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.032	0.032	51.52	163	0.02	10000	
B	11	45	2	NoGas	8.943	8.943	3.73	34255	0.03	300	
Na	23	45	1	He	52680.910	52680.910	2.31	74022006	0.07	500000	
Mg	24	45	1	He	4623.738	4623.738	1.43	3683217	0.13	500000	
Al	27	45	1	He	11.645	11.645	2.55	5509	0.21	200000	
K	39	45	1	He	1438.295	1438.295	2.58	958368	0.15	500000	
Ca	44	45	1	He	11518.005	11518.005	0.63	384444	3.00	500000	
Ti	47	45	1	He	0.674	0.674	57.94	136	0.50	2500	
V	51	45	1	He	0.091	0.091	67.52	703	0.01	10000	
Cr	52	45	1	He	0.263	0.263	6.15	4383	0.01	10000	
Mn	55	45	1	He	1836.432	1836.432	2.40	8081239	0.02	10000	
Fe	56	45	1	He	3338.008	3338.008	1.86	19020274	0.02	200000	
Co	59	103	1	He	114.203	114.203	1.37	1112987	0.01	10000	
Ni	60	103	1	He	6.560	6.560	2.26	16344	0.04	10000	
Cu	63	103	1	He	0.623	0.623	4.40	6415	0.01	10000	
Zn	66	103	1	He	5.046	5.046	3.58	7567	0.07	10000	
As	75	103	1	He	0.137	0.137	12.08	298	0.05	10000	
Se	78	103	1	He	0.097	0.097	109.39	34	0.28	10000	
Sr	88	103	1	He	41.099	41.099	1.45	208202	0.02	10000	
Mo	95	103	1	He	0.072	0.072	19.32	839	0.01	2000	
Ag	107	103	1	He	-0.002	-0.002	-34.36	16	-0.01	300	
Cd	111	103	1	He	0.061	0.061	20.77	881	0.01	4000	
Sn	118	115	1	He	-0.006	-0.006	-703.31	782	0.00	2000	
Sb	123	115	1	He	-0.006	-0.006	-208.51	810	0.00	300	
Ba	137	115	1	He	32.687	32.687	1.67	47404	0.07	10000	
W	182	165	1	He	0.008	0.008	436.61	2767	0.00	2500	
Tl	205	209	1	He	0.100	0.100	6.97	2865	0.00	5000	
Pb	208	209	1	He	0.041	0.041	5.90	2203	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1569380	1.78	1803797	87.00	30	120	
Sc	45	1	He	525065	1.43	574766	91.35	30	120	
Sc	45	2	NoGas	3969693	1.24	4296857	92.39	30	120	
Rh	103	1	He	1527472	1.44	1652712	92.42	30	120	
In	115	1	He	790014	0.49	852389	92.68	30	120	
Tb	159	1	He	2379986	0.72	2425956	98.11	30	120	
Ho	165	1	He	2453740	1.31	2452680	100.04	30	120	
Bi	209	1	He	1789957	0.49	1810473	98.87	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49409-g-6-b
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:33:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1081.530	1081.530	1.03	5139117	0.02	10000	
B	11	45	2	NoGas	160.094	160.094	0.59	512600	0.03	300	
Na	23	45	1	He	263104.248	263104.248	0.73	347467742	0.08	500000	
Mg	24	45	1	He	32171.113	32171.113	1.11	24088234	0.13	500000	
Al	27	45	1	He	9879.716	9879.716	0.47	3847726	0.26	200000	
K	39	45	1	He	17565.227	17565.227	0.85	10380649	0.17	500000	
Ca	44	45	1	He	68166.462	68166.462	1.11	2136597	3.19	500000	
Ti	47	45	1	He	106.996	106.996	2.67	19963	0.54	2500	
V	51	45	1	He	1110.223	1110.223	0.44	5292899	0.02	10000	
Cr	52	45	1	He	1074.701	1074.701	1.59	6287284	0.02	10000	
Mn	55	45	1	He	9780.885	9780.885	1.41	40466282	0.02	10000	
Fe	56	45	1	He	26486.486	26486.486	1.64	141855648	0.02	200000	
Co	59	103	1	He	1604.147	1604.147	1.81	13733379	0.01	10000	
Ni	60	103	1	He	1082.986	1082.986	0.74	2357924	0.05	10000	
Cu	63	103	1	He	1038.189	1038.189	1.44	6029737	0.02	10000	
Zn	66	103	1	He	1015.128	1015.128	1.22	1199258	0.08	10000	
As	75	103	1	He	1022.966	1022.966	0.86	764700	0.13	10000	
Se	78	103	1	He	987.936	987.936	1.47	61148	1.62	10000	
Sr	88	103	1	He	1283.459	1283.459	1.96	5708110	0.02	10000	
Mo	95	103	1	He	117.358	117.358	1.26	281796	0.04	2000	
Ag	107	103	1	He	104.755	104.755	1.18	869227	0.01	300	
Cd	111	103	1	He	1044.272	1044.272	1.36	1447892	0.07	4000	
Sn	118	115	1	He	1140.531	1140.531	0.88	3473621	0.03	2000	
Sb	123	115	1	He	111.221	111.221	0.61	359800	0.03	300	
Ba	137	115	1	He	1346.453	1346.453	1.36	1718895	0.08	10000	
W	182	165	1	He	101.462	101.462	0.78	1048309	0.01	2500	
Tl	205	209	1	He	264.444	264.444	1.38	5346615	0.00	5000	
Pb	208	209	1	He	1116.063	1116.063	0.96	29693049	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1517966	0.61	1803797	84.15	30	120	
Sc	45	1	He	493590	0.53	574766	85.88	30	120	
Sc	45	2	NoGas	3897439	0.87	4296857	90.70	30	120	
Rh	103	1	He	1341791	1.02	1652712	81.19	30	120	
In	115	1	He	695575	0.59	852389	81.60	30	120	
Tb	159	1	He	2244205	0.77	2425956	92.51	30	120	
Ho	165	1	He	2316194	0.61	2452680	94.44	30	120	
Bi	209	1	He	1468769	0.69	1810473	81.13	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-c ms
Data File Name	080SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:36:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1100.348	1100.348	2.09	5297342	0.02	10000	
B	11	45	2	NoGas	177.127	177.127	0.98	564618	0.03	300	
Na	23	45	1	He	302965.338	302965.338	0.32	399580117	0.08	500000	
Mg	24	45	1	He	36094.151	36094.151	0.66	26988802	0.13	500000	
Al	27	45	1	He	10457.208	10457.208	1.34	4066725	0.26	200000	
K	39	45	1	He	19101.177	19101.177	1.88	11267276	0.17	500000	
Ca	44	45	1	He	77083.051	77083.051	1.91	2412387	3.20	500000	
Ti	47	45	1	He	109.609	109.609	2.03	20422	0.54	2500	
V	51	45	1	He	1117.600	1117.600	0.97	5320469	0.02	10000	
Cr	52	45	1	He	1096.555	1096.555	0.77	6406887	0.02	10000	
Mn	55	45	1	He	11135.796	11135.796	2.15	46008024	0.02	10000	>LDR
Fe	56	45	1	He	29255.512	29255.512	1.81	156460265	0.02	200000	
Co	59	103	1	He	1742.053	1742.053	1.15	14792129	0.01	10000	
Ni	60	103	1	He	1135.870	1135.870	0.33	2452969	0.05	10000	
Cu	63	103	1	He	1067.810	1067.810	1.34	6151368	0.02	10000	
Zn	66	103	1	He	1040.540	1040.540	0.75	1219226	0.09	10000	
As	75	103	1	He	1051.695	1051.695	1.75	779675	0.13	10000	
Se	78	103	1	He	1012.191	1012.191	2.36	62130	1.63	10000	
Sr	88	103	1	He	1371.976	1371.976	0.38	6052956	0.02	10000	
Mo	95	103	1	He	125.590	125.590	0.69	299081	0.04	2000	
Ag	107	103	1	He	108.837	108.837	2.54	895584	0.01	300	
Cd	111	103	1	He	1066.405	1066.405	1.78	1466394	0.07	4000	
Sn	118	115	1	He	1180.849	1180.849	0.74	3581636	0.03	2000	
Sb	123	115	1	He	114.008	114.008	1.67	367244	0.03	300	
Ba	137	115	1	He	1398.024	1398.024	0.71	1777255	0.08	10000	
W	182	165	1	He	105.376	105.376	1.05	1105227	0.01	2500	
Tl	205	209	1	He	271.187	271.187	1.51	5492239	0.00	5000	
Pb	208	209	1	He	1136.134	1136.134	0.22	30277872	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1537872	0.42	1803797	85.26	30	120	
Sc	45	1	He	492920	1.15	574766	85.76	30	120	
Sc	45	2	NoGas	3883934	0.29	4296857	90.39	30	120	
Rh	103	1	He	1330859	1.48	1652712	80.53	30	120	
In	115	1	He	692712	0.64	852389	81.27	30	120	
Tb	159	1	He	2263675	0.32	2425956	93.31	30	120	
Ho	165	1	He	2351570	1.27	2452680	95.88	30	120	
Bi	209	1	He	1471222	0.36	1810473	81.26	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	081_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:40:21-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	43.579	0.944	234995	1.25	50	87.2	89.5	110.5	CCV Failed
B	11	45	2	NoGas	50.728	1.116	183849	1.03	50	101.5	89.5	110.5	
Na	23	45	1	He	26417.616	2.084	39895391	0.72	25000	105.7	89.5	110.5	
Mg	24	45	1	He	26130.965	0.974	22361647	1.62	25000	104.5	89.5	110.5	
Al	27	45	1	He	247.589	1.798	110907	1.44	250	99.0	89.5	110.5	
K	39	45	1	He	25947.104	1.602	17493261	1.26	25000	103.8	89.5	110.5	
Ca	44	45	1	He	24847.785	2.093	890238	0.54	25000	99.4	89.5	110.5	
Ti	47	45	1	He	51.288	0.961	10939	2.39	50	102.6	89.5	110.5	
V	51	45	1	He	51.691	1.322	281866	1.34	50	103.4	89.5	110.5	
Cr	52	45	1	He	51.395	1.464	346439	1.52	50	102.8	89.5	110.5	
Mn	55	45	1	He	253.245	1.681	1197479	0.97	250	101.3	89.5	110.5	
Fe	56	45	1	He	13018.614	1.097	79690559	1.52	12500	104.1	89.5	110.5	
Co	59	103	1	He	48.200	2.250	497170	1.68	50	96.4	89.5	110.5	
Ni	60	103	1	He	48.095	1.477	126238	0.79	50	96.2	89.5	110.5	
Cu	63	103	1	He	48.462	1.430	341423	1.07	50	96.9	89.5	110.5	
Zn	66	103	1	He	47.798	2.671	68809	1.29	50	95.6	89.5	110.5	
As	75	103	1	He	48.891	2.085	44210	0.97	50	97.8	89.5	110.5	
Se	78	103	1	He	47.846	1.535	3595	0.50	50	95.7	89.5	110.5	
Sr	88	103	1	He	47.852	1.369	256534	0.64	50	95.7	89.5	110.5	
Mo	95	103	1	He	50.810	1.483	147370	0.95	50	101.6	89.5	110.5	
Ag	107	103	1	He	49.548	2.434	495271	1.10	50	99.1	89.5	110.5	
Cd	111	103	1	He	49.816	1.862	84000	0.77	50	99.6	89.5	110.5	
Sn	118	115	1	He	51.517	1.781	186710	1.95	50	103.0	89.5	110.5	
Sb	123	115	1	He	52.742	1.156	202604	0.96	50	105.5	89.5	110.5	
Ba	137	115	1	He	51.586	0.396	78037	0.45	50	103.2	89.5	110.5	
W	182	165	1	He	49.335	1.831	558588	1.54	50	98.7	89.5	110.5	
Tl	205	209	1	He	47.309	1.908	1192879	1.33	50	94.6	89.5	110.5	
Pb	208	209	1	He	48.698	1.370	1616170	0.84	50	97.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1722576	0.96	1803797	95.50	30	120	
Sc	45	1	He	564194	2.60	574766	98.16	30	120	
Sc	45	2	NoGas	4315154	0.19	4296857	100.43	30	120	
Rh	103	1	He	1616566	1.35	1652712	97.81	30	120	
In	115	1	He	824152	0.49	852389	96.69	30	120	
Tb	159	1	He	2469425	1.24	2425956	101.79	30	120	
Ho	165	1	He	2531799	0.99	2452680	103.23	30	120	
Bi	209	1	He	1831269	0.82	1810473	101.15	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	082_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:44:12-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.106	20.9	593	20.7	1	
B	11	45	2	NoGas	2.714	1.7	15670	1.2	20	
Na	23	45	1	He	35.977	5.1	86722	2.1	400	
Mg	24	45	1	He	1.939	17.5	2552	10.1	1000	
Al	27	45	1	He	8.106	4.7	4319	3.0	50	
K	39	45	1	He	6.506	51.9	67603	3.4	1000	
Ca	44	45	1	He	5.406	20.9	754	6.7	1000	
Ti	47	45	1	He	0.335	17.5	72	18.7	20	
V	51	45	1	He	0.039	180.5	464	80.2	2	
Cr	52	45	1	He	0.022	13.9	3081	1.3	2	
Mn	55	45	1	He	0.284	5.5	1500	5.4	2	
Fe	56	45	1	He	12.204	22.8	80125	19.8	50	
Co	59	103	1	He	0.037	9.5	457	6.7	1	
Ni	60	103	1	He	0.015	76.8	141	22.3	2	
Cu	63	103	1	He	-0.038	-85.5	2278	8.6	2	
Zn	66	103	1	He	0.437	35.3	1526	13.9	20	
As	75	103	1	He	0.186	4.8	379	2.7	2	
Se	78	103	1	He	0.245	57.1	50	21.3	2	
Sr	88	103	1	He	0.069	33.2	537	26.4	10	
Mo	95	103	1	He	0.764	23.7	3031	16.4	2	
Ag	107	103	1	He	0.005	23.3	81	11.9	0.2	
Cd	111	103	1	He	0.114	31.1	1077	7.4	0.2	
Sn	118	115	1	He	0.502	19.1	2752	13.0	10	
Sb	123	115	1	He	0.229	28.4	1812	14.1	1	
Ba	137	115	1	He	0.043	50.3	81	42.2	5	
W	182	165	1	He	1.099	10.3	15326	8.5	10	
Tl	205	209	1	He	0.079	18.2	2500	15.7	0.5	
Pb	208	209	1	He	0.042	5.5	2382	3.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1771092	0.68	1803797	98.19	30	120	
Sc	45	1	He	561275	1.43	574766	97.65	30	120	
Sc	45	2	NoGas	4392850	0.99	4296857	102.23	30	120	
Rh	103	1	He	1701631	2.11	1652712	102.96	30	120	
In	115	1	He	856698	0.22	852389	100.51	30	120	
Tb	159	1	He	2498692	0.11	2425956	103.00	30	120	
Ho	165	1	He	2561509	0.35	2452680	104.44	30	120	
Bi	209	1	He	1902516	0.56	1810473	105.08	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-d msd
Data File Name	083SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:48:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1016.052	1016.052	1.54	5024832	0.02	10000	
B	11	45	2	NoGas	163.713	163.713	1.58	532465	0.03	300	
Na	23	45	1	He	270557.568	270557.568	2.73	371710111	0.07	500000	
Mg	24	45	1	He	32473.827	32473.827	1.80	25297617	0.13	500000	
Al	27	45	1	He	9325.301	9325.301	1.72	3778557	0.25	200000	
K	39	45	1	He	17140.908	17140.908	1.70	10540691	0.16	500000	
Ca	44	45	1	He	69626.377	69626.377	2.48	2270215	3.07	500000	
Ti	47	45	1	He	97.806	97.806	2.53	18986	0.52	2500	
V	51	45	1	He	1008.954	1008.954	2.86	5003937	0.02	10000	
Cr	52	45	1	He	987.675	987.675	1.58	6012190	0.02	10000	
Mn	55	45	1	He	10078.276	10078.276	0.43	43388068	0.02	10000	>LDR
Fe	56	45	1	He	26312.291	26312.291	1.79	146620856	0.02	200000	
Co	59	103	1	He	1596.990	1596.990	0.56	13795805	0.01	10000	
Ni	60	103	1	He	1030.927	1030.927	0.82	2264739	0.05	10000	
Cu	63	103	1	He	987.938	987.938	1.08	5790008	0.02	10000	
Zn	66	103	1	He	964.420	964.420	0.66	1149683	0.08	10000	
As	75	103	1	He	970.897	970.897	0.43	732322	0.13	10000	
Se	78	103	1	He	939.651	939.651	1.96	58683	1.60	10000	
Sr	88	103	1	He	1255.444	1255.444	1.00	5634194	0.02	10000	
Mo	95	103	1	He	113.231	113.231	0.96	274356	0.04	2000	
Ag	107	103	1	He	98.841	98.841	0.57	827555	0.01	300	
Cd	111	103	1	He	974.261	974.261	0.82	1363055	0.07	4000	
Sn	118	115	1	He	1066.161	1066.161	0.32	3312200	0.03	2000	
Sb	123	115	1	He	103.416	103.416	1.54	341256	0.03	300	
Ba	137	115	1	He	1260.843	1260.843	0.70	1641654	0.08	10000	
W	182	165	1	He	95.414	95.414	1.01	999640	0.01	2500	
Tl	205	209	1	He	242.349	242.349	0.78	4988115	0.00	5000	
Pb	208	209	1	He	1024.937	1024.937	0.38	27758291	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1580131	2.03	1803797	87.60	30	120	
Sc	45	1	He	513615	1.58	574766	89.36	30	120	
Sc	45	2	NoGas	3959765	1.27	4296857	92.15	30	120	
Rh	103	1	He	1353815	0.55	1652712	81.91	30	120	
In	115	1	He	709484	0.82	852389	83.23	30	120	
Tb	159	1	He	2253922	0.25	2425956	92.91	30	120	
Ho	165	1	He	2348246	0.57	2452680	95.74	30	120	
Bi	209	1	He	1495119	0.31	1810473	82.58	30	120	

Sample Report

Sample Table

Sample Name	240-49423-i-1-b
Data File Name	084SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:51:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.185	0.185	13.62	989	0.02	10000	
B	11	45	2	NoGas	63.592	63.592	1.27	224341	0.03	300	
Na	23	45	1	He	3435.126	3435.126	1.55	4952034	0.07	500000	
Mg	24	45	1	He	10789.554	10789.554	1.82	8764260	0.12	500000	
Al	27	45	1	He	13.428	13.428	4.39	6369	0.21	200000	
K	39	45	1	He	4736.702	4736.702	0.31	3080929	0.15	500000	
Ca	44	45	1	He	69129.098	69129.098	0.52	2350513	2.94	500000	
Ti	47	45	1	He	0.714	0.714	20.33	146	0.49	2500	
V	51	45	1	He	0.375	0.375	17.26	2183	0.02	10000	
Cr	52	45	1	He	1.278	1.278	4.22	10915	0.01	10000	
Mn	55	45	1	He	69.185	69.185	1.77	310662	0.02	10000	
Fe	56	45	1	He	59.864	59.864	2.49	353551	0.02	200000	
Co	59	103	1	He	0.283	0.283	10.55	2834	0.01	10000	
Ni	60	103	1	He	0.706	0.706	7.22	1857	0.04	10000	
Cu	63	103	1	He	1.816	1.816	3.32	14452	0.01	10000	
Zn	66	103	1	He	11.608	11.608	0.31	16556	0.07	10000	
As	75	103	1	He	1.771	1.771	1.93	1706	0.10	10000	
Se	78	103	1	He	0.922	0.922	4.63	93	0.99	10000	
Sr	88	103	1	He	106.702	106.702	0.73	545972	0.02	10000	
Mo	95	103	1	He	0.786	0.786	22.77	2817	0.03	2000	
Ag	107	103	1	He	0.009	0.009	64.65	112	0.01	300	
Cd	111	103	1	He	0.220	0.220	26.27	1144	0.02	4000	
Sn	118	115	1	He	2.568	2.568	16.43	9692	0.03	2000	
Sb	123	115	1	He	0.584	0.584	8.36	2976	0.02	300	
Ba	137	115	1	He	29.460	29.460	2.09	42779	0.07	10000	
W	182	165	1	He	1.198	1.198	21.39	15883	0.01	2500	
Tl	205	209	1	He	0.189	0.189	27.75	5070	0.00	5000	
Pb	208	209	1	He	0.231	0.231	12.06	8424	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1705083	2.10	1803797	94.53	30	120	
Sc	45	1	He	535472	0.84	574766	93.16	30	120	
Sc	45	2	NoGas	4227900	0.55	4296857	98.40	30	120	
Rh	103	1	He	1543224	0.43	1652712	93.38	30	120	
In	115	1	He	791129	1.07	852389	92.81	30	120	
Tb	159	1	He	2379284	1.54	2425956	98.08	30	120	
Ho	165	1	He	2469800	0.43	2452680	100.70	30	120	
Bi	209	1	He	1803450	1.51	1810473	99.61	30	120	

Sample Report

Sample Table

Sample Name	190-7066-a-1-a
Data File Name	085SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:55:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.122	0.122	21.91	630	0.02	10000	
B	11	45	2	NoGas	83.813	83.813	2.45	292463	0.03	300	
Na	23	45	1	He	248255.041	248255.041	0.82	353453364	0.07	500000	
Mg	24	45	1	He	8340.834	8340.834	1.53	6733350	0.12	500000	
Al	27	45	1	He	28.428	28.428	1.52	12627	0.23	200000	
K	39	45	1	He	143291.824	143291.824	1.74	90860124	0.16	500000	
Ca	44	45	1	He	14438.800	14438.800	1.15	488282	2.96	500000	
Ti	47	45	1	He	1.692	1.692	17.51	341	0.50	2500	
V	51	45	1	He	1.957	1.957	6.37	10298	0.02	10000	
Cr	52	45	1	He	1.718	1.718	2.52	13617	0.01	10000	
Mn	55	45	1	He	42.603	42.603	1.22	190172	0.02	10000	
Fe	56	45	1	He	129.264	129.264	0.74	751977	0.02	200000	
Co	59	103	1	He	0.300	0.300	2.54	2754	0.01	10000	
Ni	60	103	1	He	288.952	288.952	0.67	663503	0.04	10000	
Cu	63	103	1	He	2.404	2.404	0.37	16850	0.01	10000	
Zn	66	103	1	He	60.959	60.959	1.36	76629	0.08	10000	
As	75	103	1	He	1.945	1.945	1.93	1702	0.11	10000	
Se	78	103	1	He	0.739	0.739	6.13	74	1.00	10000	
Sr	88	103	1	He	66.661	66.661	0.39	312790	0.02	10000	
Mo	95	103	1	He	9.309	9.309	0.56	24121	0.04	2000	
Ag	107	103	1	He	0.008	0.008	6.13	96	0.01	300	
Cd	111	103	1	He	0.173	0.173	26.14	981	0.02	4000	
Sn	118	115	1	He	2.787	2.787	5.53	10174	0.03	2000	
Sb	123	115	1	He	2.987	2.987	4.00	11478	0.03	300	
Ba	137	115	1	He	2.962	2.962	3.63	4195	0.07	10000	
W	182	165	1	He	0.512	0.512	5.10	8028	0.01	2500	
Tl	205	209	1	He	0.120	0.120	11.67	2987	0.00	5000	
Pb	208	209	1	He	0.242	0.242	1.52	7789	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1635241	0.65	1803797	90.66	30	120	
Sc	45	1	He	532122	0.60	574766	92.58	30	120	
Sc	45	2	NoGas	4208065	0.82	4296857	97.93	30	120	
Rh	103	1	He	1414984	0.52	1652712	85.62	30	120	
In	115	1	He	769373	0.84	852389	90.26	30	120	
Tb	159	1	He	2340454	0.71	2425956	96.48	30	120	
Ho	165	1	He	2380016	0.62	2452680	97.04	30	120	
Bi	209	1	He	1600051	0.20	1810473	88.38	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176522/1-a
Data File Name	086_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:59:28-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.101	9.1	552	7.6	1	
B	11	45	2	NoGas	4.115	0.6	20060	2.5	20	
Na	23	45	1	He	104.679	4.3	189293	4.9	400	
Mg	24	45	1	He	51.931	4.2	44945	2.9	1000	
Al	27	45	1	He	4.310	8.2	2629	4.7	50	
K	39	45	1	He	43.645	2.4	92110	2.0	1000	
Ca	44	45	1	He	169.842	2.0	6589	1.7	1000	
Ti	47	45	1	He	0.590	29.8	126	28.4	20	
V	51	45	1	He	0.278	36.1	1758	31.2	2	
Cr	52	45	1	He	1.130	6.0	10409	3.2	2	
Mn	55	45	1	He	0.627	5.2	3103	3.7	2	
Fe	56	45	1	He	12.826	4.7	83732	3.1	50	
Co	59	103	1	He	0.133	0.8	1441	0.7	1	
Ni	60	103	1	He	0.268	8.8	808	7.9	2	
Cu	63	103	1	He	0.506	0.9	6060	0.8	2	
Zn	66	103	1	He	3.565	2.4	5988	2.2	20	
As	75	103	1	He	0.285	11.4	456	6.4	2	
Se	78	103	1	He	0.136	60.5	40	15.7	2	
Sr	88	103	1	He	0.641	6.7	3627	6.4	10	
Mo	95	103	1	He	-0.062	-45.2	510	16.1	2	
Ag	107	103	1	He	0.001	88.3	43	23.1	0.2	
Cd	111	103	1	He	0.118	13.4	1043	2.4	0.2	
Sn	118	115	1	He	0.848	2.4	3952	1.9	10	
Sb	123	115	1	He	0.369	6.5	2311	4.1	1	
Ba	137	115	1	He	1.061	11.0	1640	10.8	5	
W	182	165	1	He	0.135	17.5	4282	5.3	10	
Tl	205	209	1	He	0.022	23.6	996	12.8	0.5	
Pb	208	209	1	He	0.150	1.4	6064	1.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1736362	1.44	1803797	96.26	30	120	
Sc	45	1	He	559280	1.30	574766	97.31	30	120	
Sc	45	2	NoGas	4262211	2.17	4296857	99.19	30	120	
Rh	103	1	He	1640240	0.22	1652712	99.25	30	120	
In	115	1	He	835422	0.02	852389	98.01	30	120	
Tb	159	1	He	2456919	0.11	2425956	101.28	30	120	
Ho	165	1	He	2525394	1.04	2452680	102.96	30	120	
Bi	209	1	He	1888342	1.05	1810473	104.30	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176522/3-a
Data File Name	087_LCS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:03:22-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	984.293	984.293	1.326	4931816	1.01	1000	98.4	79.5	120.5	
B	11	2	NoGas	110.343	110.343	1.621	358741	2.42	100	110.3	79.5	120.5	
Na	23	1	He	10110.072	10110.072	2.028	14076489	0.35	10000	101.1	79.5	120.5	
Mg	24	1	He	9984.358	9984.358	1.707	7866374	0.73	10000	99.8	79.5	120.5	
Al	27	1	He	9258.220	9258.220	2.270	3793434	0.74	10000	92.6	79.5	120.5	
K	39	1	He	9940.367	9940.367	2.725	6205337	0.49	10000	99.4	79.5	120.5	
Ca	44	1	He	9167.062	9167.062	1.821	302752	1.20	10000	91.7	79.5	120.5	
Ti	47	1	He	97.622	97.622	3.496	19160	1.36	100	97.6	79.5	120.5	
V	51	1	He	990.709	990.709	1.533	4969539	1.06	1000	99.1	79.5	120.5	
Cr	52	1	He	995.485	995.485	1.623	6128049	0.86	1000	99.5	79.5	120.5	
Mn	55	1	He	983.431	983.431	2.794	4280359	0.52	1000	98.3	79.5	120.5	
Fe	56	1	He	9988.728	9988.728	1.447	56294417	0.96	10000	99.9	79.5	120.5	
Co	59	1	He	930.372	930.372	2.510	8800922	0.56	1000	93.0	79.5	120.5	
Ni	60	1	He	966.017	966.017	2.443	2323975	1.05	1000	96.6	79.5	120.5	
Cu	63	1	He	948.804	948.804	2.480	6089253	0.47	1000	94.9	79.5	120.5	
Zn	66	1	He	923.171	923.171	2.708	1205084	0.60	1000	92.3	79.5	120.5	
As	75	1	He	898.089	898.089	2.631	741797	0.53	1000	89.8	79.5	120.5	
Se	78	1	He	908.582	908.582	2.107	62145	0.33	1000	90.9	79.5	120.5	
Sr	88	1	He	950.087	950.087	1.991	4669471	0.64	1000	95.0	79.5	120.5	
Mo	95	1	He	100.606	100.606	2.834	267002	0.77	100	100.6	79.5	120.5	
Ag	107	1	He	97.077	97.077	3.220	889962	1.12	100	97.1	79.5	120.5	
Cd	111	1	He	956.731	956.731	2.775	1465754	0.68	1000	95.7	79.5	120.5	
Sn	118	1	He	1055.257	1055.257	0.704	3420737	0.55	1000	105.5	79.5	120.5	
Sb	123	1	He	101.762	101.762	0.128	350435	0.36	100	101.8	79.5	120.5	
Ba	137	1	He	998.836	998.836	1.019	1357067	0.84	1000	99.9	79.5	120.5	
W	182	1	He	92.242	92.242	0.767	997172	1.32	100	92.2	79.5	120.5	
Tl	205	1	He	229.026	229.026	1.373	5512480	0.44	250	91.6	79.5	120.5	
Pb	208	1	He	939.638	939.638	1.165	29759577	0.11	1000	94.0	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1600653	0.72	1803797	88.74	30	120	
Sc	45	1	He	519458	2.40	574766	90.38	30	120	
Sc	45	2	NoGas	3938908	1.80	4296857	91.67	30	120	
Rh	103	1	He	1483003	2.08	1652712	89.73	30	120	
In	115	1	He	740317	0.26	852389	86.85	30	120	
Tb	159	1	He	2348256	0.67	2425956	96.80	30	120	
Ho	165	1	He	2422702	0.59	2452680	98.78	30	120	
Bi	209	1	He	1748587	1.27	1810473	96.58	30	120	

Sample Report

Sample Table

Sample Name	240-49304-k-1-a
Data File Name	088SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:06:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.252	0.252	8.91	1152	0.02	10000	
B	11	45	2	NoGas	267.730	267.730	0.94	847764	0.03	300	
Na	23	45	1	He	651044.409	651044.409	1.19	850675522	0.08	500000	>LDR
Mg	24	45	1	He	221618.219	221618.219	0.84	164187119	0.13	500000	
Al	27	45	1	He	26.746	26.746	7.38	10944	0.24	200000	
K	39	45	1	He	44784.096	44784.096	0.84	26101937	0.17	500000	
Ca	44	45	1	He	199251.602	199251.602	1.00	6178730	3.22	500000	
Ti	47	45	1	He	1.631	1.631	7.32	302	0.54	2500	
V	51	45	1	He	2.204	2.204	4.02	10617	0.02	10000	
Cr	52	45	1	He	2.988	2.988	2.15	19845	0.02	10000	
Mn	55	45	1	He	3259.670	3259.670	0.67	13344517	0.02	10000	
Fe	56	45	1	He	154342.072	154342.072	0.12	817936963	0.02	200000	
Co	59	103	1	He	24.140	24.140	0.44	197291	0.01	10000	
Ni	60	103	1	He	19.297	19.297	0.07	40172	0.05	10000	
Cu	63	103	1	He	1.692	1.692	16.55	11296	0.01	10000	
Zn	66	103	1	He	32.681	32.681	1.49	37485	0.09	10000	
As	75	103	1	He	3.539	3.539	5.76	2676	0.13	10000	
Se	78	103	1	He	1.988	1.988	18.67	140	1.42	10000	
Sr	88	103	1	He	1722.893	1722.893	1.06	7313327	0.02	10000	
Mo	95	103	1	He	1.134	1.134	14.89	3130	0.04	2000	
Ag	107	103	1	He	0.010	0.010	51.69	108	0.01	300	
Cd	111	103	1	He	2.797	2.797	2.15	4359	0.06	4000	
Sn	118	115	1	He	2.233	2.233	19.01	7584	0.03	2000	
Sb	123	115	1	He	0.665	0.665	10.35	2911	0.02	300	
Ba	137	115	1	He	64.223	64.223	1.03	82881	0.08	10000	
W	182	165	1	He	1.175	1.175	18.89	14237	0.01	2500	
Tl	205	209	1	He	0.210	0.210	31.76	4442	0.00	5000	
Pb	208	209	1	He	0.297	0.297	9.14	8410	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1455203	1.83	1803797	80.67	30	120	
Sc	45	1	He	488399	1.05	574766	84.97	30	120	
Sc	45	2	NoGas	3870338	0.42	4296857	90.07	30	120	
Rh	103	1	He	1280620	1.14	1652712	77.49	30	120	
In	115	1	He	703079	0.51	852389	82.48	30	120	
Tb	159	1	He	2186447	0.63	2425956	90.13	30	120	
Ho	165	1	He	2250664	0.53	2452680	91.76	30	120	
Bi	209	1	He	1433217	0.73	1810473	79.16	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49304-k-1-a@5
Data File Name	089SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:10:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.135	0.135	10.08	689	0.02	10000	
B	11	45	2	NoGas	54.328	54.328	0.54	192757	0.03	300	
Na	23	45	1	He	129767.302	129767.302	1.59	189150607	0.07	500000	
Mg	24	45	1	He	44605.454	44605.454	2.50	36856242	0.12	500000	
Al	27	45	1	He	6.264	6.264	9.54	3401	0.18	200000	
K	39	45	1	He	8981.532	8981.532	0.81	5888253	0.15	500000	
Ca	44	45	1	He	40702.573	40702.573	0.76	1408197	2.89	500000	
Ti	47	45	1	He	0.679	0.679	42.33	141	0.48	2500	
V	51	45	1	He	0.481	0.481	24.92	2784	0.02	10000	
Cr	52	45	1	He	0.609	0.609	9.62	6779	0.01	10000	
Mn	55	45	1	He	665.835	665.835	1.99	3040410	0.02	10000	
Fe	56	45	1	He	30875.427	30875.427	1.43	182499699	0.02	200000	
Co	59	103	1	He	4.634	4.634	0.83	44835	0.01	10000	
Ni	60	103	1	He	3.827	3.827	2.17	9491	0.04	10000	
Cu	63	103	1	He	0.204	0.204	1.56	3616	0.01	10000	
Zn	66	103	1	He	6.478	6.478	2.30	9410	0.07	10000	
As	75	103	1	He	0.462	0.462	3.48	570	0.08	10000	
Se	78	103	1	He	0.339	0.339	4.07	51	0.67	10000	
Sr	88	103	1	He	336.920	336.920	2.60	1691288	0.02	10000	
Mo	95	103	1	He	0.010	0.010	113.73	664	0.00	2000	
Ag	107	103	1	He	0.003	0.003	81.04	53	0.00	300	
Cd	111	103	1	He	0.622	0.622	5.47	1753	0.04	4000	
Sn	118	115	1	He	0.182	0.182	20.29	1463	0.01	2000	
Sb	123	115	1	He	0.114	0.114	11.19	1277	0.01	300	
Ba	137	115	1	He	12.688	12.688	1.57	18799	0.07	10000	
W	182	165	1	He	0.204	0.204	13.25	5068	0.00	2500	
Tl	205	209	1	He	0.030	0.030	17.35	1107	0.00	5000	
Pb	208	209	1	He	0.068	0.068	5.28	3025	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1625837	1.13	1803797	90.13	30	120	
Sc	45	1	He	544771	1.06	574766	94.78	30	120	
Sc	45	2	NoGas	4233285	0.93	4296857	98.52	30	120	
Rh	103	1	He	1514647	1.77	1652712	91.65	30	120	
In	115	1	He	806842	0.41	852389	94.66	30	120	
Tb	159	1	He	2446667	1.60	2425956	100.85	30	120	
Ho	165	1	He	2532488	1.48	2452680	103.25	30	120	
Bi	209	1	He	1750306	0.21	1810473	96.68	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49304-k-1-a
Data File Name	090SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:14:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2143.042	2143.042	0.36	9742743	0.02	10000	
B	11	45	2	NoGas	493.301	493.301	1.99	1537637	0.03	300	>LDR
Na	23	45	1	He	629588.825	629588.825	1.38	832118456	0.08	500000	>LDR
Mg	24	45	1	He	226078.022	226078.022	1.40	169415538	0.13	500000	
Al	27	45	1	He	19154.831	19154.831	1.57	7465766	0.26	200000	
K	39	45	1	He	61733.272	61733.272	1.06	36374290	0.17	500000	
Ca	44	45	1	He	202799.244	202799.244	0.33	6360561	3.19	500000	
Ti	47	45	1	He	205.789	205.789	1.11	38431	0.54	2500	
V	51	45	1	He	2085.203	2085.203	0.97	9949184	0.02	10000	
Cr	52	45	1	He	2031.225	2031.225	0.34	11891372	0.02	10000	
Mn	55	45	1	He	4988.969	4988.969	1.16	20658573	0.02	10000	
Fe	56	45	1	He	161829.842	161829.842	0.71	867458383	0.02	200000	
Co	59	103	1	He	2080.611	2080.611	0.55	16865900	0.01	10000	
Ni	60	103	1	He	2060.785	2060.785	0.81	4248157	0.05	10000	
Cu	63	103	1	He	1993.707	1993.707	0.96	10962490	0.02	10000	
Zn	66	103	1	He	2068.767	2068.767	1.38	2313343	0.09	10000	
As	75	103	1	He	2118.780	2118.780	0.57	1499481	0.14	10000	
Se	78	103	1	He	2125.487	2125.487	1.02	124539	1.71	10000	
Sr	88	103	1	He	3849.942	3849.942	0.55	16212933	0.02	10000	
Mo	95	103	1	He	239.461	239.461	1.09	543864	0.04	2000	
Ag	107	103	1	He	214.980	214.980	1.66	1689047	0.01	300	
Cd	111	103	1	He	2175.912	2175.912	0.93	2855912	0.08	4000	
Sn	118	115	1	He	2361.697	2361.697	1.03	6785763	0.03	2000	>LDR
Sb	123	115	1	He	228.683	228.683	0.48	697245	0.03	300	
Ba	137	115	1	He	2470.265	2470.265	0.30	2975334	0.08	10000	
W	182	165	1	He	216.569	216.569	0.79	2193103	0.01	2500	
Tl	205	209	1	He	539.234	539.234	1.80	10359884	0.01	5000	
Pb	208	209	1	He	2217.361	2217.361	1.36	56056760	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1452282	0.33	1803797	80.51	30	120	
Sc	45	1	He	493998	0.18	574766	85.95	30	120	
Sc	45	2	NoGas	3820963	0.57	4296857	88.92	30	120	
Rh	103	1	He	1270395	0.36	1652712	76.87	30	120	
In	115	1	He	656288	0.56	852389	76.99	30	120	
Tb	159	1	He	2199902	1.33	2425956	90.68	30	120	
Ho	165	1	He	2272853	1.04	2452680	92.67	30	120	
Bi	209	1	He	1395658	0.38	1810473	77.09	30	120	

Sample Report

Sample Table

Sample Name	240-49304-k-1-d ms
Data File Name	091SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:18:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1193.098	1193.098	23.33	4944129	0.02	10000	
B	11	45	2	NoGas	419.119	419.119	26.02	1238937	0.03	300	>LDR
Na	23	45	1	He	633260.040	633260.040	0.44	836212559	0.08	500000	>LDR
Mg	24	45	1	He	221546.066	221546.066	0.40	165869405	0.13	500000	
Al	27	45	1	He	10038.341	10038.341	0.78	3909117	0.26	200000	
K	39	45	1	He	53241.179	53241.179	0.40	31349464	0.17	500000	
Ca	44	45	1	He	198254.181	198254.181	1.11	6212156	3.19	500000	
Ti	47	45	1	He	104.255	104.255	1.76	19453	0.54	2500	
V	51	45	1	He	1091.843	1091.843	2.65	5204416	0.02	10000	
Cr	52	45	1	He	1046.493	1046.493	2.25	6121778	0.02	10000	
Mn	55	45	1	He	4149.684	4149.684	0.72	17167477	0.02	10000	
Fe	56	45	1	He	156777.887	156777.887	0.73	839605478	0.02	200000	
Co	59	103	1	He	1072.130	1072.130	1.31	8676508	0.01	10000	
Ni	60	103	1	He	1085.125	1085.125	1.43	2233229	0.05	10000	
Cu	63	103	1	He	1030.067	1030.067	1.78	5655254	0.02	10000	
Zn	66	103	1	He	1008.640	1008.640	1.64	1126325	0.09	10000	
As	75	103	1	He	1075.091	1075.091	1.11	759666	0.14	10000	
Se	78	103	1	He	1074.410	1074.410	1.18	62860	1.71	10000	
Sr	88	103	1	He	2793.700	2793.700	1.22	11745200	0.02	10000	
Mo	95	103	1	He	124.482	124.482	1.06	282516	0.04	2000	
Ag	107	103	1	He	105.567	105.567	1.05	828038	0.01	300	
Cd	111	103	1	He	1039.219	1039.219	1.16	1362059	0.08	4000	
Sn	118	115	1	He	1190.443	1190.443	1.07	3523180	0.03	2000	
Sb	123	115	1	He	112.696	112.696	1.05	354246	0.03	300	
Ba	137	115	1	He	1172.307	1172.307	0.69	1454204	0.08	10000	
W	182	165	1	He	103.784	103.784	1.74	1058473	0.01	2500	
Tl	205	209	1	He	273.802	273.802	0.23	5283524	0.01	5000	
Pb	208	209	1	He	1131.416	1131.416	0.26	28728374	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1375604	24.26	1803797	76.26	30	120	
Sc	45	1	He	493551	0.62	574766	85.87	30	120	
Sc	45	2	NoGas	3799131	27.11	4296857	88.42	30	120	
Rh	103	1	He	1268381	1.17	1652712	76.75	30	120	
In	115	1	He	675914	0.08	852389	79.30	30	120	
Tb	159	1	He	2206064	1.68	2425956	90.94	30	120	
Ho	165	1	He	2286624	1.14	2452680	93.23	30	120	
Bi	209	1	He	1401757	0.49	1810473	77.42	30	120	

Sample Report

Sample Table

Sample Name	240-49304-k-1-e msd
Data File Name	092SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:21:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1075.869	1075.869	1.22	4908918	0.02	10000	
B	11	45	2	NoGas	380.785	380.785	1.21	1216277	0.03	300	>LDR
Na	23	45	1	He	633116.685	633116.685	1.53	835362189	0.08	500000	>LDR
Mg	24	45	1	He	221534.127	221534.127	0.42	165759497	0.13	500000	
Al	27	45	1	He	9844.535	9844.535	0.93	3830947	0.26	200000	
K	39	45	1	He	53086.337	53086.337	1.64	31233084	0.17	500000	
Ca	44	45	1	He	198591.652	198591.652	1.54	6218488	3.19	500000	
Ti	47	45	1	He	104.037	104.037	2.58	19399	0.54	2500	
V	51	45	1	He	1087.355	1087.355	1.78	5179448	0.02	10000	
Cr	52	45	1	He	1034.235	1034.235	0.62	6046144	0.02	10000	
Mn	55	45	1	He	4112.044	4112.044	0.43	17000388	0.02	10000	
Fe	56	45	1	He	156436.691	156436.691	0.60	837192322	0.02	200000	
Co	59	103	1	He	1052.164	1052.164	0.89	8706862	0.01	10000	
Ni	60	103	1	He	1067.103	1067.103	0.29	2245698	0.05	10000	
Cu	63	103	1	He	1006.760	1006.760	0.99	5652531	0.02	10000	
Zn	66	103	1	He	988.586	988.586	0.45	1128932	0.09	10000	
As	75	103	1	He	1049.158	1049.158	0.65	758094	0.14	10000	
Se	78	103	1	He	1055.290	1055.290	0.85	63135	1.67	10000	
Sr	88	103	1	He	2737.543	2737.543	0.60	11769325	0.02	10000	
Mo	95	103	1	He	121.140	121.140	0.41	281159	0.04	2000	
Ag	107	103	1	He	103.009	103.009	0.18	826219	0.01	300	
Cd	111	103	1	He	1017.413	1017.413	0.36	1363603	0.07	4000	
Sn	118	115	1	He	1166.376	1166.376	1.09	3509589	0.03	2000	
Sb	123	115	1	He	110.829	110.829	0.85	354205	0.03	300	
Ba	137	115	1	He	1176.356	1176.356	3.76	1483525	0.08	10000	
W	182	165	1	He	101.301	101.301	1.98	1052169	0.01	2500	
Tl	205	209	1	He	272.985	272.985	0.46	5323433	0.01	5000	
Pb	208	209	1	He	1111.601	1111.601	0.63	28522916	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1457769	2.03	1803797	80.82	30	120	
Sc	45	1	He	493226	1.48	574766	85.81	30	120	
Sc	45	2	NoGas	3911575	0.74	4296857	91.03	30	120	
Rh	103	1	He	1296923	0.64	1652712	78.47	30	120	
In	115	1	He	687224	0.68	852389	80.62	30	120	
Tb	159	1	He	2258071	0.39	2425956	93.08	30	120	
Ho	165	1	He	2328520	0.66	2452680	94.94	30	120	
Bi	209	1	He	1416549	0.45	1810473	78.24	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	093_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:25:25-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.530	3.533	245286	3.36	50	91.1	89.5	110.5	
B	11	45	2	NoGas	56.469	2.413	211302	1.65	50	112.9	89.5	110.5	CCV Failed
Na	23	45	1	He	26029.536	2.208	39796436	0.51	25000	104.1	89.5	110.5	
Mg	24	45	1	He	25864.384	1.421	22405567	0.51	25000	103.5	89.5	110.5	
Al	27	45	1	He	245.948	1.497	111541	0.53	250	98.4	89.5	110.5	
K	39	45	1	He	26503.099	2.409	18085664	0.53	25000	106.0	89.5	110.5	
Ca	44	45	1	He	24989.882	2.203	906412	0.31	25000	100.0	89.5	110.5	
Ti	47	45	1	He	50.933	1.726	10996	1.12	50	101.9	89.5	110.5	
V	51	45	1	He	51.374	0.383	283643	1.75	50	102.7	89.5	110.5	
Cr	52	45	1	He	51.700	1.937	352755	0.25	50	103.4	89.5	110.5	
Mn	55	45	1	He	254.987	2.091	1220580	0.40	250	102.0	89.5	110.5	
Fe	56	45	1	He	13140.785	2.264	81419681	0.38	12500	105.1	89.5	110.5	
Co	59	103	1	He	47.247	1.300	499461	0.36	50	94.5	89.5	110.5	
Ni	60	103	1	He	47.427	1.405	127581	0.96	50	94.9	89.5	110.5	
Cu	63	103	1	He	47.545	1.041	343345	0.69	50	95.1	89.5	110.5	
Zn	66	103	1	He	47.826	1.167	70570	0.21	50	95.7	89.5	110.5	
As	75	103	1	He	47.739	1.170	44249	0.22	50	95.5	89.5	110.5	
Se	78	103	1	He	47.273	3.055	3641	2.11	50	94.5	89.5	110.5	
Sr	88	103	1	He	48.460	2.280	266234	1.32	50	96.9	89.5	110.5	
Mo	95	103	1	He	50.470	0.888	150045	1.77	50	100.9	89.5	110.5	
Ag	107	103	1	He	49.046	1.456	502497	0.67	50	98.1	89.5	110.5	
Cd	111	103	1	He	49.413	1.549	85401	0.59	50	98.8	89.5	110.5	
Sn	118	115	1	He	51.757	0.719	192138	0.82	50	103.5	89.5	110.5	
Sb	123	115	1	He	53.001	0.967	208552	0.63	50	106.0	89.5	110.5	
Ba	137	115	1	He	52.384	0.410	81173	0.47	50	104.8	89.5	110.5	
W	182	165	1	He	48.176	1.455	564832	1.53	50	96.4	89.5	110.5	
Tl	205	209	1	He	47.207	0.538	1220525	0.75	50	94.4	89.5	110.5	
Pb	208	209	1	He	48.563	0.196	1652558	0.41	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1721021	0.27	1803797	95.41	30	120	
Sc	45	1	He	571138	1.94	574766	99.37	30	120	
Sc	45	2	NoGas	4470459	1.18	4296857	104.04	30	120	
Rh	103	1	He	1656699	0.95	1652712	100.24	30	120	
In	115	1	He	844207	0.33	852389	99.04	30	120	
Tb	159	1	He	2536496	1.25	2425956	104.56	30	120	
Ho	165	1	He	2621254	0.83	2452680	106.87	30	120	
Bi	209	1	He	1877586	0.49	1810473	103.71	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	094_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:29:15-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.181	7.7	1007	7.2	1	
B	11	45	2	NoGas	7.616	2.2	34244	2.6	20	
Na	23	45	1	He	98.434	3.5	181680	2.1	400	
Mg	24	45	1	He	8.303	5.6	8024	4.8	1000	
Al	27	45	1	He	7.965	3.9	4285	2.4	50	
K	39	45	1	He	11.219	10.6	71218	1.3	1000	
Ca	44	45	1	He	11.430	17.9	975	8.3	1000	
Ti	47	45	1	He	0.395	33.9	86	34.0	20	
V	51	45	1	He	0.106	46.1	839	32.6	2	
Cr	52	45	1	He	0.059	19.6	3350	1.7	2	
Mn	55	45	1	He	0.266	11.3	1425	10.0	2	
Fe	56	45	1	He	21.531	19.0	137835	17.3	50	
Co	59	103	1	He	0.037	16.1	471	12.5	1	
Ni	60	103	1	He	0.012	71.2	136	15.8	2	
Cu	63	103	1	He	0.125	16.0	3625	4.6	2	
Zn	66	103	1	He	0.527	11.0	1728	3.3	20	
As	75	103	1	He	0.148	10.4	357	2.6	2	
Se	78	103	1	He	0.316	30.4	58	11.7	2	
Sr	88	103	1	He	0.144	26.1	993	21.1	10	
Mo	95	103	1	He	0.708	26.4	2979	18.4	2	
Ag	107	103	1	He	0.009	11.6	129	10.5	0.2	
Cd	111	103	1	He	0.154	12.8	1193	2.7	0.2	
Sn	118	115	1	He	0.548	8.9	3030	6.5	10	
Sb	123	115	1	He	0.271	12.6	2052	7.2	1	
Ba	137	115	1	He	0.094	25.0	167	22.5	5	
W	182	165	1	He	1.158	12.5	16461	10.9	10	
Tl	205	209	1	He	0.111	9.2	3377	6.5	0.5	
Pb	208	209	1	He	0.070	4.9	3408	5.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1768760	0.82	1803797	98.06	30	120	
Sc	45	1	He	564925	0.80	574766	98.29	30	120	
Sc	45	2	NoGas	4533584	0.80	4296857	105.51	30	120	
Rh	103	1	He	1770958	1.95	1652712	107.15	30	120	
In	115	1	He	887359	0.44	852389	104.10	30	120	
Tb	159	1	He	2558878	0.95	2425956	105.48	30	120	
Ho	165	1	He	2633307	0.63	2452680	107.36	30	120	
Bi	209	1	He	1940025	1.73	1810473	107.16	30	120	

Sample Report

Sample Table

Sample Name	240-49304-m-1-a
Data File Name	095SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:33:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.273	0.273	13.82	1289	0.02	10000	
B	11	45	2	NoGas	241.104	241.104	0.94	794309	0.03	300	
Na	23	45	1	He	474436.326	474436.326	2.17	650409396	0.07	500000	
Mg	24	45	1	He	174793.854	174793.854	2.07	135862717	0.13	500000	
Al	27	45	1	He	25.243	25.243	2.26	10876	0.23	200000	
K	39	45	1	He	34340.539	34340.539	1.72	21013595	0.16	500000	
Ca	44	45	1	He	180992.788	180992.788	0.93	5888822	3.07	500000	
Ti	47	45	1	He	1.118	1.118	8.21	218	0.51	2500	
V	51	45	1	He	1.644	1.644	6.34	8374	0.02	10000	
Cr	52	45	1	He	2.862	2.862	2.84	20058	0.01	10000	
Mn	55	45	1	He	3265.258	3265.258	2.22	14024079	0.02	10000	
Fe	56	45	1	He	158781.083	158781.083	1.74	882885618	0.02	200000	
Co	59	103	1	He	71.668	71.668	0.62	612041	0.01	10000	
Ni	60	103	1	He	51.564	51.564	1.10	112051	0.05	10000	
Cu	63	103	1	He	1.906	1.906	3.99	13056	0.01	10000	
Zn	66	103	1	He	79.177	79.177	0.07	93932	0.08	10000	
As	75	103	1	He	2.328	2.328	1.25	1895	0.12	10000	
Se	78	103	1	He	1.411	1.411	7.02	111	1.27	10000	
Sr	88	103	1	He	1388.025	1388.025	1.32	6157650	0.02	10000	
Mo	95	103	1	He	0.471	0.471	10.10	1688	0.03	2000	
Ag	107	103	1	He	0.007	0.007	38.24	83	0.01	300	
Cd	111	103	1	He	6.985	6.985	0.20	10344	0.07	4000	
Sn	118	115	1	He	1.753	1.753	14.91	6372	0.03	2000	
Sb	123	115	1	He	0.447	0.447	3.65	2295	0.02	300	
Ba	137	115	1	He	53.123	53.123	0.41	71482	0.07	10000	
W	182	165	1	He	0.434	0.434	8.91	7057	0.01	2500	
Tl	205	209	1	He	0.095	0.095	7.76	2285	0.00	5000	
Pb	208	209	1	He	0.121	0.121	3.41	4002	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1506893	1.43	1803797	83.54	30	120	
Sc	45	1	He	512513	1.82	574766	89.17	30	120	
Sc	45	2	NoGas	4024032	0.42	4296857	93.65	30	120	
Rh	103	1	He	1338293	0.16	1652712	80.98	30	120	
In	115	1	He	733083	0.40	852389	86.00	30	120	
Tb	159	1	He	2288538	0.50	2425956	94.34	30	120	
Ho	165	1	He	2333205	1.97	2452680	95.13	30	120	
Bi	209	1	He	1495730	0.08	1810473	82.62	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176683/1-a
Data File Name	096_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:36:58-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.126	24.6	641	24.0	1	
B	11	45	2	NoGas	11.698	4.3	45404	2.7	20	
Na	23	45	1	He	174.351	3.7	287023	4.1	400	
Mg	24	45	1	He	81.095	1.9	68160	2.5	1000	
Al	27	45	1	He	3.773	3.3	2340	2.1	50	
K	39	45	1	He	20.482	10.5	74977	2.3	1000	
Ca	44	45	1	He	315.555	0.3	11502	1.0	1000	
Ti	47	45	1	He	0.399	29.1	83	28.0	20	
V	51	45	1	He	0.210	27.5	1360	23.3	2	
Cr	52	45	1	He	1.041	1.7	9607	1.5	2	
Mn	55	45	1	He	0.546	10.6	2664	10.7	2	
Fe	56	45	1	He	40.872	20.5	248589	20.8	50	
Co	59	103	1	He	0.022	13.3	284	10.6	1	
Ni	60	103	1	He	0.129	24.9	441	19.7	2	
Cu	63	103	1	He	0.827	1.8	8408	1.2	2	
Zn	66	103	1	He	4.111	3.7	6830	3.6	20	
As	75	103	1	He	0.204	3.2	385	1.9	2	
Se	78	103	1	He	0.204	63.9	45	22.1	2	
Sr	88	103	1	He	0.640	4.6	3650	4.3	10	
Mo	95	103	1	He	-0.088	-28.3	437	17.1	2	
Ag	107	103	1	He	0.004	35.5	76	20.4	0.2	
Cd	111	103	1	He	0.125	5.9	1064	1.1	0.2	
Sn	118	115	1	He	0.673	11.0	3282	7.8	10	
Sb	123	115	1	He	0.233	9.6	1766	4.5	1	
Ba	137	115	1	He	1.530	5.9	2338	5.7	5	
W	182	165	1	He	0.192	10.7	4879	5.4	10	
Tl	205	209	1	He	0.041	11.0	1468	7.7	0.5	
Pb	208	209	1	He	0.147	3.6	5958	3.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1612673	2.19	1803797	89.40	30	120	
Sc	45	1	He	546870	0.79	574766	95.15	30	120	
Sc	45	2	NoGas	4177769	1.10	4296857	97.23	30	120	
Rh	103	1	He	1653576	0.37	1652712	100.05	30	120	
In	115	1	He	828037	0.36	852389	97.14	30	120	
Tb	159	1	He	2463933	0.70	2425956	101.57	30	120	
Ho	165	1	He	2504941	0.91	2452680	102.13	30	120	
Bi	209	1	He	1884418	0.76	1810473	104.08	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176683/3-a
Data File Name	097_LCS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:40:49-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	977.280	977.280	1.971	5057626	0.78	1000	97.7	79.5	120.5	
B	11	2	NoGas	114.073	114.073	0.455	393531	0.60	100	114.1	79.5	120.5	
Na	23	1	He	10047.843	10047.843	2.180	14734098	1.15	10000	100.5	79.5	120.5	
Mg	24	1	He	9912.448	9912.448	2.261	8224776	1.47	10000	99.1	79.5	120.5	
Al	27	1	He	9101.438	9101.438	3.571	3927483	2.84	10000	91.0	79.5	120.5	
K	39	1	He	9856.293	9856.293	3.787	6479745	1.91	10000	98.6	79.5	120.5	
Ca	44	1	He	9268.547	9268.547	0.891	322394	1.01	10000	92.7	79.5	120.5	
Ti	47	1	He	95.580	95.580	4.194	19756	2.60	100	95.6	79.5	120.5	
V	51	1	He	1002.075	1002.075	2.759	5293114	1.65	1000	100.2	79.5	120.5	
Cr	52	1	He	994.390	994.390	2.112	6446203	0.31	1000	99.4	79.5	120.5	
Mn	55	1	He	971.339	971.339	1.863	4453101	0.06	1000	97.1	79.5	120.5	
Fe	56	1	He	10011.131	10011.131	0.978	59422624	1.01	10000	100.1	79.5	120.5	
Co	59	1	He	911.375	911.375	1.082	9172009	0.72	1000	91.1	79.5	120.5	
Ni	60	1	He	956.370	956.370	1.956	2447429	0.47	1000	95.6	79.5	120.5	
Cu	63	1	He	932.614	932.614	2.206	6366952	0.64	1000	93.3	79.5	120.5	
Zn	66	1	He	907.237	907.237	1.416	1259944	0.24	1000	90.7	79.5	120.5	
As	75	1	He	884.465	884.465	1.742	777189	0.75	1000	88.4	79.5	120.5	
Se	78	1	He	886.757	886.757	0.711	64526	0.88	1000	88.7	79.5	120.5	
Sr	88	1	He	941.012	941.012	1.763	4919551	0.18	1000	94.1	79.5	120.5	
Mo	95	1	He	99.553	99.553	2.064	281094	1.44	100	99.6	79.5	120.5	
Ag	107	1	He	96.776	96.776	1.652	943922	0.33	100	96.8	79.5	120.5	
Cd	111	1	He	989.290	989.290	5.987	1611697	4.54	1000	98.9	79.5	120.5	
Sn	118	1	He	1082.917	1082.917	0.662	3689077	0.68	1000	108.3	79.5	120.5	
Sb	123	1	He	102.333	102.333	0.628	370337	0.97	100	102.3	79.5	120.5	
Ba	137	1	He	1000.571	1000.571	1.019	1428590	0.36	1000	100.1	79.5	120.5	
W	182	1	He	93.440	93.440	0.855	1040031	1.01	100	93.4	79.5	120.5	
Tl	205	1	He	231.013	231.013	1.034	5723723	0.92	250	92.4	79.5	120.5	
Pb	208	1	He	949.984	949.984	2.313	30966338	0.68	1000	95.0	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1653514	1.57	1803797	91.67	30	120	
Sc	45	1	He	547033	1.86	574766	95.17	30	120	
Sc	45	2	NoGas	4181677	0.42	4296857	97.32	30	120	
Rh	103	1	He	1577376	1.60	1652712	95.44	30	120	
In	115	1	He	778017	0.89	852389	91.27	30	120	
Tb	159	1	He	2437946	1.34	2425956	100.49	30	120	
Ho	165	1	He	2494559	0.44	2452680	101.71	30	120	
Bi	209	1	He	1800010	1.89	1810473	99.42	30	120	

Sample Report

Sample Table

Sample Name	240-49299-b-1-a
Data File Name	098SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:44:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.310	0.310	1.75	1685	0.02	10000	
B	11	45	2	NoGas	49.965	49.965	2.25	186669	0.03	300	
Na	23	45	1	He	34726.855	34726.855	2.16	52041916	0.07	500000	
Mg	24	45	1	He	161056.298	161056.298	1.91	136767209	0.12	500000	
Al	27	45	1	He	19.745	19.745	1.51	9450	0.21	200000	
K	39	45	1	He	1885.742	1885.742	3.35	1320153	0.14	500000	
Ca	44	45	1	He	243929.547	243929.547	0.79	8670041	2.81	500000	
Ti	47	45	1	He	0.940	0.940	12.27	200	0.47	2500	
V	51	45	1	He	-0.010	-0.010	-1064.43	198	-0.01	10000	
Cr	52	45	1	He	1.396	1.396	2.72	12186	0.01	10000	
Mn	55	45	1	He	6.440	6.440	0.81	30386	0.02	10000	
Fe	56	45	1	He	38.870	38.870	1.52	242086	0.02	200000	
Co	59	103	1	He	0.291	0.291	5.76	2806	0.01	10000	
Ni	60	103	1	He	3.385	3.385	1.68	8256	0.04	10000	
Cu	63	103	1	He	6.057	6.057	1.64	41237	0.01	10000	
Zn	66	103	1	He	11.707	11.707	3.49	16088	0.07	10000	
As	75	103	1	He	2.983	2.983	0.86	2649	0.11	10000	
Se	78	103	1	He	4.032	4.032	8.50	303	1.33	10000	
Sr	88	103	1	He	2046.287	2046.287	1.62	10091505	0.02	10000	
Mo	95	103	1	He	6.657	6.657	3.64	18314	0.04	2000	
Ag	107	103	1	He	0.013	0.013	24.03	148	0.01	300	
Cd	111	103	1	He	0.381	0.381	13.93	1350	0.03	4000	
Sn	118	115	1	He	2.621	2.621	22.34	9807	0.03	2000	
Sb	123	115	1	He	0.567	0.567	1.53	2895	0.02	300	
Ba	137	115	1	He	17.791	17.791	0.89	25673	0.07	10000	
W	182	165	1	He	1.197	1.197	12.67	15927	0.01	2500	
Tl	205	209	1	He	0.299	0.299	19.44	7287	0.00	5000	
Pb	208	209	1	He	0.280	0.280	6.20	9346	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1735434	1.90	1803797	96.21	30	120	
Sc	45	1	He	559855	0.93	574766	97.41	30	120	
Sc	45	2	NoGas	4446201	0.53	4296857	103.48	30	120	
Rh	103	1	He	1487865	1.39	1652712	90.03	30	120	
In	115	1	He	785940	0.74	852389	92.20	30	120	
Tb	159	1	He	2415730	1.01	2425956	99.58	30	120	
Ho	165	1	He	2483085	1.78	2452680	101.24	30	120	
Bi	209	1	He	1680070	1.34	1810473	92.80	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49299-b-1-a@5
Data File Name	099SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:48:13-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.129	0.129	18.93	763	0.02	10000	
B	11	45	2	NoGas	13.142	13.142	1.00	58381	0.02	300	
Na	23	45	1	He	7015.007	7015.007	2.45	11659568	0.06	500000	
Mg	24	45	1	He	32098.434	32098.434	2.29	30157373	0.11	500000	
Al	27	45	1	He	5.032	5.032	4.50	3266	0.15	200000	
K	39	45	1	He	363.234	363.234	4.15	337676	0.11	500000	
Ca	44	45	1	He	50852.549	50852.549	3.47	1999770	2.54	500000	
Ti	47	45	1	He	0.337	0.337	46.06	80	0.42	2500	
V	51	45	1	He	0.018	0.018	299.17	395	0.00	10000	
Cr	52	45	1	He	0.309	0.309	8.06	5509	0.01	10000	
Mn	55	45	1	He	1.424	1.424	3.65	7578	0.02	10000	
Fe	56	45	1	He	9.062	9.062	7.12	67501	0.01	200000	
Co	59	103	1	He	0.062	0.062	2.87	750	0.01	10000	
Ni	60	103	1	He	0.642	0.642	0.91	1916	0.03	10000	
Cu	63	103	1	He	1.053	1.053	2.86	10569	0.01	10000	
Zn	66	103	1	He	2.295	2.295	1.68	4414	0.05	10000	
As	75	103	1	He	0.454	0.454	8.17	648	0.07	10000	
Se	78	103	1	He	0.830	0.830	6.18	98	0.85	10000	
Sr	88	103	1	He	407.687	407.687	0.78	2355348	0.02	10000	
Mo	95	103	1	He	1.041	1.041	3.61	3974	0.03	2000	
Ag	107	103	1	He	0.003	0.003	109.87	64	0.00	300	
Cd	111	103	1	He	0.138	0.138	3.74	1145	0.01	4000	
Sn	118	115	1	He	0.249	0.249	29.11	1874	0.01	2000	
Sb	123	115	1	He	0.063	0.063	17.41	1198	0.01	300	
Ba	137	115	1	He	3.388	3.388	2.65	5542	0.06	10000	
W	182	165	1	He	0.170	0.170	6.91	5020	0.00	2500	
Tl	205	209	1	He	0.058	0.058	10.67	1953	0.00	5000	
Pb	208	209	1	He	0.072	0.072	3.77	3459	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1879999	0.60	1803797	104.22	30	120	
Sc	45	1	He	619489	1.74	574766	107.78	30	120	
Sc	45	2	NoGas	4846778	0.90	4296857	112.80	30	120	
Rh	103	1	He	1742824	1.10	1652712	105.45	30	120	
In	115	1	He	889185	0.62	852389	104.32	30	120	
Tb	159	1	He	2617283	1.44	2425956	107.89	30	120	
Ho	165	1	He	2708624	0.53	2452680	110.44	30	120	
Bi	209	1	He	1922467	1.45	1810473	106.19	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49299-b-1-a
Data File Name	100SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:52:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2079.618	2079.618	3.20	10544984	0.02	10000	
B	11	45	2	NoGas	283.806	283.806	0.52	969997	0.03	300	
Na	23	45	1	He	53677.200	53677.200	3.02	76902714	0.07	500000	
Mg	24	45	1	He	170889.408	170889.408	1.60	138789217	0.12	500000	
Al	27	45	1	He	19424.280	19424.280	2.56	8204269	0.24	200000	
K	39	45	1	He	22663.478	22663.478	2.32	14509355	0.16	500000	
Ca	44	45	1	He	253714.114	253714.114	3.21	8622127	2.94	500000	
Ti	47	45	1	He	207.775	207.775	3.06	42043	0.49	2500	
V	51	45	1	He	2111.670	2111.670	1.61	10919380	0.02	10000	
Cr	52	45	1	He	2108.845	2108.845	2.18	13378906	0.02	10000	
Mn	55	45	1	He	2075.353	2075.353	1.79	9313480	0.02	10000	
Fe	56	45	1	He	20795.684	20795.684	1.29	120817662	0.02	200000	
Co	59	103	1	He	2072.625	2072.625	0.45	18658985	0.01	10000	
Ni	60	103	1	He	2082.135	2082.135	1.53	4766801	0.04	10000	
Cu	63	103	1	He	2075.182	2075.182	1.18	12672186	0.02	10000	
Zn	66	103	1	He	2071.385	2071.385	0.67	2572511	0.08	10000	
As	75	103	1	He	2230.462	2230.462	1.03	1753108	0.13	10000	
Se	78	103	1	He	2075.620	2075.620	0.38	135069	1.54	10000	
Sr	88	103	1	He	4136.158	4136.158	0.64	19344324	0.02	10000	
Mo	95	103	1	He	244.152	244.152	0.30	615848	0.04	2000	
Ag	107	103	1	He	221.681	221.681	0.63	1934273	0.01	300	
Cd	111	103	1	He	2195.107	2195.107	1.11	3199720	0.07	4000	
Sn	118	115	1	He	2351.487	2351.487	0.14	7454191	0.03	2000	>LDR
Sb	123	115	1	He	227.662	227.662	0.38	765807	0.03	300	
Ba	137	115	1	He	2397.114	2397.114	0.95	3185269	0.08	10000	
W	182	165	1	He	218.381	218.381	0.85	2376888	0.01	2500	
Tl	205	209	1	He	542.637	542.637	0.90	11502659	0.00	5000	
Pb	208	209	1	He	2223.929	2223.929	0.47	62030009	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1620460	2.06	1803797	89.84	30	120	
Sc	45	1	He	535484	1.91	574766	93.17	30	120	
Sc	45	2	NoGas	4179097	0.89	4296857	97.26	30	120	
Rh	103	1	He	1410884	0.11	1652712	85.37	30	120	
In	115	1	He	724041	0.11	852389	84.94	30	120	
Tb	159	1	He	2384973	0.39	2425956	98.31	30	120	
Ho	165	1	He	2443225	1.48	2452680	99.61	30	120	
Bi	209	1	He	1539817	0.91	1810473	85.05	30	120	

Sample Report

Sample Table

Sample Name	240-49299-b-1-d ms
Data File Name	101SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:55:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1096.396	1096.396	2.13	5681633	0.02	10000	
B	11	45	2	NoGas	168.859	168.859	0.74	591610	0.03	300	
Na	23	45	1	He	44947.255	44947.255	1.47	64909955	0.07	500000	
Mg	24	45	1	He	168153.216	168153.216	1.09	137625406	0.12	500000	
Al	27	45	1	He	10290.431	10290.431	2.94	4380060	0.23	200000	
K	39	45	1	He	12879.944	12879.944	1.26	8336430	0.15	500000	
Ca	44	45	1	He	251991.135	251991.135	0.63	8631910	2.92	500000	
Ti	47	45	1	He	108.391	108.391	1.39	22107	0.49	2500	
V	51	45	1	He	1130.310	1130.310	0.91	5890256	0.02	10000	
Cr	52	45	1	He	1097.510	1097.510	2.16	7018067	0.02	10000	
Mn	55	45	1	He	1081.160	1081.160	2.54	4889333	0.02	10000	
Fe	56	45	1	He	10979.896	10979.896	1.31	64283995	0.02	200000	
Co	59	103	1	He	1069.546	1069.546	0.38	9779412	0.01	10000	
Ni	60	103	1	He	1081.521	1081.521	0.91	2514814	0.04	10000	
Cu	63	103	1	He	1054.476	1054.476	0.82	6541055	0.02	10000	
Zn	66	103	1	He	1014.478	1014.478	0.22	1280000	0.08	10000	
As	75	103	1	He	1086.777	1086.777	0.17	867641	0.13	10000	
Se	78	103	1	He	1081.847	1081.847	0.71	71514	1.51	10000	
Sr	88	103	1	He	3170.790	3170.790	0.71	15061534	0.02	10000	
Mo	95	103	1	He	130.539	130.539	0.87	334702	0.04	2000	
Ag	107	103	1	He	108.606	108.606	1.05	962470	0.01	300	
Cd	111	103	1	He	1129.433	1129.433	1.38	1672422	0.07	4000	
Sn	118	115	1	He	1206.158	1206.158	0.41	3929646	0.03	2000	
Sb	123	115	1	He	115.811	115.811	1.23	400718	0.03	300	
Ba	137	115	1	He	1244.474	1244.474	1.71	1699397	0.07	10000	
W	182	165	1	He	108.035	108.035	0.78	1174028	0.01	2500	
Tl	205	209	1	He	269.010	269.010	3.22	6001421	0.00	5000	
Pb	208	209	1	He	1097.682	1097.682	3.83	32216871	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1655761	1.87	1803797	91.79	30	120	
Sc	45	1	He	539565	1.11	574766	93.88	30	120	
Sc	45	2	NoGas	4266978	0.70	4296857	99.30	30	120	
Rh	103	1	He	1432971	0.35	1652712	86.70	30	120	
In	115	1	He	744072	0.45	852389	87.29	30	120	
Tb	159	1	He	2370115	1.24	2425956	97.70	30	120	
Ho	165	1	He	2436391	0.60	2452680	99.34	30	120	
Bi	209	1	He	1621902	3.98	1810473	89.58	30	120	

Sample Report

Sample Table

Sample Name	240-49299-b-1-e msd
Data File Name	102SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:59:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1066.218	1066.218	1.52	5596908	0.02	10000	
B	11	45	2	NoGas	161.770	161.770	1.78	587899	0.03	300	
Na	23	45	1	He	43666.438	43666.438	0.58	63888007	0.07	500000	
Mg	24	45	1	He	162913.892	162913.892	1.62	135074691	0.12	500000	
Al	27	45	1	He	10102.469	10102.469	1.02	4356883	0.23	200000	
K	39	45	1	He	12551.035	12551.035	1.39	8231171	0.15	500000	
Ca	44	45	1	He	247679.675	247679.675	0.39	8595380	2.88	500000	
Ti	47	45	1	He	106.033	106.033	1.18	21910	0.48	2500	
V	51	45	1	He	1111.116	1111.116	0.40	5865968	0.02	10000	
Cr	52	45	1	He	1058.224	1058.224	0.31	6856169	0.02	10000	
Mn	55	45	1	He	1056.409	1056.409	0.97	4840311	0.02	10000	
Fe	56	45	1	He	10576.379	10576.379	0.70	62732475	0.02	200000	
Co	59	103	1	He	1013.490	1013.490	3.87	9534070	0.01	10000	
Ni	60	103	1	He	1033.056	1033.056	4.38	2471028	0.04	10000	
Cu	63	103	1	He	1008.090	1008.090	2.72	6435031	0.02	10000	
Zn	66	103	1	He	966.444	966.444	3.47	1254635	0.08	10000	
As	75	103	1	He	1041.167	1041.167	2.99	855323	0.12	10000	
Se	78	103	1	He	1037.704	1037.704	3.61	70575	1.47	10000	
Sr	88	103	1	He	3067.206	3067.206	3.83	14989001	0.02	10000	
Mo	95	103	1	He	123.539	123.539	2.65	325995	0.04	2000	
Ag	107	103	1	He	103.386	103.386	3.00	942793	0.01	300	
Cd	111	103	1	He	1069.211	1069.211	4.24	1628779	0.07	4000	
Sn	118	115	1	He	1178.907	1178.907	1.00	3901274	0.03	2000	
Sb	123	115	1	He	112.596	112.596	1.68	395760	0.03	300	
Ba	137	115	1	He	1204.943	1204.943	1.33	1671353	0.07	10000	
W	182	165	1	He	102.816	102.816	1.02	1124901	0.01	2500	
Tl	205	209	1	He	271.134	271.134	0.87	5813507	0.00	5000	
Pb	208	209	1	He	1117.270	1117.270	0.75	31521802	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1677050	1.44	1803797	92.97	30	120	
Sc	45	1	He	546600	0.84	574766	95.10	30	120	
Sc	45	2	NoGas	4424644	1.61	4296857	102.97	30	120	
Rh	103	1	He	1475431	3.23	1652712	89.27	30	120	
In	115	1	He	755785	0.32	852389	88.67	30	120	
Tb	159	1	He	2378442	1.17	2425956	98.04	30	120	
Ho	165	1	He	2452813	0.90	2452680	100.01	30	120	
Bi	209	1	He	1557511	0.26	1810473	86.03	30	120	

Sample Report

Sample Table

Sample Name	190-7047-d-1-a
Data File Name	103SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:02:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.474	0.474	8.50	2452	0.02	10000	
B	11	45	2	NoGas	57391.495	57391.495	0.25	209281866	0.03	300	>LDR
Na	23	45	1	He	545121.262	545121.262	1.90	809792086	0.07	500000	>LDR
Mg	24	45	1	He	40397.433	40397.433	1.60	34026821	0.12	500000	
Al	27	45	1	He	980.820	980.820	1.30	430375	0.23	200000	
K	39	45	1	He	30888.457	30888.457	0.51	20491838	0.15	500000	
Ca	44	45	1	He	104133.073	104133.073	1.71	3671272	2.84	500000	
Ti	47	45	1	He	1.185	1.185	4.73	250	0.47	2500	
V	51	45	1	He	2.895	2.895	3.07	15776	0.02	10000	
Cr	52	45	1	He	1.946	1.946	0.75	15709	0.01	10000	
Mn	55	45	1	He	453.439	453.439	0.17	2110862	0.02	10000	
Fe	56	45	1	He	628.025	628.025	0.46	3790076	0.02	200000	
Co	59	103	1	He	3.114	3.114	2.86	28544	0.01	10000	
Ni	60	103	1	He	12.643	12.643	1.34	29505	0.04	10000	
Cu	63	103	1	He	9.561	9.561	2.38	61506	0.02	10000	
Zn	66	103	1	He	230.600	230.600	0.68	291783	0.08	10000	
As	75	103	1	He	3.986	3.986	2.68	3356	0.12	10000	
Se	78	103	1	He	1.937	1.937	7.09	154	1.26	10000	
Sr	88	103	1	He	474.241	474.241	0.93	2254910	0.02	10000	
Mo	95	103	1	He	210.104	210.104	0.85	538814	0.04	2000	
Ag	107	103	1	He	0.013	0.013	18.89	141	0.01	300	
Cd	111	103	1	He	0.512	0.512	6.15	1496	0.03	4000	
Sn	118	115	1	He	4.755	4.755	14.03	17098	0.03	2000	
Sb	123	115	1	He	17.230	17.230	1.79	63462	0.03	300	
Ba	137	115	1	He	26.848	26.848	2.22	38604	0.07	10000	
W	182	165	1	He	11.208	11.208	1.15	125668	0.01	2500	
Tl	205	209	1	He	0.357	0.357	23.36	8003	0.00	5000	
Pb	208	209	1	He	8.757	8.757	0.66	248253	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1649483	1.37	1803797	91.45	30	120	
Sc	45	1	He	555331	1.52	574766	96.62	30	120	
Sc	45	2	NoGas	4484840	0.31	4296857	104.37	30	120	
Rh	103	1	He	1434259	0.53	1652712	86.78	30	120	
In	115	1	He	783249	0.22	852389	91.89	30	120	
Tb	159	1	He	2386941	1.37	2425956	98.39	30	120	
Ho	165	1	He	2465536	1.14	2452680	100.52	30	120	
Bi	209	1	He	1560191	0.63	1810473	86.18	30	120	

Sample Report

Sample Table

Sample Name	190-7048-d-1-a
Data File Name	104SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:06:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.266	0.266	4.77	1311	0.02	10000	
B	11	45	2	NoGas	836.118	836.118	2.01	2923019	0.03	300	>LDR
Na	23	45	1	He	232235.327	232235.327	0.88	337807313	0.07	500000	
Mg	24	45	1	He	8277.821	8277.821	0.64	6827469	0.12	500000	
Al	27	45	1	He	26.504	26.504	3.50	12073	0.22	200000	
K	39	45	1	He	145499.014	145499.014	2.42	94241700	0.15	500000	
Ca	44	45	1	He	14720.538	14720.538	1.73	508526	2.89	500000	
Ti	47	45	1	He	1.132	1.132	10.46	233	0.48	2500	
V	51	45	1	He	1.585	1.585	4.73	8566	0.02	10000	
Cr	52	45	1	He	1.581	1.581	8.25	13021	0.01	10000	
Mn	55	45	1	He	45.644	45.644	1.48	208139	0.02	10000	
Fe	56	45	1	He	144.632	144.632	1.68	858825	0.02	200000	
Co	59	103	1	He	0.235	0.235	6.29	2238	0.01	10000	
Ni	60	103	1	He	310.390	310.390	2.73	736919	0.04	10000	
Cu	63	103	1	He	2.871	2.871	2.19	20385	0.01	10000	
Zn	66	103	1	He	64.139	64.139	2.52	83329	0.08	10000	
As	75	103	1	He	1.904	1.904	4.03	1726	0.11	10000	
Se	78	103	1	He	0.601	0.601	10.75	67	0.90	10000	
Sr	88	103	1	He	72.316	72.316	2.74	350824	0.02	10000	
Mo	95	103	1	He	10.120	10.120	5.13	27051	0.04	2000	
Ag	107	103	1	He	0.006	0.006	33.94	84	0.01	300	
Cd	111	103	1	He	0.288	0.288	11.80	1187	0.02	4000	
Sn	118	115	1	He	2.474	2.474	11.52	9292	0.03	2000	
Sb	123	115	1	He	2.953	2.953	0.53	11577	0.03	300	
Ba	137	115	1	He	2.510	2.510	2.94	3625	0.07	10000	
W	182	165	1	He	0.874	0.874	4.86	12153	0.01	2500	
Tl	205	209	1	He	0.186	0.186	7.13	4512	0.00	5000	
Pb	208	209	1	He	0.880	0.880	3.28	26718	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1570825	0.89	1803797	87.08	30	120	
Sc	45	1	He	543686	1.88	574766	94.59	30	120	
Sc	45	2	NoGas	4291845	1.33	4296857	99.88	30	120	
Rh	103	1	He	1463727	2.81	1652712	88.57	30	120	
In	115	1	He	784450	1.08	852389	92.03	30	120	
Tb	159	1	He	2368945	0.98	2425956	97.65	30	120	
Ho	165	1	He	2439121	0.53	2452680	99.45	30	120	
Bi	209	1	He	1627596	1.87	1810473	89.90	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	105_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:10:23-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.977	1.740	246859	1.85	50	92.0	89.5	110.5	
B	11	45	2	NoGas	449.267	0.872	1696560	0.63	50	898.5	89.5	110.5	CCV Failed
Na	23	45	1	He	25168.663	1.804	40213285	1.36	25000	100.7	89.5	110.5	
Mg	24	45	1	He	25071.008	1.951	22692948	1.23	25000	100.3	89.5	110.5	
Al	27	45	1	He	246.819	2.214	116951	1.00	250	98.7	89.5	110.5	
K	39	45	1	He	26259.996	2.731	18723864	0.50	25000	105.0	89.5	110.5	
Ca	44	45	1	He	24916.251	2.409	944299	0.69	25000	99.7	89.5	110.5	
Ti	47	45	1	He	50.942	1.594	11494	2.75	50	101.9	89.5	110.5	
V	51	45	1	He	50.838	0.647	293318	2.59	50	101.7	89.5	110.5	
Cr	52	45	1	He	50.277	1.967	358545	1.15	50	100.6	89.5	110.5	
Mn	55	45	1	He	249.890	2.141	1249936	1.26	250	100.0	89.5	110.5	
Fe	56	45	1	He	12761.879	2.220	82625477	1.07	12500	102.1	89.5	110.5	
Co	59	103	1	He	47.503	0.265	506392	0.63	50	95.0	89.5	110.5	
Ni	60	103	1	He	47.253	0.839	128185	1.33	50	94.5	89.5	110.5	
Cu	63	103	1	He	47.614	0.991	346727	1.49	50	95.2	89.5	110.5	
Zn	66	103	1	He	47.726	1.420	71016	1.74	50	95.5	89.5	110.5	
As	75	103	1	He	49.219	0.874	45996	0.31	50	98.4	89.5	110.5	
Se	78	103	1	He	49.151	2.175	3816	1.60	50	98.3	89.5	110.5	
Sr	88	103	1	He	50.127	0.344	277721	0.87	50	100.3	89.5	110.5	
Mo	95	103	1	He	49.355	1.222	147955	0.73	50	98.7	89.5	110.5	
Ag	107	103	1	He	49.377	0.740	510137	0.68	50	98.8	89.5	110.5	
Cd	111	103	1	He	49.900	0.216	86961	0.58	50	99.8	89.5	110.5	
Sn	118	115	1	He	50.580	1.330	194091	0.57	50	101.2	89.5	110.5	
Sb	123	115	1	He	52.674	1.421	214231	0.73	50	105.3	89.5	110.5	
Ba	137	115	1	He	52.250	2.152	83680	1.43	50	104.5	89.5	110.5	
W	182	165	1	He	47.280	1.017	559504	1.28	50	94.6	89.5	110.5	
Tl	205	209	1	He	47.079	1.012	1221793	0.77	50	94.2	89.5	110.5	
Pb	208	209	1	He	48.574	0.503	1659224	1.10	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1715286	1.63	1803797	95.09	30	120	
Sc	45	1	He	596895	3.11	574766	103.85	30	120	
Sc	45	2	NoGas	4627468	0.87	4296857	107.69	30	120	
Rh	103	1	He	1670495	0.56	1652712	101.08	30	120	
In	115	1	He	872608	0.77	852389	102.37	30	120	
Tb	159	1	He	2551361	1.25	2425956	105.17	30	120	
Ho	165	1	He	2645392	0.49	2452680	107.86	30	120	
Bi	209	1	He	1884809	1.48	1810473	104.11	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	106_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:14:13-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.144	9.6	796	10.5	1	
B	11	45	2	NoGas	301.880	1.4	1171581	1.7	20	CCB Failed
Na	23	45	1	He	58.995	8.3	123023	5.4	400	
Mg	24	45	1	He	8.043	21.3	7861	18.6	1000	
Al	27	45	1	He	8.330	1.9	4483	0.3	50	
K	39	45	1	He	22.373	21.2	79317	3.0	1000	
Ca	44	45	1	He	11.350	10.4	980	4.8	1000	
Ti	47	45	1	He	0.470	69.7	102	68.7	20	
V	51	45	1	He	0.075	108.9	673	66.7	2	
Cr	52	45	1	He	0.040	35.1	3254	4.2	2	
Mn	55	45	1	He	0.242	22.6	1323	19.9	2	
Fe	56	45	1	He	16.569	33.2	108287	31.0	50	
Co	59	103	1	He	0.041	21.6	518	18.8	1	
Ni	60	103	1	He	0.022	18.5	163	7.1	2	
Cu	63	103	1	He	-0.054	-33.1	2219	6.1	2	
Zn	66	103	1	He	0.474	11.7	1622	5.3	20	
As	75	103	1	He	0.131	22.2	336	8.0	2	
Se	78	103	1	He	0.280	25.7	54	10.3	2	
Sr	88	103	1	He	0.158	29.9	1063	25.3	10	
Mo	95	103	1	He	0.675	21.8	2835	15.7	2	
Ag	107	103	1	He	0.008	35.3	126	26.2	0.2	
Cd	111	103	1	He	0.166	4.0	1196	0.6	0.2	
Sn	118	115	1	He	0.302	19.0	2100	10.6	10	
Sb	123	115	1	He	0.178	23.8	1686	10.3	1	
Ba	137	115	1	He	0.069	35.3	128	31.1	5	
W	182	165	1	He	1.124	14.1	15823	12.0	10	
Tl	205	209	1	He	0.082	12.4	2617	10.6	0.5	
Pb	208	209	1	He	0.058	9.8	2978	7.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1751754	1.64	1803797	97.11	30	120	
Sc	45	1	He	569378	1.30	574766	99.06	30	120	
Sc	45	2	NoGas	4747127	1.43	4296857	110.48	30	120	
Rh	103	1	He	1744534	0.47	1652712	105.56	30	120	
In	115	1	He	898155	0.34	852389	105.37	30	120	
Tb	159	1	He	2570920	1.27	2425956	105.98	30	120	
Ho	165	1	He	2594199	0.44	2452680	105.77	30	120	
Bi	209	1	He	1942969	0.57	1810473	107.32	30	120	

Sample Report

Sample Table

Sample Name	240-49336-d-1-a
Data File Name	107SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:18:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.169	0.169	7.32	878	0.02	10000	
B	11	45	2	NoGas	513.857	513.857	0.08	1840043	0.03	300	>LDR
Na	23	45	1	He	45657.033	45657.033	3.32	67760499	0.07	500000	
Mg	24	45	1	He	21905.416	21905.416	2.71	18428058	0.12	500000	
Al	27	45	1	He	165.230	165.230	2.23	73014	0.23	200000	
K	39	45	1	He	7750.139	7750.139	3.71	5179671	0.15	500000	
Ca	44	45	1	He	64097.077	64097.077	2.62	2257220	2.84	500000	
Ti	47	45	1	He	3.806	3.806	9.02	798	0.48	2500	
V	51	45	1	He	0.713	0.713	45.07	4047	0.02	10000	
Cr	52	45	1	He	1.457	1.457	7.01	12469	0.01	10000	
Mn	55	45	1	He	46.021	46.021	3.75	214030	0.02	10000	
Fe	56	45	1	He	579.542	579.542	2.85	3492911	0.02	200000	
Co	59	103	1	He	0.240	0.240	4.01	2358	0.01	10000	
Ni	60	103	1	He	1.344	1.344	6.58	3373	0.04	10000	
Cu	63	103	1	He	1.806	1.806	2.60	14041	0.01	10000	
Zn	66	103	1	He	10.509	10.509	1.90	14707	0.07	10000	
As	75	103	1	He	2.695	2.695	3.93	2440	0.11	10000	
Se	78	103	1	He	0.535	0.535	24.60	64	0.83	10000	
Sr	88	103	1	He	382.057	382.057	4.32	1907252	0.02	10000	
Mo	95	103	1	He	1.167	1.167	4.23	3774	0.03	2000	
Ag	107	103	1	He	0.008	0.008	29.17	108	0.01	300	
Cd	111	103	1	He	0.230	0.230	7.74	1132	0.02	4000	
Sn	118	115	1	He	1.022	1.022	7.90	4404	0.02	2000	
Sb	123	115	1	He	0.336	0.336	8.63	2097	0.02	300	
Ba	137	115	1	He	95.609	95.609	0.31	140717	0.07	10000	
W	182	165	1	He	0.406	0.406	15.29	7146	0.01	2500	
Tl	205	209	1	He	0.079	0.079	4.14	2271	0.00	5000	
Pb	208	209	1	He	0.401	0.401	4.45	13528	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1649480	1.63	1803797	91.44	30	120	
Sc	45	1	He	554851	3.23	574766	96.54	30	120	
Sc	45	2	NoGas	4389861	1.47	4296857	102.16	30	120	
Rh	103	1	He	1507029	3.08	1652712	91.19	30	120	
In	115	1	He	801904	0.47	852389	94.08	30	120	
Tb	159	1	He	2409153	1.49	2425956	99.31	30	120	
Ho	165	1	He	2465198	1.64	2452680	100.51	30	120	
Bi	209	1	He	1744869	1.90	1810473	96.38	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	108SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:21:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2220.142	2220.142	1.76	11078639	0.02	10000	
B	11	45	2	NoGas	417.929	417.929	1.72	1477963	0.03	300	>LDR
Na	23	45	1	He	20593.751	20593.751	2.34	30802055	0.07	500000	
Mg	24	45	1	He	20642.304	20642.304	3.64	17482778	0.12	500000	
Al	27	45	1	He	19827.816	19827.816	3.39	8734202	0.23	200000	
K	39	45	1	He	21146.186	21146.186	3.91	14121533	0.15	500000	
Ca	44	45	1	He	19056.439	19056.439	3.51	675987	2.82	500000	
Ti	47	45	1	He	202.463	202.463	3.38	42737	0.47	2500	
V	51	45	1	He	2071.583	2071.583	2.25	11174091	0.02	10000	
Cr	52	45	1	He	2053.917	2053.917	2.83	13591618	0.02	10000	
Mn	55	45	1	He	2078.128	2078.128	3.32	9725868	0.02	10000	
Fe	56	45	1	He	20990.355	20990.355	2.53	127194133	0.02	200000	
Co	59	103	1	He	1971.095	1971.095	1.34	19476386	0.01	10000	
Ni	60	103	1	He	1973.336	1973.336	0.85	4958742	0.04	10000	
Cu	63	103	1	He	1956.187	1956.187	1.99	13110661	0.01	10000	
Zn	66	103	1	He	2039.397	2039.397	2.08	2779717	0.07	10000	
As	75	103	1	He	2111.886	2111.886	1.72	1821909	0.12	10000	
Se	78	103	1	He	1974.979	1974.979	1.30	141060	1.40	10000	
Sr	88	103	1	He	2130.844	2130.844	1.38	10938296	0.02	10000	
Mo	95	103	1	He	203.221	203.221	3.32	562674	0.04	2000	
Ag	107	103	1	He	213.211	213.211	1.00	2042004	0.01	300	
Cd	111	103	1	He	2163.403	2163.403	1.24	3461301	0.06	4000	
Sn	118	115	1	He	2329.288	2329.288	0.49	7940822	0.03	2000	>LDR
Sb	123	115	1	He	232.771	232.771	0.25	842038	0.03	300	
Ba	137	115	1	He	2416.867	2416.867	0.64	3453752	0.07	10000	
W	182	165	1	He	209.629	209.629	0.90	2369712	0.01	2500	
Tl	205	209	1	He	495.457	495.457	0.97	12397051	0.00	5000	
Pb	208	209	1	He	2050.697	2050.697	1.08	67517706	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1594450	2.16	1803797	88.39	30	120	
Sc	45	1	He	558755	3.49	574766	97.21	30	120	
Sc	45	2	NoGas	4332447	0.71	4296857	100.83	30	120	
Rh	103	1	He	1548718	1.39	1652712	93.71	30	120	
In	115	1	He	778660	0.29	852389	91.35	30	120	
Tb	159	1	He	2469878	1.03	2425956	101.81	30	120	
Ho	165	1	He	2537241	0.51	2452680	103.45	30	120	
Bi	209	1	He	1817701	0.68	1810473	100.40	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176157/1-a
Data File Name	109_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:25:20-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.405	8.6	2130	7.8	1	
B	11	45	2	NoGas	192.068	1.4	687355	0.5	20	Blank Failed
Na	23	45	1	He	51.376	1.3	106349	1.4	400	
Mg	24	45	1	He	4.225	3.8	4356	2.4	1000	
Al	27	45	1	He	4.209	4.4	2511	2.1	50	
K	39	45	1	He	32.429	7.1	82204	0.3	1000	
Ca	44	45	1	He	14.339	28.6	1038	13.9	1000	
Ti	47	45	1	He	0.476	40.4	99	40.5	20	
V	51	45	1	He	0.519	26.4	2970	24.1	2	
Cr	52	45	1	He	1.270	4.6	11017	2.1	2	
Mn	55	45	1	He	0.377	1.5	1873	1.4	2	
Fe	56	45	1	He	16.628	29.1	103843	27.9	50	
Co	59	103	1	He	0.388	6.2	4056	5.9	1	
Ni	60	103	1	He	0.309	0.7	902	1.1	2	
Cu	63	103	1	He	1.090	23.4	10044	17.2	2	
Zn	66	103	1	He	2.852	5.0	4882	3.8	20	
As	75	103	1	He	1.841	4.7	1849	3.7	2	
Se	78	103	1	He	1.614	17.4	149	13.7	2	
Sr	88	103	1	He	0.498	7.1	2807	6.3	10	
Mo	95	103	1	He	3.575	32.3	10984	29.8	2	Blank Failed
Ag	107	103	1	He	0.016	28.2	196	23.2	0.2	
Cd	111	103	1	He	0.605	20.1	1840	10.5	0.2	Blank Failed
Sn	118	115	1	He	17.082	27.3	62536	26.3	10	Blank Failed
Sb	123	115	1	He	0.616	5.6	3230	3.6	1	
Ba	137	115	1	He	0.577	28.8	887	27.8	5	
W	182	165	1	He	3.786	30.0	44484	26.9	10	
Tl	205	209	1	He	0.471	27.2	12652	25.9	0.5	
Pb	208	209	1	He	0.408	25.8	14876	23.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1678893	0.94	1803797	93.08	30	120	
Sc	45	1	He	543321	1.45	574766	94.53	30	120	
Sc	45	2	NoGas	4363868	0.92	4296857	101.56	30	120	
Rh	103	1	He	1615230	0.51	1652712	97.73	30	120	
In	115	1	He	825817	0.53	852389	96.88	30	120	
Tb	159	1	He	2406986	1.63	2425956	99.22	30	120	
Ho	165	1	He	2485252	1.57	2452680	101.33	30	120	
Bi	209	1	He	1888304	1.51	1810473	104.30	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176157/2-a
Data File Name	110_LCS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:29:12-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1098.732	1098.732	0.998	5461126	0.41	1000	109.9	79.5	120.5	
B	11	2	NoGas	288.796	288.796	1.898	1004893	0.74	100	288.8	79.5	120.5	LCS Failed
Na	23	1	He	10742.126	10742.126	1.488	15503534	1.22	10000	107.4	79.5	120.5	
Mg	24	1	He	10635.175	10635.175	2.019	8685308	0.62	10000	106.4	79.5	120.5	
Al	27	1	He	9930.616	9930.616	0.796	4218934	2.06	10000	99.3	79.5	120.5	
K	39	1	He	10862.340	10862.340	2.816	7023356	0.80	10000	108.6	79.5	120.5	
Ca	44	1	He	9679.676	9679.676	2.400	331307	0.22	10000	96.8	79.5	120.5	
Ti	47	1	He	103.144	103.144	2.415	20991	2.12	100	103.1	79.5	120.5	
V	51	1	He	1081.739	1081.739	3.007	5623273	0.61	1000	108.2	79.5	120.5	
Cr	52	1	He	1062.800	1062.800	2.960	6780105	0.35	1000	106.3	79.5	120.5	
Mn	55	1	He	1074.059	1074.059	1.531	4846904	1.09	1000	107.4	79.5	120.5	
Fe	56	1	He	10719.137	10719.137	2.144	62615155	0.81	10000	107.2	79.5	120.5	
Co	59	1	He	992.937	992.937	1.491	9747571	0.72	1000	99.3	79.5	120.5	
Ni	60	1	He	1017.755	1017.755	2.119	2540696	1.04	1000	101.8	79.5	120.5	
Cu	63	1	He	998.314	998.314	1.240	6648956	0.36	1000	99.8	79.5	120.5	
Zn	66	1	He	976.988	976.988	1.171	1323534	0.53	1000	97.7	79.5	120.5	
As	75	1	He	979.827	979.827	1.159	839896	0.32	1000	98.0	79.5	120.5	
Se	78	1	He	990.580	990.580	0.575	70310	0.66	1000	99.1	79.5	120.5	
Sr	88	1	He	1046.088	1046.088	0.959	5335231	0.36	1000	104.6	79.5	120.5	
Mo	95	1	He	110.528	110.528	1.314	304366	0.29	100	110.5	79.5	120.5	
Ag	107	1	He	104.360	104.360	1.094	993007	0.67	100	104.4	79.5	120.5	
Cd	111	1	He	1087.866	1087.866	2.228	1729524	1.53	1000	108.8	79.5	120.5	
Sn	118	1	He	1168.905	1168.905	0.275	3956441	0.46	1000	116.9	79.5	120.5	
Sb	123	1	He	111.634	111.634	0.342	401326	0.03	100	111.6	79.5	120.5	
Ba	137	1	He	1177.022	1177.022	0.250	1669809	0.43	1000	117.7	79.5	120.5	
W	182	1	He	100.875	100.875	2.268	1113342	1.44	100	100.9	79.5	120.5	
Tl	205	1	He	249.659	249.659	1.393	6136518	1.50	250	99.9	79.5	120.5	
Pb	208	1	He	1020.055	1020.055	1.408	32989638	0.86	1000	102.0	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1587831	0.59	1803797	88.03	30	120	
Sc	45	1	He	538488	2.64	574766	93.69	30	120	
Sc	45	2	NoGas	4255606	1.21	4296857	99.04	30	120	
Rh	103	1	He	1538661	1.23	1652712	93.10	30	120	
In	115	1	He	773014	0.32	852389	90.69	30	120	
Tb	159	1	He	2397388	0.60	2425956	98.82	30	120	
Ho	165	1	He	2474380	0.84	2452680	100.88	30	120	
Bi	209	1	He	1785487	0.61	1810473	98.62	30	120	

Sample Report

Sample Table

Sample Name	240-49236-d-3-a
Data File Name	111SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:32:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.272	0.272	7.01	1430	0.02	10000	
B	11	45	2	NoGas	284.911	284.911	0.79	1016825	0.03	300	
Na	23	45	1	He	46635.736	46635.736	2.32	67960712	0.07	500000	
Mg	24	45	1	He	32088.529	32088.529	1.68	26503938	0.12	500000	
Al	27	45	1	He	7.754	7.754	3.46	4042	0.19	200000	
K	39	45	1	He	3089.103	3089.103	2.59	2064211	0.15	500000	
Ca	44	45	1	He	19977.796	19977.796	1.30	691107	2.89	500000	
Ti	47	45	1	He	0.420	0.420	30.23	88	0.48	2500	
V	51	45	1	He	0.222	0.222	87.26	1424	0.02	10000	
Cr	52	45	1	He	1.338	1.338	5.20	11480	0.01	10000	
Mn	55	45	1	He	0.504	0.504	3.14	2461	0.02	10000	
Fe	56	45	1	He	29.907	29.907	1.73	182507	0.02	200000	
Co	59	103	1	He	0.295	0.295	20.36	2871	0.01	10000	
Ni	60	103	1	He	0.208	0.208	6.66	594	0.03	10000	
Cu	63	103	1	He	1.475	1.475	8.50	11879	0.01	10000	
Zn	66	103	1	He	3.871	3.871	3.11	5906	0.07	10000	
As	75	103	1	He	2.036	2.036	6.22	1887	0.11	10000	
Se	78	103	1	He	1.171	1.171	24.90	108	1.08	10000	
Sr	88	103	1	He	392.819	392.819	4.85	1960216	0.02	10000	
Mo	95	103	1	He	0.862	0.862	17.43	2948	0.03	2000	
Ag	107	103	1	He	0.010	0.010	70.22	124	0.01	300	
Cd	111	103	1	He	0.394	0.394	12.20	1388	0.03	4000	
Sn	118	115	1	He	3.161	3.161	16.75	11823	0.03	2000	
Sb	123	115	1	He	0.514	0.514	3.48	2739	0.02	300	
Ba	137	115	1	He	20.513	20.513	2.50	29989	0.07	10000	
W	182	165	1	He	1.306	1.306	16.49	17069	0.01	2500	
Tl	205	209	1	He	0.251	0.251	25.61	6514	0.00	5000	
Pb	208	209	1	He	0.197	0.197	16.20	7177	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1673645	0.48	1803797	92.78	30	120	
Sc	45	1	He	544552	1.47	574766	94.74	30	120	
Sc	45	2	NoGas	4364121	1.71	4296857	101.57	30	120	
Rh	103	1	He	1506919	3.36	1652712	91.18	30	120	
In	115	1	He	796326	0.66	852389	93.42	30	120	
Tb	159	1	He	2421015	1.30	2425956	99.80	30	120	
Ho	165	1	He	2472647	0.72	2452680	100.81	30	120	
Bi	209	1	He	1769341	0.46	1810473	97.73	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49236-d-3-a@5
Data File Name	112SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:36:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.175	0.175	6.39	963	0.02	10000	
B	11	45	2	NoGas	127.538	127.538	1.27	477310	0.03	300	
Na	23	45	1	He	9370.894	9370.894	2.40	14568840	0.06	500000	
Mg	24	45	1	He	6574.639	6574.639	3.43	5782118	0.11	500000	
Al	27	45	1	He	25.009	25.009	2.83	12194	0.21	200000	
K	39	45	1	He	601.695	601.695	3.46	480729	0.13	500000	
Ca	44	45	1	He	4051.648	4051.648	1.33	149729	2.71	500000	
Ti	47	45	1	He	0.197	0.197	28.74	44	0.44	2500	
V	51	45	1	He	0.131	0.131	67.38	1006	0.01	10000	
Cr	52	45	1	He	0.313	0.313	7.71	5184	0.01	10000	
Mn	55	45	1	He	0.397	0.397	3.92	2101	0.02	10000	
Fe	56	45	1	He	6.462	6.462	2.98	46789	0.01	200000	
Co	59	103	1	He	0.059	0.059	3.13	678	0.01	10000	
Ni	60	103	1	He	0.057	0.057	16.88	251	0.02	10000	
Cu	63	103	1	He	0.228	0.228	11.20	4138	0.01	10000	
Zn	66	103	1	He	1.551	1.551	11.09	3118	0.05	10000	
As	75	103	1	He	0.421	0.421	6.18	587	0.07	10000	
Se	78	103	1	He	0.350	0.350	21.67	57	0.62	10000	
Sr	88	103	1	He	72.266	72.266	0.52	398083	0.02	10000	
Mo	95	103	1	He	-0.009	-0.009	-478.63	673	0.00	2000	
Ag	107	103	1	He	0.002	0.002	72.51	54	0.00	300	
Cd	111	103	1	He	0.177	0.177	21.24	1157	0.02	4000	
Sn	118	115	1	He	0.515	0.515	6.90	2849	0.02	2000	
Sb	123	115	1	He	0.084	0.084	24.07	1257	0.01	300	
Ba	137	115	1	He	3.929	3.929	5.17	6296	0.06	10000	
W	182	165	1	He	0.318	0.318	9.26	6416	0.00	2500	
Tl	205	209	1	He	0.075	0.075	6.67	2389	0.00	5000	
Pb	208	209	1	He	0.067	0.067	5.65	3231	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1747707	0.38	1803797	96.89	30	120	
Sc	45	1	He	579969	2.38	574766	100.91	30	120	
Sc	45	2	NoGas	4543396	0.45	4296857	105.74	30	120	
Rh	103	1	He	1661241	0.87	1652712	100.52	30	120	
In	115	1	He	871276	0.46	852389	102.22	30	120	
Tb	159	1	He	2519071	0.61	2425956	103.84	30	120	
Ho	165	1	He	2558703	0.39	2452680	104.32	30	120	
Bi	209	1	He	1906119	0.76	1810473	105.28	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49236-d-3-a
Data File Name	113SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:40:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1117.225	1117.225	1.45	5445363	0.02	10000	
B	11	45	2	NoGas	367.964	367.964	0.49	1222712	0.03	300	>LDR
Na	23	45	1	He	57358.757	57358.757	2.03	79472414	0.07	500000	
Mg	24	45	1	He	42952.258	42952.258	1.52	33732221	0.13	500000	
Al	27	45	1	He	10454.709	10454.709	0.98	4270884	0.24	200000	
K	39	45	1	He	14156.988	14156.988	1.25	8786875	0.16	500000	
Ca	44	45	1	He	29811.020	29811.020	1.33	980301	3.04	500000	
Ti	47	45	1	He	105.874	105.874	1.41	20722	0.51	2500	
V	51	45	1	He	1120.888	1120.888	0.81	5605541	0.02	10000	
Cr	52	45	1	He	1102.820	1102.820	1.83	6767007	0.02	10000	
Mn	55	45	1	He	1097.287	1097.287	3.03	4761195	0.02	10000	
Fe	56	45	1	He	11030.197	11030.197	2.44	61961335	0.02	200000	
Co	59	103	1	He	1070.361	1070.361	0.43	9481711	0.01	10000	
Ni	60	103	1	He	1085.956	1085.956	0.61	2446380	0.04	10000	
Cu	63	103	1	He	1074.079	1074.079	2.80	6454048	0.02	10000	
Zn	66	103	1	He	1050.116	1050.116	1.49	1283522	0.08	10000	
As	75	103	1	He	1085.522	1085.522	0.98	839577	0.13	10000	
Se	78	103	1	He	1078.894	1078.894	1.27	69091	1.56	10000	
Sr	88	103	1	He	1540.170	1540.170	0.62	7088013	0.02	10000	
Mo	95	103	1	He	122.322	122.322	0.93	303881	0.04	2000	
Ag	107	103	1	He	111.938	111.938	1.33	961014	0.01	300	
Cd	111	103	1	He	1179.348	1179.348	2.54	1691813	0.07	4000	
Sn	118	115	1	He	1216.722	1216.722	0.89	3906951	0.03	2000	
Sb	123	115	1	He	115.816	115.816	0.28	394974	0.03	300	
Ba	137	115	1	He	1262.653	1262.653	0.99	1699374	0.07	10000	
W	182	165	1	He	105.588	105.588	1.84	1129440	0.01	2500	
Tl	205	209	1	He	270.590	270.590	4.45	6063143	0.00	5000	
Pb	208	209	1	He	1112.893	1112.893	4.38	32813595	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1557148	1.34	1803797	86.33	30	120	
Sc	45	1	He	517782	1.68	574766	90.09	30	120	
Sc	45	2	NoGas	4068413	1.19	4296857	94.68	30	120	
Rh	103	1	He	1388310	1.03	1652712	84.00	30	120	
In	115	1	He	733359	0.21	852389	86.04	30	120	
Tb	159	1	He	2333422	0.55	2425956	96.19	30	120	
Ho	165	1	He	2398377	1.03	2452680	97.79	30	120	
Bi	209	1	He	1629611	4.00	1810473	90.01	30	120	

Sample Report

Sample Table

Sample Name	240-49236-d-3-b du
Data File Name	114SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:44:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.303	0.303	18.98	1593	0.02	10000	
B	11	45	2	NoGas	211.289	211.289	1.81	744039	0.03	300	
Na	23	45	1	He	42934.049	42934.049	1.37	60947912	0.07	500000	
Mg	24	45	1	He	29538.562	29538.562	2.38	23761462	0.12	500000	
Al	27	45	1	He	5.609	5.609	7.86	3037	0.18	200000	
K	39	45	1	He	2787.543	2787.543	0.63	1820502	0.15	500000	
Ca	44	45	1	He	18151.201	18151.201	1.92	611605	2.97	500000	
Ti	47	45	1	He	0.383	0.383	9.79	78	0.49	2500	
V	51	45	1	He	0.301	0.301	21.30	1786	0.02	10000	
Cr	52	45	1	He	1.311	1.311	5.05	11010	0.01	10000	
Mn	55	45	1	He	0.579	0.579	8.65	2729	0.02	10000	
Fe	56	45	1	He	27.578	27.578	4.90	164353	0.02	200000	
Co	59	103	1	He	0.236	0.236	17.14	2244	0.01	10000	
Ni	60	103	1	He	0.207	0.207	15.01	574	0.04	10000	
Cu	63	103	1	He	1.217	1.217	8.90	9895	0.01	10000	
Zn	66	103	1	He	8.314	8.314	4.07	11444	0.07	10000	
As	75	103	1	He	1.638	1.638	5.87	1507	0.11	10000	
Se	78	103	1	He	0.982	0.982	17.29	92	1.06	10000	
Sr	88	103	1	He	365.406	365.406	2.40	1770495	0.02	10000	
Mo	95	103	1	He	0.628	0.628	23.67	2252	0.03	2000	
Ag	107	103	1	He	0.008	0.008	56.02	103	0.01	300	
Cd	111	103	1	He	0.347	0.347	24.05	1275	0.03	4000	
Sn	118	115	1	He	2.335	2.335	16.96	8847	0.03	2000	
Sb	123	115	1	He	0.405	0.405	14.16	2310	0.02	300	
Ba	137	115	1	He	18.288	18.288	1.88	26436	0.07	10000	
W	182	165	1	He	1.141	1.141	18.13	15052	0.01	2500	
Tl	205	209	1	He	0.227	0.227	24.41	5809	0.00	5000	
Pb	208	209	1	He	0.185	0.185	15.88	6686	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1679284	1.07	1803797	93.10	30	120	
Sc	45	1	He	530406	1.70	574766	92.28	30	120	
Sc	45	2	NoGas	4297488	1.59	4296857	100.01	30	120	
Rh	103	1	He	1462001	1.81	1652712	88.46	30	120	
In	115	1	He	787340	1.10	852389	92.37	30	120	
Tb	159	1	He	2362658	0.58	2425956	97.39	30	120	
Ho	165	1	He	2442586	2.08	2452680	99.59	30	120	
Bi	209	1	He	1738307	1.03	1810473	96.01	30	120	

Sample Report

Sample Table

Sample Name	240-49236-d-3-c ms
Data File Name	115SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:47:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	106.109	106.109	1.95	525835	0.02	10000	
B	11	45	2	NoGas	334.863	334.863	1.14	1126415	0.03	300	>LDR
Na	23	45	1	He	54834.012	54834.012	1.81	76987223	0.07	500000	
Mg	24	45	1	He	41077.815	41077.815	2.00	32687499	0.13	500000	
Al	27	45	1	He	9949.764	9949.764	1.35	4118498	0.24	200000	
K	39	45	1	He	13664.869	13664.869	1.82	8595967	0.16	500000	
Ca	44	45	1	He	28774.415	28774.415	1.80	958789	3.00	500000	
Ti	47	45	1	He	101.438	101.438	3.53	20111	0.50	2500	
V	51	45	1	He	104.324	104.324	1.67	528795	0.02	10000	
Cr	52	45	1	He	104.692	104.692	1.60	653447	0.02	10000	
Mn	55	45	1	He	102.953	102.953	1.59	452860	0.02	10000	
Fe	56	45	1	He	10664.153	10664.153	2.01	60706378	0.02	200000	
Co	59	103	1	He	102.412	102.412	1.01	919400	0.01	10000	
Ni	60	103	1	He	101.393	101.393	0.31	231552	0.04	10000	
Cu	63	103	1	He	102.726	102.726	0.25	627549	0.02	10000	
Zn	66	103	1	He	106.576	106.576	0.90	132668	0.08	10000	
As	75	103	1	He	108.521	108.521	0.83	85214	0.13	10000	
Se	78	103	1	He	106.750	106.750	0.94	6951	1.54	10000	
Sr	88	103	1	He	495.572	495.572	1.43	2311250	0.02	10000	
Mo	95	103	1	He	115.600	115.600	0.45	291076	0.04	2000	
Ag	107	103	1	He	109.609	109.609	0.56	953703	0.01	300	
Cd	111	103	1	He	109.439	109.439	1.71	159759	0.07	4000	
Sn	118	115	1	He	105.996	105.996	0.26	352915	0.03	2000	
Sb	123	115	1	He	108.895	108.895	0.70	384344	0.03	300	
Ba	137	115	1	He	129.515	129.515	1.09	180386	0.07	10000	
W	182	165	1	He	100.530	100.530	0.63	1081136	0.01	2500	
Tl	205	209	1	He	107.991	107.991	3.31	2442167	0.00	5000	
Pb	208	209	1	He	108.312	108.312	2.88	3223726	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1583166	1.07	1803797	87.77	30	120	
Sc	45	1	He	524691	2.00	574766	91.29	30	120	
Sc	45	2	NoGas	4116560	0.41	4296857	95.80	30	120	
Rh	103	1	He	1406916	0.42	1652712	85.13	30	120	
In	115	1	He	758895	0.64	852389	89.03	30	120	
Tb	159	1	He	2337521	0.16	2425956	96.35	30	120	
Ho	165	1	He	2410876	1.39	2452680	98.30	30	120	
Bi	209	1	He	1643649	2.97	1810473	90.79	30	120	

Sample Report

Sample Table

Sample Name	240-49236-a-4-a
Data File Name	116SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:51:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.163	0.163	18.05	841	0.02	10000	
B	11	45	2	NoGas	75.630	75.630	1.04	269107	0.03	300	
Na	23	45	1	He	905.906	905.906	1.47	1344804	0.07	500000	
Mg	24	45	1	He	28.348	28.348	4.39	24180	0.12	500000	
Al	27	45	1	He	52.968	52.968	2.09	23347	0.23	200000	
K	39	45	1	He	47.548	47.548	5.27	91742	0.05	500000	
Ca	44	45	1	He	175.734	175.734	3.66	6587	2.67	500000	
Ti	47	45	1	He	0.407	0.407	6.41	84	0.48	2500	
V	51	45	1	He	0.101	0.101	219.83	777	0.01	10000	
Cr	52	45	1	He	2.001	2.001	3.05	15684	0.01	10000	
Mn	55	45	1	He	5.911	5.911	0.66	27004	0.02	10000	
Fe	56	45	1	He	57.791	57.791	1.54	345543	0.02	200000	
Co	59	103	1	He	0.139	0.139	3.71	1506	0.01	10000	
Ni	60	103	1	He	2.502	2.502	1.18	6748	0.04	10000	
Cu	63	103	1	He	0.426	0.426	7.81	5489	0.01	10000	
Zn	66	103	1	He	3.466	3.466	2.46	5837	0.06	10000	
As	75	103	1	He	0.615	0.615	3.10	757	0.08	10000	
Se	78	103	1	He	0.446	0.446	17.42	63	0.71	10000	
Sr	88	103	1	He	0.707	0.707	2.17	3979	0.02	10000	
Mo	95	103	1	He	0.866	0.866	24.49	3225	0.03	2000	
Ag	107	103	1	He	0.007	0.007	25.24	102	0.01	300	
Cd	111	103	1	He	0.121	0.121	30.79	1047	0.01	4000	
Sn	118	115	1	He	0.850	0.850	21.17	3901	0.02	2000	
Sb	123	115	1	He	0.695	0.695	4.90	3523	0.02	300	
Ba	137	115	1	He	0.713	0.713	7.39	1090	0.07	10000	
W	182	165	1	He	1.472	1.472	14.38	19005	0.01	2500	
Tl	205	209	1	He	0.139	0.139	18.42	4003	0.00	5000	
Pb	208	209	1	He	0.118	0.118	5.44	4916	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1643436	2.47	1803797	91.11	30	120	
Sc	45	1	He	541834	0.95	574766	94.27	30	120	
Sc	45	2	NoGas	4281634	0.11	4296857	99.65	30	120	
Rh	103	1	He	1638439	0.59	1652712	99.14	30	120	
In	115	1	He	823286	0.27	852389	96.59	30	120	
Tb	159	1	He	2433599	1.67	2425956	100.32	30	120	
Ho	165	1	He	2488125	1.17	2452680	101.45	30	120	
Bi	209	1	He	1869843	0.94	1810473	103.28	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	117_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:55:34-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.286	1.916	240641	2.19	50	92.6	89.5	110.5	
B	11	45	2	NoGas	101.835	1.236	365100	1.41	50	203.7	89.5	110.5	CCV Failed
Na	23	45	1	He	25038.435	3.087	38307111	0.45	25000	100.2	89.5	110.5	
Mg	24	45	1	He	25070.174	1.973	21735258	1.57	25000	100.3	89.5	110.5	
Al	27	45	1	He	245.209	2.134	111298	1.67	250	98.1	89.5	110.5	
K	39	45	1	He	25771.782	3.474	17598920	0.72	25000	103.1	89.5	110.5	
Ca	44	45	1	He	24886.976	2.421	903403	1.00	25000	99.5	89.5	110.5	
Ti	47	45	1	He	50.092	4.890	10819	3.41	50	100.2	89.5	110.5	
V	51	45	1	He	50.881	3.396	281020	1.00	50	101.8	89.5	110.5	
Cr	52	45	1	He	49.901	2.398	340849	1.08	50	99.8	89.5	110.5	
Mn	55	45	1	He	249.101	2.925	1193213	0.77	250	99.6	89.5	110.5	
Fe	56	45	1	He	12691.732	3.162	78689837	0.97	12500	101.5	89.5	110.5	
Co	59	103	1	He	47.784	1.525	482107	0.86	50	95.6	89.5	110.5	
Ni	60	103	1	He	47.083	1.884	120875	1.01	50	94.2	89.5	110.5	
Cu	63	103	1	He	47.212	2.123	325396	1.58	50	94.4	89.5	110.5	
Zn	66	103	1	He	48.496	2.691	68282	2.23	50	97.0	89.5	110.5	
As	75	103	1	He	49.258	1.042	43572	1.17	50	98.5	89.5	110.5	
Se	78	103	1	He	49.771	1.646	3657	1.55	50	99.5	89.5	110.5	
Sr	88	103	1	He	50.136	0.860	262915	1.23	50	100.3	89.5	110.5	
Mo	95	103	1	He	49.828	1.721	141375	1.36	50	99.7	89.5	110.5	
Ag	107	103	1	He	49.611	0.943	485120	0.39	50	99.2	89.5	110.5	
Cd	111	103	1	He	50.158	0.950	82729	0.72	50	100.3	89.5	110.5	
Sn	118	115	1	He	50.218	1.066	183693	1.64	50	100.4	89.5	110.5	
Sb	123	115	1	He	53.380	0.460	206927	0.89	50	106.8	89.5	110.5	
Ba	137	115	1	He	52.965	1.444	80852	0.86	50	105.9	89.5	110.5	
W	182	165	1	He	47.587	0.864	540410	0.71	50	95.2	89.5	110.5	
Tl	205	209	1	He	47.224	1.152	1190823	0.85	50	94.4	89.5	110.5	
Pb	208	209	1	He	48.786	1.025	1619185	0.80	50	97.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1660732	0.30	1803797	92.07	30	120	
Sc	45	1	He	571748	3.44	574766	99.47	30	120	
Sc	45	2	NoGas	4338189	0.25	4296857	100.96	30	120	
Rh	103	1	He	1581149	0.87	1652712	95.67	30	120	
In	115	1	He	831692	0.58	852389	97.57	30	120	
Tb	159	1	He	2494625	1.37	2425956	102.83	30	120	
Ho	165	1	He	2538792	0.16	2452680	103.51	30	120	
Bi	209	1	He	1831339	0.83	1810473	101.15	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	118_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:59:24-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.107	23.0	559	21.9	1	
B	11	45	2	NoGas	48.854	2.0	181480	1.7	20	CCB Failed
Na	23	45	1	He	25.669	6.0	69413	0.9	400	
Mg	24	45	1	He	2.905	20.9	3286	13.8	1000	
Al	27	45	1	He	7.635	6.3	4004	2.7	50	
K	39	45	1	He	13.638	28.6	70489	1.1	1000	
Ca	44	45	1	He	4.859	33.3	715	5.6	1000	
Ti	47	45	1	He	0.230	37.7	49	38.8	20	
V	51	45	1	He	0.051	115.8	514	57.9	2	
Cr	52	45	1	He	0.049	30.4	3179	2.0	2	
Mn	55	45	1	He	0.125	11.0	732	7.9	2	
Fe	56	45	1	He	12.286	33.1	78324	28.0	50	
Co	59	103	1	He	0.026	9.5	328	7.2	1	
Ni	60	103	1	He	0.022	24.2	156	8.7	2	
Cu	63	103	1	He	-0.115	-12.9	1665	7.4	2	
Zn	66	103	1	He	0.465	17.9	1518	7.2	20	
As	75	103	1	He	0.088	7.1	277	1.1	2	
Se	78	103	1	He	0.252	19.8	49	8.9	2	
Sr	88	103	1	He	0.079	26.0	573	20.0	10	
Mo	95	103	1	He	0.670	21.0	2667	16.8	2	
Ag	107	103	1	He	0.005	50.4	82	30.7	0.2	
Cd	111	103	1	He	0.138	22.9	1082	5.3	0.2	
Sn	118	115	1	He	0.297	8.3	2004	5.0	10	
Sb	123	115	1	He	0.168	31.6	1585	13.7	1	
Ba	137	115	1	He	0.101	6.5	173	5.8	5	
W	182	165	1	He	1.028	12.2	14496	9.0	10	
Tl	205	209	1	He	0.065	6.9	2122	4.9	0.5	
Pb	208	209	1	He	0.037	10.3	2203	7.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1669206	1.03	1803797	92.54	30	120	
Sc	45	1	He	546969	2.43	574766	95.16	30	120	
Sc	45	2	NoGas	4417705	0.36	4296857	102.81	30	120	
Rh	103	1	He	1646928	1.17	1652712	99.65	30	120	
In	115	1	He	864099	0.35	852389	101.37	30	120	
Tb	159	1	He	2495588	1.26	2425956	102.87	30	120	
Ho	165	1	He	2559122	0.81	2452680	104.34	30	120	
Bi	209	1	He	1897239	2.04	1810473	104.79	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	119_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:03:16-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.862	1.858	241359	2.08	50	93.7	89.5	110.5	
B	11	45	2	NoGas	89.686	1.094	332876	2.05	50	179.4	89.5	110.5	CCV Failed
Na	23	45	1	He	24817.600	3.023	38068348	1.23	25000	99.3	89.5	110.5	
Mg	24	45	1	He	25166.565	5.146	21856723	1.14	25000	100.7	89.5	110.5	
Al	27	45	1	He	246.838	2.993	112297	1.27	250	98.7	89.5	110.5	
K	39	45	1	He	25875.077	4.612	17709033	1.10	25000	103.5	89.5	110.5	
Ca	44	45	1	He	24968.136	3.178	908523	0.99	25000	99.9	89.5	110.5	
Ti	47	45	1	He	49.747	0.799	10780	3.34	50	99.5	89.5	110.5	
V	51	45	1	He	50.611	3.764	280245	1.86	50	101.2	89.5	110.5	
Cr	52	45	1	He	49.894	3.803	341562	0.67	50	99.8	89.5	110.5	
Mn	55	45	1	He	249.702	4.128	1198767	0.11	250	99.9	89.5	110.5	
Fe	56	45	1	He	12657.151	4.396	78648641	0.63	12500	101.3	89.5	110.5	
Co	59	103	1	He	47.716	1.835	479266	0.38	50	95.4	89.5	110.5	
Ni	60	103	1	He	47.703	1.439	121930	1.05	50	95.4	89.5	110.5	
Cu	63	103	1	He	47.222	1.683	324018	0.55	50	94.4	89.5	110.5	
Zn	66	103	1	He	48.950	3.026	68598	1.50	50	97.9	89.5	110.5	
As	75	103	1	He	49.558	1.742	43637	0.48	50	99.1	89.5	110.5	
Se	78	103	1	He	49.383	1.305	3613	0.71	50	98.8	89.5	110.5	
Sr	88	103	1	He	51.298	1.778	267776	0.38	50	102.6	89.5	110.5	
Mo	95	103	1	He	49.926	2.267	141058	3.32	50	99.9	89.5	110.5	
Ag	107	103	1	He	49.611	1.563	482944	0.15	50	99.2	89.5	110.5	
Cd	111	103	1	He	50.559	1.749	83009	0.92	50	101.1	89.5	110.5	
Sn	118	115	1	He	50.293	1.581	186431	1.03	50	100.6	89.5	110.5	
Sb	123	115	1	He	52.889	1.431	207790	0.83	50	105.8	89.5	110.5	
Ba	137	115	1	He	52.737	2.596	81588	2.08	50	105.5	89.5	110.5	
W	182	165	1	He	47.748	1.468	541947	2.01	50	95.5	89.5	110.5	
Tl	205	209	1	He	46.717	0.145	1185453	0.50	50	93.4	89.5	110.5	
Pb	208	209	1	He	48.295	0.065	1612958	0.34	50	96.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1645271	1.19	1803797	91.21	30	120	
Sc	45	1	He	573298	4.11	574766	99.74	30	120	
Sc	45	2	NoGas	4481057	1.01	4296857	104.29	30	120	
Rh	103	1	He	1574234	1.57	1652712	95.25	30	120	
In	115	1	He	842922	0.61	852389	98.89	30	120	
Tb	159	1	He	2478723	1.59	2425956	102.18	30	120	
Ho	165	1	He	2537291	0.56	2452680	103.45	30	120	
Bi	209	1	He	1842752	0.36	1810473	101.78	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	120_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:07:08-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.100	19.8	522	18.9	1	
B	11	45	2	NoGas	39.350	2.1	148336	1.3	20	CCB Failed
Na	23	45	1	He	23.215	9.3	66595	3.1	400	
Mg	24	45	1	He	2.529	30.8	3008	20.0	1000	
Al	27	45	1	He	7.841	2.6	4145	3.6	50	
K	39	45	1	He	16.257	25.3	73054	1.9	1000	
Ca	44	45	1	He	6.081	15.9	767	4.5	1000	
Ti	47	45	1	He	0.128	47.6	28	45.4	20	
V	51	45	1	He	0.071	52.2	632	30.7	2	
Cr	52	45	1	He	0.000	14032.2	2898	5.2	2	
Mn	55	45	1	He	0.092	21.6	588	14.5	2	
Fe	56	45	1	He	11.936	32.3	77248	28.0	50	
Co	59	103	1	He	0.017	15.3	233	12.4	1	
Ni	60	103	1	He	0.007	21.7	118	4.3	2	
Cu	63	103	1	He	-0.109	-21.4	1733	9.4	2	
Zn	66	103	1	He	0.428	7.1	1493	2.4	20	
As	75	103	1	He	0.096	40.2	289	12.0	2	
Se	78	103	1	He	0.321	31.3	55	14.0	2	
Sr	88	103	1	He	0.038	11.3	357	6.5	10	
Mo	95	103	1	He	0.623	24.3	2577	18.2	2	
Ag	107	103	1	He	0.005	29.2	80	16.7	0.2	
Cd	111	103	1	He	0.103	45.8	1041	7.4	0.2	
Sn	118	115	1	He	0.370	16.5	2293	9.8	10	
Sb	123	115	1	He	0.166	28.3	1585	11.9	1	
Ba	137	115	1	He	0.059	21.3	108	18.1	5	
W	182	165	1	He	0.978	14.8	14129	12.1	10	
Tl	205	209	1	He	0.061	20.8	2015	16.2	0.5	
Pb	208	209	1	He	0.035	8.8	2143	4.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1655035	0.94	1803797	91.75	30	120	
Sc	45	1	He	553418	1.97	574766	96.29	30	120	
Sc	45	2	NoGas	4447790	0.94	4296857	103.51	30	120	
Rh	103	1	He	1678863	0.65	1652712	101.58	30	120	
In	115	1	He	869433	0.54	852389	102.00	30	120	
Tb	159	1	He	2481605	0.83	2425956	102.29	30	120	
Ho	165	1	He	2594555	0.40	2452680	105.78	30	120	
Bi	209	1	He	1900457	0.24	1810473	104.97	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	121CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:11:01-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.994	0.994	8.030	5182	6.93	1	99.4	69.5	130.5	
B	11	2	NoGas	53.832	53.832	0.677	201680	1.46	20	269.2	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1085.782	1085.782	1.207	1693350	0.77	1000	108.6	69.5	130.5	
Mg	24	1	He	1038.751	1038.751	1.505	901462	2.00	1000	103.9	69.5	130.5	
Al	27	1	He	50.135	50.135	1.056	23349	1.96	50	100.3	69.5	130.5	
K	39	1	He	1071.265	1071.265	0.963	793468	0.51	1000	107.1	69.5	130.5	
Ca	44	1	He	1036.926	1036.926	2.272	38188	1.68	1000	103.7	69.5	130.5	
Ti	47	1	He	9.727	9.727	6.517	2103	7.58	10	97.3	69.5	130.5	
V	51	1	He	5.229	5.229	3.481	29112	2.22	5	104.6	69.5	130.5	
Cr	52	1	He	3.726	3.726	1.490	28224	2.48	2	186.3	69.5	130.5	6020A CR1 Failed
Mn	55	1	He	5.469	5.469	2.676	26361	1.86	5	109.4	69.5	130.5	
Fe	56	1	He	111.843	111.843	1.068	699554	0.21	100	111.8	69.5	130.5	
Co	59	1	He	0.974	0.974	1.666	10333	1.80	1	97.4	69.5	130.5	
Ni	60	1	He	2.649	2.649	2.308	7209	2.38	2	132.5	69.5	130.5	6020A CR1 Failed
Cu	63	1	He	1.820	1.820	0.732	15525	0.76	2	91.0	69.5	130.5	
Zn	66	1	He	19.517	19.517	1.586	29267	1.69	20	97.6	69.5	130.5	
As	75	1	He	4.937	4.937	2.097	4748	2.08	5	98.7	69.5	130.5	
Se	78	1	He	4.889	4.889	1.269	403	1.32	5	97.8	69.5	130.5	
Sr	88	1	He	9.959	9.959	0.992	54768	1.13	10	99.6	69.5	130.5	
Mo	95	1	He	10.091	10.091	1.433	30517	1.39	10	100.9	69.5	130.5	
Ag	107	1	He	1.001	1.001	3.643	10278	3.58	1	100.1	69.5	130.5	
Cd	111	1	He	1.079	1.079	2.477	2695	1.79	1	107.9	69.5	130.5	
Sn	118	1	He	9.929	9.929	1.107	38964	0.78	10	99.3	69.5	130.5	
Sb	123	1	He	1.913	1.913	1.071	8699	1.00	2	95.6	69.5	130.5	
Ba	137	1	He	5.239	5.239	1.497	8436	1.42	5	104.8	69.5	130.5	
W	182	1	He	9.545	9.545	2.887	112547	2.18	10	95.4	69.5	130.5	
Tl	205	1	He	1.912	1.912	1.290	50996	1.10	2	95.6	69.5	130.5	
Pb	208	1	He	1.066	1.066	0.623	38046	0.60	1	106.6	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1665038	1.06	1803797	92.31	30	120	
Sc	45	1	He	571497	1.22	574766	99.43	30	120	
Sc	45	2	NoGas	4468930	1.13	4296857	104.00	30	120	
Rh	103	1	He	1654602	0.15	1652712	100.11	30	120	
In	115	1	He	875951	0.31	852389	102.76	30	120	
Tb	159	1	He	2540368	1.29	2425956	104.72	30	120	
Ho	165	1	He	2583572	1.61	2452680	105.34	30	120	
Bi	209	1	He	1922056	0.28	1810473	106.16	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176562/1-a@2
Data File Name	122_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:14:54-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.106	10.8	544	10.8	1	
B	11	45	2	NoGas	41.570	0.1	148499	0.3	20	Blank Failed
Na	23	45	1	He	57.383	1.0	114977	1.8	400	
Mg	24	45	1	He	30.969	1.5	26376	2.3	1000	
Al	27	45	1	He	6.330	3.0	3417	1.4	50	
K	39	45	1	He	42.305	6.1	88530	2.8	1000	
Ca	44	45	1	He	99.269	5.3	3962	3.8	1000	
Ti	47	45	1	He	0.581	97.5	120	96.6	20	
V	51	45	1	He	0.291	10.9	1774	9.7	2	
Cr	52	45	1	He	1.174	5.5	10386	3.3	2	
Mn	55	45	1	He	0.555	6.8	2685	5.5	2	
Fe	56	45	1	He	14.559	2.0	91505	2.7	50	
Co	59	103	1	He	0.047	15.5	534	14.0	1	
Ni	60	103	1	He	0.206	8.9	627	7.5	2	
Cu	63	103	1	He	0.334	9.5	4720	3.6	2	
Zn	66	103	1	He	2.418	4.6	4227	4.9	20	
As	75	103	1	He	0.346	12.8	500	9.1	2	
Se	78	103	1	He	0.325	16.1	53	6.5	2	
Sr	88	103	1	He	0.606	3.6	3354	3.6	10	
Mo	95	103	1	He	0.234	25.1	1340	11.6	2	
Ag	107	103	1	He	0.006	22.0	88	13.3	0.2	
Cd	111	103	1	He	0.116	39.3	1015	8.2	0.2	
Sn	118	115	1	He	17.586	2.5	64259	2.6	10	Blank Failed
Sb	123	115	1	He	0.102	21.1	1257	6.3	1	
Ba	137	115	1	He	1.144	7.0	1741	6.3	5	
W	182	165	1	He	0.570	19.7	9021	12.7	10	
Tl	205	209	1	He	0.087	14.4	2698	13.2	0.5	
Pb	208	209	1	He	0.237	7.2	9122	5.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1633978	0.54	1803797	90.59	30	120	
Sc	45	1	He	542783	1.07	574766	94.44	30	120	
Sc	45	2	NoGas	4223623	0.24	4296857	98.30	30	120	
Rh	103	1	He	1600315	1.18	1652712	96.83	30	120	
In	115	1	He	823806	0.72	852389	96.65	30	120	
Tb	159	1	He	2420800	0.63	2425956	99.79	30	120	
Ho	165	1	He	2486334	1.08	2452680	101.37	30	120	
Bi	209	1	He	1908848	1.14	1810473	105.43	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176562/2-a@2
Data File Name	123LCSS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:18:45-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	516.347	516.347	0.859	2559295	0.76	500	103.3	78.6	110.5	
B	11	2	NoGas	92.160	92.160	1.001	315678	1.77	50	184.3	79.5	120.5	LCSS Failed
Na	23	1	He	5217.730	5217.730	1.660	7414099	0.31	5000	104.4	79.5	120.5	
Mg	24	1	He	5162.824	5162.824	0.588	4143484	0.78	5000	103.3	79.5	120.5	
Al	27	1	He	4988.215	4988.215	0.881	2082183	0.53	5000	99.8	79.5	120.5	
K	39	1	He	5346.061	5346.061	1.334	3427097	0.48	5000	106.9	79.5	120.5	
Ca	44	1	He	4819.061	4819.061	1.177	162352	1.13	5000	96.4	79.5	120.5	
Ti	47	1	He	50.934	50.934	3.193	10183	1.85	50	101.9	79.5	120.5	
V	51	1	He	530.696	530.696	1.988	2711106	0.85	500	106.1	71.5	110.5	
Cr	52	1	He	522.413	522.413	1.428	3276698	1.16	500	104.5	69.5	110.5	
Mn	55	1	He	522.104	522.104	1.008	2315019	0.83	500	104.4	79.5	120.5	
Fe	56	1	He	5232.765	5232.765	2.103	30035104	0.80	5000	104.7	79.5	120.5	
Co	59	1	He	472.206	472.206	2.918	4634869	1.32	500	94.4	73.9	110.5	
Ni	60	1	He	457.963	457.963	2.614	1143198	0.90	500	91.6	74.9	110.5	
Cu	63	1	He	480.194	480.194	1.931	3199190	0.68	500	96.0	72.6	110.5	
Zn	66	1	He	450.887	450.887	2.402	611161	0.70	500	90.2	71.5	113.4	
As	75	1	He	452.289	452.289	2.019	387760	0.28	500	90.5	73.4	110.5	
Se	78	1	He	444.767	444.767	1.928	31581	0.59	500	89.0	64.6	110.5	
Sr	88	1	He	509.195	509.195	1.445	2597024	0.95	500	101.8	79.5	120.5	
Mo	95	1	He	52.584	52.584	1.683	145137	0.27	50	105.2	29.5	140.5	
Ag	107	1	He	49.779	49.779	2.224	473609	0.41	50	99.6	59.5	114.5	
Cd	111	1	He	477.150	477.150	1.853	759014	0.09	500	95.4	73.5	110.5	
Sn	118	1	He	576.661	576.661	0.382	1977986	0.71	500	115.3	79.5	120.5	
Sb	123	1	He	51.944	51.944	0.149	189643	0.33	50	103.9	67.5	113.4	
Ba	137	1	He	523.849	523.849	0.658	752957	0.23	500	104.8	69.5	110.5	
W	182	1	He	48.016	48.016	1.196	533197	1.17	50	96.0	74.6	125.4	
Tl	205	1	He	119.087	119.087	0.939	2995799	1.03	125	95.3	70.6	110.5	
Pb	208	1	He	483.840	483.840	0.783	16015057	0.72	500	96.8	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1583484	1.59	1803797	87.79	30	120	
Sc	45	1	He	528977	1.36	574766	92.03	30	120	
Sc	45	2	NoGas	4137546	0.83	4296857	96.29	30	120	
Rh	103	1	He	1538755	1.81	1652712	93.10	30	120	
In	115	1	He	783201	0.43	852389	91.88	30	120	
Tb	159	1	He	2392760	0.61	2425956	98.63	30	120	
Ho	165	1	He	2482621	0.53	2452680	101.22	30	120	
Bi	209	1	He	1827238	0.09	1810473	100.93	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-2-j@2
Data File Name	124SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:22:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.086	2.086	1.81	10529	0.02	10000	
B	11	45	2	NoGas	40.212	40.212	0.85	147627	0.03	300	
Na	23	45	1	He	144.209	144.209	1.67	244431	0.06	500000	
Mg	24	45	1	He	7238.128	7238.128	0.51	6043868	0.12	500000	
Al	27	45	1	He	48705.616	48705.616	1.01	21146937	0.23	200000	
K	39	45	1	He	2435.041	2435.041	1.56	1658136	0.15	500000	
Ca	44	45	1	He	10696.980	10696.980	0.74	374293	2.86	500000	
Ti	47	45	1	He	351.954	351.954	1.10	73222	0.48	2500	
V	51	45	1	He	101.943	101.943	0.95	542118	0.02	10000	
Cr	52	45	1	He	73.538	73.538	0.39	482400	0.02	10000	
Mn	55	45	1	He	1986.143	1986.143	0.69	9162585	0.02	10000	
Fe	56	45	1	He	90959.767	90959.767	0.50	543192458	0.02	200000	
Co	59	103	1	He	29.692	29.692	1.85	287694	0.01	10000	
Ni	60	103	1	He	188.498	188.498	1.94	464465	0.04	10000	
Cu	63	103	1	He	48.884	48.884	2.34	323454	0.02	10000	
Zn	66	103	1	He	285.908	285.908	1.75	382774	0.07	10000	
As	75	103	1	He	42.147	42.147	2.22	35824	0.12	10000	
Se	78	103	1	He	4.366	4.366	7.12	333	1.31	10000	
Sr	88	103	1	He	36.181	36.181	1.75	182227	0.02	10000	
Mo	95	103	1	He	7.197	7.197	1.22	20160	0.04	2000	
Ag	107	103	1	He	0.222	0.222	6.78	2118	0.01	300	
Cd	111	103	1	He	0.953	0.953	7.90	2276	0.04	4000	
Sn	118	115	1	He	20.320	20.320	1.56	72388	0.03	2000	
Sb	123	115	1	He	0.712	0.712	3.22	3507	0.02	300	
Ba	137	115	1	He	262.761	262.761	0.59	387974	0.07	10000	
W	182	165	1	He	0.899	0.899	11.47	13043	0.01	2500	
Tl	205	209	1	He	0.811	0.811	4.68	21303	0.00	5000	
Pb	208	209	1	He	78.710	78.710	0.86	2669772	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1612005	1.23	1803797	89.37	30	120	
Sc	45	1	He	550359	0.67	574766	95.75	30	120	
Sc	45	2	NoGas	4335213	1.20	4296857	100.89	30	120	
Rh	103	1	He	1518486	1.24	1652712	91.88	30	120	
In	115	1	He	804528	0.55	852389	94.39	30	120	
Tb	159	1	He	2492632	1.03	2425956	102.75	30	120	
Ho	165	1	He	2559650	0.94	2452680	104.36	30	120	
Bi	209	1	He	1871968	0.54	1810473	103.40	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49071-a-2-j@10
Data File Name	125SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:26:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.476	0.476	9.16	2478	0.02	10000	
B	11	45	2	NoGas	27.767	27.767	1.88	105951	0.03	300	
Na	23	45	1	He	42.461	42.461	0.27	98461	0.04	500000	
Mg	24	45	1	He	1502.358	1502.358	1.57	1306064	0.12	500000	
Al	27	45	1	He	10100.842	10100.842	2.02	4563868	0.22	200000	
K	39	45	1	He	478.721	478.721	2.29	391005	0.12	500000	
Ca	44	45	1	He	2181.674	2181.674	2.25	79880	2.73	500000	
Ti	47	45	1	He	72.918	72.918	0.68	15789	0.46	2500	
V	51	45	1	He	20.438	20.438	1.69	113303	0.02	10000	
Cr	52	45	1	He	14.931	14.931	0.93	104318	0.01	10000	
Mn	55	45	1	He	419.953	419.953	2.39	2015767	0.02	10000	
Fe	56	45	1	He	18609.963	18609.963	1.92	115638315	0.02	200000	
Co	59	103	1	He	5.884	5.884	1.69	62660	0.01	10000	
Ni	60	103	1	He	36.738	36.738	2.49	99501	0.04	10000	
Cu	63	103	1	He	9.551	9.551	1.70	71439	0.01	10000	
Zn	66	103	1	He	57.865	57.865	2.91	85766	0.07	10000	
As	75	103	1	He	8.341	8.341	2.70	7946	0.10	10000	
Se	78	103	1	He	1.052	1.052	15.67	111	0.95	10000	
Sr	88	103	1	He	7.169	7.169	0.69	39779	0.02	10000	
Mo	95	103	1	He	1.223	1.223	3.45	4344	0.03	2000	
Ag	107	103	1	He	0.042	0.042	9.06	462	0.01	300	
Cd	111	103	1	He	0.180	0.180	19.36	1167	0.02	4000	
Sn	118	115	1	He	3.795	3.795	3.94	15259	0.02	2000	
Sb	123	115	1	He	0.045	0.045	33.84	1091	0.00	300	
Ba	137	115	1	He	52.205	52.205	0.71	82940	0.06	10000	
W	182	165	1	He	0.190	0.190	11.22	5157	0.00	2500	
Tl	205	209	1	He	0.172	0.172	3.08	5071	0.00	5000	
Pb	208	209	1	He	16.090	16.090	0.46	571543	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1659497	0.68	1803797	92.00	30	120	
Sc	45	1	He	572793	2.28	574766	99.66	30	120	
Sc	45	2	NoGas	4426783	1.22	4296857	103.02	30	120	
Rh	103	1	He	1667816	1.21	1652712	100.91	30	120	
In	115	1	He	865547	0.23	852389	101.54	30	120	
Tb	159	1	He	2580498	0.78	2425956	106.37	30	120	
Ho	165	1	He	2659740	1.70	2452680	108.44	30	120	
Bi	209	1	He	1957705	0.34	1810473	108.13	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49071-a-2-j@2
Data File Name	126SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:30:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1089.759	1089.759	1.07	5282455	0.02	10000	
B	11	45	2	NoGas	141.655	141.655	0.65	494548	0.03	300	
Na	23	45	1	He	10410.586	10410.586	0.75	15339449	0.07	500000	
Mg	24	45	1	He	17029.083	17029.083	1.34	14196926	0.12	500000	
Al	27	45	1	He	56498.854	56498.854	1.42	24495098	0.23	200000	
K	39	45	1	He	12808.907	12808.907	2.26	8444310	0.15	500000	
Ca	44	45	1	He	19743.551	19743.551	1.38	689403	2.86	500000	
Ti	47	45	1	He	443.533	443.533	1.25	92142	0.48	2500	
V	51	45	1	He	1151.361	1151.361	1.55	6111120	0.02	10000	
Cr	52	45	1	He	1109.198	1109.198	0.88	7225981	0.02	10000	
Mn	55	45	1	He	2963.396	2963.396	1.74	13650115	0.02	10000	
Fe	56	45	1	He	97519.255	97519.255	1.71	581485470	0.02	200000	
Co	59	103	1	He	1052.184	1052.184	1.27	9942371	0.01	10000	
Ni	60	103	1	He	1228.029	1228.029	1.65	2950790	0.04	10000	
Cu	63	103	1	He	1062.625	1062.625	1.76	6811624	0.02	10000	
Zn	66	103	1	He	1317.487	1317.487	2.03	1717525	0.08	10000	
As	75	103	1	He	1039.844	1039.844	0.82	857947	0.12	10000	
Se	78	103	1	He	995.610	995.610	0.92	68017	1.46	10000	
Sr	88	103	1	He	1134.538	1134.538	1.35	5569574	0.02	10000	
Mo	95	103	1	He	122.895	122.895	1.52	325664	0.04	2000	
Ag	107	103	1	He	106.500	106.500	1.28	975371	0.01	300	
Cd	111	103	1	He	1099.641	1099.641	0.99	1682836	0.07	4000	
Sn	118	115	1	He	1205.385	1205.385	1.25	4076586	0.03	2000	
Sb	123	115	1	He	112.774	112.774	0.52	405094	0.03	300	
Ba	137	115	1	He	1491.513	1491.513	1.34	2114289	0.07	10000	
W	182	165	1	He	101.861	101.861	0.79	1143237	0.01	2500	
Tl	205	209	1	He	252.906	252.906	0.87	6277613	0.00	5000	
Pb	208	209	1	He	1108.993	1108.993	0.14	36221982	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1548432	0.33	1803797	85.84	30	120	
Sc	45	1	He	549628	1.80	574766	95.63	30	120	
Sc	45	2	NoGas	4243862	0.55	4296857	98.77	30	120	
Rh	103	1	He	1480982	1.14	1652712	89.61	30	120	
In	115	1	He	772408	0.32	852389	90.62	30	120	
Tb	159	1	He	2456849	0.54	2425956	101.27	30	120	
Ho	165	1	He	2515978	0.06	2452680	102.58	30	120	
Bi	209	1	He	1803121	0.34	1810473	99.59	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-2-k du@2
Data File Name	127SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:33:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.163	2.163	1.50	10926	0.02	10000	
B	11	45	2	NoGas	35.147	35.147	0.47	130354	0.03	300	
Na	23	45	1	He	136.094	136.094	1.99	231309	0.06	500000	
Mg	24	45	1	He	7255.861	7255.861	1.31	6028418	0.12	500000	
Al	27	45	1	He	48732.536	48732.536	1.30	21053596	0.23	200000	
K	39	45	1	He	2500.649	2500.649	1.33	1692595	0.15	500000	
Ca	44	45	1	He	4960.156	4960.156	1.69	172984	2.87	500000	
Ti	47	45	1	He	363.752	363.752	1.53	75297	0.48	2500	
V	51	45	1	He	105.622	105.622	0.74	558895	0.02	10000	
Cr	52	45	1	He	76.472	76.472	1.08	499038	0.02	10000	
Mn	55	45	1	He	1736.328	1736.328	2.05	7969608	0.02	10000	
Fe	56	45	1	He	95214.256	95214.256	2.09	565720991	0.02	200000	
Co	59	103	1	He	27.832	27.832	1.52	270612	0.01	10000	
Ni	60	103	1	He	137.234	137.234	0.81	339380	0.04	10000	
Cu	63	103	1	He	48.909	48.909	2.03	324726	0.02	10000	
Zn	66	103	1	He	282.797	282.797	2.55	379873	0.07	10000	
As	75	103	1	He	43.570	43.570	2.15	37154	0.12	10000	
Se	78	103	1	He	4.582	4.582	9.94	349	1.31	10000	
Sr	88	103	1	He	21.355	21.355	2.36	107964	0.02	10000	
Mo	95	103	1	He	8.206	8.206	3.67	22966	0.04	2000	
Ag	107	103	1	He	0.225	0.225	6.18	2150	0.01	300	
Cd	111	103	1	He	1.026	1.026	2.86	2399	0.04	4000	
Sn	118	115	1	He	23.015	23.015	1.83	81483	0.03	2000	
Sb	123	115	1	He	0.883	0.883	8.31	4123	0.02	300	
Ba	137	115	1	He	251.270	251.270	0.15	369239	0.07	10000	
W	182	165	1	He	1.366	1.366	16.48	18445	0.01	2500	
Tl	205	209	1	He	0.953	0.953	8.12	24427	0.00	5000	
Pb	208	209	1	He	81.552	81.552	1.60	2707805	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1613038	0.90	1803797	89.42	30	120	
Sc	45	1	He	547646	1.21	574766	95.28	30	120	
Sc	45	2	NoGas	4354249	0.25	4296857	101.34	30	120	
Rh	103	1	He	1523837	2.18	1652712	92.20	30	120	
In	115	1	He	800681	0.47	852389	93.93	30	120	
Tb	159	1	He	2474587	1.19	2425956	102.00	30	120	
Ho	165	1	He	2569674	1.61	2452680	104.77	30	120	
Bi	209	1	He	1832758	1.66	1810473	101.23	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-2-I ms@2
Data File Name	128SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:37:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	50.079	50.079	2.50	248821	0.02	10000	
B	11	45	2	NoGas	69.678	69.678	0.72	247642	0.03	300	
Na	23	45	1	He	4854.949	4854.949	0.90	7217822	0.07	500000	
Mg	24	45	1	He	12540.664	12540.664	0.44	10524837	0.12	500000	
Al	27	45	1	He	58146.294	58146.294	0.59	25377165	0.23	200000	
K	39	45	1	He	7126.149	7126.149	1.63	4757187	0.15	500000	
Ca	44	45	1	He	9925.244	9925.244	1.25	349131	2.84	500000	
Ti	47	45	1	He	436.432	436.432	0.53	91268	0.48	2500	
V	51	45	1	He	159.909	159.909	0.22	854645	0.02	10000	
Cr	52	45	1	He	122.541	122.541	0.39	806089	0.02	10000	
Mn	55	45	1	He	2103.593	2103.593	0.78	9754809	0.02	10000	
Fe	56	45	1	He	101343.029	101343.029	0.50	608334180	0.02	200000	
Co	59	103	1	He	77.167	77.167	2.01	738552	0.01	10000	
Ni	60	103	1	He	205.448	205.448	2.07	500085	0.04	10000	
Cu	63	103	1	He	96.759	96.759	1.65	630305	0.02	10000	
Zn	66	103	1	He	357.279	357.279	1.58	472352	0.08	10000	
As	75	103	1	He	90.746	90.746	2.10	75992	0.12	10000	
Se	78	103	1	He	45.863	45.863	2.21	3200	1.43	10000	
Sr	88	103	1	He	72.976	72.976	2.44	362927	0.02	10000	
Mo	95	103	1	He	56.957	56.957	1.87	153215	0.04	2000	
Ag	107	103	1	He	47.494	47.494	1.79	440576	0.01	300	
Cd	111	103	1	He	48.087	48.087	1.88	75271	0.06	4000	
Sn	118	115	1	He	56.204	56.204	0.92	196316	0.03	2000	
Sb	123	115	1	He	13.890	13.890	0.35	52065	0.03	300	
Ba	137	115	1	He	326.148	326.148	1.77	475624	0.07	10000	
W	182	165	1	He	35.307	35.307	1.27	403360	0.01	2500	
Tl	205	209	1	He	43.484	43.484	1.35	1091260	0.00	5000	
Pb	208	209	1	He	134.115	134.115	0.13	4428217	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1587718	2.67	1803797	88.02	30	120	
Sc	45	1	He	553202	0.13	574766	96.25	30	120	
Sc	45	2	NoGas	4268910	0.98	4296857	99.35	30	120	
Rh	103	1	He	1500216	1.87	1652712	90.77	30	120	
In	115	1	He	794631	0.60	852389	93.22	30	120	
Tb	159	1	He	2493470	0.69	2425956	102.78	30	120	
Ho	165	1	He	2549533	0.62	2452680	103.95	30	120	
Bi	209	1	He	1822449	0.43	1810473	100.66	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-3-b@2
Data File Name	129SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:41:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.660	2.660	6.19	13383	0.02	10000	
B	11	45	2	NoGas	35.959	35.959	0.34	132489	0.03	300	
Na	23	45	1	He	174.972	174.972	1.23	287615	0.06	500000	
Mg	24	45	1	He	14055.169	14055.169	0.81	11650132	0.12	500000	
Al	27	45	1	He	45099.527	45099.527	1.53	19439627	0.23	200000	
K	39	45	1	He	3564.486	3564.486	1.68	2380871	0.15	500000	
Ca	44	45	1	He	26378.766	26378.766	0.65	915513	2.88	500000	
Ti	47	45	1	He	376.389	376.389	0.44	77739	0.48	2500	
V	51	45	1	He	94.513	94.513	0.87	498988	0.02	10000	
Cr	52	45	1	He	86.613	86.613	1.00	563546	0.02	10000	
Mn	55	45	1	He	3514.509	3514.509	1.36	16095846	0.02	10000	
Fe	56	45	1	He	106876.772	106876.772	0.28	633618855	0.02	200000	
Co	59	103	1	He	41.541	41.541	3.71	405243	0.01	10000	
Ni	60	103	1	He	98.597	98.597	3.93	244643	0.04	10000	
Cu	63	103	1	He	61.276	61.276	3.88	407638	0.02	10000	
Zn	66	103	1	He	289.760	289.760	3.91	390551	0.07	10000	
As	75	103	1	He	52.943	52.943	3.92	45261	0.12	10000	
Se	78	103	1	He	4.170	4.170	3.75	322	1.30	10000	
Sr	88	103	1	He	55.449	55.449	4.15	281070	0.02	10000	
Mo	95	103	1	He	7.095	7.095	3.79	20024	0.04	2000	
Ag	107	103	1	He	0.168	0.168	10.72	1616	0.01	300	
Cd	111	103	1	He	0.868	0.868	7.82	2155	0.04	4000	
Sn	118	115	1	He	17.085	17.085	0.96	60549	0.03	2000	
Sb	123	115	1	He	0.591	0.591	1.44	3033	0.02	300	
Ba	137	115	1	He	290.298	290.298	0.80	425528	0.07	10000	
W	182	165	1	He	0.739	0.739	11.65	11268	0.01	2500	
Tl	205	209	1	He	0.816	0.816	2.95	20731	0.00	5000	
Pb	208	209	1	He	90.961	90.961	0.92	2983051	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1607789	1.22	1803797	89.13	30	120	
Sc	45	1	He	546363	0.29	574766	95.06	30	120	
Sc	45	2	NoGas	4330184	1.03	4296857	100.78	30	120	
Rh	103	1	He	1530182	4.08	1652712	92.59	30	120	
In	115	1	He	798671	0.63	852389	93.70	30	120	
Tb	159	1	He	2485280	0.57	2425956	102.45	30	120	
Ho	165	1	He	2571701	1.23	2452680	104.85	30	120	
Bi	209	1	He	1810020	0.68	1810473	99.97	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-4-b@2
Data File Name	130SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:45:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.626	2.626	0.87	13265	0.02	10000	
B	11	45	2	NoGas	34.590	34.590	2.39	129072	0.03	300	
Na	23	45	1	He	169.366	169.366	1.68	283335	0.06	500000	
Mg	24	45	1	He	13330.450	13330.450	0.81	11204402	0.12	500000	
Al	27	45	1	He	46166.447	46166.447	1.14	20178982	0.23	200000	
K	39	45	1	He	3948.787	3948.787	0.60	2667940	0.15	500000	
Ca	44	45	1	He	32257.121	32257.121	1.13	1135194	2.84	500000	
Ti	47	45	1	He	355.796	355.796	0.56	74520	0.48	2500	
V	51	45	1	He	93.288	93.288	1.42	499439	0.02	10000	
Cr	52	45	1	He	88.434	88.434	0.21	583427	0.02	10000	
Mn	55	45	1	He	2310.727	2310.727	0.89	10731489	0.02	10000	
Fe	56	45	1	He	109326.927	109326.927	0.17	657268881	0.02	200000	
Co	59	103	1	He	36.743	36.743	2.98	352913	0.01	10000	
Ni	60	103	1	He	101.450	101.450	2.92	247850	0.04	10000	
Cu	63	103	1	He	76.833	76.833	3.35	502661	0.02	10000	
Zn	66	103	1	He	310.567	310.567	2.98	412106	0.08	10000	
As	75	103	1	He	58.634	58.634	2.53	49343	0.12	10000	
Se	78	103	1	He	4.398	4.398	9.94	332	1.32	10000	
Sr	88	103	1	He	73.145	73.145	3.67	364998	0.02	10000	
Mo	95	103	1	He	6.795	6.795	3.86	18902	0.04	2000	
Ag	107	103	1	He	0.177	0.177	6.59	1681	0.01	300	
Cd	111	103	1	He	0.905	0.905	1.48	2182	0.04	4000	
Sn	118	115	1	He	18.797	18.797	1.19	66044	0.03	2000	
Sb	123	115	1	He	0.625	0.625	3.31	3135	0.02	300	
Ba	137	115	1	He	301.016	301.016	1.07	437909	0.07	10000	
W	182	165	1	He	0.433	0.433	3.11	7591	0.01	2500	
Tl	205	209	1	He	0.800	0.800	1.56	20246	0.00	5000	
Pb	208	209	1	He	100.024	100.024	0.14	3267824	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1612968	2.41	1803797	89.42	30	120	
Sc	45	1	He	554048	0.62	574766	96.40	30	120	
Sc	45	2	NoGas	4378193	0.93	4296857	101.89	30	120	
Rh	103	1	He	1506091	3.42	1652712	91.13	30	120	
In	115	1	He	792737	1.24	852389	93.00	30	120	
Tb	159	1	He	2472482	0.23	2425956	101.92	30	120	
Ho	165	1	He	2512012	0.48	2452680	102.42	30	120	
Bi	209	1	He	1803136	0.36	1810473	99.59	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	131_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:48:53-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.404	2.860	236833	2.46	50	92.8	89.5	110.5	
B	11	45	2	NoGas	61.180	0.997	224311	0.76	50	122.4	89.5	110.5	CCV Failed
Na	23	45	1	He	25188.343	3.269	38025132	0.87	25000	100.8	89.5	110.5	
Mg	24	45	1	He	25062.730	2.267	21438500	0.39	25000	100.3	89.5	110.5	
Al	27	45	1	He	248.870	1.522	111454	0.95	250	99.5	89.5	110.5	
K	39	45	1	He	25994.556	3.034	17517078	0.68	25000	104.0	89.5	110.5	
Ca	44	45	1	He	24797.395	2.089	888254	0.47	25000	99.2	89.5	110.5	
Ti	47	45	1	He	50.154	2.571	10697	4.03	50	100.3	89.5	110.5	
V	51	45	1	He	51.056	1.712	278358	1.91	50	102.1	89.5	110.5	
Cr	52	45	1	He	50.285	1.529	338934	0.99	50	100.6	89.5	110.5	
Mn	55	45	1	He	251.786	1.873	1190326	1.09	250	100.7	89.5	110.5	
Fe	56	45	1	He	12734.251	2.135	77921379	0.78	12500	101.9	89.5	110.5	
Co	59	103	1	He	46.571	1.557	482503	1.46	50	93.1	89.5	110.5	
Ni	60	103	1	He	46.464	2.089	122495	1.85	50	92.9	89.5	110.5	
Cu	63	103	1	He	46.367	0.782	328209	0.60	50	92.7	89.5	110.5	
Zn	66	103	1	He	47.286	1.625	68389	1.33	50	94.6	89.5	110.5	
As	75	103	1	He	47.806	0.462	43428	0.33	50	95.6	89.5	110.5	
Se	78	103	1	He	47.908	1.450	3616	1.44	50	95.8	89.5	110.5	
Sr	88	103	1	He	49.094	0.415	264356	0.41	50	98.2	89.5	110.5	
Mo	95	103	1	He	49.054	2.476	142931	2.50	50	98.1	89.5	110.5	
Ag	107	103	1	He	48.948	0.798	491491	0.66	50	97.9	89.5	110.5	
Cd	111	103	1	He	49.251	0.686	83428	0.41	50	98.5	89.5	110.5	
Sn	118	115	1	He	49.828	0.818	185330	1.28	50	99.7	89.5	110.5	
Sb	123	115	1	He	52.714	0.800	207780	0.39	50	105.4	89.5	110.5	
Ba	137	115	1	He	52.718	1.690	81826	1.33	50	105.4	89.5	110.5	
W	182	165	1	He	47.081	0.269	545141	1.33	50	94.2	89.5	110.5	
Tl	205	209	1	He	47.134	1.635	1207231	1.06	50	94.3	89.5	110.5	
Pb	208	209	1	He	48.396	0.994	1631499	0.45	50	96.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1630467	0.75	1803797	90.39	30	120	
Sc	45	1	He	564070	2.47	574766	98.14	30	120	
Sc	45	2	NoGas	4389487	0.66	4296857	102.16	30	120	
Rh	103	1	He	1623545	0.29	1652712	98.24	30	120	
In	115	1	He	845652	0.68	852389	99.21	30	120	
Tb	159	1	He	2531013	1.35	2425956	104.33	30	120	
Ho	165	1	He	2588366	1.23	2452680	105.53	30	120	
Bi	209	1	He	1860133	0.57	1810473	102.74	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	132_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:52:45-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.072	21.0	382	22.1	1	
B	11	45	2	NoGas	15.957	2.4	64163	1.6	20	
Na	23	45	1	He	16.112	10.5	56075	3.2	400	
Mg	24	45	1	He	2.148	28.2	2689	17.7	1000	
Al	27	45	1	He	9.840	0.4	5015	1.0	50	
K	39	45	1	He	7.201	12.4	67091	0.7	1000	
Ca	44	45	1	He	4.533	9.2	712	3.0	1000	
Ti	47	45	1	He	0.165	15.9	36	14.3	20	
V	51	45	1	He	0.060	200.0	568	111.6	2	
Cr	52	45	1	He	-0.054	-28.7	2541	4.2	2	
Mn	55	45	1	He	0.202	13.4	1098	10.3	2	
Fe	56	45	1	He	18.127	22.2	114493	20.0	50	
Co	59	103	1	He	0.015	24.4	223	18.3	1	
Ni	60	103	1	He	0.016	38.8	142	12.0	2	
Cu	63	103	1	He	-0.157	-7.9	1408	6.3	2	
Zn	66	103	1	He	0.504	16.3	1626	8.1	20	
As	75	103	1	He	0.025	19.4	226	1.5	2	
Se	78	103	1	He	0.240	31.5	49	12.6	2	
Sr	88	103	1	He	0.025	94.3	284	45.2	10	
Mo	95	103	1	He	0.567	36.1	2437	25.5	2	
Ag	107	103	1	He	0.002	102.3	52	37.4	0.2	
Cd	111	103	1	He	0.045	27.3	953	2.9	0.2	
Sn	118	115	1	He	0.245	12.5	1837	6.2	10	
Sb	123	115	1	He	0.101	43.7	1339	13.3	1	
Ba	137	115	1	He	0.038	60.7	74	49.3	5	
W	182	165	1	He	0.875	17.9	13136	14.2	10	
Tl	205	209	1	He	0.043	21.3	1572	15.3	0.5	
Pb	208	209	1	He	0.037	4.9	2246	2.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1663877	1.21	1803797	92.24	30	120	
Sc	45	1	He	553222	1.28	574766	96.25	30	120	
Sc	45	2	NoGas	4477033	2.02	4296857	104.19	30	120	
Rh	103	1	He	1699587	0.66	1652712	102.84	30	120	
In	115	1	He	879114	0.22	852389	103.14	30	120	
Tb	159	1	He	2567816	1.41	2425956	105.85	30	120	
Ho	165	1	He	2632850	0.48	2452680	107.35	30	120	
Bi	209	1	He	1946129	0.26	1810473	107.49	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-8-d@2
Data File Name	133SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:56:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.450	1.450	2.83	7346	0.02	10000	
B	11	45	2	NoGas	31.456	31.456	0.84	119289	0.03	300	
Na	23	45	1	He	322.490	322.490	2.07	520460	0.06	500000	
Mg	24	45	1	He	17840.962	17840.962	1.30	15295830	0.12	500000	
Al	27	45	1	He	23681.301	23681.301	2.07	10557134	0.22	200000	
K	39	45	1	He	4230.697	4230.697	1.21	2910882	0.15	500000	
Ca	44	45	1	He	21749.058	21749.058	1.07	780822	2.79	500000	
Ti	47	45	1	He	220.968	220.968	1.31	47204	0.47	2500	
V	51	45	1	He	45.215	45.215	2.56	246995	0.02	10000	
Cr	52	45	1	He	41.717	41.717	1.36	282266	0.01	10000	
Mn	55	45	1	He	1777.706	1777.706	0.98	8420999	0.02	10000	
Fe	56	45	1	He	103105.501	103105.501	1.52	632195513	0.02	200000	
Co	59	103	1	He	33.701	33.701	2.30	334124	0.01	10000	
Ni	60	103	1	He	73.481	73.481	1.23	185345	0.04	10000	
Cu	63	103	1	He	83.640	83.640	1.85	564666	0.01	10000	
Zn	66	103	1	He	226.106	226.106	1.29	309945	0.07	10000	
As	75	103	1	He	95.321	95.321	2.23	82673	0.12	10000	
Se	78	103	1	He	2.794	2.794	6.91	228	1.23	10000	
Sr	88	103	1	He	45.242	45.242	2.16	233124	0.02	10000	
Mo	95	103	1	He	5.199	5.199	1.88	15080	0.03	2000	
Ag	107	103	1	He	0.085	0.085	6.83	848	0.01	300	
Cd	111	103	1	He	0.552	0.552	3.34	1684	0.03	4000	
Sn	118	115	1	He	16.844	16.844	3.63	61025	0.03	2000	
Sb	123	115	1	He	0.440	0.440	8.12	2528	0.02	300	
Ba	137	115	1	He	134.136	134.136	0.53	200952	0.07	10000	
W	182	165	1	He	0.432	0.432	15.09	7787	0.01	2500	
Tl	205	209	1	He	0.520	0.520	0.52	13740	0.00	5000	
Pb	208	209	1	He	48.585	48.585	1.13	1641146	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1617333	1.25	1803797	89.66	30	120	
Sc	45	1	He	565171	1.74	574766	98.33	30	120	
Sc	45	2	NoGas	4428912	1.60	4296857	103.07	30	120	
Rh	103	1	He	1553946	1.79	1652712	94.02	30	120	
In	115	1	He	816276	0.61	852389	95.76	30	120	
Tb	159	1	He	2515756	1.19	2425956	103.70	30	120	
Ho	165	1	He	2584166	1.79	2452680	105.36	30	120	
Bi	209	1	He	1863955	1.26	1810473	102.95	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-15-f@2
Data File Name	134SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:00:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.163	2.163	6.36	11252	0.02	10000	
B	11	45	2	NoGas	37.263	37.263	0.31	141684	0.03	300	
Na	23	45	1	He	346.941	346.941	0.68	562829	0.06	500000	
Mg	24	45	1	He	26250.821	26250.821	0.88	22719845	0.12	500000	
Al	27	45	1	He	38189.763	38189.763	0.20	17189991	0.22	200000	
K	39	45	1	He	6290.078	6290.078	0.83	4338115	0.14	500000	
Ca	44	45	1	He	32941.619	32941.619	1.24	1193678	2.76	500000	
Ti	47	45	1	He	294.058	294.058	0.72	63422	0.46	2500	
V	51	45	1	He	64.265	64.265	1.06	354397	0.02	10000	
Cr	52	45	1	He	62.855	62.855	0.71	427870	0.01	10000	
Mn	55	45	1	He	1053.316	1053.316	1.97	5037163	0.02	10000	
Fe	56	45	1	He	125536.520	125536.520	1.38	777133622	0.02	200000	
Co	59	103	1	He	46.976	46.976	0.99	472352	0.01	10000	
Ni	60	103	1	He	107.315	107.315	0.88	274472	0.04	10000	
Cu	63	103	1	He	99.548	99.548	1.15	681158	0.01	10000	
Zn	66	103	1	He	288.395	288.395	1.78	400675	0.07	10000	
As	75	103	1	He	70.189	70.189	1.90	61789	0.11	10000	
Se	78	103	1	He	3.797	3.797	5.47	304	1.25	10000	
Sr	88	103	1	He	83.702	83.702	1.13	437332	0.02	10000	
Mo	95	103	1	He	5.332	5.332	2.51	15669	0.03	2000	
Ag	107	103	1	He	0.097	0.097	8.65	971	0.01	300	
Cd	111	103	1	He	0.596	0.596	4.56	1781	0.03	4000	
Sn	118	115	1	He	16.733	16.733	2.88	61044	0.03	2000	
Sb	123	115	1	He	0.305	0.305	10.38	2028	0.02	300	
Ba	137	115	1	He	169.246	169.246	0.90	255317	0.07	10000	
W	182	165	1	He	0.229	0.229	13.22	5560	0.00	2500	
Tl	205	209	1	He	0.553	0.553	1.98	14385	0.00	5000	
Pb	208	209	1	He	54.332	54.332	0.65	1808411	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1661686	1.44	1803797	92.12	30	120	
Sc	45	1	He	570539	0.63	574766	99.26	30	120	
Sc	45	2	NoGas	4475522	0.53	4296857	104.16	30	120	
Rh	103	1	He	1575789	1.01	1652712	95.35	30	120	
In	115	1	He	821967	0.39	852389	96.43	30	120	
Tb	159	1	He	2551547	0.59	2425956	105.18	30	120	
Ho	165	1	He	2631023	1.02	2452680	107.27	30	120	
Bi	209	1	He	1836634	0.22	1810473	101.45	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-22-d@2
Data File Name	135SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:04:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.909	2.909	4.07	15014	0.02	10000	
B	11	45	2	NoGas	44.096	44.096	1.48	167550	0.03	300	
Na	23	45	1	He	340.549	340.549	0.92	560946	0.06	500000	
Mg	24	45	1	He	27770.576	27770.576	0.95	24378031	0.11	500000	
Al	27	45	1	He	44707.682	44707.682	1.24	20409595	0.22	200000	
K	39	45	1	He	7971.479	7971.479	1.01	5558522	0.14	500000	
Ca	44	45	1	He	27344.818	27344.818	0.34	1005128	2.72	500000	
Ti	47	45	1	He	305.773	305.773	0.56	66887	0.46	2500	
V	51	45	1	He	74.075	74.075	1.38	414237	0.02	10000	
Cr	52	45	1	He	71.897	71.897	0.25	495969	0.01	10000	
Mn	55	45	1	He	1679.229	1679.229	0.84	8145104	0.02	10000	
Fe	56	45	1	He	138871.775	138871.775	0.29	871976339	0.02	200000	
Co	59	103	1	He	55.390	55.390	1.13	556542	0.01	10000	
Ni	60	103	1	He	134.692	134.692	1.25	344213	0.04	10000	
Cu	63	103	1	He	92.706	92.706	1.01	634046	0.01	10000	
Zn	66	103	1	He	302.906	302.906	1.13	420509	0.07	10000	
As	75	103	1	He	83.556	83.556	0.68	73474	0.11	10000	
Se	78	103	1	He	4.106	4.106	4.76	326	1.26	10000	
Sr	88	103	1	He	86.782	86.782	0.54	453094	0.02	10000	
Mo	95	103	1	He	5.282	5.282	1.33	15519	0.03	2000	
Ag	107	103	1	He	0.117	0.117	0.52	1171	0.01	300	
Cd	111	103	1	He	0.629	0.629	8.27	1833	0.03	4000	
Sn	118	115	1	He	16.895	16.895	2.15	61378	0.03	2000	
Sb	123	115	1	He	0.341	0.341	8.08	2159	0.02	300	
Ba	137	115	1	He	218.343	218.343	0.27	328019	0.07	10000	
W	182	165	1	He	0.192	0.192	20.56	5160	0.00	2500	
Tl	205	209	1	He	0.675	0.675	1.97	17358	0.00	5000	
Pb	208	209	1	He	59.969	59.969	1.00	1982774	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1647773	1.35	1803797	91.35	30	120	
Sc	45	1	He	578671	0.78	574766	100.68	30	120	
Sc	45	2	NoGas	4502588	1.18	4296857	104.79	30	120	
Rh	103	1	He	1574630	0.89	1652712	95.28	30	120	
In	115	1	He	818567	0.36	852389	96.03	30	120	
Tb	159	1	He	2573351	0.65	2425956	106.08	30	120	
Ho	165	1	He	2647566	0.78	2452680	107.95	30	120	
Bi	209	1	He	1824660	1.35	1810473	100.78	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-34-d@2
Data File Name	136SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:08:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.220	2.220	2.75	11523	0.02	10000	
B	11	45	2	NoGas	33.688	33.688	1.76	130218	0.03	300	
Na	23	45	1	He	289.655	289.655	1.30	475459	0.06	500000	
Mg	24	45	1	He	26103.968	26103.968	1.23	22596583	0.12	500000	
Al	27	45	1	He	38204.831	38204.831	1.96	17198001	0.22	200000	
K	39	45	1	He	6005.610	6005.610	0.64	4145599	0.14	500000	
Ca	44	45	1	He	49250.666	49250.666	2.04	1785027	2.76	500000	
Ti	47	45	1	He	327.079	327.079	1.19	70554	0.46	2500	
V	51	45	1	He	63.942	63.942	2.38	352637	0.02	10000	
Cr	52	45	1	He	62.292	62.292	1.27	424125	0.01	10000	
Mn	55	45	1	He	1569.814	1569.814	1.55	7508762	0.02	10000	
Fe	56	45	1	He	121171.414	121171.414	0.48	750287810	0.02	200000	
Co	59	103	1	He	45.624	45.624	2.82	462307	0.01	10000	
Ni	60	103	1	He	107.866	107.866	3.13	277997	0.04	10000	
Cu	63	103	1	He	83.243	83.243	2.72	574404	0.01	10000	
Zn	66	103	1	He	265.976	265.976	2.88	372467	0.07	10000	
As	75	103	1	He	72.278	72.278	2.67	64121	0.11	10000	
Se	78	103	1	He	3.616	3.616	2.23	293	1.23	10000	
Sr	88	103	1	He	84.978	84.978	2.56	447445	0.02	10000	
Mo	95	103	1	He	4.360	4.360	1.44	13036	0.03	2000	
Ag	107	103	1	He	0.087	0.087	4.77	881	0.01	300	
Cd	111	103	1	He	0.502	0.502	5.13	1641	0.03	4000	
Sn	118	115	1	He	16.945	16.945	1.28	62063	0.03	2000	
Sb	123	115	1	He	0.267	0.267	15.38	1890	0.01	300	
Ba	137	115	1	He	197.830	197.830	1.57	299618	0.07	10000	
W	182	165	1	He	0.176	0.176	14.21	4945	0.00	2500	
Tl	205	209	1	He	0.654	0.654	1.44	17150	0.00	5000	
Pb	208	209	1	He	45.566	45.566	0.62	1535580	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1657471	1.12	1803797	91.89	30	120	
Sc	45	1	He	570659	1.10	574766	99.29	30	120	
Sc	45	2	NoGas	4529560	0.85	4296857	105.42	30	120	
Rh	103	1	He	1588661	2.66	1652712	96.12	30	120	
In	115	1	He	825268	0.77	852389	96.82	30	120	
Tb	159	1	He	2572580	1.08	2425956	106.04	30	120	
Ho	165	1	He	2636397	1.00	2452680	107.49	30	120	
Bi	209	1	He	1859376	0.30	1810473	102.70	30	120	

Sample Report

Sample Table

Sample Name	240-49171-b-19-a@2
Data File Name	137SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:11:51-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.465	0.465	14.25	2345	0.02	10000	
B	11	45	2	NoGas	17.344	17.344	2.16	67174	0.03	300	
Na	23	45	1	He	90.631	90.631	1.46	165331	0.05	500000	
Mg	24	45	1	He	882.472	882.472	0.79	736703	0.12	500000	
Al	27	45	1	He	5253.318	5253.318	0.93	2278649	0.23	200000	
K	39	45	1	He	943.895	943.895	1.00	679803	0.14	500000	
Ca	44	45	1	He	361.121	361.121	2.63	13151	2.75	500000	
Ti	47	45	1	He	83.466	83.466	4.09	17342	0.48	2500	
V	51	45	1	He	14.258	14.258	2.94	75935	0.02	10000	
Cr	52	45	1	He	12.334	12.334	0.26	83200	0.01	10000	
Mn	55	45	1	He	132.324	132.324	0.39	609841	0.02	10000	
Fe	56	45	1	He	15703.982	15703.982	0.71	93666950	0.02	200000	
Co	59	103	1	He	5.416	5.416	1.42	57063	0.01	10000	
Ni	60	103	1	He	15.065	15.065	1.54	40424	0.04	10000	
Cu	63	103	1	He	7.527	7.527	2.91	56214	0.01	10000	
Zn	66	103	1	He	133.058	133.058	1.95	194000	0.07	10000	
As	75	103	1	He	19.409	19.409	1.91	18030	0.11	10000	
Se	78	103	1	He	0.837	0.837	21.34	93	0.90	10000	
Sr	88	103	1	He	6.102	6.102	1.30	33513	0.02	10000	
Mo	95	103	1	He	2.994	2.994	3.40	9516	0.03	2000	
Ag	107	103	1	He	0.011	0.011	9.03	149	0.01	300	
Cd	111	103	1	He	0.117	0.117	29.67	1048	0.01	4000	
Sn	118	115	1	He	17.978	17.978	2.25	66750	0.03	2000	
Sb	123	115	1	He	0.172	0.172	9.77	1549	0.01	300	
Ba	137	115	1	He	27.736	27.736	0.77	42634	0.07	10000	
W	182	165	1	He	0.143	0.143	18.56	4497	0.00	2500	
Tl	205	209	1	He	0.148	0.148	1.31	4273	0.00	5000	
Pb	208	209	1	He	8.833	8.833	0.66	303606	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1611819	2.78	1803797	89.36	30	120	
Sc	45	1	He	549665	0.69	574766	95.63	30	120	
Sc	45	2	NoGas	4344376	1.54	4296857	101.11	30	120	
Rh	103	1	He	1649935	1.84	1652712	99.83	30	120	
In	115	1	He	837321	0.12	852389	98.23	30	120	
Tb	159	1	He	2538010	0.46	2425956	104.62	30	120	
Ho	165	1	He	2599745	1.00	2452680	106.00	30	120	
Bi	209	1	He	1891716	0.41	1810473	104.49	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-6-h@2
Data File Name	138SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:15:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.020	4.020	2.74	20382	0.02	10000	
B	11	45	2	NoGas	21.004	21.004	0.32	83093	0.03	300	
Na	23	45	1	He	169.299	169.299	0.82	302233	0.06	500000	
Mg	24	45	1	He	10592.111	10592.111	0.53	9499575	0.11	500000	
Al	27	45	1	He	61338.254	61338.254	0.83	28606862	0.21	200000	
K	39	45	1	He	3807.753	3807.753	1.15	2747310	0.14	500000	
Ca	44	45	1	He	859.367	859.367	0.98	32843	2.62	500000	
Ti	47	45	1	He	525.817	525.817	1.03	117506	0.45	2500	
V	51	45	1	He	130.305	130.305	0.74	744273	0.02	10000	
Cr	52	45	1	He	100.147	100.147	0.36	704553	0.01	10000	
Mn	55	45	1	He	4279.221	4279.221	1.33	21205339	0.02	10000	
Fe	56	45	1	He	127276.121	127276.121	0.87	816421870	0.02	200000	
Co	59	103	1	He	59.050	59.050	1.48	607452	0.01	10000	
Ni	60	103	1	He	86.153	86.153	2.53	225434	0.04	10000	
Cu	63	103	1	He	72.162	72.162	1.43	505842	0.01	10000	
Zn	66	103	1	He	279.149	279.149	0.92	396845	0.07	10000	
As	75	103	1	He	61.550	61.550	1.52	55462	0.11	10000	
Se	78	103	1	He	5.932	5.932	5.49	470	1.26	10000	
Sr	88	103	1	He	17.804	17.804	1.58	95276	0.02	10000	
Mo	95	103	1	He	8.198	8.198	2.61	24279	0.03	2000	
Ag	107	103	1	He	0.178	0.178	1.76	1810	0.01	300	
Cd	111	103	1	He	0.725	0.725	2.86	2036	0.04	4000	
Sn	118	115	1	He	20.419	20.419	1.56	74564	0.03	2000	
Sb	123	115	1	He	0.501	0.501	10.67	2787	0.02	300	
Ba	137	115	1	He	468.205	468.205	0.56	708706	0.07	10000	
W	182	165	1	He	0.306	0.306	11.01	6435	0.00	2500	
Tl	205	209	1	He	0.843	0.843	0.86	22157	0.00	5000	
Pb	208	209	1	He	90.386	90.386	2.81	3067850	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1619480	1.17	1803797	89.78	30	120	
Sc	45	1	He	591161	0.45	574766	102.85	30	120	
Sc	45	2	NoGas	4506475	0.92	4296857	104.88	30	120	
Rh	103	1	He	1612241	1.26	1652712	97.55	30	120	
In	115	1	He	824777	0.67	852389	96.76	30	120	
Tb	159	1	He	2544432	0.72	2425956	104.88	30	120	
Ho	165	1	He	2618299	1.36	2452680	106.75	30	120	
Bi	209	1	He	1873904	1.88	1810473	103.50	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-8-f@2
Data File Name	139SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:19:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.908	3.908	2.53	18907	0.02	10000	
B	11	45	2	NoGas	22.320	22.320	0.50	83331	0.03	300	
Na	23	45	1	He	151.440	151.440	0.76	256549	0.06	500000	
Mg	24	45	1	He	11062.525	11062.525	1.20	9290142	0.12	500000	
Al	27	45	1	He	63111.826	63111.826	1.47	27562142	0.23	200000	
K	39	45	1	He	4053.661	4053.661	0.54	2734697	0.15	500000	
Ca	44	45	1	He	1296.503	1296.503	1.27	46114	2.81	500000	
Ti	47	45	1	He	567.558	567.558	0.21	118764	0.48	2500	
V	51	45	1	He	128.398	128.398	0.52	686712	0.02	10000	
Cr	52	45	1	He	89.418	89.418	0.28	589356	0.02	10000	
Mn	55	45	1	He	3154.505	3154.505	0.12	14637105	0.02	10000	
Fe	56	45	1	He	129056.212	129056.212	0.37	775172627	0.02	200000	
Co	59	103	1	He	52.604	52.604	1.86	495907	0.01	10000	
Ni	60	103	1	He	104.488	104.488	2.94	250523	0.04	10000	
Cu	63	103	1	He	83.764	83.764	2.59	537680	0.02	10000	
Zn	66	103	1	He	294.505	294.505	1.68	383627	0.08	10000	
As	75	103	1	He	59.071	59.071	1.81	48786	0.12	10000	
Se	78	103	1	He	5.981	5.981	7.00	434	1.38	10000	
Sr	88	103	1	He	25.244	25.244	2.48	123739	0.02	10000	
Mo	95	103	1	He	8.706	8.706	0.98	23596	0.04	2000	
Ag	107	103	1	He	0.121	0.121	8.71	1136	0.01	300	
Cd	111	103	1	He	0.966	0.966	8.80	2236	0.04	4000	
Sn	118	115	1	He	17.631	17.631	2.73	60873	0.03	2000	
Sb	123	115	1	He	0.626	0.626	7.46	3079	0.02	300	
Ba	137	115	1	He	449.679	449.679	0.86	642391	0.07	10000	
W	182	165	1	He	0.300	0.300	17.43	6224	0.00	2500	
Tl	205	209	1	He	0.892	0.892	0.15	22744	0.00	5000	
Pb	208	209	1	He	67.012	67.012	0.50	2209785	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1545131	0.87	1803797	85.66	30	120	
Sc	45	1	He	553548	0.28	574766	96.31	30	120	
Sc	45	2	NoGas	4271688	2.12	4296857	99.41	30	120	
Rh	103	1	He	1477601	1.70	1652712	89.40	30	120	
In	115	1	He	778419	0.70	852389	91.32	30	120	
Tb	159	1	He	2489118	1.54	2425956	102.60	30	120	
Ho	165	1	He	2561616	1.50	2452680	104.44	30	120	
Bi	209	1	He	1819757	0.28	1810473	100.51	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-10-h@2
Data File Name	140SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:23:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.876	1.876	8.11	8658	0.02	10000	
B	11	45	2	NoGas	17.910	17.910	3.67	62197	0.03	300	
Na	23	45	1	He	118.821	118.821	1.89	191046	0.06	500000	
Mg	24	45	1	He	6223.547	6223.547	1.75	4795372	0.13	500000	
Al	27	45	1	He	30542.849	30542.849	0.83	12237621	0.25	200000	
K	39	45	1	He	2762.665	2762.665	3.40	1728233	0.16	500000	
Ca	44	45	1	He	690.098	690.098	1.90	22759	3.03	500000	
Ti	47	45	1	He	430.993	430.993	0.88	82746	0.52	2500	
V	51	45	1	He	80.181	80.181	0.53	393516	0.02	10000	
Cr	52	45	1	He	92.557	92.557	0.18	559593	0.02	10000	
Mn	55	45	1	He	1528.935	1528.935	0.70	6508825	0.02	10000	
Fe	56	45	1	He	79971.608	79971.608	0.40	440711894	0.02	200000	
Co	59	103	1	He	32.009	32.009	0.31	288337	0.01	10000	
Ni	60	103	1	He	66.644	66.644	0.34	152720	0.04	10000	
Cu	63	103	1	He	28.478	28.478	0.18	176075	0.02	10000	
Zn	66	103	1	He	164.046	164.046	0.11	204487	0.08	10000	
As	75	103	1	He	59.589	59.589	0.62	47020	0.13	10000	
Se	78	103	1	He	2.894	2.894	3.76	214	1.35	10000	
Sr	88	103	1	He	11.679	11.679	1.61	54767	0.02	10000	
Mo	95	103	1	He	5.856	5.856	2.23	15356	0.04	2000	
Ag	107	103	1	He	0.103	0.103	2.78	930	0.01	300	
Cd	111	103	1	He	0.434	0.434	12.78	1359	0.03	4000	
Sn	118	115	1	He	17.568	17.568	1.15	59278	0.03	2000	
Sb	123	115	1	He	0.249	0.249	18.20	1681	0.01	300	
Ba	137	115	1	He	184.264	184.264	0.33	257262	0.07	10000	
W	182	165	1	He	0.231	0.231	7.37	5223	0.00	2500	
Tl	205	209	1	He	0.439	0.439	1.93	11052	0.00	5000	
Pb	208	209	1	He	38.395	38.395	0.39	1227105	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1474507	0.77	1803797	81.74	30	120	
Sc	45	1	He	507861	0.67	574766	88.36	30	120	
Sc	45	2	NoGas	3906392	0.33	4296857	90.91	30	120	
Rh	103	1	He	1411483	0.15	1652712	85.40	30	120	
In	115	1	He	760712	0.38	852389	89.24	30	120	
Tb	159	1	He	2366204	0.79	2425956	97.54	30	120	
Ho	165	1	He	2457831	1.24	2452680	100.21	30	120	
Bi	209	1	He	1763199	0.49	1810473	97.39	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	141_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:27:07-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.563	2.440	218793	2.32	50	95.1	89.5	110.5	
B	11	45	2	NoGas	54.852	0.407	185136	1.62	50	109.7	89.5	110.5	
Na	23	45	1	He	25341.469	0.985	34638207	0.26	25000	101.4	89.5	110.5	
Mg	24	45	1	He	25150.968	1.411	19475654	0.56	25000	100.6	89.5	110.5	
Al	27	45	1	He	248.630	2.912	100778	2.07	250	99.5	89.5	110.5	
K	39	45	1	He	25710.268	2.375	15686033	1.67	25000	102.8	89.5	110.5	
Ca	44	45	1	He	24938.475	1.753	808632	0.91	25000	99.8	89.5	110.5	
Ti	47	45	1	He	50.278	2.499	9702	1.52	50	100.6	89.5	110.5	
V	51	45	1	He	51.840	1.891	255815	1.80	50	103.7	89.5	110.5	
Cr	52	45	1	He	50.700	1.675	309298	1.07	50	101.4	89.5	110.5	
Mn	55	45	1	He	252.603	1.397	1080945	0.36	250	101.0	89.5	110.5	
Fe	56	45	1	He	12886.016	1.527	71377699	1.00	12500	103.1	89.5	110.5	
Co	59	103	1	He	48.379	0.499	440483	0.99	50	96.8	89.5	110.5	
Ni	60	103	1	He	48.123	0.878	111488	0.27	50	96.2	89.5	110.5	
Cu	63	103	1	He	47.945	0.554	298170	0.90	50	95.9	89.5	110.5	
Zn	66	103	1	He	48.998	0.233	62250	0.84	50	98.0	89.5	110.5	
As	75	103	1	He	49.704	0.473	39671	0.85	50	99.4	89.5	110.5	
Se	78	103	1	He	48.890	2.175	3242	1.41	50	97.8	89.5	110.5	
Sr	88	103	1	He	51.182	0.696	242178	0.74	50	102.4	89.5	110.5	
Mo	95	103	1	He	51.802	2.025	132610	2.41	50	103.6	89.5	110.5	
Ag	107	103	1	He	52.306	0.648	461541	0.81	50	104.6	89.5	110.5	
Cd	111	103	1	He	51.888	0.922	77198	0.45	50	103.8	89.5	110.5	
Sn	118	115	1	He	50.954	1.162	176486	0.93	50	101.9	89.5	110.5	
Sb	123	115	1	He	53.045	1.634	194716	0.17	50	106.1	89.5	110.5	
Ba	137	115	1	He	53.000	0.846	76620	0.83	50	106.0	89.5	110.5	
W	182	165	1	He	47.275	0.826	528246	1.99	50	94.5	89.5	110.5	
Tl	205	209	1	He	46.726	0.432	1162876	0.20	50	93.5	89.5	110.5	
Pb	208	209	1	He	48.474	0.199	1587810	0.24	50	96.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1469499	0.77	1803797	81.47	30	120	
Sc	45	1	He	510487	1.06	574766	88.82	30	120	
Sc	45	2	NoGas	4028305	1.36	4296857	93.75	30	120	
Rh	103	1	He	1426736	0.75	1652712	86.33	30	120	
In	115	1	He	787665	1.51	852389	92.41	30	120	
Tb	159	1	He	2430305	1.78	2425956	100.18	30	120	
Ho	165	1	He	2497875	1.62	2452680	101.84	30	120	
Bi	209	1	He	1807345	0.44	1810473	99.83	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	142_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:30:59-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.056	16.9	267	15.0	1	
B	11	45	2	NoGas	9.279	3.0	36047	1.8	20	
Na	23	45	1	He	14.810	11.3	49806	4.0	400	
Mg	24	45	1	He	2.121	13.6	2456	8.5	1000	
Al	27	45	1	He	9.571	2.3	4504	1.6	50	
K	39	45	1	He	12.625	28.0	64980	2.9	1000	
Ca	44	45	1	He	2.300	42.8	583	4.9	1000	
Ti	47	45	1	He	0.151	52.9	30	50.9	20	
V	51	45	1	He	0.047	214.7	460	106.9	2	
Cr	52	45	1	He	-0.046	-19.6	2388	1.7	2	
Mn	55	45	1	He	0.278	5.6	1335	4.4	2	
Fe	56	45	1	He	17.359	20.6	101148	19.0	50	
Co	59	103	1	He	0.008	42.4	129	24.0	1	
Ni	60	103	1	He	0.008	67.6	112	12.0	2	
Cu	63	103	1	He	-0.180	-6.7	1149	8.2	2	
Zn	66	103	1	He	0.456	5.3	1446	1.9	20	
As	75	103	1	He	-0.010	-326.6	180	15.6	2	
Se	78	103	1	He	0.052	152.6	32	17.0	2	
Sr	88	103	1	He	0.009	15.4	184	2.8	10	
Mo	95	103	1	He	0.678	29.4	2584	22.5	2	
Ag	107	103	1	He	0.001	192.9	39	40.5	0.2	
Cd	111	103	1	He	0.012	189.4	833	3.4	0.2	
Sn	118	115	1	He	0.189	13.5	1522	5.5	10	
Sb	123	115	1	He	0.089	45.7	1208	12.3	1	
Ba	137	115	1	He	0.024	51.1	49	37.6	5	
W	182	165	1	He	0.886	20.7	12743	16.1	10	
Tl	205	209	1	He	0.036	28.1	1330	20.5	0.5	
Pb	208	209	1	He	0.028	3.6	1878	2.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1502860	1.99	1803797	83.32	30	120	
Sc	45	1	He	508736	0.61	574766	88.51	30	120	
Sc	45	2	NoGas	4048664	0.75	4296857	94.22	30	120	
Rh	103	1	He	1581362	1.25	1652712	95.68	30	120	
In	115	1	He	824787	0.56	852389	96.76	30	120	
Tb	159	1	He	2456737	0.48	2425956	101.27	30	120	
Ho	165	1	He	2530352	0.50	2452680	103.17	30	120	
Bi	209	1	He	1869272	1.34	1810473	103.25	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	143CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:34:50-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.916	0.916	7.960	4475	6.43	1	91.6	69.5	130.5	
B	11	2	NoGas	25.682	25.682	1.150	92164	1.82	20	128.4	69.5	130.5	
Na	23	1	He	1075.838	1075.838	2.302	1546021	0.75	1000	107.6	69.5	130.5	
Mg	24	1	He	1040.414	1040.414	1.186	831839	0.55	1000	104.0	69.5	130.5	
Al	27	1	He	50.777	50.777	1.348	21777	0.51	50	101.6	69.5	130.5	
K	39	1	He	1051.449	1051.449	2.032	718599	0.63	1000	105.1	69.5	130.5	
Ca	44	1	He	1018.792	1018.792	1.540	34579	0.34	1000	101.9	69.5	130.5	
Ti	47	1	He	10.709	10.709	1.839	2132	1.15	10	107.1	69.5	130.5	
V	51	1	He	5.407	5.407	1.312	27737	1.16	5	108.1	69.5	130.5	
Cr	52	1	He	3.941	3.941	1.119	27341	0.69	2	197.0	69.5	130.5	6020A CR1 Failed
Mn	55	1	He	5.629	5.629	0.604	25000	1.64	5	112.6	69.5	130.5	
Fe	56	1	He	116.909	116.909	1.185	673498	0.54	100	116.9	69.5	130.5	
Co	59	1	He	0.938	0.938	3.271	9543	2.84	1	93.8	69.5	130.5	
Ni	60	1	He	2.685	2.685	2.295	6997	1.27	2	134.3	69.5	130.5	6020A CR1 Failed
Cu	63	1	He	1.676	1.676	4.068	13880	3.01	2	83.8	69.5	130.5	
Zn	66	1	He	18.670	18.670	2.184	26851	1.07	20	93.4	69.5	130.5	
As	75	1	He	4.710	4.710	1.835	4348	1.05	5	94.2	69.5	130.5	
Se	78	1	He	4.866	4.866	1.757	384	2.56	5	97.3	69.5	130.5	
Sr	88	1	He	9.693	9.693	1.646	51062	1.38	10	96.9	69.5	130.5	
Mo	95	1	He	9.789	9.789	3.002	28376	1.99	10	97.9	69.5	130.5	
Ag	107	1	He	0.990	0.990	5.954	9735	4.90	1	99.0	69.5	130.5	
Cd	111	1	He	1.068	1.068	1.798	2564	0.96	1	106.8	69.5	130.5	
Sn	118	1	He	10.055	10.055	1.981	37524	2.09	10	100.5	69.5	130.5	
Sb	123	1	He	1.857	1.857	0.696	8059	0.29	2	92.9	69.5	130.5	
Ba	137	1	He	5.390	5.390	3.069	8255	3.39	5	107.8	69.5	130.5	
W	182	1	He	9.698	9.698	1.349	110292	0.59	10	97.0	69.5	130.5	
Tl	205	1	He	1.897	1.897	2.272	49093	1.02	2	94.8	69.5	130.5	
Pb	208	1	He	1.057	1.057	2.489	36602	0.49	1	105.7	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1560031	2.32	1803797	86.49	30	120	
Sc	45	1	He	526590	1.69	574766	91.62	30	120	
Sc	45	2	NoGas	4143717	1.12	4296857	96.44	30	120	
Rh	103	1	He	1585090	1.03	1652712	95.91	30	120	
In	115	1	He	833194	0.34	852389	97.75	30	120	
Tb	159	1	He	2440507	0.82	2425956	100.60	30	120	
Ho	165	1	He	2492603	1.18	2452680	101.63	30	120	
Bi	209	1	He	1865108	2.56	1810473	103.02	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176698/1-a@2
Data File Name	144_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:38:41-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.081	36.1	382	33.8	1	
B	11	45	2	NoGas	12.008	3.0	43957	1.9	20	
Na	23	45	1	He	47.714	3.2	95204	0.9	400	
Mg	24	45	1	He	38.006	2.7	30341	0.7	1000	
Al	27	45	1	He	27.423	1.2	11746	1.8	50	
K	39	45	1	He	41.625	4.6	83097	1.5	1000	
Ca	44	45	1	He	130.372	5.3	4752	5.9	1000	
Ti	47	45	1	He	0.461	27.3	90	25.9	20	
V	51	45	1	He	0.278	17.4	1604	13.1	2	
Cr	52	45	1	He	0.998	2.5	8734	1.4	2	
Mn	55	45	1	He	0.568	3.7	2586	3.4	2	
Fe	56	45	1	He	17.787	3.9	104318	5.6	50	
Co	59	103	1	He	0.098	2.6	986	4.2	1	
Ni	60	103	1	He	0.284	15.1	778	15.2	2	
Cu	63	103	1	He	0.311	13.4	4262	5.3	2	
Zn	66	103	1	He	3.366	3.9	5198	3.0	20	
As	75	103	1	He	0.504	7.5	598	6.5	2	
Se	78	103	1	He	0.480	10.2	60	6.3	2	
Sr	88	103	1	He	0.388	5.7	2052	7.1	10	
Mo	95	103	1	He	0.406	21.8	1711	12.1	2	
Ag	107	103	1	He	0.009	22.2	108	14.6	0.2	
Cd	111	103	1	He	0.043	20.5	836	1.5	0.2	
Sn	118	115	1	He	17.180	1.3	60691	1.5	10	Blank Failed
Sb	123	115	1	He	0.080	19.3	1135	5.3	1	
Ba	137	115	1	He	0.966	6.0	1423	5.7	5	
W	182	165	1	He	0.494	12.1	8228	7.7	10	
Tl	205	209	1	He	0.328	3.9	8717	4.5	0.5	
Pb	208	209	1	He	0.253	2.5	9342	2.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1501941	2.48	1803797	83.27	30	120	
Sc	45	1	He	512125	1.92	574766	89.10	30	120	
Sc	45	2	NoGas	3952267	1.01	4296857	91.98	30	120	
Rh	103	1	He	1495999	1.90	1652712	90.52	30	120	
In	115	1	He	796188	0.24	852389	93.41	30	120	
Tb	159	1	He	2409514	1.17	2425956	99.32	30	120	
Ho	165	1	He	2499075	0.44	2452680	101.89	30	120	
Bi	209	1	He	1839140	0.74	1810473	101.58	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176698/2-a@2
Data File Name	145LCSS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:42:33-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	507.000	507.000	1.603	2363052	0.92	500	101.4	78.6	110.5	
B	11	2	NoGas	62.481	62.481	1.107	203655	0.49	50	125.0	79.5	120.5	LCSS Failed
Na	23	1	He	5041.215	5041.215	2.014	6825828	1.41	5000	100.8	79.5	120.5	
Mg	24	1	He	5022.529	5022.529	1.214	3840168	0.22	5000	100.5	79.5	120.5	
Al	27	1	He	4750.560	4750.560	1.852	1889127	0.66	5000	95.0	79.5	120.5	
K	39	1	He	5087.953	5087.953	1.256	3110208	0.11	5000	101.8	79.5	120.5	
Ca	44	1	He	4549.425	4549.425	0.913	146053	0.91	5000	91.0	79.5	120.5	
Ti	47	1	He	49.039	49.039	2.704	9341	1.56	50	98.1	79.5	120.5	
V	51	1	He	515.100	515.100	0.504	2507395	1.00	500	103.0	71.5	110.5	
Cr	52	1	He	508.692	508.692	1.044	3039902	0.73	500	101.7	69.5	110.5	
Mn	55	1	He	518.128	518.128	2.236	2188538	1.06	500	103.6	79.5	120.5	
Fe	56	1	He	5069.998	5069.998	1.787	27726301	0.49	5000	101.4	79.5	120.5	
Co	59	1	He	460.465	460.465	3.367	4325926	0.86	500	92.1	73.9	110.5	
Ni	60	1	He	450.424	450.424	3.533	1076111	0.56	500	90.1	74.9	110.5	
Cu	63	1	He	471.608	471.608	4.026	3006587	1.03	500	94.3	72.6	110.5	
Zn	66	1	He	444.310	444.310	2.076	576564	1.13	500	88.9	71.5	113.4	
As	75	1	He	439.435	439.435	2.662	360614	0.66	500	87.9	73.4	110.5	
Se	78	1	He	436.920	436.920	2.528	29696	0.48	500	87.4	64.6	110.5	
Sr	88	1	He	501.508	501.508	3.102	2448107	1.89	500	100.3	79.5	120.5	
Mo	95	1	He	51.639	51.639	2.836	136426	0.22	50	103.3	29.5	140.5	
Ag	107	1	He	49.212	49.212	2.801	448173	0.91	50	98.4	59.5	114.5	
Cd	111	1	He	475.790	475.790	2.006	724517	0.96	500	95.2	73.5	110.5	
Sn	118	1	He	558.568	558.568	2.642	1867209	2.02	500	111.7	79.5	120.5	
Sb	123	1	He	50.703	50.703	0.872	180435	0.26	50	101.4	67.5	113.4	
Ba	137	1	He	512.752	512.752	1.392	718306	0.53	500	102.6	69.5	110.5	
W	182	1	He	47.113	47.113	1.695	522524	0.98	50	94.2	74.6	125.4	
Tl	205	1	He	117.905	117.905	1.031	2924891	0.06	125	94.3	70.6	110.5	
Pb	208	1	He	479.461	479.461	0.991	15650206	0.60	500	95.9	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1489093	1.57	1803797	82.55	30	120	
Sc	45	1	He	503973	1.34	574766	87.68	30	120	
Sc	45	2	NoGas	3904705	1.44	4296857	90.87	30	120	
Rh	103	1	He	1473260	2.93	1652712	89.14	30	120	
In	115	1	He	763377	0.90	852389	89.56	30	120	
Tb	159	1	He	2407021	0.69	2425956	99.22	30	120	
Ho	165	1	He	2479712	1.71	2452680	101.10	30	120	
Bi	209	1	He	1802017	1.07	1810473	99.53	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-d@2
Data File Name	146SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:46:13-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.060	3.060	2.17	14343	0.02	10000	
B	11	45	2	NoGas	18.400	18.400	0.56	67330	0.03	300	
Na	23	45	1	He	121.408	121.408	1.14	206555	0.06	500000	
Mg	24	45	1	He	7393.597	7393.597	0.95	6048255	0.12	500000	
Al	27	45	1	He	39097.121	39097.121	0.77	16630609	0.24	200000	
K	39	45	1	He	3254.573	3254.573	1.41	2150402	0.15	500000	
Ca	44	45	1	He	619.993	619.993	2.48	21757	2.85	500000	
Ti	47	45	1	He	322.651	322.651	1.36	65758	0.49	2500	
V	51	45	1	He	109.797	109.797	0.73	572003	0.02	10000	
Cr	52	45	1	He	93.403	93.403	0.42	599519	0.02	10000	
Mn	55	45	1	He	7886.754	7886.754	0.80	35644560	0.02	10000	
Fe	56	45	1	He	193623.303	193623.303	0.87	1132755191	0.02	200000	
Co	59	103	1	He	58.043	58.043	0.57	524675	0.01	10000	
Ni	60	103	1	He	87.116	87.116	0.37	200317	0.04	10000	
Cu	63	103	1	He	56.993	56.993	0.88	351492	0.02	10000	
Zn	66	103	1	He	198.387	198.387	0.63	248026	0.08	10000	
As	75	103	1	He	73.410	73.410	0.70	58093	0.13	10000	
Se	78	103	1	He	5.192	5.192	4.42	365	1.42	10000	
Sr	88	103	1	He	22.704	22.704	1.05	106733	0.02	10000	
Mo	95	103	1	He	7.767	7.767	0.07	20246	0.04	2000	
Ag	107	103	1	He	0.095	0.095	3.12	857	0.01	300	
Cd	111	103	1	He	0.602	0.602	8.19	1609	0.04	4000	
Sn	118	115	1	He	18.076	18.076	1.90	61609	0.03	2000	
Sb	123	115	1	He	0.748	0.748	1.78	3478	0.02	300	
Ba	137	115	1	He	314.440	314.440	0.38	443587	0.07	10000	
W	182	165	1	He	0.714	0.714	14.42	10656	0.01	2500	
Tl	205	209	1	He	0.837	0.837	2.95	21004	0.00	5000	
Pb	208	209	1	He	68.699	68.699	0.36	2226032	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1497607	2.15	1803797	83.03	30	120	
Sc	45	1	He	539209	1.76	574766	93.81	30	120	
Sc	45	2	NoGas	4125599	1.33	4296857	96.01	30	120	
Rh	103	1	He	1416499	0.69	1652712	85.71	30	120	
In	115	1	He	768669	0.29	852389	90.18	30	120	
Tb	159	1	He	2438038	2.56	2425956	100.50	30	120	
Ho	165	1	He	2494561	0.84	2452680	101.71	30	120	
Bi	209	1	He	1788168	0.70	1810473	98.77	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-1-d@10
Data File Name	147SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:50:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.623	0.623	2.96	2826	0.02	10000	
B	11	45	2	NoGas	9.176	9.176	2.74	34447	0.03	300	
Na	23	45	1	He	31.918	31.918	4.84	72479	0.04	500000	
Mg	24	45	1	He	1555.011	1555.011	4.29	1190492	0.13	500000	
Al	27	45	1	He	8281.975	8281.975	3.91	3295998	0.25	200000	
K	39	45	1	He	660.173	660.173	2.82	453474	0.15	500000	
Ca	44	45	1	He	123.468	123.468	4.50	4457	2.77	500000	
Ti	47	45	1	He	67.930	67.930	4.49	12954	0.52	2500	
V	51	45	1	He	23.012	23.012	3.30	112329	0.02	10000	
Cr	52	45	1	He	19.676	19.676	2.91	120238	0.02	10000	
Mn	55	45	1	He	1666.115	1666.115	3.20	7044336	0.02	10000	
Fe	56	45	1	He	41676.731	41676.731	3.08	228120009	0.02	200000	
Co	59	103	1	He	11.482	11.482	1.02	104003	0.01	10000	
Ni	60	103	1	He	17.303	17.303	1.10	39919	0.04	10000	
Cu	63	103	1	He	11.469	11.469	0.66	72555	0.02	10000	
Zn	66	103	1	He	41.101	41.101	0.73	52046	0.08	10000	
As	75	103	1	He	14.723	14.723	1.15	11805	0.12	10000	
Se	78	103	1	He	1.123	1.123	2.84	99	1.13	10000	
Sr	88	103	1	He	4.465	4.465	1.58	21123	0.02	10000	
Mo	95	103	1	He	1.316	1.316	1.02	3933	0.03	2000	
Ag	107	103	1	He	0.015	0.015	36.06	156	0.01	300	
Cd	111	103	1	He	0.141	0.141	28.09	937	0.02	4000	
Sn	118	115	1	He	3.314	3.314	5.24	12072	0.03	2000	
Sb	123	115	1	He	0.029	0.029	85.08	924	0.00	300	
Ba	137	115	1	He	62.978	62.978	1.10	89880	0.07	10000	
W	182	165	1	He	0.112	0.112	17.04	3908	0.00	2500	
Tl	205	209	1	He	0.166	0.166	3.73	4607	0.00	5000	
Pb	208	209	1	He	13.520	13.520	0.84	450542	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1447831	0.45	1803797	80.27	30	120	
Sc	45	1	He	504705	2.96	574766	87.81	30	120	
Sc	45	2	NoGas	3904967	0.50	4296857	90.88	30	120	
Rh	103	1	He	1418832	0.55	1652712	85.85	30	120	
In	115	1	He	777547	0.16	852389	91.22	30	120	
Tb	159	1	He	2405165	0.59	2425956	99.14	30	120	
Ho	165	1	He	2454504	1.18	2452680	100.07	30	120	
Bi	209	1	He	1836129	1.06	1810473	101.42	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-1-d@2
Data File Name	148SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:53:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1110.767	1110.767	1.79	4939763	0.02	10000	
B	11	45	2	NoGas	119.174	119.174	1.35	396476	0.03	300	
Na	23	45	1	He	9868.949	9868.949	1.67	13448211	0.07	500000	
Mg	24	45	1	He	16999.070	16999.070	1.52	13106090	0.13	500000	
Al	27	45	1	He	46700.653	46700.653	2.79	18722535	0.25	200000	
K	39	45	1	He	13123.286	13123.286	2.52	7999242	0.16	500000	
Ca	44	45	1	He	9646.112	9646.112	1.97	311722	3.09	500000	
Ti	47	45	1	He	410.821	410.821	1.11	78932	0.52	2500	
V	51	45	1	He	1138.722	1138.722	2.67	5589216	0.02	10000	
Cr	52	45	1	He	1109.367	1109.367	3.31	6681566	0.02	10000	
Mn	55	45	1	He	8654.903	8654.903	1.40	36870552	0.02	10000	
Fe	56	45	1	He	199915.534	199915.534	2.07	1102401343	0.02	200000	
Co	59	103	1	He	1080.915	1080.915	0.83	9194584	0.01	10000	
Ni	60	103	1	He	1131.710	1131.710	0.83	2448123	0.05	10000	
Cu	63	103	1	He	1091.632	1091.632	1.70	6299017	0.02	10000	
Zn	66	103	1	He	1187.218	1187.218	1.96	1393359	0.09	10000	
As	75	103	1	He	1070.692	1070.692	1.00	795198	0.13	10000	
Se	78	103	1	He	986.079	986.079	0.70	60642	1.63	10000	
Sr	88	103	1	He	1137.063	1137.063	0.97	5024760	0.02	10000	
Mo	95	103	1	He	125.776	125.776	0.68	300040	0.04	2000	
Ag	107	103	1	He	109.237	109.237	0.60	900575	0.01	300	
Cd	111	103	1	He	1097.754	1097.754	2.64	1512078	0.07	4000	
Sn	118	115	1	He	1212.764	1212.764	0.55	3761767	0.03	2000	
Sb	123	115	1	He	113.455	113.455	1.02	373782	0.03	300	
Ba	137	115	1	He	1558.586	1558.586	1.54	2026333	0.08	10000	
W	182	165	1	He	99.960	99.960	1.20	1081641	0.01	2500	
Tl	205	209	1	He	272.197	272.197	1.83	5914638	0.00	5000	
Pb	208	209	1	He	1198.967	1198.967	1.44	34282838	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1420627	0.28	1803797	78.76	30	120	
Sc	45	1	He	508308	1.85	574766	88.44	30	120	
Sc	45	2	NoGas	4035111	0.11	4296857	93.91	30	120	
Rh	103	1	He	1333082	0.73	1652712	80.66	30	120	
In	115	1	He	708415	0.46	852389	83.11	30	120	
Tb	159	1	He	2352986	0.08	2425956	96.99	30	120	
Ho	165	1	He	2425697	1.31	2452680	98.90	30	120	
Bi	209	1	He	1578808	1.93	1810473	87.20	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-e du@2
Data File Name	149SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:57:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.338	3.338	1.49	15251	0.02	10000	
B	11	45	2	NoGas	19.038	19.038	0.84	70478	0.03	300	
Na	23	45	1	He	127.362	127.362	2.72	210064	0.06	500000	
Mg	24	45	1	He	7797.777	7797.777	2.33	6227798	0.13	500000	
Al	27	45	1	He	43650.943	43650.943	1.43	18131508	0.24	200000	
K	39	45	1	He	3788.002	3788.002	2.25	2434348	0.16	500000	
Ca	44	45	1	He	667.941	667.941	1.30	22852	2.92	500000	
Ti	47	45	1	He	304.584	304.584	1.65	60616	0.50	2500	
V	51	45	1	He	115.724	115.724	1.77	588653	0.02	10000	
Cr	52	45	1	He	101.627	101.627	1.91	636657	0.02	10000	
Mn	55	45	1	He	6413.884	6413.884	1.48	28304731	0.02	10000	
Fe	56	45	1	He	191143.318	191143.318	2.10	1091862001	0.02	200000	
Co	59	103	1	He	50.903	50.903	1.10	445079	0.01	10000	
Ni	60	103	1	He	87.821	87.821	0.87	195338	0.04	10000	
Cu	63	103	1	He	57.737	57.737	0.44	344411	0.02	10000	
Zn	66	103	1	He	204.667	204.667	1.23	247467	0.08	10000	
As	75	103	1	He	71.574	71.574	0.56	54790	0.13	10000	
Se	78	103	1	He	5.873	5.873	8.18	396	1.48	10000	
Sr	88	103	1	He	25.274	25.274	0.52	114917	0.02	10000	
Mo	95	103	1	He	8.451	8.451	4.64	21253	0.04	2000	
Ag	107	103	1	He	0.100	0.100	8.90	870	0.01	300	
Cd	111	103	1	He	0.708	0.708	5.85	1707	0.04	4000	
Sn	118	115	1	He	18.452	18.452	2.71	61270	0.03	2000	
Sb	123	115	1	He	0.974	0.974	3.47	4176	0.02	300	
Ba	137	115	1	He	313.060	313.060	0.26	430404	0.07	10000	
W	182	165	1	He	1.555	1.555	22.00	19709	0.01	2500	
Tl	205	209	1	He	1.135	1.135	9.97	27010	0.00	5000	
Pb	208	209	1	He	71.333	71.333	1.94	2206227	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1459037	1.36	1803797	80.89	30	120	
Sc	45	1	He	526534	1.47	574766	91.61	30	120	
Sc	45	2	NoGas	4185602	1.15	4296857	97.41	30	120	
Rh	103	1	He	1370222	1.03	1652712	82.91	30	120	
In	115	1	He	749111	0.40	852389	87.88	30	120	
Tb	159	1	He	2407056	0.84	2425956	99.22	30	120	
Ho	165	1	He	2463407	1.24	2452680	100.44	30	120	
Bi	209	1	He	1707271	2.11	1810473	94.30	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-f ms@2
Data File Name	150SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:01:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	51.285	51.285	1.53	222658	0.02	10000	
B	11	45	2	NoGas	53.938	53.938	1.14	181053	0.03	300	
Na	23	45	1	He	4563.767	4563.767	1.53	6297244	0.07	500000	
Mg	24	45	1	He	12261.050	12261.050	2.14	9547637	0.13	500000	
Al	27	45	1	He	48951.408	48951.408	0.85	19824263	0.25	200000	
K	39	45	1	He	7333.256	7333.256	1.38	4541351	0.16	500000	
Ca	44	45	1	He	4985.415	4985.415	0.89	162979	3.06	500000	
Ti	47	45	1	He	409.332	409.332	0.86	79431	0.52	2500	
V	51	45	1	He	167.737	167.737	1.54	831789	0.02	10000	
Cr	52	45	1	He	141.865	141.865	1.27	865469	0.02	10000	
Mn	55	45	1	He	7666.386	7666.386	0.11	32988613	0.02	10000	
Fe	56	45	1	He	204035.068	204035.068	0.87	1136469075	0.02	200000	>LDR
Co	59	103	1	He	105.135	105.135	0.23	919739	0.01	10000	
Ni	60	103	1	He	130.042	130.042	1.04	289366	0.04	10000	
Cu	63	103	1	He	101.404	101.404	0.56	603662	0.02	10000	
Zn	66	103	1	He	249.323	249.323	0.59	301498	0.08	10000	
As	75	103	1	He	120.511	120.511	0.25	92193	0.13	10000	
Se	78	103	1	He	47.132	47.132	1.22	3004	1.57	10000	
Sr	88	103	1	He	72.062	72.062	0.27	327605	0.02	10000	
Mo	95	103	1	He	58.155	58.155	0.27	142978	0.04	2000	
Ag	107	103	1	He	47.562	47.562	0.53	403273	0.01	300	
Cd	111	103	1	He	47.641	47.641	1.11	68171	0.07	4000	
Sn	118	115	1	He	57.476	57.476	1.00	187789	0.03	2000	
Sb	123	115	1	He	16.383	16.383	1.20	57304	0.03	300	
Ba	137	115	1	He	363.683	363.683	1.20	496144	0.07	10000	
W	182	165	1	He	32.760	32.760	2.02	361592	0.01	2500	
Tl	205	209	1	He	41.972	41.972	1.14	1008183	0.00	5000	
Pb	208	209	1	He	121.500	121.500	1.94	3839589	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1387034	2.00	1803797	76.90	30	120	
Sc	45	1	He	513341	0.97	574766	89.31	30	120	
Sc	45	2	NoGas	4004541	1.99	4296857	93.20	30	120	
Rh	103	1	He	1370951	0.35	1652712	82.95	30	120	
In	115	1	He	743328	0.28	852389	87.21	30	120	
Tb	159	1	He	2401698	1.35	2425956	99.00	30	120	
Ho	165	1	He	2461879	0.44	2452680	100.38	30	120	
Bi	209	1	He	1744499	1.49	1810473	96.36	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-2-b@2
Data File Name	151SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:05:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.425	3.425	1.30	15136	0.02	10000	
B	11	45	2	NoGas	20.684	20.684	1.61	74940	0.03	300	
Na	23	45	1	He	166.010	166.010	1.49	262935	0.06	500000	
Mg	24	45	1	He	11633.430	11633.430	0.25	9236410	0.13	500000	
Al	27	45	1	He	59081.083	59081.083	0.81	24392191	0.24	200000	
K	39	45	1	He	5204.087	5204.087	2.04	3302052	0.16	500000	
Ca	44	45	1	He	906.704	906.704	2.24	30643	2.96	500000	
Ti	47	45	1	He	344.747	344.747	1.62	68196	0.51	2500	
V	51	45	1	He	119.352	119.352	0.79	603482	0.02	10000	
Cr	52	45	1	He	104.174	104.174	1.44	648625	0.02	10000	
Mn	55	45	1	He	3181.564	3181.564	1.89	13955437	0.02	10000	
Fe	56	45	1	He	176164.622	176164.622	1.33	1000299054	0.02	200000	
Co	59	103	1	He	48.291	48.291	0.52	426745	0.01	10000	
Ni	60	103	1	He	101.890	101.890	0.54	229025	0.04	10000	
Cu	63	103	1	He	87.957	87.957	0.17	529178	0.02	10000	
Zn	66	103	1	He	255.635	255.635	0.15	312228	0.08	10000	
As	75	103	1	He	78.379	78.379	0.26	60624	0.13	10000	
Se	78	103	1	He	6.442	6.442	5.87	436	1.48	10000	
Sr	88	103	1	He	36.576	36.576	0.86	168012	0.02	10000	
Mo	95	103	1	He	8.793	8.793	0.32	22331	0.04	2000	
Ag	107	103	1	He	0.087	0.087	4.13	774	0.01	300	
Cd	111	103	1	He	0.753	0.753	3.18	1790	0.04	4000	
Sn	118	115	1	He	17.497	17.497	2.62	58304	0.03	2000	
Sb	123	115	1	He	0.915	0.915	2.90	3981	0.02	300	
Ba	137	115	1	He	387.123	387.123	0.30	533691	0.07	10000	
W	182	165	1	He	0.688	0.688	12.96	10471	0.01	2500	
Tl	205	209	1	He	1.039	1.039	0.31	25567	0.00	5000	
Pb	208	209	1	He	89.585	89.585	1.67	2857317	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1411718	1.81	1803797	78.26	30	120	
Sc	45	1	He	523339	0.99	574766	91.05	30	120	
Sc	45	2	NoGas	4122314	0.74	4296857	95.94	30	120	
Rh	103	1	He	1384783	0.29	1652712	83.79	30	120	
In	115	1	He	751176	0.30	852389	88.13	30	120	
Tb	159	1	He	2458106	1.23	2425956	101.33	30	120	
Ho	165	1	He	2519458	0.61	2452680	102.72	30	120	
Bi	209	1	He	1760655	1.89	1810473	97.25	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-4-b@2
Data File Name	152SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:08:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.885	2.885	3.40	12653	0.02	10000	
B	11	45	2	NoGas	62.968	62.968	1.16	207552	0.03	300	
Na	23	45	1	He	1804.266	1804.266	2.15	2462404	0.07	500000	
Mg	24	45	1	He	12413.228	12413.228	0.88	9492095	0.13	500000	
Al	27	45	1	He	44862.271	44862.271	0.60	17839933	0.25	200000	
K	39	45	1	He	16499.826	16499.826	1.19	9961888	0.17	500000	
Ca	44	45	1	He	133.747	133.747	25.27	4779	2.80	500000	
Ti	47	45	1	He	397.708	397.708	0.18	75782	0.52	2500	
V	51	45	1	He	79.346	79.346	1.94	386482	0.02	10000	
Cr	52	45	1	He	81.609	81.609	0.35	490012	0.02	10000	
Mn	55	45	1	He	6276.349	6276.349	0.99	26517594	0.02	10000	
Fe	56	45	1	He	112422.379	112422.379	0.96	614903069	0.02	200000	
Co	59	103	1	He	42.601	42.601	0.69	371283	0.01	10000	
Ni	60	103	1	He	106.250	106.250	0.37	235531	0.05	10000	
Cu	63	103	1	He	95.820	95.820	0.20	568344	0.02	10000	
Zn	66	103	1	He	241.121	241.121	0.82	290474	0.08	10000	
As	75	103	1	He	200.770	200.770	0.22	152894	0.13	10000	
Se	78	103	1	He	3.755	3.755	3.57	261	1.44	10000	
Sr	88	103	1	He	2336.345	2336.345	0.63	10576956	0.02	10000	
Mo	95	103	1	He	672.381	672.381	0.43	1640651	0.04	2000	
Ag	107	103	1	He	0.082	0.082	11.67	716	0.01	300	
Cd	111	103	1	He	0.546	0.546	9.90	1472	0.04	4000	
Sn	118	115	1	He	17.020	17.020	3.09	55818	0.03	2000	
Sb	123	115	1	He	0.410	0.410	4.46	2186	0.02	300	
Ba	137	115	1	He	339.309	339.309	0.45	460267	0.07	10000	
W	182	165	1	He	11.235	11.235	1.95	124575	0.01	2500	
Tl	205	209	1	He	0.575	0.575	1.82	14103	0.00	5000	
Pb	208	209	1	He	403.796	403.796	2.49	12670338	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1400460	0.97	1803797	77.64	30	120	
Sc	45	1	He	504055	0.70	574766	87.70	30	120	
Sc	45	2	NoGas	3949519	1.59	4296857	91.92	30	120	
Rh	103	1	He	1365683	0.34	1652712	82.63	30	120	
In	115	1	He	739114	0.43	852389	86.71	30	120	
Tb	159	1	He	2366157	0.47	2425956	97.54	30	120	
Ho	165	1	He	2438442	1.07	2452680	99.42	30	120	
Bi	209	1	He	1732691	1.91	1810473	95.70	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	153_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:12:39-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.286	0.842	209416	0.53	50	94.6	89.5	110.5	
B	11	45	2	NoGas	50.892	1.149	164509	0.89	50	101.8	89.5	110.5	
Na	23	45	1	He	25530.690	2.179	33417129	0.81	25000	102.1	89.5	110.5	
Mg	24	45	1	He	25411.837	0.818	18847152	1.34	25000	101.6	89.5	110.5	
Al	27	45	1	He	251.070	1.353	97466	0.89	250	100.4	89.5	110.5	
K	39	45	1	He	26173.217	2.630	15290331	0.80	25000	104.7	89.5	110.5	
Ca	44	45	1	He	25412.811	2.323	789077	0.60	25000	101.7	89.5	110.5	
Ti	47	45	1	He	52.106	3.527	9627	1.47	50	104.2	89.5	110.5	
V	51	45	1	He	52.296	1.233	247148	1.22	50	104.6	89.5	110.5	
Cr	52	45	1	He	52.019	1.472	303855	0.72	50	104.0	89.5	110.5	
Mn	55	45	1	He	261.140	1.257	1070246	0.90	250	104.5	89.5	110.5	
Fe	56	45	1	He	13253.887	1.672	70307191	0.46	12500	106.0	89.5	110.5	
Co	59	103	1	He	47.367	0.849	426282	0.95	50	94.7	89.5	110.5	
Ni	60	103	1	He	47.384	0.817	108513	0.89	50	94.8	89.5	110.5	
Cu	63	103	1	He	47.449	0.653	291694	0.54	50	94.9	89.5	110.5	
Zn	66	103	1	He	49.169	0.537	61743	0.66	50	98.3	89.5	110.5	
As	75	103	1	He	49.429	0.606	38997	0.46	50	98.9	89.5	110.5	
Se	78	103	1	He	48.683	0.258	3191	0.20	50	97.4	89.5	110.5	
Sr	88	103	1	He	51.753	0.481	242055	0.31	50	103.5	89.5	110.5	
Mo	95	103	1	He	59.063	1.621	149364	1.59	50	118.1	89.5	110.5	CCV Failed
Ag	107	103	1	He	51.806	1.150	451846	1.08	50	103.6	89.5	110.5	
Cd	111	103	1	He	52.944	0.981	77847	0.80	50	105.9	89.5	110.5	
Sn	118	115	1	He	50.499	0.239	173524	0.08	50	101.0	89.5	110.5	
Sb	123	115	1	He	53.108	0.981	193406	0.81	50	106.2	89.5	110.5	
Ba	137	115	1	He	52.677	0.571	75546	0.34	50	105.4	89.5	110.5	
W	182	165	1	He	47.627	2.696	526952	2.23	50	95.3	89.5	110.5	
Tl	205	209	1	He	47.096	0.906	1162368	0.43	50	94.2	89.5	110.5	
Pb	208	209	1	He	48.315	0.881	1569511	0.80	50	96.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1414837	1.36	1803797	78.44	30	120	
Sc	45	1	He	488953	2.15	574766	85.07	30	120	
Sc	45	2	NoGas	3849288	0.63	4296857	89.58	30	120	
Rh	103	1	He	1410251	0.17	1652712	85.33	30	120	
In	115	1	He	781330	0.32	852389	91.66	30	120	
Tb	159	1	He	2406374	0.09	2425956	99.19	30	120	
Ho	165	1	He	2473678	0.50	2452680	100.86	30	120	
Bi	209	1	He	1792403	0.58	1810473	99.00	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	154_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:16:29-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.112	22.8	504	22.6	1	
B	11	45	2	NoGas	6.124	2.0	24825	2.3	20	
Na	23	45	1	He	11.034	12.2	43256	2.7	400	
Mg	24	45	1	He	2.147	33.4	2393	20.7	1000	
Al	27	45	1	He	9.205	6.3	4218	3.7	50	
K	39	45	1	He	10.887	14.1	61921	0.3	1000	
Ca	44	45	1	He	1.652	81.4	545	9.5	1000	
Ti	47	45	1	He	0.073	39.0	14	35.3	20	
V	51	45	1	He	0.036	139.9	393	59.2	2	
Cr	52	45	1	He	-0.048	-47.7	2300	4.4	2	
Mn	55	45	1	He	1.413	3.9	5978	2.5	2	
Fe	56	45	1	He	24.518	15.4	136110	13.2	50	
Co	59	103	1	He	0.024	25.6	279	21.7	1	
Ni	60	103	1	He	0.016	76.8	123	24.0	2	
Cu	63	103	1	He	-0.150	-9.4	1265	6.6	2	
Zn	66	103	1	He	0.436	13.8	1325	6.6	20	
As	75	103	1	He	0.028	71.8	200	9.2	2	
Se	78	103	1	He	0.173	69.5	38	20.9	2	
Sr	88	103	1	He	0.044	19.0	341	12.8	10	
Mo	95	103	1	He	1.496	15.1	4568	13.1	2	
Ag	107	103	1	He	0.005	32.4	71	19.0	0.2	
Cd	111	103	1	He	0.042	20.7	823	0.8	0.2	
Sn	118	115	1	He	0.200	31.0	1522	13.7	10	
Sb	123	115	1	He	0.062	50.6	1078	10.2	1	
Ba	137	115	1	He	0.040	42.7	72	35.9	5	
W	182	165	1	He	0.919	13.8	12761	9.9	10	
Tl	205	209	1	He	0.054	16.1	1797	11.9	0.5	
Pb	208	209	1	He	0.053	7.2	2682	5.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1425765	0.59	1803797	79.04	30	120	
Sc	45	1	He	492810	1.71	574766	85.74	30	120	
Sc	45	2	NoGas	3915603	0.87	4296857	91.13	30	120	
Rh	103	1	He	1476997	0.84	1652712	89.37	30	120	
In	115	1	He	804165	0.78	852389	94.34	30	120	
Tb	159	1	He	2382992	1.17	2425956	98.23	30	120	
Ho	165	1	He	2464316	0.99	2452680	100.47	30	120	
Bi	209	1	He	1856986	0.93	1810473	102.57	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-11-b@2
Data File Name	155SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:20:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.487	2.487	6.45	10800	0.02	10000	
B	11	45	2	NoGas	18.078	18.078	2.73	63435	0.03	300	
Na	23	45	1	He	312.853	312.853	1.94	458972	0.07	500000	
Mg	24	45	1	He	8600.712	8600.712	1.70	6689326	0.13	500000	
Al	27	45	1	He	55390.135	55390.135	3.27	22397015	0.25	200000	
K	39	45	1	He	3590.297	3590.297	2.22	2249582	0.16	500000	
Ca	44	45	1	He	5080.485	5080.485	1.85	165856	3.06	500000	
Ti	47	45	1	He	602.527	602.527	2.29	116756	0.52	2500	
V	51	45	1	He	106.100	106.100	3.05	525466	0.02	10000	
Cr	52	45	1	He	82.952	82.952	2.53	506475	0.02	10000	
Mn	55	45	1	He	4407.583	4407.583	2.99	18936670	0.02	10000	
Fe	56	45	1	He	84230.347	84230.347	2.46	468505741	0.02	200000	
Co	59	103	1	He	39.237	39.237	0.72	344693	0.01	10000	
Ni	60	103	1	He	104.275	104.275	0.54	233001	0.04	10000	
Cu	63	103	1	He	47.889	47.889	0.60	287352	0.02	10000	
Zn	66	103	1	He	243.420	243.420	0.70	295579	0.08	10000	
As	75	103	1	He	77.284	77.284	0.31	59426	0.13	10000	
Se	78	103	1	He	5.136	5.136	3.72	351	1.46	10000	
Sr	88	103	1	He	78.935	78.935	1.81	360305	0.02	10000	
Mo	95	103	1	He	8.879	8.879	0.79	22411	0.04	2000	
Ag	107	103	1	He	0.147	0.147	3.15	1278	0.01	300	
Cd	111	103	1	He	0.676	0.676	10.54	1668	0.04	4000	
Sn	118	115	1	He	16.812	16.812	0.40	56268	0.03	2000	
Sb	123	115	1	He	0.573	0.573	7.58	2799	0.02	300	
Ba	137	115	1	He	395.576	395.576	0.30	547477	0.07	10000	
W	182	165	1	He	0.571	0.571	4.02	8947	0.01	2500	
Tl	205	209	1	He	0.912	0.912	0.89	22499	0.00	5000	
Pb	208	209	1	He	48.339	48.339	1.35	1543359	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1387539	2.84	1803797	76.92	30	120	
Sc	45	1	He	512778	2.24	574766	89.21	30	120	
Sc	45	2	NoGas	3950202	0.30	4296857	91.93	30	120	
Rh	103	1	He	1376598	0.54	1652712	83.29	30	120	
In	115	1	He	754109	0.18	852389	88.47	30	120	
Tb	159	1	He	2389935	1.26	2425956	98.52	30	120	
Ho	165	1	He	2460509	1.41	2452680	100.32	30	120	
Bi	209	1	He	1761828	1.18	1810473	97.31	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-13-b@2
Data File Name	156SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:24:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.047	2.047	4.87	8936	0.02	10000	
B	11	45	2	NoGas	13.639	13.639	1.31	48761	0.03	300	
Na	23	45	1	He	86.286	86.286	1.25	143548	0.06	500000	
Mg	24	45	1	He	5045.036	5045.036	1.21	3800046	0.13	500000	
Al	27	45	1	He	32635.648	32635.648	0.88	12782406	0.26	200000	
K	39	45	1	He	2556.891	2556.891	0.29	1567674	0.16	500000	
Ca	44	45	1	He	875.000	875.000	1.25	28073	3.12	500000	
Ti	47	45	1	He	355.348	355.348	1.83	66688	0.53	2500	
V	51	45	1	He	66.597	66.597	0.70	319562	0.02	10000	
Cr	52	45	1	He	61.400	61.400	0.55	363752	0.02	10000	
Mn	55	45	1	He	1778.231	1778.231	1.02	7399852	0.02	10000	
Fe	56	45	1	He	83373.230	83373.230	0.99	449121982	0.02	200000	
Co	59	103	1	He	36.484	36.484	0.22	321629	0.01	10000	
Ni	60	103	1	He	74.577	74.577	0.68	167242	0.04	10000	
Cu	63	103	1	He	40.526	40.526	0.48	244341	0.02	10000	
Zn	66	103	1	He	250.410	250.410	0.71	305109	0.08	10000	
As	75	103	1	He	98.629	98.629	0.74	76056	0.13	10000	
Se	78	103	1	He	3.409	3.409	5.40	242	1.41	10000	
Sr	88	103	1	He	16.387	16.387	0.84	75154	0.02	10000	
Mo	95	103	1	He	7.891	7.891	1.07	20052	0.04	2000	
Ag	107	103	1	He	0.094	0.094	3.74	827	0.01	300	
Cd	111	103	1	He	0.654	0.654	11.85	1643	0.04	4000	
Sn	118	115	1	He	14.589	14.589	1.42	48541	0.03	2000	
Sb	123	115	1	He	0.376	0.376	6.07	2093	0.02	300	
Ba	137	115	1	He	223.322	223.322	1.00	306618	0.07	10000	
W	182	165	1	He	0.339	0.339	7.82	6346	0.01	2500	
Tl	205	209	1	He	0.607	0.607	2.42	15064	0.00	5000	
Pb	208	209	1	He	46.188	46.188	0.80	1471121	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1393754	1.71	1803797	77.27	30	120	
Sc	45	1	He	496458	0.73	574766	86.38	30	120	
Sc	45	2	NoGas	3916784	0.22	4296857	91.15	30	120	
Rh	103	1	He	1381395	0.34	1652712	83.58	30	120	
In	115	1	He	748107	0.22	852389	87.77	30	120	
Tb	159	1	He	2365877	0.27	2425956	97.52	30	120	
Ho	165	1	He	2435760	0.98	2452680	99.31	30	120	
Bi	209	1	He	1757398	0.71	1810473	97.07	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-14-b@2
Data File Name	157SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:27:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.408	2.408	3.59	10474	0.02	10000	
B	11	45	2	NoGas	18.935	18.935	1.84	65868	0.03	300	
Na	23	45	1	He	158.411	158.411	3.47	243599	0.07	500000	
Mg	24	45	1	He	8381.278	8381.278	2.68	6425368	0.13	500000	
Al	27	45	1	He	41445.460	41445.460	0.30	16525274	0.25	200000	
K	39	45	1	He	4097.537	4097.537	0.54	2523149	0.16	500000	
Ca	44	45	1	He	1116.676	1116.676	1.61	36336	3.07	500000	
Ti	47	45	1	He	499.482	499.482	0.50	95421	0.52	2500	
V	51	45	1	He	92.653	92.653	0.72	452477	0.02	10000	
Cr	52	45	1	He	80.343	80.343	0.49	483722	0.02	10000	
Mn	55	45	1	He	3055.772	3055.772	1.57	12943751	0.02	10000	
Fe	56	45	1	He	108295.817	108295.817	0.48	593899870	0.02	200000	
Co	59	103	1	He	116.726	116.726	0.38	1017910	0.01	10000	
Ni	60	103	1	He	135.371	135.371	0.29	300270	0.05	10000	
Cu	63	103	1	He	61.251	61.251	0.47	364296	0.02	10000	
Zn	66	103	1	He	613.970	613.970	0.55	739086	0.08	10000	
As	75	103	1	He	499.570	499.570	0.15	380463	0.13	10000	
Se	78	103	1	He	4.354	4.354	5.15	299	1.46	10000	
Sr	88	103	1	He	54.178	54.178	0.56	245554	0.02	10000	
Mo	95	103	1	He	9.940	9.940	0.81	24838	0.04	2000	
Ag	107	103	1	He	0.291	0.291	3.59	2488	0.01	300	
Cd	111	103	1	He	1.311	1.311	5.51	2554	0.05	4000	
Sn	118	115	1	He	16.646	16.646	1.66	55030	0.03	2000	
Sb	123	115	1	He	0.887	0.887	7.08	3850	0.02	300	
Ba	137	115	1	He	308.007	308.007	2.08	420992	0.07	10000	
W	182	165	1	He	0.340	0.340	5.65	6409	0.01	2500	
Tl	205	209	1	He	1.200	1.200	2.03	29183	0.00	5000	
Pb	208	209	1	He	75.112	75.112	2.33	2373756	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1389527	1.77	1803797	77.03	30	120	
Sc	45	1	He	505384	1.12	574766	87.93	30	120	
Sc	45	2	NoGas	3931376	1.06	4296857	91.49	30	120	
Rh	103	1	He	1366629	0.26	1652712	82.69	30	120	
In	115	1	He	744866	1.20	852389	87.39	30	120	
Tb	159	1	He	2398971	1.17	2425956	98.89	30	120	
Ho	165	1	He	2458853	0.52	2452680	100.25	30	120	
Bi	209	1	He	1744766	2.62	1810473	96.37	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-15-b@2
Data File Name	158SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:31:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.721	3.721	4.02	16178	0.02	10000	
B	11	45	2	NoGas	18.190	18.190	2.28	65564	0.03	300	
Na	23	45	1	He	179.768	179.768	1.16	277774	0.06	500000	
Mg	24	45	1	He	15200.870	15200.870	1.31	11878510	0.13	500000	
Al	27	45	1	He	67676.624	67676.624	1.55	27502185	0.25	200000	
K	39	45	1	He	4911.555	4911.555	2.29	3070728	0.16	500000	
Ca	44	45	1	He	1865.256	1865.256	2.11	61507	3.03	500000	
Ti	47	45	1	He	699.757	699.757	1.27	136255	0.51	2500	
V	51	45	1	He	136.041	136.041	1.24	677056	0.02	10000	
Cr	52	45	1	He	121.859	121.859	0.70	746448	0.02	10000	
Mn	55	45	1	He	2310.856	2310.856	0.86	9978121	0.02	10000	
Fe	56	45	1	He	163533.524	163533.524	0.88	914071928	0.02	200000	
Co	59	103	1	He	57.061	57.061	0.13	493919	0.01	10000	
Ni	60	103	1	He	129.237	129.237	0.54	284528	0.05	10000	
Cu	63	103	1	He	135.028	135.028	0.27	794651	0.02	10000	
Zn	66	103	1	He	415.272	415.272	0.10	496388	0.08	10000	
As	75	103	1	He	97.694	97.694	0.63	73977	0.13	10000	
Se	78	103	1	He	6.427	6.427	3.55	426	1.51	10000	
Sr	88	103	1	He	26.798	26.798	0.70	120614	0.02	10000	
Mo	95	103	1	He	10.895	10.895	0.60	26968	0.04	2000	
Ag	107	103	1	He	0.133	0.133	5.04	1143	0.01	300	
Cd	111	103	1	He	1.104	1.104	4.01	2244	0.05	4000	
Sn	118	115	1	He	16.396	16.396	3.27	53834	0.03	2000	
Sb	123	115	1	He	0.949	0.949	2.76	4037	0.02	300	
Ba	137	115	1	He	370.487	370.487	0.66	502938	0.07	10000	
W	182	165	1	He	0.296	0.296	4.35	5961	0.00	2500	
Tl	205	209	1	He	1.231	1.231	2.09	29433	0.00	5000	
Pb	208	209	1	He	111.203	111.203	1.96	3454186	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1389087	2.02	1803797	77.01	30	120	
Sc	45	1	He	515157	1.40	574766	89.63	30	120	
Sc	45	2	NoGas	4059769	0.60	4296857	94.48	30	120	
Rh	103	1	He	1356434	0.33	1652712	82.07	30	120	
In	115	1	He	739697	0.93	852389	86.78	30	120	
Tb	159	1	He	2385858	0.96	2425956	98.35	30	120	
Ho	165	1	He	2469305	0.90	2452680	100.68	30	120	
Bi	209	1	He	1714841	1.96	1810473	94.72	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-16-b@2
Data File Name	159SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:35:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.974	2.974	5.02	12634	0.02	10000	
B	11	45	2	NoGas	18.615	18.615	1.89	64029	0.03	300	
Na	23	45	1	He	207.807	207.807	1.11	308853	0.07	500000	
Mg	24	45	1	He	13254.839	13254.839	1.37	10108976	0.13	500000	
Al	27	45	1	He	46157.819	46157.819	1.86	18305893	0.25	200000	
K	39	45	1	He	4922.202	4922.202	0.86	3003864	0.16	500000	
Ca	44	45	1	He	3344.483	3344.483	1.31	107241	3.12	500000	
Ti	47	45	1	He	427.974	427.974	1.37	81331	0.53	2500	
V	51	45	1	He	92.013	92.013	1.37	446984	0.02	10000	
Cr	52	45	1	He	80.669	80.669	1.13	483125	0.02	10000	
Mn	55	45	1	He	2830.060	2830.060	0.93	11926017	0.02	10000	
Fe	56	45	1	He	121515.946	121515.946	0.77	662904205	0.02	200000	
Co	59	103	1	He	47.495	47.495	0.52	411820	0.01	10000	
Ni	60	103	1	He	104.662	104.662	1.04	230829	0.05	10000	
Cu	63	103	1	He	85.914	85.914	0.27	507225	0.02	10000	
Zn	66	103	1	He	285.432	285.432	0.85	341990	0.08	10000	
As	75	103	1	He	61.117	61.117	0.34	46420	0.13	10000	
Se	78	103	1	He	4.413	4.413	6.57	301	1.47	10000	
Sr	88	103	1	He	31.942	31.942	1.00	143986	0.02	10000	
Mo	95	103	1	He	6.296	6.296	3.37	15851	0.04	2000	
Ag	107	103	1	He	0.102	0.102	2.34	883	0.01	300	
Cd	111	103	1	He	0.651	0.651	8.64	1612	0.04	4000	
Sn	118	115	1	He	16.558	16.558	2.09	54495	0.03	2000	
Sb	123	115	1	He	0.506	0.506	4.46	2521	0.02	300	
Ba	137	115	1	He	327.114	327.114	0.53	445075	0.07	10000	
W	182	165	1	He	0.251	0.251	10.51	5423	0.00	2500	
Tl	205	209	1	He	0.780	0.780	0.81	19100	0.00	5000	
Pb	208	209	1	He	77.044	77.044	0.51	2434023	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1356506	1.77	1803797	75.20	30	120	
Sc	45	1	He	502760	1.11	574766	87.47	30	120	
Sc	45	2	NoGas	3882319	1.36	4296857	90.35	30	120	
Rh	103	1	He	1358767	0.42	1652712	82.21	30	120	
In	115	1	He	741371	0.47	852389	86.98	30	120	
Tb	159	1	He	2410100	0.62	2425956	99.35	30	120	
Ho	165	1	He	2452679	1.16	2452680	100.00	30	120	
Bi	209	1	He	1743536	0.51	1810473	96.30	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-17-b@2
Data File Name	160SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:39:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.917	3.917	0.69	16875	0.02	10000	
B	11	45	2	NoGas	19.158	19.158	2.13	67690	0.03	300	
Na	23	45	1	He	192.233	192.233	0.88	290601	0.07	500000	
Mg	24	45	1	He	13403.669	13403.669	0.57	10320355	0.13	500000	
Al	27	45	1	He	61441.034	61441.034	1.16	24599865	0.25	200000	
K	39	45	1	He	5197.381	5197.381	0.93	3198516	0.16	500000	
Ca	44	45	1	He	4992.634	4992.634	0.68	161370	3.09	500000	
Ti	47	45	1	He	419.259	419.259	1.08	80434	0.52	2500	
V	51	45	1	He	121.488	121.488	1.95	595665	0.02	10000	
Cr	52	45	1	He	92.700	92.700	1.40	560051	0.02	10000	
Mn	55	45	1	He	4285.749	4285.749	2.45	18230390	0.02	10000	
Fe	56	45	1	He	174147.746	174147.746	0.82	959032602	0.02	200000	
Co	59	103	1	He	56.015	56.015	0.40	485344	0.01	10000	
Ni	60	103	1	He	107.166	107.166	1.37	236184	0.05	10000	
Cu	63	103	1	He	96.692	96.692	0.18	570190	0.02	10000	
Zn	66	103	1	He	317.928	317.928	0.39	380573	0.08	10000	
As	75	103	1	He	75.920	75.920	0.15	57583	0.13	10000	
Se	78	103	1	He	6.311	6.311	4.20	420	1.50	10000	
Sr	88	103	1	He	43.300	43.300	0.22	195008	0.02	10000	
Mo	95	103	1	He	8.797	8.797	3.71	21905	0.04	2000	
Ag	107	103	1	He	0.194	0.194	4.11	1658	0.01	300	
Cd	111	103	1	He	1.048	1.048	9.72	2168	0.05	4000	
Sn	118	115	1	He	17.744	17.744	1.09	58204	0.03	2000	
Sb	123	115	1	He	0.539	0.539	9.01	2629	0.02	300	
Ba	137	115	1	He	522.051	522.051	1.00	708632	0.07	10000	
W	182	165	1	He	0.257	0.257	9.78	5460	0.00	2500	
Tl	205	209	1	He	0.920	0.920	1.31	22539	0.00	5000	
Pb	208	209	1	He	82.433	82.433	1.17	2611157	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1375901	1.73	1803797	76.28	30	120	
Sc	45	1	He	507543	1.25	574766	88.30	30	120	
Sc	45	2	NoGas	3996541	0.30	4296857	93.01	30	120	
Rh	103	1	He	1357798	0.43	1652712	82.16	30	120	
In	115	1	He	739630	0.24	852389	86.77	30	120	
Tb	159	1	He	2387688	0.13	2425956	98.42	30	120	
Ho	165	1	He	2439760	0.18	2452680	99.47	30	120	
Bi	209	1	He	1748363	1.56	1810473	96.57	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-18-b@2
Data File Name	161SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:43:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.409	3.409	7.22	14666	0.02	10000	
B	11	45	2	NoGas	16.206	16.206	2.86	56672	0.03	300	
Na	23	45	1	He	195.530	195.530	1.07	290984	0.07	500000	
Mg	24	45	1	He	14468.590	14468.590	1.39	10984688	0.13	500000	
Al	27	45	1	He	58587.212	58587.212	1.29	23130974	0.25	200000	
K	39	45	1	He	4426.885	4426.885	0.71	2694876	0.16	500000	
Ca	44	45	1	He	4085.583	4085.583	0.61	130310	3.14	500000	
Ti	47	45	1	He	453.566	453.566	1.75	85803	0.53	2500	
V	51	45	1	He	109.256	109.256	0.58	528323	0.02	10000	
Cr	52	45	1	He	92.387	92.387	0.78	550430	0.02	10000	
Mn	55	45	1	He	2705.723	2705.723	0.80	11350503	0.02	10000	
Fe	56	45	1	He	140669.109	140669.109	0.26	763910387	0.02	200000	
Co	59	103	1	He	51.336	51.336	0.52	446261	0.01	10000	
Ni	60	103	1	He	112.686	112.686	0.92	249155	0.05	10000	
Cu	63	103	1	He	96.378	96.378	0.41	570202	0.02	10000	
Zn	66	103	1	He	414.502	414.502	0.20	497593	0.08	10000	
As	75	103	1	He	68.972	68.972	0.89	52500	0.13	10000	
Se	78	103	1	He	4.747	4.747	4.42	323	1.47	10000	
Sr	88	103	1	He	29.571	29.571	0.28	133650	0.02	10000	
Mo	95	103	1	He	7.393	7.393	2.54	18559	0.04	2000	
Ag	107	103	1	He	0.149	0.149	5.75	1285	0.01	300	
Cd	111	103	1	He	0.880	0.880	3.07	1938	0.05	4000	
Sn	118	115	1	He	16.254	16.254	1.67	53415	0.03	2000	
Sb	123	115	1	He	0.414	0.414	5.48	2202	0.02	300	
Ba	137	115	1	He	365.707	365.707	0.78	496759	0.07	10000	
W	182	165	1	He	0.259	0.259	4.25	5572	0.00	2500	
Tl	205	209	1	He	0.937	0.937	0.82	22823	0.00	5000	
Pb	208	209	1	He	73.743	73.743	2.43	2323630	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1374355	1.58	1803797	76.19	30	120	
Sc	45	1	He	500473	0.77	574766	87.07	30	120	
Sc	45	2	NoGas	3898311	0.34	4296857	90.72	30	120	
Rh	103	1	He	1362258	0.80	1652712	82.43	30	120	
In	115	1	He	740118	0.44	852389	86.83	30	120	
Tb	159	1	He	2423316	0.54	2425956	99.89	30	120	
Ho	165	1	He	2480377	0.96	2452680	101.13	30	120	
Bi	209	1	He	1739499	2.12	1810473	96.08	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-20-b@2
Data File Name	162SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:47:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.667	3.667	3.79	15366	0.02	10000	
B	11	45	2	NoGas	22.863	22.863	1.53	78722	0.03	300	
Na	23	45	1	He	280.990	280.990	1.97	406818	0.07	500000	
Mg	24	45	1	He	18053.817	18053.817	1.44	13755089	0.13	500000	
Al	27	45	1	He	60907.186	60907.186	1.76	24131828	0.25	200000	
K	39	45	1	He	6796.864	6796.864	1.16	4122126	0.16	500000	
Ca	44	45	1	He	7590.547	7590.547	0.68	242528	3.13	500000	
Ti	47	45	1	He	430.615	430.615	1.46	81760	0.53	2500	
V	51	45	1	He	109.211	109.211	0.91	530004	0.02	10000	
Cr	52	45	1	He	100.981	100.981	0.81	603534	0.02	10000	
Mn	55	45	1	He	2727.788	2727.788	1.39	11483582	0.02	10000	
Fe	56	45	1	He	147497.968	147497.968	0.18	803868697	0.02	200000	
Co	59	103	1	He	65.425	65.425	1.00	564806	0.01	10000	
Ni	60	103	1	He	145.118	145.118	1.19	318636	0.05	10000	
Cu	63	103	1	He	105.715	105.715	1.95	620918	0.02	10000	
Zn	66	103	1	He	331.847	331.847	0.65	395762	0.08	10000	
As	75	103	1	He	68.659	68.659	1.13	51900	0.13	10000	
Se	78	103	1	He	4.930	4.930	2.51	332	1.49	10000	
Sr	88	103	1	He	43.313	43.313	0.35	194356	0.02	10000	
Mo	95	103	1	He	6.638	6.638	2.32	16609	0.04	2000	
Ag	107	103	1	He	0.108	0.108	10.46	933	0.01	300	
Cd	111	103	1	He	0.733	0.733	6.56	1720	0.04	4000	
Sn	118	115	1	He	17.569	17.569	1.02	57610	0.03	2000	
Sb	123	115	1	He	0.480	0.480	2.41	2427	0.02	300	
Ba	137	115	1	He	422.113	422.113	0.67	572706	0.07	10000	
W	182	165	1	He	0.176	0.176	18.88	4649	0.00	2500	
Tl	205	209	1	He	0.988	0.988	0.33	23645	0.00	5000	
Pb	208	209	1	He	67.098	67.098	1.56	2079648	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1338294	0.71	1803797	74.19	30	120	
Sc	45	1	He	502272	1.11	574766	87.39	30	120	
Sc	45	2	NoGas	3945985	0.31	4296857	91.83	30	120	
Rh	103	1	He	1352871	0.41	1652712	81.86	30	120	
In	115	1	He	739281	0.57	852389	86.73	30	120	
Tb	159	1	He	2413295	1.23	2425956	99.48	30	120	
Ho	165	1	He	2475295	0.70	2452680	100.92	30	120	
Bi	209	1	He	1710746	1.95	1810473	94.49	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-21-b@2
Data File Name	163SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:50:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.723	3.723	1.73	15885	0.02	10000	
B	11	45	2	NoGas	28.405	28.405	2.81	95596	0.03	300	
Na	23	45	1	He	319.778	319.778	0.78	456703	0.07	500000	
Mg	24	45	1	He	18946.028	18946.028	1.14	14363800	0.13	500000	
Al	27	45	1	He	68941.452	68941.452	0.38	27183096	0.25	200000	
K	39	45	1	He	7838.773	7838.773	0.39	4721960	0.17	500000	
Ca	44	45	1	He	10159.266	10159.266	0.10	322839	3.15	500000	
Ti	47	45	1	He	455.934	455.934	0.27	86139	0.53	2500	
V	51	45	1	He	122.939	122.939	0.72	593659	0.02	10000	
Cr	52	45	1	He	123.244	123.244	0.25	732400	0.02	10000	
Mn	55	45	1	He	2933.271	2933.271	2.23	12287465	0.02	10000	
Fe	56	45	1	He	165001.202	165001.202	1.25	894765813	0.02	200000	
Co	59	103	1	He	78.903	78.903	0.44	663129	0.01	10000	
Ni	60	103	1	He	160.438	160.438	0.86	342937	0.05	10000	
Cu	63	103	1	He	130.354	130.354	0.60	744924	0.02	10000	
Zn	66	103	1	He	390.505	390.505	0.63	453271	0.09	10000	
As	75	103	1	He	89.514	89.514	0.21	65827	0.14	10000	
Se	78	103	1	He	7.542	7.542	1.29	482	1.57	10000	
Sr	88	103	1	He	52.245	52.245	1.22	228210	0.02	10000	
Mo	95	103	1	He	8.623	8.623	1.91	20837	0.04	2000	
Ag	107	103	1	He	0.132	0.132	6.66	1100	0.01	300	
Cd	111	103	1	He	0.942	0.942	7.08	1959	0.05	4000	
Sn	118	115	1	He	18.400	18.400	1.83	59063	0.03	2000	
Sb	123	115	1	He	0.653	0.653	6.28	2959	0.02	300	
Ba	137	115	1	He	417.422	417.422	0.52	554677	0.08	10000	
W	182	165	1	He	0.208	0.208	2.91	4986	0.00	2500	
Tl	205	209	1	He	1.059	1.059	1.72	25626	0.00	5000	
Pb	208	209	1	He	78.938	78.938	1.10	2477060	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1362488	0.92	1803797	75.53	30	120	
Sc	45	1	He	499779	1.04	574766	86.95	30	120	
Sc	45	2	NoGas	3910184	1.81	4296857	91.00	30	120	
Rh	103	1	He	1317026	0.54	1652712	79.69	30	120	
In	115	1	He	724059	0.63	852389	84.94	30	120	
Tb	159	1	He	2463940	0.46	2425956	101.57	30	120	
Ho	165	1	He	2468613	0.27	2452680	100.65	30	120	
Bi	209	1	He	1731930	1.53	1810473	95.66	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-1-b@2
Data File Name	164SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:54:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.802	3.802	2.70	15759	0.02	10000	
B	11	45	2	NoGas	23.072	23.072	1.15	74327	0.03	300	
Na	23	45	1	He	282.778	282.778	2.07	379577	0.07	500000	
Mg	24	45	1	He	19137.935	19137.935	1.01	13525213	0.14	500000	
Al	27	45	1	He	70981.379	70981.379	1.42	26085855	0.27	200000	
K	39	45	1	He	6227.329	6227.329	0.55	3507394	0.18	500000	
Ca	44	45	1	He	31519.139	31519.139	0.58	932642	3.38	500000	
Ti	47	45	1	He	391.656	391.656	0.61	68972	0.57	2500	
V	51	45	1	He	138.714	138.714	0.70	624327	0.02	10000	
Cr	52	45	1	He	109.947	109.947	0.54	609302	0.02	10000	
Mn	55	45	1	He	4471.797	4471.797	0.64	17461873	0.03	10000	
Fe	56	45	1	He	156699.212	156699.212	1.64	792075240	0.02	200000	
Co	59	103	1	He	58.565	58.565	0.80	475184	0.01	10000	
Ni	60	103	1	He	123.341	123.341	1.00	254534	0.05	10000	
Cu	63	103	1	He	74.313	74.313	0.69	410800	0.02	10000	
Zn	66	103	1	He	344.415	344.415	0.12	386025	0.09	10000	
As	75	103	1	He	72.249	72.249	0.57	51322	0.14	10000	
Se	78	103	1	He	5.373	5.373	10.09	338	1.59	10000	
Sr	88	103	1	He	89.548	89.548	1.36	377539	0.02	10000	
Mo	95	103	1	He	8.108	8.108	1.57	18947	0.04	2000	
Ag	107	103	1	He	0.335	0.335	3.97	2659	0.01	300	
Cd	111	103	1	He	1.135	1.135	5.29	2144	0.05	4000	
Sn	118	115	1	He	17.371	17.371	1.21	53448	0.03	2000	
Sb	123	115	1	He	14.053	14.053	0.50	45969	0.03	300	
Ba	137	115	1	He	473.422	473.422	0.65	602614	0.08	10000	
W	182	165	1	He	0.249	0.249	10.03	5086	0.00	2500	
Tl	205	209	1	He	1.032	1.032	1.03	22516	0.00	5000	
Pb	208	209	1	He	98.363	98.363	0.33	2780526	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1323810	1.38	1803797	73.39	30	120	
Sc	45	1	He	465860	0.78	574766	81.05	30	120	
Sc	45	2	NoGas	3694430	0.46	4296857	85.98	30	120	
Rh	103	1	He	1271498	0.95	1652712	76.93	30	120	
In	115	1	He	693593	0.69	852389	81.37	30	120	
Tb	159	1	He	2239287	0.66	2425956	92.31	30	120	
Ho	165	1	He	2311554	1.03	2452680	94.25	30	120	
Bi	209	1	He	1560160	0.29	1810473	86.17	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	165_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:58:30-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.046	2.975	192199	2.75	50	92.1	89.5	110.5	
B	11	45	2	NoGas	47.676	1.270	147313	1.08	50	95.4	89.5	110.5	
Na	23	45	1	He	25475.839	1.678	31512394	2.04	25000	101.9	89.5	110.5	
Mg	24	45	1	He	25473.088	0.804	17850494	1.10	25000	101.9	89.5	110.5	
Al	27	45	1	He	252.874	1.143	92752	1.05	250	101.1	89.5	110.5	
K	39	45	1	He	26330.803	0.429	14536977	0.54	25000	105.3	89.5	110.5	
Ca	44	45	1	He	25413.402	0.402	745719	0.74	25000	101.7	89.5	110.5	
Ti	47	45	1	He	52.313	0.628	9136	0.97	50	104.6	89.5	110.5	
V	51	45	1	He	51.563	0.416	230251	0.15	50	103.1	89.5	110.5	
Cr	52	45	1	He	51.634	0.807	285013	0.96	50	103.3	89.5	110.5	
Mn	55	45	1	He	260.489	0.748	1008723	0.38	250	104.2	89.5	110.5	
Fe	56	45	1	He	13170.637	0.065	66019142	0.35	12500	105.4	89.5	110.5	
Co	59	103	1	He	47.228	0.847	405369	0.44	50	94.5	89.5	110.5	
Ni	60	103	1	He	47.151	0.682	102983	0.35	50	94.3	89.5	110.5	
Cu	63	103	1	He	47.038	0.316	275815	0.74	50	94.1	89.5	110.5	
Zn	66	103	1	He	48.495	0.644	58090	0.90	50	97.0	89.5	110.5	
As	75	103	1	He	49.178	0.897	37005	0.52	50	98.4	89.5	110.5	
Se	78	103	1	He	49.339	0.984	3085	1.23	50	98.7	89.5	110.5	
Sr	88	103	1	He	51.163	0.401	228234	0.84	50	102.3	89.5	110.5	
Mo	95	103	1	He	51.935	1.475	125330	1.41	50	103.9	89.5	110.5	
Ag	107	103	1	He	51.472	0.528	428181	0.65	50	102.9	89.5	110.5	
Cd	111	103	1	He	52.217	0.991	73236	0.57	50	104.4	89.5	110.5	
Sn	118	115	1	He	50.029	0.285	162659	0.35	50	100.1	89.5	110.5	
Sb	123	115	1	He	53.541	0.371	184478	0.50	50	107.1	89.5	110.5	
Ba	137	115	1	He	53.357	0.953	72402	1.30	50	106.7	89.5	110.5	
W	182	165	1	He	46.220	1.129	494790	1.46	50	92.4	89.5	110.5	
Tl	205	209	1	He	47.032	1.531	1105123	0.40	50	94.1	89.5	110.5	
Pb	208	209	1	He	48.830	1.713	1510120	0.58	50	97.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1333599	1.99	1803797	73.93	30	120	
Sc	45	1	He	461923	0.37	574766	80.37	30	120	
Sc	45	2	NoGas	3671477	0.21	4296857	85.45	30	120	
Rh	103	1	He	1345038	0.44	1652712	81.38	30	120	
In	115	1	He	739252	0.56	852389	86.73	30	120	
Tb	159	1	He	2313565	0.98	2425956	95.37	30	120	
Ho	165	1	He	2392744	0.36	2452680	97.56	30	120	
Bi	209	1	He	1706601	1.27	1810473	94.26	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	166_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:02:23-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.048	16.0	196	16.3	1	
B	11	45	2	NoGas	4.230	5.7	17298	3.6	20	
Na	23	45	1	He	9.744	8.2	37398	1.6	400	
Mg	24	45	1	He	2.840	13.6	2623	8.8	1000	
Al	27	45	1	He	10.077	4.9	4103	4.5	50	
K	39	45	1	He	13.984	8.8	57351	0.2	1000	
Ca	44	45	1	He	2.900	54.2	525	9.3	1000	
Ti	47	45	1	He	0.221	61.2	38	58.7	20	
V	51	45	1	He	0.092	90.5	593	58.7	2	
Cr	52	45	1	He	-0.045	-24.2	2082	2.2	2	
Mn	55	45	1	He	1.432	3.7	5451	3.1	2	
Fe	56	45	1	He	35.854	9.0	177094	7.7	50	
Co	59	103	1	He	0.028	21.4	287	17.6	1	
Ni	60	103	1	He	0.049	29.4	186	16.7	2	
Cu	63	103	1	He	-0.184	-12.3	953	13.9	2	
Zn	66	103	1	He	0.506	5.1	1290	2.5	20	
As	75	103	1	He	-0.010	-135.9	153	6.9	2	
Se	78	103	1	He	0.152	75.0	34	21.3	2	
Sr	88	103	1	He	0.013	19.7	172	5.9	10	
Mo	95	103	1	He	0.760	22.0	2394	16.3	2	
Ag	107	103	1	He	0.000	-453.4	24	34.3	0.2	
Cd	111	103	1	He	0.015	40.4	713	0.9	0.2	
Sn	118	115	1	He	0.248	18.5	1545	8.7	10	
Sb	123	115	1	He	0.061	99.1	983	20.2	1	
Ba	137	115	1	He	0.042	18.7	68	14.2	5	
W	182	165	1	He	0.824	10.7	10934	9.0	10	
Tl	205	209	1	He	0.035	32.0	1171	22.2	0.5	
Pb	208	209	1	He	0.034	10.2	1840	7.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1298093	1.06	1803797	71.96	30	120	
Sc	45	1	He	443378	0.98	574766	77.14	30	120	
Sc	45	2	NoGas	3604638	0.55	4296857	83.89	30	120	
Rh	103	1	He	1346889	0.58	1652712	81.50	30	120	
In	115	1	He	735660	1.50	852389	86.31	30	120	
Tb	159	1	He	2231203	0.19	2425956	91.97	30	120	
Ho	165	1	He	2294535	0.89	2452680	93.55	30	120	
Bi	209	1	He	1661870	2.94	1810473	91.79	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-2-b@2
Data File Name	167SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:06:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.579	3.579	0.60	14847	0.02	10000	
B	11	45	2	NoGas	13.514	13.514	3.24	47120	0.03	300	
Na	23	45	1	He	147.719	147.719	1.55	223292	0.07	500000	
Mg	24	45	1	He	10355.212	10355.212	1.58	7735005	0.13	500000	
Al	27	45	1	He	63224.773	63224.773	1.11	24559510	0.26	200000	
K	39	45	1	He	3960.994	3960.994	0.46	2378243	0.17	500000	
Ca	44	45	1	He	2245.321	2245.321	1.91	70673	3.18	500000	
Ti	47	45	1	He	364.667	364.667	2.43	67871	0.54	2500	
V	51	45	1	He	134.067	134.067	0.78	637812	0.02	10000	
Cr	52	45	1	He	95.420	95.420	0.51	559259	0.02	10000	
Mn	55	45	1	He	5016.494	5016.494	0.44	20705928	0.02	10000	
Fe	56	45	1	He	131210.953	131210.953	0.60	701044523	0.02	200000	
Co	59	103	1	He	52.826	52.826	0.42	445962	0.01	10000	
Ni	60	103	1	He	100.539	100.539	0.55	215899	0.05	10000	
Cu	63	103	1	He	64.839	64.839	1.32	373196	0.02	10000	
Zn	66	103	1	He	291.375	291.375	0.46	339885	0.09	10000	
As	75	103	1	He	60.699	60.699	0.82	44887	0.14	10000	
Se	78	103	1	He	5.265	5.265	4.19	345	1.53	10000	
Sr	88	103	1	He	24.773	24.773	0.60	108749	0.02	10000	
Mo	95	103	1	He	7.906	7.906	0.69	19236	0.04	2000	
Ag	107	103	1	He	0.268	0.268	2.59	2222	0.01	300	
Cd	111	103	1	He	0.946	0.946	7.99	1973	0.05	4000	
Sn	118	115	1	He	18.345	18.345	1.37	58851	0.03	2000	
Sb	123	115	1	He	3.884	3.884	2.26	13808	0.03	300	
Ba	137	115	1	He	438.917	438.917	0.21	582902	0.08	10000	
W	182	165	1	He	0.546	0.546	4.86	8325	0.01	2500	
Tl	205	209	1	He	0.941	0.941	1.25	22351	0.00	5000	
Pb	208	209	1	He	97.273	97.273	1.28	2989640	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1324770	1.65	1803797	73.44	30	120	
Sc	45	1	He	492412	1.07	574766	85.67	30	120	
Sc	45	2	NoGas	3817322	1.75	4296857	88.84	30	120	
Rh	103	1	He	1322918	0.35	1652712	80.05	30	120	
In	115	1	He	723623	0.28	852389	84.89	30	120	
Tb	159	1	He	2287066	1.44	2425956	94.27	30	120	
Ho	165	1	He	2362232	1.04	2452680	96.31	30	120	
Bi	209	1	He	1696276	0.53	1810473	93.69	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-3-b@2
Data File Name	168SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:10:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.727	4.727	4.79	19541	0.02	10000	
B	11	45	2	NoGas	14.909	14.909	2.76	50979	0.03	300	
Na	23	45	1	He	168.721	168.721	0.49	248211	0.07	500000	
Mg	24	45	1	He	13318.593	13318.593	0.44	9839626	0.14	500000	
Al	27	45	1	He	68672.422	68672.422	0.33	26383485	0.26	200000	
K	39	45	1	He	4662.002	4662.002	0.95	2758595	0.17	500000	
Ca	44	45	1	He	2029.101	2029.101	0.57	63218	3.21	500000	
Ti	47	45	1	He	456.738	456.738	0.54	84080	0.54	2500	
V	51	45	1	He	160.077	160.077	0.41	753120	0.02	10000	
Cr	52	45	1	He	115.603	115.603	0.39	669562	0.02	10000	
Mn	55	45	1	He	6920.000	6920.000	0.42	28247447	0.02	10000	
Fe	56	45	1	He	169332.268	169332.268	0.36	894773084	0.02	200000	
Co	59	103	1	He	73.891	73.891	0.75	615803	0.01	10000	
Ni	60	103	1	He	138.875	138.875	0.25	294384	0.05	10000	
Cu	63	103	1	He	78.885	78.885	0.44	447811	0.02	10000	
Zn	66	103	1	He	357.091	357.091	0.40	411071	0.09	10000	
As	75	103	1	He	74.867	74.867	0.76	54620	0.14	10000	
Se	78	103	1	He	6.242	6.242	7.56	400	1.56	10000	
Sr	88	103	1	He	31.168	31.168	0.48	135047	0.02	10000	
Mo	95	103	1	He	9.619	9.619	1.91	22988	0.04	2000	
Ag	107	103	1	He	0.270	0.270	3.88	2206	0.01	300	
Cd	111	103	1	He	1.120	1.120	9.02	2183	0.05	4000	
Sn	118	115	1	He	17.881	17.881	3.02	56821	0.03	2000	
Sb	123	115	1	He	0.972	0.972	0.23	3986	0.02	300	
Ba	137	115	1	He	609.896	609.896	0.93	802000	0.08	10000	
W	182	165	1	He	0.298	0.298	13.89	5790	0.01	2500	
Tl	205	209	1	He	1.039	1.039	0.97	24549	0.00	5000	
Pb	208	209	1	He	103.053	103.053	2.29	3157453	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1321506	2.82	1803797	73.26	30	120	
Sc	45	1	He	486979	0.21	574766	84.73	30	120	
Sc	45	2	NoGas	3780997	0.47	4296857	87.99	30	120	
Rh	103	1	He	1306035	0.57	1652712	79.02	30	120	
In	115	1	He	716526	0.40	852389	84.06	30	120	
Tb	159	1	He	2312364	0.40	2425956	95.32	30	120	
Ho	165	1	He	2392961	1.14	2452680	97.57	30	120	
Bi	209	1	He	1691320	1.16	1810473	93.42	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-4-b@2
Data File Name	169SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:13:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.358	3.358	5.93	13895	0.02	10000	
B	11	45	2	NoGas	10.486	10.486	2.32	37788	0.03	300	
Na	23	45	1	He	153.698	153.698	2.90	227981	0.07	500000	
Mg	24	45	1	He	11512.465	11512.465	1.59	8481549	0.14	500000	
Al	27	45	1	He	72345.877	72345.877	2.48	27713863	0.26	200000	
K	39	45	1	He	3560.711	3560.711	1.19	2114136	0.17	500000	
Ca	44	45	1	He	2431.127	2431.127	0.52	75453	3.22	500000	
Ti	47	45	1	He	402.007	402.007	1.57	73799	0.54	2500	
V	51	45	1	He	155.629	155.629	1.55	730155	0.02	10000	
Cr	52	45	1	He	101.451	101.451	1.96	586234	0.02	10000	
Mn	55	45	1	He	4322.049	4322.049	2.59	17591924	0.02	10000	
Fe	56	45	1	He	141730.918	141730.918	1.89	746807739	0.02	200000	
Co	59	103	1	He	54.674	54.674	0.60	461911	0.01	10000	
Ni	60	103	1	He	95.885	95.885	0.62	206064	0.05	10000	
Cu	63	103	1	He	54.642	54.642	0.86	315053	0.02	10000	
Zn	66	103	1	He	377.215	377.215	1.22	440141	0.09	10000	
As	75	103	1	He	62.523	62.523	0.85	46265	0.14	10000	
Se	78	103	1	He	5.600	5.600	1.33	366	1.53	10000	
Sr	88	103	1	He	23.501	23.501	0.31	103252	0.02	10000	
Mo	95	103	1	He	9.236	9.236	0.20	22398	0.04	2000	
Ag	107	103	1	He	0.251	0.251	4.75	2081	0.01	300	
Cd	111	103	1	He	1.089	1.089	2.22	2170	0.05	4000	
Sn	118	115	1	He	18.215	18.215	2.66	58743	0.03	2000	
Sb	123	115	1	He	0.712	0.712	2.28	3168	0.02	300	
Ba	137	115	1	He	400.066	400.066	0.78	534044	0.07	10000	
W	182	165	1	He	0.317	0.317	15.81	5979	0.01	2500	
Tl	205	209	1	He	1.020	1.020	0.57	24638	0.00	5000	
Pb	208	209	1	He	111.225	111.225	1.07	3480793	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1321466	1.45	1803797	73.26	30	120	
Sc	45	1	He	485712	1.90	574766	84.51	30	120	
Sc	45	2	NoGas	3822367	0.47	4296857	88.96	30	120	
Rh	103	1	He	1323926	0.34	1652712	80.11	30	120	
In	115	1	He	727352	0.20	852389	85.33	30	120	
Tb	159	1	He	2323854	0.91	2425956	95.79	30	120	
Ho	165	1	He	2387542	1.12	2452680	97.34	30	120	
Bi	209	1	He	1727326	0.47	1810473	95.41	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-5-b@2
Data File Name	170SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:17:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.299	3.299	1.31	13131	0.03	10000	
B	11	45	2	NoGas	14.420	14.420	2.24	48200	0.03	300	
Na	23	45	1	He	152.375	152.375	0.64	220017	0.07	500000	
Mg	24	45	1	He	10116.816	10116.816	1.01	7247108	0.14	500000	
Al	27	45	1	He	62995.138	62995.138	0.51	23466591	0.27	200000	
K	39	45	1	He	3794.556	3794.556	2.16	2186879	0.17	500000	
Ca	44	45	1	He	5261.809	5261.809	0.66	158199	3.33	500000	
Ti	47	45	1	He	491.857	491.857	0.99	87793	0.56	2500	
V	51	45	1	He	136.222	136.222	1.03	621432	0.02	10000	
Cr	52	45	1	He	94.538	94.538	1.06	531350	0.02	10000	
Mn	55	45	1	He	7250.436	7250.436	0.91	28696296	0.03	10000	
Fe	56	45	1	He	119421.988	119421.988	0.43	611860545	0.02	200000	
Co	59	103	1	He	53.202	53.202	0.55	446842	0.01	10000	
Ni	60	103	1	He	94.402	94.402	0.17	201690	0.05	10000	
Cu	63	103	1	He	50.922	50.922	0.66	292008	0.02	10000	
Zn	66	103	1	He	306.290	306.290	1.15	355404	0.09	10000	
As	75	103	1	He	52.711	52.711	0.54	38802	0.14	10000	
Se	78	103	1	He	5.382	5.382	5.76	350	1.54	10000	
Sr	88	103	1	He	34.156	34.156	0.64	149135	0.02	10000	
Mo	95	103	1	He	8.427	8.427	0.71	20364	0.04	2000	
Ag	107	103	1	He	0.276	0.276	7.83	2271	0.01	300	
Cd	111	103	1	He	1.249	1.249	5.27	2376	0.05	4000	
Sn	118	115	1	He	18.535	18.535	3.06	59370	0.03	2000	
Sb	123	115	1	He	1.050	1.050	3.79	4282	0.02	300	
Ba	137	115	1	He	520.529	520.529	0.72	690334	0.08	10000	
W	182	165	1	He	0.360	0.360	4.71	6413	0.01	2500	
Tl	205	209	1	He	0.978	0.978	0.32	23730	0.00	5000	
Pb	208	209	1	He	103.746	103.746	1.48	3260028	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1271373	1.16	1803797	70.48	30	120	
Sc	45	1	He	472180	0.43	574766	82.15	30	120	
Sc	45	2	NoGas	3683767	0.84	4296857	85.73	30	120	
Rh	103	1	He	1316175	0.97	1652712	79.64	30	120	
In	115	1	He	722641	0.37	852389	84.78	30	120	
Tb	159	1	He	2287517	0.25	2425956	94.29	30	120	
Ho	165	1	He	2378723	0.77	2452680	96.98	30	120	
Bi	209	1	He	1734465	0.99	1810473	95.80	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-6-b@2
Data File Name	171SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:21:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.975	2.975	2.83	12097	0.02	10000	
B	11	45	2	NoGas	14.427	14.427	0.33	48111	0.03	300	
Na	23	45	1	He	169.569	169.569	3.26	240115	0.07	500000	
Mg	24	45	1	He	10530.657	10530.657	0.87	7494159	0.14	500000	
Al	27	45	1	He	57820.990	57820.990	1.70	21398125	0.27	200000	
K	39	45	1	He	3670.110	3670.110	1.05	2103298	0.17	500000	
Ca	44	45	1	He	10716.845	10716.845	0.60	319622	3.35	500000	
Ti	47	45	1	He	414.830	414.830	1.38	73556	0.56	2500	
V	51	45	1	He	124.368	124.368	1.01	563659	0.02	10000	
Cr	52	45	1	He	92.969	92.969	0.83	519171	0.02	10000	
Mn	55	45	1	He	3410.503	3410.503	1.50	13409488	0.03	10000	
Fe	56	45	1	He	108976.940	108976.940	0.91	554685845	0.02	200000	
Co	59	103	1	He	42.212	42.212	0.68	352128	0.01	10000	
Ni	60	103	1	He	97.632	97.632	0.23	207165	0.05	10000	
Cu	63	103	1	He	66.325	66.325	1.23	377154	0.02	10000	
Zn	66	103	1	He	350.033	350.033	0.61	403323	0.09	10000	
As	75	103	1	He	50.329	50.329	0.32	36804	0.14	10000	
Se	78	103	1	He	4.740	4.740	8.45	309	1.53	10000	
Sr	88	103	1	He	69.941	69.941	0.78	303176	0.02	10000	
Mo	95	103	1	He	7.633	7.633	2.62	18371	0.04	2000	
Ag	107	103	1	He	0.240	0.240	4.90	1966	0.01	300	
Cd	111	103	1	He	1.123	1.123	6.06	2188	0.05	4000	
Sn	118	115	1	He	26.173	26.173	2.36	83241	0.03	2000	
Sb	123	115	1	He	1.569	1.569	2.34	6002	0.03	300	
Ba	137	115	1	He	595.383	595.383	0.73	786792	0.08	10000	
W	182	165	1	He	0.303	0.303	4.63	5772	0.01	2500	
Tl	205	209	1	He	0.860	0.860	0.49	20351	0.00	5000	
Pb	208	209	1	He	120.278	120.278	1.23	3676742	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1298633	1.07	1803797	71.99	30	120	
Sc	45	1	He	469112	1.17	574766	81.62	30	120	
Sc	45	2	NoGas	3675269	1.29	4296857	85.53	30	120	
Rh	103	1	He	1307209	0.45	1652712	79.09	30	120	
In	115	1	He	720072	0.77	852389	84.48	30	120	
Tb	159	1	He	2301234	0.47	2425956	94.86	30	120	
Ho	165	1	He	2360709	0.35	2452680	96.25	30	120	
Bi	209	1	He	1687296	1.00	1810473	93.20	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-7-b@2
Data File Name	172SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:25:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.403	3.403	5.86	13646	0.02	10000	
B	11	45	2	NoGas	16.469	16.469	1.67	56256	0.03	300	
Na	23	45	1	He	204.671	204.671	2.37	293054	0.07	500000	
Mg	24	45	1	He	10952.409	10952.409	0.90	8037442	0.14	500000	
Al	27	45	1	He	45267.250	45267.250	1.13	17274445	0.26	200000	
K	39	45	1	He	6065.549	6065.549	1.53	3548474	0.17	500000	
Ca	44	45	1	He	2076.771	2076.771	0.89	64258	3.23	500000	
Ti	47	45	1	He	339.899	339.899	1.03	62151	0.55	2500	
V	51	45	1	He	85.011	85.011	0.29	397379	0.02	10000	
Cr	52	45	1	He	133.592	133.592	0.28	768172	0.02	10000	
Mn	55	45	1	He	1608.248	1608.248	1.89	6520538	0.02	10000	
Fe	56	45	1	He	122640.860	122640.860	1.24	643684703	0.02	200000	
Co	59	103	1	He	44.149	44.149	0.67	368255	0.01	10000	
Ni	60	103	1	He	133.312	133.312	1.10	282802	0.05	10000	
Cu	63	103	1	He	82.023	82.023	0.97	465892	0.02	10000	
Zn	66	103	1	He	213.719	213.719	0.95	246484	0.09	10000	
As	75	103	1	He	53.091	53.091	1.15	38808	0.14	10000	
Se	78	103	1	He	4.797	4.797	2.53	313	1.53	10000	
Sr	88	103	1	He	24.653	24.653	0.53	106925	0.02	10000	
Mo	95	103	1	He	4.251	4.251	2.74	10477	0.04	2000	
Ag	107	103	1	He	0.161	0.161	3.28	1323	0.01	300	
Cd	111	103	1	He	0.618	0.618	8.84	1507	0.04	4000	
Sn	118	115	1	He	17.094	17.094	0.50	54210	0.03	2000	
Sb	123	115	1	He	0.361	0.361	13.89	1951	0.02	300	
Ba	137	115	1	He	272.189	272.189	0.48	357018	0.08	10000	
W	182	165	1	He	0.145	0.145	28.82	4164	0.00	2500	
Tl	205	209	1	He	0.716	0.716	1.26	16823	0.00	5000	
Pb	208	209	1	He	77.370	77.370	0.93	2339599	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1281548	1.69	1803797	71.05	30	120	
Sc	45	1	He	483721	0.70	574766	84.16	30	120	
Sc	45	2	NoGas	3813521	1.11	4296857	88.75	30	120	
Rh	103	1	He	1307080	0.83	1652712	79.09	30	120	
In	115	1	He	714690	0.62	852389	83.85	30	120	
Tb	159	1	He	2327964	0.68	2425956	95.96	30	120	
Ho	165	1	He	2394413	1.30	2452680	97.62	30	120	
Bi	209	1	He	1668906	0.87	1810473	92.18	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-8-b@2
Data File Name	173SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:29:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.558	3.558	3.75	14262	0.02	10000	
B	11	45	2	NoGas	18.928	18.928	0.85	64446	0.03	300	
Na	23	45	1	He	184.224	184.224	1.49	270993	0.07	500000	
Mg	24	45	1	He	12623.840	12623.840	2.02	9415455	0.13	500000	
Al	27	45	1	He	73834.871	73834.871	2.25	28638152	0.26	200000	
K	39	45	1	He	6297.212	6297.212	2.55	3742135	0.17	500000	
Ca	44	45	1	He	1318.867	1318.867	1.22	41660	3.17	500000	
Ti	47	45	1	He	388.970	388.970	2.57	72285	0.54	2500	
V	51	45	1	He	131.159	131.159	2.37	622975	0.02	10000	
Cr	52	45	1	He	106.231	106.231	1.51	621398	0.02	10000	
Mn	55	45	1	He	790.292	790.292	2.17	3256844	0.02	10000	
Fe	56	45	1	He	146871.366	146871.366	2.00	783507293	0.02	200000	
Co	59	103	1	He	39.156	39.156	0.78	326502	0.01	10000	
Ni	60	103	1	He	92.766	92.766	0.69	196762	0.05	10000	
Cu	63	103	1	He	92.994	92.994	0.82	527796	0.02	10000	
Zn	66	103	1	He	256.430	256.430	1.15	295520	0.09	10000	
As	75	103	1	He	70.655	70.655	0.74	51582	0.14	10000	
Se	78	103	1	He	5.994	5.994	3.44	385	1.56	10000	
Sr	88	103	1	He	22.482	22.482	0.94	97491	0.02	10000	
Mo	95	103	1	He	5.767	5.767	2.62	14008	0.04	2000	
Ag	107	103	1	He	0.199	0.199	0.35	1633	0.01	300	
Cd	111	103	1	He	0.647	0.647	8.19	1545	0.04	4000	
Sn	118	115	1	He	17.294	17.294	0.90	54756	0.03	2000	
Sb	123	115	1	He	0.688	0.688	7.51	3030	0.02	300	
Ba	137	115	1	He	342.913	342.913	0.61	449110	0.08	10000	
W	182	165	1	He	0.190	0.190	17.26	4668	0.00	2500	
Tl	205	209	1	He	1.007	1.007	5.02	23369	0.00	5000	
Pb	208	209	1	He	70.385	70.385	2.81	2116525	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1280505	0.93	1803797	70.99	30	120	
Sc	45	1	He	491737	1.69	574766	85.55	30	120	
Sc	45	2	NoGas	3847437	0.86	4296857	89.54	30	120	
Rh	103	1	He	1306689	0.68	1652712	79.06	30	120	
In	115	1	He	713625	0.30	852389	83.72	30	120	
Tb	159	1	He	2333982	0.88	2425956	96.21	30	120	
Ho	165	1	He	2406314	0.79	2452680	98.11	30	120	
Bi	209	1	He	1660275	2.59	1810473	91.70	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	174_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:32:54-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.915	2.210	187100	1.42	50	93.8	89.5	110.5	
B	11	45	2	NoGas	44.488	1.130	137537	1.47	50	89.0	89.5	110.5	CCV Failed
Na	23	45	1	He	25059.587	1.208	31044540	1.02	25000	100.2	89.5	110.5	
Mg	24	45	1	He	24991.094	1.973	17537764	0.68	25000	100.0	89.5	110.5	
Al	27	45	1	He	250.300	1.553	91952	0.69	250	100.1	89.5	110.5	
K	39	45	1	He	26137.765	2.377	14450898	0.81	25000	104.6	89.5	110.5	
Ca	44	45	1	He	25258.170	1.807	742247	0.74	25000	101.0	89.5	110.5	
Ti	47	45	1	He	52.010	3.619	9095	2.41	50	104.0	89.5	110.5	
V	51	45	1	He	51.498	0.338	230351	2.01	50	103.0	89.5	110.5	
Cr	52	45	1	He	51.240	1.570	283274	0.78	50	102.5	89.5	110.5	
Mn	55	45	1	He	260.516	1.725	1010341	0.84	250	104.2	89.5	110.5	
Fe	56	45	1	He	13265.508	1.930	66591617	0.88	12500	106.1	89.5	110.5	
Co	59	103	1	He	46.867	0.852	403474	0.36	50	93.7	89.5	110.5	
Ni	60	103	1	He	46.342	0.768	101526	1.12	50	92.7	89.5	110.5	
Cu	63	103	1	He	46.780	1.173	275131	0.64	50	93.6	89.5	110.5	
Zn	66	103	1	He	48.329	0.110	58068	0.75	50	96.7	89.5	110.5	
As	75	103	1	He	48.206	0.981	36385	0.15	50	96.4	89.5	110.5	
Se	78	103	1	He	47.975	4.327	3008	3.48	50	95.9	89.5	110.5	
Sr	88	103	1	He	51.302	0.650	229534	0.24	50	102.6	89.5	110.5	
Mo	95	103	1	He	51.474	2.633	124582	1.83	50	102.9	89.5	110.5	
Ag	107	103	1	He	51.220	0.775	427358	0.34	50	102.4	89.5	110.5	
Cd	111	103	1	He	52.590	1.984	73972	1.30	50	105.2	89.5	110.5	
Sn	118	115	1	He	51.216	0.912	168455	0.82	50	102.4	89.5	110.5	
Sb	123	115	1	He	53.252	0.639	185641	0.61	50	106.5	89.5	110.5	
Ba	137	115	1	He	52.955	0.573	72698	0.50	50	105.9	89.5	110.5	
W	182	165	1	He	46.719	1.525	506865	0.67	50	93.4	89.5	110.5	
Tl	205	209	1	He	46.593	0.668	1127597	0.32	50	93.2	89.5	110.5	
Pb	208	209	1	He	48.113	0.877	1532540	0.68	50	96.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1274108	0.94	1803797	70.63	30	120	
Sc	45	1	He	462718	2.22	574766	80.51	30	120	
Sc	45	2	NoGas	3664641	1.32	4296857	85.29	30	120	
Rh	103	1	He	1349104	0.84	1652712	81.63	30	120	
In	115	1	He	747931	0.36	852389	87.75	30	120	
Tb	159	1	He	2323275	0.75	2425956	95.77	30	120	
Ho	165	1	He	2425399	1.00	2452680	98.89	30	120	
Bi	209	1	He	1757560	0.94	1810473	97.08	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	175_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:36:44-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.041	25.5	163	25.8	1	
B	11	45	2	NoGas	3.020	2.8	13424	2.1	20	
Na	23	45	1	He	7.071	15.6	33992	2.6	400	
Mg	24	45	1	He	2.876	26.6	2626	18.0	1000	
Al	27	45	1	He	10.556	8.9	4238	6.4	50	
K	39	45	1	He	10.130	52.3	54925	3.9	1000	
Ca	44	45	1	He	4.079	34.2	555	8.0	1000	
Ti	47	45	1	He	0.222	22.0	38	22.2	20	
V	51	45	1	He	0.104	39.6	642	26.2	2	
Cr	52	45	1	He	-0.040	-37.1	2096	4.6	2	
Mn	55	45	1	He	1.630	4.7	6147	5.1	2	
Fe	56	45	1	He	42.457	11.1	207349	9.5	50	
Co	59	103	1	He	0.021	18.8	222	14.8	1	
Ni	60	103	1	He	0.038	2.2	162	1.2	2	
Cu	63	103	1	He	-0.198	-1.4	880	1.9	2	
Zn	66	103	1	He	0.470	14.7	1257	6.8	20	
As	75	103	1	He	-0.012	-73.6	153	4.7	2	
Se	78	103	1	He	0.162	77.8	34	22.6	2	
Sr	88	103	1	He	0.005	148.2	141	25.3	10	
Mo	95	103	1	He	0.681	25.2	2220	18.6	2	
Ag	107	103	1	He	0.001	299.5	36	76.4	0.2	
Cd	111	103	1	He	0.019	114.3	724	4.3	0.2	
Sn	118	115	1	He	0.217	22.5	1459	10.4	10	
Sb	123	115	1	He	0.021	126.1	854	11.0	1	
Ba	137	115	1	He	0.066	12.9	101	11.6	5	
W	182	165	1	He	0.815	15.8	10986	11.5	10	
Tl	205	209	1	He	0.036	37.4	1222	23.9	0.5	
Pb	208	209	1	He	0.032	6.0	1848	1.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1239406	0.65	1803797	68.71	30	120	
Sc	45	1	He	440384	1.32	574766	76.62	30	120	
Sc	45	2	NoGas	3518380	1.00	4296857	81.88	30	120	
Rh	103	1	He	1356792	0.26	1652712	82.09	30	120	
In	115	1	He	741406	0.49	852389	86.98	30	120	
Tb	159	1	He	2259452	0.45	2425956	93.14	30	120	
Ho	165	1	He	2327815	0.83	2452680	94.91	30	120	
Bi	209	1	He	1719357	2.57	1810473	94.97	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	176CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:40:37-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.919	0.919	1.471	3719	1.94	1	91.9	69.5	130.5	
B	11	2	NoGas	19.039	19.039	2.988	60350	2.41	20	95.2	69.5	130.5	
Na	23	1	He	1059.350	1059.350	2.871	1327698	3.10	1000	105.9	69.5	130.5	
Mg	24	1	He	1013.643	1013.643	0.603	706509	0.85	1000	101.4	69.5	130.5	
Al	27	1	He	49.764	49.764	1.970	18618	2.36	50	99.5	69.5	130.5	
K	39	1	He	1039.115	1039.115	1.087	619711	0.58	1000	103.9	69.5	130.5	
Ca	44	1	He	1030.015	1030.015	0.510	30472	0.55	1000	103.0	69.5	130.5	
Ti	47	1	He	10.384	10.384	9.112	1802	8.88	10	103.8	69.5	130.5	
V	51	1	He	5.196	5.196	3.761	23242	3.74	5	103.9	69.5	130.5	
Cr	52	1	He	3.938	3.938	0.669	23821	1.11	2	196.9	69.5	130.5	6020A CR1 Failed
Mn	55	1	He	6.946	6.946	0.786	26859	1.21	5	138.9	69.5	130.5	6020A CR1 Failed
Fe	56	1	He	141.348	141.348	0.317	708825	0.21	100	141.3	69.5	130.5	6020A CR1 Failed
Co	59	1	He	0.967	0.967	0.507	8504	0.45	1	96.7	69.5	130.5	
Ni	60	1	He	2.711	2.711	0.749	6111	0.66	2	135.5	69.5	130.5	6020A CR1 Failed
Cu	63	1	He	1.740	1.740	0.542	12390	0.53	2	87.0	69.5	130.5	
Zn	66	1	He	19.415	19.415	1.334	24133	1.21	20	97.1	69.5	130.5	
As	75	1	He	4.834	4.834	2.628	3856	2.49	5	96.7	69.5	130.5	
Se	78	1	He	4.850	4.850	0.973	331	0.84	5	97.0	69.5	130.5	
Sr	88	1	He	10.127	10.127	1.218	46153	1.18	10	101.3	69.5	130.5	
Mo	95	1	He	10.304	10.304	1.339	25815	1.23	10	103.0	69.5	130.5	
Ag	107	1	He	1.053	1.053	2.461	8955	2.52	1	105.3	69.5	130.5	
Cd	111	1	He	1.036	1.036	2.829	2172	1.85	1	103.6	69.5	130.5	
Sn	118	1	He	9.960	9.960	1.415	33913	1.76	10	99.6	69.5	130.5	
Sb	123	1	He	1.868	1.868	1.205	7392	1.26	2	93.4	69.5	130.5	
Ba	137	1	He	5.372	5.372	2.860	7505	2.76	5	107.4	69.5	130.5	
W	182	1	He	9.125	9.125	2.826	100492	2.50	10	91.3	69.5	130.5	
Tl	205	1	He	1.874	1.874	1.319	46262	1.31	2	93.7	69.5	130.5	
Pb	208	1	He	1.029	1.029	1.391	34013	1.40	1	102.9	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1291839	1.03	1803797	71.62	30	120	
Sc	45	1	He	458988	0.51	574766	79.86	30	120	
Sc	45	2	NoGas	3584060	1.00	4296857	83.41	30	120	
Rh	103	1	He	1371334	0.08	1652712	82.97	30	120	
In	115	1	He	760046	0.40	852389	89.17	30	120	
Tb	159	1	He	2295040	1.43	2425956	94.60	30	120	
Ho	165	1	He	2409961	1.63	2452680	98.26	30	120	
Bi	209	1	He	1778455	0.21	1810473	98.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	177_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:44:29-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.990	1.158	191710	0.48	50	96.0	89.5	110.5	
B	11	45	2	NoGas	44.576	1.906	139789	0.97	50	89.2	89.5	110.5	CCV Failed
Na	23	45	1	He	24325.585	2.590	31186375	1.09	25000	97.3	89.5	110.5	
Mg	24	45	1	He	24343.227	3.402	17676828	0.52	25000	97.4	89.5	110.5	
Al	27	45	1	He	239.470	2.681	91069	1.00	250	95.8	89.5	110.5	
K	39	45	1	He	25558.928	4.222	14621541	1.33	25000	102.2	89.5	110.5	
Ca	44	45	1	He	24687.458	3.155	750726	0.66	25000	98.7	89.5	110.5	
Ti	47	45	1	He	49.721	4.575	8997	2.58	50	99.4	89.5	110.5	
V	51	45	1	He	50.868	3.100	235399	0.38	50	101.7	89.5	110.5	
Cr	52	45	1	He	50.027	3.156	286240	0.22	50	100.1	89.5	110.5	
Mn	55	45	1	He	252.019	2.675	1011466	0.35	250	100.8	89.5	110.5	
Fe	56	45	1	He	12797.300	2.065	66491017	1.01	12500	102.4	89.5	110.5	
Co	59	103	1	He	46.945	1.062	404687	0.96	50	93.9	89.5	110.5	
Ni	60	103	1	He	46.566	0.404	102148	0.46	50	93.1	89.5	110.5	
Cu	63	103	1	He	46.655	0.634	274765	0.60	50	93.3	89.5	110.5	
Zn	66	103	1	He	48.142	0.372	57921	0.29	50	96.3	89.5	110.5	
As	75	103	1	He	49.028	0.609	37053	0.70	50	98.1	89.5	110.5	
Se	78	103	1	He	48.987	1.949	3076	2.08	50	98.0	89.5	110.5	
Sr	88	103	1	He	51.979	0.185	232871	0.21	50	104.0	89.5	110.5	
Mo	95	103	1	He	51.372	1.149	124514	1.05	50	102.7	89.5	110.5	
Ag	107	103	1	He	51.204	0.656	427792	0.69	50	102.4	89.5	110.5	
Cd	111	103	1	He	52.682	0.655	74203	0.63	50	105.4	89.5	110.5	
Sn	118	115	1	He	50.251	0.512	166546	0.26	50	100.5	89.5	110.5	
Sb	123	115	1	He	53.039	0.636	186305	0.75	50	106.1	89.5	110.5	
Ba	137	115	1	He	53.227	0.876	73624	0.63	50	106.5	89.5	110.5	
W	182	165	1	He	46.163	1.328	498353	1.86	50	92.3	89.5	110.5	
Tl	205	209	1	He	46.406	1.576	1117624	0.74	50	92.8	89.5	110.5	
Pb	208	209	1	He	48.034	1.575	1522589	0.52	50	96.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1276176	0.80	1803797	70.75	30	120	
Sc	45	1	He	478993	3.04	574766	83.34	30	120	
Sc	45	2	NoGas	3717911	0.89	4296857	86.53	30	120	
Rh	103	1	He	1350846	0.16	1652712	81.74	30	120	
In	115	1	He	753599	0.42	852389	88.41	30	120	
Tb	159	1	He	2325124	1.48	2425956	95.84	30	120	
Ho	165	1	He	2412946	1.05	2452680	98.38	30	120	
Bi	209	1	He	1749142	1.06	1810473	96.61	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	178_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:48:20-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.047	15.6	189	15.6	1	
B	11	45	2	NoGas	3.671	5.8	15592	3.4	20	
Na	23	45	1	He	6.744	26.4	34099	4.3	400	
Mg	24	45	1	He	2.188	23.4	2200	14.2	1000	
Al	27	45	1	He	8.269	1.7	3499	3.2	50	
K	39	45	1	He	12.698	34.4	57117	2.3	1000	
Ca	44	45	1	He	2.941	49.0	530	6.9	1000	
Ti	47	45	1	He	0.153	23.2	27	21.7	20	
V	51	45	1	He	0.043	38.7	389	16.5	2	
Cr	52	45	1	He	-0.055	-18.7	2047	4.5	2	
Mn	55	45	1	He	1.302	6.5	5007	4.6	2	
Fe	56	45	1	He	26.098	12.3	131143	10.0	50	
Co	59	103	1	He	0.025	9.7	258	8.6	1	
Ni	60	103	1	He	0.039	25.3	164	12.9	2	
Cu	63	103	1	He	-0.202	-5.5	857	6.9	2	
Zn	66	103	1	He	0.479	13.8	1269	6.8	20	
As	75	103	1	He	-0.013	-249.6	152	16.2	2	
Se	78	103	1	He	0.198	41.6	37	14.6	2	
Sr	88	103	1	He	0.005	92.4	138	14.2	10	
Mo	95	103	1	He	0.615	24.7	2061	17.1	2	
Ag	107	103	1	He	0.005	73.8	64	43.1	0.2	
Cd	111	103	1	He	0.020	180.3	726	6.4	0.2	
Sn	118	115	1	He	0.282	44.2	1678	24.3	10	
Sb	123	115	1	He	0.084	39.1	1073	10.6	1	
Ba	137	115	1	He	0.032	35.9	56	28.4	5	
W	182	165	1	He	0.812	10.6	11001	8.6	10	
Tl	205	209	1	He	0.036	13.0	1248	8.2	0.5	
Pb	208	209	1	He	0.026	2.0	1683	1.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1269006	1.86	1803797	70.35	30	120	
Sc	45	1	He	447049	1.88	574766	77.78	30	120	
Sc	45	2	NoGas	3588925	0.94	4296857	83.52	30	120	
Rh	103	1	He	1357847	0.70	1652712	82.16	30	120	
In	115	1	He	744739	0.24	852389	87.37	30	120	
Tb	159	1	He	2293378	1.16	2425956	94.54	30	120	
Ho	165	1	He	2335119	0.51	2452680	95.21	30	120	
Bi	209	1	He	1740382	0.94	1810473	96.13	30	120	

MTMSCCBDILH20-192 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/21/15 **Analyst:** AMM **Instrument:** I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient ≥ 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* = 90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

Level I Analyst: [signature] Date: 4/22/15 Time: 17:45-23:53
Level I Analyst: Date: Time:
Level II Reviewer: [signature] Date: 04/22/2015 Time: 17:45- 23:53
Level II Reviewer: Date: Time:

Comments:

L:/Metals/ICPMS /ICPMS Data Review Checklist
Revised (3)2013

Current Signal

[NoGas]

Mass	Range	Count	Avg. Count	RSD [%]
7	5000	3333	3382.8	1.11
89	10000	5189	5183.9	2.27
205	10000	5294	5236.8	1.72
156/140	1	0.576 %	0.720 %	14.24
70/140	2	1.187 %	1.247 %	16.06
115	100	54	66.6	23.06
63	5000	3765	3726.2	1.80
60	200	106	95.4	14.15
121	100	60	47.2	20.51
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

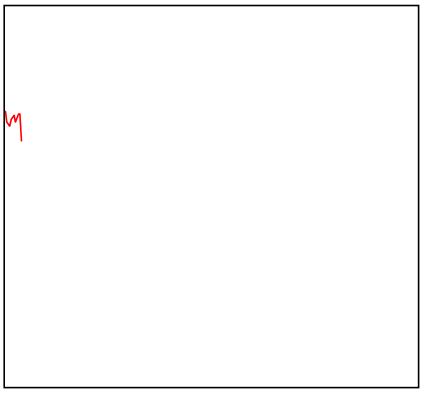
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	14.96	L/min
MU./Dil. Gas	0.55	L/min	Ar Gas Tank Press	5.91E+2	kPa			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1294	1400.0	3.33
51	50	34	33.4	22.38
52	200	127	125.4	10.73
51/59	5	2.627 %	2.392 %	22.86
52/59	20	9.811 %	8.983 %	12.49
7	50	16	16.7	29.09
89	2000	1416	1475.1	4.52
205	5000	3140	3199.3	3.06
6	20	2	1.6	72.67
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	15.02	L/min
MU./Dil. Gas	0.55	L/min	Ar Gas Tank Press	5.90E+2	kPa			

US EPA Tune Check Sample Report

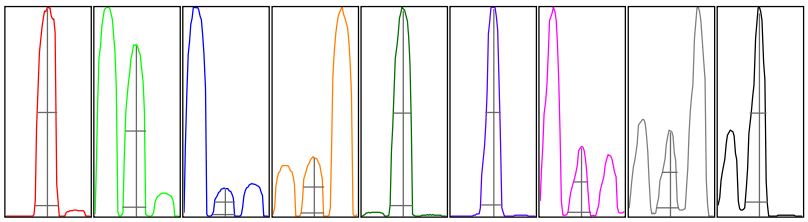
Batch Folder D:\Analytical Runs\I10042115D.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	45211	0.81	5.00	
24	143706	0.28	5.00	
25	18828	0.36	5.00	
26	22218	1.17	5.00	
59	171716	0.67	5.00	
115	247671	0.88	5.00	
206	84419	0.99	5.00	
207	75415	0.96	5.00	
208	176538	0.66	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	45806	45269	45040	45114	44828
24	144382	143608	143591	143664	143284
25	18852	18819	18796	18927	18748
26	22637	22145	22231	22151	21926
59	173715	171718	171032	171025	171088
115	251268	246666	248129	246022	246268
206	85547	84949	83800	84312	83486
207	76556	75356	75529	74973	74661
208	178561	176041	175954	175733	176402

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6993	9.00	8.9 - 9.1		0.801	0.850	
24	22556	24.00	23.9 - 24.1		0.791	0.850	
25	3021	25.00	24.9 - 25.1		0.787	0.850	
26	3492	26.00	25.9 - 26.1		0.798	0.850	
59	27999	59.00	58.9 - 59.1		0.798	0.850	
115	47255	115.05	114.9 - 115.1		0.743	0.850	
206	16318	206.00	205.9 - 206.1		0.766	0.850	
207	14393	207.00	206.9 - 207.1		0.761	0.850	
208	34958	208.00	207.9 - 208.1		0.780	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

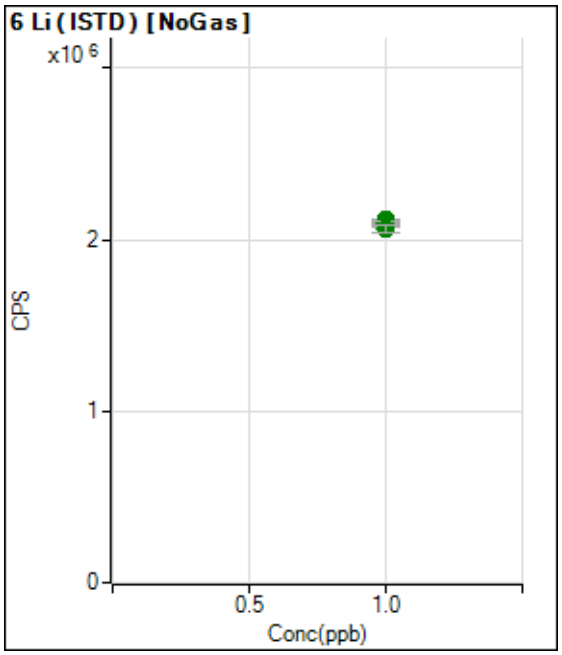
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

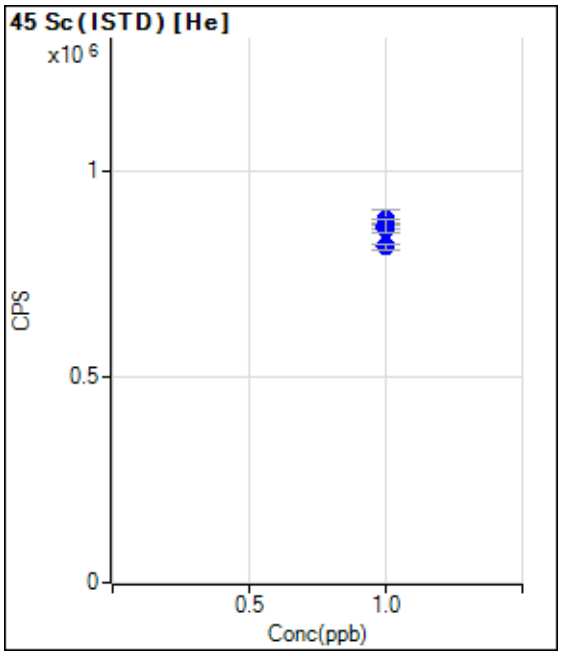
Calibration for 073_CCB.d

Batch Folder: D:\Analytical Runs\I10042115G.b\
Analysis File: I10042115G.batch.bin
DA Date-Time: 4/21/2015 10:21:56 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

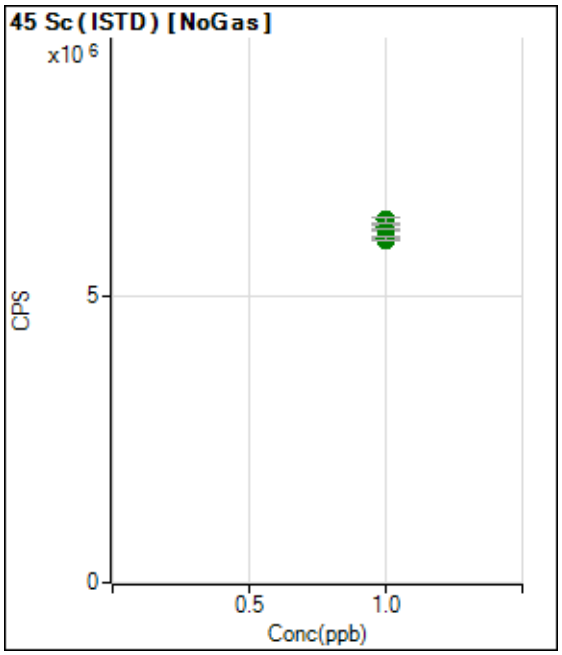
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/21/2015 5:49:31 PM
2	003CALS.d	STD1-1906323	4/21/2015 5:53:22 PM
3	004CALS.d	STD2-1904110	4/21/2015 5:57:14 PM
4	005CALS.d	STD3-1906333	4/21/2015 6:00:59 PM
5	006CALS.d	STD4-1906536	4/21/2015 6:04:43 PM



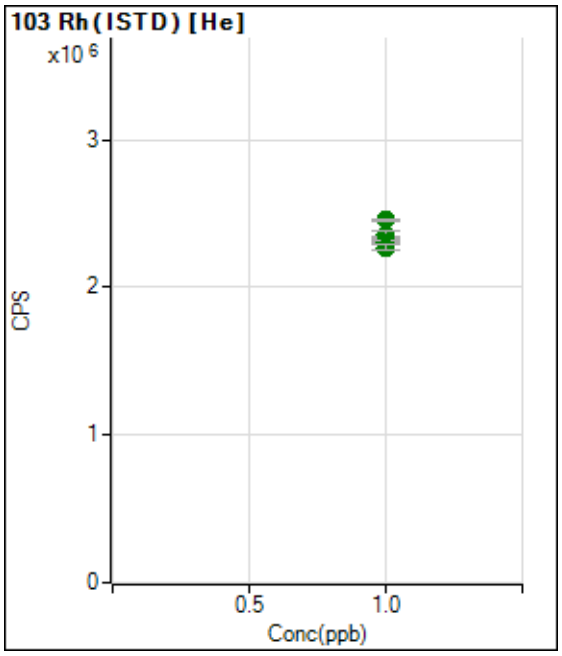
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2077022.29		A	0.5
2	☐	1.000		2083752.45		A	0.9
3	☐	1.000		2114345.94		A	0.9
4	☐	1.000		2097365.32		A	1.0
5	☐	1.000		2059994.29		A	2.3



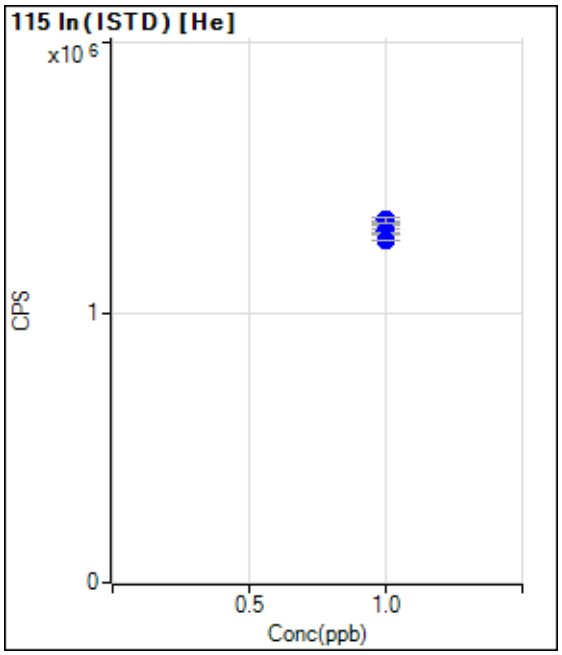
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		817535.90		P	1.5
2	☐	1.000		868165.85		P	2.1
3	☐	1.000		883361.31		P	5.4
4	☐	1.000		861888.03		P	1.8
5	☐	1.000		868761.89		P	3.4



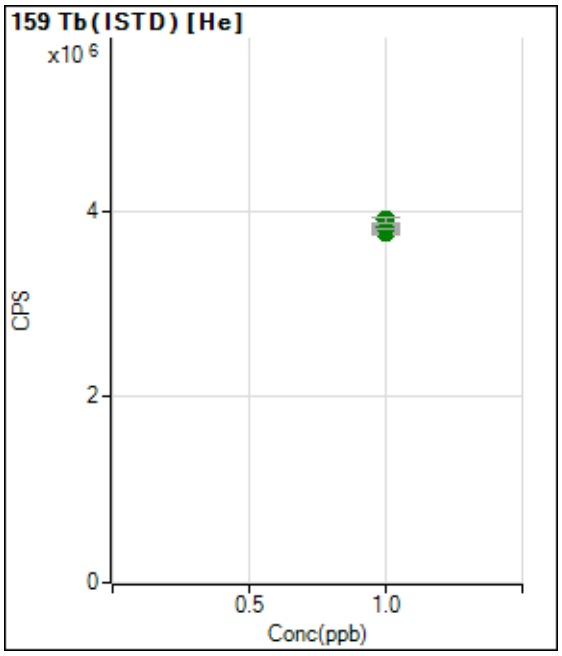
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5970055.04		A	0.8
2	☐	1.000		6171681.42		A	1.4
3	☐	1.000		6194629.48		A	1.5
4	☐	1.000		6317963.78		A	1.5
5	☐	1.000		5991955.46		A	1.5



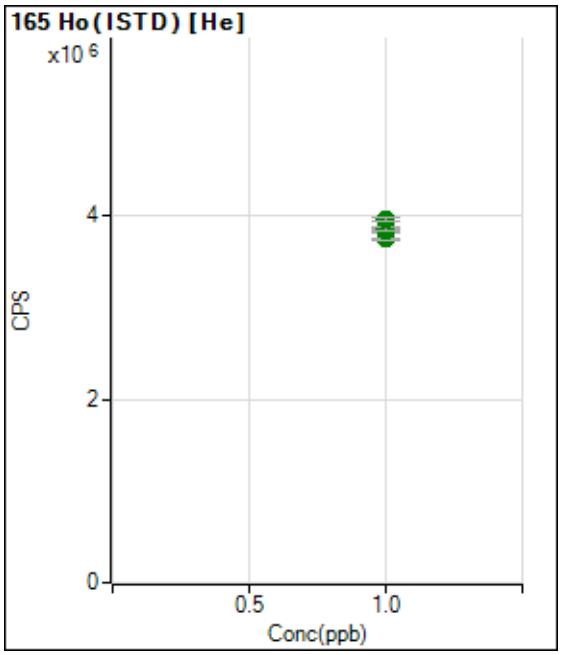
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2327919.49		A	1.5
2	☐	1.000		2356981.43		A	2.2
3	☐	1.000		2301167.68		A	1.0
4	☐	1.000		2272303.87		A	1.3
5	☐	1.000		2457674.14		A	0.8



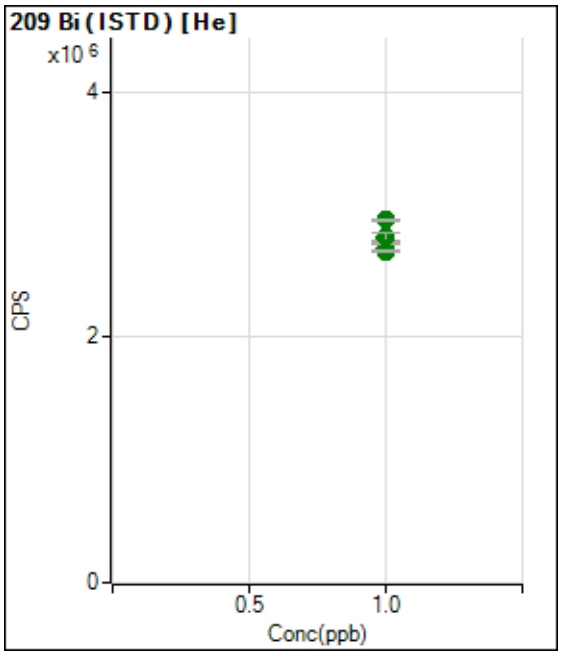
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1305097.89		P	1.0
2	☐	1.000		1333258.40		P	0.8
3	☐	1.000		1293840.69		P	0.2
4	☐	1.000		1269568.95		P	0.0
5	☐	1.000		1344824.64		P	1.3



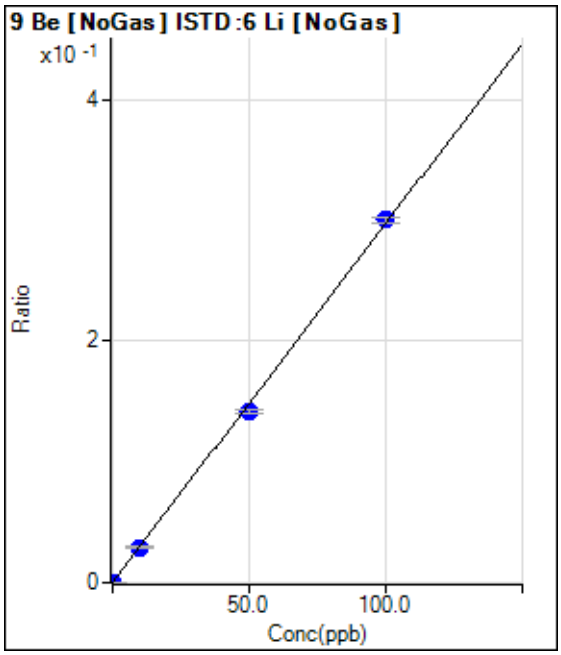
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3765959.30		A	1.1
2	☐	1.000		3812068.32		A	1.7
3	☐	1.000		3828003.18		A	0.5
4	☐	1.000		3830837.35		A	0.7
5	☐	1.000		3907041.51		A	1.4



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3748206.38		A	0.4
2	☐	1.000		3837590.54		A	0.8
3	☐	1.000		3866033.88		A	0.3
4	☐	1.000		3860975.40		A	0.7
5	☐	1.000		3958788.32		A	1.0



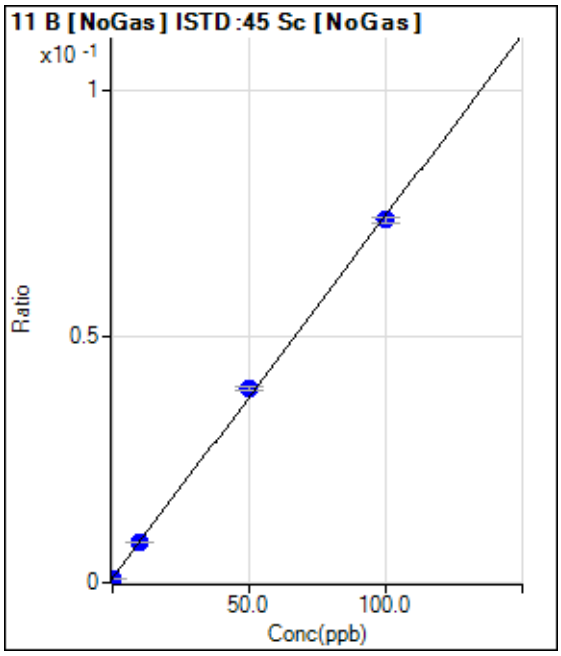
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2822318.15		A	1.7
2	☐	1.000		2814413.64		A	2.3
3	☐	1.000		2731366.77		A	1.7
4	☐	1.000		2698896.77		A	0.7
5	☐	1.000		2958207.94		A	0.4



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	48.15	0.0000	P	53.8
2	☐	10.000	9.863	61104.54	0.0293	P	2.6
3	☐	50.000	47.845	300578.33	0.1422	P	2.5
4	☐	100.000	101.091	629972.18	0.3004	P	1.4
5	☐			114.82	0.0001	P	5.0

y = 0.0030 * x + 2.3218E-005
R = 0.9996
DL = 0.01261
BEC = 0.007814

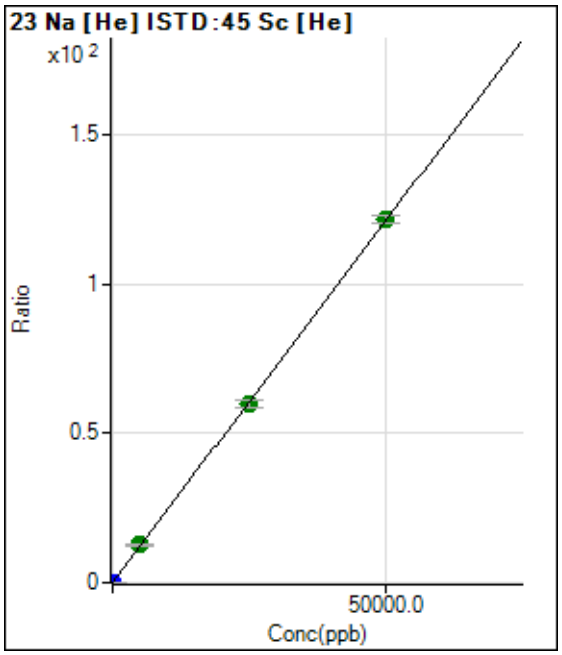
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5664.07	0.0009	P	2.9
2	☐	10.000	9.998	51238.50	0.0083	P	1.6
3	☐	50.000	52.272	244014.67	0.0394	P	1.6
4	☐			8754.29	0.0014	P	7.6
5	☐	100.000	98.864	441329.37	0.0737	P	1.8

y = 7.3553E-004 * x + 9.4887E-004
R = 0.9995
DL = 0.1131
BEC = 1.29

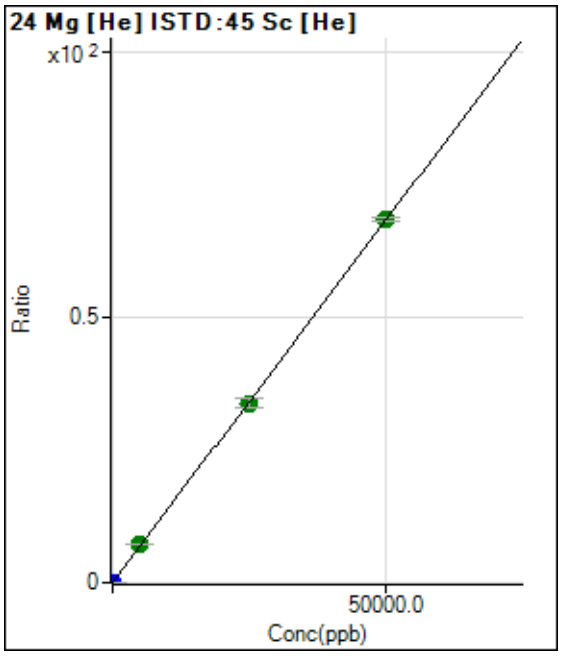
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17579.41	0.0215	P	1.7
2	☐	5000.000	5179.458	10909770.40	12.5689	A	2.3
3	☐	25000.000	24628.295	52641027.54	59.6844	A	4.3
4	☐	50000.000	50167.907	104738710.65	121.5549	A	2.2
5	☐			55361.99	0.0637	P	2.5

y = 0.0024 * x + 0.0215
R = 0.9999
DL = 0.4437
BEC = 8.876

Weight: <None>
Min Conc: <None>

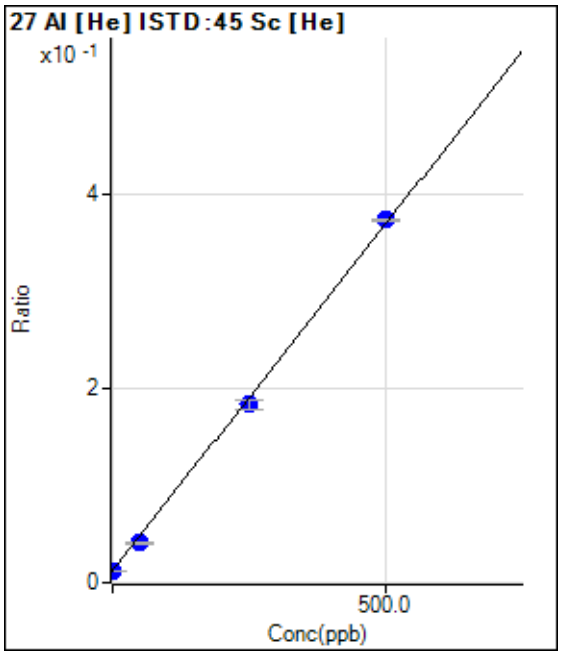


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	514.85	0.0006	P	25.9
2	☐	5000.000	5272.760	6255359.47	7.2069	A	2.6
3	☐	25000.000	24746.166	29823171.04	33.8211	A	5.1
4	☐	50000.000	50099.641	59007925.43	68.4716	A	1.0
5	☐			5541.87	0.0063	P	24.7

y = 0.0014 * x + 6.3039E-004
R = 1.0000
DL = 0.359
BEC = 0.4613

Weight: <None>
Min Conc: <None>

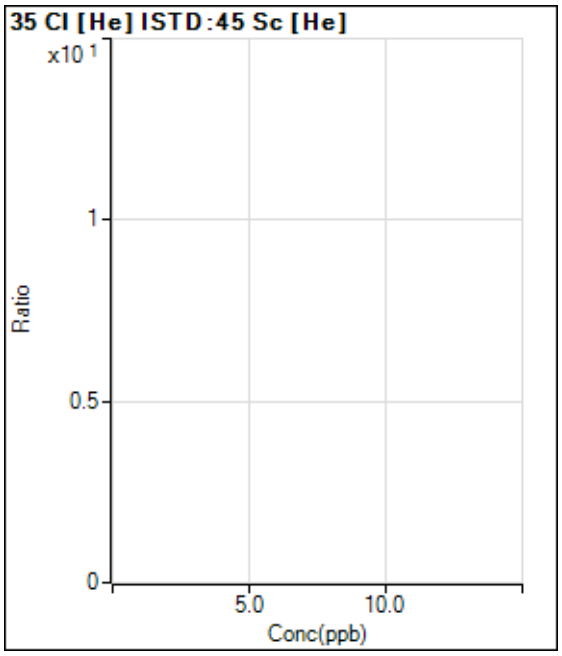
Calibration for 073_CCB.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10168.46	0.0124	P	1.7
2	☐	50.000	39.497	35271.41	0.0406	P	1.3
3	☐	250.000	239.702	161807.37	0.1835	P	5.2
4	☐	500.000	506.199	322082.47	0.3737	P	0.7
5	☐			2801.36	0.0032	P	6.9

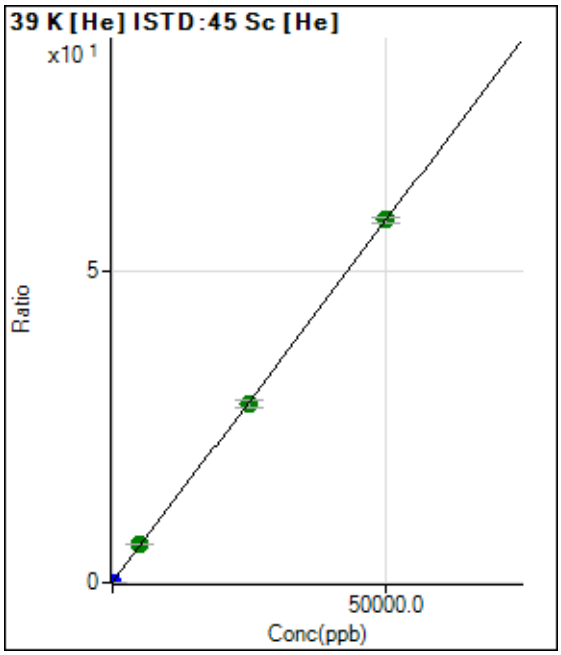
y = 7.1367E-004 * x + 0.0124
R = 0.9995
DL = 0.9007
BEC = 17.43

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			13621830.01	16.6636	A	0.9
2	☐			14332375.36	16.5124	A	1.7
3	☐			14415385.07	16.3509	A	5.6
4	☐			14093835.55	16.3527	A	0.5
5	☐			14612346.18	16.8302	A	2.8

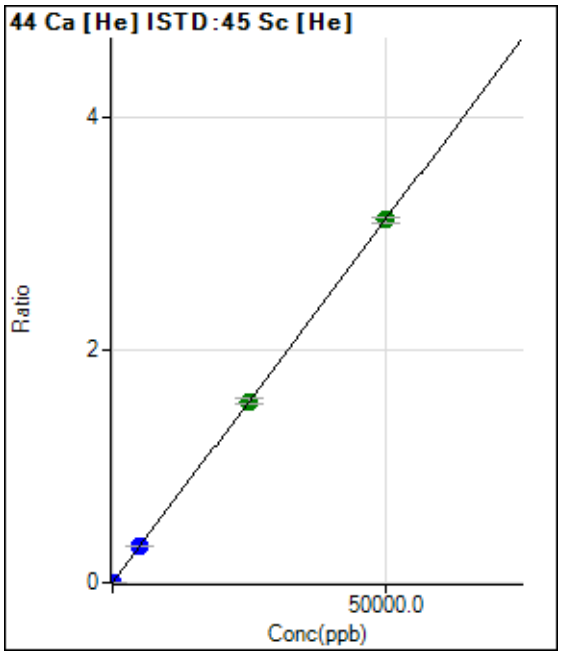
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38378.82	0.0470	P	4.6
2	☐	5000.000	5225.103	5292446.78	6.0971	A	1.6
3	☐	25000.000	24748.892	25316589.74	28.7034	A	4.5
4	☐	50000.000	50103.044	50031738.75	58.0607	A	1.7
5	☐			48461.95	0.0558	P	3.1

y = 0.0012 * x + 0.0470
R = 1.0000
DL = 5.609
BEC = 40.56

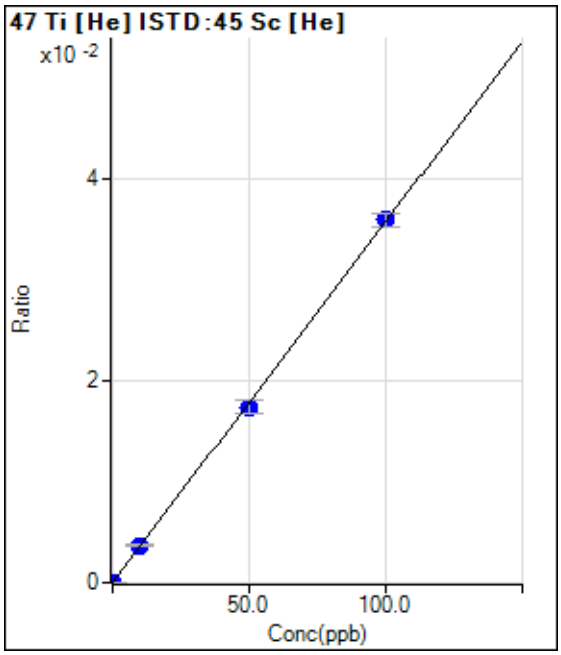
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	714.55	0.0009	P	11.3
2	☐	5000.000	5093.089	276726.29	0.3188	P	1.3
3	☐	25000.000	25020.072	1378439.12	1.5627	A	4.0
4	☐	50000.000	49980.655	2689231.35	3.1208	A	1.8
5	☐			1236.69	0.0014	P	4.1

y = 6.2423E-005 * x + 8.7421E-004
R = 1.0000
DL = 4.764
BEC = 14

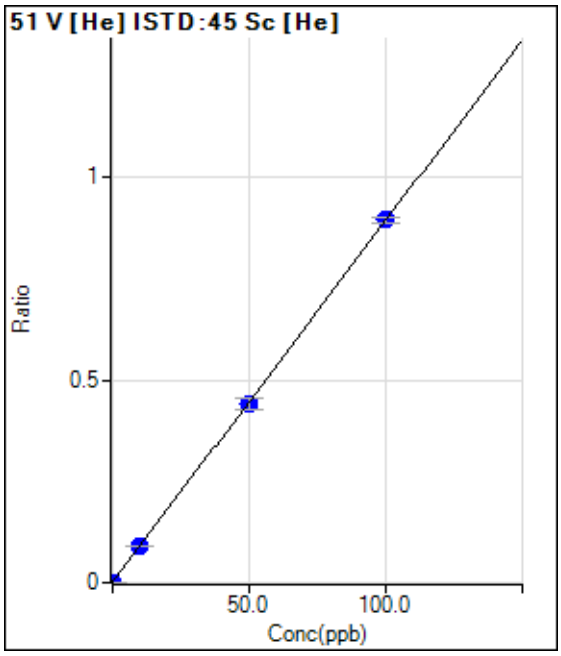
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12.22	0.0000	P	15.4
2	☐	10.000	10.148	3154.76	0.0036	P	4.9
3	☐	50.000	48.763	15344.44	0.0174	P	6.9
4	☐			27.78	0.0000	P	8.7
5	☐	100.000	100.604	31175.75	0.0359	P	3.8

y = 3.5680E-004 * x + 1.4942E-005
R = 0.9999
DL = 0.01929
BEC = 0.04188

Weight: <None>
Min Conc: <None>

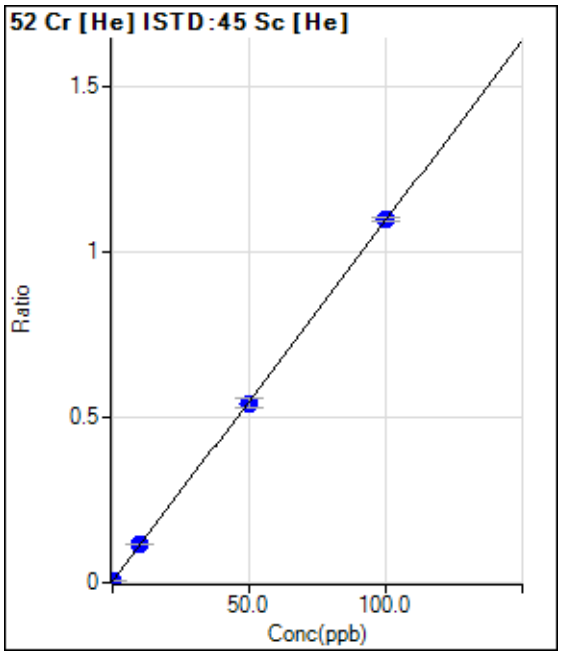


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	652.08	0.0008	P	28.4
2	☐	10.000	10.081	78780.24	0.0908	P	1.8
3	☐	50.000	49.457	389738.88	0.4421	P	5.8
4	☐	100.000	100.263	771662.80	0.8955	P	1.4
5	☐			672.02	0.0008	P	92.4

y = 0.0089 * x + 7.9957E-004
R = 1.0000
DL = 0.07641
BEC = 0.08961

Weight: <None>
Min Conc: <None>

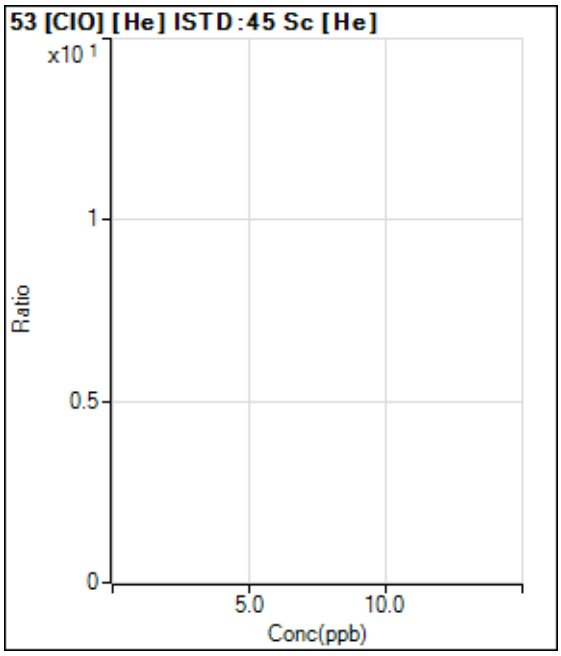
Calibration for 073_CCB.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2644.68	0.0032	P	8.1
2	☐	10.000	10.441	101681.06	0.1171	P	0.9
3	☐	50.000	49.504	479076.16	0.5433	P	4.8
4	☐	100.000	100.204	944823.33	1.0963	P	1.2
5	☐			3976.04	0.0046	P	8.9

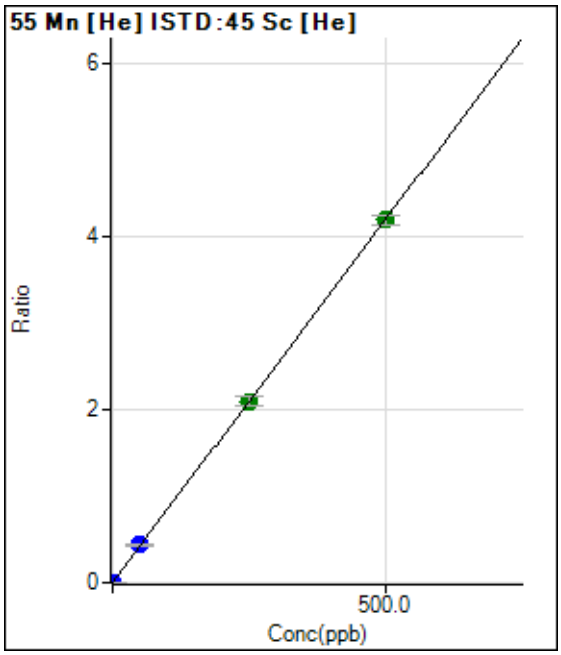
y = 0.0109 * x + 0.0032
R = 1.0000
DL = 0.07238
BEC = 0.2964

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			685.23	0.0008	P	9.9
2	☐			12819.87	0.0148	P	2.1
3	☐			58035.43	0.0658	P	3.4
4	☐			115803.91	0.1344	P	1.4
5	☐			781.54	0.0009	P	28.1

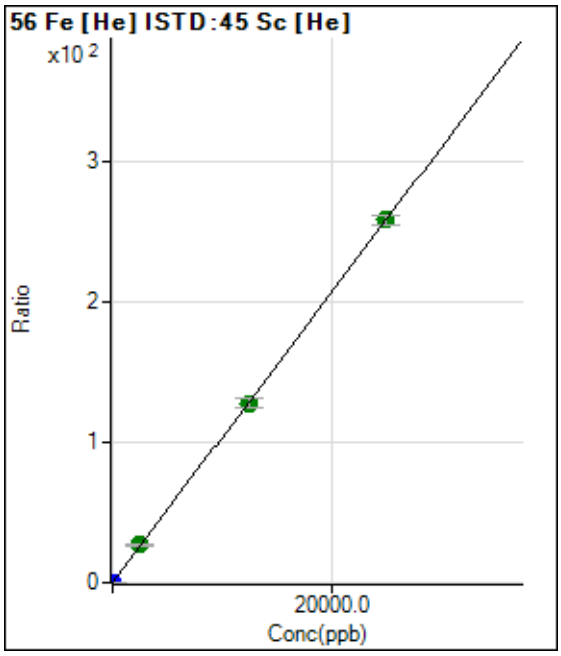
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	467.79	0.0006	P	8.3
2	☐	50.000	51.657	376642.77	0.4339	P	1.4
3	☐	250.000	250.245	1851360.97	2.0999	A	5.4
4	☐	500.000	499.712	3612538.05	4.1927	A	2.8
5	☐			1656.77	0.0019	P	3.3

y = 0.0084 * x + 5.7244E-004
R = 1.0000
DL = 0.01706
BEC = 0.06824

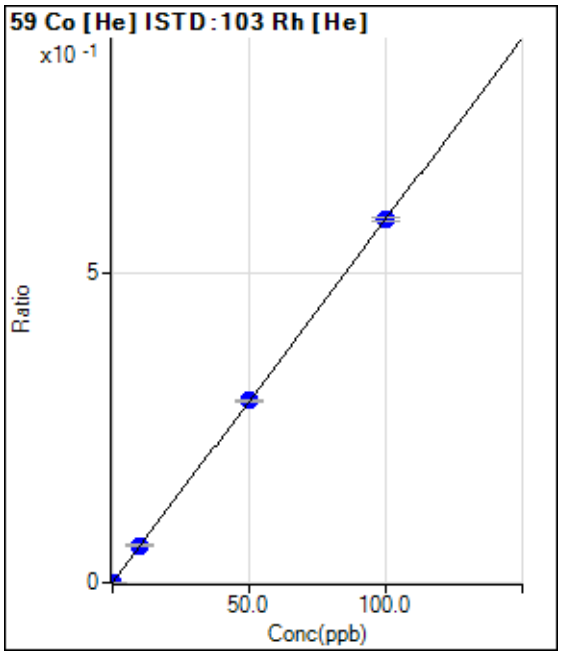
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13476.31	0.0165	P	2.9
2	☐	2500.000	2596.690	23252513.52	26.7880	A	1.9
3	☐	12500.000	12365.767	112418062.20	127.5057	A	5.4
4	☐	25000.000	25057.447	222606364.49	258.3551	A	2.6
5	☐			204783.86	0.2343	P	29.8

y = 0.0103 * x + 0.0165
R = 1.0000
DL = 0.1394
BEC = 1.599

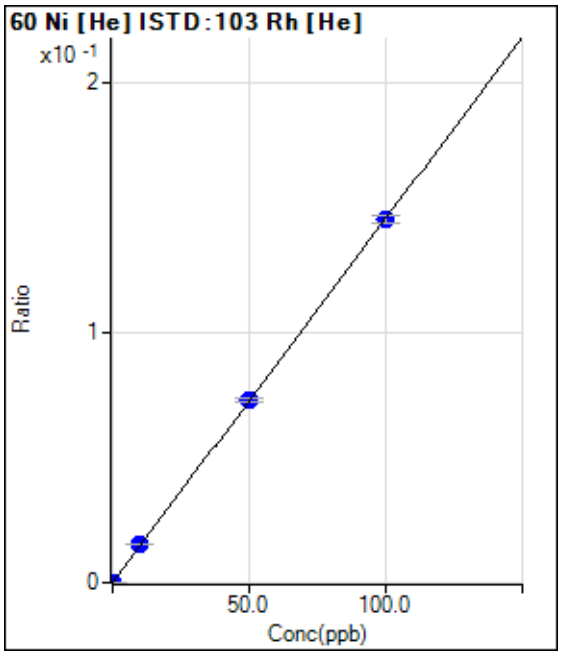
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	37.78	0.0000	P	20.7
2	☐	10.000	10.298	142637.88	0.0605	P	3.4
3	☐	50.000	50.074	677222.91	0.2943	P	1.8
4	☐	100.000	99.933	1334585.02	0.5874	P	1.2
5	☐			151.11	0.0001	P	29.2

y = 0.0059 * x + 1.6197E-005
R = 1.0000
DL = 0.001711
BEC = 0.002756

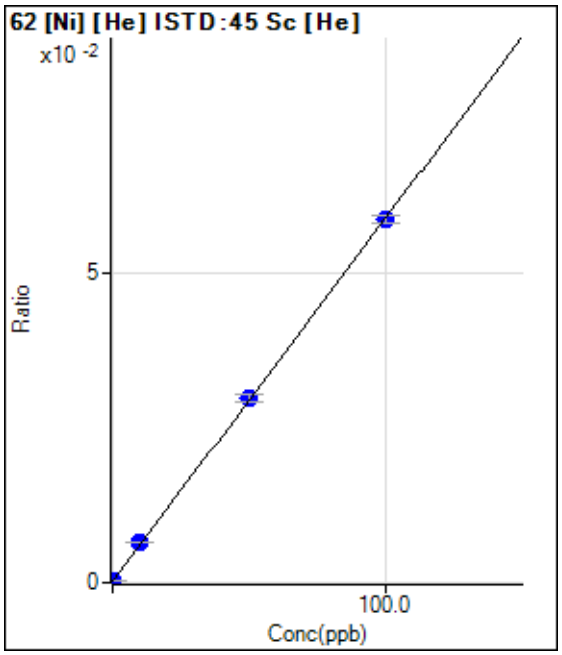
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93.34	0.0000	P	12.1
2	☐	10.000	10.566	36359.02	0.0154	P	2.3
3	☐	50.000	50.407	169021.92	0.0735	P	2.1
4	☐	100.000	99.740	330150.67	0.1453	P	2.2
5	☐			246.67	0.0001	P	14.4

y = 0.0015 * x + 4.0142E-005
R = 1.0000
DL = 0.009969
BEC = 0.02756

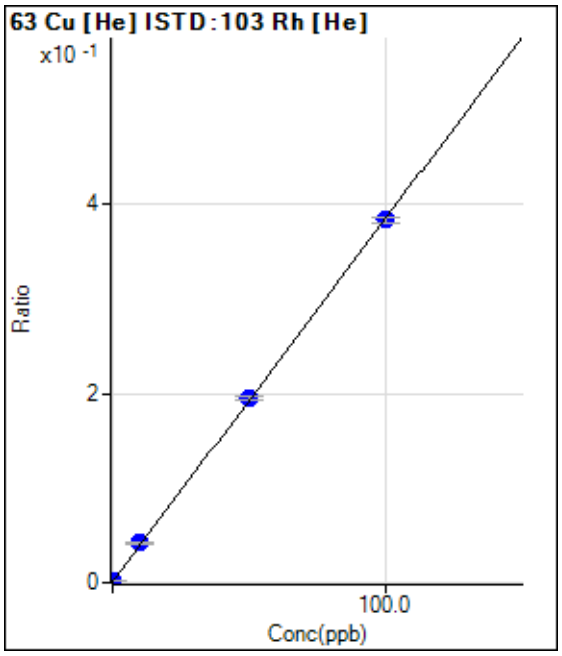
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	148.89	0.0002	P	16.3
2	☐	10.000	10.806	5670.98	0.0065	P	2.1
3	☐	50.000	50.683	26445.18	0.0300	P	4.0
4	☐	100.000	99.578	50596.38	0.0587	P	2.0
5	☐			183.34	0.0002	P	13.6

y = 5.8785E-004 * x + 1.8198E-004
R = 0.9999
DL = 0.1517
BEC = 0.3096

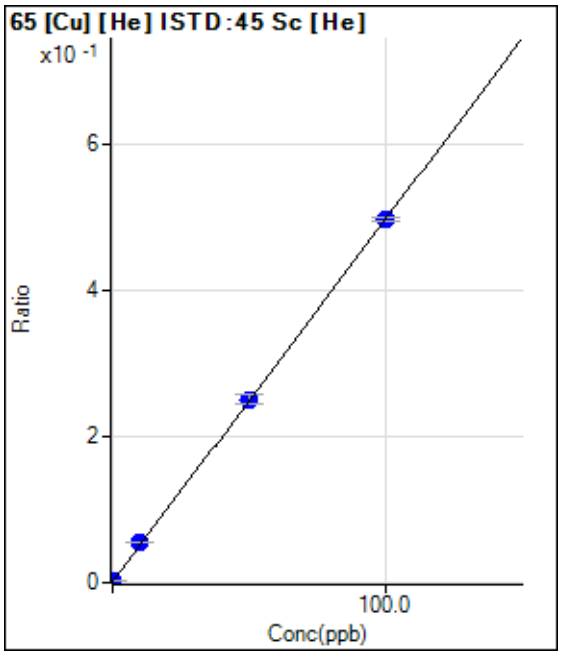
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3293.68	0.0014	P	3.2
2	☐	10.000	10.541	98656.99	0.0419	P	2.7
3	☐	50.000	50.673	450755.78	0.1959	P	1.8
4	☐	100.000	99.609	871823.26	0.3837	P	1.7
5	☐			3093.64	0.0013	P	5.1

y = 0.0038 * x + 0.0014
R = 1.0000
DL = 0.03509
BEC = 0.3687

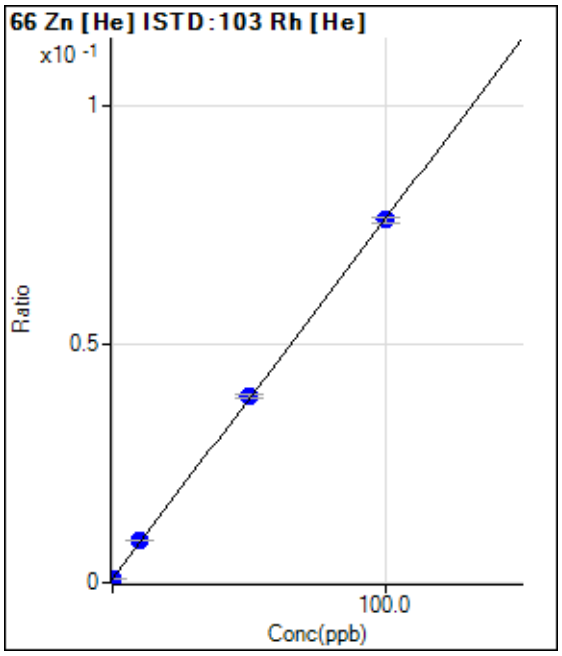
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1524.53	0.0019	P	7.5
2	☐	10.000	10.863	48407.23	0.0558	P	2.4
3	☐	50.000	50.231	221477.10	0.2511	P	4.9
4	☐	100.000	99.798	428402.52	0.4971	P	1.1
5	☐			1434.52	0.0017	P	2.9

y = 0.0050 * x + 0.0019
R = 1.0000
DL = 0.08474
BEC = 0.376

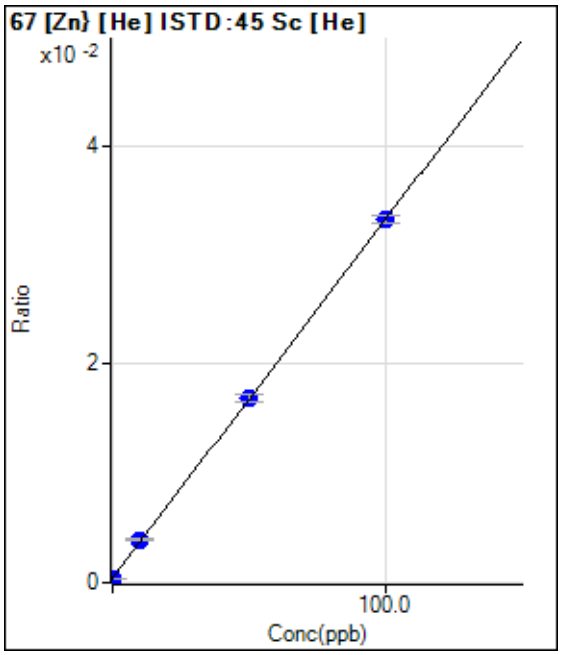
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2124.60	0.0009	P	3.0
2	☐	10.000	10.500	20803.33	0.0088	P	1.2
3	☐	50.000	50.616	89876.31	0.0391	P	2.0
4	☐	100.000	99.642	172705.99	0.0760	P	1.5
5	☐			2592.45	0.0011	P	2.9

y = 7.5372E-004 * x + 9.1238E-004
R = 1.0000
DL = 0.1099
BEC = 1.211

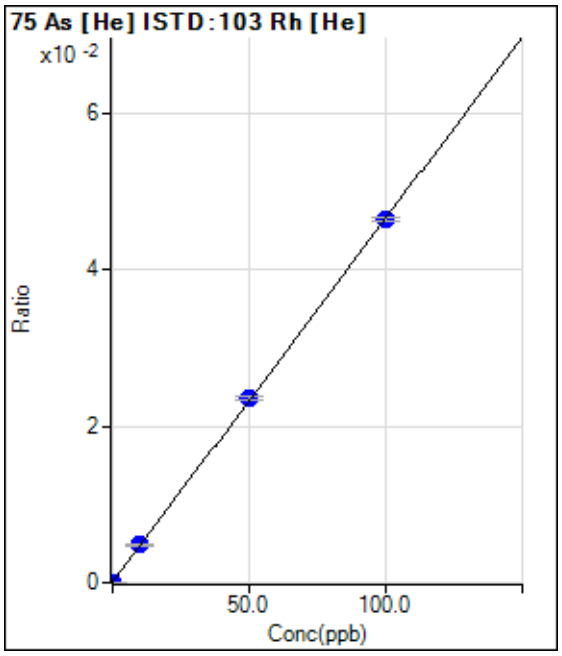
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	333.34	0.0004	P	9.7
2	☐	10.000	10.708	3408.15	0.0039	P	3.4
3	☐	50.000	50.141	14895.25	0.0169	P	4.6
4	☐	100.000	99.859	28635.25	0.0332	P	2.2
5	☐			407.79	0.0005	P	4.7

y = 3.2871E-004 * x + 4.0735E-004
R = 1.0000
DL = 0.3615
BEC = 1.239

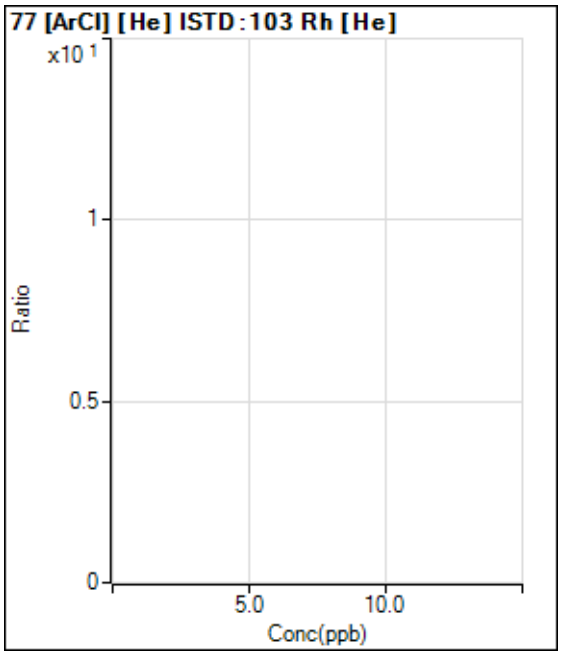
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.21	0.0000	P	3.8
2	☐	10.000	10.313	11396.10	0.0048	P	2.6
3	☐	50.000	50.574	54208.01	0.0236	P	1.6
4	☐	100.000	99.681	105414.88	0.0464	P	1.2
5	☐			344.56	0.0001	P	6.5

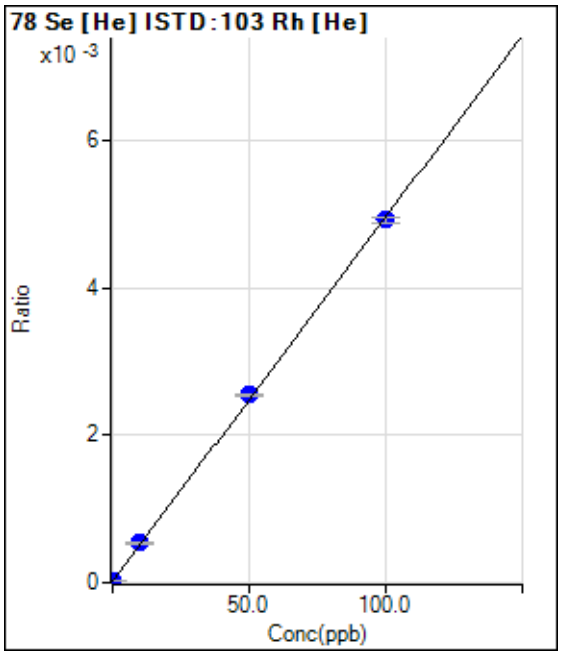
y = 4.6504E-004 * x + 4.0484E-005
R = 1.0000
DL = 0.009993
BEC = 0.08705

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			29.63	0.0000	P	41.6
2	☐			296.32	0.0001	P	23.3
3	☐			1522.36	0.0007	P	3.0
4	☐			3363.45	0.0015	P	6.6
5	☐			37.04	0.0000	P	34.3

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	37.15	0.0000	P	1.5
2	☐	10.000	10.522	1260.58	0.0005	P	6.3
3	☐	50.000	51.244	5856.36	0.0025	P	0.3
4	☐	100.000	99.326	11173.31	0.0049	P	1.4
5	☐			70.65	0.0000	P	14.6

y = 4.9351E-005 * x + 1.5957E-005

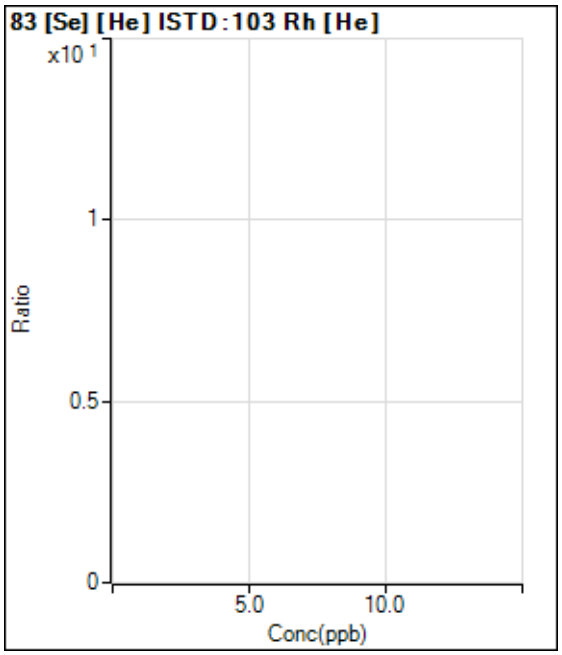
R = 0.9999

DL = 0.01428

BEC = 0.3233

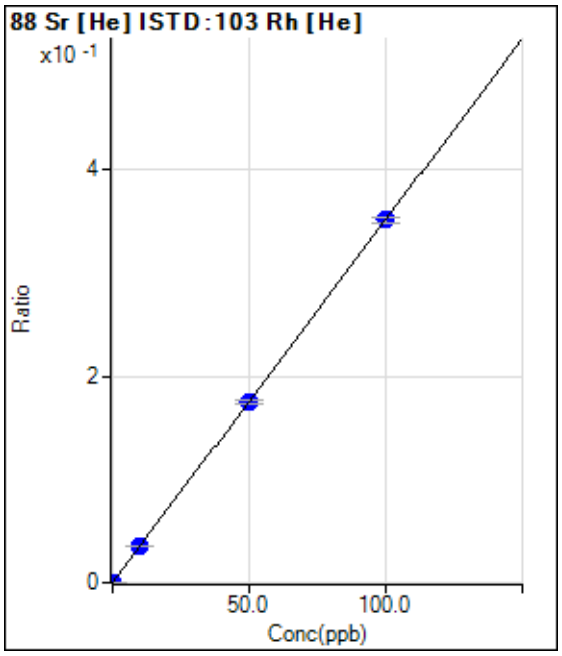
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			244.11	0.0001	P	3.6
2	☐			238.39	0.0001	P	4.4
3	☐			231.32	0.0001	P	6.2
4	☐			226.60	0.0001	P	9.9
5	☐			224.58	0.0001	P	2.2

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	216.67	0.0001	P	9.3
2	☐	10.000	10.134	84092.35	0.0357	P	3.0
3	☐	50.000	49.917	403659.05	0.1754	P	2.0
4	☐	100.000	100.028	798513.67	0.3515	P	1.9
5	☐			224.45	0.0001	P	6.5

y = 0.0035 * x + 9.3082E-005

R = 1.0000

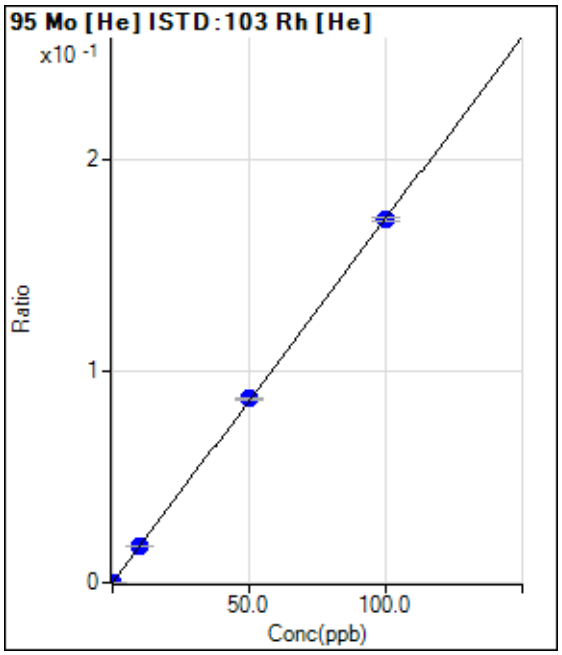
DL = 0.007399

BEC = 0.0265

Weight: <None>

Min Conc: <None>

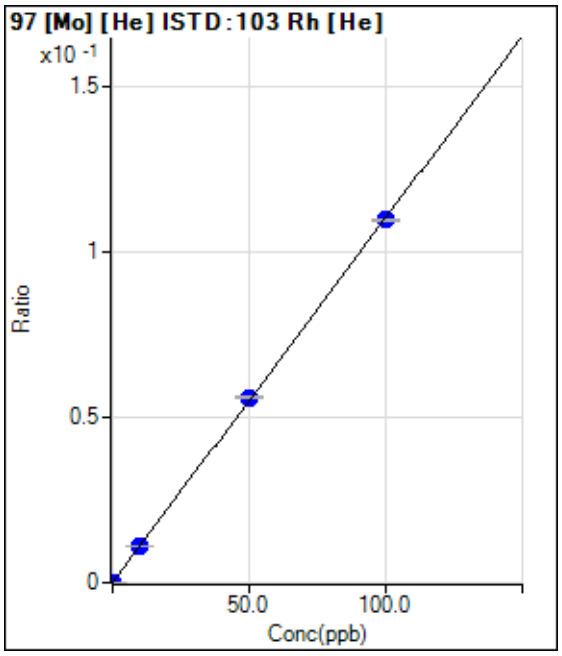
Calibration for 073_CCB.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.89	0.0000	P	7.3
2	☐	10.000	10.131	41059.20	0.0174	P	1.9
3	☐	50.000	50.628	200078.32	0.0869	P	0.8
4	☐			3776.03	0.0017	P	19.7
5	☐	100.000	99.673	420606.55	0.1711	P	1.2

y = 0.0017 * x + 2.5308E-005
R = 1.0000
DL = 0.003238
BEC = 0.01474

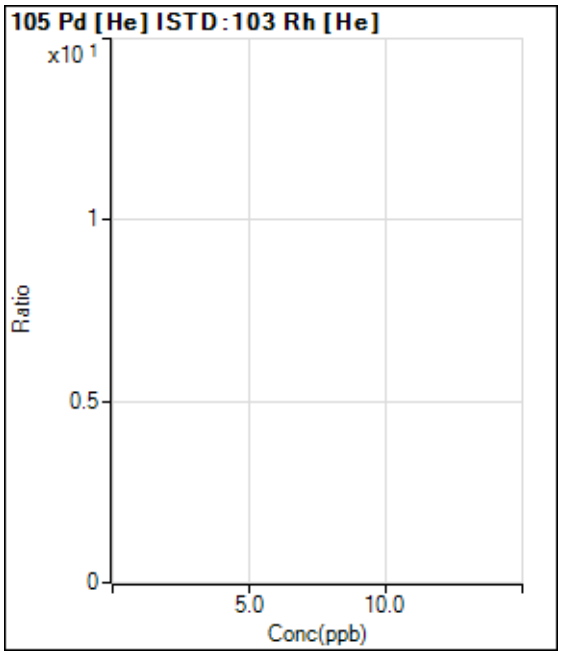
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51.86	0.0000	P	32.9
2	☐	10.000	10.008	26016.68	0.0110	P	3.1
3	☐	50.000	50.904	129045.58	0.0561	P	1.5
4	☐			2667.03	0.0012	P	11.8
5	☐	100.000	99.547	269438.76	0.1096	P	0.7

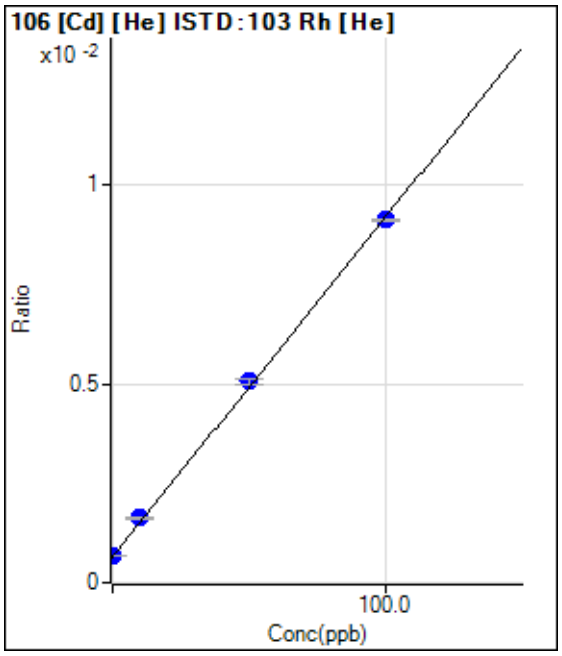
y = 0.0011 * x + 2.2272E-005
R = 0.9999
DL = 0.01995
BEC = 0.02023

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1507.55	0.0006	P	6.8
2	☐			1722.40	0.0007	P	9.4
3	☐			1877.98	0.0008	P	14.0
4	☐			2296.56	0.0010	P	4.5
5	☐			1685.35	0.0007	P	5.3

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1549.23	0.0007	P	1.2
2	☐	10.000	11.373	3856.33	0.0016	P	2.3
3	☐	50.000	51.447	11638.58	0.0051	P	2.3
4	☐	100.000	99.139	20747.69	0.0091	P	0.6
5	☐			1741.84	0.0007	P	3.1

y = 8.5390E-005 * x + 6.6544E-004

R = 0.9998

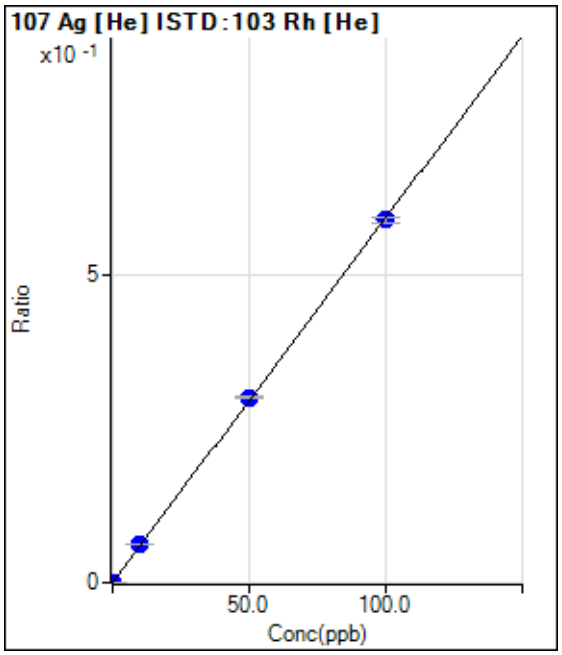
DL = 0.2758

BEC = 7.793

Weight: <None>

Min Conc: <None>

Calibration for 073_CCB.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.89	0.0000	P	21.1
2	☐	10.000	10.529	147154.93	0.0625	P	2.8
3	☐	50.000	50.773	692946.33	0.3012	P	1.5
4	☐	100.000	99.560	1341659.70	0.5905	P	1.6
5	☐			371.12	0.0002	P	16.1

y = 0.0059 * x + 8.1230E-006

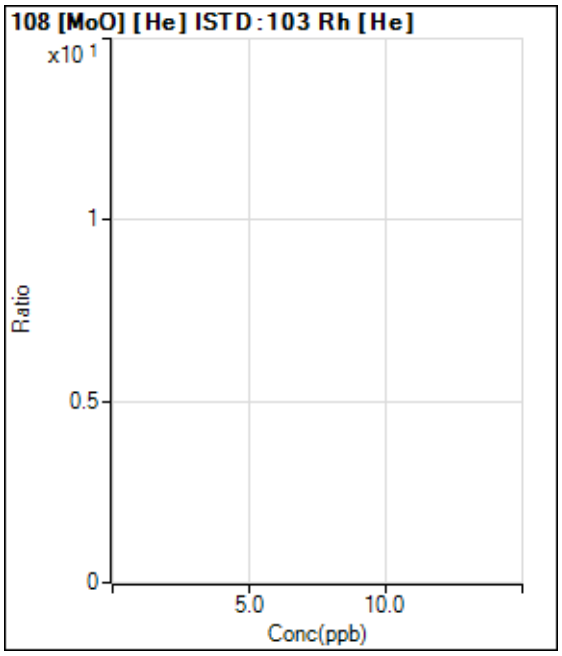
R = 0.9999

DL = 0.0008668

BEC = 0.00137

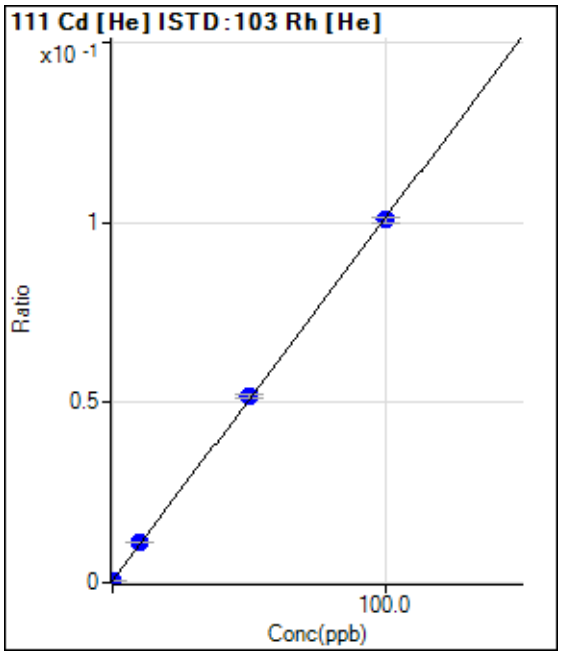
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			7.41	0.0000	P	173.2
2	☐			1670.55	0.0007	P	13.7
3	☐			7635.43	0.0033	P	4.7
4	☐			15085.00	0.0066	P	6.1
5	☐			211.12	0.0001	P	22.6

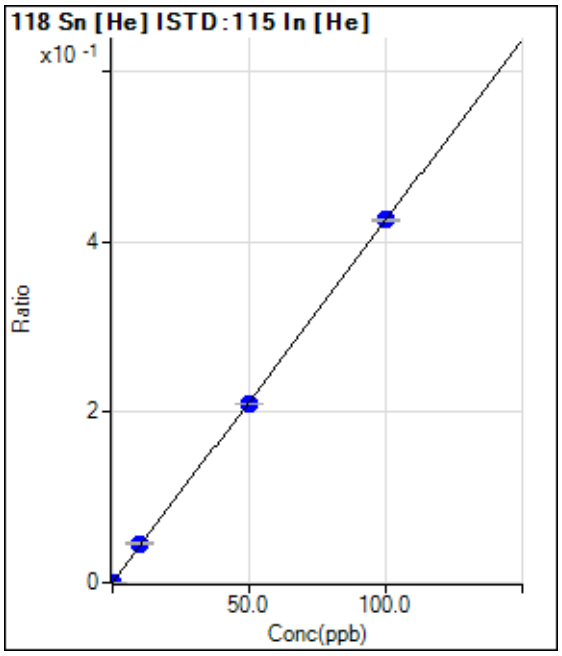
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1180.38	0.0005	P	1.5
2	☐	10.000	10.543	26236.12	0.0111	P	2.2
3	☐	50.000	50.981	119406.26	0.0519	P	1.6
4	☐	100.000	99.455	228925.25	0.1008	P	1.3
5	☐			1257.44	0.0005	P	4.2

y = 0.0010 * x + 5.0698E-004
R = 0.9999
DL = 0.02261
BEC = 0.503

Weight: <None>
Min Conc: <None>

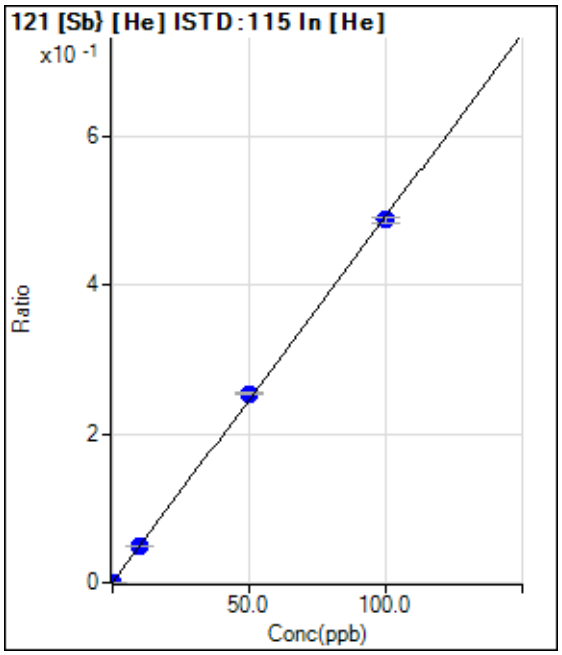


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	311.13	0.0002	P	12.4
2	☐	10.000	10.796	61422.61	0.0461	P	1.3
3	☐	50.000	49.478	272059.03	0.2103	P	0.3
4	☐			4237.77	0.0033	P	6.2
5	☐	100.000	100.181	572212.96	0.4255	P	0.5

y = 0.0042 * x + 2.3840E-004
R = 0.9999
DL = 0.02088
BEC = 0.05616

Weight: <None>
Min Conc: <None>

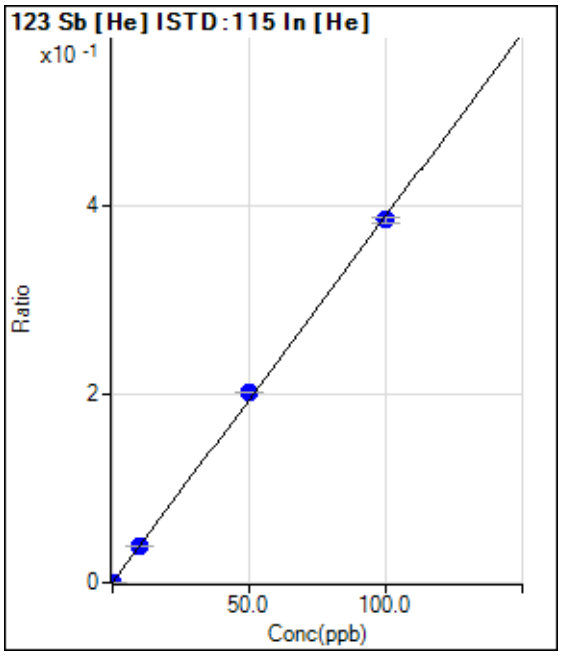
Calibration for 073_CCB.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	271.12	0.0002	P	3.7
2	☐	10.000	10.058	66159.00	0.0496	P	0.6
3	☐	50.000	51.723	329039.99	0.2543	P	0.4
4	☐			2655.81	0.0021	P	8.9
5	☐	100.000	99.132	655159.42	0.4872	P	1.2

y = 0.0049 * x + 2.0778E-004
R = 0.9997
DL = 0.004706
BEC = 0.04229

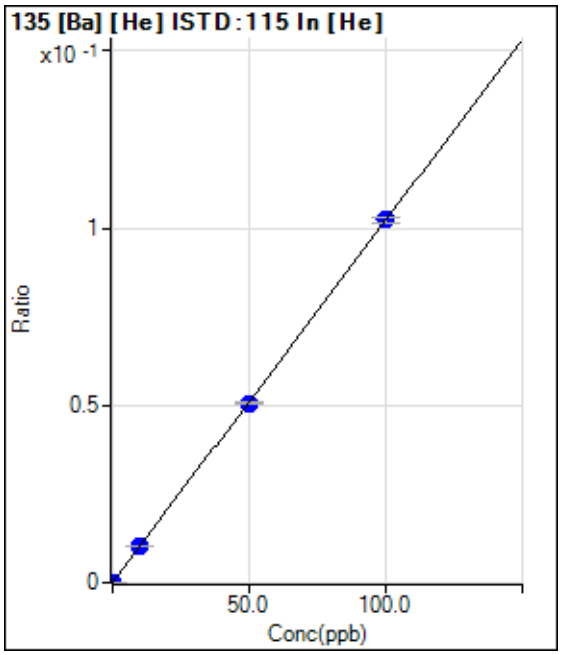
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	183.34	0.0001	P	7.4
2	☐	10.000	9.928	51504.99	0.0386	P	1.0
3	☐	50.000	51.911	260596.65	0.2014	P	0.5
4	☐			2145.72	0.0017	P	9.0
5	☐	100.000	99.052	516595.95	0.3842	P	1.6

y = 0.0039 * x + 1.4041E-004
R = 0.9997
DL = 0.008055
BEC = 0.03621

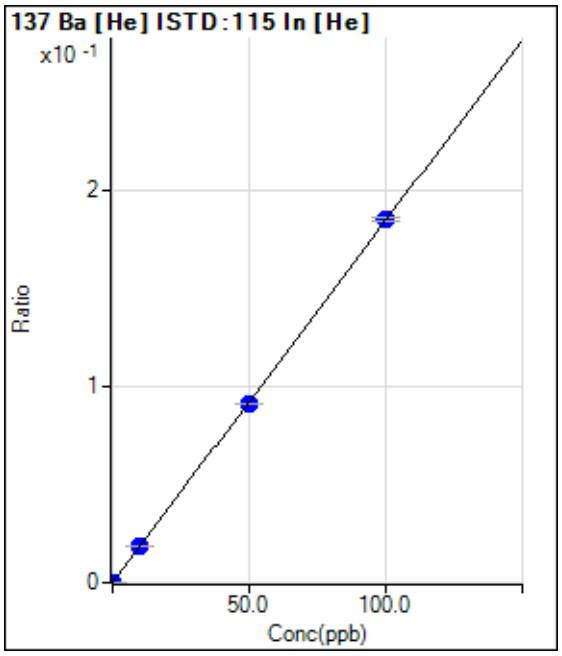
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.67	0.0000	P	1.0
2	☐	10.000	10.081	13750.18	0.0103	P	2.7
3	☐	50.000	49.596	65550.43	0.0507	P	0.8
4	☐	100.000	100.194	129916.03	0.1023	P	1.5
5	☐			78.89	0.0001	P	7.5

y = 0.0010 * x + 2.0437E-005
R = 1.0000
DL = 0.0005789
BEC = 0.02001

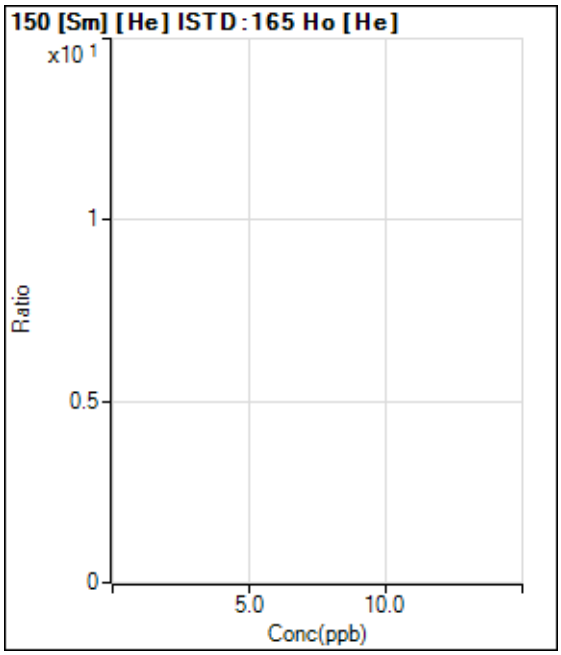
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	37.78	0.0000	P	30.0
2	☐	10.000	9.872	24353.25	0.0183	P	0.9
3	☐	50.000	49.389	118080.69	0.0913	P	0.7
4	☐	100.000	100.318	235303.04	0.1853	P	1.2
5	☐			225.56	0.0002	P	18.3

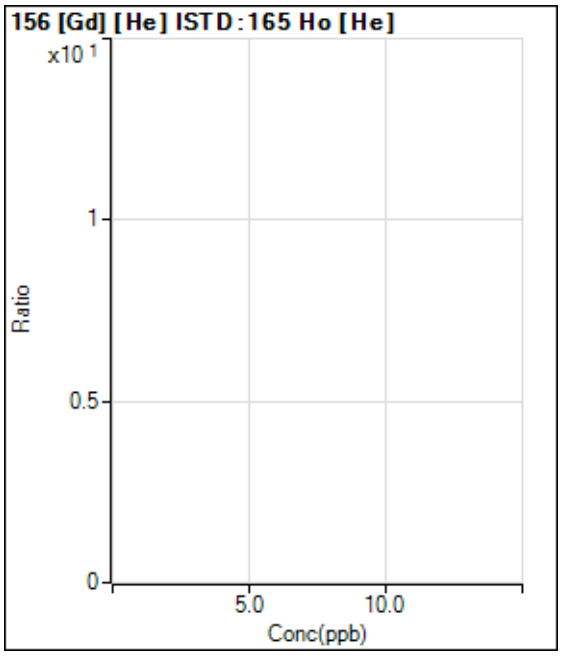
y = 0.0018 * x + 2.8892E-005
R = 1.0000
DL = 0.0141
BEC = 0.01564

Weight: <None>
Min Conc: <None>



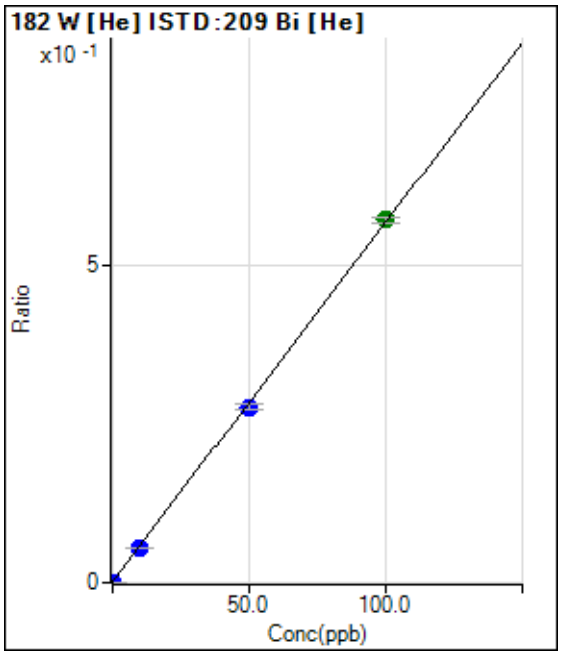
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			5.33	0.0000	P	21.8
2	☐			6.67	0.0000	P	91.3
3	☐			13.33	0.0000	P	46.1
4	☐			14.67	0.0000	P	8.3
5	☐			6.67	0.0000	P	62.4

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			16.67	0.0000	P	18.7
2	☐			10.00	0.0000	P	20.7
3	☐			20.00	0.0000	P	20.3
4	☐			24.00	0.0000	P	13.7
5	☐			5.33	0.0000	P	115.2

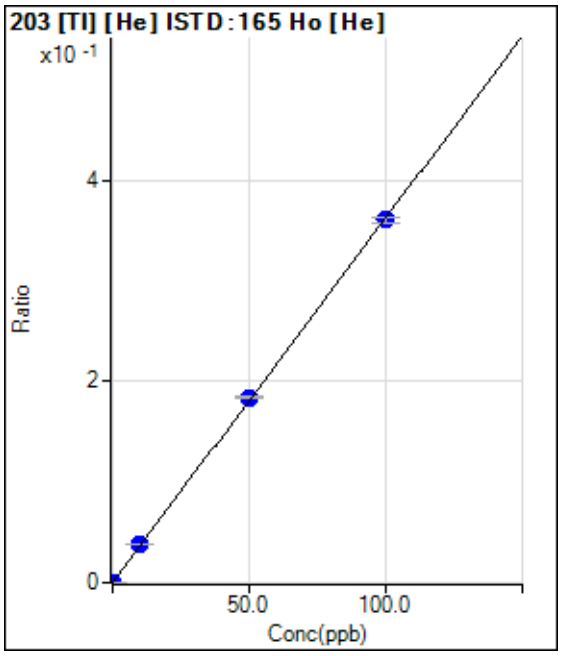
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3830.30	0.0014	P	4.7
2	☐	10.000	9.200	150146.57	0.0534	P	1.3
3	☐	50.000	48.723	755610.07	0.2767	P	2.8
4	☐			18062.73	0.0067	P	13.5
5	☐	100.000	100.719	1687997.04	0.5706	A	1.5

y = 0.0057 * x + 0.0014
R = 0.9999
DL = 0.03381
BEC = 0.24

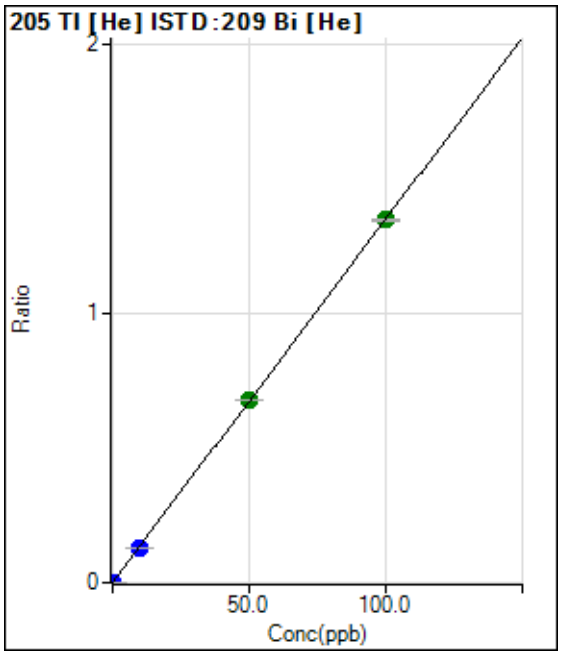
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.82	0.0000	P	173.2
2	☐	10.000	10.561	146856.81	0.0383	P	0.6
3	☐	50.000	50.760	711050.88	0.1839	P	0.8
4	☐	100.000	99.564	1392784.40	0.3608	P	1.5
5	☐			1414.95	0.0004	P	26.4

y = 0.0036 * x + 3.9724E-006
R = 0.9999
DL = 0.005697
BEC = 0.001096

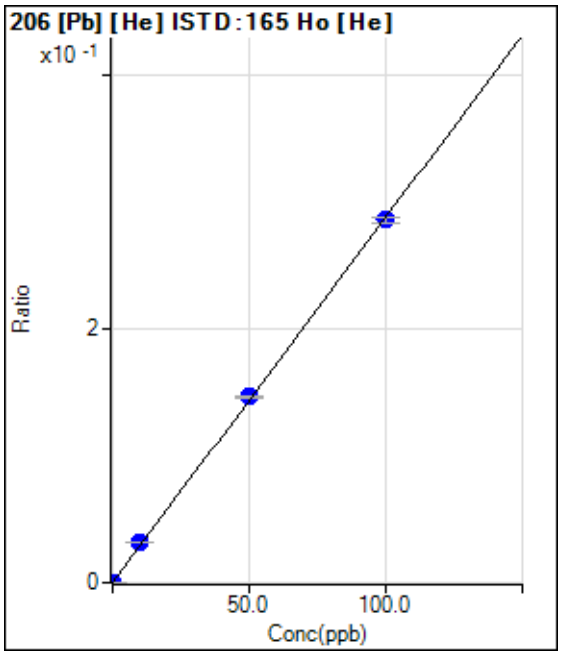
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	36.6
2	☐	10.000	9.597	364870.41	0.1297	P	3.2
3	☐	50.000	50.293	1856300.97	0.6797	A	0.7
4	☐	100.000	99.894	3643513.47	1.3500	A	0.4
5	☐			1756.80	0.0006	P	22.8

y = 0.0135 * x + 7.8434E-006
R = 1.0000
DL = 0.0006375
BEC = 0.0005804

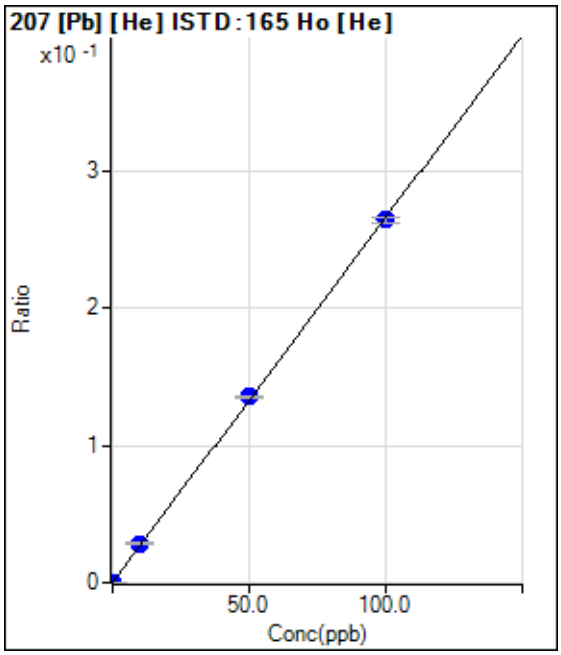
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127.78	0.0000	P	14.9
2	☐	10.000	10.871	120221.58	0.0313	P	0.4
3	☐	50.000	51.006	567782.02	0.1469	P	1.3
4	☐	100.000	99.410	1104954.40	0.2862	P	1.4
5	☐			878.93	0.0002	P	9.0

y = 0.0029 * x + 3.4080E-005
R = 0.9999
DL = 0.005305
BEC = 0.01184

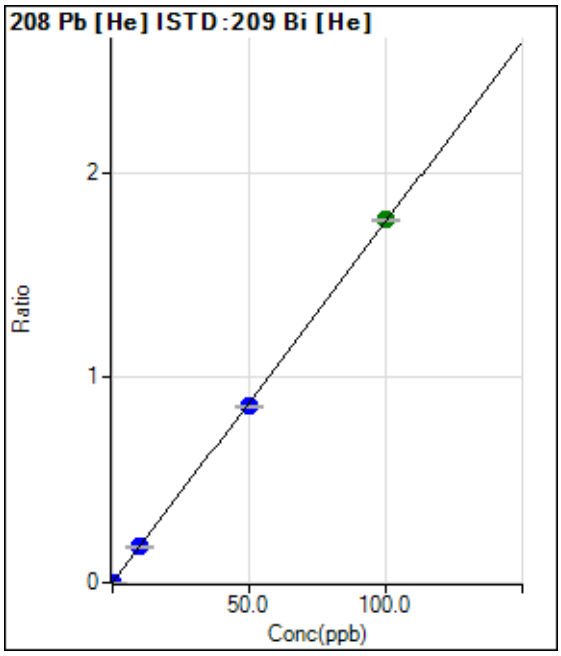
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.33	0.0000	P	11.9
2	☐	10.000	10.774	110112.76	0.0287	P	1.0
3	☐	50.000	50.949	524080.79	0.1356	P	1.2
4	☐	100.000	99.448	1021427.42	0.2646	P	1.8
5	☐			722.25	0.0002	P	4.9

y = 0.0027 * x + 3.5585E-005
R = 0.9999
DL = 0.004776
BEC = 0.01338

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	576.68	0.0002	P	5.5
2	☐	10.000	9.988	494422.91	0.1758	P	3.3
3	☐	50.000	48.922	2349154.02	0.8601	P	0.9
4	☐	100.000	100.540	4770235.40	1.7675	A	0.3
5	☐			3455.77	0.0012	P	9.7

y = 0.0176 * x + 2.0425E-004
R = 0.9999
DL = 0.001923
BEC = 0.01162

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T17:45:38-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	70	64.78
B	11	45	2	NoGas	5901	0.09
Na	23	45	1	He	17468	0.01
Mg	24	45	1	He	478	9.25
Al	27	45	1	He	10244	0.02
K	39	45	1	He	39377	0.00
Ca	44	45	1	He	749	0.74
Ti	47	45	1	He	2	7790.33
Cr	52	45	1	He	2582	0.16
Mn	55	45	1	He	528	1.92
Fe	56	45	1	He	13420	0.02
Co	59	103	1	He	48	42.14
Ni	60	103	1	He	66	71.65
Cu	63	103	1	He	3215	0.21
Zn	66	103	1	He	2159	0.09
As	75	103	1	He	97	12.58
Se	78	103	1	He	35	24.28
Sr	88	103	1	He	224	3.40
Mo	95	103	1	He	93	6.63
Ag	107	103	1	He	30	111.11
Cd	111	103	1	He	1220	0.09
Sn	118	115	1	He	315	9.53
Sb	123	115	1	He	206	3.56
Ba	137	115	1	He	56	59.47
W	182	209	1	He	4034	0.07
Tl	205	209	1	He	27	162.42
Pb	208	209	1	He	622	2.21

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	2072837	1.89
Sc	45	1	He	837283	0.29
Sc	45	2	NoGas	6043215	0.76
Rh	103	1	He	2343300	0.56
In	115	1	He	1313068	0.42
Tb	159	1	He	3773476	0.91
Ho	165	1	He	3770710	0.93
Bi	209	1	He	2802156	0.55

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T17:49:31-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	48	110.71
B	11	45	2	NoGas	5664	0.04
Na	23	45	1	He	17579	0.01
Mg	24	45	1	He	515	4.89
Al	27	45	1	He	10168	0.00
K	39	45	1	He	38379	0.01
Ca	44	45	1	He	715	1.55
Ti	47	45	1	He	12	128.75
V	51	45	1	He	652	4.17
Cr	52	45	1	He	2645	0.34
Mn	55	45	1	He	468	1.63
Fe	56	45	1	He	13476	0.01
Co	59	103	1	He	38	58.78
Ni	60	103	1	He	93	11.48
Cu	63	103	1	He	3294	0.06
Zn	66	103	1	He	2125	0.22
As	75	103	1	He	94	2.55
Se	78	103	1	He	37	5.50
Sr	88	103	1	He	217	4.26
Mo	95	103	1	He	59	11.09
Ag	107	103	1	He	19	107.76
Cd	111	103	1	He	1180	0.26
Sn	118	115	1	He	311	3.98
Sb	123	115	1	He	183	4.54
Ba	137	115	1	He	38	82.00
W	182	209	1	He	3830	0.16
Tl	205	209	1	He	22	169.94
Pb	208	209	1	He	577	1.16

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	2077022	0.45
Sc	45	1	He	817536	1.51
Sc	45	2	NoGas	5970055	0.85
Rh	103	1	He	2327919	1.54
In	115	1	He	1305098	0.96
Tb	159	1	He	3765959	1.07
Ho	165	1	He	3748206	0.43
Bi	209	1	He	2822318	1.74

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T17:53:22-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	61105	0.00
B	11	2	NoGas	51239	0.00
Na	23	1	He	10909770	0.00
Mg	24	1	He	6255359	0.00
Al	27	1	He	35271	0.01
K	39	1	He	5292447	0.00
Ca	44	1	He	276726	0.00
Ti	47	1	He	3155	0.11
V	51	1	He	78780	0.00
Cr	52	1	He	101681	0.00
Mn	55	1	He	376643	0.00
Fe	56	1	He	23252514	0.00
Co	59	1	He	142638	0.00
Ni	60	1	He	36359	0.00
Cu	63	1	He	98657	0.00
Zn	66	1	He	20803	0.01
As	75	1	He	11396	0.01
Se	78	1	He	1261	0.37
Sr	88	1	He	84092	0.00
Mo	95	1	He	41059	0.01
Ag	107	1	He	147155	0.00
Cd	111	1	He	26236	0.00
Sn	118	1	He	61423	0.00
Sb	123	1	He	51505	0.00
Ba	137	1	He	24353	0.01
W	182	1	He	150147	0.00
Tl	205	1	He	364870	0.00
Pb	208	1	He	494423	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2083752	0.91	2077022	100.32	30	120	
Sc	45	1	He	868166	2.07	817536	106.19	30	120	
Sc	45	2	NoGas	6171681	1.39	5970055	103.38	30	120	
Rh	103	1	He	2356981	2.17	2327919	101.25	30	120	
In	115	1	He	1333258	0.76	1305098	102.16	30	120	
Tb	159	1	He	3812068	1.74	3765959	101.22	30	120	
Ho	165	1	He	3837591	0.77	3748206	102.38	30	120	
Bi	209	1	He	2814414	2.35	2822318	99.72	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T17:57:14-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	300578	0.00
B	11	2	NoGas	244015	0.00
Na	23	1	He	52641028	0.00
Mg	24	1	He	29823171	0.00
Al	27	1	He	161807	0.00
K	39	1	He	25316590	0.00
Ca	44	1	He	1378439	0.00
Ti	47	1	He	15344	0.01
V	51	1	He	389739	0.00
Cr	52	1	He	479076	0.00
Mn	55	1	He	1851361	0.00
Fe	56	1	He	112418062	0.00
Co	59	1	He	677223	0.00
Ni	60	1	He	169022	0.00
Cu	63	1	He	450756	0.00
Zn	66	1	He	89876	0.00
As	75	1	He	54208	0.00
Se	78	1	He	5856	0.02
Sr	88	1	He	403659	0.00
Mo	95	1	He	200078	0.00
Ag	107	1	He	692946	0.00
Cd	111	1	He	119406	0.00
Sn	118	1	He	272059	0.00
Sb	123	1	He	260597	0.00
Ba	137	1	He	118081	0.00
W	182	1	He	755610	0.00
Tl	205	1	He	1856301	0.00
Pb	208	1	He	2349154	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2114346	0.87	2077022	101.80	30	120	
Sc	45	1	He	883361	5.36	817536	108.05	30	120	
Sc	45	2	NoGas	6194629	1.53	5970055	103.76	30	120	
Rh	103	1	He	2301168	1.05	2327919	98.85	30	120	
In	115	1	He	1293841	0.20	1305098	99.14	30	120	
Tb	159	1	He	3828003	0.54	3765959	101.65	30	120	
Ho	165	1	He	3866034	0.30	3748206	103.14	30	120	
Bi	209	1	He	2731367	1.73	2822318	96.78	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:00:59-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	629972	0.00
B	11	2	NoGas	8754	0.09
Na	23	1	He	104738711	0.00
Mg	24	1	He	59007925	0.00
Al	27	1	He	322082	0.00
K	39	1	He	50031739	0.00
Ca	44	1	He	2689231	0.00
Ti	47	1	He	28	24.91
V	51	1	He	771663	0.00
Cr	52	1	He	944823	0.00
Mn	55	1	He	3612538	0.00
Fe	56	1	He	222606364	0.00
Co	59	1	He	1334585	0.00
Ni	60	1	He	330151	0.00
Cu	63	1	He	871823	0.00
Zn	66	1	He	172706	0.00
As	75	1	He	105415	0.00
Se	78	1	He	11173	0.00
Sr	88	1	He	798514	0.00
Mo	95	1	He	3776	0.52
Ag	107	1	He	1341660	0.00
Cd	111	1	He	228925	0.00
Sn	118	1	He	4238	0.15
Sb	123	1	He	2146	0.42
Ba	137	1	He	235303	0.00
W	182	1	He	18063	0.08
Tl	205	1	He	3643513	0.00
Pb	208	1	He	4770235	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2097365	0.97	2077022	100.98	30	120	
Sc	45	1	He	861888	1.81	817536	105.43	30	120	
Sc	45	2	NoGas	6317964	1.54	5970055	105.83	30	120	
Rh	103	1	He	2272304	1.32	2327919	97.61	30	120	
In	115	1	He	1269569	0.05	1305098	97.28	30	120	
Tb	159	1	He	3830837	0.69	3765959	101.72	30	120	
Ho	165	1	He	3860975	0.74	3748206	103.01	30	120	
Bi	209	1	He	2698897	0.67	2822318	95.63	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:04:43-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	115	4.87
B	11	2	NoGas	441329	0.00
Na	23	1	He	55362	0.01
Mg	24	1	He	5542	0.51
Al	27	1	He	2801	0.13
K	39	1	He	48462	0.00
Ca	44	1	He	1237	0.40
Ti	47	1	He	31176	0.01
V	51	1	He	672	13.75
Cr	52	1	He	3976	0.15
Mn	55	1	He	1657	0.23
Fe	56	1	He	204784	0.02
Co	59	1	He	151	19.93
Ni	60	1	He	247	5.77
Cu	63	1	He	3094	0.14
Zn	66	1	He	2592	0.11
As	75	1	He	345	2.08
Se	78	1	He	71	20.16
Sr	88	1	He	224	3.26
Mo	95	1	He	420607	0.00
Ag	107	1	He	371	4.58
Cd	111	1	He	1257	0.37
Sn	118	1	He	572213	0.00
Sb	123	1	He	516596	0.00
Ba	137	1	He	226	8.35
W	182	1	He	1687997	0.00
Tl	205	1	He	1757	1.28
Pb	208	1	He	3456	0.27

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2059994	2.26	2077022	99.18	30	120	
Sc	45	1	He	868762	3.36	817536	106.27	30	120	
Sc	45	2	NoGas	5991955	1.52	5970055	100.37	30	120	
Rh	103	1	He	2457674	0.81	2327919	105.57	30	120	
In	115	1	He	1344825	1.32	1305098	103.04	30	120	
Tb	159	1	He	3907042	1.40	3765959	103.75	30	120	
Ho	165	1	He	3958788	1.02	3748206	105.62	30	120	
Bi	209	1	He	2958208	0.36	2822318	104.81	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:08:33-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	40.193	1.426	249891	1.39	40	100.5	89.5	110.5	
B	11	45	NoGas	45.705	2.416	213477	2.24	40	114.3	89.5	110.5	ICV Failed
Na	23	45	He	20790.058	0.422	43280762	0.58	20000	104.0	89.5	110.5	
Mg	24	45	He	21200.915	1.515	24888285	0.85	20000	106.0	89.5	110.5	
Al	27	45	He	200.588	0.882	133649	0.12	200	100.3	89.5	110.5	
K	39	45	He	20967.040	1.597	20892733	0.68	20000	104.8	89.5	110.5	
Ca	44	45	He	20339.753	0.455	1091372	0.54	20000	101.7	89.5	110.5	
Ti	47	45	He	42.293	2.274	12974	1.37	40	105.7	89.5	110.5	
V	51	45	He	41.548	1.362	319135	1.09	40	103.9	89.5	110.5	
Cr	52	45	He	41.780	0.572	394277	0.35	40	104.5	89.5	110.5	
Mn	55	45	He	212.802	1.666	1533856	0.98	200	106.4	89.5	110.5	
Fe	56	45	He	10529.372	0.464	93261512	0.45	10000	105.3	89.5	110.5	
Co	59	103	He	39.854	0.945	556458	1.07	40	99.6	89.5	110.5	
Ni	60	103	He	41.106	0.987	142316	0.96	40	102.8	89.5	110.5	
Cu	63	103	He	40.856	1.149	375839	1.28	40	102.1	89.5	110.5	
Zn	66	103	He	40.801	0.475	75218	1.04	40	102.0	89.5	110.5	
As	75	103	He	38.763	1.273	42914	0.86	40	96.9	89.5	110.5	
Se	78	103	He	40.916	0.611	4834	1.17	40	102.3	89.5	110.5	
Sr	88	103	He	40.346	0.742	336864	0.17	40	100.9	89.5	110.5	
Mo	95	103	He	42.127	1.020	171861	1.10	40	105.3	89.5	110.5	
Ag	107	103	He	41.106	0.841	579159	1.05	40	102.8	89.5	110.5	
Cd	111	103	He	41.116	0.883	99649	0.70	40	102.8	89.5	110.5	
Sn	118	115	He	40.978	0.754	228224	1.15	40	102.4	89.5	110.5	
Sb	123	115	He	37.258	1.298	189450	1.28	40	93.1	89.5	110.5	
Ba	137	115	He	40.437	0.679	97903	0.31	40	101.1	89.5	110.5	
W	182	209	He	38.364	1.838	613208	1.16	40	95.9	89.5	110.5	
Tl	205	209	He	38.162	0.481	1449571	0.21	40	95.4	89.5	110.5	
Pb	208	209	He	39.821	0.766	1967974	0.59	40	99.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	2092149	0.26	2077022	100.73	30	120	
Sc	45	He	859001	0.91	817536	105.07	30	120	
Sc	45	NoGas	6176005	0.68	5970055	103.45	30	120	
Rh	103	He	2375375	0.59	2327919	102.04	30	120	
In	115	He	1310180	0.44	1305098	100.39	30	120	
Tb	159	He	3870929	1.12	3765959	102.79	30	120	
Ho	165	He	3933849	1.11	3748206	104.95	30	120	
Bi	209	He	2810751	0.68	2822318	99.59	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:12:22-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.024	47.8	20	16.7	20	
W	182	1	He	1.002	15.8	20514	12.5	10	
Ca	44	1	He	0.786	297.1	783	16.6	1000	
Na	23	1	He	10.862	12.0	40490	5.4	400	
Mg	24	1	He	2.148	14.5	3019	10.7	1000	
K	39	1	He	6.305	18.9	45970	1.6	1000	
V	51	1	He	-0.022	-250.3	510	81.8	2	
Cr	52	1	He	-0.001	-1889.2	2730	4.5	2	
Mn	55	1	He	0.037	46.2	744	15.0	2	
Fe	56	1	He	13.130	31.4	128365	26.7	50	
Co	59	1	He	0.004	53.9	98	31.7	1	
Ni	60	1	He	-0.008	-9.0	70	4.8	2	
Cu	63	1	He	-0.085	-14.9	2709	4.9	2	
Zn	66	1	He	-0.379	-13.3	1560	5.1	20	
As	75	1	He	0.037	22.8	144	6.5	2	
Se	78	1	He	0.035	169.4	44	16.0	2	
Sr	88	1	He	0.003	102.6	257	9.4	10	
Mo	95	1	He	0.897	14.8	3897	14.9	2	
Ag	107	1	He	0.012	35.8	196	32.2	0.2	
Cd	111	1	He	0.008	268.6	1281	3.1	0.2	
Ba	137	1	He	0.011	71.2	68	30.1	5	
Sn	118	1	He	0.493	3.2	3167	2.8	10	
Tl	205	1	He	0.023	17.9	914	17.3	0.5	
Pb	208	1	He	0.016	22.9	1421	13.1	1	
Al	27	1	He	-0.317	-143.3	10347	2.4	50	
Sb	123	1	He	1.379	22.2	7454	21.7	1	ICB Failed
B	11	2	NoGas	2.118	6.0	16019	2.4	20	
Be	9	2	NoGas	0.002	192.8	63	36.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2186151	1.40	2077022	105.25	30	120	
Sc	45	1	He	847269	1.26	817536	103.64	30	120	
Sc	45	2	NoGas	6393181	1.32	5970055	107.09	30	120	
Rh	103	1	He	2489331	0.99	2327919	106.93	30	120	
In	115	1	He	1358766	0.11	1305098	104.11	30	120	

Tb	159	1	He	3911656	0.61	3765959	103.87	30	120	
Ho	165	1	He	3922055	0.88	3748206	104.64	30	120	
Bi	209	1	He	2923673	0.20	2822318	103.59	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1912660
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:16:15-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.967	0.967	3.888	6253	4.39	1	96.7	69.5	130.5	
B	11	2	NoGas	21.084	21.084	3.466	106050	2.57	20	105.4	69.5	130.5	
Na	23	1	He	1069.625	1069.625	1.096	2316959	0.35	1000	107.0	69.5	130.5	
Mg	24	1	He	1093.333	1093.333	0.322	1325799	1.39	1000	109.3	69.5	130.5	
Al	27	1	He	38.467	38.467	1.435	35380	1.61	50	76.9	69.5	130.5	
K	39	1	He	1044.011	1044.011	0.549	1113725	0.95	1000	104.4	69.5	130.5	
Ca	44	1	He	1028.879	1028.879	1.939	57735	2.23	1000	102.9	69.5	130.5	
Ti	47	1	He	10.518	10.518	4.040	3340	2.62	10	105.2	69.5	130.5	
V	51	1	He	5.163	5.163	2.844	41573	3.67	5	103.3	69.5	130.5	
Cr	52	1	He	2.118	2.118	2.979	23350	1.23	2	105.9	69.5	130.5	
Mn	55	1	He	5.260	5.260	0.761	39645	1.93	5	105.2	69.5	130.5	
Fe	56	1	He	106.824	106.824	1.237	991279	0.27	100	106.8	69.5	130.5	
Co	59	1	He	0.981	0.981	1.654	14558	1.28	1	98.1	69.5	130.5	
Ni	60	1	He	2.009	2.009	2.825	7466	2.11	2	100.4	69.5	130.5	
Cu	63	1	He	2.008	2.008	1.918	22968	1.35	2	100.4	69.5	130.5	
Zn	66	1	He	20.189	20.189	1.809	40604	1.30	20	100.9	69.5	130.5	
As	75	1	He	5.022	5.022	1.993	5981	1.64	5	100.4	69.5	130.5	
Se	78	1	He	5.158	5.158	5.481	681	4.89	5	103.2	69.5	130.5	
Sr	88	1	He	9.483	9.483	0.705	84098	0.73	10	94.8	69.5	130.5	
Mo	95	1	He	10.452	10.452	2.070	45237	1.53	10	104.5	69.5	130.5	
Ag	107	1	He	1.038	1.038	1.236	15524	0.55	1	103.8	69.5	130.5	
Cd	111	1	He	0.990	0.990	7.103	3788	4.23	1	99.0	69.5	130.5	
Sn	118	1	He	10.117	10.117	1.510	59690	1.24	10	101.2	69.5	130.5	
Sb	123	1	He	2.321	2.321	2.832	12631	2.59	2	116.0	69.5	130.5	
Ba	137	1	He	4.962	4.962	1.717	12709	1.47	5	99.2	69.5	130.5	
W	182	1	He	9.463	9.463	0.858	161571	0.80	10	94.6	69.5	130.5	
Tl	205	1	He	1.891	1.891	1.537	75310	1.26	2	94.5	69.5	130.5	
Pb	208	1	He	1.037	1.037	0.487	54321	0.44	1	103.7	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2158233	0.77	2077022	103.91	30	120	
Sc	45	1	He	886895	1.41	817536	108.48	30	120	
Sc	45	2	NoGas	6445133	0.92	5970055	107.96	30	120	
Rh	103	1	He	2517557	0.70	2327919	108.15	30	120	
In	115	1	He	1382211	0.27	1305098	105.91	30	120	
Tb	159	1	He	3916248	0.24	3765959	103.99	30	120	
Ho	165	1	He	3981847	0.28	3748206	106.23	30	120	
Bi	209	1	He	2946318	0.29	2822318	104.39	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:20:05-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.011	67.4	100	40.1	1	
B	11	45	2	NoGas	1.543	9.0	11278	5.6	20	
Na	23	45	1	He	48418.178	4.5	94219918	1.5	75200	
Mg	24	45	1	He	49208.382	4.3	54016737	1.5	75200	
Al	27	45	1	He	48699.679	3.6	27932561	2.3	75200	
K	39	45	1	He	48808.791	4.5	45425602	1.3	75200	
Ca	44	45	1	He	49501.165	3.1	2483748	2.8	75200	
Ti	47	45	1	He	993.617	4.5	284733	1.3	1505	
V	51	45	1	He	-0.045	-105.5	335	109.1	4	
Cr	52	45	1	He	0.651	5.4	8309	3.1	4	
Mn	55	45	1	He	0.342	4.2	2765	2.8	4	
Fe	56	45	1	He	49593.768	3.7	410784233	2.3	75200	
Co	59	103	1	He	0.029	7.8	396	7.2	2	
Ni	60	103	1	He	0.091	21.3	361	16.3	4	
Cu	63	103	1	He	0.194	13.5	4526	4.8	4	
Zn	66	103	1	He	0.581	3.7	2831	1.3	10	
As	75	103	1	He	0.093	17.2	176	9.1	4	
Se	78	103	1	He	0.146	85.1	49	26.7	4	
Sr	88	103	1	He	0.336	4.9	2674	4.6	20	
Mo	95	103	1	He	1050.585	1.0	3781947	0.8	1505	
Ag	107	103	1	He	0.015	6.3	207	5.6	1	
Cd	111	103	1	He	0.045	146.4	1158	11.8	1	
Sn	118	115	1	He	0.373	10.7	2178	9.2	20	
Sb	123	115	1	He	0.316	7.6	1631	7.4	1	
Ba	137	115	1	He	0.045	16.1	133	11.5	2	
W	182	209	1	He	0.382	13.4	9184	7.0	20	
Tl	205	209	1	He	0.006	19.0	247	17.7	1	
Pb	208	209	1	He	0.099	1.6	5073	1.0	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1781961	0.68	2077022	85.79	30	120	
Sc	45	1	He	804531	5.90	817536	98.41	30	120	
Sc	45	2	NoGas	5410368	0.82	5970055	90.63	30	120	
Rh	103	1	He	2096763	0.23	2327919	90.07	30	120	
In	115	1	He	1194876	0.60	1305098	91.55	30	120	
Tb	159	1	He	3605414	1.07	3765959	95.74	30	120	
Ho	165	1	He	3662294	0.47	3748206	97.71	30	120	
Bi	209	1	He	2613379	1.55	2822318	92.60	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:23:51-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	106.822	1.306	560183	0.42	100	106.8	79.5	120.5	
B	11	45	2	NoGas	109.786	0.450	450785	0.69	100	109.8	79.5	120.5	
Na	23	45	1	He	49793.415	3.860	92621382	0.94	50000	99.6	79.5	120.5	
Mg	24	45	1	He	51098.476	3.167	53621931	0.82	50000	102.2	79.5	120.5	
Al	27	45	1	He	49728.723	2.534	27264654	1.64	50000	99.5	79.5	120.5	
K	39	45	1	He	49760.945	3.236	44275451	0.85	50000	99.5	79.5	120.5	
Ca	44	45	1	He	50085.944	2.768	2401530	1.23	50000	100.2	79.5	120.5	
Ti	47	45	1	He	1123.754	3.579	307842	0.46	1100	102.2	79.5	120.5	
V	51	45	1	He	102.094	3.047	700153	1.51	100	102.1	79.5	120.5	
Cr	52	45	1	He	104.005	3.165	873636	0.82	100	104.0	79.5	120.5	
Mn	55	45	1	He	101.156	2.956	652068	1.39	100	101.2	79.5	120.5	
Fe	56	45	1	He	51803.373	3.202	410093859	0.95	50000	103.6	79.5	120.5	
Co	59	103	1	He	99.100	1.499	1233836	1.33	100	99.1	79.5	120.5	
Ni	60	103	1	He	99.202	1.346	306158	1.21	100	99.2	79.5	120.5	
Cu	63	103	1	He	98.713	1.371	805517	1.14	100	98.7	79.5	120.5	
Zn	66	103	1	He	98.857	1.194	159763	1.05	100	98.9	79.5	120.5	
As	75	103	1	He	99.075	1.181	97680	0.98	100	99.1	79.5	120.5	
Se	78	103	1	He	99.684	1.720	10454	1.50	100	99.7	79.5	120.5	
Sr	88	103	1	He	99.394	0.603	739783	0.48	100	99.4	79.5	120.5	
Mo	95	103	1	He	1171.247	1.601	4259634	1.73	1100	106.5	79.5	120.5	
Ag	107	103	1	He	100.359	0.969	1260887	0.75	100	100.4	79.5	120.5	
Cd	111	103	1	He	100.765	0.771	216223	0.55	100	100.8	79.5	120.5	
Sn	118	115	1	He	100.537	0.575	504995	0.42	100	100.5	79.5	120.5	
Sb	123	115	1	He	107.218	1.021	491783	0.63	100	107.2	79.5	120.5	
Ba	137	115	1	He	102.664	1.436	224308	1.28	100	102.7	79.5	120.5	
W	182	209	1	He	105.766	5.884	1559895	4.93	100	105.8	79.5	120.5	
Tl	205	209	1	He	101.386	0.990	3568533	0.54	100	101.4	79.5	120.5	
Pb	208	209	1	He	102.665	0.469	4700709	0.73	100	102.7	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1765040	1.17	2077022	84.98	30	120	
Sc	45	1	He	768471	4.02	817536	94.00	30	120	
Sc	45	2	NoGas	5517526	0.24	5970055	92.42	30	120	
Rh	103	1	He	2118258	0.22	2327919	90.99	30	120	
In	115	1	He	1182613	0.46	1305098	90.61	30	120	
Tb	159	1	He	3661832	1.28	3765959	97.24	30	120	
Ho	165	1	He	3669415	0.80	3748206	97.90	30	120	
Bi	209	1	He	2604629	1.18	2822318	92.29	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:27:35-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.826	2.704	267873	1.94	50	95.7	89.5	110.5	
B	11	45	2	NoGas	53.612	1.104	229749	1.97	50	107.2	89.5	110.5	
Na	23	45	1	He	25447.770	3.170	48582844	1.58	25000	101.8	89.5	110.5	
Mg	24	45	1	He	25831.526	1.314	27818929	0.96	25000	103.3	89.5	110.5	
Al	27	45	1	He	252.481	1.332	151788	1.01	250	101.0	89.5	110.5	
K	39	45	1	He	25334.941	2.576	23148050	0.71	25000	101.3	89.5	110.5	
Ca	44	45	1	He	25020.480	1.443	1231420	1.44	25000	100.1	89.5	110.5	
Ti	47	45	1	He	53.278	3.966	14985	1.84	50	106.6	89.5	110.5	
V	51	45	1	He	51.422	2.270	362135	0.16	50	102.8	89.5	110.5	
Cr	52	45	1	He	51.618	2.372	446184	0.25	50	103.2	89.5	110.5	
Mn	55	45	1	He	264.390	3.033	1747711	0.91	250	105.8	89.5	110.5	
Fe	56	45	1	He	13056.015	2.521	106059140	0.42	12500	104.4	89.5	110.5	
Co	59	103	1	He	48.494	1.844	638007	0.97	50	97.0	89.5	110.5	
Ni	60	103	1	He	48.273	2.235	157458	0.49	50	96.5	89.5	110.5	
Cu	63	103	1	He	48.927	1.850	423471	0.09	50	97.9	89.5	110.5	
Zn	66	103	1	He	48.827	2.122	84411	0.73	50	97.7	89.5	110.5	
As	75	103	1	He	48.296	1.523	50362	0.27	50	96.6	89.5	110.5	
Se	78	103	1	He	49.242	3.486	5474	1.77	50	98.5	89.5	110.5	
Sr	88	103	1	He	48.159	1.351	378876	0.41	50	96.3	89.5	110.5	
Mo	95	103	1	He	75.180	7.598	288848	6.55	50	150.4	89.5	110.5	CCV Failed
Ag	107	103	1	He	50.572	2.248	671343	0.60	50	101.1	89.5	110.5	
Cd	111	103	1	He	50.859	2.952	115863	1.19	50	101.7	89.5	110.5	
Sn	118	115	1	He	50.356	0.732	263080	0.38	50	100.7	89.5	110.5	
Sb	123	115	1	He	52.762	0.679	251667	0.37	50	105.5	89.5	110.5	
Ba	137	115	1	He	49.941	1.526	113445	1.06	50	99.9	89.5	110.5	
W	182	209	1	He	49.985	1.026	777736	0.48	50	100.0	89.5	110.5	
Tl	205	209	1	He	50.786	0.524	1880535	0.69	50	101.6	89.5	110.5	
Pb	208	209	1	He	48.548	0.224	2338744	0.60	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1885200	1.59	2077022	90.76	30	120	
Sc	45	1	He	788116	2.17	817536	96.40	30	120	
Sc	45	2	NoGas	5688977	0.92	5970055	95.29	30	120	
Rh	103	1	He	2238693	1.77	2327919	96.17	30	120	
In	115	1	He	1229380	0.58	1305098	94.20	30	120	
Tb	159	1	He	3812286	0.67	3765959	101.23	30	120	
Ho	165	1	He	3841954	0.40	3748206	102.50	30	120	
Bi	209	1	He	2739939	0.61	2822318	97.08	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:31:25-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.009	111.2	96	59.2	1	
B	11	45	2	NoGas	2.583	6.8	16182	4.3	20	
Na	23	45	1	He	15.959	12.0	46437	6.7	400	
Mg	24	45	1	He	3.260	19.2	3923	15.8	1000	
Al	27	45	1	He	0.760	53.3	10025	2.2	50	
K	39	45	1	He	9.695	25.3	44927	4.1	1000	
Ca	44	45	1	He	4.118	31.3	873	6.1	1000	
Ti	47	45	1	He	0.249	28.4	80	23.2	20	
V	51	45	1	He	-0.028	-118.2	423	53.4	2	
Cr	52	45	1	He	0.006	313.8	2545	6.3	2	
Mn	55	45	1	He	0.044	27.4	726	9.7	2	
Fe	56	45	1	He	18.066	25.5	156311	22.3	50	
Co	59	103	1	He	0.004	24.1	96	14.5	1	
Ni	60	103	1	He	-0.001	-504.1	91	22.4	2	
Cu	63	103	1	He	-0.137	-7.6	2115	4.0	2	
Zn	66	103	1	He	-0.206	-7.5	1797	1.5	20	
As	75	103	1	He	0.030	23.5	129	5.7	2	
Se	78	103	1	He	0.036	66.9	42	6.5	2	
Sr	88	103	1	He	0.001	375.0	232	18.5	10	
Mo	95	103	1	He	3.940	8.5	16111	8.2	2	CCB Failed
Ag	107	103	1	He	0.019	24.8	283	22.9	0.2	
Cd	111	103	1	He	-0.010	-88.2	1178	2.3	0.2	
Sn	118	115	1	He	0.446	9.0	2741	7.7	10	
Sb	123	115	1	He	0.357	9.0	1961	8.2	1	
Ba	137	115	1	He	0.005	141.1	49	33.6	5	
W	182	209	1	He	0.995	15.4	19902	10.9	10	
Tl	205	209	1	He	0.031	15.0	1212	13.4	0.5	
Pb	208	209	1	He	0.021	19.7	1650	12.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1921591	2.23	2077022	92.52	30	120	
Sc	45	1	He	772246	1.07	817536	94.46	30	120	
Sc	45	2	NoGas	5680745	0.89	5970055	95.15	30	120	
Rh	103	1	He	2373161	0.47	2327919	101.94	30	120	
In	115	1	He	1286998	0.37	1305098	98.61	30	120	
Tb	159	1	He	3803227	0.59	3765959	100.99	30	120	
Ho	165	1	He	3879740	0.70	3748206	103.51	30	120	
Bi	209	1	He	2855623	1.79	2822318	101.18	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176863/1-a@2
Data File Name	014_Blk.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:38:37-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.011	43.5	107	26.0	1	
B	11	45	2	NoGas	2.430	1.9	15529	2.1	20	
Na	23	45	1	He	36.511	3.1	87700	0.8	400	
Mg	24	45	1	He	34.847	2.9	38490	1.6	1000	
Al	27	45	1	He	-5.502	-5.5	6792	3.2	50	
K	39	45	1	He	21.869	8.8	57651	0.3	1000	
Ca	44	45	1	He	196.224	1.8	10469	1.7	1000	
Ti	47	45	1	He	0.399	14.4	126	13.6	20	
V	51	45	1	He	0.118	95.7	1459	52.8	2	
Cr	52	45	1	He	0.921	3.9	10591	1.3	2	
Mn	55	45	1	He	1.060	4.6	7549	3.5	2	
Fe	56	45	1	He	20.534	3.0	182198	5.7	50	
Co	59	103	1	He	0.007	14.6	128	9.2	1	
Ni	60	103	1	He	0.147	4.3	581	4.8	2	
Cu	63	103	1	He	0.906	3.3	11157	2.5	2	
Zn	66	103	1	He	3.199	4.7	7577	3.6	20	
As	75	103	1	He	0.114	12.1	214	6.9	2	
Se	78	103	1	He	0.026	68.4	39	6.3	2	
Sr	88	103	1	He	0.310	2.9	2692	2.2	10	
Mo	95	103	1	He	2.026	7.0	7981	5.6	2	Blank Failed
Ag	107	103	1	He	0.038	30.4	528	27.8	0.2	
Cd	111	103	1	He	0.005	263.1	1167	1.3	0.2	
Sn	118	115	1	He	20.396	1.5	108729	1.4	10	Blank Failed
Sb	123	115	1	He	0.378	14.9	2013	14.1	1	
Ba	137	115	1	He	0.688	3.7	1629	4.4	5	
W	182	209	1	He	0.353	8.1	9214	4.7	10	
Tl	205	209	1	He	0.022	10.8	850	9.9	0.5	
Pb	208	209	1	He	0.087	5.0	4758	3.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1909059	0.63	2077022	91.91	30	120	
Sc	45	1	He	798060	3.26	817536	97.62	30	120	
Sc	45	2	NoGas	5674506	1.05	5970055	95.05	30	120	
Rh	103	1	He	2279676	1.38	2327919	97.93	30	120	
In	115	1	He	1252382	0.75	1305098	95.96	30	120	
Tb	159	1	He	3737713	0.91	3765959	99.25	30	120	
Ho	165	1	He	3784672	1.21	3748206	100.97	30	120	
Bi	209	1	He	2747209	0.69	2822318	97.34	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176863/3-a@2
Data File Name	015LCSS.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:42:29-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	507.022	507.022	3.605	2623032	0.70	500	101.4	78.6	110.5	
B	11	2	NoGas	64.014	64.014	0.331	247489	1.63	50	128.0	79.5	120.5	LCSS Failed
Na	23	1	He	5448.462	5448.462	1.014	9685962	2.61	5000	109.0	79.5	120.5	
Mg	24	1	He	5489.302	5489.302	0.570	5496845	2.42	5000	109.8	79.5	120.5	
Al	27	1	He	5259.685	5259.685	0.318	2758983	1.79	5000	105.2	79.5	120.5	
K	39	1	He	5228.027	5228.027	2.029	4468685	2.17	5000	104.6	79.5	120.5	
Ca	44	1	He	5216.211	5216.211	0.626	239161	1.27	5000	104.3	79.5	120.5	
Ti	47	1	He	53.078	53.078	2.970	13880	1.13	50	106.2	79.5	120.5	
V	51	1	He	524.145	524.145	0.175	3426950	1.98	500	104.8	71.5	110.5	
Cr	52	1	He	538.308	538.308	0.905	4304330	2.02	500	107.7	69.5	110.5	
Mn	55	1	He	536.953	536.953	0.275	3300467	2.09	500	107.4	79.5	120.5	
Fe	56	1	He	5496.658	5496.658	0.637	41527565	1.97	5000	109.9	79.5	120.5	
Co	59	1	He	488.097	488.097	2.743	6187591	2.31	500	97.6	73.9	110.5	
Ni	60	1	He	505.599	505.599	1.660	1588620	1.98	500	101.1	74.9	110.5	
Cu	63	1	He	505.488	505.488	0.569	4187830	0.81	500	101.1	72.6	110.5	
Zn	66	1	He	455.015	455.015	1.836	741677	1.49	500	91.0	71.5	113.4	
As	75	1	He	429.028	429.028	1.605	430423	1.41	500	85.8	73.4	110.5	
Se	78	1	He	414.248	414.248	1.102	44131	1.19	500	82.8	64.6	110.5	
Sr	88	1	He	487.989	487.989	1.164	3697679	1.17	500	97.6	79.5	120.5	
Mo	95	1	He	54.602	54.602	1.303	202256	1.29	50	109.2	29.5	140.5	
Ag	107	1	He	52.364	52.364	1.426	669921	1.33	50	104.7	59.5	114.5	
Cd	111	1	He	486.721	486.721	1.381	1059302	1.11	500	97.3	73.5	110.5	
Sn	118	1	He	574.321	574.321	0.629	2800681	0.43	500	114.9	79.5	120.5	
Sb	123	1	He	50.936	50.936	0.385	227015	0.72	50	101.9	67.5	113.4	
Ba	137	1	He	504.075	504.075	0.610	1069616	0.79	500	100.8	69.5	110.5	
W	182	1	He	50.474	50.474	0.900	764270	0.65	50	100.9	74.6	125.4	
Tl	205	1	He	126.472	126.472	0.781	4557591	1.23	125	101.2	70.6	110.5	
Pb	208	1	He	513.806	513.806	1.328	24082013	1.01	500	102.8	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1742402	2.91	2077022	83.89	30	120	
Sc	45	1	He	732587	1.88	817536	89.61	30	120	
Sc	45	2	NoGas	5152295	1.33	5970055	86.30	30	120	
Rh	103	1	He	2157001	0.67	2327919	92.66	30	120	
In	115	1	He	1148686	0.89	1305098	88.02	30	120	
Tb	159	1	He	3625179	0.64	3765959	96.26	30	120	
Ho	165	1	He	3709235	1.06	3748206	98.96	30	120	
Bi	209	1	He	2666473	0.66	2822318	94.48	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-j@2
Data File Name	016SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:46:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.070	1.070	1.25	5431	0.02	10000	
B	11	45	2	NoGas	19.436	19.436	2.48	129896	0.01	300	
Na	23	45	1	He	791.903	791.903	1.85	2314235	0.03	500000	
Mg	24	45	1	He	2775.643	2775.643	1.82	4526180	0.06	500000	
Al	27	45	1	He	17779.425	17779.425	2.41	15149917	0.12	200000	
K	39	45	1	He	140.618	140.618	3.21	250254	0.06	500000	
Ca	44	45	1	He	778576.633	778576.633	2.32	57975735	1.34	500000	>LDR
Ti	47	45	1	He	44283.267	44283.267	2.02	18848714	0.23	2500	>LDR
V	51	45	1	He	3654.111	3654.111	2.71	38891613	0.01	10000	
Cr	52	45	1	He	1643.695	1643.695	2.86	21389580	0.01	10000	
Mn	55	45	1	He	5340.747	5340.747	2.79	53438501	0.01	10000	
Fe	56	45	1	He	195806.237	195806.237	1.99	2408178535	0.01	200000	
Co	59	103	1	He	43.156	43.156	1.42	448215	0.01	10000	
Ni	60	103	1	He	88.149	88.149	0.51	226941	0.04	10000	
Cu	63	103	1	He	121.928	121.928	1.06	829381	0.01	10000	
Zn	66	103	1	He	519.156	519.156	1.32	693020	0.07	10000	
As	75	103	1	He	16.423	16.423	1.70	13566	0.12	10000	
Se	78	103	1	He	4.567	4.567	3.18	426	1.07	10000	
Sr	88	103	1	He	26848.612	26848.612	1.49	166642824	0.02	10000	>LDR
Mo	95	103	1	He	19.540	19.540	0.65	59321	0.03	2000	
Ag	107	103	1	He	1.743	1.743	7.82	18288	0.01	300	
Cd	111	103	1	He	8.277	8.277	7.43	15640	0.05	4000	
Sn	118	115	1	He	77.777	77.777	0.66	333176	0.02	2000	
Sb	123	115	1	He	1.040	1.040	5.90	4207	0.02	300	
Ba	137	115	1	He	63.846	63.846	0.81	118953	0.05	10000	
W	182	209	1	He	42.325	42.325	0.76	512199	0.01	2500	
Tl	205	209	1	He	0.180	0.180	13.59	5182	0.00	5000	
Pb	208	209	1	He	112.869	112.869	1.39	4224422	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1695932	0.71	2077022	81.65	30	120	
Sc	45	1	He	1193437	3.35	817536	145.98	30	120	ISTD Failed
Sc	45	2	NoGas	8523026	1.72	5970055	142.76	30	120	ISTD Failed
Rh	103	1	He	1767008	0.77	2327919	75.91	30	120	
In	115	1	He	1008382	0.74	1305098	77.26	30	120	
Tb	159	1	He	3296890	1.24	3765959	87.54	30	120	
Ho	165	1	He	3336080	0.71	3748206	89.00	30	120	
Bi	209	1	He	2129152	0.58	2822318	75.44	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111357-a-2-j@10
Data File Name	017SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:49:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.409	0.409	10.00	1993	0.02	10000	
B	11	45	2	NoGas	11.109	11.109	4.42	57449	0.02	300	
Na	23	45	1	He	434.763	434.763	1.73	940067	0.05	500000	
Mg	24	45	1	He	1596.074	1596.074	1.24	1908655	0.08	500000	
Al	27	45	1	He	9745.917	9745.917	0.90	6095453	0.16	200000	
K	39	45	1	He	76.445	76.445	0.90	118530	0.06	500000	
Ca	44	45	1	He	427912.072	427912.072	1.12	23368732	1.83	500000	
Ti	47	45	1	He	24575.516	24575.516	0.85	7671193	0.32	2500	>LDR
V	51	45	1	He	2076.800	2076.800	1.72	16212215	0.01	10000	
Cr	52	45	1	He	932.238	932.238	1.72	8899091	0.01	10000	
Mn	55	45	1	He	3001.481	3001.481	0.76	22027505	0.01	10000	
Fe	56	45	1	He	113453.604	113453.604	1.39	1023218626	0.01	200000	
Co	59	103	1	He	17.086	17.086	0.97	194155	0.01	10000	
Ni	60	103	1	He	35.106	35.106	2.11	98915	0.04	10000	
Cu	63	103	1	He	49.349	49.349	1.84	368844	0.01	10000	
Zn	66	103	1	He	215.743	215.743	2.02	316074	0.07	10000	
As	75	103	1	He	5.899	5.899	2.03	5380	0.11	10000	
Se	78	103	1	He	1.811	1.811	0.81	204	0.89	10000	
Sr	88	103	1	He	10437.874	10437.874	1.47	70875828	0.01	10000	>LDR
Mo	95	103	1	He	7.843	7.843	1.92	26076	0.03	2000	
Ag	107	103	1	He	0.718	0.718	2.97	8244	0.01	300	
Cd	111	103	1	He	3.429	3.429	4.72	7662	0.04	4000	
Sn	118	115	1	He	30.591	30.591	1.81	141369	0.02	2000	
Sb	123	115	1	He	0.370	0.370	2.30	1710	0.02	300	
Ba	137	115	1	He	25.675	25.675	0.30	51568	0.05	10000	
W	182	209	1	He	16.301	16.301	1.92	227699	0.01	2500	
Tl	205	209	1	He	0.052	0.052	13.70	1720	0.00	5000	
Pb	208	209	1	He	43.103	43.103	1.82	1845880	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1608398	1.79	2077022	77.44	30	120	
Sc	45	1	He	874839	1.44	817536	107.01	30	120	
Sc	45	2	NoGas	6299460	0.36	5970055	105.52	30	120	
Rh	103	1	He	1933137	0.92	2327919	83.04	30	120	
In	115	1	He	1086630	0.38	1305098	83.26	30	120	
Tb	159	1	He	3512947	0.80	3765959	93.28	30	120	
Ho	165	1	He	3576527	1.05	3748206	95.42	30	120	
Bi	209	1	He	2436097	1.67	2822318	86.32	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111357-a-2-j@2
Data File Name	018SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:53:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	925.758	925.758	1.85	4727251	0.02	10000	
B	11	45	2	NoGas	85.360	85.360	1.11	538727	0.02	300	
Na	23	45	1	He	6984.219	6984.219	1.11	19161968	0.04	500000	
Mg	24	45	1	He	8774.853	8774.853	1.31	13565571	0.06	500000	
Al	27	45	1	He	23288.928	23288.928	0.62	18814223	0.12	200000	
K	39	45	1	He	6104.804	6104.804	1.56	8048383	0.08	500000	
Ca	44	45	1	He	775847.416	775847.416	1.24	54785462	1.42	500000	>LDR
Ti	47	45	1	He	44107.708	44107.708	1.19	17801113	0.25	2500	>LDR
V	51	45	1	He	4281.521	4281.521	1.00	43216502	0.01	10000	
Cr	52	45	1	He	2241.328	2241.328	1.78	27659808	0.01	10000	
Mn	55	45	1	He	5856.335	5856.335	1.54	55569604	0.01	10000	
Fe	56	45	1	He	201956.401	201956.401	1.01	2355158733	0.01	200000	>LDR
Co	59	103	1	He	1012.590	1012.590	0.74	10721325	0.01	10000	
Ni	60	103	1	He	1069.882	1069.882	1.08	2807263	0.04	10000	
Cu	63	103	1	He	1056.913	1056.913	0.53	7310288	0.01	10000	
Zn	66	103	1	He	1376.696	1376.696	0.68	1870933	0.07	10000	
As	75	103	1	He	998.191	998.191	0.51	836286	0.12	10000	
Se	78	103	1	He	997.462	997.462	0.33	88706	1.12	10000	
Sr	88	103	1	He	26185.325	26185.325	1.33	165695451	0.02	10000	>LDR
Mo	95	103	1	He	134.661	134.661	0.66	416534	0.03	2000	
Ag	107	103	1	He	96.877	96.877	0.33	1035121	0.01	300	
Cd	111	103	1	He	980.083	980.083	0.08	1780610	0.06	4000	
Sn	118	115	1	He	1168.958	1168.958	0.60	4901380	0.02	2000	
Sb	123	115	1	He	103.378	103.378	0.76	396029	0.03	300	
Ba	137	115	1	He	1167.221	1167.221	1.43	2129651	0.05	10000	
W	182	209	1	He	165.065	165.065	2.16	2051837	0.01	2500	
Tl	205	209	1	He	257.653	257.653	0.21	7647308	0.00	5000	
Pb	208	209	1	He	1141.052	1141.052	0.87	44049815	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1718996	1.74	2077022	82.76	30	120	
Sc	45	1	He	1131166	0.79	817536	138.36	30	120	ISTD Failed
Sc	45	2	NoGas	8453391	1.68	5970055	141.60	30	120	ISTD Failed
Rh	103	1	He	1801469	0.68	2327919	77.39	30	120	
In	115	1	He	987683	0.19	1305098	75.68	30	120	
Tb	159	1	He	3388033	1.40	3765959	89.96	30	120	
Ho	165	1	He	3446323	1.78	3748206	91.95	30	120	
Bi	209	1	He	2196232	0.34	2822318	77.82	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-k ms@2
Data File Name	019SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T18:56:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	485.271	485.271	1.04	2391351	0.02	10000	
B	11	45	2	NoGas	51.921	51.921	1.39	325670	0.02	300	
Na	23	45	1	He	4073.761	4073.761	1.64	11332116	0.04	500000	
Mg	24	45	1	He	5777.149	5777.149	1.75	9047378	0.06	500000	
Al	27	45	1	He	20264.154	20264.154	1.78	16584594	0.12	200000	
K	39	45	1	He	3147.341	3147.341	1.32	4229338	0.07	500000	
Ca	44	45	1	He	835759.253	835759.253	1.53	59776971	1.40	500000	>LDR
Ti	47	45	1	He	44566.198	44566.198	1.08	18219427	0.24	2500	>LDR
V	51	45	1	He	4026.103	4026.103	1.54	41163493	0.01	10000	
Cr	52	45	1	He	1969.246	1969.246	0.95	24617941	0.01	10000	
Mn	55	45	1	He	5518.706	5518.706	1.29	53046433	0.01	10000	
Fe	56	45	1	He	198884.524	198884.524	1.34	2349376333	0.01	200000	
Co	59	103	1	He	540.570	540.570	1.42	5791996	0.01	10000	
Ni	60	103	1	He	599.237	599.237	1.17	1591396	0.04	10000	
Cu	63	103	1	He	606.592	606.592	1.20	4246644	0.01	10000	
Zn	66	103	1	He	891.898	891.898	1.56	1227073	0.07	10000	
As	75	103	1	He	497.179	497.179	0.74	421562	0.12	10000	
Se	78	103	1	He	498.317	498.317	1.81	44857	1.11	10000	
Sr	88	103	1	He	26461.106	26461.106	1.67	169438784	0.02	10000	>LDR
Mo	95	103	1	He	77.244	77.244	1.82	241788	0.03	2000	
Ag	107	103	1	He	50.224	50.224	0.80	543060	0.01	300	
Cd	111	103	1	He	468.508	468.508	1.01	861818	0.05	4000	
Sn	118	115	1	He	644.108	644.108	0.48	2712266	0.02	2000	
Sb	123	115	1	He	45.767	45.767	0.86	176148	0.03	300	
Ba	137	115	1	He	578.086	578.086	0.41	1059218	0.05	10000	
W	182	209	1	He	79.093	79.093	1.71	974255	0.01	2500	
Tl	205	209	1	He	134.435	134.435	1.10	3947861	0.00	5000	
Pb	208	209	1	He	647.940	647.940	0.81	24749452	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1658482	0.74	2077022	79.85	30	120	
Sc	45	1	He	1145831	0.68	817536	140.16	30	120	ISTD Failed
Sc	45	2	NoGas	8321641	0.87	5970055	139.39	30	120	ISTD Failed
Rh	103	1	He	1823073	1.06	2327919	78.31	30	120	
In	115	1	He	991872	0.07	1305098	76.00	30	120	
Tb	159	1	He	3407358	1.10	3765959	90.48	30	120	
Ho	165	1	He	3452701	0.87	3748206	92.12	30	120	
Bi	209	1	He	2173125	1.15	2822318	77.00	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-I msd@2
Data File Name	020SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:00:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	485.391	485.391	1.97	2346089	0.02	10000	
B	11	45	2	NoGas	52.021	52.021	0.93	314076	0.02	300	
Na	23	45	1	He	4156.669	4156.669	1.34	11024421	0.04	500000	
Mg	24	45	1	He	5850.584	5850.584	0.22	8736321	0.07	500000	
Al	27	45	1	He	19680.466	19680.466	1.17	15358330	0.13	200000	
K	39	45	1	He	3256.628	3256.628	0.50	4170910	0.08	500000	
Ca	44	45	1	He	794132.060	794132.060	0.97	54158110	1.47	500000	>LDR
Ti	47	45	1	He	42906.358	42906.358	0.27	16725232	0.26	2500	>LDR
V	51	45	1	He	3951.612	3951.612	0.80	38523489	0.01	10000	
Cr	52	45	1	He	1934.459	1934.459	0.92	23058179	0.01	10000	
Mn	55	45	1	He	5264.575	5264.575	0.34	48250610	0.01	10000	
Fe	56	45	1	He	196616.239	196616.239	1.45	2214565388	0.01	200000	
Co	59	103	1	He	540.432	540.432	1.37	5765547	0.01	10000	
Ni	60	103	1	He	596.522	596.522	1.47	1577236	0.04	10000	
Cu	63	103	1	He	600.980	600.980	1.03	4189318	0.01	10000	
Zn	66	103	1	He	864.079	864.079	1.67	1183739	0.07	10000	
As	75	103	1	He	490.118	490.118	1.22	413773	0.12	10000	
Se	78	103	1	He	482.513	482.513	1.38	43251	1.12	10000	
Sr	88	103	1	He	24277.586	24277.586	1.94	154788207	0.02	10000	>LDR
Mo	95	103	1	He	75.999	75.999	1.26	236877	0.03	2000	
Ag	107	103	1	He	50.311	50.311	1.22	541651	0.01	300	
Cd	111	103	1	He	467.196	467.196	1.33	855695	0.05	4000	
Sn	118	115	1	He	643.002	643.002	0.46	2681691	0.02	2000	
Sb	123	115	1	He	46.702	46.702	0.73	178022	0.03	300	
Ba	137	115	1	He	572.124	572.124	0.26	1038265	0.06	10000	
W	182	209	1	He	81.429	81.429	1.67	998940	0.01	2500	
Tl	205	209	1	He	135.941	135.941	0.41	3976144	0.00	5000	
Pb	208	209	1	He	644.192	644.192	1.04	24506834	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1627074	1.53	2077022	78.34	30	120	
Sc	45	1	He	1092505	0.31	817536	133.63	30	120	ISTD Failed
Sc	45	2	NoGas	8009803	1.05	5970055	134.17	30	120	ISTD Failed
Rh	103	1	He	1815225	0.90	2327919	77.98	30	120	
In	115	1	He	982387	0.37	1305098	75.27	30	120	
Tb	159	1	He	3358081	1.81	3765959	89.17	30	120	
Ho	165	1	He	3447674	0.94	3748206	91.98	30	120	
Bi	209	1	He	2164315	0.65	2822318	76.69	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-3-e@2
Data File Name	021SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:04:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.942	0.942	8.91	4471	0.02	10000	
B	11	45	2	NoGas	22.225	22.225	1.07	135985	0.02	300	
Na	23	45	1	He	616.349	616.349	0.88	1612297	0.04	500000	
Mg	24	45	1	He	3757.530	3757.530	0.49	5467209	0.07	500000	
Al	27	45	1	He	16888.414	16888.414	0.79	12843054	0.13	200000	
K	39	45	1	He	151.993	151.993	1.42	237342	0.06	500000	
Ca	44	45	1	He	590186.669	590186.669	0.79	39217004	1.50	500000	>LDR
Ti	47	45	1	He	42675.068	42675.068	0.41	16209036	0.26	2500	>LDR
V	51	45	1	He	3671.328	3671.328	1.49	34870791	0.01	10000	
Cr	52	45	1	He	1661.915	1661.915	0.53	19302916	0.01	10000	
Mn	55	45	1	He	4888.204	4888.204	1.23	43650674	0.01	10000	
Fe	56	45	1	He	190645.679	190645.679	1.12	2092200664	0.01	200000	
Co	59	103	1	He	36.142	36.142	0.59	392206	0.01	10000	
Ni	60	103	1	He	74.588	74.588	1.14	200644	0.04	10000	
Cu	63	103	1	He	103.582	103.582	0.42	736571	0.01	10000	
Zn	66	103	1	He	451.499	451.499	0.61	629952	0.07	10000	
As	75	103	1	He	12.162	12.162	1.60	10516	0.12	10000	
Se	78	103	1	He	3.177	3.177	2.38	319	1.00	10000	
Sr	88	103	1	He	21148.755	21148.755	0.64	137157532	0.02	10000	>LDR
Mo	95	103	1	He	17.159	17.159	0.81	54434	0.03	2000	
Ag	107	103	1	He	1.565	1.565	1.98	17150	0.01	300	
Cd	111	103	1	He	7.584	7.584	0.46	15049	0.05	4000	
Sn	118	115	1	He	60.570	60.570	1.01	260428	0.02	2000	
Sb	123	115	1	He	0.940	0.940	1.99	3828	0.02	300	
Ba	137	115	1	He	57.637	57.637	0.86	107769	0.05	10000	
W	182	209	1	He	35.061	35.061	1.84	450132	0.01	2500	
Tl	205	209	1	He	0.174	0.174	13.59	5329	0.00	5000	
Pb	208	209	1	He	92.126	92.126	0.27	3654002	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1584977	0.85	2077022	76.31	30	120	
Sc	45	1	He	1064514	0.97	817536	130.21	30	120	ISTD Failed
Sc	45	2	NoGas	7862542	0.46	5970055	131.70	30	120	ISTD Failed
Rh	103	1	He	1846203	0.64	2327919	79.31	30	120	
In	115	1	He	1011940	0.22	1305098	77.54	30	120	
Tb	159	1	He	3411834	0.41	3765959	90.60	30	120	
Ho	165	1	He	3474649	0.76	3748206	92.70	30	120	
Bi	209	1	He	2256151	0.05	2822318	79.94	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-4-e@2
Data File Name	022SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:07:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.916	0.916	3.59	4197	0.02	10000	
B	11	45	2	NoGas	17.889	17.889	1.71	109129	0.02	300	
Na	23	45	1	He	557.246	557.246	0.66	1432650	0.04	500000	
Mg	24	45	1	He	2955.707	2955.707	0.75	4220639	0.07	500000	
Al	27	45	1	He	16792.996	16792.996	0.77	12532892	0.13	200000	
K	39	45	1	He	139.264	139.264	0.95	217510	0.06	500000	
Ca	44	45	1	He	592095.772	592095.772	0.53	38611250	1.53	500000	>LDR
Ti	47	45	1	He	43710.254	43710.254	0.57	16292303	0.27	2500	>LDR
V	51	45	1	He	3806.184	3806.184	0.92	35480243	0.01	10000	
Cr	52	45	1	He	1722.209	1722.209	0.86	19629059	0.01	10000	
Mn	55	45	1	He	4911.455	4911.455	0.91	43042472	0.01	10000	
Fe	56	45	1	He	186208.664	186208.664	0.48	2005509823	0.01	200000	
Co	59	103	1	He	35.136	35.136	0.15	374783	0.01	10000	
Ni	60	103	1	He	76.912	76.912	0.62	203358	0.04	10000	
Cu	63	103	1	He	107.341	107.341	0.48	750165	0.01	10000	
Zn	66	103	1	He	455.928	455.928	0.18	625234	0.07	10000	
As	75	103	1	He	11.805	11.805	0.81	10035	0.12	10000	
Se	78	103	1	He	2.825	2.825	2.31	282	1.00	10000	
Sr	88	103	1	He	20650.636	20650.636	0.48	131634350	0.02	10000	>LDR
Mo	95	103	1	He	16.701	16.701	0.23	52076	0.03	2000	
Ag	107	103	1	He	1.876	1.876	0.29	20210	0.01	300	
Cd	111	103	1	He	8.486	8.486	5.85	16442	0.05	4000	
Sn	118	115	1	He	63.397	63.397	1.07	265586	0.02	2000	
Sb	123	115	1	He	0.781	0.781	1.08	3126	0.02	300	
Ba	137	115	1	He	55.096	55.096	0.73	100379	0.05	10000	
W	182	209	1	He	38.575	38.575	0.70	489045	0.01	2500	
Tl	205	209	1	He	0.110	0.110	1.80	3340	0.00	5000	
Pb	208	209	1	He	93.862	93.862	1.91	3678249	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1529611	1.45	2077022	73.64	30	120	
Sc	45	1	He	1044644	0.43	817536	127.78	30	120	ISTD Failed
Sc	45	2	NoGas	7735081	0.84	5970055	129.56	30	120	ISTD Failed
Rh	103	1	He	1814623	0.32	2327919	77.95	30	120	
In	115	1	He	985995	0.06	1305098	75.55	30	120	
Tb	159	1	He	3330481	1.70	3765959	88.44	30	120	
Ho	165	1	He	3419717	0.90	3748206	91.24	30	120	
Bi	209	1	He	2229242	0.42	2822318	78.99	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-5-e@2
Data File Name	023SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:11:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.470	2.470	2.42	12668	0.02	10000	
B	11	45	2	NoGas	49.708	49.708	2.69	217860	0.02	300	
Na	23	45	1	He	1244.155	1244.155	0.99	2321289	0.05	500000	
Mg	24	45	1	He	9776.955	9776.955	1.95	10216299	0.10	500000	
Al	27	45	1	He	42538.714	42538.714	1.68	23224236	0.18	200000	
K	39	45	1	He	2670.054	2670.054	1.40	2399972	0.11	500000	
Ca	44	45	1	He	65263.142	65263.142	1.42	3115727	2.09	500000	
Ti	47	45	1	He	1140.701	1140.701	1.38	311193	0.37	2500	
V	51	45	1	He	198.035	198.035	1.86	1352313	0.01	10000	
Cr	52	45	1	He	226.889	226.889	0.29	1895261	0.01	10000	
Mn	55	45	1	He	2002.504	2002.504	0.82	12846228	0.02	10000	
Fe	56	45	1	He	207819.861	207819.861	1.51	1638108913	0.01	200000	>LDR
Co	59	103	1	He	27.561	27.561	0.15	361079	0.01	10000	
Ni	60	103	1	He	96.006	96.006	0.53	311755	0.03	10000	
Cu	63	103	1	He	415.979	415.979	1.64	3560655	0.01	10000	
Zn	66	103	1	He	1473.717	1473.717	0.14	2477619	0.06	10000	
As	75	103	1	He	40.057	40.057	1.00	41604	0.10	10000	
Se	78	103	1	He	3.899	3.899	4.45	465	0.84	10000	
Sr	88	103	1	He	1346.881	1346.881	1.57	10543422	0.01	10000	
Mo	95	103	1	He	12.879	12.879	0.93	49335	0.03	2000	
Ag	107	103	1	He	3.000	3.000	3.81	39651	0.01	300	
Cd	111	103	1	He	6.481	6.481	2.87	15684	0.04	4000	
Sn	118	115	1	He	491.472	491.472	1.04	2399153	0.02	2000	
Sb	123	115	1	He	10.296	10.296	0.30	46065	0.02	300	
Ba	137	115	1	He	547.832	547.832	1.20	1163523	0.05	10000	
W	182	209	1	He	5.867	5.867	2.37	94603	0.01	2500	
Tl	205	209	1	He	0.409	0.409	0.39	15174	0.00	5000	
Pb	208	209	1	He	1481.559	1481.559	0.95	71383743	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1720773	1.88	2077022	82.85	30	120	
Sc	45	1	He	764714	2.89	817536	93.54	30	120	
Sc	45	2	NoGas	5807729	0.37	5970055	97.28	30	120	
Rh	103	1	He	2228724	2.06	2327919	95.74	30	120	
In	115	1	He	1149897	2.03	1305098	88.11	30	120	
Tb	159	1	He	3831166	1.36	3765959	101.73	30	120	
Ho	165	1	He	3867310	1.23	3748206	103.18	30	120	
Bi	209	1	He	2741394	2.10	2822318	97.13	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	024_CCV.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:15:04-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.178	2.212	237229	2.08	50	94.4	89.5	110.5	
B	11	45	2	NoGas	51.559	0.401	211737	2.05	50	103.1	89.5	110.5	
Na	23	45	1	He	26726.040	1.031	47390954	1.97	25000	106.9	89.5	110.5	
Mg	24	45	1	He	26763.501	1.085	26761858	0.58	25000	107.1	89.5	110.5	
Al	27	45	1	He	244.924	0.994	136990	0.72	250	98.0	89.5	110.5	
K	39	45	1	He	25776.284	1.421	21870052	0.44	25000	103.1	89.5	110.5	
Ca	44	45	1	He	25411.471	1.111	1161205	0.67	25000	101.6	89.5	110.5	
Ti	47	45	1	He	77.617	0.903	20275	1.66	50	155.2	89.5	110.5	CCV Failed
V	51	45	1	He	54.380	1.425	355599	0.76	50	108.8	89.5	110.5	
Cr	52	45	1	He	55.059	1.735	441804	1.40	50	110.1	89.5	110.5	
Mn	55	45	1	He	270.560	2.151	1660972	1.60	250	108.2	89.5	110.5	
Fe	56	45	1	He	13682.994	1.345	103220854	0.48	12500	109.5	89.5	110.5	
Co	59	103	1	He	47.037	0.913	631592	1.36	50	94.1	89.5	110.5	
Ni	60	103	1	He	47.969	0.509	159699	1.01	50	95.9	89.5	110.5	
Cu	63	103	1	He	48.036	1.191	424392	1.45	50	96.1	89.5	110.5	
Zn	66	103	1	He	46.463	1.807	82077	1.40	50	92.9	89.5	110.5	
As	75	103	1	He	45.533	1.167	48461	0.82	50	91.1	89.5	110.5	
Se	78	103	1	He	44.439	1.833	5046	2.07	50	88.9	89.5	110.5	CCV Failed
Sr	88	103	1	He	46.140	0.247	370458	0.82	50	92.3	89.5	110.5	
Mo	95	103	1	He	50.474	0.707	198005	0.26	50	100.9	89.5	110.5	
Ag	107	103	1	He	50.466	0.806	683782	1.05	50	100.9	89.5	110.5	
Cd	111	103	1	He	49.596	1.243	115363	1.79	50	99.2	89.5	110.5	
Sn	118	115	1	He	51.866	0.883	263312	1.10	50	103.7	89.5	110.5	
Sb	123	115	1	He	53.993	0.542	250255	0.53	50	108.0	89.5	110.5	
Ba	137	115	1	He	50.490	1.059	111456	1.41	50	101.0	89.5	110.5	
W	182	209	1	He	50.281	0.907	783521	0.32	50	100.6	89.5	110.5	
Tl	205	209	1	He	51.306	0.272	1902749	1.13	50	102.6	89.5	110.5	
Pb	208	209	1	He	49.523	0.643	2389342	0.83	50	99.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1692284	1.44	2077022	81.48	30	120	
Sc	45	1	He	731677	0.97	817536	89.50	30	120	
Sc	45	2	NoGas	5446775	1.69	5970055	91.23	30	120	
Rh	103	1	He	2284331	0.58	2327919	98.13	30	120	
In	115	1	He	1194623	0.35	1305098	91.54	30	120	
Tb	159	1	He	3829735	1.04	3765959	101.69	30	120	
Ho	165	1	He	3885637	0.02	3748206	103.67	30	120	
Bi	209	1	He	2744169	0.86	2822318	97.23	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:18:50-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.054	31.0	326	25.6	1	
B	11	45	2	NoGas	2.447	2.3	15711	0.7	20	
Na	23	45	1	He	13.465	9.3	40063	4.6	400	
Mg	24	45	1	He	2.421	28.0	2911	22.2	1000	
Al	27	45	1	He	0.032	416.1	9229	1.8	50	
K	39	45	1	He	7.726	3.9	41404	1.5	1000	
Ca	44	45	1	He	38.572	12.2	2429	7.7	1000	
Ti	47	45	1	He	4.757	3.0	1268	3.4	20	
V	51	45	1	He	0.167	57.0	1692	35.8	2	
Cr	52	45	1	He	0.073	26.6	2981	4.7	2	
Mn	55	45	1	He	0.360	8.9	2660	6.3	2	
Fe	56	45	1	He	26.177	14.1	211837	12.1	50	
Co	59	103	1	He	0.010	27.0	183	20.5	1	
Ni	60	103	1	He	0.007	153.2	119	30.8	2	
Cu	63	103	1	He	-0.112	-12.7	2334	4.4	2	
Zn	66	103	1	He	-0.132	-29.7	1925	3.5	20	
As	75	103	1	He	0.163	18.8	275	12.0	2	
Se	78	103	1	He	0.113	49.1	51	12.4	2	
Sr	88	103	1	He	0.628	7.5	5443	6.1	10	
Mo	95	103	1	He	0.888	12.7	3664	11.4	2	
Ag	107	103	1	He	0.010	15.5	160	12.5	0.2	
Cd	111	103	1	He	-0.043	-26.4	1097	3.6	0.2	
Sn	118	115	1	He	0.443	6.0	2634	4.5	10	
Sb	123	115	1	He	0.260	10.8	1427	8.6	1	
Ba	137	115	1	He	0.036	6.8	118	4.3	5	
W	182	209	1	He	0.916	13.1	18730	11.5	10	
Tl	205	209	1	He	0.035	22.1	1365	22.7	0.5	
Pb	208	209	1	He	0.121	9.0	6694	9.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1778095	1.91	2077022	85.61	30	120	
Sc	45	1	He	740499	1.20	817536	90.58	30	120	
Sc	45	2	NoGas	5716112	1.21	5970055	95.75	30	120	
Rh	103	1	He	2367044	1.11	2327919	101.68	30	120	
In	115	1	He	1244047	0.86	1305098	95.32	30	120	
Tb	159	1	He	3855725	1.03	3765959	102.38	30	120	
Ho	165	1	He	3892869	0.43	3748206	103.86	30	120	
Bi	209	1	He	2863722	1.56	2822318	101.47	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-6-e@2
Data File Name	026SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:22:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.794	0.794	3.87	3656	0.02	10000	
B	11	45	2	NoGas	16.207	16.207	2.14	64739	0.03	300	
Na	23	45	1	He	1061.382	1061.382	0.55	1778668	0.06	500000	
Mg	24	45	1	He	4054.004	4054.004	1.13	3800905	0.11	500000	
Al	27	45	1	He	23733.795	23733.795	0.96	11627045	0.20	200000	
K	39	45	1	He	927.977	927.977	0.23	769307	0.12	500000	
Ca	44	45	1	He	72593.847	72593.847	1.05	3108958	2.33	500000	
Ti	47	45	1	He	579.604	579.604	1.42	141885	0.41	2500	
V	51	45	1	He	114.759	114.759	2.53	702858	0.02	10000	
Cr	52	45	1	He	90.633	90.633	1.03	680400	0.01	10000	
Mn	55	45	1	He	331.111	331.111	2.31	1905528	0.02	10000	
Fe	56	45	1	He	35671.016	35671.016	1.18	252269199	0.01	200000	
Co	59	103	1	He	3.614	3.614	0.94	43579	0.01	10000	
Ni	60	103	1	He	17.833	17.833	1.27	53338	0.03	10000	
Cu	63	103	1	He	273.428	273.428	0.53	2154528	0.01	10000	
Zn	66	103	1	He	174.005	174.005	0.84	270753	0.06	10000	
As	75	103	1	He	9.096	9.096	0.48	8756	0.10	10000	
Se	78	103	1	He	2.692	2.692	7.45	305	0.88	10000	
Sr	88	103	1	He	1517.415	1517.415	0.66	10928886	0.01	10000	
Mo	95	103	1	He	2.882	2.882	1.14	10198	0.03	2000	
Ag	107	103	1	He	1.322	1.322	2.60	16092	0.01	300	
Cd	111	103	1	He	0.710	0.710	9.23	2506	0.03	4000	
Sn	118	115	1	He	68.149	68.149	2.61	314051	0.02	2000	
Sb	123	115	1	He	0.994	0.994	3.74	4335	0.02	300	
Ba	137	115	1	He	123.120	123.120	0.37	246729	0.05	10000	
W	182	209	1	He	0.926	0.926	3.85	17332	0.01	2500	
Tl	205	209	1	He	0.243	0.243	0.89	8654	0.00	5000	
Pb	208	209	1	He	166.975	166.975	0.81	7718323	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1534659	1.07	2077022	73.89	30	120	
Sc	45	1	He	685989	1.30	817536	83.91	30	120	
Sc	45	2	NoGas	5031039	1.31	5970055	84.27	30	120	
Rh	103	1	He	2050234	0.49	2327919	88.07	30	120	
In	115	1	He	1084707	0.33	1305098	83.11	30	120	
Tb	159	1	He	3537400	0.99	3765959	93.93	30	120	
Ho	165	1	He	3586483	1.41	3748206	95.69	30	120	
Bi	209	1	He	2629758	1.70	2822318	93.18	30	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:26:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.023	0.023	47.16	163	0.01	10000	
B	11	45	2	NoGas	2.832	2.832	3.31	17316	0.02	300	
Na	23	45	1	He	7.822	7.822	8.26	30077	0.03	500000	
Mg	24	45	1	He	1.058	1.058	17.15	1545	0.07	500000	
Al	27	45	1	He	-13.293	-13.293	-5.30	2195	-0.61	200000	
K	39	45	1	He	2.816	2.816	22.40	37343	0.01	500000	
Ca	44	45	1	He	15.971	15.971	5.69	1391	1.15	500000	
Ti	47	45	1	He	3.249	3.249	13.94	873	0.37	2500	
V	51	45	1	He	0.118	0.118	24.58	1374	0.01	10000	
Cr	52	45	1	He	0.027	0.027	77.03	2620	0.00	10000	
Mn	55	45	1	He	0.183	0.183	3.72	1570	0.01	10000	
Fe	56	45	1	He	15.960	15.960	16.13	134534	0.01	200000	
Co	59	103	1	He	0.004	0.004	19.68	100	0.00	10000	
Ni	60	103	1	He	-0.014	-0.014	-20.34	47	-0.03	10000	
Cu	63	103	1	He	-0.047	-0.047	-61.27	2934	0.00	10000	
Zn	66	103	1	He	-0.804	-0.804	-1.58	727	-0.11	10000	
As	75	103	1	He	0.043	0.043	29.18	143	0.03	10000	
Se	78	103	1	He	0.025	0.025	40.90	41	0.06	10000	
Sr	88	103	1	He	0.419	0.419	9.79	3716	0.01	10000	
Mo	95	103	1	He	0.134	0.134	11.82	604	0.02	2000	
Ag	107	103	1	He	0.006	0.006	20.06	103	0.01	300	
Cd	111	103	1	He	-0.070	-0.070	-21.29	1037	-0.01	4000	
Sn	118	115	1	He	0.172	0.172	20.82	1208	0.01	2000	
Sb	123	115	1	He	0.062	0.062	23.54	476	0.01	300	
Ba	137	115	1	He	0.039	0.039	26.34	126	0.03	10000	
W	182	209	1	He	0.105	0.105	18.11	5738	0.00	2500	
Tl	205	209	1	He	0.004	0.004	30.97	190	0.00	5000	
Pb	208	209	1	He	0.083	0.083	16.21	4890	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1806949	1.04	2077022	87.00	30	120	
Sc	45	1	He	743451	0.46	817536	90.94	30	120	
Sc	45	2	NoGas	5711367	0.89	5970055	95.67	30	120	
Rh	103	1	He	2374244	0.35	2327919	101.99	30	120	
In	115	1	He	1248161	0.95	1305098	95.64	30	120	
Tb	159	1	He	3801172	0.89	3765959	100.94	30	120	
Ho	165	1	He	3869367	1.48	3748206	103.23	30	120	
Bi	209	1	He	2938336	1.34	2822318	104.11	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-j@10
Data File Name	028SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:30:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.221	0.221	26.75	1078	0.02	10000	
B	11	45	2	NoGas	7.200	7.200	3.57	35787	0.02	300	
Na	23	45	1	He	241.533	241.533	1.77	484839	0.05	500000	
Mg	24	45	1	He	857.082	857.082	1.81	936699	0.09	500000	
Al	27	45	1	He	5465.359	5465.359	1.69	3127471	0.17	200000	
K	39	45	1	He	44.804	44.804	2.17	79009	0.06	500000	
Ca	44	45	1	He	236240.753	236240.753	2.25	11786050	2.00	500000	
Ti	47	45	1	He	13529.700	13529.700	0.63	3859057	0.35	2500	>LDR
V	51	45	1	He	1170.364	1170.364	1.38	8347829	0.01	10000	
Cr	52	45	1	He	529.231	529.231	1.63	4616919	0.01	10000	
Mn	55	45	1	He	1670.342	1670.342	1.49	11200273	0.01	10000	
Fe	56	45	1	He	63142.663	63142.663	1.95	520289633	0.01	200000	
Co	59	103	1	He	8.352	8.352	1.24	99824	0.01	10000	
Ni	60	103	1	He	17.511	17.511	1.20	51931	0.03	10000	
Cu	63	103	1	He	24.519	24.519	1.47	194189	0.01	10000	
Zn	66	103	1	He	110.747	110.747	0.35	171531	0.06	10000	
As	75	103	1	He	2.796	2.796	1.83	2725	0.10	10000	
Se	78	103	1	He	0.749	0.749	6.32	108	0.70	10000	
Sr	88	103	1	He	4975.121	4975.121	0.48	35526402	0.01	10000	
Mo	95	103	1	He	3.570	3.570	1.54	12510	0.03	2000	
Ag	107	103	1	He	0.162	0.162	7.24	1967	0.01	300	
Cd	111	103	1	He	0.848	0.848	3.09	2767	0.03	4000	
Sn	118	115	1	He	15.221	15.221	2.66	72265	0.02	2000	
Sb	123	115	1	He	0.219	0.219	0.81	1101	0.02	300	
Ba	137	115	1	He	12.884	12.884	1.16	26550	0.05	10000	
W	182	209	1	He	7.232	7.232	1.04	110890	0.01	2500	
Tl	205	209	1	He	0.020	0.020	7.20	743	0.00	5000	
Pb	208	209	1	He	20.893	20.893	0.93	964844	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1582881	0.91	2077022	76.21	30	120	
Sc	45	1	He	799462	2.46	817536	97.79	30	120	
Sc	45	2	NoGas	5732293	1.62	5970055	96.02	30	120	
Rh	103	1	He	2032734	0.97	2327919	87.32	30	120	
In	115	1	He	1114164	0.66	1305098	85.37	30	120	
Tb	159	1	He	3608158	1.54	3765959	95.81	30	120	
Ho	165	1	He	3674649	1.16	3748206	98.04	30	120	
Bi	209	1	He	2625846	0.48	2822318	93.04	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111357-a-2-j@50
Data File Name	029SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:33:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.482	0.482	4.77	2230	0.02	10000	
B	11	45	2	NoGas	11.311	11.311	1.73	58459	0.02	300	
Na	23	45	1	He	454.143	454.143	2.67	945539	0.05	500000	
Mg	24	45	1	He	1669.731	1669.731	3.06	1924125	0.09	500000	
Al	27	45	1	He	10251.652	10251.652	1.74	6178425	0.17	200000	
K	39	45	1	He	83.686	83.686	4.38	121282	0.07	500000	
Ca	44	45	1	He	449623.040	449623.040	2.70	23660477	1.90	500000	
Ti	47	45	1	He	25785.795	25785.795	2.01	7756117	0.33	2500	>LDR
V	51	45	1	He	2210.516	2210.516	3.31	16627081	0.01	10000	
Cr	52	45	1	He	987.458	987.458	2.38	9083568	0.01	10000	
Mn	55	45	1	He	3174.012	3174.012	2.13	22447297	0.01	10000	
Fe	56	45	1	He	119809.730	119809.730	2.19	1041306341	0.01	200000	
Co	59	103	1	He	17.892	17.892	2.65	196809	0.01	10000	
Ni	60	103	1	He	37.249	37.249	1.41	101604	0.04	10000	
Cu	63	103	1	He	51.256	51.256	2.16	370767	0.01	10000	
Zn	66	103	1	He	223.798	223.798	2.02	317353	0.07	10000	
As	75	103	1	He	6.064	6.064	2.94	5353	0.11	10000	
Se	78	103	1	He	1.815	1.815	6.35	198	0.92	10000	
Sr	88	103	1	He	10900.531	10900.531	1.13	71654846	0.02	10000	>LDR
Mo	95	103	1	He	7.950	7.950	3.43	25588	0.03	2000	
Ag	107	103	1	He	0.716	0.716	2.92	7959	0.01	300	
Cd	111	103	1	He	3.534	3.534	6.56	7613	0.05	4000	
Sn	118	115	1	He	32.942	32.942	1.24	144919	0.02	2000	
Sb	123	115	1	He	0.373	0.373	2.06	1642	0.02	300	
Ba	137	115	1	He	28.254	28.254	2.88	54021	0.05	10000	
W	182	209	1	He	17.051	17.051	3.51	231749	0.01	2500	
Tl	205	209	1	He	0.043	0.043	6.10	1392	0.00	5000	
Pb	208	209	1	He	45.558	45.558	2.56	1899650	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1530090	1.84	2077022	73.67	30	120	
Sc	45	1	He	843159	1.30	817536	103.13	30	120	
Sc	45	2	NoGas	6307653	1.26	5970055	105.65	30	120	
Rh	103	1	He	1871379	0.55	2327919	80.39	30	120	
In	115	1	He	1034598	0.62	1305098	79.27	30	120	
Tb	159	1	He	3416512	0.89	3765959	90.72	30	120	
Ho	165	1	He	3460755	0.17	3748206	92.33	30	120	
Bi	209	1	He	2372046	1.22	2822318	84.05	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111357-a-2-j@10
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:37:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1112.335	1112.335	0.43	4817176	0.02	10000	
B	11	45	2	NoGas	112.264	112.264	1.27	445686	0.03	300	
Na	23	45	1	He	10598.776	10598.776	1.46	18320821	0.06	500000	
Mg	24	45	1	He	11222.719	11222.719	0.79	10936788	0.10	500000	
Al	27	45	1	He	15721.505	15721.505	0.31	8008901	0.20	200000	
K	39	45	1	He	10028.817	10028.817	0.24	8313157	0.12	500000	
Ca	44	45	1	He	277347.509	277347.509	0.16	12344644	2.25	500000	
Ti	47	45	1	He	15402.530	15402.530	0.80	3918430	0.39	2500	>LDR
V	51	45	1	He	2329.617	2329.617	0.78	14821543	0.02	10000	
Cr	52	45	1	He	1628.719	1628.719	0.98	12670309	0.01	10000	
Mn	55	45	1	He	2883.684	2883.684	0.88	17248108	0.02	10000	
Fe	56	45	1	He	81578.649	81578.649	0.38	599678572	0.01	200000	
Co	59	103	1	He	1062.906	1062.906	0.85	11718440	0.01	10000	
Ni	60	103	1	He	1108.586	1108.586	0.96	3028830	0.04	10000	
Cu	63	103	1	He	1082.678	1082.678	0.96	7796983	0.01	10000	
Zn	66	103	1	He	1149.239	1149.239	0.90	1626469	0.07	10000	
As	75	103	1	He	1032.162	1032.162	0.52	900411	0.11	10000	
Se	78	103	1	He	990.525	990.525	0.17	91722	1.08	10000	
Sr	88	103	1	He	6575.258	6575.258	1.49	43324214	0.02	10000	
Mo	95	103	1	He	123.245	123.245	1.77	396929	0.03	2000	
Ag	107	103	1	He	110.796	110.796	0.76	1232650	0.01	300	
Cd	111	103	1	He	1173.166	1173.166	1.06	2219092	0.05	4000	
Sn	118	115	1	He	1288.312	1288.312	0.28	5389265	0.02	2000	
Sb	123	115	1	He	120.605	120.605	1.00	460925	0.03	300	
Ba	137	115	1	He	1299.742	1299.742	0.60	2365900	0.05	10000	
W	182	209	1	He	135.407	135.407	0.47	1826346	0.01	2500	
Tl	205	209	1	He	288.687	288.687	1.15	9293696	0.00	5000	
Pb	208	209	1	He	1191.304	1191.304	0.98	49882142	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1457643	1.76	2077022	70.18	30	120	
Sc	45	1	He	713000	1.00	817536	87.21	30	120	
Sc	45	2	NoGas	5336035	1.26	5970055	89.38	30	120	
Rh	103	1	He	1875746	0.31	2327919	80.58	30	120	
In	115	1	He	985396	0.14	1305098	75.50	30	120	
Tb	159	1	He	3374466	1.20	3765959	89.60	30	120	
Ho	165	1	He	3472298	0.86	3748206	92.64	30	120	
Bi	209	1	He	2382268	1.27	2822318	84.41	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-k ms@10
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:41:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	100.458	100.458	1.25	443960	0.02	10000	
B	11	45	2	NoGas	16.286	16.286	2.81	68743	0.02	300	
Na	23	45	1	He	1244.618	1244.618	1.13	2161574	0.06	500000	
Mg	24	45	1	He	1796.212	1796.212	0.65	1747961	0.10	500000	
Al	27	45	1	He	6203.968	6203.968	1.43	3160521	0.20	200000	
K	39	45	1	He	927.943	927.943	1.55	798253	0.12	500000	
Ca	44	45	1	He	250521.433	250521.433	0.17	11133215	2.25	500000	
Ti	47	45	1	He	13466.276	13466.276	1.18	3420228	0.39	2500	>LDR
V	51	45	1	He	1231.068	1231.068	1.59	7819850	0.02	10000	
Cr	52	45	1	He	606.437	606.437	1.65	4711407	0.01	10000	
Mn	55	45	1	He	1703.064	1703.064	0.27	10170945	0.02	10000	
Fe	56	45	1	He	62964.088	62964.088	0.88	462103413	0.01	200000	
Co	59	103	1	He	101.278	101.278	0.81	1129536	0.01	10000	
Ni	60	103	1	He	110.038	110.038	0.53	304198	0.04	10000	
Cu	63	103	1	He	116.785	116.785	0.90	853180	0.01	10000	
Zn	66	103	1	He	189.811	189.811	0.27	273192	0.07	10000	
As	75	103	1	He	93.141	93.141	0.44	82264	0.11	10000	
Se	78	103	1	He	90.179	90.179	0.85	8475	1.06	10000	
Sr	88	103	1	He	4995.629	4995.629	0.77	33297826	0.02	10000	
Mo	95	103	1	He	15.545	15.545	1.38	50688	0.03	2000	
Ag	107	103	1	He	10.231	10.231	1.09	115158	0.01	300	
Cd	111	103	1	He	99.023	99.023	0.73	190358	0.05	4000	
Sn	118	115	1	He	122.637	122.637	0.43	536081	0.02	2000	
Sb	123	115	1	He	10.165	10.165	2.50	40716	0.02	300	
Ba	137	115	1	He	114.244	114.244	0.43	217247	0.05	10000	
W	182	209	1	He	15.287	15.287	2.86	215755	0.01	2500	
Tl	205	209	1	He	23.550	23.550	0.26	782535	0.00	5000	
Pb	208	209	1	He	122.702	122.702	0.15	5303619	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1487348	0.30	2077022	71.61	30	120	
Sc	45	1	He	711873	0.77	817536	87.08	30	120	
Sc	45	2	NoGas	5317656	0.38	5970055	89.07	30	120	
Rh	103	1	He	1897487	0.32	2327919	81.51	30	120	
In	115	1	He	1029297	0.82	1305098	78.87	30	120	
Tb	159	1	He	3413005	0.51	3765959	90.63	30	120	
Ho	165	1	He	3498883	0.35	3748206	93.35	30	120	
Bi	209	1	He	2458744	0.54	2822318	87.12	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-I msd@10
Data File Name	032SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:44:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	101.632	101.632	1.10	446653	0.02	10000	
B	11	45	2	NoGas	15.713	15.713	2.03	66348	0.02	300	
Na	23	45	1	He	1240.669	1240.669	1.22	2131561	0.06	500000	
Mg	24	45	1	He	1803.721	1803.721	0.84	1736315	0.10	500000	
Al	27	45	1	He	6097.981	6097.981	1.20	3073313	0.20	200000	
K	39	45	1	He	964.239	964.239	0.56	819264	0.12	500000	
Ca	44	45	1	He	243078.522	243078.522	1.47	10685481	2.27	500000	
Ti	47	45	1	He	13136.242	13136.242	0.06	3300486	0.40	2500	>LDR
V	51	45	1	He	1198.763	1198.763	0.89	7532780	0.02	10000	
Cr	52	45	1	He	601.159	601.159	0.51	4620138	0.01	10000	
Mn	55	45	1	He	1636.167	1636.167	0.74	9665747	0.02	10000	
Fe	56	45	1	He	61545.952	61545.952	0.96	446818756	0.01	200000	
Co	59	103	1	He	102.934	102.934	1.73	1151712	0.01	10000	
Ni	60	103	1	He	111.703	111.703	1.41	309811	0.04	10000	
Cu	63	103	1	He	117.544	117.544	1.95	861469	0.01	10000	
Zn	66	103	1	He	190.741	190.741	1.49	275414	0.07	10000	
As	75	103	1	He	94.116	94.116	1.85	83391	0.11	10000	
Se	78	103	1	He	90.758	90.758	2.33	8556	1.06	10000	
Sr	88	103	1	He	4769.979	4769.979	1.49	31897489	0.01	10000	
Mo	95	103	1	He	14.432	14.432	1.55	47219	0.03	2000	
Ag	107	103	1	He	10.496	10.496	1.69	118527	0.01	300	
Cd	111	103	1	He	100.912	100.912	1.81	194597	0.05	4000	
Sn	118	115	1	He	120.951	120.951	0.36	529488	0.02	2000	
Sb	123	115	1	He	9.831	9.831	0.90	39432	0.02	300	
Ba	137	115	1	He	116.873	116.873	0.93	222563	0.05	10000	
W	182	209	1	He	14.703	14.703	3.58	209761	0.01	2500	
Tl	205	209	1	He	23.838	23.838	1.55	800314	0.00	5000	
Pb	208	209	1	He	122.299	122.299	2.15	5340545	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1479033	0.49	2077022	71.21	30	120	
Sc	45	1	He	704169	0.41	817536	86.13	30	120	
Sc	45	2	NoGas	5304752	1.22	5970055	88.86	30	120	
Rh	103	1	He	1903966	1.71	2327919	81.79	30	120	
In	115	1	He	1030769	0.50	1305098	78.98	30	120	
Tb	159	1	He	3439609	0.15	3765959	91.33	30	120	
Ho	165	1	He	3488269	0.97	3748206	93.07	30	120	
Bi	209	1	He	2484723	1.91	2822318	88.04	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-3-e@10
Data File Name	033SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:48:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.269	0.269	18.10	1196	0.02	10000	
B	11	45	2	NoGas	7.186	7.186	3.51	32856	0.02	300	
Na	23	45	1	He	175.317	175.317	1.23	317984	0.06	500000	
Mg	24	45	1	He	1098.473	1098.473	0.73	1070321	0.10	500000	
Al	27	45	1	He	5153.811	5153.811	1.86	2630202	0.20	200000	
K	39	45	1	He	47.177	47.177	2.56	72396	0.07	500000	
Ca	44	45	1	He	176385.454	176385.454	0.74	7847527	2.25	500000	
Ti	47	45	1	He	12703.354	12703.354	1.75	3230061	0.39	2500	>LDR
V	51	45	1	He	1073.546	1073.546	0.40	6827420	0.02	10000	
Cr	52	45	1	He	496.924	496.924	1.15	3865362	0.01	10000	
Mn	55	45	1	He	1468.796	1468.796	0.85	8781395	0.02	10000	
Fe	56	45	1	He	58000.565	58000.565	0.77	426174552	0.01	200000	
Co	59	103	1	He	6.945	6.945	1.77	79716	0.01	10000	
Ni	60	103	1	He	14.650	14.650	2.56	41726	0.04	10000	
Cu	63	103	1	He	20.262	20.262	2.05	154542	0.01	10000	
Zn	66	103	1	He	97.064	97.064	1.13	144578	0.07	10000	
As	75	103	1	He	2.402	2.402	1.34	2259	0.11	10000	
Se	78	103	1	He	0.740	0.740	21.18	102	0.72	10000	
Sr	88	103	1	He	4137.075	4137.075	1.57	28365367	0.01	10000	
Mo	95	103	1	He	3.391	3.391	1.10	11414	0.03	2000	
Ag	107	103	1	He	0.232	0.232	4.76	2700	0.01	300	
Cd	111	103	1	He	1.121	1.121	6.30	3194	0.04	4000	
Sn	118	115	1	He	12.851	12.851	1.23	57866	0.02	2000	
Sb	123	115	1	He	0.262	0.262	3.43	1221	0.02	300	
Ba	137	115	1	He	11.476	11.476	1.55	22418	0.05	10000	
W	182	209	1	He	6.404	6.404	2.79	93572	0.01	2500	
Tl	205	209	1	He	0.057	0.057	16.09	1923	0.00	5000	
Pb	208	209	1	He	17.280	17.280	0.78	757370	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1457348	1.58	2077022	70.17	30	120	
Sc	45	1	He	712668	0.82	817536	87.17	30	120	
Sc	45	2	NoGas	5269127	0.89	5970055	88.26	30	120	
Rh	103	1	He	1952037	1.08	2327919	83.85	30	120	
In	115	1	He	1056192	0.93	1305098	80.93	30	120	
Tb	159	1	He	3458267	0.84	3765959	91.83	30	120	
Ho	165	1	He	3531861	0.38	3748206	94.23	30	120	
Bi	209	1	He	2491827	0.51	2822318	88.29	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-4-e@10
Data File Name	034SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:52:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.242	0.242	10.57	1074	0.02	10000	
B	11	45	2	NoGas	5.855	5.855	2.80	27636	0.02	300	
Na	23	45	1	He	157.968	157.968	0.30	286466	0.06	500000	
Mg	24	45	1	He	874.874	874.874	0.92	847862	0.10	500000	
Al	27	45	1	He	5221.767	5221.767	1.32	2649857	0.20	200000	
K	39	45	1	He	44.585	44.585	3.60	69872	0.06	500000	
Ca	44	45	1	He	178183.022	178183.022	0.91	7883459	2.26	500000	
Ti	47	45	1	He	13233.574	13233.574	0.56	3346721	0.40	2500	>LDR
V	51	45	1	He	1135.172	1135.172	0.84	7179445	0.02	10000	
Cr	52	45	1	He	518.122	518.122	0.59	4008249	0.01	10000	
Mn	55	45	1	He	1495.549	1495.549	1.59	8891921	0.02	10000	
Fe	56	45	1	He	57471.784	57471.784	0.96	419945370	0.01	200000	
Co	59	103	1	He	6.848	6.848	0.53	77868	0.01	10000	
Ni	60	103	1	He	15.180	15.180	0.38	42840	0.04	10000	
Cu	63	103	1	He	21.719	21.719	0.08	163950	0.01	10000	
Zn	66	103	1	He	99.717	99.717	1.10	147119	0.07	10000	
As	75	103	1	He	2.259	2.259	0.80	2110	0.11	10000	
Se	78	103	1	He	0.535	0.535	10.72	82	0.65	10000	
Sr	88	103	1	He	4062.231	4062.231	1.40	27597544	0.01	10000	
Mo	95	103	1	He	3.227	3.227	1.80	10765	0.03	2000	
Ag	107	103	1	He	0.311	0.311	5.01	3584	0.01	300	
Cd	111	103	1	He	1.569	1.569	11.98	4039	0.04	4000	
Sn	118	115	1	He	13.129	13.129	1.31	58925	0.02	2000	
Sb	123	115	1	He	0.208	0.208	13.86	997	0.02	300	
Ba	137	115	1	He	10.993	10.993	1.20	21409	0.05	10000	
W	182	209	1	He	6.819	6.819	1.50	99867	0.01	2500	
Tl	205	209	1	He	0.028	0.028	4.03	976	0.00	5000	
Pb	208	209	1	He	17.768	17.768	0.97	782336	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1450518	3.36	2077022	69.84	30	120	
Sc	45	1	He	708759	1.11	817536	86.69	30	120	
Sc	45	2	NoGas	5258130	0.68	5970055	88.08	30	120	
Rh	103	1	He	1933967	0.16	2327919	83.08	30	120	
In	115	1	He	1052767	0.19	1305098	80.67	30	120	
Tb	159	1	He	3431806	0.46	3765959	91.13	30	120	
Ho	165	1	He	3463448	0.97	3748206	92.40	30	120	
Bi	209	1	He	2503383	0.99	2822318	88.70	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-5-e@10
Data File Name	035SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:55:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.505	0.505	18.10	2456	0.02	10000	
B	11	45	2	NoGas	11.097	11.097	1.65	47933	0.02	300	
Na	23	45	1	He	256.949	256.949	0.81	436943	0.06	500000	
Mg	24	45	1	He	2149.071	2149.071	0.76	1993379	0.11	500000	
Al	27	45	1	He	9340.222	9340.222	2.04	4530423	0.21	200000	
K	39	45	1	He	572.725	572.725	0.36	481878	0.12	500000	
Ca	44	45	1	He	13635.711	13635.711	0.69	578141	2.36	500000	
Ti	47	45	1	He	250.561	250.561	1.57	60664	0.41	2500	
V	51	45	1	He	39.730	39.730	1.37	241075	0.02	10000	
Cr	52	45	1	He	46.167	46.167	1.58	343870	0.01	10000	
Mn	55	45	1	He	444.548	444.548	0.74	2530839	0.02	10000	
Fe	56	45	1	He	44721.301	44721.301	0.59	312863401	0.01	200000	
Co	59	103	1	He	5.480	5.480	1.39	68073	0.01	10000	
Ni	60	103	1	He	19.527	19.527	0.70	60163	0.03	10000	
Cu	63	103	1	He	81.787	81.787	1.02	666070	0.01	10000	
Zn	66	103	1	He	311.120	311.120	0.61	497260	0.06	10000	
As	75	103	1	He	8.491	8.491	2.00	8426	0.10	10000	
Se	78	103	1	He	0.765	0.765	13.19	113	0.67	10000	
Sr	88	103	1	He	283.943	283.943	1.96	2107098	0.01	10000	
Mo	95	103	1	He	2.646	2.646	3.99	9649	0.03	2000	
Ag	107	103	1	He	0.690	0.690	3.12	8657	0.01	300	
Cd	111	103	1	He	1.668	1.668	1.61	4623	0.04	4000	
Sn	118	115	1	He	91.104	91.104	0.16	435303	0.02	2000	
Sb	123	115	1	He	2.166	2.166	1.78	9604	0.02	300	
Ba	137	115	1	He	110.015	110.015	0.48	228627	0.05	10000	
W	182	209	1	He	1.150	1.150	3.31	21315	0.01	2500	
Tl	205	209	1	He	0.086	0.086	2.58	3169	0.00	5000	
Pb	208	209	1	He	302.491	302.491	1.27	14433792	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1610014	0.68	2077022	77.52	30	120	
Sc	45	1	He	678603	2.54	817536	83.01	30	120	
Sc	45	2	NoGas	5260354	1.02	5970055	88.11	30	120	
Rh	103	1	He	2112290	0.47	2327919	90.74	30	120	
In	115	1	He	1124895	1.72	1305098	86.19	30	120	
Tb	159	1	He	3605510	1.55	3765959	95.74	30	120	
Ho	165	1	He	3642221	1.22	3748206	97.17	30	120	
Bi	209	1	He	2714679	1.26	2822318	96.19	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	036_CCV.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T19:59:40-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.852	2.372	230760	1.73	50	95.7	89.5	110.5	
B	11	45	2	NoGas	49.883	0.484	196666	0.85	50	99.8	89.5	110.5	
Na	23	45	1	He	26601.958	0.587	44390908	0.29	25000	106.4	89.5	110.5	
Mg	24	45	1	He	26429.546	1.179	24873163	0.91	25000	105.7	89.5	110.5	
Al	27	45	1	He	245.713	1.679	129316	1.31	250	98.3	89.5	110.5	
K	39	45	1	He	25866.207	0.514	20656018	0.20	25000	103.5	89.5	110.5	
Ca	44	45	1	He	25545.629	0.579	1098669	0.39	25000	102.2	89.5	110.5	
Ti	47	45	1	He	69.312	2.168	17039	1.86	50	138.6	89.5	110.5	CCV Failed
V	51	45	1	He	53.443	2.268	328918	1.94	50	106.9	89.5	110.5	
Cr	52	45	1	He	53.986	1.352	407751	1.04	50	108.0	89.5	110.5	
Mn	55	45	1	He	271.011	1.361	1565916	1.04	250	108.4	89.5	110.5	
Fe	56	45	1	He	13729.961	0.671	97485061	0.42	12500	109.8	89.5	110.5	
Co	59	103	1	He	47.091	0.468	585519	1.03	50	94.2	89.5	110.5	
Ni	60	103	1	He	47.448	1.186	146268	0.56	50	94.9	89.5	110.5	
Cu	63	103	1	He	47.769	0.518	390810	0.77	50	95.5	89.5	110.5	
Zn	66	103	1	He	46.584	0.383	76204	1.33	50	93.2	89.5	110.5	
As	75	103	1	He	45.927	0.274	45266	1.51	50	91.9	89.5	110.5	
Se	78	103	1	He	45.231	1.161	4755	1.09	50	90.5	89.5	110.5	
Sr	88	103	1	He	46.976	1.015	349241	0.38	50	94.0	89.5	110.5	
Mo	95	103	1	He	51.417	1.787	186764	0.51	50	102.8	89.5	110.5	
Ag	107	103	1	He	50.487	0.326	633473	1.39	50	101.0	89.5	110.5	
Cd	111	103	1	He	50.988	0.807	109786	0.52	50	102.0	89.5	110.5	
Sn	118	115	1	He	51.497	0.330	247961	0.82	50	103.0	89.5	110.5	
Sb	123	115	1	He	53.960	0.290	237211	0.67	50	107.9	89.5	110.5	
Ba	137	115	1	He	51.860	0.652	108574	0.54	50	103.7	89.5	110.5	
W	182	209	1	He	49.122	2.219	733490	1.71	50	98.2	89.5	110.5	
Tl	205	209	1	He	51.176	1.111	1818441	0.72	50	102.4	89.5	110.5	
Pb	208	209	1	He	49.132	1.322	2271221	1.09	50	98.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1623255	2.36	2077022	78.15	30	120	
Sc	45	1	He	688607	0.32	817536	84.23	30	120	
Sc	45	2	NoGas	5225133	1.21	5970055	87.52	30	120	
Rh	103	1	He	2115384	1.28	2327919	90.87	30	120	
In	115	1	He	1133037	0.49	1305098	86.82	30	120	
Tb	159	1	He	3609573	0.51	3765959	95.85	30	120	
Ho	165	1	He	3716473	0.49	3748206	99.15	30	120	
Bi	209	1	He	2629347	0.69	2822318	93.16	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	037_CCB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:03:27-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.053	29.8	296	24.1	1	
B	11	45	2	NoGas	2.872	3.0	15970	2.3	20	
Na	23	45	1	He	11.414	6.1	34088	3.5	400	
Mg	24	45	1	He	1.585	20.4	1941	16.4	1000	
Al	27	45	1	He	-0.657	-123.6	8301	4.3	50	
K	39	45	1	He	7.004	1.6	38196	0.8	1000	
Ca	44	45	1	He	8.895	35.2	992	14.3	1000	
Ti	47	45	1	He	2.588	15.1	651	15.4	20	
V	51	45	1	He	0.044	81.8	827	26.7	2	
Cr	52	45	1	He	0.000	-10011.0	2241	5.7	2	
Mn	55	45	1	He	0.103	14.2	996	8.1	2	
Fe	56	45	1	He	11.809	16.0	95900	14.4	50	
Co	59	103	1	He	0.005	43.0	100	26.7	1	
Ni	60	103	1	He	-0.006	-171.3	71	46.2	2	
Cu	63	103	1	He	-0.165	-11.9	1753	10.7	2	
Zn	66	103	1	He	-0.223	-27.7	1668	5.3	20	
As	75	103	1	He	0.227	1.4	328	2.0	2	
Se	78	103	1	He	0.083	86.9	45	16.9	2	
Sr	88	103	1	He	0.118	20.7	1133	16.1	10	
Mo	95	103	1	He	0.835	17.9	3273	18.7	2	
Ag	107	103	1	He	0.010	30.5	156	27.9	0.2	
Cd	111	103	1	He	-0.032	-51.2	1065	4.4	0.2	
Sn	118	115	1	He	0.614	9.4	3363	8.3	10	
Sb	123	115	1	He	0.296	19.2	1525	16.6	1	
Ba	137	115	1	He	0.012	55.7	60	24.2	5	
W	182	209	1	He	0.906	10.7	17981	8.6	10	
Tl	205	209	1	He	0.028	24.1	1079	23.8	0.5	
Pb	208	209	1	He	0.070	5.8	3961	4.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1640863	2.01	2077022	79.00	30	120	
Sc	45	1	He	693514	0.64	817536	84.83	30	120	
Sc	45	2	NoGas	5217266	0.37	5970055	87.39	30	120	
Rh	103	1	He	2241343	1.02	2327919	96.28	30	120	
In	115	1	He	1183061	1.46	1305098	90.65	30	120	
Tb	159	1	He	3684871	1.63	3765959	97.85	30	120	
Ho	165	1	He	3731199	1.46	3748206	99.55	30	120	
Bi	209	1	He	2774680	0.43	2822318	98.31	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-6-e@10
Data File Name	038SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:07:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.185	0.185	9.92	882	0.02	10000	
B	11	45	2	NoGas	4.461	4.461	2.47	20772	0.02	300	
Na	23	45	1	He	218.181	218.181	1.50	362353	0.06	500000	
Mg	24	45	1	He	854.631	854.631	1.42	769893	0.11	500000	
Al	27	45	1	He	5135.852	5135.852	0.35	2422861	0.21	200000	
K	39	45	1	He	201.880	201.880	1.12	184925	0.11	500000	
Ca	44	45	1	He	14762.997	14762.997	0.07	607685	2.43	500000	
Ti	47	45	1	He	120.205	120.205	2.59	28261	0.43	2500	
V	51	45	1	He	23.862	23.862	1.38	140810	0.02	10000	
Cr	52	45	1	He	18.996	18.996	0.54	138641	0.01	10000	
Mn	55	45	1	He	66.309	66.309	0.16	366847	0.02	10000	
Fe	56	45	1	He	7470.415	7470.415	0.21	50750975	0.01	200000	
Co	59	103	1	He	0.708	0.708	2.22	8523	0.01	10000	
Ni	60	103	1	He	3.687	3.687	1.23	11040	0.03	10000	
Cu	63	103	1	He	54.270	54.270	0.44	427890	0.01	10000	
Zn	66	103	1	He	37.648	37.648	0.95	59761	0.06	10000	
As	75	103	1	He	1.975	1.975	4.47	1957	0.10	10000	
Se	78	103	1	He	0.602	0.602	8.47	93	0.65	10000	
Sr	88	103	1	He	319.917	319.917	0.01	2293205	0.01	10000	
Mo	95	103	1	He	0.659	0.659	1.74	2361	0.03	2000	
Ag	107	103	1	He	0.274	0.274	5.81	3327	0.01	300	
Cd	111	103	1	He	0.112	0.112	23.01	1265	0.01	4000	
Sn	118	115	1	He	13.494	13.494	2.83	62798	0.02	2000	
Sb	123	115	1	He	0.261	0.261	11.22	1259	0.02	300	
Ba	137	115	1	He	24.912	24.912	0.80	50271	0.05	10000	
W	182	209	1	He	0.295	0.295	4.73	8080	0.00	2500	
Tl	205	209	1	He	0.053	0.053	7.18	1932	0.00	5000	
Pb	208	209	1	He	31.944	31.944	0.95	1502028	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1540686	1.40	2077022	74.18	30	120	
Sc	45	1	He	658793	0.99	817536	80.58	30	120	
Sc	45	2	NoGas	4910191	1.00	5970055	82.25	30	120	
Rh	103	1	He	2040412	0.43	2327919	87.65	30	120	
In	115	1	He	1091743	0.25	1305098	83.65	30	120	
Tb	159	1	He	3480595	1.69	3765959	92.42	30	120	
Ho	165	1	He	3510821	2.08	3748206	93.67	30	120	
Bi	209	1	He	2674114	0.49	2822318	94.75	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	lb 240-176989/1-c@10
Data File Name	039_Blk.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:11:06-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.033	7.3	200	5.6	1	
B	11	45	2	NoGas	2.596	4.2	15081	3.4	20	
Na	23	45	1	He	162725.977	1.3	272265634	1.0	400	Blank Failed
Mg	24	45	1	He	1.183	14.6	1552	10.8	1000	
Al	27	45	1	He	-2.963	-34.5	7130	6.8	50	
K	39	45	1	He	18.813	5.8	47481	1.8	1000	
Ca	44	45	1	He	12.567	14.2	1146	6.6	1000	
Ti	47	45	1	He	1.401	23.5	356	22.9	20	
V	51	45	1	He	-0.011	-951.8	487	131.2	2	
Cr	52	45	1	He	0.140	2.9	3285	0.7	2	
Mn	55	45	1	He	0.101	10.0	981	5.7	2	
Fe	56	45	1	He	5.422	18.6	49982	14.1	50	
Co	59	103	1	He	0.002	122.1	53	43.8	1	
Ni	60	103	1	He	0.141	10.6	521	9.1	2	
Cu	63	103	1	He	0.015	162.2	3123	6.2	2	
Zn	66	103	1	He	0.294	23.3	2402	4.9	20	
As	75	103	1	He	0.058	32.5	143	12.9	2	
Se	78	103	1	He	0.045	107.9	38	13.5	2	
Sr	88	103	1	He	0.174	3.4	1488	3.1	10	
Mo	95	103	1	He	0.119	10.8	486	9.3	2	
Ag	107	103	1	He	0.006	12.0	93	9.4	0.2	
Cd	111	103	1	He	-0.029	-41.7	1012	2.4	0.2	
Sn	118	115	1	He	0.319	11.3	1796	9.9	10	
Sb	123	115	1	He	0.052	7.3	386	3.9	1	
Ba	137	115	1	He	0.323	16.0	707	14.9	5	
W	182	209	1	He	0.098	10.7	5016	2.2	10	
Tl	205	209	1	He	0.003	31.7	121	25.6	0.5	
Pb	208	209	1	He	0.049	1.8	2810	1.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1637575	0.66	2077022	78.84	30	120	
Sc	45	1	He	690644	0.32	817536	84.48	30	120	
Sc	45	2	NoGas	5274942	0.54	5970055	88.36	30	120	
Rh	103	1	He	2117703	0.34	2327919	90.97	30	120	
In	115	1	He	1128963	0.41	1305098	86.50	30	120	
Tb	159	1	He	3613694	0.81	3765959	95.96	30	120	
Ho	165	1	He	3658737	0.97	3748206	97.61	30	120	
Bi	209	1	He	2624445	0.95	2822318	92.99	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177073/2-a@10
Data File Name	040_Blk.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:14:56-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.019	39.0	130	27.6	1	
B	11	45	2	NoGas	1.593	4.4	10948	3.4	20	
Na	23	45	1	He	42.473	9.9	85428	8.8	400	
Mg	24	45	1	He	0.056	206.4	485	22.6	1000	
Al	27	45	1	He	-3.889	-11.4	6635	2.9	50	
K	39	45	1	He	2.624	46.1	34326	2.3	1000	
Ca	44	45	1	He	4.640	13.0	799	3.5	1000	
Ti	47	45	1	He	0.830	36.1	213	33.8	20	
V	51	45	1	He	-0.148	-33.4	-359	-84.8	2	
Cr	52	45	1	He	0.059	35.2	2665	6.5	2	
Mn	55	45	1	He	0.103	11.2	986	7.1	2	
Fe	56	45	1	He	1.458	7.1	21640	3.3	50	
Co	59	103	1	He	0.002	46.1	58	17.6	1	
Ni	60	103	1	He	-0.001	-174.4	84	8.2	2	
Cu	63	103	1	He	-0.079	-13.8	2445	4.9	2	
Zn	66	103	1	He	-0.057	-11.6	1911	1.1	20	
As	75	103	1	He	0.043	30.4	133	9.4	2	
Se	78	103	1	He	0.033	214.3	39	19.5	2	
Sr	88	103	1	He	0.049	18.4	584	13.1	10	
Mo	95	103	1	He	0.054	17.5	258	13.1	2	
Ag	107	103	1	He	0.005	35.6	81	28.9	0.2	
Cd	111	103	1	He	-0.063	-38.8	975	5.1	0.2	
Sn	118	115	1	He	0.442	19.6	2437	17.7	10	
Sb	123	115	1	He	0.034	7.2	314	3.7	1	
Ba	137	115	1	He	0.012	42.1	58	17.6	5	
W	182	209	1	He	0.031	64.3	4238	7.0	10	
Tl	205	209	1	He	0.001	31.7	78	22.0	0.5	
Pb	208	209	1	He	0.040	5.2	2532	4.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1623485	0.56	2077022	78.16	30	120	
Sc	45	1	He	686540	0.81	817536	83.98	30	120	
Sc	45	2	NoGas	5162562	1.66	5970055	86.47	30	120	
Rh	103	1	He	2198365	1.32	2327919	94.43	30	120	
In	115	1	He	1152464	0.48	1305098	88.30	30	120	
Tb	159	1	He	3559745	1.24	3765959	94.52	30	120	
Ho	165	1	He	3630294	0.12	3748206	96.85	30	120	
Bi	209	1	He	2771151	0.92	2822318	98.19	30	120	

Sample Report

Sample Table

Sample Name	lcs 240-177073/3-a@10
Data File Name	041SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:18:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	93.304	93.304	0.74	467283	0.02	10000	
B	11	45	2	NoGas	11.868	11.868	0.86	53266	0.02	300	
Na	23	45	1	He	159402.894	159402.894	0.85	287793226	0.06	500000	
Mg	24	45	1	He	1039.449	1039.449	0.91	1059146	0.10	500000	
Al	27	45	1	He	993.537	993.537	0.22	537739	0.18	200000	
K	39	45	1	He	1025.599	1025.599	1.61	919928	0.11	500000	
Ca	44	45	1	He	992.986	992.986	1.85	46845	2.12	500000	
Ti	47	45	1	He	11.086	11.086	0.32	2959	0.37	2500	
V	51	45	1	He	103.693	103.693	0.78	690156	0.02	10000	
Cr	52	45	1	He	103.750	103.750	0.17	845946	0.01	10000	
Mn	55	45	1	He	99.076	99.076	0.27	619880	0.02	10000	
Fe	56	45	1	He	1049.643	1049.643	0.47	8078064	0.01	200000	
Co	59	103	1	He	94.730	94.730	1.34	1211670	0.01	10000	
Ni	60	103	1	He	95.444	95.444	1.80	302599	0.03	10000	
Cu	63	103	1	He	96.571	96.571	1.67	809612	0.01	10000	
Zn	66	103	1	He	96.101	96.101	0.97	159604	0.06	10000	
As	75	103	1	He	92.358	92.358	1.06	93550	0.10	10000	
Se	78	103	1	He	91.356	91.356	2.07	9845	0.93	10000	
Sr	88	103	1	He	92.913	92.913	1.54	710425	0.01	10000	
Mo	95	103	1	He	10.431	10.431	1.87	39022	0.03	2000	
Ag	107	103	1	He	10.103	10.103	1.34	130422	0.01	300	
Cd	111	103	1	He	98.312	98.312	1.34	216746	0.05	4000	
Sn	118	115	1	He	102.490	102.490	0.81	511695	0.02	2000	
Sb	123	115	1	He	10.637	10.637	0.98	48647	0.02	300	
Ba	137	115	1	He	101.783	101.783	0.52	221051	0.05	10000	
W	182	209	1	He	9.562	9.562	2.32	148726	0.01	2500	
Tl	205	209	1	He	22.726	22.726	0.99	824614	0.00	5000	
Pb	208	209	1	He	100.571	100.571	1.21	4746874	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1685525	0.92	2077022	81.15	30	120	
Sc	45	1	He	745302	1.69	817536	91.16	30	120	
Sc	45	2	NoGas	5503420	0.48	5970055	92.18	30	120	
Rh	103	1	He	2176232	1.41	2327919	93.48	30	120	
In	115	1	He	1175487	0.56	1305098	90.07	30	120	
Tb	159	1	He	3770542	0.58	3765959	100.12	30	120	
Ho	165	1	He	3844924	0.29	3748206	102.58	30	120	
Bi	209	1	He	2684914	0.82	2822318	95.13	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-2-d@10
Data File Name	042SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:22:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.036	0.036	65.53	230	0.02	10000	
B	11	45	2	NoGas	8.559	8.559	3.52	42880	0.02	300	
Na	23	45	1	He	159842.822	159842.822	1.42	299877351	0.05	500000	
Mg	24	45	1	He	1866.338	1866.338	0.26	1975810	0.09	500000	
Al	27	45	1	He	0.607	0.607	22.12	9969	0.01	200000	
K	39	45	1	He	121.382	121.382	1.68	145216	0.08	500000	
Ca	44	45	1	He	134532.122	134532.122	1.62	6504071	2.07	500000	
Ti	47	45	1	He	0.751	0.751	23.87	219	0.34	2500	
V	51	45	1	He	20.919	20.919	0.97	145168	0.01	10000	
Cr	52	45	1	He	0.241	0.241	7.67	4538	0.01	10000	
Mn	55	45	1	He	101.558	101.558	0.41	660220	0.02	10000	
Fe	56	45	1	He	2.226	2.226	5.21	30542	0.01	200000	
Co	59	103	1	He	0.199	0.199	3.69	2648	0.01	10000	
Ni	60	103	1	He	0.553	0.553	3.62	1890	0.03	10000	
Cu	63	103	1	He	0.018	0.018	87.63	3311	0.00	10000	
Zn	66	103	1	He	1.161	1.161	4.21	3993	0.03	10000	
As	75	103	1	He	0.828	0.828	12.02	951	0.09	10000	
Se	78	103	1	He	0.499	0.499	17.83	91	0.55	10000	
Sr	88	103	1	He	2635.733	2635.733	0.99	20679666	0.01	10000	
Mo	95	103	1	He	0.917	0.917	1.67	3573	0.03	2000	
Ag	107	103	1	He	0.008	0.008	17.30	120	0.01	300	
Cd	111	103	1	He	0.034	0.034	57.73	1208	0.00	4000	
Sn	118	115	1	He	0.769	0.769	7.50	4297	0.02	2000	
Sb	123	115	1	He	0.119	0.119	4.02	739	0.02	300	
Ba	137	115	1	He	0.761	0.761	5.58	1760	0.04	10000	
W	182	209	1	He	0.315	0.315	21.02	8555	0.00	2500	
Tl	205	209	1	He	0.028	0.028	27.58	1067	0.00	5000	
Pb	208	209	1	He	0.041	0.041	9.20	2529	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1758366	1.81	2077022	84.66	30	120	
Sc	45	1	He	774418	0.72	817536	94.73	30	120	
Sc	45	2	NoGas	5920886	1.57	5970055	99.18	30	120	
Rh	103	1	He	2233457	0.68	2327919	95.94	30	120	
In	115	1	He	1226839	0.68	1305098	94.00	30	120	
Tb	159	1	He	3868513	0.71	3765959	102.72	30	120	
Ho	165	1	He	3930708	1.32	3748206	104.87	30	120	
Bi	209	1	He	2724275	0.31	2822318	96.53	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111548-a-2-d@50
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:26:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.028	0.028	41.59	196	0.01	10000	
B	11	45	2	NoGas	2.652	2.652	5.88	16923	0.02	300	
Na	23	45	1	He	32807.908	32807.908	1.67	60943948	0.05	500000	
Mg	24	45	1	He	367.825	367.825	0.49	385872	0.10	500000	
Al	27	45	1	He	-2.903	-2.903	-11.11	7948	-0.04	200000	
K	39	45	1	He	28.535	28.535	2.96	61333	0.05	500000	
Ca	44	45	1	He	28287.007	28287.007	1.29	1354399	2.09	500000	
Ti	47	45	1	He	0.738	0.738	14.06	213	0.35	2500	
V	51	45	1	He	4.169	4.169	2.61	29128	0.01	10000	
Cr	52	45	1	He	0.039	0.039	33.95	2804	0.00	10000	
Mn	55	45	1	He	20.788	20.788	0.70	134132	0.02	10000	
Fe	56	45	1	He	0.169	0.169	25.77	13977	0.00	200000	
Co	59	103	1	He	0.040	0.040	3.06	577	0.01	10000	
Ni	60	103	1	He	0.091	0.091	6.29	394	0.02	10000	
Cu	63	103	1	He	-0.098	-0.098	-6.08	2378	0.00	10000	
Zn	66	103	1	He	-0.144	-0.144	-9.85	1842	-0.01	10000	
As	75	103	1	He	0.182	0.182	2.09	287	0.06	10000	
Se	78	103	1	He	0.056	0.056	52.97	43	0.13	10000	
Sr	88	103	1	He	527.212	527.212	0.46	4245384	0.01	10000	
Mo	95	103	1	He	0.216	0.216	2.17	907	0.02	2000	
Ag	107	103	1	He	0.006	0.006	14.16	100	0.01	300	
Cd	111	103	1	He	0.003	0.003	533.04	1169	0.00	4000	
Sn	118	115	1	He	0.292	0.292	8.62	1859	0.02	2000	
Sb	123	115	1	He	0.039	0.039	21.85	369	0.01	300	
Ba	137	115	1	He	0.149	0.149	18.26	383	0.04	10000	
W	182	209	1	He	0.076	0.076	24.25	5101	0.00	2500	
Tl	205	209	1	He	0.006	0.006	19.09	260	0.00	5000	
Pb	208	209	1	He	0.021	0.021	6.04	1627	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1819484	1.44	2077022	87.60	30	120	
Sc	45	1	He	766636	0.52	817536	93.77	30	120	
Sc	45	2	NoGas	5838334	0.79	5970055	97.79	30	120	
Rh	103	1	He	2292297	0.99	2327919	98.47	30	120	
In	115	1	He	1259716	0.35	1305098	96.52	30	120	
Tb	159	1	He	3850210	0.34	3765959	102.24	30	120	
Ho	165	1	He	3932092	1.58	3748206	104.91	30	120	
Bi	209	1	He	2852717	0.24	2822318	101.08	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111548-a-2-d@10
Data File Name	044SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:30:13-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	967.537	967.537	0.33	4551921	0.02	10000	
B	11	45	2	NoGas	110.336	110.336	0.28	424856	0.03	300	
Na	23	45	1	He	168714.539	168714.539	0.23	280471189	0.06	500000	
Mg	24	45	1	He	11976.314	11976.314	0.15	11232138	0.11	500000	
Al	27	45	1	He	9768.311	9768.311	0.35	4792182	0.20	200000	
K	39	45	1	He	10141.149	10141.149	0.27	8089630	0.13	500000	
Ca	44	45	1	He	142499.294	142499.294	0.89	6104191	2.33	500000	
Ti	47	45	1	He	103.332	103.332	0.97	25310	0.41	2500	
V	51	45	1	He	1055.272	1055.272	0.99	6461926	0.02	10000	
Cr	52	45	1	He	1022.762	1022.762	0.63	7658127	0.01	10000	
Mn	55	45	1	He	1100.750	1100.750	1.60	6336454	0.02	10000	
Fe	56	45	1	He	10273.146	10273.146	1.73	72682786	0.01	200000	
Co	59	103	1	He	933.781	933.781	1.05	10933184	0.01	10000	
Ni	60	103	1	He	958.675	958.675	1.50	2781687	0.03	10000	
Cu	63	103	1	He	935.520	935.520	1.25	7155446	0.01	10000	
Zn	66	103	1	He	885.895	885.895	0.57	1331952	0.07	10000	
As	75	103	1	He	926.380	926.380	0.53	858267	0.11	10000	
Se	78	103	1	He	894.052	894.052	0.74	87926	1.02	10000	
Sr	88	103	1	He	3513.848	3513.848	1.28	24588725	0.01	10000	
Mo	95	103	1	He	104.209	104.209	1.61	356474	0.03	2000	
Ag	107	103	1	He	96.430	96.430	0.60	1139376	0.01	300	
Cd	111	103	1	He	1014.510	1014.510	1.17	2038106	0.05	4000	
Sn	118	115	1	He	1091.269	1091.269	0.93	4926546	0.02	2000	
Sb	123	115	1	He	105.239	105.239	0.98	434067	0.02	300	
Ba	137	115	1	He	1115.817	1115.817	1.24	2191906	0.05	10000	
W	182	209	1	He	99.267	99.267	0.60	1416414	0.01	2500	
Tl	205	209	1	He	245.593	245.593	1.99	8359097	0.00	5000	
Pb	208	209	1	He	1006.200	1006.200	0.60	44543761	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1583455	0.67	2077022	76.24	30	120	
Sc	45	1	He	686194	0.86	817536	83.93	30	120	
Sc	45	2	NoGas	5174620	1.06	5970055	86.68	30	120	
Rh	103	1	He	1992105	0.41	2327919	85.57	30	120	
In	115	1	He	1063464	0.75	1305098	81.49	30	120	
Tb	159	1	He	3588796	0.85	3765959	95.30	30	120	
Ho	165	1	He	3689605	1.46	3748206	98.44	30	120	
Bi	209	1	He	2518513	0.58	2822318	89.24	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-2-e ms@10
Data File Name	045SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:33:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	102.412	102.412	1.71	481020	0.02	10000	
B	11	45	2	NoGas	20.781	20.781	1.11	80114	0.03	300	
Na	23	45	1	He	160792.749	160792.749	1.85	275299471	0.06	500000	
Mg	24	45	1	He	2861.838	2861.838	2.09	2764569	0.10	500000	
Al	27	45	1	He	1016.463	1016.463	1.70	521481	0.19	200000	
K	39	45	1	He	1152.625	1152.625	1.99	976381	0.12	500000	
Ca	44	45	1	He	136784.647	136784.647	0.70	6036487	2.27	500000	
Ti	47	45	1	He	11.389	11.389	2.88	2885	0.39	2500	
V	51	45	1	He	126.673	126.673	1.04	799526	0.02	10000	
Cr	52	45	1	He	105.667	105.667	0.98	817076	0.01	10000	
Mn	55	45	1	He	201.940	201.940	0.62	1197965	0.02	10000	
Fe	56	45	1	He	1061.168	1061.168	1.99	7743211	0.01	200000	
Co	59	103	1	He	97.337	97.337	1.27	1169684	0.01	10000	
Ni	60	103	1	He	96.956	96.956	1.36	288806	0.03	10000	
Cu	63	103	1	He	96.841	96.841	1.48	762781	0.01	10000	
Zn	66	103	1	He	95.905	95.905	0.92	149640	0.06	10000	
As	75	103	1	He	98.910	98.910	0.66	94117	0.11	10000	
Se	78	103	1	He	94.631	94.631	0.99	9580	0.99	10000	
Sr	88	103	1	He	2747.784	2747.784	0.85	19732189	0.01	10000	
Mo	95	103	1	He	13.403	13.403	2.20	47101	0.03	2000	
Ag	107	103	1	He	10.165	10.165	1.12	123281	0.01	300	
Cd	111	103	1	He	99.892	99.892	0.89	206887	0.05	4000	
Sn	118	115	1	He	110.189	110.189	0.45	528053	0.02	2000	
Sb	123	115	1	He	11.708	11.708	2.08	51391	0.02	300	
Ba	137	115	1	He	104.553	104.553	1.05	217956	0.05	10000	
W	182	209	1	He	12.087	12.087	2.02	177977	0.01	2500	
Tl	205	209	1	He	23.856	23.856	0.86	823510	0.00	5000	
Pb	208	209	1	He	103.705	103.705	0.51	4657031	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1580664	0.29	2077022	76.10	30	120	
Sc	45	1	He	706994	3.23	817536	86.48	30	120	
Sc	45	2	NoGas	4935278	0.99	5970055	82.67	30	120	
Rh	103	1	He	2044245	1.26	2327919	87.81	30	120	
In	115	1	He	1128272	2.06	1305098	86.45	30	120	
Tb	159	1	He	3628204	2.13	3765959	96.34	30	120	
Ho	165	1	He	3693446	1.62	3748206	98.54	30	120	
Bi	209	1	He	2554496	1.65	2822318	90.51	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-2-f msd@10
Data File Name	046SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:37:32-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	94.981	94.981	2.79	444881	0.02	10000	
B	11	45	2	NoGas	18.843	18.843	4.07	76368	0.02	300	
Na	23	45	1	He	158084.645	158084.645	1.87	260767501	0.06	500000	
Mg	24	45	1	He	2819.802	2819.802	1.82	2624438	0.11	500000	
Al	27	45	1	He	975.529	975.529	0.77	482560	0.20	200000	
K	39	45	1	He	1095.797	1095.797	1.20	895950	0.12	500000	
Ca	44	45	1	He	131535.211	131535.211	0.10	5592236	2.35	500000	
Ti	47	45	1	He	10.431	10.431	8.87	2542	0.41	2500	
V	51	45	1	He	121.090	121.090	0.80	736340	0.02	10000	
Cr	52	45	1	He	100.958	100.958	0.53	752208	0.01	10000	
Mn	55	45	1	He	195.751	195.751	0.87	1118635	0.02	10000	
Fe	56	45	1	He	1020.870	1020.870	1.00	7178231	0.01	200000	
Co	59	103	1	He	90.823	90.823	1.52	1078530	0.01	10000	
Ni	60	103	1	He	90.582	90.582	1.05	266651	0.03	10000	
Cu	63	103	1	He	90.533	90.533	2.03	704855	0.01	10000	
Zn	66	103	1	He	91.061	91.061	1.50	140511	0.06	10000	
As	75	103	1	He	92.191	92.191	1.77	86697	0.11	10000	
Se	78	103	1	He	90.275	90.275	0.85	9034	1.00	10000	
Sr	88	103	1	He	2600.512	2600.512	2.34	18455144	0.01	10000	
Mo	95	103	1	He	11.129	11.129	1.05	38656	0.03	2000	
Ag	107	103	1	He	9.422	9.422	1.87	112924	0.01	300	
Cd	111	103	1	He	94.424	94.424	1.26	193319	0.05	4000	
Sn	118	115	1	He	99.914	99.914	0.77	468879	0.02	2000	
Sb	123	115	1	He	10.432	10.432	1.69	44849	0.02	300	
Ba	137	115	1	He	98.760	98.760	0.89	201599	0.05	10000	
W	182	209	1	He	10.244	10.244	2.04	148264	0.01	2500	
Tl	205	209	1	He	22.774	22.774	0.90	770094	0.00	5000	
Pb	208	209	1	He	99.395	99.395	1.24	4372066	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1576772	1.51	2077022	75.92	30	120	
Sc	45	1	He	681008	1.54	817536	83.30	30	120	
Sc	45	2	NoGas	5156589	0.47	5970055	86.37	30	120	
Rh	103	1	He	2020494	0.81	2327919	86.79	30	120	
In	115	1	He	1104905	0.58	1305098	84.66	30	120	
Tb	159	1	He	3579790	1.21	3765959	95.06	30	120	
Ho	165	1	He	3649373	0.26	3748206	97.36	30	120	
Bi	209	1	He	2502130	0.52	2822318	88.66	30	120	

Sample Report

Sample Table

Sample Name	680-111445-a-2-f@10
Data File Name	047SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:41:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.061	0.061	23.99	337	0.02	10000	
B	11	45	2	NoGas	30.741	30.741	1.48	126161	0.02	300	
Na	23	45	1	He	161516.159	161516.159	0.93	274823959	0.06	500000	
Mg	24	45	1	He	2002.777	2002.777	1.95	1922913	0.10	500000	
Al	27	45	1	He	-2.942	-2.942	-13.15	7263	-0.04	200000	
K	39	45	1	He	151.233	151.233	1.10	155975	0.10	500000	
Ca	44	45	1	He	132705.592	132705.592	0.36	5818741	2.28	500000	
Ti	47	45	1	He	0.584	0.584	31.00	157	0.37	2500	
V	51	45	1	He	7.170	7.170	1.75	45494	0.02	10000	
Cr	52	45	1	He	0.253	0.253	5.55	4209	0.01	10000	
Mn	55	45	1	He	517.904	517.904	1.39	3051898	0.02	10000	
Fe	56	45	1	He	1.869	1.869	7.45	25110	0.01	200000	
Co	59	103	1	He	0.430	0.430	4.39	5166	0.01	10000	
Ni	60	103	1	He	1.096	1.096	3.33	3321	0.03	10000	
Cu	63	103	1	He	0.588	0.588	5.92	7459	0.01	10000	
Zn	66	103	1	He	2.510	2.510	1.74	5694	0.04	10000	
As	75	103	1	He	0.457	0.457	4.12	514	0.09	10000	
Se	78	103	1	He	0.361	0.361	24.34	69	0.53	10000	
Sr	88	103	1	He	2934.214	2934.214	1.04	20930932	0.01	10000	
Mo	95	103	1	He	0.836	0.836	9.50	2969	0.03	2000	
Ag	107	103	1	He	0.025	0.025	1.42	314	0.01	300	
Cd	111	103	1	He	0.060	0.060	40.53	1151	0.01	4000	
Sn	118	115	1	He	1.697	1.697	3.61	8373	0.02	2000	
Sb	123	115	1	He	0.182	0.182	3.61	952	0.02	300	
Ba	137	115	1	He	1.549	1.549	5.79	3253	0.05	10000	
W	182	209	1	He	0.485	0.485	4.06	10400	0.00	2500	
Tl	205	209	1	He	0.035	0.035	20.56	1210	0.00	5000	
Pb	208	209	1	He	0.113	0.113	7.37	5562	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1649855	1.45	2077022	79.43	30	120	
Sc	45	1	He	702339	0.26	817536	85.91	30	120	
Sc	45	2	NoGas	5355261	1.56	5970055	89.70	30	120	
Rh	103	1	He	2030808	0.91	2327919	87.24	30	120	
In	115	1	He	1125418	0.59	1305098	86.23	30	120	
Tb	159	1	He	3605737	0.82	3765959	95.75	30	120	
Ho	165	1	He	3694893	0.67	3748206	98.58	30	120	
Bi	209	1	He	2539810	0.63	2822318	89.99	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	048_CCV.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:45:04-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.830	5.233	233045	1.91	50	93.7	89.5	110.5	
B	11	45	2	NoGas	50.438	1.246	200836	0.07	50	100.9	89.5	110.5	
Na	23	45	1	He	26477.611	1.149	44408030	1.28	25000	105.9	89.5	110.5	
Mg	24	45	1	He	26354.725	0.811	24928818	0.84	25000	105.4	89.5	110.5	
Al	27	45	1	He	243.869	1.043	129064	1.06	250	97.5	89.5	110.5	
K	39	45	1	He	25694.849	0.960	20623557	1.05	25000	102.8	89.5	110.5	
Ca	44	45	1	He	25301.958	0.389	1093715	0.51	25000	101.2	89.5	110.5	
Ti	47	45	1	He	53.996	3.073	13344	2.95	50	108.0	89.5	110.5	
V	51	45	1	He	52.273	0.734	323372	0.83	50	104.5	89.5	110.5	
Cr	52	45	1	He	53.023	0.354	402555	0.24	50	106.0	89.5	110.5	
Mn	55	45	1	He	272.587	2.481	1583068	2.60	250	109.0	89.5	110.5	
Fe	56	45	1	He	13397.243	1.264	95604983	1.21	12500	107.2	89.5	110.5	
Co	59	103	1	He	46.840	1.074	573630	0.62	50	93.7	89.5	110.5	
Ni	60	103	1	He	47.117	1.346	143068	0.78	50	94.2	89.5	110.5	
Cu	63	103	1	He	47.715	1.108	384502	0.43	50	95.4	89.5	110.5	
Zn	66	103	1	He	47.159	2.110	75950	0.79	50	94.3	89.5	110.5	
As	75	103	1	He	46.604	0.960	45239	0.69	50	93.2	89.5	110.5	
Se	78	103	1	He	45.832	1.855	4746	1.59	50	91.7	89.5	110.5	
Sr	88	103	1	He	46.815	1.191	342816	0.08	50	93.6	89.5	110.5	
Mo	95	103	1	He	50.840	0.833	181932	1.90	50	101.7	89.5	110.5	
Ag	107	103	1	He	50.557	1.561	624751	0.35	50	101.1	89.5	110.5	
Cd	111	103	1	He	50.441	1.464	106985	0.40	50	100.9	89.5	110.5	
Sn	118	115	1	He	51.644	1.115	246673	0.22	50	103.3	89.5	110.5	
Sb	123	115	1	He	54.084	0.662	235860	0.45	50	108.2	89.5	110.5	
Ba	137	115	1	He	51.583	1.788	107126	0.75	50	103.2	89.5	110.5	
W	182	209	1	He	48.502	0.916	729475	1.85	50	97.0	89.5	110.5	
Tl	205	209	1	He	51.181	1.158	1831479	1.43	50	102.4	89.5	110.5	
Pb	208	209	1	He	48.678	1.818	2265902	0.55	50	97.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1676624	3.43	2077022	80.72	30	120	
Sc	45	1	He	692091	0.13	817536	84.66	30	120	
Sc	45	2	NoGas	5279077	1.27	5970055	88.43	30	120	
Rh	103	1	He	2083652	1.26	2327919	89.51	30	120	
In	115	1	He	1124050	1.10	1305098	86.13	30	120	
Tb	159	1	He	3606972	0.63	3765959	95.78	30	120	
Ho	165	1	He	3642408	0.27	3748206	97.18	30	120	
Bi	209	1	He	2648036	1.69	2822318	93.82	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	049_CCB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:48:51-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.055	26.6	319	23.7	1	
B	11	45	2	NoGas	2.722	4.0	15956	1.6	20	
Na	23	45	1	He	70.983	2.9	136585	2.2	400	
Mg	24	45	1	He	1.532	28.0	1922	21.1	1000	
Al	27	45	1	He	-1.046	-96.1	8258	6.4	50	
K	39	45	1	He	13.045	8.4	43824	1.9	1000	
Ca	44	45	1	He	7.120	22.7	931	7.5	1000	
Ti	47	45	1	He	0.430	10.2	119	9.0	20	
V	51	45	1	He	-0.034	-59.4	352	35.8	2	
Cr	52	45	1	He	-0.023	-52.6	2109	4.1	2	
Mn	55	45	1	He	0.137	20.4	1217	13.2	2	
Fe	56	45	1	He	9.444	25.0	80341	21.0	50	
Co	59	103	1	He	0.008	25.7	141	19.2	1	
Ni	60	103	1	He	0.003	167.6	100	17.6	2	
Cu	63	103	1	He	0.004	350.8	3194	3.2	2	
Zn	66	103	1	He	-0.173	-13.0	1746	1.7	20	
As	75	103	1	He	0.216	5.7	315	3.5	2	
Se	78	103	1	He	0.128	28.5	50	7.5	2	
Sr	88	103	1	He	0.079	11.3	824	9.0	10	
Mo	95	103	1	He	0.889	19.4	3462	18.7	2	
Ag	107	103	1	He	0.014	21.4	210	19.2	0.2	
Cd	111	103	1	He	-0.007	-397.0	1116	5.6	0.2	
Sn	118	115	1	He	0.784	4.0	4282	3.4	10	
Sb	123	115	1	He	0.302	9.5	1576	8.2	1	
Ba	137	115	1	He	0.016	20.4	71	10.8	5	
W	182	209	1	He	0.897	13.5	18178	9.6	10	
Tl	205	209	1	He	0.027	20.5	1063	18.9	0.5	
Pb	208	209	1	He	0.046	11.2	2856	7.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1710168	1.12	2077022	82.34	30	120	
Sc	45	1	He	706060	0.42	817536	86.36	30	120	
Sc	45	2	NoGas	5408612	1.66	5970055	90.60	30	120	
Rh	103	1	He	2232620	0.57	2327919	95.91	30	120	
In	115	1	He	1200631	0.37	1305098	92.00	30	120	
Tb	159	1	He	3702692	0.19	3765959	98.32	30	120	
Ho	165	1	He	3794848	0.89	3748206	101.24	30	120	
Bi	209	1	He	2829877	1.57	2822318	100.27	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	050CRIA.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:52:40-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.936	0.936	7.576	4879	8.11	1	93.6	69.5	130.5	
B	11	2	NoGas	20.452	20.452	1.161	87010	0.47	20	102.3	69.5	130.5	
Na	23	1	He	1185.908	1185.908	0.530	2112479	1.17	1000	118.6	69.5	130.5	
Mg	24	1	He	1098.539	1098.539	0.239	1096220	0.88	1000	109.9	69.5	130.5	
Al	27	1	He	38.115	38.115	2.232	28935	2.42	50	76.2	69.5	130.5	
K	39	1	He	1065.504	1065.504	0.798	934686	0.78	1000	106.6	69.5	130.5	
Ca	44	1	He	1037.378	1037.378	0.822	47901	1.40	1000	103.7	69.5	130.5	
Ti	47	1	He	10.908	10.908	3.581	2851	3.59	10	109.1	69.5	130.5	
V	51	1	He	5.428	5.428	2.553	35937	3.51	5	108.6	69.5	130.5	
Cr	52	1	He	2.159	2.159	4.033	19552	3.93	2	108.0	69.5	130.5	
Mn	55	1	He	5.436	5.436	1.015	33703	1.39	5	108.7	69.5	130.5	
Fe	56	1	He	109.780	109.780	0.750	838105	1.48	100	109.8	69.5	130.5	
Co	59	1	He	0.979	0.979	2.489	13130	1.30	1	97.9	69.5	130.5	
Ni	60	1	He	1.927	1.927	3.694	6477	2.96	2	96.4	69.5	130.5	
Cu	63	1	He	1.877	1.877	3.889	19604	2.71	2	93.8	69.5	130.5	
Zn	66	1	He	18.964	18.964	3.191	34588	1.58	20	94.8	69.5	130.5	
As	75	1	He	4.637	4.637	1.158	4998	0.32	5	92.7	69.5	130.5	
Se	78	1	He	4.537	4.537	5.348	546	5.95	5	90.7	69.5	130.5	
Sr	88	1	He	9.126	9.126	2.971	73139	2.13	10	91.3	69.5	130.5	
Mo	95	1	He	10.080	10.080	0.387	39434	1.18	10	100.8	69.5	130.5	
Ag	107	1	He	1.061	1.061	1.470	14342	0.73	1	106.1	69.5	130.5	
Cd	111	1	He	1.006	1.006	4.193	3459	1.66	1	100.6	69.5	130.5	
Sn	118	1	He	10.797	10.797	0.638	55707	1.65	10	108.0	69.5	130.5	
Sb	123	1	He	2.052	2.052	1.748	9790	0.54	2	102.6	69.5	130.5	
Ba	137	1	He	4.904	4.904	0.581	10987	1.63	5	98.1	69.5	130.5	
W	182	1	He	9.389	9.389	2.410	152823	1.58	10	93.9	69.5	130.5	
Tl	205	1	He	1.902	1.902	1.276	72196	0.59	2	95.1	69.5	130.5	
Pb	208	1	He	1.060	1.060	0.583	52907	1.26	1	106.0	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1738704	0.62	2077022	83.71	30	120	
Sc	45	1	He	729849	1.03	817536	89.27	30	120	
Sc	45	2	NoGas	5441334	1.20	5970055	91.14	30	120	
Rh	103	1	He	2275337	1.46	2327919	97.74	30	120	
In	115	1	He	1209061	1.17	1305098	92.64	30	120	
Tb	159	1	He	3689416	1.08	3765959	97.97	30	120	
Ho	165	1	He	3730948	1.08	3748206	99.54	30	120	
Bi	209	1	He	2808519	0.89	2822318	99.51	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	051SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:56:32-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2080.192	2080.192	2.68	9402252	0.02	10000	
B	11	45	2	NoGas	217.520	217.520	0.64	780745	0.03	300	
Na	23	45	1	He	21634.666	21634.666	2.73	35602431	0.06	500000	
Mg	24	45	1	He	21499.274	21499.274	1.87	19955558	0.11	500000	
Al	27	45	1	He	20592.467	20592.467	2.70	9988223	0.21	200000	
K	39	45	1	He	20925.707	20925.707	1.61	16488108	0.13	500000	
Ca	44	45	1	He	19521.974	19521.974	1.25	828317	2.36	500000	
Ti	47	45	1	He	207.491	207.491	3.83	50268	0.41	2500	
V	51	45	1	He	2067.156	2067.156	3.78	12522755	0.02	10000	
Cr	52	45	1	He	2123.673	2123.673	2.20	15734652	0.01	10000	
Mn	55	45	1	He	2094.702	2094.702	1.50	11935579	0.02	10000	
Fe	56	45	1	He	21700.310	21700.310	2.45	151934590	0.01	200000	
Co	59	103	1	He	1896.980	1896.980	0.19	22740633	0.01	10000	
Ni	60	103	1	He	1926.618	1926.618	1.97	5722100	0.03	10000	
Cu	63	103	1	He	1931.593	1931.593	0.63	15122485	0.01	10000	
Zn	66	103	1	He	1994.012	1994.012	1.14	3066881	0.07	10000	
As	75	103	1	He	1927.662	1927.662	0.21	1828411	0.11	10000	
Se	78	103	1	He	1784.307	1784.307	0.86	179612	0.99	10000	
Sr	88	103	1	He	1946.643	1946.643	0.61	13946357	0.01	10000	
Mo	95	103	1	He	202.629	202.629	3.71	709211	0.03	2000	
Ag	107	103	1	He	211.570	211.570	1.83	2558791	0.01	300	
Cd	111	103	1	He	2123.604	2123.604	1.17	4366226	0.05	4000	
Sn	118	115	1	He	2340.427	2340.427	1.25	10331284	0.02	2000	>LDR
Sb	123	115	1	He	229.401	229.401	0.11	924992	0.02	300	
Ba	137	115	1	He	2321.740	2321.740	0.87	4459409	0.05	10000	
W	182	209	1	He	216.155	216.155	1.35	3143395	0.01	2500	
Tl	205	209	1	He	502.939	502.939	1.16	17469459	0.00	5000	
Pb	208	209	1	He	2082.785	2082.785	0.30	94105871	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1521600	1.35	2077022	73.26	30	120	
Sc	45	1	He	679411	3.22	817536	83.10	30	120	
Sc	45	2	NoGas	4851051	1.13	5970055	81.26	30	120	
Rh	103	1	He	2039625	2.30	2327919	87.62	30	120	
In	115	1	He	1039794	0.81	1305098	79.67	30	120	
Tb	159	1	He	3493330	0.72	3765959	92.76	30	120	
Ho	165	1	He	3556576	0.67	3748206	94.89	30	120	
Bi	209	1	He	2570391	0.95	2822318	91.07	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-2-j@50
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T20:59:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.298	0.298	12.96	1389	0.02	10000	
B	11	45	2	NoGas	4.145	4.145	6.18	19044	0.02	300	
Na	23	45	1	He	52.065	52.065	1.69	94170	0.06	500000	
Mg	24	45	1	He	320.463	320.463	0.95	279798	0.11	500000	
Al	27	45	1	He	2130.630	2130.630	0.60	977913	0.22	200000	
K	39	45	1	He	109.671	109.671	0.88	110962	0.10	500000	
Ca	44	45	1	He	437.302	437.302	0.89	17970	2.43	500000	
Ti	47	45	1	He	14.951	14.951	3.50	3413	0.44	2500	
V	51	45	1	He	4.652	4.652	4.86	26988	0.02	10000	
Cr	52	45	1	He	3.360	3.360	2.84	25440	0.01	10000	
Mn	55	45	1	He	84.007	84.007	0.70	449906	0.02	10000	
Fe	56	45	1	He	4010.912	4010.912	0.95	26387873	0.02	200000	
Co	59	103	1	He	1.288	1.288	2.70	15592	0.01	10000	
Ni	60	103	1	He	7.631	7.631	1.61	22919	0.03	10000	
Cu	63	103	1	He	2.545	2.545	4.27	22978	0.01	10000	
Zn	66	103	1	He	10.825	10.825	2.10	18634	0.06	10000	
As	75	103	1	He	3.315	3.315	5.30	3251	0.10	10000	
Se	78	103	1	He	1.748	1.748	8.83	210	0.83	10000	
Sr	88	103	1	He	1.400	1.400	3.84	10296	0.01	10000	
Mo	95	103	1	He	3.677	3.677	18.66	13034	0.03	2000	
Ag	107	103	1	He	0.035	0.035	32.34	450	0.01	300	
Cd	111	103	1	He	0.140	0.140	30.26	1333	0.01	4000	
Sn	118	115	1	He	10.619	10.619	11.11	49459	0.02	2000	
Sb	123	115	1	He	0.468	0.468	9.88	2135	0.02	300	
Ba	137	115	1	He	10.125	10.125	0.91	20446	0.05	10000	
W	182	209	1	He	3.084	3.084	17.04	49980	0.01	2500	
Tl	205	209	1	He	0.288	0.288	31.25	10363	0.00	5000	
Pb	208	209	1	He	3.478	3.478	1.84	163230	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1529935	2.01	2077022	73.66	30	120	
Sc	45	1	He	637903	0.69	817536	78.03	30	120	
Sc	45	2	NoGas	4763050	0.96	5970055	79.78	30	120	
Rh	103	1	He	2054358	0.99	2327919	88.25	30	120	
In	115	1	He	1091498	0.31	1305098	83.63	30	120	
Tb	159	1	He	3437225	0.64	3765959	91.27	30	120	
Ho	165	1	He	3527924	0.56	3748206	94.12	30	120	
Bi	209	1	He	2660928	0.63	2822318	94.28	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49071-a-2-j@250
Data File Name	053SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:03:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.133	0.133	17.42	648	0.02	10000	
B	11	45	2	NoGas	2.661	2.661	1.67	14139	0.02	300	
Na	23	45	1	He	41.598	41.598	0.87	79944	0.05	500000	
Mg	24	45	1	He	61.898	61.898	1.95	55719	0.11	500000	
Al	27	45	1	He	396.654	396.654	1.03	193211	0.21	200000	
K	39	45	1	He	27.518	27.518	7.07	51537	0.05	500000	
Ca	44	45	1	He	77.914	77.914	3.50	3751	2.08	500000	
Ti	47	45	1	He	3.083	3.083	6.98	729	0.42	2500	
V	51	45	1	He	0.875	0.875	5.03	5625	0.02	10000	
Cr	52	45	1	He	0.598	0.598	2.67	6382	0.01	10000	
Mn	55	45	1	He	15.800	15.800	1.56	87031	0.02	10000	
Fe	56	45	1	He	766.176	766.176	1.42	5175257	0.01	200000	
Co	59	103	1	He	0.242	0.242	5.26	2973	0.01	10000	
Ni	60	103	1	He	1.437	1.437	5.51	4403	0.03	10000	
Cu	63	103	1	He	0.554	0.554	3.29	7309	0.01	10000	
Zn	66	103	1	He	1.429	1.429	7.93	4104	0.03	10000	
As	75	103	1	He	0.763	0.763	3.51	816	0.09	10000	
Se	78	103	1	He	0.396	0.396	18.71	73	0.54	10000	
Sr	88	103	1	He	0.284	0.284	1.30	2251	0.01	10000	
Mo	95	103	1	He	0.659	0.659	1.29	2387	0.03	2000	
Ag	107	103	1	He	0.010	0.010	17.98	143	0.01	300	
Cd	111	103	1	He	0.031	0.031	35.23	1110	0.00	4000	
Sn	118	115	1	He	2.442	2.442	3.28	11745	0.02	2000	
Sb	123	115	1	He	0.112	0.112	3.53	637	0.02	300	
Ba	137	115	1	He	1.938	1.938	3.36	3996	0.05	10000	
W	182	209	1	He	0.598	0.598	3.29	12654	0.00	2500	
Tl	205	209	1	He	0.048	0.048	9.04	1748	0.00	5000	
Pb	208	209	1	He	0.700	0.700	1.96	33419	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1548215	1.42	2077022	74.54	30	120	
Sc	45	1	He	653804	0.51	817536	79.97	30	120	
Sc	45	2	NoGas	4866192	1.98	5970055	81.51	30	120	
Rh	103	1	He	2063590	0.90	2327919	88.65	30	120	
In	115	1	He	1107607	0.24	1305098	84.87	30	120	
Tb	159	1	He	3459289	0.68	3765959	91.86	30	120	
Ho	165	1	He	3523149	1.05	3748206	94.00	30	120	
Bi	209	1	He	2670981	0.63	2822318	94.64	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49071-a-2-j@50
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:07:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	996.559	996.559	1.85	4676121	0.02	10000	
B	11	45	2	NoGas	110.087	110.087	1.43	413799	0.03	300	
Na	23	45	1	He	10394.441	10394.441	2.97	17663912	0.06	500000	
Mg	24	45	1	He	10628.053	10628.053	3.50	10179880	0.10	500000	
Al	27	45	1	He	11884.972	11884.972	2.29	5954528	0.20	200000	
K	39	45	1	He	10148.175	10148.175	2.44	8269349	0.12	500000	
Ca	44	45	1	He	9792.294	9792.294	1.74	429138	2.28	500000	
Ti	47	45	1	He	113.009	113.009	2.44	28274	0.40	2500	
V	51	45	1	He	1034.716	1034.716	3.24	6471357	0.02	10000	
Cr	52	45	1	He	1041.484	1041.484	3.00	7965286	0.01	10000	
Mn	55	45	1	He	1092.958	1092.958	3.38	6426204	0.02	10000	
Fe	56	45	1	He	14252.287	14252.287	2.53	103005729	0.01	200000	
Co	59	103	1	He	948.883	948.883	0.61	11508827	0.01	10000	
Ni	60	103	1	He	996.198	996.198	1.07	2994237	0.03	10000	
Cu	63	103	1	He	971.129	971.129	0.50	7694190	0.01	10000	
Zn	66	103	1	He	1036.029	1036.029	1.08	1613190	0.06	10000	
As	75	103	1	He	917.242	917.242	0.69	880272	0.10	10000	
Se	78	103	1	He	911.351	911.351	0.61	92841	0.98	10000	
Sr	88	103	1	He	974.889	974.889	1.34	7066645	0.01	10000	
Mo	95	103	1	He	100.700	100.700	2.58	356800	0.03	2000	
Ag	107	103	1	He	101.339	101.339	0.22	1240326	0.01	300	
Cd	111	103	1	He	1062.465	1062.465	0.42	2211016	0.05	4000	
Sn	118	115	1	He	1133.653	1133.653	0.73	5221650	0.02	2000	
Sb	123	115	1	He	106.841	106.841	0.25	449620	0.02	300	
Ba	137	115	1	He	1154.113	1154.113	0.50	2313189	0.05	10000	
W	182	209	1	He	94.364	94.364	2.39	1417215	0.01	2500	
Tl	205	209	1	He	246.563	246.563	1.47	8832685	0.00	5000	
Pb	208	209	1	He	1024.510	1024.510	1.46	47736824	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1579412	1.44	2077022	76.04	30	120	
Sc	45	1	He	701267	2.83	817536	85.78	30	120	
Sc	45	2	NoGas	5051479	0.80	5970055	84.61	30	120	
Rh	103	1	He	2063549	0.51	2327919	88.64	30	120	
In	115	1	He	1085018	0.57	1305098	83.14	30	120	
Tb	159	1	He	3586073	1.11	3765959	95.22	30	120	
Ho	165	1	He	3618318	0.76	3748206	96.53	30	120	
Bi	209	1	He	2651098	1.33	2822318	93.93	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-2-k du@50
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:11:13-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.234	0.234	10.15	1141	0.02	10000	
B	11	45	2	NoGas	3.653	3.653	3.37	18091	0.02	300	
Na	23	45	1	He	40.888	40.888	2.72	81045	0.05	500000	
Mg	24	45	1	He	308.077	308.077	1.27	283483	0.11	500000	
Al	27	45	1	He	2092.731	2092.731	0.53	1012419	0.21	200000	
K	39	45	1	He	104.040	104.040	0.99	112560	0.09	500000	
Ca	44	45	1	He	200.284	200.284	3.11	8993	2.23	500000	
Ti	47	45	1	He	15.468	15.468	2.53	3720	0.42	2500	
V	51	45	1	He	4.397	4.397	2.75	26917	0.02	10000	
Cr	52	45	1	He	3.266	3.266	0.85	26123	0.01	10000	
Mn	55	45	1	He	70.774	70.774	0.21	399535	0.02	10000	
Fe	56	45	1	He	4061.856	4061.856	0.64	28164012	0.01	200000	
Co	59	103	1	He	1.113	1.113	1.51	13772	0.01	10000	
Ni	60	103	1	He	5.554	5.554	0.61	17070	0.03	10000	
Cu	63	103	1	He	2.173	2.173	2.42	20483	0.01	10000	
Zn	66	103	1	He	10.892	10.892	0.95	19156	0.06	10000	
As	75	103	1	He	2.936	2.936	0.42	2952	0.10	10000	
Se	78	103	1	He	1.245	1.245	5.56	163	0.77	10000	
Sr	88	103	1	He	0.836	0.836	1.55	6360	0.01	10000	
Mo	95	103	1	He	2.056	2.056	16.75	7475	0.03	2000	
Ag	107	103	1	He	0.025	0.025	17.74	330	0.01	300	
Cd	111	103	1	He	0.091	0.091	23.02	1257	0.01	4000	
Sn	118	115	1	He	7.597	7.597	9.88	36637	0.02	2000	
Sb	123	115	1	He	0.952	0.952	17.68	4320	0.02	300	
Ba	137	115	1	He	9.755	9.755	1.21	20357	0.05	10000	
W	182	209	1	He	1.903	1.903	10.03	33354	0.01	2500	
Tl	205	209	1	He	0.109	0.109	12.50	4067	0.00	5000	
Pb	208	209	1	He	3.376	3.376	1.22	163876	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1589094	1.37	2077022	76.51	30	120	
Sc	45	1	He	672274	0.14	817536	82.23	30	120	
Sc	45	2	NoGas	4975317	1.42	5970055	83.34	30	120	
Rh	103	1	He	2099827	1.10	2327919	90.20	30	120	
In	115	1	He	1127949	0.41	1305098	86.43	30	120	
Tb	159	1	He	3561138	0.84	3765959	94.56	30	120	
Ho	165	1	He	3598854	0.85	3748206	96.02	30	120	
Bi	209	1	He	2751857	1.27	2822318	97.50	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-2-I ms@50
Data File Name	056SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:15:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.039	2.039	5.19	9925	0.02	10000	
B	11	45	2	NoGas	4.340	4.340	1.70	20883	0.02	300	
Na	23	45	1	He	247.866	247.866	2.01	424572	0.06	500000	
Mg	24	45	1	He	569.217	569.217	2.05	531456	0.11	500000	
Al	27	45	1	He	2690.578	2690.578	1.87	1319238	0.20	200000	
K	39	45	1	He	306.581	306.581	1.04	274396	0.11	500000	
Ca	44	45	1	He	421.857	421.857	1.29	18574	2.27	500000	
Ti	47	45	1	He	19.821	19.821	3.21	4837	0.41	2500	
V	51	45	1	He	6.988	6.988	1.12	43111	0.02	10000	
Cr	52	45	1	He	5.533	5.533	1.23	43412	0.01	10000	
Mn	55	45	1	He	90.082	90.082	0.76	516286	0.02	10000	
Fe	56	45	1	He	4565.980	4565.980	0.61	32147523	0.01	200000	
Co	59	103	1	He	3.098	3.098	1.61	39050	0.01	10000	
Ni	60	103	1	He	8.323	8.323	0.60	26061	0.03	10000	
Cu	63	103	1	He	4.084	4.084	0.49	36623	0.01	10000	
Zn	66	103	1	He	14.271	14.271	2.62	25004	0.06	10000	
As	75	103	1	He	3.858	3.858	1.20	3931	0.10	10000	
Se	78	103	1	He	2.103	2.103	11.53	257	0.82	10000	
Sr	88	103	1	He	2.716	2.716	1.36	20639	0.01	10000	
Mo	95	103	1	He	2.533	2.533	1.23	9373	0.03	2000	
Ag	107	103	1	He	1.958	1.958	1.20	24905	0.01	300	
Cd	111	103	1	He	1.971	1.971	3.80	5342	0.04	4000	
Sn	118	115	1	He	4.392	4.392	2.94	21492	0.02	2000	
Sb	123	115	1	He	0.782	0.782	4.56	3613	0.02	300	
Ba	137	115	1	He	12.768	12.768	0.40	26881	0.05	10000	
W	182	209	1	He	1.788	1.788	2.81	31179	0.01	2500	
Tl	205	209	1	He	1.801	1.801	1.52	66261	0.00	5000	
Pb	208	209	1	He	5.486	5.486	0.63	262944	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1632388	2.58	2077022	78.59	30	120	
Sc	45	1	He	682694	1.02	817536	83.51	30	120	
Sc	45	2	NoGas	5042642	0.42	5970055	84.47	30	120	
Rh	103	1	He	2142803	0.82	2327919	92.05	30	120	
In	115	1	He	1138345	0.16	1305098	87.22	30	120	
Tb	159	1	He	3569810	0.59	3765959	94.79	30	120	
Ho	165	1	He	3629957	1.33	3748206	96.85	30	120	
Bi	209	1	He	2720918	0.72	2822318	96.41	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-3-b@50
Data File Name	057SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:18:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.179	0.179	13.09	889	0.02	10000	
B	11	45	2	NoGas	2.378	2.378	2.11	13583	0.02	300	
Na	23	45	1	He	37.939	37.939	1.49	77176	0.05	500000	
Mg	24	45	1	He	615.497	615.497	1.64	572853	0.11	500000	
Al	27	45	1	He	1999.639	1999.639	1.42	979586	0.20	200000	
K	39	45	1	He	149.775	149.775	0.98	149974	0.10	500000	
Ca	44	45	1	He	1115.411	1115.411	1.05	47977	2.32	500000	
Ti	47	45	1	He	16.847	16.847	2.80	4101	0.41	2500	
V	51	45	1	He	3.933	3.933	5.22	24423	0.02	10000	
Cr	52	45	1	He	3.827	3.827	0.61	30613	0.01	10000	
Mn	55	45	1	He	149.291	149.291	0.29	852657	0.02	10000	
Fe	56	45	1	He	4722.609	4722.609	2.22	33143980	0.01	200000	
Co	59	103	1	He	1.661	1.661	1.03	20715	0.01	10000	
Ni	60	103	1	He	4.168	4.168	1.39	12943	0.03	10000	
Cu	63	103	1	He	2.552	2.552	0.95	23742	0.01	10000	
Zn	66	103	1	He	11.689	11.689	1.72	20592	0.06	10000	
As	75	103	1	He	2.242	2.242	4.36	2293	0.10	10000	
Se	78	103	1	He	0.330	0.330	10.39	68	0.48	10000	
Sr	88	103	1	He	2.060	2.060	3.24	15518	0.01	10000	
Mo	95	103	1	He	0.409	0.409	7.70	1539	0.03	2000	
Ag	107	103	1	He	0.014	0.014	36.78	193	0.01	300	
Cd	111	103	1	He	0.009	0.009	134.72	1094	0.00	4000	
Sn	118	115	1	He	1.859	1.859	6.07	9181	0.02	2000	
Sb	123	115	1	He	0.113	0.113	14.49	651	0.02	300	
Ba	137	115	1	He	11.433	11.433	0.77	23877	0.05	10000	
W	182	209	1	He	0.203	0.203	4.09	6772	0.00	2500	
Tl	205	209	1	He	0.043	0.043	8.35	1599	0.00	5000	
Pb	208	209	1	He	3.716	3.716	0.46	177291	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1596547	0.96	2077022	76.87	30	120	
Sc	45	1	He	680505	0.24	817536	83.24	30	120	
Sc	45	2	NoGas	5035599	1.07	5970055	84.35	30	120	
Rh	103	1	He	2117981	1.09	2327919	90.98	30	120	
In	115	1	He	1128963	0.39	1305098	86.50	30	120	
Tb	159	1	He	3545081	1.76	3765959	94.13	30	120	
Ho	165	1	He	3617859	0.80	3748206	96.52	30	120	
Bi	209	1	He	2706056	0.55	2822318	95.88	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-4-b@50
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:22:45-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.158	0.158	18.04	807	0.02	10000	
B	11	45	2	NoGas	2.144	2.144	9.30	12946	0.02	300	
Na	23	45	1	He	35.642	35.642	2.62	74071	0.05	500000	
Mg	24	45	1	He	642.716	642.716	2.20	603704	0.11	500000	
Al	27	45	1	He	2215.243	2215.243	1.53	1094387	0.20	200000	
K	39	45	1	He	178.373	178.373	2.16	174110	0.10	500000	
Ca	44	45	1	He	1479.698	1479.698	2.36	64037	2.31	500000	
Ti	47	45	1	He	16.651	16.651	2.64	4091	0.41	2500	
V	51	45	1	He	4.305	4.305	2.36	26931	0.02	10000	
Cr	52	45	1	He	4.177	4.177	1.66	33518	0.01	10000	
Mn	55	45	1	He	105.534	105.534	1.42	608466	0.02	10000	
Fe	56	45	1	He	5201.918	5201.918	2.04	36845304	0.01	200000	
Co	59	103	1	He	1.516	1.516	0.50	19300	0.01	10000	
Ni	60	103	1	He	4.214	4.214	2.58	13360	0.03	10000	
Cu	63	103	1	He	3.259	3.259	1.43	30111	0.01	10000	
Zn	66	103	1	He	12.889	12.889	0.85	22984	0.06	10000	
As	75	103	1	He	2.501	2.501	0.43	2603	0.10	10000	
Se	78	103	1	He	0.258	0.258	21.94	62	0.42	10000	
Sr	88	103	1	He	2.839	2.839	1.46	21767	0.01	10000	
Mo	95	103	1	He	0.353	0.353	1.28	1367	0.03	2000	
Ag	107	103	1	He	0.011	0.011	16.05	160	0.01	300	
Cd	111	103	1	He	0.000	0.000	24996.96	1097	0.00	4000	
Sn	118	115	1	He	1.555	1.555	2.70	7806	0.02	2000	
Sb	123	115	1	He	0.111	0.111	13.71	652	0.02	300	
Ba	137	115	1	He	12.571	12.571	1.46	26528	0.05	10000	
W	182	209	1	He	0.097	0.097	8.14	5194	0.00	2500	
Tl	205	209	1	He	0.041	0.041	4.13	1531	0.00	5000	
Pb	208	209	1	He	4.251	4.251	1.62	204372	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1633931	1.91	2077022	78.67	30	120	
Sc	45	1	He	686898	1.11	817536	84.02	30	120	
Sc	45	2	NoGas	5125005	0.34	5970055	85.85	30	120	
Rh	103	1	He	2162720	0.39	2327919	92.90	30	120	
In	115	1	He	1140969	0.49	1305098	87.42	30	120	
Tb	159	1	He	3542708	0.49	3765959	94.07	30	120	
Ho	165	1	He	3600371	0.59	3748206	96.06	30	120	
Bi	209	1	He	2727682	1.34	2822318	96.65	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-8-d@50
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:26:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.110	0.110	31.67	589	0.02	10000	
B	11	45	2	NoGas	2.319	2.319	7.80	13984	0.02	300	
Na	23	45	1	He	41.435	41.435	1.93	84709	0.05	500000	
Mg	24	45	1	He	844.296	844.296	0.62	802463	0.11	500000	
Al	27	45	1	He	1121.110	1121.110	1.32	564728	0.20	200000	
K	39	45	1	He	187.813	187.813	0.98	183796	0.10	500000	
Ca	44	45	1	He	975.887	975.887	1.19	42949	2.27	500000	
Ti	47	45	1	He	10.282	10.282	4.68	2560	0.40	2500	
V	51	45	1	He	2.030	2.030	4.78	13141	0.02	10000	
Cr	52	45	1	He	1.913	1.913	3.43	16747	0.01	10000	
Mn	55	45	1	He	79.062	79.062	1.54	461362	0.02	10000	
Fe	56	45	1	He	4839.491	4839.491	1.06	34689470	0.01	200000	
Co	59	103	1	He	1.464	1.464	2.14	18532	0.01	10000	
Ni	60	103	1	He	3.162	3.162	2.19	9988	0.03	10000	
Cu	63	103	1	He	3.609	3.609	1.18	32817	0.01	10000	
Zn	66	103	1	He	9.578	9.578	4.82	17481	0.05	10000	
As	75	103	1	He	4.011	4.011	2.54	4097	0.10	10000	
Se	78	103	1	He	0.200	0.200	19.17	56	0.36	10000	
Sr	88	103	1	He	1.801	1.801	2.78	13801	0.01	10000	
Mo	95	103	1	He	0.279	0.279	3.05	1086	0.03	2000	
Ag	107	103	1	He	0.006	0.006	8.03	100	0.01	300	
Cd	111	103	1	He	0.005	0.005	232.61	1102	0.00	4000	
Sn	118	115	1	He	1.337	1.337	5.89	6839	0.02	2000	
Sb	123	115	1	He	0.075	0.075	16.36	497	0.02	300	
Ba	137	115	1	He	5.546	5.546	2.37	11879	0.05	10000	
W	182	209	1	He	0.070	0.070	32.73	4860	0.00	2500	
Tl	205	209	1	He	0.027	0.027	5.23	1032	0.00	5000	
Pb	208	209	1	He	2.115	2.115	1.39	103725	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1672214	1.87	2077022	80.51	30	120	
Sc	45	1	He	695093	1.35	817536	85.02	30	120	
Sc	45	2	NoGas	5267839	0.37	5970055	88.24	30	120	
Rh	103	1	He	2149737	1.38	2327919	92.35	30	120	
In	115	1	He	1156135	0.48	1305098	88.59	30	120	
Tb	159	1	He	3597500	1.30	3765959	95.53	30	120	
Ho	165	1	He	3662097	0.35	3748206	97.70	30	120	
Bi	209	1	He	2775181	1.61	2822318	98.33	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	060_CCV.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:30:23-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.682	1.101	239534	1.93	50	93.4	89.5	110.5	
B	11	45	2	NoGas	49.880	2.640	204271	2.67	50	99.8	89.5	110.5	
Na	23	45	1	He	25771.721	2.877	46130311	1.61	25000	103.1	89.5	110.5	
Mg	24	45	1	He	25516.779	3.462	25754475	1.06	25000	102.1	89.5	110.5	
Al	27	45	1	He	238.007	3.343	134632	0.09	250	95.2	89.5	110.5	
K	39	45	1	He	25305.704	3.109	21675142	1.05	25000	101.2	89.5	110.5	
Ca	44	45	1	He	24674.409	2.309	1138349	0.81	25000	98.7	89.5	110.5	
Ti	47	45	1	He	52.269	5.093	13780	2.53	50	104.5	89.5	110.5	
V	51	45	1	He	51.469	2.319	339864	1.92	50	102.9	89.5	110.5	
Cr	52	45	1	He	51.750	2.015	419406	1.11	50	103.5	89.5	110.5	
Mn	55	45	1	He	250.743	2.674	1554360	2.45	250	100.3	89.5	110.5	
Fe	56	45	1	He	12962.182	2.622	98718003	0.71	12500	103.7	89.5	110.5	
Co	59	103	1	He	46.388	0.910	592103	0.52	50	92.8	89.5	110.5	
Ni	60	103	1	He	47.043	0.858	148885	0.71	50	94.1	89.5	110.5	
Cu	63	103	1	He	47.209	0.874	396537	0.58	50	94.4	89.5	110.5	
Zn	66	103	1	He	46.530	2.081	78135	1.66	50	93.1	89.5	110.5	
As	75	103	1	He	46.678	0.984	47225	0.59	50	93.4	89.5	110.5	
Se	78	103	1	He	45.421	3.035	4902	2.78	50	90.8	89.5	110.5	
Sr	88	103	1	He	46.159	0.810	352312	0.46	50	92.3	89.5	110.5	
Mo	95	103	1	He	49.811	1.124	185772	1.48	50	99.6	89.5	110.5	
Ag	107	103	1	He	49.500	0.709	637578	0.31	50	99.0	89.5	110.5	
Cd	111	103	1	He	49.683	0.927	109852	0.56	50	99.4	89.5	110.5	
Sn	118	115	1	He	51.160	0.607	251477	0.27	50	102.3	89.5	110.5	
Sb	123	115	1	He	53.651	0.631	240771	0.28	50	107.3	89.5	110.5	
Ba	137	115	1	He	51.372	0.735	109800	0.89	50	102.7	89.5	110.5	
W	182	209	1	He	49.221	1.520	734824	0.64	50	98.4	89.5	110.5	
Tl	205	209	1	He	50.332	2.459	1788067	2.18	50	100.7	89.5	110.5	
Pb	208	209	1	He	48.944	0.509	2262207	0.64	50	97.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1726698	1.50	2077022	83.13	30	120	
Sc	45	1	He	739005	3.15	817536	90.39	30	120	
Sc	45	2	NoGas	5427296	0.09	5970055	90.91	30	120	
Rh	103	1	He	2171592	0.40	2327919	93.28	30	120	
In	115	1	He	1156686	0.38	1305098	88.63	30	120	
Tb	159	1	He	3573640	2.41	3765959	94.89	30	120	
Ho	165	1	He	3703392	0.58	3748206	98.80	30	120	
Bi	209	1	He	2628936	1.14	2822318	93.15	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	061_CCB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:34:09-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.063	20.9	359	17.0	1	
B	11	45	2	NoGas	2.692	4.8	15922	4.4	20	
Na	23	45	1	He	29.154	0.9	66241	0.9	400	
Mg	24	45	1	He	1.608	22.6	2034	17.4	1000	
Al	27	45	1	He	-0.803	-17.4	8532	0.8	50	
K	39	45	1	He	11.238	6.9	43123	1.0	1000	
Ca	44	45	1	He	2.722	41.1	751	6.4	1000	
Ti	47	45	1	He	0.287	31.5	84	28.0	20	
V	51	45	1	He	-0.004	-787.3	552	33.9	2	
Cr	52	45	1	He	-0.003	-340.9	2302	3.5	2	
Mn	55	45	1	He	0.053	16.9	732	7.0	2	
Fe	56	45	1	He	12.406	24.6	103796	21.6	50	
Co	59	103	1	He	0.005	70.2	107	46.0	1	
Ni	60	103	1	He	0.011	38.1	129	11.7	2	
Cu	63	103	1	He	-0.165	-11.0	1781	9.0	2	
Zn	66	103	1	He	-0.219	-30.7	1702	6.6	20	
As	75	103	1	He	0.188	14.3	291	8.9	2	
Se	78	103	1	He	0.144	88.8	52	26.6	2	
Sr	88	103	1	He	0.006	83.4	257	13.7	10	
Mo	95	103	1	He	0.878	17.9	3487	16.6	2	
Ag	107	103	1	He	0.010	21.2	150	18.2	0.2	
Cd	111	103	1	He	-0.015	-116.1	1121	2.7	0.2	
Sn	118	115	1	He	0.829	6.2	4549	5.3	10	
Sb	123	115	1	He	0.274	13.1	1458	11.5	1	
Ba	137	115	1	He	0.017	45.1	72	23.7	5	
W	182	209	1	He	0.912	16.6	18308	13.4	10	
Tl	205	209	1	He	0.034	17.9	1312	17.9	0.5	
Pb	208	209	1	He	0.042	5.8	2627	5.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1708486	1.84	2077022	82.26	30	120	
Sc	45	1	He	719004	0.47	817536	87.95	30	120	
Sc	45	2	NoGas	5435288	1.16	5970055	91.04	30	120	
Rh	103	1	He	2277229	0.94	2327919	97.82	30	120	
In	115	1	He	1210900	0.51	1305098	92.78	30	120	
Tb	159	1	He	3693373	0.45	3765959	98.07	30	120	
Ho	165	1	He	3769583	0.43	3748206	100.57	30	120	
Bi	209	1	He	2810750	0.66	2822318	99.59	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-15-f@50
Data File Name	062SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:37:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.166	0.166	14.67	859	0.02	10000	
B	11	45	2	NoGas	2.380	2.380	2.55	14380	0.02	300	
Na	23	45	1	He	40.059	40.059	2.60	86492	0.05	500000	
Mg	24	45	1	He	1262.948	1262.948	1.41	1259797	0.10	500000	
Al	27	45	1	He	1776.970	1776.970	0.88	934381	0.19	200000	
K	39	45	1	He	276.617	276.617	0.75	267996	0.10	500000	
Ca	44	45	1	He	1468.864	1468.864	1.13	67545	2.17	500000	
Ti	47	45	1	He	13.255	13.255	4.46	3460	0.38	2500	
V	51	45	1	He	2.787	2.787	2.42	18735	0.01	10000	
Cr	52	45	1	He	2.837	2.837	3.24	24934	0.01	10000	
Mn	55	45	1	He	45.968	45.968	1.23	281774	0.02	10000	
Fe	56	45	1	He	5748.130	5748.130	0.89	43251982	0.01	200000	
Co	59	103	1	He	2.030	2.030	0.74	26240	0.01	10000	
Ni	60	103	1	He	4.729	4.729	0.64	15215	0.03	10000	
Cu	63	103	1	He	4.289	4.289	2.86	39256	0.01	10000	
Zn	66	103	1	He	12.380	12.380	0.19	22498	0.06	10000	
As	75	103	1	He	2.960	2.960	1.88	3112	0.10	10000	
Se	78	103	1	He	0.232	0.232	27.43	60	0.39	10000	
Sr	88	103	1	He	3.328	3.328	2.02	25879	0.01	10000	
Mo	95	103	1	He	0.368	0.368	12.22	1445	0.03	2000	
Ag	107	103	1	He	0.008	0.008	14.50	120	0.01	300	
Cd	111	103	1	He	0.000	0.000	-4529.15	1113	0.00	4000	
Sn	118	115	1	He	1.233	1.233	7.93	6513	0.02	2000	
Sb	123	115	1	He	0.108	0.108	11.05	667	0.02	300	
Ba	137	115	1	He	6.882	6.882	2.29	15160	0.05	10000	
W	182	209	1	He	0.157	0.157	11.11	6331	0.00	2500	
Tl	205	209	1	He	0.032	0.032	5.57	1237	0.00	5000	
Pb	208	209	1	He	2.309	2.309	1.01	115190	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1663062	2.29	2077022	80.07	30	120	
Sc	45	1	He	729698	1.51	817536	89.26	30	120	
Sc	45	2	NoGas	5327615	0.67	5970055	89.24	30	120	
Rh	103	1	He	2196254	0.44	2327919	94.34	30	120	
In	115	1	He	1189924	1.03	1305098	91.18	30	120	
Tb	159	1	He	3671283	1.81	3765959	97.49	30	120	
Ho	165	1	He	3727086	1.24	3748206	99.44	30	120	
Bi	209	1	He	2824539	1.27	2822318	100.08	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-22-d@50
Data File Name	063SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:41:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.143	0.143	14.29	767	0.02	10000	
B	11	45	2	NoGas	2.922	2.922	3.42	16567	0.02	300	
Na	23	45	1	He	38.140	38.140	2.60	83258	0.05	500000	
Mg	24	45	1	He	1326.157	1326.157	1.64	1325421	0.10	500000	
Al	27	45	1	He	2103.587	2103.587	0.99	1106540	0.19	200000	
K	39	45	1	He	355.071	355.071	2.15	334864	0.11	500000	
Ca	44	45	1	He	1234.451	1234.451	2.62	56964	2.17	500000	
Ti	47	45	1	He	14.222	14.222	0.78	3720	0.38	2500	
V	51	45	1	He	3.230	3.230	5.43	21659	0.01	10000	
Cr	52	45	1	He	3.371	3.371	0.56	29249	0.01	10000	
Mn	55	45	1	He	75.821	75.821	0.89	465395	0.02	10000	
Fe	56	45	1	He	6597.487	6597.487	0.93	49735247	0.01	200000	
Co	59	103	1	He	2.396	2.396	2.79	31174	0.01	10000	
Ni	60	103	1	He	5.906	5.906	0.89	19111	0.03	10000	
Cu	63	103	1	He	4.019	4.019	3.44	37239	0.01	10000	
Zn	66	103	1	He	13.080	13.080	0.86	23820	0.05	10000	
As	75	103	1	He	3.467	3.467	2.42	3655	0.09	10000	
Se	78	103	1	He	0.206	0.206	26.93	58	0.36	10000	
Sr	88	103	1	He	3.495	3.495	1.89	27357	0.01	10000	
Mo	95	103	1	He	0.303	0.303	4.82	1205	0.03	2000	
Ag	107	103	1	He	0.009	0.009	11.95	132	0.01	300	
Cd	111	103	1	He	0.006	0.006	428.74	1135	0.00	4000	
Sn	118	115	1	He	1.058	1.058	0.23	5590	0.02	2000	
Sb	123	115	1	He	0.063	0.063	2.67	457	0.01	300	
Ba	137	115	1	He	8.936	8.936	2.34	19545	0.05	10000	
W	182	209	1	He	0.082	0.082	29.78	5105	0.00	2500	
Tl	205	209	1	He	0.032	0.032	4.10	1232	0.00	5000	
Pb	208	209	1	He	2.553	2.553	2.34	126551	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1713824	2.17	2077022	82.51	30	120	
Sc	45	1	He	731055	0.94	817536	89.42	30	120	
Sc	45	2	NoGas	5347900	0.44	5970055	89.58	30	120	
Rh	103	1	He	2211486	0.92	2327919	95.00	30	120	
In	115	1	He	1181949	0.47	1305098	90.56	30	120	
Tb	159	1	He	3656492	1.46	3765959	97.09	30	120	
Ho	165	1	He	3715923	0.41	3748206	99.14	30	120	
Bi	209	1	He	2807383	1.57	2822318	99.47	30	120	

Sample Report

Sample Table

Sample Name	240-49171-b-19-a@50
Data File Name	064SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:45:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.066	0.066	26.81	382	0.02	10000	
B	11	45	2	NoGas	1.573	1.573	5.78	11474	0.01	300	
Na	23	45	1	He	25.654	25.654	2.28	59333	0.04	500000	
Mg	24	45	1	He	40.609	40.609	2.63	39807	0.10	500000	
Al	27	45	1	He	218.977	218.977	1.08	119664	0.18	200000	
K	39	45	1	He	45.599	45.599	2.90	70756	0.06	500000	
Ca	44	45	1	He	6.251	6.251	48.89	897	0.70	500000	
Ti	47	45	1	He	3.808	3.808	4.22	974	0.39	2500	
V	51	45	1	He	0.530	0.530	20.18	3916	0.01	10000	
Cr	52	45	1	He	0.494	0.494	1.62	6114	0.01	10000	
Mn	55	45	1	He	5.744	5.744	1.53	34584	0.02	10000	
Fe	56	45	1	He	708.784	708.784	0.69	5194664	0.01	200000	
Co	59	103	1	He	0.233	0.233	5.42	3076	0.01	10000	
Ni	60	103	1	He	0.648	0.648	4.90	2185	0.03	10000	
Cu	63	103	1	He	0.178	0.178	7.42	4657	0.00	10000	
Zn	66	103	1	He	5.230	5.230	1.14	10770	0.05	10000	
As	75	103	1	He	0.876	0.876	1.09	994	0.09	10000	
Se	78	103	1	He	0.021	0.021	404.73	38	0.06	10000	
Sr	88	103	1	He	0.240	0.240	2.76	2077	0.01	10000	
Mo	95	103	1	He	0.200	0.200	6.79	818	0.02	2000	
Ag	107	103	1	He	0.004	0.004	15.39	77	0.01	300	
Cd	111	103	1	He	0.007	0.007	148.99	1140	0.00	4000	
Sn	118	115	1	He	1.040	1.040	4.55	5535	0.02	2000	
Sb	123	115	1	He	0.049	0.049	10.79	393	0.01	300	
Ba	137	115	1	He	1.173	1.173	4.76	2611	0.04	10000	
W	182	209	1	He	0.079	0.079	31.39	5064	0.00	2500	
Tl	205	209	1	He	0.010	0.010	14.71	406	0.00	5000	
Pb	208	209	1	He	0.382	0.382	1.22	19402	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1739135	0.68	2077022	83.73	30	120	
Sc	45	1	He	709295	0.88	817536	86.76	30	120	
Sc	45	2	NoGas	5447844	0.62	5970055	91.25	30	120	
Rh	103	1	He	2218867	1.06	2327919	95.32	30	120	
In	115	1	He	1189363	0.36	1305098	91.13	30	120	
Tb	159	1	He	3654596	0.16	3765959	97.04	30	120	
Ho	165	1	He	3719576	0.59	3748206	99.24	30	120	
Bi	209	1	He	2806782	1.98	2822318	99.45	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-6-h@50
Data File Name	065SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:49:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.188	0.188	24.94	1033	0.02	10000	
B	11	45	2	NoGas	1.384	1.384	4.72	11019	0.01	300	
Na	23	45	1	He	27.380	27.380	4.48	66163	0.04	500000	
Mg	24	45	1	He	481.388	481.388	1.69	496054	0.10	500000	
Al	27	45	1	He	2855.530	2855.530	1.55	1544518	0.18	200000	
K	39	45	1	He	164.676	164.676	1.96	179019	0.09	500000	
Ca	44	45	1	He	28.860	28.860	8.02	2015	1.43	500000	
Ti	47	45	1	He	23.297	23.297	2.54	6272	0.37	2500	
V	51	45	1	He	5.707	5.707	0.60	38964	0.01	10000	
Cr	52	45	1	He	4.486	4.486	0.51	39303	0.01	10000	
Mn	55	45	1	He	186.891	186.891	1.34	1181442	0.02	10000	
Fe	56	45	1	He	5765.842	5765.842	1.13	44791337	0.01	200000	
Co	59	103	1	He	2.447	2.447	1.00	32839	0.01	10000	
Ni	60	103	1	He	3.562	3.562	1.39	11925	0.03	10000	
Cu	63	103	1	He	2.878	2.878	0.93	28420	0.01	10000	
Zn	66	103	1	He	11.134	11.134	0.87	21220	0.05	10000	
As	75	103	1	He	2.523	2.523	1.18	2768	0.09	10000	
Se	78	103	1	He	0.176	0.176	53.42	56	0.31	10000	
Sr	88	103	1	He	0.673	0.673	3.44	5602	0.01	10000	
Mo	95	103	1	He	0.352	0.352	2.17	1436	0.02	2000	
Ag	107	103	1	He	0.008	0.008	21.54	131	0.01	300	
Cd	111	103	1	He	0.010	0.010	166.06	1178	0.00	4000	
Sn	118	115	1	He	1.028	1.028	5.48	5586	0.02	2000	
Sb	123	115	1	He	0.035	0.035	25.42	334	0.01	300	
Ba	137	115	1	He	18.177	18.177	2.02	40800	0.04	10000	
W	182	209	1	He	0.039	0.039	55.74	4449	0.00	2500	
Tl	205	209	1	He	0.036	0.036	2.06	1385	0.00	5000	
Pb	208	209	1	He	3.634	3.634	0.74	180873	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1775094	1.74	2077022	85.46	30	120	
Sc	45	1	He	753342	1.06	817536	92.15	30	120	
Sc	45	2	NoGas	5602307	1.74	5970055	93.84	30	120	
Rh	103	1	He	2280663	0.29	2327919	97.97	30	120	
In	115	1	He	1214077	0.34	1305098	93.03	30	120	
Tb	159	1	He	3705807	0.43	3765959	98.40	30	120	
Ho	165	1	He	3750418	0.62	3748206	100.06	30	120	
Bi	209	1	He	2822335	0.46	2822318	100.00	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-8-f@50
Data File Name	066SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:53:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.196	0.196	10.93	1074	0.02	10000	
B	11	45	2	NoGas	1.318	1.318	8.88	10807	0.01	300	
Na	23	45	1	He	25.675	25.675	1.55	63647	0.04	500000	
Mg	24	45	1	He	542.900	542.900	0.92	564666	0.10	500000	
Al	27	45	1	He	3285.394	3285.394	0.87	1792327	0.18	200000	
K	39	45	1	He	192.572	192.572	0.85	205261	0.09	500000	
Ca	44	45	1	He	55.788	55.788	3.46	3313	1.68	500000	
Ti	47	45	1	He	27.618	27.618	3.22	7504	0.37	2500	
V	51	45	1	He	6.046	6.046	4.56	41624	0.01	10000	
Cr	52	45	1	He	4.395	4.395	1.70	38914	0.01	10000	
Mn	55	45	1	He	147.792	147.792	0.73	943189	0.02	10000	
Fe	56	45	1	He	6375.958	6375.958	1.60	49995965	0.01	200000	
Co	59	103	1	He	2.311	2.311	1.25	31098	0.01	10000	
Ni	60	103	1	He	4.786	4.786	2.28	16031	0.03	10000	
Cu	63	103	1	He	3.684	3.684	2.19	35561	0.01	10000	
Zn	66	103	1	He	13.627	13.627	2.00	25575	0.05	10000	
As	75	103	1	He	2.612	2.612	2.93	2869	0.09	10000	
Se	78	103	1	He	0.412	0.412	7.29	83	0.50	10000	
Sr	88	103	1	He	1.062	1.062	6.82	8742	0.01	10000	
Mo	95	103	1	He	0.355	0.355	2.50	1453	0.02	2000	
Ag	107	103	1	He	0.007	0.007	19.01	112	0.01	300	
Cd	111	103	1	He	0.053	0.053	25.16	1281	0.00	4000	
Sn	118	115	1	He	0.891	0.891	9.87	4942	0.02	2000	
Sb	123	115	1	He	0.033	0.033	9.53	331	0.01	300	
Ba	137	115	1	He	18.996	18.996	2.52	43142	0.04	10000	
W	182	209	1	He	0.038	0.038	51.02	4438	0.00	2500	
Tl	205	209	1	He	0.042	0.042	11.55	1631	0.00	5000	
Pb	208	209	1	He	2.999	2.999	0.80	149278	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1776691	0.36	2077022	85.54	30	120	
Sc	45	1	He	760400	0.42	817536	93.01	30	120	
Sc	45	2	NoGas	5636274	1.21	5970055	94.41	30	120	
Rh	103	1	He	2286763	1.43	2327919	98.23	30	120	
In	115	1	He	1228451	0.39	1305098	94.13	30	120	
Tb	159	1	He	3724607	1.06	3765959	98.90	30	120	
Ho	165	1	He	3822025	1.57	3748206	101.97	30	120	
Bi	209	1	He	2820554	0.70	2822318	99.94	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-10-h@50
Data File Name	067SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T21:57:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.101	0.101	36.44	585	0.02	10000	
B	11	45	2	NoGas	0.979	0.979	1.75	9384	0.01	300	
Na	23	45	1	He	22.823	22.823	3.06	57743	0.04	500000	
Mg	24	45	1	He	259.637	259.637	1.24	267327	0.10	500000	
Al	27	45	1	He	1315.059	1315.059	0.83	715148	0.18	200000	
K	39	45	1	He	113.617	113.617	2.28	134246	0.08	500000	
Ca	44	45	1	He	17.826	17.826	10.92	1495	1.19	500000	
Ti	47	45	1	He	18.435	18.435	4.26	4956	0.37	2500	
V	51	45	1	He	3.278	3.278	8.66	22582	0.01	10000	
Cr	52	45	1	He	3.883	3.883	2.06	34286	0.01	10000	
Mn	55	45	1	He	61.983	61.983	1.13	391457	0.02	10000	
Fe	56	45	1	He	3372.428	3372.428	1.39	26158444	0.01	200000	
Co	59	103	1	He	1.235	1.235	3.27	16703	0.01	10000	
Ni	60	103	1	He	2.614	2.614	0.37	8836	0.03	10000	
Cu	63	103	1	He	0.968	0.968	4.57	11777	0.01	10000	
Zn	66	103	1	He	5.651	5.651	2.42	11875	0.05	10000	
As	75	103	1	He	2.310	2.310	0.54	2559	0.09	10000	
Se	78	103	1	He	0.142	0.142	14.95	53	0.27	10000	
Sr	88	103	1	He	0.413	0.413	9.03	3548	0.01	10000	
Mo	95	103	1	He	0.244	0.244	5.10	1021	0.02	2000	
Ag	107	103	1	He	0.005	0.005	46.53	92	0.01	300	
Cd	111	103	1	He	0.016	0.016	93.88	1201	0.00	4000	
Sn	118	115	1	He	0.800	0.800	11.41	4475	0.02	2000	
Sb	123	115	1	He	0.019	0.019	51.46	263	0.01	300	
Ba	137	115	1	He	6.853	6.853	4.04	15632	0.04	10000	
W	182	209	1	He	0.007	0.007	93.98	4038	0.00	2500	
Tl	205	209	1	He	0.017	0.017	3.15	703	0.00	5000	
Pb	208	209	1	He	1.474	1.474	1.30	75526	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1810849	1.84	2077022	87.18	30	120	
Sc	45	1	He	752080	1.32	817536	91.99	30	120	
Sc	45	2	NoGas	5623190	0.75	5970055	94.19	30	120	
Rh	103	1	He	2296138	0.54	2327919	98.63	30	120	
In	115	1	He	1232028	0.30	1305098	94.40	30	120	
Tb	159	1	He	3729613	0.77	3765959	99.03	30	120	
Ho	165	1	He	3785618	1.47	3748206	101.00	30	120	
Bi	209	1	He	2892701	0.89	2822318	102.49	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176562/1-a@2
Data File Name	068_Blk.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:00:58-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.043	6.4	270	4.7	1	
B	11	45	2	NoGas	1.428	7.4	11026	3.4	20	
Na	23	45	1	He	54.057	2.0	112686	2.0	400	
Mg	24	45	1	He	31.314	2.8	32099	3.1	1000	
Al	27	45	1	He	-11.366	-1.1	3199	1.7	50	
K	39	45	1	He	26.766	2.1	57618	0.7	1000	
Ca	44	45	1	He	87.916	0.5	4702	0.8	1000	
Ti	47	45	1	He	0.506	18.7	144	17.5	20	
V	51	45	1	He	0.107	85.9	1296	47.0	2	
Cr	52	45	1	He	0.878	4.2	9467	3.4	2	
Mn	55	45	1	He	0.397	7.8	2885	6.6	2	
Fe	56	45	1	He	19.413	10.1	160131	9.5	50	
Co	59	103	1	He	0.009	18.1	157	14.7	1	
Ni	60	103	1	He	0.198	13.5	729	12.4	2	
Cu	63	103	1	He	0.399	4.2	6536	2.8	2	
Zn	66	103	1	He	1.177	8.9	3989	4.5	20	
As	75	103	1	He	0.226	8.8	322	6.3	2	
Se	78	103	1	He	0.163	12.5	53	4.9	2	
Sr	88	103	1	He	0.225	6.0	1960	4.6	10	
Mo	95	103	1	He	0.141	7.6	592	7.6	2	
Ag	107	103	1	He	0.013	10.9	190	9.1	0.2	
Cd	111	103	1	He	0.006	340.4	1136	3.4	0.2	
Sn	118	115	1	He	18.801	0.9	94215	1.4	10	Blank Failed
Sb	123	115	1	He	0.095	23.9	600	17.8	1	
Ba	137	115	1	He	0.941	6.8	2079	6.3	5	
W	182	209	1	He	0.132	38.5	5812	13.8	10	
Tl	205	209	1	He	0.016	27.0	618	26.0	0.5	
Pb	208	209	1	He	0.218	5.3	11128	5.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1779160	0.67	2077022	85.66	30	120	
Sc	45	1	He	739106	0.39	817536	90.41	30	120	
Sc	45	2	NoGas	5516547	1.26	5970055	92.40	30	120	
Rh	103	1	He	2217031	0.86	2327919	95.24	30	120	
In	115	1	He	1176951	0.49	1305098	90.18	30	120	
Tb	159	1	He	3661101	0.75	3765959	97.22	30	120	
Ho	165	1	He	3734100	0.93	3748206	99.62	30	120	
Bi	209	1	He	2763202	0.89	2822318	97.91	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176562/2-a@2
Data File Name	069LCSS.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:04:48-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	486.896	486.896	1.325	2552781	0.17	500	97.4	78.6	110.5	
B	11	2	NoGas	55.965	55.965	2.448	228486	2.43	50	111.9	79.5	120.5	
Na	23	1	He	5239.031	5239.031	2.561	9259625	1.93	5000	104.8	79.5	120.5	
Mg	24	1	He	5172.989	5172.989	2.078	5150519	2.39	5000	103.5	79.5	120.5	
Al	27	1	He	5020.296	5020.296	0.455	2618952	1.14	5000	100.4	79.5	120.5	
K	39	1	He	5053.332	5053.332	1.640	4296214	1.43	5000	101.1	79.5	120.5	
Ca	44	1	He	4836.149	4836.149	0.637	220537	0.78	5000	96.7	79.5	120.5	
Ti	47	1	He	49.644	49.644	1.496	12914	1.67	50	99.3	79.5	120.5	
V	51	1	He	502.817	502.817	1.910	3268711	1.78	500	100.6	71.5	110.5	
Cr	52	1	He	513.084	513.084	1.571	4079086	0.33	500	102.6	69.5	110.5	
Mn	55	1	He	502.721	502.721	0.626	3072411	0.72	500	100.5	79.5	120.5	
Fe	56	1	He	5178.693	5178.693	0.890	38902518	0.58	5000	103.6	79.5	120.5	
Co	59	1	He	454.930	454.930	1.098	5839193	1.27	500	91.0	73.9	110.5	
Ni	60	1	He	476.420	476.420	1.817	1515341	0.98	500	95.3	74.9	110.5	
Cu	63	1	He	475.625	475.625	0.964	3989337	0.20	500	95.1	72.6	110.5	
Zn	66	1	He	418.710	418.710	0.445	691155	0.53	500	83.7	71.5	113.4	
As	75	1	He	402.069	402.069	0.527	408406	1.02	500	80.4	73.4	110.5	
Se	78	1	He	380.339	380.339	0.536	41025	1.05	500	76.1	64.6	110.5	
Sr	88	1	He	463.627	463.627	1.383	3557060	2.27	500	92.7	79.5	120.5	
Mo	95	1	He	51.256	51.256	0.485	192232	1.22	50	102.5	29.5	140.5	
Ag	107	1	He	49.220	49.220	0.820	637524	0.97	50	98.4	59.5	114.5	
Cd	111	1	He	456.556	456.556	0.268	1006082	0.63	500	91.3	73.5	110.5	
Sn	118	1	He	564.877	564.877	1.077	2736489	2.03	500	113.0	79.5	120.5	
Sb	123	1	He	49.531	49.531	0.645	219281	0.85	50	99.1	67.5	113.4	
Ba	137	1	He	486.649	486.649	0.831	1025713	0.66	500	97.3	69.5	110.5	
W	182	1	He	48.117	48.117	0.377	730486	1.54	50	96.2	74.6	125.4	
Tl	205	1	He	119.876	119.876	1.155	4329494	0.05	125	95.9	70.6	110.5	
Pb	208	1	He	495.601	495.601	1.060	23281882	0.12	500	99.1	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1764815	1.41	2077022	84.97	30	120	
Sc	45	1	He	728451	1.25	817536	89.10	30	120	
Sc	45	2	NoGas	5425617	0.89	5970055	90.88	30	120	
Rh	103	1	He	2183789	0.88	2327919	93.81	30	120	
In	115	1	He	1141053	1.48	1305098	87.43	30	120	
Tb	159	1	He	3653690	0.45	3765959	97.02	30	120	
Ho	165	1	He	3744601	0.78	3748206	99.90	30	120	
Bi	209	1	He	2672690	1.17	2822318	94.70	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-2-j@2
Data File Name	070SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:08:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.063	2.063	0.72	12082	0.02	10000	
B	11	45	2	NoGas	9.080	9.080	0.97	48553	0.02	300	
Na	23	45	1	He	145.984	145.984	0.78	305982	0.05	500000	
Mg	24	45	1	He	7218.496	7218.496	1.30	8047192	0.09	500000	
Al	27	45	1	He	48800.462	48800.462	1.85	28418195	0.17	200000	
K	39	45	1	He	2336.424	2336.424	3.60	2244924	0.10	500000	
Ca	44	45	1	He	10387.723	10387.723	1.68	529616	1.96	500000	
Ti	47	45	1	He	355.455	355.455	0.63	103452	0.34	2500	
V	51	45	1	He	101.491	101.491	1.97	739334	0.01	10000	
Cr	52	45	1	He	73.818	73.818	1.31	659466	0.01	10000	
Mn	55	45	1	He	1905.579	1905.579	1.61	13039892	0.01	10000	
Fe	56	45	1	He	90789.518	90789.518	1.37	763506619	0.01	200000	
Co	59	103	1	He	29.095	29.095	1.54	399118	0.01	10000	
Ni	60	103	1	He	186.857	186.857	0.94	635203	0.03	10000	
Cu	63	103	1	He	48.552	48.552	0.45	438079	0.01	10000	
Zn	66	103	1	He	262.251	262.251	0.27	463315	0.06	10000	
As	75	103	1	He	37.808	37.808	0.69	41121	0.09	10000	
Se	78	103	1	He	4.188	4.188	1.87	519	0.81	10000	
Sr	88	103	1	He	32.315	32.315	0.48	265094	0.01	10000	
Mo	95	103	1	He	7.136	7.136	1.65	28642	0.02	2000	
Ag	107	103	1	He	0.226	0.226	6.25	3150	0.01	300	
Cd	111	103	1	He	0.745	0.745	6.29	2935	0.03	4000	
Sn	118	115	1	He	19.377	19.377	1.65	102067	0.02	2000	
Sb	123	115	1	He	0.775	0.775	4.06	3892	0.02	300	
Ba	137	115	1	He	245.870	245.870	0.46	562071	0.04	10000	
W	182	209	1	He	0.903	0.903	10.66	17988	0.01	2500	
Tl	205	209	1	He	0.798	0.798	3.11	30058	0.00	5000	
Pb	208	209	1	He	83.016	83.016	0.36	4065883	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1964243	1.64	2077022	94.57	30	120	
Sc	45	1	He	815621	1.35	817536	99.77	30	120	
Sc	45	2	NoGas	6365037	1.41	5970055	106.62	30	120	
Rh	103	1	He	2333265	1.72	2327919	100.23	30	120	
In	115	1	He	1237507	1.92	1305098	94.82	30	120	
Tb	159	1	He	3897405	1.52	3765959	103.49	30	120	
Ho	165	1	He	3941268	2.60	3748206	105.15	30	120	
Bi	209	1	He	2785885	0.91	2822318	98.71	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49071-a-2-j@10
Data File Name	071SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:12:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.468	0.468	9.80	2845	0.02	10000	
B	11	45	2	NoGas	2.289	2.289	5.28	17350	0.01	300	
Na	23	45	1	He	41.568	41.568	3.83	106606	0.04	500000	
Mg	24	45	1	He	1519.568	1519.568	2.22	1812562	0.08	500000	
Al	27	45	1	He	10081.462	10081.462	0.78	6289058	0.16	200000	
K	39	45	1	He	470.657	470.657	2.00	516465	0.09	500000	
Ca	44	45	1	He	2145.912	2145.912	1.07	117651	1.82	500000	
Ti	47	45	1	He	73.560	73.560	1.70	22915	0.32	2500	
V	51	45	1	He	20.545	20.545	1.70	160655	0.01	10000	
Cr	52	45	1	He	15.230	15.230	1.58	147787	0.01	10000	
Mn	55	45	1	He	405.735	405.735	2.01	2970236	0.01	10000	
Fe	56	45	1	He	19003.392	19003.392	1.95	170953615	0.01	200000	
Co	59	103	1	He	5.857	5.857	1.43	89787	0.01	10000	
Ni	60	103	1	He	37.892	37.892	1.52	143989	0.03	10000	
Cu	63	103	1	He	9.764	9.764	0.86	101391	0.01	10000	
Zn	66	103	1	He	56.148	56.148	1.85	112702	0.05	10000	
As	75	103	1	He	7.864	7.864	1.14	9640	0.08	10000	
Se	78	103	1	He	0.896	0.896	0.33	157	0.57	10000	
Sr	88	103	1	He	6.433	6.433	0.50	59153	0.01	10000	
Mo	95	103	1	He	1.371	1.371	3.14	6200	0.02	2000	
Ag	107	103	1	He	0.048	0.048	7.50	769	0.01	300	
Cd	111	103	1	He	0.151	0.151	19.85	1718	0.01	4000	
Sn	118	115	1	He	3.809	3.809	1.52	22434	0.02	2000	
Sb	123	115	1	He	0.165	0.165	6.07	1068	0.02	300	
Ba	137	115	1	He	49.151	49.151	1.54	124153	0.04	10000	
W	182	209	1	He	0.123	0.123	26.32	6224	0.00	2500	
Tl	205	209	1	He	0.160	0.160	5.06	6577	0.00	5000	
Pb	208	209	1	He	15.820	15.820	0.46	844678	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2009512	1.07	2077022	96.75	30	120	
Sc	45	1	He	872656	1.53	817536	106.74	30	120	
Sc	45	2	NoGas	6590032	0.45	5970055	110.38	30	120	
Rh	103	1	He	2607198	0.92	2327919	112.00	30	120	
In	115	1	He	1367067	0.55	1305098	104.75	30	120	
Tb	159	1	He	4114496	1.09	3765959	109.25	30	120	
Ho	165	1	He	4154029	0.36	3748206	110.83	30	120	
Bi	209	1	He	3035404	0.96	2822318	107.55	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	072_CCV.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:15:56-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.330	2.778	276987	2.30	50	98.7	89.5	110.5	
B	11	45	2	NoGas	49.317	3.106	226938	1.73	50	98.6	89.5	110.5	
Na	23	45	1	He	25594.325	3.217	50784267	1.14	25000	102.4	89.5	110.5	
Mg	24	45	1	He	25614.295	3.811	28658742	0.88	25000	102.5	89.5	110.5	
Al	27	45	1	He	239.746	3.009	150285	0.35	250	95.9	89.5	110.5	
K	39	45	1	He	25499.745	1.596	24220602	1.49	25000	102.0	89.5	110.5	
Ca	44	45	1	He	24628.570	2.296	1259678	0.76	25000	98.5	89.5	110.5	
Ti	47	45	1	He	51.930	2.457	15185	1.08	50	103.9	89.5	110.5	
V	51	45	1	He	51.497	2.060	376970	1.11	50	103.0	89.5	110.5	
Cr	52	45	1	He	51.952	2.623	466719	0.43	50	103.9	89.5	110.5	
Mn	55	45	1	He	261.546	3.916	1796648	1.06	250	104.6	89.5	110.5	
Fe	56	45	1	He	13109.991	2.860	110684138	0.18	12500	104.9	89.5	110.5	
Co	59	103	1	He	48.012	0.217	665615	0.35	50	96.0	89.5	110.5	
Ni	60	103	1	He	48.340	0.794	166157	0.40	50	96.7	89.5	110.5	
Cu	63	103	1	He	48.569	0.210	443000	0.60	50	97.1	89.5	110.5	
Zn	66	103	1	He	47.379	0.989	86377	1.13	50	94.8	89.5	110.5	
As	75	103	1	He	47.810	0.085	52534	0.60	50	95.6	89.5	110.5	
Se	78	103	1	He	46.652	0.695	5468	0.22	50	93.3	89.5	110.5	
Sr	88	103	1	He	46.933	0.212	389064	0.59	50	93.9	89.5	110.5	
Mo	95	103	1	He	50.185	1.942	203260	1.41	50	100.4	89.5	110.5	
Ag	107	103	1	He	49.732	0.564	695740	1.09	50	99.5	89.5	110.5	
Cd	111	103	1	He	49.179	0.265	118114	0.74	50	98.4	89.5	110.5	
Sn	118	115	1	He	51.285	1.240	274482	0.51	50	102.6	89.5	110.5	
Sb	123	115	1	He	53.472	1.010	261292	0.30	50	106.9	89.5	110.5	
Ba	137	115	1	He	51.057	0.713	118827	1.12	50	102.1	89.5	110.5	
W	182	209	1	He	48.810	1.712	772999	1.70	50	97.6	89.5	110.5	
Tl	205	209	1	He	51.266	0.251	1931900	0.47	50	102.5	89.5	110.5	
Pb	208	209	1	He	48.705	1.107	2387704	0.84	50	97.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1889745	0.93	2077022	90.98	30	120	
Sc	45	1	He	819279	3.07	817536	100.21	30	120	
Sc	45	2	NoGas	6098319	1.37	5970055	102.15	30	120	
Rh	103	1	He	2358561	0.53	2327919	101.32	30	120	
In	115	1	He	1259496	0.77	1305098	96.51	30	120	
Tb	159	1	He	3853728	1.15	3765959	102.33	30	120	
Ho	165	1	He	3943239	0.51	3748206	105.20	30	120	
Bi	209	1	He	2788407	0.55	2822318	98.80	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	073_CCB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:19:47-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.040	79.4	281	67.1	1	
B	11	45	2	NoGas	1.968	1.7	14992	0.8	20	
Na	23	45	1	He	19.193	5.6	54890	3.6	400	
Mg	24	45	1	He	1.712	44.1	2400	35.1	1000	
Al	27	45	1	He	0.138	304.9	10123	2.9	50	
K	39	45	1	He	7.477	25.9	44908	4.4	1000	
Ca	44	45	1	He	2.954	11.8	855	2.6	1000	
Ti	47	45	1	He	0.147	19.1	54	14.1	20	
V	51	45	1	He	0.027	235.0	842	54.9	2	
Cr	52	45	1	He	0.004	168.1	2647	1.7	2	
Mn	55	45	1	He	0.076	13.2	978	7.6	2	
Fe	56	45	1	He	14.688	22.4	135627	20.6	50	
Co	59	103	1	He	0.005	42.9	113	28.1	1	
Ni	60	103	1	He	0.006	198.5	121	35.8	2	
Cu	63	103	1	He	-0.168	-6.8	1901	5.8	2	
Zn	66	103	1	He	-0.134	-29.5	2003	4.0	20	
As	75	103	1	He	0.121	27.6	238	16.0	2	
Se	78	103	1	He	0.108	96.1	53	24.0	2	
Sr	88	103	1	He	0.006	58.8	282	11.0	10	
Mo	95	103	1	He	0.834	17.8	3597	17.2	2	
Ag	107	103	1	He	0.012	17.9	190	15.8	0.2	
Cd	111	103	1	He	-0.003	-929.3	1245	5.8	0.2	
Sn	118	115	1	He	0.360	15.3	2341	12.9	10	
Sb	123	115	1	He	0.254	10.8	1490	9.3	1	
Ba	137	115	1	He	0.009	29.7	60	11.1	5	
W	182	209	1	He	0.829	20.4	17870	15.3	10	
Tl	205	209	1	He	0.036	24.9	1451	23.9	0.5	
Pb	208	209	1	He	0.051	11.5	3241	8.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1993613	1.44	2077022	95.98	30	120	
Sc	45	1	He	807297	0.69	817536	98.75	30	120	
Sc	45	2	NoGas	6255818	0.90	5970055	104.79	30	120	
Rh	103	1	He	2470015	0.35	2327919	106.10	30	120	
In	115	1	He	1326381	0.45	1305098	101.63	30	120	
Tb	159	1	He	3941613	1.44	3765959	104.66	30	120	
Ho	165	1	He	4012251	0.36	3748206	107.04	30	120	
Bi	209	1	He	2960279	0.80	2822318	104.89	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49071-a-2-j@2
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:23:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1138.201	1138.201	0.18	5939431	0.02	10000	
B	11	45	2	NoGas	129.331	129.331	1.70	548750	0.02	300	
Na	23	45	1	He	11223.411	11223.411	0.17	21295219	0.05	500000	
Mg	24	45	1	He	18832.796	18832.796	0.97	20142071	0.09	500000	
Al	27	45	1	He	61407.308	61407.308	0.40	34306026	0.18	200000	
K	39	45	1	He	13295.406	13295.406	0.96	12083682	0.11	500000	
Ca	44	45	1	He	21311.909	21311.909	0.64	1041790	2.05	500000	
Ti	47	45	1	He	478.320	478.320	1.30	133564	0.36	2500	
V	51	45	1	He	1220.701	1220.701	0.53	8524889	0.01	10000	
Cr	52	45	1	He	1196.188	1196.188	1.46	10213573	0.01	10000	
Mn	55	45	1	He	3086.465	3086.465	2.27	20260588	0.02	10000	
Fe	56	45	1	He	106176.915	106176.915	1.34	856628482	0.01	200000	
Co	59	103	1	He	1090.403	1090.403	1.48	14313202	0.01	10000	
Ni	60	103	1	He	1295.505	1295.505	1.76	4214515	0.03	10000	
Cu	63	103	1	He	1121.527	1121.527	2.17	9616418	0.01	10000	
Zn	66	103	1	He	1314.781	1314.781	2.10	2215074	0.06	10000	
As	75	103	1	He	991.585	991.585	1.49	1029940	0.10	10000	
Se	78	103	1	He	893.795	893.795	1.35	98549	0.91	10000	
Sr	88	103	1	He	1086.032	1086.032	1.70	8520119	0.01	10000	
Mo	95	103	1	He	127.128	127.128	2.17	487470	0.03	2000	
Ag	107	103	1	He	109.833	109.833	1.42	1454897	0.01	300	
Cd	111	103	1	He	1113.913	1113.913	1.37	2508754	0.04	4000	
Sn	118	115	1	He	1256.944	1256.944	0.94	6178075	0.02	2000	
Sb	123	115	1	He	116.859	116.859	0.56	524769	0.02	300	
Ba	137	115	1	He	1521.037	1521.037	1.67	3253118	0.05	10000	
W	182	209	1	He	121.657	121.657	1.58	1906721	0.01	2500	
Tl	205	209	1	He	264.277	264.277	0.99	9884675	0.00	5000	
Pb	208	209	1	He	1175.092	1175.092	1.61	57165644	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1756290	0.40	2077022	84.56	30	120	
Sc	45	1	He	782603	1.26	817536	95.73	30	120	
Sc	45	2	NoGas	5711608	0.34	5970055	95.67	30	120	
Rh	103	1	He	2233612	1.40	2327919	95.95	30	120	
In	115	1	He	1157840	0.42	1305098	88.72	30	120	
Tb	159	1	He	3827871	0.30	3765959	101.64	30	120	
Ho	165	1	He	3835940	1.16	3748206	102.34	30	120	
Bi	209	1	He	2767816	1.02	2822318	98.07	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-2-k du@2
Data File Name	075SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:27:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.191	2.191	5.89	12812	0.02	10000	
B	11	45	2	NoGas	10.505	10.505	6.40	55870	0.02	300	
Na	23	45	1	He	138.917	138.917	1.88	302562	0.05	500000	
Mg	24	45	1	He	7325.428	7325.428	1.34	8461143	0.09	500000	
Al	27	45	1	He	50622.839	50622.839	0.94	30542479	0.17	200000	
K	39	45	1	He	2450.050	2450.050	1.20	2437185	0.10	500000	
Ca	44	45	1	He	5013.981	5013.981	1.20	265252	1.89	500000	
Ti	47	45	1	He	375.328	375.328	1.45	113183	0.33	2500	
V	51	45	1	He	107.795	107.795	1.09	813537	0.01	10000	
Cr	52	45	1	He	79.903	79.903	0.81	739361	0.01	10000	
Mn	55	45	1	He	1739.059	1739.059	0.48	12330156	0.01	10000	
Fe	56	45	1	He	98898.193	98898.193	1.81	861691664	0.01	200000	
Co	59	103	1	He	28.494	28.494	0.60	402394	0.01	10000	
Ni	60	103	1	He	143.693	143.693	0.63	502933	0.03	10000	
Cu	63	103	1	He	50.550	50.550	0.30	469508	0.01	10000	
Zn	66	103	1	He	272.394	272.394	1.02	495416	0.05	10000	
As	75	103	1	He	41.040	41.040	0.23	45949	0.09	10000	
Se	78	103	1	He	5.043	5.043	1.99	636	0.79	10000	
Sr	88	103	1	He	20.356	20.356	1.41	172006	0.01	10000	
Mo	95	103	1	He	8.548	8.548	2.41	35317	0.02	2000	
Ag	107	103	1	He	0.248	0.248	5.51	3558	0.01	300	
Cd	111	103	1	He	0.728	0.728	8.76	2981	0.02	4000	
Sn	118	115	1	He	22.797	22.797	3.22	124408	0.02	2000	
Sb	123	115	1	He	1.068	1.068	3.97	5491	0.02	300	
Ba	137	115	1	He	242.920	242.920	0.28	575443	0.04	10000	
W	182	209	1	He	1.449	1.449	18.59	27313	0.01	2500	
Tl	205	209	1	He	0.828	0.828	4.44	32026	0.00	5000	
Pb	208	209	1	He	86.495	86.495	0.95	4351266	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1960445	1.02	2077022	94.39	30	120	
Sc	45	1	He	845132	0.72	817536	103.38	30	120	
Sc	45	2	NoGas	6441757	0.89	5970055	107.90	30	120	
Rh	103	1	He	2402441	0.58	2327919	103.20	30	120	
In	115	1	He	1282296	0.35	1305098	98.25	30	120	
Tb	159	1	He	4038599	1.70	3765959	107.24	30	120	
Ho	165	1	He	4087090	0.63	3748206	109.04	30	120	
Bi	209	1	He	2861762	1.41	2822318	101.40	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-2-I ms@2
Data File Name	076SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:30:51-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	51.286	51.286	1.84	289077	0.02	10000	
B	11	45	2	NoGas	48.950	48.950	1.50	229662	0.02	300	
Na	23	45	1	He	5053.561	5053.561	2.06	10014077	0.05	500000	
Mg	24	45	1	He	13079.797	13079.797	1.10	14599512	0.09	500000	
Al	27	45	1	He	61113.918	61113.918	1.42	35627294	0.17	200000	
K	39	45	1	He	7096.086	7096.086	2.52	6747113	0.11	500000	
Ca	44	45	1	He	10044.850	10044.850	2.35	512697	1.96	500000	
Ti	47	45	1	He	451.457	451.457	1.51	131553	0.34	2500	
V	51	45	1	He	164.542	164.542	1.00	1199724	0.01	10000	
Cr	52	45	1	He	128.337	128.337	1.83	1145872	0.01	10000	
Mn	55	45	1	He	2124.476	2124.476	2.06	14553328	0.01	10000	
Fe	56	45	1	He	105916.612	105916.612	1.35	891780853	0.01	200000	
Co	59	103	1	He	77.073	77.073	1.05	1056593	0.01	10000	
Ni	60	103	1	He	209.875	209.875	1.36	713065	0.03	10000	
Cu	63	103	1	He	98.322	98.322	1.24	883440	0.01	10000	
Zn	66	103	1	He	336.229	336.229	1.64	593177	0.06	10000	
As	75	103	1	He	82.996	82.996	1.32	90116	0.09	10000	
Se	78	103	1	He	40.459	40.459	0.16	4694	0.86	10000	
Sr	88	103	1	He	67.733	67.733	1.16	555169	0.01	10000	
Mo	95	103	1	He	56.942	56.942	1.08	228070	0.02	2000	
Ag	107	103	1	He	47.170	47.170	0.57	652569	0.01	300	
Cd	111	103	1	He	45.849	45.849	0.99	108977	0.04	4000	
Sn	118	115	1	He	55.690	55.690	1.26	293284	0.02	2000	
Sb	123	115	1	He	13.643	13.643	1.71	65738	0.02	300	
Ba	137	115	1	He	316.128	316.128	0.42	723782	0.04	10000	
W	182	209	1	He	37.005	37.005	0.41	587241	0.01	2500	
Tl	205	209	1	He	48.491	48.491	0.94	1828143	0.00	5000	
Pb	208	209	1	He	139.599	139.599	0.48	6846037	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1896986	0.83	2077022	91.33	30	120	
Sc	45	1	He	816777	2.05	817536	99.91	30	120	
Sc	45	2	NoGas	6215675	1.51	5970055	104.11	30	120	
Rh	103	1	He	2332437	0.73	2327919	100.19	30	120	
In	115	1	He	1239384	0.65	1305098	94.96	30	120	
Tb	159	1	He	3944749	0.71	3765959	104.75	30	120	
Ho	165	1	He	3984507	0.71	3748206	106.30	30	120	
Bi	209	1	He	2789776	0.86	2822318	98.85	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-3-b@2
Data File Name	077SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:34:32-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.242	3.242	2.45	15566	0.02	10000	
B	11	45	2	NoGas	19.653	19.653	2.83	82100	0.02	300	
Na	23	45	1	He	184.454	184.454	1.32	387179	0.05	500000	
Mg	24	45	1	He	14579.434	14579.434	0.55	16473390	0.09	500000	
Al	27	45	1	He	47445.737	47445.737	0.81	28003106	0.17	200000	
K	39	45	1	He	3628.686	3628.686	1.96	3512171	0.10	500000	
Ca	44	45	1	He	28029.065	28029.065	2.14	1447329	1.94	500000	
Ti	47	45	1	He	398.206	398.206	0.78	117472	0.34	2500	
V	51	45	1	He	97.688	97.688	0.16	721312	0.01	10000	
Cr	52	45	1	He	92.350	92.350	0.94	835518	0.01	10000	
Mn	55	45	1	He	3635.699	3635.699	0.22	25215736	0.01	10000	
Fe	56	45	1	He	113524.031	113524.031	1.18	967606717	0.01	200000	
Co	59	103	1	He	44.062	44.062	2.50	606459	0.01	10000	
Ni	60	103	1	He	106.134	106.134	2.21	362102	0.03	10000	
Cu	63	103	1	He	65.175	65.175	2.40	589072	0.01	10000	
Zn	66	103	1	He	285.256	285.256	2.42	505594	0.06	10000	
As	75	103	1	He	50.871	50.871	2.41	55491	0.09	10000	
Se	78	103	1	He	4.491	4.491	3.94	556	0.81	10000	
Sr	88	103	1	He	53.280	53.280	2.36	438483	0.01	10000	
Mo	95	103	1	He	7.578	7.578	2.59	30525	0.02	2000	
Ag	107	103	1	He	0.176	0.176	2.34	2467	0.01	300	
Cd	111	103	1	He	0.754	0.754	8.56	2965	0.03	4000	
Sn	118	115	1	He	16.986	16.986	1.01	89796	0.02	2000	
Sb	123	115	1	He	0.784	0.784	2.00	3945	0.02	300	
Ba	137	115	1	He	290.135	290.135	0.78	665267	0.04	10000	
W	182	209	1	He	0.754	0.754	7.77	15671	0.00	2500	
Tl	205	209	1	He	0.785	0.785	2.01	29631	0.00	5000	
Pb	208	209	1	He	97.802	97.802	0.72	4796908	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1612906	3.11	2077022	77.65	30	120	
Sc	45	1	He	826730	0.58	817536	101.12	30	120	
Sc	45	2	NoGas	5331329	1.78	5970055	89.30	30	120	
Rh	103	1	He	2342467	2.21	2327919	100.62	30	120	
In	115	1	He	1241266	0.76	1305098	95.11	30	120	
Tb	159	1	He	3913838	0.15	3765959	103.93	30	120	
Ho	165	1	He	3972388	0.22	3748206	105.98	30	120	
Bi	209	1	He	2790031	0.64	2822318	98.86	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-4-b@2
Data File Name	078SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:38:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.627	2.627	1.92	15103	0.02	10000	
B	11	45	2	NoGas	15.543	15.543	2.18	78526	0.02	300	
Na	23	45	1	He	172.539	172.539	0.73	360956	0.05	500000	
Mg	24	45	1	He	13973.670	13973.670	0.78	15685624	0.09	500000	
Al	27	45	1	He	47415.577	47415.577	0.68	27802498	0.17	200000	
K	39	45	1	He	3917.109	3917.109	0.94	3763545	0.10	500000	
Ca	44	45	1	He	33795.549	33795.549	1.73	1733254	1.95	500000	
Ti	47	45	1	He	367.867	367.867	1.44	107809	0.34	2500	
V	51	45	1	He	96.708	96.708	0.91	709418	0.01	10000	
Cr	52	45	1	He	92.995	92.995	0.83	835820	0.01	10000	
Mn	55	45	1	He	2337.481	2337.481	0.90	16105109	0.01	10000	
Fe	56	45	1	He	114480.350	114480.350	0.55	969364441	0.01	200000	
Co	59	103	1	He	36.875	36.875	1.26	508059	0.01	10000	
Ni	60	103	1	He	103.427	103.427	0.41	353225	0.03	10000	
Cu	63	103	1	He	78.260	78.260	0.81	707397	0.01	10000	
Zn	66	103	1	He	295.928	295.928	0.72	524967	0.06	10000	
As	75	103	1	He	53.563	53.563	0.95	58481	0.09	10000	
Se	78	103	1	He	4.252	4.252	6.78	529	0.80	10000	
Sr	88	103	1	He	67.825	67.825	0.32	558717	0.01	10000	
Mo	95	103	1	He	7.002	7.002	0.87	28240	0.02	2000	
Ag	107	103	1	He	0.171	0.171	6.42	2395	0.01	300	
Cd	111	103	1	He	0.810	0.810	1.75	3102	0.03	4000	
Sn	118	115	1	He	18.197	18.197	2.83	95437	0.02	2000	
Sb	123	115	1	He	0.762	0.762	2.07	3809	0.02	300	
Ba	137	115	1	He	291.373	291.373	0.34	662954	0.04	10000	
W	182	209	1	He	0.400	0.400	5.33	10044	0.00	2500	
Tl	205	209	1	He	0.786	0.786	1.88	29546	0.00	5000	
Pb	208	209	1	He	102.386	102.386	0.72	5000709	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1929300	0.86	2077022	92.89	30	120	
Sc	45	1	He	821314	0.79	817536	100.46	30	120	
Sc	45	2	NoGas	6342308	0.83	5970055	106.24	30	120	
Rh	103	1	He	2344144	0.90	2327919	100.70	30	120	
In	115	1	He	1231640	0.35	1305098	94.37	30	120	
Tb	159	1	He	3876401	0.68	3765959	102.93	30	120	
Ho	165	1	He	3935462	0.21	3748206	105.00	30	120	
Bi	209	1	He	2778354	0.72	2822318	98.44	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-8-d@2
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:41:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.527	1.527	6.14	8947	0.02	10000	
B	11	45	2	NoGas	15.665	15.665	1.25	80326	0.02	300	
Na	23	45	1	He	336.809	336.809	0.38	703957	0.05	500000	
Mg	24	45	1	He	18584.910	18584.910	1.47	21351093	0.09	500000	
Al	27	45	1	He	24886.939	24886.939	1.15	14940234	0.17	200000	
K	39	45	1	He	4265.770	4265.770	1.93	4191324	0.10	500000	
Ca	44	45	1	He	21866.184	21866.184	0.76	1148097	1.90	500000	
Ti	47	45	1	He	230.237	230.237	0.88	69067	0.33	2500	
V	51	45	1	He	46.237	46.237	1.83	347457	0.01	10000	
Cr	52	45	1	He	43.924	43.924	1.20	405484	0.01	10000	
Mn	55	45	1	He	1783.860	1783.860	1.60	12579362	0.01	10000	
Fe	56	45	1	He	107537.442	107537.442	1.67	931907234	0.01	200000	
Co	59	103	1	He	34.766	34.766	1.00	484473	0.01	10000	
Ni	60	103	1	He	77.537	77.537	1.56	267819	0.03	10000	
Cu	63	103	1	He	87.810	87.810	1.58	802281	0.01	10000	
Zn	66	103	1	He	222.934	222.934	2.00	400467	0.06	10000	
As	75	103	1	He	88.739	88.739	1.35	97925	0.09	10000	
Se	78	103	1	He	3.147	3.147	4.19	406	0.78	10000	
Sr	88	103	1	He	42.063	42.063	1.51	350494	0.01	10000	
Mo	95	103	1	He	5.376	5.376	3.97	21934	0.02	2000	
Ag	107	103	1	He	0.098	0.098	1.83	1396	0.01	300	
Cd	111	103	1	He	0.490	0.490	15.09	2372	0.02	4000	
Sn	118	115	1	He	16.944	16.944	1.61	90019	0.02	2000	
Sb	123	115	1	He	0.502	0.502	3.27	2602	0.02	300	
Ba	137	115	1	He	131.991	131.991	0.57	304181	0.04	10000	
W	182	209	1	He	0.228	0.228	8.99	7402	0.00	2500	
Tl	205	209	1	He	0.493	0.493	1.80	18653	0.00	5000	
Pb	208	209	1	He	50.379	50.379	0.57	2478071	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1961266	1.20	2077022	94.43	30	120	
Sc	45	1	He	840618	0.97	817536	102.82	30	120	
Sc	45	2	NoGas	6441453	1.55	5970055	107.90	30	120	
Rh	103	1	He	2370959	1.63	2327919	101.85	30	120	
In	115	1	He	1247424	0.35	1305098	95.58	30	120	
Tb	159	1	He	4015820	0.77	3765959	106.63	30	120	
Ho	165	1	He	4018874	0.87	3748206	107.22	30	120	
Bi	209	1	He	2797741	0.59	2822318	99.13	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-15-f@2
Data File Name	080SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:45:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.350	2.350	2.32	13465	0.02	10000	
B	11	45	2	NoGas	22.470	22.470	0.73	111301	0.02	300	
Na	23	45	1	He	361.527	361.527	1.46	749887	0.05	500000	
Mg	24	45	1	He	27397.367	27397.367	1.82	31291349	0.09	500000	
Al	27	45	1	He	39966.341	39966.341	1.60	23846640	0.17	200000	
K	39	45	1	He	6312.008	6312.008	1.96	6147011	0.10	500000	
Ca	44	45	1	He	35015.695	35015.695	3.85	1827151	1.92	500000	
Ti	47	45	1	He	307.328	307.328	0.87	91660	0.34	2500	
V	51	45	1	He	66.545	66.545	1.48	496898	0.01	10000	
Cr	52	45	1	He	66.195	66.195	1.27	606190	0.01	10000	
Mn	55	45	1	He	1056.536	1056.536	2.04	7407092	0.01	10000	
Fe	56	45	1	He	130440.163	130440.163	1.09	1123927920	0.01	200000	
Co	59	103	1	He	48.501	48.501	1.13	672547	0.01	10000	
Ni	60	103	1	He	112.545	112.545	0.33	386829	0.03	10000	
Cu	63	103	1	He	104.468	104.468	0.80	949261	0.01	10000	
Zn	66	103	1	He	275.616	275.616	0.78	492224	0.06	10000	
As	75	103	1	He	66.022	66.022	0.94	72527	0.09	10000	
Se	78	103	1	He	4.110	4.110	2.73	516	0.80	10000	
Sr	88	103	1	He	79.700	79.700	1.59	660677	0.01	10000	
Mo	95	103	1	He	5.610	5.610	1.82	22779	0.02	2000	
Ag	107	103	1	He	0.126	0.126	10.23	1780	0.01	300	
Cd	111	103	1	He	0.493	0.493	6.70	2369	0.02	4000	
Sn	118	115	1	He	17.287	17.287	1.57	90826	0.02	2000	
Sb	123	115	1	He	0.440	0.440	4.80	2278	0.02	300	
Ba	137	115	1	He	168.807	168.807	0.73	384705	0.04	10000	
W	182	209	1	He	0.155	0.155	11.95	6246	0.00	2500	
Tl	205	209	1	He	0.540	0.540	2.15	20424	0.00	5000	
Pb	208	209	1	He	55.127	55.127	0.49	2710765	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1922356	0.85	2077022	92.55	30	120	
Sc	45	1	He	835842	1.75	817536	102.24	30	120	
Sc	45	2	NoGas	6368777	1.37	5970055	106.68	30	120	
Rh	103	1	He	2359146	0.50	2327919	101.34	30	120	
In	115	1	He	1233629	0.85	1305098	94.52	30	120	
Tb	159	1	He	3974775	1.61	3765959	105.54	30	120	
Ho	165	1	He	3978803	0.80	3748206	106.15	30	120	
Bi	209	1	He	2796957	0.97	2822318	99.10	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-22-d@2
Data File Name	081SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:49:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.848	2.848	2.06	16816	0.02	10000	
B	11	45	2	NoGas	31.636	31.636	1.94	158171	0.02	300	
Na	23	45	1	He	359.280	359.280	0.59	760066	0.05	500000	
Mg	24	45	1	He	29359.808	29359.808	0.65	34196863	0.09	500000	
Al	27	45	1	He	47608.062	47608.062	0.55	28965964	0.16	200000	
K	39	45	1	He	8229.715	8229.715	2.00	8160151	0.10	500000	
Ca	44	45	1	He	29543.997	29543.997	0.38	1572440	1.88	500000	
Ti	47	45	1	He	329.709	329.709	2.24	100265	0.33	2500	
V	51	45	1	He	77.406	77.406	0.71	589300	0.01	10000	
Cr	52	45	1	He	77.806	77.806	0.47	726101	0.01	10000	
Mn	55	45	1	He	1742.865	1742.865	0.48	12461405	0.01	10000	
Fe	56	45	1	He	147612.788	147612.788	0.62	1296969620	0.01	200000	
Co	59	103	1	He	58.759	58.759	1.46	808915	0.01	10000	
Ni	60	103	1	He	144.560	144.560	1.23	493268	0.03	10000	
Cu	63	103	1	He	100.727	100.727	0.90	908831	0.01	10000	
Zn	66	103	1	He	304.696	304.696	1.52	540010	0.06	10000	
As	75	103	1	He	80.736	80.736	1.10	88033	0.09	10000	
Se	78	103	1	He	4.789	4.789	8.74	591	0.81	10000	
Sr	88	103	1	He	85.196	85.196	1.28	701173	0.01	10000	
Mo	95	103	1	He	5.770	5.770	1.52	23261	0.02	2000	
Ag	107	103	1	He	0.135	0.135	7.96	1898	0.01	300	
Cd	111	103	1	He	0.598	0.598	9.43	2598	0.02	4000	
Sn	118	115	1	He	17.481	17.481	0.33	93399	0.02	2000	
Sb	123	115	1	He	0.518	0.518	2.66	2697	0.02	300	
Ba	137	115	1	He	217.682	217.682	0.68	504516	0.04	10000	
W	182	209	1	He	0.178	0.178	4.73	6583	0.00	2500	
Tl	205	209	1	He	0.693	0.693	1.89	26134	0.00	5000	
Pb	208	209	1	He	65.011	65.011	1.99	3184366	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1982220	0.91	2077022	95.44	30	120	
Sc	45	1	He	852238	0.89	817536	104.24	30	120	
Sc	45	2	NoGas	6531743	0.97	5970055	109.41	30	120	
Rh	103	1	He	2342486	1.65	2327919	100.63	30	120	
In	115	1	He	1254606	0.63	1305098	96.13	30	120	
Tb	159	1	He	4008080	0.69	3765959	106.43	30	120	
Ho	165	1	He	4052307	1.20	3748206	108.11	30	120	
Bi	209	1	He	2786520	1.22	2822318	98.73	30	120	

Sample Report

Sample Table

Sample Name	240-49171-b-19-a@2
Data File Name	082SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:53:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.468	0.468	12.15	2580	0.02	10000	
B	11	45	2	NoGas	5.471	5.471	7.18	29862	0.02	300	
Na	23	45	1	He	81.967	81.967	1.95	175474	0.05	500000	
Mg	24	45	1	He	911.317	911.317	1.68	993555	0.09	500000	
Al	27	45	1	He	5305.196	5305.196	1.44	3029352	0.18	200000	
K	39	45	1	He	936.460	936.460	1.64	902011	0.10	500000	
Ca	44	45	1	He	349.255	349.255	5.29	18071	1.93	500000	
Ti	47	45	1	He	87.223	87.223	3.23	24820	0.35	2500	
V	51	45	1	He	14.102	14.102	2.25	100960	0.01	10000	
Cr	52	45	1	He	12.690	12.690	1.43	112967	0.01	10000	
Mn	55	45	1	He	133.281	133.281	1.34	891988	0.01	10000	
Fe	56	45	1	He	16412.875	16412.875	1.18	134940297	0.01	200000	
Co	59	103	1	He	5.595	5.595	2.26	79813	0.01	10000	
Ni	60	103	1	He	15.889	15.889	0.75	56243	0.03	10000	
Cu	63	103	1	He	7.914	7.914	2.21	77108	0.01	10000	
Zn	66	103	1	He	128.505	128.505	1.35	237182	0.05	10000	
As	75	103	1	He	18.090	18.090	1.36	20506	0.09	10000	
Se	78	103	1	He	0.716	0.716	5.99	125	0.58	10000	
Sr	88	103	1	He	5.845	5.845	2.49	50039	0.01	10000	
Mo	95	103	1	He	3.248	3.248	1.26	13595	0.02	2000	
Ag	107	103	1	He	0.019	0.019	27.05	294	0.01	300	
Cd	111	103	1	He	0.111	0.111	22.22	1500	0.01	4000	
Sn	118	115	1	He	18.039	18.039	1.14	96762	0.02	2000	
Sb	123	115	1	He	0.276	0.276	9.71	1522	0.02	300	
Ba	137	115	1	He	26.475	26.475	1.53	61642	0.04	10000	
W	182	209	1	He	0.119	0.119	14.70	5875	0.00	2500	
Tl	205	209	1	He	0.154	0.154	1.82	6042	0.00	5000	
Pb	208	209	1	He	8.773	8.773	0.70	447760	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1827648	1.60	2077022	87.99	30	120	
Sc	45	1	He	797508	2.16	817536	97.55	30	120	
Sc	45	2	NoGas	6006504	0.85	5970055	100.61	30	120	
Rh	103	1	He	2426278	1.97	2327919	104.23	30	120	
In	115	1	He	1259810	1.27	1305098	96.53	30	120	
Tb	159	1	He	3963735	0.67	3765959	105.25	30	120	
Ho	165	1	He	3970043	0.61	3748206	105.92	30	120	
Bi	209	1	He	2899876	1.10	2822318	102.75	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-6-h@2
Data File Name	083SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T22:56:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.094	4.094	2.05	23779	0.02	10000	
B	11	45	2	NoGas	9.773	9.773	2.38	53344	0.02	300	
Na	23	45	1	He	176.554	176.554	1.45	378876	0.05	500000	
Mg	24	45	1	He	11034.491	11034.491	0.54	12719450	0.09	500000	
Al	27	45	1	He	64233.933	64233.933	0.53	38672577	0.17	200000	
K	39	45	1	He	3855.659	3855.659	1.69	3805157	0.10	500000	
Ca	44	45	1	He	852.659	852.659	0.47	45627	1.87	500000	
Ti	47	45	1	He	563.616	563.616	1.02	169612	0.33	2500	
V	51	45	1	He	136.472	136.472	0.40	1027691	0.01	10000	
Cr	52	45	1	He	106.451	106.451	0.41	982134	0.01	10000	
Mn	55	45	1	He	4347.033	4347.033	1.25	30757415	0.01	10000	
Fe	56	45	1	He	133545.600	133545.600	0.65	1161227296	0.01	200000	
Co	59	103	1	He	61.389	61.389	2.44	849437	0.01	10000	
Ni	60	103	1	He	91.162	91.162	1.55	312671	0.03	10000	
Cu	63	103	1	He	76.277	76.277	1.56	692529	0.01	10000	
Zn	66	103	1	He	275.567	275.567	1.12	491102	0.06	10000	
As	75	103	1	He	58.436	58.436	1.19	64067	0.09	10000	
Se	78	103	1	He	6.039	6.039	2.81	739	0.82	10000	
Sr	88	103	1	He	16.883	16.883	0.41	139842	0.01	10000	
Mo	95	103	1	He	8.708	8.708	0.90	35253	0.02	2000	
Ag	107	103	1	He	0.184	0.184	1.82	2590	0.01	300	
Cd	111	103	1	He	0.733	0.733	5.71	2934	0.02	4000	
Sn	118	115	1	He	20.601	20.601	1.09	109517	0.02	2000	
Sb	123	115	1	He	0.618	0.618	4.33	3167	0.02	300	
Ba	137	115	1	He	455.405	455.405	0.52	1050653	0.04	10000	
W	182	209	1	He	0.375	0.375	2.19	9729	0.00	2500	
Tl	205	209	1	He	0.838	0.838	2.33	31736	0.00	5000	
Pb	208	209	1	He	94.221	94.221	0.14	4637663	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1951377	1.17	2077022	93.95	30	120	
Sc	45	1	He	843377	0.91	817536	103.16	30	120	
Sc	45	2	NoGas	6555674	0.48	5970055	109.81	30	120	
Rh	103	1	He	2354244	1.35	2327919	101.13	30	120	
In	115	1	He	1248849	0.92	1305098	95.69	30	120	
Tb	159	1	He	3965054	0.73	3765959	105.29	30	120	
Ho	165	1	He	3995003	1.98	3748206	106.58	30	120	
Bi	209	1	He	2799857	0.28	2822318	99.20	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	084_CCV.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:00:43-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.219	1.629	266404	1.50	50	98.4	89.5	110.5	
B	11	45	2	NoGas	50.303	0.741	222124	1.34	50	100.6	89.5	110.5	
Na	23	45	1	He	26159.063	2.143	50013165	1.24	25000	104.6	89.5	110.5	
Mg	24	45	1	He	26382.142	2.252	28446901	1.40	25000	105.5	89.5	110.5	
Al	27	45	1	He	246.209	1.644	148447	0.58	250	98.5	89.5	110.5	
K	39	45	1	He	25795.645	3.178	23596950	1.10	25000	103.2	89.5	110.5	
Ca	44	45	1	He	25275.956	1.472	1245556	0.89	25000	101.1	89.5	110.5	
Ti	47	45	1	He	52.538	3.649	14797	1.61	50	105.1	89.5	110.5	
V	51	45	1	He	52.896	4.000	372900	1.96	50	105.8	89.5	110.5	
Cr	52	45	1	He	53.021	1.220	458916	0.88	50	106.0	89.5	110.5	
Mn	55	45	1	He	262.986	1.105	1741185	1.00	250	105.2	89.5	110.5	
Fe	56	45	1	He	13439.964	2.208	109325407	0.13	12500	107.5	89.5	110.5	
Co	59	103	1	He	47.538	0.671	658318	0.87	50	95.1	89.5	110.5	
Ni	60	103	1	He	47.694	0.392	163760	0.46	50	95.4	89.5	110.5	
Cu	63	103	1	He	48.216	0.109	439321	0.70	50	96.4	89.5	110.5	
Zn	66	103	1	He	47.367	1.440	86256	1.06	50	94.7	89.5	110.5	
As	75	103	1	He	46.659	0.829	51215	0.73	50	93.3	89.5	110.5	
Se	78	103	1	He	44.650	1.924	5229	1.94	50	89.3	89.5	110.5	CCV Failed
Sr	88	103	1	He	46.010	0.849	380982	0.18	50	92.0	89.5	110.5	
Mo	95	103	1	He	49.859	2.097	201719	1.78	50	99.7	89.5	110.5	
Ag	107	103	1	He	49.452	0.605	691040	0.71	50	98.9	89.5	110.5	
Cd	111	103	1	He	48.894	1.781	117303	1.72	50	97.8	89.5	110.5	
Sn	118	115	1	He	50.736	1.143	266981	1.76	50	101.5	89.5	110.5	
Sb	123	115	1	He	53.453	1.454	256772	0.79	50	106.9	89.5	110.5	
Ba	137	115	1	He	51.221	0.889	117187	0.33	50	102.4	89.5	110.5	
W	182	209	1	He	48.828	1.304	770883	0.41	50	97.7	89.5	110.5	
Tl	205	209	1	He	51.115	3.676	1919873	2.66	50	102.2	89.5	110.5	
Pb	208	209	1	He	48.650	0.877	2377774	0.70	50	97.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1821599	1.53	2077022	87.70	30	120	
Sc	45	1	He	789138	2.10	817536	96.53	30	120	
Sc	45	2	NoGas	5853257	0.91	5970055	98.04	30	120	
Rh	103	1	He	2355969	0.78	2327919	101.20	30	120	
In	115	1	He	1238183	0.66	1305098	94.87	30	120	
Tb	159	1	He	3884019	0.50	3765959	103.13	30	120	
Ho	165	1	He	3908878	0.48	3748206	104.29	30	120	
Bi	209	1	He	2780091	1.57	2822318	98.50	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	085_CCB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:04:31-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.030	41.1	211	32.0	1	
B	11	45	2	NoGas	1.543	8.2	12453	5.7	20	
Na	23	45	1	He	13.785	6.4	42186	3.1	400	
Mg	24	45	1	He	2.277	20.9	2874	16.8	1000	
Al	27	45	1	He	0.695	41.9	9943	1.7	50	
K	39	45	1	He	8.951	10.7	44062	1.3	1000	
Ca	44	45	1	He	2.517	84.6	793	13.5	1000	
Ti	47	45	1	He	0.201	36.6	67	30.4	20	
V	51	45	1	He	-0.040	-190.7	342	151.8	2	
Cr	52	45	1	He	-0.011	-23.5	2397	1.3	2	
Mn	55	45	1	He	0.128	21.1	1266	13.0	2	
Fe	56	45	1	He	20.094	22.6	171764	20.3	50	
Co	59	103	1	He	0.006	24.9	122	16.7	1	
Ni	60	103	1	He	0.003	205.0	110	21.9	2	
Cu	63	103	1	He	-0.150	-2.8	2057	2.7	2	
Zn	66	103	1	He	-0.148	-53.2	1966	6.5	20	
As	75	103	1	He	0.086	14.5	197	7.9	2	
Se	78	103	1	He	0.053	46.0	46	7.3	2	
Sr	88	103	1	He	0.002	48.4	242	2.9	10	
Mo	95	103	1	He	0.895	18.5	3835	18.4	2	
Ag	107	103	1	He	0.011	29.8	177	26.1	0.2	
Cd	111	103	1	He	-0.024	-20.6	1186	0.9	0.2	
Sn	118	115	1	He	0.342	12.7	2160	11.2	10	
Sb	123	115	1	He	0.223	8.0	1286	7.1	1	
Ba	137	115	1	He	0.025	31.1	96	19.2	5	
W	182	209	1	He	0.930	22.9	18827	18.3	10	
Tl	205	209	1	He	0.045	15.2	1738	15.1	0.5	
Pb	208	209	1	He	0.045	13.9	2841	10.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1879264	1.39	2077022	90.48	30	120	
Sc	45	1	He	768628	0.75	817536	94.02	30	120	
Sc	45	2	NoGas	5973877	1.32	5970055	100.06	30	120	
Rh	103	1	He	2454524	0.82	2327919	105.44	30	120	
In	115	1	He	1276803	0.34	1305098	97.83	30	120	
Tb	159	1	He	3868370	0.97	3765959	102.72	30	120	
Ho	165	1	He	3909615	0.69	3748206	104.31	30	120	
Bi	209	1	He	2846299	0.73	2822318	100.85	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-8-f@2
Data File Name	086SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:08:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.982	3.982	2.92	23200	0.02	10000	
B	11	45	2	NoGas	12.639	12.639	2.84	67334	0.02	300	
Na	23	45	1	He	151.848	151.848	1.13	342952	0.04	500000	
Mg	24	45	1	He	11230.758	11230.758	1.38	13519510	0.08	500000	
Al	27	45	1	He	65430.722	65430.722	1.42	41138305	0.16	200000	
K	39	45	1	He	4004.477	4004.477	0.60	4125423	0.10	500000	
Ca	44	45	1	He	1278.210	1278.210	0.29	71052	1.80	500000	
Ti	47	45	1	He	579.873	579.873	0.27	182262	0.32	2500	
V	51	45	1	He	128.992	128.992	0.39	1014561	0.01	10000	
Cr	52	45	1	He	91.094	91.094	0.89	878121	0.01	10000	
Mn	55	45	1	He	3085.207	3085.207	0.22	22799030	0.01	10000	
Fe	56	45	1	He	131046.253	131046.253	0.30	1190076504	0.01	200000	
Co	59	103	1	He	52.868	52.868	0.64	742108	0.01	10000	
Ni	60	103	1	He	106.136	106.136	0.23	369263	0.03	10000	
Cu	63	103	1	He	84.813	84.813	0.54	780742	0.01	10000	
Zn	66	103	1	He	281.597	281.597	0.96	509044	0.06	10000	
As	75	103	1	He	54.679	54.679	0.56	60818	0.09	10000	
Se	78	103	1	He	6.416	6.416	3.97	794	0.81	10000	
Sr	88	103	1	He	23.616	23.616	1.99	198346	0.01	10000	
Mo	95	103	1	He	8.881	8.881	0.63	36471	0.02	2000	
Ag	107	103	1	He	0.130	0.130	7.30	1861	0.01	300	
Cd	111	103	1	He	0.818	0.818	3.88	3178	0.03	4000	
Sn	118	115	1	He	16.960	16.960	2.21	91850	0.02	2000	
Sb	123	115	1	He	0.813	0.813	1.28	4185	0.02	300	
Ba	137	115	1	He	425.433	425.433	0.79	999317	0.04	10000	
W	182	209	1	He	0.605	0.605	2.68	13558	0.00	2500	
Tl	205	209	1	He	0.888	0.888	0.94	34085	0.00	5000	
Pb	208	209	1	He	69.000	69.000	1.37	3442858	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1957743	1.62	2077022	94.26	30	120	
Sc	45	1	He	880850	1.35	817536	107.74	30	120	
Sc	45	2	NoGas	6572924	0.86	5970055	110.10	30	120	
Rh	103	1	He	2388017	0.79	2327919	102.58	30	120	
In	115	1	He	1271529	0.25	1305098	97.43	30	120	
Tb	159	1	He	3994677	0.82	3765959	106.07	30	120	
Ho	165	1	He	4028452	1.17	3748206	107.48	30	120	
Bi	209	1	He	2838411	1.09	2822318	100.57	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-10-h@2
Data File Name	087SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:12:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.006	2.006	1.97	12112	0.02	10000	
B	11	45	2	NoGas	8.196	8.196	1.45	47584	0.02	300	
Na	23	45	1	He	114.993	114.993	1.08	264842	0.04	500000	
Mg	24	45	1	He	6183.963	6183.963	1.27	7459782	0.08	500000	
Al	27	45	1	He	31569.043	31569.043	0.89	19895426	0.16	200000	
K	39	45	1	He	2684.717	2684.717	0.59	2785025	0.10	500000	
Ca	44	45	1	He	661.162	661.162	1.91	37198	1.78	500000	
Ti	47	45	1	He	441.469	441.469	0.79	139034	0.32	2500	
V	51	45	1	He	81.136	81.136	0.41	639672	0.01	10000	
Cr	52	45	1	He	93.794	93.794	0.28	905890	0.01	10000	
Mn	55	45	1	He	1509.952	1509.952	0.74	11179976	0.01	10000	
Fe	56	45	1	He	82208.432	82208.432	1.15	748043099	0.01	200000	
Co	59	103	1	He	32.190	32.190	0.78	474217	0.01	10000	
Ni	60	103	1	He	67.945	67.945	0.55	248140	0.03	10000	
Cu	63	103	1	He	29.047	29.047	0.51	282973	0.01	10000	
Zn	66	103	1	He	154.669	154.669	0.92	294453	0.05	10000	
As	75	103	1	He	54.867	54.867	1.32	64047	0.09	10000	
Se	78	103	1	He	3.031	3.031	5.99	415	0.73	10000	
Sr	88	103	1	He	10.819	10.819	0.88	95480	0.01	10000	
Mo	95	103	1	He	5.807	5.807	0.38	25050	0.02	2000	
Ag	107	103	1	He	0.100	0.100	4.97	1507	0.01	300	
Cd	111	103	1	He	0.356	0.356	12.96	2170	0.02	4000	
Sn	118	115	1	He	17.374	17.374	0.61	97548	0.02	2000	
Sb	123	115	1	He	0.437	0.437	5.83	2419	0.02	300	
Ba	137	115	1	He	178.682	178.682	0.62	435197	0.04	10000	
W	182	209	1	He	0.372	0.372	16.65	9967	0.00	2500	
Tl	205	209	1	He	0.432	0.432	0.46	16846	0.00	5000	
Pb	208	209	1	He	38.446	38.446	0.81	1948166	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2023422	1.80	2077022	97.42	30	120	
Sc	45	1	He	882569	0.19	817536	107.95	30	120	
Sc	45	2	NoGas	6819764	0.72	5970055	114.23	30	120	
Rh	103	1	He	2506366	1.06	2327919	107.67	30	120	
In	115	1	He	1318399	0.98	1305098	101.02	30	120	
Tb	159	1	He	4093629	0.87	3765959	108.70	30	120	
Ho	165	1	He	4110336	0.52	3748206	109.66	30	120	
Bi	209	1	He	2881919	0.03	2822318	102.11	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-34-d@2
Data File Name	088SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:15:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.188	2.188	1.47	11986	0.02	10000	
B	11	45	2	NoGas	21.719	21.719	0.63	101575	0.02	300	
Na	23	45	1	He	296.898	296.898	0.65	575713	0.05	500000	
Mg	24	45	1	He	27093.367	27093.367	0.82	28779991	0.09	500000	
Al	27	45	1	He	39557.194	39557.194	1.12	21951125	0.18	200000	
K	39	45	1	He	5993.131	5993.131	1.47	5430015	0.11	500000	
Ca	44	45	1	He	49114.045	49114.045	0.97	2383535	2.06	500000	
Ti	47	45	1	He	340.197	340.197	1.57	94357	0.36	2500	
V	51	45	1	He	64.864	64.864	0.69	450465	0.01	10000	
Cr	52	45	1	He	65.025	65.025	1.14	553809	0.01	10000	
Mn	55	45	1	He	1580.592	1580.592	1.28	10305892	0.02	10000	
Fe	56	45	1	He	126491.767	126491.767	0.76	1013563586	0.01	200000	
Co	59	103	1	He	46.990	46.990	0.44	614075	0.01	10000	
Ni	60	103	1	He	112.335	112.335	0.80	363853	0.03	10000	
Cu	63	103	1	He	86.458	86.458	0.70	740875	0.01	10000	
Zn	66	103	1	He	256.140	256.140	0.78	431222	0.06	10000	
As	75	103	1	He	66.851	66.851	1.18	69200	0.10	10000	
Se	78	103	1	He	3.976	3.976	2.91	472	0.84	10000	
Sr	88	103	1	He	80.632	80.632	1.39	629864	0.01	10000	
Mo	95	103	1	He	4.496	4.496	1.74	17215	0.03	2000	
Ag	107	103	1	He	0.092	0.092	8.01	1230	0.01	300	
Cd	111	103	1	He	0.474	0.474	4.44	2190	0.02	4000	
Sn	118	115	1	He	17.212	17.212	1.26	86091	0.02	2000	
Sb	123	115	1	He	0.435	0.435	6.18	2146	0.02	300	
Ba	137	115	1	He	190.899	190.899	1.34	414187	0.05	10000	
W	182	209	1	He	0.196	0.196	5.93	6646	0.00	2500	
Tl	205	209	1	He	0.648	0.648	0.68	23664	0.00	5000	
Pb	208	209	1	He	46.355	46.355	0.65	2199627	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1836814	0.50	2077022	88.43	30	120	
Sc	45	1	He	777206	0.56	817536	95.07	30	120	
Sc	45	2	NoGas	6001965	0.13	5970055	100.53	30	120	
Rh	103	1	He	2223319	1.55	2327919	95.51	30	120	
In	115	1	He	1174461	0.42	1305098	89.99	30	120	
Tb	159	1	He	3902528	0.94	3765959	103.63	30	120	
Ho	165	1	He	3901095	1.59	3748206	104.08	30	120	
Bi	209	1	He	2698942	0.79	2822318	95.63	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	089_CCV.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:19:36-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.522	1.172	266847	1.27	50	99.0	89.5	110.5	
B	11	45	2	NoGas	49.622	0.186	222111	0.84	50	99.2	89.5	110.5	
Na	23	45	1	He	26610.778	1.806	50242618	2.36	25000	106.4	89.5	110.5	
Mg	24	45	1	He	26376.938	1.759	28083406	1.30	25000	105.5	89.5	110.5	
Al	27	45	1	He	246.786	2.278	146882	0.77	250	98.7	89.5	110.5	
K	39	45	1	He	26194.337	2.177	23662823	1.25	25000	104.8	89.5	110.5	
Ca	44	45	1	He	25682.638	0.111	1249920	2.56	25000	102.7	89.5	110.5	
Ti	47	45	1	He	53.971	1.771	15015	2.45	50	107.9	89.5	110.5	
V	51	45	1	He	53.556	3.504	372779	0.98	50	107.1	89.5	110.5	
Cr	52	45	1	He	53.606	1.886	458062	1.24	50	107.2	89.5	110.5	
Mn	55	45	1	He	266.451	0.825	1742065	2.13	250	106.6	89.5	110.5	
Fe	56	45	1	He	13566.730	1.568	108974949	1.10	12500	108.5	89.5	110.5	
Co	59	103	1	He	47.433	0.806	654963	1.37	50	94.9	89.5	110.5	
Ni	60	103	1	He	48.189	1.013	164981	1.36	50	96.4	89.5	110.5	
Cu	63	103	1	He	48.312	0.194	438908	0.78	50	96.6	89.5	110.5	
Zn	66	103	1	He	47.251	0.525	85806	1.03	50	94.5	89.5	110.5	
As	75	103	1	He	47.385	0.833	51861	1.32	50	94.8	89.5	110.5	
Se	78	103	1	He	45.606	1.119	5324	0.52	50	91.2	89.5	110.5	
Sr	88	103	1	He	46.589	0.442	384658	0.32	50	93.2	89.5	110.5	
Mo	95	103	1	He	50.117	1.934	202174	1.52	50	100.2	89.5	110.5	
Ag	107	103	1	He	49.742	0.537	693061	0.32	50	99.5	89.5	110.5	
Cd	111	103	1	He	49.435	0.684	118246	0.76	50	98.9	89.5	110.5	
Sn	118	115	1	He	50.876	0.998	268116	1.11	50	101.8	89.5	110.5	
Sb	123	115	1	He	53.412	0.341	256985	0.32	50	106.8	89.5	110.5	
Ba	137	115	1	He	51.051	0.083	116982	0.53	50	102.1	89.5	110.5	
W	182	209	1	He	48.841	1.863	771495	1.16	50	97.7	89.5	110.5	
Tl	205	209	1	He	51.936	3.168	1951834	2.07	50	103.9	89.5	110.5	
Pb	208	209	1	He	48.611	0.854	2377182	0.93	50	97.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1813329	0.92	2077022	87.30	30	120	
Sc	45	1	He	779235	2.67	817536	95.32	30	120	
Sc	45	2	NoGas	5931343	0.91	5970055	99.35	30	120	
Rh	103	1	He	2349102	0.59	2327919	100.91	30	120	
In	115	1	He	1240090	0.60	1305098	95.02	30	120	
Tb	159	1	He	3893936	1.91	3765959	103.40	30	120	
Ho	165	1	He	3991270	1.58	3748206	106.48	30	120	
Bi	209	1	He	2781543	1.39	2822318	98.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	090_CCB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:23:22-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.031	27.5	207	22.3	1	
B	11	45	2	NoGas	1.784	3.8	13398	2.6	20	
Na	23	45	1	He	12.038	12.6	38389	6.6	400	
Mg	24	45	1	He	2.591	24.7	3160	20.4	1000	
Al	27	45	1	He	1.206	14.2	10081	0.4	50	
K	39	45	1	He	9.105	21.2	43579	3.1	1000	
Ca	44	45	1	He	1.919	61.3	753	6.7	1000	
Ti	47	45	1	He	0.093	64.8	37	45.5	20	
V	51	45	1	He	-0.014	-332.5	514	60.4	2	
Cr	52	45	1	He	-0.005	-551.2	2411	9.9	2	
Mn	55	45	1	He	0.095	4.7	1038	1.9	2	
Fe	56	45	1	He	19.560	22.1	165195	19.8	50	
Co	59	103	1	He	0.005	74.1	107	46.9	1	
Ni	60	103	1	He	-0.002	-162.1	89	15.6	2	
Cu	63	103	1	He	-0.166	-8.3	1887	6.8	2	
Zn	66	103	1	He	-0.115	-26.8	2006	2.6	20	
As	75	103	1	He	0.096	9.5	207	5.1	2	
Se	78	103	1	He	0.049	106.3	45	14.1	2	
Sr	88	103	1	He	0.001	161.9	238	7.7	10	
Mo	95	103	1	He	0.936	19.1	3965	18.9	2	
Ag	107	103	1	He	0.010	34.8	169	30.8	0.2	
Cd	111	103	1	He	-0.011	-162.5	1205	3.8	0.2	
Sn	118	115	1	He	0.342	4.4	2145	3.4	10	
Sb	123	115	1	He	0.259	19.8	1451	16.7	1	
Ba	137	115	1	He	0.013	27.6	68	12.4	5	
W	182	209	1	He	0.908	20.3	18601	16.3	10	
Tl	205	209	1	He	0.036	16.7	1419	16.7	0.5	
Pb	208	209	1	He	0.038	11.6	2510	9.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1818331	1.18	2077022	87.55	30	120	
Sc	45	1	He	757941	0.82	817536	92.71	30	120	
Sc	45	2	NoGas	5924622	1.16	5970055	99.24	30	120	
Rh	103	1	He	2429367	0.23	2327919	104.36	30	120	
In	115	1	He	1270181	0.70	1305098	97.32	30	120	
Tb	159	1	He	3845988	1.37	3765959	102.13	30	120	
Ho	165	1	He	3866098	1.03	3748206	103.15	30	120	
Bi	209	1	He	2864707	0.27	2822318	101.50	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	091CRIA.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:27:11-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.018	1.018	3.720	5697	2.88	1	101.8	69.5	130.5	
B	11	2	NoGas	20.397	20.397	1.871	94889	1.89	20	102.0	69.5	130.5	
Na	23	1	He	1106.358	1106.358	1.049	2132568	0.43	1000	110.6	69.5	130.5	
Mg	24	1	He	1092.745	1092.745	1.608	1179382	1.61	1000	109.3	69.5	130.5	
Al	27	1	He	38.555	38.555	3.049	31537	1.25	50	77.1	69.5	130.5	
K	39	1	He	1050.724	1050.724	1.012	997430	0.84	1000	105.1	69.5	130.5	
Ca	44	1	He	1031.297	1031.297	0.865	51506	0.42	1000	103.1	69.5	130.5	
Ti	47	1	He	10.685	10.685	5.400	3020	4.47	10	106.8	69.5	130.5	
V	51	1	He	5.238	5.238	1.202	37530	2.04	5	104.8	69.5	130.5	
Cr	52	1	He	2.199	2.199	3.057	21485	1.84	2	109.9	69.5	130.5	
Mn	55	1	He	5.246	5.246	1.410	35192	0.68	5	104.9	69.5	130.5	
Fe	56	1	He	112.366	112.366	0.830	927467	0.34	100	112.4	69.5	130.5	
Co	59	1	He	0.987	0.987	2.005	13853	1.46	1	98.7	69.5	130.5	
Ni	60	1	He	2.061	2.061	1.395	7242	1.02	2	103.0	69.5	130.5	
Cu	63	1	He	1.844	1.844	1.231	20218	0.45	2	92.2	69.5	130.5	
Zn	66	1	He	19.731	19.731	1.151	37579	0.59	20	98.7	69.5	130.5	
As	75	1	He	4.845	4.845	1.351	5461	1.07	5	96.9	69.5	130.5	
Se	78	1	He	4.834	4.834	4.692	606	4.36	5	96.7	69.5	130.5	
Sr	88	1	He	9.331	9.331	1.279	78261	0.69	10	93.3	69.5	130.5	
Mo	95	1	He	10.313	10.313	1.962	42216	1.53	10	103.1	69.5	130.5	
Ag	107	1	He	1.057	1.057	2.769	14941	2.89	1	105.7	69.5	130.5	
Cd	111	1	He	1.021	1.021	1.962	3657	1.07	1	102.1	69.5	130.5	
Sn	118	1	He	10.614	10.614	0.418	57706	0.78	10	106.1	69.5	130.5	
Sb	123	1	He	2.009	2.009	2.637	10100	2.37	2	100.4	69.5	130.5	
Ba	137	1	He	5.114	5.114	0.365	12072	0.71	5	102.3	69.5	130.5	
W	182	1	He	9.366	9.366	2.671	157272	1.76	10	93.7	69.5	130.5	
Tl	205	1	He	1.884	1.884	0.982	73792	0.96	2	94.2	69.5	130.5	
Pb	208	1	He	1.043	1.043	2.529	53698	1.01	1	104.3	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1870559	0.87	2077022	90.06	30	120	
Sc	45	1	He	789391	0.91	817536	96.56	30	120	
Sc	45	2	NoGas	5948472	0.32	5970055	99.64	30	120	
Rh	103	1	He	2380977	0.61	2327919	102.28	30	120	
In	115	1	He	1273966	0.39	1305098	97.61	30	120	
Tb	159	1	He	3822059	1.22	3765959	101.49	30	120	
Ho	165	1	He	3914230	1.15	3748206	104.43	30	120	
Bi	209	1	He	2897460	1.52	2822318	102.66	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-1-a@2
Data File Name	092SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:31:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.462	1.462	6.21	8387	0.02	10000	
B	11	45	2	NoGas	2.703	2.703	5.61	19073	0.01	300	
Na	23	45	1	He	288.008	288.008	2.20	604833	0.05	500000	
Mg	24	45	1	He	267.803	267.803	2.33	308323	0.09	500000	
Al	27	45	1	He	9259.482	9259.482	3.16	5567048	0.17	200000	
K	39	45	1	He	735.009	735.009	2.48	755179	0.10	500000	
Ca	44	45	1	He	326.994	326.994	3.23	17901	1.83	500000	
Ti	47	45	1	He	135.517	135.517	3.20	40668	0.33	2500	
V	51	45	1	He	47.102	47.102	3.89	354010	0.01	10000	
Cr	52	45	1	He	36.648	36.648	3.26	338862	0.01	10000	
Mn	55	45	1	He	82.437	82.437	2.64	582016	0.01	10000	
Fe	56	45	1	He	91700.463	91700.463	2.49	795031488	0.01	200000	
Co	59	103	1	He	7.332	7.332	1.72	102178	0.01	10000	
Ni	60	103	1	He	3.582	3.582	3.05	12461	0.03	10000	
Cu	63	103	1	He	108.700	108.700	1.08	992188	0.01	10000	
Zn	66	103	1	He	66.599	66.599	1.52	121134	0.05	10000	
As	75	103	1	He	8.401	8.401	1.61	9356	0.09	10000	
Se	78	103	1	He	2.335	2.335	9.32	311	0.75	10000	
Sr	88	103	1	He	5.900	5.900	2.17	49338	0.01	10000	
Mo	95	103	1	He	3.308	3.308	1.69	13521	0.02	2000	
Ag	107	103	1	He	0.039	0.039	14.84	563	0.01	300	
Cd	111	103	1	He	0.161	0.161	21.71	1586	0.01	4000	
Sn	118	115	1	He	15.977	15.977	0.63	85477	0.02	2000	
Sb	123	115	1	He	0.265	0.265	8.21	1468	0.02	300	
Ba	137	115	1	He	41.848	41.848	0.91	97118	0.04	10000	
W	182	209	1	He	0.427	0.427	18.35	10645	0.00	2500	
Tl	205	209	1	He	0.283	0.283	2.48	10837	0.00	5000	
Pb	208	209	1	He	24.754	24.754	0.97	1230384	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1921397	0.98	2077022	92.51	30	120	
Sc	45	1	He	841301	2.80	817536	102.91	30	120	
Sc	45	2	NoGas	6494392	0.08	5970055	108.78	30	120	
Rh	103	1	He	2370371	1.19	2327919	101.82	30	120	
In	115	1	He	1255844	0.19	1305098	96.23	30	120	
Tb	159	1	He	3902560	0.60	3765959	103.63	30	120	
Ho	165	1	He	3960642	1.11	3748206	105.67	30	120	
Bi	209	1	He	2826565	0.88	2822318	100.15	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-2-a@2
Data File Name	093SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:34:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.656	1.656	5.79	9129	0.02	10000	
B	11	45	2	NoGas	5.214	5.214	1.92	31824	0.02	300	
Na	23	45	1	He	1226.720	1226.720	0.94	2446547	0.05	500000	
Mg	24	45	1	He	1142.479	1142.479	1.77	1276530	0.09	500000	
Al	27	45	1	He	13617.067	13617.067	0.30	7953895	0.17	200000	
K	39	45	1	He	3178.811	3178.811	0.96	3047548	0.10	500000	
Ca	44	45	1	He	507.887	507.887	2.73	26641	1.91	500000	
Ti	47	45	1	He	245.372	245.372	1.04	71589	0.34	2500	
V	51	45	1	He	241.366	241.366	1.08	1761587	0.01	10000	
Cr	52	45	1	He	106.692	106.692	0.27	954119	0.01	10000	
Mn	55	45	1	He	55.135	55.135	0.70	378566	0.01	10000	
Fe	56	45	1	He	94821.400	94821.400	1.06	799088057	0.01	200000	
Co	59	103	1	He	2.636	2.636	1.76	34507	0.01	10000	
Ni	60	103	1	He	4.481	4.481	3.26	14612	0.03	10000	
Cu	63	103	1	He	34.223	34.223	2.28	295373	0.01	10000	
Zn	66	103	1	He	23.129	23.129	0.79	40802	0.06	10000	
As	75	103	1	He	3.520	3.520	4.79	3731	0.09	10000	
Se	78	103	1	He	6.355	6.355	4.13	733	0.87	10000	
Sr	88	103	1	He	12.780	12.780	1.39	100060	0.01	10000	
Mo	95	103	1	He	0.456	0.456	7.01	1796	0.03	2000	
Ag	107	103	1	He	0.030	0.030	8.71	410	0.01	300	
Cd	111	103	1	He	0.761	0.761	2.66	2834	0.03	4000	
Sn	118	115	1	He	17.487	17.487	0.74	86858	0.02	2000	
Sb	123	115	1	He	0.453	0.453	5.70	2210	0.02	300	
Ba	137	115	1	He	95.773	95.773	0.14	206345	0.05	10000	
W	182	209	1	He	0.216	0.216	9.61	6954	0.00	2500	
Tl	205	209	1	He	0.532	0.532	1.73	19426	0.00	5000	
Pb	208	209	1	He	42.279	42.279	0.71	2005263	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1845814	1.21	2077022	88.87	30	120	
Sc	45	1	He	817455	2.70	817536	99.99	30	120	
Sc	45	2	NoGas	6652990	0.52	5970055	111.44	30	120	
Rh	103	1	He	2224223	1.75	2327919	95.55	30	120	
In	115	1	He	1166169	2.59	1305098	89.35	30	120	
Tb	159	1	He	3822250	1.23	3765959	101.49	30	120	
Ho	165	1	He	3916089	1.56	3748206	104.48	30	120	
Bi	209	1	He	2697499	0.91	2822318	95.58	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-3-a@2
Data File Name	094SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:38:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.708	0.708	4.73	4067	0.02	10000	
B	11	45	2	NoGas	2.510	2.510	5.82	18640	0.01	300	
Na	23	45	1	He	591.112	591.112	1.19	1131828	0.05	500000	
Mg	24	45	1	He	1637.948	1637.948	1.68	1742898	0.09	500000	
Al	27	45	1	He	36032.644	36032.644	0.80	20025866	0.18	200000	
K	39	45	1	He	1295.000	1295.000	2.83	1204768	0.11	500000	
Ca	44	45	1	He	1818.504	1818.504	1.60	89070	2.04	500000	
Ti	47	45	1	He	223.170	223.170	0.38	61999	0.36	2500	
V	51	45	1	He	203.595	203.595	0.93	1414883	0.01	10000	
Cr	52	45	1	He	61.569	61.569	0.87	525434	0.01	10000	
Mn	55	45	1	He	70.618	70.618	0.52	461602	0.02	10000	
Fe	56	45	1	He	60587.925	60587.925	1.59	486450487	0.01	200000	
Co	59	103	1	He	5.152	5.152	1.12	66167	0.01	10000	
Ni	60	103	1	He	9.493	9.493	1.23	30303	0.03	10000	
Cu	63	103	1	He	44.630	44.630	0.11	377285	0.01	10000	
Zn	66	103	1	He	30.177	30.177	0.80	51670	0.06	10000	
As	75	103	1	He	8.557	8.557	0.17	8781	0.10	10000	
Se	78	103	1	He	2.139	2.139	6.47	266	0.81	10000	
Sr	88	103	1	He	7.802	7.802	2.08	60107	0.01	10000	
Mo	95	103	1	He	2.902	2.902	3.67	10930	0.03	2000	
Ag	107	103	1	He	0.021	0.021	5.95	290	0.01	300	
Cd	111	103	1	He	0.249	0.249	16.79	1654	0.02	4000	
Sn	118	115	1	He	16.565	16.565	0.53	82235	0.02	2000	
Sb	123	115	1	He	0.324	0.324	4.20	1630	0.02	300	
Ba	137	115	1	He	93.565	93.565	0.67	201445	0.05	10000	
W	182	209	1	He	0.202	0.202	8.88	6735	0.00	2500	
Tl	205	209	1	He	0.556	0.556	2.26	20266	0.00	5000	
Pb	208	209	1	He	30.828	30.828	0.70	1461088	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1913180	0.72	2077022	92.11	30	120	
Sc	45	1	He	778481	4.10	817536	95.22	30	120	
Sc	45	2	NoGas	6668230	0.23	5970055	111.69	30	120	
Rh	103	1	He	2184548	4.16	2327919	93.84	30	120	
In	115	1	He	1165394	3.76	1305098	89.30	30	120	
Tb	159	1	He	3681571	3.04	3765959	97.76	30	120	
Ho	165	1	He	3701522	2.21	3748206	98.75	30	120	
Bi	209	1	He	2695536	2.93	2822318	95.51	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-4-a@2
Data File Name	095SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:42:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.730	0.730	3.02	4086	0.02	10000	
B	11	45	2	NoGas	3.494	3.494	5.03	22730	0.02	300	
Na	23	45	1	He	282.585	282.585	0.43	599622	0.05	500000	
Mg	24	45	1	He	154.292	154.292	1.11	179625	0.09	500000	
Al	27	45	1	He	7500.962	7500.962	0.69	4556744	0.16	200000	
K	39	45	1	He	1677.892	1677.892	1.46	1689659	0.10	500000	
Ca	44	45	1	He	166.255	166.255	2.29	9557	1.74	500000	
Ti	47	45	1	He	227.265	227.265	2.57	68875	0.33	2500	
V	51	45	1	He	96.419	96.419	0.93	731291	0.01	10000	
Cr	52	45	1	He	26.507	26.507	0.45	248322	0.01	10000	
Mn	55	45	1	He	86.631	86.631	0.24	617679	0.01	10000	
Fe	56	45	1	He	39567.386	39567.386	0.35	346455053	0.01	200000	
Co	59	103	1	He	1.487	1.487	1.23	21214	0.01	10000	
Ni	60	103	1	He	2.338	2.338	3.47	8349	0.03	10000	
Cu	63	103	1	He	31.575	31.575	1.56	297087	0.01	10000	
Zn	66	103	1	He	33.596	33.596	0.15	63580	0.05	10000	
As	75	103	1	He	10.011	10.011	0.79	11380	0.09	10000	
Se	78	103	1	He	3.500	3.500	2.08	457	0.77	10000	
Sr	88	103	1	He	8.836	8.836	2.07	75438	0.01	10000	
Mo	95	103	1	He	2.119	2.119	0.89	8878	0.02	2000	
Ag	107	103	1	He	0.050	0.050	14.45	742	0.01	300	
Cd	111	103	1	He	0.312	0.312	6.74	1990	0.02	4000	
Sn	118	115	1	He	17.052	17.052	2.77	92759	0.02	2000	
Sb	123	115	1	He	0.387	0.387	8.09	2097	0.02	300	
Ba	137	115	1	He	59.977	59.977	0.25	141539	0.04	10000	
W	182	209	1	He	0.105	0.105	19.79	5512	0.00	2500	
Tl	205	209	1	He	0.274	0.274	1.98	10470	0.00	5000	
Pb	208	209	1	He	49.887	49.887	0.62	2474894	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1863227	2.52	2077022	89.71	30	120	
Sc	45	1	He	849247	1.04	817536	103.88	30	120	
Sc	45	2	NoGas	6459759	0.71	5970055	108.20	30	120	
Rh	103	1	He	2423495	1.47	2327919	104.11	30	120	
In	115	1	He	1277186	0.40	1305098	97.86	30	120	
Tb	159	1	He	4006851	1.07	3765959	106.40	30	120	
Ho	165	1	He	4048151	0.66	3748206	108.00	30	120	
Bi	209	1	He	2821795	1.22	2822318	99.98	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-5-a@2
Data File Name	096SMPL.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:46:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.985	3.985	4.60	20564	0.02	10000	
B	11	45	2	NoGas	4.285	4.285	2.75	26535	0.02	300	
Na	23	45	1	He	789.665	789.665	1.05	1672495	0.05	500000	
Mg	24	45	1	He	54841.004	54841.004	0.67	64798418	0.08	500000	
Al	27	45	1	He	82414.126	82414.126	1.61	50859442	0.16	200000	
K	39	45	1	He	9212.287	9212.287	0.74	9263022	0.10	500000	
Ca	44	45	1	He	12532.998	12532.998	0.48	677132	1.85	500000	
Ti	47	45	1	He	2801.735	2801.735	0.87	864256	0.32	2500	>LDR
V	51	45	1	He	249.820	249.820	6.48	1928226	0.01	10000	
Cr	52	45	1	He	1110.452	1110.452	0.31	10475941	0.01	10000	
Mn	55	45	1	He	2042.032	2042.032	0.71	14810784	0.01	10000	
Fe	56	45	1	He	123851.333	123851.333	0.19	1103964436	0.01	200000	
Co	59	103	1	He	86.971	86.971	0.44	1117925	0.01	10000	
Ni	60	103	1	He	282.957	282.957	0.30	901414	0.03	10000	
Cu	63	103	1	He	208.966	208.966	0.53	1757061	0.01	10000	
Zn	66	103	1	He	200.770	200.770	0.57	332925	0.06	10000	
As	75	103	1	He	8.551	8.551	0.66	8785	0.10	10000	
Se	78	103	1	He	3.342	3.342	5.08	396	0.84	10000	
Sr	88	103	1	He	49.112	49.112	0.60	377483	0.01	10000	
Mo	95	103	1	He	1.746	1.746	4.53	6612	0.03	2000	
Ag	107	103	1	He	0.060	0.060	11.33	799	0.01	300	
Cd	111	103	1	He	0.492	0.492	15.97	2195	0.02	4000	
Sn	118	115	1	He	17.840	17.840	0.74	87305	0.02	2000	
Sb	123	115	1	He	0.290	0.290	4.97	1453	0.02	300	
Ba	137	115	1	He	493.342	493.342	0.68	1047316	0.05	10000	
W	182	209	1	He	0.423	0.423	9.75	9759	0.00	2500	
Tl	205	209	1	He	0.737	0.737	1.61	25929	0.00	5000	
Pb	208	209	1	He	61.349	61.349	0.36	2807375	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1733429	0.34	2077022	83.46	30	120	
Sc	45	1	He	864565	0.79	817536	105.75	30	120	
Sc	45	2	NoGas	6471392	0.39	5970055	108.40	30	120	
Rh	103	1	He	2186907	0.65	2327919	93.94	30	120	
In	115	1	He	1149214	0.60	1305098	88.06	30	120	
Tb	159	1	He	3675442	0.77	3765959	97.60	30	120	
Ho	165	1	He	3773434	1.00	3748206	100.67	30	120	
Bi	209	1	He	2602886	0.66	2822318	92.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	097_CCV.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:49:59-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.897	2.012	244868	2.72	50	99.8	89.5	110.5	
B	11	45	2	NoGas	49.382	1.249	199958	1.89	50	98.8	89.5	110.5	
Na	23	45	1	He	26235.448	1.555	45521330	0.63	25000	104.9	89.5	110.5	
Mg	24	45	1	He	26151.131	1.622	25591015	1.05	25000	104.6	89.5	110.5	
Al	27	45	1	He	248.700	0.891	136003	1.35	250	99.5	89.5	110.5	
K	39	45	1	He	25914.218	1.240	21518303	0.68	25000	103.7	89.5	110.5	
Ca	44	45	1	He	25380.556	1.508	1135000	0.49	25000	101.5	89.5	110.5	
Ti	47	45	1	He	55.317	1.790	14142	0.74	50	110.6	89.5	110.5	CCV Failed
V	51	45	1	He	52.773	2.356	337696	0.49	50	105.5	89.5	110.5	
Cr	52	45	1	He	53.582	1.918	420809	0.26	50	107.2	89.5	110.5	
Mn	55	45	1	He	274.043	1.415	1646472	0.53	250	109.6	89.5	110.5	
Fe	56	45	1	He	13534.463	1.868	99916069	0.37	12500	108.3	89.5	110.5	
Co	59	103	1	He	47.412	0.834	598602	1.02	50	94.8	89.5	110.5	
Ni	60	103	1	He	48.067	0.878	150468	0.93	50	96.1	89.5	110.5	
Cu	63	103	1	He	48.443	1.671	402357	0.16	50	96.9	89.5	110.5	
Zn	66	103	1	He	47.298	2.896	78514	1.00	50	94.6	89.5	110.5	
As	75	103	1	He	47.117	1.227	47149	0.66	50	94.2	89.5	110.5	
Se	78	103	1	He	45.758	1.549	4885	1.65	50	91.5	89.5	110.5	
Sr	88	103	1	He	46.881	1.516	353903	0.61	50	93.8	89.5	110.5	
Mo	95	103	1	He	50.341	3.574	185646	2.28	50	100.7	89.5	110.5	
Ag	107	103	1	He	50.339	0.625	641346	1.20	50	100.7	89.5	110.5	
Cd	111	103	1	He	50.411	1.416	110226	0.51	50	100.8	89.5	110.5	
Sn	118	115	1	He	50.915	1.298	248207	1.21	50	101.8	89.5	110.5	
Sb	123	115	1	He	54.616	1.118	243072	0.46	50	109.2	89.5	110.5	
Ba	137	115	1	He	52.381	2.272	111021	1.63	50	104.8	89.5	110.5	
W	182	209	1	He	48.573	0.656	733003	1.75	50	97.1	89.5	110.5	
Tl	205	209	1	He	52.090	0.590	1870296	1.26	50	104.2	89.5	110.5	
Pb	208	209	1	He	48.683	1.747	2273803	0.87	50	97.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1651441	1.75	2077022	79.51	30	120	
Sc	45	1	He	716131	1.92	817536	87.60	30	120	
Sc	45	2	NoGas	5364824	1.12	5970055	89.86	30	120	
Rh	103	1	He	2148140	1.79	2327919	92.28	30	120	
In	115	1	He	1147159	0.87	1305098	87.90	30	120	
Tb	159	1	He	3696043	0.46	3765959	98.14	30	120	
Ho	165	1	He	3695588	1.28	3748206	98.60	30	120	
Bi	209	1	He	2656798	1.14	2822318	94.14	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	098_CCB.d
Data Path Name	D:\Analytical Runs\I10042115G.b
Acq Date Time	2015-04-21T23:53:45-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.024	49.3	156	35.7	1	
B	11	45	2	NoGas	1.182	9.5	9781	5.5	20	
Na	23	45	1	He	10.475	13.4	32604	6.6	400	
Mg	24	45	1	He	2.584	18.8	2893	15.2	1000	
Al	27	45	1	He	0.882	88.4	9091	3.6	50	
K	39	45	1	He	8.623	25.3	39614	3.8	1000	
Ca	44	45	1	He	2.214	63.3	704	8.6	1000	
Ti	47	45	1	He	0.356	7.4	99	7.0	20	
V	51	45	1	He	-0.006	-263.1	518	19.8	2	
Cr	52	45	1	He	0.000	1115.2	2252	1.7	2	
Mn	55	45	1	He	0.064	38.0	770	17.6	2	
Fe	56	45	1	He	18.192	23.6	141812	20.9	50	
Co	59	103	1	He	0.003	117.7	80	65.5	1	
Ni	60	103	1	He	0.004	56.2	103	6.4	2	
Cu	63	103	1	He	-0.135	-9.3	1990	4.8	2	
Zn	66	103	1	He	-0.190	-34.6	1707	7.3	20	
As	75	103	1	He	0.071	14.5	163	8.0	2	
Se	78	103	1	He	0.016	220.9	37	10.2	2	
Sr	88	103	1	He	-0.006	-51.6	160	16.5	10	
Mo	95	103	1	He	0.873	15.4	3385	16.6	2	
Ag	107	103	1	He	0.010	25.3	150	21.2	0.2	
Cd	111	103	1	He	-0.005	-570.1	1113	4.2	0.2	
Sn	118	115	1	He	0.338	24.0	1978	21.0	10	
Sb	123	115	1	He	0.235	18.7	1240	16.8	1	
Ba	137	115	1	He	0.016	23.5	69	12.2	5	
W	182	209	1	He	0.902	17.6	17488	14.3	10	
Tl	205	209	1	He	0.033	26.3	1228	26.2	0.5	
Pb	208	209	1	He	0.035	13.4	2238	10.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1643424	1.70	2077022	79.12	30	120	
Sc	45	1	He	695725	0.72	817536	85.10	30	120	
Sc	45	2	NoGas	5378510	0.94	5970055	90.09	30	120	
Rh	103	1	He	2218395	1.46	2327919	95.30	30	120	
In	115	1	He	1180592	0.60	1305098	90.46	30	120	
Tb	159	1	He	3615866	0.44	3765959	96.01	30	120	
Ho	165	1	He	3657776	1.26	3748206	97.59	30	120	
Bi	209	1	He	2709171	0.40	2822318	95.99	30	120	

MTMSCCBDILH20-193 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/22/15 **Analyst:** AS **Instrument:** I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient ≥ 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* =90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

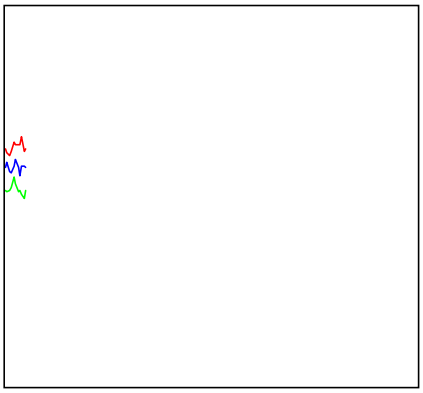
Level I Analyst: [signature] Date: 4/23/15 Time: 14:52-20:28
Level I Analyst: Date: Time:

Level II Reviewer: Karen L Conte Date: 4-24-15 Time: 14:52-20:28
Level II Reviewer: Date: Time:

Comments:

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	3133	3148.4	2.31
89	10000	5148	5177.6	2.81
205	10000	5748	5759.3	2.16
156/140	2	0.675 %	0.753 %	20.88
70/140	2	0.987 %	1.108 %	15.13
115	500	351	399.6	5.59
63	500	434	418.8	6.86
60	100	39	44.6	15.27
121	20	5	10.7	35.40
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	14.99	L/min
MU./Dil. Gas	0.65	L/min	Ar Gas Tank Press	5.85E+2	kPa			

Current Signal

[He]

Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1259	1310.0	4.41
51	50	41	42.5	10.50
52	200	99	110.3	13.83
51/59	5	3.255 %	3.247 %	10.45
52/59	20	7.861 %	8.420 %	12.92
7	50	24	15.2	36.45
89	2000	1536	1462.9	3.95
205	5000	3586	3519.0	2.47
6	20	3	1.3	90.83
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	14.99	L/min
MU./Dil. Gas	0.65	L/min	Ar Gas Tank Press	5.85E+2	kPa			

US EPA Tune Check Sample Report

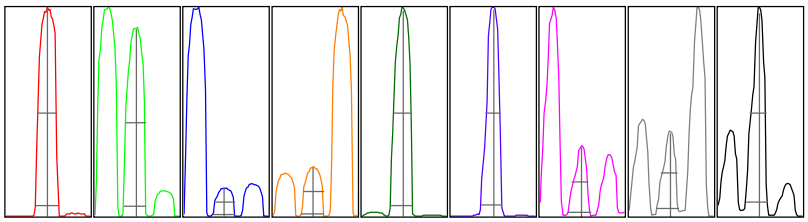
Batch Folder D:\Analytical Runs\I10042215A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	39308	0.80	5.00	
24	137578	1.54	5.00	
25	18200	1.48	5.00	
26	21091	1.71	5.00	
59	154157	0.30	5.00	
115	248898	0.25	5.00	
206	92385	0.68	5.00	
207	82690	0.56	5.00	
208	195008	0.23	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	39781	39353	39317	39159	38929
24	134097	137230	138076	139170	139316
25	17796	18170	18164	18345	18524
26	20671	20996	20860	21419	21509
59	154715	154282	153644	154432	153713
115	249921	248852	248582	248245	248888
206	92516	92915	91350	92845	92298
207	83511	82553	82523	82390	82475
208	195450	195157	194254	195191	194988

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6093	9.00	8.9 - 9.1		0.790	0.850	
24	21820	24.00	23.9 - 24.1		0.788	0.850	
25	2926	24.95	24.9 - 25.1		0.775	0.850	
26	3372	25.95	25.9 - 26.1		0.790	0.850	
59	25273	59.00	58.9 - 59.1		0.792	0.850	
115	47876	115.05	114.9 - 115.1		0.740	0.850	
206	18111	206.00	205.9 - 206.1		0.760	0.850	
207	15928	207.00	206.9 - 207.1		0.756	0.850	
208	38719	208.00	207.9 - 208.1		0.774	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

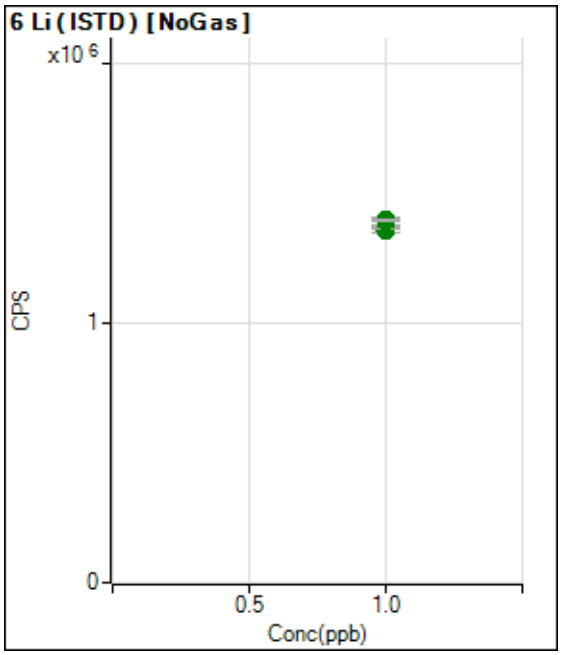
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

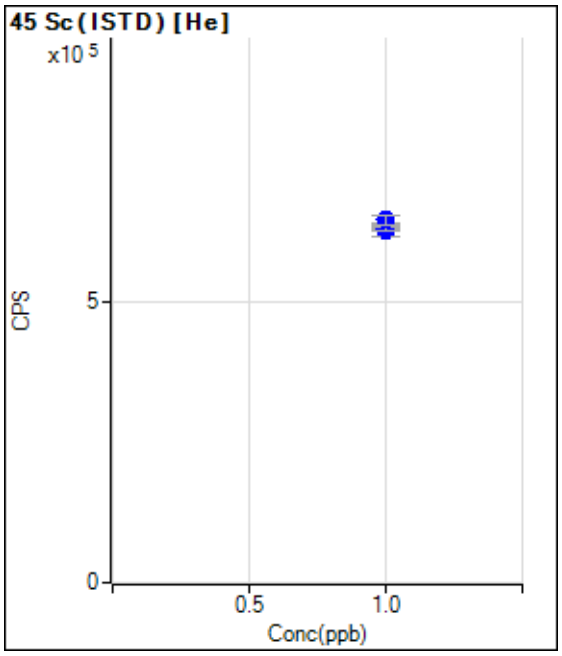
Calibration for 014SMPL.d

Batch Folder: D:\Analytical Runs\I10042215C.b\
Analysis File: I10042215C.batch.bin
DA Date-Time: 4/22/2015 3:44:27 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

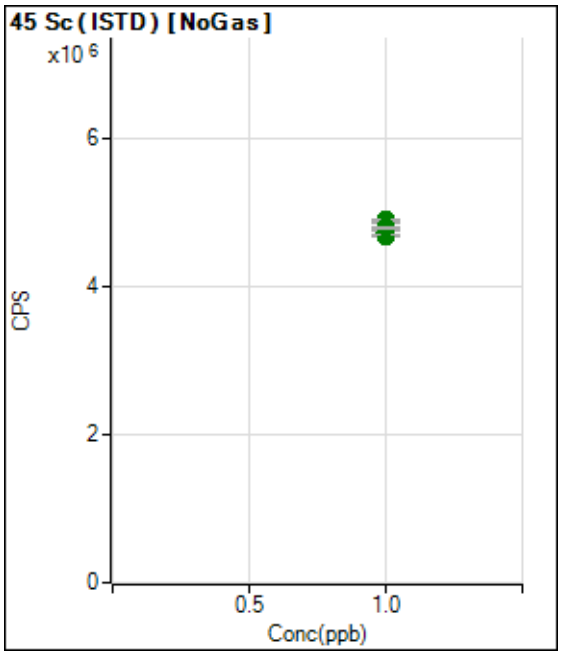
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/22/2015 2:56:39 PM
2	003CALS.d	STD1-1906323	4/22/2015 3:00:27 PM
3	004CALS.d	STD2-1904110	4/22/2015 3:04:15 PM
4	005CALS.d	STD3-1906333	4/22/2015 3:08:05 PM
5	006CALS.d	STD4-1906536	4/22/2015 3:11:51 PM



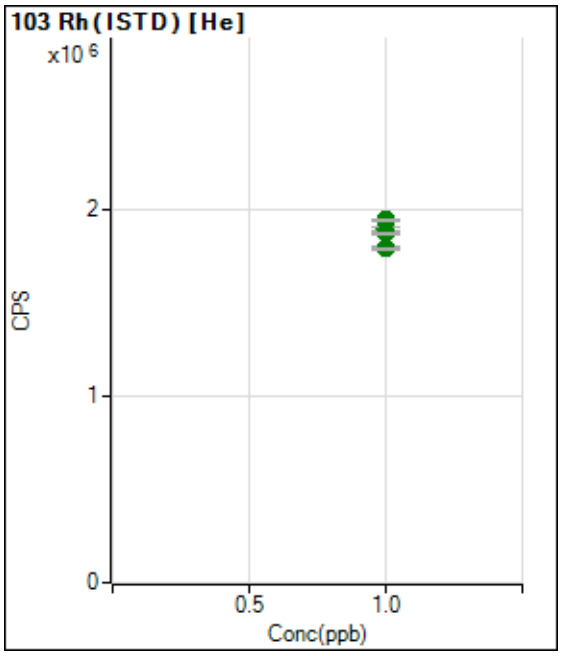
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1389655.32		A	1.3
2	☐	1.000		1357111.87		A	1.5
3	☐	1.000		1365209.99		A	0.2
4	☐	1.000		1398132.17		A	1.2
5	☐	1.000		1395034.51		A	0.3



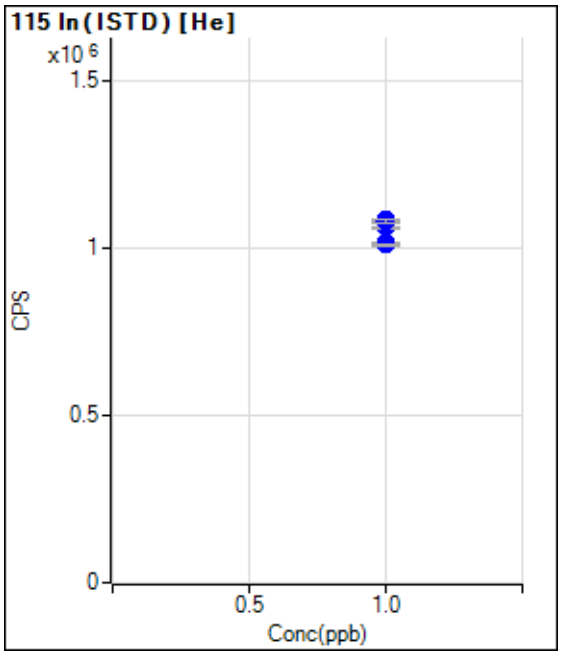
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		628608.62		P	0.5
2	☐	1.000		634725.63		P	1.2
3	☐	1.000		630420.30		P	4.2
4	☐	1.000		632141.21		P	1.1
5	☐	1.000		647896.50		P	2.6



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4813296.20		A	1.5
2	☐	1.000		4676619.95		A	0.4
3	☐	1.000		4719343.15		A	1.2
4	☐	1.000		4898034.11		A	0.4
5	☐	1.000		4794715.23		A	0.6



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1894468.74		A	1.0
2	☐	1.000		1871729.72		A	0.5
3	☐	1.000		1794555.21		A	0.7
4	☐	1.000		1789010.00		A	0.8
5	☐	1.000		1944156.87		A	0.7



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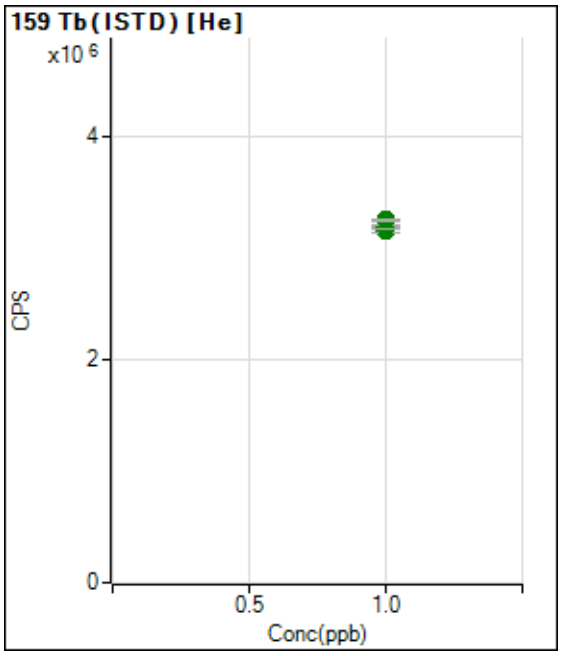
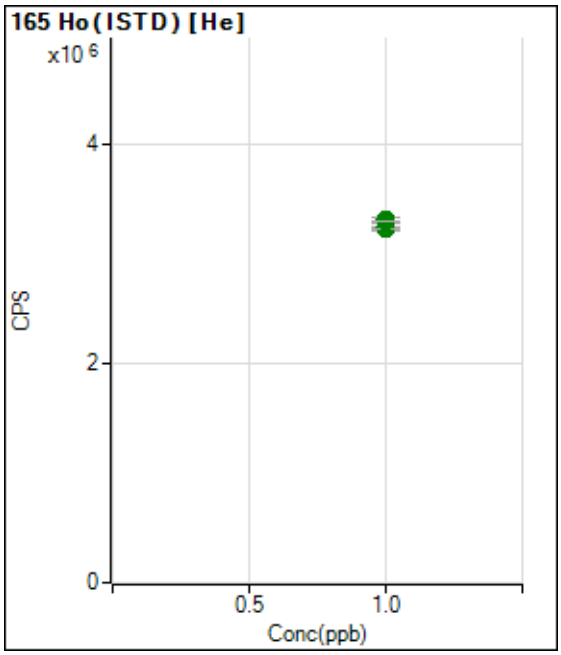
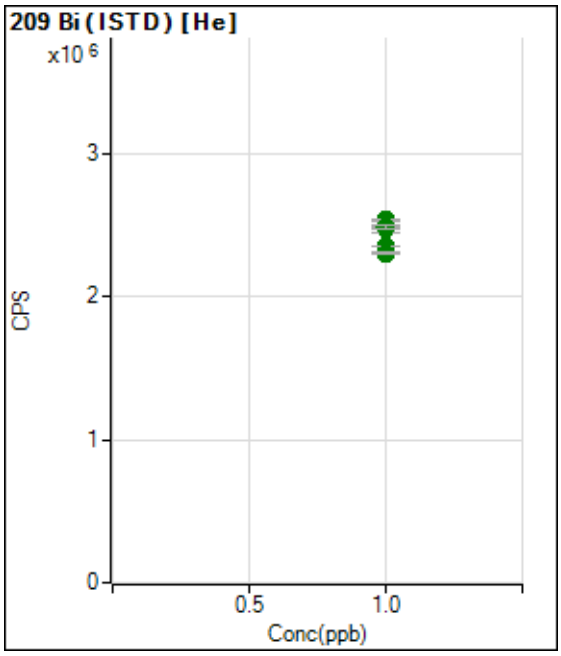
1	☐	1.000		1086371.43		P	0.2
2	☐	1.000		1062585.06		P	0.7
3	☐	1.000		1017533.21		P	0.4
4	☐	1.000		1011939.51		P	0.6
5	☐	1.000		1080936.13		P	1.0



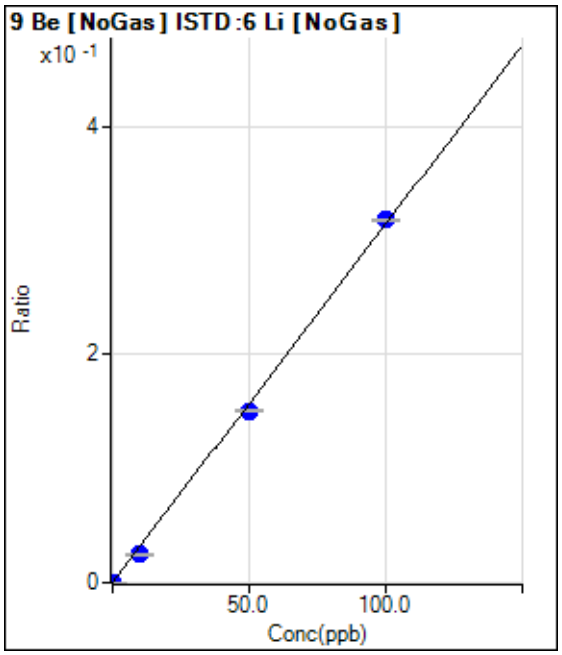
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3251379.18		A	0.2
2	☐	1.000		3202308.69		A	0.7
3	☐	1.000		3158032.44		A	1.7
4	☐	1.000		3182665.71		A	0.9
5	☐	1.000		3250918.20		A	0.9



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3312124.03		A	1.1
2	☐	1.000		3286570.49		A	0.6
3	☐	1.000		3231264.94		A	0.8
4	☐	1.000		3254943.62		A	1.7
5	☐	1.000		3301825.70		A	0.3



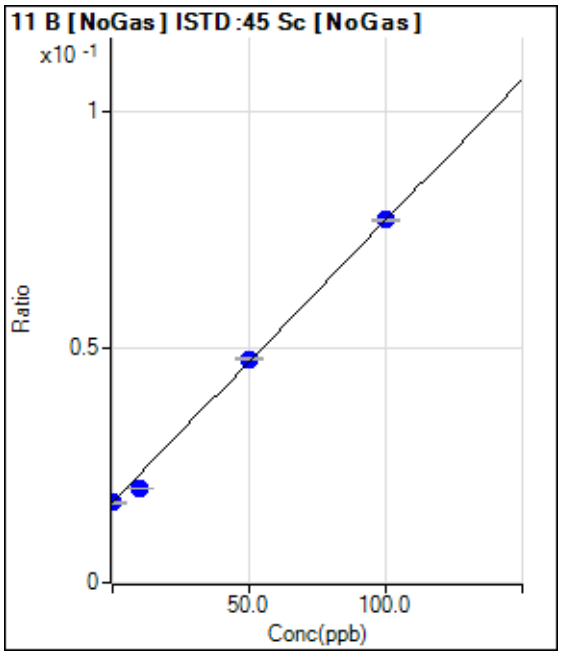
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2533294.07		A	0.5
2	☐	1.000		2466651.78		A	1.7
3	☐	1.000		2353558.31		A	0.2
4	☐	1.000		2300605.60		A	0.8
5	☐	1.000		2485448.79		A	1.4



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	211.12	0.0002	P	1.3
2	☐	10.000	7.844	33657.44	0.0248	P	3.7
3	☐	50.000	47.947	205937.56	0.1508	P	1.2
4	☐	100.000	101.242	445087.57	0.3184	P	0.5
5	☐			174.09	0.0001	P	32.3

y = 0.0031 * x + 1.5194E-004
R = 0.9995
DL = 0.001838
BEC = 0.04834

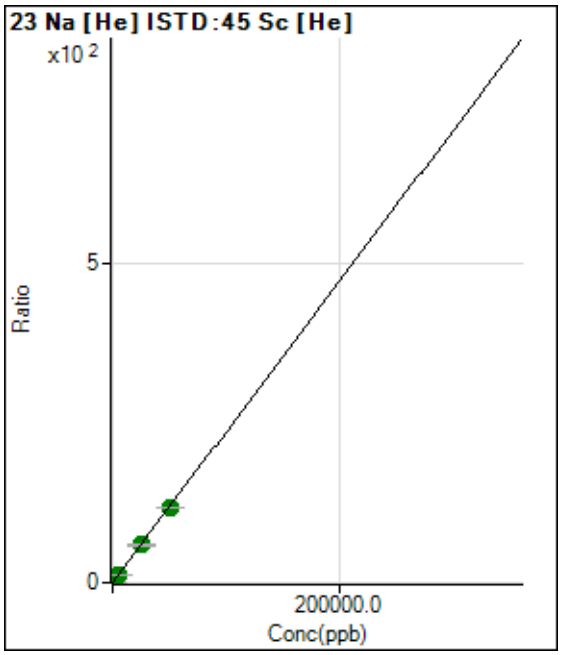
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	82180.37	0.0171	P	3.2
2	☐	10.000	5.074	94096.07	0.0201	P	0.1
3	☐	50.000	50.727	224126.71	0.0475	P	0.9
4	☐			59755.56	0.0122	P	0.8
5	☐	100.000	100.129	369729.10	0.0771	P	0.7

y = 5.9958E-004 * x + 0.0171
R = 0.9987
DL = 2.718
BEC = 28.48

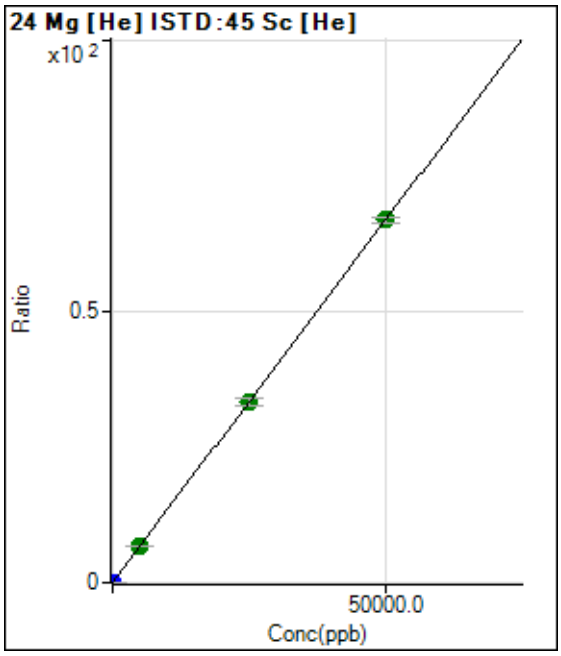
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	76365.42	0.1215	P	1.9
2	☐	5000.000	5142.659	7762385.80	12.2295	A	0.2
3	☐	25000.00	24879.74	36961197.60	58.6992	A	4.2
4	☐	50000.00	50045.86	74558561.85	117.951	A	0.6
5	☐			89260.25	0.1378	P	1.1

y = 0.0024 * x + 0.1215
R = 1.0000
DL = 2.986
BEC = 51.6

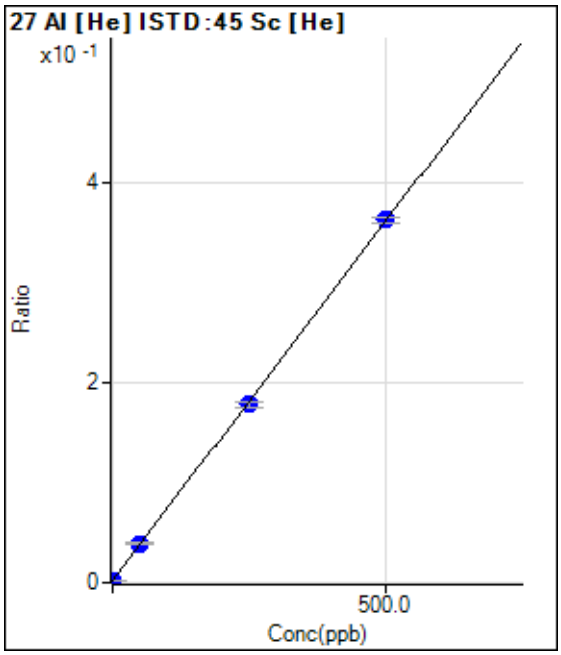
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1363.20	0.0022	P	3.8
2	☐	5000.000	5122.178	4346989.29	6.8492	A	1.0
3	☐	25000.00	24892.82	20958164.45	33.2774	A	3.6
4	☐	50000.00	50041.36	42282946.47	66.8944	A	1.4
5	☐			4541.55	0.0070	P	27.8

y = 0.0013 * x + 0.0022
R = 1.0000
DL = 0.1837
BEC = 1.622

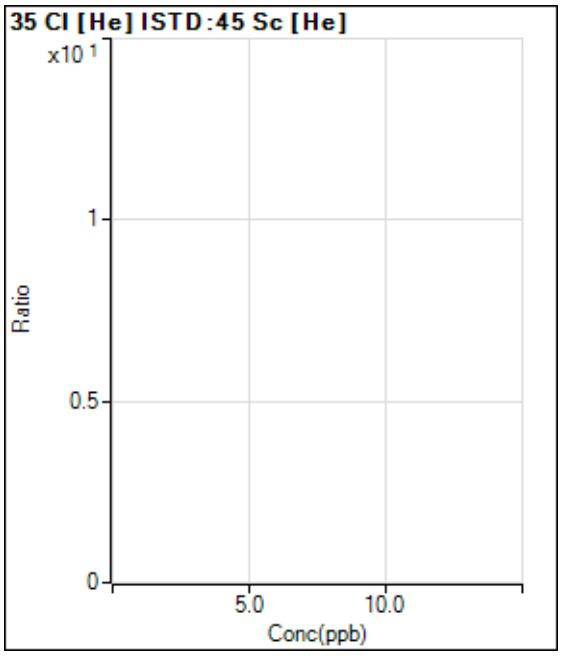
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1337.85	0.0021	P	5.6
2	☐	50.000	51.723	24970.28	0.0393	P	1.8
3	☐	250.000	245.254	112467.59	0.1786	P	3.6
4	☐	500.000	502.201	229730.35	0.3634	P	1.3
5	☐			2101.27	0.0032	P	4.8

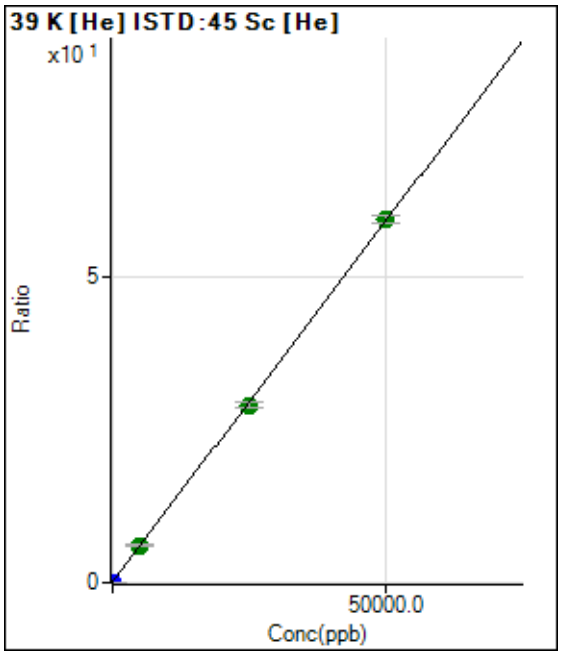
y = 7.1947E-004 * x + 0.0021
R = 0.9999
DL = 0.4956
BEC = 2.958

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			9396604.95	14.9485	A	0.5
2	☐			9934279.24	15.6522	A	0.9
3	☐			9987416.73	15.8627	A	4.6
4	☐			10092224.83	15.9673	A	2.0
5	☐			10756793.55	16.6083	A	2.1

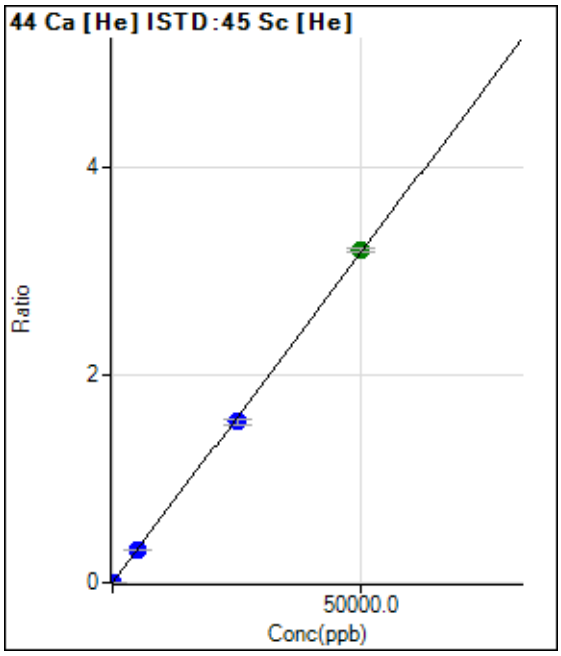
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33323.87	0.0530	P	2.2
2	☐	5000.000	5144.696	3882301.70	6.1167	A	1.4
3	☐	25000.00	24529.45	18243429.37	28.9640	A	3.1
4	☐	50000.00	50220.80	37444350.36	59.2443	A	2.3
5	☐			41570.89	0.0642	P	0.7

y = 0.0012 * x + 0.0530
R = 0.9999
DL = 2.942
BEC = 44.98

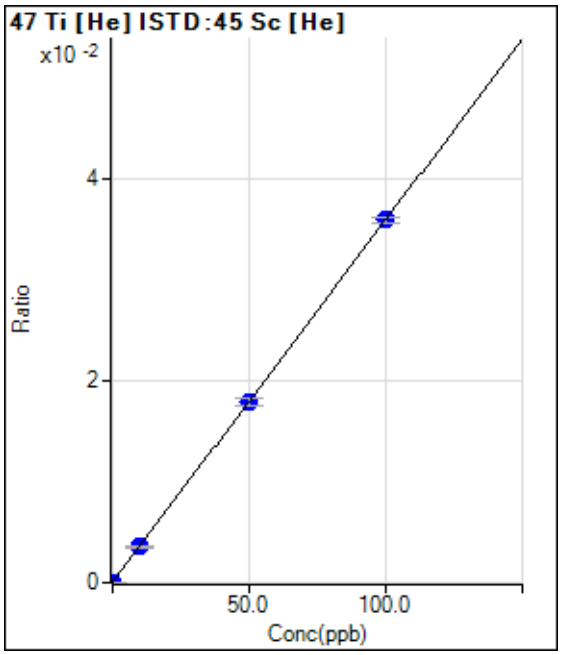
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	409.63	0.0007	P	9.4
2	☐	5000.000	5047.203	204244.95	0.3218	P	0.8
3	☐	25000.00	24347.64	976159.70	1.5499	P	3.3
4	☐	50000.00	50321.45	2024322.87	3.2026	A	1.1
5	☐			930.90	0.0014	P	0.9

y = 6.3630E-005 * x + 6.5170E-004
R = 0.9998
DL = 2.889
BEC = 10.24

Weight: <None>
Min Conc: <None>



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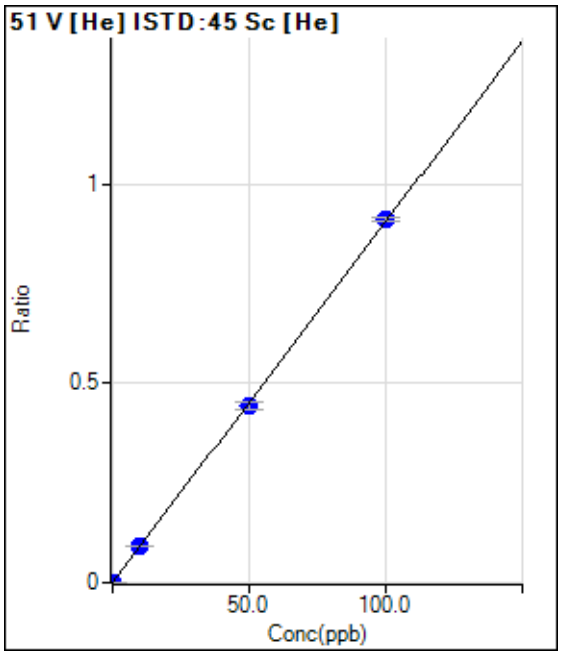
1	☐	0.000	0.000	24.44	0.0000	P	41.4
2	☐	10.000	9.833	2261.28	0.0036	P	3.8
3	☐	50.000	49.885	11281.39	0.0179	P	4.5
4	☐			40.00	0.0001	P	36.3
5	☐	100.000	100.074	23251.63	0.0359	P	1.7

y = 3.5833E-004 * x + 3.8860E-005
R = 1.0000
DL = 0.1347
BEC = 0.1084

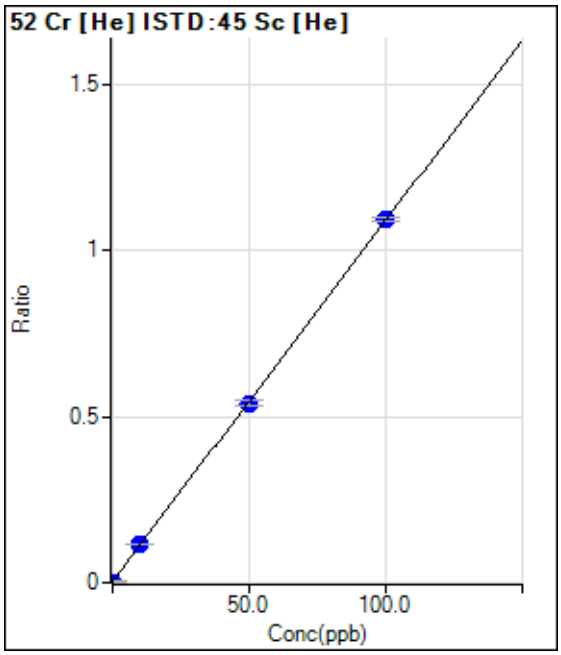
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-124.28	-0.0002	P	-214.
2	☐	10.000	10.030	57505.94	0.0906	P	1.7
3	☐	50.000	48.922	278770.28	0.4427	P	4.1
4	☐	100.000	100.536	575177.05	0.9100	P	1.2
5	☐			253.20	0.0004	P	189.2

y = 0.0091 * x - 1.9709E-004
R = 0.9999
DL = 0.1399
BEC = -0.02177

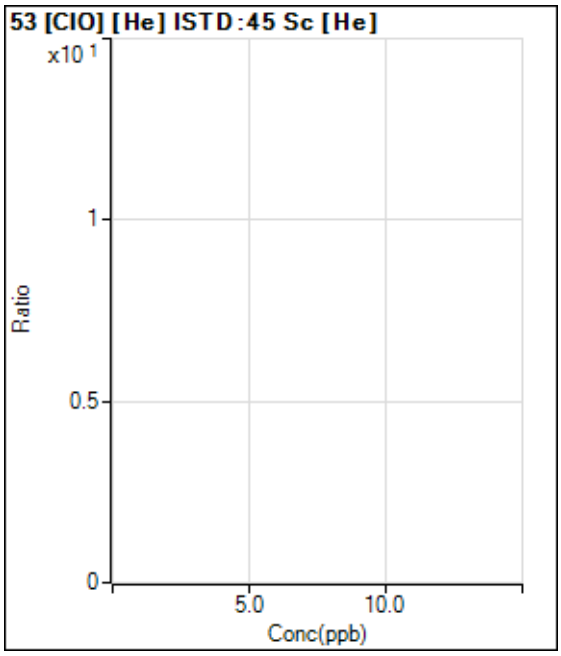
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1785.67	0.0028	P	4.1
2	☐	10.000	10.251	72560.63	0.1143	P	1.1
3	☐	50.000	49.488	340819.98	0.5411	P	2.9
4	☐	100.000	100.231	690834.02	1.0929	P	1.0
5	☐			3019.17	0.0047	P	3.0

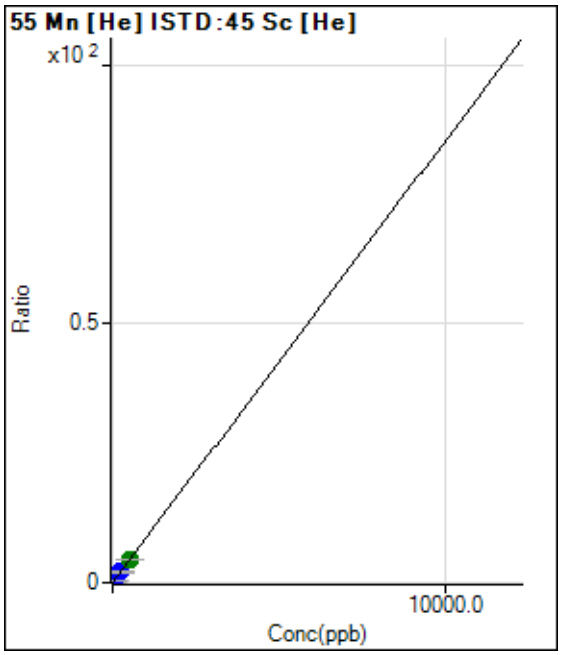
y = 0.0109 * x + 0.0028
R = 1.0000
DL = 0.03175
BEC = 0.2612

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			648.20	0.0010	P	13.6
2	☐			9113.81	0.0144	P	1.0
3	☐			41923.78	0.0665	P	1.1
4	☐			84639.70	0.1339	P	1.2
5	☐			640.78	0.0010	P	27.3

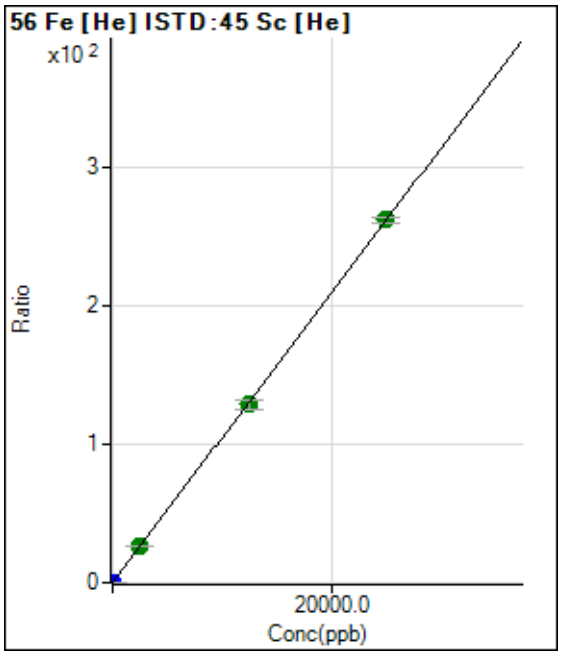
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	472.24	0.0008	P	3.9
2	☐	50.000	50.325	274057.60	0.4318	P	1.4
3	☐	250.000	240.166	1295962.24	2.0578	P	3.6
4	☐	500.000	504.884	2734298.08	4.3252	A	1.3
5	☐			1312.29	0.0020	P	4.8

y = 0.0086 * x + 7.5133E-004
R = 0.9997
DL = 0.01028
BEC = 0.08772

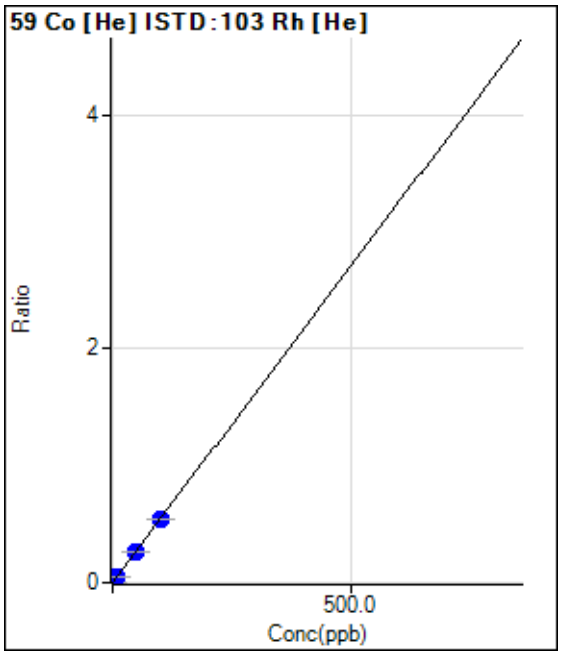
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5007.42	0.0080	P	3.2
2	☐	2500.000	2550.010	16911295.44	26.6454	A	1.2
3	☐	12500.00	12315.30	81000530.12	128.653	A	4.7
4	☐	25000.00	25087.34	165654397.8	262.070	A	1.5
5	☐			193090.48	0.2966	P	28.1

y = 0.0104 * x + 0.0080
R = 0.9999
DL = 0.07323
BEC = 0.7625

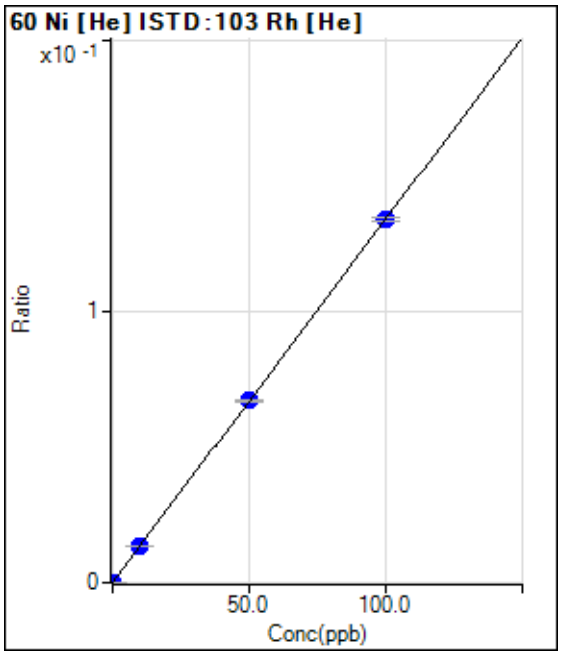
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.89	0.0000	P	62.2
2	☐	10.000	10.107	102346.26	0.0547	P	2.2
3	☐	50.000	49.466	480201.06	0.2676	P	1.0
4	☐	100.000	100.256	970195.83	0.5423	P	1.3
5	☐			140.00	0.0001	P	17.8

y = 0.0054 * x + 1.0003E-005
R = 1.0000
DL = 0.003452
BEC = 0.001849

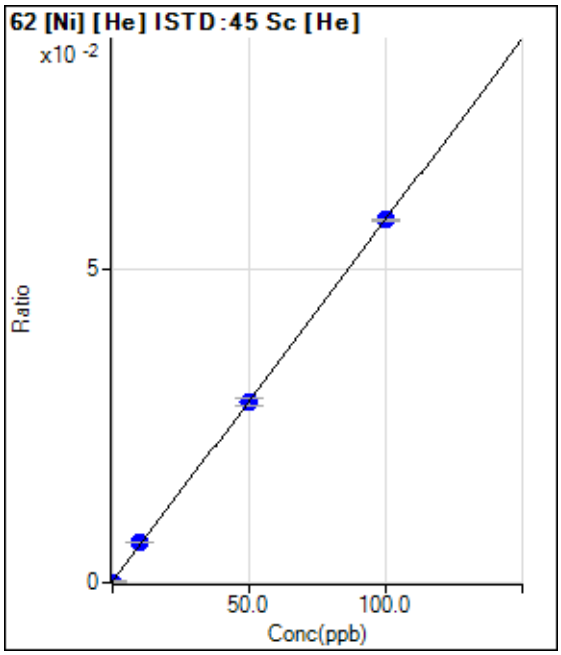
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	89.9
2	☐	10.000	9.994	25074.31	0.0134	P	1.7
3	☐	50.000	50.257	120793.33	0.0673	P	1.0
4	☐	100.000	99.872	239271.52	0.1338	P	1.1
5	☐			184.45	0.0001	P	4.3

y = 0.0013 * x + 1.4582E-005
R = 1.0000
DL = 0.02937
BEC = 0.01089

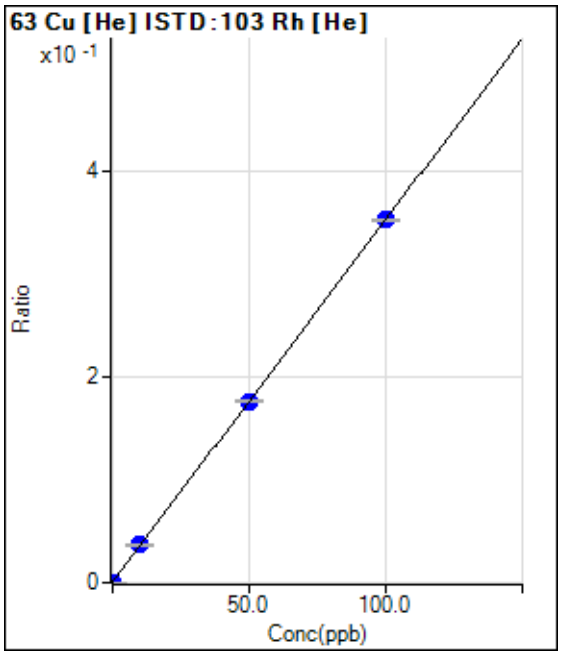
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.44	0.0002	P	19.8
2	☐	10.000	10.921	4106.08	0.0065	P	1.7
3	☐	50.000	49.900	18272.79	0.0290	P	4.1
4	☐	100.000	99.958	36650.61	0.0580	P	0.5
5	☐			156.67	0.0002	P	3.7

y = 5.7851E-004 * x + 1.5033E-004
R = 1.0000
DL = 0.1544
BEC = 0.2599

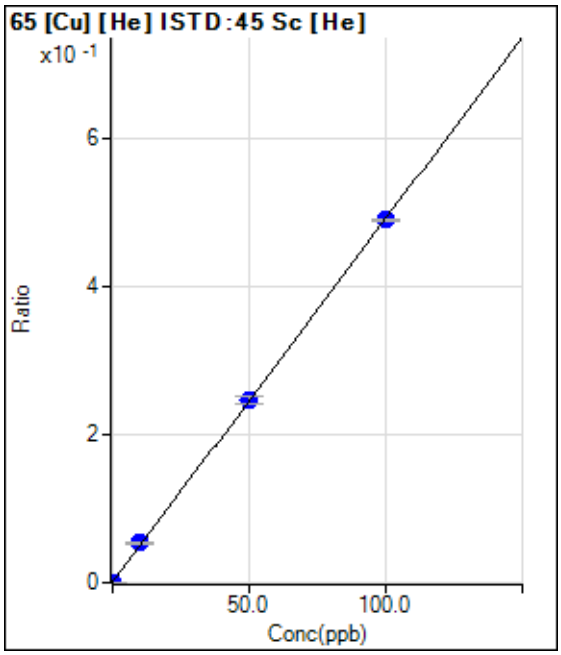
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	620.02	0.0003	P	3.1
2	☐	10.000	10.329	68593.22	0.0366	P	2.5
3	☐	50.000	49.908	315530.55	0.1758	P	0.9
4	☐	100.000	100.013	629755.93	0.3520	P	0.7
5	☐			1044.49	0.0005	P	6.6

y = 0.0035 * x + 3.2733E-004
R = 1.0000
DL = 0.008645
BEC = 0.09308

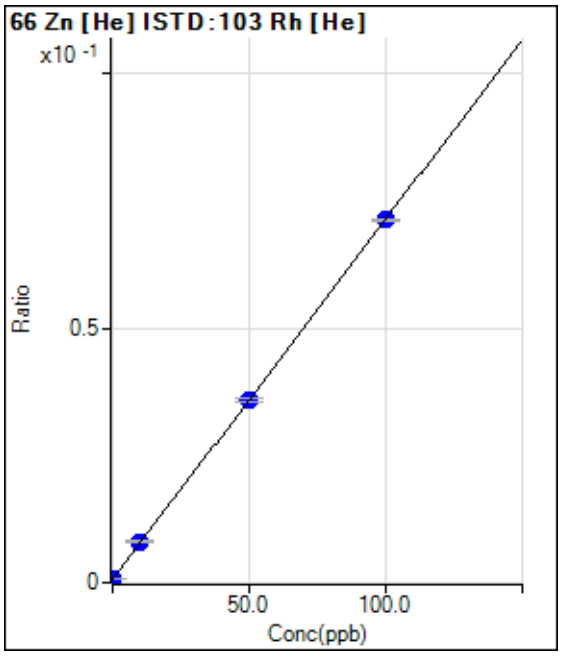
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	273.34	0.0004	P	10.1
2	☐	10.000	10.812	33886.52	0.0534	P	1.2
3	☐	50.000	50.311	155457.28	0.2469	P	3.8
4	☐	100.000	99.763	309152.29	0.4891	P	0.6
5	☐			532.24	0.0008	P	4.2

y = 0.0049 * x + 4.3470E-004
R = 1.0000
DL = 0.02701
BEC = 0.08875

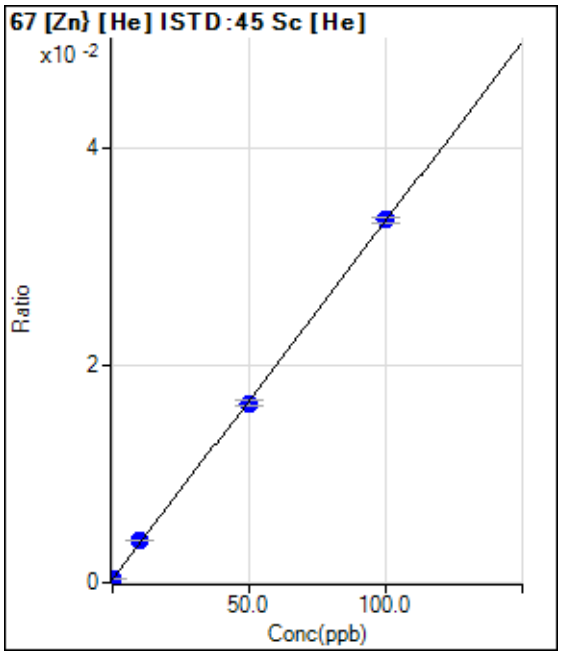
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1127.83	0.0006	P	3.5
2	☐	10.000	10.613	15154.32	0.0081	P	2.1
3	☐	50.000	50.024	64511.94	0.0360	P	2.6
4	☐	100.000	99.927	127417.34	0.0712	P	0.8
5	☐			1871.24	0.0010	P	5.6

y = 7.0679E-004 * x + 5.9526E-004
R = 1.0000
DL = 0.08938
BEC = 0.8422

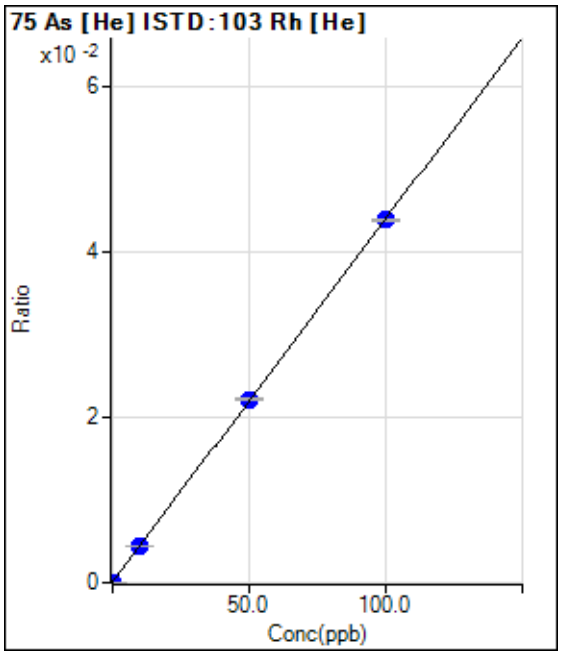
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	191.11	0.0003	P	16.0
2	☐	10.000	10.752	2439.09	0.0038	P	1.9
3	☐	50.000	49.138	10377.54	0.0165	P	2.8
4	☐	100.000	100.356	21070.32	0.0333	P	1.7
5	☐			264.45	0.0004	P	10.3

y = 3.2907E-004 * x + 3.0390E-004
R = 0.9999
DL = 0.4445
BEC = 0.9235

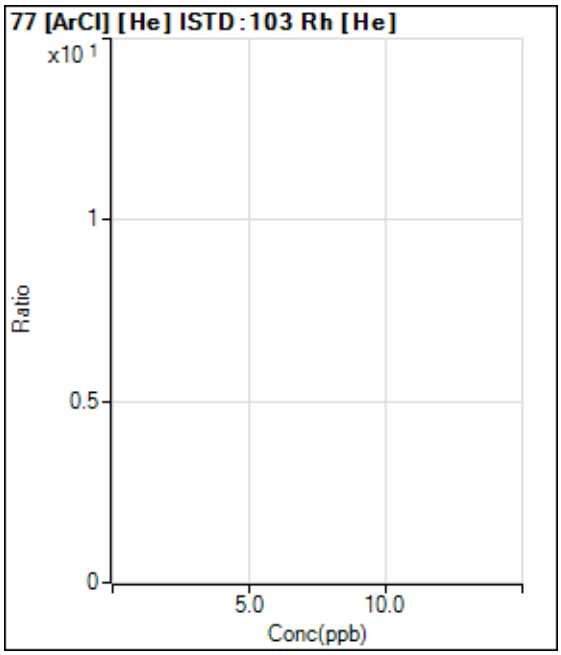
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	96.14	0.0001	P	10.8
2	☐	10.000	10.009	8327.69	0.0044	P	2.6
3	☐	50.000	50.393	39831.06	0.0222	P	0.7
4	☐	100.000	99.802	78552.40	0.0439	P	0.4
5	☐			1029.39	0.0005	P	11.4

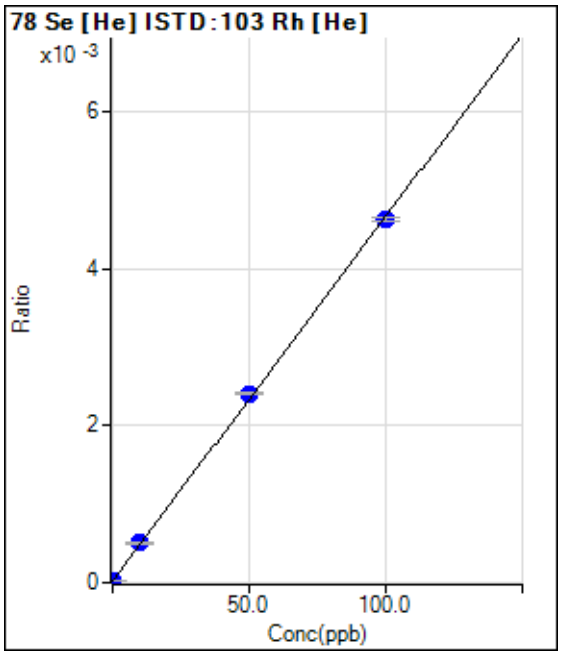
y = 4.3945E-004 * x + 5.0786E-005
R = 1.0000
DL = 0.03754
BEC = 0.1156

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			14.81	0.0000	P	86.6
2	☐			274.09	0.0001	P	32.4
3	☐			1155.65	0.0006	P	9.0
4	☐			2529.92	0.0014	P	3.7
5	☐			25.92	0.0000	P	25.4

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	34.33	0.0000	P	7.3
2	☐	10.000	10.438	940.33	0.0005	P	1.2
3	☐	50.000	51.547	4324.24	0.0024	P	1.0
4	☐	100.000	99.183	8265.43	0.0046	P	1.0
5	☐			121.06	0.0001	P	14.6

y = 4.6397E-005 * x + 1.8128E-005

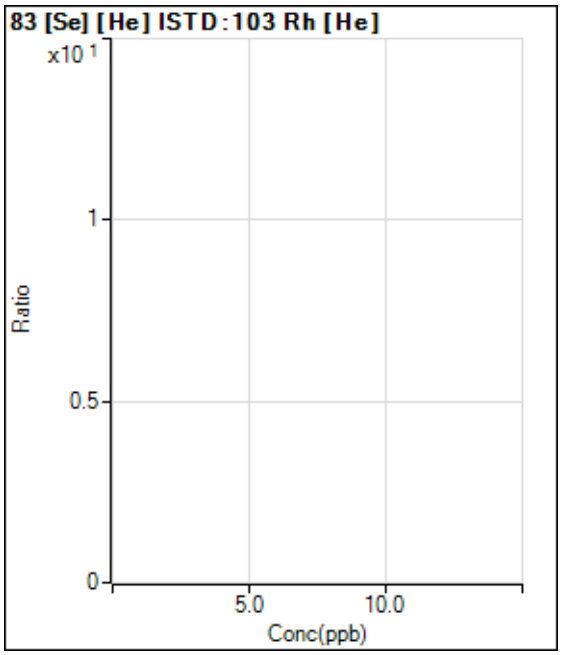
R = 0.9998

DL = 0.08536

BEC = 0.3907

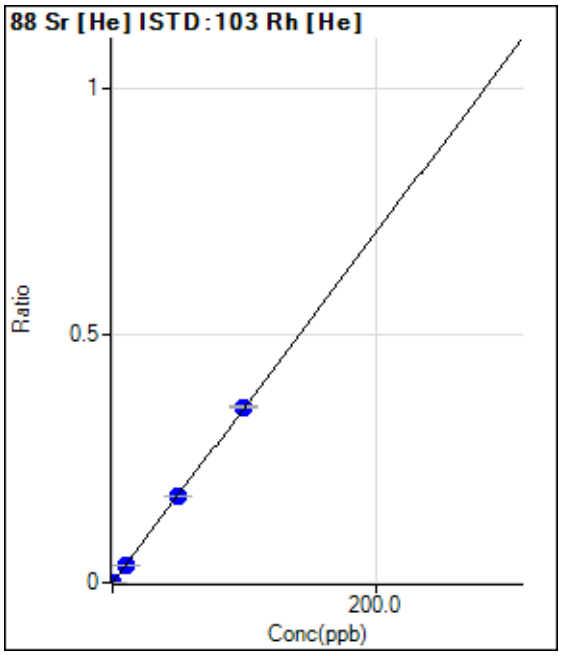
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			76.10	0.0000	P	5.7
2	☐			92.26	0.0000	P	11.6
3	☐			75.09	0.0000	P	10.2
4	☐			79.46	0.0000	P	5.0
5	☐			88.89	0.0000	P	13.2

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	173.34	0.0001	P	16.6
2	☐	10.000	9.922	65687.41	0.0351	P	2.7
3	☐	50.000	49.217	311758.09	0.1737	P	0.4
4	☐	100.000	100.399	633830.93	0.3543	P	0.7
5	☐			238.89	0.0001	P	12.4

y = 0.0035 * x + 9.1430E-005

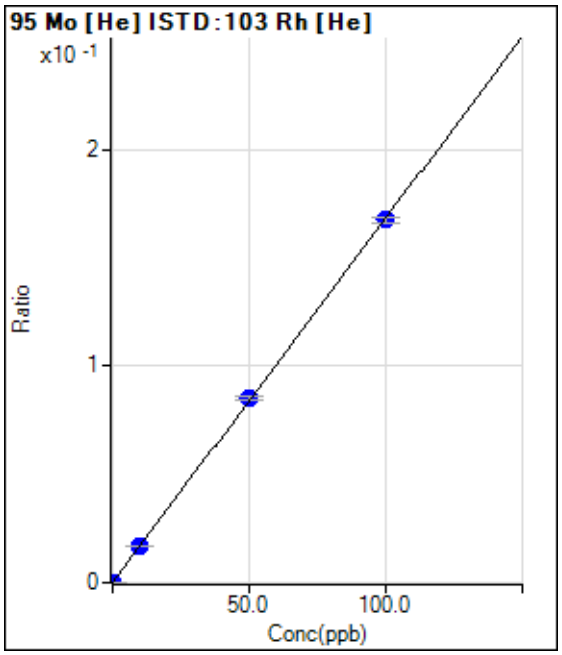
R = 0.9999

DL = 0.01288

BEC = 0.02592

Weight: <None>

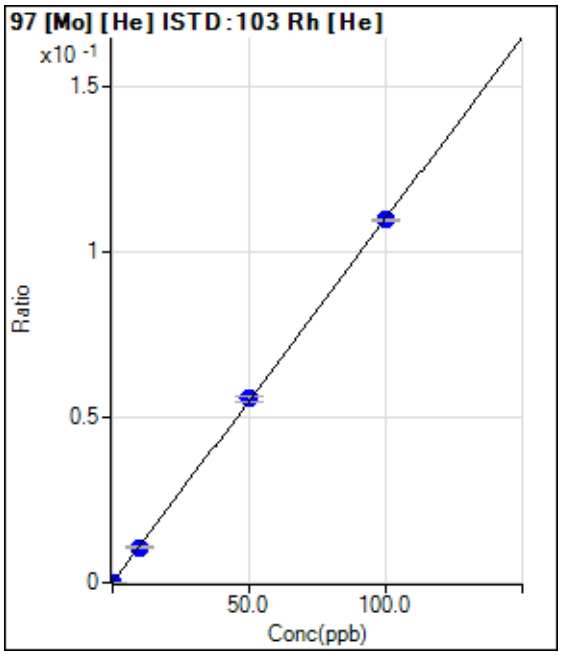
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.67	0.0000	P	5.7
2	☐	10.000	10.025	31607.51	0.0169	P	3.0
3	☐	50.000	50.690	152884.30	0.0852	P	2.3
4	☐			3011.42	0.0017	P	16.3
5	☐	100.000	99.652	325523.54	0.1674	P	1.6

y = 0.0017 * x + 4.5731E-005
R = 1.0000
DL = 0.004627
BEC = 0.02722

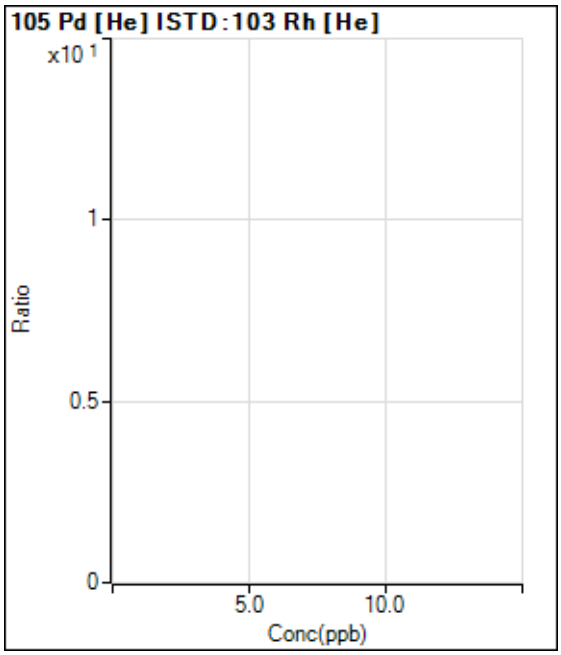
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88.90	0.0000	P	33.2
2	☐	10.000	9.717	20071.57	0.0107	P	2.6
3	☐	50.000	50.633	99938.43	0.0557	P	2.8
4	☐			2155.80	0.0012	P	23.0
5	☐	100.000	99.712	213113.87	0.1096	P	0.8

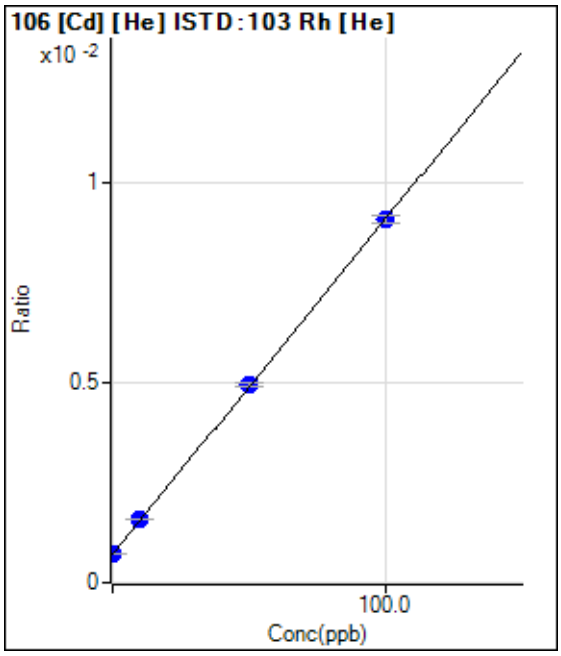
y = 0.0011 * x + 4.6922E-005
R = 1.0000
DL = 0.04247
BEC = 0.0427

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1292.70	0.0007	P	3.3
2	☐			1366.79	0.0007	P	4.8
3	☐			1511.25	0.0008	P	11.0
4	☐			1774.24	0.0010	P	12.0
5	☐			1507.55	0.0008	P	2.9

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1347.87	0.0007	P	3.8
2	☐	10.000	10.352	2953.46	0.0016	P	2.1
3	☐	50.000	50.539	8866.93	0.0049	P	1.5
4	☐	100.000	99.695	16199.46	0.0091	P	2.1
5	☐			1495.69	0.0008	P	4.6

y = 8.3698E-005 * x + 7.1136E-004

R = 1.0000

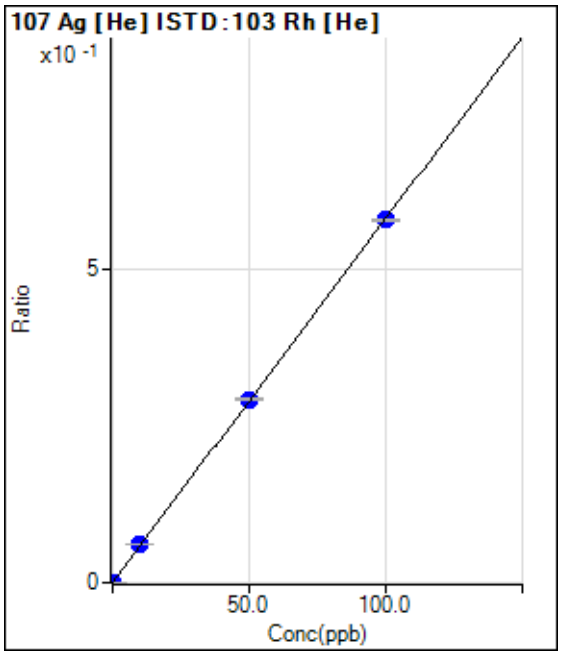
DL = 0.9692

BEC = 8.499

Weight: <None>

Min Conc: <None>

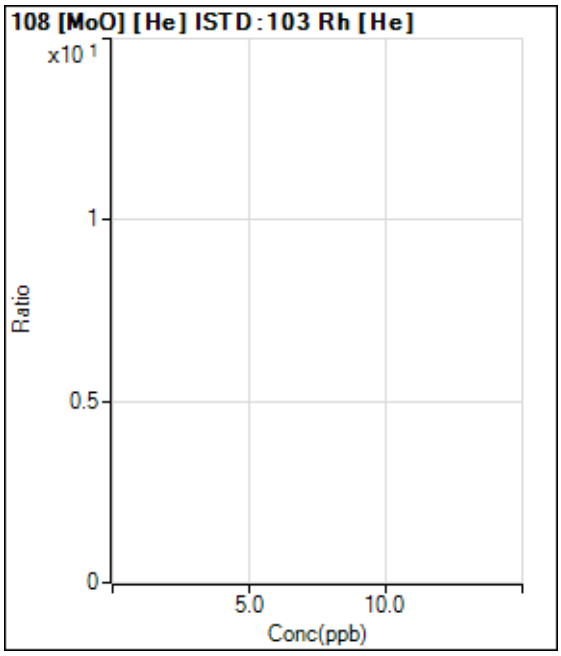
Calibration for 014SMPL.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	58.5
2	☐	10.000	10.508	114086.73	0.0610	P	1.3
3	☐	50.000	50.377	524216.35	0.2921	P	1.3
4	☐	100.000	99.761	1034892.11	0.5785	P	0.5
5	☐			281.12	0.0001	P	13.7

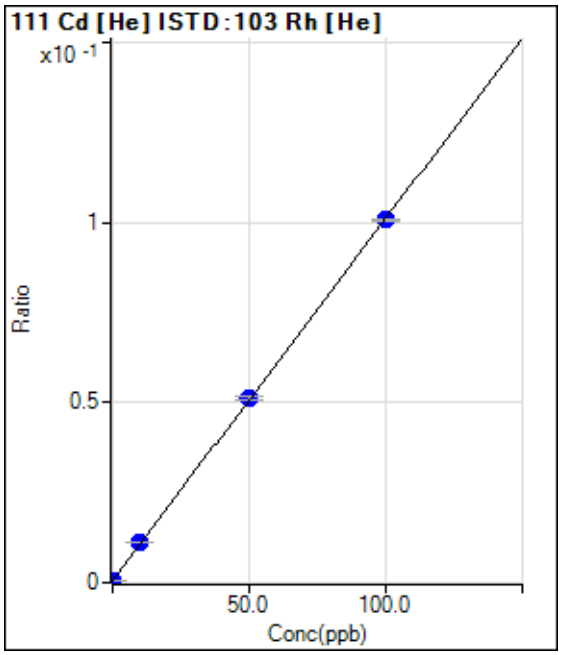
y = 0.0058 * x + 2.3462E-005
R = 1.0000
DL = 0.0071
BEC = 0.004046

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			0.00	0.0000	P	
2	☐			1251.96	0.0007	P	25.5
3	☐			6290.35	0.0035	P	4.7
4	☐			11370.95	0.0064	P	4.2
5	☐			107.41	0.0001	P	61.8

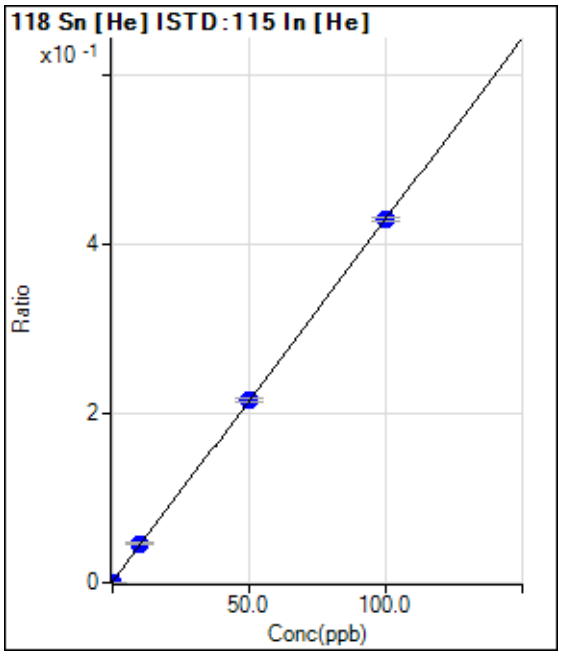
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1032.47	0.0005	P	3.8
2	☐	10.000	10.423	20626.30	0.0110	P	0.5
3	☐	50.000	50.391	91855.96	0.0512	P	2.0
4	☐	100.000	99.762	180348.86	0.1008	P	0.5
5	☐			1154.06	0.0006	P	9.6

y = 0.0010 * x + 5.4490E-004
R = 1.0000
DL = 0.06256
BEC = 0.5422

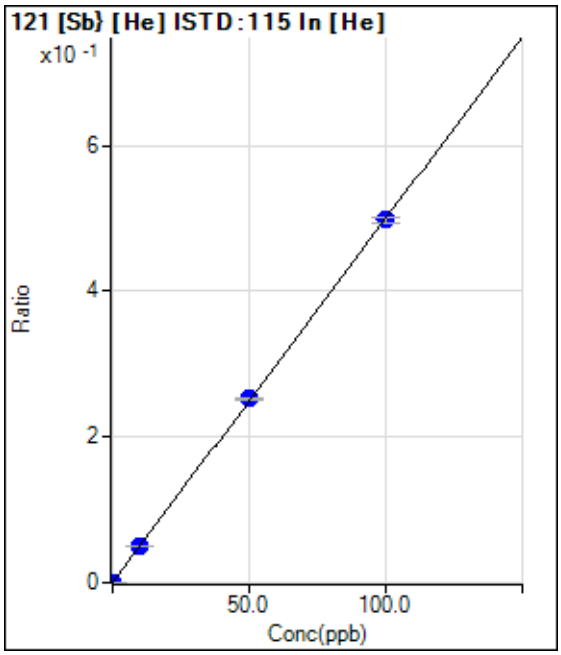
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1129.73	0.0010	P	13.3
2	☐	10.000	10.522	49049.70	0.0462	P	2.3
3	☐	50.000	50.190	220018.11	0.2162	P	1.8
4	☐			3237.52	0.0032	P	0.8
5	☐	100.000	99.853	463889.30	0.4292	P	1.1

y = 0.0043 * x + 0.0010
R = 1.0000
DL = 0.097
BEC = 0.2425

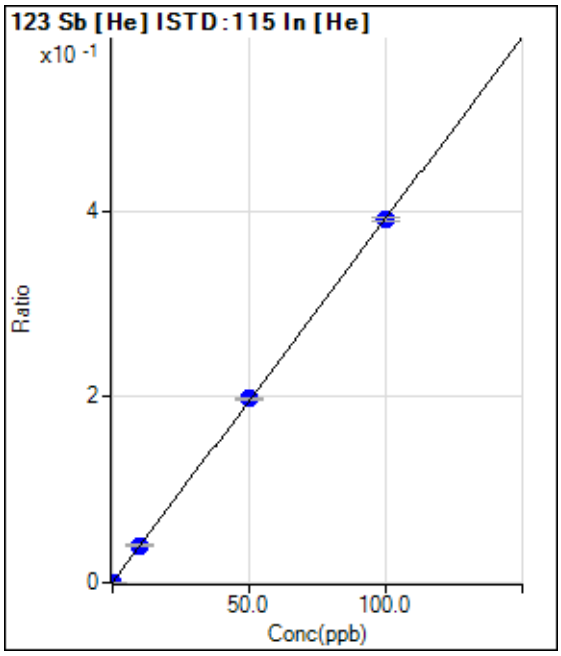
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	257.78	0.0002	P	8.4
2	☐	10.000	10.160	54137.19	0.0509	P	1.9
3	☐	50.000	50.488	256629.52	0.2522	P	1.6
4	☐			3942.74	0.0039	P	12.7
5	☐	100.000	99.740	538299.91	0.4980	P	1.3

y = 0.0050 * x + 2.3726E-004
R = 1.0000
DL = 0.01199
BEC = 0.04754

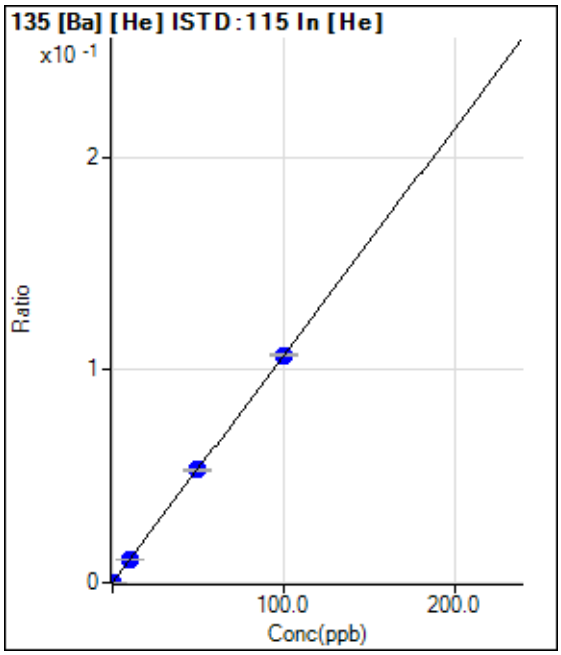
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	208.90	0.0002	P	14.8
2	☐	10.000	10.244	42806.70	0.0403	P	0.9
3	☐	50.000	50.525	201421.82	0.1980	P	0.9
4	☐			3187.02	0.0031	P	13.6
5	☐	100.000	99.713	422058.78	0.3905	P	1.0

y = 0.0039 * x + 1.9229E-004
R = 1.0000
DL = 0.02186
BEC = 0.04913

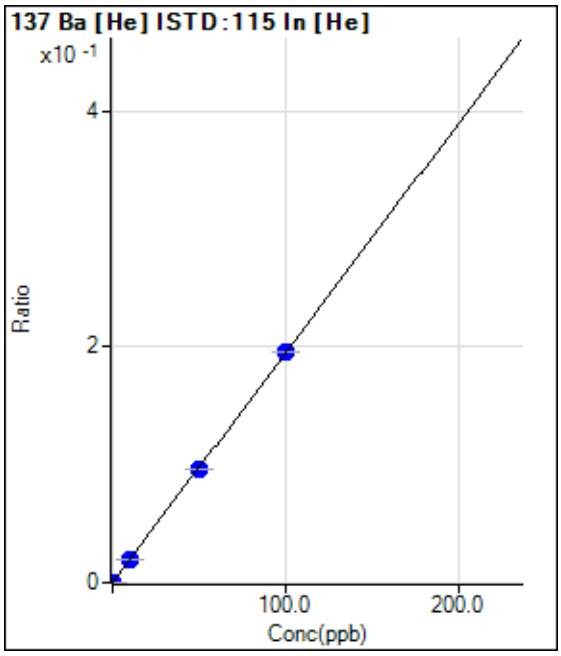
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24.44	0.0000	P	31.3
2	☐	10.000	9.758	11081.51	0.0104	P	0.4
3	☐	50.000	49.553	53797.23	0.0529	P	1.1
4	☐	100.000	100.248	108212.50	0.1069	P	0.5
5	☐			65.56	0.0001	P	29.8

y = 0.0011 * x + 2.2491E-005
R = 1.0000
DL = 0.01978
BEC = 0.02109

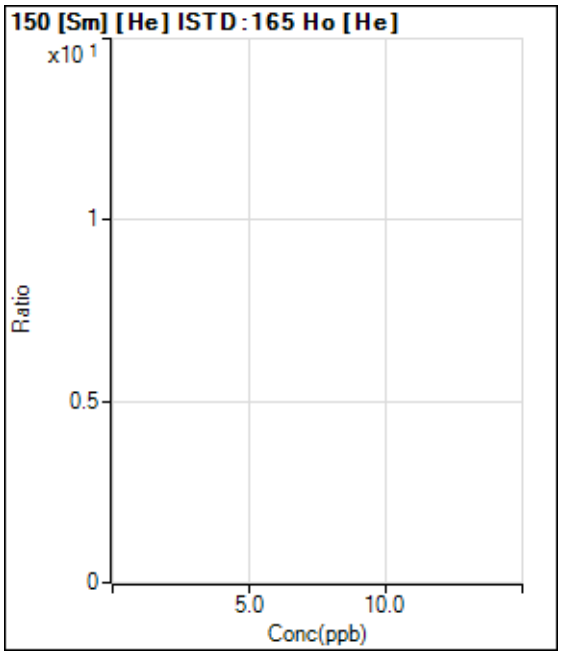
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	71.11	0.0001	P	16.7
2	☐	10.000	9.983	20766.21	0.0195	P	2.5
3	☐	50.000	49.333	98023.32	0.0963	P	0.3
4	☐	100.000	100.335	198194.61	0.1959	P	0.3
5	☐			152.23	0.0001	P	6.5

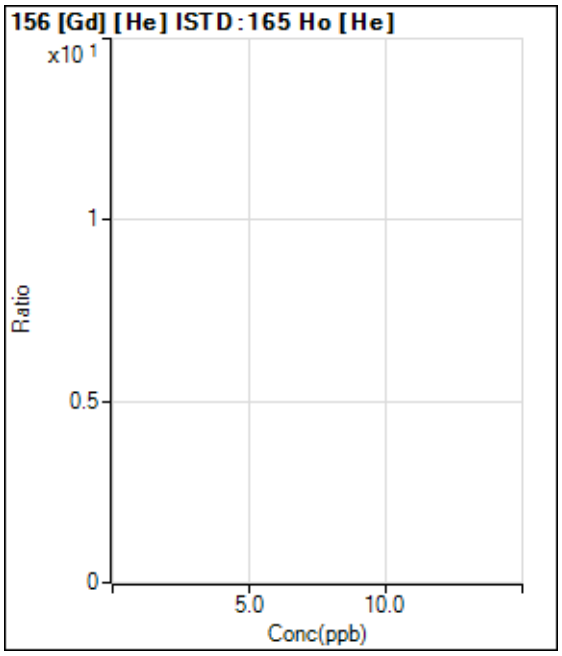
y = 0.0020 * x + 6.5472E-005
R = 1.0000
DL = 0.01678
BEC = 0.03355

Weight: <None>
Min Conc: <None>



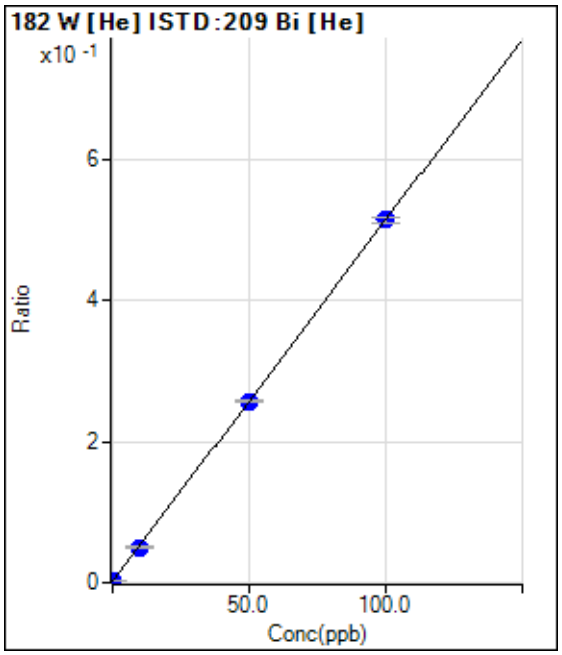
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4.67	0.0000	P	108.6
2	☐			2.67	0.0000	P	173.2
3	☐			7.33	0.0000	P	102.6
4	☐			14.00	0.0000	P	63.8
5	☐			4.67	0.0000	P	65.6

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			24.00	0.0000	P	7.3
2	☐			11.33	0.0000	P	36.6
3	☐			14.00	0.0000	P	51.7
4	☐			24.00	0.0000	P	37.9
5	☐			11.33	0.0000	P	20.5

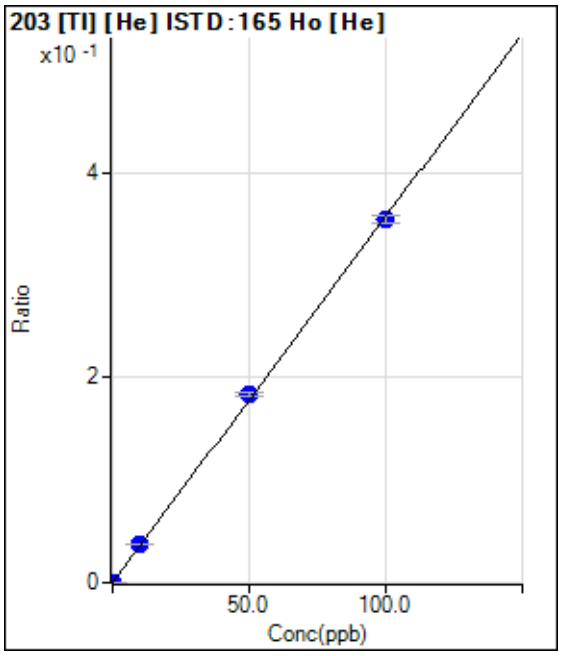
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3719.14	0.0015	P	8.4
2	☐	10.000	9.390	122298.10	0.0496	P	4.6
3	☐	50.000	49.894	605435.87	0.2572	P	0.7
4	☐			15419.27	0.0067	P	17.2
5	☐	100.000	100.114	1279074.95	0.5147	P	1.4

y = 0.0051 * x + 0.0015
R = 1.0000
DL = 0.07255
BEC = 0.2863

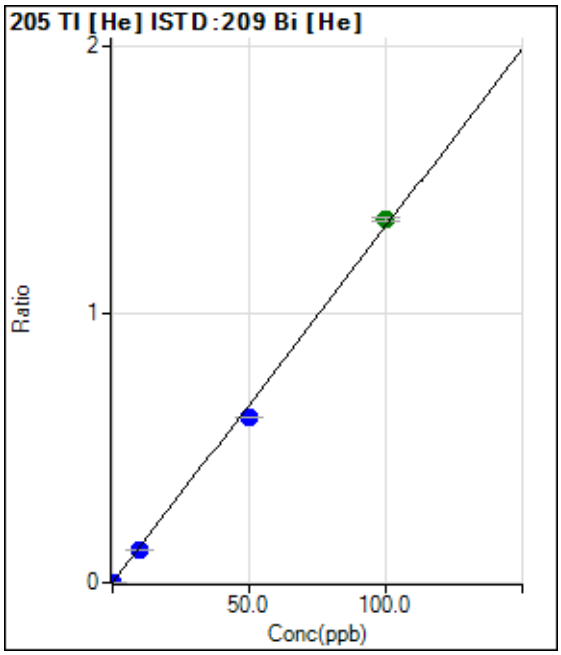
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.93	0.0000	P	64.5
2	☐	10.000	10.483	122851.61	0.0374	P	1.7
3	☐	50.000	51.533	593648.25	0.1837	P	1.7
4	☐	100.000	99.185	1150783.17	0.3536	P	2.1
5	☐			1792.78	0.0005	P	24.7

y = 0.0036 * x + 7.7927E-006
R = 0.9998
DL = 0.004229
BEC = 0.002186

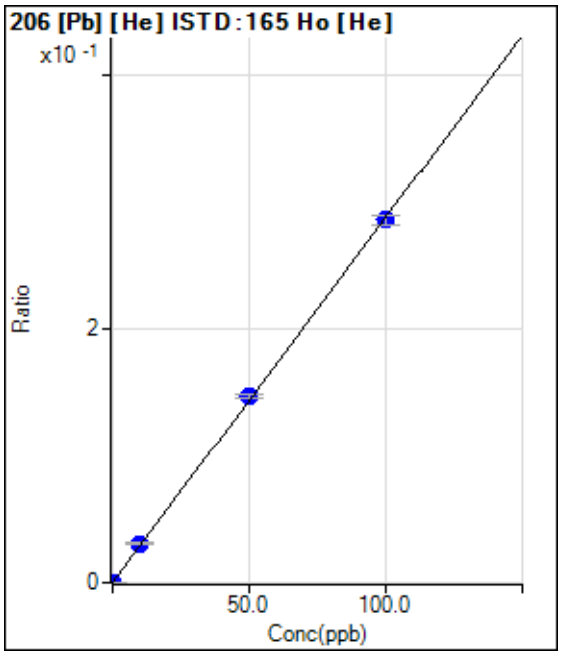
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.89	0.0000	P	21.6
2	☐	10.000	9.269	303167.15	0.1229	P	1.1
3	☐	50.000	46.351	1446391.61	0.6146	P	0.7
4	☐	100.000	101.898	3108044.39	1.3510	A	0.9
5	☐			3504.89	0.0014	P	23.6

y = 0.0133 * x + 2.3251E-005
R = 0.9989
DL = 0.001136
BEC = 0.001754

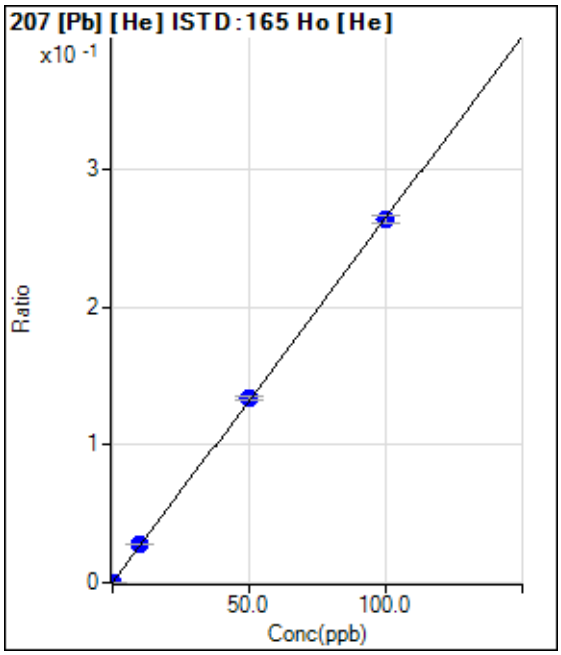
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	227.78	0.0001	P	5.1
2	☐	10.000	10.692	101109.49	0.0308	P	2.1
3	☐	50.000	50.964	472996.89	0.1464	P	1.8
4	☐	100.000	99.449	929341.49	0.2856	P	2.6
5	☐			925.60	0.0003	P	7.5

y = 0.0029 * x + 6.8773E-005
R = 0.9999
DL = 0.003634
BEC = 0.02395

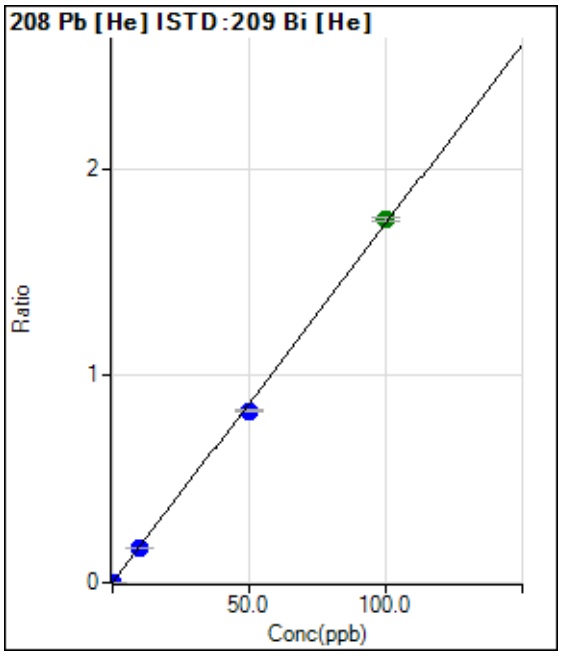
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	222.23	0.0001	P	12.7
2	☐	10.000	10.626	92510.78	0.0281	P	1.2
3	☐	50.000	50.722	433321.08	0.1341	P	1.9
4	☐	100.000	99.576	856593.16	0.2632	P	2.0
5	☐			805.59	0.0002	P	6.8

y = 0.0026 * x + 6.7069E-005
R = 0.9999
DL = 0.009671
BEC = 0.02538

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	948.92	0.0004	P	2.7
2	☐	10.000	9.736	416805.13	0.1690	P	1.2
3	☐	50.000	47.792	1948998.94	0.8281	P	1.1
4	☐	100.000	101.130	4030260.74	1.7519	A	1.1
5	☐			3758.00	0.0015	P	5.1

y = 0.0173 * x + 3.7457E-004
R = 0.9996
DL = 0.00178
BEC = 0.02163

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T14:52:49-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	196	9.27
B	11	45	2	NoGas	103828	0.00
Na	23	45	1	He	80743	0.00
Mg	24	45	1	He	1571	0.55
Al	27	45	1	He	1276	0.36
K	39	45	1	He	34088	0.01
Ca	44	45	1	He	444	0.99
Ti	47	45	1	He	18	121.86
V	51	45	1	He	518	14.37
Cr	52	45	1	He	1841	0.39
Mn	55	45	1	He	473	1.97
Fe	56	45	1	He	6223	0.11
Co	59	103	1	He	36	84.77
Ni	60	103	1	He	32	148.32
Cu	63	103	1	He	690	1.27
Zn	66	103	1	He	1080	0.48
As	75	103	1	He	102	1.46
Se	78	103	1	He	36	11.40
Sr	88	103	1	He	243	9.40
Mo	95	103	1	He	88	27.48
Ag	107	103	1	He	46	66.87
Cd	111	103	1	He	987	0.39
Sn	118	115	1	He	1219	0.92
Sb	123	115	1	He	200	8.82
Ba	137	115	1	He	66	27.25
W	182	209	1	He	3589	0.20
Tl	205	209	1	He	63	68.02
Pb	208	209	1	He	917	0.87

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1396251	0.54
Sc	45	1	He	637553	0.51
Sc	45	2	NoGas	4884031	1.32
Rh	103	1	He	1906680	1.18
In	115	1	He	1084697	0.42
Tb	159	1	He	3239190	0.43
Ho	165	1	He	3291602	0.50
Bi	209	1	He	2496837	1.01

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T14:56:39-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	211	0.00
B	11	45	2	NoGas	82180	0.00
Na	23	45	1	He	76365	0.00
Mg	24	45	1	He	1363	0.30
Al	27	45	1	He	1338	0.44
K	39	45	1	He	33324	0.01
Ca	44	45	1	He	410	2.27
Ti	47	45	1	He	24	170.45
Cr	52	45	1	He	1786	0.24
Mn	55	45	1	He	472	0.74
Fe	56	45	1	He	5007	0.07
Co	59	103	1	He	19	328.01
Ni	60	103	1	He	28	327.07
Cu	63	103	1	He	620	0.38
Zn	66	103	1	He	1128	0.37
As	75	103	1	He	96	10.31
Se	78	103	1	He	34	18.40
Sr	88	103	1	He	173	9.98
Mo	95	103	1	He	87	7.69
Ag	107	103	1	He	44	131.09
Cd	111	103	1	He	1032	0.44
Sn	118	115	1	He	1130	1.19
Sb	123	115	1	He	209	7.10
Ba	137	115	1	He	71	23.15
W	182	209	1	He	3719	0.24
Tl	205	209	1	He	59	36.40
Pb	208	209	1	He	949	0.30

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1389655	1.27
Sc	45	1	He	628609	0.48
Sc	45	2	NoGas	4813296	1.50
Rh	103	1	He	1894469	1.02
In	115	1	He	1086371	0.22
Tb	159	1	He	3251379	0.20
Ho	165	1	He	3312124	1.05
Bi	209	1	He	2533294	0.49

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:00:27-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	33657	0.01
B	11	2	NoGas	94096	0.00
Na	23	1	He	7762386	0.00
Mg	24	1	He	4346989	0.00
Al	27	1	He	24970	0.01
K	39	1	He	3882302	0.00
Ca	44	1	He	204245	0.00
Ti	47	1	He	2261	0.20
V	51	1	He	57506	0.00
Cr	52	1	He	72561	0.00
Mn	55	1	He	274058	0.00
Fe	56	1	He	16911295	0.00
Co	59	1	He	102346	0.00
Ni	60	1	He	25074	0.00
Cu	63	1	He	68593	0.00
Zn	66	1	He	15154	0.01
As	75	1	He	8328	0.03
Se	78	1	He	940	0.09
Sr	88	1	He	65687	0.00
Mo	95	1	He	31608	0.01
Ag	107	1	He	114087	0.00
Cd	111	1	He	20626	0.00
Sn	118	1	He	49050	0.01
Sb	123	1	He	42807	0.00
Ba	137	1	He	20766	0.01
W	182	1	He	122298	0.00
Tl	205	1	He	303167	0.00
Pb	208	1	He	416805	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1357112	1.51	1389655	97.66	30	120	
Sc	45	1	He	634726	1.24	628609	100.97	30	120	
Sc	45	2	NoGas	4676620	0.39	4813296	97.16	30	120	
Rh	103	1	He	1871730	0.53	1894469	98.80	30	120	
In	115	1	He	1062585	0.74	1086371	97.81	30	120	
Tb	159	1	He	3202309	0.67	3251379	98.49	30	120	
Ho	165	1	He	3286570	0.59	3312124	99.23	30	120	
Bi	209	1	He	2466652	1.72	2533294	97.37	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:04:15-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	205938	0.00
B	11	2	NoGas	224127	0.00
Na	23	1	He	36961198	0.00
Mg	24	1	He	20958164	0.00
Al	27	1	He	112468	0.00
K	39	1	He	18243429	0.00
Ca	44	1	He	976160	0.00
Ti	47	1	He	11281	0.02
V	51	1	He	278770	0.00
Cr	52	1	He	340820	0.00
Mn	55	1	He	1295962	0.00
Fe	56	1	He	81000530	0.00
Co	59	1	He	480201	0.00
Ni	60	1	He	120793	0.00
Cu	63	1	He	315531	0.00
Zn	66	1	He	64512	0.00
As	75	1	He	39831	0.00
Se	78	1	He	4324	0.01
Sr	88	1	He	311758	0.00
Mo	95	1	He	152884	0.00
Ag	107	1	He	524216	0.00
Cd	111	1	He	91856	0.00
Sn	118	1	He	220018	0.00
Sb	123	1	He	201422	0.00
Ba	137	1	He	98023	0.00
W	182	1	He	605436	0.00
Tl	205	1	He	1446392	0.00
Pb	208	1	He	1948999	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1365210	0.16	1389655	98.24	30	120	
Sc	45	1	He	630420	4.23	628609	100.29	30	120	
Sc	45	2	NoGas	4719343	1.22	4813296	98.05	30	120	
Rh	103	1	He	1794555	0.69	1894469	94.73	30	120	
In	115	1	He	1017533	0.41	1086371	93.66	30	120	
Tb	159	1	He	3158032	1.67	3251379	97.13	30	120	
Ho	165	1	He	3231265	0.80	3312124	97.56	30	120	
Bi	209	1	He	2353558	0.20	2533294	92.91	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:08:05-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	445088	0.00
B	11	2	NoGas	59756	0.00
Na	23	1	He	74558562	0.00
Mg	24	1	He	42282946	0.00
Al	27	1	He	229730	0.00
K	39	1	He	37444350	0.00
Ca	44	1	He	2024323	0.00
Ti	47	1	He	40	90.83
V	51	1	He	575177	0.00
Cr	52	1	He	690834	0.00
Mn	55	1	He	2734298	0.00
Fe	56	1	He	165654398	0.00
Co	59	1	He	970196	0.00
Ni	60	1	He	239272	0.00
Cu	63	1	He	629756	0.00
Zn	66	1	He	127417	0.00
As	75	1	He	78552	0.00
Se	78	1	He	8265	0.02
Sr	88	1	He	633831	0.00
Mo	95	1	He	3011	0.54
Ag	107	1	He	1034892	0.00
Cd	111	1	He	180349	0.00
Sn	118	1	He	3238	0.01
Sb	123	1	He	3187	0.44
Ba	137	1	He	198195	0.00
W	182	1	He	15419	0.11
Tl	205	1	He	3108044	0.00
Pb	208	1	He	4030261	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1398132	1.23	1389655	100.61	30	120	
Sc	45	1	He	632141	1.14	628609	100.56	30	120	
Sc	45	2	NoGas	4898034	0.44	4813296	101.76	30	120	
Rh	103	1	He	1789010	0.75	1894469	94.43	30	120	
In	115	1	He	1011940	0.63	1086371	93.15	30	120	
Tb	159	1	He	3182666	0.91	3251379	97.89	30	120	
Ho	165	1	He	3254944	1.74	3312124	98.27	30	120	
Bi	209	1	He	2300606	0.83	2533294	90.81	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:11:51-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	174	18.45
B	11	2	NoGas	369729	0.00
Na	23	1	He	89260	0.00
Mg	24	1	He	4542	0.66
Al	27	1	He	2101	0.20
K	39	1	He	41571	0.01
Ca	44	1	He	931	0.38
Ti	47	1	He	23252	0.00
V	51	1	He	253	72.73
Cr	52	1	He	3019	0.13
Mn	55	1	He	1312	0.56
Fe	56	1	He	193090	0.02
Co	59	1	He	140	12.84
Ni	60	1	He	184	2.26
Cu	63	1	He	1044	0.57
Zn	66	1	He	1871	0.34
As	75	1	He	1029	1.10
Se	78	1	He	121	11.97
Sr	88	1	He	239	5.40
Mo	95	1	He	325524	0.00
Ag	107	1	He	281	4.80
Cd	111	1	He	1154	0.77
Sn	118	1	He	463889	0.00
Sb	123	1	He	422059	0.00
Ba	137	1	He	152	3.62
W	182	1	He	1279075	0.00
Tl	205	1	He	3505	0.66
Pb	208	1	He	3758	0.14

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1395035	0.33	1389655	100.39	30	120	
Sc	45	1	He	647897	2.63	628609	103.07	30	120	
Sc	45	2	NoGas	4794715	0.65	4813296	99.61	30	120	
Rh	103	1	He	1944157	0.69	1894469	102.62	30	120	
In	115	1	He	1080936	1.02	1086371	99.50	30	120	
Tb	159	1	He	3250918	0.91	3251379	99.99	30	120	
Ho	165	1	He	3301826	0.31	3312124	99.69	30	120	
Bi	209	1	He	2485449	1.39	2533294	98.11	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:15:41-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	39.013	0.625	174997	0.88	40	97.5	89.5	110.5	
B	11	45	NoGas	35.957	3.286	188437	1.92	40	89.9	89.5	110.5	
Na	23	45	He	20850.463	1.793	31382448	0.52	20000	104.3	89.5	110.5	
Mg	24	45	He	20778.236	1.424	17714003	0.46	20000	103.9	89.5	110.5	
Al	27	45	He	205.431	1.580	95612	0.54	200	102.7	89.5	110.5	
K	39	45	He	20712.455	2.113	15600550	0.45	20000	103.6	89.5	110.5	
Ca	44	45	He	20050.722	1.512	814016	0.34	20000	100.3	89.5	110.5	
Ti	47	45	He	41.108	1.767	9418	0.39	40	102.8	89.5	110.5	
V	51	45	He	41.056	1.640	236905	1.02	40	102.6	89.5	110.5	
Cr	52	45	He	41.043	1.029	286484	0.87	40	102.6	89.5	110.5	
Mn	55	45	He	200.640	1.108	1096449	0.75	200	100.3	89.5	110.5	
Fe	56	45	He	10264.799	1.894	68381942	0.66	10000	102.6	89.5	110.5	
Co	59	103	He	40.117	0.826	404863	0.38	40	100.3	89.5	110.5	
Ni	60	103	He	40.704	1.513	101709	1.06	40	101.8	89.5	110.5	
Cu	63	103	He	41.478	1.133	272715	0.68	40	103.7	89.5	110.5	
Zn	66	103	He	41.990	0.773	56476	0.78	40	105.0	89.5	110.5	
As	75	103	He	39.654	1.136	32604	0.78	40	99.1	89.5	110.5	
Se	78	103	He	41.488	0.958	3625	1.19	40	103.7	89.5	110.5	
Sr	88	103	He	40.362	0.785	265817	0.45	40	100.9	89.5	110.5	
Mo	95	103	He	42.846	1.655	134352	1.89	40	107.1	89.5	110.5	
Ag	107	103	He	41.226	0.927	445989	0.62	40	103.1	89.5	110.5	
Cd	111	103	He	40.861	0.349	77629	0.13	40	102.2	89.5	110.5	
Sn	118	115	He	41.458	0.777	186793	0.98	40	103.6	89.5	110.5	
Sb	123	115	He	41.637	0.607	170459	0.26	40	104.1	89.5	110.5	
Ba	137	115	He	40.800	1.825	83241	1.33	40	102.0	89.5	110.5	
W	182	209	He	39.465	1.083	489869	1.18	40	98.7	89.5	110.5	
Tl	205	209	He	37.243	0.648	1187062	0.65	40	93.1	89.5	110.5	
Pb	208	209	He	39.074	0.985	1627735	0.99	40	97.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1425458	1.25	1389655	102.58	30	120	
Sc	45	He	637826	1.84	628609	101.47	30	120	
Sc	45	NoGas	4877061	0.64	4813296	101.32	30	120	
Rh	103	He	1865575	0.46	1894469	98.47	30	120	
In	115	He	1044746	0.84	1086371	96.17	30	120	
Tb	159	He	3212157	0.30	3251379	98.79	30	120	
Ho	165	He	3285176	1.19	3312124	99.19	30	120	
Bi	209	He	2403917	0.11	2533294	94.89	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:19:28-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.075	41.6	41	16.9	20	
W	182	1	He	1.243	13.5	19620	11.2	10	
Ca	44	1	He	-0.943	-224.7	370	22.0	1000	
Na	23	1	He	3.536	47.2	81331	2.1	400	
Mg	24	1	He	1.703	42.3	2782	20.8	1000	
K	39	1	He	7.184	25.5	38516	2.9	1000	
V	51	1	He	0.088	16.2	377	20.6	2	
Cr	52	1	He	0.013	54.7	1871	2.2	2	
Mn	55	1	He	-0.015	-79.9	390	15.7	2	
Fe	56	1	He	15.417	28.2	105739	26.1	50	
Co	59	1	He	0.007	12.5	89	10.8	1	
Ni	60	1	He	0.002	351.7	33	55.7	2	
Cu	63	1	He	0.026	13.2	806	3.8	2	
Zn	66	1	He	-0.268	-13.8	781	5.5	20	
As	75	1	He	0.166	14.4	238	7.6	2	
Se	78	1	He	0.331	19.1	65	8.5	2	
Sr	88	1	He	0.016	38.9	282	13.8	10	
Mo	95	1	He	1.007	20.1	3344	19.2	2	
Ag	107	1	He	0.006	19.2	111	10.5	0.2	
Cd	111	1	He	-0.003	-456.7	1044	1.8	0.2	
Ba	137	1	He	0.000	33717.4	71	16.5	5	
Sn	118	1	He	0.267	28.7	2371	14.6	10	
Tl	205	1	He	0.050	16.7	1726	16.4	0.5	
Pb	208	1	He	0.017	16.8	1660	7.6	1	
Al	27	1	He	-0.107	-222.7	1286	9.2	50	
Sb	123	1	He	1.062	19.0	4720	17.8	1	ICB Failed
B	11	2	NoGas	-9.766	-0.9	54332	0.1	20	
Be	9	2	NoGas	0.012	132.1	270	28.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1415813	1.32	1389655	101.88	30	120	
Sc	45	1	He	626628	0.95	628609	99.68	30	120	
Sc	45	2	NoGas	4841273	0.51	4813296	100.58	30	120	
Rh	103	1	He	1926152	0.98	1894469	101.67	30	120	
In	115	1	He	1085097	0.58	1086371	99.88	30	120	

Tb	159	1	He	3252878	0.75	3251379	100.05	30	120	
Ho	165	1	He	3319976	0.59	3312124	100.24	30	120	
Bi	209	1	He	2501369	0.34	2533294	98.74	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1912660
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:23:18-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.901	0.901	2.895	4204	3.70	1	90.1	69.5	130.5	
B	11	2	NoGas	11.625	11.625	1.378	117072	0.35	20	58.1	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1066.852	1066.852	0.480	1693946	0.46	1000	106.7	69.5	130.5	
Mg	24	1	He	1056.797	1056.797	1.155	910084	0.25	1000	105.7	69.5	130.5	
Al	27	1	He	51.239	51.239	3.397	25082	2.88	50	102.5	69.5	130.5	
K	39	1	He	1051.781	1051.781	0.711	831528	0.51	1000	105.2	69.5	130.5	
Ca	44	1	He	1019.304	1019.304	1.389	42138	0.48	1000	101.9	69.5	130.5	
Ti	47	1	He	10.926	10.926	3.978	2544	4.04	10	109.3	69.5	130.5	
V	51	1	He	5.427	5.427	4.224	31476	3.90	5	108.5	69.5	130.5	
Cr	52	1	He	2.144	2.144	2.580	16825	2.05	2	107.2	69.5	130.5	
Mn	55	1	He	5.108	5.108	1.841	28623	1.12	5	102.2	69.5	130.5	
Fe	56	1	He	105.993	105.993	1.041	717351	0.95	100	106.0	69.5	130.5	
Co	59	1	He	1.029	1.029	1.589	10738	0.56	1	102.9	69.5	130.5	
Ni	60	1	He	2.121	2.121	3.212	5500	2.34	2	106.1	69.5	130.5	
Cu	63	1	He	2.126	2.126	0.662	15036	0.76	2	106.3	69.5	130.5	
Zn	66	1	He	20.673	20.673	2.774	29292	1.41	20	103.4	69.5	130.5	
As	75	1	He	5.068	5.068	1.483	4388	1.08	5	101.4	69.5	130.5	
Se	78	1	He	5.355	5.355	3.022	514	2.49	5	107.1	69.5	130.5	
Sr	88	1	He	9.822	9.822	1.881	66927	0.56	10	98.2	69.5	130.5	
Mo	95	1	He	10.639	10.639	2.754	34510	1.36	10	106.4	69.5	130.5	
Ag	107	1	He	1.071	1.071	2.202	12004	0.95	1	107.1	69.5	130.5	
Cd	111	1	He	1.027	1.027	5.507	3037	3.13	1	102.7	69.5	130.5	
Sn	118	1	He	10.376	10.376	1.929	49313	1.70	10	103.8	69.5	130.5	
Sb	123	1	He	2.341	2.341	1.329	10131	1.17	2	117.0	69.5	130.5	
Ba	137	1	He	5.016	5.016	3.081	10672	3.22	5	100.3	69.5	130.5	
W	182	1	He	9.869	9.869	0.302	129930	0.89	10	98.7	69.5	130.5	
Tl	205	1	He	1.884	1.884	1.530	62398	1.72	2	94.2	69.5	130.5	
Pb	208	1	He	1.022	1.022	2.024	45112	1.52	1	102.2	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1409353	1.38	1389655	101.42	30	120	
Sc	45	1	He	643291	0.90	628609	102.34	30	120	
Sc	45	2	NoGas	4868159	0.51	4813296	101.14	30	120	
Rh	103	1	He	1926702	1.37	1894469	101.70	30	120	
In	115	1	He	1083111	0.26	1086371	99.70	30	120	
Tb	159	1	He	3241245	0.66	3251379	99.69	30	120	
Ho	165	1	He	3306863	0.76	3312124	99.84	30	120	
Bi	209	1	He	2495794	0.90	2533294	98.52	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:27:08-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.010	266.9	219	44.4	1	
B	11	45	2	NoGas	-11.462	-4.9	43793	1.9	20	
Na	23	45	1	He	47575.009	2.5	66868077	2.3	75200	
Mg	24	45	1	He	47895.599	2.8	38176725	2.1	75200	
Al	27	45	1	He	45805.099	2.6	19652441	2.1	75200	
K	39	45	1	He	47596.057	3.3	33476537	1.9	75200	
Ca	44	45	1	He	48823.937	3.9	1852443	2.4	75200	
Ti	47	45	1	He	962.784	4.2	205641	0.8	1505	
V	51	45	1	He	0.063	24.4	228	41.5	4	
Cr	52	45	1	He	0.639	7.0	5834	3.1	4	
Mn	55	45	1	He	0.417	1.6	2578	3.4	4	
Fe	56	45	1	He	47489.697	3.3	295749428	1.4	75200	
Co	59	103	1	He	0.034	13.4	319	11.5	2	
Ni	60	103	1	He	0.100	21.0	244	17.5	4	
Cu	63	103	1	He	0.340	10.5	2501	8.2	4	
Zn	66	103	1	He	0.088	55.0	1079	3.6	10	
As	75	103	1	He	0.314	4.0	310	2.1	4	
Se	78	103	1	He	0.485	16.9	67	8.1	4	
Sr	88	103	1	He	0.342	2.6	2133	3.3	20	
Mo	95	103	1	He	1062.348	3.0	2930149	2.0	1505	
Ag	107	103	1	He	0.010	4.3	133	4.3	1	
Cd	111	103	1	He	0.048	101.3	975	9.8	1	
Sn	118	115	1	He	0.434	21.5	2787	14.2	20	
Sb	123	115	1	He	0.296	8.1	1296	7.4	1	
Ba	137	115	1	He	0.052	27.6	160	16.3	2	
W	182	209	1	He	0.551	7.4	9651	6.5	20	
Tl	205	209	1	He	0.012	6.4	403	4.1	1	
Pb	208	209	1	He	0.577	0.8	23298	2.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1200114	1.62	1389655	86.36	30	120	
Sc	45	1	He	596769	4.66	628609	94.93	30	120	
Sc	45	2	NoGas	4292056	1.40	4813296	89.17	30	120	
Rh	103	1	He	1642409	1.61	1894469	86.69	30	120	
In	115	1	He	960143	0.55	1086371	88.38	30	120	
Tb	159	1	He	3042108	0.43	3251379	93.56	30	120	
Ho	165	1	He	3085400	0.54	3312124	93.15	30	120	
Bi	209	1	He	2248168	1.93	2533294	88.74	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:30:54-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	101.078	1.254	375994	0.59	100	101.1	79.5	120.5	
B	11	45	2	NoGas	100.636	2.074	331020	0.61	100	100.6	79.5	120.5	
Na	23	45	1	He	49210.061	2.176	66163234	0.64	50000	98.4	79.5	120.5	
Mg	24	45	1	He	49321.803	2.132	37612155	0.84	50000	98.6	79.5	120.5	
Al	27	45	1	He	47366.501	1.843	19443121	1.11	50000	94.7	79.5	120.5	
K	39	45	1	He	49182.483	2.399	33096737	0.45	50000	98.4	79.5	120.5	
Ca	44	45	1	He	49368.800	1.999	1792415	0.88	50000	98.7	79.5	120.5	
Ti	47	45	1	He	1081.600	2.499	221102	0.54	1100	98.3	79.5	120.5	
V	51	45	1	He	99.198	2.481	512172	0.90	100	99.2	79.5	120.5	
Cr	52	45	1	He	100.375	1.954	624388	0.93	100	100.4	79.5	120.5	
Mn	55	45	1	He	97.325	2.281	475957	0.74	100	97.3	79.5	120.5	
Fe	56	45	1	He	49442.188	2.289	294623046	0.54	50000	98.9	79.5	120.5	
Co	59	103	1	He	99.132	2.036	883239	0.17	100	99.1	79.5	120.5	
Ni	60	103	1	He	97.767	2.455	215640	0.59	100	97.8	79.5	120.5	
Cu	63	103	1	He	98.190	3.224	569149	1.10	100	98.2	79.5	120.5	
Zn	66	103	1	He	98.793	2.453	115979	0.32	100	98.8	79.5	120.5	
As	75	103	1	He	100.913	3.262	73111	1.13	100	100.9	79.5	120.5	
Se	78	103	1	He	101.519	2.907	7787	0.87	100	101.5	79.5	120.5	
Sr	88	103	1	He	99.219	2.058	576690	0.57	100	99.2	79.5	120.5	
Mo	95	103	1	He	1195.051	1.893	3307768	3.60	1100	108.6	79.5	120.5	
Ag	107	103	1	He	99.666	2.394	951830	0.43	100	99.7	79.5	120.5	
Cd	111	103	1	He	100.953	3.027	167986	0.90	100	101.0	79.5	120.5	
Sn	118	115	1	He	98.689	0.951	404297	0.48	100	98.7	79.5	120.5	
Sb	123	115	1	He	104.420	0.753	389740	0.44	100	104.4	79.5	120.5	
Ba	137	115	1	He	99.895	0.367	185862	0.21	100	99.9	79.5	120.5	
W	182	209	1	He	102.004	0.070	1189392	0.59	100	102.0	79.5	120.5	
Tl	205	209	1	He	100.627	0.922	3026093	0.47	100	100.6	79.5	120.5	
Pb	208	209	1	He	100.460	0.605	3947295	0.45	100	100.5	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1183046	0.73	1389655	85.13	30	120	
Sc	45	1	He	570687	2.81	628609	90.79	30	120	
Sc	45	2	NoGas	4276262	1.22	4813296	88.84	30	120	
Rh	103	1	He	1647507	2.10	1894469	86.96	30	120	
In	115	1	He	953149	0.47	1086371	87.74	30	120	
Tb	159	1	He	3071043	0.70	3251379	94.45	30	120	
Ho	165	1	He	3098145	0.08	3312124	93.54	30	120	
Bi	209	1	He	2268215	0.62	2533294	89.54	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:34:39-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.586	0.035	195860	0.51	50	97.2	89.5	110.5	
B	11	45	2	NoGas	49.122	3.699	210760	1.04	50	98.2	89.5	110.5	
Na	23	45	1	He	24998.945	2.053	35143825	1.01	25000	100.0	89.5	110.5	
Mg	24	45	1	He	24999.810	2.101	19913266	0.51	25000	100.0	89.5	110.5	
Al	27	45	1	He	249.822	1.085	108386	1.65	250	99.9	89.5	110.5	
K	39	45	1	He	25040.777	2.717	17615323	0.60	25000	100.2	89.5	110.5	
Ca	44	45	1	He	24649.039	1.708	934958	0.52	25000	98.6	89.5	110.5	
Ti	47	45	1	He	51.942	4.038	11111	2.62	50	103.9	89.5	110.5	
V	51	45	1	He	49.828	1.657	268705	1.63	50	99.7	89.5	110.5	
Cr	52	45	1	He	50.550	2.100	329268	0.51	50	101.1	89.5	110.5	
Mn	55	45	1	He	245.259	2.139	1252110	0.12	250	98.1	89.5	110.5	
Fe	56	45	1	He	12628.638	2.669	78600455	0.56	12500	101.0	89.5	110.5	
Co	59	103	1	He	49.275	1.366	467542	0.30	50	98.5	89.5	110.5	
Ni	60	103	1	He	48.844	0.329	114761	1.34	50	97.7	89.5	110.5	
Cu	63	103	1	He	49.517	1.650	305985	0.18	50	99.0	89.5	110.5	
Zn	66	103	1	He	49.488	1.292	62394	0.35	50	99.0	89.5	110.5	
As	75	103	1	He	49.749	1.051	38437	0.91	50	99.5	89.5	110.5	
Se	78	103	1	He	50.528	0.775	4144	1.68	50	101.1	89.5	110.5	
Sr	88	103	1	He	49.182	1.669	304498	0.70	50	98.4	89.5	110.5	
Mo	95	103	1	He	76.388	6.926	225001	5.28	50	152.8	89.5	110.5	CCV Failed
Ag	107	103	1	He	51.105	1.873	519776	0.26	50	102.2	89.5	110.5	
Cd	111	103	1	He	51.328	2.267	91429	0.64	50	102.7	89.5	110.5	
Sn	118	115	1	He	49.592	1.144	214721	1.18	50	99.2	89.5	110.5	
Sb	123	115	1	He	51.596	0.991	203134	0.70	50	103.2	89.5	110.5	
Ba	137	115	1	He	49.657	1.288	97438	0.92	50	99.3	89.5	110.5	
W	182	209	1	He	51.806	1.332	627968	0.67	50	103.6	89.5	110.5	
Tl	205	209	1	He	46.712	0.288	1456487	0.39	50	93.4	89.5	110.5	
Pb	208	209	1	He	48.090	0.543	1959580	0.37	50	96.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1281336	0.53	1389655	92.21	30	120	
Sc	45	1	He	596021	2.21	628609	94.82	30	120	
Sc	45	2	NoGas	4530389	1.40	4813296	94.12	30	120	
Rh	103	1	He	1754244	1.61	1894469	92.60	30	120	
In	115	1	He	1004908	0.37	1086371	92.50	30	120	
Tb	159	1	He	3215738	1.34	3251379	98.90	30	120	
Ho	165	1	He	3251002	1.30	3312124	98.15	30	120	
Bi	209	1	He	2351695	0.66	2533294	92.83	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:38:32-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.009	193.4	233	33.3	1	
B	11	45	2	NoGas	-12.896	-1.5	41788	1.6	20	
Na	23	45	1	He	5.011	54.0	76205	2.8	400	
Mg	24	45	1	He	2.827	20.0	3397	10.6	1000	
Al	27	45	1	He	1.574	16.6	1867	7.7	50	
K	39	45	1	He	11.301	12.8	37933	0.9	1000	
Ca	44	45	1	He	7.724	26.8	654	11.8	1000	
Ti	47	45	1	He	0.232	22.5	70	17.2	20	
V	51	45	1	He	0.027	183.2	24	1066.9	2	
Cr	52	45	1	He	0.015	136.0	1716	5.5	2	
Mn	55	45	1	He	0.256	17.3	1680	10.9	2	
Fe	56	45	1	He	17.478	26.3	108661	23.1	50	
Co	59	103	1	He	0.006	93.1	76	69.8	1	
Ni	60	103	1	He	0.005	125.3	39	39.6	2	
Cu	63	103	1	He	0.041	21.1	867	6.0	2	
Zn	66	103	1	He	0.191	25.3	1338	4.1	20	
As	75	103	1	He	0.128	17.3	196	8.3	2	
Se	78	103	1	He	0.142	33.8	45	8.3	2	
Sr	88	103	1	He	0.002	378.2	180	25.9	10	
Mo	95	103	1	He	3.587	11.9	11123	11.0	2	CCB Failed
Ag	107	103	1	He	0.010	27.1	146	18.5	0.2	
Cd	111	103	1	He	-0.036	-73.9	932	6.1	0.2	
Sn	118	115	1	He	0.316	10.9	2467	5.5	10	
Sb	123	115	1	He	0.673	13.6	2915	12.4	1	
Ba	137	115	1	He	-0.004	-265.4	59	38.5	5	
W	182	209	1	He	1.078	15.6	17065	13.6	10	
Tl	205	209	1	He	0.049	12.8	1648	13.6	0.5	
Pb	208	209	1	He	0.024	6.2	1920	4.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1280643	1.61	1389655	92.16	30	120	
Sc	45	1	He	572093	2.01	628609	91.01	30	120	
Sc	45	2	NoGas	4471198	1.39	4813296	92.89	30	120	
Rh	103	1	He	1833027	0.80	1894469	96.76	30	120	
In	115	1	He	1031302	0.83	1086371	94.93	30	120	
Tb	159	1	He	3199331	1.45	3251379	98.40	30	120	
Ho	165	1	He	3257406	0.21	3312124	98.35	30	120	
Bi	209	1	He	2437844	1.48	2533294	96.23	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-b
Data File Name	014SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:42:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.015	0.015	82.64	226	0.01	10000	
B	11	45	2	NoGas	36.880	36.880	1.22	160960	0.02	300	
Na	23	45	1	He	240625.405	240625.405	3.55	311644054	0.08	500000	
Mg	24	45	1	He	20904.377	20904.377	4.50	15365623	0.14	500000	
Al	27	45	1	He	18.348	18.348	5.47	8430	0.22	200000	
K	39	45	1	He	6637.978	6637.978	5.32	4329871	0.15	500000	
Ca	44	45	1	He	54849.300	54849.300	2.91	1920130	2.86	500000	
Ti	47	45	1	He	0.416	0.416	12.52	103	0.40	2500	
V	51	45	1	He	0.201	0.201	136.46	872	0.02	10000	
Cr	52	45	1	He	0.738	0.738	9.95	5971	0.01	10000	
Mn	55	45	1	He	8186.954	8186.954	3.63	38565246	0.02	10000	
Fe	56	45	1	He	15046.094	15046.094	4.35	86425245	0.02	200000	
Co	59	103	1	He	573.755	573.755	0.54	4842874	0.01	10000	
Ni	60	103	1	He	31.674	31.674	2.89	66193	0.05	10000	
Cu	63	103	1	He	3.491	3.491	2.62	19662	0.02	10000	
Zn	66	103	1	He	22.649	22.649	2.32	25904	0.09	10000	
As	75	103	1	He	0.856	0.856	4.12	666	0.13	10000	
Se	78	103	1	He	0.372	0.372	9.45	55	0.67	10000	
Sr	88	103	1	He	207.762	207.762	1.17	1143805	0.02	10000	
Mo	95	103	1	He	3.281	3.281	0.89	8670	0.04	2000	
Ag	107	103	1	He	0.014	0.014	35.02	160	0.01	300	
Cd	111	103	1	He	0.030	0.030	105.97	896	0.00	4000	
Sn	118	115	1	He	0.889	0.889	29.37	4316	0.02	2000	
Sb	123	115	1	He	0.668	0.668	3.72	2495	0.03	300	
Ba	137	115	1	He	157.766	157.766	0.49	273646	0.06	10000	
W	182	209	1	He	0.453	0.453	7.54	8065	0.01	2500	
Tl	205	209	1	He	0.523	0.523	3.82	14794	0.00	5000	
Pb	208	209	1	He	0.203	0.203	0.78	8264	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1136425	1.92	1389655	81.78	30	120	
Sc	45	1	He	550511	4.17	628609	87.58	30	120	
Sc	45	2	NoGas	4107134	1.20	4813296	85.33	30	120	
Rh	103	1	He	1560396	0.95	1894469	82.37	30	120	
In	115	1	He	888650	0.87	1086371	81.80	30	120	
Tb	159	1	He	2963282	0.99	3251379	91.14	30	120	
Ho	165	1	He	3043737	1.69	3312124	91.90	30	120	
Bi	209	1	He	2126730	0.85	2533294	83.95	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49409-g-6-b@5
Data File Name	015SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:46:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.012	0.012	143.39	230	0.01	10000	
B	11	45	2	NoGas	-4.570	-4.570	-8.71	62238	-0.01	300	
Na	23	45	1	He	51151.217	51151.217	0.91	68702536	0.07	500000	
Mg	24	45	1	He	4485.943	4485.943	0.60	3418666	0.13	500000	
Al	27	45	1	He	4.146	4.146	3.18	2912	0.14	200000	
K	39	45	1	He	1417.090	1417.090	0.48	982064	0.14	500000	
Ca	44	45	1	He	11495.790	11495.790	0.87	417227	2.76	500000	
Ti	47	45	1	He	0.066	0.066	62.82	36	0.18	2500	
V	51	45	1	He	0.070	0.070	175.42	250	0.03	10000	
Cr	52	45	1	He	0.159	0.159	8.01	2604	0.01	10000	
Mn	55	45	1	He	1781.144	1781.144	0.57	8694618	0.02	10000	
Fe	56	45	1	He	3258.045	3258.045	0.74	19399908	0.02	200000	
Co	59	103	1	He	115.801	115.801	1.31	1081651	0.01	10000	
Ni	60	103	1	He	6.552	6.552	2.27	15174	0.04	10000	
Cu	63	103	1	He	0.754	0.754	0.65	5143	0.01	10000	
Zn	66	103	1	He	4.703	4.703	1.68	6767	0.07	10000	
As	75	103	1	He	0.164	0.164	2.08	212	0.08	10000	
Se	78	103	1	He	0.104	0.104	106.95	40	0.26	10000	
Sr	88	103	1	He	41.417	41.417	1.29	252461	0.02	10000	
Mo	95	103	1	He	0.960	0.960	3.62	2864	0.03	2000	
Ag	107	103	1	He	0.005	0.005	43.32	92	0.01	300	
Cd	111	103	1	He	-0.006	-0.006	-551.92	929	0.00	4000	
Sn	118	115	1	He	-0.025	-0.025	-151.69	922	0.00	2000	
Sb	123	115	1	He	0.106	0.106	16.58	602	0.02	300	
Ba	137	115	1	He	31.091	31.091	1.15	60041	0.05	10000	
W	182	209	1	He	0.154	0.154	15.49	5305	0.00	2500	
Tl	205	209	1	He	0.108	0.108	1.71	3402	0.00	5000	
Pb	208	209	1	He	0.041	0.041	4.41	2537	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1218206	0.70	1389655	87.66	30	120	
Sc	45	1	He	569904	0.53	628609	90.66	30	120	
Sc	45	2	NoGas	4340533	0.22	4813296	90.18	30	120	
Rh	103	1	He	1726808	0.84	1894469	91.15	30	120	
In	115	1	He	988601	0.42	1086371	91.00	30	120	
Tb	159	1	He	3130184	0.81	3251379	96.27	30	120	
Ho	165	1	He	3203500	0.94	3312124	96.72	30	120	
Bi	209	1	He	2348175	0.26	2533294	92.69	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49409-g-6-b
Data File Name	016SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:49:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	986.862	986.862	0.90	3680941	0.03	10000	
B	11	45	2	NoGas	157.753	157.753	1.70	480867	0.03	300	
Na	23	45	1	He	249242.755	249242.755	1.71	326983780	0.08	500000	
Mg	24	45	1	He	30797.471	30797.471	1.56	22935932	0.13	500000	
Al	27	45	1	He	9897.013	9897.013	1.43	3968216	0.25	200000	
K	39	45	1	He	16628.555	16628.555	2.80	10946576	0.15	500000	
Ca	44	45	1	He	63453.046	63453.046	2.21	2249645	2.82	500000	
Ti	47	45	1	He	102.691	102.691	0.87	20526	0.50	2500	
V	51	45	1	He	1023.882	1023.882	2.38	5163400	0.02	10000	
Cr	52	45	1	He	1013.382	1013.382	1.78	6141387	0.02	10000	
Mn	55	45	1	He	9097.961	9097.961	1.35	43415814	0.02	10000	
Fe	56	45	1	He	25015.684	25015.684	1.86	145578274	0.02	200000	
Co	59	103	1	He	1568.075	1568.075	1.32	13438514	0.01	10000	
Ni	60	103	1	He	1065.034	1065.034	1.38	2259499	0.05	10000	
Cu	63	103	1	He	1035.638	1035.638	1.96	5769891	0.02	10000	
Zn	66	103	1	He	965.278	965.278	1.56	1081777	0.09	10000	
As	75	103	1	He	999.548	999.548	1.16	695986	0.14	10000	
Se	78	103	1	He	966.048	966.048	1.36	71038	1.36	10000	
Sr	88	103	1	He	1260.284	1260.284	2.56	7043760	0.02	10000	
Mo	95	103	1	He	118.119	118.119	0.54	314423	0.04	2000	
Ag	107	103	1	He	103.032	103.032	1.05	946545	0.01	300	
Cd	111	103	1	He	1082.334	1082.334	1.28	1724207	0.06	4000	
Sn	118	115	1	He	1155.086	1155.086	1.00	4327261	0.03	2000	
Sb	123	115	1	He	113.155	113.155	0.52	387070	0.03	300	
Ba	137	115	1	He	1326.152	1326.152	0.43	2260691	0.06	10000	
W	182	209	1	He	112.051	112.051	1.01	1229998	0.01	2500	
Tl	205	209	1	He	244.575	244.575	0.52	6926042	0.00	5000	
Pb	208	209	1	He	1051.534	1051.534	1.01	38898633	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1186816	1.86	1389655	85.40	30	120	
Sc	45	1	He	557180	1.48	628609	88.64	30	120	
Sc	45	2	NoGas	4306836	1.21	4813296	89.48	30	120	
Rh	103	1	He	1584434	1.25	1894469	83.63	30	120	
In	115	1	He	873561	0.08	1086371	80.41	30	120	
Tb	159	1	He	3019260	0.70	3251379	92.86	30	120	
Ho	165	1	He	3064942	0.19	3312124	92.54	30	120	
Bi	209	1	He	2135970	1.02	2533294	84.32	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-c ms
Data File Name	017SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:53:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1013.846	1013.846	1.90	3644245	0.03	10000	
B	11	45	2	NoGas	171.843	171.843	1.33	505333	0.03	300	
Na	23	45	1	He	289377.436	289377.436	0.93	367658667	0.08	500000	
Mg	24	45	1	He	34223.811	34223.811	0.85	24683817	0.14	500000	
Al	27	45	1	He	10042.517	10042.517	1.50	3899193	0.26	200000	
K	39	45	1	He	17989.975	17989.975	0.34	11469252	0.16	500000	
Ca	44	45	1	He	73314.311	73314.311	1.03	2517677	2.91	500000	
Ti	47	45	1	He	105.276	105.276	0.17	20376	0.52	2500	
V	51	45	1	He	1062.184	1062.184	2.10	5187487	0.02	10000	
Cr	52	45	1	He	1051.066	1051.066	1.69	6168699	0.02	10000	
Mn	55	45	1	He	10467.474	10467.474	1.24	48370638	0.02	10000	>LDR
Fe	56	45	1	He	27846.310	27846.310	0.84	156944705	0.02	200000	
Co	59	103	1	He	1688.274	1688.274	1.31	14255607	0.01	10000	
Ni	60	103	1	He	1094.521	1094.521	0.22	2287959	0.05	10000	
Cu	63	103	1	He	1035.153	1035.153	1.20	5682620	0.02	10000	
Zn	66	103	1	He	961.793	961.793	0.60	1062090	0.09	10000	
As	75	103	1	He	1001.520	1001.520	0.36	687118	0.15	10000	
Se	78	103	1	He	965.943	965.943	0.46	69988	1.38	10000	
Sr	88	103	1	He	1298.880	1298.880	1.57	7153137	0.02	10000	
Mo	95	103	1	He	123.259	123.259	1.44	323251	0.04	2000	
Ag	107	103	1	He	105.130	105.130	0.85	951598	0.01	300	
Cd	111	103	1	He	1096.298	1096.298	0.78	1720769	0.06	4000	
Sn	118	115	1	He	1193.254	1193.254	0.98	4360614	0.03	2000	
Sb	123	115	1	He	114.802	114.802	0.62	383076	0.03	300	
Ba	137	115	1	He	1390.671	1390.671	1.52	2312513	0.06	10000	
W	182	209	1	He	119.879	119.879	0.39	1268711	0.01	2500	
Tl	205	209	1	He	258.145	258.145	1.10	7048353	0.00	5000	
Pb	208	209	1	He	1092.406	1092.406	1.14	38963498	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1143588	0.09	1389655	82.29	30	120	
Sc	45	1	He	539572	1.42	628609	85.84	30	120	
Sc	45	2	NoGas	4207237	0.35	4813296	87.41	30	120	
Rh	103	1	He	1561040	0.71	1894469	82.40	30	120	
In	115	1	He	852163	0.43	1086371	78.44	30	120	
Tb	159	1	He	3011838	0.72	3251379	92.63	30	120	
Ho	165	1	He	3057165	0.89	3312124	92.30	30	120	
Bi	209	1	He	2059526	1.20	2533294	81.30	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-d msd
Data File Name	018SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:57:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	920.216	920.216	1.69	3409666	0.03	10000	
B	11	45	2	NoGas	159.334	159.334	2.00	473821	0.03	300	
Na	23	45	1	He	266822.863	266822.863	4.25	337934342	0.08	500000	
Mg	24	45	1	He	31635.959	31635.959	3.17	22749000	0.14	500000	
Al	27	45	1	He	9129.562	9129.562	2.31	3534899	0.26	200000	
K	39	45	1	He	16546.457	16546.457	3.55	10518298	0.16	500000	
Ca	44	45	1	He	66727.768	66727.768	1.68	2284829	2.92	500000	
Ti	47	45	1	He	96.667	96.667	1.85	18657	0.52	2500	
V	51	45	1	He	958.252	958.252	2.49	4667226	0.02	10000	
Cr	52	45	1	He	964.508	964.508	1.80	5645293	0.02	10000	
Mn	55	45	1	He	9687.903	9687.903	2.70	44640218	0.02	10000	
Fe	56	45	1	He	25449.042	25449.042	2.50	143019519	0.02	200000	
Co	59	103	1	He	1550.774	1550.774	2.47	13031736	0.01	10000	
Ni	60	103	1	He	1010.464	1010.464	2.07	2102088	0.05	10000	
Cu	63	103	1	He	964.500	964.500	2.36	5269495	0.02	10000	
Zn	66	103	1	He	894.352	894.352	1.63	982986	0.09	10000	
As	75	103	1	He	922.886	922.886	1.62	630167	0.15	10000	
Se	78	103	1	He	900.677	900.677	2.57	64943	1.39	10000	
Sr	88	103	1	He	1186.578	1186.578	0.94	6504853	0.02	10000	
Mo	95	103	1	He	112.712	112.712	1.26	294224	0.04	2000	
Ag	107	103	1	He	97.499	97.499	1.67	878353	0.01	300	
Cd	111	103	1	He	929.874	929.874	1.94	1452721	0.06	4000	
Sn	118	115	1	He	1075.364	1075.364	0.44	3987359	0.03	2000	
Sb	123	115	1	He	103.204	103.204	0.52	349423	0.03	300	
Ba	137	115	1	He	1244.879	1244.879	1.03	2100361	0.06	10000	
W	182	209	1	He	109.258	109.258	0.45	1168577	0.01	2500	
Tl	205	209	1	He	234.430	234.430	1.80	6467115	0.00	5000	
Pb	208	209	1	He	990.232	990.232	1.38	35686691	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1178927	0.77	1389655	84.84	30	120	
Sc	45	1	He	538177	2.33	628609	85.61	30	120	
Sc	45	2	NoGas	4208293	1.82	4813296	87.43	30	120	
Rh	103	1	He	1553948	2.04	1894469	82.03	30	120	
In	115	1	He	864615	0.51	1086371	79.59	30	120	
Tb	159	1	He	2991750	1.51	3251379	92.01	30	120	
Ho	165	1	He	3105741	0.09	3312124	93.77	30	120	
Bi	209	1	He	2081013	1.35	2533294	82.15	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177242/1-a
Data File Name	019_Blk.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:00:40-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.254	3.6	1189	1.9	1	
B	11	45	2	NoGas	-10.308	-8.8	47841	4.6	20	
Na	23	45	1	He	150.845	7.3	278994	7.3	400	
Mg	24	45	1	He	63.827	2.6	51161	1.1	1000	
Al	27	45	1	He	15.430	2.4	7741	3.9	50	
K	39	45	1	He	28.231	0.9	50471	2.1	1000	
Ca	44	45	1	He	190.586	1.4	7474	2.0	1000	
Ti	47	45	1	He	0.210	21.6	67	13.2	20	
V	51	45	1	He	0.346	58.7	1728	64.4	2	
Cr	52	45	1	He	1.087	3.4	8579	3.9	2	
Mn	55	45	1	He	1.757	14.4	9257	15.6	2	
Fe	56	45	1	He	26.908	9.6	169272	11.3	50	
Co	59	103	1	He	0.213	16.3	2163	14.7	1	
Ni	60	103	1	He	0.309	12.7	799	10.7	2	
Cu	63	103	1	He	0.727	12.2	5384	9.3	2	
Zn	66	103	1	He	4.440	3.2	6975	3.4	20	
As	75	103	1	He	1.273	7.3	1139	5.2	2	
Se	78	103	1	He	1.106	16.1	130	11.1	2	
Sr	88	103	1	He	0.554	6.0	3819	4.2	10	
Mo	95	103	1	He	1.089	12.6	3498	11.1	2	
Ag	107	103	1	He	0.022	18.2	280	13.7	0.2	
Cd	111	103	1	He	0.040	26.6	1092	0.7	0.2	
Sn	118	115	1	He	2.083	22.3	9985	19.5	10	
Sb	123	115	1	He	0.420	7.2	1839	6.0	1	
Ba	137	115	1	He	1.214	5.6	2438	5.1	5	
W	182	209	1	He	1.400	17.6	21263	13.0	10	
Tl	205	209	1	He	0.220	31.7	7210	29.9	0.5	
Pb	208	209	1	He	0.386	15.3	17356	12.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1252814	1.32	1389655	90.15	30	120	
Sc	45	1	He	584942	1.90	628609	93.05	30	120	
Sc	45	2	NoGas	4390531	0.93	4813296	91.22	30	120	
Rh	103	1	He	1868251	1.76	1894469	98.62	30	120	
In	115	1	He	1001966	0.48	1086371	92.23	30	120	
Tb	159	1	He	3189404	0.64	3251379	98.09	30	120	
Ho	165	1	He	3255841	0.21	3312124	98.30	30	120	
Bi	209	1	He	2463993	1.82	2533294	97.26	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177242/2-a
Data File Name	020_LCS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:04:32-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1051.213	1051.213	0.976	4040870	1.05	1000	105.1	79.5	120.5	
B	11	2	NoGas	123.483	123.483	1.427	388923	0.64	100	123.5	79.5	120.5	LCS Failed
Na	23	1	He	10856.350	10856.350	3.245	14327084	0.84	10000	108.6	79.5	120.5	
Mg	24	1	He	10689.057	10689.057	2.901	7972614	0.47	10000	106.9	79.5	120.5	
Al	27	1	He	9954.341	9954.341	1.473	3998357	2.45	10000	99.5	79.5	120.5	
K	39	1	He	10518.986	10518.986	2.640	6946589	0.46	10000	105.2	79.5	120.5	
Ca	44	1	He	9644.927	9644.927	2.018	342797	0.82	10000	96.4	79.5	120.5	
Ti	47	1	He	107.033	107.033	1.977	21424	1.72	100	107.0	79.5	120.5	
V	51	1	He	1081.906	1081.906	2.489	5464852	1.15	1000	108.2	79.5	120.5	
Cr	52	1	He	1101.677	1101.677	2.908	6686173	1.09	1000	110.2	79.5	120.5	
Mn	55	1	He	1071.052	1071.052	2.997	5118275	0.42	1000	107.1	79.5	120.5	
Fe	56	1	He	10806.171	10806.171	2.144	62988464	0.70	10000	108.1	79.5	120.5	
Co	59	1	He	1038.584	1038.584	1.273	9658862	0.55	1000	103.9	79.5	120.5	
Ni	60	1	He	1094.364	1094.364	2.888	2518947	1.15	1000	109.4	79.5	120.5	
Cu	63	1	He	1085.899	1085.899	3.356	6564548	2.34	1000	108.6	79.5	120.5	
Zn	66	1	He	1030.441	1030.441	2.123	1252999	0.36	1000	103.0	79.5	120.5	
As	75	1	He	1013.798	1013.798	1.978	765959	0.24	1000	101.4	79.5	120.5	
Se	78	1	He	1051.754	1051.754	2.408	83914	0.66	1000	105.2	79.5	120.5	
Sr	88	1	He	1028.260	1028.260	1.878	6236481	0.08	1000	102.8	79.5	120.5	
Mo	95	1	He	113.031	113.031	2.261	326455	0.72	100	113.0	79.5	120.5	
Ag	107	1	He	106.787	106.787	1.819	1064501	0.21	100	106.8	79.5	120.5	
Cd	111	1	He	1159.008	1159.008	4.637	2002754	2.92	1000	115.9	79.5	120.5	
Sn	118	1	He	1203.097	1203.097	1.202	4728303	1.98	1000	120.3	79.5	120.5	
Sb	123	1	He	115.747	115.747	0.291	415337	0.74	100	115.7	79.5	120.5	
Ba	137	1	He	1175.772	1175.772	2.560	2102288	1.71	1000	117.6	79.5	120.5	
W	182	1	He	110.470	110.470	0.951	1310735	0.87	100	110.5	79.5	120.5	
Tl	205	1	He	262.492	262.492	1.624	8034426	1.75	250	105.0	79.5	120.5	
Pb	208	1	He	1094.486	1094.486	1.099	43761000	0.77	1000	109.4	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1222988	0.14	1389655	88.01	30	120	
Sc	45	1	He	558171	2.62	628609	88.79	30	120	
Sc	45	2	NoGas	4268640	0.88	4813296	88.68	30	120	
Rh	103	1	He	1719475	1.81	1894469	90.76	30	120	
In	115	1	He	916381	0.87	1086371	84.35	30	120	
Tb	159	1	He	3141096	1.80	3251379	96.61	30	120	
Ho	165	1	He	3177866	0.75	3312124	95.95	30	120	
Bi	209	1	He	2308590	0.63	2533294	91.13	30	120	

Sample Report

Sample Table

Sample Name	190-7091-a-1-b
Data File Name	021SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:08:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.265	0.265	24.70	1174	0.02	10000	
B	11	45	2	NoGas	51.692	51.692	0.52	206595	0.03	300	
Na	23	45	1	He	209959.581	209959.581	2.27	273178248	0.08	500000	
Mg	24	45	1	He	3149.004	3149.004	1.62	2326950	0.14	500000	
Al	27	45	1	He	360.889	360.889	1.88	144632	0.25	200000	
K	39	45	1	He	8336.000	8336.000	2.40	5457393	0.15	500000	
Ca	44	45	1	He	43921.052	43921.052	2.37	1544351	2.84	500000	
Ti	47	45	1	He	2.177	2.177	10.80	452	0.48	2500	
V	51	45	1	He	4.543	4.543	2.75	22618	0.02	10000	
Cr	52	45	1	He	2.152	2.152	4.00	14499	0.01	10000	
Mn	55	45	1	He	11.261	11.261	2.33	53703	0.02	10000	
Fe	56	45	1	He	492.024	492.024	1.90	2844150	0.02	200000	
Co	59	103	1	He	0.490	0.490	6.64	4452	0.01	10000	
Ni	60	103	1	He	2.417	2.417	4.33	5439	0.04	10000	
Cu	63	103	1	He	25.408	25.408	1.64	149978	0.02	10000	
Zn	66	103	1	He	91.423	91.423	1.04	109070	0.08	10000	
As	75	103	1	He	2.930	2.930	7.33	2237	0.13	10000	
Se	78	103	1	He	2.779	2.779	13.21	246	1.13	10000	
Sr	88	103	1	He	574.809	574.809	2.21	3391618	0.02	10000	
Mo	95	103	1	He	44.143	44.143	0.82	124100	0.04	2000	
Ag	107	103	1	He	0.032	0.032	8.55	346	0.01	300	
Cd	111	103	1	He	0.201	0.201	24.43	1249	0.02	4000	
Sn	118	115	1	He	4.089	4.089	10.60	17239	0.02	2000	
Sb	123	115	1	He	0.999	0.999	5.27	3809	0.03	300	
Ba	137	115	1	He	18.553	18.553	1.36	33679	0.06	10000	
W	182	209	1	He	1.353	1.353	16.54	25135	0.01	2500	
Tl	205	209	1	He	0.189	0.189	32.48	7555	0.00	5000	
Pb	208	209	1	He	0.663	0.663	5.55	35467	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1192695	1.41	1389655	85.83	30	120	
Sc	45	1	He	552585	1.26	628609	87.91	30	120	
Sc	45	2	NoGas	4297604	1.12	4813296	89.29	30	120	
Rh	103	1	He	1672709	1.36	1894469	88.29	30	120	
In	115	1	He	928605	0.72	1086371	85.48	30	120	
Tb	159	1	He	3087423	0.63	3251379	94.96	30	120	
Ho	165	1	He	3141662	0.78	3312124	94.85	30	120	
Bi	209	1	He	2994034	1.21	2533294	118.19	30	120	

Sample Report

Sample Table

Sample Name	SD 190-7091-a-1-b@5
Data File Name	022SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:11:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.136	0.136	25.87	756	0.02	10000	
B	11	45	2	NoGas	1.847	1.847	17.87	83509	0.00	300	
Na	23	45	1	He	43967.295	43967.295	0.83	61564005	0.07	500000	
Mg	24	45	1	He	648.564	648.564	2.05	516240	0.13	500000	
Al	27	45	1	He	77.086	77.086	3.47	34203	0.23	200000	
K	39	45	1	He	1804.927	1804.927	2.20	1295017	0.14	500000	
Ca	44	45	1	He	9079.419	9079.419	3.08	343498	2.64	500000	
Ti	47	45	1	He	1.114	1.114	98.78	260	0.43	2500	
V	51	45	1	He	0.967	0.967	8.40	5085	0.02	10000	
Cr	52	45	1	He	0.500	0.500	7.21	4916	0.01	10000	
Mn	55	45	1	He	2.603	2.603	6.04	13683	0.02	10000	
Fe	56	45	1	He	100.005	100.005	2.48	625188	0.02	200000	
Co	59	103	1	He	0.136	0.136	2.92	1393	0.01	10000	
Ni	60	103	1	He	0.531	0.531	8.11	1356	0.04	10000	
Cu	63	103	1	He	5.296	5.296	2.38	35434	0.01	10000	
Zn	66	103	1	He	19.752	19.752	3.96	27209	0.07	10000	
As	75	103	1	He	0.527	0.527	11.84	528	0.10	10000	
Se	78	103	1	He	0.437	0.437	12.23	72	0.61	10000	
Sr	88	103	1	He	108.467	108.467	2.73	715541	0.02	10000	
Mo	95	103	1	He	8.851	8.851	1.75	27882	0.03	2000	
Ag	107	103	1	He	0.013	0.013	12.04	181	0.01	300	
Cd	111	103	1	He	0.001	0.001	815.62	1020	0.00	4000	
Sn	118	115	1	He	0.587	0.587	7.22	3727	0.02	2000	
Sb	123	115	1	He	0.260	0.260	5.11	1268	0.02	300	
Ba	137	115	1	He	3.699	3.699	5.85	7626	0.05	10000	
W	182	209	1	He	0.348	0.348	13.69	8599	0.00	2500	
Tl	205	209	1	He	0.043	0.043	5.79	1581	0.00	5000	
Pb	208	209	1	He	0.227	0.227	7.56	11366	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1302580	0.61	1389655	93.73	30	120	
Sc	45	1	He	594056	1.24	628609	94.50	30	120	
Sc	45	2	NoGas	4592088	0.70	4813296	95.40	30	120	
Rh	103	1	He	1869899	1.45	1894469	98.70	30	120	
In	115	1	He	1047656	1.43	1086371	96.44	30	120	
Tb	159	1	He	3289468	0.46	3251379	101.17	30	120	
Ho	165	1	He	3362173	0.69	3312124	101.51	30	120	
Bi	209	1	He	2646095	1.96	2533294	104.45	30	120	

Sample Report

Sample Table

Sample Name	PDS 190-7091-a-1-b
Data File Name	023SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:15:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1000.340	1000.340	1.28	3666403	0.03	10000	
B	11	45	2	NoGas	172.692	172.692	1.34	510344	0.03	300	
Na	23	45	1	He	206841.673	206841.673	4.15	272140893	0.08	500000	
Mg	24	45	1	He	13073.577	13073.577	2.37	9768983	0.13	500000	
Al	27	45	1	He	10124.039	10124.039	3.00	4071611	0.25	200000	
K	39	45	1	He	17714.261	17714.261	2.70	11697659	0.15	500000	
Ca	44	45	1	He	51270.485	51270.485	3.42	1823331	2.81	500000	
Ti	47	45	1	He	105.978	105.978	2.46	21264	0.50	2500	
V	51	45	1	He	1016.715	1016.715	1.65	5145066	0.02	10000	
Cr	52	45	1	He	1017.889	1017.889	2.63	6188651	0.02	10000	
Mn	55	45	1	He	986.202	986.202	2.62	4721192	0.02	10000	
Fe	56	45	1	He	10602.008	10602.008	2.54	61899509	0.02	200000	
Co	59	103	1	He	1003.311	1003.311	1.26	8680188	0.01	10000	
Ni	60	103	1	He	1031.421	1031.421	1.26	2209011	0.05	10000	
Cu	63	103	1	He	1048.345	1048.345	1.95	5896301	0.02	10000	
Zn	66	103	1	He	1027.107	1027.107	1.43	1161963	0.09	10000	
As	75	103	1	He	985.612	985.612	1.27	692798	0.14	10000	
Se	78	103	1	He	966.710	966.710	1.28	71763	1.35	10000	
Sr	88	103	1	He	1599.019	1599.019	1.95	9022127	0.02	10000	
Mo	95	103	1	He	158.953	158.953	0.62	427125	0.04	2000	
Ag	107	103	1	He	104.371	104.371	1.25	967940	0.01	300	
Cd	111	103	1	He	1078.640	1078.640	2.63	1734570	0.06	4000	
Sn	118	115	1	He	1186.492	1186.492	1.01	4436388	0.03	2000	
Sb	123	115	1	He	113.133	113.133	1.01	386253	0.03	300	
Ba	137	115	1	He	1188.666	1188.666	1.07	2022469	0.06	10000	
W	182	209	1	He	85.089	85.089	0.91	1263125	0.01	2500	
Tl	205	209	1	He	191.719	191.719	0.90	7335852	0.00	5000	
Pb	208	209	1	He	793.174	793.174	1.27	39646871	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1166200	1.27	1389655	83.92	30	120	
Sc	45	1	He	559180	3.26	628609	88.96	30	120	
Sc	45	2	NoGas	4231104	0.58	4813296	87.90	30	120	
Rh	103	1	He	1599471	1.04	1894469	84.43	30	120	
In	115	1	He	871936	0.90	1086371	80.26	30	120	
Tb	159	1	He	3043422	0.65	3251379	93.60	30	120	
Ho	165	1	He	3133634	0.62	3312124	94.61	30	120	
Bi	209	1	He	2886166	1.07	2533294	113.93	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	024_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:19:19-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.264	1.672	193287	1.78	50	94.5	89.5	110.5	
B	11	45	2	NoGas	40.579	1.639	195654	1.47	50	81.2	89.5	110.5	CCV Failed
Na	23	45	1	He	25050.504	2.360	37476388	2.57	25000	100.2	89.5	110.5	
Mg	24	45	1	He	24694.540	4.639	20917388	0.25	25000	98.8	89.5	110.5	
Al	27	45	1	He	241.169	4.030	111316	0.91	250	96.5	89.5	110.5	
K	39	45	1	He	24491.645	4.519	18324756	0.18	25000	98.0	89.5	110.5	
Ca	44	45	1	He	24023.426	3.255	969407	1.57	25000	96.1	89.5	110.5	
Ti	47	45	1	He	49.229	6.103	11197	1.49	50	98.5	89.5	110.5	
V	51	45	1	He	49.375	3.475	283213	1.32	50	98.8	89.5	110.5	
Cr	52	45	1	He	49.721	3.383	344575	1.37	50	99.4	89.5	110.5	
Mn	55	45	1	He	238.977	3.791	1297776	0.88	250	95.6	89.5	110.5	
Fe	56	45	1	He	12342.095	3.884	81714806	0.78	12500	98.7	89.5	110.5	
Co	59	103	1	He	49.084	0.991	492547	1.42	50	98.2	89.5	110.5	
Ni	60	103	1	He	49.498	0.971	122973	0.81	50	99.0	89.5	110.5	
Cu	63	103	1	He	49.587	1.175	324062	1.31	50	99.2	89.5	110.5	
Zn	66	103	1	He	48.732	1.057	64993	0.89	50	97.5	89.5	110.5	
As	75	103	1	He	49.633	0.422	40553	1.04	50	99.3	89.5	110.5	
Se	78	103	1	He	49.762	1.402	4316	1.81	50	99.5	89.5	110.5	
Sr	88	103	1	He	47.917	0.547	313756	1.07	50	95.8	89.5	110.5	
Mo	95	103	1	He	51.610	1.330	160880	0.63	50	103.2	89.5	110.5	
Ag	107	103	1	He	50.286	0.842	540925	1.32	50	100.6	89.5	110.5	
Cd	111	103	1	He	50.384	1.079	94943	1.50	50	100.8	89.5	110.5	
Sn	118	115	1	He	50.703	1.567	224624	1.57	50	101.4	89.5	110.5	
Sb	123	115	1	He	50.621	1.184	203939	0.63	50	101.2	89.5	110.5	
Ba	137	115	1	He	49.563	0.635	99525	0.87	50	99.1	89.5	110.5	
W	182	209	1	He	51.140	1.360	646399	1.01	50	102.3	89.5	110.5	
Tl	205	209	1	He	47.715	5.224	1551494	5.71	50	95.4	89.5	110.5	
Pb	208	209	1	He	47.607	0.891	2022744	1.47	50	95.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1299831	0.32	1389655	93.54	30	120	
Sc	45	1	He	634553	4.74	628609	100.95	30	120	
Sc	45	2	NoGas	4724780	0.60	4813296	98.16	30	120	
Rh	103	1	He	1854959	0.78	1894469	97.91	30	120	
In	115	1	He	1028341	0.63	1086371	94.66	30	120	
Tb	159	1	He	3291741	1.07	3251379	101.24	30	120	
Ho	165	1	He	3355855	0.76	3312124	101.32	30	120	
Bi	209	1	He	2452253	1.78	2533294	96.80	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:23:09-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.120	17.7	707	8.7	1	
B	11	45	2	NoGas	-16.293	-2.5	34036	2.3	20	
Na	23	45	1	He	118.174	8.1	237423	4.6	400	
Mg	24	45	1	He	1.913	36.7	2804	18.8	1000	
Al	27	45	1	He	0.918	12.2	1657	2.7	50	
K	39	45	1	He	23.503	11.8	47949	3.4	1000	
Ca	44	45	1	He	12.780	14.2	871	8.4	1000	
Ti	47	45	1	He	-0.020	-84.6	19	20.4	20	
V	51	45	1	He	0.125	8.4	554	9.9	2	
Cr	52	45	1	He	0.049	26.3	2005	2.9	2	
Mn	55	45	1	He	0.403	3.1	2500	3.5	2	
Fe	56	45	1	He	21.598	26.3	138547	24.4	50	
Co	59	103	1	He	0.050	8.0	540	8.6	1	
Ni	60	103	1	He	0.028	18.8	100	12.0	2	
Cu	63	103	1	He	0.139	13.0	1573	8.6	2	
Zn	66	103	1	He	0.359	7.4	1639	2.7	20	
As	75	103	1	He	0.195	5.4	263	4.0	2	
Se	78	103	1	He	0.264	46.6	59	19.9	2	
Sr	88	103	1	He	0.044	15.4	476	11.3	10	
Mo	95	103	1	He	1.080	20.6	3596	21.2	2	
Ag	107	103	1	He	0.015	21.0	214	16.6	0.2	
Cd	111	103	1	He	-0.017	-78.9	1020	3.8	0.2	
Sn	118	115	1	He	0.535	8.9	3534	5.8	10	
Sb	123	115	1	He	0.674	13.3	3000	12.1	1	
Ba	137	115	1	He	0.022	42.9	116	17.4	5	
W	182	209	1	He	1.171	14.8	18678	12.2	10	
Tl	205	209	1	He	0.068	15.4	2300	15.2	0.5	
Pb	208	209	1	He	0.125	9.7	6338	8.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1340998	4.03	1389655	96.50	30	120	
Sc	45	1	He	594219	1.28	628609	94.53	30	120	
Sc	45	2	NoGas	4657820	1.45	4813296	96.77	30	120	
Rh	103	1	He	1930421	1.58	1894469	101.90	30	120	
In	115	1	He	1060180	0.36	1086371	97.59	30	120	
Tb	159	1	He	3277030	0.32	3251379	100.79	30	120	
Ho	165	1	He	3345465	1.21	3312124	101.01	30	120	
Bi	209	1	He	2499180	0.85	2533294	98.65	30	120	

Sample Report

Sample Table

Sample Name	190-7091-a-1-c ms
Data File Name	026SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:26:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1077.587	1077.587	0.80	3930789	0.03	10000	
B	11	45	2	NoGas	178.956	178.956	0.99	523520	0.03	300	
Na	23	45	1	He	210458.854	210458.854	3.26	276820122	0.08	500000	
Mg	24	45	1	He	13503.564	13503.564	4.36	10079131	0.13	500000	
Al	27	45	1	He	10384.959	10384.959	3.92	4173198	0.25	200000	
K	39	45	1	He	18345.620	18345.620	4.70	12100931	0.15	500000	
Ca	44	45	1	He	53413.436	53413.436	3.93	1898087	2.81	500000	
Ti	47	45	1	He	113.414	113.414	5.54	22710	0.50	2500	
V	51	45	1	He	1098.362	1098.362	2.56	5553976	0.02	10000	
Cr	52	45	1	He	1079.722	1079.722	2.68	6560381	0.02	10000	
Mn	55	45	1	He	1060.726	1060.726	3.66	5073712	0.02	10000	
Fe	56	45	1	He	11072.960	11072.960	3.14	64602700	0.02	200000	
Co	59	103	1	He	1094.786	1094.786	0.79	9504593	0.01	10000	
Ni	60	103	1	He	1120.986	1120.986	2.03	2408892	0.05	10000	
Cu	63	103	1	He	1131.304	1131.304	1.00	6384914	0.02	10000	
Zn	66	103	1	He	1103.586	1103.586	0.78	1252725	0.09	10000	
As	75	103	1	He	1061.549	1061.549	0.65	748743	0.14	10000	
Se	78	103	1	He	1029.804	1029.804	1.01	76706	1.34	10000	
Sr	88	103	1	He	1658.579	1658.579	0.44	9390980	0.02	10000	
Mo	95	103	1	He	165.754	165.754	1.15	446899	0.04	2000	
Ag	107	103	1	He	106.430	106.430	1.61	990418	0.01	300	
Cd	111	103	1	He	1158.630	1158.630	1.49	1869563	0.06	4000	
Sn	118	115	1	He	1242.675	1242.675	0.83	4669340	0.03	2000	
Sb	123	115	1	He	119.634	119.634	0.30	410460	0.03	300	
Ba	137	115	1	He	1252.238	1252.238	0.11	2141143	0.06	10000	
W	182	209	1	He	85.848	85.848	1.36	1332697	0.01	2500	
Tl	205	209	1	He	184.203	184.203	0.44	7371578	0.00	5000	
Pb	208	209	1	He	813.899	813.899	0.46	42548886	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1160549	0.43	1389655	83.51	30	120	
Sc	45	1	He	558902	3.64	628609	88.91	30	120	
Sc	45	2	NoGas	4209195	1.14	4813296	87.45	30	120	
Rh	103	1	He	1604909	0.91	1894469	84.72	30	120	
In	115	1	He	876201	0.27	1086371	80.65	30	120	
Tb	159	1	He	3046123	0.87	3251379	93.69	30	120	
Ho	165	1	He	3120723	0.88	3312124	94.22	30	120	
Bi	209	1	He	3018426	0.82	2533294	119.15	30	120	

Sample Report

Sample Table

Sample Name	190-7091-a-1-d msd
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:30:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1078.825	1078.825	1.65	4015432	0.03	10000	
B	11	45	2	NoGas	182.533	182.533	1.17	537983	0.03	300	
Na	23	45	1	He	215374.469	215374.469	2.19	279925574	0.08	500000	
Mg	24	45	1	He	13691.109	13691.109	2.70	10101413	0.14	500000	
Al	27	45	1	He	10487.824	10487.824	2.54	4165444	0.25	200000	
K	39	45	1	He	18524.009	18524.009	3.09	12077127	0.15	500000	
Ca	44	45	1	He	54684.712	54684.712	2.15	1920898	2.85	500000	
Ti	47	45	1	He	111.802	111.802	3.09	22129	0.51	2500	
V	51	45	1	He	1125.344	1125.344	2.39	5622544	0.02	10000	
Cr	52	45	1	He	1112.695	1112.695	2.54	6679970	0.02	10000	
Mn	55	45	1	He	1095.298	1095.298	2.16	5178020	0.02	10000	
Fe	56	45	1	He	11422.348	11422.348	2.68	65850895	0.02	200000	
Co	59	103	1	He	1107.907	1107.907	1.07	9607267	0.01	10000	
Ni	60	103	1	He	1134.214	1134.214	1.03	2434687	0.05	10000	
Cu	63	103	1	He	1151.622	1151.622	2.53	6491381	0.02	10000	
Zn	66	103	1	He	1110.295	1110.295	1.71	1258818	0.09	10000	
As	75	103	1	He	1071.986	1071.986	1.43	755210	0.14	10000	
Se	78	103	1	He	1045.572	1045.572	1.12	77792	1.34	10000	
Sr	88	103	1	He	1686.443	1686.443	1.41	9537384	0.02	10000	
Mo	95	103	1	He	170.309	170.309	1.26	458650	0.04	2000	
Ag	107	103	1	He	106.840	106.840	0.68	993150	0.01	300	
Cd	111	103	1	He	1179.690	1179.690	1.05	1901461	0.06	4000	
Sn	118	115	1	He	1245.137	1245.137	1.18	4692034	0.03	2000	
Sb	123	115	1	He	119.790	119.790	0.28	412193	0.03	300	
Ba	137	115	1	He	1269.522	1269.522	0.63	2176952	0.06	10000	
W	182	209	1	He	82.019	82.019	0.83	1349822	0.01	2500	
Tl	205	209	1	He	175.344	175.344	1.32	7437285	0.00	5000	
Pb	208	209	1	He	770.428	770.428	0.47	42689619	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1184286	0.96	1389655	85.22	30	120	
Sc	45	1	He	552075	2.21	628609	87.82	30	120	
Sc	45	2	NoGas	4252386	1.08	4813296	88.35	30	120	
Rh	103	1	He	1603171	1.46	1894469	84.62	30	120	
In	115	1	He	878747	0.60	1086371	80.89	30	120	
Tb	159	1	He	3079662	1.89	3251379	94.72	30	120	
Ho	165	1	He	3138607	1.93	3312124	94.76	30	120	
Bi	209	1	He	3199260	0.56	2533294	126.29	30	120	ISTD Failed

Sample Report

Sample Table

Sample Name	190-7092-a-1-b
Data File Name	028SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:34:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.340	0.340	9.53	1508	0.02	10000	
B	11	45	2	NoGas	138.821	138.821	1.91	415221	0.03	300	
Na	23	45	1	He	149310.476	149310.476	0.08	190813504	0.08	500000	
Mg	24	45	1	He	8183.882	8183.882	0.87	5936831	0.14	500000	
Al	27	45	1	He	509.690	509.690	1.19	200123	0.25	200000	
K	39	45	1	He	27241.427	27241.427	1.81	17448331	0.16	500000	
Ca	44	45	1	He	57931.847	57931.847	1.89	2000305	2.90	500000	
Ti	47	45	1	He	6.461	6.461	6.88	1278	0.51	2500	
V	51	45	1	He	1.438	1.438	6.01	6953	0.02	10000	
Cr	52	45	1	He	2.639	2.639	1.54	17115	0.02	10000	
Mn	55	45	1	He	38.274	38.274	0.61	178280	0.02	10000	
Fe	56	45	1	He	866.272	866.272	1.19	4914030	0.02	200000	
Co	59	103	1	He	0.443	0.443	6.90	4121	0.01	10000	
Ni	60	103	1	He	2.724	2.724	4.70	6262	0.04	10000	
Cu	63	103	1	He	14.686	14.686	1.59	88910	0.02	10000	
Zn	66	103	1	He	269.005	269.005	2.47	326230	0.08	10000	
As	75	103	1	He	1.490	1.490	10.97	1206	0.12	10000	
Se	78	103	1	He	2.313	2.313	10.64	215	1.08	10000	
Sr	88	103	1	He	1211.788	1211.788	1.56	7313461	0.02	10000	
Mo	95	103	1	He	6.145	6.145	6.39	17731	0.03	2000	
Ag	107	103	1	He	0.057	0.057	16.16	601	0.01	300	
Cd	111	103	1	He	0.384	0.384	11.99	1592	0.02	4000	
Sn	118	115	1	He	4.547	4.547	10.05	19397	0.02	2000	
Sb	123	115	1	He	1.199	1.199	3.59	4612	0.03	300	
Ba	137	115	1	He	34.680	34.680	1.44	63979	0.05	10000	
W	182	209	1	He	1.423	1.423	12.00	21118	0.01	2500	
Tl	205	209	1	He	0.220	0.220	29.89	7105	0.00	5000	
Pb	208	209	1	He	1.486	1.486	3.01	62883	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1236104	2.18	1389655	88.95	30	120	
Sc	45	1	He	542603	0.97	628609	86.32	30	120	
Sc	45	2	NoGas	4139770	1.30	4813296	86.01	30	120	
Rh	103	1	He	1710937	1.69	1894469	90.31	30	120	
In	115	1	He	944645	1.96	1086371	86.95	30	120	
Tb	159	1	He	3119589	2.45	3251379	95.95	30	120	
Ho	165	1	He	3190456	1.32	3312124	96.33	30	120	
Bi	209	1	He	2408669	0.97	2533294	95.08	30	120	

Sample Report

Sample Table

Sample Name	190-7093-a-1-b
Data File Name	029SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:37:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.218	0.218	18.62	1056	0.02	10000	
B	11	45	2	NoGas	102.274	102.274	2.73	324574	0.03	300	
Na	23	45	1	He	862685.937	862685.937	4.28	1093837853	0.08	500000	>LDR
Mg	24	45	1	He	34874.889	34874.889	2.80	25113944	0.14	500000	
Al	27	45	1	He	443.043	443.043	3.19	172843	0.26	200000	
K	39	45	1	He	29464.620	29464.620	2.96	18735265	0.16	500000	
Ca	44	45	1	He	135884.329	135884.329	2.19	4658912	2.92	500000	
Ti	47	45	1	He	4.091	4.091	24.19	808	0.51	2500	
V	51	45	1	He	1.312	1.312	9.14	6311	0.02	10000	
Cr	52	45	1	He	4.475	4.475	1.86	27758	0.02	10000	
Mn	55	45	1	He	57.946	57.946	3.01	267753	0.02	10000	
Fe	56	45	1	He	2116.917	2116.917	3.32	11915329	0.02	200000	
Co	59	103	1	He	0.382	0.382	6.28	3311	0.01	10000	
Ni	60	103	1	He	15.192	15.192	1.74	32444	0.05	10000	
Cu	63	103	1	He	36.756	36.756	1.54	206506	0.02	10000	
Zn	66	103	1	He	570.653	570.653	1.88	643671	0.09	10000	
As	75	103	1	He	1.358	1.358	1.37	1032	0.13	10000	
Se	78	103	1	He	1.649	1.649	7.16	151	1.09	10000	
Sr	88	103	1	He	12871.953	12871.953	2.06	72366124	0.02	10000	>LDR
Mo	95	103	1	He	10.241	10.241	2.83	27484	0.04	2000	
Ag	107	103	1	He	0.091	0.091	3.91	882	0.01	300	
Cd	111	103	1	He	0.209	0.209	10.93	1203	0.02	4000	
Sn	118	115	1	He	4.775	4.775	3.39	19367	0.02	2000	
Sb	123	115	1	He	1.411	1.411	5.44	5145	0.03	300	
Ba	137	115	1	He	142.260	142.260	0.90	249984	0.06	10000	
W	182	209	1	He	0.352	0.352	12.13	8962	0.00	2500	
Tl	205	209	1	He	0.098	0.098	5.58	3612	0.00	5000	
Pb	208	209	1	He	0.510	0.510	1.27	25227	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1262202	0.35	1389655	90.83	30	120	
Sc	45	1	He	539028	3.42	628609	85.75	30	120	
Sc	45	2	NoGas	4140792	1.44	4813296	86.03	30	120	
Rh	103	1	He	1593847	1.61	1894469	84.13	30	120	
In	115	1	He	900316	0.46	1086371	82.87	30	120	
Tb	159	1	He	3061068	0.86	3251379	94.15	30	120	
Ho	165	1	He	3168065	0.36	3312124	95.65	30	120	
Bi	209	1	He	2739193	0.47	2533294	108.13	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:41:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1912.761	1912.761	2.15	7432105	0.03	10000	
B	11	45	2	NoGas	211.135	211.135	0.89	650623	0.03	300	
Na	23	45	1	He	19878.348	19878.348	3.96	29227458	0.07	500000	
Mg	24	45	1	He	19474.378	19474.378	3.51	16218148	0.12	500000	
Al	27	45	1	He	18253.985	18253.985	4.34	8180686	0.22	200000	
K	39	45	1	He	19151.263	19151.263	3.56	14094180	0.14	500000	
Ca	44	45	1	He	17414.072	17414.072	4.23	690518	2.52	500000	
Ti	47	45	1	He	190.265	190.265	3.42	42500	0.45	2500	
V	51	45	1	He	1913.076	1913.076	3.49	10789515	0.02	10000	
Cr	52	45	1	He	1941.053	1941.053	3.69	13152658	0.01	10000	
Mn	55	45	1	He	1898.395	1898.395	4.16	10127612	0.02	10000	
Fe	56	45	1	He	19530.003	19530.003	3.33	127102524	0.02	200000	
Co	59	103	1	He	1974.605	1974.605	0.38	19005029	0.01	10000	
Ni	60	103	1	He	2016.767	2016.767	0.91	4804711	0.04	10000	
Cu	63	103	1	He	2026.070	2026.070	1.50	12675452	0.02	10000	
Zn	66	103	1	He	2052.679	2052.679	0.69	2582534	0.08	10000	
As	75	103	1	He	1919.765	1919.765	1.11	1500981	0.13	10000	
Se	78	103	1	He	1909.238	1909.238	0.47	157634	1.21	10000	
Sr	88	103	1	He	2009.644	2009.644	0.82	12614041	0.02	10000	
Mo	95	103	1	He	202.465	202.465	3.32	605004	0.03	2000	
Ag	107	103	1	He	217.716	217.716	0.75	2246306	0.01	300	
Cd	111	103	1	He	2139.201	2139.201	1.20	3826001	0.06	4000	
Sn	118	115	1	He	2337.284	2337.284	1.39	9425919	0.02	2000	>LDR
Sb	123	115	1	He	229.394	229.394	0.93	844632	0.03	300	
Ba	137	115	1	He	2272.375	2272.375	1.46	4170426	0.05	10000	
W	182	209	1	He	226.503	226.503	4.06	2761544	0.01	2500	
Tl	205	209	1	He	502.584	502.584	2.53	15831773	0.00	5000	
Pb	208	209	1	He	2089.833	2089.833	1.95	86007189	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1236492	1.60	1389655	88.98	30	120	
Sc	45	1	He	623649	4.79	628609	99.21	30	120	
Sc	45	2	NoGas	4528418	1.08	4813296	94.08	30	120	
Rh	103	1	He	1779236	1.41	1894469	93.92	30	120	
In	115	1	He	940526	0.49	1086371	86.57	30	120	
Tb	159	1	He	3179922	0.30	3251379	97.80	30	120	
Ho	165	1	He	3286394	0.88	3312124	99.22	30	120	
Bi	209	1	He	2377008	2.74	2533294	93.83	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD Fe
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:45:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.423	0.423	13.00	1896	0.02	10000	
B	11	45	2	NoGas	-14.339	-14.339	-3.23	38919	-0.04	300	
Na	23	45	1	He	88.422	88.422	17.28	217840	0.04	500000	
Mg	24	45	1	He	3.085	3.085	52.84	4178	0.07	500000	
Al	27	45	1	He	2.652	2.652	40.41	2671	0.10	200000	
K	39	45	1	He	9.996	9.996	25.53	42751	0.02	500000	
Ca	44	45	1	He	8.451	8.451	22.53	783	1.08	500000	
Ti	47	45	1	He	0.228	0.228	78.64	79	0.29	2500	
V	51	45	1	He	0.326	0.326	43.73	1832	0.02	10000	
Cr	52	45	1	He	0.631	0.631	11.42	6411	0.01	10000	
Mn	55	45	1	He	2.210	2.210	4.09	12971	0.02	10000	
Fe	56	45	1	He	146818.289	146818.289	3.09	1010225027	0.01	200000	
Co	59	103	1	He	0.700	0.700	15.57	7314	0.01	10000	
Ni	60	103	1	He	1.136	1.136	8.97	2963	0.04	10000	
Cu	63	103	1	He	0.926	0.926	16.65	6899	0.01	10000	
Zn	66	103	1	He	0.609	0.609	25.11	1977	0.03	10000	
As	75	103	1	He	1.407	1.407	9.56	1289	0.11	10000	
Se	78	103	1	He	1.417	1.417	2.56	162	0.88	10000	
Sr	88	103	1	He	0.506	0.506	24.68	3610	0.01	10000	
Mo	95	103	1	He	3.729	3.729	12.62	12152	0.03	2000	
Ag	107	103	1	He	0.041	0.041	5.39	503	0.01	300	
Cd	111	103	1	He	0.188	0.188	64.03	1412	0.01	4000	
Sn	118	115	1	He	11.541	11.541	11.88	53586	0.02	2000	
Sb	123	115	1	He	0.972	0.972	4.71	4242	0.02	300	
Ba	137	115	1	He	0.230	0.230	58.98	543	0.04	10000	
W	182	209	1	He	3.304	3.304	12.24	47063	0.01	2500	
Tl	205	209	1	He	0.373	0.373	33.59	12718	0.00	5000	
Pb	208	209	1	He	0.606	0.606	17.55	27818	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1277741	1.92	1389655	91.95	30	120	
Sc	45	1	He	659156	3.48	628609	104.86	30	120	
Sc	45	2	NoGas	4589516	0.50	4813296	95.35	30	120	
Rh	103	1	He	1929599	2.23	1894469	101.85	30	120	
In	115	1	He	1061508	1.28	1086371	97.71	30	120	
Tb	159	1	He	3311336	0.68	3251379	101.84	30	120	
Ho	165	1	He	3403271	0.86	3312124	102.75	30	120	
Bi	209	1	He	2555214	1.19	2533294	100.87	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD Al
Data File Name	032SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:48:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.233	0.233	13.78	1204	0.02	10000	
B	11	45	2	NoGas	-13.541	-13.541	-0.79	42516	-0.03	300	
Na	23	45	1	He	45.237	45.237	3.39	131373	0.03	500000	
Mg	24	45	1	He	1.307	1.307	18.16	2259	0.06	500000	
Al	27	45	1	He	163155.172	163155.172	1.69	67638028	0.24	200000	
K	39	45	1	He	6.771	6.771	20.19	35139	0.02	500000	
Ca	44	45	1	He	19.075	19.075	20.20	1073	1.78	500000	
Ti	47	45	1	He	0.091	0.091	44.52	41	0.22	2500	
V	51	45	1	He	0.203	0.203	18.96	950	0.02	10000	
Cr	52	45	1	He	0.087	0.087	24.77	2185	0.00	10000	
Mn	55	45	1	He	1.060	1.060	2.05	5664	0.02	10000	
Fe	56	45	1	He	102.249	102.249	33.50	616866	0.02	200000	
Co	59	103	1	He	0.063	0.063	5.53	661	0.01	10000	
Ni	60	103	1	He	0.120	0.120	12.73	328	0.04	10000	
Cu	63	103	1	He	0.311	0.311	7.46	2664	0.01	10000	
Zn	66	103	1	He	12.233	12.233	2.74	17312	0.07	10000	
As	75	103	1	He	0.489	0.489	6.88	498	0.10	10000	
Se	78	103	1	He	0.457	0.457	25.97	74	0.62	10000	
Sr	88	103	1	He	0.203	0.203	4.49	1516	0.01	10000	
Mo	95	103	1	He	1.037	1.037	9.04	3350	0.03	2000	
Ag	107	103	1	He	0.021	0.021	15.15	270	0.01	300	
Cd	111	103	1	He	-0.001	-0.001	-3943.27	1019	0.00	4000	
Sn	118	115	1	He	3.691	3.691	3.87	17918	0.02	2000	
Sb	123	115	1	He	0.160	0.160	9.94	869	0.02	300	
Ba	137	115	1	He	0.052	0.052	38.78	178	0.03	10000	
W	182	209	1	He	1.122	1.122	11.00	17299	0.01	2500	
Tl	205	209	1	He	0.067	0.067	5.73	2195	0.00	5000	
Pb	208	209	1	He	0.227	0.227	7.15	10313	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1362440	1.50	1389655	98.04	30	120	
Sc	45	1	He	576351	2.46	628609	91.69	30	120	
Sc	45	2	NoGas	4745714	1.25	4813296	98.60	30	120	
Rh	103	1	He	1873508	0.67	1894469	98.89	30	120	
In	115	1	He	1062676	1.16	1086371	97.82	30	120	
Tb	159	1	He	3216013	0.62	3251379	98.91	30	120	
Ho	165	1	He	3269531	1.39	3312124	98.71	30	120	
Bi	209	1	He	2397404	1.12	2533294	94.64	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176698/1-a@2
Data File Name	033_Blk.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:52:45-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.220	4.9	1019	2.7	1	
B	11	45	2	NoGas	-13.798	-5.8	38021	3.8	20	
Na	23	45	1	He	51.699	7.9	142618	0.6	400	
Mg	24	45	1	He	37.327	1.2	30552	2.7	1000	
Al	27	45	1	He	23.619	34.1	11309	34.1	50	
K	39	45	1	He	24.798	15.2	48213	2.9	1000	
Ca	44	45	1	He	120.169	3.4	4869	3.9	1000	
Ti	47	45	1	He	0.511	33.4	131	31.4	20	
V	51	45	1	He	0.171	36.1	799	45.2	2	
Cr	52	45	1	He	0.820	1.9	6898	2.4	2	
Mn	55	45	1	He	1.353	0.4	7242	3.5	2	
Fe	56	45	1	He	36.368	13.4	228398	16.9	50	
Co	59	103	1	He	0.154	12.8	1508	11.5	1	
Ni	60	103	1	He	0.279	13.4	696	11.0	2	
Cu	63	103	1	He	0.691	2.3	4953	3.7	2	
Zn	66	103	1	He	2.293	10.6	3983	9.6	20	
As	75	103	1	He	0.887	3.7	792	4.8	2	
Se	78	103	1	He	0.684	21.9	89	12.8	2	
Sr	88	103	1	He	0.529	9.8	3509	7.6	10	
Mo	95	103	1	He	0.752	10.9	2352	12.3	2	
Ag	107	103	1	He	0.029	0.6	348	2.4	0.2	
Cd	111	103	1	He	0.028	18.9	1029	2.3	0.2	
Sn	118	115	1	He	21.913	5.4	94838	6.3	10	Blank Failed
Sb	123	115	1	He	0.199	7.0	968	5.7	1	
Ba	137	115	1	He	0.933	12.8	1883	12.6	5	
W	182	209	1	He	0.680	6.1	11920	5.0	10	
Tl	205	209	1	He	0.359	2.8	11518	3.5	0.5	
Pb	208	209	1	He	0.463	12.6	20216	12.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1208894	1.29	1389655	86.99	30	120	
Sc	45	1	He	586974	3.79	628609	93.38	30	120	
Sc	45	2	NoGas	4320745	2.12	4813296	89.77	30	120	
Rh	103	1	He	1795626	1.87	1894469	94.78	30	120	
In	115	1	He	998003	0.98	1086371	91.87	30	120	
Tb	159	1	He	3199014	1.62	3251379	98.39	30	120	
Ho	165	1	He	3243267	0.70	3312124	97.92	30	120	
Bi	209	1	He	2404825	0.78	2533294	94.93	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176698/2-a@2
Data File Name	034LCSS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:56:34-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	468.645	468.645	1.376	1677036	0.95	500	93.7	78.6	110.5	
B	11	2	NoGas	42.772	42.772	3.061	174636	1.58	50	85.5	79.5	120.5	
Na	23	1	He	4811.696	4811.696	2.036	6280139	1.12	5000	96.2	79.5	120.5	
Mg	24	1	He	4885.388	4885.388	3.548	3581880	0.90	5000	97.7	79.5	120.5	
Al	27	1	He	4564.349	4564.349	2.665	1802062	0.56	5000	91.3	79.5	120.5	
K	39	1	He	4725.112	4725.112	4.388	3082069	1.34	5000	94.5	79.5	120.5	
Ca	44	1	He	4391.734	4391.734	2.178	153619	1.01	5000	87.8	79.5	120.5	
Ti	47	1	He	46.645	46.645	2.983	9187	0.08	50	93.3	79.5	120.5	
V	51	1	He	490.970	490.970	4.338	2436777	2.01	500	98.2	71.5	110.5	
Cr	52	1	He	493.050	493.050	4.249	2941607	2.23	500	98.6	69.5	110.5	
Mn	55	1	He	481.322	481.322	2.328	2261395	0.87	500	96.3	79.5	120.5	
Fe	56	1	He	4858.917	4858.917	2.327	27840698	0.74	5000	97.2	79.5	120.5	
Co	59	1	He	460.527	460.527	0.837	4198209	0.80	500	92.1	73.9	110.5	
Ni	60	1	He	446.195	446.195	0.520	1006960	1.19	500	89.2	74.9	110.5	
Cu	63	1	He	478.586	478.586	1.052	2836625	0.59	500	95.7	72.6	110.5	
Zn	66	1	He	418.210	418.210	0.311	499132	0.73	500	83.6	71.5	113.4	
As	75	1	He	405.330	405.330	0.254	300266	0.78	500	81.1	73.4	110.5	
Se	78	1	He	392.402	392.402	0.382	30712	0.94	500	78.5	64.6	110.5	
Sr	88	1	He	468.126	468.126	0.727	2783409	1.07	500	93.6	79.5	120.5	
Mo	95	1	He	50.674	50.674	0.850	143522	1.13	50	101.3	29.5	140.5	
Ag	107	1	He	48.780	48.780	0.584	476697	0.45	50	97.6	59.5	114.5	
Cd	111	1	He	453.227	453.227	0.736	768534	0.35	500	90.6	73.5	110.5	
Sn	118	1	He	561.489	561.489	0.352	2186073	0.44	500	112.3	79.5	120.5	
Sb	123	1	He	49.077	49.077	0.525	174527	0.65	50	98.2	67.5	113.4	
Ba	137	1	He	472.019	472.019	0.380	836092	0.45	500	94.4	69.5	110.5	
W	182	1	He	49.232	49.232	2.046	582713	1.73	50	98.5	74.6	125.4	
Tl	205	1	He	118.069	118.069	0.830	3593561	0.72	125	94.5	70.6	110.5	
Pb	208	1	He	487.953	487.953	0.869	19400859	0.21	500	97.6	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1138561	1.40	1389655	81.93	30	120	
Sc	45	1	He	548696	3.11	628609	87.29	30	120	
Sc	45	2	NoGas	4087733	0.81	4813296	84.93	30	120	
Rh	103	1	He	1685267	1.04	1894469	88.96	30	120	
In	115	1	He	907651	0.13	1086371	83.55	30	120	
Tb	159	1	He	3058085	0.52	3251379	94.06	30	120	
Ho	165	1	He	3124511	1.08	3312124	94.34	30	120	
Bi	209	1	He	2295648	0.73	2533294	90.62	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-d@2
Data File Name	035SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:00:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.026	3.026	2.71	11597	0.03	10000	
B	11	45	2	NoGas	-7.947	-7.947	-3.47	56093	-0.01	300	
Na	23	45	1	He	115.148	115.148	3.81	240365	0.05	500000	
Mg	24	45	1	He	7023.141	7023.141	3.54	5748525	0.12	500000	
Al	27	45	1	He	36882.555	36882.555	3.97	16244889	0.23	200000	
K	39	45	1	He	3020.026	3020.026	3.14	2211595	0.14	500000	
Ca	44	45	1	He	579.507	579.507	1.26	22981	2.52	500000	
Ti	47	45	1	He	311.697	311.697	1.93	68412	0.46	2500	
V	51	45	1	He	103.131	103.131	2.34	571526	0.02	10000	
Cr	52	45	1	He	89.598	89.598	2.83	598324	0.01	10000	
Mn	55	45	1	He	7350.115	7350.115	2.44	38545440	0.02	10000	
Fe	56	45	1	He	187305.170	187305.170	2.23	1197966708	0.02	200000	
Co	59	103	1	He	55.793	55.793	0.86	527300	0.01	10000	
Ni	60	103	1	He	84.232	84.232	1.04	197098	0.04	10000	
Cu	63	103	1	He	55.919	55.919	1.15	344121	0.02	10000	
Zn	66	103	1	He	180.992	180.992	1.31	224521	0.08	10000	
As	75	103	1	He	65.173	65.173	0.99	50125	0.13	10000	
Se	78	103	1	He	4.972	4.972	2.24	435	1.14	10000	
Sr	88	103	1	He	20.228	20.228	0.78	124839	0.02	10000	
Mo	95	103	1	He	7.581	7.581	0.26	22328	0.03	2000	
Ag	107	103	1	He	0.097	0.097	2.58	1027	0.01	300	
Cd	111	103	1	He	0.483	0.483	10.13	1801	0.03	4000	
Sn	118	115	1	He	17.901	17.901	0.34	74200	0.02	2000	
Sb	123	115	1	He	0.878	0.878	0.35	3462	0.03	300	
Ba	137	115	1	He	290.313	290.313	0.62	540402	0.05	10000	
W	182	209	1	He	0.871	0.871	12.24	13769	0.01	2500	
Tl	205	209	1	He	0.852	0.852	4.56	26259	0.00	5000	
Pb	208	209	1	He	67.294	67.294	0.72	2706537	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1200505	1.02	1389655	86.39	30	120	
Sc	45	1	He	612440	1.90	628609	97.43	30	120	
Sc	45	2	NoGas	4555192	0.21	4813296	94.64	30	120	
Rh	103	1	He	1747188	1.22	1894469	92.23	30	120	
In	115	1	He	953797	0.33	1086371	87.80	30	120	
Tb	159	1	He	3192540	0.35	3251379	98.19	30	120	
Ho	165	1	He	3266107	0.23	3312124	98.61	30	120	
Bi	209	1	He	2321490	0.41	2533294	91.64	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	036_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:03:58-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.713	1.986	171304	1.75	50	91.4	89.5	110.5	
B	11	45	2	NoGas	38.611	2.705	167600	1.84	50	77.2	89.5	110.5	CCV Failed
Na	23	45	1	He	25159.466	1.669	33412403	0.69	25000	100.6	89.5	110.5	
Mg	24	45	1	He	25012.213	1.334	18824427	1.99	25000	100.0	89.5	110.5	
Al	27	45	1	He	246.222	0.787	100932	1.76	250	98.5	89.5	110.5	
K	39	45	1	He	24585.865	3.149	16337433	0.85	25000	98.3	89.5	110.5	
Ca	44	45	1	He	24160.182	2.296	865625	0.07	25000	96.6	89.5	110.5	
Ti	47	45	1	He	49.333	1.793	9973	1.26	50	98.7	89.5	110.5	
V	51	45	1	He	49.613	1.481	252734	1.38	50	99.2	89.5	110.5	
Cr	52	45	1	He	50.467	1.552	310564	1.10	50	100.9	89.5	110.5	
Mn	55	45	1	He	242.953	1.567	1171796	0.76	250	97.2	89.5	110.5	
Fe	56	45	1	He	12602.571	1.852	74106937	0.82	12500	100.8	89.5	110.5	
Co	59	103	1	He	47.422	0.699	442113	0.77	50	94.8	89.5	110.5	
Ni	60	103	1	He	47.482	0.510	109601	0.25	50	95.0	89.5	110.5	
Cu	63	103	1	He	48.363	0.834	293654	0.68	50	96.7	89.5	110.5	
Zn	66	103	1	He	47.060	0.851	58351	1.51	50	94.1	89.5	110.5	
As	75	103	1	He	47.540	0.888	36091	0.74	50	95.1	89.5	110.5	
Se	78	103	1	He	46.359	0.668	3738	1.32	50	92.7	89.5	110.5	
Sr	88	103	1	He	46.408	0.863	282312	0.23	50	92.8	89.5	110.5	
Mo	95	103	1	He	49.498	3.288	143347	2.63	50	99.0	89.5	110.5	
Ag	107	103	1	He	49.660	1.043	496272	0.48	50	99.3	89.5	110.5	
Cd	111	103	1	He	49.156	1.606	86077	1.35	50	98.3	89.5	110.5	
Sn	118	115	1	He	50.477	1.343	206166	0.94	50	101.0	89.5	110.5	
Sb	123	115	1	He	50.942	0.611	189217	0.38	50	101.9	89.5	110.5	
Ba	137	115	1	He	49.437	1.204	91518	0.71	50	98.9	89.5	110.5	
W	182	209	1	He	49.451	2.237	591300	0.78	50	98.9	89.5	110.5	
Tl	205	209	1	He	46.043	0.851	1415924	0.60	50	92.1	89.5	110.5	
Pb	208	209	1	He	47.692	0.653	1916728	0.83	50	95.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1191096	0.42	1389655	85.71	30	120	
Sc	45	1	He	563043	2.33	628609	89.57	30	120	
Sc	45	2	NoGas	4166386	1.61	4813296	86.56	30	120	
Rh	103	1	He	1723396	0.68	1894469	90.97	30	120	
In	115	1	He	948066	0.50	1086371	87.27	30	120	
Tb	159	1	He	3131651	1.95	3251379	96.32	30	120	
Ho	165	1	He	3195990	0.93	3312124	96.49	30	120	
Bi	209	1	He	2319563	1.45	2533294	91.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	037_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:07:48-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.140	39.4	719	28.6	1	
B	11	45	2	NoGas	-16.903	-1.8	29788	2.6	20	
Na	23	45	1	He	38.490	7.9	114999	2.0	400	
Mg	24	45	1	He	2.603	41.4	3056	24.0	1000	
Al	27	45	1	He	2.511	14.8	2132	5.1	50	
K	39	45	1	He	12.375	15.1	36646	1.7	1000	
Ca	44	45	1	He	13.047	18.0	803	8.6	1000	
Ti	47	45	1	He	0.091	112.8	39	52.4	20	
V	51	45	1	He	0.081	106.0	287	145.1	2	
Cr	52	45	1	He	0.013	206.4	1616	8.4	2	
Mn	55	45	1	He	0.484	7.6	2652	4.9	2	
Fe	56	45	1	He	31.461	20.1	182161	17.9	50	
Co	59	103	1	He	0.037	11.9	374	11.5	1	
Ni	60	103	1	He	0.032	45.4	103	34.0	2	
Cu	63	103	1	He	0.105	15.3	1256	8.3	2	
Zn	66	103	1	He	0.440	26.4	1636	9.0	20	
As	75	103	1	He	0.133	1.7	197	1.1	2	
Se	78	103	1	He	0.126	42.5	43	10.2	2	
Sr	88	103	1	He	0.060	42.0	549	29.5	10	
Mo	95	103	1	He	0.940	21.6	2933	21.1	2	
Ag	107	103	1	He	0.012	27.7	164	20.7	0.2	
Cd	111	103	1	He	-0.042	-24.4	907	2.1	0.2	
Sn	118	115	1	He	0.471	9.0	3045	5.6	10	
Sb	123	115	1	He	0.648	19.6	2714	17.7	1	
Ba	137	115	1	He	0.026	17.5	116	7.3	5	
W	182	209	1	He	1.036	22.4	16283	16.7	10	
Tl	205	209	1	He	0.054	12.7	1763	11.5	0.5	
Pb	208	209	1	He	0.075	9.1	4027	6.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1214949	0.65	1389655	87.43	30	120	
Sc	45	1	He	542343	1.72	628609	86.28	30	120	
Sc	45	2	NoGas	4289977	0.14	4813296	89.13	30	120	
Rh	103	1	He	1804385	0.18	1894469	95.24	30	120	
In	115	1	He	995596	0.45	1086371	91.64	30	120	
Tb	159	1	He	3134835	0.41	3251379	96.42	30	120	
Ho	165	1	He	3190883	1.12	3312124	96.34	30	120	
Bi	209	1	He	2404305	1.00	2533294	94.91	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-1-d@10
Data File Name	038SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:11:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.651	0.651	1.95	2674	0.02	10000	
B	11	45	2	NoGas	-16.291	-16.291	-2.05	31914	-0.05	300	
Na	23	45	1	He	29.301	29.301	4.67	115440	0.03	500000	
Mg	24	45	1	He	1486.315	1486.315	4.54	1204218	0.12	500000	
Al	27	45	1	He	7835.967	7835.967	4.79	3414250	0.23	200000	
K	39	45	1	He	617.306	617.306	5.40	472499	0.13	500000	
Ca	44	45	1	He	124.157	124.157	4.89	5177	2.40	500000	
Ti	47	45	1	He	64.546	64.546	5.59	14021	0.46	2500	
V	51	45	1	He	21.376	21.376	2.32	117173	0.02	10000	
Cr	52	45	1	He	18.371	18.371	3.57	122729	0.01	10000	
Mn	55	45	1	He	1537.430	1537.430	5.14	7971591	0.02	10000	
Fe	56	45	1	He	39082.020	39082.020	4.67	247163164	0.02	200000	
Co	59	103	1	He	11.292	11.292	0.71	109606	0.01	10000	
Ni	60	103	1	He	16.979	16.979	1.94	40815	0.04	10000	
Cu	63	103	1	He	11.424	11.424	1.34	72664	0.02	10000	
Zn	66	103	1	He	40.371	40.371	1.12	52260	0.08	10000	
As	75	103	1	He	13.831	13.831	1.48	10995	0.13	10000	
Se	78	103	1	He	1.034	1.034	12.14	119	0.87	10000	
Sr	88	103	1	He	4.094	4.094	1.66	26081	0.02	10000	
Mo	95	103	1	He	1.456	1.456	1.59	4470	0.03	2000	
Ag	107	103	1	He	0.024	0.024	11.37	290	0.01	300	
Cd	111	103	1	He	0.074	0.074	35.05	1111	0.01	4000	
Sn	118	115	1	He	3.502	3.502	2.59	16034	0.02	2000	
Sb	123	115	1	He	0.358	0.358	7.02	1590	0.02	300	
Ba	137	115	1	He	57.352	57.352	1.34	111824	0.05	10000	
W	182	209	1	He	0.258	0.258	9.87	6698	0.00	2500	
Tl	205	209	1	He	0.161	0.161	1.75	5176	0.00	5000	
Pb	208	209	1	He	13.365	13.365	0.56	556754	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1216154	1.52	1389655	87.51	30	120	
Sc	45	1	He	606422	5.43	628609	96.47	30	120	
Sc	45	2	NoGas	4365727	1.90	4813296	90.70	30	120	
Rh	103	1	He	1794240	1.62	1894469	94.71	30	120	
In	115	1	He	998537	0.73	1086371	91.91	30	120	
Tb	159	1	He	3178565	1.31	3251379	97.76	30	120	
Ho	165	1	He	3251632	0.38	3312124	98.17	30	120	
Bi	209	1	He	2401414	1.32	2533294	94.79	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-1-d@2
Data File Name	039SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:15:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	948.960	948.960	0.96	3375916	0.03	10000	
B	11	45	2	NoGas	103.243	103.243	1.63	339726	0.03	300	
Na	23	45	1	He	9902.100	9902.100	2.95	13788141	0.07	500000	
Mg	24	45	1	He	16469.716	16469.716	2.27	12955648	0.13	500000	
Al	27	45	1	He	44959.621	44959.621	3.10	19032146	0.24	200000	
K	39	45	1	He	12192.577	12192.577	2.20	8486802	0.14	500000	
Ca	44	45	1	He	9227.041	9227.041	1.48	345885	2.67	500000	
Ti	47	45	1	He	394.287	394.287	1.80	83162	0.47	2500	
V	51	45	1	He	1050.844	1050.844	1.30	5598692	0.02	10000	
Cr	52	45	1	He	1042.992	1042.992	2.22	6676606	0.02	10000	
Mn	55	45	1	He	8018.640	8018.640	1.69	40416286	0.02	10000	
Fe	56	45	1	He	190226.774	190226.774	1.33	1169417731	0.02	200000	
Co	59	103	1	He	1039.755	1039.755	1.10	9290677	0.01	10000	
Ni	60	103	1	He	1109.014	1109.014	2.33	2453037	0.05	10000	
Cu	63	103	1	He	1053.225	1053.225	0.83	6118352	0.02	10000	
Zn	66	103	1	He	1068.227	1068.227	0.77	1248116	0.09	10000	
As	75	103	1	He	949.574	949.574	1.21	689373	0.14	10000	
Se	78	103	1	He	845.817	845.817	1.85	64851	1.30	10000	
Sr	88	103	1	He	1017.951	1017.951	1.92	5932144	0.02	10000	
Mo	95	103	1	He	117.470	117.470	1.07	326005	0.04	2000	
Ag	107	103	1	He	102.070	102.070	1.25	977646	0.01	300	
Cd	111	103	1	He	1046.527	1046.527	0.46	1738305	0.06	4000	
Sn	118	115	1	He	1164.143	1164.143	0.63	4460870	0.03	2000	
Sb	123	115	1	He	108.448	108.448	1.15	379449	0.03	300	
Ba	137	115	1	He	1445.067	1445.067	0.28	2519774	0.06	10000	
W	182	209	1	He	106.543	106.543	1.74	1214959	0.01	2500	
Tl	205	209	1	He	253.850	253.850	0.53	7467316	0.00	5000	
Pb	208	209	1	He	1113.299	1113.299	0.99	42779606	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1131837	0.49	1389655	81.45	30	120	
Sc	45	1	He	588628	2.63	628609	93.64	30	120	
Sc	45	2	NoGas	4301421	0.48	4813296	89.37	30	120	
Rh	103	1	He	1651851	0.48	1894469	87.19	30	120	
In	115	1	He	893546	0.54	1086371	82.25	30	120	
Tb	159	1	He	3174147	0.70	3251379	97.62	30	120	
Ho	165	1	He	3190365	1.05	3312124	96.32	30	120	
Bi	209	1	He	2218747	0.98	2533294	87.58	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-e du@2
Data File Name	040SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:18:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.208	3.208	2.17	11949	0.03	10000	
B	11	45	2	NoGas	-7.630	-7.630	-3.79	55487	-0.01	300	
Na	23	45	1	He	117.366	117.366	1.90	230376	0.05	500000	
Mg	24	45	1	He	7657.393	7657.393	2.40	5928164	0.13	500000	
Al	27	45	1	He	43148.551	43148.551	1.43	17978619	0.24	200000	
K	39	45	1	He	3524.288	3524.288	3.05	2435756	0.14	500000	
Ca	44	45	1	He	652.504	652.504	3.71	24414	2.67	500000	
Ti	47	45	1	He	300.315	300.315	2.16	62336	0.48	2500	
V	51	45	1	He	111.948	111.948	1.87	586780	0.02	10000	
Cr	52	45	1	He	101.122	101.122	1.69	638496	0.02	10000	
Mn	55	45	1	He	6082.558	6082.558	2.49	30167471	0.02	10000	
Fe	56	45	1	He	185569.550	185569.550	2.80	1122369627	0.02	200000	
Co	59	103	1	He	49.558	49.558	1.44	442305	0.01	10000	
Ni	60	103	1	He	86.493	86.493	0.74	191110	0.05	10000	
Cu	63	103	1	He	57.501	57.501	0.62	334142	0.02	10000	
Zn	66	103	1	He	196.663	196.663	1.37	230299	0.09	10000	
As	75	103	1	He	66.343	66.343	0.94	48183	0.14	10000	
Se	78	103	1	He	5.880	5.880	7.85	480	1.22	10000	
Sr	88	103	1	He	22.826	22.826	1.08	133012	0.02	10000	
Mo	95	103	1	He	8.268	8.268	3.99	22989	0.04	2000	
Ag	107	103	1	He	0.093	0.093	3.71	930	0.01	300	
Cd	111	103	1	He	0.504	0.504	12.76	1735	0.03	4000	
Sn	118	115	1	He	18.123	18.123	1.54	71959	0.03	2000	
Sb	123	115	1	He	0.996	0.996	3.80	3738	0.03	300	
Ba	137	115	1	He	288.043	288.043	0.73	513730	0.06	10000	
W	182	209	1	He	1.751	1.751	19.96	23607	0.01	2500	
Tl	205	209	1	He	1.037	1.037	7.10	31138	0.00	5000	
Pb	208	209	1	He	67.976	67.976	0.46	2663317	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1167577	2.59	1389655	84.02	30	120	
Sc	45	1	He	579179	1.69	628609	92.14	30	120	
Sc	45	2	NoGas	4437630	0.65	4813296	92.20	30	120	
Rh	103	1	He	1649849	0.49	1894469	87.09	30	120	
In	115	1	He	913915	1.08	1086371	84.13	30	120	
Tb	159	1	He	3087264	0.41	3251379	94.95	30	120	
Ho	165	1	He	3177749	1.07	3312124	95.94	30	120	
Bi	209	1	He	2261525	0.72	2533294	89.27	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-f ms@2
Data File Name	041SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:22:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	46.970	46.970	1.01	163072	0.03	10000	
B	11	45	2	NoGas	31.444	31.444	3.69	152129	0.02	300	
Na	23	45	1	He	4449.308	4449.308	1.17	5839726	0.08	500000	
Mg	24	45	1	He	12015.600	12015.600	0.91	8852407	0.14	500000	
Al	27	45	1	He	47428.766	47428.766	1.22	18806083	0.25	200000	
K	39	45	1	He	6898.298	6898.298	2.34	4509587	0.15	500000	
Ca	44	45	1	He	4788.653	4788.653	1.74	168265	2.85	500000	
Ti	47	45	1	He	394.132	394.132	1.09	77856	0.51	2500	
V	51	45	1	He	162.453	162.453	1.08	810370	0.02	10000	
Cr	52	45	1	He	140.342	140.342	0.73	842697	0.02	10000	
Mn	55	45	1	He	7258.031	7258.031	0.46	34260089	0.02	10000	
Fe	56	45	1	He	197377.744	197377.744	0.53	1136256595	0.02	200000	
Co	59	103	1	He	102.192	102.192	0.47	880869	0.01	10000	
Ni	60	103	1	He	127.291	127.291	0.53	271626	0.05	10000	
Cu	63	103	1	He	103.583	103.583	0.63	580942	0.02	10000	
Zn	66	103	1	He	233.058	233.058	0.74	263425	0.09	10000	
As	75	103	1	He	109.759	109.759	0.64	76939	0.14	10000	
Se	78	103	1	He	41.938	41.938	1.29	3129	1.34	10000	
Sr	88	103	1	He	66.540	66.540	0.38	374211	0.02	10000	
Mo	95	103	1	He	56.683	56.683	0.53	151790	0.04	2000	
Ag	107	103	1	He	46.305	46.305	0.59	427873	0.01	300	
Cd	111	103	1	He	44.481	44.481	1.27	72102	0.06	4000	
Sn	118	115	1	He	56.861	56.861	1.24	214702	0.03	2000	
Sb	123	115	1	He	16.255	16.255	0.63	55962	0.03	300	
Ba	137	115	1	He	341.541	341.541	0.52	584516	0.06	10000	
W	182	209	1	He	35.621	35.621	0.92	400947	0.01	2500	
Tl	205	209	1	He	41.236	41.236	1.52	1190800	0.00	5000	
Pb	208	209	1	He	122.843	122.843	1.73	4634599	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1103492	0.16	1389655	79.41	30	120	
Sc	45	1	He	551114	1.16	628609	87.67	30	120	
Sc	45	2	NoGas	4234565	1.30	4813296	87.98	30	120	
Rh	103	1	He	1593439	0.34	1894469	84.11	30	120	
In	115	1	He	876939	0.30	1086371	80.72	30	120	
Tb	159	1	He	3022878	0.26	3251379	92.97	30	120	
Ho	165	1	He	3085122	0.45	3312124	93.15	30	120	
Bi	209	1	He	2178369	1.66	2533294	85.99	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-2-b@2
Data File Name	042SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:26:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.245	3.245	5.08	11682	0.03	10000	
B	11	45	2	NoGas	-3.409	-3.409	-4.73	66609	-0.01	300	
Na	23	45	1	He	151.129	151.129	1.72	270562	0.06	500000	
Mg	24	45	1	He	11368.282	11368.282	1.84	8615641	0.13	500000	
Al	27	45	1	He	57874.179	57874.179	1.41	23604364	0.25	200000	
K	39	45	1	He	4919.655	4919.655	0.88	3316911	0.15	500000	
Ca	44	45	1	He	896.201	896.201	0.82	32694	2.74	500000	
Ti	47	45	1	He	341.034	341.034	1.64	69291	0.49	2500	
V	51	45	1	He	116.342	116.342	0.93	596932	0.02	10000	
Cr	52	45	1	He	103.734	103.734	1.26	641105	0.02	10000	
Mn	55	45	1	He	3069.960	3069.960	1.56	14905034	0.02	10000	
Fe	56	45	1	He	172472.466	172472.466	0.75	1021267657	0.02	200000	
Co	59	103	1	He	47.568	47.568	0.50	420751	0.01	10000	
Ni	60	103	1	He	100.322	100.322	0.73	219679	0.05	10000	
Cu	63	103	1	He	87.575	87.575	0.45	504075	0.02	10000	
Zn	66	103	1	He	244.621	244.621	0.43	283670	0.09	10000	
As	75	103	1	He	72.540	72.540	0.15	52207	0.14	10000	
Se	78	103	1	He	6.874	6.874	4.48	551	1.25	10000	
Sr	88	103	1	He	33.282	33.282	1.37	192138	0.02	10000	
Mo	95	103	1	He	8.728	8.728	1.24	24047	0.04	2000	
Ag	107	103	1	He	0.088	0.088	10.25	876	0.01	300	
Cd	111	103	1	He	0.526	0.526	16.93	1756	0.03	4000	
Sn	118	115	1	He	17.163	17.163	2.16	67794	0.03	2000	
Sb	123	115	1	He	1.045	1.045	0.92	3891	0.03	300	
Ba	137	115	1	He	358.056	358.056	1.02	634824	0.06	10000	
W	182	209	1	He	0.868	0.868	18.51	13332	0.01	2500	
Tl	205	209	1	He	0.994	0.994	1.90	29770	0.00	5000	
Pb	208	209	1	He	92.702	92.702	1.61	3620227	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1128247	0.69	1389655	81.19	30	120	
Sc	45	1	He	566862	0.59	628609	90.18	30	120	
Sc	45	2	NoGas	4430321	0.64	4813296	92.04	30	120	
Rh	103	1	He	1635106	0.58	1894469	86.31	30	120	
In	115	1	He	908550	1.25	1086371	83.63	30	120	
Tb	159	1	He	3101567	1.08	3251379	95.39	30	120	
Ho	165	1	He	3170356	1.46	3312124	95.72	30	120	
Bi	209	1	He	2254613	1.33	2533294	89.00	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-4-b@2
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:30:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.652	2.652	4.85	9288	0.03	10000	
B	11	45	2	NoGas	43.764	43.764	0.31	178069	0.02	300	
Na	23	45	1	He	1795.833	1795.833	3.34	2301714	0.08	500000	
Mg	24	45	1	He	12368.483	12368.483	4.81	8746632	0.14	500000	
Al	27	45	1	He	44563.783	44563.783	4.49	16962257	0.26	200000	
K	39	45	1	He	15915.686	15915.686	3.33	9954388	0.16	500000	
Ca	44	45	1	He	164.252	164.252	5.92	5888	2.79	500000	
Ti	47	45	1	He	395.533	395.533	3.84	75008	0.53	2500	
V	51	45	1	He	76.955	76.955	3.72	368508	0.02	10000	
Cr	52	45	1	He	81.546	81.546	3.86	470728	0.02	10000	
Mn	55	45	1	He	6071.848	6071.848	4.05	27514979	0.02	10000	
Fe	56	45	1	He	111615.923	111615.923	4.89	616718820	0.02	200000	
Co	59	103	1	He	41.812	41.812	4.43	358713	0.01	10000	
Ni	60	103	1	He	104.618	104.618	5.01	222143	0.05	10000	
Cu	63	103	1	He	96.123	96.123	4.47	536542	0.02	10000	
Zn	66	103	1	He	226.325	226.325	4.57	254599	0.09	10000	
As	75	103	1	He	180.845	180.845	4.56	126101	0.14	10000	
Se	78	103	1	He	3.555	3.555	4.00	291	1.22	10000	
Sr	88	103	1	He	2135.363	2135.363	5.20	11943933	0.02	10000	
Mo	95	103	1	He	646.769	646.769	6.01	1722048	0.04	2000	
Ag	107	103	1	He	0.082	0.082	14.93	786	0.01	300	
Cd	111	103	1	He	0.394	0.394	15.45	1491	0.03	4000	
Sn	118	115	1	He	17.671	17.671	3.43	66895	0.03	2000	
Sb	123	115	1	He	0.583	0.583	11.01	2149	0.03	300	
Ba	137	115	1	He	319.343	319.343	5.40	542425	0.06	10000	
W	182	209	1	He	12.430	12.430	4.19	141214	0.01	2500	
Tl	205	209	1	He	0.552	0.552	4.22	15904	0.00	5000	
Pb	208	209	1	He	410.219	410.219	4.71	15388416	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1094573	0.57	1389655	78.77	30	120	
Sc	45	1	He	529592	3.81	628609	84.25	30	120	
Sc	45	2	NoGas	4110707	1.09	4813296	85.40	30	120	
Rh	103	1	He	1587806	4.36	1894469	83.81	30	120	
In	115	1	He	871881	4.91	1086371	80.26	30	120	
Tb	159	1	He	2993016	4.88	3251379	92.05	30	120	
Ho	165	1	He	3030714	5.10	3312124	91.50	30	120	
Bi	209	1	He	2168797	4.41	2533294	85.61	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-11-b@2
Data File Name	044SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:34:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.233	2.233	4.22	7776	0.03	10000	
B	11	45	2	NoGas	-7.700	-7.700	-3.39	50912	-0.02	300	
Na	23	45	1	He	306.725	306.725	0.77	450893	0.07	500000	
Mg	24	45	1	He	8633.916	8633.916	2.43	6168786	0.14	500000	
Al	27	45	1	He	54845.942	54845.942	1.11	21090190	0.26	200000	
K	39	45	1	He	3438.289	3438.289	1.19	2194230	0.16	500000	
Ca	44	45	1	He	4961.816	4961.816	1.31	169079	2.93	500000	
Ti	47	45	1	He	606.683	606.683	0.98	116214	0.52	2500	
V	51	45	1	He	106.026	106.026	0.28	512919	0.02	10000	
Cr	52	45	1	He	84.411	84.411	0.58	492168	0.02	10000	
Mn	55	45	1	He	4285.510	4285.510	0.25	19618966	0.02	10000	
Fe	56	45	1	He	83933.084	83933.084	0.38	468614399	0.02	200000	
Co	59	103	1	He	38.963	38.963	0.72	334997	0.01	10000	
Ni	60	103	1	He	103.683	103.683	0.21	220694	0.05	10000	
Cu	63	103	1	He	48.122	48.122	0.93	269470	0.02	10000	
Zn	66	103	1	He	241.112	241.112	1.19	271788	0.09	10000	
As	75	103	1	He	70.837	70.837	1.01	49556	0.14	10000	
Se	78	103	1	He	4.674	4.674	3.87	373	1.25	10000	
Sr	88	103	1	He	71.995	71.995	0.53	403840	0.02	10000	
Mo	95	103	1	He	13.862	13.862	10.57	37071	0.04	2000	
Ag	107	103	1	He	0.146	0.146	3.48	1382	0.01	300	
Cd	111	103	1	He	0.536	0.536	8.40	1723	0.03	4000	
Sn	118	115	1	He	16.243	16.243	2.36	62813	0.03	2000	
Sb	123	115	1	He	0.617	0.617	4.73	2317	0.03	300	
Ba	137	115	1	He	368.764	368.764	0.79	639508	0.06	10000	
W	182	209	1	He	0.535	0.535	2.99	9281	0.01	2500	
Tl	205	209	1	He	0.874	0.874	1.95	25572	0.00	5000	
Pb	208	209	1	He	47.926	47.926	1.19	1829638	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1084781	1.17	1389655	78.06	30	120	
Sc	45	1	He	534473	0.96	628609	85.02	30	120	
Sc	45	2	NoGas	4085495	0.33	4813296	84.88	30	120	
Rh	103	1	He	1589395	0.65	1894469	83.90	30	120	
In	115	1	He	888621	0.31	1086371	81.80	30	120	
Tb	159	1	He	3010350	0.57	3251379	92.59	30	120	
Ho	165	1	He	3034576	1.28	3312124	91.62	30	120	
Bi	209	1	He	2203423	1.17	2533294	86.98	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-13-b@2
Data File Name	045SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:37:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.201	2.201	4.23	7632	0.03	10000	
B	11	45	2	NoGas	-11.717	-11.717	-2.22	41147	-0.03	300	
Na	23	45	1	He	82.893	82.893	3.60	167457	0.05	500000	
Mg	24	45	1	He	5875.248	5875.248	1.66	4154296	0.14	500000	
Al	27	45	1	He	37743.283	37743.283	1.37	14361530	0.26	200000	
K	39	45	1	He	2807.042	2807.042	1.66	1777638	0.16	500000	
Ca	44	45	1	He	1011.895	1011.895	1.22	34394	2.94	500000	
Ti	47	45	1	He	414.082	414.082	0.39	78490	0.53	2500	
V	51	45	1	He	76.316	76.316	0.89	365291	0.02	10000	
Cr	52	45	1	He	72.307	72.307	0.89	417371	0.02	10000	
Mn	55	45	1	He	1989.659	1989.659	0.88	9012658	0.02	10000	
Fe	56	45	1	He	97319.030	97319.030	0.58	537619908	0.02	200000	
Co	59	103	1	He	42.033	42.033	1.92	370465	0.01	10000	
Ni	60	103	1	He	87.173	87.173	2.39	190195	0.05	10000	
Cu	63	103	1	He	47.203	47.203	2.29	270965	0.02	10000	
Zn	66	103	1	He	265.869	265.869	2.56	307096	0.09	10000	
As	75	103	1	He	102.092	102.092	1.95	73178	0.14	10000	
Se	78	103	1	He	3.895	3.895	6.01	324	1.20	10000	
Sr	88	103	1	He	17.558	17.558	1.95	101069	0.02	10000	
Mo	95	103	1	He	9.840	9.840	3.48	26998	0.04	2000	
Ag	107	103	1	He	0.092	0.092	4.65	904	0.01	300	
Cd	111	103	1	He	0.547	0.547	10.73	1784	0.03	4000	
Sn	118	115	1	He	16.696	16.696	2.87	64738	0.03	2000	
Sb	123	115	1	He	0.614	0.614	4.58	2316	0.03	300	
Ba	137	115	1	He	245.520	245.520	1.37	427142	0.06	10000	
W	182	209	1	He	0.326	0.326	15.39	6891	0.00	2500	
Tl	205	209	1	He	0.652	0.652	2.60	19027	0.00	5000	
Pb	208	209	1	He	52.053	52.053	0.61	1980389	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1079941	1.84	1389655	77.71	30	120	
Sc	45	1	He	528853	0.67	628609	84.13	30	120	
Sc	45	2	NoGas	4093302	1.20	4813296	85.04	30	120	
Rh	103	1	He	1629645	2.04	1894469	86.02	30	120	
In	115	1	He	891477	0.76	1086371	82.06	30	120	
Tb	159	1	He	3006377	0.75	3251379	92.46	30	120	
Ho	165	1	He	3052155	1.44	3312124	92.15	30	120	
Bi	209	1	He	2195880	1.01	2533294	86.68	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-14-b@2
Data File Name	046SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:41:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.218	2.218	3.79	7935	0.03	10000	
B	11	45	2	NoGas	-5.164	-5.164	-1.11	59481	-0.01	300	
Na	23	45	1	He	141.520	141.520	2.63	250188	0.06	500000	
Mg	24	45	1	He	8229.137	8229.137	1.74	6053722	0.14	500000	
Al	27	45	1	He	40183.202	40183.202	1.23	15909277	0.25	200000	
K	39	45	1	He	3934.032	3934.032	0.80	2580568	0.15	500000	
Ca	44	45	1	He	1084.914	1084.914	0.70	38344	2.83	500000	
Ti	47	45	1	He	493.718	493.718	0.94	97369	0.51	2500	
V	51	45	1	He	91.800	91.800	1.00	457189	0.02	10000	
Cr	52	45	1	He	80.395	80.395	0.98	482671	0.02	10000	
Mn	55	45	1	He	2934.214	2934.214	1.30	13829084	0.02	10000	
Fe	56	45	1	He	106910.619	106910.619	1.50	614489753	0.02	200000	
Co	59	103	1	He	113.353	113.353	1.82	1013006	0.01	10000	
Ni	60	103	1	He	132.960	132.960	0.97	294187	0.05	10000	
Cu	63	103	1	He	60.785	60.785	1.67	353670	0.02	10000	
Zn	66	103	1	He	574.947	574.947	1.75	672314	0.09	10000	
As	75	103	1	He	451.471	451.471	1.32	327863	0.14	10000	
Se	78	103	1	He	4.113	4.113	7.23	345	1.19	10000	
Sr	88	103	1	He	49.407	49.407	0.96	288141	0.02	10000	
Mo	95	103	1	He	10.113	10.113	2.26	28149	0.04	2000	
Ag	107	103	1	He	0.278	0.278	3.70	2704	0.01	300	
Cd	111	103	1	He	1.124	1.124	3.71	2766	0.04	4000	
Sn	118	115	1	He	16.770	16.770	1.33	66530	0.03	2000	
Sb	123	115	1	He	1.032	1.032	0.54	3859	0.03	300	
Ba	137	115	1	He	288.693	288.693	1.01	513805	0.06	10000	
W	182	209	1	He	0.345	0.345	15.60	7265	0.00	2500	
Tl	205	209	1	He	1.151	1.151	1.87	34272	0.00	5000	
Pb	208	209	1	He	76.020	76.020	4.15	2953270	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1114459	0.77	1389655	80.20	30	120	
Sc	45	1	He	550284	1.07	628609	87.54	30	120	
Sc	45	2	NoGas	4254194	1.59	4813296	88.38	30	120	
Rh	103	1	He	1652372	1.79	1894469	87.22	30	120	
In	115	1	He	912004	1.02	1086371	83.95	30	120	
Tb	159	1	He	3075037	1.00	3251379	94.58	30	120	
Ho	165	1	He	3121247	0.08	3312124	94.24	30	120	
Bi	209	1	He	2242851	0.98	2533294	88.53	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-15-b@2
Data File Name	047SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:45:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.791	3.791	4.15	13691	0.03	10000	
B	11	45	2	NoGas	-4.436	-4.436	-7.58	65025	-0.01	300	
Na	23	45	1	He	186.408	186.408	1.28	320720	0.06	500000	
Mg	24	45	1	He	17068.603	17068.603	1.13	13059742	0.13	500000	
Al	27	45	1	He	75963.178	75963.178	1.29	31280962	0.24	200000	
K	39	45	1	He	5398.143	5398.143	1.39	3671651	0.15	500000	
Ca	44	45	1	He	2077.070	2077.070	2.26	76015	2.73	500000	
Ti	47	45	1	He	796.423	796.423	1.06	163357	0.49	2500	
V	51	45	1	He	152.629	152.629	1.17	790713	0.02	10000	
Cr	52	45	1	He	140.148	140.148	0.98	873980	0.02	10000	
Mn	55	45	1	He	2495.824	2495.824	0.99	12235317	0.02	10000	
Fe	56	45	1	He	182713.597	182713.597	1.05	1092367992	0.02	200000	
Co	59	103	1	He	64.334	64.334	0.71	573899	0.01	10000	
Ni	60	103	1	He	145.781	145.781	1.00	321934	0.05	10000	
Cu	63	103	1	He	153.179	153.179	1.43	888785	0.02	10000	
Zn	66	103	1	He	435.089	435.089	1.12	508074	0.09	10000	
As	75	103	1	He	99.803	99.803	1.11	72407	0.14	10000	
Se	78	103	1	He	7.246	7.246	8.23	584	1.24	10000	
Sr	88	103	1	He	27.769	27.769	0.72	161713	0.02	10000	
Mo	95	103	1	He	12.250	12.250	0.69	34008	0.04	2000	
Ag	107	103	1	He	0.138	0.138	7.76	1359	0.01	300	
Cd	111	103	1	He	1.062	1.062	6.47	2658	0.04	4000	
Sn	118	115	1	He	18.347	18.347	2.26	72495	0.03	2000	
Sb	123	115	1	He	1.256	1.256	1.11	4646	0.03	300	
Ba	137	115	1	He	398.660	398.660	0.57	707655	0.06	10000	
W	182	209	1	He	0.444	0.444	5.02	8362	0.01	2500	
Tl	205	209	1	He	1.305	1.305	1.80	38693	0.00	5000	
Pb	208	209	1	He	123.174	123.174	0.99	4765874	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1134636	1.26	1389655	81.65	30	120	
Sc	45	1	He	572357	0.70	628609	91.05	30	120	
Sc	45	2	NoGas	4509566	1.18	4813296	93.69	30	120	
Rh	103	1	He	1649088	0.73	1894469	87.05	30	120	
In	115	1	He	909576	0.36	1086371	83.73	30	120	
Tb	159	1	He	3116755	1.42	3251379	95.86	30	120	
Ho	165	1	He	3174560	1.24	3312124	95.85	30	120	
Bi	209	1	He	2233776	0.95	2533294	88.18	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	048_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:49:14-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.527	2.352	156795	1.16	50	93.1	89.5	110.5	
B	11	45	2	NoGas	31.323	0.404	141711	0.71	50	62.6	89.5	110.5	CCV Failed
Na	23	45	1	He	25396.972	0.932	31345727	0.70	25000	101.6	89.5	110.5	
Mg	24	45	1	He	25411.426	1.029	17772072	1.05	25000	101.6	89.5	110.5	
Al	27	45	1	He	250.786	1.370	95522	2.37	250	100.3	89.5	110.5	
K	39	45	1	He	25063.183	1.113	15481830	1.08	25000	100.3	89.5	110.5	
Ca	44	45	1	He	24707.579	0.603	822835	1.03	25000	98.8	89.5	110.5	
Ti	47	45	1	He	51.020	0.900	9585	0.86	50	102.0	89.5	110.5	
V	51	45	1	He	50.888	1.935	240924	2.15	50	101.8	89.5	110.5	
Cr	52	45	1	He	51.580	1.188	294959	0.91	50	103.2	89.5	110.5	
Mn	55	45	1	He	248.858	0.946	1115498	0.67	250	99.5	89.5	110.5	
Fe	56	45	1	He	13082.692	0.561	71502039	1.06	12500	104.7	89.5	110.5	
Co	59	103	1	He	46.789	2.063	417571	1.24	50	93.6	89.5	110.5	
Ni	60	103	1	He	47.083	1.783	104039	1.20	50	94.2	89.5	110.5	
Cu	63	103	1	He	47.613	2.389	276750	1.47	50	95.2	89.5	110.5	
Zn	66	103	1	He	47.533	1.777	56407	1.02	50	95.1	89.5	110.5	
As	75	103	1	He	47.479	2.231	34504	1.21	50	95.0	89.5	110.5	
Se	78	103	1	He	46.944	1.858	3623	0.93	50	93.9	89.5	110.5	
Sr	88	103	1	He	47.108	1.718	274333	0.69	50	94.2	89.5	110.5	
Mo	95	103	1	He	49.856	1.718	138247	1.96	50	99.7	89.5	110.5	
Ag	107	103	1	He	50.168	1.958	479940	1.10	50	100.3	89.5	110.5	
Cd	111	103	1	He	50.054	3.271	83882	2.29	50	100.1	89.5	110.5	
Sn	118	115	1	He	49.854	1.082	196003	1.48	50	99.7	89.5	110.5	
Sb	123	115	1	He	51.233	0.612	183159	0.54	50	102.5	89.5	110.5	
Ba	137	115	1	He	50.643	0.772	90237	1.09	50	101.3	89.5	110.5	
W	182	209	1	He	50.587	2.383	576663	0.87	50	101.2	89.5	110.5	
Tl	205	209	1	He	46.861	0.624	1374114	1.20	50	93.7	89.5	110.5	
Pb	208	209	1	He	48.608	0.621	1862715	1.26	50	97.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1071323	1.34	1389655	77.09	30	120	
Sc	45	1	He	523205	1.62	628609	83.23	30	120	
Sc	45	2	NoGas	3951937	0.92	4813296	82.10	30	120	
Rh	103	1	He	1649931	1.05	1894469	87.09	30	120	
In	115	1	He	912498	0.44	1086371	84.00	30	120	
Tb	159	1	He	3025119	0.53	3251379	93.04	30	120	
Ho	165	1	He	3083045	0.98	3312124	93.08	30	120	
Bi	209	1	He	2211715	1.55	2533294	87.31	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	049_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:53:05-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.034	104.0	289	43.7	1	
B	11	45	2	NoGas	-21.882	-0.7	15852	2.1	20	
Na	23	45	1	He	-0.483	-473.8	62224	3.6	400	
Mg	24	45	1	He	2.785	17.0	3045	10.1	1000	
Al	27	45	1	He	3.923	3.4	2560	2.4	50	
K	39	45	1	He	7.619	20.8	32055	2.8	1000	
Ca	44	45	1	He	12.402	23.2	745	12.3	1000	
Ti	47	45	1	He	0.060	94.6	31	32.7	20	
V	51	45	1	He	0.061	148.3	185	231.4	2	
Cr	52	45	1	He	0.033	36.0	1657	4.2	2	
Mn	55	45	1	He	0.745	8.9	3687	7.6	2	
Fe	56	45	1	He	33.458	15.1	184660	13.6	50	
Co	59	103	1	He	0.019	20.2	192	18.2	1	
Ni	60	103	1	He	0.022	55.6	76	37.0	2	
Cu	63	103	1	He	0.047	21.4	856	7.5	2	
Zn	66	103	1	He	0.433	26.0	1566	9.2	20	
As	75	103	1	He	0.095	8.9	161	4.2	2	
Se	78	103	1	He	-0.045	-75.7	28	9.5	2	
Sr	88	103	1	He	0.031	29.8	350	15.9	10	
Mo	95	103	1	He	0.998	24.1	2991	23.7	2	
Ag	107	103	1	He	0.007	61.4	107	38.0	0.2	
Cd	111	103	1	He	-0.059	-23.6	843	3.2	0.2	
Sn	118	115	1	He	0.257	10.2	2045	5.6	10	
Sb	123	115	1	He	0.538	18.8	2194	17.4	1	
Ba	137	115	1	He	0.021	38.0	102	15.1	5	
W	182	209	1	He	0.937	17.2	14570	14.2	10	
Tl	205	209	1	He	0.054	8.5	1715	9.2	0.5	
Pb	208	209	1	He	0.065	8.9	3466	7.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1112008	1.74	1389655	80.02	30	120	
Sc	45	1	He	517163	1.25	628609	82.27	30	120	
Sc	45	2	NoGas	4004786	0.83	4813296	83.20	30	120	
Rh	103	1	He	1736644	0.39	1894469	91.67	30	120	
In	115	1	He	954954	0.42	1086371	87.90	30	120	
Tb	159	1	He	3008639	1.03	3251379	92.53	30	120	
Ho	165	1	He	3107947	0.38	3312124	93.84	30	120	
Bi	209	1	He	2321989	1.01	2533294	91.66	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-16-b@2
Data File Name	050SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:56:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.671	2.671	7.32	9092	0.03	10000	
B	11	45	2	NoGas	-6.593	-6.593	-7.93	53879	-0.01	300	
Na	23	45	1	He	190.830	190.830	2.77	309997	0.06	500000	
Mg	24	45	1	He	12577.328	12577.328	3.30	9131382	0.14	500000	
Al	27	45	1	He	44141.973	44141.973	3.02	17250521	0.26	200000	
K	39	45	1	He	4584.623	4584.623	2.52	2963320	0.15	500000	
Ca	44	45	1	He	3139.249	3139.249	2.73	108830	2.88	500000	
Ti	47	45	1	He	416.990	416.990	1.90	81177	0.51	2500	
V	51	45	1	He	87.096	87.096	2.90	428076	0.02	10000	
Cr	52	45	1	He	77.284	77.284	2.30	458029	0.02	10000	
Mn	55	45	1	He	2622.330	2622.330	2.35	12198609	0.02	10000	
Fe	56	45	1	He	116439.900	116439.900	1.03	660734552	0.02	200000	
Co	59	103	1	He	45.713	45.713	1.48	391933	0.01	10000	
Ni	60	103	1	He	101.149	101.149	0.83	214707	0.05	10000	
Cu	63	103	1	He	84.203	84.203	0.82	469834	0.02	10000	
Zn	66	103	1	He	264.356	264.356	1.10	297091	0.09	10000	
As	75	103	1	He	55.215	55.215	1.28	38539	0.14	10000	
Se	78	103	1	He	4.427	4.427	3.72	354	1.25	10000	
Sr	88	103	1	He	29.000	29.000	0.93	162304	0.02	10000	
Mo	95	103	1	He	6.570	6.570	2.54	17563	0.04	2000	
Ag	107	103	1	He	0.086	0.086	6.22	824	0.01	300	
Cd	111	103	1	He	0.514	0.514	6.96	1681	0.03	4000	
Sn	118	115	1	He	16.050	16.050	0.55	61958	0.03	2000	
Sb	123	115	1	He	0.952	0.952	2.15	3474	0.03	300	
Ba	137	115	1	He	299.342	299.342	1.04	518125	0.06	10000	
W	182	209	1	He	0.614	0.614	3.04	10085	0.01	2500	
Tl	205	209	1	He	0.768	0.768	1.07	22321	0.00	5000	
Pb	208	209	1	He	76.624	76.624	1.82	2901756	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1063744	0.33	1389655	76.55	30	120	
Sc	45	1	He	543312	2.62	628609	86.43	30	120	
Sc	45	2	NoGas	4105266	0.89	4813296	85.29	30	120	
Rh	103	1	He	1585050	1.07	1894469	83.67	30	120	
In	115	1	He	886929	0.61	1086371	81.64	30	120	
Tb	159	1	He	2985563	1.08	3251379	91.82	30	120	
Ho	165	1	He	3043983	0.60	3312124	91.90	30	120	
Bi	209	1	He	2185928	0.71	2533294	86.29	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-17-b@2
Data File Name	051SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:00:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.486	3.486	3.06	11945	0.03	10000	
B	11	45	2	NoGas	-6.419	-6.419	-2.39	55851	-0.01	300	
Na	23	45	1	He	178.284	178.284	0.99	291180	0.06	500000	
Mg	24	45	1	He	13238.574	13238.574	1.64	9521587	0.14	500000	
Al	27	45	1	He	60898.097	60898.097	1.55	23571865	0.26	200000	
K	39	45	1	He	4923.248	4923.248	2.57	3150017	0.16	500000	
Ca	44	45	1	He	4915.931	4915.931	0.95	168628	2.92	500000	
Ti	47	45	1	He	415.843	415.843	0.64	80185	0.52	2500	
V	51	45	1	He	116.658	116.658	1.35	568074	0.02	10000	
Cr	52	45	1	He	91.612	91.612	0.83	537546	0.02	10000	
Mn	55	45	1	He	4114.464	4114.464	1.24	18959291	0.02	10000	
Fe	56	45	1	He	169675.180	169675.180	0.38	953539198	0.02	200000	
Co	59	103	1	He	54.549	54.549	0.73	468770	0.01	10000	
Ni	60	103	1	He	104.171	104.171	0.90	221614	0.05	10000	
Cu	63	103	1	He	95.536	95.536	0.34	534199	0.02	10000	
Zn	66	103	1	He	298.373	298.373	1.13	335931	0.09	10000	
As	75	103	1	He	68.999	68.999	0.43	48247	0.14	10000	
Se	78	103	1	He	6.085	6.085	1.15	477	1.27	10000	
Sr	88	103	1	He	38.991	38.991	0.64	218673	0.02	10000	
Mo	95	103	1	He	8.772	8.772	2.15	23479	0.04	2000	
Ag	107	103	1	He	0.206	0.206	3.31	1935	0.01	300	
Cd	111	103	1	He	0.923	0.923	0.16	2340	0.04	4000	
Sn	118	115	1	He	17.327	17.327	0.50	66549	0.03	2000	
Sb	123	115	1	He	0.712	0.712	3.74	2632	0.03	300	
Ba	137	115	1	He	484.662	484.662	0.60	835550	0.06	10000	
W	182	209	1	He	0.375	0.375	19.69	7439	0.01	2500	
Tl	205	209	1	He	0.916	0.916	1.71	26726	0.00	5000	
Pb	208	209	1	He	84.431	84.431	1.27	3212154	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1075346	0.43	1389655	77.38	30	120	
Sc	45	1	He	537988	0.51	628609	85.58	30	120	
Sc	45	2	NoGas	4221759	0.31	4813296	87.71	30	120	
Rh	103	1	He	1588551	0.83	1894469	83.85	30	120	
In	115	1	He	883418	0.48	1086371	81.32	30	120	
Tb	159	1	He	3030634	0.85	3251379	93.21	30	120	
Ho	165	1	He	3078157	0.69	3312124	92.94	30	120	
Bi	209	1	He	2196364	1.57	2533294	86.70	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-18-b@2
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:04:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.105	3.105	2.56	10255	0.03	10000	
B	11	45	2	NoGas	-10.100	-10.100	-4.66	45256	-0.02	300	
Na	23	45	1	He	179.629	179.629	1.31	285159	0.06	500000	
Mg	24	45	1	He	14130.387	14130.387	1.34	9894479	0.14	500000	
Al	27	45	1	He	57402.799	57402.799	1.14	21633154	0.27	200000	
K	39	45	1	He	4207.218	4207.218	1.54	2624979	0.16	500000	
Ca	44	45	1	He	3944.755	3944.755	0.90	131813	2.99	500000	
Ti	47	45	1	He	443.362	443.362	1.02	83234	0.53	2500	
V	51	45	1	He	107.141	107.141	1.32	507943	0.02	10000	
Cr	52	45	1	He	91.157	91.157	1.48	520754	0.02	10000	
Mn	55	45	1	He	2563.426	2563.426	1.18	11500544	0.02	10000	
Fe	56	45	1	He	135851.278	135851.278	1.35	743292842	0.02	200000	
Co	59	103	1	He	49.585	49.585	2.13	420540	0.01	10000	
Ni	60	103	1	He	109.988	109.988	2.74	230911	0.05	10000	
Cu	63	103	1	He	94.779	94.779	2.29	523027	0.02	10000	
Zn	66	103	1	He	384.763	384.763	2.60	427255	0.09	10000	
As	75	103	1	He	61.943	61.943	2.22	42755	0.14	10000	
Se	78	103	1	He	4.647	4.647	5.20	366	1.27	10000	
Sr	88	103	1	He	26.631	26.631	2.09	147442	0.02	10000	
Mo	95	103	1	He	7.309	7.309	4.78	19314	0.04	2000	
Ag	107	103	1	He	0.132	0.132	13.27	1236	0.01	300	
Cd	111	103	1	He	0.700	0.700	4.68	1958	0.04	4000	
Sn	118	115	1	He	15.656	15.656	1.06	59415	0.03	2000	
Sb	123	115	1	He	0.562	0.562	4.40	2086	0.03	300	
Ba	137	115	1	He	335.708	335.708	0.99	571069	0.06	10000	
W	182	209	1	He	0.337	0.337	11.14	6928	0.00	2500	
Tl	205	209	1	He	0.885	0.885	1.41	25473	0.00	5000	
Pb	208	209	1	He	70.986	70.986	1.50	2665501	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1034845	1.57	1389655	74.47	30	120	
Sc	45	1	He	523809	0.81	628609	83.33	30	120	
Sc	45	2	NoGas	4106447	1.02	4813296	85.31	30	120	
Rh	103	1	He	1568159	1.79	1894469	82.78	30	120	
In	115	1	He	871696	0.90	1086371	80.24	30	120	
Tb	159	1	He	2964553	2.68	3251379	91.18	30	120	
Ho	165	1	He	3031056	1.60	3312124	91.51	30	120	
Bi	209	1	He	2167672	1.33	2533294	85.57	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-20-b@2
Data File Name	053SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:08:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.070	3.070	5.76	10151	0.03	10000	
B	11	45	2	NoGas	-2.433	-2.433	-16.15	63011	0.00	300	
Na	23	45	1	He	268.464	268.464	0.54	393147	0.07	500000	
Mg	24	45	1	He	17603.751	17603.751	0.21	12277751	0.14	500000	
Al	27	45	1	He	59358.678	59358.678	0.16	22281749	0.27	200000	
K	39	45	1	He	6484.297	6484.297	2.09	4014629	0.16	500000	
Ca	44	45	1	He	7359.390	7359.390	1.29	244635	3.01	500000	
Ti	47	45	1	He	433.516	433.516	0.95	81066	0.53	2500	
V	51	45	1	He	106.298	106.298	0.81	501944	0.02	10000	
Cr	52	45	1	He	100.812	100.812	0.21	573484	0.02	10000	
Mn	55	45	1	He	2623.745	2623.745	1.03	11724383	0.02	10000	
Fe	56	45	1	He	144548.123	144548.123	0.25	787761444	0.02	200000	
Co	59	103	1	He	66.599	66.599	4.40	534397	0.01	10000	
Ni	60	103	1	He	149.123	149.123	4.30	296225	0.05	10000	
Cu	63	103	1	He	108.563	108.563	3.87	566831	0.02	10000	
Zn	66	103	1	He	321.911	321.911	3.90	338407	0.10	10000	
As	75	103	1	He	65.149	65.149	3.79	42548	0.15	10000	
Se	78	103	1	He	5.008	5.008	2.52	372	1.35	10000	
Sr	88	103	1	He	41.415	41.415	4.24	216871	0.02	10000	
Mo	95	103	1	He	6.678	6.678	5.31	16701	0.04	2000	
Ag	107	103	1	He	0.105	0.105	5.52	940	0.01	300	
Cd	111	103	1	He	0.580	0.580	13.39	1675	0.03	4000	
Sn	118	115	1	He	17.032	17.032	3.59	63917	0.03	2000	
Sb	123	115	1	He	0.591	0.591	6.14	2165	0.03	300	
Ba	137	115	1	He	389.568	389.568	0.97	656198	0.06	10000	
W	182	209	1	He	0.230	0.230	6.75	5657	0.00	2500	
Tl	205	209	1	He	0.966	0.966	0.70	27434	0.00	5000	
Pb	208	209	1	He	64.207	64.207	1.08	2378686	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1036629	2.17	1389655	74.60	30	120	
Sc	45	1	He	521707	0.35	628609	82.99	30	120	
Sc	45	2	NoGas	4034222	0.70	4813296	83.81	30	120	
Rh	103	1	He	1484929	3.77	1894469	78.38	30	120	
In	115	1	He	863170	1.04	1086371	79.45	30	120	
Tb	159	1	He	2960437	1.23	3251379	91.05	30	120	
Ho	165	1	He	3008456	0.53	3312124	90.83	30	120	
Bi	209	1	He	2138385	0.49	2533294	84.41	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-21-b@2
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:12:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.617	3.617	2.47	11864	0.03	10000	
B	11	45	2	NoGas	3.596	3.596	17.68	78640	0.00	300	
Na	23	45	1	He	311.290	311.290	1.78	450100	0.07	500000	
Mg	24	45	1	He	18694.106	18694.106	0.36	13165899	0.14	500000	
Al	27	45	1	He	67761.499	67761.499	0.53	25684890	0.26	200000	
K	39	45	1	He	7567.283	7567.283	0.51	4726686	0.16	500000	
Ca	44	45	1	He	9959.241	9959.241	0.56	334188	2.98	500000	
Ti	47	45	1	He	454.862	454.862	0.99	85886	0.53	2500	
V	51	45	1	He	119.242	119.242	0.57	568615	0.02	10000	
Cr	52	45	1	He	123.150	123.150	0.52	707086	0.02	10000	
Mn	55	45	1	He	2786.516	2786.516	1.33	12573660	0.02	10000	
Fe	56	45	1	He	160568.222	160568.222	0.93	883626098	0.02	200000	
Co	59	103	1	He	79.932	79.932	3.34	638657	0.01	10000	
Ni	60	103	1	He	162.201	162.201	3.28	320831	0.05	10000	
Cu	63	103	1	He	133.775	133.775	3.54	695273	0.02	10000	
Zn	66	103	1	He	383.006	383.006	3.05	400731	0.10	10000	
As	75	103	1	He	85.409	85.409	2.87	55517	0.15	10000	
Se	78	103	1	He	8.440	8.440	3.83	605	1.39	10000	
Sr	88	103	1	He	49.826	49.826	2.53	259815	0.02	10000	
Mo	95	103	1	He	8.778	8.778	3.98	21843	0.04	2000	
Ag	107	103	1	He	0.125	0.125	7.73	1104	0.01	300	
Cd	111	103	1	He	0.863	0.863	4.88	2087	0.04	4000	
Sn	118	115	1	He	17.425	17.425	0.47	65128	0.03	2000	
Sb	123	115	1	He	0.799	0.799	5.18	2855	0.03	300	
Ba	137	115	1	He	389.194	389.194	0.91	652986	0.06	10000	
W	182	209	1	He	0.268	0.268	9.67	6116	0.00	2500	
Tl	205	209	1	He	1.024	1.024	3.43	29278	0.00	5000	
Pb	208	209	1	He	81.154	81.154	2.55	3026287	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1029981	0.57	1389655	74.12	30	120	
Sc	45	1	He	526825	0.44	628609	83.81	30	120	
Sc	45	2	NoGas	4088342	0.48	4813296	84.94	30	120	
Rh	103	1	He	1477994	3.03	1894469	78.02	30	120	
In	115	1	He	859745	0.62	1086371	79.14	30	120	
Tb	159	1	He	2998944	0.90	3251379	92.24	30	120	
Ho	165	1	He	3031216	1.56	3312124	91.52	30	120	
Bi	209	1	He	2153140	1.69	2533294	84.99	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-1-b@2
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:15:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.827	3.827	4.04	12364	0.03	10000	
B	11	45	2	NoGas	-1.931	-1.931	-22.81	62182	0.00	300	
Na	23	45	1	He	263.878	263.878	1.59	381006	0.07	500000	
Mg	24	45	1	He	18623.579	18623.579	0.26	12772299	0.15	500000	
Al	27	45	1	He	68816.391	68816.391	1.65	25397475	0.27	200000	
K	39	45	1	He	5982.058	5982.058	2.24	3643499	0.16	500000	
Ca	44	45	1	He	30398.604	30398.604	1.83	992467	3.06	500000	
Ti	47	45	1	He	386.147	386.147	1.87	70993	0.54	2500	
V	51	45	1	He	134.700	134.700	0.88	625470	0.02	10000	
Cr	52	45	1	He	108.323	108.323	1.34	605776	0.02	10000	
Mn	55	45	1	He	4203.884	4203.884	1.15	18470596	0.02	10000	
Fe	56	45	1	He	153444.540	153444.540	1.27	822220838	0.02	200000	
Co	59	103	1	He	59.017	59.017	4.48	474751	0.01	10000	
Ni	60	103	1	He	124.760	124.760	4.20	248468	0.05	10000	
Cu	63	103	1	He	75.585	75.585	4.45	395736	0.02	10000	
Zn	66	103	1	He	333.119	333.119	4.42	351005	0.09	10000	
As	75	103	1	He	68.703	68.703	4.26	44974	0.15	10000	
Se	78	103	1	He	5.731	5.731	4.90	423	1.36	10000	
Sr	88	103	1	He	84.457	84.457	4.22	443254	0.02	10000	
Mo	95	103	1	He	8.306	8.306	5.23	20813	0.04	2000	
Ag	107	103	1	He	0.334	0.334	3.26	2917	0.01	300	
Cd	111	103	1	He	1.099	1.099	5.79	2453	0.04	4000	
Sn	118	115	1	He	16.460	16.460	2.21	61679	0.03	2000	
Sb	123	115	1	He	13.844	13.844	1.32	46839	0.03	300	
Ba	137	115	1	He	432.963	432.963	0.19	727753	0.06	10000	
W	182	209	1	He	0.275	0.275	9.53	6135	0.00	2500	
Tl	205	209	1	He	0.954	0.954	2.33	27021	0.00	5000	
Pb	208	209	1	He	95.263	95.263	1.88	3520178	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1015432	1.09	1389655	73.07	30	120	
Sc	45	1	He	513013	1.38	628609	81.61	30	120	
Sc	45	2	NoGas	3905941	0.68	4813296	81.15	30	120	
Rh	103	1	He	1488699	3.77	1894469	78.58	30	120	
In	115	1	He	861309	0.47	1086371	79.28	30	120	
Tb	159	1	He	2914646	0.88	3251379	89.64	30	120	
Ho	165	1	He	2967600	0.82	3312124	89.60	30	120	
Bi	209	1	He	2133565	1.80	2533294	84.22	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-2-b@2
Data File Name	056SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:19:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.308	3.308	1.72	10744	0.03	10000	
B	11	45	2	NoGas	-12.918	-12.918	-2.88	36685	-0.04	300	
Na	23	45	1	He	130.152	130.152	2.06	219224	0.06	500000	
Mg	24	45	1	He	10267.488	10267.488	0.52	7032822	0.15	500000	
Al	27	45	1	He	61611.046	61611.046	2.15	22707191	0.27	200000	
K	39	45	1	He	3831.182	3831.182	2.68	2340102	0.16	500000	
Ca	44	45	1	He	2193.695	2193.695	1.41	71840	3.05	500000	
Ti	47	45	1	He	366.002	366.002	1.07	67209	0.54	2500	
V	51	45	1	He	131.795	131.795	2.44	611067	0.02	10000	
Cr	52	45	1	He	95.777	95.777	0.99	535098	0.02	10000	
Mn	55	45	1	He	4823.057	4823.057	1.87	21162355	0.02	10000	
Fe	56	45	1	He	128080.028	128080.028	2.27	685336275	0.02	200000	
Co	59	103	1	He	52.953	52.953	5.54	425244	0.01	10000	
Ni	60	103	1	He	102.215	102.215	5.33	203229	0.05	10000	
Cu	63	103	1	He	66.571	66.571	5.19	348051	0.02	10000	
Zn	66	103	1	He	285.506	285.506	5.32	300468	0.10	10000	
As	75	103	1	He	57.536	57.536	5.40	37612	0.15	10000	
Se	78	103	1	He	5.327	5.327	7.11	394	1.35	10000	
Sr	88	103	1	He	23.011	23.011	5.40	120658	0.02	10000	
Mo	95	103	1	He	7.851	7.851	5.93	19643	0.04	2000	
Ag	107	103	1	He	0.253	0.253	3.41	2218	0.01	300	
Cd	111	103	1	He	0.862	0.862	4.48	2097	0.04	4000	
Sn	118	115	1	He	17.526	17.526	1.98	65652	0.03	2000	
Sb	123	115	1	He	3.897	3.897	2.78	13312	0.03	300	
Ba	137	115	1	He	404.337	404.337	0.63	680013	0.06	10000	
W	182	209	1	He	0.270	0.270	11.88	6094	0.00	2500	
Tl	205	209	1	He	0.893	0.893	3.08	25374	0.00	5000	
Pb	208	209	1	He	98.102	98.102	2.06	3634410	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1018360	2.56	1389655	73.28	30	120	
Sc	45	1	He	512352	1.61	628609	81.51	30	120	
Sc	45	2	NoGas	3930556	0.64	4813296	81.66	30	120	
Rh	103	1	He	1487149	4.81	1894469	78.50	30	120	
In	115	1	He	861785	0.90	1086371	79.33	30	120	
Tb	159	1	He	2909634	0.65	3251379	89.49	30	120	
Ho	165	1	He	2977609	0.51	3312124	89.90	30	120	
Bi	209	1	He	2139005	1.55	2533294	84.44	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-3-b@2
Data File Name	057SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:23:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.306	4.306	1.15	13316	0.03	10000	
B	11	45	2	NoGas	-10.551	-10.551	-0.97	41986	-0.03	300	
Na	23	45	1	He	146.648	146.648	0.17	236019	0.06	500000	
Mg	24	45	1	He	12979.442	12979.442	0.37	8774172	0.15	500000	
Al	27	45	1	He	66441.546	66441.546	0.19	24172620	0.27	200000	
K	39	45	1	He	4462.838	4462.838	1.06	2686559	0.17	500000	
Ca	44	45	1	He	1961.135	1961.135	2.61	63425	3.09	500000	
Ti	47	45	1	He	454.074	454.074	0.92	82292	0.55	2500	
V	51	45	1	He	156.285	156.285	0.31	715331	0.02	10000	
Cr	52	45	1	He	114.671	114.671	0.71	632039	0.02	10000	
Mn	55	45	1	He	6637.378	6637.378	0.38	28746578	0.02	10000	
Fe	56	45	1	He	164618.099	164618.099	0.73	869530792	0.02	200000	
Co	59	103	1	He	74.774	74.774	4.04	585944	0.01	10000	
Ni	60	103	1	He	141.304	141.304	4.19	274099	0.05	10000	
Cu	63	103	1	He	81.255	81.255	3.88	414397	0.02	10000	
Zn	66	103	1	He	345.689	345.689	5.10	354675	0.10	10000	
As	75	103	1	He	71.103	71.103	4.51	45329	0.16	10000	
Se	78	103	1	He	6.337	6.337	6.62	452	1.40	10000	
Sr	88	103	1	He	29.502	29.502	4.27	150896	0.02	10000	
Mo	95	103	1	He	9.874	9.874	3.64	24095	0.04	2000	
Ag	107	103	1	He	0.268	0.268	4.01	2292	0.01	300	
Cd	111	103	1	He	1.049	1.049	18.24	2310	0.05	4000	
Sn	118	115	1	He	17.369	17.369	1.30	63824	0.03	2000	
Sb	123	115	1	He	1.033	1.033	4.52	3582	0.03	300	
Ba	137	115	1	He	566.262	566.262	0.41	934009	0.06	10000	
W	182	209	1	He	0.273	0.273	1.62	6109	0.00	2500	
Tl	205	209	1	He	0.988	0.988	2.66	27956	0.00	5000	
Pb	208	209	1	He	101.513	101.513	2.46	3744852	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	973024	1.33	1389655	70.02	30	120	
Sc	45	1	He	505651	0.33	628609	80.44	30	120	
Sc	45	2	NoGas	3904928	0.77	4813296	81.13	30	120	
Rh	103	1	He	1450312	4.52	1894469	76.56	30	120	
In	115	1	He	845211	0.32	1086371	77.80	30	120	
Tb	159	1	He	2907351	0.37	3251379	89.42	30	120	
Ho	165	1	He	2939418	1.00	3312124	88.75	30	120	
Bi	209	1	He	2130249	2.10	2533294	84.09	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-4-b@2
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:27:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.094	3.094	4.42	9614	0.03	10000	
B	11	45	2	NoGas	-14.857	-14.857	-1.50	31739	-0.05	300	
Na	23	45	1	He	138.664	138.664	1.80	223548	0.06	500000	
Mg	24	45	1	He	11262.698	11262.698	2.11	7513423	0.15	500000	
Al	27	45	1	He	71230.499	71230.499	1.49	25575543	0.28	200000	
K	39	45	1	He	3428.024	3428.024	1.46	2043022	0.17	500000	
Ca	44	45	1	He	2381.571	2381.571	3.25	75929	3.14	500000	
Ti	47	45	1	He	404.755	404.755	0.83	72402	0.56	2500	
V	51	45	1	He	153.330	153.330	0.80	692662	0.02	10000	
Cr	52	45	1	He	101.791	101.791	1.55	553851	0.02	10000	
Mn	55	45	1	He	4185.070	4185.070	1.90	17887292	0.02	10000	
Fe	56	45	1	He	140024.261	140024.261	1.66	729902887	0.02	200000	
Co	59	103	1	He	55.819	55.819	3.73	437431	0.01	10000	
Ni	60	103	1	He	97.393	97.393	3.31	188969	0.05	10000	
Cu	63	103	1	He	56.637	56.637	2.86	289053	0.02	10000	
Zn	66	103	1	He	374.899	374.899	3.47	384736	0.10	10000	
As	75	103	1	He	59.969	59.969	3.70	38251	0.16	10000	
Se	78	103	1	He	5.485	5.485	5.15	395	1.39	10000	
Sr	88	103	1	He	22.150	22.150	3.80	113337	0.02	10000	
Mo	95	103	1	He	9.502	9.502	4.15	23184	0.04	2000	
Ag	107	103	1	He	0.255	0.255	4.71	2179	0.01	300	
Cd	111	103	1	He	1.029	1.029	12.14	2286	0.05	4000	
Sn	118	115	1	He	17.712	17.712	2.82	65504	0.03	2000	
Sb	123	115	1	He	0.809	0.809	2.66	2858	0.03	300	
Ba	137	115	1	He	373.837	373.837	0.33	620807	0.06	10000	
W	182	209	1	He	0.261	0.261	18.28	5931	0.00	2500	
Tl	205	209	1	He	1.012	1.012	2.37	28405	0.00	5000	
Pb	208	209	1	He	111.061	111.061	1.68	4066842	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	973756	1.76	1389655	70.07	30	120	
Sc	45	1	He	499109	1.85	628609	79.40	30	120	
Sc	45	2	NoGas	3884758	0.85	4813296	80.71	30	120	
Rh	103	1	He	1449921	3.57	1894469	76.53	30	120	
In	115	1	He	850938	0.98	1086371	78.33	30	120	
Tb	159	1	He	2874093	1.03	3251379	88.40	30	120	
Ho	165	1	He	2947350	0.44	3312124	88.99	30	120	
Bi	209	1	He	2114343	2.18	2533294	83.46	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-5-b@2
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:30:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.213	3.213	1.07	9903	0.03	10000	
B	11	45	2	NoGas	-10.149	-10.149	-5.49	41258	-0.02	300	
Na	23	45	1	He	140.117	140.117	2.94	219750	0.06	500000	
Mg	24	45	1	He	10234.580	10234.580	1.11	6661715	0.15	500000	
Al	27	45	1	He	62779.145	62779.145	1.02	21991102	0.29	200000	
K	39	45	1	He	3700.021	3700.021	1.07	2148922	0.17	500000	
Ca	44	45	1	He	5246.958	5246.958	1.01	162858	3.22	500000	
Ti	47	45	1	He	501.382	501.382	0.49	87492	0.57	2500	
V	51	45	1	He	135.099	135.099	0.41	595386	0.02	10000	
Cr	52	45	1	He	96.382	96.382	0.59	511734	0.02	10000	
Mn	55	45	1	He	7068.615	7068.615	1.17	29476969	0.02	10000	
Fe	56	45	1	He	118757.529	118757.529	0.64	603986109	0.02	200000	
Co	59	103	1	He	56.335	56.335	0.23	429011	0.01	10000	
Ni	60	103	1	He	100.887	100.887	0.66	190202	0.05	10000	
Cu	63	103	1	He	55.231	55.231	0.76	273877	0.02	10000	
Zn	66	103	1	He	310.207	310.207	0.34	309484	0.10	10000	
As	75	103	1	He	52.567	52.567	0.91	32592	0.16	10000	
Se	78	103	1	He	5.807	5.807	6.54	405	1.43	10000	
Sr	88	103	1	He	34.027	34.027	0.51	169125	0.02	10000	
Mo	95	103	1	He	9.198	9.198	1.70	21813	0.04	2000	
Ag	107	103	1	He	0.293	0.293	4.61	2427	0.01	300	
Cd	111	103	1	He	1.276	1.276	4.68	2572	0.05	4000	
Sn	118	115	1	He	18.212	18.212	1.52	66456	0.03	2000	
Sb	123	115	1	He	1.157	1.157	2.32	3965	0.03	300	
Ba	137	115	1	He	494.827	494.827	0.90	811079	0.06	10000	
W	182	209	1	He	0.391	0.391	8.76	7361	0.01	2500	
Tl	205	209	1	He	0.969	0.969	2.44	27273	0.00	5000	
Pb	208	209	1	He	106.122	106.122	0.70	3895669	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	965943	0.58	1389655	69.51	30	120	
Sc	45	1	He	486870	0.63	628609	77.45	30	120	
Sc	45	2	NoGas	3752621	0.94	4813296	77.96	30	120	
Rh	103	1	He	1407738	0.17	1894469	74.31	30	120	
In	115	1	He	839955	0.75	1086371	77.32	30	120	
Tb	159	1	He	2848263	1.01	3251379	87.60	30	120	
Ho	165	1	He	2897974	1.70	3312124	87.50	30	120	
Bi	209	1	He	2119254	1.68	2533294	83.66	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	060_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:34:40-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.849	0.066	147789	1.37	50	93.7	89.5	110.5	
B	11	45	2	NoGas	29.166	3.598	129497	1.13	50	58.3	89.5	110.5	CCV Failed
Na	23	45	1	He	25038.347	0.673	29263534	1.17	25000	100.2	89.5	110.5	
Mg	24	45	1	He	24921.089	1.766	16501660	0.49	25000	99.7	89.5	110.5	
Al	27	45	1	He	250.327	0.559	90273	0.92	250	100.1	89.5	110.5	
K	39	45	1	He	25161.178	2.365	14714455	1.07	25000	100.6	89.5	110.5	
Ca	44	45	1	He	24642.087	1.159	777009	0.35	25000	98.6	89.5	110.5	
Ti	47	45	1	He	52.556	4.981	9349	5.23	50	105.1	89.5	110.5	
V	51	45	1	He	51.185	1.551	229433	0.35	50	102.4	89.5	110.5	
Cr	52	45	1	He	50.992	0.937	276123	0.58	50	102.0	89.5	110.5	
Mn	55	45	1	He	248.396	0.412	1054322	0.97	250	99.4	89.5	110.5	
Fe	56	45	1	He	12930.465	1.583	66908755	0.36	12500	103.4	89.5	110.5	
Co	59	103	1	He	47.202	1.659	397042	0.56	50	94.4	89.5	110.5	
Ni	60	103	1	He	46.805	1.188	97481	0.46	50	93.6	89.5	110.5	
Cu	63	103	1	He	47.418	2.403	259765	1.06	50	94.8	89.5	110.5	
Zn	66	103	1	He	47.721	1.066	53372	0.54	50	95.4	89.5	110.5	
As	75	103	1	He	47.793	1.410	32737	0.56	50	95.6	89.5	110.5	
Se	78	103	1	He	47.273	0.894	3439	1.74	50	94.5	89.5	110.5	
Sr	88	103	1	He	47.584	1.706	261169	0.51	50	95.2	89.5	110.5	
Mo	95	103	1	He	50.244	0.556	131323	1.78	50	100.5	89.5	110.5	
Ag	107	103	1	He	50.389	1.555	454343	0.41	50	100.8	89.5	110.5	
Cd	111	103	1	He	50.268	1.072	79406	0.38	50	100.5	89.5	110.5	
Sn	118	115	1	He	49.843	1.007	188705	0.33	50	99.7	89.5	110.5	
Sb	123	115	1	He	51.661	0.751	177861	0.68	50	103.3	89.5	110.5	
Ba	137	115	1	He	50.388	2.971	86450	2.04	50	100.8	89.5	110.5	
W	182	209	1	He	48.761	1.138	551860	0.25	50	97.5	89.5	110.5	
Tl	205	209	1	He	45.659	1.477	1328720	0.53	50	91.3	89.5	110.5	
Pb	208	209	1	He	47.138	2.388	1792558	1.25	50	94.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1002646	1.31	1389655	72.15	30	120	
Sc	45	1	He	495397	1.35	628609	78.81	30	120	
Sc	45	2	NoGas	3746703	0.84	4813296	77.84	30	120	
Rh	103	1	He	1555122	1.37	1894469	82.09	30	120	
In	115	1	He	878784	0.94	1086371	80.89	30	120	
Tb	159	1	He	2906138	0.57	3251379	89.38	30	120	
Ho	165	1	He	2981530	0.75	3312124	90.02	30	120	
Bi	209	1	He	2195087	1.37	2533294	86.65	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	061_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:38:29-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.033	42.9	252	17.8	1	
B	11	45	2	NoGas	-23.701	-1.3	10737	5.8	20	
Na	23	45	1	He	-5.293	-18.8	52178	1.4	400	
Mg	24	45	1	He	2.512	34.0	2641	19.6	1000	
Al	27	45	1	He	4.909	0.7	2709	1.4	50	
K	39	45	1	He	4.925	54.8	28137	4.1	1000	
Ca	44	45	1	He	11.993	23.0	677	11.3	1000	
Ti	47	45	1	He	0.106	65.8	37	31.5	20	
V	51	45	1	He	0.107	50.6	369	63.1	2	
Cr	52	45	1	He	0.040	61.8	1568	8.9	2	
Mn	55	45	1	He	1.100	5.4	4870	4.4	2	
Fe	56	45	1	He	36.710	14.3	187165	12.9	50	
Co	59	103	1	He	0.014	9.3	142	9.5	1	
Ni	60	103	1	He	0.031	32.3	93	23.4	2	
Cu	63	103	1	He	0.034	24.7	737	5.2	2	
Zn	66	103	1	He	0.310	8.4	1347	3.5	20	
As	75	103	1	He	0.076	19.9	140	8.6	2	
Se	78	103	1	He	0.089	50.3	37	8.9	2	
Sr	88	103	1	He	0.013	63.3	229	20.7	10	
Mo	95	103	1	He	0.912	23.3	2615	24.1	2	
Ag	107	103	1	He	0.002	126.8	60	45.5	0.2	
Cd	111	103	1	He	-0.060	-70.4	800	7.8	0.2	
Sn	118	115	1	He	0.233	17.9	1845	8.5	10	
Sb	123	115	1	He	0.582	20.2	2234	18.3	1	
Ba	137	115	1	He	0.024	44.5	102	18.8	5	
W	182	209	1	He	0.936	14.8	13881	11.2	10	
Tl	205	209	1	He	0.045	12.5	1387	12.1	0.5	
Pb	208	209	1	He	0.047	1.9	2627	1.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	981820	1.19	1389655	70.65	30	120	
Sc	45	1	He	478655	1.40	628609	76.15	30	120	
Sc	45	2	NoGas	3744986	0.91	4813296	77.81	30	120	
Rh	103	1	He	1653917	1.38	1894469	87.30	30	120	
In	115	1	He	904599	0.31	1086371	83.27	30	120	
Tb	159	1	He	2898817	0.70	3251379	89.16	30	120	
Ho	165	1	He	2983822	0.73	3312124	90.09	30	120	
Bi	209	1	He	2215619	0.97	2533294	87.46	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-6-b@2
Data File Name	062SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:42:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.955	2.955	3.53	8884	0.03	10000	
B	11	45	2	NoGas	-9.943	-9.943	-3.92	41299	-0.02	300	
Na	23	45	1	He	150.515	150.515	4.82	237596	0.06	500000	
Mg	24	45	1	He	10083.077	10083.077	4.92	6727343	0.15	500000	
Al	27	45	1	He	55513.616	55513.616	4.74	19933516	0.28	200000	
K	39	45	1	He	3428.824	3428.824	4.76	2043296	0.17	500000	
Ca	44	45	1	He	10237.977	10237.977	3.63	325548	3.14	500000	
Ti	47	45	1	He	403.207	403.207	3.45	72154	0.56	2500	
V	51	45	1	He	118.420	118.420	4.34	535010	0.02	10000	
Cr	52	45	1	He	89.749	89.749	4.34	488602	0.02	10000	
Mn	55	45	1	He	3172.880	3172.880	4.84	13563369	0.02	10000	
Fe	56	45	1	He	102858.705	102858.705	4.79	536213739	0.02	200000	
Co	59	103	1	He	43.826	43.826	0.34	330956	0.01	10000	
Ni	60	103	1	He	102.843	102.843	0.78	192259	0.05	10000	
Cu	63	103	1	He	69.333	69.333	0.58	340794	0.02	10000	
Zn	66	103	1	He	350.995	350.995	0.48	347125	0.10	10000	
As	75	103	1	He	49.090	49.090	0.92	30185	0.16	10000	
Se	78	103	1	He	4.630	4.630	2.47	325	1.42	10000	
Sr	88	103	1	He	67.907	67.907	0.69	334551	0.02	10000	
Mo	95	103	1	He	8.117	8.117	2.47	19095	0.04	2000	
Ag	107	103	1	He	0.247	0.247	3.22	2030	0.01	300	
Cd	111	103	1	He	1.101	1.101	0.97	2305	0.05	4000	
Sn	118	115	1	He	25.056	25.056	1.39	91501	0.03	2000	
Sb	123	115	1	He	2.001	2.001	2.09	6768	0.03	300	
Ba	137	115	1	He	551.294	551.294	0.50	907471	0.06	10000	
W	182	209	1	He	0.662	0.662	4.53	10244	0.01	2500	
Tl	205	209	1	He	0.846	0.846	2.07	23686	0.00	5000	
Pb	208	209	1	He	117.063	117.063	1.05	4272433	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	941270	0.94	1389655	67.73	30	120	
Sc	45	1	He	499834	4.95	628609	79.51	30	120	
Sc	45	2	NoGas	3715626	1.31	4813296	77.20	30	120	
Rh	103	1	He	1395923	0.39	1894469	73.68	30	120	
In	115	1	He	843496	0.73	1086371	77.64	30	120	
Tb	159	1	He	2806143	0.42	3251379	86.31	30	120	
Ho	165	1	He	2844404	2.03	3312124	85.88	30	120	
Bi	209	1	He	2107075	1.38	2533294	83.18	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-7-b@2
Data File Name	063SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:46:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.192	3.192	7.91	9599	0.03	10000	
B	11	45	2	NoGas	-8.787	-8.787	-2.14	45538	-0.02	300	
Na	23	45	1	He	188.313	188.313	1.46	281756	0.07	500000	
Mg	24	45	1	He	10860.366	10860.366	0.54	7242969	0.15	500000	
Al	27	45	1	He	44725.909	44725.909	1.39	16052414	0.28	200000	
K	39	45	1	He	5847.764	5847.764	0.68	3464557	0.17	500000	
Ca	44	45	1	He	2007.012	2007.012	0.58	64027	3.13	500000	
Ti	47	45	1	He	340.002	340.002	1.45	60790	0.56	2500	
V	51	45	1	He	82.750	82.750	1.07	373587	0.02	10000	
Cr	52	45	1	He	133.389	133.389	1.03	725051	0.02	10000	
Mn	55	45	1	He	1532.871	1532.871	0.51	6549525	0.02	10000	
Fe	56	45	1	He	120516.951	120516.951	0.76	627998091	0.02	200000	
Co	59	103	1	He	46.601	46.601	1.33	346367	0.01	10000	
Ni	60	103	1	He	141.885	141.885	1.02	261061	0.05	10000	
Cu	63	103	1	He	87.851	87.851	0.51	424917	0.02	10000	
Zn	66	103	1	He	216.482	216.482	0.44	211042	0.10	10000	
As	75	103	1	He	52.927	52.927	1.10	32026	0.17	10000	
Se	78	103	1	He	5.487	5.487	5.06	375	1.46	10000	
Sr	88	103	1	He	24.421	24.421	0.39	118507	0.02	10000	
Mo	95	103	1	He	4.631	4.631	2.69	10753	0.04	2000	
Ag	107	103	1	He	0.161	0.161	8.79	1315	0.01	300	
Cd	111	103	1	He	0.585	0.585	10.14	1556	0.04	4000	
Sn	118	115	1	He	16.803	16.803	0.21	60092	0.03	2000	
Sb	123	115	1	He	0.582	0.582	7.08	2032	0.03	300	
Ba	137	115	1	He	254.079	254.079	0.53	407725	0.06	10000	
W	182	209	1	He	0.293	0.293	19.09	6135	0.00	2500	
Tl	205	209	1	He	0.702	0.702	2.04	19255	0.00	5000	
Pb	208	209	1	He	74.261	74.261	1.25	2656282	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	943069	1.06	1389655	67.86	30	120	
Sc	45	1	He	498828	0.65	628609	79.35	30	120	
Sc	45	2	NoGas	3855832	0.54	4813296	80.11	30	120	
Rh	103	1	He	1373987	0.82	1894469	72.53	30	120	
In	115	1	He	822242	0.25	1086371	75.69	30	120	
Tb	159	1	He	2835787	0.09	3251379	87.22	30	120	
Ho	165	1	He	2877671	0.77	3312124	86.88	30	120	
Bi	209	1	He	2064868	1.11	2533294	81.51	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-8-b@2
Data File Name	064SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:49:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.331	3.331	4.70	10155	0.03	10000	
B	11	45	2	NoGas	-5.812	-5.812	-7.69	51888	-0.01	300	
Na	23	45	1	He	172.622	172.622	1.28	258980	0.07	500000	
Mg	24	45	1	He	12683.024	12683.024	0.82	8318202	0.15	500000	
Al	27	45	1	He	74466.028	74466.028	1.09	26284836	0.28	200000	
K	39	45	1	He	6215.257	6215.257	1.73	3619536	0.17	500000	
Ca	44	45	1	He	1309.341	1309.341	0.93	41190	3.18	500000	
Ti	47	45	1	He	391.931	391.931	0.80	68916	0.57	2500	
V	51	45	1	He	130.205	130.205	0.55	578195	0.02	10000	
Cr	52	45	1	He	107.806	107.806	0.50	576588	0.02	10000	
Mn	55	45	1	He	764.223	764.223	1.39	3211427	0.02	10000	
Fe	56	45	1	He	146660.908	146660.908	0.56	751593943	0.02	200000	
Co	59	103	1	He	40.878	40.878	0.48	301193	0.01	10000	
Ni	60	103	1	He	96.817	96.817	0.50	176601	0.05	10000	
Cu	63	103	1	He	98.760	98.760	0.22	473468	0.02	10000	
Zn	66	103	1	He	256.023	256.023	0.93	247273	0.10	10000	
As	75	103	1	He	69.068	69.068	0.62	41410	0.17	10000	
Se	78	103	1	He	6.380	6.380	5.14	428	1.49	10000	
Sr	88	103	1	He	21.948	21.948	0.73	105591	0.02	10000	
Mo	95	103	1	He	6.161	6.161	3.54	14157	0.04	2000	
Ag	107	103	1	He	0.216	0.216	4.33	1736	0.01	300	
Cd	111	103	1	He	0.732	0.732	4.31	1744	0.04	4000	
Sn	118	115	1	He	16.800	16.800	1.69	59701	0.03	2000	
Sb	123	115	1	He	0.832	0.832	3.29	2819	0.03	300	
Ba	137	115	1	He	316.674	316.674	0.88	504939	0.06	10000	
W	182	209	1	He	0.219	0.219	3.51	5334	0.00	2500	
Tl	205	209	1	He	0.952	0.952	0.86	26040	0.00	5000	
Pb	208	209	1	He	66.204	66.204	1.04	2363007	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	956259	0.79	1389655	68.81	30	120	
Sc	45	1	He	490595	0.82	628609	78.04	30	120	
Sc	45	2	NoGas	3817661	1.56	4813296	79.31	30	120	
Rh	103	1	He	1362022	0.13	1894469	71.89	30	120	
In	115	1	He	817042	0.51	1086371	75.21	30	120	
Tb	159	1	He	2803415	0.90	3251379	86.22	30	120	
Ho	165	1	He	2851044	0.66	3312124	86.08	30	120	
Bi	209	1	He	2060257	0.60	2533294	81.33	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV -1945747
Data File Name	065_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:53:47-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.427	2.108	143257	1.47	50	94.9	89.5	110.5	
B	11	45	2	NoGas	27.693	1.273	123357	1.85	50	55.4	89.5	110.5	CCV Failed
Na	23	45	1	He	25056.436	2.743	28327286	1.47	25000	100.2	89.5	110.5	
Mg	24	45	1	He	24950.694	1.210	15985325	0.31	25000	99.8	89.5	110.5	
Al	27	45	1	He	252.406	0.437	88064	1.70	250	101.0	89.5	110.5	
K	39	45	1	He	25164.505	0.610	14241545	1.67	25000	100.7	89.5	110.5	
Ca	44	45	1	He	24756.544	0.818	755288	0.82	25000	99.0	89.5	110.5	
Ti	47	45	1	He	52.772	2.178	9083	3.27	50	105.5	89.5	110.5	
V	51	45	1	He	50.894	2.366	220699	1.09	50	101.8	89.5	110.5	
Cr	52	45	1	He	51.355	0.975	269039	0.34	50	102.7	89.5	110.5	
Mn	55	45	1	He	248.516	1.052	1020503	0.37	250	99.4	89.5	110.5	
Fe	56	45	1	He	12999.790	0.848	65086500	0.61	12500	104.0	89.5	110.5	
Co	59	103	1	He	49.913	0.875	383169	0.57	50	99.8	89.5	110.5	
Ni	60	103	1	He	49.796	0.824	94646	0.50	50	99.6	89.5	110.5	
Cu	63	103	1	He	50.299	0.200	251475	0.52	50	100.6	89.5	110.5	
Zn	66	103	1	He	50.595	1.882	51589	1.48	50	101.2	89.5	110.5	
As	75	103	1	He	51.051	0.988	31909	0.81	50	102.1	89.5	110.5	
Se	78	103	1	He	51.499	1.159	3416	0.77	50	103.0	89.5	110.5	
Sr	88	103	1	He	50.845	1.069	254685	0.62	50	101.7	89.5	110.5	
Mo	95	103	1	He	53.783	2.276	128265	2.06	50	107.6	89.5	110.5	
Ag	107	103	1	He	53.586	1.072	440969	0.88	50	107.2	89.5	110.5	
Cd	111	103	1	He	53.741	0.426	77421	0.58	50	107.5	89.5	110.5	
Sn	118	115	1	He	49.601	0.838	183580	0.78	50	99.2	89.5	110.5	
Sb	123	115	1	He	51.340	0.442	172787	0.49	50	102.7	89.5	110.5	
Ba	137	115	1	He	50.480	0.644	84674	0.62	50	101.0	89.5	110.5	
W	182	209	1	He	49.236	1.586	535764	1.30	50	98.5	89.5	110.5	
Tl	205	209	1	He	46.056	0.986	1288750	0.74	50	92.1	89.5	110.5	
Pb	208	209	1	He	47.700	0.992	1744349	0.97	50	95.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	960192	1.06	1389655	69.10	30	120	
Sc	45	1	He	479301	1.30	628609	76.25	30	120	
Sc	45	2	NoGas	3662172	1.42	4813296	76.08	30	120	
Rh	103	1	He	1419117	0.45	1894469	74.91	30	120	
In	115	1	He	859020	0.10	1086371	79.07	30	120	
Tb	159	1	He	2832842	1.47	3251379	87.13	30	120	
Ho	165	1	He	2865572	1.16	3312124	86.52	30	120	
Bi	209	1	He	2110495	0.60	2533294	83.31	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	066_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:57:39-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.016	76.5	200	20.0	1	
B	11	45	2	NoGas	-22.439	-0.3	13572	2.1	20	
Na	23	45	1	He	-8.930	-19.1	47622	3.0	400	
Mg	24	45	1	He	3.194	27.9	3049	17.5	1000	
Al	27	45	1	He	5.499	6.2	2886	5.0	50	
K	39	45	1	He	6.166	19.0	28575	1.4	1000	
Ca	44	45	1	He	12.415	20.4	684	11.5	1000	
Ti	47	45	1	He	0.068	125.9	30	48.4	20	
V	51	45	1	He	0.094	18.8	310	24.2	2	
Cr	52	45	1	He	0.036	42.2	1533	4.6	2	
Mn	55	45	1	He	0.746	6.1	3385	4.5	2	
Fe	56	45	1	He	38.353	10.7	193600	9.5	50	
Co	59	103	1	He	0.013	26.4	132	23.4	1	
Ni	60	103	1	He	0.010	82.6	44	38.5	2	
Cu	63	103	1	He	0.024	61.8	667	12.7	2	
Zn	66	103	1	He	0.357	31.2	1368	8.9	20	
As	75	103	1	He	0.053	24.2	120	7.2	2	
Se	78	103	1	He	0.085	94.6	36	16.6	2	
Sr	88	103	1	He	0.009	23.7	201	6.3	10	
Mo	95	103	1	He	1.018	11.8	2836	11.7	2	
Ag	107	103	1	He	0.004	26.5	77	13.0	0.2	
Cd	111	103	1	He	-0.041	-14.0	814	0.8	0.2	
Sn	118	115	1	He	0.261	32.9	1948	17.0	10	
Sb	123	115	1	He	0.579	19.1	2218	17.6	1	
Ba	137	115	1	He	0.029	28.3	110	13.2	5	
W	182	209	1	He	0.975	15.8	14233	11.1	10	
Tl	205	209	1	He	0.046	15.5	1389	13.9	0.5	
Pb	208	209	1	He	0.045	9.8	2528	5.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	986111	1.11	1389655	70.96	30	120	
Sc	45	1	He	474143	1.02	628609	75.43	30	120	
Sc	45	2	NoGas	3744230	1.16	4813296	77.79	30	120	
Rh	103	1	He	1614439	0.37	1894469	85.22	30	120	
In	115	1	He	902126	0.09	1086371	83.04	30	120	
Tb	159	1	He	2878459	0.58	3251379	88.53	30	120	
Ho	165	1	He	2912652	0.83	3312124	87.94	30	120	
Bi	209	1	He	2203329	1.18	2533294	86.97	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	067CRIA.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:01:29-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.998	0.998	4.925	3304	5.09	1	99.8	69.5	130.5	
B	11	2	NoGas	-2.801	-2.801	-4.472	58188	0.65	20	-14.0	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1073.753	1073.753	1.643	1310869	0.73	1000	107.4	69.5	130.5	
Mg	24	1	He	1066.454	1066.454	0.479	706464	1.51	1000	106.6	69.5	130.5	
Al	27	1	He	51.674	51.674	1.917	19450	2.63	50	103.3	69.5	130.5	
K	39	1	He	1056.929	1056.929	1.628	642536	0.45	1000	105.7	69.5	130.5	
Ca	44	1	He	1045.241	1045.241	2.457	33232	2.87	1000	104.5	69.5	130.5	
Ti	47	1	He	11.265	11.265	4.414	2016	2.72	10	112.7	69.5	130.5	
V	51	1	He	5.341	5.341	2.065	23832	3.31	5	106.8	69.5	130.5	
Cr	52	1	He	2.206	2.206	1.188	13277	1.43	2	110.3	69.5	130.5	
Mn	55	1	He	5.705	5.705	2.774	24546	1.95	5	114.1	69.5	130.5	
Fe	56	1	He	120.911	120.911	1.264	628848	0.90	100	120.9	69.5	130.5	
Co	59	1	He	0.982	0.982	3.463	8660	1.97	1	98.2	69.5	130.5	
Ni	60	1	He	1.944	1.944	2.116	4261	0.92	2	97.2	69.5	130.5	
Cu	63	1	He	1.991	1.991	3.769	11931	2.13	2	99.6	69.5	130.5	
Zn	66	1	He	19.884	19.884	2.521	23847	1.22	20	99.4	69.5	130.5	
As	75	1	He	4.903	4.903	3.139	3590	1.57	5	98.1	69.5	130.5	
Se	78	1	He	5.049	5.049	6.132	411	5.77	5	101.0	69.5	130.5	
Sr	88	1	He	9.581	9.581	2.007	55176	0.51	10	95.8	69.5	130.5	
Mo	95	1	He	10.474	10.474	0.668	28721	1.63	10	104.7	69.5	130.5	
Ag	107	1	He	1.038	1.038	2.381	9843	3.60	1	103.8	69.5	130.5	
Cd	111	1	He	1.026	1.026	5.865	2565	2.42	1	102.6	69.5	130.5	
Sn	118	1	He	10.183	10.183	3.567	40597	3.18	10	101.8	69.5	130.5	
Sb	123	1	He	2.181	2.181	5.558	7929	5.29	2	109.1	69.5	130.5	
Ba	137	1	He	5.087	5.087	0.077	9076	0.39	5	101.7	69.5	130.5	
W	182	1	He	9.692	9.692	1.202	114219	0.38	10	96.9	69.5	130.5	
Tl	205	1	He	1.894	1.894	1.667	56131	1.11	2	94.7	69.5	130.5	
Pb	208	1	He	1.058	1.058	1.413	41750	0.96	1	105.8	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1004346	0.41	1389655	72.27	30	120	
Sc	45	1	He	494843	1.96	628609	78.72	30	120	
Sc	45	2	NoGas	3778648	0.18	4813296	78.50	30	120	
Rh	103	1	He	1628249	1.51	1894469	85.95	30	120	
In	115	1	He	908231	0.34	1086371	83.60	30	120	
Tb	159	1	He	2891676	1.09	3251379	88.94	30	120	
Ho	165	1	He	2969822	0.20	3312124	89.67	30	120	
Bi	209	1	He	2232967	0.80	2533294	88.14	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177128/1-a@2
Data File Name	068_Blk.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:05:18-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.023	150.0	215	49.7	1	
B	11	45	2	NoGas	-22.714	-0.5	12123	0.9	20	
Na	23	45	1	He	19.124	4.2	78631	0.9	400	
Mg	24	45	1	He	30.627	1.5	20360	2.7	1000	
Al	27	45	1	He	2.665	7.5	1910	3.1	50	
K	39	45	1	He	21.083	11.6	36757	2.5	1000	
Ca	44	45	1	He	98.493	5.3	3266	3.2	1000	
Ti	47	45	1	He	0.240	25.6	59	17.3	20	
V	51	45	1	He	0.236	31.3	917	34.1	2	
Cr	52	45	1	He	0.817	4.8	5536	1.8	2	
Mn	55	45	1	He	0.789	7.5	3543	5.0	2	
Fe	56	45	1	He	29.667	4.7	150201	6.4	50	
Co	59	103	1	He	0.016	19.7	139	18.0	1	
Ni	60	103	1	He	0.157	7.4	322	6.9	2	
Cu	63	103	1	He	1.540	25.7	8254	24.4	2	
Zn	66	103	1	He	3.060	1.9	3963	1.8	20	
As	75	103	1	He	0.158	13.7	173	7.5	2	
Se	78	103	1	He	0.139	20.6	35	5.1	2	
Sr	88	103	1	He	0.238	6.6	1340	6.3	10	
Mo	95	103	1	He	0.429	25.0	1100	23.6	2	
Ag	107	103	1	He	0.003	118.7	57	48.2	0.2	
Cd	111	103	1	He	0.005	152.1	791	1.5	0.2	
Sn	118	115	1	He	18.578	1.3	68683	1.2	10	Blank Failed
Sb	123	115	1	He	0.237	6.6	953	5.9	1	
Ba	137	115	1	He	0.835	5.1	1442	4.8	5	
W	182	209	1	He	0.483	21.5	8510	12.4	10	
Tl	205	209	1	He	0.032	7.8	954	7.4	0.5	
Pb	208	209	1	He	0.183	2.3	7672	2.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	948619	1.62	1389655	68.26	30	120	
Sc	45	1	He	472279	1.92	628609	75.13	30	120	
Sc	45	2	NoGas	3504707	1.24	4813296	72.81	30	120	
Rh	103	1	He	1436788	0.37	1894469	75.84	30	120	
In	115	1	He	851142	0.44	1086371	78.35	30	120	
Tb	159	1	He	2779597	0.57	3251379	85.49	30	120	
Ho	165	1	He	2823069	0.35	3312124	85.23	30	120	
Bi	209	1	He	2160068	1.32	2533294	85.27	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177128/2-a@2
Data File Name	069LCSS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:09:10-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	484.078	484.078	1.788	1383267	0.51	500	96.8	78.6	110.5	
B	11	2	NoGas	31.261	31.261	2.235	125385	0.91	50	62.5	79.5	120.5	LCSS Failed
Na	23	1	He	4828.166	4828.166	1.591	5312775	0.80	5000	96.6	79.5	120.5	
Mg	24	1	He	4928.950	4928.950	1.463	3047812	0.93	5000	98.6	79.5	120.5	
Al	27	1	He	4750.099	4750.099	2.086	1581230	0.69	5000	95.0	79.5	120.5	
K	39	1	He	4966.359	4966.359	1.643	2731196	0.27	5000	99.3	79.5	120.5	
Ca	44	1	He	4547.686	4547.686	2.274	134104	1.36	5000	91.0	79.5	120.5	
Ti	47	1	He	48.238	48.238	1.590	8011	0.32	50	96.5	79.5	120.5	
V	51	1	He	499.524	499.524	3.285	2090716	1.88	500	99.9	71.5	110.5	
Cr	52	1	He	507.296	507.296	1.827	2552462	0.30	500	101.5	69.5	110.5	
Mn	55	1	He	496.594	496.594	2.239	1967011	0.43	500	99.3	79.5	120.5	
Fe	56	1	He	5079.638	5079.638	1.770	24539655	0.47	5000	101.6	79.5	120.5	
Co	59	1	He	494.185	494.185	0.677	3698618	0.71	500	98.8	73.9	110.5	
Ni	60	1	He	474.292	474.292	0.316	878737	0.53	500	94.9	74.9	110.5	
Cu	63	1	He	503.429	503.429	0.825	2449731	0.30	500	100.7	72.6	110.5	
Zn	66	1	He	456.883	456.883	0.669	447594	0.61	500	91.4	71.5	113.4	
As	75	1	He	440.912	440.912	0.423	268148	0.58	500	88.2	73.4	110.5	
Se	78	1	He	420.952	420.952	0.656	27047	0.68	500	84.2	64.6	110.5	
Sr	88	1	He	514.982	514.982	0.502	2513812	0.22	500	103.0	79.5	120.5	
Mo	95	1	He	54.447	54.447	0.521	126598	0.83	50	108.9	29.5	140.5	
Ag	107	1	He	52.261	52.261	0.519	419290	0.56	50	104.5	59.5	114.5	
Cd	111	1	He	494.543	494.543	0.698	688423	0.76	500	98.9	73.5	110.5	
Sn	118	1	He	562.352	562.352	1.399	1964945	1.10	500	112.5	79.5	120.5	
Sb	123	1	He	49.173	49.173	0.535	156942	0.48	50	98.3	67.5	113.4	
Ba	137	1	He	484.297	484.297	0.568	769905	0.66	500	96.9	69.5	110.5	
W	182	1	He	47.880	47.880	1.333	510685	0.17	50	95.8	74.6	125.4	
Tl	205	1	He	121.550	121.550	0.535	3333360	0.84	125	97.2	70.6	110.5	
Pb	208	1	He	494.075	494.075	1.346	17699137	0.56	500	98.8	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	909339	2.29	1389655	65.44	30	120	
Sc	45	1	He	462504	1.91	628609	73.58	30	120	
Sc	45	2	NoGas	3500262	0.26	4813296	72.72	30	120	
Rh	103	1	He	1383559	0.54	1894469	73.03	30	120	
In	115	1	He	814614	0.33	1086371	74.98	30	120	
Tb	159	1	He	2745227	0.90	3251379	84.43	30	120	
Ho	165	1	He	2817665	0.71	3312124	85.07	30	120	
Bi	209	1	He	2068480	1.33	2533294	81.65	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-d@2
Data File Name	070SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:12:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.579	2.579	1.80	7828	0.03	10000	
B	11	45	2	NoGas	45.279	45.279	3.86	166967	0.03	300	
Na	23	45	1	He	1899.836	1899.836	3.03	2290992	0.08	500000	
Mg	24	45	1	He	11067.031	11067.031	2.45	7378310	0.15	500000	
Al	27	45	1	He	42633.516	42633.516	2.68	15296589	0.28	200000	
K	39	45	1	He	15372.977	15372.977	1.97	9062564	0.17	500000	
Ca	44	45	1	He	104.045	104.045	58.63	3638	2.86	500000	
Ti	47	45	1	He	323.123	323.123	1.56	57767	0.56	2500	
V	51	45	1	He	75.350	75.350	0.84	340169	0.02	10000	
Cr	52	45	1	He	77.411	77.411	2.31	421280	0.02	10000	
Mn	55	45	1	He	10781.740	10781.740	2.24	46054697	0.02	10000	>LDR
Fe	56	45	1	He	100096.597	100096.597	1.61	521490806	0.02	200000	
Co	59	103	1	He	37.995	37.995	0.92	281455	0.01	10000	
Ni	60	103	1	He	97.761	97.761	0.34	179273	0.05	10000	
Cu	63	103	1	He	99.825	99.825	1.00	481133	0.02	10000	
Zn	66	103	1	He	229.625	229.625	1.12	223053	0.10	10000	
As	75	103	1	He	217.730	217.730	0.26	131087	0.17	10000	
Se	78	103	1	He	4.138	4.138	3.10	288	1.44	10000	
Sr	88	103	1	He	1899.420	1899.420	0.93	9176197	0.02	10000	
Mo	95	103	1	He	685.153	685.153	1.45	1575894	0.04	2000	
Ag	107	103	1	He	0.087	0.087	15.34	726	0.01	300	
Cd	111	103	1	He	0.551	0.551	8.03	1504	0.04	4000	
Sn	118	115	1	He	17.310	17.310	1.21	62504	0.03	2000	
Sb	123	115	1	He	0.700	0.700	7.38	2435	0.03	300	
Ba	137	115	1	He	306.709	306.709	0.06	497128	0.06	10000	
W	182	209	1	He	17.599	17.599	0.54	190544	0.01	2500	
Tl	205	209	1	He	0.561	0.561	4.85	15493	0.00	5000	
Pb	208	209	1	He	393.167	393.167	0.16	14151943	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	947844	0.94	1389655	68.21	30	120	
Sc	45	1	He	498870	2.44	628609	79.36	30	120	
Sc	45	2	NoGas	3775956	1.47	4813296	78.45	30	120	
Rh	103	1	He	1369301	0.39	1894469	72.28	30	120	
In	115	1	He	830522	0.45	1086371	76.45	30	120	
Tb	159	1	He	2816256	0.23	3251379	86.62	30	120	
Ho	165	1	He	2886292	0.53	3312124	87.14	30	120	
Bi	209	1	He	2078159	0.06	2533294	82.03	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-3-d@10
Data File Name	071SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:16:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.482	0.482	12.28	1608	0.03	10000	
B	11	45	2	NoGas	-9.306	-9.306	-8.44	42260	-0.02	300	
Na	23	45	1	He	380.468	380.468	1.31	484181	0.08	500000	
Mg	24	45	1	He	2427.171	2427.171	0.83	1545230	0.16	500000	
Al	27	45	1	He	9507.214	9507.214	0.84	3256570	0.29	200000	
K	39	45	1	He	3416.736	3416.736	1.80	1941645	0.18	500000	
Ca	44	45	1	He	-52.487	-52.487	-53.97	-1291	4.07	500000	
Ti	47	45	1	He	70.058	70.058	1.49	11966	0.59	2500	
V	51	45	1	He	16.428	16.428	1.93	70695	0.02	10000	
Cr	52	45	1	He	16.758	16.758	0.95	88096	0.02	10000	
Mn	55	45	1	He	2334.115	2334.115	2.14	9513957	0.02	10000	
Fe	56	45	1	He	21788.426	21788.426	2.22	108312611	0.02	200000	
Co	59	103	1	He	7.609	7.609	0.54	58716	0.01	10000	
Ni	60	103	1	He	19.641	19.641	0.82	37535	0.05	10000	
Cu	63	103	1	He	20.175	20.175	0.55	101654	0.02	10000	
Zn	66	103	1	He	48.427	48.427	1.02	49667	0.10	10000	
As	75	103	1	He	45.126	45.126	0.52	28357	0.16	10000	
Se	78	103	1	He	0.782	0.782	21.04	78	1.01	10000	
Sr	88	103	1	He	389.645	389.645	0.68	1960759	0.02	10000	
Mo	95	103	1	He	124.223	124.223	0.40	297674	0.04	2000	
Ag	107	103	1	He	0.014	0.014	31.43	146	0.01	300	
Cd	111	103	1	He	0.155	0.155	6.97	1000	0.02	4000	
Sn	118	115	1	He	3.340	3.340	3.15	13113	0.03	2000	
Sb	123	115	1	He	0.134	0.134	12.00	611	0.02	300	
Ba	137	115	1	He	61.453	61.453	1.10	102429	0.06	10000	
W	182	209	1	He	3.538	3.538	5.53	42167	0.01	2500	
Tl	205	209	1	He	0.117	0.117	4.02	3384	0.00	5000	
Pb	208	209	1	He	71.915	71.915	1.90	2680837	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	964189	0.43	1389655	69.38	30	120	
Sc	45	1	He	475994	1.96	628609	75.72	30	120	
Sc	45	2	NoGas	3676918	1.88	4813296	76.39	30	120	
Rh	103	1	He	1426264	0.46	1894469	75.29	30	120	
In	115	1	He	853683	0.49	1086371	78.58	30	120	
Tb	159	1	He	2839697	0.37	3251379	87.34	30	120	
Ho	165	1	He	2869723	1.76	3312124	86.64	30	120	
Bi	209	1	He	2152102	1.59	2533294	84.95	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-3-d@2
Data File Name	072SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:20:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	975.122	975.122	1.07	2872670	0.03	10000	
B	11	45	2	NoGas	155.583	155.583	0.58	394951	0.04	300	
Na	23	45	1	He	11640.561	11640.561	1.86	13084623	0.09	500000	
Mg	24	45	1	He	20799.919	20799.919	1.15	13217718	0.16	500000	
Al	27	45	1	He	51935.474	51935.474	0.84	17763462	0.29	200000	
K	39	45	1	He	24973.108	24973.108	2.03	14015193	0.18	500000	
Ca	44	45	1	He	8797.770	8797.770	1.96	266387	3.30	500000	
Ti	47	45	1	He	414.421	414.421	1.92	70604	0.59	2500	
V	51	45	1	He	1066.737	1066.737	1.21	4590459	0.02	10000	
Cr	52	45	1	He	1070.777	1070.777	1.51	5536840	0.02	10000	
Mn	55	45	1	He	11577.302	11577.302	1.14	47136520	0.02	10000	>LDR
Fe	56	45	1	He	109256.558	109256.558	1.68	542488530	0.02	200000	
Co	59	103	1	He	1090.629	1090.629	1.21	7669994	0.01	10000	
Ni	60	103	1	He	1192.502	1192.502	1.33	2075981	0.06	10000	
Cu	63	103	1	He	1180.192	1180.192	1.61	5395921	0.02	10000	
Zn	66	103	1	He	1192.997	1192.997	0.99	1096974	0.11	10000	
As	75	103	1	He	1183.696	1183.696	1.08	676323	0.18	10000	
Se	78	103	1	He	942.801	942.801	1.08	56892	1.66	10000	
Sr	88	103	1	He	2997.837	2997.837	1.01	13750038	0.02	10000	
Mo	95	103	1	He	815.103	815.103	0.73	1780084	0.05	2000	
Ag	107	103	1	He	111.273	111.273	1.16	838830	0.01	300	
Cd	111	103	1	He	1072.133	1072.133	0.80	1401565	0.08	4000	
Sn	118	115	1	He	1201.583	1201.583	1.20	3972367	0.03	2000	
Sb	123	115	1	He	110.647	110.647	1.32	334010	0.03	300	
Ba	137	115	1	He	1516.163	1516.163	2.46	2280594	0.07	10000	
W	182	209	1	He	119.845	119.845	1.46	1231618	0.01	2500	
Tl	205	209	1	He	254.525	254.525	0.63	6749068	0.00	5000	
Pb	208	209	1	He	1429.862	1429.862	0.47	49530034	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	937267	0.98	1389655	67.45	30	120	
Sc	45	1	He	475401	1.52	628609	75.63	30	120	
Sc	45	2	NoGas	3578585	0.61	4813296	74.35	30	120	
Rh	103	1	He	1300103	0.63	1894469	68.63	30	120	
In	115	1	He	770962	1.18	1086371	70.97	30	120	
Tb	159	1	He	2760177	1.07	3251379	84.89	30	120	
Ho	165	1	He	2785899	1.15	3312124	84.11	30	120	
Bi	209	1	He	2000023	0.84	2533294	78.95	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-e du@2
Data File Name	073SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:23:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.403	2.403	7.11	6991	0.03	10000	
B	11	45	2	NoGas	43.928	43.928	1.69	153690	0.03	300	
Na	23	45	1	He	1793.993	1793.993	1.88	1968167	0.09	500000	
Mg	24	45	1	He	10301.995	10301.995	0.72	6239059	0.17	500000	
Al	27	45	1	He	38574.848	38574.848	1.00	12572449	0.31	200000	
K	39	45	1	He	14271.628	14271.628	1.83	7642877	0.19	500000	
Ca	44	45	1	He	294.062	294.062	13.29	8769	3.35	500000	
Ti	47	45	1	He	352.261	352.261	0.79	57196	0.62	2500	
V	51	45	1	He	69.537	69.537	1.03	285061	0.02	10000	
Cr	52	45	1	He	74.123	74.123	1.22	366430	0.02	10000	
Mn	55	45	1	He	5159.864	5159.864	1.46	20018368	0.03	10000	
Fe	56	45	1	He	97297.954	97297.954	1.00	460387519	0.02	200000	
Co	59	103	1	He	35.875	35.875	0.62	252079	0.01	10000	
Ni	60	103	1	He	90.839	90.839	0.17	158014	0.06	10000	
Cu	63	103	1	He	80.242	80.242	0.95	366928	0.02	10000	
Zn	66	103	1	He	195.095	195.095	0.47	179872	0.11	10000	
As	75	103	1	He	202.616	202.616	0.87	115716	0.18	10000	
Se	78	103	1	He	4.189	4.189	14.74	276	1.52	10000	
Sr	88	103	1	He	1389.372	1389.372	0.84	6366673	0.02	10000	
Mo	95	103	1	He	617.231	617.231	0.53	1346686	0.05	2000	
Ag	107	103	1	He	0.082	0.082	10.54	647	0.01	300	
Cd	111	103	1	He	0.614	0.614	9.82	1509	0.04	4000	
Sn	118	115	1	He	20.190	20.190	3.89	68275	0.03	2000	
Sb	123	115	1	He	0.996	0.996	6.73	3187	0.03	300	
Ba	137	115	1	He	274.831	274.831	0.53	418005	0.07	10000	
W	182	209	1	He	20.400	20.400	1.82	209341	0.01	2500	
Tl	205	209	1	He	0.809	0.809	12.71	21237	0.00	5000	
Pb	208	209	1	He	256.224	256.224	0.33	8760531	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	907423	2.40	1389655	65.30	30	120	
Sc	45	1	He	452993	1.08	628609	72.06	30	120	
Sc	45	2	NoGas	3539829	0.18	4813296	73.54	30	120	
Rh	103	1	He	1298868	0.38	1894469	68.56	30	120	
In	115	1	He	779334	0.30	1086371	71.74	30	120	
Tb	159	1	He	2690155	0.76	3251379	82.74	30	120	
Ho	165	1	He	2754614	1.03	3312124	83.17	30	120	
Bi	209	1	He	1973919	0.83	2533294	77.92	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-f ms@2
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:27:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	48.135	48.135	0.40	135800	0.04	10000	
B	11	45	2	NoGas	91.342	91.342	1.53	251636	0.04	300	
Na	23	45	1	He	6233.776	6233.776	1.56	6624175	0.09	500000	
Mg	24	45	1	He	14852.197	14852.197	0.41	8888705	0.17	500000	
Al	27	45	1	He	44219.578	44219.578	1.07	14242643	0.31	200000	
K	39	45	1	He	18190.790	18190.790	0.79	9621203	0.19	500000	
Ca	44	45	1	He	4361.198	4361.198	0.43	124515	3.50	500000	
Ti	47	45	1	He	439.210	439.210	1.40	70467	0.62	2500	
V	51	45	1	He	115.093	115.093	1.01	466334	0.02	10000	
Cr	52	45	1	He	117.111	117.111	1.13	571411	0.02	10000	
Mn	55	45	1	He	9604.956	9604.956	1.51	36825879	0.03	10000	
Fe	56	45	1	He	97684.410	97684.410	1.23	456772746	0.02	200000	
Co	59	103	1	He	80.535	80.535	0.07	554800	0.01	10000	
Ni	60	103	1	He	133.486	133.486	0.95	227644	0.06	10000	
Cu	63	103	1	He	133.933	133.933	0.54	600187	0.02	10000	
Zn	66	103	1	He	240.851	240.851	0.41	217544	0.11	10000	
As	75	103	1	He	235.065	235.065	0.31	131613	0.18	10000	
Se	78	103	1	He	42.970	42.970	1.74	2562	1.68	10000	
Sr	88	103	1	He	2055.593	2055.593	0.21	9235458	0.02	10000	
Mo	95	103	1	He	713.031	713.031	0.48	1525306	0.05	2000	
Ag	107	103	1	He	50.228	50.228	0.24	370918	0.01	300	
Cd	111	103	1	He	49.042	49.042	1.28	63459	0.08	4000	
Sn	118	115	1	He	61.705	61.705	1.97	203351	0.03	2000	
Sb	123	115	1	He	17.061	17.061	1.44	51281	0.03	300	
Ba	137	115	1	He	324.750	324.750	1.03	485241	0.07	10000	
W	182	209	1	He	54.912	54.912	0.85	553228	0.01	2500	
Tl	205	209	1	He	41.695	41.695	0.79	1080815	0.00	5000	
Pb	208	209	1	He	434.146	434.146	0.82	14701284	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	896750	0.89	1389655	64.53	30	120	
Sc	45	1	He	447663	0.88	628609	71.21	30	120	
Sc	45	2	NoGas	3502779	1.26	4813296	72.77	30	120	
Rh	103	1	He	1273474	0.45	1894469	67.22	30	120	
In	115	1	He	765657	0.67	1086371	70.48	30	120	
Tb	159	1	He	2669950	0.93	3251379	82.12	30	120	
Ho	165	1	He	2722368	1.30	3312124	82.19	30	120	
Bi	209	1	He	1955125	0.57	2533294	77.18	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-9-b@2
Data File Name	075SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:31:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.695	3.695	2.66	10789	0.03	10000	
B	11	45	2	NoGas	-7.734	-7.734	-4.61	46106	-0.02	300	
Na	23	45	1	He	186.716	186.716	1.82	266837	0.07	500000	
Mg	24	45	1	He	15244.654	15244.654	2.40	9690807	0.16	500000	
Al	27	45	1	He	65400.635	65400.635	1.70	22377068	0.29	200000	
K	39	45	1	He	5596.714	5596.714	1.47	3162119	0.18	500000	
Ca	44	45	1	He	1839.056	1839.056	0.42	55964	3.29	500000	
Ti	47	45	1	He	407.960	407.960	1.64	69535	0.59	2500	
V	51	45	1	He	117.965	117.965	1.26	507783	0.02	10000	
Cr	52	45	1	He	103.221	103.221	1.48	535200	0.02	10000	
Mn	55	45	1	He	1238.026	1238.026	1.85	5042963	0.02	10000	
Fe	56	45	1	He	144657.630	144657.630	1.19	718620149	0.02	200000	
Co	59	103	1	He	53.862	53.862	0.32	381867	0.01	10000	
Ni	60	103	1	He	125.570	125.570	1.17	220392	0.06	10000	
Cu	63	103	1	He	105.005	105.005	0.59	484354	0.02	10000	
Zn	66	103	1	He	288.001	288.001	0.33	267551	0.11	10000	
As	75	103	1	He	71.830	71.830	0.23	41435	0.17	10000	
Se	78	103	1	He	6.158	6.158	6.79	398	1.55	10000	
Sr	88	103	1	He	27.930	27.930	1.27	129256	0.02	10000	
Mo	95	103	1	He	13.584	13.584	11.76	29959	0.05	2000	
Ag	107	103	1	He	0.151	0.151	8.69	1176	0.01	300	
Cd	111	103	1	He	0.826	0.826	8.21	1801	0.05	4000	
Sn	118	115	1	He	17.009	17.009	2.37	58676	0.03	2000	
Sb	123	115	1	He	0.858	0.858	4.00	2816	0.03	300	
Ba	137	115	1	He	379.917	379.917	0.71	588097	0.06	10000	
W	182	209	1	He	1.085	1.085	10.60	14192	0.01	2500	
Tl	205	209	1	He	1.010	1.010	1.43	27065	0.00	5000	
Pb	208	209	1	He	64.206	64.206	1.11	2245204	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	916964	0.89	1389655	65.99	30	120	
Sc	45	1	He	475620	1.60	628609	75.66	30	120	
Sc	45	2	NoGas	3705745	0.37	4813296	76.99	30	120	
Rh	103	1	He	1310564	0.34	1894469	69.18	30	120	
In	115	1	He	793204	0.33	1086371	73.01	30	120	
Tb	159	1	He	2737535	0.82	3251379	84.20	30	120	
Ho	165	1	He	2803446	1.51	3312124	84.64	30	120	
Bi	209	1	He	2018538	1.24	2533294	79.68	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-10-b@2
Data File Name	076SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:35:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.254	3.254	3.15	9418	0.03	10000	
B	11	45	2	NoGas	-13.347	-13.347	-3.02	32296	-0.04	300	
Na	23	45	1	He	158.513	158.513	0.44	227563	0.07	500000	
Mg	24	45	1	He	10635.735	10635.735	0.97	6540640	0.16	500000	
Al	27	45	1	He	59204.014	59204.014	1.39	19593823	0.30	200000	
K	39	45	1	He	3773.752	3773.752	1.37	2070347	0.18	500000	
Ca	44	45	1	He	1790.015	1790.015	0.15	52694	3.40	500000	
Ti	47	45	1	He	511.805	511.805	1.00	84380	0.61	2500	
V	51	45	1	He	129.318	129.318	1.59	538415	0.02	10000	
Cr	52	45	1	He	89.584	89.584	1.43	449449	0.02	10000	
Mn	55	45	1	He	4082.591	4082.591	0.51	16085615	0.03	10000	
Fe	56	45	1	He	129017.310	129017.310	1.34	619958642	0.02	200000	
Co	59	103	1	He	61.393	61.393	1.41	427766	0.01	10000	
Ni	60	103	1	He	89.269	89.269	0.45	153990	0.06	10000	
Cu	63	103	1	He	68.413	68.413	0.87	310296	0.02	10000	
Zn	66	103	1	He	259.930	259.930	1.21	237397	0.11	10000	
As	75	103	1	He	58.130	58.130	0.93	32969	0.18	10000	
Se	78	103	1	He	5.118	5.118	1.38	329	1.55	10000	
Sr	88	103	1	He	21.776	21.776	1.39	99070	0.02	10000	
Mo	95	103	1	He	9.807	9.807	1.20	21277	0.05	2000	
Ag	107	103	1	He	0.163	0.163	8.26	1250	0.01	300	
Cd	111	103	1	He	0.716	0.716	2.19	1628	0.04	4000	
Sn	118	115	1	He	16.422	16.422	0.62	55707	0.03	2000	
Sb	123	115	1	He	0.755	0.755	3.97	2452	0.03	300	
Ba	137	115	1	He	380.086	380.086	0.50	578305	0.07	10000	
W	182	209	1	He	0.506	0.506	6.52	8025	0.01	2500	
Tl	205	209	1	He	0.919	0.919	1.03	24138	0.00	5000	
Pb	208	209	1	He	74.238	74.238	0.85	2541879	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	907314	1.11	1389655	65.29	30	120	
Sc	45	1	He	460011	1.03	628609	73.18	30	120	
Sc	45	2	NoGas	3557942	1.21	4813296	73.92	30	120	
Rh	103	1	He	1288060	0.38	1894469	67.99	30	120	
In	115	1	He	779644	0.46	1086371	71.77	30	120	
Tb	159	1	He	2656871	0.11	3251379	81.72	30	120	
Ho	165	1	He	2713597	0.25	3312124	81.93	30	120	
Bi	209	1	He	1976385	0.13	2533294	78.02	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	077_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:39:05-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.678	0.951	142687	0.61	50	97.4	89.5	110.5	
B	11	45	2	NoGas	28.222	2.592	119945	1.73	50	56.4	89.5	110.5	CCV Failed
Na	23	45	1	He	25463.427	0.878	27514040	0.80	25000	101.9	89.5	110.5	
Mg	24	45	1	He	25239.581	1.890	15451855	0.39	25000	101.0	89.5	110.5	
Al	27	45	1	He	253.183	0.698	84409	1.42	250	101.3	89.5	110.5	
K	39	45	1	He	25322.624	1.437	13692988	0.23	25000	101.3	89.5	110.5	
Ca	44	45	1	He	24846.583	1.145	724384	0.82	25000	99.4	89.5	110.5	
Ti	47	45	1	He	52.668	0.175	8662	1.44	50	105.3	89.5	110.5	
V	51	45	1	He	51.435	1.168	213198	1.94	50	102.9	89.5	110.5	
Cr	52	45	1	He	51.935	0.996	259992	0.57	50	103.9	89.5	110.5	
Mn	55	45	1	He	251.405	0.991	986565	0.57	250	100.6	89.5	110.5	
Fe	56	45	1	He	13131.255	2.562	62817178	1.14	12500	105.1	89.5	110.5	
Co	59	103	1	He	49.989	1.080	367573	0.54	50	100.0	89.5	110.5	
Ni	60	103	1	He	49.721	0.555	90520	0.24	50	99.4	89.5	110.5	
Cu	63	103	1	He	50.828	0.953	243396	0.42	50	101.7	89.5	110.5	
Zn	66	103	1	He	50.260	2.443	49090	1.75	50	100.5	89.5	110.5	
As	75	103	1	He	51.277	0.720	30699	0.10	50	102.6	89.5	110.5	
Se	78	103	1	He	51.085	1.862	3247	2.52	50	102.2	89.5	110.5	
Sr	88	103	1	He	51.634	1.031	247741	1.18	50	103.3	89.5	110.5	
Mo	95	103	1	He	54.459	1.479	124410	1.79	50	108.9	89.5	110.5	
Ag	107	103	1	He	53.924	1.143	425039	0.83	50	107.8	89.5	110.5	
Cd	111	103	1	He	54.105	1.281	74652	0.54	50	108.2	89.5	110.5	
Sn	118	115	1	He	49.529	1.159	176073	1.15	50	99.1	89.5	110.5	
Sb	123	115	1	He	51.696	0.505	167109	0.55	50	103.4	89.5	110.5	
Ba	137	115	1	He	51.000	0.899	82167	1.01	50	102.0	89.5	110.5	
W	182	209	1	He	49.124	0.239	518940	1.13	50	98.2	89.5	110.5	
Tl	205	209	1	He	46.269	1.649	1256729	0.76	50	92.5	89.5	110.5	
Pb	208	209	1	He	47.863	2.030	1698915	1.16	50	95.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	931731	0.40	1389655	67.05	30	120	
Sc	45	1	He	458045	1.56	628609	72.87	30	120	
Sc	45	2	NoGas	3527715	0.78	4813296	73.29	30	120	
Rh	103	1	He	1359312	0.73	1894469	71.75	30	120	
In	115	1	He	825082	0.15	1086371	75.95	30	120	
Tb	159	1	He	2767101	0.76	3251379	85.11	30	120	
Ho	165	1	He	2853533	1.26	3312124	86.15	30	120	
Bi	209	1	He	2048750	0.90	2533294	80.87	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	078_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:42:56-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.059	7.6	326	5.2	1	
B	11	45	2	NoGas	-23.114	-1.2	11708	5.8	20	
Na	23	45	1	He	-10.141	-20.5	44529	3.9	400	
Mg	24	45	1	He	2.916	45.2	2763	28.0	1000	
Al	27	45	1	He	4.240	19.6	2361	10.4	50	
K	39	45	1	He	6.545	41.6	27700	4.2	1000	
Ca	44	45	1	He	12.689	46.2	665	24.9	1000	
Ti	47	45	1	He	0.143	80.5	41	46.1	20	
V	51	45	1	He	0.079	39.8	238	55.5	2	
Cr	52	45	1	He	0.037	58.2	1478	6.1	2	
Mn	55	45	1	He	1.209	6.8	5066	5.5	2	
Fe	56	45	1	He	31.789	16.5	154990	14.9	50	
Co	59	103	1	He	0.026	16.5	223	13.3	1	
Ni	60	103	1	He	0.026	48.4	72	37.6	2	
Cu	63	103	1	He	0.047	32.6	721	9.7	2	
Zn	66	103	1	He	0.433	19.7	1316	3.6	20	
As	75	103	1	He	0.113	20.9	147	8.1	2	
Se	78	103	1	He	0.168	42.9	38	15.2	2	
Sr	88	103	1	He	0.040	34.4	341	18.4	10	
Mo	95	103	1	He	1.246	16.8	3117	14.1	2	
Ag	107	103	1	He	0.004	39.1	67	17.3	0.2	
Cd	111	103	1	He	0.000	-9568.5	796	2.1	0.2	
Sn	118	115	1	He	0.257	33.5	1837	17.0	10	
Sb	123	115	1	He	0.559	14.3	2040	12.9	1	
Ba	137	115	1	He	0.021	53.7	91	20.1	5	
W	182	209	1	He	0.973	15.6	13821	12.1	10	
Tl	205	209	1	He	0.059	6.4	1737	6.0	0.5	
Pb	208	209	1	He	0.088	7.0	4078	5.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	962293	1.02	1389655	69.25	30	120	
Sc	45	1	He	456348	1.13	628609	72.60	30	120	
Sc	45	2	NoGas	3635633	1.72	4813296	75.53	30	120	
Rh	103	1	He	1461720	3.28	1894469	77.16	30	120	
In	115	1	He	857646	0.58	1086371	78.95	30	120	
Tb	159	1	He	2781769	0.64	3251379	85.56	30	120	
Ho	165	1	He	2840462	0.40	3312124	85.76	30	120	
Bi	209	1	He	2141094	0.26	2533294	84.52	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-1-b@2
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:46:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.928	2.928	8.46	8528	0.03	10000	
B	11	45	2	NoGas	-7.516	-7.516	-8.56	44406	-0.02	300	
Na	23	45	1	He	211.725	211.725	3.54	284826	0.07	500000	
Mg	24	45	1	He	13494.934	13494.934	2.28	8289927	0.16	500000	
Al	27	45	1	He	45682.984	45682.984	2.85	15100701	0.30	200000	
K	39	45	1	He	3837.786	3837.786	1.78	2102833	0.18	500000	
Ca	44	45	1	He	24374.762	24374.762	1.71	712978	3.42	500000	
Ti	47	45	1	He	441.222	441.222	2.26	72660	0.61	2500	
V	51	45	1	He	88.624	88.624	2.43	368543	0.02	10000	
Cr	52	45	1	He	84.780	84.780	1.78	424993	0.02	10000	
Mn	55	45	1	He	2693.128	2693.128	1.47	10600433	0.03	10000	
Fe	56	45	1	He	114886.435	114886.435	2.29	551407836	0.02	200000	
Co	59	103	1	He	40.908	40.908	1.39	285439	0.01	10000	
Ni	60	103	1	He	101.157	101.157	1.48	174736	0.06	10000	
Cu	63	103	1	He	64.403	64.403	1.46	292536	0.02	10000	
Zn	66	103	1	He	233.318	233.318	1.41	213468	0.11	10000	
As	75	103	1	He	67.608	67.608	1.17	38387	0.18	10000	
Se	78	103	1	He	4.541	4.541	2.33	295	1.54	10000	
Sr	88	103	1	He	68.493	68.493	1.55	311796	0.02	10000	
Mo	95	103	1	He	7.208	7.208	1.58	15677	0.05	2000	
Ag	107	103	1	He	0.193	0.193	4.99	1471	0.01	300	
Cd	111	103	1	He	0.855	0.855	12.27	1810	0.05	4000	
Sn	118	115	1	He	17.127	17.127	1.51	58241	0.03	2000	
Sb	123	115	1	He	1.758	1.758	4.61	5531	0.03	300	
Ba	137	115	1	He	291.598	291.598	1.03	445066	0.07	10000	
W	182	209	1	He	0.671	0.671	6.58	9800	0.01	2500	
Tl	205	209	1	He	0.692	0.692	1.35	18368	0.00	5000	
Pb	208	209	1	He	74.434	74.434	0.55	2575019	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	912234	1.25	1389655	65.64	30	120	
Sc	45	1	He	459658	2.86	628609	73.12	30	120	
Sc	45	2	NoGas	3533010	1.31	4813296	73.40	30	120	
Rh	103	1	He	1289939	0.92	1894469	68.09	30	120	
In	115	1	He	782115	0.82	1086371	71.99	30	120	
Tb	159	1	He	2714979	0.33	3251379	83.50	30	120	
Ho	165	1	He	2747900	0.37	3312124	82.96	30	120	
Bi	209	1	He	1996909	0.79	2533294	78.83	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-2-b@2
Data File Name	080SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:50:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.093	3.093	1.66	8877	0.03	10000	
B	11	45	2	NoGas	-13.040	-13.040	-5.65	32693	-0.04	300	
Na	23	45	1	He	142.963	142.963	2.34	210615	0.07	500000	
Mg	24	45	1	He	9692.066	9692.066	0.90	5958465	0.16	500000	
Al	27	45	1	He	66740.951	66740.951	2.24	22076511	0.30	200000	
K	39	45	1	He	3500.535	3500.535	1.68	1921436	0.18	500000	
Ca	44	45	1	He	3914.095	3914.095	1.34	114813	3.41	500000	
Ti	47	45	1	He	334.742	334.742	2.55	55159	0.61	2500	
V	51	45	1	He	136.832	136.832	1.81	569455	0.02	10000	
Cr	52	45	1	He	95.895	95.895	1.97	480790	0.02	10000	
Mn	55	45	1	He	3285.761	3285.761	2.15	12938750	0.03	10000	
Fe	56	45	1	He	127666.610	127666.610	1.87	613136207	0.02	200000	
Co	59	103	1	He	51.161	51.161	0.49	361941	0.01	10000	
Ni	60	103	1	He	92.902	92.902	0.26	162709	0.06	10000	
Cu	63	103	1	He	61.557	61.557	0.59	283516	0.02	10000	
Zn	66	103	1	He	308.349	308.349	0.96	285781	0.11	10000	
As	75	103	1	He	77.340	77.340	0.38	44514	0.17	10000	
Se	78	103	1	He	5.926	5.926	3.40	383	1.55	10000	
Sr	88	103	1	He	26.718	26.718	1.48	123389	0.02	10000	
Mo	95	103	1	He	8.989	8.989	0.68	19805	0.05	2000	
Ag	107	103	1	He	0.440	0.440	2.00	3366	0.01	300	
Cd	111	103	1	He	0.966	0.966	3.13	1983	0.05	4000	
Sn	118	115	1	He	17.129	17.129	2.17	59062	0.03	2000	
Sb	123	115	1	He	1.508	1.508	1.41	4833	0.03	300	
Ba	137	115	1	He	363.020	363.020	0.55	561790	0.06	10000	
W	182	209	1	He	0.420	0.420	6.87	7306	0.01	2500	
Tl	205	209	1	He	1.021	1.021	1.46	27385	0.00	5000	
Pb	208	209	1	He	118.287	118.287	0.57	4136062	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	898826	1.51	1389655	64.68	30	120	
Sc	45	1	He	459901	2.54	628609	73.16	30	120	
Sc	45	2	NoGas	3530717	0.37	4813296	73.35	30	120	
Rh	103	1	He	1307750	0.40	1894469	69.03	30	120	
In	115	1	He	792973	0.38	1086371	72.99	30	120	
Tb	159	1	He	2663604	1.00	3251379	81.92	30	120	
Ho	165	1	He	2724857	1.20	3312124	82.27	30	120	
Bi	209	1	He	2018572	0.65	2533294	79.68	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-3-b@2
Data File Name	081SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:54:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.036	3.036	2.38	8436	0.04	10000	
B	11	45	2	NoGas	-10.858	-10.858	-7.34	36868	-0.03	300	
Na	23	45	1	He	162.982	162.982	1.68	225477	0.07	500000	
Mg	24	45	1	He	9603.294	9603.294	2.74	5729017	0.17	500000	
Al	27	45	1	He	66154.156	66154.156	2.98	21238026	0.31	200000	
K	39	45	1	He	3712.475	3712.475	2.06	1976347	0.19	500000	
Ca	44	45	1	He	6881.549	6881.549	1.69	195702	3.52	500000	
Ti	47	45	1	He	399.620	399.620	1.78	63923	0.63	2500	
V	51	45	1	He	136.505	136.505	1.68	551453	0.02	10000	
Cr	52	45	1	He	105.884	105.884	1.77	515170	0.02	10000	
Mn	55	45	1	He	3968.711	3968.711	2.60	15168776	0.03	10000	
Fe	56	45	1	He	127922.998	127922.998	2.15	596308385	0.02	200000	
Co	59	103	1	He	62.117	62.117	0.23	428148	0.01	10000	
Ni	60	103	1	He	94.735	94.735	0.74	161653	0.06	10000	
Cu	63	103	1	He	61.744	61.744	0.40	277061	0.02	10000	
Zn	66	103	1	He	303.538	303.538	0.13	274104	0.11	10000	
As	75	103	1	He	77.348	77.348	0.45	43373	0.18	10000	
Se	78	103	1	He	5.781	5.781	3.28	365	1.58	10000	
Sr	88	103	1	He	37.300	37.300	1.55	167789	0.02	10000	
Mo	95	103	1	He	8.918	8.918	3.25	19143	0.05	2000	
Ag	107	103	1	He	0.414	0.414	1.12	3088	0.01	300	
Cd	111	103	1	He	0.987	0.987	1.58	1958	0.05	4000	
Sn	118	115	1	He	17.983	17.983	1.67	60486	0.03	2000	
Sb	123	115	1	He	1.927	1.927	3.98	5986	0.03	300	
Ba	137	115	1	He	349.764	349.764	1.12	528375	0.07	10000	
W	182	209	1	He	0.458	0.458	2.59	7498	0.01	2500	
Tl	205	209	1	He	1.010	1.010	2.54	26364	0.00	5000	
Pb	208	209	1	He	124.901	124.901	2.13	4251500	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	870419	1.85	1389655	62.64	30	120	
Sc	45	1	He	446366	1.97	628609	71.01	30	120	
Sc	45	2	NoGas	3487895	1.18	4813296	72.46	30	120	
Rh	103	1	He	1274127	0.21	1894469	67.26	30	120	
In	115	1	He	774090	0.78	1086371	71.25	30	120	
Tb	159	1	He	2643770	0.26	3251379	81.31	30	120	
Ho	165	1	He	2714324	0.10	3312124	81.95	30	120	
Bi	209	1	He	1965488	1.77	2533294	77.59	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-4-b@2
Data File Name	082SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:58:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.066	3.066	4.16	8673	0.04	10000	
B	11	45	2	NoGas	-5.622	-5.622	-4.68	47989	-0.01	300	
Na	23	45	1	He	227.963	227.963	3.10	294069	0.08	500000	
Mg	24	45	1	He	8101.291	8101.291	2.52	4839146	0.17	500000	
Al	27	45	1	He	33852.228	33852.228	3.21	10881363	0.31	200000	
K	39	45	1	He	2285.723	2285.723	2.92	1227226	0.19	500000	
Ca	44	45	1	He	26667.537	26667.537	1.92	758444	3.52	500000	
Ti	47	45	1	He	405.041	405.041	2.62	64864	0.62	2500	
V	51	45	1	He	80.031	80.031	2.41	323626	0.02	10000	
Cr	52	45	1	He	96.039	96.039	2.17	467939	0.02	10000	
Mn	55	45	1	He	3963.404	3963.404	1.57	15169125	0.03	10000	
Fe	56	45	1	He	107990.159	107990.159	3.12	503946060	0.02	200000	
Co	59	103	1	He	48.492	48.492	1.00	337112	0.01	10000	
Ni	60	103	1	He	104.115	104.115	0.34	179181	0.06	10000	
Cu	63	103	1	He	61.835	61.835	0.70	279851	0.02	10000	
Zn	66	103	1	He	215.488	215.488	0.87	196486	0.11	10000	
As	75	103	1	He	127.347	127.347	0.28	71981	0.18	10000	
Se	78	103	1	He	4.783	4.783	2.45	308	1.55	10000	
Sr	88	103	1	He	87.713	87.713	0.68	397780	0.02	10000	
Mo	95	103	1	He	7.442	7.442	1.07	16123	0.05	2000	
Ag	107	103	1	He	0.621	0.621	2.97	4656	0.01	300	
Cd	111	103	1	He	0.932	0.932	9.89	1904	0.05	4000	
Sn	118	115	1	He	18.471	18.471	1.90	62084	0.03	2000	
Sb	123	115	1	He	2.633	2.633	2.96	8124	0.03	300	
Ba	137	115	1	He	422.524	422.524	0.80	637980	0.07	10000	
W	182	209	1	He	1.067	1.067	10.44	13982	0.01	2500	
Tl	205	209	1	He	0.718	0.718	1.55	19234	0.00	5000	
Pb	208	209	1	He	136.836	136.836	0.38	4779432	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	885856	1.47	1389655	63.75	30	120	
Sc	45	1	He	446915	1.98	628609	71.10	30	120	
Sc	45	2	NoGas	3501280	1.28	4813296	72.74	30	120	
Rh	103	1	He	1285065	0.20	1894469	67.83	30	120	
In	115	1	He	773732	0.60	1086371	71.22	30	120	
Tb	159	1	He	2663487	2.19	3251379	81.92	30	120	
Ho	165	1	He	2737997	0.79	3312124	82.67	30	120	
Bi	209	1	He	2016417	0.94	2533294	79.60	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-4-b@2
Data File Name	083SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:01:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.967	2.967	7.53	8310	0.04	10000	
B	11	45	2	NoGas	-16.295	-16.295	-1.95	25285	-0.06	300	
Na	23	45	1	He	143.808	143.808	2.48	203901	0.07	500000	
Mg	24	45	1	He	9412.672	9412.672	2.49	5577338	0.17	500000	
Al	27	45	1	He	55495.881	55495.881	1.98	17696079	0.31	200000	
K	39	45	1	He	2847.595	2847.595	0.54	1511158	0.19	500000	
Ca	44	45	1	He	2391.146	2391.146	1.05	67724	3.53	500000	
Ti	47	45	1	He	466.643	466.643	0.30	74138	0.63	2500	
V	51	45	1	He	129.895	129.895	0.75	521149	0.02	10000	
Cr	52	45	1	He	78.407	78.407	1.57	379189	0.02	10000	
Mn	55	45	1	He	16263.248	16263.248	0.12	61746844	0.03	10000	>LDR
Fe	56	45	1	He	123493.628	123493.628	2.63	571704937	0.02	200000	
Co	59	103	1	He	59.106	59.106	1.21	405727	0.01	10000	
Ni	60	103	1	He	71.518	71.518	1.74	121545	0.06	10000	
Cu	63	103	1	He	48.860	48.860	0.13	218441	0.02	10000	
Zn	66	103	1	He	499.456	499.456	0.66	448711	0.11	10000	
As	75	103	1	He	62.190	62.190	0.76	34744	0.18	10000	
Se	78	103	1	He	5.161	5.161	4.26	327	1.58	10000	
Sr	88	103	1	He	31.670	31.670	0.25	141895	0.02	10000	
Mo	95	103	1	He	9.792	9.792	1.31	20928	0.05	2000	
Ag	107	103	1	He	1.754	1.754	1.01	12937	0.01	300	
Cd	111	103	1	He	1.526	1.526	6.79	2638	0.06	4000	
Sn	118	115	1	He	16.630	16.630	1.45	55406	0.03	2000	
Sb	123	115	1	He	0.898	0.898	0.89	2840	0.03	300	
Ba	137	115	1	He	478.836	478.836	0.61	715684	0.07	10000	
W	182	209	1	He	3.475	3.475	1.75	37608	0.01	2500	
Tl	205	209	1	He	1.137	1.137	0.27	29446	0.00	5000	
Pb	208	209	1	He	222.371	222.371	0.23	7511837	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	877347	1.56	1389655	63.13	30	120	
Sc	45	1	He	443274	1.65	628609	70.52	30	120	
Sc	45	2	NoGas	3460120	1.26	4813296	71.89	30	120	
Rh	103	1	He	1268947	0.50	1894469	66.98	30	120	
In	115	1	He	765873	0.23	1086371	70.50	30	120	
Tb	159	1	He	2619884	0.94	3251379	80.58	30	120	
Ho	165	1	He	2664295	0.67	3312124	80.44	30	120	
Bi	209	1	He	1950236	0.45	2533294	76.98	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-6-b@2
Data File Name	084SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:05:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.577	2.577	3.24	7246	0.04	10000	
B	11	45	2	NoGas	-14.404	-14.404	-4.31	29220	-0.05	300	
Na	23	45	1	He	134.655	134.655	0.42	194890	0.07	500000	
Mg	24	45	1	He	8590.553	8590.553	1.57	5103905	0.17	500000	
Al	27	45	1	He	56639.330	56639.330	1.20	18110352	0.31	200000	
K	39	45	1	He	3392.943	3392.943	1.36	1800630	0.19	500000	
Ca	44	45	1	He	938.917	938.917	1.96	26840	3.50	500000	
Ti	47	45	1	He	407.940	407.940	1.38	64975	0.63	2500	
V	51	45	1	He	129.864	129.864	0.98	522372	0.02	10000	
Cr	52	45	1	He	80.386	80.386	1.15	389765	0.02	10000	
Mn	55	45	1	He	7440.999	7440.999	1.50	28321598	0.03	10000	
Fe	56	45	1	He	115945.296	115945.296	0.54	538248939	0.02	200000	
Co	59	103	1	He	48.987	48.987	0.28	339702	0.01	10000	
Ni	60	103	1	He	73.218	73.218	0.71	125697	0.06	10000	
Cu	63	103	1	He	42.361	42.361	1.53	191366	0.02	10000	
Zn	66	103	1	He	261.808	261.808	1.63	237958	0.11	10000	
As	75	103	1	He	52.647	52.647	0.42	29722	0.18	10000	
Se	78	103	1	He	4.739	4.739	3.57	305	1.55	10000	
Sr	88	103	1	He	17.622	17.622	0.78	79809	0.02	10000	
Mo	95	103	1	He	8.136	8.136	2.07	17578	0.05	2000	
Ag	107	103	1	He	0.421	0.421	0.65	3157	0.01	300	
Cd	111	103	1	He	0.876	0.876	5.08	1827	0.05	4000	
Sn	118	115	1	He	17.333	17.333	1.26	58319	0.03	2000	
Sb	123	115	1	He	0.881	0.881	7.43	2817	0.03	300	
Ba	137	115	1	He	447.870	447.870	0.41	676457	0.07	10000	
W	182	209	1	He	0.593	0.593	5.51	8970	0.01	2500	
Tl	205	209	1	He	0.904	0.904	1.15	23907	0.00	5000	
Pb	208	209	1	He	105.174	105.174	2.06	3625000	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	878487	1.36	1389655	63.22	30	120	
Sc	45	1	He	444416	1.05	628609	70.70	30	120	
Sc	45	2	NoGas	3462259	1.04	4813296	71.93	30	120	
Rh	103	1	He	1281872	0.61	1894469	67.66	30	120	
In	115	1	He	773941	0.45	1086371	71.24	30	120	
Tb	159	1	He	2644182	0.65	3251379	81.32	30	120	
Ho	165	1	He	2680831	1.02	3312124	80.94	30	120	
Bi	209	1	He	1990117	1.72	2533294	78.56	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-8-b@2
Data File Name	085SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:09:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.164	3.164	8.20	8943	0.04	10000	
B	11	45	2	NoGas	-11.974	-11.974	-6.19	34151	-0.04	300	
Na	23	45	1	He	130.066	130.066	1.22	190536	0.07	500000	
Mg	24	45	1	He	8408.604	8408.604	2.34	5007532	0.17	500000	
Al	27	45	1	He	66177.505	66177.505	2.65	21208509	0.31	200000	
K	39	45	1	He	3512.638	3512.638	1.99	1867731	0.19	500000	
Ca	44	45	1	He	1392.436	1392.436	0.87	39763	3.50	500000	
Ti	47	45	1	He	406.861	406.861	1.28	64961	0.63	2500	
V	51	45	1	He	142.056	142.056	1.11	572797	0.02	10000	
Cr	52	45	1	He	92.052	92.052	1.00	447233	0.02	10000	
Mn	55	45	1	He	7073.335	7073.335	1.85	26986789	0.03	10000	
Fe	56	45	1	He	124176.733	124176.733	1.23	577828813	0.02	200000	
Co	59	103	1	He	63.029	63.029	0.09	432641	0.01	10000	
Ni	60	103	1	He	96.344	96.344	0.65	163718	0.06	10000	
Cu	63	103	1	He	59.348	59.348	0.47	265234	0.02	10000	
Zn	66	103	1	He	288.759	288.759	0.21	259722	0.11	10000	
As	75	103	1	He	63.142	63.142	0.54	35274	0.18	10000	
Se	78	103	1	He	5.953	5.953	2.37	373	1.59	10000	
Sr	88	103	1	He	18.599	18.599	0.40	83376	0.02	10000	
Mo	95	103	1	He	9.243	9.243	1.95	19759	0.05	2000	
Ag	107	103	1	He	0.346	0.346	1.55	2572	0.01	300	
Cd	111	103	1	He	0.877	0.877	4.11	1810	0.05	4000	
Sn	118	115	1	He	18.122	18.122	1.10	60798	0.03	2000	
Sb	123	115	1	He	1.176	1.176	9.75	3704	0.03	300	
Ba	137	115	1	He	498.501	498.501	0.72	751194	0.07	10000	
W	182	209	1	He	0.403	0.403	8.99	6954	0.01	2500	
Tl	205	209	1	He	1.025	1.025	1.15	26759	0.00	5000	
Pb	208	209	1	He	117.701	117.701	1.07	4008319	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	886241	2.61	1389655	63.77	30	120	
Sc	45	1	He	445493	1.05	628609	70.87	30	120	
Sc	45	2	NoGas	3449947	0.99	4813296	71.68	30	120	
Rh	103	1	He	1268888	0.38	1894469	66.98	30	120	
In	115	1	He	772160	0.35	1086371	71.08	30	120	
Tb	159	1	He	2662809	0.44	3251379	81.90	30	120	
Ho	165	1	He	2694528	0.78	3312124	81.35	30	120	
Bi	209	1	He	1966040	0.93	2533294	77.61	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV -1945747
Data File Name	086_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:13:15-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.950	1.171	145027	2.48	50	99.9	89.5	110.5	
B	11	45	2	NoGas	26.993	3.367	119284	2.10	50	54.0	89.5	110.5	CCV Failed
Na	23	45	1	He	24823.210	2.813	26687577	0.91	25000	99.3	89.5	110.5	
Mg	24	45	1	He	24857.260	2.028	15143782	0.23	25000	99.4	89.5	110.5	
Al	27	45	1	He	253.590	1.355	84127	0.93	250	101.4	89.5	110.5	
K	39	45	1	He	25351.812	2.759	13640124	0.85	25000	101.4	89.5	110.5	
Ca	44	45	1	He	24831.714	1.398	720419	0.53	25000	99.3	89.5	110.5	
Ti	47	45	1	He	50.440	3.621	8253	1.80	50	100.9	89.5	110.5	
V	51	45	1	He	50.589	2.155	208631	0.84	50	101.2	89.5	110.5	
Cr	52	45	1	He	50.793	1.805	253054	0.28	50	101.6	89.5	110.5	
Mn	55	45	1	He	248.436	2.022	970085	0.10	250	99.4	89.5	110.5	
Fe	56	45	1	He	12978.967	1.951	61791106	0.06	12500	103.8	89.5	110.5	
Co	59	103	1	He	50.143	0.741	361287	0.47	50	100.3	89.5	110.5	
Ni	60	103	1	He	49.943	1.231	89091	0.52	50	99.9	89.5	110.5	
Cu	63	103	1	He	50.273	0.435	235903	0.79	50	100.5	89.5	110.5	
Zn	66	103	1	He	50.893	1.243	48700	0.50	50	101.8	89.5	110.5	
As	75	103	1	He	51.483	0.674	30201	0.37	50	103.0	89.5	110.5	
Se	78	103	1	He	50.733	1.853	3159	2.33	50	101.5	89.5	110.5	
Sr	88	103	1	He	51.735	0.872	243218	0.25	50	103.5	89.5	110.5	
Mo	95	103	1	He	54.556	3.060	122116	3.05	50	109.1	89.5	110.5	
Ag	107	103	1	He	53.724	0.627	414934	0.18	50	107.4	89.5	110.5	
Cd	111	103	1	He	54.010	1.936	73019	1.21	50	108.0	89.5	110.5	
Sn	118	115	1	He	49.915	1.435	174459	0.86	50	99.8	89.5	110.5	
Sb	123	115	1	He	51.726	1.295	164414	1.77	50	103.5	89.5	110.5	
Ba	137	115	1	He	51.416	0.450	81449	0.18	50	102.8	89.5	110.5	
W	182	209	1	He	48.605	1.672	508964	1.82	50	97.2	89.5	110.5	
Tl	205	209	1	He	45.752	1.346	1231763	0.59	50	91.5	89.5	110.5	
Pb	208	209	1	He	47.429	0.780	1668802	0.07	50	94.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	922813	1.38	1389655	66.41	30	120	
Sc	45	1	He	455847	1.93	628609	72.52	30	120	
Sc	45	2	NoGas	3586061	1.24	4813296	74.50	30	120	
Rh	103	1	He	1331934	0.72	1894469	70.31	30	120	
In	115	1	He	811272	0.62	1086371	74.68	30	120	
Tb	159	1	He	2758704	0.59	3251379	84.85	30	120	
Ho	165	1	He	2795215	0.13	3312124	84.39	30	120	
Bi	209	1	He	2030692	0.82	2533294	80.16	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	087_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:17:04-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.010	311.9	174	54.3	1	
B	11	45	2	NoGas	-23.129	-0.3	11374	0.5	20	
Na	23	45	1	He	-13.516	-12.1	40234	4.2	400	
Mg	24	45	1	He	1.631	54.4	1948	26.4	1000	
Al	27	45	1	He	3.383	13.7	2047	7.2	50	
K	39	45	1	He	3.887	73.7	25834	5.1	1000	
Ca	44	45	1	He	9.862	7.6	574	4.4	1000	
Ti	47	45	1	He	0.202	9.3	50	6.7	20	
V	51	45	1	He	0.045	43.8	95	84.9	2	
Cr	52	45	1	He	0.018	116.0	1365	8.0	2	
Mn	55	45	1	He	1.430	1.4	5832	1.6	2	
Fe	56	45	1	He	33.689	16.7	161360	15.5	50	
Co	59	103	1	He	0.013	38.6	120	34.1	1	
Ni	60	103	1	He	0.021	21.2	64	16.6	2	
Cu	63	103	1	He	0.018	28.4	581	1.8	2	
Zn	66	103	1	He	0.428	13.4	1332	5.6	20	
As	75	103	1	He	0.092	18.5	135	5.1	2	
Se	78	103	1	He	0.099	151.7	34	27.6	2	
Sr	88	103	1	He	0.007	54.2	173	8.8	10	
Mo	95	103	1	He	0.919	22.4	2356	21.7	2	
Ag	107	103	1	He	0.006	70.9	83	41.8	0.2	
Cd	111	103	1	He	-0.026	-76.0	770	0.8	0.2	
Sn	118	115	1	He	0.271	26.3	1878	13.9	10	
Sb	123	115	1	He	0.549	21.3	1995	19.5	1	
Ba	137	115	1	He	0.027	7.8	100	3.3	5	
W	182	209	1	He	0.900	22.2	12998	15.5	10	
Tl	205	209	1	He	0.044	9.7	1306	8.0	0.5	
Pb	208	209	1	He	0.068	6.3	3315	3.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	945940	1.26	1389655	68.07	30	120	
Sc	45	1	He	448720	0.78	628609	71.38	30	120	
Sc	45	2	NoGas	3543089	0.85	4813296	73.61	30	120	
Rh	103	1	He	1483569	2.99	1894469	78.31	30	120	
In	115	1	He	852387	0.13	1086371	78.46	30	120	
Tb	159	1	He	2767487	0.77	3251379	85.12	30	120	
Ho	165	1	He	2848485	0.36	3312124	86.00	30	120	
Bi	209	1	He	2140678	1.43	2533294	84.50	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	088CRIA.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:20:53-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.934	0.934	12.750	2897	13.30	1	93.4	69.5	130.5	
B	11	2	NoGas	-3.089	-3.089	-20.284	52987	2.40	20	-15.4	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1070.160	1070.160	2.129	1211177	0.26	1000	107.0	69.5	130.5	
Mg	24	1	He	1059.961	1059.961	1.608	650824	1.18	1000	106.0	69.5	130.5	
Al	27	1	He	52.044	52.044	1.126	18150	1.35	50	104.1	69.5	130.5	
K	39	1	He	1048.548	1048.548	1.718	591134	1.73	1000	104.9	69.5	130.5	
Ca	44	1	He	1027.063	1027.063	1.767	30271	1.25	1000	102.7	69.5	130.5	
Ti	47	1	He	10.564	10.564	3.425	1753	1.62	10	105.6	69.5	130.5	
V	51	1	He	5.471	5.471	1.376	22629	2.39	5	109.4	69.5	130.5	
Cr	52	1	He	2.181	2.181	2.905	12179	0.97	2	109.0	69.5	130.5	
Mn	55	1	He	6.158	6.158	2.106	24538	2.25	5	123.2	69.5	130.5	
Fe	56	1	He	118.143	118.143	1.797	569622	0.33	100	118.1	69.5	130.5	
Co	59	1	He	1.065	1.065	1.826	8056	1.19	1	106.5	69.5	130.5	
Ni	60	1	He	2.115	2.115	7.202	3974	7.07	2	105.8	69.5	130.5	
Cu	63	1	He	2.185	2.185	3.292	11179	2.36	2	109.2	69.5	130.5	
Zn	66	1	He	21.103	21.103	2.345	21652	2.83	20	105.5	69.5	130.5	
As	75	1	He	5.222	5.222	1.536	3274	1.85	5	104.4	69.5	130.5	
Se	78	1	He	5.301	5.301	4.681	369	4.79	5	106.0	69.5	130.5	
Sr	88	1	He	10.310	10.310	0.336	50901	0.73	10	103.1	69.5	130.5	
Mo	95	1	He	11.293	11.293	0.562	26541	0.52	10	112.9	69.5	130.5	
Ag	107	1	He	1.157	1.157	2.254	9396	1.89	1	115.7	69.5	130.5	
Cd	111	1	He	1.109	1.109	2.130	2316	0.64	1	110.9	69.5	130.5	
Sn	118	1	He	10.294	10.294	0.235	38155	0.64	10	102.9	69.5	130.5	
Sb	123	1	He	2.097	2.097	3.362	7095	3.15	2	104.9	69.5	130.5	
Ba	137	1	He	5.115	5.115	1.442	8484	1.72	5	102.3	69.5	130.5	
W	182	1	He	9.812	9.812	2.619	108352	1.52	10	98.1	69.5	130.5	
Tl	205	1	He	1.899	1.899	1.937	52761	0.90	2	95.0	69.5	130.5	
Pb	208	1	He	1.082	1.082	0.947	40011	0.46	1	108.2	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	937638	1.80	1389655	67.47	30	120	
Sc	45	1	He	458696	1.78	628609	72.97	30	120	
Sc	45	2	NoGas	3480084	0.63	4813296	72.30	30	120	
Rh	103	1	He	1395849	0.87	1894469	73.68	30	120	
In	115	1	He	844537	0.41	1086371	77.74	30	120	
Tb	159	1	He	2753624	1.30	3251379	84.69	30	120	
Ho	165	1	He	2794387	0.35	3312124	84.37	30	120	
Bi	209	1	He	2093433	1.06	2533294	82.64	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	089_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:24:46-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.326	2.140	141836	1.33	50	96.7	89.5	110.5	
B	11	45	2	NoGas	27.954	2.874	117575	1.85	50	55.9	89.5	110.5	CCV Failed
Na	23	45	1	He	24377.420	4.789	27073599	1.04	25000	97.5	89.5	110.5	
Mg	24	45	1	He	24552.522	5.065	15448530	1.15	25000	98.2	89.5	110.5	
Al	27	45	1	He	238.763	4.634	81865	0.52	250	95.5	89.5	110.5	
K	39	45	1	He	24404.040	4.113	13566680	0.97	25000	97.6	89.5	110.5	
Ca	44	45	1	He	23995.144	4.262	719088	0.80	25000	96.0	89.5	110.5	
Ti	47	45	1	He	48.116	3.929	8137	2.49	50	96.2	89.5	110.5	
V	51	45	1	He	48.941	5.462	208406	0.47	50	97.9	89.5	110.5	
Cr	52	45	1	He	49.578	4.997	255120	0.76	50	99.2	89.5	110.5	
Mn	55	45	1	He	241.346	4.798	973351	0.24	250	96.5	89.5	110.5	
Fe	56	45	1	He	12545.736	4.760	61690002	0.51	12500	100.4	89.5	110.5	
Co	59	103	1	He	50.992	0.261	362889	0.63	50	102.0	89.5	110.5	
Ni	60	103	1	He	50.591	0.894	89142	1.26	50	101.2	89.5	110.5	
Cu	63	103	1	He	51.259	1.308	237554	1.04	50	102.5	89.5	110.5	
Zn	66	103	1	He	51.560	0.684	48723	0.36	50	103.1	89.5	110.5	
As	75	103	1	He	52.318	0.487	30313	0.70	50	104.6	89.5	110.5	
Se	78	103	1	He	53.180	0.655	3270	0.96	50	106.4	89.5	110.5	
Sr	88	103	1	He	52.276	0.465	242743	0.51	50	104.6	89.5	110.5	
Mo	95	103	1	He	55.081	1.595	121773	1.54	50	110.2	89.5	110.5	
Ag	107	103	1	He	54.119	0.786	412845	0.64	50	108.2	89.5	110.5	
Cd	111	103	1	He	54.543	0.376	72832	0.76	50	109.1	89.5	110.5	
Sn	118	115	1	He	49.904	0.867	173804	0.79	50	99.8	89.5	110.5	
Sb	123	115	1	He	51.761	0.772	163925	0.44	50	103.5	89.5	110.5	
Ba	137	115	1	He	50.645	0.575	79943	0.94	50	101.3	89.5	110.5	
W	182	209	1	He	49.267	1.175	510940	1.15	50	98.5	89.5	110.5	
Tl	205	209	1	He	45.533	1.991	1214163	0.74	50	91.1	89.5	110.5	
Pb	208	209	1	He	47.297	1.829	1648244	0.67	50	94.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	933004	0.93	1389655	67.14	30	120	
Sc	45	1	He	471469	5.18	628609	75.00	30	120	
Sc	45	2	NoGas	3474433	0.88	4813296	72.18	30	120	
Rh	103	1	He	1315536	0.46	1894469	69.44	30	120	
In	115	1	He	808356	0.37	1086371	74.41	30	120	
Tb	159	1	He	2700930	1.56	3251379	83.07	30	120	
Ho	165	1	He	2741282	0.83	3312124	82.77	30	120	
Bi	209	1	He	2011476	1.26	2533294	79.40	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	090_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:28:37-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	-0.015	-135.1	96	63.6	1	
B	11	45	2	NoGas	-24.339	-0.7	8536	3.2	20	
Na	23	45	1	He	-11.180	-23.3	41964	4.8	400	
Mg	24	45	1	He	2.240	31.4	2274	17.1	1000	
Al	27	45	1	He	1.339	5.3	1365	3.3	50	
K	39	45	1	He	5.516	61.7	26257	6.7	1000	
Ca	44	45	1	He	12.312	15.1	633	6.5	1000	
Ti	47	45	1	He	0.096	70.2	32	31.6	20	
V	51	45	1	He	0.087	77.7	258	104.1	2	
Cr	52	45	1	He	0.032	67.9	1407	5.8	2	
Mn	55	45	1	He	1.134	4.0	4617	2.8	2	
Fe	56	45	1	He	24.997	21.0	118612	19.7	50	
Co	59	103	1	He	0.011	22.7	96	22.4	1	
Ni	60	103	1	He	0.008	68.1	37	32.8	2	
Cu	63	103	1	He	0.028	17.0	600	5.5	2	
Zn	66	103	1	He	0.401	16.4	1239	8.3	20	
As	75	103	1	He	0.067	28.2	113	12.8	2	
Se	78	103	1	He	0.195	14.8	38	7.9	2	
Sr	88	103	1	He	-0.001	-713.0	121	38.6	10	
Mo	95	103	1	He	0.989	14.9	2411	17.6	2	
Ag	107	103	1	He	0.009	40.3	107	30.8	0.2	
Cd	111	103	1	He	-0.007	-161.6	758	4.0	0.2	
Sn	118	115	1	He	0.220	4.9	1652	2.1	10	
Sb	123	115	1	He	0.517	27.4	1847	25.3	1	
Ba	137	115	1	He	0.022	67.5	90	26.7	5	
W	182	209	1	He	1.027	20.9	13814	14.9	10	
Tl	205	209	1	He	0.048	20.5	1363	18.6	0.5	
Pb	208	209	1	He	0.051	12.7	2579	8.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	924508	1.11	1389655	66.53	30	120	
Sc	45	1	He	441272	1.83	628609	70.20	30	120	
Sc	45	2	NoGas	3435390	1.08	4813296	71.37	30	120	
Rh	103	1	He	1408218	2.91	1894469	74.33	30	120	
In	115	1	He	833465	0.46	1086371	76.72	30	120	
Tb	159	1	He	2647059	1.80	3251379	81.41	30	120	
Ho	165	1	He	2769191	2.08	3312124	83.61	30	120	
Bi	209	1	He	2055526	2.35	2533294	81.14	30	120	

MTMSCCBDILH20-193 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/24/15 **Analyst:** AS **Instrument:** I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* = 90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

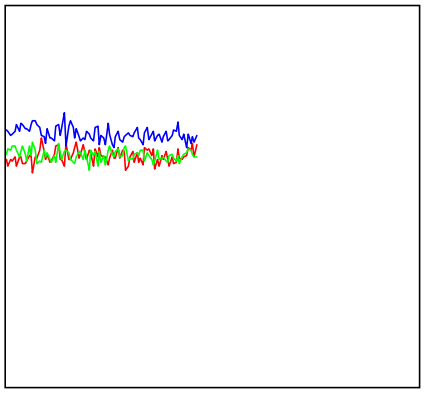
Level I Analyst: Anjali Sharma Date: 4/24/15 Time: 8:59 - 10:44 - 12:11
Level I Analyst: Anjali Sharma Date: 4/27/15 Time: 8:59 - 23:33

Level II Reviewer: ~~Karen L. Lantz~~ Date: ~~4/24/15~~ Time: ~~8:59 - 10:44~~ 4/24/15 ku
Level II Reviewer: Karen L. Lantz Date: 4-24-15 Time: 8:59 - 12:11
4/27/15 12:17 - 23:33

Comments:

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	3176	3029.5	2.99
89	10000	6043	6084.1	2.43
205	10000	6596	6646.6	2.76
156/140	2	0.776 %	0.753 %	19.66
70/140	2	0.959 %	1.169 %	14.50
115	50	9	10.2	40.41
63	500	298	291.4	8.07
60	200	34	50.9	34.47
121	50	26	30.5	24.36
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

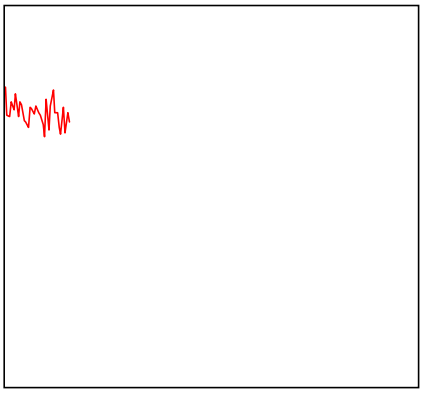
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	15.02	L/min
MU./Dil. Gas	0.65	L/min	Ar Gas Tank Press	6.61E+2	kPa			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1396	1437.7	4.55
51	200	99	90.4	14.99
52	200	122	117.1	13.55
51/59	10	7.094 %	6.301 %	15.82
52/59	20	8.742 %	8.162 %	14.36
7	50	18	15.7	33.15
89	2000	1748	1659.3	3.49
205	5000	3840	3790.8	3.13
6	20	1	0.9	129.76
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	14.98	L/min
MU./Dil. Gas	0.65	L/min	Ar Gas Tank Press	6.61E+2	kPa			

US EPA Tune Check Sample Report

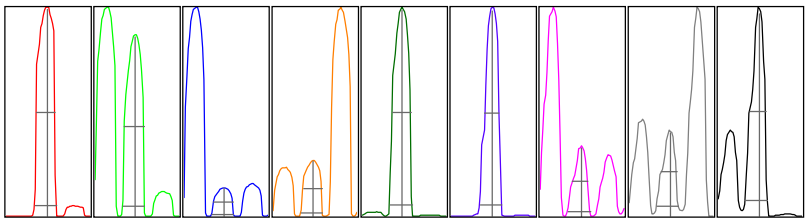
Batch Folder D:\Analytical Runs\I10042415A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	38712	0.48	5.00	
24	148944	0.35	5.00	
25	20171	0.23	5.00	
26	23195	0.63	5.00	
59	189400	0.43	5.00	
115	326901	0.41	5.00	
206	117611	0.63	5.00	
207	105343	0.61	5.00	
208	247680	0.65	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	39009	38733	38540	38573	38705
24	149714	148356	148787	148706	149155
25	20193	20232	20107	20174	20148
26	23410	23151	23018	23249	23146
59	190676	189028	189047	189659	188593
115	329064	327310	326319	325796	326014
206	118591	117774	117733	117415	116542
207	106339	105027	105531	105161	104659
208	249910	247925	245606	248140	246819

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6178	9.00	8.9 - 9.1		0.778	0.850	
24	24262	23.95	23.9 - 24.1		0.769	0.850	
25	3274	24.95	24.9 - 25.1		0.775	0.850	
26	3754	25.95	25.9 - 26.1		0.774	0.850	
59	31063	58.95	58.9 - 59.1		0.809	0.850	
115	60121	115.00	114.9 - 115.1		0.781	0.850	
206	21853	206.00	205.9 - 206.1		0.794	0.850	
207	19226	207.00	206.9 - 207.1		0.777	0.850	
208	46898	208.00	207.9 - 208.1		0.790	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

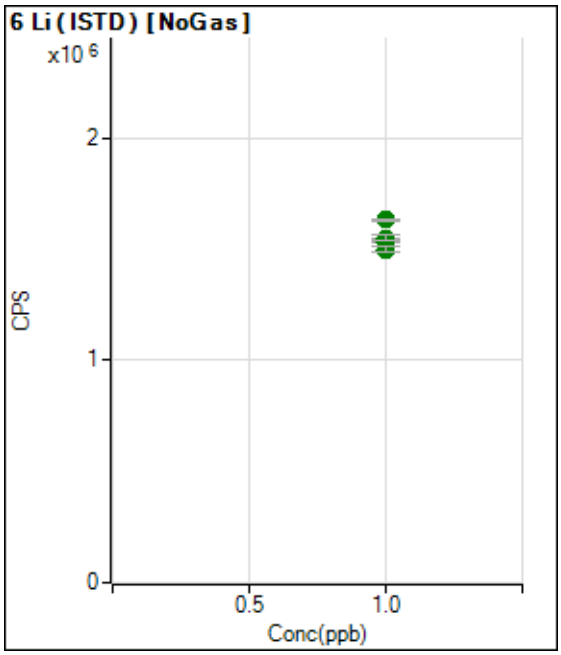
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

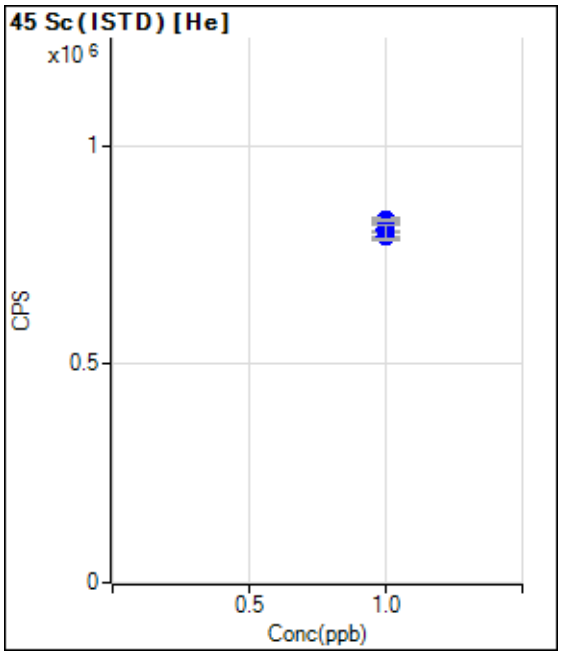
Calibration for 020SMPL.d

Batch Folder: D:\Analytical Runs\I10042415A.b\
Analysis File: I10042415A.batch.bin
DA Date-Time: 4/24/2015 10:47:10 AM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

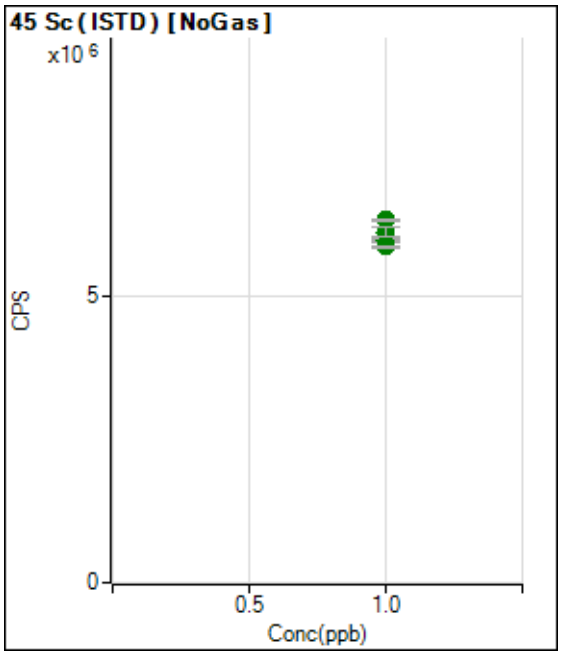
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/24/2015 9:03:11 AM
2	003CALS.d	STD1-1906323	4/24/2015 9:07:04 AM
3	004CALS.d	STD2-1904110	4/24/2015 9:10:52 AM
4	005CALS.d	STD3-1906333	4/24/2015 9:14:41 AM
5	006CALS.d	STD4-1906536	4/24/2015 9:18:28 AM



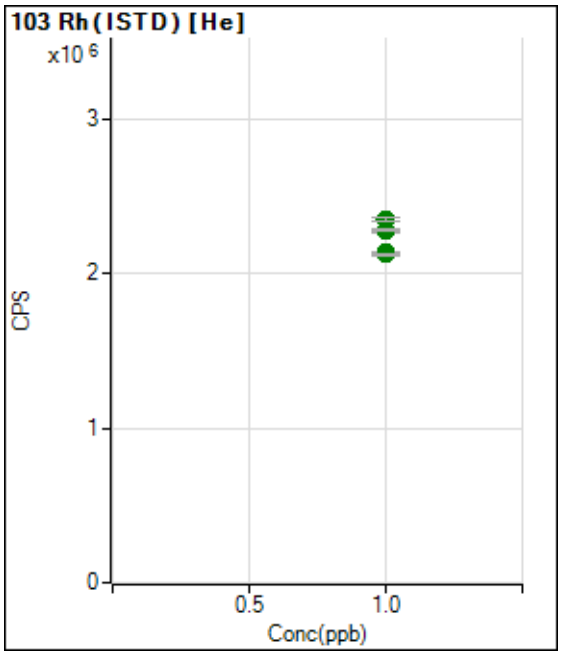
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1631380.70		A	0.7
2	☐	1.000		1540307.15		A	0.8
3	☐	1.000		1526248.41		A	1.7
4	☐	1.000		1551780.36		A	1.6
5	☐	1.000		1498103.13		A	2.0



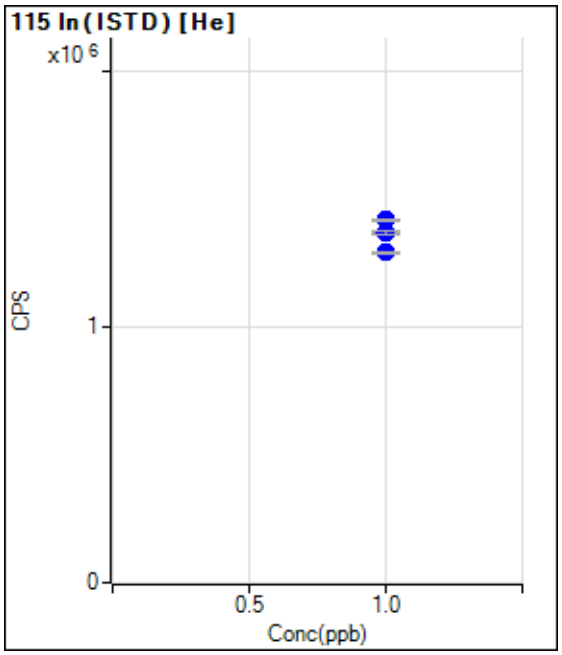
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		829695.59		P	1.4
2	☐	1.000		817537.88		P	3.3
3	☐	1.000		807513.79		P	4.4
4	☐	1.000		790122.88		P	2.1
5	☐	1.000		803039.60		P	4.2



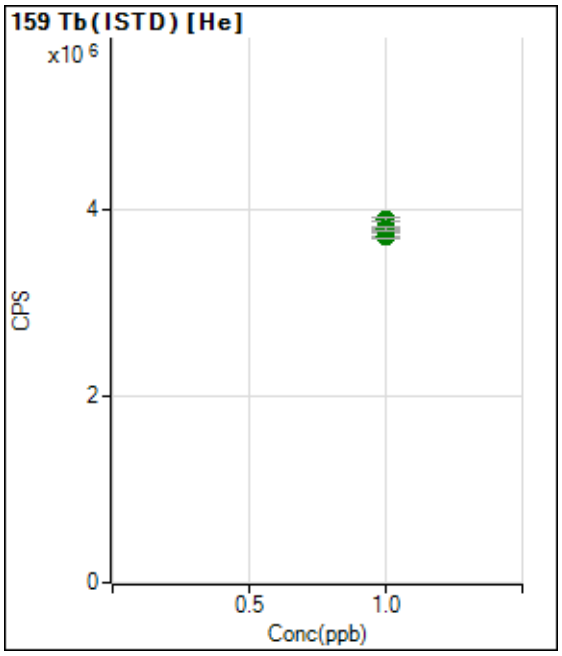
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6325637.53		A	0.2
2	☐	1.000		5950417.40		A	0.6
3	☐	1.000		5970501.43		A	1.1
4	☐	1.000		6107044.76		A	2.8
5	☐	1.000		5852964.49		A	0.7



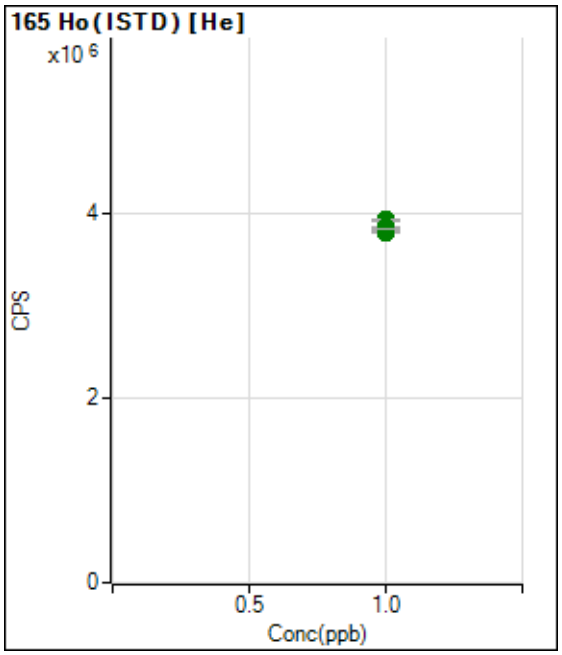
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2345542.75		A	1.1
2	☐	1.000		2270622.48		A	0.4
3	☐	1.000		2138680.75		A	0.2
4	☐	1.000		2121899.08		A	0.8
5	☐	1.000		2278765.60		A	0.7



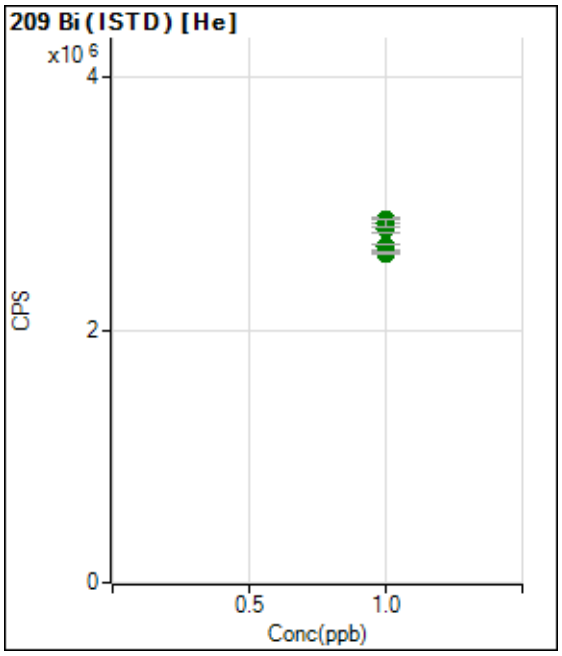
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1419467.00		P	0.5
2	☐	1.000		1368321.56		P	0.6
3	☐	1.000		1291611.85		P	0.6
4	☐	1.000		1290416.56		P	0.6
5	☐	1.000		1367724.92		P	1.0



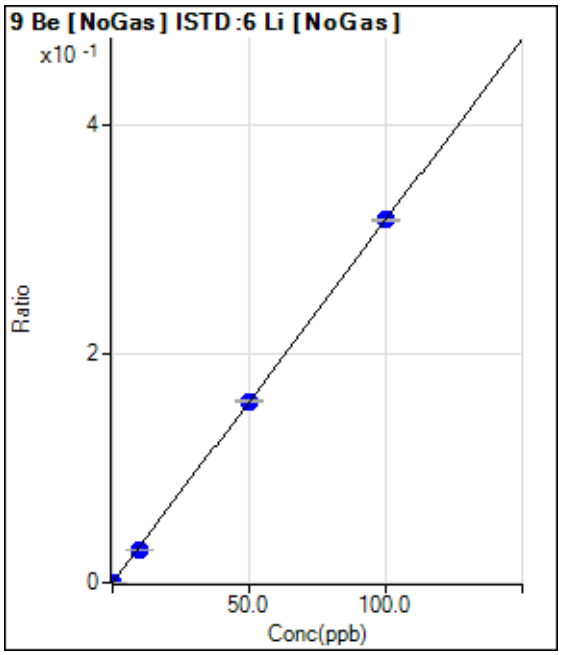
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3888261.79		A	1.0
2	☐	1.000		3779425.55		A	0.9
3	☐	1.000		3744716.52		A	1.9
4	☐	1.000		3712947.49		A	1.7
5	☐	1.000		3796091.10		A	1.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3932561.79		A	0.4
2	☐	1.000		3846649.57		A	0.7
3	☐	1.000		3795686.66		A	0.5
4	☐	1.000		3791295.96		A	0.3
5	☐	1.000		3835106.79		A	0.5



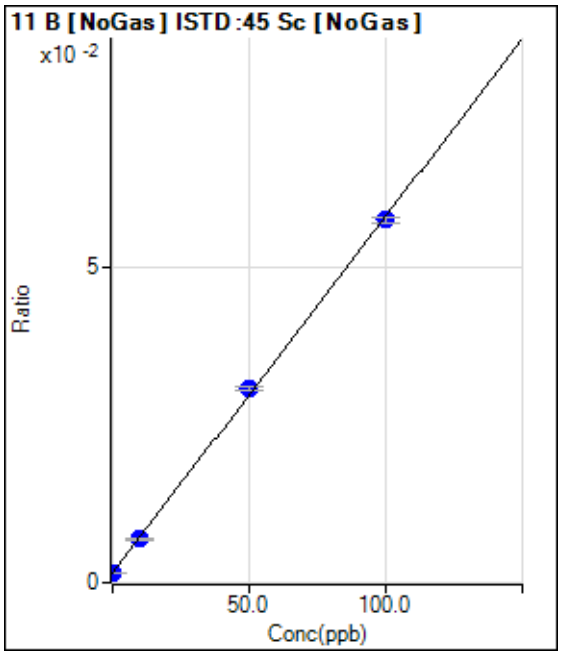
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2874804.82		A	1.3
2	☐	1.000		2797035.03		A	1.2
3	☐	1.000		2659575.52		A	1.4
4	☐	1.000		2611397.26		A	1.0
5	☐	1.000		2853757.74		A	2.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	74.5
2	☐	10.000	9.067	44179.23	0.0287	P	2.9
3	☐	50.000	49.944	240950.08	0.1579	P	1.3
4	☐	100.000	100.121	491107.69	0.3165	P	0.6
5	☐			151.86	0.0001	P	15.0

y = 0.0032 * x + 2.7200E-005
R = 1.0000
DL = 0.01924
BEC = 0.008605

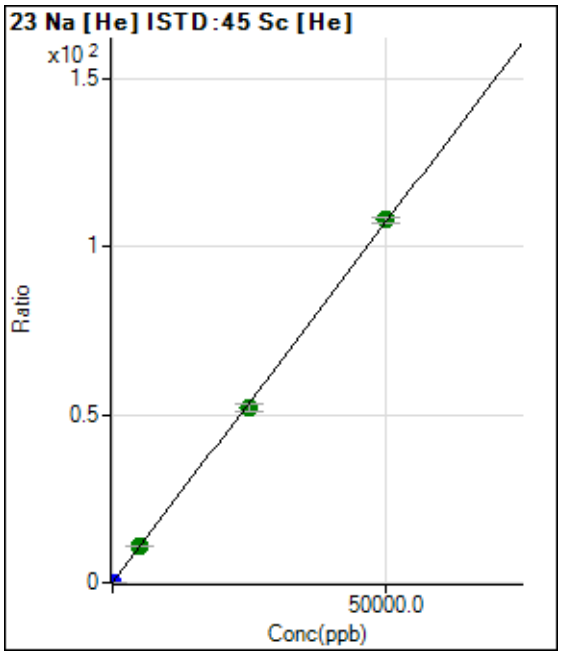
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9869.75	0.0016	P	4.4
2	☐	10.000	9.616	41488.21	0.0070	P	4.6
3	☐	50.000	51.866	183611.44	0.0308	P	1.9
4	☐			12245.17	0.0020	P	2.3
5	☐	100.000	99.105	335668.74	0.0573	P	1.6

y = 5.6290E-004 * x + 0.0016
R = 0.9997
DL = 0.3637
BEC = 2.772

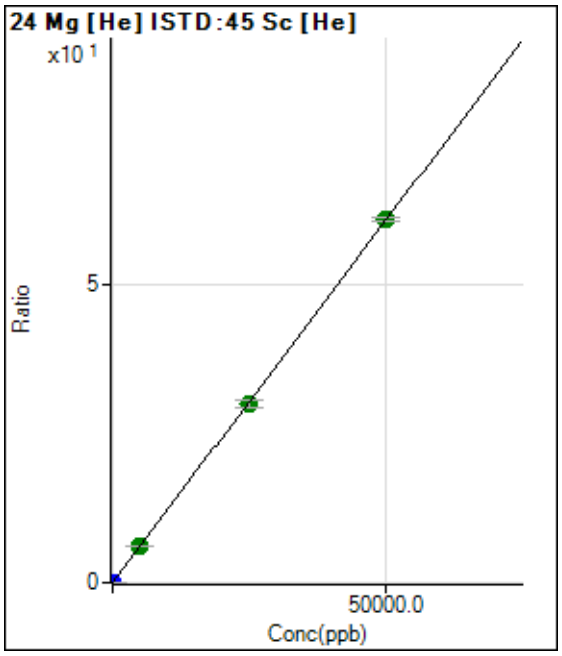
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23119.03	0.0279	P	2.1
2	☐	5000.000	5068.973	8886942.47	10.8742	A	2.0
3	☐	25000.000	24210.598	41801990.93	51.8327	A	4.4
4	☐	50000.000	50387.804	85188646.61	107.8457	A	1.9
5	☐			39064.96	0.0486	P	4.7

y = 0.0021 * x + 0.0279
R = 0.9998
DL = 0.8254
BEC = 13.02

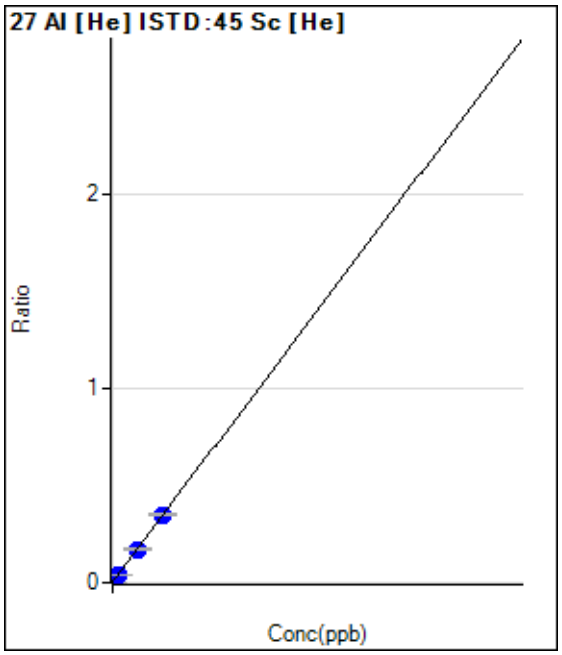
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	988.97	0.0012	P	15.1
2	☐	5000.000	5140.359	5111829.19	6.2540	A	1.6
3	☐	25000.000	24674.041	24209588.85	30.0151	A	4.0
4	☐	50000.000	50148.944	48191972.16	61.0031	A	1.2
5	☐			5475.15	0.0068	P	13.1

y = 0.0012 * x + 0.0012
R = 1.0000
DL = 0.4453
BEC = 0.981

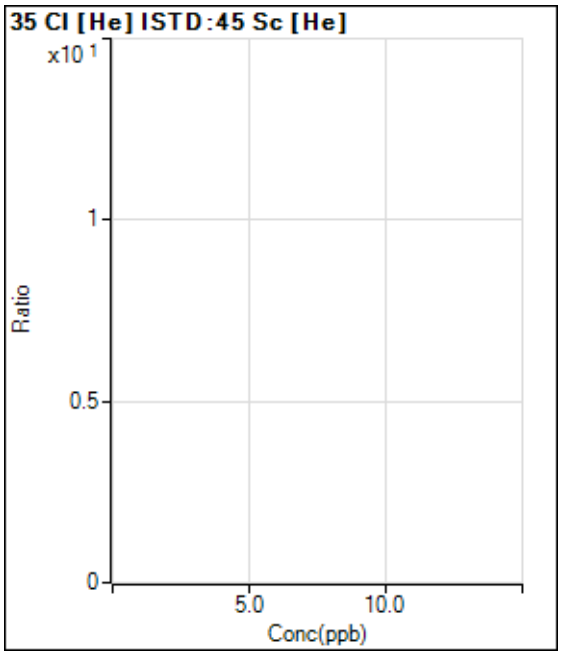
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2648.00	0.0032	P	7.6
2	☐	50.000	49.865	30708.98	0.0376	P	1.3
3	☐	250.000	245.708	139162.76	0.1726	P	5.5
4	☐	500.000	502.160	276019.85	0.3494	P	2.0
5	☐			2865.82	0.0036	P	5.3

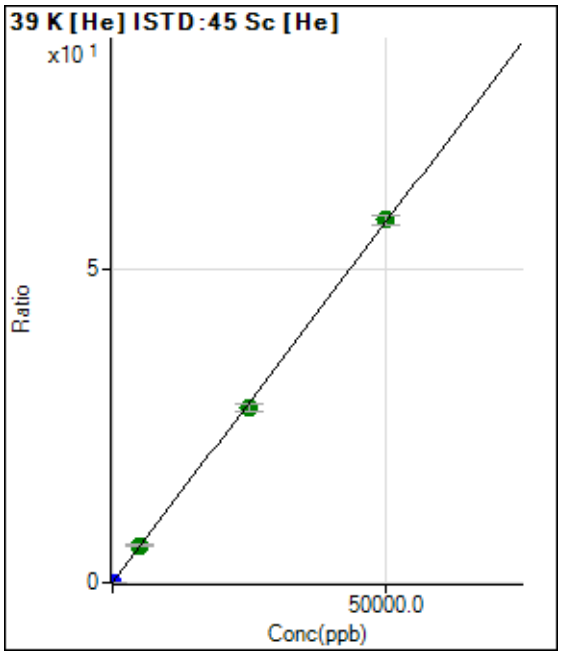
y = 6.8952E-004 * x + 0.0032
R = 0.9999
DL = 1.048
BEC = 4.626

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			13349840.67	16.0920	A	1.5
2	☐			12632885.61	15.4604	A	2.4
3	☐			12470725.43	15.4634	A	4.5
4	☐			12109121.74	15.3298	A	2.0
5	☐			12941196.25	16.1304	A	3.5

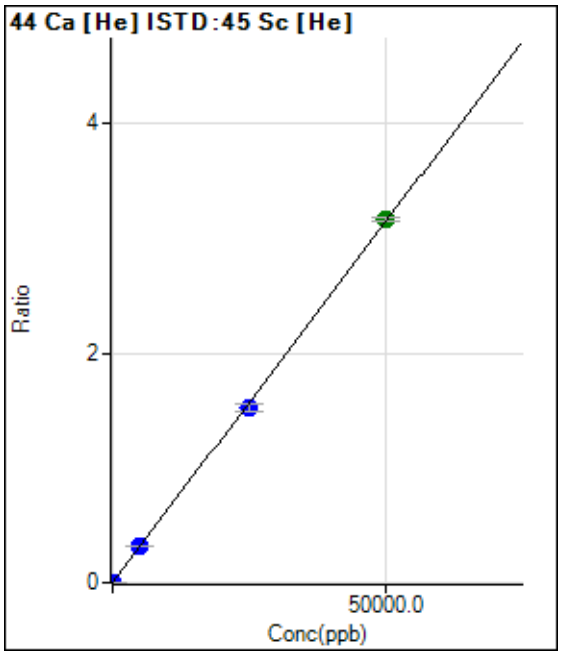
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38274.64	0.0461	P	1.7
2	☐	5000.000	5141.355	4849697.38	5.9343	A	2.0
3	☐	25000.000	24265.021	22452697.25	27.8360	A	4.0
4	☐	50000.000	50353.354	45584978.74	57.7140	A	2.5
5	☐			42461.49	0.0529	P	0.8

y = 0.0011 * x + 0.0461
R = 0.9998
DL = 2.058
BEC = 40.28

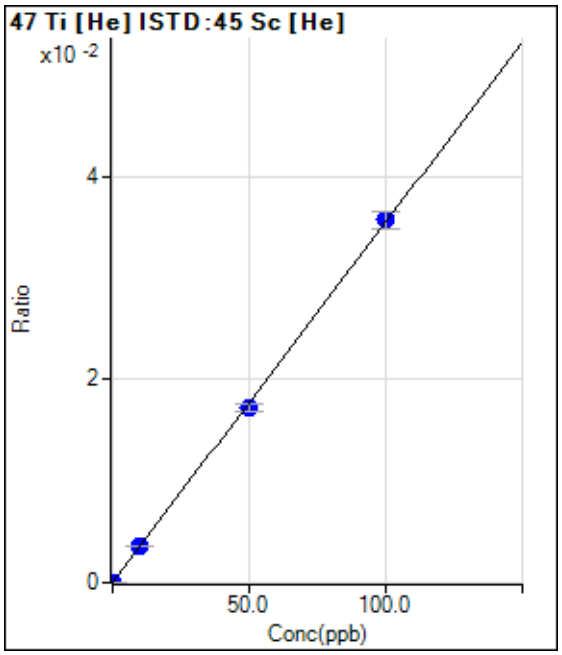
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1003.83	0.0012	P	15.0
2	☐	5000.000	5000.793	257825.02	0.3155	P	1.5
3	☐	25000.000	24363.660	1235832.22	1.5323	P	4.2
4	☐	50000.000	50318.091	2499004.66	3.1633	A	1.2
5	☐			1139.06	0.0014	P	7.6

y = 6.2841E-005 * x + 0.0012
R = 0.9999
DL = 8.639
BEC = 19.23

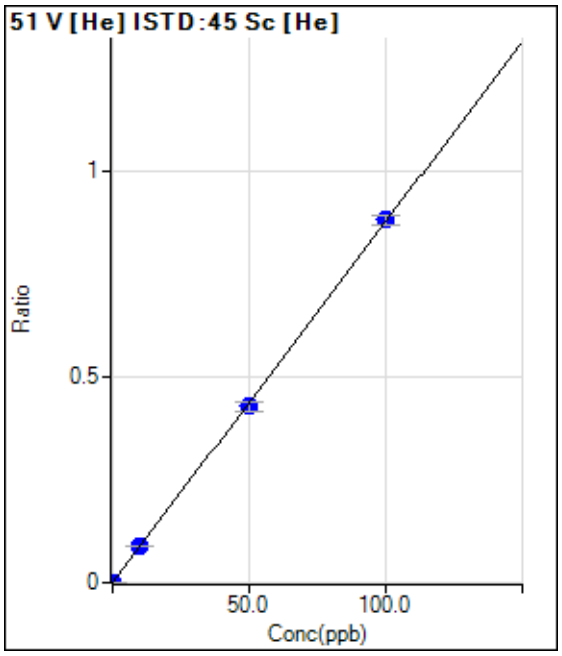
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	26.0
2	☐	10.000	9.980	2902.49	0.0036	P	1.2
3	☐	50.000	48.605	13902.14	0.0172	P	3.9
4	☐			17.78	0.0000	P	29.8
5	☐	100.000	100.700	28623.77	0.0357	P	4.5

y = 3.5421E-004 * x + 1.6103E-005
R = 0.9998
DL = 0.03548
BEC = 0.04546

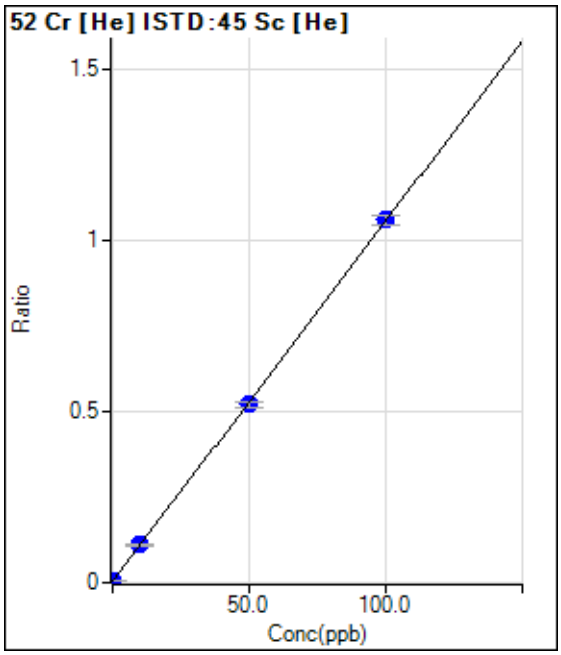
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.14	0.0001	P	728.1
2	☐	10.000	10.044	71999.45	0.0881	P	2.3
3	☐	50.000	48.849	345100.92	0.4280	P	5.0
4	☐	100.000	100.571	695861.57	0.8810	P	2.3
5	☐			541.49	0.0007	P	57.6

y = 0.0088 * x + 1.2709E-004
R = 0.9999
DL = 0.3169
BEC = 0.01451

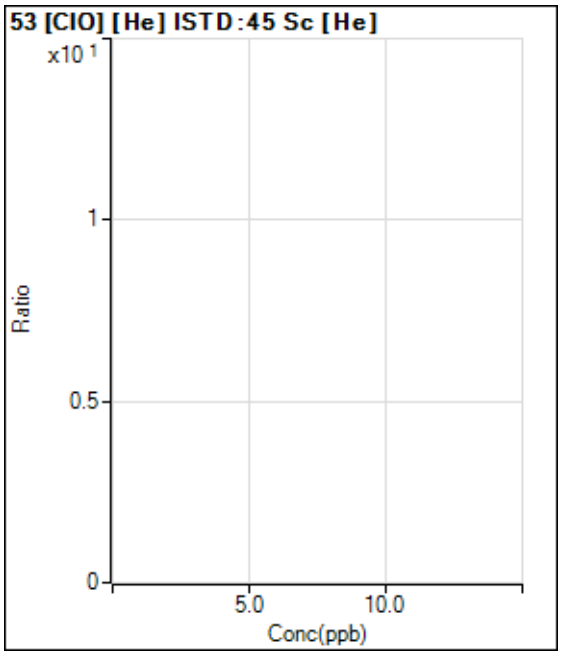
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2573.55	0.0031	P	5.3
2	☐	10.000	10.125	89657.22	0.1097	P	0.8
3	☐	50.000	49.138	419721.65	0.5204	P	4.0
4	☐	100.000	100.419	837413.89	1.0602	P	2.3
5	☐			3677.10	0.0046	P	3.6

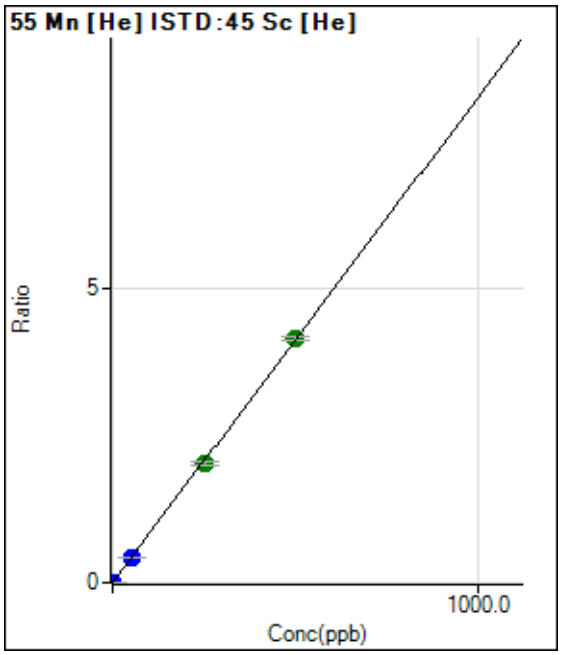
y = 0.0105 * x + 0.0031
R = 0.9999
DL = 0.04688
BEC = 0.2948

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1966.88	0.0024	P	15.0
2	☐			11400.40	0.0139	P	6.2
3	☐			51794.52	0.0642	P	3.2
4	☐			102393.77	0.1296	P	2.5
5	☐			733.38	0.0009	P	15.6

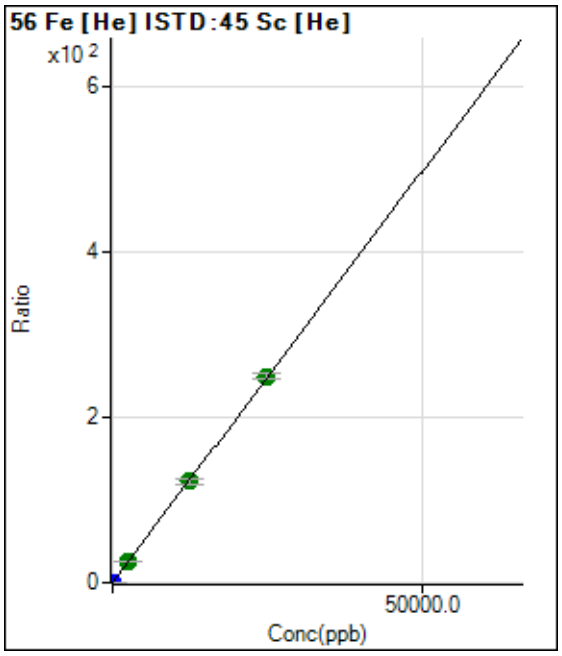
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1230.06	0.0015	P	2.4
2	☐	50.000	50.534	342909.72	0.4195	P	1.1
3	☐	250.000	245.959	1642241.12	2.0362	A	4.3
4	☐	500.000	501.967	3281596.40	4.1541	A	1.3
5	☐			1567.87	0.0020	P	14.0

y = 0.0083 * x + 0.0015
R = 0.9999
DL = 0.01307
BEC = 0.1792

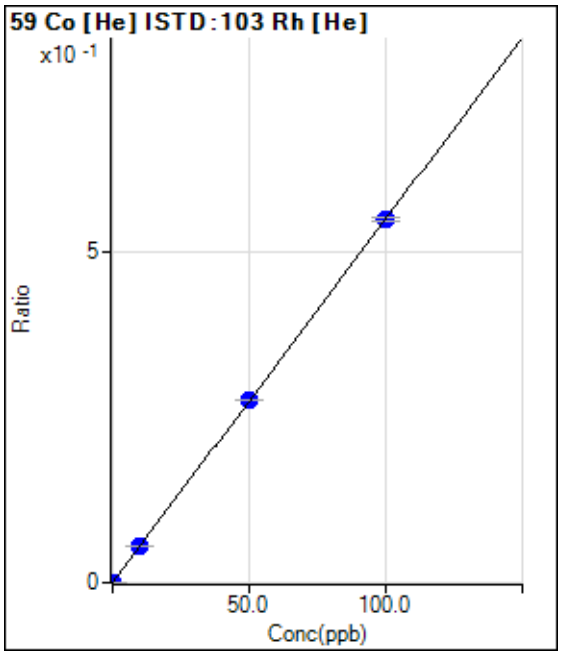
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4585.09	0.0055	P	5.7
2	☐	2500.000	2535.095	20566579.74	25.1686	A	2.3
3	☐	12500.000	12329.704	98690627.19	122.3886	A	4.9
4	☐	25000.000	25081.639	196640618.85	248.9628	A	2.6
5	☐			275375.27	0.3410	P	21.9

y = 0.0099 * x + 0.0055
R = 1.0000
DL = 0.0957
BEC = 0.557

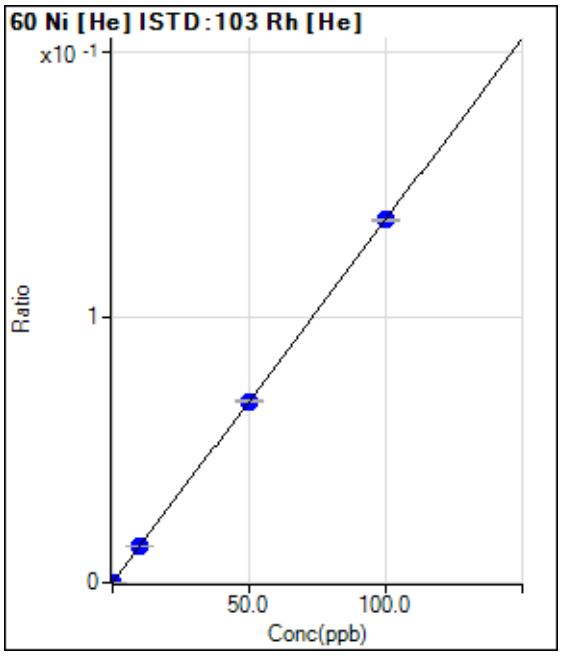
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.78	0.0000	P	54.1
2	☐	10.000	10.103	126406.59	0.0557	P	1.7
3	☐	50.000	50.282	592350.12	0.2770	P	0.3
4	☐	100.000	99.848	1166939.02	0.5500	P	0.9
5	☐			220.01	0.0001	P	31.5

y = 0.0055 * x + 2.0382E-005
R = 1.0000
DL = 0.006004
BEC = 0.0037

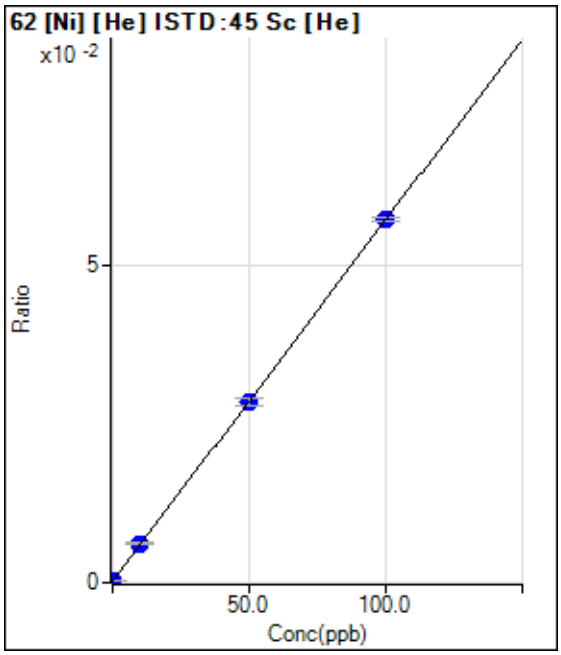
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	128.89	0.0001	P	21.0
2	☐	10.000	9.919	30883.23	0.0136	P	2.0
3	☐	50.000	50.028	146236.59	0.0684	P	0.8
4	☐	100.000	99.994	289874.62	0.1366	P	0.5
5	☐			330.01	0.0001	P	14.4

y = 0.0014 * x + 5.4954E-005
R = 1.0000
DL = 0.02537
BEC = 0.04024

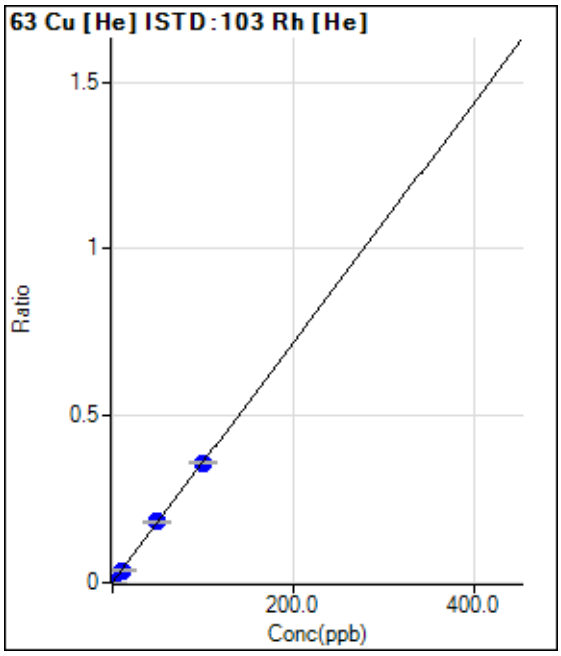
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	147.78	0.0002	P	25.0
2	☐	10.000	10.511	5028.54	0.0062	P	2.7
3	☐	50.000	49.679	22927.00	0.0284	P	4.2
4	☐	100.000	100.110	45107.56	0.0571	P	1.1
5	☐			208.89	0.0003	P	14.4

y = 5.6855E-004 * x + 1.7849E-004
R = 1.0000
DL = 0.2351
BEC = 0.3139

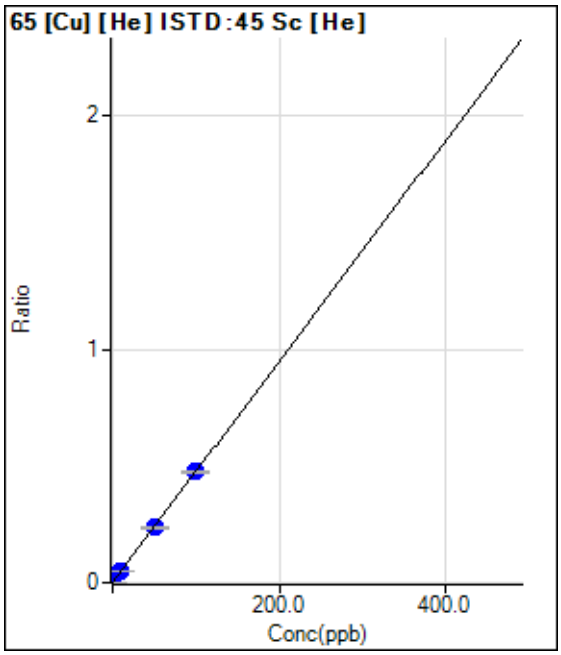
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1714.55	0.0007	P	4.5
2	☐	10.000	10.195	84808.34	0.0373	P	2.5
3	☐	50.000	50.307	387992.67	0.1814	P	0.5
4	☐	100.000	99.827	762296.27	0.3593	P	1.5
5	☐			1535.65	0.0007	P	8.4

y = 0.0036 * x + 7.3091E-004
R = 1.0000
DL = 0.02761
BEC = 0.2035

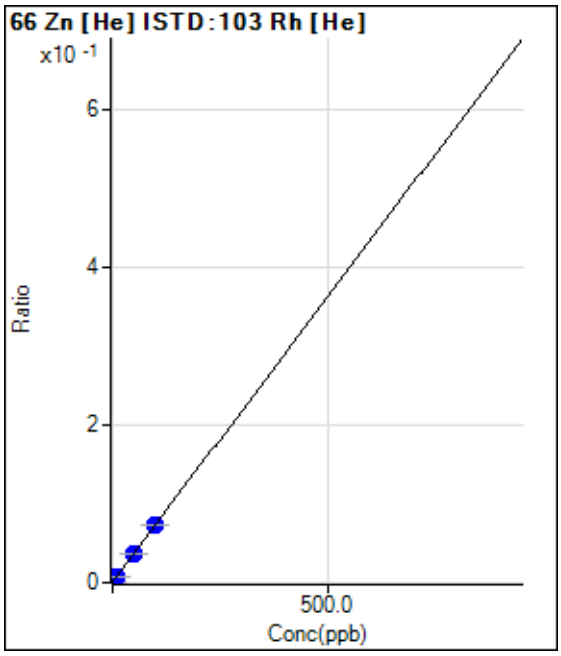
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	778.92	0.0009	P	11.3
2	☐	10.000	10.605	41834.23	0.0512	P	0.9
3	☐	50.000	49.647	190470.21	0.2362	P	4.3
4	☐	100.000	100.116	375449.34	0.4753	P	1.5
5	☐			832.26	0.0010	P	6.7

y = 0.0047 * x + 9.3938E-004
R = 1.0000
DL = 0.06726
BEC = 0.1983

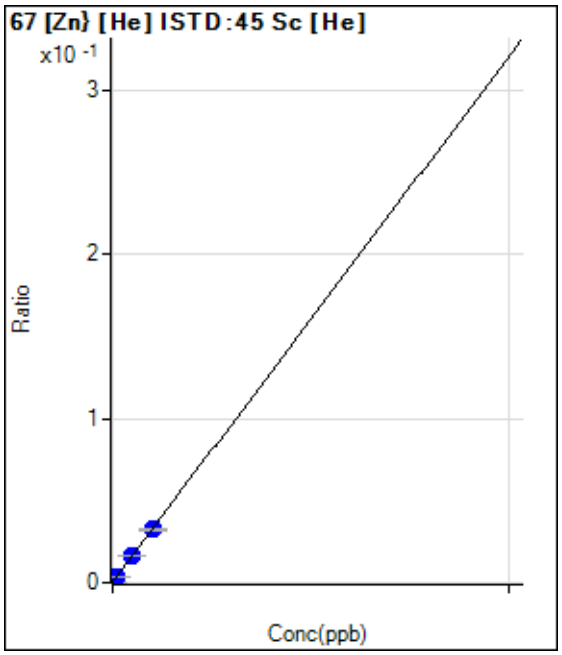
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1973.47	0.0008	P	2.0
2	☐	10.000	10.041	18451.86	0.0081	P	3.1
3	☐	50.000	49.532	78647.36	0.0368	P	0.5
4	☐	100.000	100.230	156069.00	0.0736	P	0.1
5	☐			2237.95	0.0010	P	0.7

y = 7.2544E-004 * x + 8.4125E-004
R = 1.0000
DL = 0.071
BEC = 1.16

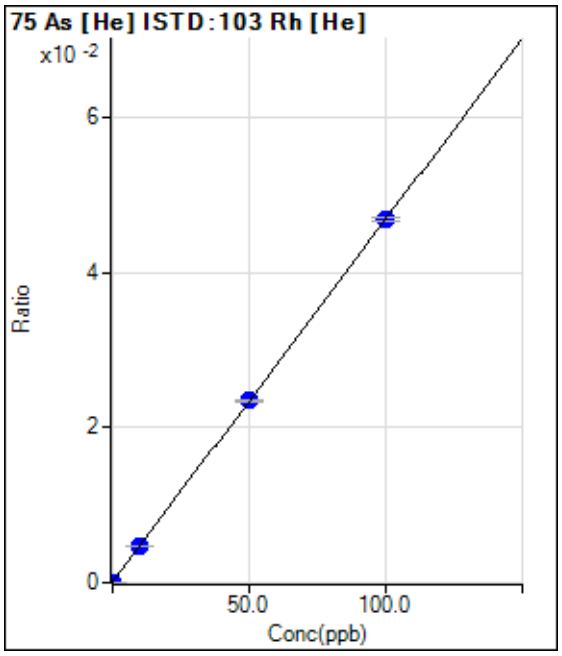
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	296.67	0.0004	P	17.7
2	☐	10.000	10.592	3066.97	0.0037	P	7.5
3	☐	50.000	49.169	12980.42	0.0161	P	2.8
4	☐	100.000	100.356	25641.79	0.0325	P	2.7
5	☐			368.90	0.0005	P	7.8

y = 3.1990E-004 * x + 3.5812E-004
R = 0.9999
DL = 0.5949
BEC = 1.119

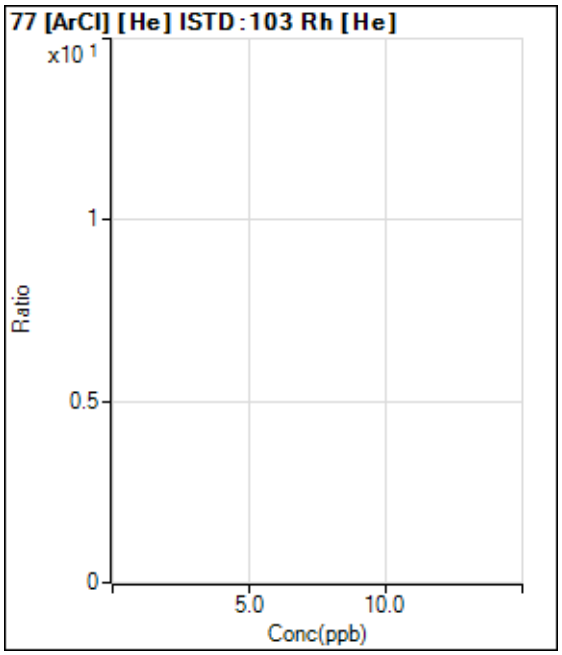
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	163.13	0.0001	P	11.3
2	☐	10.000	10.045	10819.04	0.0048	P	1.9
3	☐	50.000	50.119	50248.45	0.0235	P	0.7
4	☐	100.000	99.936	99257.85	0.0468	P	1.1
5	☐			460.83	0.0002	P	10.5

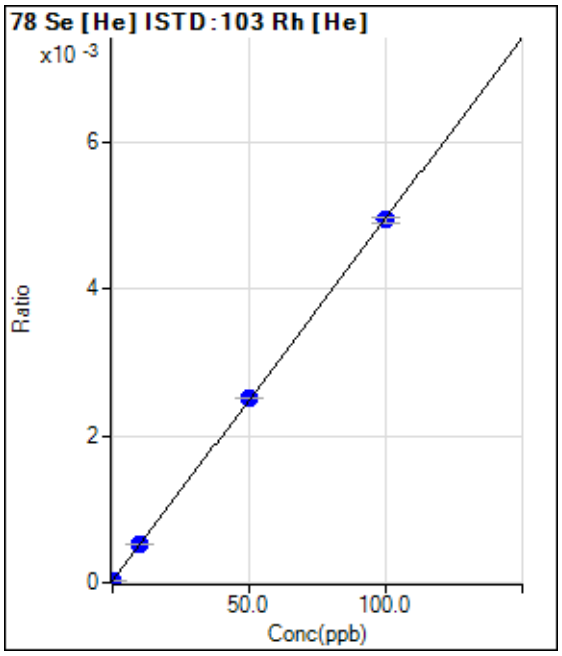
y = 4.6741E-004 * x + 6.9592E-005
R = 1.0000
DL = 0.0504
BEC = 0.1489

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			22.22	0.0000	P	100.5
2	☐			348.17	0.0002	P	12.8
3	☐			1600.15	0.0007	P	10.3
4	☐			3222.67	0.0015	P	11.0
5	☐			14.81	0.0000	P	43.0

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51.90	0.0000	P	8.0
2	☐	10.000	10.188	1192.91	0.0005	P	2.6
3	☐	50.000	50.627	5395.52	0.0025	P	0.5
4	☐	100.000	99.668	10492.30	0.0049	P	1.7
5	☐			90.88	0.0000	P	21.8

y = 4.9395E-005 * x + 2.2119E-005

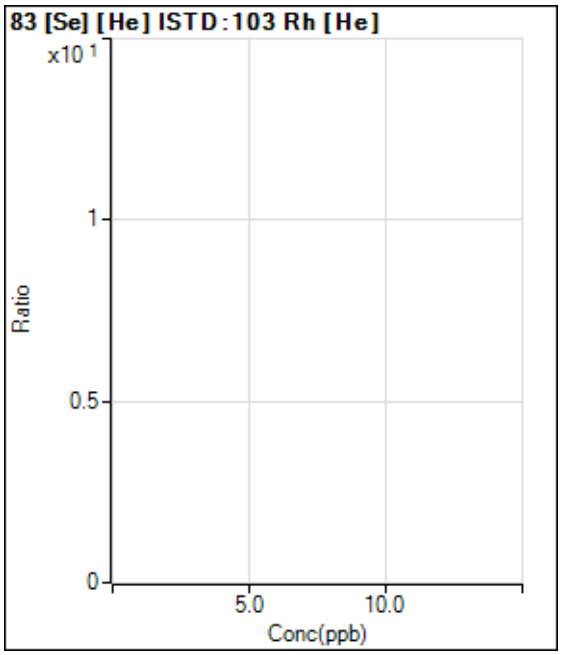
R = 1.0000

DL = 0.107

BEC = 0.4478

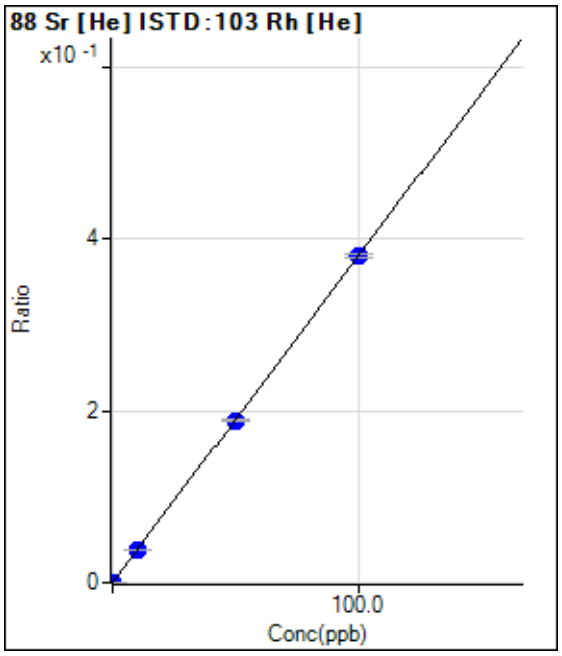
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			95.29	0.0000	P	19.8
2	☐			105.05	0.0000	P	19.3
3	☐			102.69	0.0000	P	12.4
4	☐			106.06	0.0000	P	8.6
5	☐			102.36	0.0000	P	9.1

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	117.78	0.0001	P	30.1
2	☐	10.000	9.848	85029.26	0.0374	P	2.7
3	☐	50.000	49.625	403131.16	0.1885	P	1.0
4	☐	100.000	100.203	807469.52	0.3806	P	0.9
5	☐			288.90	0.0001	P	13.9

y = 0.0038 * x + 5.0104E-005

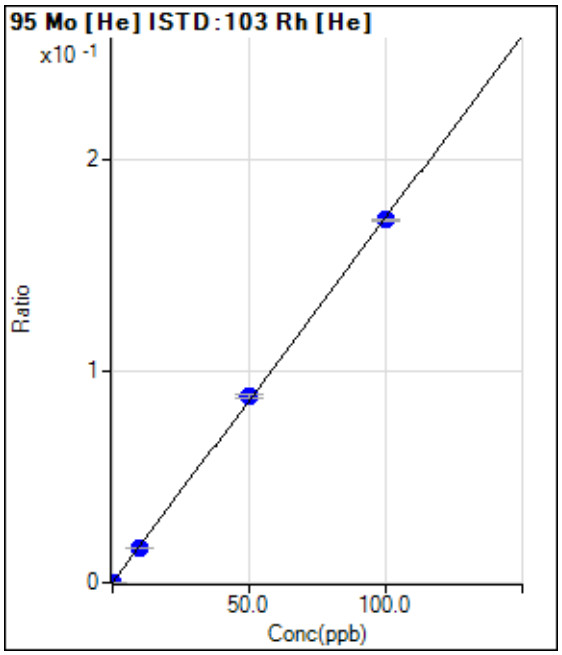
R = 1.0000

DL = 0.01193

BEC = 0.01319

Weight: <None>

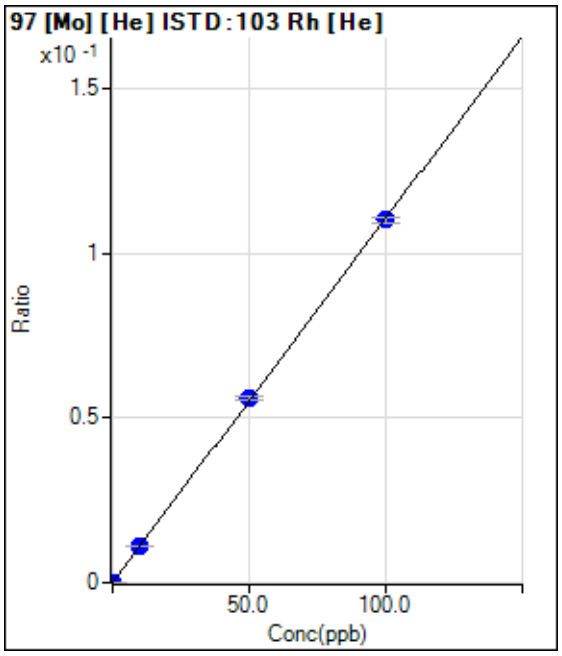
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0000	P	37.2
2	☐	10.000	9.672	37953.38	0.0167	P	1.1
3	☐	50.000	51.117	188697.31	0.0882	P	1.6
4	☐			3195.90	0.0015	P	17.1
5	☐	100.000	99.474	391196.37	0.1717	P	0.3

y = 0.0017 * x + 2.6123E-005
R = 0.9999
DL = 0.0169
BEC = 0.01514

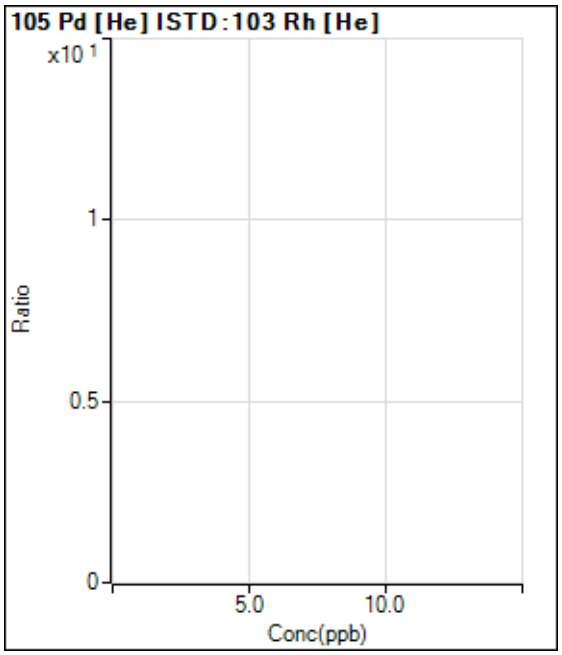
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.81	0.0000	P	86.6
2	☐	10.000	10.027	25145.08	0.0111	P	3.4
3	☐	50.000	50.627	119533.62	0.0559	P	2.0
4	☐			1800.19	0.0008	P	15.3
5	☐	100.000	99.684	250745.61	0.1100	P	1.5

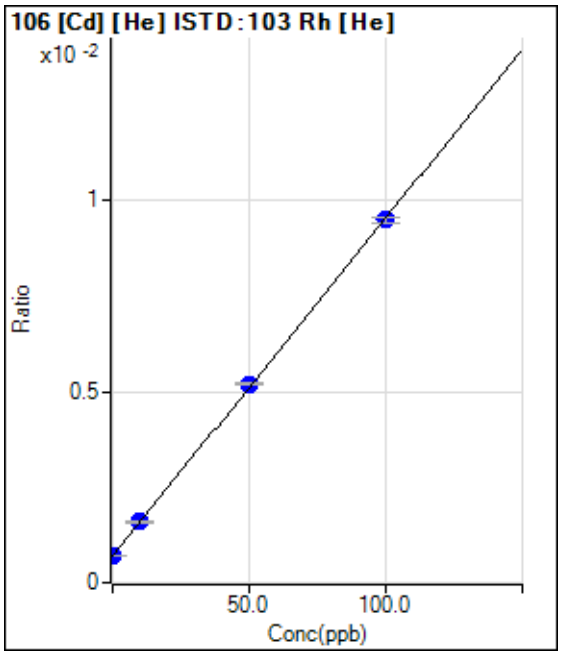
y = 0.0011 * x + 6.3218E-006
R = 1.0000
DL = 0.01488
BEC = 0.005727

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1670.56	0.0007	P	11.0
2	☐			1807.60	0.0008	P	24.7
3	☐			2055.78	0.0010	P	6.3
4	☐			2441.05	0.0011	P	9.7
5	☐			1748.34	0.0008	P	13.5

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1626.35	0.0007	P	2.2
2	☐	10.000	10.112	3602.41	0.0016	P	2.2
3	☐	50.000	50.938	11105.24	0.0052	P	0.5
4	☐	100.000	99.520	20122.04	0.0095	P	1.6
5	☐			1730.06	0.0008	P	2.5

y = 8.8330E-005 * x + 6.9328E-004

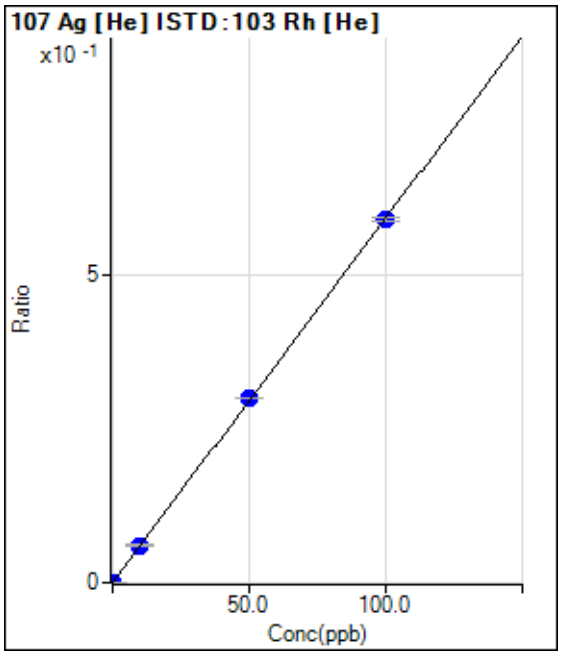
R = 0.9999

DL = 0.5141

BEC = 7.849

Weight: <None>

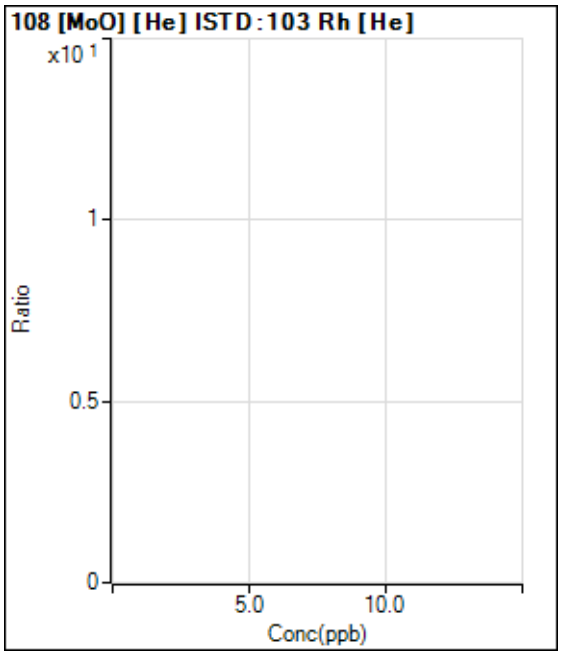
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.56	0.0000	P	91.3
2	☐	10.000	10.272	138266.67	0.0609	P	1.7
3	☐	50.000	50.678	642464.04	0.3004	P	0.1
4	☐	100.000	99.634	1253098.01	0.5906	P	1.1
5	☐			250.01	0.0001	P	17.1

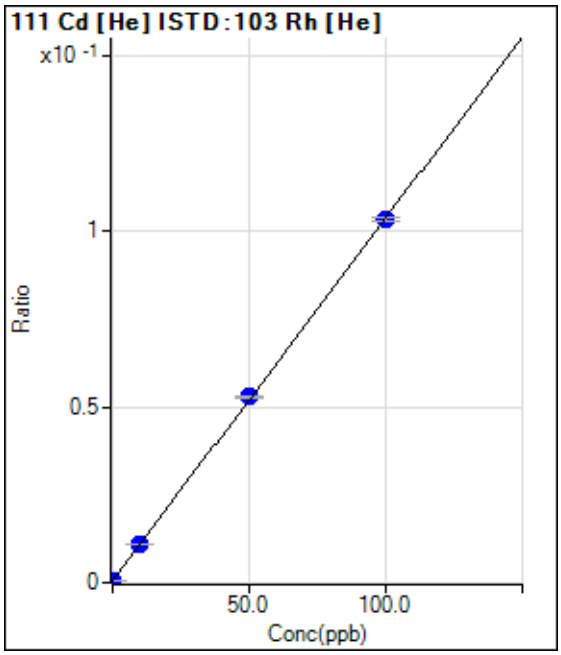
y = 0.0059 * x + 2.3780E-006
R = 1.0000
DL = 0.001099
BEC = 0.0004012

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			14.81	0.0000	P	86.6
2	☐			1500.15	0.0007	P	14.0
3	☐			7049.98	0.0033	P	3.9
4	☐			13806.18	0.0065	P	4.9
5	☐			100.01	0.0000	P	50.5

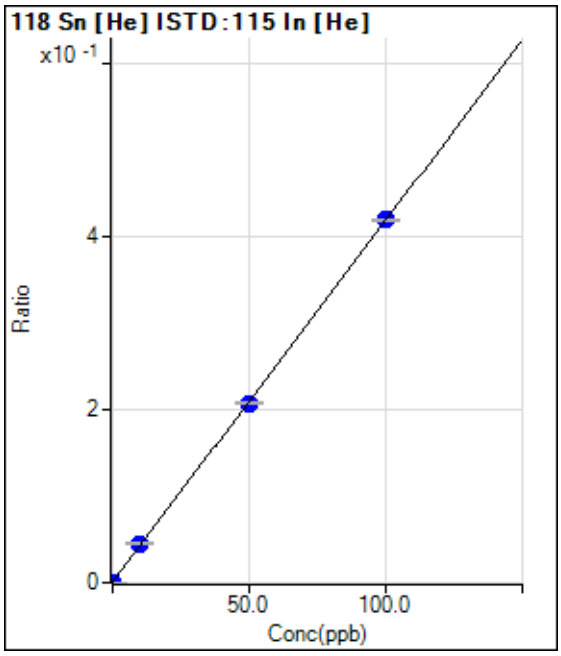
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1232.01	0.0005	P	1.8
2	☐	10.000	10.146	24958.20	0.0110	P	3.1
3	☐	50.000	50.737	113053.77	0.0529	P	0.5
4	☐	100.000	99.617	219141.23	0.1033	P	1.0
5	☐			1362.94	0.0006	P	6.3

y = 0.0010 * x + 5.2519E-004
R = 1.0000
DL = 0.0269
BEC = 0.5091

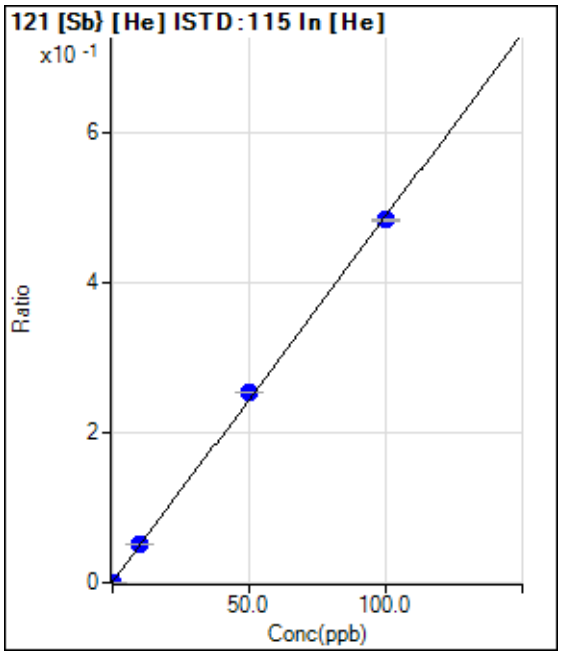
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1114.93	0.0008	P	11.0
2	☐	10.000	10.627	61713.30	0.0451	P	2.3
3	☐	50.000	49.477	267481.25	0.2071	P	1.6
4	☐			4634.35	0.0036	P	9.1
5	☐	100.000	100.199	572523.27	0.4186	P	0.2

y = 0.0042 * x + 7.8560E-004
R = 0.9999
DL = 0.06215
BEC = 0.1884

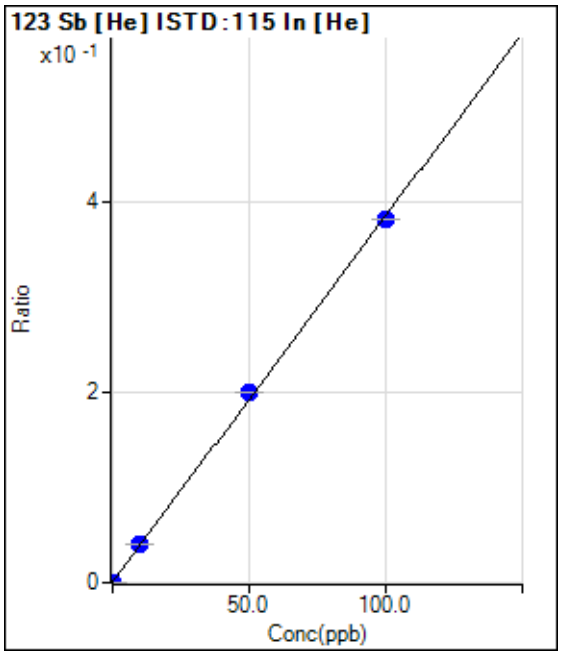
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	823.37	0.0006	P	3.4
2	☐	10.000	10.307	69477.45	0.0508	P	1.5
3	☐	50.000	51.821	326682.70	0.2529	P	0.4
4	☐			4210.58	0.0033	P	9.1
5	☐	100.000	99.059	660543.62	0.4830	P	0.6

y = 0.0049 * x + 5.7999E-004
R = 0.9997
DL = 0.01213
BEC = 0.1191

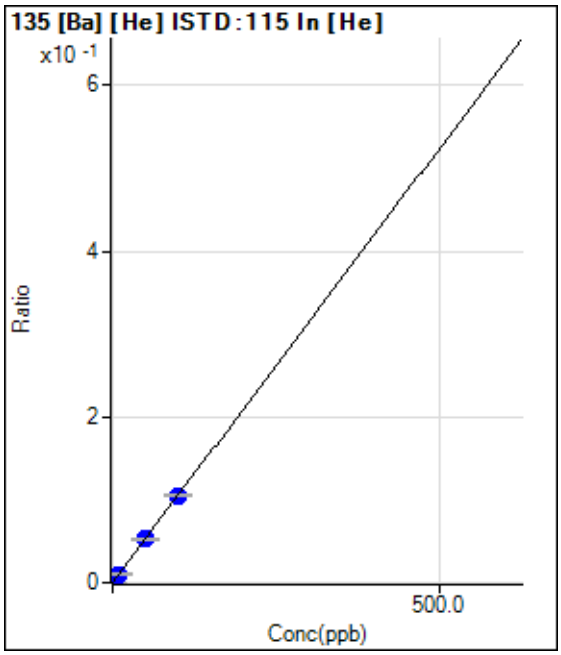
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	638.91	0.0004	P	9.4
2	☐	10.000	10.266	54718.16	0.0400	P	1.4
3	☐	50.000	51.957	259021.83	0.2005	P	0.3
4	☐			3329.26	0.0026	P	9.9
5	☐	100.000	98.995	522052.36	0.3817	P	0.1

y = 0.0039 * x + 4.4999E-004
R = 0.9997
DL = 0.03288
BEC = 0.1168

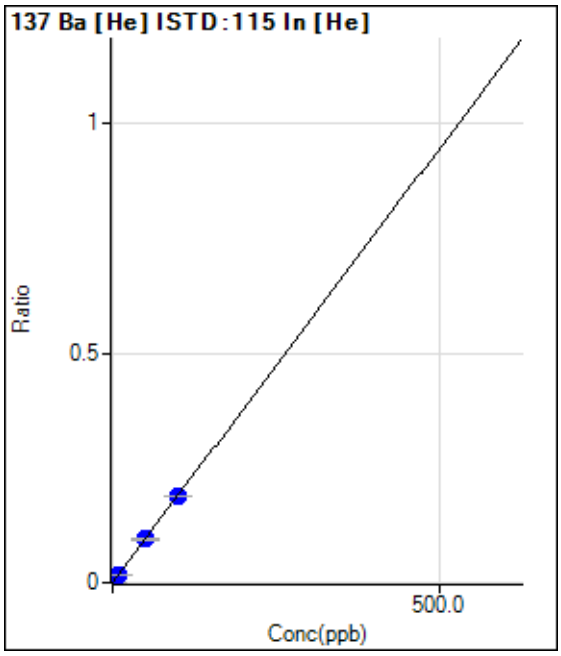
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46.67	0.0000	P	18.8
2	☐	10.000	9.807	14098.25	0.0103	P	2.7
3	☐	50.000	49.994	67659.62	0.0524	P	1.5
4	☐	100.000	100.023	135205.73	0.1048	P	1.8
5	☐			81.11	0.0001	P	28.2

y = 0.0010 * x + 3.2873E-005
R = 1.0000
DL = 0.01769
BEC = 0.03139

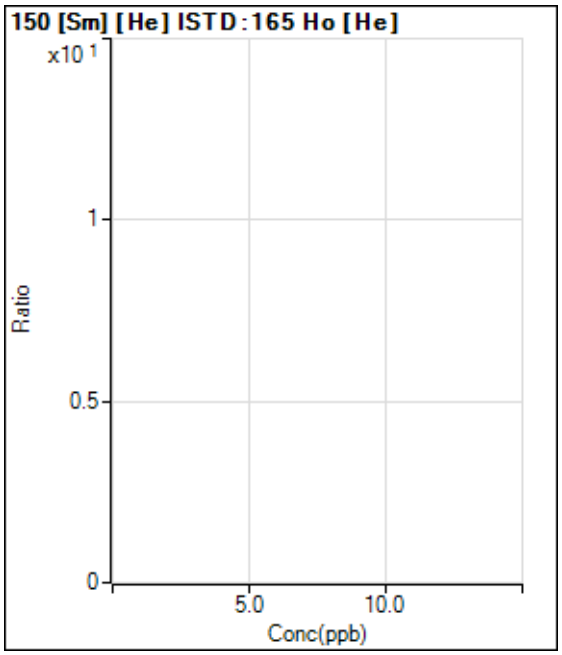
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.00	0.0001	P	14.9
2	☐	10.000	9.749	25346.97	0.0185	P	2.3
3	☐	50.000	49.960	122218.87	0.0946	P	1.9
4	☐	100.000	100.045	244440.15	0.1894	P	1.0
5	☐			183.34	0.0001	P	22.1

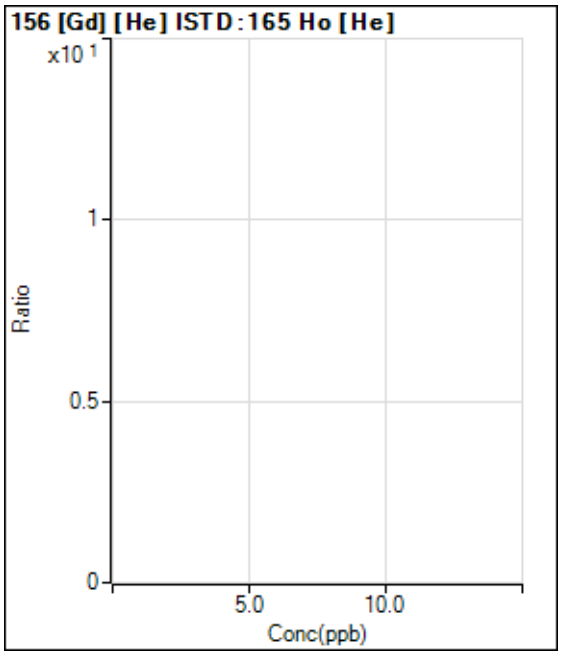
y = 0.0019 * x + 7.0421E-005
R = 1.0000
DL = 0.01662
BEC = 0.03721

Weight: <None>
Min Conc: <None>



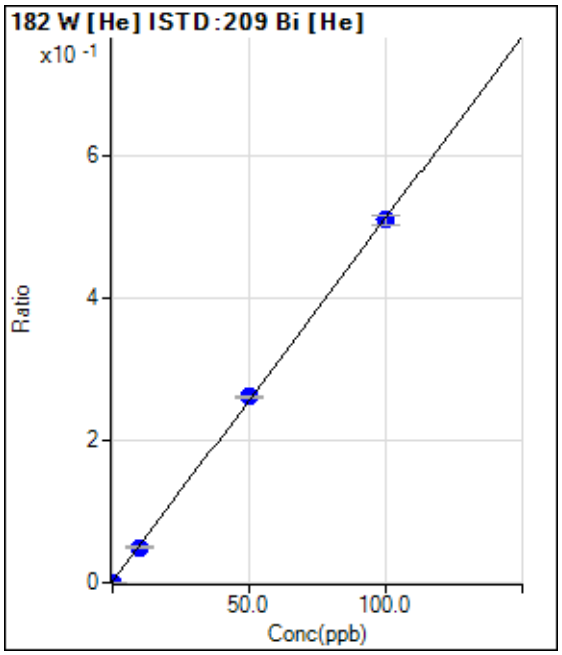
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2.00	0.0000	P	100.0
2	☐			3.33	0.0000	P	91.4
3	☐			19.33	0.0000	P	86.5
4	☐			20.00	0.0000	P	86.7
5	☐			3.33	0.0000	P	34.3

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			10.00	0.0000	P	72.2
2	☐			14.00	0.0000	P	51.6
3	☐			14.67	0.0000	P	20.5
4	☐			24.67	0.0000	P	38.2
5	☐			8.67	0.0000	P	35.0

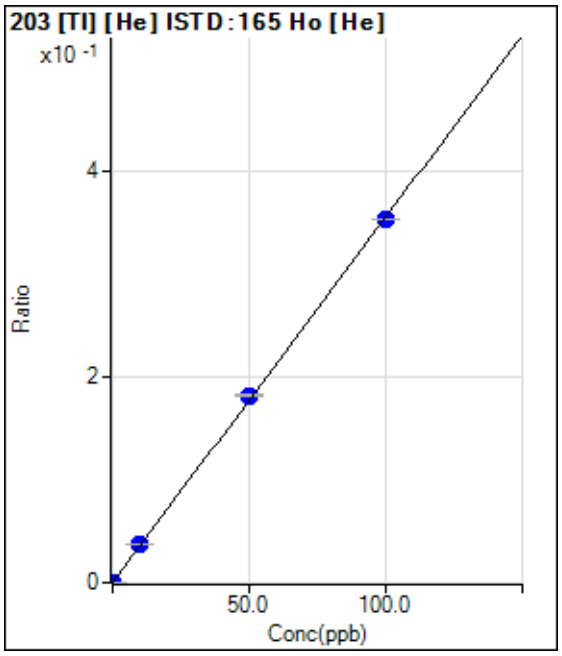
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3730.24	0.0013	P	3.8
2	☐	10.000	9.501	139239.39	0.0498	P	0.9
3	☐	50.000	50.947	694844.75	0.2613	P	1.2
4	☐			17232.09	0.0066	P	13.9
5	☐	100.000	99.576	1453299.54	0.5094	P	2.7

y = 0.0051 * x + 0.0013
R = 0.9999
DL = 0.0287
BEC = 0.2543

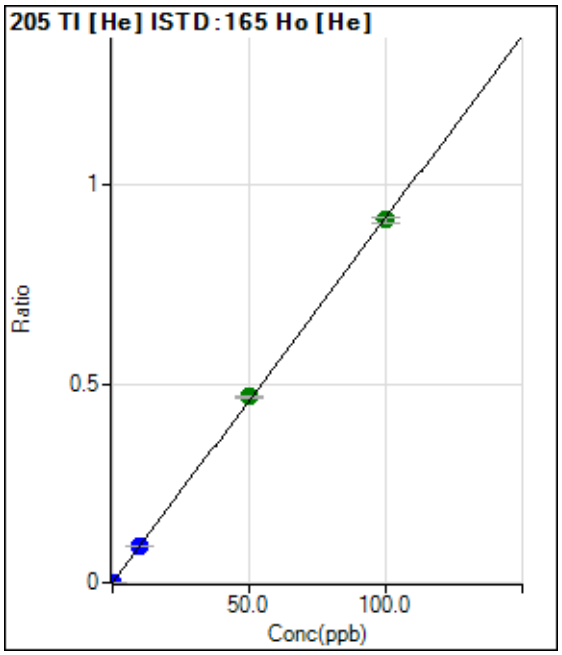
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	66.8
2	☐	10.000	10.361	141504.54	0.0368	P	1.1
3	☐	50.000	51.189	689715.22	0.1817	P	1.0
4	☐	100.000	99.369	1337353.48	0.3527	P	0.1
5	☐			1744.63	0.0005	P	15.1

y = 0.0035 * x + 8.4870E-006
R = 0.9999
DL = 0.004791
BEC = 0.002391

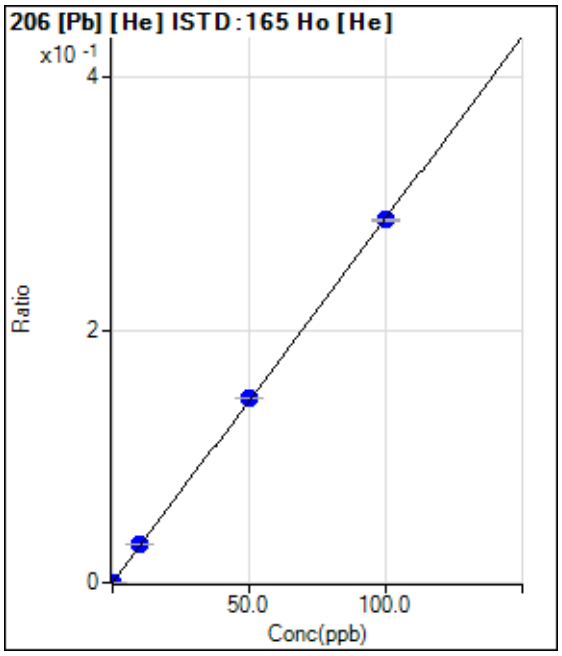
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	71.11	0.0000	P	54.3
2	☐	10.000	9.889	349176.26	0.0908	P	1.5
3	☐	50.000	50.982	1775994.23	0.4679	A	1.6
4	☐	100.000	99.520	3462823.20	0.9133	A	1.3
5	☐			3024.79	0.0008	P	31.5

y = 0.0092 * x + 1.8106E-005
R = 0.9999
DL = 0.003214
BEC = 0.001973

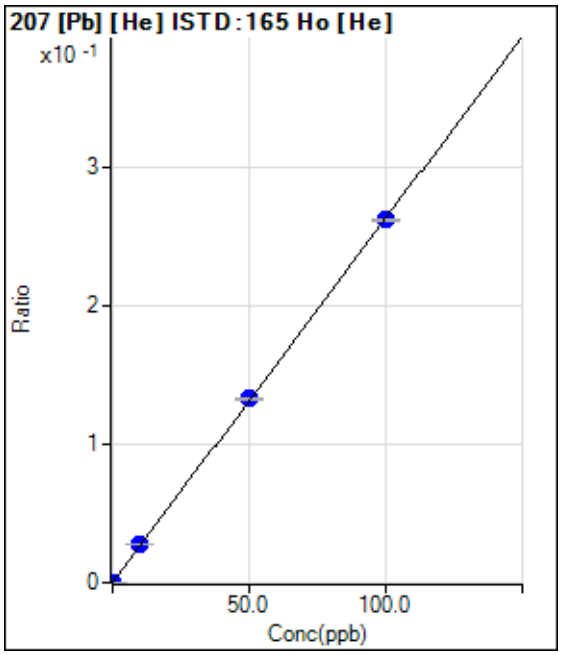
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	193.34	0.0000	P	9.3
2	☐	10.000	10.588	117572.20	0.0306	P	2.2
3	☐	50.000	50.599	553648.48	0.1459	P	0.7
4	☐	100.000	99.642	1088833.67	0.2872	P	0.4
5	☐			744.48	0.0002	P	4.1

y = 0.0029 * x + 4.9175E-005
R = 1.0000
DL = 0.004754
BEC = 0.01706

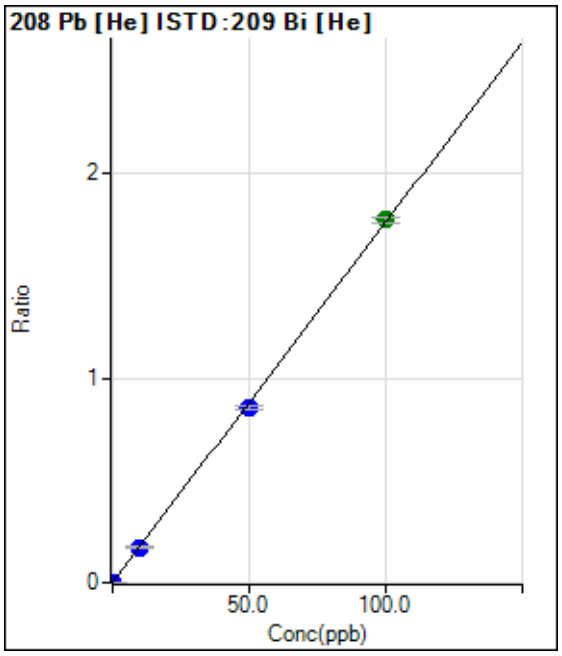
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	170.00	0.0000	P	17.3
2	☐	10.000	10.537	106826.61	0.0278	P	1.8
3	☐	50.000	50.567	505183.85	0.1331	P	0.7
4	☐	100.000	99.663	994368.78	0.2623	P	0.4
5	☐			720.03	0.0002	P	11.9

y = 0.0026 * x + 4.3223E-005
R = 1.0000
DL = 0.008541
BEC = 0.01643

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	807.80	0.0003	P	7.4
2	☐	10.000	9.757	481158.37	0.1720	P	2.3
3	☐	50.000	48.647	2277930.97	0.8566	P	1.7
4	☐	100.000	100.701	4629581.73	1.7730	A	1.3
5	☐			3266.86	0.0011	P	11.7

y = 0.0176 * x + 2.8103E-004
R = 0.9998
DL = 0.003544
BEC = 0.01596

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T08:59:18-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	70	131.47
B	11	45	2	NoGas	10785	0.06
Na	23	45	1	He	22681	0.01
Mg	24	45	1	He	1100	1.75
Al	27	45	1	He	2700	0.07
K	39	45	1	He	37829	0.01
Ca	44	45	1	He	1147	0.60
Ti	47	45	1	He	52	117.45
Cr	52	45	1	He	2584	0.18
Mn	55	45	1	He	1275	0.25
Fe	56	45	1	He	9614	0.28
Co	59	103	1	He	61	53.80
Ni	60	103	1	He	149	8.55
Cu	63	103	1	He	1688	0.66
Zn	66	103	1	He	1962	0.04
As	75	103	1	He	209	8.65
Se	78	103	1	He	57	13.78
Sr	88	103	1	He	129	13.36
Mo	95	103	1	He	596	6.75
Ag	107	103	1	He	12	1054.29
Cd	111	103	1	He	1301	0.34
Sn	118	115	1	He	1896	1.58
Sb	123	115	1	He	1092	2.27
Ba	137	115	1	He	100	23.34
W	182	209	1	He	5824	0.21
Tl	205	165	1	He	230	5.38
Pb	208	209	1	He	834	0.56

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1705161	0.85
Sc	45	1	He	844110	0.55
Sc	45	2	NoGas	6525731	1.04
Rh	103	1	He	2402308	0.48
In	115	1	He	1433973	0.24
Tb	159	1	He	3915650	1.00
Ho	165	1	He	4002193	0.94
Bi	209	1	He	2891682	0.51

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:03:11-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	44	168.74
B	11	45	2	NoGas	9870	0.05
Na	23	45	1	He	23119	0.02
Mg	24	45	1	He	989	1.42
Al	27	45	1	He	2648	0.33
K	39	45	1	He	38275	0.00
Ca	44	45	1	He	1004	1.62
Ti	47	45	1	He	13	187.59
V	51	45	1	He	111	624.55
Cr	52	45	1	He	2574	0.17
Mn	55	45	1	He	1230	0.26
Fe	56	45	1	He	4585	0.11
Co	59	103	1	He	48	113.42
Ni	60	103	1	He	129	16.34
Cu	63	103	1	He	1715	0.29
Zn	66	103	1	He	1973	0.16
As	75	103	1	He	163	6.39
Se	78	103	1	He	52	17.06
Sr	88	103	1	He	118	26.36
Mo	95	103	1	He	61	59.42
Ag	107	103	1	He	6	1649.19
Cd	111	103	1	He	1232	0.23
Sn	118	115	1	He	1115	0.96
Sb	123	115	1	He	639	1.53
Ba	137	115	1	He	100	15.28
W	182	209	1	He	3730	0.10
Tl	205	165	1	He	71	76.11
Pb	208	209	1	He	808	0.90

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1631381	0.72
Sc	45	1	He	829696	1.36
Sc	45	2	NoGas	6325638	0.21
Rh	103	1	He	2345543	1.11
In	115	1	He	1419467	0.49
Tb	159	1	He	3888262	0.98
Ho	165	1	He	3932562	0.35
Bi	209	1	He	2874805	1.34

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:07:04-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	44179	0.00
B	11	2	NoGas	41488	0.01
Na	23	1	He	8886942	0.00
Mg	24	1	He	5111829	0.00
Al	27	1	He	30709	0.01
K	39	1	He	4849697	0.00
Ca	44	1	He	257825	0.00
Ti	47	1	He	2902	0.07
V	51	1	He	71999	0.00
Cr	52	1	He	89657	0.00
Mn	55	1	He	342910	0.00
Fe	56	1	He	20566580	0.00
Co	59	1	He	126407	0.00
Ni	60	1	He	30883	0.01
Cu	63	1	He	84808	0.00
Zn	66	1	He	18452	0.02
As	75	1	He	10819	0.02
Se	78	1	He	1193	0.24
Sr	88	1	He	85029	0.00
Mo	95	1	He	37953	0.00
Ag	107	1	He	138267	0.00
Cd	111	1	He	24958	0.01
Sn	118	1	He	61713	0.00
Sb	123	1	He	54718	0.00
Ba	137	1	He	25347	0.01
W	182	1	He	139239	0.00
Tl	205	1	He	349176	0.00
Pb	208	1	He	481158	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1540307	0.83	1631381	94.42	30	120	
Sc	45	1	He	817538	3.25	829696	98.53	30	120	
Sc	45	2	NoGas	5950417	0.56	6325638	94.07	30	120	
Rh	103	1	He	2270622	0.38	2345543	96.81	30	120	
In	115	1	He	1368322	0.64	1419467	96.40	30	120	
Tb	159	1	He	3779426	0.90	3888262	97.20	30	120	
Ho	165	1	He	3846650	0.70	3932562	97.82	30	120	
Bi	209	1	He	2797035	1.23	2874805	97.29	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:10:52-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	240950	0.00
B	11	2	NoGas	183611	0.00
Na	23	1	He	41801991	0.00
Mg	24	1	He	24209589	0.00
Al	27	1	He	139163	0.00
K	39	1	He	22452697	0.00
Ca	44	1	He	1235832	0.00
Ti	47	1	He	13902	0.02
V	51	1	He	345101	0.00
Cr	52	1	He	419722	0.00
Mn	55	1	He	1642241	0.00
Fe	56	1	He	98690627	0.00
Co	59	1	He	592350	0.00
Ni	60	1	He	146237	0.00
Cu	63	1	He	387993	0.00
Zn	66	1	He	78647	0.00
As	75	1	He	50248	0.00
Se	78	1	He	5396	0.01
Sr	88	1	He	403131	0.00
Mo	95	1	He	188697	0.00
Ag	107	1	He	642464	0.00
Cd	111	1	He	113054	0.00
Sn	118	1	He	267481	0.00
Sb	123	1	He	259022	0.00
Ba	137	1	He	122219	0.00
W	182	1	He	694845	0.00
Tl	205	1	He	1775994	0.00
Pb	208	1	He	2277931	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1526248	1.73	1631381	93.56	30	120	
Sc	45	1	He	807514	4.37	829696	97.33	30	120	
Sc	45	2	NoGas	5970501	1.09	6325638	94.39	30	120	
Rh	103	1	He	2138681	0.22	2345543	91.18	30	120	
In	115	1	He	1291612	0.62	1419467	90.99	30	120	
Tb	159	1	He	3744717	1.88	3888262	96.31	30	120	
Ho	165	1	He	3795687	0.46	3932562	96.52	30	120	
Bi	209	1	He	2659576	1.42	2874805	92.51	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:14:41-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	491108	0.00
B	11	2	NoGas	12245	0.04
Na	23	1	He	85188647	0.00
Mg	24	1	He	48191972	0.00
Al	27	1	He	276020	0.00
K	39	1	He	45584979	0.00
Ca	44	1	He	2499005	0.00
Ti	47	1	He	18	161.10
V	51	1	He	695862	0.00
Cr	52	1	He	837414	0.00
Mn	55	1	He	3281596	0.00
Fe	56	1	He	196640619	0.00
Co	59	1	He	1166939	0.00
Ni	60	1	He	289875	0.00
Cu	63	1	He	762296	0.00
Zn	66	1	He	156069	0.00
As	75	1	He	99258	0.00
Se	78	1	He	10492	0.01
Sr	88	1	He	807470	0.00
Mo	95	1	He	3196	0.51
Ag	107	1	He	1253098	0.00
Cd	111	1	He	219141	0.00
Sn	118	1	He	4634	0.20
Sb	123	1	He	3329	0.31
Ba	137	1	He	244440	0.00
W	182	1	He	17232	0.08
Tl	205	1	He	3462823	0.00
Pb	208	1	He	4629582	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1551780	1.55	1631381	95.12	30	120	
Sc	45	1	He	790123	2.12	829696	95.23	30	120	
Sc	45	2	NoGas	6107045	2.81	6325638	96.54	30	120	
Rh	103	1	He	2121899	0.80	2345543	90.47	30	120	
In	115	1	He	1290417	0.61	1419467	90.91	30	120	
Tb	159	1	He	3712947	1.73	3888262	95.49	30	120	
Ho	165	1	He	3791296	0.31	3932562	96.41	30	120	
Bi	209	1	He	2611397	0.96	2874805	90.84	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:18:28-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	152	10.03
B	11	2	NoGas	335669	0.00
Na	23	1	He	39065	0.02
Mg	24	1	He	5475	0.32
Al	27	1	He	2866	0.19
K	39	1	He	42461	0.01
Ca	44	1	He	1139	0.73
Ti	47	1	He	28624	0.01
V	51	1	He	541	11.48
Cr	52	1	He	3677	0.21
Mn	55	1	He	1568	0.99
Fe	56	1	He	275375	0.01
Co	59	1	He	220	14.51
Ni	60	1	He	330	4.32
Cu	63	1	He	1536	0.54
Zn	66	1	He	2238	0.06
As	75	1	He	461	2.39
Se	78	1	He	91	24.27
Sr	88	1	He	289	4.59
Mo	95	1	He	391196	0.00
Ag	107	1	He	250	6.97
Cd	111	1	He	1363	0.41
Sn	118	1	He	572523	0.00
Sb	123	1	He	522052	0.00
Ba	137	1	He	183	12.19
W	182	1	He	1453300	0.00
Tl	205	1	He	3025	1.03
Pb	208	1	He	3267	0.31

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1498103	1.99	1631381	91.83	30	120	
Sc	45	1	He	803040	4.17	829696	96.79	30	120	
Sc	45	2	NoGas	5852964	0.67	6325638	92.53	30	120	
Rh	103	1	He	2278766	0.70	2345543	97.15	30	120	
In	115	1	He	1367725	0.97	1419467	96.35	30	120	
Tb	159	1	He	3796091	0.97	3888262	97.63	30	120	
Ho	165	1	He	3835107	0.48	3932562	97.52	30	120	
Bi	209	1	He	2853758	2.05	2874805	99.27	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:22:19-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	39.719	2.977	199844	1.68	40	99.3	89.5	110.5	
B	11	45	NoGas	42.614	1.107	160744	0.12	40	106.5	89.5	110.5	
Na	23	45	He	20347.473	2.253	35423057	0.91	20000	101.7	89.5	110.5	
Mg	24	45	He	20572.318	1.718	20349026	0.69	20000	102.9	89.5	110.5	
Al	27	45	He	202.762	1.205	116282	0.87	200	101.4	89.5	110.5	
K	39	45	He	20635.545	2.407	19252292	0.57	20000	103.2	89.5	110.5	
Ca	44	45	He	20094.657	1.450	1027800	0.55	20000	100.5	89.5	110.5	
Ti	47	45	He	40.693	4.295	11732	3.36	40	101.7	89.5	110.5	
V	51	45	He	40.709	2.273	290021	1.52	40	101.8	89.5	110.5	
Cr	52	45	He	41.092	1.340	354283	1.10	40	102.7	89.5	110.5	
Mn	55	45	He	207.587	0.717	1397977	2.61	200	103.8	89.5	110.5	
Fe	56	45	He	10216.638	2.075	82465319	1.66	10000	102.2	89.5	110.5	
Co	59	103	He	40.223	0.218	494721	0.36	40	100.6	89.5	110.5	
Ni	60	103	He	40.791	0.971	124511	1.27	40	102.0	89.5	110.5	
Cu	63	103	He	40.594	1.245	327179	0.95	40	101.5	89.5	110.5	
Zn	66	103	He	41.119	0.557	68483	0.07	40	102.8	89.5	110.5	
As	75	103	He	39.716	0.668	41605	0.24	40	99.3	89.5	110.5	
Se	78	103	He	42.068	1.056	4689	0.72	40	105.2	89.5	110.5	
Sr	88	103	He	40.385	1.039	342529	0.55	40	101.0	89.5	110.5	
Mo	95	103	He	42.603	1.507	164192	1.02	40	106.5	89.5	110.5	
Ag	107	103	He	41.029	0.289	543038	0.26	40	102.6	89.5	110.5	
Cd	111	103	He	40.453	1.072	94346	1.20	40	101.1	89.5	110.5	
Sn	118	115	He	40.657	1.079	228942	1.44	40	101.6	89.5	110.5	
Sb	123	115	He	43.806	1.643	227377	1.99	40	109.5	89.5	110.5	
Ba	137	115	He	40.105	0.393	102127	0.38	40	100.3	89.5	110.5	
W	182	209	He	40.649	0.952	568386	1.13	40	101.6	89.5	110.5	
Tl	205	165	He	39.187	1.277	1386061	1.22	40	98.0	89.5	110.5	
Pb	208	209	He	39.641	1.401	1900915	1.28	40	99.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1591870	1.37	1631381	97.58	30	120	
Sc	45	He	813295	1.95	829696	98.02	30	120	
Sc	45	NoGas	6292310	1.09	6325638	99.47	30	120	
Rh	103	He	2232877	0.55	2345543	95.20	30	120	
In	115	He	1344152	0.38	1419467	94.69	30	120	
Tb	159	He	3806803	1.92	3888262	97.91	30	120	
Ho	165	He	3853877	0.16	3932562	98.00	30	120	
Bi	209	He	2723051	0.66	2874805	94.72	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:26:10-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.029	20.7	21	9.1	20	
W	182	1	He	1.241	13.8	21845	10.8	10	
Ca	44	1	He	-9.642	-20.9	480	21.1	1000	
Na	23	1	He	3.422	19.7	28015	2.8	400	
Mg	24	1	He	2.011	34.1	2893	21.6	1000	
K	39	1	He	4.594	28.0	40936	2.4	1000	
V	51	1	He	0.039	94.2	376	69.2	2	
Cr	52	1	He	-0.004	-280.4	2440	2.3	2	
Mn	55	1	He	-0.122	-7.9	378	16.3	2	
Fe	56	1	He	19.417	24.3	157605	22.3	50	
Co	59	1	He	0.003	103.4	82	43.4	1	
Ni	60	1	He	-0.001	-647.6	126	22.1	2	
Cu	63	1	He	-0.072	-7.4	1113	4.0	2	
Zn	66	1	He	-0.315	-15.3	1443	4.5	20	
As	75	1	He	0.022	87.8	188	10.0	2	
Se	78	1	He	0.089	8.1	63	2.6	2	
Sr	88	1	He	0.013	22.7	236	11.5	10	
Mo	95	1	He	0.911	16.4	3769	16.7	2	
Ag	107	1	He	0.010	14.6	147	14.9	0.2	
Cd	111	1	He	0.044	53.3	1345	2.8	0.2	
Ba	137	1	He	-0.007	-36.3	81	8.6	5	
Sn	118	1	He	0.360	14.4	3226	9.7	10	
Tl	205	1	He	0.044	30.2	1647	28.8	0.5	
Pb	208	1	He	0.010	22.6	1331	8.2	1	
Al	27	1	He	1.396	26.9	3306	4.9	50	
Sb	123	1	He	0.522	7.3	3474	6.3	1	
B	11	2	NoGas	0.981	9.6	13376	2.7	20	
Be	9	2	NoGas	0.007	176.7	78	75.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1631422	0.57	1631381	100.00	30	120	
Sc	45	1	He	796577	1.31	829696	96.01	30	120	
Sc	45	2	NoGas	6332474	0.34	6325638	100.11	30	120	
Rh	103	1	He	2358192	1.43	2345543	100.54	30	120	
In	115	1	He	1411905	0.37	1419467	99.47	30	120	

Tb	159	1	He	3887187	0.02	3888262	99.97	30	120	
Ho	165	1	He	3914967	0.86	3932562	99.55	30	120	
Bi	209	1	He	2863182	0.75	2874805	99.60	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1912660
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:30:04-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.044	1.044	4.154	5012	5.57	1	104.4	69.5	130.5	
B	11	2	NoGas	23.577	23.577	5.104	85976	2.56	20	117.9	69.5	130.5	
Na	23	1	He	1060.776	1060.776	2.000	1948698	1.12	1000	106.1	69.5	130.5	
Mg	24	1	He	1077.817	1077.817	0.945	1113136	1.71	1000	107.8	69.5	130.5	
Al	27	1	He	48.108	48.108	1.960	30838	0.13	50	96.2	69.5	130.5	
K	39	1	He	1075.149	1075.149	0.905	1083552	1.05	1000	107.5	69.5	130.5	
Ca	44	1	He	1018.635	1018.635	1.033	55324	1.77	1000	101.9	69.5	130.5	
Ti	47	1	He	10.758	10.758	4.676	3245	3.49	10	107.6	69.5	130.5	
V	51	1	He	5.329	5.329	1.886	39693	1.08	5	106.6	69.5	130.5	
Cr	52	1	He	2.125	2.125	2.771	21599	1.26	2	106.2	69.5	130.5	
Mn	55	1	He	5.209	5.209	1.204	37808	1.32	5	104.2	69.5	130.5	
Fe	56	1	He	108.979	108.979	0.564	922254	1.52	100	109.0	69.5	130.5	
Co	59	1	He	1.006	1.006	2.830	13385	2.63	1	100.6	69.5	130.5	
Ni	60	1	He	2.057	2.057	3.238	6891	3.22	2	102.9	69.5	130.5	
Cu	63	1	He	2.013	2.013	1.822	19151	1.52	2	100.6	69.5	130.5	
Zn	66	1	He	20.587	20.587	1.916	37955	2.01	20	102.9	69.5	130.5	
As	75	1	He	5.113	5.113	0.636	5917	0.83	5	102.3	69.5	130.5	
Se	78	1	He	5.261	5.261	2.021	678	1.96	5	105.2	69.5	130.5	
Sr	88	1	He	9.637	9.637	0.665	88162	0.55	10	96.4	69.5	130.5	
Mo	95	1	He	10.468	10.468	1.161	43518	1.07	10	104.7	69.5	130.5	
Ag	107	1	He	1.033	1.033	0.742	14738	0.91	1	103.3	69.5	130.5	
Cd	111	1	He	1.042	1.042	0.157	3850	0.28	1	104.2	69.5	130.5	
Sn	118	1	He	10.088	10.088	0.541	61370	0.85	10	100.9	69.5	130.5	
Sb	123	1	He	2.203	2.203	1.821	12797	1.19	2	110.2	69.5	130.5	
Ba	137	1	He	4.941	4.941	1.793	13493	1.38	5	98.8	69.5	130.5	
W	182	1	He	10.180	10.180	2.063	152706	2.18	10	101.8	69.5	130.5	
Tl	205	1	He	2.046	2.046	1.873	74530	1.26	2	102.3	69.5	130.5	
Pb	208	1	He	1.044	1.044	3.177	53518	1.96	1	104.4	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1506387	2.35	1631381	92.34	30	120	
Sc	45	1	He	848301	1.92	829696	102.24	30	120	
Sc	45	2	NoGas	5800348	2.08	6325638	91.70	30	120	
Rh	103	1	He	2405851	0.22	2345543	102.57	30	120	
In	115	1	He	1432276	1.12	1419467	100.90	30	120	
Tb	159	1	He	3907047	1.39	3888262	100.48	30	120	
Ho	165	1	He	3966512	0.80	3932562	100.86	30	120	
Bi	209	1	He	2868080	1.15	2874805	99.77	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	ZZZZ
Data File Name	014_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:21:13-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	-0.007	-19.2	15	86.6	1	
B	11	45	2	NoGas	-1.703	-1.1	7083	1.1	20	
Na	23	45	1	He	-5.719	-48.6	16130	5.3	400	
Mg	24	45	1	He	0.504	74.6	1926	13.0	1000	
Al	27	45	1	He	8.258	64.7	9096	13.1	50	
K	39	45	1	He	-23.759	-24.6	19703	14.3	1000	
Ca	44	45	1	He	-15.961	-9.0	213	36.2	1000	
Ti	47	45	1	He	16.237	140.5	4501	120.8	20	
V	51	45	1	He	0.065	91.7	704	61.9	2	
Cr	52	45	1	He	-0.171	-48.5	1249	27.1	2	
Mn	55	45	1	He	-0.151	-7.2	243	6.3	2	
Fe	56	45	1	He	2.215	44.8	28785	23.1	50	
Co	59	103	1	He	-0.002	-74.8	58	54.8	1	
Ni	60	103	1	He	-0.031	-5.7	72	2.7	2	
Cu	63	103	1	He	-0.157	-7.7	963	8.2	2	
Zn	66	103	1	He	-1.090	-2.1	290	18.9	20	
As	75	103	1	He	-0.099	-15.8	134	18.3	2	
Se	78	103	1	He	-0.232	-10.8	63	11.9	2	
Sr	88	103	1	He	-0.001	-775.1	257	50.9	10	
Mo	95	103	1	He	0.033	39.6	506	38.1	2	
Ag	107	103	1	He	0.001	47.9	33	36.1	0.2	
Cd	111	103	1	He	0.053	8.0	3436	15.6	0.2	
Sn	118	115	1	He	-0.044	-109.0	2208	12.8	10	
Sb	123	115	1	He	-0.054	-16.9	914	13.8	1	
Ba	137	115	1	He	-0.002	-669.1	239	28.6	5	
W	182	209	1	He	1.124	47.9	36712	5.4	10	
Tl	205	165	1	He	-0.001	-13.4	58	8.8	0.5	
Pb	208	209	1	He	-0.003	-138.1	1203	6.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3126201	7.17	1631381	191.63	30	120	ISTD Failed
Sc	45	1	He	1132578	34.83	829696	136.51	30	120	ISTD Failed
Sc	45	2	NoGas	11780520	2.46	6325638	186.23	30	120	ISTD Failed
Rh	103	1	He	5927199	16.20	2345543	252.70	30	120	ISTD Failed
In	115	1	He	3796197	17.17	1419467	267.44	30	120	ISTD Failed
Tb	159	1	He	10072430	17.72	3888262	259.05	30	120	ISTD Failed
Ho	165	1	He	10325492	17.55	3932562	262.56	30	120	ISTD Failed
Bi	209	1	He	5693580	32.63	2874805	198.05	30	120	ISTD Failed

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:33:55-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.037	43.9	189	35.8	1	
B	11	45	2	NoGas	0.854	9.8	11130	2.3	20	
Na	23	45	1	He	46893.482	5.5	77934886	1.5	75200	
Mg	24	45	1	He	46829.550	4.5	44252768	2.5	75200	
Al	27	45	1	He	44548.464	4.6	23863820	2.4	75200	
K	39	45	1	He	47217.109	6.1	42012656	0.9	75200	
Ca	44	45	1	He	48546.792	5.1	2370274	2.0	75200	
Ti	47	45	1	He	953.546	5.4	262293	1.9	1505	
V	51	45	1	He	0.010	753.6	184	302.8	4	
Cr	52	45	1	He	0.640	7.1	7645	2.7	4	
Mn	55	45	1	He	0.324	12.6	3231	1.2	4	
Fe	56	45	1	He	47084.230	5.6	362884439	1.6	75200	
Co	59	103	1	He	0.032	8.2	400	6.8	2	
Ni	60	103	1	He	0.111	13.0	419	7.7	4	
Cu	63	103	1	He	0.233	9.9	3196	5.7	4	
Zn	66	103	1	He	-0.074	-104.6	1603	6.7	10	
As	75	103	1	He	0.096	15.6	233	6.3	4	
Se	78	103	1	He	0.186	31.5	64	7.8	4	
Sr	88	103	1	He	0.338	1.3	2712	1.6	20	
Mo	95	103	1	He	1024.383	3.9	3598715	2.2	1505	
Ag	107	103	1	He	0.015	11.6	190	9.3	1	
Cd	111	103	1	He	-0.009	-294.0	1050	6.3	1	
Sn	118	115	1	He	0.376	7.5	2934	5.6	20	
Sb	123	115	1	He	0.275	3.4	1882	2.2	1	
Ba	137	115	1	He	0.033	16.9	166	8.4	2	
W	182	209	1	He	0.557	6.7	10704	5.8	20	
Tl	205	165	1	He	0.007	9.5	289	7.7	1	
Pb	208	209	1	He	0.588	1.0	27487	1.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1323780	1.30	1631381	81.14	30	120	
Sc	45	1	He	778498	7.08	829696	93.83	30	120	
Sc	45	2	NoGas	5452568	0.27	6325638	86.20	30	120	
Rh	103	1	He	2036887	1.94	2345543	86.84	30	120	
In	115	1	He	1246815	0.70	1419467	87.84	30	120	
Tb	159	1	He	3610330	0.91	3888262	92.85	30	120	
Ho	165	1	He	3689701	0.43	3932562	93.82	30	120	
Bi	209	1	He	2584461	1.52	2874805	89.90	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:37:43-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	103.161	1.732	422098	0.63	100	103.2	79.5	120.5	
B	11	45	2	NoGas	101.808	0.539	317813	0.31	100	101.8	79.5	120.5	
Na	23	45	1	He	48905.835	3.174	76203843	1.25	50000	97.8	79.5	120.5	
Mg	24	45	1	He	49498.614	2.387	43844959	2.01	50000	99.0	79.5	120.5	
Al	27	45	1	He	46451.633	2.726	23322202	1.43	50000	92.9	79.5	120.5	
K	39	45	1	He	49332.806	4.159	41155260	1.17	50000	98.7	79.5	120.5	
Ca	44	45	1	He	49399.110	3.186	2260798	1.04	50000	98.8	79.5	120.5	
Ti	47	45	1	He	1090.099	3.420	281091	0.71	1100	99.1	79.5	120.5	
V	51	45	1	He	99.787	2.751	636425	1.34	100	99.8	79.5	120.5	
Cr	52	45	1	He	101.461	3.280	779782	0.83	100	101.5	79.5	120.5	
Mn	55	45	1	He	99.986	3.161	603232	0.95	100	100.0	79.5	120.5	
Fe	56	45	1	He	49769.280	3.090	359642635	1.02	50000	99.5	79.5	120.5	
Co	59	103	1	He	99.532	0.565	1097986	0.97	100	99.5	79.5	120.5	
Ni	60	103	1	He	98.338	0.839	269079	1.14	100	98.3	79.5	120.5	
Cu	63	103	1	He	98.361	0.856	709028	1.48	100	98.4	79.5	120.5	
Zn	66	103	1	He	98.303	0.399	144510	0.98	100	98.3	79.5	120.5	
As	75	103	1	He	100.199	0.927	93936	1.13	100	100.2	79.5	120.5	
Se	78	103	1	He	101.968	1.030	10132	1.24	100	102.0	79.5	120.5	
Sr	88	103	1	He	99.168	0.926	754330	1.54	100	99.2	79.5	120.5	
Mo	95	103	1	He	1150.327	2.590	3974943	1.95	1100	104.6	79.5	120.5	
Ag	107	103	1	He	99.725	0.349	1183901	0.84	100	99.7	79.5	120.5	
Cd	111	103	1	He	99.777	0.637	207181	0.95	100	99.8	79.5	120.5	
Sn	118	115	1	He	100.220	0.655	515295	0.25	100	100.2	79.5	120.5	
Sb	123	115	1	He	107.017	0.458	507806	0.96	100	107.0	79.5	120.5	
Ba	137	115	1	He	101.398	1.341	236308	1.85	100	101.4	79.5	120.5	
W	182	209	1	He	104.183	1.103	1371723	1.66	100	104.2	79.5	120.5	
Tl	205	165	1	He	100.889	0.814	3374765	0.68	100	100.9	79.5	120.5	
Pb	208	209	1	He	100.721	1.389	4563854	0.96	100	100.7	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1294518	1.11	1631381	79.35	30	120	
Sc	45	1	He	728623	4.12	829696	87.82	30	120	
Sc	45	2	NoGas	5398752	0.32	6325638	85.35	30	120	
Rh	103	1	He	2002767	0.64	2345543	85.39	30	120	
In	115	1	He	1230771	0.52	1419467	86.71	30	120	
Tb	159	1	He	3577698	1.08	3888262	92.01	30	120	
Ho	165	1	He	3644844	0.26	3932562	92.68	30	120	
Bi	209	1	He	2573850	1.36	2874805	89.53	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:41:28-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.358	1.596	216344	1.21	50	96.7	89.5	110.5	
B	11	45	2	NoGas	50.520	2.049	173149	1.02	50	101.0	89.5	110.5	
Na	23	45	1	He	24518.014	1.488	40303200	0.51	25000	98.1	89.5	110.5	
Mg	24	45	1	He	24629.636	1.834	23003582	0.16	25000	98.5	89.5	110.5	
Al	27	45	1	He	248.890	2.562	134199	0.56	250	99.6	89.5	110.5	
K	39	45	1	He	24742.369	2.831	21789028	1.00	25000	99.0	89.5	110.5	
Ca	44	45	1	He	24690.607	2.296	1192142	0.41	25000	98.8	89.5	110.5	
Ti	47	45	1	He	52.536	1.766	14300	0.55	50	105.1	89.5	110.5	
V	51	45	1	He	49.902	1.809	335673	0.18	50	99.8	89.5	110.5	
Cr	52	45	1	He	50.186	1.313	408038	0.94	50	100.4	89.5	110.5	
Mn	55	45	1	He	255.723	1.482	1625502	1.07	250	102.3	89.5	110.5	
Fe	56	45	1	He	12527.034	2.229	95466696	0.27	12500	100.2	89.5	110.5	
Co	59	103	1	He	47.839	1.598	577362	0.56	50	95.7	89.5	110.5	
Ni	60	103	1	He	47.427	1.091	142037	0.25	50	94.9	89.5	110.5	
Cu	63	103	1	He	47.975	1.729	379140	0.99	50	95.9	89.5	110.5	
Zn	66	103	1	He	48.175	0.783	78420	0.69	50	96.3	89.5	110.5	
As	75	103	1	He	47.961	1.698	49269	0.56	50	95.9	89.5	110.5	
Se	78	103	1	He	49.101	0.920	5363	0.38	50	98.2	89.5	110.5	
Sr	88	103	1	He	47.867	1.854	398367	0.84	50	95.7	89.5	110.5	
Mo	95	103	1	He	75.599	8.576	285717	7.42	50	151.2	89.5	110.5	CCV Failed
Ag	107	103	1	He	49.325	2.369	640565	1.22	50	98.6	89.5	110.5	
Cd	111	103	1	He	49.108	1.709	112137	0.55	50	98.2	89.5	110.5	
Sn	118	115	1	He	50.441	0.828	273517	0.57	50	100.9	89.5	110.5	
Sb	123	115	1	He	52.224	0.532	261149	0.35	50	104.4	89.5	110.5	
Ba	137	115	1	He	50.111	1.482	122973	1.26	50	100.2	89.5	110.5	
W	182	209	1	He	52.203	2.192	725299	0.40	50	104.4	89.5	110.5	
Tl	205	165	1	He	51.105	1.941	1794388	1.71	50	102.2	89.5	110.5	
Pb	208	209	1	He	48.229	2.137	2301107	0.87	50	96.5	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1415190	0.55	1631381	86.75	30	120	
Sc	45	1	He	767969	1.98	829696	92.56	30	120	
Sc	45	2	NoGas	5772792	1.15	6325638	91.26	30	120	
Rh	103	1	He	2191270	1.14	2345543	93.42	30	120	
In	115	1	He	1295591	0.26	1419467	91.27	30	120	
Tb	159	1	He	3757351	0.82	3888262	96.63	30	120	
Ho	165	1	He	3825930	0.84	3932562	97.29	30	120	
Bi	209	1	He	2710286	2.25	2874805	94.28	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:45:18-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.027	6.4	167	6.7	1	
B	11	45	2	NoGas	1.505	6.0	14395	2.5	20	
Na	23	45	1	He	8.168	29.2	33728	9.4	400	
Mg	24	45	1	He	3.010	25.2	3608	17.2	1000	
Al	27	45	1	He	1.215	17.0	2999	1.6	50	
K	39	45	1	He	7.613	19.0	40854	1.2	1000	
Ca	44	45	1	He	2.138	73.0	1001	9.4	1000	
Ti	47	45	1	He	0.348	35.4	103	29.6	20	
V	51	45	1	He	0.007	1018.6	138	346.8	2	
Cr	52	45	1	He	0.007	171.6	2362	2.9	2	
Mn	55	45	1	He	0.036	17.2	1329	3.3	2	
Fe	56	45	1	He	28.563	18.9	214873	16.8	50	
Co	59	103	1	He	0.004	32.7	94	16.3	1	
Ni	60	103	1	He	0.063	149.5	322	91.8	2	
Cu	63	103	1	He	0.024	33.5	1863	3.5	2	
Zn	66	103	1	He	-0.094	-82.7	1761	8.0	20	
As	75	103	1	He	0.005	206.3	163	5.5	2	
Se	78	103	1	He	0.061	41.0	57	5.4	2	
Sr	88	103	1	He	0.002	187.8	131	24.4	10	
Mo	95	103	1	He	5.418	4.8	21343	4.8	2	CCB Failed
Ag	107	103	1	He	0.025	28.0	341	27.0	0.2	
Cd	111	103	1	He	0.048	13.0	1309	1.6	0.2	
Sn	118	115	1	He	0.480	6.3	3797	3.8	10	
Sb	123	115	1	He	0.495	2.3	3207	1.1	1	
Ba	137	115	1	He	0.008	79.3	116	13.0	5	
W	182	209	1	He	1.387	12.3	23559	11.2	10	
Tl	205	165	1	He	0.048	14.0	1786	14.7	0.5	
Pb	208	209	1	He	0.036	9.3	2585	7.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1481255	1.83	1631381	90.80	30	120	
Sc	45	1	He	745079	2.01	829696	89.80	30	120	
Sc	45	2	NoGas	5979116	0.65	6325638	94.52	30	120	
Rh	103	1	He	2276868	0.78	2345543	97.07	30	120	
In	115	1	He	1361849	0.76	1419467	95.94	30	120	
Tb	159	1	He	3830821	1.31	3888262	98.52	30	120	
Ho	165	1	He	3892891	1.66	3932562	98.99	30	120	
Bi	209	1	He	2811174	0.82	2874805	97.79	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-175943/1-a
Data File Name	015_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:26:21-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.016	95.0	111	62.5	1	
B	11	45	2	NoGas	3.067	2.3	18032	1.7	20	
Na	23	45	1	He	88.554	5.7	167976	1.2	400	
Mg	24	45	1	He	54.100	4.5	51796	2.2	1000	
Al	27	45	1	He	3.203	12.9	4172	1.8	50	
K	39	45	1	He	23.669	14.4	56596	0.5	1000	
Ca	44	45	1	He	209.525	6.1	11107	0.2	1000	
Ti	47	45	1	He	0.141	54.4	51	39.9	20	
V	51	45	1	He	0.183	31.4	1343	31.7	2	
Cr	52	45	1	He	0.660	10.8	7762	2.9	2	
Mn	55	45	1	He	0.197	6.2	2405	3.8	2	
Fe	56	45	1	He	11.753	4.6	94453	1.5	50	
Co	59	103	1	He	0.005	17.8	109	11.6	1	
Ni	60	103	1	He	0.133	22.4	514	18.2	2	
Cu	63	103	1	He	0.904	4.4	8660	3.0	2	
Zn	66	103	1	He	11.708	3.1	20316	1.7	20	
As	75	103	1	He	0.103	14.3	256	4.9	2	
Se	78	103	1	He	0.072	108.6	56	15.0	2	
Sr	88	103	1	He	0.408	2.3	3484	3.0	10	
Mo	95	103	1	He	0.192	2.0	778	2.9	2	
Ag	107	103	1	He	0.013	22.8	169	21.7	0.2	
Cd	111	103	1	He	0.053	21.6	1262	2.1	0.2	
Sn	118	115	1	He	0.773	11.8	5212	9.0	10	
Sb	123	115	1	He	1.316	11.7	7178	11.2	1	Blank Failed
Ba	137	115	1	He	0.749	2.9	1935	3.2	5	
W	182	209	1	He	0.029	61.2	4434	2.3	10	
Tl	205	165	1	He	0.001	102.8	91	25.7	0.5	
Pb	208	209	1	He	0.130	2.8	7886	3.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1406462	0.40	1631381	86.21	30	120	
Sc	45	1	He	774342	5.91	829696	93.33	30	120	
Sc	45	2	NoGas	5485822	0.90	6325638	86.72	30	120	
Rh	103	1	He	2176808	1.15	2345543	92.81	30	120	
In	115	1	He	1300688	0.47	1419467	91.63	30	120	
Tb	159	1	He	3648202	0.34	3888262	93.83	30	120	
Ho	165	1	He	3744596	0.88	3932562	95.22	30	120	
Bi	209	1	He	3068742	4.50	2874805	106.75	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-175943/3-a
Data File Name	016_LCS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:30:11-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1013.639	1013.639	2.624	4452594	2.11	1000	101.4	79.5	120.5	
B	11	2	NoGas	119.383	119.383	1.504	381188	0.23	100	119.4	79.5	120.5	
Na	23	1	He	10345.742	10345.742	2.390	16357652	0.77	10000	103.5	79.5	120.5	
Mg	24	1	He	10346.264	10346.264	2.836	9287772	0.02	10000	103.5	79.5	120.5	
Al	27	1	He	9552.988	9552.988	3.327	4862619	1.01	10000	95.5	79.5	120.5	
K	39	1	He	10098.744	10098.744	2.945	8568512	0.65	10000	101.0	79.5	120.5	
Ca	44	1	He	9522.837	9522.837	2.550	442515	0.90	10000	95.2	79.5	120.5	
Ti	47	1	He	100.258	100.258	4.079	26216	2.62	100	100.3	79.5	120.5	
V	51	1	He	985.194	985.194	2.932	6367348	0.23	1000	98.5	79.5	120.5	
Cr	52	1	He	1012.845	1012.845	3.248	7869424	0.63	1000	101.3	79.5	120.5	
Mn	55	1	He	1007.883	1007.883	2.438	6154727	1.73	1000	100.8	79.5	120.5	
Fe	56	1	He	10473.443	10473.443	2.174	76730479	1.50	10000	104.7	79.5	120.5	
Co	59	1	He	975.095	975.095	1.638	11418348	0.86	1000	97.5	79.5	120.5	
Ni	60	1	He	995.251	995.251	1.611	2889844	1.10	1000	99.5	79.5	120.5	
Cu	63	1	He	1000.862	1000.862	0.273	7644715	0.56	1000	100.1	79.5	120.5	
Zn	66	1	He	1014.516	1014.516	0.419	1566622	0.94	1000	101.5	79.5	120.5	
As	75	1	He	947.964	947.964	0.923	942194	0.39	1000	94.8	79.5	120.5	
Se	78	1	He	980.210	980.210	0.841	102989	0.52	1000	98.0	79.5	120.5	
Sr	88	1	He	959.702	959.702	1.198	7748331	0.53	1000	96.0	79.5	120.5	
Mo	95	1	He	107.642	107.642	0.536	394974	0.88	100	107.6	79.5	120.5	
Ag	107	1	He	103.649	103.649	1.570	1306210	0.75	100	103.6	79.5	120.5	
Cd	111	1	He	1042.679	1042.679	2.068	2287698	1.30	1000	104.3	79.5	120.5	
Sn	118	1	He	1109.838	1109.838	0.787	5623604	0.84	1000	111.0	79.5	120.5	
Sb	123	1	He	109.180	109.180	0.435	511396	0.40	100	109.2	79.5	120.5	
Ba	137	1	He	1084.923	1084.923	0.361	2494981	0.30	1000	108.5	79.5	120.5	
W	182	1	He	104.024	104.024	1.377	1459848	1.25	100	104.0	79.5	120.5	
Tl	205	1	He	252.177	252.177	1.028	8629754	1.10	250	100.9	79.5	120.5	
Pb	208	1	He	975.992	975.992	0.650	47133830	0.24	1000	97.6	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1389816	0.53	1631381	85.19	30	120	
Sc	45	1	He	738317	2.90	829696	88.99	30	120	
Sc	45	2	NoGas	5544472	1.57	6325638	87.65	30	120	
Rh	103	1	He	2126213	0.83	2345543	90.65	30	120	
In	115	1	He	1214958	0.06	1419467	85.59	30	120	
Tb	159	1	He	3676347	1.35	3888262	94.55	30	120	
Ho	165	1	He	3728817	0.34	3932562	94.82	30	120	
Bi	209	1	He	2743402	0.54	2874805	95.43	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	Xmb 240-177133/1-a@2
Data File Name	017_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:33:41-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.162	13.0	752	11.9	1	
B	11	45	2	NoGas	1.573	8.6	13598	1.9	20	
Na	23	45	1	He	38.258	2.9	81383	2.6	400	
Mg	24	45	1	He	30.352	4.3	28267	4.1	1000	
Al	27	45	1	He	3.956	16.1	4392	8.9	50	
K	39	45	1	He	22.089	6.8	52970	1.2	1000	
Ca	44	45	1	He	86.001	6.1	4903	4.2	1000	
Ti	47	45	1	He	0.178	30.8	59	26.1	20	
V	51	45	1	He	0.316	53.8	2158	53.0	2	
Cr	52	45	1	He	0.928	1.6	9546	2.2	2	
Mn	55	45	1	He	0.263	21.4	2717	14.2	2	
Fe	56	45	1	He	21.119	10.3	159733	11.5	50	
Co	59	103	1	He	0.096	26.4	1223	25.1	1	
Ni	60	103	1	He	0.244	26.9	863	22.5	2	
Cu	63	103	1	He	1.629	8.2	14641	7.1	2	
Zn	66	103	1	He	2.831	4.7	6439	3.0	20	
As	75	103	1	He	0.780	15.5	966	12.5	2	
Se	78	103	1	He	0.784	22.8	135	14.0	2	
Sr	88	103	1	He	0.291	13.2	2571	12.1	10	
Mo	95	103	1	He	1.087	15.0	4227	14.3	2	
Ag	107	103	1	He	0.025	22.0	338	21.1	0.2	
Cd	111	103	1	He	0.106	62.6	1411	10.3	0.2	
Sn	118	115	1	He	18.814	4.0	101761	4.0	10	Blank Failed
Sb	123	115	1	He	0.625	6.7	3669	5.7	1	
Ba	137	115	1	He	1.042	5.2	2624	5.1	5	
W	182	209	1	He	1.399	21.1	23711	17.7	10	
Tl	205	165	1	He	0.186	43.3	6616	43.9	0.5	
Pb	208	209	1	He	0.423	7.5	21722	7.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1393807	3.33	1631381	85.44	30	120	
Sc	45	1	He	741712	1.48	829696	89.40	30	120	
Sc	45	2	NoGas	5560954	1.24	6325638	87.91	30	120	
Rh	103	1	He	2224484	0.53	2345543	94.84	30	120	
In	115	1	He	1284255	0.30	1419467	90.47	30	120	
Tb	159	1	He	3759152	0.92	3888262	96.68	30	120	
Ho	165	1	He	3821187	1.62	3932562	97.17	30	120	
Bi	209	1	He	2811009	0.49	2874805	97.78	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	Xlcs 240-177133/2-a@2
Data File Name	018LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:37:31-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	456.764	456.764	2.750	2034483	0.92	500	91.4	78.6	110.5	
B	11	2	NoGas	56.335	56.335	1.221	186710	0.65	50	112.7	79.5	120.5	
Na	23	1	He	5063.063	5063.063	3.448	8158114	1.55	5000	101.3	79.5	120.5	
Mg	24	1	He	4976.818	4976.818	1.594	4549038	0.45	5000	99.5	79.5	120.5	
Al	27	1	He	4638.868	4638.868	1.286	2405536	0.92	5000	92.8	79.5	120.5	
K	39	1	He	4976.132	4976.132	0.700	4316667	1.24	5000	99.5	79.5	120.5	
Ca	44	1	He	4715.233	4715.233	1.691	223521	0.79	5000	94.3	79.5	120.5	
Ti	47	1	He	48.104	48.104	3.501	12811	2.36	50	96.2	79.5	120.5	
V	51	1	He	467.736	467.736	2.787	3077555	1.60	500	93.5	71.5	110.5	
Cr	52	1	He	479.955	479.955	1.623	3798150	0.78	500	96.0	69.5	110.5	
Mn	55	1	He	482.743	482.743	1.491	3001490	1.05	500	96.5	79.5	120.5	
Fe	56	1	He	5006.376	5006.376	2.407	37333256	0.61	5000	100.1	79.5	120.5	
Co	59	1	He	445.210	445.210	1.361	5400212	0.92	500	89.0	73.9	110.5	
Ni	60	1	He	445.863	445.863	0.487	1341088	0.34	500	89.2	74.9	110.5	
Cu	63	1	He	461.430	461.430	1.015	3651350	0.34	500	92.3	72.6	110.5	
Zn	66	1	He	420.210	420.210	0.775	673176	0.33	500	84.0	71.5	113.4	
As	75	1	He	402.838	402.838	1.257	414799	0.58	500	80.6	73.4	110.5	
Se	78	1	He	393.234	393.234	0.721	42825	0.08	500	78.6	64.6	110.5	
Sr	88	1	He	448.344	448.344	0.600	3749718	1.25	500	89.7	79.5	120.5	
Mo	95	1	He	51.247	51.247	1.475	194797	1.35	50	102.5	29.5	140.5	
Ag	107	1	He	48.717	48.717	0.893	635945	0.22	50	97.4	59.5	114.5	
Cd	111	1	He	439.099	439.099	0.604	998640	0.17	500	87.8	73.5	110.5	
Sn	118	1	He	542.177	542.177	1.365	2861779	1.37	500	108.4	79.5	120.5	
Sb	123	1	He	49.208	49.208	0.991	240365	0.79	50	98.4	67.5	113.4	
Ba	137	1	He	462.985	462.985	0.041	1108972	0.25	500	92.6	69.5	110.5	
W	182	1	He	50.492	50.492	1.682	707162	0.36	50	101.0	74.6	125.4	
Tl	205	1	He	116.886	116.886	2.531	4150205	1.58	125	93.5	70.6	110.5	
Pb	208	1	He	465.853	465.853	1.444	22395183	0.28	500	93.2	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1409591	1.84	1631381	86.40	30	120	
Sc	45	1	He	751430	1.94	829696	90.57	30	120	
Sc	45	2	NoGas	5612046	0.95	6325638	88.72	30	120	
Rh	103	1	He	2202307	0.68	2345543	93.89	30	120	
In	115	1	He	1265394	0.21	1419467	89.15	30	120	
Tb	159	1	He	3748886	0.94	3888262	96.42	30	120	
Ho	165	1	He	3869457	0.94	3932562	98.40	30	120	
Bi	209	1	He	2731256	1.70	2874805	95.01	30	120	

Sample Report

Sample Table

Sample Name	190-7094-a-1-a@2
Data File Name	019SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:41:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.268	0.268	7.98	1282	0.02	10000	
B	11	45	2	NoGas	49.432	49.432	1.16	168250	0.03	300	
Na	23	45	1	He	1925.432	1925.432	2.31	3185150	0.06	500000	
Mg	24	45	1	He	6708.117	6708.117	0.88	6268331	0.11	500000	
Al	27	45	1	He	5360.238	5360.238	1.14	2841175	0.19	200000	
K	39	45	1	He	1324.613	1324.613	1.77	1200481	0.11	500000	
Ca	44	45	1	He	45807.079	45807.079	1.89	2211668	2.07	500000	
Ti	47	45	1	He	89.982	89.982	0.28	24497	0.37	2500	
V	51	45	1	He	11.018	11.018	7.70	74231	0.01	10000	
Cr	52	45	1	He	109.857	109.857	2.02	890462	0.01	10000	
Mn	55	45	1	He	1823.433	1823.433	2.84	11583633	0.02	10000	
Fe	56	45	1	He	98429.289	98429.289	2.64	750203970	0.01	200000	
Co	59	103	1	He	10.999	10.999	3.47	135161	0.01	10000	
Ni	60	103	1	He	46.265	46.265	1.66	141080	0.03	10000	
Cu	63	103	1	He	594.940	594.940	1.55	4768701	0.01	10000	
Zn	66	103	1	He	1288.447	1288.447	1.30	2087170	0.06	10000	
As	75	103	1	He	11.477	11.477	2.20	12123	0.09	10000	
Se	78	103	1	He	8.300	8.300	5.77	964	0.86	10000	
Sr	88	103	1	He	205.227	205.227	2.71	1738486	0.01	10000	
Mo	95	103	1	He	23.447	23.447	2.04	90311	0.03	2000	
Ag	107	103	1	He	10.554	10.554	2.45	139560	0.01	300	
Cd	111	103	1	He	2.154	2.154	4.30	6127	0.04	4000	
Sn	118	115	1	He	58.297	58.297	0.11	323368	0.02	2000	
Sb	123	115	1	He	4.309	4.309	1.19	22599	0.02	300	
Ba	137	115	1	He	756.101	756.101	0.72	1897706	0.04	10000	
W	182	209	1	He	15.268	15.268	1.40	340200	0.00	2500	
Tl	205	165	1	He	0.265	0.265	11.40	9596	0.00	5000	
Pb	208	209	1	He	36.777	36.777	1.32	2781815	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1465488	0.66	1631381	89.83	30	120	
Sc	45	1	He	768175	2.31	829696	92.59	30	120	
Sc	45	2	NoGas	5725723	0.67	6325638	90.52	30	120	
Rh	103	1	He	2231290	1.75	2345543	95.13	30	120	
In	115	1	He	1325967	0.16	1419467	93.41	30	120	
Tb	159	1	He	3807544	1.13	3888262	97.92	30	120	
Ho	165	1	He	3920832	0.88	3932562	99.70	30	120	
Bi	209	1	He	4295330	0.97	2874805	149.41	30	120	ISTD Failed

Sample Report

Sample Table

Sample Name	190-7094-a-2-a@2
Data File Name	020SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:44:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.158	0.158	21.15	748	0.02	10000	
B	11	45	2	NoGas	36.247	36.247	2.10	121228	0.03	300	
Na	23	45	1	He	1009.218	1009.218	2.20	1635103	0.06	500000	
Mg	24	45	1	He	3431.297	3431.297	2.55	3120725	0.11	500000	
Al	27	45	1	He	2698.646	2698.646	1.93	1393467	0.19	200000	
K	39	45	1	He	1392.571	1392.571	1.71	1226759	0.11	500000	
Ca	44	45	1	He	24634.463	24634.463	1.98	1158125	2.13	500000	
Ti	47	45	1	He	64.768	64.768	13.11	17146	0.38	2500	
V	51	45	1	He	5.791	5.791	7.73	38024	0.02	10000	
Cr	52	45	1	He	48.091	48.091	1.38	380787	0.01	10000	
Mn	55	45	1	He	747.144	747.144	2.59	4621032	0.02	10000	
Fe	56	45	1	He	44137.183	44137.183	2.18	327486814	0.01	200000	
Co	59	103	1	He	4.953	4.953	1.00	60656	0.01	10000	
Ni	60	103	1	He	23.004	23.004	1.08	69926	0.03	10000	
Cu	63	103	1	He	302.307	302.307	1.51	2414067	0.01	10000	
Zn	66	103	1	He	632.846	632.846	1.42	1021908	0.06	10000	
As	75	103	1	He	5.191	5.191	0.34	5546	0.09	10000	
Se	78	103	1	He	4.107	4.107	5.51	500	0.82	10000	
Sr	88	103	1	He	111.161	111.161	2.29	937941	0.01	10000	
Mo	95	103	1	He	11.919	11.919	1.53	45753	0.03	2000	
Ag	107	103	1	He	5.655	5.655	1.54	74478	0.01	300	
Cd	111	103	1	He	1.142	1.142	5.42	3784	0.03	4000	
Sn	118	115	1	He	33.643	33.643	1.24	183470	0.02	2000	
Sb	123	115	1	He	3.706	3.706	0.31	19149	0.02	300	
Ba	137	115	1	He	417.261	417.261	1.46	1027183	0.04	10000	
W	182	209	1	He	7.162	7.162	2.08	138022	0.01	2500	
Tl	205	165	1	He	0.109	0.109	3.72	3925	0.00	5000	
Pb	208	209	1	He	18.365	18.365	1.40	1180049	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1421156	0.47	1631381	87.11	30	120	
Sc	45	1	He	747740	2.17	829696	90.12	30	120	
Sc	45	2	NoGas	5519575	0.52	6325638	87.26	30	120	
Rh	103	1	He	2222081	1.19	2345543	94.74	30	120	
In	115	1	He	1300569	0.64	1419467	91.62	30	120	
Tb	159	1	He	3803185	0.41	3888262	97.81	30	120	
Ho	165	1	He	3849085	1.57	3932562	97.88	30	120	
Bi	209	1	He	3647159	0.80	2874805	126.87	30	120	ISTD Failed

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177401/1-a@2
Data File Name	022_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:24:57-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.013	50.5	111	30.0	1	
B	11	45	2	NoGas	0.230	56.2	10852	3.0	20	
Na	23	45	1	He	30.639	6.8	82577	0.8	400	
Mg	24	45	1	He	13.077	8.2	15103	3.7	1000	
Al	27	45	1	He	1.726	14.4	3876	5.4	50	
K	39	45	1	He	20.867	10.9	61929	1.8	1000	
Ca	44	45	1	He	41.718	3.0	3388	2.2	1000	
Ti	47	45	1	He	0.130	38.1	54	24.7	20	
V	51	45	1	He	0.123	34.1	1060	27.1	2	
Cr	52	45	1	He	0.834	8.0	10501	1.9	2	
Mn	55	45	1	He	0.153	7.5	2432	6.0	2	
Fe	56	45	1	He	10.398	3.6	96153	1.2	50	
Co	59	103	1	He	0.011	20.6	194	15.4	1	
Ni	60	103	1	He	0.171	7.6	696	6.1	2	
Cu	63	103	1	He	0.458	3.4	5740	2.4	2	
Zn	66	103	1	He	2.356	3.3	6158	2.4	20	
As	75	103	1	He	0.052	28.5	226	7.3	2	
Se	78	103	1	He	-0.046	-170.0	48	19.4	2	
Sr	88	103	1	He	0.157	7.6	1559	7.0	10	
Mo	95	103	1	He	0.077	25.3	386	20.9	2	
Ag	107	103	1	He	0.008	7.3	122	6.9	0.2	
Cd	111	103	1	He	0.047	55.1	1385	4.9	0.2	
Sn	118	115	1	He	16.231	1.5	98539	1.2	10	Blank Failed
Sb	123	115	1	He	0.093	15.5	1161	6.7	1	
Ba	137	115	1	He	1.517	2.9	4234	2.7	5	
W	182	209	1	He	0.086	17.2	5475	2.1	10	
Tl	205	165	1	He	0.003	26.2	164	15.7	0.5	
Pb	208	209	1	He	0.242	13.7	14351	15.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1629858	0.89	1631381	99.91	30	120	
Sc	45	1	He	885100	4.14	829696	106.68	30	120	
Sc	45	2	NoGas	6424383	1.33	6325638	101.56	30	120	
Rh	103	1	He	2414051	0.25	2345543	102.92	30	120	
In	115	1	He	1439274	0.25	1419467	101.40	30	120	
Tb	159	1	He	3940151	1.33	3888262	101.33	30	120	
Ho	165	1	He	3994213	1.04	3932562	101.57	30	120	
Bi	209	1	He	3150976	2.32	2874805	109.61	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177401/2-a@2
Data File Name	023LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:28:52-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	463.516	463.516	1.596	2322592	1.25	500	92.7	78.6	110.5	
B	11	2	NoGas	55.460	55.460	0.336	207191	1.00	50	110.9	79.5	120.5	
Na	23	1	He	4989.253	4989.253	2.413	8937747	0.73	5000	99.8	79.5	120.5	
Mg	24	1	He	4982.178	4982.178	2.063	5061737	0.42	5000	99.6	79.5	120.5	
Al	27	1	He	4687.675	4687.675	1.280	2701975	0.44	5000	93.8	79.5	120.5	
K	39	1	He	4941.028	4941.028	3.240	4763274	1.54	5000	98.8	79.5	120.5	
Ca	44	1	He	4673.358	4673.358	1.475	246263	0.21	5000	93.5	79.5	120.5	
Ti	47	1	He	47.662	47.662	2.053	14111	0.43	50	95.3	79.5	120.5	
V	51	1	He	472.124	472.124	1.701	3453380	0.89	500	94.4	71.5	110.5	
Cr	52	1	He	480.895	480.895	1.788	4230057	0.52	500	96.2	69.5	110.5	
Mn	55	1	He	485.540	485.540	1.572	3355569	0.46	500	97.1	79.5	120.5	
Fe	56	1	He	4913.927	4913.927	2.763	40731026	1.10	5000	98.3	79.5	120.5	
Co	59	1	He	467.543	467.543	1.004	5995689	1.13	500	93.5	73.9	110.5	
Ni	60	1	He	490.494	490.494	0.527	1559773	1.30	500	98.1	74.9	110.5	
Cu	63	1	He	487.569	487.569	1.308	4078704	0.71	500	97.5	72.6	110.5	
Zn	66	1	He	441.108	441.108	0.655	746998	0.99	500	88.2	71.5	113.4	
As	75	1	He	424.369	424.369	0.886	461961	0.44	500	84.9	73.4	110.5	
Se	78	1	He	415.230	415.230	1.305	47801	0.18	500	83.0	64.6	110.5	
Sr	88	1	He	463.180	463.180	0.885	4095453	1.68	500	92.6	79.5	120.5	
Mo	95	1	He	52.127	52.127	1.119	209467	0.26	50	104.3	29.5	140.5	
Ag	107	1	He	49.565	49.565	0.749	684043	0.98	50	99.1	59.5	114.5	
Cd	111	1	He	453.332	453.332	0.835	1089930	0.56	500	90.7	73.5	110.5	
Sn	118	1	He	539.487	539.487	0.626	3044403	1.14	500	107.9	79.5	120.5	
Sb	123	1	He	48.247	48.247	1.111	251967	0.92	50	96.5	67.5	113.4	
Ba	137	1	He	470.664	470.664	0.209	1205258	0.60	500	94.1	69.5	110.5	
W	182	1	He	49.703	49.703	0.743	731038	0.71	50	99.4	74.6	125.4	
Tl	205	1	He	120.251	120.251	0.507	4403117	1.15	125	96.2	70.6	110.5	
Pb	208	1	He	469.246	469.246	0.668	23687299	0.40	500	93.8	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1585354	1.16	1631381	97.18	30	120	
Sc	45	1	He	835243	1.68	829696	100.67	30	120	
Sc	45	2	NoGas	6321094	1.31	6325638	99.93	30	120	
Rh	103	1	He	2328356	1.31	2345543	99.27	30	120	
In	115	1	He	1352831	0.67	1419467	95.31	30	120	
Tb	159	1	He	3917170	1.17	3888262	100.74	30	120	
Ho	165	1	He	3989811	1.17	3932562	101.46	30	120	
Bi	209	1	He	2867534	0.50	2874805	99.75	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-f@2
Data File Name	024SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:32:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.526	0.526	9.48	2222	0.02	10000	
B	11	45	2	NoGas	11.445	11.445	4.59	73156	0.02	300	
Na	23	45	1	He	1293.587	1293.587	4.33	3844720	0.03	500000	
Mg	24	45	1	He	2039.979	2039.979	3.14	3416308	0.06	500000	
Al	27	45	1	He	12801.110	12801.110	2.00	12155610	0.11	200000	
K	39	45	1	He	163.404	163.404	3.13	321076	0.05	500000	
Ca	44	45	1	He	623507.521	623507.521	2.17	53938464	1.16	500000	>LDR
Ti	47	45	1	He	35258.350	35258.350	2.11	17192240	0.21	2500	>LDR
V	51	45	1	He	3898.312	3898.312	1.57	47021371	0.01	10000	
Cr	52	45	1	He	1461.633	1461.633	3.23	21175120	0.01	10000	
Mn	55	45	1	He	203.798	203.798	1.13	2324048	0.01	10000	
Fe	56	45	1	He	11486.654	11486.654	2.76	156951016	0.01	200000	
Co	59	103	1	He	3.082	3.082	4.76	31399	0.01	10000	
Ni	60	103	1	He	11.260	11.260	1.90	28502	0.04	10000	
Cu	63	103	1	He	15.723	15.723	2.74	105659	0.01	10000	
Zn	66	103	1	He	263.614	263.614	1.69	354734	0.07	10000	
As	75	103	1	He	5.779	5.779	2.00	5117	0.11	10000	
Se	78	103	1	He	2.401	2.401	9.61	260	0.92	10000	
Sr	88	103	1	He	21524.942	21524.942	1.50	150952465	0.01	10000	>LDR
Mo	95	103	1	He	8.038	8.038	2.11	25658	0.03	2000	
Ag	107	103	1	He	2.222	2.222	6.59	24295	0.01	300	
Cd	111	103	1	He	10.320	10.320	5.79	20611	0.05	4000	
Sn	118	115	1	He	72.947	72.947	0.99	351600	0.02	2000	
Sb	123	115	1	He	7.182	7.182	2.38	32415	0.02	300	
Ba	137	115	1	He	41.685	41.685	0.88	91046	0.05	10000	
W	182	209	1	He	13.594	13.594	0.63	162686	0.01	2500	
Tl	205	165	1	He	0.175	0.175	16.61	5793	0.00	5000	
Pb	208	209	1	He	56.537	56.537	0.41	2291705	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1315358	0.94	1631381	80.63	30	120	
Sc	45	1	He	1377973	7.18	829696	166.08	30	120	ISTD Failed
Sc	45	2	NoGas	9142317	0.91	6325638	144.53	30	120	ISTD Failed
Rh	103	1	He	1846320	2.56	2345543	78.72	30	120	
In	115	1	He	1152784	2.21	1419467	81.21	30	120	
Tb	159	1	He	3469100	1.08	3888262	89.22	30	120	
Ho	165	1	He	3554253	1.47	3932562	90.38	30	120	
Bi	209	1	He	2302074	1.42	2874805	80.08	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111548-a-3-f@10
Data File Name	025SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:36:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.202	0.202	5.75	852	0.02	10000	
B	11	45	2	NoGas	3.155	3.155	4.10	19615	0.02	300	
Na	23	45	1	He	446.214	446.214	2.35	757035	0.06	500000	
Mg	24	45	1	He	704.527	704.527	2.16	661161	0.11	500000	
Al	27	45	1	He	4496.947	4496.947	2.00	2391351	0.19	200000	
K	39	45	1	He	57.830	57.830	5.47	86561	0.07	500000	
Ca	44	45	1	He	211368.603	211368.603	1.82	10234351	2.07	500000	
Ti	47	45	1	He	11999.786	11999.786	2.24	3274622	0.37	2500	>LDR
V	51	45	1	He	1324.466	1324.466	3.08	8936500	0.01	10000	
Cr	52	45	1	He	511.811	511.811	3.77	4152623	0.01	10000	
Mn	55	45	1	He	69.131	69.131	2.17	441738	0.02	10000	
Fe	56	45	1	He	4070.193	4070.193	2.46	31128153	0.01	200000	
Co	59	103	1	He	0.601	0.601	1.43	6386	0.01	10000	
Ni	60	103	1	He	2.236	2.236	0.80	5962	0.04	10000	
Cu	63	103	1	He	3.217	3.217	3.60	23552	0.01	10000	
Zn	66	103	1	He	56.797	56.797	2.56	80610	0.07	10000	
As	75	103	1	He	0.853	0.853	0.88	898	0.09	10000	
Se	78	103	1	He	0.412	0.412	14.90	81	0.51	10000	
Sr	88	103	1	He	4054.123	4054.123	3.92	29511123	0.01	10000	
Mo	95	103	1	He	1.620	1.620	2.43	5410	0.03	2000	
Ag	107	103	1	He	0.439	0.439	4.61	4995	0.01	300	
Cd	111	103	1	He	2.073	2.073	10.62	5109	0.04	4000	
Sn	118	115	1	He	14.874	14.874	5.44	72864	0.02	2000	
Sb	123	115	1	He	1.497	1.497	5.03	7213	0.02	300	
Ba	137	115	1	He	8.518	8.518	5.76	18785	0.05	10000	
W	182	209	1	He	2.590	2.590	1.29	36903	0.01	2500	
Tl	205	165	1	He	0.030	0.030	11.33	1058	0.00	5000	
Pb	208	209	1	He	11.462	11.462	3.44	513512	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1279863	1.89	1631381	78.45	30	120	
Sc	45	1	He	770560	1.36	829696	92.87	30	120	
Sc	45	2	NoGas	5878627	0.39	6325638	92.93	30	120	
Rh	103	1	He	1917919	2.03	2345543	81.77	30	120	
In	115	1	He	1161106	2.44	1419467	81.80	30	120	
Tb	159	1	He	3511623	2.53	3888262	90.31	30	120	
Ho	165	1	He	3608591	3.50	3932562	91.76	30	120	
Bi	209	1	He	2542471	1.71	2874805	88.44	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111548-a-3-f@2
Data File Name	026SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:39:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	901.808	901.808	1.74	3398087	0.03	10000	
B	11	45	2	NoGas	73.172	73.172	0.76	360256	0.02	300	
Na	23	45	1	He	6999.026	6999.026	1.75	16904600	0.04	500000	
Mg	24	45	1	He	7562.398	7562.398	0.18	10365587	0.07	500000	
Al	27	45	1	He	18160.827	18160.827	1.60	14112165	0.13	200000	
K	39	45	1	He	5727.040	5727.040	1.49	7441245	0.08	500000	
Ca	44	45	1	He	645966.894	645966.894	0.70	45734908	1.41	500000	>LDR
Ti	47	45	1	He	36207.679	36207.679	1.22	14448846	0.25	2500	>LDR
V	51	45	1	He	4514.152	4514.152	0.70	44543952	0.01	10000	
Cr	52	45	1	He	2055.387	2055.387	1.63	24379056	0.01	10000	
Mn	55	45	1	He	746.372	746.372	1.07	6957761	0.01	10000	
Fe	56	45	1	He	17327.243	17327.243	0.86	193774748	0.01	200000	
Co	59	103	1	He	964.091	964.091	0.22	8854437	0.01	10000	
Ni	60	103	1	He	969.352	969.352	1.86	2207379	0.04	10000	
Cu	63	103	1	He	939.476	939.476	0.47	5627723	0.02	10000	
Zn	66	103	1	He	1095.742	1095.742	0.86	1326842	0.08	10000	
As	75	103	1	He	1015.956	1015.956	1.05	791920	0.13	10000	
Se	78	103	1	He	1045.228	1045.228	0.76	86127	1.21	10000	
Sr	88	103	1	He	21867.143	21867.143	0.34	138465634	0.02	10000	>LDR
Mo	95	103	1	He	124.062	124.062	0.83	356995	0.03	2000	
Ag	107	103	1	He	98.572	98.572	0.87	974270	0.01	300	
Cd	111	103	1	He	991.396	991.396	1.75	1706065	0.06	4000	
Sn	118	115	1	He	1165.143	1165.143	1.25	5005594	0.02	2000	
Sb	123	115	1	He	110.270	110.270	1.19	437924	0.03	300	
Ba	137	115	1	He	1137.122	1137.122	0.61	2217282	0.05	10000	
W	182	209	1	He	126.116	126.116	0.19	1429131	0.01	2500	
Tl	205	165	1	He	244.321	244.321	1.05	7522677	0.00	5000	
Pb	208	209	1	He	1061.007	1061.007	1.35	41387795	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1192240	2.67	1631381	73.08	30	120	
Sc	45	1	He	1126668	0.94	829696	135.79	30	120	ISTD Failed
Sc	45	2	NoGas	8427012	0.99	6325638	133.22	30	120	ISTD Failed
Rh	103	1	He	1667473	0.54	2345543	71.09	30	120	
In	115	1	He	1030157	0.52	1419467	72.57	30	120	
Tb	159	1	He	3256364	1.42	3888262	83.75	30	120	
Ho	165	1	He	3355091	0.61	3932562	85.32	30	120	
Bi	209	1	He	2216154	1.33	2874805	77.09	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-g ms@2
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:43:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	437.883	437.883	2.04	1524410	0.03	10000	
B	11	45	2	NoGas	38.973	38.973	1.57	179440	0.02	300	
Na	23	45	1	He	4152.147	4152.147	1.56	9344389	0.04	500000	
Mg	24	45	1	He	4751.935	4751.935	0.65	6062244	0.08	500000	
Al	27	45	1	He	15412.477	15412.477	0.99	11145905	0.14	200000	
K	39	45	1	He	2861.789	2861.789	1.68	3484861	0.08	500000	
Ca	44	45	1	He	758935.521	758935.521	1.11	50009006	1.52	500000	>LDR
Ti	47	45	1	He	36022.321	36022.321	0.91	13379106	0.27	2500	>LDR
V	51	45	1	He	4208.231	4208.231	1.40	38645168	0.01	10000	
Cr	52	45	1	He	1772.763	1772.763	0.62	19570394	0.01	10000	
Mn	55	45	1	He	479.244	479.244	1.04	4158396	0.01	10000	
Fe	56	45	1	He	14562.113	14562.113	1.64	151552678	0.01	200000	
Co	59	103	1	He	458.370	458.370	2.34	4095540	0.01	10000	
Ni	60	103	1	He	447.001	447.001	0.76	990432	0.05	10000	
Cu	63	103	1	He	459.386	459.386	1.82	2677800	0.02	10000	
Zn	66	103	1	He	631.134	631.134	0.71	744145	0.08	10000	
As	75	103	1	He	439.911	439.911	0.95	333677	0.13	10000	
Se	78	103	1	He	481.216	481.216	0.85	38598	1.25	10000	
Sr	88	103	1	He	25532.098	25532.098	0.86	157294136	0.02	10000	>LDR
Mo	95	103	1	He	58.759	58.759	0.78	164526	0.04	2000	
Ag	107	103	1	He	47.565	47.565	1.06	457380	0.01	300	
Cd	111	103	1	He	450.664	450.664	0.78	754998	0.06	4000	
Sn	118	115	1	He	595.796	595.796	0.82	2493485	0.02	2000	
Sb	123	115	1	He	46.287	46.287	0.72	179311	0.03	300	
Ba	137	115	1	He	517.180	517.180	1.00	982225	0.05	10000	
W	182	209	1	He	32.088	32.088	0.78	357978	0.01	2500	
Tl	205	165	1	He	118.318	118.318	0.71	3582177	0.00	5000	
Pb	208	209	1	He	538.938	538.938	0.45	20578155	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1101638	1.92	1631381	67.53	30	120	
Sc	45	1	He	1048539	0.80	829696	126.38	30	120	ISTD Failed
Sc	45	2	NoGas	7636331	0.72	6325638	120.72	30	120	ISTD Failed
Rh	103	1	He	1622361	1.13	2345543	69.17	30	120	
In	115	1	He	1003416	1.24	1419467	70.69	30	120	
Tb	159	1	He	3219276	0.31	3888262	82.79	30	120	
Ho	165	1	He	3299027	0.78	3932562	83.89	30	120	
Bi	209	1	He	2169026	0.75	2874805	75.45	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	028_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:52:44-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.691	2.049	185029	3.26	50	93.4	89.5	110.5	
B	11	45	2	NoGas	50.054	0.623	151163	0.54	50	100.1	89.5	110.5	
Na	23	45	1	He	26276.468	0.916	36833223	1.49	25000	105.1	89.5	110.5	
Mg	24	45	1	He	25994.056	1.567	20702442	0.92	25000	104.0	89.5	110.5	
Al	27	45	1	He	251.642	0.754	115694	0.65	250	100.7	89.5	110.5	
K	39	45	1	He	25880.193	1.858	19434986	0.94	25000	103.5	89.5	110.5	
Ca	44	45	1	He	25667.856	1.524	1056872	1.27	25000	102.7	89.5	110.5	
Ti	47	45	1	He	71.273	0.881	16541	1.47	50	142.5	89.5	110.5	CCV Failed
V	51	45	1	He	52.951	1.493	303720	0.62	50	105.9	89.5	110.5	
Cr	52	45	1	He	52.623	1.956	364708	1.40	50	105.2	89.5	110.5	
Mn	55	45	1	He	261.986	2.051	1419872	1.22	250	104.8	89.5	110.5	
Fe	56	45	1	He	13120.721	1.158	85270952	0.46	12500	105.0	89.5	110.5	
Co	59	103	1	He	47.676	1.519	511472	0.72	50	95.4	89.5	110.5	
Ni	60	103	1	He	47.455	1.910	126328	1.38	50	94.9	89.5	110.5	
Cu	63	103	1	He	48.125	1.654	338058	0.74	50	96.2	89.5	110.5	
Zn	66	103	1	He	48.183	1.962	69712	0.89	50	96.4	89.5	110.5	
As	75	103	1	He	47.859	2.274	43700	1.22	50	95.7	89.5	110.5	
Se	78	103	1	He	48.963	1.967	4753	0.90	50	97.9	89.5	110.5	
Sr	88	103	1	He	48.718	1.858	360393	0.96	50	97.4	89.5	110.5	
Mo	95	103	1	He	51.113	1.522	171830	1.44	50	102.2	89.5	110.5	
Ag	107	103	1	He	50.783	2.454	586226	1.51	50	101.6	89.5	110.5	
Cd	111	103	1	He	51.864	1.602	105221	1.39	50	103.7	89.5	110.5	
Sn	118	115	1	He	50.261	1.445	249374	1.66	50	100.5	89.5	110.5	
Sb	123	115	1	He	51.735	0.778	236707	0.38	50	103.5	89.5	110.5	
Ba	137	115	1	He	49.900	0.525	112041	0.39	50	99.8	89.5	110.5	
W	182	209	1	He	52.072	1.588	683100	1.36	50	104.1	89.5	110.5	
Tl	205	165	1	He	51.695	2.366	1722937	2.89	50	103.4	89.5	110.5	
Pb	208	209	1	He	49.317	1.655	2221506	0.96	50	98.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1253401	2.11	1631381	76.83	30	120	
Sc	45	1	He	654768	1.02	829696	78.92	30	120	
Sc	45	2	NoGas	5083669	0.96	6325638	80.37	30	120	
Rh	103	1	He	1947782	1.06	2345543	83.04	30	120	
In	115	1	He	1185405	0.41	1419467	83.51	30	120	
Tb	159	1	He	3495343	1.24	3888262	89.89	30	120	
Ho	165	1	He	3631250	0.81	3932562	92.34	30	120	
Bi	209	1	He	2558267	0.70	2874805	88.99	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	029_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:56:31-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.082	3.3	367	3.0	1	
B	11	45	2	NoGas	-0.091	-145.3	7809	4.7	20	
Na	23	45	1	He	7.778	12.0	29135	3.6	400	
Mg	24	45	1	He	1.940	41.8	2322	26.8	1000	
Al	27	45	1	He	0.460	32.5	2297	4.2	50	
K	39	45	1	He	6.233	58.1	34872	7.0	1000	
Ca	44	45	1	He	8.811	17.5	1154	5.7	1000	
Ti	47	45	1	He	2.887	12.2	680	11.6	20	
V	51	45	1	He	0.100	34.6	655	29.2	2	
Cr	52	45	1	He	0.011	284.4	2106	9.0	2	
Mn	55	45	1	He	0.045	51.8	1216	9.3	2	
Fe	56	45	1	He	14.673	20.5	98860	18.8	50	
Co	59	103	1	He	0.007	29.7	119	20.3	1	
Ni	60	103	1	He	-0.005	-208.3	99	30.6	2	
Cu	63	103	1	He	0.096	11.7	2225	4.8	2	
Zn	66	103	1	He	-0.038	-248.6	1680	7.7	20	
As	75	103	1	He	0.084	5.9	225	2.1	2	
Se	78	103	1	He	0.109	64.7	57	13.3	2	
Sr	88	103	1	He	0.151	8.9	1292	9.3	10	
Mo	95	103	1	He	0.940	13.5	3405	13.5	2	
Ag	107	103	1	He	0.016	15.2	202	13.7	0.2	
Cd	111	103	1	He	0.023	139.6	1133	5.0	0.2	
Sn	118	115	1	He	0.369	7.3	2860	4.4	10	
Sb	123	115	1	He	0.533	9.7	3077	7.1	1	
Ba	137	115	1	He	0.014	52.0	120	13.9	5	
W	182	209	1	He	1.070	16.8	18282	12.1	10	
Tl	205	165	1	He	0.039	19.4	1380	18.2	0.5	
Pb	208	209	1	He	0.093	13.7	5186	10.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1284934	0.93	1631381	78.76	30	120	
Sc	45	1	He	654884	1.37	829696	78.93	30	120	
Sc	45	2	NoGas	5176097	0.22	6325638	81.83	30	120	
Rh	103	1	He	2066171	1.16	2345543	88.09	30	120	
In	115	1	He	1230524	0.94	1419467	86.69	30	120	
Tb	159	1	He	3591874	0.85	3888262	92.38	30	120	
Ho	165	1	He	3671995	1.14	3932562	93.37	30	120	
Bi	209	1	He	2707559	1.44	2874805	94.18	30	120	

Sample Report

Sample Table

Sample Name	190-7094-a-1-a@2
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:00:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.246	0.246	13.14	1022	0.02	10000	
B	11	45	2	NoGas	48.062	48.062	1.16	146723	0.03	300	
Na	23	45	1	He	1997.089	1997.089	2.55	2805567	0.07	500000	
Mg	24	45	1	He	6777.663	6777.663	1.92	5378419	0.13	500000	
Al	27	45	1	He	5393.824	5393.824	2.29	2427949	0.22	200000	
K	39	45	1	He	1326.245	1326.245	3.07	1020812	0.13	500000	
Ca	44	45	1	He	46538.997	46538.997	2.10	1908418	2.44	500000	
Ti	47	45	1	He	103.273	103.273	2.34	23874	0.43	2500	
V	51	45	1	He	10.697	10.697	1.37	61206	0.02	10000	
Cr	52	45	1	He	110.517	110.517	1.59	760893	0.01	10000	
Mn	55	45	1	He	1831.703	1831.703	2.26	9884558	0.02	10000	
Fe	56	45	1	He	99904.367	99904.367	3.18	646774374	0.02	200000	
Co	59	103	1	He	10.307	10.307	1.41	114044	0.01	10000	
Ni	60	103	1	He	43.555	43.555	1.91	119560	0.04	10000	
Cu	63	103	1	He	566.132	566.132	2.50	4084693	0.01	10000	
Zn	66	103	1	He	1243.589	1243.589	1.81	1813391	0.07	10000	
As	75	103	1	He	10.788	10.788	3.10	10265	0.11	10000	
Se	78	103	1	He	7.757	7.757	1.79	814	0.95	10000	
Sr	88	103	1	He	195.347	195.347	3.09	1489702	0.01	10000	
Mo	95	103	1	He	23.040	23.040	1.28	79886	0.03	2000	
Ag	107	103	1	He	10.497	10.497	1.62	124961	0.01	300	
Cd	111	103	1	He	2.613	2.613	3.08	6469	0.04	4000	
Sn	118	115	1	He	57.513	57.513	0.79	288713	0.02	2000	
Sb	123	115	1	He	4.382	4.382	1.37	20794	0.02	300	
Ba	137	115	1	He	760.243	760.243	0.69	1726711	0.04	10000	
W	182	209	1	He	14.737	14.737	0.93	317495	0.00	2500	
Tl	205	165	1	He	0.204	0.204	2.02	6962	0.00	5000	
Pb	208	209	1	He	36.191	36.191	0.31	2645212	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1268369	0.29	1631381	77.75	30	120	
Sc	45	1	He	652343	0.99	829696	78.62	30	120	
Sc	45	2	NoGas	5127599	0.67	6325638	81.06	30	120	
Rh	103	1	He	2008164	0.53	2345543	85.62	30	120	
In	115	1	He	1199962	1.03	1419467	84.54	30	120	
Tb	159	1	He	3614038	0.81	3888262	92.95	30	120	
Ho	165	1	He	3690706	1.66	3932562	93.85	30	120	
Bi	209	1	He	4150211	0.61	2874805	144.36	30	120	ISTD Failed

Sample Report

Sample Table

Sample Name	190-7094-a-2-a@2
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:04:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.129	0.129	8.06	596	0.02	10000	
B	11	45	2	NoGas	34.537	34.537	1.31	114316	0.03	300	
Na	23	45	1	He	1042.257	1042.257	2.17	1566447	0.07	500000	
Mg	24	45	1	He	3487.173	3487.173	0.85	2943523	0.12	500000	
Al	27	45	1	He	2686.282	2686.282	1.86	1287140	0.21	200000	
K	39	45	1	He	1408.932	1408.932	0.36	1151453	0.12	500000	
Ca	44	45	1	He	25129.832	25129.832	0.57	1096383	2.29	500000	
Ti	47	45	1	He	64.920	64.920	6.98	15967	0.41	2500	
V	51	45	1	He	5.938	5.938	3.31	36171	0.02	10000	
Cr	52	45	1	He	48.625	48.625	0.54	357271	0.01	10000	
Mn	55	45	1	He	765.705	765.705	0.71	4395660	0.02	10000	
Fe	56	45	1	He	45141.924	45141.924	1.06	310842494	0.01	200000	
Co	59	103	1	He	4.868	4.868	0.87	57350	0.01	10000	
Ni	60	103	1	He	22.413	22.413	0.59	65543	0.03	10000	
Cu	63	103	1	He	295.374	295.374	0.26	2269236	0.01	10000	
Zn	66	103	1	He	622.613	622.613	0.34	967214	0.06	10000	
As	75	103	1	He	5.121	5.121	1.19	5265	0.10	10000	
Se	78	103	1	He	4.024	4.024	6.09	472	0.85	10000	
Sr	88	103	1	He	111.502	111.502	0.47	905137	0.01	10000	
Mo	95	103	1	He	11.934	11.934	1.51	44075	0.03	2000	
Ag	107	103	1	He	5.688	5.688	0.83	72063	0.01	300	
Cd	111	103	1	He	1.300	1.300	9.11	3988	0.03	4000	
Sn	118	115	1	He	33.851	33.851	0.88	178075	0.02	2000	
Sb	123	115	1	He	3.750	3.750	0.96	18685	0.02	300	
Ba	137	115	1	He	424.890	424.890	0.90	1009034	0.04	10000	
W	182	209	1	He	7.124	7.124	2.44	138926	0.01	2500	
Tl	205	165	1	He	0.099	0.099	6.24	3618	0.00	5000	
Pb	208	209	1	He	18.069	18.069	1.21	1174681	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1372156	1.37	1631381	84.11	30	120	
Sc	45	1	He	693755	0.73	829696	83.62	30	120	
Sc	45	2	NoGas	5443189	0.36	6325638	86.05	30	120	
Rh	103	1	He	2137494	1.08	2345543	91.13	30	120	
In	115	1	He	1254645	1.01	1419467	88.39	30	120	
Tb	159	1	He	3789824	0.38	3888262	97.47	30	120	
Ho	165	1	He	3897954	1.33	3932562	99.12	30	120	
Bi	209	1	He	3690104	1.15	2874805	128.36	30	120	ISTD Failed

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	032_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:07:50-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.781	2.541	228211	1.32	50	95.6	89.5	110.5	
B	11	45	2	NoGas	49.484	2.737	183521	2.71	50	99.0	89.5	110.5	
Na	23	45	1	He	25053.728	2.691	44151866	0.35	25000	100.2	89.5	110.5	
Mg	24	45	1	He	25007.922	2.896	25040582	0.26	25000	100.0	89.5	110.5	
Al	27	45	1	He	242.751	2.506	140415	0.75	250	97.1	89.5	110.5	
K	39	45	1	He	24987.506	2.947	23594532	1.21	25000	100.0	89.5	110.5	
Ca	44	45	1	He	24786.721	2.246	1283300	0.87	25000	99.1	89.5	110.5	
Ti	47	45	1	He	52.002	5.853	15169	3.72	50	104.0	89.5	110.5	
V	51	45	1	He	50.894	2.061	367082	0.97	50	101.8	89.5	110.5	
Cr	52	45	1	He	51.156	2.728	445837	0.29	50	102.3	89.5	110.5	
Mn	55	45	1	He	256.058	3.064	1744765	0.22	250	102.4	89.5	110.5	
Fe	56	45	1	He	12730.668	2.748	104020783	0.32	12500	101.8	89.5	110.5	
Co	59	103	1	He	48.670	0.218	626692	1.32	50	97.3	89.5	110.5	
Ni	60	103	1	He	48.010	0.705	153389	0.75	50	96.0	89.5	110.5	
Cu	63	103	1	He	49.115	1.367	414041	0.87	50	98.2	89.5	110.5	
Zn	66	103	1	He	48.232	1.953	83745	0.83	50	96.5	89.5	110.5	
As	75	103	1	He	48.639	0.358	53305	1.09	50	97.3	89.5	110.5	
Se	78	103	1	He	47.855	0.778	5577	0.45	50	95.7	89.5	110.5	
Sr	88	103	1	He	48.239	0.484	428325	1.23	50	96.5	89.5	110.5	
Mo	95	103	1	He	51.133	2.964	206265	1.87	50	102.3	89.5	110.5	
Ag	107	103	1	He	50.328	1.118	697312	0.69	50	100.7	89.5	110.5	
Cd	111	103	1	He	50.261	1.221	122410	0.26	50	100.5	89.5	110.5	
Sn	118	115	1	He	50.056	1.040	291843	0.74	50	100.1	89.5	110.5	
Sb	123	115	1	He	51.579	1.245	277317	0.85	50	103.2	89.5	110.5	
Ba	137	115	1	He	50.742	0.969	133885	1.17	50	101.5	89.5	110.5	
W	182	209	1	He	51.578	0.749	774404	1.94	50	103.2	89.5	110.5	
Tl	205	165	1	He	51.837	1.313	1983145	0.96	50	103.7	89.5	110.5	
Pb	208	209	1	He	48.783	1.736	2514565	0.43	50	97.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1511095	1.32	1631381	92.63	30	120	
Sc	45	1	He	823607	3.01	829696	99.27	30	120	
Sc	45	2	NoGas	6238980	0.67	6325638	98.63	30	120	
Rh	103	1	He	2337601	1.22	2345543	99.66	30	120	
In	115	1	He	1392996	0.48	1419467	98.14	30	120	
Tb	159	1	He	4060112	0.85	3888262	104.42	30	120	
Ho	165	1	He	4168644	0.40	3932562	106.00	30	120	
Bi	209	1	He	2927642	1.39	2874805	101.84	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	033_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:11:40-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.061	19.3	330	16.6	1	
B	11	45	2	NoGas	0.213	40.4	10296	2.7	20	
Na	23	45	1	He	7.698	16.9	34864	5.6	400	
Mg	24	45	1	He	2.682	39.3	3501	28.1	1000	
Al	27	45	1	He	0.349	117.3	2698	7.9	50	
K	39	45	1	He	7.066	37.5	42647	5.0	1000	
Ca	44	45	1	He	5.548	42.3	1225	9.2	1000	
Ti	47	45	1	He	0.904	5.6	264	5.7	20	
V	51	45	1	He	0.013	329.0	190	156.4	2	
Cr	52	45	1	He	0.008	111.8	2505	2.3	2	
Mn	55	45	1	He	0.057	22.4	1536	5.0	2	
Fe	56	45	1	He	27.916	22.4	222106	21.3	50	
Co	59	103	1	He	0.004	54.8	107	28.6	1	
Ni	60	103	1	He	-0.011	-57.8	98	20.8	2	
Cu	63	103	1	He	0.070	26.0	2397	7.0	2	
Zn	66	103	1	He	0.021	171.7	2090	3.5	20	
As	75	103	1	He	0.017	21.5	190	2.8	2	
Se	78	103	1	He	0.035	150.2	58	10.7	2	
Sr	88	103	1	He	0.034	9.1	441	6.2	10	
Mo	95	103	1	He	0.943	18.2	4034	17.3	2	
Ag	107	103	1	He	0.016	20.7	241	19.9	0.2	
Cd	111	103	1	He	0.039	38.9	1380	2.2	0.2	
Sn	118	115	1	He	0.349	22.6	3238	15.0	10	
Sb	123	115	1	He	0.548	19.9	3697	16.7	1	
Ba	137	115	1	He	0.022	42.1	162	15.6	5	
W	182	209	1	He	1.128	22.4	21122	18.0	10	
Tl	205	165	1	He	0.032	25.9	1305	24.5	0.5	
Pb	208	209	1	He	0.056	9.0	3774	6.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1491301	1.01	1631381	91.41	30	120	
Sc	45	1	He	786652	0.67	829696	94.81	30	120	
Sc	45	2	NoGas	6128606	1.37	6325638	96.89	30	120	
Rh	103	1	He	2441025	0.61	2345543	104.07	30	120	
In	115	1	He	1443065	0.60	1419467	101.66	30	120	
Tb	159	1	He	4018686	0.44	3888262	103.35	30	120	
Ho	165	1	He	4149414	0.08	3932562	105.51	30	120	
Bi	209	1	He	2994424	0.85	2874805	104.16	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	034_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:17:59-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.117	1.269	226910	1.11	50	94.2	89.5	110.5	
B	11	45	2	NoGas	48.861	2.100	185189	0.67	50	97.7	89.5	110.5	
Na	23	45	1	He	24008.049	4.317	44358568	0.24	25000	96.0	89.5	110.5	
Mg	24	45	1	He	23905.092	2.344	25111684	2.24	25000	95.6	89.5	110.5	
Al	27	45	1	He	235.924	3.833	143166	0.61	250	94.4	89.5	110.5	
K	39	45	1	He	24339.665	3.353	24103699	1.06	25000	97.4	89.5	110.5	
Ca	44	45	1	He	24132.538	2.601	1310583	2.28	25000	96.5	89.5	110.5	
Ti	47	45	1	He	50.083	2.519	15332	1.95	50	100.2	89.5	110.5	
V	51	45	1	He	48.720	3.840	368424	0.59	50	97.4	89.5	110.5	
Cr	52	45	1	He	48.951	4.214	447409	0.33	50	97.9	89.5	110.5	
Mn	55	45	1	He	245.747	4.711	1755654	1.23	250	98.3	89.5	110.5	
Fe	56	45	1	He	12132.847	3.927	103949178	0.43	12500	97.1	89.5	110.5	
Co	59	103	1	He	48.828	0.884	626958	0.36	50	97.7	89.5	110.5	
Ni	60	103	1	He	48.431	0.811	154307	0.28	50	96.9	89.5	110.5	
Cu	63	103	1	He	49.495	1.180	416091	0.78	50	99.0	89.5	110.5	
Zn	66	103	1	He	48.756	0.304	84413	0.70	50	97.5	89.5	110.5	
As	75	103	1	He	49.678	1.030	54289	0.61	50	99.4	89.5	110.5	
Se	78	103	1	He	49.343	2.211	5733	2.34	50	98.7	89.5	110.5	
Sr	88	103	1	He	48.903	1.145	432996	0.73	50	97.8	89.5	110.5	
Mo	95	103	1	He	50.327	1.498	202505	2.01	50	100.7	89.5	110.5	
Ag	107	103	1	He	50.462	1.147	697252	0.62	50	100.9	89.5	110.5	
Cd	111	103	1	He	50.075	0.919	121632	0.56	50	100.2	89.5	110.5	
Sn	118	115	1	He	50.100	0.942	293168	0.72	50	100.2	89.5	110.5	
Sb	123	115	1	He	51.851	0.346	279808	0.46	50	103.7	89.5	110.5	
Ba	137	115	1	He	50.362	0.961	133367	0.88	50	100.7	89.5	110.5	
W	182	209	1	He	50.808	0.792	761041	1.24	50	101.6	89.5	110.5	
Tl	205	165	1	He	51.546	0.771	1956396	0.21	50	103.1	89.5	110.5	
Pb	208	209	1	He	48.219	1.388	2479691	0.67	50	96.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1523478	1.65	1631381	93.39	30	120	
Sc	45	1	He	864118	4.43	829696	104.15	30	120	
Sc	45	2	NoGas	6373033	1.66	6325638	100.75	30	120	
Rh	103	1	He	2331119	0.53	2345543	99.39	30	120	
In	115	1	He	1398092	0.26	1419467	98.49	30	120	
Tb	159	1	He	4024439	1.12	3888262	103.50	30	120	
Ho	165	1	He	4135633	0.57	3932562	105.16	30	120	
Bi	209	1	He	2920573	0.77	2874805	101.59	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	035_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:21:44-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.040	32.5	237	27.5	1	
B	11	45	2	NoGas	0.724	23.5	12590	4.2	20	
Na	23	45	1	He	6.795	14.6	34337	3.8	400	
Mg	24	45	1	He	2.448	56.0	3371	38.9	1000	
Al	27	45	1	He	0.152	121.4	2668	2.7	50	
K	39	45	1	He	7.538	26.8	44355	3.0	1000	
Ca	44	45	1	He	3.545	46.1	1160	8.3	1000	
Ti	47	45	1	He	0.655	7.7	201	8.2	20	
V	51	45	1	He	0.009	302.1	167	116.1	2	
Cr	52	45	1	He	0.006	104.2	2567	2.4	2	
Mn	55	45	1	He	0.071	6.2	1680	1.9	2	
Fe	56	45	1	He	24.917	22.4	204550	20.8	50	
Co	59	103	1	He	0.005	42.4	118	24.4	1	
Ni	60	103	1	He	-0.003	-408.2	128	33.0	2	
Cu	63	103	1	He	0.057	23.7	2348	5.8	2	
Zn	66	103	1	He	-0.029	-120.2	2056	2.8	20	
As	75	103	1	He	0.025	15.2	204	2.2	2	
Se	78	103	1	He	0.095	129.3	67	23.4	2	
Sr	88	103	1	He	0.018	30.2	299	17.3	10	
Mo	95	103	1	He	0.936	24.8	4118	25.0	2	
Ag	107	103	1	He	0.021	12.4	312	12.8	0.2	
Cd	111	103	1	He	0.029	59.2	1391	2.7	0.2	
Sn	118	115	1	He	0.358	13.3	3352	8.2	10	
Sb	123	115	1	He	0.590	19.8	4006	16.0	1	
Ba	137	115	1	He	0.013	103.9	139	25.9	5	
W	182	209	1	He	1.093	11.7	21118	9.1	10	
Tl	205	165	1	He	0.035	30.7	1393	28.3	0.5	
Pb	208	209	1	He	0.042	6.2	3110	4.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1552882	0.78	1631381	95.19	30	120	
Sc	45	1	He	810154	1.23	829696	97.64	30	120	
Sc	45	2	NoGas	6398729	0.70	6325638	101.16	30	120	
Rh	103	1	He	2507027	0.65	2345543	106.88	30	120	
In	115	1	He	1471504	0.54	1419467	103.67	30	120	
Tb	159	1	He	4104515	0.91	3888262	105.56	30	120	
Ho	165	1	He	4155840	0.79	3932562	105.68	30	120	
Bi	209	1	He	3071982	0.42	2874805	106.86	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-175943/1-a
Data File Name	036_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:25:36-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.055	25.3	296	21.3	1	
B	11	45	2	NoGas	2.393	2.9	17301	0.6	20	
Na	23	45	1	He	95.317	1.7	184330	1.5	400	
Mg	24	45	1	He	56.572	0.8	55677	2.3	1000	
Al	27	45	1	He	3.285	8.5	4337	3.2	50	
K	39	45	1	He	29.320	6.7	63370	0.7	1000	
Ca	44	45	1	He	214.087	1.0	11661	2.6	1000	
Ti	47	45	1	He	0.871	37.1	257	33.1	20	
V	51	45	1	He	0.089	20.4	719	15.2	2	
Cr	52	45	1	He	0.651	3.8	7916	1.5	2	
Mn	55	45	1	He	0.248	3.0	2811	2.9	2	
Fe	56	45	1	He	21.703	7.3	175892	9.3	50	
Co	59	103	1	He	0.006	34.1	121	22.1	1	
Ni	60	103	1	He	0.099	28.6	446	21.7	2	
Cu	63	103	1	He	0.736	4.3	7909	1.6	2	
Zn	66	103	1	He	11.819	3.8	22056	1.9	20	
As	75	103	1	He	0.083	34.0	254	10.3	2	
Se	78	103	1	He	0.076	130.7	61	17.1	2	
Sr	88	103	1	He	0.417	4.4	3829	2.9	10	
Mo	95	103	1	He	0.224	9.3	964	7.6	2	
Ag	107	103	1	He	0.021	29.0	292	27.2	0.2	
Cd	111	103	1	He	0.031	20.8	1305	0.9	0.2	
Sn	118	115	1	He	0.979	7.2	6746	6.3	10	
Sb	123	115	1	He	1.194	9.7	6987	7.5	1	Blank Failed
Ba	137	115	1	He	0.773	7.7	2126	7.2	5	
W	182	209	1	He	0.277	6.7	8347	3.7	10	
Tl	205	165	1	He	0.010	17.4	419	12.9	0.5	
Pb	208	209	1	He	0.168	3.7	9954	3.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1481735	1.49	1631381	90.83	30	120	
Sc	45	1	He	795371	2.77	829696	95.86	30	120	
Sc	45	2	NoGas	5951014	0.75	6325638	94.08	30	120	
Rh	103	1	He	2343473	1.82	2345543	99.91	30	120	
In	115	1	He	1385640	1.36	1419467	97.62	30	120	
Tb	159	1	He	3892844	1.91	3888262	100.12	30	120	
Ho	165	1	He	3979716	2.70	3932562	101.20	30	120	
Bi	209	1	He	3080165	0.39	2874805	107.14	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-175943/3-a
Data File Name	037_LCS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:29:28-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	971.750	971.750	1.886	4358624	0.86	1000	97.2	79.5	120.5	
B	11	2	NoGas	116.130	116.130	1.212	379795	0.42	100	116.1	79.5	120.5	
Na	23	1	He	10303.213	10303.213	2.092	16367517	0.18	10000	103.0	79.5	120.5	
Mg	24	1	He	10299.638	10299.638	3.315	9288893	1.12	10000	103.0	79.5	120.5	
Al	27	1	He	9354.165	9354.165	2.531	4784835	1.56	10000	93.5	79.5	120.5	
K	39	1	He	10198.061	10198.061	2.942	8693165	0.72	10000	102.0	79.5	120.5	
Ca	44	1	He	9301.064	9301.064	2.789	434236	0.56	10000	93.0	79.5	120.5	
Ti	47	1	He	99.100	99.100	2.310	26040	1.08	100	99.1	79.5	120.5	
V	51	1	He	995.940	995.940	3.220	6466903	1.00	1000	99.6	79.5	120.5	
Cr	52	1	He	1018.541	1018.541	1.521	7953187	0.87	1000	101.9	79.5	120.5	
Mn	55	1	He	1015.058	1015.058	0.781	6228750	1.70	1000	101.5	79.5	120.5	
Fe	56	1	He	10375.553	10375.553	1.793	76369544	0.53	10000	103.8	79.5	120.5	
Co	59	1	He	958.081	958.081	2.974	11388225	1.34	1000	95.8	79.5	120.5	
Ni	60	1	He	983.492	983.492	2.121	2898992	0.77	1000	98.3	79.5	120.5	
Cu	63	1	He	983.526	983.526	1.117	7626758	1.09	1000	98.4	79.5	120.5	
Zn	66	1	He	1007.219	1007.219	1.030	1579053	1.16	1000	100.7	79.5	120.5	
As	75	1	He	936.694	936.694	1.217	945166	0.41	1000	93.7	79.5	120.5	
Se	78	1	He	959.837	959.837	0.942	102387	0.68	1000	96.0	79.5	120.5	
Sr	88	1	He	948.877	948.877	2.292	7776827	0.81	1000	94.9	79.5	120.5	
Mo	95	1	He	107.776	107.776	0.566	401509	1.39	100	107.8	79.5	120.5	
Ag	107	1	He	103.625	103.625	1.661	1325783	0.23	100	103.6	79.5	120.5	
Cd	111	1	He	1046.935	1046.935	1.928	2331967	0.32	1000	104.7	79.5	120.5	
Sn	118	1	He	1125.628	1125.628	0.616	5741229	0.40	1000	112.6	79.5	120.5	
Sb	123	1	He	111.044	111.044	0.808	523549	0.70	100	111.0	79.5	120.5	
Ba	137	1	He	1103.207	1103.207	0.914	2553773	0.77	1000	110.3	79.5	120.5	
W	182	1	He	109.633	109.633	5.713	1566994	4.88	100	109.6	79.5	120.5	
Tl	205	1	He	252.717	252.717	0.477	8965815	0.97	250	101.1	79.5	120.5	
Pb	208	1	He	994.280	994.280	0.833	48923363	0.10	1000	99.4	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1419417	2.43	1631381	87.01	30	120	
Sc	45	1	He	741709	2.27	829696	89.40	30	120	
Sc	45	2	NoGas	5674892	0.93	6325638	89.71	30	120	
Rh	103	1	He	2158763	1.61	2345543	92.04	30	120	
In	115	1	He	1222989	0.32	1419467	86.16	30	120	
Tb	159	1	He	3762548	1.17	3888262	96.77	30	120	
Ho	165	1	He	3865772	0.92	3932562	98.30	30	120	
Bi	209	1	He	2795259	0.87	2874805	97.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	038_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:33:01-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.589	2.792	244003	1.68	50	97.2	89.5	110.5	
B	11	45	2	NoGas	51.577	2.487	197992	2.22	50	103.2	89.5	110.5	
Na	23	45	1	He	24936.666	2.854	45750276	0.32	25000	99.7	89.5	110.5	
Mg	24	45	1	He	25166.021	2.943	26234511	0.63	25000	100.7	89.5	110.5	
Al	27	45	1	He	242.671	3.400	146112	0.48	250	97.1	89.5	110.5	
K	39	45	1	He	25195.122	2.812	24767696	0.56	25000	100.8	89.5	110.5	
Ca	44	45	1	He	25006.574	4.436	1347324	1.76	25000	100.0	89.5	110.5	
Ti	47	45	1	He	50.800	0.938	15440	2.04	50	101.6	89.5	110.5	
V	51	45	1	He	50.686	3.282	380513	0.39	50	101.4	89.5	110.5	
Cr	52	45	1	He	50.856	2.973	461428	0.04	50	101.7	89.5	110.5	
Mn	55	45	1	He	255.228	3.689	1810399	1.00	250	102.1	89.5	110.5	
Fe	56	45	1	He	12732.305	3.516	108293416	0.61	12500	101.9	89.5	110.5	
Co	59	103	1	He	49.032	1.206	649280	0.27	50	98.1	89.5	110.5	
Ni	60	103	1	He	48.878	1.206	160603	0.28	50	97.8	89.5	110.5	
Cu	63	103	1	He	49.454	1.269	428762	0.41	50	98.9	89.5	110.5	
Zn	66	103	1	He	48.930	2.367	87347	1.35	50	97.9	89.5	110.5	
As	75	103	1	He	49.775	1.077	56097	0.13	50	99.6	89.5	110.5	
Se	78	103	1	He	48.877	2.167	5857	1.45	50	97.8	89.5	110.5	
Sr	88	103	1	He	48.206	1.703	440178	0.90	50	96.4	89.5	110.5	
Mo	95	103	1	He	51.425	2.009	213397	2.25	50	102.8	89.5	110.5	
Ag	107	103	1	He	49.928	1.515	711459	0.66	50	99.9	89.5	110.5	
Cd	111	103	1	He	49.938	1.369	125094	0.39	50	99.9	89.5	110.5	
Sn	118	115	1	He	51.525	0.250	305659	0.88	50	103.1	89.5	110.5	
Sb	123	115	1	He	52.043	1.435	284707	0.39	50	104.1	89.5	110.5	
Ba	137	115	1	He	50.554	2.099	135714	1.17	50	101.1	89.5	110.5	
W	182	209	1	He	53.351	0.716	802797	0.46	50	106.7	89.5	110.5	
Tl	205	165	1	He	51.430	0.585	1992819	0.71	50	102.9	89.5	110.5	
Pb	208	209	1	He	49.019	0.570	2533261	0.60	50	98.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1588916	1.94	1631381	97.40	30	120	
Sc	45	1	He	857436	2.90	829696	103.34	30	120	
Sc	45	2	NoGas	6471963	0.51	6325638	102.31	30	120	
Rh	103	1	He	2404170	0.97	2345543	102.50	30	120	
In	115	1	He	1417487	1.08	1419467	99.86	30	120	
Tb	159	1	He	4118013	1.07	3888262	105.91	30	120	
Ho	165	1	He	4221973	0.21	3932562	107.36	30	120	
Bi	209	1	He	2934762	0.26	2874805	102.09	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	039_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:36:50-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.126	33.9	674	31.5	1	
B	11	45	2	NoGas	0.761	15.0	12801	3.8	20	
Na	23	45	1	He	7.745	17.0	36333	3.9	400	
Mg	24	45	1	He	2.829	69.2	3764	49.2	1000	
Al	27	45	1	He	0.589	24.8	2943	1.8	50	
K	39	45	1	He	7.407	51.9	44660	6.0	1000	
Ca	44	45	1	He	2.050	114.6	1093	9.3	1000	
Ti	47	45	1	He	0.340	22.6	112	22.3	20	
V	51	45	1	He	0.027	117.5	297	76.7	2	
Cr	52	45	1	He	0.013	115.9	2647	3.6	2	
Mn	55	45	1	He	0.067	35.5	1662	7.4	2	
Fe	56	45	1	He	26.044	26.3	215263	23.4	50	
Co	59	103	1	He	0.021	33.7	348	28.8	1	
Ni	60	103	1	He	0.017	44.9	199	13.4	2	
Cu	63	103	1	He	0.092	22.5	2699	7.2	2	
Zn	66	103	1	He	-0.006	-784.4	2126	3.4	20	
As	75	103	1	He	0.154	7.6	359	3.7	2	
Se	78	103	1	He	0.215	31.1	83	10.2	2	
Sr	88	103	1	He	0.020	37.6	321	22.7	10	
Mo	95	103	1	He	1.083	20.2	4816	19.8	2	
Ag	107	103	1	He	0.020	27.0	301	26.8	0.2	
Cd	111	103	1	He	0.043	69.5	1447	5.3	0.2	
Sn	118	115	1	He	0.616	10.1	4931	7.2	10	
Sb	123	115	1	He	0.643	16.8	4302	13.9	1	
Ba	137	115	1	He	0.011	111.5	134	26.0	5	
W	182	209	1	He	1.374	13.6	25169	10.4	10	
Tl	205	165	1	He	0.063	22.6	2519	22.8	0.5	
Pb	208	209	1	He	0.135	13.4	8044	11.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1584656	1.66	1631381	97.14	30	120	
Sc	45	1	He	818596	2.51	829696	98.66	30	120	
Sc	45	2	NoGas	6436098	0.60	6325638	101.75	30	120	
Rh	103	1	He	2541409	0.99	2345543	108.35	30	120	
In	115	1	He	1470450	0.55	1419467	103.59	30	120	
Tb	159	1	He	4111614	0.59	3888262	105.74	30	120	
Ho	165	1	He	4241790	1.11	3932562	107.86	30	120	
Bi	209	1	He	3031213	1.04	2874805	105.44	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177401/1-a@2
Data File Name	040_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:40:43-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.095	24.4	489	21.7	1	
B	11	45	2	NoGas	0.939	17.4	12809	3.8	20	
Na	23	45	1	He	34.575	3.6	83269	1.7	400	
Mg	24	45	1	He	14.448	8.0	15333	5.3	1000	
Al	27	45	1	He	1.213	11.7	3291	1.0	50	
K	39	45	1	He	22.417	4.1	58721	1.5	1000	
Ca	44	45	1	He	44.694	3.3	3284	1.0	1000	
Ti	47	45	1	He	0.772	33.7	236	29.5	20	
V	51	45	1	He	0.179	37.5	1392	36.3	2	
Cr	52	45	1	He	0.834	8.3	9714	4.4	2	
Mn	55	45	1	He	0.183	6.0	2451	1.1	2	
Fe	56	45	1	He	21.140	9.1	176403	11.4	50	
Co	59	103	1	He	0.019	18.8	298	16.5	1	
Ni	60	103	1	He	0.151	20.7	628	17.6	2	
Cu	63	103	1	He	0.425	4.4	5424	3.5	2	
Zn	66	103	1	He	2.220	5.8	5887	2.6	20	
As	75	103	1	He	0.208	11.8	401	5.9	2	
Se	78	103	1	He	0.145	83.3	70	18.6	2	
Sr	88	103	1	He	0.184	1.0	1802	2.5	10	
Mo	95	103	1	He	0.466	15.6	1992	14.2	2	
Ag	107	103	1	He	0.017	10.9	248	9.4	0.2	
Cd	111	103	1	He	0.050	20.8	1384	2.5	0.2	
Sn	118	115	1	He	17.459	2.0	102823	2.0	10	Blank Failed
Sb	123	115	1	He	0.431	5.2	2947	4.0	1	
Ba	137	115	1	He	1.541	2.8	4175	2.9	5	
W	182	209	1	He	0.576	5.1	12921	3.2	10	
Tl	205	165	1	He	0.031	21.3	1239	19.5	0.5	
Pb	208	209	1	He	0.277	13.3	15734	13.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1499469	1.90	1631381	91.91	30	120	
Sc	45	1	He	817932	2.59	829696	98.58	30	120	
Sc	45	2	NoGas	6132866	0.70	6325638	96.95	30	120	
Rh	103	1	He	2401990	1.59	2345543	102.41	30	120	
In	115	1	He	1397303	0.17	1419467	98.44	30	120	
Tb	159	1	He	4034218	0.14	3888262	103.75	30	120	
Ho	165	1	He	4111677	1.07	3932562	104.55	30	120	
Bi	209	1	He	3050016	0.68	2874805	106.09	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177401/2-a@2
Data File Name	041LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:44:35-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	453.144	453.144	1.337	2014594	0.37	500	90.6	78.6	110.5	
B	11	2	NoGas	54.649	54.649	1.092	184147	1.44	50	109.3	79.5	120.5	
Na	23	1	He	4907.618	4907.618	1.153	7890802	0.46	5000	98.2	79.5	120.5	
Mg	24	1	He	4962.514	4962.514	1.249	4525113	1.48	5000	99.3	79.5	120.5	
Al	27	1	He	4573.718	4573.718	1.453	2365899	1.26	5000	91.5	79.5	120.5	
K	39	1	He	4858.995	4858.995	0.967	4205354	1.38	5000	97.2	79.5	120.5	
Ca	44	1	He	4520.885	4520.885	1.651	213817	1.12	5000	90.4	79.5	120.5	
Ti	47	1	He	48.176	48.176	5.423	12799	4.83	50	96.4	79.5	120.5	
V	51	1	He	481.105	481.105	1.808	3157920	0.89	500	96.2	71.5	110.5	
Cr	52	1	He	484.358	484.358	0.192	3823921	1.38	500	96.9	69.5	110.5	
Mn	55	1	He	488.898	488.898	0.483	3032408	1.22	500	97.8	79.5	120.5	
Fe	56	1	He	4986.277	4986.277	1.510	37094690	0.18	5000	99.7	79.5	120.5	
Co	59	1	He	453.805	453.805	0.904	5523715	0.69	500	90.8	73.9	110.5	
Ni	60	1	He	452.810	452.810	1.324	1366663	0.71	500	90.6	74.9	110.5	
Cu	63	1	He	464.711	464.711	1.429	3690007	0.75	500	92.9	72.6	110.5	
Zn	66	1	He	424.258	424.258	1.460	681981	0.78	500	84.9	71.5	113.4	
As	75	1	He	411.091	411.091	0.961	424773	0.52	500	82.2	73.4	110.5	
Se	78	1	He	394.947	394.947	1.518	43159	0.90	500	79.0	64.6	110.5	
Sr	88	1	He	451.961	451.961	0.976	3792964	1.04	500	90.4	79.5	120.5	
Mo	95	1	He	51.350	51.350	1.091	195866	0.63	50	102.7	29.5	140.5	
Ag	107	1	He	49.060	49.060	0.804	642660	0.56	50	98.1	59.5	114.5	
Cd	111	1	He	453.196	453.196	1.021	1034231	0.59	500	90.6	73.5	110.5	
Sn	118	1	He	545.338	545.338	0.198	2895987	0.28	500	109.1	79.5	120.5	
Sb	123	1	He	49.515	49.515	0.552	243336	0.36	50	99.0	67.5	113.4	
Ba	137	1	He	481.104	481.104	0.167	1159386	0.40	500	96.2	69.5	110.5	
W	182	1	He	50.561	50.561	0.086	729846	0.42	50	101.1	74.6	125.4	
Tl	205	1	He	121.075	121.075	1.922	4392743	0.80	125	96.9	70.6	110.5	
Pb	208	1	He	472.585	472.585	0.964	23415078	0.94	500	94.5	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1406617	1.06	1631381	86.22	30	120	
Sc	45	1	He	749524	1.55	829696	90.34	30	120	
Sc	45	2	NoGas	5697295	1.27	6325638	90.07	30	120	
Rh	103	1	He	2209962	0.71	2345543	94.22	30	120	
In	115	1	He	1273098	0.24	1419467	89.69	30	120	
Tb	159	1	He	3827680	1.10	3888262	98.44	30	120	
Ho	165	1	He	3953933	1.40	3932562	100.54	30	120	
Bi	209	1	He	2814525	0.43	2874805	97.90	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-f@2
Data File Name	042SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:48:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.666	0.666	1.70	2567	0.03	10000	
B	11	45	2	NoGas	11.367	11.367	3.37	69349	0.02	300	
Na	23	45	1	He	1288.731	1288.731	3.33	3475211	0.04	500000	
Mg	24	45	1	He	2041.489	2041.489	2.67	3100673	0.07	500000	
Al	27	45	1	He	12805.600	12805.600	2.60	11022721	0.12	200000	
K	39	45	1	He	163.193	163.193	3.05	290808	0.06	500000	
Ca	44	45	1	He	627265.669	627265.669	1.78	49208187	1.27	500000	>LDR
Ti	47	45	1	He	35827.838	35827.838	3.22	15832631	0.23	2500	>LDR
V	51	45	1	He	3917.408	3917.408	2.24	42823107	0.01	10000	
Cr	52	45	1	He	1491.578	1491.578	2.53	19597835	0.01	10000	
Mn	55	45	1	He	207.440	207.440	2.24	2143547	0.01	10000	
Fe	56	45	1	He	11695.335	11695.335	3.05	144847079	0.01	200000	
Co	59	103	1	He	2.952	2.952	3.78	29017	0.01	10000	
Ni	60	103	1	He	10.700	10.700	2.18	26140	0.04	10000	
Cu	63	103	1	He	15.099	15.099	3.15	97958	0.02	10000	
Zn	66	103	1	He	254.505	254.505	2.90	330561	0.08	10000	
As	75	103	1	He	5.831	5.831	0.37	4980	0.12	10000	
Se	78	103	1	He	2.344	2.344	9.58	246	0.95	10000	
Sr	88	103	1	He	20871.717	20871.717	1.97	141250043	0.01	10000	>LDR
Mo	95	103	1	He	8.106	8.106	2.15	24968	0.03	2000	
Ag	107	103	1	He	2.255	2.255	4.53	23815	0.01	300	
Cd	111	103	1	He	10.695	10.695	6.48	20582	0.05	4000	
Sn	118	115	1	He	73.720	73.720	0.16	342220	0.02	2000	
Sb	123	115	1	He	7.296	7.296	1.89	31688	0.02	300	
Ba	137	115	1	He	42.099	42.099	1.03	88543	0.05	10000	
W	182	209	1	He	13.468	13.468	0.62	161629	0.01	2500	
Tl	205	165	1	He	0.203	0.203	15.04	6682	0.00	5000	
Pb	208	209	1	He	56.684	56.684	0.43	2303839	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1204775	1.08	1631381	73.85	30	120	
Sc	45	1	He	1249166	6.11	829696	150.56	30	120	ISTD Failed
Sc	45	2	NoGas	8714720	0.87	6325638	137.77	30	120	ISTD Failed
Rh	103	1	He	1781910	1.80	2345543	75.97	30	120	
In	115	1	He	1110403	3.04	1419467	78.23	30	120	
Tb	159	1	He	3432372	1.66	3888262	88.28	30	120	
Ho	165	1	He	3544857	1.77	3932562	90.14	30	120	
Bi	209	1	He	2308090	1.60	2874805	80.29	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-f@10
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:51:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.180	0.180	19.19	682	0.03	10000	
B	11	45	2	NoGas	3.406	3.406	3.01	18970	0.02	300	
Na	23	45	1	He	438.085	438.085	1.24	697485	0.06	500000	
Mg	24	45	1	He	692.214	692.214	0.65	609309	0.11	500000	
Al	27	45	1	He	4420.003	4420.003	0.40	2204429	0.20	200000	
K	39	45	1	He	54.181	54.181	6.47	78209	0.07	500000	
Ca	44	45	1	He	208784.786	208784.786	1.91	9482950	2.20	500000	
Ti	47	45	1	He	11759.639	11759.639	1.54	3009666	0.39	2500	>LDR
V	51	45	1	He	1316.686	1316.686	1.55	8333684	0.02	10000	
Cr	52	45	1	He	510.004	510.004	1.06	3881150	0.01	10000	
Mn	55	45	1	He	69.033	69.033	1.02	413724	0.02	10000	
Fe	56	45	1	He	4026.677	4026.677	1.54	28886869	0.01	200000	
Co	59	103	1	He	0.573	0.573	0.97	5902	0.01	10000	
Ni	60	103	1	He	2.078	2.078	7.63	5375	0.04	10000	
Cu	63	103	1	He	3.074	3.074	1.78	21872	0.01	10000	
Zn	66	103	1	He	54.511	54.511	2.62	75040	0.07	10000	
As	75	103	1	He	0.827	0.827	4.52	847	0.10	10000	
Se	78	103	1	He	0.422	0.422	20.91	80	0.53	10000	
Sr	88	103	1	He	4011.709	4011.709	2.65	28304573	0.01	10000	
Mo	95	103	1	He	1.575	1.575	3.19	5101	0.03	2000	
Ag	107	103	1	He	0.432	0.432	2.76	4765	0.01	300	
Cd	111	103	1	He	1.914	1.914	9.51	4644	0.04	4000	
Sn	118	115	1	He	14.866	14.866	1.67	71271	0.02	2000	
Sb	123	115	1	He	1.507	1.507	0.50	7102	0.02	300	
Ba	137	115	1	He	8.389	8.389	1.95	18110	0.05	10000	
W	182	209	1	He	2.498	2.498	2.84	36002	0.01	2500	
Tl	205	165	1	He	0.031	0.031	2.90	1083	0.00	5000	
Pb	208	209	1	He	11.176	11.176	0.97	505044	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1146923	1.09	1631381	70.30	30	120	
Sc	45	1	He	722584	1.89	829696	87.09	30	120	
Sc	45	2	NoGas	5454702	0.60	6325638	86.23	30	120	
Rh	103	1	He	1858185	1.01	2345543	79.22	30	120	
In	115	1	He	1135417	0.99	1419467	79.99	30	120	
Tb	159	1	He	3504211	0.75	3888262	90.12	30	120	
Ho	165	1	He	3572451	0.74	3932562	90.84	30	120	
Bi	209	1	He	2563411	0.65	2874805	89.17	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111548-a-3-f@10
Data File Name	044SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:55:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.203	0.203	13.36	752	0.03	10000	
B	11	45	2	NoGas	3.472	3.472	6.43	19051	0.02	300	
Na	23	45	1	He	428.245	428.245	0.45	674104	0.06	500000	
Mg	24	45	1	He	685.657	685.657	0.54	596350	0.11	500000	
Al	27	45	1	He	4332.684	4332.684	0.36	2135163	0.20	200000	
K	39	45	1	He	55.802	55.802	2.58	78566	0.07	500000	
Ca	44	45	1	He	206908.499	206908.499	1.38	9283216	2.23	500000	
Ti	47	45	1	He	11736.590	11736.590	0.76	2968225	0.40	2500	>LDR
V	51	45	1	He	1317.782	1317.782	0.48	8240415	0.02	10000	
Cr	52	45	1	He	507.289	507.289	0.81	3814775	0.01	10000	
Mn	55	45	1	He	67.990	67.990	0.60	402621	0.02	10000	
Fe	56	45	1	He	3979.695	3979.695	1.20	28204631	0.01	200000	
Co	59	103	1	He	0.545	0.545	1.43	5495	0.01	10000	
Ni	60	103	1	He	2.080	2.080	3.54	5259	0.04	10000	
Cu	63	103	1	He	3.075	3.075	2.96	21391	0.01	10000	
Zn	66	103	1	He	55.408	55.408	1.15	74552	0.07	10000	
As	75	103	1	He	0.748	0.748	0.12	762	0.10	10000	
Se	78	103	1	He	0.367	0.367	4.60	73	0.50	10000	
Sr	88	103	1	He	4000.519	4000.519	1.80	27597874	0.01	10000	
Mo	95	103	1	He	1.502	1.502	0.76	4757	0.03	2000	
Ag	107	103	1	He	0.481	0.481	4.74	5184	0.01	300	
Cd	111	103	1	He	2.334	2.334	3.08	5327	0.04	4000	
Sn	118	115	1	He	14.546	14.546	0.35	69037	0.02	2000	
Sb	123	115	1	He	1.489	1.489	2.34	6950	0.02	300	
Ba	137	115	1	He	8.485	8.485	3.12	18124	0.05	10000	
W	182	209	1	He	2.438	2.438	1.53	34920	0.01	2500	
Tl	205	165	1	He	0.029	0.029	9.72	992	0.00	5000	
Pb	208	209	1	He	11.098	11.098	1.30	497148	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1121344	1.59	1631381	68.74	30	120	
Sc	45	1	He	713962	1.03	829696	86.05	30	120	
Sc	45	2	NoGas	5419189	1.03	6325638	85.67	30	120	
Rh	103	1	He	1816859	0.96	2345543	77.46	30	120	
In	115	1	He	1123650	0.30	1419467	79.16	30	120	
Tb	159	1	He	3472601	0.90	3888262	89.31	30	120	
Ho	165	1	He	3538501	0.63	3932562	89.98	30	120	
Bi	209	1	He	2541337	1.23	2874805	88.40	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111548-a-3-f@50
Data File Name	045SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:59:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.100	0.100	3.93	407	0.02	10000	
B	11	45	2	NoGas	0.561	0.561	21.65	9484	0.01	300	
Na	23	45	1	He	102.825	102.825	2.75	163172	0.06	500000	
Mg	24	45	1	He	159.628	159.628	1.44	128623	0.12	500000	
Al	27	45	1	He	1025.745	1025.745	1.07	467716	0.22	200000	
K	39	45	1	He	15.751	15.751	9.01	42250	0.04	500000	
Ca	44	45	1	He	49445.845	49445.845	0.67	2046499	2.42	500000	
Ti	47	45	1	He	2704.285	2704.285	1.39	630640	0.43	2500	>LDR
V	51	45	1	He	314.254	314.254	2.12	1812167	0.02	10000	
Cr	52	45	1	He	119.258	119.258	1.80	828523	0.01	10000	
Mn	55	45	1	He	16.095	16.095	1.63	88631	0.02	10000	
Fe	56	45	1	He	946.644	946.644	0.89	6189826	0.02	200000	
Co	59	103	1	He	0.108	0.108	5.07	1225	0.01	10000	
Ni	60	103	1	He	0.409	0.409	13.14	1221	0.03	10000	
Cu	63	103	1	He	0.594	0.594	6.92	5711	0.01	10000	
Zn	66	103	1	He	11.191	11.191	4.55	17851	0.06	10000	
As	75	103	1	He	0.131	0.131	14.56	261	0.05	10000	
Se	78	103	1	He	0.068	0.068	89.51	51	0.13	10000	
Sr	88	103	1	He	792.054	792.054	1.12	5993459	0.01	10000	
Mo	95	103	1	He	0.317	0.317	8.91	1141	0.03	2000	
Ag	107	103	1	He	0.088	0.088	6.56	1040	0.01	300	
Cd	111	103	1	He	0.445	0.445	23.18	1960	0.02	4000	
Sn	118	115	1	He	2.891	2.891	6.35	15345	0.02	2000	
Sb	123	115	1	He	0.294	0.294	9.19	1889	0.02	300	
Ba	137	115	1	He	1.717	1.717	3.37	3969	0.04	10000	
W	182	209	1	He	0.470	0.470	7.82	10115	0.00	2500	
Tl	205	165	1	He	0.008	0.008	18.93	323	0.00	5000	
Pb	208	209	1	He	2.219	2.219	1.69	107652	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1188793	0.72	1631381	72.87	30	120	
Sc	45	1	He	658377	0.99	829696	79.35	30	120	
Sc	45	2	NoGas	5055722	1.21	6325638	79.92	30	120	
Rh	103	1	He	1992622	0.75	2345543	84.95	30	120	
In	115	1	He	1195320	0.32	1419467	84.21	30	120	
Tb	159	1	He	3525348	0.74	3888262	90.67	30	120	
Ho	165	1	He	3666834	0.76	3932562	93.24	30	120	
Bi	209	1	He	2736470	0.56	2874805	95.19	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111548-a-3-f@2
Data File Name	046SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:03:13-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	885.722	885.722	1.33	2962162	0.03	10000	
B	11	45	2	NoGas	69.015	69.015	0.90	314445	0.02	300	
Na	23	45	1	He	6952.876	6952.876	1.13	15153396	0.05	500000	
Mg	24	45	1	He	7568.957	7568.957	0.75	9361395	0.08	500000	
Al	27	45	1	He	18172.773	18172.773	0.44	12742383	0.14	200000	
K	39	45	1	He	5788.973	5788.973	0.18	6787228	0.09	500000	
Ca	44	45	1	He	645090.975	645090.975	1.32	41214669	1.57	500000	>LDR
Ti	47	45	1	He	36017.411	36017.411	0.72	12970562	0.28	2500	>LDR
V	51	45	1	He	4561.240	4561.240	0.50	40615610	0.01	10000	
Cr	52	45	1	He	2067.685	2067.685	0.99	22132272	0.01	10000	
Mn	55	45	1	He	758.062	758.062	0.87	6377200	0.01	10000	
Fe	56	45	1	He	17651.345	17651.345	1.08	178131811	0.01	200000	
Co	59	103	1	He	927.409	927.409	0.76	8106045	0.01	10000	
Ni	60	103	1	He	930.592	930.592	0.87	2016873	0.05	10000	
Cu	63	103	1	He	898.380	898.380	1.05	5121518	0.02	10000	
Zn	66	103	1	He	1050.484	1050.484	0.70	1210654	0.09	10000	
As	75	103	1	He	983.440	983.440	1.04	729544	0.13	10000	
Se	78	103	1	He	1003.230	1003.230	0.76	78673	1.28	10000	
Sr	88	103	1	He	21312.814	21312.814	1.00	128430502	0.02	10000	>LDR
Mo	95	103	1	He	121.144	121.144	0.70	331757	0.04	2000	
Ag	107	103	1	He	97.413	97.413	0.88	916303	0.01	300	
Cd	111	103	1	He	960.480	960.480	0.23	1573077	0.06	4000	
Sn	118	115	1	He	1160.185	1160.185	0.50	4733738	0.02	2000	
Sb	123	115	1	He	111.073	111.073	1.08	418921	0.03	300	
Ba	137	115	1	He	1154.521	1154.521	1.33	2137855	0.05	10000	
W	182	209	1	He	121.488	121.488	1.60	1370819	0.01	2500	
Tl	205	165	1	He	240.722	240.722	0.59	7258805	0.00	5000	
Pb	208	209	1	He	1042.633	1042.633	1.46	40498355	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058146	1.23	1631381	64.86	30	120	
Sc	45	1	He	1016651	0.35	829696	122.53	30	120	ISTD Failed
Sc	45	2	NoGas	7781518	1.37	6325638	123.02	30	120	ISTD Failed
Rh	103	1	He	1586918	0.78	2345543	67.66	30	120	
In	115	1	He	978343	0.57	1419467	68.92	30	120	
Tb	159	1	He	3180107	0.80	3888262	81.79	30	120	
Ho	165	1	He	3285769	0.69	3932562	83.55	30	120	
Bi	209	1	He	2206758	1.30	2874805	76.76	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111548-a-3-f@10
Data File Name	047SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:06:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	951.980	951.980	1.24	3355818	0.03	10000	
B	11	45	2	NoGas	97.444	97.444	0.87	304710	0.03	300	
Na	23	45	1	He	9370.901	9370.901	1.26	13817617	0.07	500000	
Mg	24	45	1	He	9630.059	9630.059	0.56	8062326	0.12	500000	
Al	27	45	1	He	12497.130	12497.130	1.35	5931842	0.21	200000	
K	39	45	1	He	8939.639	8939.639	0.18	7077482	0.13	500000	
Ca	44	45	1	He	215273.892	215273.892	1.10	9310339	2.31	500000	
Ti	47	45	1	He	11903.511	11903.511	0.80	2901633	0.41	2500	>LDR
V	51	45	1	He	2213.193	2213.193	1.37	13339157	0.02	10000	
Cr	52	45	1	He	1397.691	1397.691	1.75	10126749	0.01	10000	
Mn	55	45	1	He	962.364	962.364	1.33	5479516	0.02	10000	
Fe	56	45	1	He	13100.949	13100.949	0.50	89491139	0.01	200000	
Co	59	103	1	He	915.088	915.088	1.17	9098566	0.01	10000	
Ni	60	103	1	He	923.263	923.263	1.19	2276315	0.04	10000	
Cu	63	103	1	He	911.174	911.174	1.45	5909071	0.02	10000	
Zn	66	103	1	He	930.270	930.270	0.93	1219766	0.08	10000	
As	75	103	1	He	937.493	937.493	0.86	791144	0.12	10000	
Se	78	103	1	He	927.322	927.322	0.68	82728	1.12	10000	
Sr	88	103	1	He	4873.892	4873.892	0.16	33411421	0.01	10000	
Mo	95	103	1	He	108.893	108.893	0.88	339245	0.03	2000	
Ag	107	103	1	He	98.838	98.838	0.58	1057615	0.01	300	
Cd	111	103	1	He	1026.436	1026.436	0.61	1912319	0.05	4000	
Sn	118	115	1	He	1137.929	1137.929	1.30	5082754	0.02	2000	
Sb	123	115	1	He	109.274	109.274	0.10	451214	0.02	300	
Ba	137	115	1	He	1126.268	1126.268	0.99	2283242	0.05	10000	
W	182	209	1	He	109.400	109.400	2.51	1397598	0.01	2500	
Tl	205	165	1	He	252.634	252.634	1.71	8327219	0.00	5000	
Pb	208	209	1	He	1011.672	1011.672	0.70	44483087	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1115299	0.99	1631381	68.37	30	120	
Sc	45	1	He	688176	0.68	829696	82.94	30	120	
Sc	45	2	NoGas	5401492	0.15	6325638	85.39	30	120	
Rh	103	1	He	1805234	0.34	2345543	76.96	30	120	
In	115	1	He	1071059	0.69	1419467	75.46	30	120	
Tb	159	1	He	3476813	1.00	3888262	89.42	30	120	
Ho	165	1	He	3591755	0.46	3932562	91.33	30	120	
Bi	209	1	He	2497770	0.41	2874805	86.88	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-g ms@2
Data File Name	048SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:10:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	433.651	433.651	3.71	1424826	0.03	10000	
B	11	45	2	NoGas	38.211	38.211	1.14	175321	0.02	300	
Na	23	45	1	He	4029.731	4029.731	0.19	8532320	0.05	500000	
Mg	24	45	1	He	4704.157	4704.157	0.64	5645178	0.08	500000	
Al	27	45	1	He	15045.638	15045.638	0.55	10235512	0.15	200000	
K	39	45	1	He	2813.435	2813.435	0.75	3223397	0.09	500000	
Ca	44	45	1	He	751017.261	751017.261	1.20	46554511	1.61	500000	>LDR
Ti	47	45	1	He	35464.393	35464.393	0.85	12390698	0.29	2500	>LDR
V	51	45	1	He	4169.737	4169.737	1.17	36024658	0.01	10000	
Cr	52	45	1	He	1764.151	1764.151	0.16	18320285	0.01	10000	
Mn	55	45	1	He	470.093	470.093	0.99	3837414	0.01	10000	
Fe	56	45	1	He	14410.874	14410.874	0.69	141096786	0.01	200000	
Co	59	103	1	He	460.151	460.151	2.52	3866191	0.01	10000	
Ni	60	103	1	He	445.795	445.795	1.74	928916	0.05	10000	
Cu	63	103	1	He	453.702	453.702	0.72	2487652	0.02	10000	
Zn	66	103	1	He	629.667	629.667	2.14	698108	0.09	10000	
As	75	103	1	He	443.534	443.534	2.45	316348	0.14	10000	
Se	78	103	1	He	481.256	481.256	1.81	36301	1.33	10000	
Sr	88	103	1	He	25531.644	25531.644	1.87	147908674	0.02	10000	>LDR
Mo	95	103	1	He	60.487	60.487	3.18	159228	0.04	2000	
Ag	107	103	1	He	48.402	48.402	2.60	437630	0.01	300	
Cd	111	103	1	He	458.243	458.243	2.43	721840	0.06	4000	
Sn	118	115	1	He	602.545	602.545	2.01	2425054	0.02	2000	
Sb	123	115	1	He	47.124	47.124	1.45	175537	0.03	300	
Ba	137	115	1	He	521.558	521.558	0.55	952560	0.05	10000	
W	182	209	1	He	32.713	32.713	1.78	357500	0.01	2500	
Tl	205	165	1	He	115.455	115.455	1.67	3453302	0.00	5000	
Pb	208	209	1	He	536.378	536.378	0.78	20064800	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1039733	1.09	1631381	63.73	30	120	
Sc	45	1	He	986322	1.14	829696	118.88	30	120	
Sc	45	2	NoGas	7599650	0.28	6325638	120.14	30	120	ISTD Failed
Rh	103	1	He	1526114	2.94	2345543	65.06	30	120	
In	115	1	He	964856	0.38	1419467	67.97	30	120	
Tb	159	1	He	3097678	1.47	3888262	79.67	30	120	
Ho	165	1	He	3259425	0.88	3932562	82.88	30	120	
Bi	209	1	He	2125018	0.50	2874805	73.92	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-g ms@10
Data File Name	049SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:13:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	91.817	91.817	0.12	305130	0.03	10000	
B	11	45	2	NoGas	11.872	11.872	1.80	41700	0.03	300	
Na	23	45	1	He	1311.034	1311.034	1.12	1845225	0.07	500000	
Mg	24	45	1	He	1516.321	1516.321	0.79	1202077	0.13	500000	
Al	27	45	1	He	4867.719	4867.719	1.34	2188078	0.22	200000	
K	39	45	1	He	884.418	884.418	0.73	689737	0.13	500000	
Ca	44	45	1	He	236027.661	236027.661	0.79	9660960	2.44	500000	
Ti	47	45	1	He	11326.901	11326.901	0.84	2613114	0.43	2500	>LDR
V	51	45	1	He	1344.177	1344.177	0.18	7667807	0.02	10000	
Cr	52	45	1	He	578.697	578.697	1.72	3969602	0.01	10000	
Mn	55	45	1	He	149.851	149.851	0.60	808347	0.02	10000	
Fe	56	45	1	He	4680.847	4680.847	1.85	30263953	0.02	200000	
Co	59	103	1	He	87.498	87.498	0.88	844856	0.01	10000	
Ni	60	103	1	He	87.247	87.247	0.64	208980	0.04	10000	
Cu	63	103	1	He	88.378	88.378	0.82	557732	0.02	10000	
Zn	66	103	1	He	132.823	132.823	2.23	170381	0.08	10000	
As	75	103	1	He	81.341	81.341	0.95	66769	0.12	10000	
Se	78	103	1	He	84.652	84.652	0.87	7369	1.15	10000	
Sr	88	103	1	He	4777.933	4777.933	1.08	31806961	0.02	10000	
Mo	95	103	1	He	10.896	10.896	1.98	33003	0.03	2000	
Ag	107	103	1	He	9.834	9.834	1.02	102204	0.01	300	
Cd	111	103	1	He	94.776	94.776	1.34	172291	0.06	4000	
Sn	118	115	1	He	113.216	113.216	1.22	501300	0.02	2000	
Sb	123	115	1	He	9.578	9.578	1.30	39579	0.02	300	
Ba	137	115	1	He	103.079	103.079	1.33	206910	0.05	10000	
W	182	209	1	He	5.921	5.921	4.30	77328	0.01	2500	
Tl	205	165	1	He	23.377	23.377	1.93	732365	0.00	5000	
Pb	208	209	1	He	105.290	105.290	0.71	4548365	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1051272	0.46	1631381	64.44	30	120	
Sc	45	1	He	651294	0.10	829696	78.50	30	120	
Sc	45	2	NoGas	5059076	0.36	6325638	79.98	30	120	
Rh	103	1	He	1753075	1.02	2345543	74.74	30	120	
In	115	1	He	1060148	0.55	1419467	74.69	30	120	
Tb	159	1	He	3355930	2.04	3888262	86.31	30	120	
Ho	165	1	He	3413809	0.88	3932562	86.81	30	120	
Bi	209	1	He	2453706	1.08	2874805	85.35	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	050_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:17:37-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.316	2.766	166051	1.71	50	92.6	89.5	110.5	
B	11	45	2	NoGas	48.314	0.363	136198	1.27	50	96.6	89.5	110.5	
Na	23	45	1	He	26464.165	2.965	33522336	1.74	25000	105.9	89.5	110.5	
Mg	24	45	1	He	26185.797	1.906	18849422	0.69	25000	104.7	89.5	110.5	
Al	27	45	1	He	251.419	2.266	104469	1.13	250	100.6	89.5	110.5	
K	39	45	1	He	26218.004	1.304	17796272	0.39	25000	104.9	89.5	110.5	
Ca	44	45	1	He	26006.449	1.507	967827	0.47	25000	104.0	89.5	110.5	
Ti	47	45	1	He	86.819	5.768	18201	4.53	50	173.6	89.5	110.5	CCV Failed
V	51	45	1	He	53.156	1.547	275596	1.23	50	106.3	89.5	110.5	
Cr	52	45	1	He	53.730	1.788	336543	0.93	50	107.5	89.5	110.5	
Mn	55	45	1	He	264.086	2.324	1293605	1.11	250	105.6	89.5	110.5	
Fe	56	45	1	He	13428.787	1.955	78878939	0.96	12500	107.4	89.5	110.5	
Co	59	103	1	He	45.907	0.611	473799	0.72	50	91.8	89.5	110.5	
Ni	60	103	1	He	45.477	1.376	116471	1.47	50	91.0	89.5	110.5	
Cu	63	103	1	He	46.707	1.016	315687	1.12	50	93.4	89.5	110.5	
Zn	66	103	1	He	46.508	1.213	64791	1.09	50	93.0	89.5	110.5	
As	75	103	1	He	46.260	0.451	40643	0.50	50	92.5	89.5	110.5	
Se	78	103	1	He	46.403	1.204	4336	1.12	50	92.8	89.5	110.5	
Sr	88	103	1	He	47.273	0.541	336446	0.63	50	94.5	89.5	110.5	
Mo	95	103	1	He	50.502	0.971	163322	0.90	50	101.0	89.5	110.5	
Ag	107	103	1	He	50.289	0.889	558532	0.99	50	100.6	89.5	110.5	
Cd	111	103	1	He	51.409	1.218	100344	1.31	50	102.8	89.5	110.5	
Sn	118	115	1	He	51.639	1.072	241909	0.74	50	103.3	89.5	110.5	
Sb	123	115	1	He	52.449	0.317	226608	0.30	50	104.9	89.5	110.5	
Ba	137	115	1	He	51.584	0.365	109372	0.61	50	103.2	89.5	110.5	
W	182	209	1	He	51.261	1.268	668471	0.63	50	102.5	89.5	110.5	
Tl	205	165	1	He	50.414	2.136	1654230	2.43	50	100.8	89.5	110.5	
Pb	208	209	1	He	48.659	1.858	2178741	1.25	50	97.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1134300	1.51	1631381	69.53	30	120	
Sc	45	1	He	591835	1.20	829696	71.33	30	120	
Sc	45	2	NoGas	4736464	1.61	6325638	74.88	30	120	
Rh	103	1	He	1873655	0.11	2345543	79.88	30	120	
In	115	1	He	1119411	0.61	1419467	78.86	30	120	
Tb	159	1	He	3469285	0.45	3888262	89.22	30	120	
Ho	165	1	He	3575100	0.32	3932562	90.91	30	120	
Bi	209	1	He	2543000	1.13	2874805	88.46	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	051_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:21:28-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.150	11.2	567	11.9	1	
B	11	45	2	NoGas	0.457	40.1	8551	5.7	20	
Na	23	45	1	He	11.287	20.8	32430	9.2	400	
Mg	24	45	1	He	2.240	61.8	2441	42.5	1000	
Al	27	45	1	He	1.180	18.0	2497	3.6	50	
K	39	45	1	He	8.322	17.7	34716	2.6	1000	
Ca	44	45	1	He	19.311	11.1	1510	5.0	1000	
Ti	47	45	1	He	4.179	6.5	933	6.6	20	
V	51	45	1	He	0.139	39.8	837	36.0	2	
Cr	52	45	1	He	0.027	93.5	2112	8.3	2	
Mn	55	45	1	He	0.092	47.1	1398	15.7	2	
Fe	56	45	1	He	15.093	20.2	96845	19.2	50	
Co	59	103	1	He	0.014	33.6	197	26.9	1	
Ni	60	103	1	He	0.000	-2075.8	111	4.6	2	
Cu	63	103	1	He	0.135	13.2	2466	6.5	2	
Zn	66	103	1	He	-0.007	-1062.6	1696	6.2	20	
As	75	103	1	He	0.214	5.5	344	2.3	2	
Se	78	103	1	He	0.126	53.6	57	10.5	2	
Sr	88	103	1	He	0.265	6.8	2140	6.6	10	
Mo	95	103	1	He	0.925	16.0	3291	16.4	2	
Ag	107	103	1	He	0.015	9.9	190	10.7	0.2	
Cd	111	103	1	He	0.010	238.8	1085	3.6	0.2	
Sn	118	115	1	He	0.535	17.3	3560	13.1	10	
Sb	123	115	1	He	0.539	17.0	2981	13.9	1	
Ba	137	115	1	He	0.009	14.4	103	3.2	5	
W	182	209	1	He	1.156	7.9	19331	7.2	10	
Tl	205	165	1	He	0.047	24.7	1621	24.2	0.5	
Pb	208	209	1	He	0.129	5.9	6835	6.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1130581	1.69	1631381	69.30	30	120	
Sc	45	1	He	623699	0.59	829696	75.17	30	120	
Sc	45	2	NoGas	4705370	1.81	6325638	74.39	30	120	
Rh	103	1	He	2027114	1.30	2345543	86.42	30	120	
In	115	1	He	1179723	0.42	1419467	83.11	30	120	
Tb	159	1	He	3521407	0.64	3888262	90.57	30	120	
Ho	165	1	He	3604970	0.48	3932562	91.67	30	120	
Bi	209	1	He	2684585	1.09	2874805	93.38	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-h msd@2
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:25:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	416.847	416.847	2.27	1273261	0.03	10000	
B	11	45	2	NoGas	37.734	37.734	0.82	156073	0.02	300	
Na	23	45	1	He	4019.982	4019.982	0.97	7987329	0.05	500000	
Mg	24	45	1	He	4578.684	4578.684	0.97	5155948	0.09	500000	
Al	27	45	1	He	14589.844	14589.844	1.35	9312747	0.16	200000	
K	39	45	1	He	2875.467	2875.467	1.04	3090683	0.09	500000	
Ca	44	45	1	He	731043.754	731043.754	0.66	42524349	1.72	500000	>LDR
Ti	47	45	1	He	33614.900	33614.900	0.87	11020605	0.31	2500	>LDR
V	51	45	1	He	4019.866	4019.866	1.38	32584473	0.01	10000	
Cr	52	45	1	He	1698.176	1698.176	1.40	16546288	0.01	10000	
Mn	55	45	1	He	462.137	462.137	1.02	3539938	0.01	10000	
Fe	56	45	1	He	14157.359	14157.359	1.24	130055404	0.01	200000	
Co	59	103	1	He	436.348	436.348	2.14	3572227	0.01	10000	
Ni	60	103	1	He	423.719	423.719	1.76	860096	0.05	10000	
Cu	63	103	1	He	440.609	440.609	0.50	2353765	0.02	10000	
Zn	66	103	1	He	604.455	604.455	1.49	653000	0.09	10000	
As	75	103	1	He	431.530	431.530	2.04	299876	0.14	10000	
Se	78	103	1	He	471.754	471.754	1.97	34677	1.36	10000	
Sr	88	103	1	He	24823.933	24823.933	2.15	140104048	0.02	10000	>LDR
Mo	95	103	1	He	55.723	55.723	2.21	142921	0.04	2000	
Ag	107	103	1	He	48.281	48.281	3.10	425174	0.01	300	
Cd	111	103	1	He	454.215	454.215	2.24	696979	0.07	4000	
Sn	118	115	1	He	582.421	582.421	2.56	2297895	0.03	2000	
Sb	123	115	1	He	43.680	43.680	1.35	159533	0.03	300	
Ba	137	115	1	He	509.142	509.142	0.83	911441	0.06	10000	
W	182	209	1	He	25.032	25.032	3.59	281282	0.01	2500	
Tl	205	165	1	He	113.889	113.889	1.86	3351303	0.00	5000	
Pb	208	209	1	He	506.280	506.280	0.95	19437383	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	966716	2.65	1631381	59.26	30	120	
Sc	45	1	He	925762	4.03	829696	111.58	30	120	
Sc	45	2	NoGas	6844933	0.59	6325638	108.21	30	120	
Rh	103	1	He	1486870	4.40	2345543	63.39	30	120	
In	115	1	He	945721	1.47	1419467	66.63	30	120	
Tb	159	1	He	3083958	0.92	3888262	79.31	30	120	
Ho	165	1	He	3206363	2.25	3932562	81.53	30	120	
Bi	209	1	He	2181117	2.51	2874805	75.87	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-h msd@10
Data File Name	053SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:28:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	88.695	88.695	2.98	267076	0.03	10000	
B	11	45	2	NoGas	11.246	11.246	3.18	36392	0.03	300	
Na	23	45	1	He	1268.724	1268.724	0.95	1666460	0.08	500000	
Mg	24	45	1	He	1449.000	1449.000	0.84	1071670	0.14	500000	
Al	27	45	1	He	4540.172	4540.172	0.56	1904097	0.24	200000	
K	39	45	1	He	867.372	867.372	0.96	631593	0.14	500000	
Ca	44	45	1	He	223425.072	223425.072	0.88	8531957	2.62	500000	
Ti	47	45	1	He	10493.271	10493.271	1.10	2258508	0.46	2500	>LDR
V	51	45	1	He	1255.190	1255.190	0.31	6679902	0.02	10000	
Cr	52	45	1	He	536.892	536.892	1.01	3435906	0.02	10000	
Mn	55	45	1	He	142.915	142.915	0.30	719262	0.02	10000	
Fe	56	45	1	He	4480.036	4480.036	0.20	27022395	0.02	200000	
Co	59	103	1	He	82.834	82.834	1.91	761268	0.01	10000	
Ni	60	103	1	He	82.657	82.657	1.30	188448	0.04	10000	
Cu	63	103	1	He	83.856	83.856	1.85	503747	0.02	10000	
Zn	66	103	1	He	125.948	125.948	0.97	153859	0.08	10000	
As	75	103	1	He	77.918	77.918	1.74	60882	0.13	10000	
Se	78	103	1	He	81.291	81.291	1.42	6737	1.21	10000	
Sr	88	103	1	He	4541.335	4541.335	2.34	28772100	0.02	10000	
Mo	95	103	1	He	10.182	10.182	1.41	29359	0.03	2000	
Ag	107	103	1	He	9.654	9.654	2.74	95469	0.01	300	
Cd	111	103	1	He	92.506	92.506	0.58	160100	0.06	4000	
Sn	118	115	1	He	108.764	108.764	1.45	459475	0.02	2000	
Sb	123	115	1	He	9.035	9.035	1.15	35647	0.03	300	
Ba	137	115	1	He	100.295	100.295	0.06	192062	0.05	10000	
W	182	209	1	He	4.772	4.772	4.41	61868	0.01	2500	
Tl	205	165	1	He	22.812	22.812	0.86	698792	0.00	5000	
Pb	208	209	1	He	101.853	101.853	0.78	4326021	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	953022	2.50	1631381	58.42	30	120	
Sc	45	1	He	607607	0.62	829696	73.23	30	120	
Sc	45	2	NoGas	4612348	0.43	6325638	72.92	30	120	
Rh	103	1	He	1668709	1.25	2345543	71.14	30	120	
In	115	1	He	1011366	0.28	1419467	71.25	30	120	
Tb	159	1	He	3200709	0.38	3888262	82.32	30	120	
Ho	165	1	He	3337453	0.65	3932562	84.87	30	120	
Bi	209	1	He	2412362	0.64	2874805	83.91	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-2-m@2
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:32:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.796	0.796	6.24	2393	0.03	10000	
B	11	45	2	NoGas	9.840	9.840	1.03	51353	0.02	300	
Na	23	45	1	He	1126.450	1126.450	2.11	2347899	0.05	500000	
Mg	24	45	1	He	2156.655	2156.655	0.62	2527392	0.09	500000	
Al	27	45	1	He	13397.916	13397.916	0.33	8898909	0.15	200000	
K	39	45	1	He	119.730	119.730	1.83	176472	0.07	500000	
Ca	44	45	1	He	597025.936	597025.936	0.77	36127337	1.65	500000	>LDR
Ti	47	45	1	He	36222.513	36222.513	0.45	12354940	0.29	2500	>LDR
V	51	45	1	He	4227.223	4227.223	0.94	35654166	0.01	10000	
Cr	52	45	1	He	1644.138	1644.138	0.51	16669693	0.01	10000	
Mn	55	45	1	He	249.901	249.901	1.57	1992141	0.01	10000	
Fe	56	45	1	He	12689.603	12689.603	0.29	121292066	0.01	200000	
Co	59	103	1	He	3.364	3.364	1.95	26711	0.01	10000	
Ni	60	103	1	He	11.666	11.666	2.62	23020	0.05	10000	
Cu	63	103	1	He	15.798	15.798	1.25	82761	0.02	10000	
Zn	66	103	1	He	233.855	233.855	1.56	245507	0.10	10000	
As	75	103	1	He	5.108	5.108	1.84	3539	0.14	10000	
Se	78	103	1	He	1.902	1.902	9.47	167	1.14	10000	
Sr	88	103	1	He	19552.016	19552.016	0.57	106917665	0.02	10000	>LDR
Mo	95	103	1	He	10.103	10.103	1.41	25141	0.04	2000	
Ag	107	103	1	He	2.944	2.944	1.27	25135	0.01	300	
Cd	111	103	1	He	13.981	13.981	1.14	21525	0.06	4000	
Sn	118	115	1	He	69.758	69.758	0.63	272983	0.03	2000	
Sb	123	115	1	He	3.945	3.945	2.82	14640	0.03	300	
Ba	137	115	1	He	40.314	40.314	1.07	71484	0.06	10000	
W	182	209	1	He	13.940	13.940	1.69	152046	0.01	2500	
Tl	205	165	1	He	0.168	0.168	13.86	4894	0.00	5000	
Pb	208	209	1	He	63.705	63.705	1.53	2354621	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	941255	2.02	1631381	57.70	30	120	
Sc	45	1	He	962941	0.79	829696	116.06	30	120	
Sc	45	2	NoGas	7233774	0.32	6325638	114.36	30	120	
Rh	103	1	He	1440059	0.63	2345543	61.40	30	120	
In	115	1	He	935957	0.33	1419467	65.94	30	120	
Tb	159	1	He	3023583	1.00	3888262	77.76	30	120	
Ho	165	1	He	3136470	0.55	3932562	79.76	30	120	
Bi	209	1	He	2099492	1.62	2874805	73.03	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-2-m@10
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:36:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.231	0.231	12.67	733	0.03	10000	
B	11	45	2	NoGas	3.181	3.181	5.78	16137	0.02	300	
Na	23	45	1	He	371.997	371.997	1.06	516018	0.07	500000	
Mg	24	45	1	He	719.202	719.202	0.86	548726	0.13	500000	
Al	27	45	1	He	4601.563	4601.563	0.90	1989493	0.23	200000	
K	39	45	1	He	41.116	41.116	1.54	58394	0.07	500000	
Ca	44	45	1	He	196124.997	196124.997	2.03	7720196	2.54	500000	
Ti	47	45	1	He	12112.861	12112.861	0.58	2687487	0.45	2500	>LDR
V	51	45	1	He	1415.118	1415.118	1.44	7763212	0.02	10000	
Cr	52	45	1	He	554.291	554.291	1.28	3656661	0.02	10000	
Mn	55	45	1	He	80.500	80.500	1.51	418048	0.02	10000	
Fe	56	45	1	He	4282.885	4282.885	1.50	26630751	0.02	200000	
Co	59	103	1	He	0.634	0.634	0.85	5881	0.01	10000	
Ni	60	103	1	He	2.230	2.230	0.33	5193	0.04	10000	
Cu	63	103	1	He	3.123	3.123	1.42	20010	0.02	10000	
Zn	66	103	1	He	48.789	48.789	0.52	60698	0.08	10000	
As	75	103	1	He	0.784	0.784	4.93	731	0.11	10000	
Se	78	103	1	He	0.197	0.197	23.02	53	0.37	10000	
Sr	88	103	1	He	3631.053	3631.053	0.35	23097638	0.02	10000	
Mo	95	103	1	He	1.852	1.852	3.23	5398	0.03	2000	
Ag	107	103	1	He	0.517	0.517	1.55	5135	0.01	300	
Cd	111	103	1	He	2.293	2.293	3.89	4843	0.05	4000	
Sn	118	115	1	He	14.092	14.092	3.60	61088	0.02	2000	
Sb	123	115	1	He	0.787	0.787	7.76	3569	0.02	300	
Ba	137	115	1	He	7.974	7.974	0.78	15556	0.05	10000	
W	182	209	1	He	2.591	2.591	1.16	34924	0.01	2500	
Tl	205	165	1	He	0.030	0.030	3.64	993	0.00	5000	
Pb	208	209	1	He	12.666	12.666	1.75	536949	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	968366	1.47	1631381	59.36	30	120	
Sc	45	1	He	626393	0.93	829696	75.50	30	120	
Sc	45	2	NoGas	4816530	0.84	6325638	76.14	30	120	
Rh	103	1	He	1675155	0.80	2345543	71.42	30	120	
In	115	1	He	1025878	0.46	1419467	72.27	30	120	
Tb	159	1	He	3257259	0.84	3888262	83.77	30	120	
Ho	165	1	He	3362131	0.47	3932562	85.49	30	120	
Bi	209	1	He	2405484	0.83	2874805	83.67	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-4-e@2
Data File Name	056SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:40:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.585	0.585	4.91	1674	0.03	10000	
B	11	45	2	NoGas	9.821	9.821	3.53	44866	0.02	300	
Na	23	45	1	He	1250.320	1250.320	0.17	2275806	0.05	500000	
Mg	24	45	1	He	1740.707	1740.707	0.93	1783505	0.10	500000	
Al	27	45	1	He	12192.726	12192.726	0.91	7079965	0.17	200000	
K	39	45	1	He	127.481	127.481	1.05	161761	0.08	500000	
Ca	44	45	1	He	659958.412	659958.412	0.91	34916626	1.89	500000	>LDR
Ti	47	45	1	He	30302.037	30302.037	0.72	9036406	0.34	2500	>LDR
V	51	45	1	He	3675.640	3675.640	0.91	27103217	0.01	10000	
Cr	52	45	1	He	1396.259	1396.259	0.40	12376696	0.01	10000	
Mn	55	45	1	He	149.666	149.666	0.43	1043580	0.01	10000	
Fe	56	45	1	He	9521.752	9521.752	0.30	79571064	0.01	200000	
Co	59	103	1	He	2.143	2.143	1.05	16543	0.01	10000	
Ni	60	103	1	He	7.938	7.938	2.51	15240	0.05	10000	
Cu	63	103	1	He	8.819	8.819	1.30	45332	0.02	10000	
Zn	66	103	1	He	175.877	175.877	0.96	179662	0.10	10000	
As	75	103	1	He	4.663	4.663	1.59	3147	0.15	10000	
Se	78	103	1	He	1.671	1.671	3.58	146	1.14	10000	
Sr	88	103	1	He	21486.444	21486.444	0.97	114136755	0.02	10000	>LDR
Mo	95	103	1	He	8.084	8.084	1.54	19551	0.04	2000	
Ag	107	103	1	He	2.555	2.555	1.23	21187	0.01	300	
Cd	111	103	1	He	11.971	11.971	4.04	18009	0.07	4000	
Sn	118	115	1	He	69.877	69.877	1.22	267014	0.03	2000	
Sb	123	115	1	He	1.946	1.946	4.30	7259	0.03	300	
Ba	137	115	1	He	33.013	33.013	0.98	57172	0.06	10000	
W	182	209	1	He	16.786	16.786	0.76	179448	0.01	2500	
Tl	205	165	1	He	0.093	0.093	5.72	2684	0.00	5000	
Pb	208	209	1	He	52.824	52.824	0.34	1919593	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	891440	0.73	1631381	54.64	30	120	
Sc	45	1	He	841873	0.97	829696	101.47	30	120	
Sc	45	2	NoGas	6329863	0.37	6325638	100.07	30	120	
Rh	103	1	He	1398886	0.49	2345543	59.64	30	120	
In	115	1	He	913931	0.14	1419467	64.39	30	120	
Tb	159	1	He	2996703	0.39	3888262	77.07	30	120	
Ho	165	1	He	3092974	0.44	3932562	78.65	30	120	
Bi	209	1	He	2063699	0.41	2874805	71.79	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-4-e@10
Data File Name	057SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:43:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.235	0.235	6.40	726	0.03	10000	
B	11	45	2	NoGas	2.591	2.591	4.68	13817	0.02	300	
Na	23	45	1	He	387.324	387.324	1.34	507484	0.08	500000	
Mg	24	45	1	He	538.448	538.448	0.72	388722	0.14	500000	
Al	27	45	1	He	3880.489	3880.489	1.27	1586969	0.24	200000	
K	39	45	1	He	40.029	40.029	6.35	54490	0.07	500000	
Ca	44	45	1	He	201267.917	201267.917	0.35	7493523	2.69	500000	
Ti	47	45	1	He	9472.309	9472.309	1.32	1987677	0.48	2500	>LDR
V	51	45	1	He	1152.777	1152.777	0.57	5981462	0.02	10000	
Cr	52	45	1	He	440.772	440.772	0.94	2750593	0.02	10000	
Mn	55	45	1	He	46.899	46.899	1.21	230717	0.02	10000	
Fe	56	45	1	He	3023.889	3023.889	0.46	17784375	0.02	200000	
Co	59	103	1	He	0.391	0.391	2.49	3639	0.01	10000	
Ni	60	103	1	He	1.399	1.399	5.90	3286	0.04	10000	
Cu	63	103	1	He	1.678	1.678	2.79	11301	0.01	10000	
Zn	66	103	1	He	35.747	35.747	0.73	44771	0.08	10000	
As	75	103	1	He	0.708	0.708	1.73	670	0.11	10000	
Se	78	103	1	He	0.285	0.285	30.54	61	0.47	10000	
Sr	88	103	1	He	3913.212	3913.212	1.49	24846935	0.02	10000	
Mo	95	103	1	He	1.528	1.528	4.50	4451	0.03	2000	
Ag	107	103	1	He	0.409	0.409	4.59	4059	0.01	300	
Cd	111	103	1	He	1.982	1.982	4.62	4297	0.05	4000	
Sn	118	115	1	He	14.137	14.137	0.72	60642	0.02	2000	
Sb	123	115	1	He	0.353	0.353	7.21	1838	0.02	300	
Ba	137	115	1	He	6.623	6.623	1.87	12798	0.05	10000	
W	182	209	1	He	3.189	3.189	2.00	42336	0.01	2500	
Tl	205	165	1	He	0.020	0.020	8.70	669	0.00	5000	
Pb	208	209	1	He	10.434	10.434	1.17	443212	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	943009	0.43	1631381	57.80	30	120	
Sc	45	1	He	592415	0.16	829696	71.40	30	120	
Sc	45	2	NoGas	4577806	1.21	6325638	72.37	30	120	
Rh	103	1	He	1672193	1.12	2345543	71.29	30	120	
In	115	1	He	1015195	0.09	1419467	71.52	30	120	
Tb	159	1	He	3243502	0.36	3888262	83.42	30	120	
Ho	165	1	He	3331583	0.25	3932562	84.72	30	120	
Bi	209	1	He	2409276	0.18	2874805	83.81	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-5-e@2
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:47:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	8.603	8.603	1.50	28297	0.03	10000	
B	11	45	2	NoGas	51.550	51.550	1.17	165544	0.03	300	
Na	23	45	1	He	12423.802	12423.802	1.79	17266459	0.07	500000	
Mg	24	45	1	He	23094.933	23094.933	0.28	18236129	0.13	500000	
Al	27	45	1	He	86331.135	86331.135	0.31	38641127	0.22	200000	
K	39	45	1	He	9994.328	9994.328	0.34	7459346	0.13	500000	
Ca	44	45	1	He	28492.381	28492.381	0.73	1162835	2.45	500000	
Ti	47	45	1	He	1745.179	1745.179	2.58	401005	0.44	2500	
V	51	45	1	He	421.746	421.746	2.12	2396536	0.02	10000	
Cr	52	45	1	He	261.792	261.792	1.47	1790689	0.01	10000	
Mn	55	45	1	He	1828.743	1828.743	1.55	9818000	0.02	10000	
Fe	56	45	1	He	155738.752	155738.752	1.73	1003000813	0.02	200000	
Co	59	103	1	He	54.422	54.422	0.59	509390	0.01	10000	
Ni	60	103	1	He	67.885	67.885	0.84	157635	0.04	10000	
Cu	63	103	1	He	63.399	63.399	0.47	388228	0.02	10000	
Zn	66	103	1	He	242.948	242.948	0.89	300875	0.08	10000	
As	75	103	1	He	63.057	63.057	0.58	50199	0.13	10000	
Se	78	103	1	He	10.891	10.891	2.41	951	1.14	10000	
Sr	88	103	1	He	683.272	683.272	0.87	4408498	0.02	10000	
Mo	95	103	1	He	8.494	8.494	1.85	24944	0.03	2000	
Ag	107	103	1	He	0.811	0.811	7.92	8158	0.01	300	
Cd	111	103	1	He	3.644	3.644	5.24	7276	0.05	4000	
Sn	118	115	1	He	23.765	23.765	1.80	101742	0.02	2000	
Sb	123	115	1	He	0.493	0.493	7.74	2394	0.02	300	
Ba	137	115	1	He	251.826	251.826	1.16	485693	0.05	10000	
W	182	209	1	He	1.339	1.339	6.26	19598	0.01	2500	
Tl	205	165	1	He	1.067	1.067	1.79	35190	0.00	5000	
Pb	208	209	1	He	114.598	114.598	0.80	4864374	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1039734	2.43	1631381	63.73	30	120	
Sc	45	1	He	649133	4.04	829696	78.24	30	120	
Sc	45	2	NoGas	5414130	0.77	6325638	85.59	30	120	
Rh	103	1	He	1699316	2.88	2345543	72.45	30	120	
In	115	1	He	1019024	3.12	1419467	71.79	30	120	
Tb	159	1	He	3444143	2.70	3888262	88.58	30	120	
Ho	165	1	He	3586296	2.04	3932562	91.19	30	120	
Bi	209	1	He	2410951	1.10	2874805	83.86	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-5-e@10
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:51:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.677	1.677	1.66	5886	0.03	10000	
B	11	45	2	NoGas	11.075	11.075	5.12	39335	0.03	300	
Na	23	45	1	He	2823.478	2823.478	0.62	3904059	0.07	500000	
Mg	24	45	1	He	5200.306	5200.306	0.63	4069475	0.13	500000	
Al	27	45	1	He	19455.746	19455.746	0.99	8630492	0.23	200000	
K	39	45	1	He	2333.254	2333.254	2.25	1748315	0.13	500000	
Ca	44	45	1	He	6486.751	6486.751	0.59	262972	2.47	500000	
Ti	47	45	1	He	393.039	393.039	1.34	89555	0.44	2500	
V	51	45	1	He	91.436	91.436	1.77	515168	0.02	10000	
Cr	52	45	1	He	57.869	57.869	0.84	393819	0.01	10000	
Mn	55	45	1	He	419.679	419.679	0.75	2234087	0.02	10000	
Fe	56	45	1	He	35001.956	35001.956	0.22	223471200	0.02	200000	
Co	59	103	1	He	10.771	10.771	0.79	116350	0.01	10000	
Ni	60	103	1	He	13.550	13.550	1.57	36387	0.04	10000	
Cu	63	103	1	He	12.946	12.946	1.38	92594	0.01	10000	
Zn	66	103	1	He	51.651	51.651	0.62	75113	0.07	10000	
As	75	103	1	He	12.925	12.925	0.59	11981	0.11	10000	
Se	78	103	1	He	2.104	2.104	6.25	247	0.85	10000	
Sr	88	103	1	He	126.467	126.467	0.25	941676	0.01	10000	
Mo	95	103	1	He	1.636	1.636	2.24	5588	0.03	2000	
Ag	107	103	1	He	0.119	0.119	14.20	1387	0.01	300	
Cd	111	103	1	He	0.526	0.526	9.62	2093	0.03	4000	
Sn	118	115	1	He	4.514	4.514	0.92	22972	0.02	2000	
Sb	123	115	1	He	0.049	0.049	24.71	749	0.01	300	
Ba	137	115	1	He	48.022	48.022	0.84	106557	0.05	10000	
W	182	209	1	He	0.286	0.286	1.36	7398	0.00	2500	
Tl	205	165	1	He	0.224	0.224	3.09	7750	0.00	5000	
Pb	208	209	1	He	21.755	21.755	0.66	1028662	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1104792	0.92	1631381	67.72	30	120	
Sc	45	1	He	643217	0.65	829696	77.52	30	120	
Sc	45	2	NoGas	5048336	1.26	6325638	79.81	30	120	
Rh	103	1	He	1960625	0.42	2345543	83.59	30	120	
In	115	1	He	1171427	0.25	1419467	82.53	30	120	
Tb	159	1	He	3623637	0.74	3888262	93.19	30	120	
Ho	165	1	He	3744029	0.33	3932562	95.21	30	120	
Bi	209	1	He	2684154	0.57	2874805	93.37	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	060_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:55:17-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.947	0.983	162744	1.77	50	95.9	89.5	110.5	
B	11	45	2	NoGas	46.236	0.271	129163	1.19	50	92.5	89.5	110.5	
Na	23	45	1	He	25624.860	1.395	33007146	0.76	25000	102.5	89.5	110.5	
Mg	24	45	1	He	25445.606	2.116	18622830	1.11	25000	101.8	89.5	110.5	
Al	27	45	1	He	251.638	1.294	106317	1.01	250	100.7	89.5	110.5	
K	39	45	1	He	25877.183	1.888	17857946	0.54	25000	103.5	89.5	110.5	
Ca	44	45	1	He	25528.306	1.013	966031	1.46	25000	102.1	89.5	110.5	
Ti	47	45	1	He	63.012	2.747	13441	3.14	50	126.0	89.5	110.5	CCV Failed
V	51	45	1	He	52.432	1.252	276390	1.00	50	104.9	89.5	110.5	
Cr	52	45	1	He	52.449	0.819	334093	1.34	50	104.9	89.5	110.5	
Mn	55	45	1	He	258.382	1.710	1286941	1.04	250	103.4	89.5	110.5	
Fe	56	45	1	He	13048.345	1.733	77926515	0.60	12500	104.4	89.5	110.5	
Co	59	103	1	He	45.311	1.427	472410	1.04	50	90.6	89.5	110.5	
Ni	60	103	1	He	44.481	1.384	115086	1.22	50	89.0	89.5	110.5	CCV Failed
Cu	63	103	1	He	45.764	1.704	312483	0.81	50	91.5	89.5	110.5	
Zn	66	103	1	He	45.807	0.804	64491	0.58	50	91.6	89.5	110.5	
As	75	103	1	He	45.977	1.733	40806	1.25	50	92.0	89.5	110.5	
Se	78	103	1	He	45.685	1.257	4313	1.40	50	91.4	89.5	110.5	
Sr	88	103	1	He	47.481	1.368	341377	1.35	50	95.0	89.5	110.5	
Mo	95	103	1	He	50.067	2.098	163556	1.15	50	100.1	89.5	110.5	
Ag	107	103	1	He	49.619	1.772	556727	1.79	50	99.2	89.5	110.5	
Cd	111	103	1	He	49.853	1.722	98328	1.24	50	99.7	89.5	110.5	
Sn	118	115	1	He	50.636	1.440	241323	1.23	50	101.3	89.5	110.5	
Sb	123	115	1	He	52.002	1.179	228556	0.93	50	104.0	89.5	110.5	
Ba	137	115	1	He	51.731	1.127	111575	1.09	50	103.5	89.5	110.5	
W	182	209	1	He	50.266	0.303	652542	0.62	50	100.5	89.5	110.5	
Tl	205	165	1	He	51.109	4.129	1660246	3.44	50	102.2	89.5	110.5	
Pb	208	209	1	He	48.823	1.152	2176010	0.66	50	97.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1073592	0.90	1631381	65.81	30	120	
Sc	45	1	He	601792	2.14	829696	72.53	30	120	
Sc	45	2	NoGas	4682044	1.04	6325638	74.02	30	120	
Rh	103	1	He	1892885	0.96	2345543	80.70	30	120	
In	115	1	He	1138725	0.52	1419467	80.22	30	120	
Tb	159	1	He	3479244	1.48	3888262	89.48	30	120	
Ho	165	1	He	3540151	0.70	3932562	90.02	30	120	
Bi	209	1	He	2531140	0.81	2874805	88.05	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	061_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:59:06-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.066	7.0	263	4.9	1	
B	11	45	2	NoGas	0.340	49.5	8298	5.4	20	
Na	23	45	1	He	9.181	13.9	28697	5.5	400	
Mg	24	45	1	He	2.594	36.9	2626	26.5	1000	
Al	27	45	1	He	1.862	12.4	2702	3.3	50	
K	39	45	1	He	11.548	5.7	35862	1.1	1000	
Ca	44	45	1	He	10.671	17.8	1135	6.1	1000	
Ti	47	45	1	He	2.021	4.1	442	4.2	20	
V	51	45	1	He	0.095	67.1	577	57.9	2	
Cr	52	45	1	He	-0.006	-84.7	1833	1.6	2	
Mn	55	45	1	He	0.061	31.8	1202	7.8	2	
Fe	56	45	1	He	19.632	16.3	121036	15.6	50	
Co	59	103	1	He	0.004	72.0	84	38.3	1	
Ni	60	103	1	He	-0.004	-203.8	97	26.0	2	
Cu	63	103	1	He	0.028	67.4	1631	7.7	2	
Zn	66	103	1	He	0.005	1538.5	1659	3.0	20	
As	75	103	1	He	0.140	12.8	265	4.0	2	
Se	78	103	1	He	0.142	42.6	57	7.7	2	
Sr	88	103	1	He	0.101	10.1	849	5.7	10	
Mo	95	103	1	He	0.852	12.0	2940	11.3	2	
Ag	107	103	1	He	0.013	17.6	154	18.1	0.2	
Cd	111	103	1	He	0.007	278.1	1046	3.5	0.2	
Sn	118	115	1	He	0.323	19.7	2519	12.4	10	
Sb	123	115	1	He	0.500	20.3	2806	16.4	1	
Ba	137	115	1	He	0.015	49.5	117	14.3	5	
W	182	209	1	He	1.043	14.5	17540	11.2	10	
Tl	205	165	1	He	0.037	20.2	1285	17.4	0.5	
Pb	208	209	1	He	0.063	10.8	3675	8.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1121210	1.44	1631381	68.73	30	120	
Sc	45	1	He	604159	0.27	829696	72.82	30	120	
Sc	45	2	NoGas	4738285	0.37	6325638	74.91	30	120	
Rh	103	1	He	1966726	4.03	2345543	83.85	30	120	
In	115	1	He	1181373	0.08	1419467	83.23	30	120	
Tb	159	1	He	3469979	2.03	3888262	89.24	30	120	
Ho	165	1	He	3630176	1.69	3932562	92.31	30	120	
Bi	209	1	He	2649694	0.65	2874805	92.17	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	062CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:03:00-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.908	0.908	12.474	3234	11.70	1	90.8	69.5	130.5	
B	11	2	NoGas	18.168	18.168	0.656	57003	0.37	20	90.8	69.5	130.5	
Na	23	1	He	1047.573	1047.573	0.440	1417644	0.52	1000	104.8	69.5	130.5	
Mg	24	1	He	1061.516	1061.516	0.901	807366	1.18	1000	106.2	69.5	130.5	
Al	27	1	He	46.344	46.344	1.571	21953	1.19	50	92.7	69.5	130.5	
K	39	1	He	1069.882	1069.882	1.425	794236	1.48	1000	107.0	69.5	130.5	
Ca	44	1	He	1038.200	1038.200	0.094	41510	0.68	1000	103.8	69.5	130.5	
Ti	47	1	He	11.613	11.613	7.749	2579	7.35	10	116.1	69.5	130.5	
V	51	1	He	5.323	5.323	2.324	29204	2.82	5	106.5	69.5	130.5	
Cr	52	1	He	2.160	2.160	0.218	16143	0.93	2	108.0	69.5	130.5	
Mn	55	1	He	5.309	5.309	2.070	28361	1.27	5	106.2	69.5	130.5	
Fe	56	1	He	114.021	114.021	0.904	710417	0.38	100	114.0	69.5	130.5	
Co	59	1	He	0.940	0.940	4.638	10355	2.46	1	94.0	69.5	130.5	
Ni	60	1	He	1.855	1.855	4.446	5154	2.23	2	92.7	69.5	130.5	
Cu	63	1	He	1.865	1.865	0.892	14802	2.27	2	93.2	69.5	130.5	
Zn	66	1	He	18.512	18.512	3.590	28426	1.55	20	92.6	69.5	130.5	
As	75	1	He	4.505	4.505	3.176	4333	1.14	5	90.1	69.5	130.5	
Se	78	1	He	4.732	4.732	2.458	510	1.72	5	94.6	69.5	130.5	
Sr	88	1	He	9.383	9.383	3.458	71066	1.18	10	93.8	69.5	130.5	
Mo	95	1	He	10.099	10.099	0.640	34780	2.67	10	101.0	69.5	130.5	
Ag	107	1	He	1.018	1.018	2.262	12027	1.37	1	101.8	69.5	130.5	
Cd	111	1	He	1.043	1.043	4.534	3189	1.63	1	104.3	69.5	130.5	
Sn	118	1	He	10.137	10.137	2.500	51564	2.75	10	101.4	69.5	130.5	
Sb	123	1	He	2.137	2.137	1.654	10397	1.56	2	106.9	69.5	130.5	
Ba	137	1	He	5.069	5.069	2.831	11573	2.87	5	101.4	69.5	130.5	
W	182	1	He	9.531	9.531	2.016	133705	1.98	10	95.3	69.5	130.5	
Tl	205	1	He	2.045	2.045	0.798	67699	0.94	2	102.2	69.5	130.5	
Pb	208	1	He	1.066	1.066	0.220	50981	0.60	1	106.6	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1117252	0.74	1631381	68.49	30	120	
Sc	45	1	He	624684	0.74	829696	75.29	30	120	
Sc	45	2	NoGas	4836219	0.26	6325638	76.45	30	120	
Rh	103	1	He	1992857	2.31	2345543	84.96	30	120	
In	115	1	He	1197533	0.35	1419467	84.36	30	120	
Tb	159	1	He	3567034	0.40	3888262	91.74	30	120	
Ho	165	1	He	3604014	0.64	3932562	91.65	30	120	
Bi	209	1	He	2677441	0.39	2874805	93.13	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	063_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:06:53-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.914	1.550	166381	1.02	50	93.8	89.5	110.5	
B	11	45	2	NoGas	46.175	1.803	133482	0.91	50	92.4	89.5	110.5	
Na	23	45	1	He	25004.929	8.081	33233466	0.13	25000	100.0	89.5	110.5	
Mg	24	45	1	He	24869.154	8.061	18781175	0.14	25000	99.5	89.5	110.5	
Al	27	45	1	He	243.758	8.057	106332	0.20	250	97.5	89.5	110.5	
K	39	45	1	He	25440.391	8.415	18113514	0.51	25000	101.8	89.5	110.5	
Ca	44	45	1	He	25228.241	7.990	985020	0.60	25000	100.9	89.5	110.5	
Ti	47	45	1	He	54.874	7.991	12081	3.20	50	109.7	89.5	110.5	
V	51	45	1	He	51.168	8.493	278241	0.60	50	102.3	89.5	110.5	
Cr	52	45	1	He	51.504	7.609	338610	0.82	50	103.0	89.5	110.5	
Mn	55	45	1	He	256.238	7.766	1317136	1.17	250	102.5	89.5	110.5	
Fe	56	45	1	He	12864.815	7.354	79307744	0.97	12500	102.9	89.5	110.5	
Co	59	103	1	He	46.749	9.772	477790	0.93	50	93.5	89.5	110.5	
Ni	60	103	1	He	46.142	8.392	117122	1.46	50	92.3	89.5	110.5	
Cu	63	103	1	He	46.743	9.489	312916	0.92	50	93.5	89.5	110.5	
Zn	66	103	1	He	47.170	9.295	65080	0.75	50	94.3	89.5	110.5	
As	75	103	1	He	47.894	9.435	41674	0.57	50	95.8	89.5	110.5	
Se	78	103	1	He	48.406	8.763	4480	0.51	50	96.8	89.5	110.5	
Sr	88	103	1	He	48.831	9.670	344173	1.38	50	97.7	89.5	110.5	
Mo	95	103	1	He	51.991	9.879	166496	0.81	50	104.0	89.5	110.5	
Ag	107	103	1	He	50.587	9.018	556620	0.56	50	101.2	89.5	110.5	
Cd	111	103	1	He	51.235	9.356	99063	0.33	50	102.5	89.5	110.5	
Sn	118	115	1	He	50.734	8.281	241238	0.66	50	101.5	89.5	110.5	
Sb	123	115	1	He	53.091	7.692	232862	0.33	50	106.2	89.5	110.5	
Ba	137	115	1	He	52.154	7.579	112268	1.17	50	104.3	89.5	110.5	
W	182	209	1	He	51.415	7.083	656769	0.31	50	102.8	89.5	110.5	
Tl	205	165	1	He	50.988	7.722	1644516	2.28	50	102.0	89.5	110.5	
Pb	208	209	1	He	49.367	6.873	2165495	0.52	50	98.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1121903	1.25	1631381	68.77	30	120	
Sc	45	1	He	623372	7.64	829696	75.13	30	120	
Sc	45	2	NoGas	4845095	0.84	6325638	76.59	30	120	
Rh	103	1	He	1866468	9.09	2345543	79.58	30	120	
In	115	1	He	1140959	7.80	1419467	80.38	30	120	
Tb	159	1	He	3427156	7.83	3888262	88.14	30	120	
Ho	165	1	He	3526970	7.40	3932562	89.69	30	120	
Bi	209	1	He	2498679	6.67	2874805	86.92	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	064_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:10:40-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.066	20.9	267	19.1	1	
B	11	45	2	NoGas	0.401	37.0	8669	3.7	20	
Na	23	45	1	He	9.907	19.9	29577	8.2	400	
Mg	24	45	1	He	2.541	41.1	2582	29.4	1000	
Al	27	45	1	He	1.077	5.7	2371	1.4	50	
K	39	45	1	He	11.309	14.8	35629	3.0	1000	
Ca	44	45	1	He	7.397	44.8	1009	12.2	1000	
Ti	47	45	1	He	1.156	6.2	257	5.7	20	
V	51	45	1	He	0.092	99.1	564	85.9	2	
Cr	52	45	1	He	0.000	-16557.6	1870	8.4	2	
Mn	55	45	1	He	0.060	42.2	1192	10.2	2	
Fe	56	45	1	He	17.691	21.6	109170	20.6	50	
Co	59	103	1	He	0.003	36.6	77	17.4	1	
Ni	60	103	1	He	-0.004	-68.1	99	7.0	2	
Cu	63	103	1	He	0.024	45.8	1613	4.0	2	
Zn	66	103	1	He	0.079	83.6	1778	4.6	20	
As	75	103	1	He	0.093	7.6	224	3.3	2	
Se	78	103	1	He	0.073	84.5	51	12.4	2	
Sr	88	103	1	He	0.037	19.0	380	14.5	10	
Mo	95	103	1	He	0.946	20.6	3284	20.4	2	
Ag	107	103	1	He	0.015	42.4	187	41.8	0.2	
Cd	111	103	1	He	0.029	82.2	1098	5.0	0.2	
Sn	118	115	1	He	0.394	21.1	2860	15.1	10	
Sb	123	115	1	He	0.552	15.8	3036	13.8	1	
Ba	137	115	1	He	0.002	665.0	88	36.9	5	
W	182	209	1	He	1.154	18.6	18819	15.5	10	
Tl	205	165	1	He	0.038	22.4	1308	21.4	0.5	
Pb	208	209	1	He	0.047	15.7	2880	11.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1125804	0.87	1631381	69.01	30	120	
Sc	45	1	He	603020	0.38	829696	72.68	30	120	
Sc	45	2	NoGas	4856037	0.99	6325638	76.77	30	120	
Rh	103	1	He	1979085	0.78	2345543	84.38	30	120	
In	115	1	He	1177373	0.72	1419467	82.94	30	120	
Tb	159	1	He	3453965	0.76	3888262	88.83	30	120	
Ho	165	1	He	3534366	0.48	3932562	89.87	30	120	
Bi	209	1	He	2617231	0.43	2874805	91.04	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	065SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:14:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1969.949	1969.949	0.72	6287912	0.03	10000	
B	11	45	2	NoGas	199.351	199.351	0.39	502556	0.04	300	
Na	23	45	1	He	19747.869	19747.869	2.79	25461485	0.08	500000	
Mg	24	45	1	He	19765.140	19765.140	2.36	14480729	0.14	500000	
Al	27	45	1	He	18520.438	18520.438	2.78	7692308	0.24	200000	
K	39	45	1	He	19995.125	19995.125	3.68	13813914	0.14	500000	
Ca	44	45	1	He	17863.033	17863.033	3.66	676500	2.64	500000	
Ti	47	45	1	He	200.192	200.192	2.70	42716	0.47	2500	
V	51	45	1	He	1950.802	1950.802	2.73	10288726	0.02	10000	
Cr	52	45	1	He	2008.130	2008.130	3.15	12730124	0.02	10000	
Mn	55	45	1	He	2028.481	2028.481	2.39	10107521	0.02	10000	
Fe	56	45	1	He	20594.400	20594.400	2.66	123101475	0.02	200000	
Co	59	103	1	He	1816.725	1816.725	1.14	18157257	0.01	10000	
Ni	60	103	1	He	1819.912	1819.912	2.61	4509921	0.04	10000	
Cu	63	103	1	He	1823.828	1823.828	0.46	11888481	0.02	10000	
Zn	66	103	1	He	1921.708	1921.708	1.00	2531292	0.08	10000	
As	75	103	1	He	1818.910	1818.910	1.25	1542835	0.12	10000	
Se	78	103	1	He	1831.691	1831.691	1.29	164216	1.12	10000	
Sr	88	103	1	He	1945.669	1945.669	1.29	13407306	0.01	10000	
Mo	95	103	1	He	200.924	200.924	1.35	629168	0.03	2000	
Ag	107	103	1	He	208.997	208.997	1.31	2247993	0.01	300	
Cd	111	103	1	He	2086.056	2086.056	2.38	3905231	0.05	4000	
Sn	118	115	1	He	2263.803	2263.803	1.92	9876208	0.02	2000	>LDR
Sb	123	115	1	He	221.438	221.438	0.58	892602	0.02	300	
Ba	137	115	1	He	2295.425	2295.425	0.48	4545196	0.05	10000	
W	182	209	1	He	215.291	215.291	2.11	2738983	0.01	2500	
Tl	205	165	1	He	516.761	516.761	0.97	16344275	0.00	5000	
Pb	208	209	1	He	2008.738	2008.738	0.74	88055843	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1009830	0.97	1631381	61.90	30	120	
Sc	45	1	He	602576	3.91	829696	72.63	30	120	
Sc	45	2	NoGas	4417018	0.50	6325638	69.83	30	120	
Rh	103	1	He	1814701	1.03	2345543	77.37	30	120	
In	115	1	He	1046146	0.35	1419467	73.70	30	120	
Tb	159	1	He	3376304	1.01	3888262	86.83	30	120	
Ho	165	1	He	3446537	0.95	3932562	87.64	30	120	
Bi	209	1	He	2490267	0.67	2874805	86.62	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177128/1-a@2
Data File Name	066_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:18:02-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.427	18.0	1441	18.3	1	
B	11	45	2	NoGas	2.055	10.1	12208	3.9	20	
Na	23	45	1	He	51.030	0.5	79226	0.6	400	
Mg	24	45	1	He	33.299	2.8	24102	2.0	1000	
Al	27	45	1	He	5.149	20.6	3894	10.0	50	
K	39	45	1	He	37.864	3.3	51734	0.8	1000	
Ca	44	45	1	He	105.324	6.9	4523	4.8	1000	
Ti	47	45	1	He	2.101	19.4	440	19.7	20	
V	51	45	1	He	0.574	42.6	2972	41.1	2	
Cr	52	45	1	He	1.071	4.0	8310	2.7	2	
Mn	55	45	1	He	0.555	14.1	3507	9.7	2	
Fe	56	45	1	He	42.119	19.1	244810	18.7	50	
Co	59	103	1	He	0.222	23.7	2292	22.7	1	
Ni	60	103	1	He	0.379	30.1	1053	26.6	2	
Cu	63	103	1	He	1.403	22.5	10623	19.1	2	
Zn	66	103	1	He	2.990	8.6	5544	5.6	20	
As	75	103	1	He	2.923	12.8	2644	11.6	2	Blank Failed
Se	78	103	1	He	2.086	5.3	231	3.8	2	Blank Failed
Sr	88	103	1	He	0.546	5.4	3913	4.7	10	
Mo	95	103	1	He	4.301	28.1	13707	27.5	2	Blank Failed
Ag	107	103	1	He	0.049	12.1	541	11.5	0.2	
Cd	111	103	1	He	0.261	22.4	1463	7.0	0.2	Blank Failed
Sn	118	115	1	He	37.408	17.0	172618	15.5	10	Blank Failed
Sb	123	115	1	He	2.116	18.8	9466	16.5	1	Blank Failed
Ba	137	115	1	He	1.146	11.3	2467	9.7	5	
W	182	209	1	He	4.564	24.3	65443	23.1	10	
Tl	205	165	1	He	0.297	56.3	9491	54.9	0.5	
Pb	208	209	1	He	0.864	19.4	41216	19.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1045564	1.05	1631381	64.09	30	120	
Sc	45	1	He	578089	1.00	829696	69.67	30	120	
Sc	45	2	NoGas	4493425	0.48	6325638	71.04	30	120	
Rh	103	1	He	1842276	0.61	2345543	78.54	30	120	
In	115	1	He	1102668	1.28	1419467	77.68	30	120	
Tb	159	1	He	3369762	0.94	3888262	86.66	30	120	
Ho	165	1	He	3473591	1.02	3932562	88.33	30	120	
Bi	209	1	He	2661404	0.13	2874805	92.58	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177128/2-a@2
Data File Name	067LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:21:53-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	465.285	465.285	2.520	1507852	0.61	500	93.1	78.6	110.5	
B	11	2	NoGas	51.599	51.599	0.880	136215	1.02	50	103.2	79.5	120.5	
Na	23	1	He	4903.245	4903.245	1.329	6096230	0.18	5000	98.1	79.5	120.5	
Mg	24	1	He	4987.094	4987.094	0.827	3516679	1.70	5000	99.7	79.5	120.5	
Al	27	1	He	4522.939	4522.939	0.862	1809290	1.28	5000	90.5	79.5	120.5	
K	39	1	He	4933.237	4933.237	0.944	3301036	0.72	5000	98.7	79.5	120.5	
Ca	44	1	He	4534.917	4534.917	2.028	165838	0.53	5000	90.7	79.5	120.5	
Ti	47	1	He	50.873	50.873	1.166	10453	1.70	50	101.7	79.5	120.5	
V	51	1	He	490.662	490.662	1.262	2490529	0.25	500	98.1	71.5	110.5	
Cr	52	1	He	496.983	496.983	0.608	3033898	1.22	500	99.4	69.5	110.5	
Mn	55	1	He	500.060	500.060	0.459	2398378	1.05	500	100.0	79.5	120.5	
Fe	56	1	He	5066.026	5066.026	1.283	29144050	0.51	5000	101.3	79.5	120.5	
Co	59	1	He	435.949	435.949	0.100	4366783	0.30	500	87.2	73.9	110.5	
Ni	60	1	He	428.932	428.932	0.892	1065406	1.04	500	85.8	74.9	110.5	
Cu	63	1	He	449.082	449.082	1.375	2934600	1.19	500	89.8	72.6	110.5	
Zn	66	1	He	415.345	415.345	0.704	549491	0.90	500	83.1	71.5	113.4	
As	75	1	He	400.522	400.522	0.198	340579	0.36	500	80.1	73.4	110.5	
Se	78	1	He	390.231	390.231	0.696	35095	0.78	500	78.0	64.6	110.5	
Sr	88	1	He	462.944	462.944	0.578	3197128	0.46	500	92.6	79.5	120.5	
Mo	95	1	He	51.000	51.000	1.242	160088	1.44	50	102.0	29.5	140.5	
Ag	107	1	He	48.298	48.298	0.491	520644	0.31	50	96.6	59.5	114.5	
Cd	111	1	He	461.083	461.083	0.187	865903	0.06	500	92.2	73.5	110.5	
Sn	118	1	He	554.456	554.456	0.629	2458361	0.72	500	110.9	79.5	120.5	
Sb	123	1	He	50.451	50.451	0.600	206997	0.22	50	100.9	67.5	113.4	
Ba	137	1	He	495.465	495.465	0.350	996891	0.19	500	99.1	69.5	110.5	
W	182	1	He	48.119	48.119	1.293	631586	1.31	50	96.2	74.6	125.4	
Tl	205	1	He	121.711	121.711	0.434	3883309	0.62	125	97.4	70.6	110.5	
Pb	208	1	He	469.953	469.953	0.174	21166898	0.20	500	94.0	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1025720	2.85	1631381	62.87	30	120	
Sc	45	1	He	579587	1.51	829696	69.86	30	120	
Sc	45	2	NoGas	4450628	0.48	6325638	70.36	30	120	
Rh	103	1	He	1818594	0.21	2345543	77.53	30	120	
In	115	1	He	1062949	0.40	1419467	74.88	30	120	
Tb	159	1	He	3361556	1.29	3888262	86.45	30	120	
Ho	165	1	He	3476641	1.05	3932562	88.41	30	120	
Bi	209	1	He	2558519	0.11	2874805	89.00	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-d@20
Data File Name	068SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:25:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.508	0.508	12.81	1859	0.03	10000	
B	11	45	2	NoGas	7.558	7.558	1.98	28541	0.03	300	
Na	23	45	1	He	216.958	216.958	1.47	309313	0.07	500000	
Mg	24	45	1	He	1284.435	1284.435	0.99	982819	0.13	500000	
Al	27	45	1	He	4947.942	4947.942	1.95	2146325	0.23	200000	
K	39	45	1	He	1827.240	1827.240	2.40	1344446	0.14	500000	
Ca	44	45	1	He	3.894	3.894	154.40	913	0.43	500000	
Ti	47	45	1	He	36.444	36.444	1.78	8124	0.45	2500	
V	51	45	1	He	8.621	8.621	4.67	47543	0.02	10000	
Cr	52	45	1	He	8.797	8.797	1.16	60160	0.01	10000	
Mn	55	45	1	He	1249.096	1249.096	2.70	6495308	0.02	10000	
Fe	56	45	1	He	11591.762	11591.762	0.92	72325993	0.02	200000	
Co	59	103	1	He	3.746	3.746	0.39	40904	0.01	10000	
Ni	60	103	1	He	9.380	9.380	3.54	25471	0.04	10000	
Cu	63	103	1	He	9.683	9.683	1.51	70315	0.01	10000	
Zn	66	103	1	He	23.302	23.302	1.55	35140	0.07	10000	
As	75	103	1	He	21.959	21.959	2.68	20460	0.11	10000	
Se	78	103	1	He	1.011	1.011	6.88	143	0.71	10000	
Sr	88	103	1	He	173.193	173.193	1.65	1302452	0.01	10000	
Mo	95	103	1	He	56.721	56.721	3.46	193824	0.03	2000	
Ag	107	103	1	He	0.023	0.023	4.36	276	0.01	300	
Cd	111	103	1	He	0.136	0.136	13.87	1318	0.01	4000	
Sn	118	115	1	He	2.649	2.649	4.95	13958	0.02	2000	
Sb	123	115	1	He	0.261	0.261	4.74	1715	0.02	300	
Ba	137	115	1	He	33.063	33.063	0.58	73908	0.04	10000	
W	182	209	1	He	2.385	2.385	4.48	36353	0.01	2500	
Tl	205	165	1	He	0.145	0.145	23.22	4941	0.00	5000	
Pb	208	209	1	He	38.508	38.508	0.77	1830280	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1138119	1.40	1631381	69.76	30	120	
Sc	45	1	He	628620	1.39	829696	75.77	30	120	
Sc	45	2	NoGas	4908383	0.61	6325638	77.60	30	120	
Rh	103	1	He	1980553	1.63	2345543	84.44	30	120	
In	115	1	He	1179686	0.30	1419467	83.11	30	120	
Tb	159	1	He	3528951	1.13	3888262	90.76	30	120	
Ho	165	1	He	3666957	1.54	3932562	93.25	30	120	
Bi	209	1	He	2698943	0.79	2874805	93.88	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-3-d@100
Data File Name	069SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:29:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.207	0.207	11.36	785	0.03	10000	
B	11	45	2	NoGas	1.318	1.318	6.36	11574	0.01	300	
Na	23	45	1	He	46.061	46.061	0.95	78254	0.06	500000	
Mg	24	45	1	He	252.722	252.722	1.95	190995	0.13	500000	
Al	27	45	1	He	980.108	980.108	3.29	420154	0.23	200000	
K	39	45	1	He	357.230	357.230	3.15	281725	0.13	500000	
Ca	44	45	1	He	-0.315	-0.315	-2896.78	732	-0.04	500000	
Ti	47	45	1	He	7.503	7.503	3.19	1655	0.45	2500	
V	51	45	1	He	1.756	1.756	7.79	9590	0.02	10000	
Cr	52	45	1	He	1.756	1.756	2.63	13362	0.01	10000	
Mn	55	45	1	He	247.026	247.026	2.31	1265589	0.02	10000	
Fe	56	45	1	He	2307.397	2307.397	2.19	14177389	0.02	200000	
Co	59	103	1	He	0.739	0.739	4.91	8060	0.01	10000	
Ni	60	103	1	He	1.878	1.878	4.09	5162	0.04	10000	
Cu	63	103	1	He	1.923	1.923	4.20	15048	0.01	10000	
Zn	66	103	1	He	4.319	4.319	5.35	7831	0.06	10000	
As	75	103	1	He	4.463	4.463	2.50	4249	0.11	10000	
Se	78	103	1	He	0.272	0.272	20.06	70	0.39	10000	
Sr	88	103	1	He	33.518	33.518	3.86	250879	0.01	10000	
Mo	95	103	1	He	12.096	12.096	4.30	41172	0.03	2000	
Ag	107	103	1	He	0.014	0.014	7.08	168	0.01	300	
Cd	111	103	1	He	0.063	0.063	36.84	1165	0.01	4000	
Sn	118	115	1	He	0.583	0.583	5.49	3852	0.02	2000	
Sb	123	115	1	He	0.081	0.081	7.00	912	0.01	300	
Ba	137	115	1	He	6.291	6.291	5.82	14335	0.04	10000	
W	182	209	1	He	0.605	0.605	8.56	11760	0.01	2500	
Tl	205	165	1	He	0.029	0.029	3.85	1012	0.00	5000	
Pb	208	209	1	He	7.410	7.410	5.63	350757	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1151567	1.04	1631381	70.59	30	120	
Sc	45	1	He	619028	1.74	829696	74.61	30	120	
Sc	45	2	NoGas	5027689	0.43	6325638	79.48	30	120	
Rh	103	1	He	1971722	2.81	2345543	84.06	30	120	
In	115	1	He	1198238	2.92	1419467	84.41	30	120	
Tb	159	1	He	3480680	5.26	3888262	89.52	30	120	
Ho	165	1	He	3607539	2.21	3932562	91.74	30	120	
Bi	209	1	He	2688243	4.87	2874805	93.51	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-3-d@20
Data File Name	070SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:33:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1022.166	1022.166	1.37	3458033	0.03	10000	
B	11	45	2	NoGas	109.541	109.541	1.41	296380	0.04	300	
Na	23	45	1	He	9924.295	9924.295	3.56	13455056	0.07	500000	
Mg	24	45	1	He	11079.556	11079.556	3.08	8529972	0.13	500000	
Al	27	45	1	He	13783.110	13783.110	3.17	6016733	0.23	200000	
K	39	45	1	He	11698.866	11698.866	4.99	8503239	0.14	500000	
Ca	44	45	1	He	8878.395	8878.395	3.13	353854	2.51	500000	
Ti	47	45	1	He	131.138	131.138	2.93	29408	0.45	2500	
V	51	45	1	He	994.197	994.197	3.29	5510692	0.02	10000	
Cr	52	45	1	He	1001.072	1001.072	3.92	6669454	0.02	10000	
Mn	55	45	1	He	2119.568	2119.568	3.36	11097016	0.02	10000	
Fe	56	45	1	He	20704.884	20704.884	3.05	130073822	0.02	200000	
Co	59	103	1	He	923.933	923.933	1.80	9548327	0.01	10000	
Ni	60	103	1	He	951.448	951.448	0.92	2438081	0.04	10000	
Cu	63	103	1	He	948.993	948.993	1.34	6396682	0.01	10000	
Zn	66	103	1	He	968.213	968.213	1.28	1319440	0.07	10000	
As	75	103	1	He	950.091	950.091	1.42	833341	0.11	10000	
Se	78	103	1	He	948.245	948.245	1.27	87924	1.08	10000	
Sr	88	103	1	He	1167.865	1167.865	1.64	8320985	0.01	10000	
Mo	95	103	1	He	155.704	155.704	1.09	504170	0.03	2000	
Ag	107	103	1	He	101.084	101.084	1.62	1124236	0.01	300	
Cd	111	103	1	He	1069.293	1069.293	0.91	2070557	0.05	4000	
Sn	118	115	1	He	1129.843	1129.843	1.21	5214222	0.02	2000	
Sb	123	115	1	He	109.298	109.298	0.51	466289	0.02	300	
Ba	137	115	1	He	1183.287	1183.287	1.16	2478595	0.05	10000	
W	182	209	1	He	98.391	98.391	3.22	1303478	0.01	2500	
Tl	205	165	1	He	259.172	259.172	0.79	8448145	0.00	5000	
Pb	208	209	1	He	1035.549	1035.549	1.51	47215874	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1070345	1.47	1631381	65.61	30	120	
Sc	45	1	He	633492	4.89	829696	76.35	30	120	
Sc	45	2	NoGas	4688296	0.85	6325638	74.12	30	120	
Rh	103	1	He	1876317	0.34	2345543	80.00	30	120	
In	115	1	He	1106608	0.67	1419467	77.96	30	120	
Tb	159	1	He	3476649	1.44	3888262	89.41	30	120	
Ho	165	1	He	3551950	0.78	3932562	90.32	30	120	
Bi	209	1	He	2590579	2.18	2874805	90.11	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-e du@20
Data File Name	071SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:36:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.544	0.544	9.63	1959	0.03	10000	
B	11	45	2	NoGas	6.222	6.222	4.47	24517	0.03	300	
Na	23	45	1	He	196.492	196.492	0.68	272426	0.07	500000	
Mg	24	45	1	He	1123.804	1123.804	1.25	831392	0.14	500000	
Al	27	45	1	He	4204.951	4204.951	1.76	1763741	0.24	200000	
K	39	45	1	He	1576.873	1576.873	0.51	1125451	0.14	500000	
Ca	44	45	1	He	13.580	13.580	105.86	1252	1.09	500000	
Ti	47	45	1	He	38.133	38.133	1.21	8218	0.46	2500	
V	51	45	1	He	7.777	7.777	2.78	41465	0.02	10000	
Cr	52	45	1	He	8.034	8.034	1.62	53275	0.02	10000	
Mn	55	45	1	He	577.326	577.326	0.51	2903205	0.02	10000	
Fe	56	45	1	He	10624.498	10624.498	1.03	64087269	0.02	200000	
Co	59	103	1	He	3.440	3.440	1.90	36224	0.01	10000	
Ni	60	103	1	He	8.697	8.697	1.49	22786	0.04	10000	
Cu	63	103	1	He	7.827	7.827	0.68	55073	0.01	10000	
Zn	66	103	1	He	20.575	20.575	1.58	30106	0.07	10000	
As	75	103	1	He	21.359	21.359	1.13	19196	0.11	10000	
Se	78	103	1	He	1.515	1.515	8.00	185	0.82	10000	
Sr	88	103	1	He	126.230	126.230	0.31	915425	0.01	10000	
Mo	95	103	1	He	56.290	56.290	0.09	185524	0.03	2000	
Ag	107	103	1	He	0.030	0.030	16.36	348	0.01	300	
Cd	111	103	1	He	0.214	0.214	18.14	1425	0.02	4000	
Sn	118	115	1	He	8.216	8.216	12.55	40658	0.02	2000	
Sb	123	115	1	He	1.012	1.012	20.62	5043	0.02	300	
Ba	137	115	1	He	28.552	28.552	1.17	62797	0.05	10000	
W	182	209	1	He	3.981	3.981	9.15	57407	0.01	2500	
Tl	205	165	1	He	0.193	0.193	18.14	6368	0.00	5000	
Pb	208	209	1	He	23.892	23.892	0.62	1117783	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1123503	1.72	1631381	68.87	30	120	
Sc	45	1	He	607678	0.58	829696	73.24	30	120	
Sc	45	2	NoGas	4842265	0.27	6325638	76.55	30	120	
Rh	103	1	He	1909563	0.67	2345543	81.41	30	120	
In	115	1	He	1160525	0.48	1419467	81.76	30	120	
Tb	159	1	He	3496085	0.88	3888262	89.91	30	120	
Ho	165	1	He	3567499	0.34	3932562	90.72	30	120	
Bi	209	1	He	2655980	0.22	2874805	92.39	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-f ms@20
Data File Name	072SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:40:32-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.018	5.018	1.52	18261	0.03	10000	
B	11	45	2	NoGas	10.445	10.445	1.15	37776	0.03	300	
Na	23	45	1	He	655.836	655.836	2.51	930081	0.07	500000	
Mg	24	45	1	He	1554.467	1554.467	2.24	1229573	0.13	500000	
Al	27	45	1	He	4648.071	4648.071	0.61	2085073	0.22	200000	
K	39	45	1	He	1983.329	1983.329	2.78	1505998	0.13	500000	
Ca	44	45	1	He	451.838	451.838	5.12	19233	2.35	500000	
Ti	47	45	1	He	46.084	46.084	1.29	10620	0.43	2500	
V	51	45	1	He	12.299	12.299	1.57	70093	0.02	10000	
Cr	52	45	1	He	12.333	12.333	0.65	86394	0.01	10000	
Mn	55	45	1	He	1025.882	1025.882	1.36	5516481	0.02	10000	
Fe	56	45	1	He	10423.756	10423.756	1.68	67243144	0.02	200000	
Co	59	103	1	He	7.460	7.460	0.43	83230	0.01	10000	
Ni	60	103	1	He	12.238	12.238	1.50	33948	0.04	10000	
Cu	63	103	1	He	12.565	12.565	1.07	92851	0.01	10000	
Zn	66	103	1	He	24.262	24.262	1.13	37342	0.06	10000	
As	75	103	1	He	23.288	23.288	0.35	22180	0.10	10000	
Se	78	103	1	He	5.148	5.148	5.26	560	0.92	10000	
Sr	88	103	1	He	180.388	180.388	1.14	1386968	0.01	10000	
Mo	95	103	1	He	56.604	56.604	0.47	197807	0.03	2000	
Ag	107	103	1	He	4.611	4.611	0.59	55341	0.01	300	
Cd	111	103	1	He	4.824	4.824	0.81	11138	0.04	4000	
Sn	118	115	1	He	7.767	7.767	2.08	39982	0.02	2000	
Sb	123	115	1	He	1.926	1.926	1.84	9484	0.02	300	
Ba	137	115	1	He	32.805	32.805	0.41	74922	0.04	10000	
W	182	209	1	He	5.419	5.419	1.68	78427	0.01	2500	
Tl	205	165	1	He	4.541	4.541	1.15	152206	0.00	5000	
Pb	208	209	1	He	40.440	40.440	0.87	1929072	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1149472	0.69	1631381	70.46	30	120	
Sc	45	1	He	649967	1.28	829696	78.34	30	120	
Sc	45	2	NoGas	5077635	0.22	6325638	80.27	30	120	
Rh	103	1	He	2024739	0.98	2345543	86.32	30	120	
In	115	1	He	1205291	0.66	1419467	84.91	30	120	
Tb	159	1	He	3582116	1.47	3888262	92.13	30	120	
Ho	165	1	He	3650351	0.13	3932562	92.82	30	120	
Bi	209	1	He	2708770	0.30	2874805	94.22	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-9-b@20
Data File Name	073SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:44:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.556	0.556	10.55	2197	0.03	10000	
B	11	45	2	NoGas	1.350	1.350	8.93	12508	0.01	300	
Na	23	45	1	He	25.038	25.038	3.31	56401	0.04	500000	
Mg	24	45	1	He	1749.250	1749.250	2.35	1474532	0.12	500000	
Al	27	45	1	He	7414.876	7414.876	0.68	3543862	0.21	200000	
K	39	45	1	He	636.718	636.718	2.43	536991	0.12	500000	
Ca	44	45	1	He	210.949	210.949	1.60	10023	2.10	500000	
Ti	47	45	1	He	46.394	46.394	0.82	11395	0.41	2500	
V	51	45	1	He	13.406	13.406	2.56	81405	0.02	10000	
Cr	52	45	1	He	11.846	11.846	2.79	88508	0.01	10000	
Mn	55	45	1	He	139.952	139.952	2.06	802896	0.02	10000	
Fe	56	45	1	He	16647.830	16647.830	2.25	114450911	0.01	200000	
Co	59	103	1	He	5.304	5.304	0.91	61780	0.01	10000	
Ni	60	103	1	He	12.405	12.405	1.13	35917	0.03	10000	
Cu	63	103	1	He	10.486	10.486	0.24	81138	0.01	10000	
Zn	66	103	1	He	30.929	30.929	1.53	49193	0.06	10000	
As	75	103	1	He	7.692	7.692	0.90	7745	0.10	10000	
Se	78	103	1	He	0.853	0.853	14.41	136	0.63	10000	
Sr	88	103	1	He	2.778	2.778	1.82	22403	0.01	10000	
Mo	95	103	1	He	1.933	1.933	6.70	7103	0.03	2000	
Ag	107	103	1	He	0.020	0.020	18.55	254	0.01	300	
Cd	111	103	1	He	0.115	0.115	13.11	1360	0.01	4000	
Sn	118	115	1	He	2.526	2.526	0.68	14195	0.02	2000	
Sb	123	115	1	He	0.164	0.164	12.26	1359	0.01	300	
Ba	137	115	1	He	40.903	40.903	0.17	97193	0.04	10000	
W	182	209	1	He	0.406	0.406	8.86	9385	0.00	2500	
Tl	205	165	1	He	0.124	0.124	2.06	4322	0.00	5000	
Pb	208	209	1	He	6.929	6.929	0.99	340369	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1232885	2.19	1631381	75.57	30	120	
Sc	45	1	He	692778	1.85	829696	83.50	30	120	
Sc	45	2	NoGas	5391701	0.98	6325638	85.24	30	120	
Rh	103	1	He	2113358	0.64	2345543	90.10	30	120	
In	115	1	He	1254278	0.48	1419467	88.36	30	120	
Tb	159	1	He	3681703	0.65	3888262	94.69	30	120	
Ho	165	1	He	3749595	0.58	3932562	95.35	30	120	
Bi	209	1	He	2784149	0.82	2874805	96.85	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-10-b@20
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:48:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.484	0.484	6.98	1911	0.03	10000	
B	11	45	2	NoGas	0.604	0.604	23.60	10296	0.01	300	
Na	23	45	1	He	19.949	19.949	4.60	49103	0.04	500000	
Mg	24	45	1	He	1157.619	1157.619	0.42	981035	0.12	500000	
Al	27	45	1	He	6428.759	6428.759	1.47	3087729	0.21	200000	
K	39	45	1	He	405.553	405.553	1.14	355426	0.11	500000	
Ca	44	45	1	He	192.256	192.256	2.51	9251	2.08	500000	
Ti	47	45	1	He	54.834	54.834	3.88	13532	0.41	2500	
V	51	45	1	He	13.675	13.675	0.26	83461	0.02	10000	
Cr	52	45	1	He	9.641	9.641	1.41	72806	0.01	10000	
Mn	55	45	1	He	455.449	455.449	0.32	2623750	0.02	10000	
Fe	56	45	1	He	13884.717	13884.717	0.70	95937376	0.01	200000	
Co	59	103	1	He	5.652	5.652	0.57	66765	0.01	10000	
Ni	60	103	1	He	8.485	8.485	1.78	24951	0.03	10000	
Cu	63	103	1	He	6.501	6.501	0.48	51609	0.01	10000	
Zn	66	103	1	He	26.328	26.328	2.34	42731	0.06	10000	
As	75	103	1	He	5.874	5.874	1.71	6033	0.10	10000	
Se	78	103	1	He	0.566	0.566	10.00	107	0.53	10000	
Sr	88	103	1	He	2.104	2.104	1.91	17233	0.01	10000	
Mo	95	103	1	He	1.078	1.078	2.48	4044	0.03	2000	
Ag	107	103	1	He	0.020	0.020	14.87	256	0.01	300	
Cd	111	103	1	He	0.126	0.126	12.77	1405	0.01	4000	
Sn	118	115	1	He	1.998	1.998	3.77	11712	0.02	2000	
Sb	123	115	1	He	0.089	0.089	8.84	1017	0.01	300	
Ba	137	115	1	He	38.990	38.990	1.61	94906	0.04	10000	
W	182	209	1	He	0.209	0.209	8.29	6639	0.00	2500	
Tl	205	165	1	He	0.100	0.100	1.12	3569	0.00	5000	
Pb	208	209	1	He	7.639	7.639	2.52	378349	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1226390	0.55	1631381	75.17	30	120	
Sc	45	1	He	696099	0.54	829696	83.90	30	120	
Sc	45	2	NoGas	5415955	1.28	6325638	85.62	30	120	
Rh	103	1	He	2143216	1.04	2345543	91.37	30	120	
In	115	1	He	1284818	0.31	1419467	90.51	30	120	
Tb	159	1	He	3739917	0.80	3888262	96.18	30	120	
Ho	165	1	He	3825374	0.68	3932562	97.27	30	120	
Bi	209	1	He	2808842	2.37	2874805	97.71	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	075_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:51:57-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.113	1.315	176212	1.36	50	96.2	89.5	110.5	
B	11	45	2	NoGas	45.782	3.014	137846	2.54	50	91.6	89.5	110.5	
Na	23	45	1	He	24366.199	2.082	34721495	1.12	25000	97.5	89.5	110.5	
Mg	24	45	1	He	24393.161	2.001	19750728	1.06	25000	97.6	89.5	110.5	
Al	27	45	1	He	242.154	1.688	113264	1.20	250	96.9	89.5	110.5	
K	39	45	1	He	25080.816	1.446	19151372	1.40	25000	100.3	89.5	110.5	
Ca	44	45	1	He	24762.688	1.391	1036696	1.68	25000	99.1	89.5	110.5	
Ti	47	45	1	He	50.571	2.324	11940	4.18	50	101.1	89.5	110.5	
V	51	45	1	He	50.478	2.012	294355	0.96	50	101.0	89.5	110.5	
Cr	52	45	1	He	50.481	0.964	355846	2.07	50	101.0	89.5	110.5	
Mn	55	45	1	He	254.887	1.448	1404830	2.64	250	102.0	89.5	110.5	
Fe	56	45	1	He	12689.435	1.548	83845652	1.37	12500	101.5	89.5	110.5	
Co	59	103	1	He	45.856	1.224	499056	1.47	50	91.7	89.5	110.5	
Ni	60	103	1	He	45.729	2.136	123496	2.23	50	91.5	89.5	110.5	
Cu	63	103	1	He	46.088	1.580	328496	1.72	50	92.2	89.5	110.5	
Zn	66	103	1	He	46.664	2.031	68546	2.20	50	93.3	89.5	110.5	
As	75	103	1	He	47.663	0.782	44153	0.92	50	95.3	89.5	110.5	
Se	78	103	1	He	48.234	2.849	4751	2.55	50	96.5	89.5	110.5	
Sr	88	103	1	He	48.405	1.405	363269	1.62	50	96.8	89.5	110.5	
Mo	95	103	1	He	50.342	2.313	171664	1.88	50	100.7	89.5	110.5	
Ag	107	103	1	He	49.500	0.911	579708	0.65	50	99.0	89.5	110.5	
Cd	111	103	1	He	50.197	0.558	103339	0.54	50	100.4	89.5	110.5	
Sn	118	115	1	He	50.151	0.526	251607	0.81	50	100.3	89.5	110.5	
Sb	123	115	1	He	52.068	0.534	240894	0.37	50	104.1	89.5	110.5	
Ba	137	115	1	He	51.263	1.049	116391	1.37	50	102.5	89.5	110.5	
W	182	209	1	He	49.553	1.582	666272	1.18	50	99.1	89.5	110.5	
Tl	205	165	1	He	51.442	2.792	1746427	1.51	50	102.9	89.5	110.5	
Pb	208	209	1	He	47.700	0.475	2201949	0.98	50	95.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1158617	1.89	1631381	71.02	30	120	
Sc	45	1	He	665848	2.86	829696	80.25	30	120	
Sc	45	2	NoGas	5043861	0.30	6325638	79.74	30	120	
Rh	103	1	He	1975738	0.47	2345543	84.23	30	120	
In	115	1	He	1198670	0.61	1419467	84.45	30	120	
Tb	159	1	He	3583975	0.74	3888262	92.17	30	120	
Ho	165	1	He	3700053	1.48	3932562	94.09	30	120	
Bi	209	1	He	2621466	0.71	2874805	91.19	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	076_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:55:45-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.103	11.6	422	9.5	1	
B	11	45	2	NoGas	0.442	20.6	9069	2.9	20	
Na	23	45	1	He	7.680	15.1	28056	5.3	400	
Mg	24	45	1	He	1.625	19.1	2008	11.3	1000	
Al	27	45	1	He	1.177	15.3	2535	3.4	50	
K	39	45	1	He	10.322	8.9	36712	1.2	1000	
Ca	44	45	1	He	5.780	52.6	996	12.4	1000	
Ti	47	45	1	He	0.306	7.5	79	6.5	20	
V	51	45	1	He	0.039	187.7	294	136.9	2	
Cr	52	45	1	He	-0.004	-457.1	1940	5.2	2	
Mn	55	45	1	He	0.080	27.9	1358	8.4	2	
Fe	56	45	1	He	22.360	21.9	143970	20.7	50	
Co	59	103	1	He	0.006	12.4	111	7.5	1	
Ni	60	103	1	He	-0.001	-1531.4	111	21.3	2	
Cu	63	103	1	He	0.005	51.5	1538	0.5	2	
Zn	66	103	1	He	0.042	229.7	1789	7.4	20	
As	75	103	1	He	0.160	10.3	296	4.7	2	
Se	78	103	1	He	0.244	34.0	70	11.3	2	
Sr	88	103	1	He	0.014	30.9	211	15.8	10	
Mo	95	103	1	He	1.034	22.7	3712	21.8	2	
Ag	107	103	1	He	0.015	18.6	186	18.1	0.2	
Cd	111	103	1	He	0.050	42.9	1183	3.2	0.2	
Sn	118	115	1	He	0.557	7.7	3867	5.8	10	
Sb	123	115	1	He	0.523	20.0	3065	16.2	1	
Ba	137	115	1	He	0.005	239.3	100	29.6	5	
W	182	209	1	He	1.208	16.9	20366	14.1	10	
Tl	205	165	1	He	0.043	20.6	1516	19.9	0.5	
Pb	208	209	1	He	0.074	7.5	4304	5.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1195526	2.28	1631381	73.28	30	120	
Sc	45	1	He	633493	0.66	829696	76.35	30	120	
Sc	45	2	NoGas	5012784	0.33	6325638	79.25	30	120	
Rh	103	1	He	2052793	0.82	2345543	87.52	30	120	
In	115	1	He	1243549	0.17	1419467	87.61	30	120	
Tb	159	1	He	3606082	0.58	3888262	92.74	30	120	
Ho	165	1	He	3668309	0.32	3932562	93.28	30	120	
Bi	209	1	He	2729394	1.26	2874805	94.94	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-1-b@20
Data File Name	077SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:59:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.406	0.406	6.91	1489	0.03	10000	
B	11	45	2	NoGas	1.779	1.779	12.01	12723	0.01	300	
Na	23	45	1	He	28.886	28.886	3.93	57918	0.05	500000	
Mg	24	45	1	He	1477.016	1477.016	1.41	1161488	0.13	500000	
Al	27	45	1	He	4858.170	4858.170	1.81	2166022	0.22	200000	
K	39	45	1	He	412.341	412.341	1.75	334882	0.12	500000	
Ca	44	45	1	He	2661.496	2661.496	1.76	108826	2.45	500000	
Ti	47	45	1	He	46.579	46.579	2.64	10670	0.44	2500	
V	51	45	1	He	9.494	9.494	4.63	53780	0.02	10000	
Cr	52	45	1	He	9.016	9.016	2.27	63313	0.01	10000	
Mn	55	45	1	He	302.576	302.576	1.16	1618129	0.02	10000	
Fe	56	45	1	He	12331.837	12331.837	1.52	79080544	0.02	200000	
Co	59	103	1	He	3.831	3.831	1.46	41738	0.01	10000	
Ni	60	103	1	He	9.598	9.598	1.15	26013	0.04	10000	
Cu	63	103	1	He	5.945	5.945	2.38	43643	0.01	10000	
Zn	66	103	1	He	24.514	24.514	1.73	36807	0.07	10000	
As	75	103	1	He	6.805	6.805	1.00	6423	0.11	10000	
Se	78	103	1	He	0.488	0.488	17.84	91	0.53	10000	
Sr	88	103	1	He	6.519	6.519	2.54	49018	0.01	10000	
Mo	95	103	1	He	0.809	0.809	3.85	2811	0.03	2000	
Ag	107	103	1	He	0.025	0.025	10.43	296	0.01	300	
Cd	111	103	1	He	0.123	0.123	22.27	1288	0.01	4000	
Sn	118	115	1	He	2.047	2.047	4.45	11082	0.02	2000	
Sb	123	115	1	He	0.329	0.329	4.30	2040	0.02	300	
Ba	137	115	1	He	30.571	30.571	1.75	68890	0.04	10000	
W	182	209	1	He	0.320	0.320	6.24	7921	0.00	2500	
Tl	205	165	1	He	0.085	0.085	3.17	2887	0.00	5000	
Pb	208	209	1	He	7.814	7.814	0.44	372663	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1135861	1.54	1631381	69.63	30	120	
Sc	45	1	He	646188	2.45	829696	77.88	30	120	
Sc	45	2	NoGas	4969060	1.39	6325638	78.55	30	120	
Rh	103	1	He	1976187	0.50	2345543	84.25	30	120	
In	115	1	He	1189090	0.31	1419467	83.77	30	120	
Tb	159	1	He	3494289	0.49	3888262	89.87	30	120	
Ho	165	1	He	3621315	0.53	3932562	92.09	30	120	
Bi	209	1	He	2703796	0.81	2874805	94.05	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-2-b@20
Data File Name	078SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:03:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.409	0.409	8.30	1608	0.03	10000	
B	11	45	2	NoGas	0.971	0.971	18.09	11222	0.01	300	
Na	23	45	1	He	18.986	18.986	2.40	46738	0.04	500000	
Mg	24	45	1	He	1029.882	1029.882	1.83	855736	0.12	500000	
Al	27	45	1	He	6864.071	6864.071	2.24	3231756	0.21	200000	
K	39	45	1	He	370.820	370.820	2.63	321266	0.12	500000	
Ca	44	45	1	He	420.661	420.661	3.66	18864	2.23	500000	
Ti	47	45	1	He	34.756	34.756	5.80	8409	0.41	2500	
V	51	45	1	He	14.603	14.603	1.23	87373	0.02	10000	
Cr	52	45	1	He	10.005	10.005	2.54	73987	0.01	10000	
Mn	55	45	1	He	358.713	358.713	3.14	2025736	0.02	10000	
Fe	56	45	1	He	13339.352	13339.352	2.26	90352425	0.01	200000	
Co	59	103	1	He	4.725	4.725	2.55	54513	0.01	10000	
Ni	60	103	1	He	8.656	8.656	2.60	24856	0.03	10000	
Cu	63	103	1	He	5.811	5.811	3.81	45207	0.01	10000	
Zn	66	103	1	He	31.001	31.001	0.91	48839	0.06	10000	
As	75	103	1	He	7.497	7.497	2.12	7480	0.10	10000	
Se	78	103	1	He	0.591	0.591	23.75	107	0.55	10000	
Sr	88	103	1	He	2.534	2.534	2.28	20245	0.01	10000	
Mo	95	103	1	He	0.865	0.865	2.52	3178	0.03	2000	
Ag	107	103	1	He	0.043	0.043	12.04	543	0.01	300	
Cd	111	103	1	He	0.132	0.132	23.38	1384	0.01	4000	
Sn	118	115	1	He	1.842	1.842	1.27	10637	0.02	2000	
Sb	123	115	1	He	0.208	0.208	9.33	1570	0.01	300	
Ba	137	115	1	He	36.875	36.875	0.95	87762	0.04	10000	
W	182	209	1	He	0.181	0.181	7.73	6227	0.00	2500	
Tl	205	165	1	He	0.114	0.114	3.31	4003	0.00	5000	
Pb	208	209	1	He	11.348	11.348	1.70	560577	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1216083	1.74	1631381	74.54	30	120	
Sc	45	1	He	682566	1.98	829696	82.27	30	120	
Sc	45	2	NoGas	5326580	0.13	6325638	84.21	30	120	
Rh	103	1	He	2093535	1.68	2345543	89.26	30	120	
In	115	1	He	1256198	0.67	1419467	88.50	30	120	
Tb	159	1	He	3664529	0.99	3888262	94.25	30	120	
Ho	165	1	He	3745472	0.68	3932562	95.24	30	120	
Bi	209	1	He	2802473	1.08	2874805	97.48	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-3-b@20
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:07:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.432	0.432	6.99	1689	0.03	10000	
B	11	45	2	NoGas	0.790	0.790	12.88	10729	0.01	300	
Na	23	45	1	He	21.349	21.349	8.49	51807	0.04	500000	
Mg	24	45	1	He	1079.212	1079.212	0.47	925825	0.12	500000	
Al	27	45	1	He	7165.974	7165.974	1.21	3483701	0.21	200000	
K	39	45	1	He	411.730	411.730	1.89	364724	0.11	500000	
Ca	44	45	1	He	779.509	779.509	0.89	35366	2.20	500000	
Ti	47	45	1	He	44.759	44.759	3.90	11184	0.40	2500	
V	51	45	1	He	15.364	15.364	1.19	94900	0.02	10000	
Cr	52	45	1	He	11.636	11.636	0.65	88493	0.01	10000	
Mn	55	45	1	He	446.901	446.901	0.11	2606027	0.02	10000	
Fe	56	45	1	He	14101.694	14101.694	1.32	98623165	0.01	200000	
Co	59	103	1	He	6.135	6.135	1.75	72557	0.01	10000	
Ni	60	103	1	He	9.298	9.298	0.55	27367	0.03	10000	
Cu	63	103	1	He	6.189	6.189	0.57	49271	0.01	10000	
Zn	66	103	1	He	32.352	32.352	0.95	52169	0.06	10000	
As	75	103	1	He	8.056	8.056	1.16	8229	0.10	10000	
Se	78	103	1	He	0.684	0.684	6.72	120	0.57	10000	
Sr	88	103	1	He	3.664	3.664	1.99	29968	0.01	10000	
Mo	95	103	1	He	0.875	0.875	2.86	3297	0.03	2000	
Ag	107	103	1	He	0.045	0.045	8.63	580	0.01	300	
Cd	111	103	1	He	0.126	0.126	2.45	1407	0.01	4000	
Sn	118	115	1	He	1.971	1.971	3.48	11556	0.02	2000	
Sb	123	115	1	He	0.234	0.234	7.35	1732	0.01	300	
Ba	137	115	1	He	37.704	37.704	2.28	91675	0.04	10000	
W	182	209	1	He	0.124	0.124	11.59	5446	0.00	2500	
Tl	205	165	1	He	0.116	0.116	2.26	4112	0.00	5000	
Pb	208	209	1	He	12.663	12.663	1.75	629740	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1212063	1.57	1631381	74.30	30	120	
Sc	45	1	He	704619	0.94	829696	84.92	30	120	
Sc	45	2	NoGas	5351460	0.73	6325638	84.60	30	120	
Rh	103	1	He	2145971	0.52	2345543	91.49	30	120	
In	115	1	He	1283551	1.08	1419467	90.42	30	120	
Tb	159	1	He	3707740	1.63	3888262	95.36	30	120	
Ho	165	1	He	3790847	0.78	3932562	96.40	30	120	
Bi	209	1	He	2821995	1.30	2874805	98.16	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-4-b@20
Data File Name	080SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:11:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.412	0.412	12.11	1633	0.03	10000	
B	11	45	2	NoGas	1.625	1.625	11.06	13720	0.01	300	
Na	23	45	1	He	29.928	29.928	1.47	64446	0.05	500000	
Mg	24	45	1	He	909.397	909.397	2.04	776509	0.12	500000	
Al	27	45	1	He	3781.261	3781.261	2.07	1830344	0.21	200000	
K	39	45	1	He	269.743	269.743	2.97	248938	0.11	500000	
Ca	44	45	1	He	3039.215	3039.215	2.65	134751	2.26	500000	
Ti	47	45	1	He	45.070	45.070	2.38	11206	0.40	2500	
V	51	45	1	He	8.848	8.848	3.41	54460	0.02	10000	
Cr	52	45	1	He	10.664	10.664	0.74	80907	0.01	10000	
Mn	55	45	1	He	453.499	453.499	2.00	2631619	0.02	10000	
Fe	56	45	1	He	12007.790	12007.790	3.09	83561294	0.01	200000	
Co	59	103	1	He	4.823	4.823	1.76	56800	0.01	10000	
Ni	60	103	1	He	10.429	10.429	0.78	30549	0.03	10000	
Cu	63	103	1	He	6.182	6.182	1.75	48995	0.01	10000	
Zn	66	103	1	He	23.318	23.318	2.25	37934	0.06	10000	
As	75	103	1	He	13.416	13.416	1.49	13545	0.10	10000	
Se	78	103	1	He	0.684	0.684	13.92	119	0.57	10000	
Sr	88	103	1	He	8.937	8.937	1.41	72616	0.01	10000	
Mo	95	103	1	He	0.726	0.726	4.16	2735	0.03	2000	
Ag	107	103	1	He	0.073	0.073	7.33	923	0.01	300	
Cd	111	103	1	He	0.110	0.110	31.56	1365	0.01	4000	
Sn	118	115	1	He	2.001	2.001	1.87	11701	0.02	2000	
Sb	123	115	1	He	0.303	0.303	7.03	2073	0.01	300	
Ba	137	115	1	He	45.856	45.856	0.77	111332	0.04	10000	
W	182	209	1	He	0.132	0.132	11.01	5553	0.00	2500	
Tl	205	165	1	He	0.085	0.085	2.49	2986	0.00	5000	
Pb	208	209	1	He	14.107	14.107	0.47	701109	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1230100	0.14	1631381	75.40	30	120	
Sc	45	1	He	701381	2.27	829696	84.53	30	120	
Sc	45	2	NoGas	5543287	0.45	6325638	87.63	30	120	
Rh	103	1	He	2136636	1.32	2345543	91.09	30	120	
In	115	1	He	1281686	0.58	1419467	90.29	30	120	
Tb	159	1	He	3705187	0.39	3888262	95.29	30	120	
Ho	165	1	He	3761004	0.74	3932562	95.64	30	120	
Bi	209	1	He	2820192	0.30	2874805	98.10	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-4-b@20
Data File Name	081SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:14:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.370	0.370	11.45	1530	0.02	10000	
B	11	45	2	NoGas	0.641	0.641	27.18	10863	0.01	300	
Na	23	45	1	He	18.344	18.344	3.65	48406	0.04	500000	
Mg	24	45	1	He	997.206	997.206	2.68	875681	0.11	500000	
Al	27	45	1	He	5798.553	5798.553	3.02	2885786	0.20	200000	
K	39	45	1	He	300.221	300.221	4.01	281217	0.11	500000	
Ca	44	45	1	He	247.475	247.475	0.90	12092	2.05	500000	
Ti	47	45	1	He	49.024	49.024	2.52	12536	0.39	2500	
V	51	45	1	He	13.848	13.848	3.61	87560	0.02	10000	
Cr	52	45	1	He	8.273	8.273	1.61	65058	0.01	10000	
Mn	55	45	1	He	1747.803	1747.803	1.38	10430360	0.02	10000	
Fe	56	45	1	He	13058.869	13058.869	1.95	93493594	0.01	200000	
Co	59	103	1	He	5.616	5.616	0.59	68156	0.01	10000	
Ni	60	103	1	He	6.713	6.713	0.53	20310	0.03	10000	
Cu	63	103	1	He	4.610	4.610	1.65	38076	0.01	10000	
Zn	66	103	1	He	51.168	51.168	1.04	83591	0.06	10000	
As	75	103	1	He	6.299	6.299	0.62	6637	0.09	10000	
Se	78	103	1	He	0.577	0.577	21.11	111	0.52	10000	
Sr	88	103	1	He	3.040	3.040	2.32	25526	0.01	10000	
Mo	95	103	1	He	0.911	0.911	1.81	3518	0.03	2000	
Ag	107	103	1	He	0.163	0.163	4.69	2133	0.01	300	
Cd	111	103	1	He	0.190	0.190	5.62	1587	0.01	4000	
Sn	118	115	1	He	1.725	1.725	4.18	10507	0.02	2000	
Sb	123	115	1	He	0.096	0.096	11.41	1079	0.01	300	
Ba	137	115	1	He	48.545	48.545	0.35	121106	0.04	10000	
W	182	209	1	He	0.389	0.389	2.64	9459	0.00	2500	
Tl	205	165	1	He	0.121	0.121	2.24	4353	0.00	5000	
Pb	208	209	1	He	20.840	20.840	0.86	1058576	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1281007	1.78	1631381	78.52	30	120	
Sc	45	1	He	721423	1.79	829696	86.95	30	120	
Sc	45	2	NoGas	5655989	1.12	6325638	89.41	30	120	
Rh	103	1	He	2202161	0.78	2345543	93.89	30	120	
In	115	1	He	1317052	1.06	1419467	92.78	30	120	
Tb	159	1	He	3779939	1.11	3888262	97.21	30	120	
Ho	165	1	He	3856707	0.68	3932562	98.07	30	120	
Bi	209	1	He	2883411	0.58	2874805	100.30	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-6-b@20
Data File Name	082SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:18:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.340	0.340	3.51	1404	0.02	10000	
B	11	45	2	NoGas	0.685	0.685	22.47	10981	0.01	300	
Na	23	45	1	He	16.769	16.769	2.15	46745	0.04	500000	
Mg	24	45	1	He	901.118	901.118	0.41	804811	0.11	500000	
Al	27	45	1	He	5906.172	5906.172	0.88	2989568	0.20	200000	
K	39	45	1	He	352.585	352.585	1.60	329958	0.11	500000	
Ca	44	45	1	He	94.639	94.639	4.37	5247	1.80	500000	
Ti	47	45	1	He	42.902	42.902	2.61	11156	0.38	2500	
V	51	45	1	He	13.472	13.472	1.49	86631	0.02	10000	
Cr	52	45	1	He	8.303	8.303	2.09	66367	0.01	10000	
Mn	55	45	1	He	782.097	782.097	1.98	4746178	0.02	10000	
Fe	56	45	1	He	12058.229	12058.229	1.85	87774577	0.01	200000	
Co	59	103	1	He	4.630	4.630	0.57	57427	0.01	10000	
Ni	60	103	1	He	6.951	6.951	0.77	21483	0.03	10000	
Cu	63	103	1	He	3.976	3.976	0.70	33776	0.01	10000	
Zn	66	103	1	He	26.262	26.262	1.55	44757	0.06	10000	
As	75	103	1	He	5.206	5.206	0.65	5632	0.09	10000	
Se	78	103	1	He	0.537	0.537	17.68	109	0.49	10000	
Sr	88	103	1	He	1.674	1.674	1.64	14418	0.01	10000	
Mo	95	103	1	He	0.744	0.744	4.80	2948	0.03	2000	
Ag	107	103	1	He	0.042	0.042	9.76	570	0.01	300	
Cd	111	103	1	He	0.125	0.125	19.13	1472	0.01	4000	
Sn	118	115	1	He	1.748	1.748	3.37	10756	0.02	2000	
Sb	123	115	1	He	0.069	0.069	10.92	954	0.01	300	
Ba	137	115	1	He	44.950	44.950	1.01	113433	0.04	10000	
W	182	209	1	He	0.128	0.128	11.24	5635	0.00	2500	
Tl	205	165	1	He	0.100	0.100	0.75	3630	0.00	5000	
Pb	208	209	1	He	10.139	10.139	1.10	517065	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1275668	0.46	1631381	78.20	30	120	
Sc	45	1	He	733458	1.72	829696	88.40	30	120	
Sc	45	2	NoGas	5645193	1.07	6325638	89.24	30	120	
Rh	103	1	He	2250062	0.90	2345543	95.93	30	120	
In	115	1	He	1332174	0.30	1419467	93.85	30	120	
Tb	159	1	He	3818595	0.35	3888262	98.21	30	120	
Ho	165	1	He	3875926	0.79	3932562	98.56	30	120	
Bi	209	1	He	2892618	0.79	2874805	100.62	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-8-b@20
Data File Name	083SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:22:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.418	0.418	5.46	1785	0.02	10000	
B	11	45	2	NoGas	0.427	0.427	39.01	10641	0.00	300	
Na	23	45	1	He	17.231	17.231	2.58	49597	0.03	500000	
Mg	24	45	1	He	897.225	897.225	0.98	837153	0.11	500000	
Al	27	45	1	He	6903.003	6903.003	1.17	3649352	0.19	200000	
K	39	45	1	He	374.269	374.269	1.54	363770	0.10	500000	
Ca	44	45	1	He	151.892	151.892	3.94	8240	1.84	500000	
Ti	47	45	1	He	42.644	42.644	3.00	11586	0.37	2500	
V	51	45	1	He	14.951	14.951	1.04	100441	0.01	10000	
Cr	52	45	1	He	9.725	9.725	1.42	80814	0.01	10000	
Mn	55	45	1	He	759.866	759.866	1.32	4817439	0.02	10000	
Fe	56	45	1	He	13064.034	13064.034	0.59	99363743	0.01	200000	
Co	59	103	1	He	6.105	6.105	2.42	76494	0.01	10000	
Ni	60	103	1	He	9.285	9.285	1.59	28955	0.03	10000	
Cu	63	103	1	He	5.717	5.717	1.21	48355	0.01	10000	
Zn	66	103	1	He	30.168	30.168	0.68	51674	0.06	10000	
As	75	103	1	He	6.401	6.401	2.65	6959	0.09	10000	
Se	78	103	1	He	0.664	0.664	2.55	125	0.53	10000	
Sr	88	103	1	He	1.837	1.837	2.50	15970	0.01	10000	
Mo	95	103	1	He	0.880	0.880	3.81	3513	0.03	2000	
Ag	107	103	1	He	0.035	0.035	9.56	483	0.01	300	
Cd	111	103	1	He	0.112	0.112	10.43	1457	0.01	4000	
Sn	118	115	1	He	1.793	1.793	4.98	11301	0.02	2000	
Sb	123	115	1	He	0.073	0.073	23.84	1000	0.01	300	
Ba	137	115	1	He	50.700	50.700	0.95	131347	0.04	10000	
W	182	209	1	He	0.090	0.090	20.22	5083	0.00	2500	
Tl	205	165	1	He	0.107	0.107	5.47	3966	0.00	5000	
Pb	208	209	1	He	11.359	11.359	0.76	579984	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1324905	0.88	1631381	81.21	30	120	
Sc	45	1	He	766256	1.02	829696	92.35	30	120	
Sc	45	2	NoGas	5907458	1.55	6325638	93.39	30	120	
Rh	103	1	He	2273882	1.52	2345543	96.94	30	120	
In	115	1	He	1367734	0.35	1419467	96.36	30	120	
Tb	159	1	He	3857192	1.03	3888262	99.20	30	120	
Ho	165	1	He	3976714	0.99	3932562	101.12	30	120	
Bi	209	1	He	2896559	0.76	2874805	100.76	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	084_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:26:08-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.972	1.570	193830	1.05	50	99.9	89.5	110.5	
B	11	45	2	NoGas	46.674	1.727	147706	1.96	50	93.3	89.5	110.5	
Na	23	45	1	He	24069.364	2.232	36532812	1.14	25000	96.3	89.5	110.5	
Mg	24	45	1	He	24041.143	2.392	20732680	0.91	25000	96.2	89.5	110.5	
Al	27	45	1	He	236.384	2.249	117814	1.03	250	94.6	89.5	110.5	
K	39	45	1	He	25069.714	2.922	20385336	1.14	25000	100.3	89.5	110.5	
Ca	44	45	1	He	24583.415	2.262	1096076	1.04	25000	98.3	89.5	110.5	
Ti	47	45	1	He	51.450	2.438	12934	2.61	50	102.9	89.5	110.5	
V	51	45	1	He	50.656	3.259	314563	0.72	50	101.3	89.5	110.5	
Cr	52	45	1	He	50.116	2.452	376201	0.80	50	100.2	89.5	110.5	
Mn	55	45	1	He	255.226	2.711	1497749	0.48	250	102.1	89.5	110.5	
Fe	56	45	1	He	12572.521	2.055	88479399	1.21	12500	100.6	89.5	110.5	
Co	59	103	1	He	47.386	1.913	528463	1.77	50	94.8	89.5	110.5	
Ni	60	103	1	He	46.679	2.277	129160	0.46	50	93.4	89.5	110.5	
Cu	63	103	1	He	47.319	2.591	345529	1.42	50	94.6	89.5	110.5	
Zn	66	103	1	He	47.868	2.005	72006	1.38	50	95.7	89.5	110.5	
As	75	103	1	He	49.066	2.290	46567	0.98	50	98.1	89.5	110.5	
Se	78	103	1	He	49.100	3.123	4954	1.73	50	98.2	89.5	110.5	
Sr	88	103	1	He	49.544	1.999	380984	1.14	50	99.1	89.5	110.5	
Mo	95	103	1	He	50.631	2.779	176907	1.57	50	101.3	89.5	110.5	
Ag	107	103	1	He	49.922	2.965	599016	1.64	50	99.8	89.5	110.5	
Cd	111	103	1	He	50.198	2.352	105884	0.58	50	100.4	89.5	110.5	
Sn	118	115	1	He	50.035	1.853	258496	0.82	50	100.1	89.5	110.5	
Sb	123	115	1	He	52.148	0.663	248463	0.39	50	104.3	89.5	110.5	
Ba	137	115	1	He	51.491	1.906	120390	1.58	50	103.0	89.5	110.5	
W	182	209	1	He	50.159	1.707	680402	1.61	50	100.3	89.5	110.5	
Tl	205	165	1	He	51.034	0.610	1759115	1.61	50	102.1	89.5	110.5	
Pb	208	209	1	He	47.888	1.241	2230266	1.19	50	95.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1227045	1.38	1631381	75.22	30	120	
Sc	45	1	He	709282	3.20	829696	85.49	30	120	
Sc	45	2	NoGas	5306633	0.35	6325638	83.89	30	120	
Rh	103	1	He	2024969	2.07	2345543	86.33	30	120	
In	115	1	He	1234490	1.03	1419467	86.97	30	120	
Tb	159	1	He	3681433	0.96	3888262	94.68	30	120	
Ho	165	1	He	3755620	1.04	3932562	95.50	30	120	
Bi	209	1	He	2644816	0.62	2874805	92.00	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	085_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:29:56-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.078	11.8	337	9.5	1	
B	11	45	2	NoGas	0.260	65.7	9099	5.9	20	
Na	23	45	1	He	7.025	21.6	28634	5.6	400	
Mg	24	45	1	He	1.839	71.2	2278	44.5	1000	
Al	27	45	1	He	1.290	16.9	2725	2.5	50	
K	39	45	1	He	10.265	12.3	38683	2.6	1000	
Ca	44	45	1	He	5.186	38.3	1025	7.1	1000	
Ti	47	45	1	He	0.312	13.2	84	9.9	20	
V	51	45	1	He	0.026	353.5	233	232.4	2	
Cr	52	45	1	He	-0.007	-74.3	2027	2.6	2	
Mn	55	45	1	He	0.076	40.9	1411	10.4	2	
Fe	56	45	1	He	23.662	21.3	160208	18.7	50	
Co	59	103	1	He	0.004	47.6	87	23.1	1	
Ni	60	103	1	He	-0.021	-28.3	56	30.8	2	
Cu	63	103	1	He	0.004	157.5	1585	1.9	2	
Zn	66	103	1	He	-0.037	-169.2	1736	5.1	20	
As	75	103	1	He	0.079	7.3	227	3.2	2	
Se	78	103	1	He	0.171	15.8	65	4.0	2	
Sr	88	103	1	He	0.013	30.4	216	15.9	10	
Mo	95	103	1	He	0.894	20.2	3346	20.3	2	
Ag	107	103	1	He	0.013	36.2	167	35.6	0.2	
Cd	111	103	1	He	0.039	21.9	1205	1.0	0.2	
Sn	118	115	1	He	0.405	11.7	3149	6.4	10	
Sb	123	115	1	He	0.497	14.0	3009	9.8	1	
Ba	137	115	1	He	0.006	132.4	104	17.6	5	
W	182	209	1	He	1.072	16.0	18723	12.9	10	
Tl	205	165	1	He	0.041	25.4	1481	24.4	0.5	
Pb	208	209	1	He	0.042	12.2	2831	9.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1232465	1.35	1631381	75.55	30	120	
Sc	45	1	He	668278	2.00	829696	80.55	30	120	
Sc	45	2	NoGas	5332089	0.52	6325638	84.29	30	120	
Rh	103	1	He	2130954	0.75	2345543	90.85	30	120	
In	115	1	He	1273716	1.73	1419467	89.73	30	120	
Tb	159	1	He	3636833	0.72	3888262	93.53	30	120	
Ho	165	1	He	3729127	0.56	3932562	94.83	30	120	
Bi	209	1	He	2766107	0.33	2874805	96.22	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	086CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:33:46-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.987	0.987	4.067	3949	3.16	1	98.7	69.5	130.5	
B	11	2	NoGas	18.141	18.141	4.614	63305	2.63	20	90.7	69.5	130.5	
Na	23	1	He	1060.712	1060.712	2.082	1600027	2.03	1000	106.1	69.5	130.5	
Mg	24	1	He	1057.138	1057.138	0.261	896364	0.12	1000	105.7	69.5	130.5	
Al	27	1	He	46.811	46.811	1.441	24699	1.15	50	93.6	69.5	130.5	
K	39	1	He	1071.984	1071.984	0.775	887112	0.47	1000	107.2	69.5	130.5	
Ca	44	1	He	1027.605	1027.605	0.770	45814	0.99	1000	102.8	69.5	130.5	
Ti	47	1	He	10.230	10.230	4.596	2535	4.32	10	102.3	69.5	130.5	
V	51	1	He	5.296	5.296	2.881	32393	2.62	5	105.9	69.5	130.5	
Cr	52	1	He	2.142	2.142	1.155	17861	0.96	2	107.1	69.5	130.5	
Mn	55	1	He	5.223	5.223	0.742	31125	0.91	5	104.5	69.5	130.5	
Fe	56	1	He	111.584	111.584	0.387	775184	0.59	100	111.6	69.5	130.5	
Co	59	1	He	0.957	0.957	0.376	11254	0.85	1	95.7	69.5	130.5	
Ni	60	1	He	1.940	1.940	3.731	5749	3.18	2	97.0	69.5	130.5	
Cu	63	1	He	1.852	1.852	4.074	15695	3.24	2	92.6	69.5	130.5	
Zn	66	1	He	19.367	19.367	1.295	31657	0.77	20	96.8	69.5	130.5	
As	75	1	He	4.896	4.896	1.404	5013	1.59	5	97.9	69.5	130.5	
Se	78	1	He	5.136	5.136	1.404	586	1.60	5	102.7	69.5	130.5	
Sr	88	1	He	9.599	9.599	2.338	77603	2.38	10	96.0	69.5	130.5	
Mo	95	1	He	10.339	10.339	0.315	37985	0.74	10	103.4	69.5	130.5	
Ag	107	1	He	1.057	1.057	1.857	13329	1.97	1	105.7	69.5	130.5	
Cd	111	1	He	1.093	1.093	8.269	3514	5.40	1	109.3	69.5	130.5	
Sn	118	1	He	10.212	10.212	2.203	55469	2.31	10	102.1	69.5	130.5	
Sb	123	1	He	2.061	2.061	0.378	10728	0.81	2	103.1	69.5	130.5	
Ba	137	1	He	5.155	5.155	2.173	12569	1.72	5	103.1	69.5	130.5	
W	182	1	He	9.639	9.639	1.119	140950	1.35	10	96.4	69.5	130.5	
Tl	205	1	He	2.059	2.059	3.092	71031	2.09	2	103.0	69.5	130.5	
Pb	208	1	He	1.038	1.038	2.448	51786	2.16	1	103.8	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1254792	1.41	1631381	76.92	30	120	
Sc	45	1	He	696417	0.28	829696	83.94	30	120	
Sc	45	2	NoGas	5379970	1.88	6325638	85.05	30	120	
Rh	103	1	He	2126052	0.48	2345543	90.64	30	120	
In	115	1	He	1279074	0.72	1419467	90.11	30	120	
Tb	159	1	He	3679669	1.11	3888262	94.64	30	120	
Ho	165	1	He	3756192	1.11	3932562	95.52	30	120	
Bi	209	1	He	2791841	0.37	2874805	97.11	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176698/1-a@2
Data File Name	087_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:37:37-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.082	30.2	333	27.3	1	
B	11	45	2	NoGas	0.269	107.4	8495	7.9	20	
Na	23	45	1	He	41.922	4.9	77187	2.2	400	
Mg	24	45	1	He	38.035	1.8	31187	4.4	1000	
Al	27	45	1	He	2.071	25.3	3038	10.5	50	
K	39	45	1	He	34.647	3.5	56366	2.4	1000	
Ca	44	45	1	He	114.094	0.3	5505	3.7	1000	
Ti	47	45	1	He	0.738	28.6	181	23.3	20	
V	51	45	1	He	0.091	27.4	609	26.1	2	
Cr	52	45	1	He	0.833	10.5	7786	3.9	2	
Mn	55	45	1	He	0.299	7.8	2598	1.7	2	
Fe	56	45	1	He	21.706	4.6	145380	8.5	50	
Co	59	103	1	He	0.087	12.1	990	12.8	1	
Ni	60	103	1	He	0.228	12.8	728	10.3	2	
Cu	63	103	1	He	0.281	5.4	3465	3.4	2	
Zn	66	103	1	He	1.659	1.8	4069	1.7	20	
As	75	103	1	He	0.414	3.4	523	2.9	2	
Se	78	103	1	He	0.438	19.8	87	10.0	2	
Sr	88	103	1	He	0.372	5.1	2907	3.9	10	
Mo	95	103	1	He	0.592	17.3	2086	16.8	2	
Ag	107	103	1	He	0.025	18.1	296	18.1	0.2	
Cd	111	103	1	He	0.051	52.5	1150	3.8	0.2	
Sn	118	115	1	He	17.642	1.5	88682	1.7	10	Blank Failed
Sb	123	115	1	He	0.395	6.5	2350	6.1	1	
Ba	137	115	1	He	0.853	10.2	2009	8.6	5	
W	182	209	1	He	0.435	22.0	9781	14.5	10	
Tl	205	165	1	He	0.326	3.0	10780	2.5	0.5	
Pb	208	209	1	He	0.190	2.2	10071	1.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1159817	1.72	1631381	71.09	30	120	
Sc	45	1	He	657114	3.97	829696	79.20	30	120	
Sc	45	2	NoGas	4967497	1.59	6325638	78.53	30	120	
Rh	103	1	He	1990053	1.12	2345543	84.84	30	120	
In	115	1	He	1192775	1.11	1419467	84.03	30	120	
Tb	159	1	He	3477857	1.29	3888262	89.45	30	120	
Ho	165	1	He	3587273	0.99	3932562	91.22	30	120	
Bi	209	1	He	2778059	1.37	2874805	96.63	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176698/2-a@2
Data File Name	088LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:41:27-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	453.088	453.088	1.445	1552860	2.09	500	90.6	78.6	110.5	
B	11	2	NoGas	49.636	49.636	0.474	134443	0.57	50	99.3	79.5	120.5	
Na	23	1	He	4765.751	4765.751	1.623	6100939	1.27	5000	95.3	79.5	120.5	
Mg	24	1	He	4854.251	4854.251	1.507	3523839	1.37	5000	97.1	79.5	120.5	
Al	27	1	He	4558.474	4558.474	1.863	1877293	1.81	5000	91.2	79.5	120.5	
K	39	1	He	4869.542	4869.542	1.930	3354754	0.93	5000	97.4	79.5	120.5	
Ca	44	1	He	4380.194	4380.194	1.243	164961	1.48	5000	87.6	79.5	120.5	
Ti	47	1	He	48.383	48.383	1.376	10235	1.37	50	96.8	79.5	120.5	
V	51	1	He	480.535	480.535	2.035	2511040	0.93	500	96.1	71.5	110.5	
Cr	52	1	He	487.340	487.340	2.172	3062426	0.82	500	97.5	69.5	110.5	
Mn	55	1	He	495.065	495.065	2.837	2443864	0.52	500	99.0	79.5	120.5	
Fe	56	1	He	4934.431	4934.431	1.865	29224330	0.84	5000	98.7	79.5	120.5	
Co	59	1	He	425.871	425.871	0.124	4349044	0.26	500	85.2	73.9	110.5	
Ni	60	1	He	420.496	420.496	0.318	1064825	0.54	500	84.1	74.9	110.5	
Cu	63	1	He	439.315	439.315	0.451	2926878	0.68	500	87.9	72.6	110.5	
Zn	66	1	He	404.843	404.843	0.606	546084	0.79	500	81.0	71.5	113.4	
As	75	1	He	396.051	396.051	1.164	343353	1.39	500	79.2	73.4	110.5	
Se	78	1	He	387.080	387.080	1.061	35491	1.22	500	77.4	64.6	110.5	
Sr	88	1	He	457.277	457.277	0.903	3219657	1.13	500	91.5	79.5	120.5	
Mo	95	1	He	49.440	49.440	0.155	158220	0.33	50	98.9	29.5	140.5	
Ag	107	1	He	47.520	47.520	1.041	522268	1.26	50	95.0	59.5	114.5	
Cd	111	1	He	447.506	447.506	0.427	856836	0.65	500	89.5	73.5	110.5	
Sn	118	1	He	544.221	544.221	1.309	2463172	1.45	500	108.8	79.5	120.5	
Sb	123	1	He	49.256	49.256	0.222	206315	0.86	50	98.5	67.5	113.4	
Ba	137	1	He	483.477	483.477	0.724	993032	1.30	500	96.7	69.5	110.5	
W	182	1	He	46.262	46.262	2.220	611239	0.32	50	92.5	74.6	125.4	
Tl	205	1	He	120.081	120.081	1.953	3821197	0.86	125	96.1	70.6	110.5	
Pb	208	1	He	456.060	456.060	0.846	20677425	1.35	500	91.2	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1084208	0.89	1631381	66.46	30	120	
Sc	45	1	He	596812	2.73	829696	71.93	30	120	
Sc	45	2	NoGas	4557301	0.13	6325638	72.04	30	120	
Rh	103	1	He	1854069	0.23	2345543	79.05	30	120	
In	115	1	He	1085051	0.65	1419467	76.44	30	120	
Tb	159	1	He	3405101	0.79	3888262	87.57	30	120	
Ho	165	1	He	3467870	1.15	3932562	88.18	30	120	
Bi	209	1	He	2575718	1.94	2874805	89.60	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-d@20
Data File Name	089SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:45:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.429	0.429	1.41	1682	0.03	10000	
B	11	45	2	NoGas	0.902	0.902	9.82	10748	0.01	300	
Na	23	45	1	He	12.661	12.661	2.52	36745	0.03	500000	
Mg	24	45	1	He	760.198	760.198	1.21	619148	0.12	500000	
Al	27	45	1	He	4009.435	4009.435	1.89	1850663	0.22	200000	
K	39	45	1	He	331.075	331.075	2.09	284379	0.12	500000	
Ca	44	45	1	He	64.743	64.743	3.22	3528	1.83	500000	
Ti	47	45	1	He	33.655	33.655	4.13	7981	0.42	2500	
V	51	45	1	He	11.037	11.037	3.49	64717	0.02	10000	
Cr	52	45	1	He	9.831	9.831	0.88	71282	0.01	10000	
Mn	55	45	1	He	815.405	815.405	1.02	4511709	0.02	10000	
Fe	56	45	1	He	20372.567	20372.567	1.25	135221492	0.02	200000	
Co	59	103	1	He	5.451	5.451	0.34	61020	0.01	10000	
Ni	60	103	1	He	8.125	8.125	1.74	22648	0.04	10000	
Cu	63	103	1	He	5.550	5.550	0.19	41975	0.01	10000	
Zn	66	103	1	He	19.198	19.198	1.36	29996	0.06	10000	
As	75	103	1	He	7.144	7.144	1.37	6924	0.10	10000	
Se	78	103	1	He	1.004	1.004	3.18	146	0.69	10000	
Sr	88	103	1	He	2.079	2.079	3.07	16134	0.01	10000	
Mo	95	103	1	He	0.992	0.992	8.39	3532	0.03	2000	
Ag	107	103	1	He	0.023	0.023	8.43	277	0.01	300	
Cd	111	103	1	He	0.156	0.156	12.87	1394	0.01	4000	
Sn	118	115	1	He	2.204	2.204	6.09	12112	0.02	2000	
Sb	123	115	1	He	0.262	0.262	16.22	1771	0.01	300	
Ba	137	115	1	He	30.115	30.115	2.13	69312	0.04	10000	
W	182	209	1	He	0.613	0.613	14.94	12124	0.01	2500	
Tl	205	165	1	He	0.160	0.160	12.22	5474	0.00	5000	
Pb	208	209	1	He	6.744	6.744	0.07	325559	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1215406	2.28	1631381	74.50	30	120	
Sc	45	1	He	668727	0.94	829696	80.60	30	120	
Sc	45	2	NoGas	5196121	1.54	6325638	82.14	30	120	
Rh	103	1	He	2031059	0.47	2345543	86.59	30	120	
In	115	1	He	1214562	0.44	1419467	85.56	30	120	
Tb	159	1	He	3569566	0.82	3888262	91.80	30	120	
Ho	165	1	He	3680434	0.94	3932562	93.59	30	120	
Bi	209	1	He	2735887	1.10	2874805	95.17	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-1-d@100
Data File Name	090SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:48:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.125	0.125	2.36	507	0.02	10000	
B	11	45	2	NoGas	-0.191	-0.191	-53.14	7472	0.00	300	
Na	23	45	1	He	3.854	3.854	1.11	23924	0.02	500000	
Mg	24	45	1	He	158.051	158.051	0.13	128186	0.12	500000	
Al	27	45	1	He	845.935	845.935	0.86	388592	0.22	200000	
K	39	45	1	He	71.279	71.279	3.79	84664	0.08	500000	
Ca	44	45	1	He	12.241	12.241	5.36	1310	0.93	500000	
Ti	47	45	1	He	6.795	6.795	9.77	1605	0.42	2500	
V	51	45	1	He	2.413	2.413	4.94	14096	0.02	10000	
Cr	52	45	1	He	2.003	2.003	1.22	16028	0.01	10000	
Mn	55	45	1	He	170.526	170.526	0.45	935716	0.02	10000	
Fe	56	45	1	He	4281.929	4281.929	1.42	28164314	0.02	200000	
Co	59	103	1	He	1.110	1.110	1.50	12645	0.01	10000	
Ni	60	103	1	He	1.627	1.627	5.75	4694	0.03	10000	
Cu	63	103	1	He	1.082	1.082	4.15	9514	0.01	10000	
Zn	66	103	1	He	3.834	3.834	3.65	7469	0.05	10000	
As	75	103	1	He	1.465	1.465	3.69	1555	0.09	10000	
Se	78	103	1	He	0.224	0.224	30.82	68	0.33	10000	
Sr	88	103	1	He	0.419	0.419	2.36	3381	0.01	10000	
Mo	95	103	1	He	0.229	0.229	9.23	869	0.03	2000	
Ag	107	103	1	He	0.006	0.006	24.63	76	0.01	300	
Cd	111	103	1	He	0.080	0.080	51.38	1253	0.01	4000	
Sn	118	115	1	He	0.413	0.413	10.02	3123	0.01	2000	
Sb	123	115	1	He	0.029	0.029	33.80	699	0.00	300	
Ba	137	115	1	He	5.975	5.975	0.66	14178	0.04	10000	
W	182	209	1	He	0.165	0.165	23.07	5898	0.00	2500	
Tl	205	165	1	He	0.030	0.030	8.96	1082	0.00	5000	
Pb	208	209	1	He	1.389	1.389	0.72	68240	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1199620	1.04	1631381	73.53	30	120	
Sc	45	1	He	662630	1.23	829696	79.86	30	120	
Sc	45	2	NoGas	5144449	2.60	6325638	81.33	30	120	
Rh	103	1	He	2061403	0.86	2345543	87.89	30	120	
In	115	1	He	1245896	0.22	1419467	87.77	30	120	
Tb	159	1	He	3632495	0.73	3888262	93.42	30	120	
Ho	165	1	He	3724335	1.65	3932562	94.71	30	120	
Bi	209	1	He	2758092	0.84	2874805	95.94	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-1-d@20
Data File Name	091SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:52:45-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	992.707	992.707	1.10	3465841	0.03	10000	
B	11	45	2	NoGas	100.229	100.229	1.46	282310	0.04	300	
Na	23	45	1	He	9614.176	9614.176	4.53	13653520	0.07	500000	
Mg	24	45	1	He	10421.737	10421.737	5.66	8399155	0.12	500000	
Al	27	45	1	He	12829.584	12829.584	3.51	5867836	0.22	200000	
K	39	45	1	He	10248.698	10248.698	4.73	7809784	0.13	500000	
Ca	44	45	1	He	8821.553	8821.553	3.68	368351	2.39	500000	
Ti	47	45	1	He	126.391	126.391	5.22	29675	0.43	2500	
V	51	45	1	He	969.040	969.040	3.20	5628384	0.02	10000	
Cr	52	45	1	He	969.836	969.836	3.77	6770832	0.01	10000	
Mn	55	45	1	He	1756.092	1756.092	4.26	9631484	0.02	10000	
Fe	56	45	1	He	29531.031	29531.031	4.03	194325086	0.02	200000	
Co	59	103	1	He	919.939	919.939	0.89	9746717	0.01	10000	
Ni	60	103	1	He	947.352	947.352	0.69	2488539	0.04	10000	
Cu	63	103	1	He	941.043	941.043	0.67	6502333	0.01	10000	
Zn	66	103	1	He	951.089	951.089	0.60	1328706	0.07	10000	
As	75	103	1	He	922.709	922.709	0.78	829640	0.11	10000	
Se	78	103	1	He	934.493	934.493	0.90	88822	1.05	10000	
Sr	88	103	1	He	979.202	979.202	1.13	7152011	0.01	10000	
Mo	95	103	1	He	99.214	99.214	2.82	329230	0.03	2000	
Ag	107	103	1	He	99.288	99.288	0.96	1131951	0.01	300	
Cd	111	103	1	He	1043.018	1043.018	0.43	2070481	0.05	4000	
Sn	118	115	1	He	1100.448	1100.448	1.34	5223078	0.02	2000	
Sb	123	115	1	He	105.784	105.784	0.77	464131	0.02	300	
Ba	137	115	1	He	1152.614	1152.614	1.27	2482836	0.05	10000	
W	182	209	1	He	94.385	94.385	1.05	1250426	0.01	2500	
Tl	205	165	1	He	254.353	254.353	1.58	8339423	0.00	5000	
Pb	208	209	1	He	991.858	991.858	0.80	45210965	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1104639	1.53	1631381	67.71	30	120	
Sc	45	1	He	663990	6.03	829696	80.03	30	120	
Sc	45	2	NoGas	4869439	0.71	6325638	76.98	30	120	
Rh	103	1	He	1923572	2.11	2345543	82.01	30	120	
In	115	1	He	1137997	0.59	1419467	80.17	30	120	
Tb	159	1	He	3459432	1.39	3888262	88.97	30	120	
Ho	165	1	He	3572857	1.07	3932562	90.85	30	120	
Bi	209	1	He	2589269	0.80	2874805	90.07	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-e du@20
Data File Name	092SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:56:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.577	0.577	12.08	2156	0.03	10000	
B	11	45	2	NoGas	1.062	1.062	10.48	11044	0.01	300	
Na	23	45	1	He	16.126	16.126	2.10	40364	0.04	500000	
Mg	24	45	1	He	850.408	850.408	0.80	670284	0.13	500000	
Al	27	45	1	He	4722.972	4722.972	1.37	2109702	0.22	200000	
K	39	45	1	He	400.822	400.822	1.18	326988	0.12	500000	
Ca	44	45	1	He	69.559	69.559	5.03	3612	1.93	500000	
Ti	47	45	1	He	32.551	32.551	1.89	7474	0.44	2500	
V	51	45	1	He	12.460	12.460	2.19	70722	0.02	10000	
Cr	52	45	1	He	11.112	11.112	0.73	77716	0.01	10000	
Mn	55	45	1	He	693.326	693.326	0.86	3713176	0.02	10000	
Fe	56	45	1	He	20858.480	20858.480	1.12	133998261	0.02	200000	
Co	59	103	1	He	4.921	4.921	1.89	54074	0.01	10000	
Ni	60	103	1	He	8.508	8.508	1.89	23275	0.04	10000	
Cu	63	103	1	He	5.763	5.763	2.84	42723	0.01	10000	
Zn	66	103	1	He	20.602	20.602	1.50	31477	0.07	10000	
As	75	103	1	He	7.799	7.799	3.40	7405	0.11	10000	
Se	78	103	1	He	1.625	1.625	3.89	204	0.80	10000	
Sr	88	103	1	He	2.413	2.413	5.01	18362	0.01	10000	
Mo	95	103	1	He	2.532	2.532	14.89	8752	0.03	2000	
Ag	107	103	1	He	0.027	0.027	32.39	322	0.01	300	
Cd	111	103	1	He	0.188	0.188	15.08	1434	0.01	4000	
Sn	118	115	1	He	7.525	7.525	9.60	38322	0.02	2000	
Sb	123	115	1	He	0.896	0.896	13.95	4646	0.02	300	
Ba	137	115	1	He	29.949	29.949	1.71	67659	0.04	10000	
W	182	209	1	He	2.183	2.183	12.46	33354	0.01	2500	
Tl	205	165	1	He	0.233	0.233	15.47	7806	0.00	5000	
Pb	208	209	1	He	7.086	7.086	1.06	335294	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1165247	0.88	1631381	71.43	30	120	
Sc	45	1	He	647233	0.77	829696	78.01	30	120	
Sc	45	2	NoGas	5117030	0.59	6325638	80.89	30	120	
Rh	103	1	He	1994121	1.62	2345543	85.02	30	120	
In	115	1	He	1192217	1.04	1419467	83.99	30	120	
Tb	159	1	He	3520877	1.90	3888262	90.55	30	120	
Ho	165	1	He	3626811	0.42	3932562	92.23	30	120	
Bi	209	1	He	2682163	0.43	2874805	93.30	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-f ms@20
Data File Name	093SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:00:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.166	5.166	3.77	20245	0.03	10000	
B	11	45	2	NoGas	4.331	4.331	0.76	21661	0.02	300	
Na	23	45	1	He	476.243	476.243	0.56	730995	0.07	500000	
Mg	24	45	1	He	1302.356	1302.356	1.06	1106965	0.12	500000	
Al	27	45	1	He	5171.155	5171.155	0.90	2491909	0.21	200000	
K	39	45	1	He	763.129	763.129	1.74	642430	0.12	500000	
Ca	44	45	1	He	540.689	540.689	1.37	24568	2.20	500000	
Ti	47	45	1	He	42.444	42.444	0.07	10509	0.40	2500	
V	51	45	1	He	17.592	17.592	1.71	107674	0.02	10000	
Cr	52	45	1	He	15.066	15.066	1.19	112910	0.01	10000	
Mn	55	45	1	He	805.138	805.138	0.58	4651656	0.02	10000	
Fe	56	45	1	He	21674.817	21674.817	1.86	150217087	0.01	200000	
Co	59	103	1	He	10.378	10.378	0.44	118081	0.01	10000	
Ni	60	103	1	He	12.898	12.898	2.04	36484	0.04	10000	
Cu	63	103	1	He	10.263	10.263	1.34	77625	0.01	10000	
Zn	66	103	1	He	25.475	25.475	0.59	39900	0.06	10000	
As	75	103	1	He	12.260	12.260	2.46	11975	0.10	10000	
Se	78	103	1	He	5.153	5.153	4.67	571	0.90	10000	
Sr	88	103	1	He	6.881	6.881	1.21	54055	0.01	10000	
Mo	95	103	1	He	5.483	5.483	0.79	19591	0.03	2000	
Ag	107	103	1	He	4.717	4.717	0.93	57745	0.01	300	
Cd	111	103	1	He	4.767	4.767	1.02	11239	0.04	4000	
Sn	118	115	1	He	7.253	7.253	2.69	38682	0.02	2000	
Sb	123	115	1	He	1.859	1.859	0.39	9486	0.02	300	
Ba	137	115	1	He	34.923	34.923	1.28	82484	0.04	10000	
W	182	209	1	He	3.559	3.559	1.35	53266	0.01	2500	
Tl	205	165	1	He	4.468	4.468	1.05	151627	0.00	5000	
Pb	208	209	1	He	11.849	11.849	1.48	571700	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1238432	1.90	1631381	75.91	30	120	
Sc	45	1	He	698242	0.49	829696	84.16	30	120	
Sc	45	2	NoGas	5417956	1.27	6325638	85.65	30	120	
Rh	103	1	He	2064968	1.05	2345543	88.04	30	120	
In	115	1	He	1246579	0.62	1419467	87.82	30	120	
Tb	159	1	He	3589538	1.31	3888262	92.32	30	120	
Ho	165	1	He	3696058	0.98	3932562	93.99	30	120	
Bi	209	1	He	2737596	1.43	2874805	95.23	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-2-b@20
Data File Name	094SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:03:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.467	0.467	13.87	1893	0.02	10000	
B	11	45	2	NoGas	0.891	0.891	11.13	11478	0.01	300	
Na	23	45	1	He	17.001	17.001	5.08	46356	0.04	500000	
Mg	24	45	1	He	1201.776	1201.776	2.07	1055856	0.11	500000	
Al	27	45	1	He	6065.473	6065.473	1.34	3020675	0.20	200000	
K	39	45	1	He	538.160	538.160	1.20	478104	0.11	500000	
Ca	44	45	1	He	97.548	97.548	3.92	5297	1.84	500000	
Ti	47	45	1	He	35.332	35.332	1.95	9043	0.39	2500	
V	51	45	1	He	12.309	12.309	1.14	77903	0.02	10000	
Cr	52	45	1	He	10.877	10.877	1.99	84869	0.01	10000	
Mn	55	45	1	He	338.146	338.146	0.58	2019972	0.02	10000	
Fe	56	45	1	He	18569.541	18569.541	2.56	133018844	0.01	200000	
Co	59	103	1	He	4.647	4.647	2.29	55409	0.01	10000	
Ni	60	103	1	He	9.780	9.780	2.26	29013	0.03	10000	
Cu	63	103	1	He	8.571	8.571	1.19	68183	0.01	10000	
Zn	66	103	1	He	25.270	25.270	3.19	41472	0.06	10000	
As	75	103	1	He	7.458	7.458	1.67	7692	0.10	10000	
Se	78	103	1	He	0.855	0.855	16.73	139	0.61	10000	
Sr	88	103	1	He	3.344	3.344	2.40	27582	0.01	10000	
Mo	95	103	1	He	0.915	0.915	6.19	3472	0.03	2000	
Ag	107	103	1	He	0.014	0.014	8.48	186	0.01	300	
Cd	111	103	1	He	0.124	0.124	11.97	1414	0.01	4000	
Sn	118	115	1	He	2.248	2.248	2.61	13150	0.02	2000	
Sb	123	115	1	He	0.176	0.176	4.23	1460	0.01	300	
Ba	137	115	1	He	36.163	36.163	1.47	88698	0.04	10000	
W	182	209	1	He	0.298	0.298	2.24	7962	0.00	2500	
Tl	205	165	1	He	0.115	0.115	5.18	4107	0.00	5000	
Pb	208	209	1	He	8.609	8.609	1.52	429061	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1257849	0.40	1631381	77.10	30	120	
Sc	45	1	He	721740	0.76	829696	86.99	30	120	
Sc	45	2	NoGas	5566403	0.86	6325638	88.00	30	120	
Rh	103	1	He	2163899	2.04	2345543	92.26	30	120	
In	115	1	He	1294608	0.82	1419467	91.20	30	120	
Tb	159	1	He	3737830	1.40	3888262	96.13	30	120	
Ho	165	1	He	3841436	1.59	3932562	97.68	30	120	
Bi	209	1	He	2826382	1.21	2874805	98.32	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-4-b@20
Data File Name	095SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:07:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.415	0.415	13.86	1689	0.02	10000	
B	11	45	2	NoGas	5.003	5.003	4.47	24521	0.02	300	
Na	23	45	1	He	188.462	188.462	1.63	311570	0.06	500000	
Mg	24	45	1	He	1345.872	1345.872	2.64	1183829	0.11	500000	
Al	27	45	1	He	4815.102	4815.102	2.63	2401439	0.20	200000	
K	39	45	1	He	1850.909	1850.909	4.24	1564762	0.12	500000	
Ca	44	45	1	He	-31.607	-31.607	-38.04	-568	5.56	500000	
Ti	47	45	1	He	43.488	43.488	2.72	11142	0.39	2500	
V	51	45	1	He	8.606	8.606	3.69	54548	0.02	10000	
Cr	52	45	1	He	8.793	8.793	2.53	69126	0.01	10000	
Mn	55	45	1	He	676.560	676.560	2.53	4045357	0.02	10000	
Fe	56	45	1	He	12296.296	12296.296	3.24	88189008	0.01	200000	
Co	59	103	1	He	4.329	4.329	2.07	51757	0.01	10000	
Ni	60	103	1	He	10.642	10.642	1.16	31643	0.03	10000	
Cu	63	103	1	He	9.818	9.818	2.01	78066	0.01	10000	
Zn	66	103	1	He	25.404	25.404	2.55	41794	0.06	10000	
As	75	103	1	He	20.187	20.187	1.98	20616	0.10	10000	
Se	78	103	1	He	0.458	0.458	7.02	97	0.47	10000	
Sr	88	103	1	He	229.505	229.505	0.80	1890490	0.01	10000	
Mo	95	103	1	He	58.203	58.203	2.78	217863	0.03	2000	
Ag	107	103	1	He	0.015	0.015	9.73	203	0.01	300	
Cd	111	103	1	He	0.136	0.136	26.80	1442	0.01	4000	
Sn	118	115	1	He	2.126	2.126	0.37	12516	0.02	2000	
Sb	123	115	1	He	0.068	0.068	2.22	923	0.01	300	
Ba	137	115	1	He	33.687	33.687	1.38	82796	0.04	10000	
W	182	209	1	He	1.270	1.270	6.30	21834	0.01	2500	
Tl	205	165	1	He	0.063	0.063	2.35	2289	0.00	5000	
Pb	208	209	1	He	38.823	38.823	1.33	1919125	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1262952	2.29	1631381	77.42	30	120	
Sc	45	1	He	722845	2.11	829696	87.12	30	120	
Sc	45	2	NoGas	5602676	0.58	6325638	88.57	30	120	
Rh	103	1	He	2169173	1.08	2345543	92.48	30	120	
In	115	1	He	1297211	0.99	1419467	91.39	30	120	
Tb	159	1	He	3720269	0.72	3888262	95.68	30	120	
Ho	165	1	He	3843567	0.81	3932562	97.74	30	120	
Bi	209	1	He	2807378	1.55	2874805	97.65	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	096_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:11:29-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.142	2.538	178372	3.17	50	96.3	89.5	110.5	
B	11	45	2	NoGas	45.329	1.085	137145	2.36	50	90.7	89.5	110.5	
Na	23	45	1	He	24413.908	2.817	35068214	0.97	25000	97.7	89.5	110.5	
Mg	24	45	1	He	24597.227	3.001	20075914	1.64	25000	98.4	89.5	110.5	
Al	27	45	1	He	240.832	1.682	113586	2.05	250	96.3	89.5	110.5	
K	39	45	1	He	25306.817	3.269	19474373	0.53	25000	101.2	89.5	110.5	
Ca	44	45	1	He	24753.276	2.103	1044608	1.21	25000	99.0	89.5	110.5	
Ti	47	45	1	He	50.608	2.733	12044	3.92	50	101.2	89.5	110.5	
V	51	45	1	He	50.152	1.889	294874	1.98	50	100.3	89.5	110.5	
Cr	52	45	1	He	50.461	1.569	358571	1.76	50	100.9	89.5	110.5	
Mn	55	45	1	He	256.426	2.297	1424461	1.63	250	102.6	89.5	110.5	
Fe	56	45	1	He	12682.992	2.209	84477223	1.17	12500	101.5	89.5	110.5	
Co	59	103	1	He	46.325	0.383	502053	2.04	50	92.7	89.5	110.5	
Ni	60	103	1	He	45.999	0.905	123703	2.04	50	92.0	89.5	110.5	
Cu	63	103	1	He	46.710	1.108	331467	0.63	50	93.4	89.5	110.5	
Zn	66	103	1	He	47.045	0.729	68802	2.11	50	94.1	89.5	110.5	
As	75	103	1	He	48.029	0.464	44304	1.94	50	96.1	89.5	110.5	
Se	78	103	1	He	47.998	0.301	4708	1.49	50	96.0	89.5	110.5	
Sr	88	103	1	He	48.211	1.083	360248	1.03	50	96.4	89.5	110.5	
Mo	95	103	1	He	50.820	2.463	172534	1.39	50	101.6	89.5	110.5	
Ag	107	103	1	He	49.320	0.795	575129	0.96	50	98.6	89.5	110.5	
Cd	111	103	1	He	49.673	0.421	101840	1.74	50	99.3	89.5	110.5	
Sn	118	115	1	He	50.481	0.962	251084	0.17	50	101.0	89.5	110.5	
Sb	123	115	1	He	51.709	0.161	237199	0.91	50	103.4	89.5	110.5	
Ba	137	115	1	He	51.233	0.362	115330	1.01	50	102.5	89.5	110.5	
W	182	209	1	He	48.907	2.330	650772	1.45	50	97.8	89.5	110.5	
Tl	205	165	1	He	50.124	5.143	1671040	4.33	50	100.2	89.5	110.5	
Pb	208	209	1	He	47.350	0.722	2163204	1.03	50	94.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1171880	1.12	1631381	71.83	30	120	
Sc	45	1	He	671339	3.35	829696	80.91	30	120	
Sc	45	2	NoGas	5064740	1.41	6325638	80.07	30	120	
Rh	103	1	He	1967420	1.73	2345543	83.88	30	120	
In	115	1	He	1188437	0.79	1419467	83.72	30	120	
Tb	159	1	He	3513397	0.68	3888262	90.36	30	120	
Ho	165	1	He	3633573	0.84	3932562	92.40	30	120	
Bi	209	1	He	2594468	1.35	2874805	90.25	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	097_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:15:16-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.073	46.6	307	41.9	1	
B	11	45	2	NoGas	0.480	110.3	9180	16.4	20	
Na	23	45	1	He	5.899	21.0	25615	5.3	400	
Mg	24	45	1	He	1.413	62.8	1837	35.7	1000	
Al	27	45	1	He	0.176	101.1	2096	3.0	50	
K	39	45	1	He	9.600	23.2	36156	3.1	1000	
Ca	44	45	1	He	1.999	78.7	844	5.9	1000	
Ti	47	45	1	He	0.286	16.6	74	15.7	20	
V	51	45	1	He	0.095	71.9	605	61.0	2	
Cr	52	45	1	He	0.011	134.7	2036	3.5	2	
Mn	55	45	1	He	0.047	23.6	1183	3.9	2	
Fe	56	45	1	He	24.205	22.4	155263	20.3	50	
Co	59	103	1	He	0.005	71.5	92	39.7	1	
Ni	60	103	1	He	-0.005	-205.0	98	29.0	2	
Cu	63	103	1	He	-0.003	-627.2	1468	8.5	2	
Zn	66	103	1	He	-0.084	-39.2	1588	2.2	20	
As	75	103	1	He	0.103	14.1	240	6.6	2	
Se	78	103	1	He	0.123	37.0	57	8.6	2	
Sr	88	103	1	He	0.010	69.5	181	29.8	10	
Mo	95	103	1	He	1.096	17.8	3906	18.5	2	
Ag	107	103	1	He	0.012	18.7	153	17.3	0.2	
Cd	111	103	1	He	0.059	52.4	1191	4.5	0.2	
Sn	118	115	1	He	0.485	6.1	3430	4.0	10	
Sb	123	115	1	He	0.545	20.2	3113	15.9	1	
Ba	137	115	1	He	0.000	-1213.5	86	6.0	5	
W	182	209	1	He	1.130	12.7	18849	10.2	10	
Tl	205	165	1	He	0.042	22.0	1448	21.0	0.5	
Pb	208	209	1	He	0.062	5.8	3685	4.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1191214	1.03	1631381	73.02	30	120	
Sc	45	1	He	633128	1.53	829696	76.31	30	120	
Sc	45	2	NoGas	5014953	0.15	6325638	79.28	30	120	
Rh	103	1	He	2034734	0.93	2345543	86.75	30	120	
In	115	1	He	1221412	0.73	1419467	86.05	30	120	
Tb	159	1	He	3538460	2.29	3888262	91.00	30	120	
Ho	165	1	He	3615402	0.07	3932562	91.94	30	120	
Bi	209	1	He	2668069	0.15	2874805	92.81	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-11-b@20
Data File Name	098SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:19:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.283	0.283	9.26	1141	0.02	10000	
B	11	45	2	NoGas	0.619	0.619	34.55	10029	0.01	300	
Na	23	45	1	He	35.280	35.280	1.83	69227	0.05	500000	
Mg	24	45	1	He	893.550	893.550	1.18	728582	0.12	500000	
Al	27	45	1	He	5726.538	5726.538	2.80	2645118	0.22	200000	
K	39	45	1	He	364.692	364.692	2.56	310477	0.12	500000	
Ca	44	45	1	He	532.910	532.910	1.95	23229	2.29	500000	
Ti	47	45	1	He	62.182	62.182	2.47	14755	0.42	2500	
V	51	45	1	He	10.880	10.880	4.59	63865	0.02	10000	
Cr	52	45	1	He	8.698	8.698	1.54	63379	0.01	10000	
Mn	55	45	1	He	463.906	463.906	1.99	2570144	0.02	10000	
Fe	56	45	1	He	8837.164	8837.164	3.11	58716182	0.02	200000	
Co	59	103	1	He	3.744	3.744	1.79	42112	0.01	10000	
Ni	60	103	1	He	10.018	10.018	2.74	28023	0.04	10000	
Cu	63	103	1	He	4.652	4.652	2.21	35583	0.01	10000	
Zn	66	103	1	He	23.609	23.609	2.91	36656	0.06	10000	
As	75	103	1	He	7.181	7.181	2.09	6991	0.10	10000	
Se	78	103	1	He	0.525	0.525	26.73	98	0.54	10000	
Sr	88	103	1	He	7.278	7.278	1.00	56503	0.01	10000	
Mo	95	103	1	He	0.925	0.925	4.45	3309	0.03	2000	
Ag	107	103	1	He	0.022	0.022	3.59	271	0.01	300	
Cd	111	103	1	He	0.105	0.105	43.33	1293	0.01	4000	
Sn	118	115	1	He	1.800	1.800	3.24	10022	0.02	2000	
Sb	123	115	1	He	0.195	0.195	6.15	1450	0.01	300	
Ba	137	115	1	He	37.886	37.886	1.44	86776	0.04	10000	
W	182	209	1	He	0.290	0.290	5.71	7487	0.00	2500	
Tl	205	165	1	He	0.096	0.096	7.47	3295	0.00	5000	
Pb	208	209	1	He	4.781	4.781	0.92	227785	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1236865	0.82	1631381	75.82	30	120	
Sc	45	1	He	669697	2.79	829696	80.72	30	120	
Sc	45	2	NoGas	5257615	1.12	6325638	83.12	30	120	
Rh	103	1	He	2040782	1.79	2345543	87.01	30	120	
In	115	1	He	1208953	0.19	1419467	85.17	30	120	
Tb	159	1	He	3553843	1.06	3888262	91.40	30	120	
Ho	165	1	He	3663154	0.37	3932562	93.15	30	120	
Bi	209	1	He	2697422	0.36	2874805	93.83	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-13-b@20
Data File Name	099SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:22:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.304	0.304	12.45	1248	0.02	10000	
B	11	45	2	NoGas	0.125	0.125	64.19	8999	0.00	300	
Na	23	45	1	He	10.950	10.950	1.53	36129	0.03	500000	
Mg	24	45	1	He	613.830	613.830	0.96	526812	0.12	500000	
Al	27	45	1	He	3990.504	3990.504	1.32	1940377	0.21	200000	
K	39	45	1	He	296.836	296.836	2.24	271945	0.11	500000	
Ca	44	45	1	He	107.479	107.479	3.55	5608	1.92	500000	
Ti	47	45	1	He	42.599	42.599	1.37	10641	0.40	2500	
V	51	45	1	He	7.897	7.897	0.64	48813	0.02	10000	
Cr	52	45	1	He	7.505	7.505	1.11	57839	0.01	10000	
Mn	55	45	1	He	210.647	210.647	0.89	1228535	0.02	10000	
Fe	56	45	1	He	10188.155	10188.155	0.76	71238393	0.01	200000	
Co	59	103	1	He	4.225	4.225	1.62	49567	0.01	10000	
Ni	60	103	1	He	8.725	8.725	0.43	25471	0.03	10000	
Cu	63	103	1	He	4.777	4.777	0.58	38067	0.01	10000	
Zn	66	103	1	He	29.524	29.524	2.73	47362	0.06	10000	
As	75	103	1	He	10.929	10.929	0.20	11018	0.10	10000	
Se	78	103	1	He	0.472	0.472	19.91	97	0.49	10000	
Sr	88	103	1	He	1.844	1.844	2.57	15009	0.01	10000	
Mo	95	103	1	He	0.845	0.845	7.02	3158	0.03	2000	
Ag	107	103	1	He	0.014	0.014	20.19	181	0.01	300	
Cd	111	103	1	He	0.139	0.139	10.03	1423	0.01	4000	
Sn	118	115	1	He	1.697	1.697	2.68	10000	0.02	2000	
Sb	123	115	1	He	0.090	0.090	10.20	1011	0.01	300	
Ba	137	115	1	He	24.867	24.867	0.70	59988	0.04	10000	
W	182	209	1	He	0.136	0.136	24.64	5564	0.00	2500	
Tl	205	165	1	He	0.070	0.070	2.44	2480	0.00	5000	
Pb	208	209	1	He	5.182	5.182	0.50	255917	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1264330	1.35	1631381	77.50	30	120	
Sc	45	1	He	704445	0.97	829696	84.90	30	120	
Sc	45	2	NoGas	5518604	1.14	6325638	87.24	30	120	
Rh	103	1	He	2127860	0.31	2345543	90.72	30	120	
In	115	1	He	1272540	1.48	1419467	89.65	30	120	
Tb	159	1	He	3681597	0.66	3888262	94.68	30	120	
Ho	165	1	He	3769797	0.91	3932562	95.86	30	120	
Bi	209	1	He	2796734	1.07	2874805	97.28	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-14-b@20
Data File Name	100SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:26:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.307	0.307	2.97	1300	0.02	10000	
B	11	45	2	NoGas	0.842	0.842	3.51	11534	0.01	300	
Na	23	45	1	He	16.855	16.855	3.41	46456	0.04	500000	
Mg	24	45	1	He	875.475	875.475	1.60	774607	0.11	500000	
Al	27	45	1	He	4245.382	4245.382	1.89	2129231	0.20	200000	
K	39	45	1	He	423.380	423.380	2.71	385779	0.11	500000	
Ca	44	45	1	He	120.276	120.276	1.33	6371	1.89	500000	
Ti	47	45	1	He	51.701	51.701	3.17	13316	0.39	2500	
V	51	45	1	He	9.655	9.655	0.26	61544	0.02	10000	
Cr	52	45	1	He	8.530	8.530	2.07	67488	0.01	10000	
Mn	55	45	1	He	317.555	317.555	2.56	1909584	0.02	10000	
Fe	56	45	1	He	11300.374	11300.374	1.65	81498223	0.01	200000	
Co	59	103	1	He	11.276	11.276	2.74	135272	0.01	10000	
Ni	60	103	1	He	13.417	13.417	2.43	40019	0.03	10000	
Cu	63	103	1	He	6.088	6.088	1.81	49210	0.01	10000	
Zn	66	103	1	He	63.113	63.113	2.69	101524	0.06	10000	
As	75	103	1	He	48.011	48.011	1.41	49021	0.10	10000	
Se	78	103	1	He	0.442	0.442	32.88	96	0.46	10000	
Sr	88	103	1	He	5.045	5.045	1.63	41829	0.01	10000	
Mo	95	103	1	He	0.986	0.986	4.15	3760	0.03	2000	
Ag	107	103	1	He	0.030	0.030	14.81	397	0.01	300	
Cd	111	103	1	He	0.172	0.172	4.54	1532	0.01	4000	
Sn	118	115	1	He	1.700	1.700	5.30	10329	0.02	2000	
Sb	123	115	1	He	0.116	0.116	12.76	1178	0.01	300	
Ba	137	115	1	He	29.214	29.214	0.72	72626	0.04	10000	
W	182	209	1	He	0.118	0.118	34.63	5412	0.00	2500	
Tl	205	165	1	He	0.122	0.122	2.12	4384	0.00	5000	
Pb	208	209	1	He	7.265	7.265	0.74	365399	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1303349	0.36	1631381	79.89	30	120	
Sc	45	1	He	726662	1.49	829696	87.58	30	120	
Sc	45	2	NoGas	5669713	1.03	6325638	89.63	30	120	
Rh	103	1	He	2178048	1.65	2345543	92.86	30	120	
In	115	1	He	1311744	0.48	1419467	92.41	30	120	
Tb	159	1	He	3732204	0.21	3888262	95.99	30	120	
Ho	165	1	He	3858171	1.19	3932562	98.11	30	120	
Bi	209	1	He	2850874	0.91	2874805	99.17	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-15-b@20
Data File Name	101SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:30:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.397	0.397	16.79	1711	0.02	10000	
B	11	45	2	NoGas	0.894	0.894	10.28	12064	0.01	300	
Na	23	45	1	He	23.729	23.729	3.18	56108	0.04	500000	
Mg	24	45	1	He	1912.131	1912.131	2.38	1660414	0.12	500000	
Al	27	45	1	He	8371.495	8371.495	2.81	4120539	0.20	200000	
K	39	45	1	He	611.174	611.174	1.82	532388	0.11	500000	
Ca	44	45	1	He	234.667	234.667	2.79	11385	2.06	500000	
Ti	47	45	1	He	87.675	87.675	3.28	22167	0.40	2500	
V	51	45	1	He	16.837	16.837	3.37	105296	0.02	10000	
Cr	52	45	1	He	15.488	15.488	2.53	118543	0.01	10000	
Mn	55	45	1	He	290.036	290.036	2.23	1713048	0.02	10000	
Fe	56	45	1	He	20534.344	20534.344	2.22	145434643	0.01	200000	
Co	59	103	1	He	6.834	6.834	14.78	76637	0.01	10000	
Ni	60	103	1	He	15.491	15.491	14.92	43154	0.04	10000	
Cu	63	103	1	He	16.293	16.293	15.04	120548	0.01	10000	
Zn	66	103	1	He	51.624	51.624	15.08	77916	0.07	10000	
As	75	103	1	He	11.469	11.469	14.72	11052	0.10	10000	
Se	78	103	1	He	1.061	1.061	29.75	151	0.70	10000	
Sr	88	103	1	He	3.049	3.049	15.62	23648	0.01	10000	
Mo	95	103	1	He	1.300	1.300	14.95	4618	0.03	2000	
Ag	107	103	1	He	0.017	0.017	15.35	213	0.01	300	
Cd	111	103	1	He	0.185	0.185	29.13	1467	0.01	4000	
Sn	118	115	1	He	1.987	1.987	6.16	11412	0.02	2000	
Sb	123	115	1	He	0.132	0.132	11.72	1207	0.01	300	
Ba	137	115	1	He	41.732	41.732	8.52	99297	0.04	10000	
W	182	209	1	He	0.133	0.133	10.09	5249	0.00	2500	
Tl	205	165	1	He	0.150	0.150	10.23	4923	0.00	5000	
Pb	208	209	1	He	12.386	12.386	11.01	576382	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1331834	1.69	1631381	81.64	30	120	
Sc	45	1	He	713749	2.20	829696	86.03	30	120	
Sc	45	2	NoGas	5847554	0.71	6325638	92.44	30	120	
Rh	103	1	He	2061656	13.25	2345543	87.90	30	120	
In	115	1	He	1261327	7.45	1419467	88.86	30	120	
Tb	159	1	He	3542268	10.59	3888262	91.10	30	120	
Ho	165	1	He	3560353	10.11	3932562	90.54	30	120	
Bi	209	1	He	2658922	9.63	2874805	92.49	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-16-b@20
Data File Name	102SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:34:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.335	0.335	18.78	1422	0.02	10000	
B	11	45	2	NoGas	0.492	0.492	23.26	10448	0.00	300	
Na	23	45	1	He	21.767	21.767	1.48	55314	0.04	500000	
Mg	24	45	1	He	1371.614	1371.614	0.06	1240824	0.11	500000	
Al	27	45	1	He	4802.742	4802.742	2.11	2463040	0.19	200000	
K	39	45	1	He	513.805	513.805	1.10	471557	0.11	500000	
Ca	44	45	1	He	345.990	345.990	0.22	17056	2.03	500000	
Ti	47	45	1	He	44.467	44.467	2.91	11715	0.38	2500	
V	51	45	1	He	9.447	9.447	2.98	61570	0.02	10000	
Cr	52	45	1	He	8.438	8.438	0.26	68315	0.01	10000	
Mn	55	45	1	He	294.038	294.038	0.53	1808823	0.02	10000	
Fe	56	45	1	He	12691.068	12691.068	0.61	93616694	0.01	200000	
Co	59	103	1	He	4.593	4.593	0.53	56442	0.01	10000	
Ni	60	103	1	He	10.208	10.208	0.49	31204	0.03	10000	
Cu	63	103	1	He	8.522	8.522	1.16	69876	0.01	10000	
Zn	66	103	1	He	28.986	28.986	1.60	48753	0.06	10000	
As	75	103	1	He	5.898	5.898	0.87	6302	0.09	10000	
Se	78	103	1	He	0.507	0.507	27.09	105	0.48	10000	
Sr	88	103	1	He	2.911	2.911	0.85	24756	0.01	10000	
Mo	95	103	1	He	0.633	0.633	6.02	2494	0.03	2000	
Ag	107	103	1	He	0.012	0.012	3.81	170	0.01	300	
Cd	111	103	1	He	0.095	0.095	14.80	1390	0.01	4000	
Sn	118	115	1	He	1.600	1.600	1.53	9926	0.02	2000	
Sb	123	115	1	He	0.038	0.038	43.38	792	0.00	300	
Ba	137	115	1	He	30.902	30.902	1.71	77955	0.04	10000	
W	182	209	1	He	0.082	0.082	17.51	4894	0.00	2500	
Tl	205	165	1	He	0.080	0.080	0.97	2938	0.00	5000	
Pb	208	209	1	He	7.495	7.495	1.77	376783	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1312378	0.93	1631381	80.45	30	120	
Sc	45	1	He	743167	1.26	829696	89.57	30	120	
Sc	45	2	NoGas	5686182	0.42	6325638	89.89	30	120	
Rh	103	1	He	2229609	1.15	2345543	95.06	30	120	
In	115	1	He	1331199	0.26	1419467	93.78	30	120	
Tb	159	1	He	3765700	1.57	3888262	96.85	30	120	
Ho	165	1	He	3892095	0.88	3932562	98.97	30	120	
Bi	209	1	He	2850195	1.07	2874805	99.14	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-17-b@20
Data File Name	103SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:38:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.381	0.381	6.92	1559	0.02	10000	
B	11	45	2	NoGas	0.435	0.435	41.44	9825	0.00	300	
Na	23	45	1	He	20.041	20.041	7.68	51521	0.04	500000	
Mg	24	45	1	He	1387.067	1387.067	3.53	1229953	0.11	500000	
Al	27	45	1	He	6404.423	6404.423	1.91	3220493	0.20	200000	
K	39	45	1	He	531.467	531.467	2.67	477098	0.11	500000	
Ca	44	45	1	He	523.326	523.326	0.79	24857	2.11	500000	
Ti	47	45	1	He	42.495	42.495	1.25	10982	0.39	2500	
V	51	45	1	He	12.116	12.116	3.54	77405	0.02	10000	
Cr	52	45	1	He	9.445	9.445	1.29	74731	0.01	10000	
Mn	55	45	1	He	447.742	447.742	3.39	2699613	0.02	10000	
Fe	56	45	1	He	17868.988	17868.988	2.27	129245648	0.01	200000	
Co	59	103	1	He	5.477	5.477	0.85	64865	0.01	10000	
Ni	60	103	1	He	10.594	10.594	3.65	31196	0.03	10000	
Cu	63	103	1	He	9.604	9.604	2.06	75674	0.01	10000	
Zn	66	103	1	He	32.015	32.015	0.59	51714	0.06	10000	
As	75	103	1	He	7.243	7.243	1.95	7422	0.10	10000	
Se	78	103	1	He	0.637	0.637	20.10	115	0.55	10000	
Sr	88	103	1	He	4.022	4.022	2.27	32920	0.01	10000	
Mo	95	103	1	He	0.866	0.866	8.80	3266	0.03	2000	
Ag	107	103	1	He	0.020	0.020	19.10	257	0.01	300	
Cd	111	103	1	He	0.166	0.166	12.48	1496	0.01	4000	
Sn	118	115	1	He	1.765	1.765	6.54	10541	0.02	2000	
Sb	123	115	1	He	0.048	0.048	26.88	821	0.01	300	
Ba	137	115	1	He	48.570	48.570	0.74	119086	0.04	10000	
W	182	209	1	He	0.063	0.063	47.84	4538	0.00	2500	
Tl	205	165	1	He	0.097	0.097	2.13	3455	0.00	5000	
Pb	208	209	1	He	7.936	7.936	1.08	392095	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1266955	0.27	1631381	77.66	30	120	
Sc	45	1	He	728981	3.09	829696	87.86	30	120	
Sc	45	2	NoGas	5442592	1.38	6325638	86.04	30	120	
Rh	103	1	He	2148706	1.78	2345543	91.61	30	120	
In	115	1	He	1294341	0.79	1419467	91.19	30	120	
Tb	159	1	He	3719214	0.35	3888262	95.65	30	120	
Ho	165	1	He	3796814	0.77	3932562	96.55	30	120	
Bi	209	1	He	2801115	0.48	2874805	97.44	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-18-b@20
Data File Name	104SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:41:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.062	0.062	36.31	256	0.02	10000	
B	11	45	2	NoGas	-0.665	-0.665	-23.47	5875	-0.01	300	
Na	23	45	1	He	1.411	1.411	39.47	19393	0.01	500000	
Mg	24	45	1	He	-0.417	-0.417	-27.95	430	-0.10	500000	
Al	27	45	1	He	2.549	2.549	18.35	3105	0.08	200000	
K	39	45	1	He	5.818	5.818	36.89	33146	0.02	500000	
Ca	44	45	1	He	-0.777	-0.777	-151.58	728	-0.11	500000	
Ti	47	45	1	He	0.103	0.103	86.23	33	0.31	2500	
V	51	45	1	He	0.017	0.017	517.24	166	0.01	10000	
Cr	52	45	1	He	0.009	0.009	183.09	2010	0.00	10000	
Mn	55	45	1	He	0.028	0.028	84.33	1073	0.00	10000	
Fe	56	45	1	He	25.576	25.576	20.27	162450	0.02	200000	
Co	59	103	1	He	0.002	0.002	25.58	58	0.00	10000	
Ni	60	103	1	He	-0.012	-0.012	-51.58	76	-0.02	10000	
Cu	63	103	1	He	-0.003	-0.003	-417.35	1421	0.00	10000	
Zn	66	103	1	He	-0.253	-0.253	-18.24	1302	-0.02	10000	
As	75	103	1	He	-0.001	-0.001	-2018.62	137	0.00	10000	
Se	78	103	1	He	0.030	0.030	193.60	47	0.06	10000	
Sr	88	103	1	He	0.005	0.005	47.00	141	0.00	10000	
Mo	95	103	1	He	0.039	0.039	8.24	187	0.02	2000	
Ag	107	103	1	He	0.004	0.004	11.53	49	0.01	300	
Cd	111	103	1	He	0.051	0.051	59.59	1144	0.00	4000	
Sn	118	115	1	He	0.010	0.010	314.82	982	0.00	2000	
Sb	123	115	1	He	-0.024	-0.024	-17.42	426	-0.01	300	
Ba	137	115	1	He	0.003	0.003	131.04	91	0.00	10000	
W	182	209	1	He	0.063	0.063	6.57	4219	0.00	2500	
Tl	205	165	1	He	0.001	0.001	72.77	83	0.00	5000	
Pb	208	209	1	He	0.018	0.018	15.41	1577	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1154172	1.53	1631381	70.75	30	120	
Sc	45	1	He	628270	2.52	829696	75.72	30	120	
Sc	45	2	NoGas	4956869	0.88	6325638	78.36	30	120	
Rh	103	1	He	1980527	4.52	2345543	84.44	30	120	
In	115	1	He	1191448	4.08	1419467	83.94	30	120	
Tb	159	1	He	3445817	4.81	3888262	88.62	30	120	
Ho	165	1	He	3502002	4.60	3932562	89.05	30	120	
Bi	209	1	He	2608659	3.32	2874805	90.74	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-20-b@20
Data File Name	105SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:45:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.386	0.386	8.83	1471	0.03	10000	
B	11	45	2	NoGas	0.265	0.265	21.28	8647	0.00	300	
Na	23	45	1	He	20.161	20.161	5.40	48019	0.04	500000	
Mg	24	45	1	He	1497.472	1497.472	2.92	1232598	0.12	500000	
Al	27	45	1	He	5984.845	5984.845	3.97	2792164	0.21	200000	
K	39	45	1	He	444.632	444.632	3.89	375488	0.12	500000	
Ca	44	45	1	He	415.005	415.005	4.99	18448	2.25	500000	
Ti	47	45	1	He	45.380	45.380	0.95	10888	0.42	2500	
V	51	45	1	He	10.774	10.774	4.36	63880	0.02	10000	
Cr	52	45	1	He	9.383	9.383	3.53	68882	0.01	10000	
Mn	55	45	1	He	276.119	276.119	2.64	1545739	0.02	10000	
Fe	56	45	1	He	14200.830	14200.830	3.25	95313212	0.01	200000	
Co	59	103	1	He	5.000	5.000	2.63	54823	0.01	10000	
Ni	60	103	1	He	10.942	10.942	1.67	29840	0.04	10000	
Cu	63	103	1	He	9.520	9.520	2.10	69483	0.01	10000	
Zn	66	103	1	He	42.222	42.222	1.51	62616	0.07	10000	
As	75	103	1	He	6.418	6.418	1.43	6107	0.11	10000	
Se	78	103	1	He	0.498	0.498	14.54	93	0.54	10000	
Sr	88	103	1	He	2.769	2.769	3.62	21017	0.01	10000	
Mo	95	103	1	He	0.714	0.714	6.42	2506	0.03	2000	
Ag	107	103	1	He	0.017	0.017	13.45	202	0.01	300	
Cd	111	103	1	He	0.168	0.168	5.64	1389	0.01	4000	
Sn	118	115	1	He	1.693	1.693	3.93	9451	0.02	2000	
Sb	123	115	1	He	0.067	0.067	27.49	854	0.01	300	
Ba	137	115	1	He	34.057	34.057	1.78	77740	0.04	10000	
W	182	209	1	He	0.079	0.079	11.23	4553	0.00	2500	
Tl	205	165	1	He	0.094	0.094	2.70	3197	0.00	5000	
Pb	208	209	1	He	7.176	7.176	0.53	338687	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1180871	1.69	1631381	72.38	30	120	
Sc	45	1	He	676619	3.10	829696	81.55	30	120	
Sc	45	2	NoGas	5059381	0.68	6325638	79.98	30	120	
Rh	103	1	He	1990014	1.90	2345543	84.84	30	120	
In	115	1	He	1204759	0.51	1419467	84.87	30	120	
Tb	159	1	He	3567484	0.83	3888262	91.75	30	120	
Ho	165	1	He	3644411	0.83	3932562	92.67	30	120	
Bi	209	1	He	2675257	0.55	2874805	93.06	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-21-b@20
Data File Name	106SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:49:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.355	0.355	14.69	1330	0.03	10000	
B	11	45	2	NoGas	0.675	0.675	27.14	9625	0.01	300	
Na	23	45	1	He	29.994	29.994	1.57	60288	0.05	500000	
Mg	24	45	1	He	1896.549	1896.549	1.65	1511702	0.13	500000	
Al	27	45	1	He	6280.878	6280.878	2.56	2838417	0.22	200000	
K	39	45	1	He	697.120	697.120	2.25	553051	0.13	500000	
Ca	44	45	1	He	794.836	794.836	2.27	33501	2.37	500000	
Ti	47	45	1	He	43.906	43.906	2.49	10195	0.43	2500	
V	51	45	1	He	11.204	11.204	4.88	64325	0.02	10000	
Cr	52	45	1	He	10.567	10.567	1.75	74882	0.01	10000	
Mn	55	45	1	He	289.664	289.664	1.46	1570368	0.02	10000	
Fe	56	45	1	He	15354.836	15354.836	1.17	99825343	0.02	200000	
Co	59	103	1	He	6.228	6.228	0.32	67717	0.01	10000	
Ni	60	103	1	He	14.162	14.162	1.03	38264	0.04	10000	
Cu	63	103	1	He	10.334	10.334	1.07	74664	0.01	10000	
Zn	66	103	1	He	33.330	33.330	1.36	49361	0.07	10000	
As	75	103	1	He	6.397	6.397	0.29	6036	0.11	10000	
Se	78	103	1	He	0.440	0.440	1.06	87	0.51	10000	
Sr	88	103	1	He	3.988	3.988	0.45	29977	0.01	10000	
Mo	95	103	1	He	0.642	0.642	3.28	2238	0.03	2000	
Ag	107	103	1	He	0.013	0.013	21.14	159	0.01	300	
Cd	111	103	1	He	0.137	0.137	6.31	1316	0.01	4000	
Sn	118	115	1	He	1.654	1.654	1.21	9173	0.02	2000	
Sb	123	115	1	He	0.019	0.019	71.63	626	0.00	300	
Ba	137	115	1	He	39.793	39.793	1.42	90027	0.04	10000	
W	182	209	1	He	0.078	0.078	20.01	4519	0.00	2500	
Tl	205	165	1	He	0.104	0.104	6.90	3476	0.00	5000	
Pb	208	209	1	He	6.400	6.400	0.62	300993	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1157485	0.26	1631381	70.95	30	120	
Sc	45	1	He	655057	2.02	829696	78.95	30	120	
Sc	45	2	NoGas	4963057	1.13	6325638	78.46	30	120	
Rh	103	1	He	1972889	1.04	2345543	84.11	30	120	
In	115	1	He	1194163	0.60	1419467	84.13	30	120	
Tb	159	1	He	3513832	0.62	3888262	90.37	30	120	
Ho	165	1	He	3559156	1.23	3932562	90.50	30	120	
Bi	209	1	He	2664806	0.32	2874805	92.70	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-1-b@20
Data File Name	107SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:53:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.402	0.402	13.17	1522	0.03	10000	
B	11	45	2	NoGas	1.262	1.262	9.58	11274	0.01	300	
Na	23	45	1	He	34.509	34.509	3.18	66751	0.05	500000	
Mg	24	45	1	He	2045.865	2045.865	0.96	1634139	0.13	500000	
Al	27	45	1	He	7268.429	7268.429	0.76	3291502	0.22	200000	
K	39	45	1	He	826.504	826.504	0.73	651542	0.13	500000	
Ca	44	45	1	He	1075.653	1075.653	0.99	45159	2.38	500000	
Ti	47	45	1	He	47.470	47.470	1.77	11047	0.43	2500	
V	51	45	1	He	12.358	12.358	4.35	71131	0.02	10000	
Cr	52	45	1	He	12.927	12.927	0.35	91352	0.01	10000	
Mn	55	45	1	He	308.369	308.369	1.89	1675356	0.02	10000	
Fe	56	45	1	He	17315.132	17315.132	2.02	112810393	0.02	200000	
Co	59	103	1	He	7.435	7.435	0.32	81296	0.01	10000	
Ni	60	103	1	He	15.227	15.227	0.77	41368	0.04	10000	
Cu	63	103	1	He	12.715	12.715	1.77	92059	0.01	10000	
Zn	66	103	1	He	39.097	39.097	0.87	57943	0.07	10000	
As	75	103	1	He	8.471	8.471	1.44	7994	0.11	10000	
Se	78	103	1	He	0.865	0.865	13.44	129	0.67	10000	
Sr	88	103	1	He	4.793	4.793	1.62	36208	0.01	10000	
Mo	95	103	1	He	0.807	0.807	4.31	2816	0.03	2000	
Ag	107	103	1	He	0.012	0.012	12.34	142	0.01	300	
Cd	111	103	1	He	0.140	0.140	16.32	1329	0.01	4000	
Sn	118	115	1	He	1.743	1.743	3.45	9533	0.02	2000	
Sb	123	115	1	He	0.034	0.034	24.05	686	0.00	300	
Ba	137	115	1	He	39.330	39.330	1.19	88209	0.04	10000	
W	182	209	1	He	0.079	0.079	6.71	4456	0.00	2500	
Tl	205	165	1	He	0.110	0.110	4.84	3677	0.00	5000	
Pb	208	209	1	He	7.758	7.758	0.88	358917	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1171324	1.16	1631381	71.80	30	120	
Sc	45	1	He	656340	0.25	829696	79.11	30	120	
Sc	45	2	NoGas	4965045	0.76	6325638	78.49	30	120	
Rh	103	1	He	1984166	0.51	2345543	84.59	30	120	
In	115	1	He	1183848	0.33	1419467	83.40	30	120	
Tb	159	1	He	3476903	0.33	3888262	89.42	30	120	
Ho	165	1	He	3589383	0.84	3932562	91.27	30	120	
Bi	209	1	He	2622664	0.61	2874805	91.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	108_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:57:03-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.765	1.181	163830	0.68	50	95.5	89.5	110.5	
B	11	45	2	NoGas	45.721	1.606	125565	1.13	50	91.4	89.5	110.5	
Na	23	45	1	He	24631.854	2.658	32541193	1.06	25000	98.5	89.5	110.5	
Mg	24	45	1	He	24767.413	1.880	18598295	2.81	25000	99.1	89.5	110.5	
Al	27	45	1	He	241.404	1.098	104716	2.19	250	96.6	89.5	110.5	
K	39	45	1	He	25242.453	2.546	17868053	0.96	25000	101.0	89.5	110.5	
Ca	44	45	1	He	24919.313	1.964	967193	1.29	25000	99.7	89.5	110.5	
Ti	47	45	1	He	50.089	1.959	10961	2.33	50	100.2	89.5	110.5	
V	51	45	1	He	51.033	2.205	275935	1.68	50	102.1	89.5	110.5	
Cr	52	45	1	He	50.319	0.915	328902	2.37	50	100.6	89.5	110.5	
Mn	55	45	1	He	252.233	1.660	1288804	1.78	250	100.9	89.5	110.5	
Fe	56	45	1	He	12843.178	1.924	78680368	1.48	12500	102.7	89.5	110.5	
Co	59	103	1	He	46.309	1.615	463411	1.99	50	92.6	89.5	110.5	
Ni	60	103	1	He	45.807	1.116	113744	1.26	50	91.6	89.5	110.5	
Cu	63	103	1	He	46.168	1.684	302568	2.03	50	92.3	89.5	110.5	
Zn	66	103	1	He	47.494	1.464	64121	1.84	50	95.0	89.5	110.5	
As	75	103	1	He	47.824	1.371	40735	1.72	50	95.6	89.5	110.5	
Se	78	103	1	He	48.128	0.499	4359	0.73	50	96.3	89.5	110.5	
Sr	88	103	1	He	48.599	0.602	335350	0.83	50	97.2	89.5	110.5	
Mo	95	103	1	He	50.059	2.021	156952	1.59	50	100.1	89.5	110.5	
Ag	107	103	1	He	49.890	2.031	537234	2.27	50	99.8	89.5	110.5	
Cd	111	103	1	He	50.474	1.240	95538	1.59	50	100.9	89.5	110.5	
Sn	118	115	1	He	49.858	0.830	230976	0.31	50	99.7	89.5	110.5	
Sb	123	115	1	He	52.102	0.739	222587	0.93	50	104.2	89.5	110.5	
Ba	137	115	1	He	51.125	1.797	107198	2.74	50	102.3	89.5	110.5	
W	182	209	1	He	49.560	1.097	623279	0.82	50	99.1	89.5	110.5	
Tl	205	165	1	He	48.107	1.816	1532741	1.57	50	96.2	89.5	110.5	
Pb	208	209	1	He	47.842	1.380	2065874	2.22	50	95.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1085016	1.34	1631381	66.51	30	120	
Sc	45	1	He	617423	3.28	829696	74.42	30	120	
Sc	45	2	NoGas	4600612	1.81	6325638	72.73	30	120	
Rh	103	1	He	1816605	0.44	2345543	77.45	30	120	
In	115	1	He	1106883	1.14	1419467	77.98	30	120	
Tb	159	1	He	3325549	0.93	3888262	85.53	30	120	
Ho	165	1	He	3471673	0.35	3932562	88.28	30	120	
Bi	209	1	He	2451989	1.01	2874805	85.29	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	109_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:00:54-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.060	42.0	244	38.8	1	
B	11	45	2	NoGas	-0.359	-55.1	6294	9.3	20	
Na	23	45	1	He	5.759	19.9	23571	5.1	400	
Mg	24	45	1	He	1.374	50.6	1678	28.5	1000	
Al	27	45	1	He	0.204	101.9	1955	4.8	50	
K	39	45	1	He	10.069	18.1	33840	3.6	1000	
Ca	44	45	1	He	0.246	422.2	718	4.9	1000	
Ti	47	45	1	He	0.275	19.6	67	18.0	20	
V	51	45	1	He	0.076	31.7	467	27.8	2	
Cr	52	45	1	He	0.000	5511.9	1822	4.1	2	
Mn	55	45	1	He	0.012	149.2	926	8.0	2	
Fe	56	45	1	He	23.029	20.4	137190	18.8	50	
Co	59	103	1	He	0.004	5.8	80	4.2	1	
Ni	60	103	1	He	-0.012	-52.7	72	23.2	2	
Cu	63	103	1	He	-0.028	-67.8	1197	10.3	2	
Zn	66	103	1	He	-0.101	-19.6	1461	1.7	20	
As	75	103	1	He	0.038	32.5	166	5.5	2	
Se	78	103	1	He	0.071	79.7	49	11.6	2	
Sr	88	103	1	He	0.005	48.9	131	12.5	10	
Mo	95	103	1	He	0.820	22.9	2740	21.8	2	
Ag	107	103	1	He	0.008	9.2	97	9.1	0.2	
Cd	111	103	1	He	0.067	42.7	1131	3.8	0.2	
Sn	118	115	1	He	0.306	9.2	2360	6.1	10	
Sb	123	115	1	He	0.518	24.3	2797	19.2	1	
Ba	137	115	1	He	0.011	54.5	104	12.1	5	
W	182	209	1	He	1.011	15.7	16461	13.1	10	
Tl	205	165	1	He	0.035	27.1	1159	24.3	0.5	
Pb	208	209	1	He	0.036	13.8	2320	10.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1116010	3.09	1631381	68.41	30	120	
Sc	45	1	He	586847	1.14	829696	70.73	30	120	
Sc	45	2	NoGas	4631612	1.23	6325638	73.22	30	120	
Rh	103	1	He	1902751	1.41	2345543	81.12	30	120	
In	115	1	He	1145517	0.57	1419467	80.70	30	120	
Tb	159	1	He	3350240	0.81	3888262	86.16	30	120	
Ho	165	1	He	3426303	1.45	3932562	87.13	30	120	
Bi	209	1	He	2548339	1.16	2874805	88.64	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-2-b@20
Data File Name	110SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:04:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.367	0.367	2.68	1422	0.03	10000	
B	11	45	2	NoGas	-0.082	-0.082	-387.10	7561	0.00	300	
Na	23	45	1	He	17.610	17.610	3.80	43047	0.04	500000	
Mg	24	45	1	He	1076.965	1076.965	0.94	861268	0.13	500000	
Al	27	45	1	He	6439.100	6439.100	1.99	2918249	0.22	200000	
K	39	45	1	He	395.052	395.052	1.89	327474	0.12	500000	
Ca	44	45	1	He	231.886	231.886	2.74	10365	2.24	500000	
Ti	47	45	1	He	37.041	37.041	3.78	8628	0.43	2500	
V	51	45	1	He	13.286	13.286	4.17	76509	0.02	10000	
Cr	52	45	1	He	9.574	9.574	1.24	68240	0.01	10000	
Mn	55	45	1	He	516.737	516.737	1.28	2808761	0.02	10000	
Fe	56	45	1	He	13056.211	13056.211	1.29	85125768	0.02	200000	
Co	59	103	1	He	5.009	5.009	0.30	54082	0.01	10000	
Ni	60	103	1	He	9.615	9.615	0.45	25829	0.04	10000	
Cu	63	103	1	He	6.244	6.244	1.74	45354	0.01	10000	
Zn	66	103	1	He	28.976	28.976	0.06	42823	0.07	10000	
As	75	103	1	He	5.565	5.565	2.39	5231	0.11	10000	
Se	78	103	1	He	0.528	0.528	13.90	94	0.56	10000	
Sr	88	103	1	He	2.210	2.210	1.14	16537	0.01	10000	
Mo	95	103	1	He	0.814	0.814	2.13	2801	0.03	2000	
Ag	107	103	1	He	0.031	0.031	34.02	370	0.01	300	
Cd	111	103	1	He	0.170	0.170	13.48	1373	0.01	4000	
Sn	118	115	1	He	1.772	1.772	3.12	9633	0.02	2000	
Sb	123	115	1	He	0.476	0.476	4.14	2692	0.02	300	
Ba	137	115	1	He	40.895	40.895	0.66	91306	0.04	10000	
W	182	209	1	He	0.239	0.239	10.43	6691	0.00	2500	
Tl	205	165	1	He	0.104	0.104	3.84	3459	0.00	5000	
Pb	208	209	1	He	9.097	9.097	0.50	426020	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1197979	0.89	1631381	73.43	30	120	
Sc	45	1	He	656861	0.57	829696	79.17	30	120	
Sc	45	2	NoGas	4994839	1.31	6325638	78.96	30	120	
Rh	103	1	He	1958854	0.99	2345543	83.51	30	120	
In	115	1	He	1178515	0.74	1419467	83.03	30	120	
Tb	159	1	He	3470228	1.36	3888262	89.25	30	120	
Ho	165	1	He	3562355	1.48	3932562	90.59	30	120	
Bi	209	1	He	2655686	0.12	2874805	92.38	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-3-b@20
Data File Name	111SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:08:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.452	0.452	10.73	1745	0.03	10000	
B	11	45	2	NoGas	0.001	0.001	13458.61	8098	0.00	300	
Na	23	45	1	He	18.396	18.396	0.26	45294	0.04	500000	
Mg	24	45	1	He	1396.908	1396.908	1.84	1145472	0.12	500000	
Al	27	45	1	He	7020.556	7020.556	1.04	3263501	0.22	200000	
K	39	45	1	He	475.415	475.415	1.82	397872	0.12	500000	
Ca	44	45	1	He	201.199	201.199	0.54	9333	2.16	500000	
Ti	47	45	1	He	47.725	47.725	3.55	11398	0.42	2500	
V	51	45	1	He	15.926	15.926	1.46	94062	0.02	10000	
Cr	52	45	1	He	11.715	11.715	1.85	85165	0.01	10000	
Mn	55	45	1	He	710.315	710.315	0.92	3960006	0.02	10000	
Fe	56	45	1	He	17234.604	17234.604	1.22	115253658	0.01	200000	
Co	59	103	1	He	6.945	6.945	1.89	77193	0.01	10000	
Ni	60	103	1	He	13.228	13.228	1.64	36547	0.04	10000	
Cu	63	103	1	He	7.557	7.557	1.62	56225	0.01	10000	
Zn	66	103	1	He	35.282	35.282	0.15	53324	0.07	10000	
As	75	103	1	He	7.010	7.010	2.22	6748	0.10	10000	
Se	78	103	1	He	0.681	0.681	10.13	112	0.61	10000	
Sr	88	103	1	He	2.847	2.847	1.84	21909	0.01	10000	
Mo	95	103	1	He	0.933	0.933	4.82	3300	0.03	2000	
Ag	107	103	1	He	0.031	0.031	5.02	377	0.01	300	
Cd	111	103	1	He	0.183	0.183	12.73	1440	0.01	4000	
Sn	118	115	1	He	1.763	1.763	3.17	9866	0.02	2000	
Sb	123	115	1	He	0.157	0.157	7.34	1277	0.01	300	
Ba	137	115	1	He	56.700	56.700	1.29	130205	0.04	10000	
W	182	209	1	He	0.136	0.136	26.96	5286	0.00	2500	
Tl	205	165	1	He	0.106	0.106	10.16	3562	0.00	5000	
Pb	208	209	1	He	9.613	9.613	0.87	450105	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1199918	0.98	1631381	73.55	30	120	
Sc	45	1	He	673799	1.90	829696	81.21	30	120	
Sc	45	2	NoGas	5188362	0.45	6325638	82.02	30	120	
Rh	103	1	He	2017134	1.40	2345543	86.00	30	120	
In	115	1	He	1212505	0.36	1419467	85.42	30	120	
Tb	159	1	He	3526662	0.48	3888262	90.70	30	120	
Ho	165	1	He	3607891	1.16	3932562	91.74	30	120	
Bi	209	1	He	2655473	0.82	2874805	92.37	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-4-b@20
Data File Name	112SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:12:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.321	0.321	10.63	1267	0.03	10000	
B	11	45	2	NoGas	-0.113	-0.113	-146.73	7772	0.00	300	
Na	23	45	1	He	16.408	16.408	7.21	42824	0.04	500000	
Mg	24	45	1	He	1188.406	1188.406	1.23	984213	0.12	500000	
Al	27	45	1	He	7386.876	7386.876	2.16	3466842	0.21	200000	
K	39	45	1	He	364.741	364.741	1.62	315545	0.12	500000	
Ca	44	45	1	He	246.240	246.240	2.69	11347	2.17	500000	
Ti	47	45	1	He	41.740	41.740	4.15	10067	0.41	2500	
V	51	45	1	He	15.793	15.793	0.53	94193	0.02	10000	
Cr	52	45	1	He	10.444	10.444	1.23	76906	0.01	10000	
Mn	55	45	1	He	445.548	445.548	2.63	2507995	0.02	10000	
Fe	56	45	1	He	14540.990	14540.990	1.59	98185938	0.01	200000	
Co	59	103	1	He	5.212	5.212	1.76	59121	0.01	10000	
Ni	60	103	1	He	9.146	9.146	1.71	25818	0.04	10000	
Cu	63	103	1	He	5.314	5.314	0.66	40783	0.01	10000	
Zn	66	103	1	He	37.557	37.557	1.25	57803	0.06	10000	
As	75	103	1	He	5.745	5.745	0.29	5670	0.10	10000	
Se	78	103	1	He	0.549	0.549	18.76	101	0.54	10000	
Sr	88	103	1	He	2.187	2.187	1.48	17194	0.01	10000	
Mo	95	103	1	He	0.873	0.873	5.11	3155	0.03	2000	
Ag	107	103	1	He	0.024	0.024	8.19	296	0.01	300	
Cd	111	103	1	He	0.175	0.175	0.98	1451	0.01	4000	
Sn	118	115	1	He	1.801	1.801	6.36	10178	0.02	2000	
Sb	123	115	1	He	0.093	0.093	14.60	990	0.01	300	
Ba	137	115	1	He	37.622	37.622	1.57	87474	0.04	10000	
W	182	209	1	He	0.109	0.109	9.66	5020	0.00	2500	
Tl	205	165	1	He	0.107	0.107	4.52	3637	0.00	5000	
Pb	208	209	1	He	10.383	10.383	0.31	496293	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1215305	0.65	1631381	74.50	30	120	
Sc	45	1	He	680364	1.65	829696	82.00	30	120	
Sc	45	2	NoGas	5194189	1.09	6325638	82.11	30	120	
Rh	103	1	He	2058096	0.56	2345543	87.74	30	120	
In	115	1	He	1227296	0.82	1419467	86.46	30	120	
Tb	159	1	He	3567643	0.95	3888262	91.75	30	120	
Ho	165	1	He	3635838	0.73	3932562	92.45	30	120	
Bi	209	1	He	2711188	0.43	2874805	94.31	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-5-b@20
Data File Name	113SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:16:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.396	0.396	10.17	1567	0.03	10000	
B	11	45	2	NoGas	0.265	0.265	24.47	8836	0.00	300	
Na	23	45	1	He	18.427	18.427	5.00	43909	0.04	500000	
Mg	24	45	1	He	1076.692	1076.692	3.96	855260	0.13	500000	
Al	27	45	1	He	6575.975	6575.975	4.21	2960178	0.22	200000	
K	39	45	1	He	394.792	394.792	3.30	325144	0.12	500000	
Ca	44	45	1	He	568.037	568.037	5.40	24072	2.36	500000	
Ti	47	45	1	He	52.086	52.086	3.12	12050	0.43	2500	
V	51	45	1	He	13.949	13.949	5.70	79767	0.02	10000	
Cr	52	45	1	He	9.919	9.919	3.51	70155	0.01	10000	
Mn	55	45	1	He	754.836	754.836	4.30	4074715	0.02	10000	
Fe	56	45	1	He	12296.211	12296.211	2.99	79647166	0.02	200000	
Co	59	103	1	He	5.276	5.276	6.51	57608	0.01	10000	
Ni	60	103	1	He	9.490	9.490	5.83	25789	0.04	10000	
Cu	63	103	1	He	5.125	5.125	6.33	37919	0.01	10000	
Zn	66	103	1	He	32.519	32.519	7.18	48388	0.07	10000	
As	75	103	1	He	5.180	5.180	7.75	4932	0.11	10000	
Se	78	103	1	He	0.626	0.626	6.92	105	0.59	10000	
Sr	88	103	1	He	3.300	3.300	8.34	24904	0.01	10000	
Mo	95	103	1	He	0.832	0.832	12.25	2890	0.03	2000	
Ag	107	103	1	He	0.034	0.034	27.86	404	0.01	300	
Cd	111	103	1	He	0.165	0.165	16.54	1379	0.01	4000	
Sn	118	115	1	He	1.858	1.858	5.72	10129	0.02	2000	
Sb	123	115	1	He	0.129	0.129	20.62	1121	0.01	300	
Ba	137	115	1	He	50.126	50.126	6.85	112554	0.04	10000	
W	182	209	1	He	0.104	0.104	22.05	4779	0.00	2500	
Tl	205	165	1	He	0.106	0.106	4.13	3469	0.00	5000	
Pb	208	209	1	He	10.150	10.150	5.63	466855	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1224331	0.90	1631381	75.05	30	120	
Sc	45	1	He	652897	2.76	829696	78.69	30	120	
Sc	45	2	NoGas	5168883	0.66	6325638	81.71	30	120	
Rh	103	1	He	1986082	6.10	2345543	84.67	30	120	
In	115	1	He	1188179	5.04	1419467	83.71	30	120	
Tb	159	1	He	3462573	5.50	3888262	89.05	30	120	
Ho	165	1	He	3518070	5.46	3932562	89.46	30	120	
Bi	209	1	He	2613779	5.16	2874805	90.92	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-6-b@20
Data File Name	114SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:19:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.335	0.335	12.06	1304	0.03	10000	
B	11	45	2	NoGas	-0.056	-0.056	-114.36	7850	0.00	300	
Na	23	45	1	He	18.830	18.830	8.05	45647	0.04	500000	
Mg	24	45	1	He	1089.386	1089.386	1.88	888788	0.12	500000	
Al	27	45	1	He	5934.168	5934.168	3.21	2743471	0.22	200000	
K	39	45	1	He	366.086	366.086	2.79	311839	0.12	500000	
Ca	44	45	1	He	1113.326	1113.326	2.80	47686	2.33	500000	
Ti	47	45	1	He	42.099	42.099	3.51	10003	0.42	2500	
V	51	45	1	He	12.468	12.468	1.41	73288	0.02	10000	
Cr	52	45	1	He	9.467	9.467	1.45	68870	0.01	10000	
Mn	55	45	1	He	351.520	351.520	2.38	1949418	0.02	10000	
Fe	56	45	1	He	10938.834	10938.834	1.09	72769739	0.02	200000	
Co	59	103	1	He	4.096	4.096	1.44	45512	0.01	10000	
Ni	60	103	1	He	9.498	9.498	1.85	26253	0.04	10000	
Cu	63	103	1	He	6.552	6.552	2.61	48898	0.01	10000	
Zn	66	103	1	He	35.285	35.285	1.09	53285	0.07	10000	
As	75	103	1	He	4.699	4.699	0.51	4567	0.10	10000	
Se	78	103	1	He	0.542	0.542	2.02	99	0.55	10000	
Sr	88	103	1	He	6.394	6.394	0.39	49037	0.01	10000	
Mo	95	103	1	He	0.701	0.701	2.38	2489	0.03	2000	
Ag	107	103	1	He	0.025	0.025	1.35	307	0.01	300	
Cd	111	103	1	He	0.174	0.174	17.57	1419	0.01	4000	
Sn	118	115	1	He	2.387	2.387	3.45	13043	0.02	2000	
Sb	123	115	1	He	0.145	0.145	2.58	1226	0.01	300	
Ba	137	115	1	He	55.539	55.539	0.73	127739	0.04	10000	
W	182	209	1	He	0.061	0.061	33.73	4327	0.00	2500	
Tl	205	165	1	He	0.088	0.088	2.62	2983	0.00	5000	
Pb	208	209	1	He	11.059	11.059	1.16	524171	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1200764	0.69	1631381	73.60	30	120	
Sc	45	1	He	670291	2.49	829696	80.79	30	120	
Sc	45	2	NoGas	5135934	0.34	6325638	81.19	30	120	
Rh	103	1	He	2015535	0.62	2345543	85.93	30	120	
In	115	1	He	1214370	0.23	1419467	85.55	30	120	
Tb	159	1	He	3518854	0.91	3888262	90.50	30	120	
Ho	165	1	He	3609590	0.98	3932562	91.79	30	120	
Bi	209	1	He	2688939	1.10	2874805	93.53	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-7-b@20
Data File Name	115SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:23:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.391	0.391	14.28	1530	0.03	10000	
B	11	45	2	NoGas	0.111	0.111	183.22	8447	0.00	300	
Na	23	45	1	He	21.244	21.244	2.69	49375	0.04	500000	
Mg	24	45	1	He	1238.388	1238.388	0.50	1015304	0.12	500000	
Al	27	45	1	He	5038.233	5038.233	1.90	2341774	0.22	200000	
K	39	45	1	He	673.654	673.654	0.35	550662	0.12	500000	
Ca	44	45	1	He	214.082	214.082	0.27	9874	2.17	500000	
Ti	47	45	1	He	37.663	37.663	4.26	8995	0.42	2500	
V	51	45	1	He	9.178	9.178	2.31	54222	0.02	10000	
Cr	52	45	1	He	14.956	14.956	1.31	108118	0.01	10000	
Mn	55	45	1	He	173.555	173.555	0.43	967936	0.02	10000	
Fe	56	45	1	He	13471.089	13471.089	1.30	90051836	0.01	200000	
Co	59	103	1	He	4.548	4.548	0.59	50562	0.01	10000	
Ni	60	103	1	He	13.765	13.765	1.37	38022	0.04	10000	
Cu	63	103	1	He	8.522	8.522	1.20	63203	0.01	10000	
Zn	66	103	1	He	22.622	22.622	0.75	34794	0.07	10000	
As	75	103	1	He	5.340	5.340	1.02	5174	0.10	10000	
Se	78	103	1	He	0.624	0.624	14.58	107	0.58	10000	
Sr	88	103	1	He	2.393	2.393	1.23	18430	0.01	10000	
Mo	95	103	1	He	0.416	0.416	6.41	1500	0.03	2000	
Ag	107	103	1	He	0.017	0.017	6.96	212	0.01	300	
Cd	111	103	1	He	0.143	0.143	13.46	1356	0.01	4000	
Sn	118	115	1	He	1.664	1.664	1.05	9399	0.02	2000	
Sb	123	115	1	He	0.006	0.006	161.50	578	0.00	300	
Ba	137	115	1	He	26.479	26.479	1.13	61062	0.04	10000	
W	182	209	1	He	0.074	0.074	14.92	4471	0.00	2500	
Tl	205	165	1	He	0.076	0.076	3.38	2582	0.00	5000	
Pb	208	209	1	He	7.671	7.671	1.05	361136	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1213114	0.71	1631381	74.36	30	120	
Sc	45	1	He	673473	0.49	829696	81.17	30	120	
Sc	45	2	NoGas	5205749	0.40	6325638	82.30	30	120	
Rh	103	1	He	2016791	0.34	2345543	85.98	30	120	
In	115	1	He	1216691	0.40	1419467	85.71	30	120	
Tb	159	1	He	3529528	0.06	3888262	90.77	30	120	
Ho	165	1	He	3608292	0.68	3932562	91.75	30	120	
Bi	209	1	He	2669052	1.20	2874805	92.84	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-8-b@20
Data File Name	116SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:27:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.385	0.385	7.74	1489	0.03	10000	
B	11	45	2	NoGas	0.559	0.559	28.38	9755	0.01	300	
Na	23	45	1	He	18.555	18.555	8.47	46248	0.04	500000	
Mg	24	45	1	He	1343.240	1343.240	2.12	1119720	0.12	500000	
Al	27	45	1	He	7774.605	7774.605	2.20	3673137	0.21	200000	
K	39	45	1	He	656.086	656.086	3.19	546066	0.12	500000	
Ca	44	45	1	He	130.357	130.357	4.21	6436	2.03	500000	
Ti	47	45	1	He	41.033	41.033	0.93	9968	0.41	2500	
V	51	45	1	He	13.662	13.662	3.24	82016	0.02	10000	
Cr	52	45	1	He	11.130	11.130	1.97	82366	0.01	10000	
Mn	55	45	1	He	79.220	79.220	1.53	449836	0.02	10000	
Fe	56	45	1	He	15210.828	15210.828	1.68	103400243	0.01	200000	
Co	59	103	1	He	3.763	3.763	1.86	42383	0.01	10000	
Ni	60	103	1	He	8.759	8.759	1.70	24549	0.04	10000	
Cu	63	103	1	He	8.998	8.998	1.22	67515	0.01	10000	
Zn	66	103	1	He	25.014	25.014	1.70	38789	0.06	10000	
As	75	103	1	He	6.722	6.722	1.33	6560	0.10	10000	
Se	78	103	1	He	0.689	0.689	15.31	115	0.60	10000	
Sr	88	103	1	He	2.069	2.069	3.58	16150	0.01	10000	
Mo	95	103	1	He	0.510	0.510	5.85	1850	0.03	2000	
Ag	107	103	1	He	0.019	0.019	13.21	239	0.01	300	
Cd	111	103	1	He	0.142	0.142	14.43	1372	0.01	4000	
Sn	118	115	1	He	1.628	1.628	5.48	9296	0.02	2000	
Sb	123	115	1	He	0.055	0.055	10.74	810	0.01	300	
Ba	137	115	1	He	31.439	31.439	1.12	73097	0.04	10000	
W	182	209	1	He	0.078	0.078	17.29	4597	0.00	2500	
Tl	205	165	1	He	0.097	0.097	3.26	3299	0.00	5000	
Pb	208	209	1	He	6.491	6.491	1.11	310374	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1197426	1.22	1631381	73.40	30	120	
Sc	45	1	He	685001	2.22	829696	82.56	30	120	
Sc	45	2	NoGas	5201047	1.82	6325638	82.22	30	120	
Rh	103	1	He	2042901	0.64	2345543	87.10	30	120	
In	115	1	He	1226931	0.21	1419467	86.44	30	120	
Tb	159	1	He	3560815	1.24	3888262	91.58	30	120	
Ho	165	1	He	3622319	0.26	3932562	92.11	30	120	
Bi	209	1	He	2709529	0.38	2874805	94.25	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	117_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:31:27-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.012	2.842	166532	2.85	50	96.0	89.5	110.5	
B	11	45	2	NoGas	45.620	0.714	126796	1.67	50	91.2	89.5	110.5	
Na	23	45	1	He	24449.161	3.767	32865856	0.32	25000	97.8	89.5	110.5	
Mg	24	45	1	He	24478.029	3.032	18700296	1.07	25000	97.9	89.5	110.5	
Al	27	45	1	He	239.523	2.697	105735	1.46	250	95.8	89.5	110.5	
K	39	45	1	He	25225.347	2.794	18173882	1.55	25000	100.9	89.5	110.5	
Ca	44	45	1	He	24764.276	2.159	978333	1.96	25000	99.1	89.5	110.5	
Ti	47	45	1	He	50.044	5.840	11135	2.22	50	100.1	89.5	110.5	
V	51	45	1	He	49.402	2.261	271885	2.05	50	98.8	89.5	110.5	
Cr	52	45	1	He	49.810	3.290	331230	0.95	50	99.6	89.5	110.5	
Mn	55	45	1	He	251.060	2.314	1305531	1.76	250	100.4	89.5	110.5	
Fe	56	45	1	He	12681.808	2.702	79065170	1.48	12500	101.5	89.5	110.5	
Co	59	103	1	He	47.240	2.309	468605	2.48	50	94.5	89.5	110.5	
Ni	60	103	1	He	47.176	1.271	116116	0.81	50	94.4	89.5	110.5	
Cu	63	103	1	He	47.180	1.826	306469	1.68	50	94.4	89.5	110.5	
Zn	66	103	1	He	47.786	1.929	63945	2.35	50	95.6	89.5	110.5	
As	75	103	1	He	48.358	2.051	40828	1.95	50	96.7	89.5	110.5	
Se	78	103	1	He	49.060	2.286	4404	2.68	50	98.1	89.5	110.5	
Sr	88	103	1	He	49.412	1.591	337983	1.58	50	98.8	89.5	110.5	
Mo	95	103	1	He	50.978	1.815	158438	0.84	50	102.0	89.5	110.5	
Ag	107	103	1	He	50.655	1.001	540712	1.11	50	101.3	89.5	110.5	
Cd	111	103	1	He	51.101	1.857	95869	1.81	50	102.2	89.5	110.5	
Sn	118	115	1	He	50.047	1.985	231974	2.34	50	100.1	89.5	110.5	
Sb	123	115	1	He	52.217	0.377	223182	0.10	50	104.4	89.5	110.5	
Ba	137	115	1	He	51.360	0.366	107728	0.81	50	102.7	89.5	110.5	
W	182	209	1	He	49.461	1.024	622194	0.83	50	98.9	89.5	110.5	
Tl	205	165	1	He	48.302	1.036	1533123	0.69	50	96.6	89.5	110.5	
Pb	208	209	1	He	48.091	1.046	2076862	1.08	50	96.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1097153	0.59	1631381	67.25	30	120	
Sc	45	1	He	628541	4.12	829696	75.76	30	120	
Sc	45	2	NoGas	4654556	1.01	6325638	73.58	30	120	
Rh	103	1	He	1800855	1.00	2345543	76.78	30	120	
In	115	1	He	1107365	0.45	1419467	78.01	30	120	
Tb	159	1	He	3343253	0.71	3888262	85.98	30	120	
Ho	165	1	He	3458587	0.94	3932562	87.95	30	120	
Bi	209	1	He	2452474	0.23	2874805	85.31	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	118_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:35:16-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.028	31.1	130	21.6	1	
B	11	45	2	NoGas	-0.771	-8.1	5212	1.9	20	
Na	23	45	1	He	5.638	27.7	23460	7.5	400	
Mg	24	45	1	He	2.005	59.8	2130	39.1	1000	
Al	27	45	1	He	0.335	99.7	2010	5.8	50	
K	39	45	1	He	11.230	11.6	34678	1.6	1000	
Ca	44	45	1	He	1.016	76.8	748	4.7	1000	
Ti	47	45	1	He	0.152	26.3	41	20.4	20	
V	51	45	1	He	0.012	218.2	138	100.4	2	
Cr	52	45	1	He	-0.002	-402.9	1813	1.8	2	
Mn	55	45	1	He	0.021	39.4	972	4.2	2	
Fe	56	45	1	He	24.302	21.9	144871	20.4	50	
Co	59	103	1	He	0.002	143.6	56	44.2	1	
Ni	60	103	1	He	-0.018	-67.5	58	52.4	2	
Cu	63	103	1	He	-0.027	-80.1	1192	11.3	2	
Zn	66	103	1	He	-0.059	-104.5	1499	6.3	20	
As	75	103	1	He	0.032	79.3	159	13.5	2	
Se	78	103	1	He	0.060	92.6	47	10.4	2	
Sr	88	103	1	He	0.005	28.5	129	8.3	10	
Mo	95	103	1	He	0.865	20.1	2849	19.1	2	
Ag	107	103	1	He	0.011	3.5	123	2.7	0.2	
Cd	111	103	1	He	0.068	15.1	1117	1.6	0.2	
Sn	118	115	1	He	0.313	32.7	2389	20.1	10	
Sb	123	115	1	He	0.496	21.9	2696	17.5	1	
Ba	137	115	1	He	-0.002	-679.8	76	43.3	5	
W	182	209	1	He	1.042	17.5	16617	14.0	10	
Tl	205	165	1	He	0.036	28.1	1216	26.8	0.5	
Pb	208	209	1	He	0.033	14.0	2183	9.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1113044	3.27	1631381	68.23	30	120	
Sc	45	1	He	587895	0.95	829696	70.86	30	120	
Sc	45	2	NoGas	4629998	1.46	6325638	73.19	30	120	
Rh	103	1	He	1877361	0.71	2345543	80.04	30	120	
In	115	1	He	1142580	0.25	1419467	80.49	30	120	
Tb	159	1	He	3369454	0.75	3888262	86.66	30	120	
Ho	165	1	He	3452663	0.47	3932562	87.80	30	120	
Bi	209	1	He	2511449	0.28	2874805	87.36	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	119CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:39:06-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.940	0.940	4.160	3371	3.20	1	94.0	69.5	130.5	
B	11	2	NoGas	17.664	17.664	3.969	53381	3.46	20	88.3	69.5	130.5	
Na	23	1	He	1079.314	1079.314	1.191	1429545	0.30	1000	107.9	69.5	130.5	
Mg	24	1	He	1061.798	1061.798	0.582	790713	0.43	1000	106.2	69.5	130.5	
Al	27	1	He	46.861	46.861	0.993	21714	1.10	50	93.7	69.5	130.5	
K	39	1	He	1080.493	1080.493	1.439	785081	1.23	1000	108.0	69.5	130.5	
Ca	44	1	He	1047.307	1047.307	1.204	40992	0.60	1000	104.7	69.5	130.5	
Ti	47	1	He	10.685	10.685	2.112	2325	1.15	10	106.9	69.5	130.5	
V	51	1	He	5.152	5.152	2.669	27676	1.81	5	103.0	69.5	130.5	
Cr	52	1	He	2.140	2.140	1.481	15679	0.90	2	107.0	69.5	130.5	
Mn	55	1	He	5.228	5.228	1.907	27357	1.24	5	104.6	69.5	130.5	
Fe	56	1	He	112.570	112.570	1.172	686773	0.38	100	112.6	69.5	130.5	
Co	59	1	He	0.911	0.911	5.792	9642	5.07	1	91.1	69.5	130.5	
Ni	60	1	He	1.851	1.851	2.443	4946	2.24	2	92.6	69.5	130.5	
Cu	63	1	He	1.787	1.787	2.068	13688	0.88	2	89.3	69.5	130.5	
Zn	66	1	He	19.010	19.010	0.496	28019	1.47	20	95.1	69.5	130.5	
As	75	1	He	4.659	4.659	0.256	4303	1.20	5	93.2	69.5	130.5	
Se	78	1	He	4.773	4.773	1.878	494	2.70	5	95.5	69.5	130.5	
Sr	88	1	He	9.425	9.425	1.023	68624	1.15	10	94.2	69.5	130.5	
Mo	95	1	He	10.161	10.161	1.968	33626	2.96	10	101.6	69.5	130.5	
Ag	107	1	He	1.029	1.029	2.202	11679	1.95	1	102.9	69.5	130.5	
Cd	111	1	He	1.075	1.075	3.451	3128	1.35	1	107.5	69.5	130.5	
Sn	118	1	He	10.207	10.207	2.464	49870	2.60	10	102.1	69.5	130.5	
Sb	123	1	He	2.097	2.097	2.374	9806	1.53	2	104.8	69.5	130.5	
Ba	137	1	He	4.966	4.966	2.656	10893	1.92	5	99.3	69.5	130.5	
W	182	1	He	9.473	9.473	1.944	126598	1.45	10	94.7	69.5	130.5	
Tl	205	1	He	2.017	2.017	0.757	64011	1.00	2	100.9	69.5	130.5	
Pb	208	1	He	1.014	1.014	2.504	46236	1.82	1	101.4	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1124956	0.91	1631381	68.96	30	120	
Sc	45	1	He	611661	0.99	829696	73.72	30	120	
Sc	45	2	NoGas	4640446	0.28	6325638	73.36	30	120	
Rh	103	1	He	1914826	1.00	2345543	81.64	30	120	
In	115	1	He	1150496	0.73	1419467	81.05	30	120	
Tb	159	1	He	3358277	1.63	3888262	86.37	30	120	
Ho	165	1	He	3453951	0.47	3932562	87.83	30	120	
Bi	209	1	He	2550554	1.06	2874805	88.72	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176764/1-a
Data File Name	120_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:42:57-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.043	81.7	178	69.6	1	
B	11	45	2	NoGas	1.085	2.7	9814	1.4	20	
Na	23	45	1	He	61.121	3.8	95344	1.0	400	
Mg	24	45	1	He	70.485	3.5	52245	1.5	1000	
Al	27	45	1	He	0.225	82.0	2012	6.4	50	
K	39	45	1	He	12.868	18.6	36571	1.0	1000	
Ca	44	45	1	He	404.255	3.8	15992	0.2	1000	
Ti	47	45	1	He	0.226	18.0	58	13.3	20	
V	51	45	1	He	0.198	106.5	1092	100.2	2	
Cr	52	45	1	He	0.711	10.4	6361	4.9	2	
Mn	55	45	1	He	0.090	17.5	1339	7.7	2	
Fe	56	45	1	He	21.674	1.6	132767	5.2	50	
Co	59	103	1	He	0.010	19.6	137	14.8	1	
Ni	60	103	1	He	0.066	15.9	269	9.1	2	
Cu	63	103	1	He	0.382	4.3	3892	1.8	2	
Zn	66	103	1	He	5.642	2.8	9131	3.5	20	
As	75	103	1	He	0.103	32.4	218	12.3	2	
Se	78	103	1	He	0.187	80.3	58	22.7	2	
Sr	88	103	1	He	0.493	1.0	3557	1.9	10	
Mo	95	103	1	He	0.310	8.2	1038	8.3	2	
Ag	107	103	1	He	0.011	24.3	129	23.2	0.2	
Cd	111	103	1	He	0.070	33.8	1105	4.0	0.2	
Sn	118	115	1	He	1.002	11.8	5434	10.2	10	
Sb	123	115	1	He	0.839	7.0	4027	5.8	1	
Ba	137	115	1	He	1.274	6.0	2718	6.2	5	
W	182	209	1	He	0.380	19.4	8673	13.2	10	
Tl	205	165	1	He	0.010	22.5	378	18.4	0.5	
Pb	208	209	1	He	0.132	2.3	6956	0.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1071570	1.65	1631381	65.68	30	120	
Sc	45	1	He	601444	3.63	829696	72.49	30	120	
Sc	45	2	NoGas	4520538	1.16	6325638	71.46	30	120	
Rh	103	1	He	1850403	1.13	2345543	78.89	30	120	
In	115	1	He	1094665	0.42	1419467	77.12	30	120	
Tb	159	1	He	3251130	0.25	3888262	83.61	30	120	
Ho	165	1	He	3341080	0.64	3932562	84.96	30	120	
Bi	209	1	He	2677348	1.71	2874805	93.13	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176764/2-a
Data File Name	121_LCS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:46:49-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	997.039	997.039	2.741	3199585	0.63	1000	99.7	79.5	120.5	
B	11	2	NoGas	104.908	104.908	1.140	259451	1.22	100	104.9	79.5	120.5	
Na	23	1	He	9945.683	9945.683	2.867	12310821	0.69	10000	99.5	79.5	120.5	
Mg	24	1	He	10013.300	10013.300	2.480	7038293	1.27	10000	100.1	79.5	120.5	
Al	27	1	He	9250.759	9250.759	3.290	3686491	0.25	10000	92.5	79.5	120.5	
K	39	1	He	10116.448	10116.448	3.670	6718876	0.31	10000	101.2	79.5	120.5	
Ca	44	1	He	9251.133	9251.133	3.371	336519	0.28	10000	92.5	79.5	120.5	
Ti	47	1	He	95.967	95.967	0.884	19660	3.33	100	96.0	79.5	120.5	
V	51	1	He	954.115	954.115	2.693	4828121	0.91	1000	95.4	79.5	120.5	
Cr	52	1	He	969.191	969.191	1.994	5897529	1.93	1000	96.9	79.5	120.5	
Mn	55	1	He	976.921	976.921	2.558	4670302	1.37	1000	97.7	79.5	120.5	
Fe	56	1	He	10268.503	10268.503	3.263	58881842	0.61	10000	102.7	79.5	120.5	
Co	59	1	He	883.484	883.484	0.695	8478250	0.98	1000	88.3	79.5	120.5	
Ni	60	1	He	907.085	907.085	1.226	2158479	1.70	1000	90.7	79.5	120.5	
Cu	63	1	He	907.174	907.174	0.748	5678692	2.00	1000	90.7	79.5	120.5	
Zn	66	1	He	895.699	895.699	0.316	1133611	1.36	1000	89.6	79.5	120.5	
As	75	1	He	886.986	886.986	1.003	722415	0.61	1000	88.7	79.5	120.5	
Se	78	1	He	924.951	924.951	1.017	79636	0.29	1000	92.5	79.5	120.5	
Sr	88	1	He	934.383	934.383	0.701	6182141	1.07	1000	93.4	79.5	120.5	
Mo	95	1	He	101.470	101.470	2.608	305043	1.32	100	101.5	79.5	120.5	
Ag	107	1	He	98.686	98.686	1.088	1019131	0.21	100	98.7	79.5	120.5	
Cd	111	1	He	1024.183	1024.183	0.535	1841603	1.10	1000	102.4	79.5	120.5	
Sn	118	1	He	1088.662	1088.662	0.682	4616392	0.57	1000	108.9	79.5	120.5	
Sb	123	1	He	106.794	106.794	1.206	418610	0.64	100	106.8	79.5	120.5	
Ba	137	1	He	1091.078	1091.078	1.455	2099743	1.05	1000	109.1	79.5	120.5	
W	182	1	He	94.709	94.709	1.354	1186641	0.86	100	94.7	79.5	120.5	
Tl	205	1	He	244.014	244.014	0.600	7377185	0.86	250	97.6	79.5	120.5	
Pb	208	1	He	935.221	935.221	0.909	40314761	0.81	1000	93.5	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1015757	2.84	1631381	62.26	30	120	
Sc	45	1	He	578118	3.59	829696	69.68	30	120	
Sc	45	2	NoGas	4280479	0.73	6325638	67.67	30	120	
Rh	103	1	He	1742358	1.31	2345543	74.28	30	120	
In	115	1	He	1016769	0.60	1419467	71.63	30	120	
Tb	159	1	He	3195862	0.84	3888262	82.19	30	120	
Ho	165	1	He	3294300	0.98	3932562	83.77	30	120	
Bi	209	1	He	2448841	1.02	2874805	85.18	30	120	

Sample Report

Sample Table

Sample Name	240-49393-s-1-a
Data File Name	122SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:50:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.231	0.231	6.77	867	0.03	10000	
B	11	45	2	NoGas	212.092	212.092	1.00	584466	0.04	300	
Na	23	45	1	He	143533.269	143533.269	2.64	182054915	0.08	500000	
Mg	24	45	1	He	82653.355	82653.355	1.19	59589935	0.14	500000	
Al	27	45	1	He	1.288	1.288	12.10	2417	0.05	200000	
K	39	45	1	He	2445.093	2445.093	1.31	1687004	0.14	500000	
Ca	44	45	1	He	103204.890	103204.890	1.29	3844609	2.68	500000	
Ti	47	45	1	He	0.548	0.548	24.30	124	0.44	2500	
V	51	45	1	He	0.418	0.418	46.50	2241	0.02	10000	
Cr	52	45	1	He	1.464	1.464	0.46	10973	0.01	10000	
Mn	55	45	1	He	95.552	95.552	0.76	469380	0.02	10000	
Fe	56	45	1	He	3176.050	3176.050	1.52	18688438	0.02	200000	
Co	59	103	1	He	0.433	0.433	9.36	4086	0.01	10000	
Ni	60	103	1	He	1.487	1.487	6.54	3546	0.04	10000	
Cu	63	103	1	He	0.227	0.227	30.94	2622	0.01	10000	
Zn	66	103	1	He	2.629	2.629	3.37	4674	0.06	10000	
As	75	103	1	He	1.572	1.572	7.63	1367	0.11	10000	
Se	78	103	1	He	1.217	1.217	17.86	140	0.87	10000	
Sr	88	103	1	He	184.819	184.819	1.29	1193723	0.02	10000	
Mo	95	103	1	He	1.781	1.781	11.70	5263	0.03	2000	
Ag	107	103	1	He	0.024	0.024	6.40	249	0.01	300	
Cd	111	103	1	He	0.194	0.194	29.70	1232	0.02	4000	
Sn	118	115	1	He	2.840	2.840	19.42	13032	0.02	2000	
Sb	123	115	1	He	1.032	1.032	1.13	4576	0.02	300	
Ba	137	115	1	He	103.152	103.152	1.81	202020	0.05	10000	
W	182	209	1	He	1.542	1.542	15.80	21148	0.01	2500	
Tl	205	165	1	He	0.180	0.180	36.84	5625	0.00	5000	
Pb	208	209	1	He	0.296	0.296	24.61	12678	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1146547	1.26	1631381	70.28	30	120	
Sc	45	1	He	592710	0.98	829696	71.44	30	120	
Sc	45	2	NoGas	4832414	0.77	6325638	76.39	30	120	
Rh	103	1	He	1701015	2.02	2345543	72.52	30	120	
In	115	1	He	1034616	2.16	1419467	72.89	30	120	
Tb	159	1	He	3242193	1.66	3888262	83.38	30	120	
Ho	165	1	He	3374817	2.22	3932562	85.82	30	120	
Bi	209	1	He	2307098	0.28	2874805	80.25	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49393-s-1-a@5
Data File Name	123SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:54:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.125	0.125	4.27	519	0.02	10000	
B	11	45	2	NoGas	39.537	39.537	0.93	123655	0.03	300	
Na	23	45	1	He	28958.657	28958.657	1.68	41259292	0.07	500000	
Mg	24	45	1	He	16839.493	16839.493	0.15	13635761	0.12	500000	
Al	27	45	1	He	2.730	2.730	7.12	3377	0.08	200000	
K	39	45	1	He	493.568	493.568	1.56	406924	0.12	500000	
Ca	44	45	1	He	21135.311	21135.311	0.93	884855	2.39	500000	
Ti	47	45	1	He	0.129	0.129	22.89	41	0.31	2500	
V	51	45	1	He	-0.064	-0.064	-188.77	-289	0.02	10000	
Cr	52	45	1	He	0.317	0.317	5.48	4283	0.01	10000	
Mn	55	45	1	He	15.830	15.830	0.57	88153	0.02	10000	
Fe	56	45	1	He	653.661	653.661	1.05	4322487	0.02	200000	
Co	59	103	1	He	0.070	0.070	11.40	812	0.01	10000	
Ni	60	103	1	He	0.268	0.268	8.15	841	0.03	10000	
Cu	63	103	1	He	-0.040	-0.040	-42.78	1170	0.00	10000	
Zn	66	103	1	He	0.090	0.090	55.24	1810	0.00	10000	
As	75	103	1	He	0.267	0.267	10.61	388	0.07	10000	
Se	78	103	1	He	0.168	0.168	44.44	61	0.28	10000	
Sr	88	103	1	He	36.086	36.086	0.13	273809	0.01	10000	
Mo	95	103	1	He	0.299	0.299	10.01	1083	0.03	2000	
Ag	107	103	1	He	0.012	0.012	23.21	144	0.01	300	
Cd	111	103	1	He	0.092	0.092	27.77	1238	0.01	4000	
Sn	118	115	1	He	0.124	0.124	15.27	1559	0.01	2000	
Sb	123	115	1	He	0.134	0.134	15.66	1157	0.01	300	
Ba	137	115	1	He	20.193	20.193	1.57	45897	0.04	10000	
W	182	209	1	He	0.289	0.289	11.62	7187	0.00	2500	
Tl	205	165	1	He	0.023	0.023	7.43	840	0.00	5000	
Pb	208	209	1	He	0.082	0.082	4.88	4473	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1227667	1.06	1631381	75.25	30	120	
Sc	45	1	He	665656	1.69	829696	80.23	30	120	
Sc	45	2	NoGas	5192020	0.26	6325638	82.08	30	120	
Rh	103	1	He	1997347	1.52	2345543	85.15	30	120	
In	115	1	He	1198644	0.52	1419467	84.44	30	120	
Tb	159	1	He	3523537	1.21	3888262	90.62	30	120	
Ho	165	1	He	3636602	0.69	3932562	92.47	30	120	
Bi	209	1	He	2593395	1.14	2874805	90.21	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49393-s-1-a
Data File Name	124SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:57:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1008.390	1008.390	1.69	3472331	0.03	10000	
B	11	45	2	NoGas	313.529	313.529	1.93	833885	0.04	300	>LDR
Na	23	45	1	He	145658.232	145658.232	2.26	185119604	0.08	500000	
Mg	24	45	1	He	88044.949	88044.949	1.77	63612170	0.14	500000	
Al	27	45	1	He	9472.798	9472.798	2.76	3880667	0.24	200000	
K	39	45	1	He	12320.590	12320.590	2.73	8406833	0.15	500000	
Ca	44	45	1	He	108850.908	108850.908	1.59	4063658	2.68	500000	
Ti	47	45	1	He	101.554	101.554	1.49	21376	0.48	2500	
V	51	45	1	He	1012.179	1012.179	3.01	5264444	0.02	10000	
Cr	52	45	1	He	1000.309	1000.309	2.94	6254899	0.02	10000	
Mn	55	45	1	He	1082.966	1082.966	3.22	5320670	0.02	10000	
Fe	56	45	1	He	13046.948	13046.948	1.85	76920101	0.02	200000	
Co	59	103	1	He	927.193	927.193	1.48	8696606	0.01	10000	
Ni	60	103	1	He	944.572	944.572	1.70	2196752	0.04	10000	
Cu	63	103	1	He	926.251	926.251	2.69	5666022	0.02	10000	
Zn	66	103	1	He	890.115	890.115	1.41	1101037	0.08	10000	
As	75	103	1	He	937.345	937.345	1.21	746200	0.13	10000	
Se	78	103	1	He	932.991	932.991	0.71	78519	1.19	10000	
Sr	88	103	1	He	1193.699	1193.699	1.36	7719241	0.02	10000	
Mo	95	103	1	He	112.412	112.412	1.92	330346	0.03	2000	
Ag	107	103	1	He	98.671	98.671	0.67	996049	0.01	300	
Cd	111	103	1	He	1039.725	1039.725	1.07	1827290	0.06	4000	
Sn	118	115	1	He	1152.842	1152.842	0.27	4766348	0.02	2000	
Sb	123	115	1	He	111.863	111.863	0.23	427518	0.03	300	
Ba	137	115	1	He	1265.441	1265.441	1.59	2374390	0.05	10000	
W	182	209	1	He	107.522	107.522	1.91	1257479	0.01	2500	
Tl	205	165	1	He	244.005	244.005	2.86	7429600	0.00	5000	
Pb	208	209	1	He	1000.960	1000.960	1.63	40288000	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1089605	1.92	1631381	66.79	30	120	
Sc	45	1	He	594129	2.61	829696	71.61	30	120	
Sc	45	2	NoGas	4684023	0.97	6325638	74.05	30	120	
Rh	103	1	He	1703048	0.96	2345543	72.61	30	120	
In	115	1	He	991359	0.64	1419467	69.84	30	120	
Tb	159	1	He	3229215	0.73	3888262	83.05	30	120	
Ho	165	1	He	3318977	1.95	3932562	84.40	30	120	
Bi	209	1	He	2286595	0.86	2874805	79.54	30	120	

Sample Report

Sample Table

Sample Name	240-49393-s-1-b ms
Data File Name	125SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:01:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1083.256	1083.256	1.10	3692679	0.03	10000	
B	11	45	2	NoGas	332.106	332.106	0.90	883832	0.04	300	>LDR
Na	23	45	1	He	156620.915	156620.915	1.68	196667955	0.08	500000	
Mg	24	45	1	He	93929.994	93929.994	1.98	67043562	0.14	500000	
Al	27	45	1	He	10194.612	10194.612	1.69	4126756	0.25	200000	
K	39	45	1	He	13287.535	13287.535	1.67	8956743	0.15	500000	
Ca	44	45	1	He	115798.176	115798.176	2.63	4270355	2.71	500000	
Ti	47	45	1	He	105.953	105.953	3.58	22031	0.48	2500	
V	51	45	1	He	1070.170	1070.170	1.70	5500453	0.02	10000	
Cr	52	45	1	He	1056.849	1056.849	1.44	6530333	0.02	10000	
Mn	55	45	1	He	1140.503	1140.503	2.58	5536572	0.02	10000	
Fe	56	45	1	He	14545.965	14545.965	1.91	84722208	0.02	200000	
Co	59	103	1	He	977.125	977.125	0.76	9193253	0.01	10000	
Ni	60	103	1	He	981.701	981.701	0.85	2290208	0.04	10000	
Cu	63	103	1	He	972.748	972.748	0.83	5969284	0.02	10000	
Zn	66	103	1	He	917.053	917.053	1.04	1137819	0.08	10000	
As	75	103	1	He	975.320	975.320	0.38	778823	0.13	10000	
Se	78	103	1	He	961.654	961.654	0.72	81177	1.18	10000	
Sr	88	103	1	He	1243.146	1243.146	1.16	8064048	0.02	10000	
Mo	95	103	1	He	118.628	118.628	2.18	349698	0.03	2000	
Ag	107	103	1	He	104.234	104.234	0.61	1055401	0.01	300	
Cd	111	103	1	He	1074.114	1074.114	0.46	1893494	0.06	4000	
Sn	118	115	1	He	1190.936	1190.936	0.35	4986642	0.02	2000	
Sb	123	115	1	He	115.628	115.628	0.15	447532	0.03	300	
Ba	137	115	1	He	1318.385	1318.385	0.28	2505432	0.05	10000	
W	182	209	1	He	115.123	115.123	1.88	1353707	0.01	2500	
Tl	205	165	1	He	254.317	254.317	0.43	7798094	0.00	5000	
Pb	208	209	1	He	1047.794	1047.794	1.53	42409905	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1078550	1.46	1631381	66.11	30	120	
Sc	45	1	He	586909	1.87	829696	70.74	30	120	
Sc	45	2	NoGas	4688708	0.93	6325638	74.12	30	120	
Rh	103	1	He	1708190	0.39	2345543	72.83	30	120	
In	115	1	He	1004000	0.20	1419467	70.73	30	120	
Tb	159	1	He	3222439	0.89	3888262	82.88	30	120	
Ho	165	1	He	3341085	0.80	3932562	84.96	30	120	
Bi	209	1	He	2299512	1.19	2874805	79.99	30	120	

Sample Report

Sample Table

Sample Name	240-49393-s-1-c msd
Data File Name	126SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:04:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1166.859	1166.859	22.57	3604414	0.03	10000	
B	11	45	2	NoGas	350.436	350.436	22.36	882526	0.04	300	>LDR
Na	23	45	1	He	155433.373	155433.373	0.94	199177496	0.08	500000	
Mg	24	45	1	He	93272.742	93272.742	1.40	67939273	0.14	500000	
Al	27	45	1	He	9942.815	9942.815	2.55	4106677	0.24	200000	
K	39	45	1	He	13136.774	13136.774	1.94	9036049	0.15	500000	
Ca	44	45	1	He	114203.771	114203.771	2.60	4297605	2.66	500000	
Ti	47	45	1	He	105.000	105.000	1.89	22279	0.47	2500	
V	51	45	1	He	1062.837	1062.837	1.25	5574283	0.02	10000	
Cr	52	45	1	He	1047.593	1047.593	0.64	6606153	0.02	10000	
Mn	55	45	1	He	1103.622	1103.622	1.06	5467926	0.02	10000	
Fe	56	45	1	He	13804.132	13804.132	0.40	82056870	0.02	200000	
Co	59	103	1	He	958.498	958.498	2.42	9216248	0.01	10000	
Ni	60	103	1	He	964.352	964.352	1.84	2299442	0.04	10000	
Cu	63	103	1	He	955.363	955.363	0.92	5992240	0.02	10000	
Zn	66	103	1	He	907.151	907.151	1.36	1150388	0.08	10000	
As	75	103	1	He	957.034	957.034	0.76	781111	0.12	10000	
Se	78	103	1	He	949.895	949.895	1.01	81956	1.16	10000	
Sr	88	103	1	He	1207.191	1207.191	1.31	8004077	0.02	10000	
Mo	95	103	1	He	117.143	117.143	1.36	352939	0.03	2000	
Ag	107	103	1	He	101.963	101.963	1.16	1055186	0.01	300	
Cd	111	103	1	He	1052.178	1052.178	1.50	1895733	0.06	4000	
Sn	118	115	1	He	1188.937	1188.937	0.46	5003817	0.02	2000	
Sb	123	115	1	He	115.246	115.246	0.45	448327	0.03	300	
Ba	137	115	1	He	1306.318	1306.318	1.41	2495018	0.05	10000	
W	182	209	1	He	113.880	113.880	1.89	1350996	0.01	2500	
Tl	205	165	1	He	250.476	250.476	0.63	7770389	0.00	5000	
Pb	208	209	1	He	1039.980	1039.980	1.50	42466042	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1011589	22.60	1631381	62.01	30	120	
Sc	45	1	He	598871	1.43	829696	72.18	30	120	
Sc	45	2	NoGas	4598186	23.44	6325638	72.69	30	120	
Rh	103	1	He	1746011	1.14	2345543	74.44	30	120	
In	115	1	He	1009138	0.83	1419467	71.09	30	120	
Tb	159	1	He	3294564	0.24	3888262	84.73	30	120	
Ho	165	1	He	3380265	0.28	3932562	85.96	30	120	
Bi	209	1	He	2319730	0.67	2874805	80.69	30	120	

Sample Report

Sample Table

Sample Name	240-49393-v-1-a
Data File Name	127SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:08:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.506	0.506	7.30	1963	0.03	10000	
B	11	45	2	NoGas	212.530	212.530	1.33	628969	0.03	300	
Na	23	45	1	He	141731.725	141731.725	2.05	192970881	0.07	500000	
Mg	24	45	1	He	81723.256	81723.256	2.22	63247805	0.13	500000	
Al	27	45	1	He	3.533	3.533	13.35	3580	0.10	200000	
K	39	45	1	He	2417.181	2417.181	1.70	1790738	0.13	500000	
Ca	44	45	1	He	104358.326	104358.326	2.39	4173105	2.50	500000	
Ti	47	45	1	He	0.552	0.552	12.55	134	0.41	2500	
V	51	45	1	He	0.521	0.521	70.20	3003	0.02	10000	
Cr	52	45	1	He	1.115	1.115	3.39	9445	0.01	10000	
Mn	55	45	1	He	77.031	77.031	1.41	406407	0.02	10000	
Fe	56	45	1	He	3058.103	3058.103	1.17	19317748	0.02	200000	
Co	59	103	1	He	0.467	0.467	7.24	4710	0.01	10000	
Ni	60	103	1	He	1.468	1.468	1.55	3746	0.04	10000	
Cu	63	103	1	He	0.430	0.430	11.13	4135	0.01	10000	
Zn	66	103	1	He	1.869	1.869	9.16	3995	0.05	10000	
As	75	103	1	He	1.788	1.788	4.29	1646	0.11	10000	
Se	78	103	1	He	1.495	1.495	3.28	174	0.86	10000	
Sr	88	103	1	He	186.009	186.009	0.55	1284332	0.01	10000	
Mo	95	103	1	He	1.929	1.929	11.90	6100	0.03	2000	
Ag	107	103	1	He	0.043	0.043	7.86	471	0.01	300	
Cd	111	103	1	He	0.228	0.228	26.73	1383	0.02	4000	
Sn	118	115	1	He	2.651	2.651	19.95	12958	0.02	2000	
Sb	123	115	1	He	0.970	0.970	2.39	4583	0.02	300	
Ba	137	115	1	He	103.495	103.495	1.17	214572	0.05	10000	
W	182	209	1	He	1.937	1.937	21.11	26486	0.01	2500	
Tl	205	165	1	He	0.276	0.276	29.83	8892	0.00	5000	
Pb	208	209	1	He	0.554	0.554	21.17	23744	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1206836	0.48	1631381	73.98	30	120	
Sc	45	1	He	636356	1.36	829696	76.70	30	120	
Sc	45	2	NoGas	5189826	0.33	6325638	82.04	30	120	
Rh	103	1	He	1818157	0.25	2345543	77.52	30	120	
In	115	1	He	1095030	0.64	1419467	77.14	30	120	
Tb	159	1	He	3398135	1.35	3888262	87.39	30	120	
Ho	165	1	He	3478746	0.98	3932562	88.46	30	120	
Bi	209	1	He	2370557	0.90	2874805	82.46	30	120	

Sample Report

Sample Table

Sample Name	240-49393-v-1-b ms
Data File Name	128SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:12:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1039.748	1039.748	1.87	3636244	0.03	10000	
B	11	45	2	NoGas	319.718	319.718	2.18	871211	0.04	300	>LDR
Na	23	45	1	He	149228.696	149228.696	2.68	192982392	0.08	500000	
Mg	24	45	1	He	90044.415	90044.415	2.87	66189407	0.14	500000	
Al	27	45	1	He	9392.978	9392.978	2.40	3916216	0.24	200000	
K	39	45	1	He	12514.976	12514.976	2.44	8690183	0.14	500000	
Ca	44	45	1	He	110925.285	110925.285	3.30	4212738	2.63	500000	
Ti	47	45	1	He	102.651	102.651	0.49	21992	0.47	2500	
V	51	45	1	He	1054.267	1054.267	2.20	5580909	0.02	10000	
Cr	52	45	1	He	1039.116	1039.116	2.75	6612130	0.02	10000	
Mn	55	45	1	He	1115.966	1115.966	3.15	5579369	0.02	10000	
Fe	56	45	1	He	13248.034	13248.034	2.64	79469930	0.02	200000	
Co	59	103	1	He	943.742	943.742	1.15	9275660	0.01	10000	
Ni	60	103	1	He	952.453	952.453	0.71	2321232	0.04	10000	
Cu	63	103	1	He	945.045	945.045	0.89	6058437	0.02	10000	
Zn	66	103	1	He	890.077	890.077	1.02	1153742	0.08	10000	
As	75	103	1	He	943.964	943.964	1.01	787450	0.12	10000	
Se	78	103	1	He	932.498	932.498	1.19	82233	1.13	10000	
Sr	88	103	1	He	1188.029	1188.029	1.72	8050168	0.01	10000	
Mo	95	103	1	He	113.430	113.430	1.96	349294	0.03	2000	
Ag	107	103	1	He	100.028	100.028	0.97	1058057	0.01	300	
Cd	111	103	1	He	1032.433	1032.433	2.16	1901250	0.05	4000	
Sn	118	115	1	He	1183.589	1183.589	0.95	5018615	0.02	2000	
Sb	123	115	1	He	114.889	114.889	0.75	450298	0.03	300	
Ba	137	115	1	He	1305.492	1305.492	1.24	2512244	0.05	10000	
W	182	209	1	He	112.051	112.051	0.36	1327985	0.01	2500	
Tl	205	165	1	He	248.851	248.851	1.07	7781960	0.00	5000	
Pb	208	209	1	He	1032.269	1032.269	1.25	42106836	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1106279	0.91	1631381	67.81	30	120	
Sc	45	1	He	604632	2.97	829696	72.87	30	120	
Sc	45	2	NoGas	4799654	1.62	6325638	75.88	30	120	
Rh	103	1	He	1784533	0.77	2345543	76.08	30	120	
In	115	1	He	1016727	0.61	1419467	71.63	30	120	
Tb	159	1	He	3321984	0.51	3888262	85.44	30	120	
Ho	165	1	He	3407661	1.25	3932562	86.65	30	120	
Bi	209	1	He	2317190	0.25	2874805	80.60	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	129_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:15:51-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.353	0.170	197226	1.00	50	98.7	89.5	110.5	
B	11	45	2	NoGas	52.583	0.557	168427	0.49	50	105.2	89.5	110.5	
Na	23	45	1	He	24722.276	2.130	36878125	1.12	25000	98.9	89.5	110.5	
Mg	24	45	1	He	24722.596	2.278	20954736	1.44	25000	98.9	89.5	110.5	
Al	27	45	1	He	240.422	1.484	117744	1.67	250	96.2	89.5	110.5	
K	39	45	1	He	25185.143	2.527	20127496	0.53	25000	100.7	89.5	110.5	
Ca	44	45	1	He	24784.744	2.226	1086032	0.97	25000	99.1	89.5	110.5	
Ti	47	45	1	He	50.116	2.161	12380	0.83	50	100.2	89.5	110.5	
V	51	45	1	He	49.904	1.560	304672	1.60	50	99.8	89.5	110.5	
Cr	52	45	1	He	50.233	1.351	370659	1.67	50	100.5	89.5	110.5	
Mn	55	45	1	He	259.785	3.601	1498075	1.55	250	103.9	89.5	110.5	
Fe	56	45	1	He	12692.940	1.979	87790357	1.16	12500	101.5	89.5	110.5	
Co	59	103	1	He	47.185	0.937	521782	0.95	50	94.4	89.5	110.5	
Ni	60	103	1	He	47.162	1.700	129407	1.40	50	94.3	89.5	110.5	
Cu	63	103	1	He	47.653	1.316	345070	1.34	50	95.3	89.5	110.5	
Zn	66	103	1	He	47.360	1.554	70664	1.79	50	94.7	89.5	110.5	
As	75	103	1	He	49.107	0.577	46218	0.52	50	98.2	89.5	110.5	
Se	78	103	1	He	49.290	1.307	4932	0.96	50	98.6	89.5	110.5	
Sr	88	103	1	He	48.740	0.822	371676	1.10	50	97.5	89.5	110.5	
Mo	95	103	1	He	50.757	1.139	175878	1.16	50	101.5	89.5	110.5	
Ag	107	103	1	He	49.514	1.261	589211	1.09	50	99.0	89.5	110.5	
Cd	111	103	1	He	50.032	1.282	104662	1.31	50	100.1	89.5	110.5	
Sn	118	115	1	He	51.465	0.679	259658	0.23	50	102.9	89.5	110.5	
Sb	123	115	1	He	52.644	0.633	244953	0.30	50	105.3	89.5	110.5	
Ba	137	115	1	He	51.645	0.846	117927	0.35	50	103.3	89.5	110.5	
W	182	209	1	He	50.721	1.616	674415	0.14	50	101.4	89.5	110.5	
Tl	205	165	1	He	51.498	1.355	1744408	0.93	50	103.0	89.5	110.5	
Pb	208	209	1	He	48.421	1.296	2210740	1.02	50	96.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1264044	0.94	1631381	77.48	30	120	
Sc	45	1	He	697051	3.01	829696	84.01	30	120	
Sc	45	2	NoGas	5405379	0.12	6325638	85.45	30	120	
Rh	103	1	He	2007561	0.48	2345543	85.59	30	120	
In	115	1	He	1205569	0.53	1419467	84.93	30	120	
Tb	159	1	He	3600837	0.32	3888262	92.61	30	120	
Ho	165	1	He	3691015	0.79	3932562	93.86	30	120	
Bi	209	1	He	2592993	1.50	2874805	90.20	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	130_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:19:41-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.266	12.7	1115	13.0	1	
B	11	45	2	NoGas	4.407	3.4	21728	1.3	20	
Na	23	45	1	He	45.880	6.5	82938	3.7	400	
Mg	24	45	1	He	4.488	27.3	4371	20.9	1000	
Al	27	45	1	He	0.362	47.7	2264	2.0	50	
K	39	45	1	He	11.680	16.1	39180	3.8	1000	
Ca	44	45	1	He	5.025	28.8	1003	5.2	1000	
Ti	47	45	1	He	0.141	27.6	43	20.4	20	
V	51	45	1	He	0.077	160.8	529	136.6	2	
Cr	52	45	1	He	0.037	54.8	2299	5.1	2	
Mn	55	45	1	He	0.042	39.4	1206	6.1	2	
Fe	56	45	1	He	22.339	23.2	149316	21.2	50	
Co	59	103	1	He	0.022	2.3	300	2.9	1	
Ni	60	103	1	He	0.013	155.9	152	37.7	2	
Cu	63	103	1	He	0.205	13.9	3090	6.5	2	
Zn	66	103	1	He	0.012	458.2	1790	5.6	20	
As	75	103	1	He	0.249	6.8	392	3.3	2	
Se	78	103	1	He	0.280	39.5	76	14.2	2	
Sr	88	103	1	He	0.036	15.3	390	12.1	10	
Mo	95	103	1	He	0.957	19.7	3527	18.4	2	
Ag	107	103	1	He	0.024	13.1	308	11.9	0.2	
Cd	111	103	1	He	0.117	20.2	1360	2.8	0.2	
Sn	118	115	1	He	0.522	1.7	3719	1.5	10	
Sb	123	115	1	He	0.530	21.1	3125	16.9	1	
Ba	137	115	1	He	0.015	91.3	123	25.8	5	
W	182	209	1	He	1.306	12.7	21690	10.9	10	
Tl	205	165	1	He	0.089	14.4	3070	13.2	0.5	
Pb	208	209	1	He	0.184	3.3	9599	3.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1281837	0.86	1631381	78.57	30	120	
Sc	45	1	He	658383	1.40	829696	79.35	30	120	
Sc	45	2	NoGas	5378840	2.79	6325638	85.03	30	120	
Rh	103	1	He	2105025	0.99	2345543	89.75	30	120	
In	115	1	He	1255019	0.29	1419467	88.41	30	120	
Tb	159	1	He	3557435	1.58	3888262	91.49	30	120	
Ho	165	1	He	3665451	1.03	3932562	93.21	30	120	
Bi	209	1	He	2722672	0.39	2874805	94.71	30	120	

Sample Report

Sample Table

Sample Name	240-49393-v-1-c msd
Data File Name	131SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:23:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1045.637	1045.637	0.46	3669044	0.03	10000	
B	11	45	2	NoGas	325.422	325.422	1.04	884007	0.04	300	>LDR
Na	23	45	1	He	153441.527	153441.527	4.91	197681466	0.08	500000	
Mg	24	45	1	He	91913.169	91913.169	2.66	67349301	0.14	500000	
Al	27	45	1	He	9999.012	9999.012	4.15	4153413	0.24	200000	
K	39	45	1	He	13081.447	13081.447	5.90	9046020	0.14	500000	
Ca	44	45	1	He	113227.746	113227.746	3.45	4285962	2.64	500000	
Ti	47	45	1	He	106.334	106.334	4.50	22690	0.47	2500	
V	51	45	1	He	1048.671	1048.671	4.21	5530669	0.02	10000	
Cr	52	45	1	He	1044.082	1044.082	3.53	6621019	0.02	10000	
Mn	55	45	1	He	1115.470	1115.470	4.56	5556865	0.02	10000	
Fe	56	45	1	He	13808.240	13808.240	3.80	82540054	0.02	200000	
Co	59	103	1	He	977.774	977.774	0.60	9171179	0.01	10000	
Ni	60	103	1	He	987.986	987.986	0.22	2297852	0.04	10000	
Cu	63	103	1	He	983.250	983.250	1.29	6014842	0.02	10000	
Zn	66	103	1	He	932.554	932.554	0.54	1153466	0.08	10000	
As	75	103	1	He	988.200	988.200	0.72	786664	0.13	10000	
Se	78	103	1	He	983.064	983.064	1.07	82726	1.19	10000	
Sr	88	103	1	He	1249.165	1249.165	1.45	8077681	0.02	10000	
Mo	95	103	1	He	118.580	118.580	0.41	348496	0.03	2000	
Ag	107	103	1	He	103.822	103.822	1.02	1047958	0.01	300	
Cd	111	103	1	He	1081.130	1081.130	0.23	1900006	0.06	4000	
Sn	118	115	1	He	1199.466	1199.466	1.09	5009637	0.02	2000	
Sb	123	115	1	He	116.074	116.074	0.69	448123	0.03	300	
Ba	137	115	1	He	1329.243	1329.243	0.15	2519758	0.05	10000	
W	182	209	1	He	113.132	113.132	1.38	1320298	0.01	2500	
Tl	205	165	1	He	252.502	252.502	0.29	7773269	0.00	5000	
Pb	208	209	1	He	1051.247	1051.247	0.49	42227589	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1110102	0.23	1631381	68.05	30	120	
Sc	45	1	He	602761	3.69	829696	72.65	30	120	
Sc	45	2	NoGas	4785281	0.74	6325638	75.65	30	120	
Rh	103	1	He	1702948	0.81	2345543	72.60	30	120	
In	115	1	He	1001502	0.71	1419467	70.55	30	120	
Tb	159	1	He	3239571	1.37	3888262	83.32	30	120	
Ho	165	1	He	3354407	0.22	3932562	85.30	30	120	
Bi	209	1	He	2281866	0.51	2874805	79.37	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-2-a
Data File Name	132SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:27:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.472	0.472	5.09	1704	0.03	10000	
B	11	45	2	NoGas	1385.873	1385.873	0.65	3794390	0.04	300	>LDR
Na	23	45	1	He	109526.890	109526.890	2.07	144987791	0.08	500000	
Mg	24	45	1	He	26656.875	26656.875	2.73	20056332	0.13	500000	
Al	27	45	1	He	111.799	111.799	2.94	49651	0.23	200000	
K	39	45	1	He	17586.558	17586.558	3.49	12484450	0.14	500000	
Ca	44	45	1	He	44187.026	44187.026	3.02	1718115	2.57	500000	
Ti	47	45	1	He	1.899	1.899	26.86	428	0.44	2500	
V	51	45	1	He	0.638	0.638	15.48	3544	0.02	10000	
Cr	52	45	1	He	1.477	1.477	3.69	11537	0.01	10000	
Mn	55	45	1	He	163.472	163.472	2.24	837415	0.02	10000	
Fe	56	45	1	He	3813.042	3813.042	2.11	23415118	0.02	200000	
Co	59	103	1	He	0.465	0.465	10.28	4627	0.01	10000	
Ni	60	103	1	He	1.303	1.303	4.48	3289	0.04	10000	
Cu	63	103	1	He	1.253	1.253	5.52	9379	0.01	10000	
Zn	66	103	1	He	8.930	8.930	1.18	13123	0.07	10000	
As	75	103	1	He	3.732	3.732	1.34	3252	0.11	10000	
Se	78	103	1	He	1.346	1.346	8.65	159	0.85	10000	
Sr	88	103	1	He	1321.588	1321.588	0.70	8997281	0.01	10000	
Mo	95	103	1	He	1.532	1.532	9.25	4787	0.03	2000	
Ag	107	103	1	He	0.040	0.040	18.79	427	0.01	300	
Cd	111	103	1	He	0.246	0.246	2.83	1396	0.02	4000	
Sn	118	115	1	He	2.443	2.443	15.64	11953	0.02	2000	
Sb	123	115	1	He	0.870	0.870	1.17	4139	0.02	300	
Ba	137	115	1	He	152.882	152.882	0.56	315177	0.05	10000	
W	182	209	1	He	2.802	2.802	8.20	36947	0.01	2500	
Tl	205	165	1	He	0.266	0.266	29.85	8578	0.00	5000	
Pb	208	209	1	He	0.815	0.815	11.36	34664	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1120610	1.12	1631381	68.69	30	120	
Sc	45	1	He	618795	2.57	829696	74.58	30	120	
Sc	45	2	NoGas	4854173	0.42	6325638	76.74	30	120	
Rh	103	1	He	1792753	0.35	2345543	76.43	30	120	
In	115	1	He	1088948	0.71	1419467	76.72	30	120	
Tb	159	1	He	3402246	1.22	3888262	87.50	30	120	
Ho	165	1	He	3484974	1.13	3932562	88.62	30	120	
Bi	209	1	He	2368881	0.53	2874805	82.40	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-2-a
Data File Name	133SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:30:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.267	0.267	6.99	985	0.03	10000	
B	11	45	2	NoGas	1495.368	1495.368	1.22	4118672	0.04	300	>LDR
Na	23	45	1	He	115800.209	115800.209	3.62	153825872	0.08	500000	
Mg	24	45	1	He	28121.632	28121.632	2.33	21239880	0.13	500000	
Al	27	45	1	He	1.121	1.121	25.02	2460	0.05	200000	
K	39	45	1	He	18529.085	18529.085	2.50	13203921	0.14	500000	
Ca	44	45	1	He	46275.394	46275.394	1.71	1806536	2.56	500000	
Ti	47	45	1	He	0.393	0.393	53.42	96	0.41	2500	
V	51	45	1	He	0.443	0.443	27.78	2482	0.02	10000	
Cr	52	45	1	He	1.227	1.227	10.54	9931	0.01	10000	
Mn	55	45	1	He	172.267	172.267	2.59	885703	0.02	10000	
Fe	56	45	1	He	3868.686	3868.686	3.12	23841813	0.02	200000	
Co	59	103	1	He	0.390	0.390	5.42	3924	0.01	10000	
Ni	60	103	1	He	1.601	1.601	4.85	4055	0.04	10000	
Cu	63	103	1	He	0.647	0.647	2.16	5526	0.01	10000	
Zn	66	103	1	He	8.444	8.444	1.96	12599	0.07	10000	
As	75	103	1	He	3.057	3.057	1.26	2710	0.11	10000	
Se	78	103	1	He	0.618	0.618	16.23	95	0.65	10000	
Sr	88	103	1	He	1400.938	1400.938	1.38	9620715	0.01	10000	
Mo	95	103	1	He	0.750	0.750	7.24	2388	0.03	2000	
Ag	107	103	1	He	0.030	0.030	19.75	329	0.01	300	
Cd	111	103	1	He	0.116	0.116	7.44	1166	0.01	4000	
Sn	118	115	1	He	0.671	0.671	15.49	3878	0.02	2000	
Sb	123	115	1	He	0.693	0.693	6.03	3378	0.02	300	
Ba	137	115	1	He	157.035	157.035	1.48	321869	0.05	10000	
W	182	209	1	He	1.766	1.766	2.70	24252	0.01	2500	
Tl	205	165	1	He	0.048	0.048	13.75	1575	0.00	5000	
Pb	208	209	1	He	0.253	0.253	8.71	11151	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1130580	1.82	1631381	69.30	30	120	
Sc	45	1	He	621188	3.10	829696	74.87	30	120	
Sc	45	2	NoGas	4884701	1.93	6325638	77.22	30	120	
Rh	103	1	He	1808623	1.30	2345543	77.11	30	120	
In	115	1	He	1082690	0.40	1419467	76.27	30	120	
Tb	159	1	He	3379022	0.69	3888262	86.90	30	120	
Ho	165	1	He	3451851	1.14	3932562	87.78	30	120	
Bi	209	1	He	2352011	0.35	2874805	81.81	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-3-a
Data File Name	134SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:34:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.255	0.255	4.06	1022	0.02	10000	
B	11	45	2	NoGas	285.108	285.108	0.71	851231	0.03	300	
Na	23	45	1	He	78268.139	78268.139	2.31	107917044	0.07	500000	
Mg	24	45	1	He	77507.779	77507.779	2.29	60744862	0.13	500000	
Al	27	45	1	He	-0.386	-0.386	-36.21	1883	-0.02	200000	
K	39	45	1	He	2485.873	2485.873	2.20	1864091	0.13	500000	
Ca	44	45	1	He	85615.954	85615.954	3.40	3466946	2.47	500000	
Ti	47	45	1	He	0.270	0.270	24.13	72	0.37	2500	
V	51	45	1	He	0.011	0.011	1723.96	152	0.01	10000	
Cr	52	45	1	He	1.092	1.092	7.00	9401	0.01	10000	
Mn	55	45	1	He	284.156	284.156	1.66	1515622	0.02	10000	
Fe	56	45	1	He	580.817	580.817	2.16	3717828	0.02	200000	
Co	59	103	1	He	0.221	0.221	4.04	2280	0.01	10000	
Ni	60	103	1	He	1.134	1.134	2.98	2951	0.04	10000	
Cu	63	103	1	He	0.549	0.549	8.88	4972	0.01	10000	
Zn	66	103	1	He	4.054	4.054	2.57	6959	0.06	10000	
As	75	103	1	He	0.884	0.884	4.56	889	0.10	10000	
Se	78	103	1	He	0.759	0.759	17.43	110	0.69	10000	
Sr	88	103	1	He	351.719	351.719	1.32	2457832	0.01	10000	
Mo	95	103	1	He	3.152	3.152	1.71	10056	0.03	2000	
Ag	107	103	1	He	0.033	0.033	9.18	368	0.01	300	
Cd	111	103	1	He	0.118	0.118	14.73	1191	0.01	4000	
Sn	118	115	1	He	0.395	0.395	12.78	2693	0.01	2000	
Sb	123	115	1	He	0.545	0.545	3.52	2827	0.02	300	
Ba	137	115	1	He	193.413	193.413	0.99	405780	0.05	10000	
W	182	209	1	He	0.379	0.379	1.45	7695	0.00	2500	
Tl	205	165	1	He	0.024	0.024	3.45	850	0.00	5000	
Pb	208	209	1	He	0.228	0.228	7.45	10198	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1226131	1.78	1631381	75.16	30	120	
Sc	45	1	He	644378	1.22	829696	77.66	30	120	
Sc	45	2	NoGas	5253114	1.31	6325638	83.04	30	120	
Rh	103	1	He	1840196	1.42	2345543	78.46	30	120	
In	115	1	He	1108316	1.22	1419467	78.08	30	120	
Tb	159	1	He	3397727	0.98	3888262	87.38	30	120	
Ho	165	1	He	3522807	0.22	3932562	89.58	30	120	
Bi	209	1	He	2381016	1.67	2874805	82.82	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-3-a
Data File Name	135SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:38:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.204	0.204	19.74	837	0.02	10000	
B	11	45	2	NoGas	271.476	271.476	0.56	809846	0.03	300	
Na	23	45	1	He	82969.948	82969.948	3.16	118259880	0.07	500000	
Mg	24	45	1	He	75175.221	75175.221	3.30	60901951	0.12	500000	
Al	27	45	1	He	-1.289	-1.289	-13.46	1533	-0.08	200000	
K	39	45	1	He	2432.411	2432.411	3.36	1886027	0.13	500000	
Ca	44	45	1	He	84610.163	84610.163	2.89	3542518	2.39	500000	
Ti	47	45	1	He	0.288	0.288	59.75	78	0.37	2500	
V	51	45	1	He	-0.221	-0.221	-152.84	-1220	0.02	10000	
Cr	52	45	1	He	1.041	1.041	2.11	9370	0.01	10000	
Mn	55	45	1	He	229.334	229.334	2.43	1264786	0.02	10000	
Fe	56	45	1	He	380.978	380.978	2.99	2522487	0.02	200000	
Co	59	103	1	He	0.236	0.236	1.23	2499	0.01	10000	
Ni	60	103	1	He	1.207	1.207	1.44	3224	0.04	10000	
Cu	63	103	1	He	0.363	0.363	6.75	3853	0.01	10000	
Zn	66	103	1	He	1.546	1.546	2.36	3714	0.04	10000	
As	75	103	1	He	0.820	0.820	2.88	856	0.10	10000	
Se	78	103	1	He	0.365	0.365	19.20	76	0.48	10000	
Sr	88	103	1	He	328.109	328.109	1.64	2357465	0.01	10000	
Mo	95	103	1	He	3.007	3.007	3.37	9866	0.03	2000	
Ag	107	103	1	He	0.032	0.032	4.43	369	0.01	300	
Cd	111	103	1	He	0.105	0.105	17.37	1199	0.01	4000	
Sn	118	115	1	He	0.333	0.333	9.32	2482	0.01	2000	
Sb	123	115	1	He	0.424	0.424	2.72	2378	0.02	300	
Ba	137	115	1	He	178.620	178.620	1.25	385931	0.05	10000	
W	182	209	1	He	0.253	0.253	19.93	6227	0.00	2500	
Tl	205	165	1	He	0.012	0.012	11.07	469	0.00	5000	
Pb	208	209	1	He	0.164	0.164	7.24	7642	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1247504	0.79	1631381	76.47	30	120	
Sc	45	1	He	666572	3.98	829696	80.34	30	120	
Sc	45	2	NoGas	5246003	1.59	6325638	82.93	30	120	
Rh	103	1	He	1892070	0.83	2345543	80.67	30	120	
In	115	1	He	1141308	0.31	1419467	80.40	30	120	
Tb	159	1	He	3511225	1.07	3888262	90.30	30	120	
Ho	165	1	He	3562462	0.36	3932562	90.59	30	120	
Bi	209	1	He	2406871	1.24	2874805	83.72	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-4-a
Data File Name	136SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:42:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.204	0.204	10.08	822	0.02	10000	
B	11	45	2	NoGas	265.586	265.586	0.61	799046	0.03	300	
Na	23	45	1	He	83857.904	83857.904	2.51	120357069	0.07	500000	
Mg	24	45	1	He	67175.490	67175.490	2.66	54800385	0.12	500000	
Al	27	45	1	He	3.852	3.852	13.63	3920	0.10	200000	
K	39	45	1	He	2621.569	2621.569	1.58	2044906	0.13	500000	
Ca	44	45	1	He	86376.492	86376.492	3.20	3640698	2.37	500000	
Ti	47	45	1	He	0.487	0.487	24.28	127	0.38	2500	
V	51	45	1	He	-0.052	-0.052	-53.90	-221	0.02	10000	
Cr	52	45	1	He	1.082	1.082	8.47	9715	0.01	10000	
Mn	55	45	1	He	138.035	138.035	1.78	766882	0.02	10000	
Fe	56	45	1	He	1056.047	1056.047	2.52	7033477	0.02	200000	
Co	59	103	1	He	0.399	0.399	2.18	4168	0.01	10000	
Ni	60	103	1	He	1.281	1.281	5.26	3394	0.04	10000	
Cu	63	103	1	He	0.699	0.699	1.74	6094	0.01	10000	
Zn	66	103	1	He	2.569	2.569	2.12	5087	0.05	10000	
As	75	103	1	He	0.828	0.828	0.53	859	0.10	10000	
Se	78	103	1	He	0.370	0.370	26.00	76	0.49	10000	
Sr	88	103	1	He	287.304	287.304	1.08	2052266	0.01	10000	
Mo	95	103	1	He	3.113	3.113	2.13	10152	0.03	2000	
Ag	107	103	1	He	0.024	0.024	3.65	274	0.01	300	
Cd	111	103	1	He	0.122	0.122	28.70	1223	0.01	4000	
Sn	118	115	1	He	0.299	0.299	22.31	2289	0.01	2000	
Sb	123	115	1	He	0.458	0.458	6.08	2495	0.02	300	
Ba	137	115	1	He	130.031	130.031	1.17	277580	0.05	10000	
W	182	209	1	He	0.318	0.318	6.89	7050	0.00	2500	
Tl	205	165	1	He	0.011	0.011	7.13	427	0.00	5000	
Pb	208	209	1	He	0.153	0.153	5.49	7191	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1223943	1.09	1631381	75.02	30	120	
Sc	45	1	He	670883	2.19	829696	80.86	30	120	
Sc	45	2	NoGas	5289490	0.67	6325638	83.62	30	120	
Rh	103	1	He	1880905	0.65	2345543	80.19	30	120	
In	115	1	He	1127575	0.59	1419467	79.44	30	120	
Tb	159	1	He	3458627	0.61	3888262	88.95	30	120	
Ho	165	1	He	3531941	0.63	3932562	89.81	30	120	
Bi	209	1	He	2412968	1.60	2874805	83.94	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-4-a
Data File Name	137SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:46:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.145	0.145	12.19	593	0.02	10000	
B	11	45	2	NoGas	271.329	271.329	0.48	811466	0.03	300	
Na	23	45	1	He	88620.095	88620.095	2.89	126147402	0.07	500000	
Mg	24	45	1	He	68446.413	68446.413	2.55	55382955	0.12	500000	
Al	27	45	1	He	0.897	0.897	37.62	2532	0.04	200000	
K	39	45	1	He	2713.117	2713.117	2.82	2097453	0.13	500000	
Ca	44	45	1	He	87158.422	87158.422	2.11	3644335	2.39	500000	
Ti	47	45	1	He	0.304	0.304	19.88	82	0.37	2500	
V	51	45	1	He	-0.171	-0.171	-191.82	-882	0.02	10000	
Cr	52	45	1	He	1.000	1.000	6.85	9066	0.01	10000	
Mn	55	45	1	He	123.347	123.347	2.37	679749	0.02	10000	
Fe	56	45	1	He	812.154	812.154	1.89	5366509	0.02	200000	
Co	59	103	1	He	0.366	0.366	5.92	3833	0.01	10000	
Ni	60	103	1	He	2.252	2.252	1.40	5888	0.04	10000	
Cu	63	103	1	He	0.874	0.874	2.31	7282	0.01	10000	
Zn	66	103	1	He	2.398	2.398	7.52	4853	0.05	10000	
As	75	103	1	He	0.843	0.843	10.02	872	0.10	10000	
Se	78	103	1	He	0.347	0.347	6.34	74	0.47	10000	
Sr	88	103	1	He	287.719	287.719	1.94	2054966	0.01	10000	
Mo	95	103	1	He	3.047	3.047	1.10	9938	0.03	2000	
Ag	107	103	1	He	0.021	0.021	1.03	242	0.01	300	
Cd	111	103	1	He	0.093	0.093	1.84	1169	0.01	4000	
Sn	118	115	1	He	0.264	0.264	17.28	2137	0.01	2000	
Sb	123	115	1	He	0.504	0.504	11.37	2709	0.02	300	
Ba	137	115	1	He	128.619	128.619	1.17	276015	0.05	10000	
W	182	209	1	He	0.333	0.333	9.09	7276	0.00	2500	
Tl	205	165	1	He	0.009	0.009	12.26	339	0.00	5000	
Pb	208	209	1	He	0.090	0.090	2.50	4539	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1223138	0.30	1631381	74.98	30	120	
Sc	45	1	He	665460	2.57	829696	80.21	30	120	
Sc	45	2	NoGas	5259315	0.90	6325638	83.14	30	120	
Rh	103	1	He	1880929	1.10	2345543	80.19	30	120	
In	115	1	He	1133495	0.31	1419467	79.85	30	120	
Tb	159	1	He	3460571	0.52	3888262	89.00	30	120	
Ho	165	1	He	3508519	0.76	3932562	89.22	30	120	
Bi	209	1	He	2428996	1.20	2874805	84.49	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-5-a
Data File Name	138SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:49:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.118	0.118	7.37	489	0.02	10000	
B	11	45	2	NoGas	108.169	108.169	0.15	318838	0.03	300	
Na	23	45	1	He	9468.726	9468.726	1.05	13189268	0.07	500000	
Mg	24	45	1	He	54291.429	54291.429	1.83	42928357	0.13	500000	
Al	27	45	1	He	4.158	4.158	11.03	3942	0.11	200000	
K	39	45	1	He	1408.911	1408.911	1.94	1078780	0.13	500000	
Ca	44	45	1	He	117379.211	117379.211	2.58	4794591	2.45	500000	
Ti	47	45	1	He	0.243	0.243	22.27	67	0.36	2500	
V	51	45	1	He	0.043	0.043	511.68	322	0.01	10000	
Cr	52	45	1	He	1.107	1.107	6.88	9586	0.01	10000	
Mn	55	45	1	He	156.723	156.723	2.35	843592	0.02	10000	
Fe	56	45	1	He	69.942	69.942	2.72	454766	0.02	200000	
Co	59	103	1	He	0.557	0.557	1.60	5761	0.01	10000	
Ni	60	103	1	He	1.297	1.297	2.99	3409	0.04	10000	
Cu	63	103	1	He	1.286	1.286	2.72	9987	0.01	10000	
Zn	66	103	1	He	2.022	2.022	8.11	4308	0.05	10000	
As	75	103	1	He	0.993	0.993	6.78	996	0.10	10000	
Se	78	103	1	He	0.847	0.847	7.13	119	0.71	10000	
Sr	88	103	1	He	228.188	228.188	1.86	1617417	0.01	10000	
Mo	95	103	1	He	1.140	1.140	1.55	3722	0.03	2000	
Ag	107	103	1	He	0.022	0.022	10.13	250	0.01	300	
Cd	111	103	1	He	0.128	0.128	15.83	1226	0.01	4000	
Sn	118	115	1	He	0.232	0.232	33.09	1974	0.01	2000	
Sb	123	115	1	He	0.481	0.481	11.85	2591	0.02	300	
Ba	137	115	1	He	54.814	54.814	1.24	116963	0.05	10000	
W	182	209	1	He	0.194	0.194	9.46	5560	0.00	2500	
Tl	205	165	1	He	0.012	0.012	15.28	450	0.00	5000	
Pb	208	209	1	He	0.119	0.119	6.53	5779	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1217814	1.24	1631381	74.65	30	120	
Sc	45	1	He	650209	2.83	829696	78.37	30	120	
Sc	45	2	NoGas	5105552	0.95	6325638	80.71	30	120	
Rh	103	1	He	1866606	0.66	2345543	79.58	30	120	
In	115	1	He	1126580	0.25	1419467	79.37	30	120	
Tb	159	1	He	3434179	1.18	3888262	88.32	30	120	
Ho	165	1	He	3575832	1.72	3932562	90.93	30	120	
Bi	209	1	He	2432042	0.55	2874805	84.60	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-5-a
Data File Name	139SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:53:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.121	0.121	25.82	496	0.02	10000	
B	11	45	2	NoGas	105.253	105.253	0.65	308311	0.03	300	
Na	23	45	1	He	9451.577	9451.577	2.13	13153278	0.07	500000	
Mg	24	45	1	He	53403.789	53403.789	2.10	42190278	0.13	500000	
Al	27	45	1	He	11.962	11.962	2.57	7430	0.16	200000	
K	39	45	1	He	1404.544	1404.544	2.89	1074577	0.13	500000	
Ca	44	45	1	He	115296.746	115296.746	2.10	4706382	2.45	500000	
Ti	47	45	1	He	0.307	0.307	5.25	81	0.38	2500	
V	51	45	1	He	-0.092	-0.092	-264.93	-442	0.02	10000	
Cr	52	45	1	He	1.488	1.488	5.76	12188	0.01	10000	
Mn	55	45	1	He	142.770	142.770	0.90	768126	0.02	10000	
Fe	56	45	1	He	29.048	29.048	1.15	190869	0.02	200000	
Co	59	103	1	He	0.503	0.503	4.73	5166	0.01	10000	
Ni	60	103	1	He	1.529	1.529	2.45	3968	0.04	10000	
Cu	63	103	1	He	1.322	1.322	1.62	10146	0.01	10000	
Zn	66	103	1	He	2.075	2.075	8.67	4345	0.05	10000	
As	75	103	1	He	1.006	1.006	1.92	999	0.10	10000	
Se	78	103	1	He	0.857	0.857	11.47	119	0.72	10000	
Sr	88	103	1	He	225.894	225.894	1.60	1588872	0.01	10000	
Mo	95	103	1	He	1.184	1.184	3.03	3832	0.03	2000	
Ag	107	103	1	He	0.020	0.020	5.11	227	0.01	300	
Cd	111	103	1	He	0.110	0.110	18.85	1182	0.01	4000	
Sn	118	115	1	He	0.227	0.227	27.86	1934	0.01	2000	
Sb	123	115	1	He	0.426	0.426	4.69	2334	0.02	300	
Ba	137	115	1	He	53.533	53.533	0.48	113108	0.05	10000	
W	182	209	1	He	0.177	0.177	9.98	5412	0.00	2500	
Tl	205	165	1	He	0.011	0.011	25.72	429	0.00	5000	
Pb	208	209	1	He	0.075	0.075	2.27	3928	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1210750	1.51	1631381	74.22	30	120	
Sc	45	1	He	649610	1.69	829696	78.29	30	120	
Sc	45	2	NoGas	5070279	0.08	6325638	80.15	30	120	
Rh	103	1	He	1852045	0.55	2345543	78.96	30	120	
In	115	1	He	1115531	0.36	1419467	78.59	30	120	
Tb	159	1	He	3369958	1.01	3888262	86.67	30	120	
Ho	165	1	He	3512803	0.64	3932562	89.33	30	120	
Bi	209	1	He	2458847	1.22	2874805	85.53	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-6-a
Data File Name	140SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:57:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.126	0.126	12.59	522	0.02	10000	
B	11	45	2	NoGas	277.545	277.545	1.17	808181	0.03	300	
Na	23	45	1	He	40959.045	40959.045	2.27	56966490	0.07	500000	
Mg	24	45	1	He	63334.729	63334.729	2.49	50059609	0.13	500000	
Al	27	45	1	He	0.307	0.307	64.82	2211	0.01	200000	
K	39	45	1	He	4933.478	4933.478	1.80	3701846	0.13	500000	
Ca	44	45	1	He	99746.939	99746.939	1.35	4074568	2.45	500000	
Ti	47	45	1	He	0.241	0.241	41.80	66	0.37	2500	
V	51	45	1	He	-0.013	-0.013	-1723.21	27	-0.05	10000	
Cr	52	45	1	He	0.977	0.977	8.81	8690	0.01	10000	
Mn	55	45	1	He	3.580	3.580	0.96	20214	0.02	10000	
Fe	56	45	1	He	10.131	10.131	2.73	68935	0.01	200000	
Co	59	103	1	He	0.378	0.378	0.48	3872	0.01	10000	
Ni	60	103	1	He	2.790	2.790	3.10	7125	0.04	10000	
Cu	63	103	1	He	0.308	0.308	2.99	3389	0.01	10000	
Zn	66	103	1	He	4.918	4.918	2.94	8125	0.06	10000	
As	75	103	1	He	0.922	0.922	5.60	923	0.10	10000	
Se	78	103	1	He	0.266	0.266	2.71	65	0.41	10000	
Sr	88	103	1	He	519.376	519.376	1.20	3635228	0.01	10000	
Mo	95	103	1	He	3.637	3.637	0.14	11614	0.03	2000	
Ag	107	103	1	He	0.017	0.017	17.30	193	0.01	300	
Cd	111	103	1	He	0.098	0.098	22.79	1154	0.01	4000	
Sn	118	115	1	He	0.160	0.160	31.57	1615	0.01	2000	
Sb	123	115	1	He	0.466	0.466	8.56	2492	0.02	300	
Ba	137	115	1	He	48.444	48.444	0.61	101861	0.05	10000	
W	182	209	1	He	0.164	0.164	18.74	5097	0.00	2500	
Tl	205	165	1	He	0.034	0.034	4.88	1158	0.00	5000	
Pb	208	209	1	He	0.076	0.076	5.88	3849	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1225515	2.02	1631381	75.12	30	120	
Sc	45	1	He	650025	2.48	829696	78.34	30	120	
Sc	45	2	NoGas	5122209	1.21	6325638	80.98	30	120	
Rh	103	1	He	1843117	0.32	2345543	78.58	30	120	
In	115	1	He	1110057	0.33	1419467	78.20	30	120	
Tb	159	1	He	3404746	0.38	3888262	87.56	30	120	
Ho	165	1	He	3501767	0.77	3932562	89.05	30	120	
Bi	209	1	He	2391506	1.58	2874805	83.19	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	141_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:01:27-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.869	1.467	191750	0.32	50	99.7	89.5	110.5	
B	11	45	2	NoGas	62.579	2.150	190634	1.05	50	125.2	89.5	110.5	CCV Failed
Na	23	45	1	He	24347.335	2.301	35353336	1.84	25000	97.4	89.5	110.5	
Mg	24	45	1	He	24352.714	3.533	20085860	1.06	25000	97.4	89.5	110.5	
Al	27	45	1	He	236.666	3.253	112820	1.58	250	94.7	89.5	110.5	
K	39	45	1	He	25052.715	3.208	19486335	0.92	25000	100.2	89.5	110.5	
Ca	44	45	1	He	24567.589	3.364	1047612	0.75	25000	98.3	89.5	110.5	
Ti	47	45	1	He	48.877	6.511	11739	2.50	50	97.8	89.5	110.5	
V	51	45	1	He	49.223	1.526	292554	2.62	50	98.4	89.5	110.5	
Cr	52	45	1	He	49.693	3.298	356801	0.83	50	99.4	89.5	110.5	
Mn	55	45	1	He	253.734	3.674	1424118	0.64	250	101.5	89.5	110.5	
Fe	56	45	1	He	12404.585	3.375	83489108	1.05	12500	99.2	89.5	110.5	
Co	59	103	1	He	47.108	0.730	498976	0.89	50	94.2	89.5	110.5	
Ni	60	103	1	He	46.843	1.437	123116	1.21	50	93.7	89.5	110.5	
Cu	63	103	1	He	47.137	0.440	326977	1.29	50	94.3	89.5	110.5	
Zn	66	103	1	He	47.378	1.386	67706	0.93	50	94.8	89.5	110.5	
As	75	103	1	He	48.500	0.556	43726	1.24	50	97.0	89.5	110.5	
Se	78	103	1	He	48.909	0.810	4688	0.63	50	97.8	89.5	110.5	
Sr	88	103	1	He	49.154	0.589	359036	1.29	50	98.3	89.5	110.5	
Mo	95	103	1	He	49.956	2.766	165785	2.02	50	99.9	89.5	110.5	
Ag	107	103	1	He	49.527	0.636	564559	1.45	50	99.1	89.5	110.5	
Cd	111	103	1	He	49.970	0.638	100129	0.94	50	99.9	89.5	110.5	
Sn	118	115	1	He	50.475	0.254	243918	0.44	50	100.9	89.5	110.5	
Sb	123	115	1	He	52.646	0.752	234607	0.38	50	105.3	89.5	110.5	
Ba	137	115	1	He	52.063	0.690	113862	1.20	50	104.1	89.5	110.5	
W	182	209	1	He	49.701	1.692	632800	0.66	50	99.4	89.5	110.5	
Tl	205	165	1	He	49.560	5.601	1616865	5.63	50	99.1	89.5	110.5	
Pb	208	209	1	He	48.622	1.077	2125472	0.66	50	97.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1216394	1.22	1631381	74.56	30	120	
Sc	45	1	He	678672	4.18	829696	81.80	30	120	
Sc	45	2	NoGas	5182912	1.06	6325638	81.94	30	120	
Rh	103	1	He	1922965	0.85	2345543	81.98	30	120	
In	115	1	He	1154612	0.53	1419467	81.34	30	120	
Tb	159	1	He	3442051	1.52	3888262	88.52	30	120	
Ho	165	1	He	3554675	0.15	3932562	90.39	30	120	
Bi	209	1	He	2482641	1.36	2874805	86.36	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	142_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:05:18-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.108	20.0	452	18.1	1	
B	11	45	2	NoGas	12.620	2.9	43916	1.1	20	
Na	23	45	1	He	37.516	8.3	68996	4.6	400	
Mg	24	45	1	He	4.176	24.6	3997	18.4	1000	
Al	27	45	1	He	-0.023	-407.0	2027	3.5	50	
K	39	45	1	He	9.366	24.2	36289	3.3	1000	
Ca	44	45	1	He	5.381	51.1	987	10.8	1000	
Ti	47	45	1	He	0.078	73.1	28	45.4	20	
V	51	45	1	He	-0.004	-3389.4	55	1538.0	2	
Cr	52	45	1	He	0.033	56.0	2204	4.4	2	
Mn	55	45	1	He	0.038	28.5	1148	3.5	2	
Fe	56	45	1	He	20.883	26.0	135523	23.7	50	
Co	59	103	1	He	0.006	47.6	104	29.7	1	
Ni	60	103	1	He	-0.009	-34.2	88	8.8	2	
Cu	63	103	1	He	0.217	3.1	3073	1.9	2	
Zn	66	103	1	He	-0.076	-81.3	1598	6.7	20	
As	75	103	1	He	0.081	17.2	219	6.9	2	
Se	78	103	1	He	0.115	68.0	57	14.8	2	
Sr	88	103	1	He	0.023	45.4	281	28.4	10	
Mo	95	103	1	He	0.805	20.2	2876	19.6	2	
Ag	107	103	1	He	0.015	17.2	184	16.8	0.2	
Cd	111	103	1	He	0.090	36.3	1257	4.7	0.2	
Sn	118	115	1	He	0.335	10.5	2641	6.7	10	
Sb	123	115	1	He	0.433	23.5	2562	18.4	1	
Ba	137	115	1	He	0.005	178.0	97	21.0	5	
W	182	209	1	He	1.091	14.7	18052	11.1	10	
Tl	205	165	1	He	0.040	26.4	1395	24.8	0.5	
Pb	208	209	1	He	0.038	12.3	2485	7.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1221612	2.11	1631381	74.88	30	120	
Sc	45	1	He	638459	1.54	829696	76.95	30	120	
Sc	45	2	NoGas	5069803	1.54	6325638	80.15	30	120	
Rh	103	1	He	2032744	0.89	2345543	86.66	30	120	
In	115	1	He	1210660	0.06	1419467	85.29	30	120	
Tb	159	1	He	3505091	0.45	3888262	90.15	30	120	
Ho	165	1	He	3595334	0.54	3932562	91.42	30	120	
Bi	209	1	He	2631894	1.09	2874805	91.55	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-6-a
Data File Name	143SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:09:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.130	0.130	13.54	515	0.03	10000	
B	11	45	2	NoGas	260.414	260.414	2.16	750457	0.03	300	
Na	23	45	1	He	40360.978	40360.978	2.12	55425748	0.07	500000	
Mg	24	45	1	He	62466.248	62466.248	3.34	48742930	0.13	500000	
Al	27	45	1	He	-0.426	-0.426	-45.30	1858	-0.02	200000	
K	39	45	1	He	4776.596	4776.596	2.21	3539269	0.13	500000	
Ca	44	45	1	He	100097.571	100097.571	2.74	4036084	2.48	500000	
Ti	47	45	1	He	0.253	0.253	5.40	68	0.37	2500	
V	51	45	1	He	-0.023	-0.023	-856.37	-43	0.05	10000	
Cr	52	45	1	He	0.909	0.909	6.53	8129	0.01	10000	
Mn	55	45	1	He	4.185	4.185	1.67	23166	0.02	10000	
Fe	56	45	1	He	13.366	13.366	9.05	88761	0.02	200000	
Co	59	103	1	He	0.432	0.432	2.82	4319	0.01	10000	
Ni	60	103	1	He	2.871	2.871	5.33	7147	0.04	10000	
Cu	63	103	1	He	0.377	0.377	12.10	3745	0.01	10000	
Zn	66	103	1	He	5.308	5.308	4.01	8437	0.06	10000	
As	75	103	1	He	0.709	0.709	9.74	721	0.10	10000	
Se	78	103	1	He	0.203	0.203	45.61	58	0.35	10000	
Sr	88	103	1	He	501.055	501.055	3.23	3421458	0.01	10000	
Mo	95	103	1	He	3.997	3.997	3.04	12451	0.03	2000	
Ag	107	103	1	He	0.020	0.020	2.66	217	0.01	300	
Cd	111	103	1	He	0.120	0.120	34.81	1166	0.01	4000	
Sn	118	115	1	He	0.476	0.476	17.24	3037	0.02	2000	
Sb	123	115	1	He	0.586	0.586	3.47	2970	0.02	300	
Ba	137	115	1	He	47.621	47.621	0.34	99040	0.05	10000	
W	182	209	1	He	0.409	0.409	7.90	8162	0.01	2500	
Tl	205	165	1	He	0.045	0.045	5.96	1472	0.00	5000	
Pb	208	209	1	He	0.080	0.080	6.38	4089	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1179006	0.94	1631381	72.27	30	120	
Sc	45	1	He	641734	1.86	829696	77.35	30	120	
Sc	45	2	NoGas	5067252	2.32	6325638	80.11	30	120	
Rh	103	1	He	1799174	2.85	2345543	76.71	30	120	
In	115	1	He	1097922	1.20	1419467	77.35	30	120	
Tb	159	1	He	3351247	0.65	3888262	86.19	30	120	
Ho	165	1	He	3397871	1.51	3932562	86.40	30	120	
Bi	209	1	He	2410448	0.69	2874805	83.85	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	144_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:13:08-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.179	1.217	185699	0.46	50	96.4	89.5	110.5	
B	11	45	2	NoGas	58.900	1.426	180210	1.81	50	117.8	89.5	110.5	CCV Failed
Na	23	45	1	He	24905.042	8.617	34784033	0.18	25000	99.6	89.5	110.5	
Mg	24	45	1	He	25071.542	8.393	19901311	1.45	25000	100.3	89.5	110.5	
Al	27	45	1	He	244.743	8.356	112203	0.77	250	97.9	89.5	110.5	
K	39	45	1	He	26161.966	8.814	19575127	1.22	25000	104.6	89.5	110.5	
Ca	44	45	1	He	25253.200	7.980	1036512	1.10	25000	101.0	89.5	110.5	
Ti	47	45	1	He	50.401	7.385	11669	3.07	50	100.8	89.5	110.5	
V	51	45	1	He	51.531	10.268	294236	1.55	50	103.1	89.5	110.5	
Cr	52	45	1	He	50.790	8.613	350857	0.92	50	101.6	89.5	110.5	
Mn	55	45	1	He	252.614	8.744	1364223	0.54	250	101.0	89.5	110.5	
Fe	56	45	1	He	12762.112	9.493	82602992	0.96	12500	102.1	89.5	110.5	
Co	59	103	1	He	47.724	3.403	488083	1.04	50	95.4	89.5	110.5	
Ni	60	103	1	He	47.401	2.341	120320	1.44	50	94.8	89.5	110.5	
Cu	63	103	1	He	48.020	2.652	321620	0.18	50	96.0	89.5	110.5	
Zn	66	103	1	He	47.998	3.108	66215	0.40	50	96.0	89.5	110.5	
As	75	103	1	He	49.182	2.711	42815	0.34	50	98.4	89.5	110.5	
Se	78	103	1	He	50.368	2.258	4661	0.69	50	100.7	89.5	110.5	
Sr	88	103	1	He	50.277	2.731	354622	0.95	50	100.6	89.5	110.5	
Mo	95	103	1	He	50.536	4.402	161938	2.44	50	101.1	89.5	110.5	
Ag	107	103	1	He	50.661	2.204	557665	0.62	50	101.3	89.5	110.5	
Cd	111	103	1	He	51.186	2.639	99022	1.22	50	102.4	89.5	110.5	
Sn	118	115	1	He	51.469	2.065	241678	2.32	50	102.9	89.5	110.5	
Sb	123	115	1	He	53.618	3.476	232083	0.37	50	107.2	89.5	110.5	
Ba	137	115	1	He	52.748	3.002	112066	1.26	50	105.5	89.5	110.5	
W	182	209	1	He	49.686	4.461	621442	1.29	50	99.4	89.5	110.5	
Tl	205	165	1	He	50.353	6.877	1585778	3.90	50	100.7	89.5	110.5	
Pb	208	209	1	He	48.532	2.749	2084856	1.67	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1219264	0.93	1631381	74.74	30	120	
Sc	45	1	He	655776	9.03	829696	79.04	30	120	
Sc	45	2	NoGas	5191071	1.03	6325638	82.06	30	120	
Rh	103	1	He	1857743	2.59	2345543	79.20	30	120	
In	115	1	He	1122346	3.24	1419467	79.07	30	120	
Tb	159	1	He	3331128	3.05	3888262	85.67	30	120	
Ho	165	1	He	3436388	3.22	3932562	87.38	30	120	
Bi	209	1	He	2440754	3.19	2874805	84.90	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	145_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:16:56-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.066	15.2	293	14.4	1	
B	11	45	2	NoGas	12.416	1.2	44591	1.4	20	
Na	23	45	1	He	31.657	8.1	61016	3.9	400	
Mg	24	45	1	He	3.856	23.6	3749	16.9	1000	
Al	27	45	1	He	0.065	479.0	2066	6.8	50	
K	39	45	1	He	11.215	22.8	37647	3.0	1000	
Ca	44	45	1	He	3.207	112.2	899	14.2	1000	
Ti	47	45	1	He	0.107	50.3	34	34.0	20	
V	51	45	1	He	0.065	67.5	444	54.3	2	
Cr	52	45	1	He	0.001	284.8	1990	0.8	2	
Mn	55	45	1	He	0.022	86.9	1063	8.1	2	
Fe	56	45	1	He	22.154	25.9	143534	23.4	50	
Co	59	103	1	He	0.005	85.8	94	47.9	1	
Ni	60	103	1	He	-0.012	-32.0	78	13.1	2	
Cu	63	103	1	He	0.122	14.7	2361	5.5	2	
Zn	66	103	1	He	-0.090	-51.4	1569	4.9	20	
As	75	103	1	He	0.082	28.3	218	10.6	2	
Se	78	103	1	He	0.174	45.4	62	12.0	2	
Sr	88	103	1	He	0.016	4.5	223	3.0	10	
Mo	95	103	1	He	0.853	21.0	3029	20.6	2	
Ag	107	103	1	He	0.016	26.4	199	26.5	0.2	
Cd	111	103	1	He	0.095	12.1	1259	2.6	0.2	
Sn	118	115	1	He	0.296	30.4	2445	18.1	10	
Sb	123	115	1	He	0.431	11.4	2556	8.3	1	
Ba	137	115	1	He	0.004	147.7	93	12.4	5	
W	182	209	1	He	1.156	13.0	18782	10.6	10	
Tl	205	165	1	He	0.044	20.0	1486	19.7	0.5	
Pb	208	209	1	He	0.039	18.1	2522	12.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1238949	1.16	1631381	75.94	30	120	
Sc	45	1	He	638734	1.94	829696	76.98	30	120	
Sc	45	2	NoGas	5215755	0.67	6325638	82.45	30	120	
Rh	103	1	He	2021216	0.72	2345543	86.17	30	120	
In	115	1	He	1211056	0.67	1419467	85.32	30	120	
Tb	159	1	He	3475600	1.30	3888262	89.39	30	120	
Ho	165	1	He	3540066	0.55	3932562	90.02	30	120	
Bi	209	1	He	2609350	1.03	2874805	90.77	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	146CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:20:48-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.039	1.039	6.625	4064	6.01	1	103.9	69.5	130.5	
B	11	2	NoGas	28.471	28.471	2.150	91561	0.58	20	142.4	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1080.635	1080.635	0.869	1560450	1.61	1000	108.1	69.5	130.5	
Mg	24	1	He	1064.644	1064.644	2.399	864176	1.20	1000	106.5	69.5	130.5	
Al	27	1	He	48.098	48.098	1.086	24240	1.38	50	96.2	69.5	130.5	
K	39	1	He	1090.392	1090.392	1.616	863381	1.06	1000	109.0	69.5	130.5	
Ca	44	1	He	1051.874	1051.874	1.312	44879	1.02	1000	105.2	69.5	130.5	
Ti	47	1	He	10.693	10.693	8.564	2537	8.98	10	106.9	69.5	130.5	
V	51	1	He	5.319	5.319	4.172	31134	2.03	5	106.4	69.5	130.5	
Cr	52	1	He	2.150	2.150	2.001	17166	3.32	2	107.5	69.5	130.5	
Mn	55	1	He	5.160	5.160	0.753	29454	2.13	5	103.2	69.5	130.5	
Fe	56	1	He	109.306	109.306	0.963	727125	1.33	100	109.3	69.5	130.5	
Co	59	1	He	0.970	0.970	0.854	10707	2.22	1	97.0	69.5	130.5	
Ni	60	1	He	1.885	1.885	3.412	5244	1.62	2	94.2	69.5	130.5	
Cu	63	1	He	2.051	2.051	3.621	16162	3.71	2	102.6	69.5	130.5	
Zn	66	1	He	19.477	19.477	2.700	29870	1.29	20	97.4	69.5	130.5	
As	75	1	He	4.876	4.876	1.746	4686	0.71	5	97.5	69.5	130.5	
Se	78	1	He	5.026	5.026	0.492	540	2.19	5	100.5	69.5	130.5	
Sr	88	1	He	9.789	9.789	2.419	74272	1.68	10	97.9	69.5	130.5	
Mo	95	1	He	10.452	10.452	1.926	36038	0.22	10	104.5	69.5	130.5	
Ag	107	1	He	1.038	1.038	1.511	12278	1.36	1	103.8	69.5	130.5	
Cd	111	1	He	1.147	1.147	8.213	3408	4.36	1	114.7	69.5	130.5	
Sn	118	1	He	10.126	10.126	1.693	52782	1.55	10	101.3	69.5	130.5	
Sb	123	1	He	2.095	2.095	2.099	10454	1.75	2	104.8	69.5	130.5	
Ba	137	1	He	5.131	5.131	0.998	12007	1.27	5	102.6	69.5	130.5	
W	182	1	He	9.733	9.733	1.285	133491	1.68	10	97.3	69.5	130.5	
Tl	205	1	He	2.048	2.048	2.140	66483	1.33	2	102.4	69.5	130.5	
Pb	208	1	He	1.031	1.031	3.149	48248	2.66	1	103.1	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1227370	0.63	1631381	75.24	30	120	
Sc	45	1	He	666879	2.19	829696	80.38	30	120	
Sc	45	2	NoGas	5207299	1.43	6325638	82.32	30	120	
Rh	103	1	He	1995728	1.75	2345543	85.09	30	120	
In	115	1	He	1227273	0.35	1419467	86.46	30	120	
Tb	159	1	He	3495476	0.61	3888262	89.90	30	120	
Ho	165	1	He	3534623	1.49	3932562	89.88	30	120	
Bi	209	1	He	2619221	0.43	2874805	91.11	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177036/1-a
Data File Name	147_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:24:40-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.104	26.6	400	24.7	1	
B	11	45	2	NoGas	12.862	0.9	41915	0.3	20	
Na	23	45	1	He	104.576	4.8	158701	1.9	400	
Mg	24	45	1	He	74.622	3.4	58011	1.2	1000	
Al	27	45	1	He	9.289	4.2	6053	1.9	50	
K	39	45	1	He	26.872	11.3	48499	0.9	1000	
Ca	44	45	1	He	242.004	8.2	10351	5.9	1000	
Ti	47	45	1	He	0.152	51.8	44	41.3	20	
V	51	45	1	He	0.145	88.6	872	77.5	2	
Cr	52	45	1	He	0.795	9.2	7232	3.2	2	
Mn	55	45	1	He	0.473	10.0	3401	5.5	2	
Fe	56	45	1	He	20.026	1.1	128958	3.3	50	
Co	59	103	1	He	0.013	39.4	177	30.0	1	
Ni	60	103	1	He	0.172	12.2	553	9.7	2	
Cu	63	103	1	He	1.086	6.9	8842	5.8	2	
Zn	66	103	1	He	8.336	3.6	13144	1.8	20	
As	75	103	1	He	0.156	17.2	272	9.2	2	
Se	78	103	1	He	0.120	15.3	54	3.5	2	
Sr	88	103	1	He	0.550	4.5	4082	3.0	10	
Mo	95	103	1	He	0.269	17.9	937	17.9	2	
Ag	107	103	1	He	0.011	20.8	127	21.1	0.2	
Cd	111	103	1	He	0.057	35.8	1114	3.3	0.2	
Sn	118	115	1	He	1.601	4.9	8417	3.9	10	
Sb	123	115	1	He	0.446	5.1	2445	3.6	1	
Ba	137	115	1	He	1.353	2.8	2969	2.3	5	
W	182	209	1	He	0.455	11.9	9411	7.5	10	
Tl	205	165	1	He	0.013	13.8	483	12.7	0.5	
Pb	208	209	1	He	0.178	4.2	8887	4.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1128511	1.21	1631381	69.18	30	120	
Sc	45	1	He	631352	4.07	829696	76.09	30	120	
Sc	45	2	NoGas	4763131	0.90	6325638	75.30	30	120	
Rh	103	1	He	1908604	1.33	2345543	81.37	30	120	
In	115	1	He	1128448	0.50	1419467	79.50	30	120	
Tb	159	1	He	3361932	0.91	3888262	86.46	30	120	
Ho	165	1	He	3409686	0.63	3932562	86.70	30	120	
Bi	209	1	He	2600722	0.62	2874805	90.47	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177036/3-a
Data File Name	148_LCS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:28:29-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1060.781	1060.781	2.220	3503078	1.24	1000	106.1	79.5	120.5	
B	11	2	NoGas	123.052	123.052	1.475	321787	1.25	100	123.1	79.5	120.5	LCS Failed
Na	23	1	He	10331.860	10331.860	3.300	12863643	0.23	10000	103.3	79.5	120.5	
Mg	24	1	He	10382.257	10382.257	4.259	7338363	1.17	10000	103.8	79.5	120.5	
Al	27	1	He	9682.678	9682.678	3.756	3881285	0.42	10000	96.8	79.5	120.5	
K	39	1	He	10453.238	10453.238	3.854	6983475	1.44	10000	104.5	79.5	120.5	
Ca	44	1	He	9291.013	9291.013	2.306	340088	1.46	10000	92.9	79.5	120.5	
Ti	47	1	He	102.129	102.129	5.339	21022	2.02	100	102.1	79.5	120.5	
V	51	1	He	1021.926	1021.926	4.094	5200846	1.34	1000	102.2	79.5	120.5	
Cr	52	1	He	1025.938	1025.938	4.114	6276818	0.79	1000	102.6	79.5	120.5	
Mn	55	1	He	1045.248	1045.248	3.101	5026079	0.48	1000	104.5	79.5	120.5	
Fe	56	1	He	10708.021	10708.021	3.939	61760515	0.65	10000	107.1	79.5	120.5	
Co	59	1	He	938.375	938.375	0.613	9071623	0.19	1000	93.8	79.5	120.5	
Ni	60	1	He	963.194	963.194	0.458	2308888	0.24	1000	96.3	79.5	120.5	
Cu	63	1	He	956.646	956.646	0.575	6032037	0.24	1000	95.7	79.5	120.5	
Zn	66	1	He	937.135	937.135	0.572	1194716	0.40	1000	93.7	79.5	120.5	
As	75	1	He	931.362	931.362	0.376	764199	0.29	1000	93.1	79.5	120.5	
Se	78	1	He	967.439	967.439	0.819	83913	0.60	1000	96.7	79.5	120.5	
Sr	88	1	He	997.809	997.809	1.558	6650437	1.18	1000	99.8	79.5	120.5	
Mo	95	1	He	108.472	108.472	2.174	328559	1.99	100	108.5	79.5	120.5	
Ag	107	1	He	102.829	102.829	0.785	1069828	0.59	100	102.8	79.5	120.5	
Cd	111	1	He	1080.496	1080.496	0.907	1957142	0.53	1000	108.0	79.5	120.5	
Sn	118	1	He	1165.383	1165.383	1.907	4904632	1.94	1000	116.5	79.5	120.5	
Sb	123	1	He	113.203	113.203	0.963	440389	0.84	100	113.2	79.5	120.5	
Ba	137	1	He	1152.096	1152.096	1.394	2200631	1.52	1000	115.2	79.5	120.5	
W	182	1	He	103.420	103.420	2.454	1269559	2.20	100	103.4	79.5	120.5	
Tl	205	1	He	256.644	256.644	1.499	7857491	0.61	250	102.7	79.5	120.5	
Pb	208	1	He	1011.016	1011.016	0.564	42709888	0.37	1000	101.1	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1044906	1.02	1631381	64.05	30	120	
Sc	45	1	He	581564	3.40	829696	70.09	30	120	
Sc	45	2	NoGas	4543422	0.45	6325638	71.83	30	120	
Rh	103	1	He	1755208	0.43	2345543	74.83	30	120	
In	115	1	He	1009129	0.16	1419467	71.09	30	120	
Tb	159	1	He	3211595	0.92	3888262	82.60	30	120	
Ho	165	1	He	3336337	0.89	3932562	84.84	30	120	
Bi	209	1	He	2399762	0.27	2874805	83.48	30	120	

Sample Report

Sample Table

Sample Name	240-49480-f-3-a
Data File Name	149SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:32:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.341	1.341	5.76	4227	0.03	10000	
B	11	45	2	NoGas	150.012	150.012	1.66	378018	0.04	300	
Na	23	45	1	He	115283.065	115283.065	1.18	136177502	0.08	500000	
Mg	24	45	1	He	40820.211	40820.211	2.41	27405208	0.15	500000	
Al	27	45	1	He	635.525	635.525	1.65	243630	0.26	200000	
K	39	45	1	He	5602.031	5602.031	2.53	3566345	0.16	500000	
Ca	44	45	1	He	55368.280	55368.280	1.06	1921270	2.88	500000	
Ti	47	45	1	He	0.960	0.960	5.90	197	0.49	2500	
V	51	45	1	He	0.579	0.579	43.70	2886	0.02	10000	
Cr	52	45	1	He	1.564	1.564	1.98	10804	0.01	10000	
Mn	55	45	1	He	1350.743	1350.743	1.44	6168579	0.02	10000	
Fe	56	45	1	He	25317.822	25317.822	1.61	138711501	0.02	200000	
Co	59	103	1	He	105.382	105.382	0.75	944638	0.01	10000	
Ni	60	103	1	He	168.619	168.619	0.75	374847	0.04	10000	
Cu	63	103	1	He	1.123	1.123	13.55	7752	0.01	10000	
Zn	66	103	1	He	895.983	895.983	1.49	1059107	0.08	10000	
As	75	103	1	He	2.733	2.733	7.88	2192	0.12	10000	
Se	78	103	1	He	1.845	1.845	13.29	184	1.00	10000	
Sr	88	103	1	He	274.271	274.271	1.58	1695011	0.02	10000	
Mo	95	103	1	He	1.073	1.073	19.97	3053	0.04	2000	
Ag	107	103	1	He	0.030	0.030	35.66	293	0.01	300	
Cd	111	103	1	He	3.851	3.851	3.77	7318	0.05	4000	
Sn	118	115	1	He	2.662	2.662	21.49	11668	0.02	2000	
Sb	123	115	1	He	0.986	0.986	3.56	4173	0.02	300	
Ba	137	115	1	He	12.323	12.323	0.92	22979	0.05	10000	
W	182	209	1	He	1.691	1.691	14.73	22347	0.01	2500	
Tl	205	165	1	He	2.969	2.969	3.56	88370	0.00	5000	
Pb	208	209	1	He	1.798	1.798	5.17	71911	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	991396	0.87	1631381	60.77	30	120	
Sc	45	1	He	552057	1.71	829696	66.54	30	120	
Sc	45	2	NoGas	4396062	1.69	6325638	69.50	30	120	
Rh	103	1	He	1627480	0.91	2345543	69.39	30	120	
In	115	1	He	982208	0.34	1419467	69.20	30	120	
Tb	159	1	He	3136604	0.61	3888262	80.67	30	120	
Ho	165	1	He	3242119	1.14	3932562	82.44	30	120	
Bi	209	1	He	2252976	0.84	2874805	78.37	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49480-f-3-a@5
Data File Name	150SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:35:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.404	0.404	4.94	1411	0.03	10000	
B	11	45	2	NoGas	35.817	35.817	3.67	102098	0.04	300	
Na	23	45	1	He	24122.857	24122.857	1.36	31102782	0.08	500000	
Mg	24	45	1	He	8527.482	8527.482	1.10	6248129	0.14	500000	
Al	27	45	1	He	130.527	130.527	1.52	56122	0.23	200000	
K	39	45	1	He	1176.715	1176.715	0.59	839466	0.14	500000	
Ca	44	45	1	He	11313.719	11313.719	1.42	428899	2.64	500000	
Ti	47	45	1	He	0.175	0.175	97.31	47	0.37	2500	
V	51	45	1	He	0.026	0.026	259.40	208	0.01	10000	
Cr	52	45	1	He	0.335	0.335	5.91	3996	0.01	10000	
Mn	55	45	1	He	291.704	291.704	1.03	1454244	0.02	10000	
Fe	56	45	1	He	5353.574	5353.574	1.36	32008105	0.02	200000	
Co	59	103	1	He	21.662	21.662	2.14	217591	0.01	10000	
Ni	60	103	1	He	35.827	35.827	1.61	89321	0.04	10000	
Cu	63	103	1	He	0.151	0.151	9.97	2325	0.01	10000	
Zn	66	103	1	He	199.290	199.290	1.42	265156	0.08	10000	
As	75	103	1	He	0.420	0.420	7.50	485	0.09	10000	
Se	78	103	1	He	0.340	0.340	9.64	71	0.48	10000	
Sr	88	103	1	He	52.798	52.798	2.12	365672	0.01	10000	
Mo	95	103	1	He	0.169	0.169	13.49	579	0.03	2000	
Ag	107	103	1	He	0.009	0.009	11.19	102	0.01	300	
Cd	111	103	1	He	0.859	0.859	1.01	2574	0.03	4000	
Sn	118	115	1	He	0.140	0.140	26.06	1526	0.01	2000	
Sb	123	115	1	He	0.173	0.173	19.68	1241	0.01	300	
Ba	137	115	1	He	2.425	2.425	3.17	5189	0.05	10000	
W	182	209	1	He	0.323	0.323	9.36	7421	0.00	2500	
Tl	205	165	1	He	0.619	0.619	3.72	19739	0.00	5000	
Pb	208	209	1	He	0.370	0.370	1.22	17142	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1082820	0.05	1631381	66.37	30	120	
Sc	45	1	He	602330	1.65	829696	72.60	30	120	
Sc	45	2	NoGas	4700899	0.65	6325638	74.32	30	120	
Rh	103	1	He	1823561	0.76	2345543	77.75	30	120	
In	115	1	He	1113186	0.38	1419467	78.42	30	120	
Tb	159	1	He	3337362	0.70	3888262	85.83	30	120	
Ho	165	1	He	3462678	1.25	3932562	88.05	30	120	
Bi	209	1	He	2519521	1.43	2874805	87.64	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49480-f-3-a
Data File Name	151SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:39:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1913.618	1913.618	1.46	6143885	0.03	10000	
B	11	45	2	NoGas	345.543	345.543	1.27	862670	0.04	300	>LDR
Na	23	45	1	He	128120.394	128120.394	1.96	152825683	0.08	500000	
Mg	24	45	1	He	57834.630	57834.630	2.65	39209574	0.15	500000	
Al	27	45	1	He	18734.263	18734.263	2.82	7200682	0.26	200000	
K	39	45	1	He	25018.084	25018.084	3.53	15991482	0.16	500000	
Ca	44	45	1	He	70203.209	70203.209	2.35	2459645	2.85	500000	
Ti	47	45	1	He	189.369	189.369	3.54	37385	0.51	2500	
V	51	45	1	He	1900.193	1900.193	2.88	9275062	0.02	10000	
Cr	52	45	1	He	1928.327	1928.327	3.08	11314020	0.02	10000	
Mn	55	45	1	He	3189.007	3189.007	3.19	14702047	0.02	10000	
Fe	56	45	1	He	43777.670	43777.670	3.30	242139777	0.02	200000	
Co	59	103	1	He	1884.938	1884.938	1.23	16968674	0.01	10000	
Ni	60	103	1	He	1946.156	1946.156	2.12	4344028	0.04	10000	
Cu	63	103	1	He	1774.346	1774.346	0.95	10417288	0.02	10000	
Zn	66	103	1	He	2626.049	2626.049	0.93	3115188	0.08	10000	
As	75	103	1	He	1792.726	1792.726	0.68	1369677	0.13	10000	
Se	78	103	1	He	1812.500	1812.500	0.88	146367	1.24	10000	
Sr	88	103	1	He	2199.569	2199.569	1.08	13652151	0.02	10000	
Mo	95	103	1	He	214.137	214.137	0.70	603974	0.04	2000	
Ag	107	103	1	He	203.744	203.744	0.57	1973969	0.01	300	
Cd	111	103	1	He	1983.536	1983.536	0.20	3345124	0.06	4000	
Sn	118	115	1	He	2294.038	2294.038	1.04	8908349	0.03	2000	>LDR
Sb	123	115	1	He	221.502	221.502	0.56	794766	0.03	300	
Ba	137	115	1	He	2290.971	2290.971	1.16	4037937	0.06	10000	
W	182	209	1	He	229.809	229.809	2.24	2592987	0.01	2500	
Tl	205	165	1	He	473.185	473.185	0.20	14031961	0.00	5000	
Pb	208	209	1	He	1967.059	1967.059	0.23	76489046	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1015795	1.09	1631381	62.27	30	120	
Sc	45	1	He	557645	3.33	829696	67.21	30	120	
Sc	45	2	NoGas	4399952	1.43	6325638	69.56	30	120	
Rh	103	1	He	1634508	0.70	2345543	69.69	30	120	
In	115	1	He	931217	0.36	1419467	65.60	30	120	
Tb	159	1	He	3141965	0.83	3888262	80.81	30	120	
Ho	165	1	He	3231233	0.20	3932562	82.17	30	120	
Bi	209	1	He	2208937	1.01	2874805	76.84	30	120	

Sample Report

Sample Table

Sample Name	240-49480-f-3-d ms
Data File Name	152SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:43:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1006.520	1006.520	1.46	3142270	0.03	10000	
B	11	45	2	NoGas	243.134	243.134	0.42	615765	0.04	300	
Na	23	45	1	He	123791.665	123791.665	2.54	148228642	0.08	500000	
Mg	24	45	1	He	49788.130	49788.130	2.58	33887477	0.15	500000	
Al	27	45	1	He	10049.705	10049.705	3.35	3878535	0.26	200000	
K	39	45	1	He	15539.166	15539.166	2.75	9983434	0.16	500000	
Ca	44	45	1	He	63279.825	63279.825	2.05	2225869	2.84	500000	
Ti	47	45	1	He	101.158	101.158	3.38	20056	0.50	2500	
V	51	45	1	He	1011.811	1011.811	2.53	4958714	0.02	10000	
Cr	52	45	1	He	998.484	998.484	2.18	5883265	0.02	10000	
Mn	55	45	1	He	2308.536	2308.536	2.72	10686481	0.02	10000	
Fe	56	45	1	He	35352.253	35352.253	2.08	196362121	0.02	200000	
Co	59	103	1	He	1012.602	1012.602	0.46	9259794	0.01	10000	
Ni	60	103	1	He	1082.109	1082.109	0.24	2453600	0.04	10000	
Cu	63	103	1	He	915.023	915.023	1.56	5456881	0.02	10000	
Zn	66	103	1	He	1849.752	1849.752	1.01	2229080	0.08	10000	
As	75	103	1	He	923.807	923.807	0.98	716944	0.13	10000	
Se	78	103	1	He	935.628	935.628	1.41	76757	1.22	10000	
Sr	88	103	1	He	1244.436	1244.436	1.47	7844879	0.02	10000	
Mo	95	103	1	He	111.108	111.108	1.51	318309	0.03	2000	
Ag	107	103	1	He	99.170	99.170	1.67	975827	0.01	300	
Cd	111	103	1	He	1032.075	1032.075	1.73	1768230	0.06	4000	
Sn	118	115	1	He	1144.092	1144.092	0.59	4636635	0.02	2000	
Sb	123	115	1	He	111.152	111.152	0.59	416406	0.03	300	
Ba	137	115	1	He	1157.151	1157.151	0.87	2128406	0.05	10000	
W	182	209	1	He	109.171	109.171	0.02	1248743	0.01	2500	
Tl	205	165	1	He	241.926	241.926	0.39	7279298	0.00	5000	
Pb	208	209	1	He	1010.840	1010.840	1.08	39792402	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	987748	0.86	1631381	60.55	30	120	
Sc	45	1	He	559751	2.32	829696	67.46	30	120	
Sc	45	2	NoGas	4448558	0.90	6325638	70.33	30	120	
Rh	103	1	He	1660263	1.32	2345543	70.78	30	120	
In	115	1	He	971749	0.22	1419467	68.46	30	120	
Tb	159	1	He	3200878	0.49	3888262	82.32	30	120	
Ho	165	1	He	3278596	0.33	3932562	83.37	30	120	
Bi	209	1	He	2236258	0.40	2874805	77.79	30	120	

Sample Report

Sample Table

Sample Name	240-49480-f-3-e msd
Data File Name	153SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:46:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	981.744	981.744	4.16	3089950	0.03	10000	
B	11	45	2	NoGas	240.736	240.736	1.61	620115	0.04	300	
Na	23	45	1	He	121019.492	121019.492	1.09	146589820	0.08	500000	
Mg	24	45	1	He	48481.685	48481.685	1.29	33380501	0.15	500000	
Al	27	45	1	He	9591.772	9591.772	1.21	3745279	0.26	200000	
K	39	45	1	He	15312.809	15312.809	2.29	9951049	0.15	500000	
Ca	44	45	1	He	61862.177	61862.177	2.75	2200718	2.81	500000	
Ti	47	45	1	He	95.581	95.581	3.03	19168	0.50	2500	
V	51	45	1	He	977.599	977.599	1.77	4846131	0.02	10000	
Cr	52	45	1	He	970.911	970.911	1.58	5786525	0.02	10000	
Mn	55	45	1	He	2274.019	2274.019	2.00	10647983	0.02	10000	
Fe	56	45	1	He	34320.017	34320.017	3.09	192770721	0.02	200000	
Co	59	103	1	He	990.522	990.522	1.17	9074420	0.01	10000	
Ni	60	103	1	He	1075.114	1075.114	0.30	2442373	0.04	10000	
Cu	63	103	1	He	898.367	898.367	0.70	5368181	0.02	10000	
Zn	66	103	1	He	1789.185	1789.185	0.33	2160356	0.08	10000	
As	75	103	1	He	910.238	910.238	0.79	707772	0.13	10000	
Se	78	103	1	He	918.013	918.013	0.31	75462	1.22	10000	
Sr	88	103	1	He	1222.901	1222.901	1.34	7724132	0.02	10000	
Mo	95	103	1	He	109.133	109.133	0.69	313267	0.03	2000	
Ag	107	103	1	He	98.893	98.893	0.21	975053	0.01	300	
Cd	111	103	1	He	1011.175	1011.175	1.71	1735817	0.06	4000	
Sn	118	115	1	He	1131.569	1131.569	0.19	4610625	0.02	2000	
Sb	123	115	1	He	109.613	109.613	0.37	412849	0.03	300	
Ba	137	115	1	He	1134.696	1134.696	2.15	2098252	0.05	10000	
W	182	209	1	He	105.986	105.986	1.51	1229044	0.01	2500	
Tl	205	165	1	He	240.160	240.160	0.73	7223244	0.00	5000	
Pb	208	209	1	He	988.802	988.802	1.58	39460664	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	996312	2.17	1631381	61.07	30	120	
Sc	45	1	He	566111	2.09	829696	68.23	30	120	
Sc	45	2	NoGas	4524283	0.54	6325638	71.52	30	120	
Rh	103	1	He	1663373	0.69	2345543	70.92	30	120	
In	115	1	He	976980	0.46	1419467	68.83	30	120	
Tb	159	1	He	3209222	1.75	3888262	82.54	30	120	
Ho	165	1	He	3277308	0.88	3932562	83.34	30	120	
Bi	209	1	He	2267185	0.96	2874805	78.86	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-1-a
Data File Name	154SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:50:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.530	0.530	5.98	1804	0.03	10000	
B	11	45	2	NoGas	32.213	32.213	1.66	90009	0.04	300	
Na	23	45	1	He	15764.292	15764.292	1.43	19855376	0.08	500000	
Mg	24	45	1	He	14116.515	14116.515	1.85	10099483	0.14	500000	
Al	27	45	1	He	16.203	16.203	2.04	8449	0.19	200000	
K	39	45	1	He	136.764	136.764	4.77	119228	0.11	500000	
Ca	44	45	1	He	21800.474	21800.474	2.38	806359	2.70	500000	
Ti	47	45	1	He	0.484	0.484	29.95	110	0.44	2500	
V	51	45	1	He	0.312	0.312	21.49	1689	0.02	10000	
Cr	52	45	1	He	0.954	0.954	2.27	7735	0.01	10000	
Mn	55	45	1	He	178.857	178.857	1.78	871052	0.02	10000	
Fe	56	45	1	He	3641.655	3641.655	1.52	21262992	0.02	200000	
Co	59	103	1	He	4.184	4.184	1.49	42036	0.01	10000	
Ni	60	103	1	He	21.274	21.274	2.07	53048	0.04	10000	
Cu	63	103	1	He	0.931	0.931	5.83	7422	0.01	10000	
Zn	66	103	1	He	110.478	110.478	1.84	147590	0.07	10000	
As	75	103	1	He	1.271	1.271	8.82	1209	0.11	10000	
Se	78	103	1	He	1.372	1.372	16.16	164	0.84	10000	
Sr	88	103	1	He	113.317	113.317	1.35	784322	0.01	10000	
Mo	95	103	1	He	1.112	1.112	13.77	3542	0.03	2000	
Ag	107	103	1	He	0.030	0.030	24.44	326	0.01	300	
Cd	111	103	1	He	0.168	0.168	18.72	1274	0.01	4000	
Sn	118	115	1	He	2.200	2.200	21.38	10711	0.02	2000	
Sb	123	115	1	He	0.838	0.838	5.46	3957	0.02	300	
Ba	137	115	1	He	22.465	22.465	1.74	45813	0.05	10000	
W	182	209	1	He	1.765	1.765	16.12	25039	0.01	2500	
Tl	205	165	1	He	0.292	0.292	30.51	9122	0.00	5000	
Pb	208	209	1	He	0.616	0.616	15.88	27024	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058520	2.16	1631381	64.88	30	120	
Sc	45	1	He	588239	1.78	829696	70.90	30	120	
Sc	45	2	NoGas	4570226	0.95	6325638	72.25	30	120	
Rh	103	1	He	1822708	1.37	2345543	77.71	30	120	
In	115	1	He	1075705	0.27	1419467	75.78	30	120	
Tb	159	1	He	3323795	1.29	3888262	85.48	30	120	
Ho	165	1	He	3381622	0.26	3932562	85.99	30	120	
Bi	209	1	He	2430615	1.09	2874805	84.55	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-2-a
Data File Name	155SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:54:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.323	0.323	6.84	1126	0.03	10000	
B	11	45	2	NoGas	12.798	12.798	3.97	40126	0.03	300	
Na	23	45	1	He	958.012	958.012	3.76	1246878	0.08	500000	
Mg	24	45	1	He	58.742	58.742	3.14	43605	0.13	500000	
Al	27	45	1	He	16.112	16.112	6.25	8580	0.19	200000	
K	39	45	1	He	18.233	18.233	9.46	40227	0.05	500000	
Ca	44	45	1	He	151.996	151.996	6.90	6455	2.35	500000	
Ti	47	45	1	He	0.190	0.190	34.24	50	0.38	2500	
V	51	45	1	He	0.091	0.091	168.54	561	0.02	10000	
Cr	52	45	1	He	4.230	4.230	2.00	28600	0.01	10000	
Mn	55	45	1	He	1.278	1.278	2.91	7237	0.02	10000	
Fe	56	45	1	He	65.262	65.262	1.59	392246	0.02	200000	
Co	59	103	1	He	0.097	0.097	6.22	1052	0.01	10000	
Ni	60	103	1	He	0.807	0.807	2.15	2196	0.04	10000	
Cu	63	103	1	He	0.453	0.453	2.10	4475	0.01	10000	
Zn	66	103	1	He	7.379	7.379	1.55	11758	0.06	10000	
As	75	103	1	He	0.377	0.377	3.19	467	0.08	10000	
Se	78	103	1	He	0.307	0.307	21.01	71	0.43	10000	
Sr	88	103	1	He	0.253	0.253	8.15	1920	0.01	10000	
Mo	95	103	1	He	0.248	0.248	7.15	861	0.03	2000	
Ag	107	103	1	He	0.018	0.018	21.99	202	0.01	300	
Cd	111	103	1	He	0.085	0.085	22.86	1162	0.01	4000	
Sn	118	115	1	He	0.616	0.616	0.47	3708	0.02	2000	
Sb	123	115	1	He	0.527	0.527	5.07	2744	0.02	300	
Ba	137	115	1	He	0.363	0.363	7.10	838	0.04	10000	
W	182	209	1	He	0.452	0.452	1.42	9136	0.00	2500	
Tl	205	165	1	He	0.068	0.068	14.17	2188	0.00	5000	
Pb	208	209	1	He	0.326	0.326	5.65	15249	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1072919	2.31	1631381	65.77	30	120	
Sc	45	1	He	600515	2.78	829696	72.38	30	120	
Sc	45	2	NoGas	4579468	1.78	6325638	72.40	30	120	
Rh	103	1	He	1898215	0.59	2345543	80.93	30	120	
In	115	1	He	1105814	0.42	1419467	77.90	30	120	
Tb	159	1	He	3323594	0.85	3888262	85.48	30	120	
Ho	165	1	He	3403906	0.81	3932562	86.56	30	120	
Bi	209	1	He	2536529	0.13	2874805	88.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	156_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:57:57-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.108	2.141	186417	1.22	50	100.2	89.5	110.5	
B	11	45	2	NoGas	53.500	2.483	160838	1.50	50	107.0	89.5	110.5	
Na	23	45	1	He	24290.226	5.497	33985020	0.77	25000	97.2	89.5	110.5	
Mg	24	45	1	He	24332.697	4.862	19347922	0.02	25000	97.3	89.5	110.5	
Al	27	45	1	He	236.203	5.809	108512	0.88	250	94.5	89.5	110.5	
K	39	45	1	He	25358.385	6.137	19006546	1.70	25000	101.4	89.5	110.5	
Ca	44	45	1	He	24664.347	4.493	1014050	0.75	25000	98.7	89.5	110.5	
Ti	47	45	1	He	50.144	6.647	11616	3.19	50	100.3	89.5	110.5	
V	51	45	1	He	50.276	4.955	287909	0.44	50	100.6	89.5	110.5	
Cr	52	45	1	He	49.767	4.596	344509	0.72	50	99.5	89.5	110.5	
Mn	55	45	1	He	246.610	4.543	1334638	0.54	250	98.6	89.5	110.5	
Fe	56	45	1	He	12617.876	5.807	81851572	2.05	12500	100.9	89.5	110.5	
Co	59	103	1	He	46.187	1.185	484336	0.74	50	92.4	89.5	110.5	
Ni	60	103	1	He	45.883	1.142	119393	0.54	50	91.8	89.5	110.5	
Cu	63	103	1	He	46.210	1.255	317348	0.53	50	92.4	89.5	110.5	
Zn	66	103	1	He	46.406	0.497	65695	1.28	50	92.8	89.5	110.5	
As	75	103	1	He	47.411	1.198	42319	0.26	50	94.8	89.5	110.5	
Se	78	103	1	He	48.511	1.345	4604	0.83	50	97.0	89.5	110.5	
Sr	88	103	1	He	48.801	1.764	352867	0.84	50	97.6	89.5	110.5	
Mo	95	103	1	He	49.135	3.830	161426	2.88	50	98.3	89.5	110.5	
Ag	107	103	1	He	49.135	1.365	554459	0.73	50	98.3	89.5	110.5	
Cd	111	103	1	He	49.542	0.901	98287	0.50	50	99.1	89.5	110.5	
Sn	118	115	1	He	49.841	0.392	238876	0.50	50	99.7	89.5	110.5	
Sb	123	115	1	He	52.441	0.416	231766	0.29	50	104.9	89.5	110.5	
Ba	137	115	1	He	51.901	1.253	112565	1.10	50	103.8	89.5	110.5	
W	182	209	1	He	49.418	1.822	630410	1.84	50	98.8	89.5	110.5	
Tl	205	165	1	He	49.979	3.989	1608500	3.47	50	100.0	89.5	110.5	
Pb	208	209	1	He	47.897	1.762	2097410	0.44	50	95.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1176941	1.03	1631381	72.14	30	120	
Sc	45	1	He	654699	4.95	829696	78.91	30	120	
Sc	45	2	NoGas	5078679	1.56	6325638	80.29	30	120	
Rh	103	1	He	1903860	1.17	2345543	81.17	30	120	
In	115	1	He	1145054	0.18	1419467	80.67	30	120	
Tb	159	1	He	3420856	0.39	3888262	87.98	30	120	
Ho	165	1	He	3507285	0.89	3932562	89.19	30	120	
Bi	209	1	He	2487164	1.40	2874805	86.52	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	157_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:01:45-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.226	15.2	900	14.2	1	
B	11	45	2	NoGas	9.130	1.9	34340	1.4	20	
Na	23	45	1	He	33.745	1.9	61763	3.1	400	
Mg	24	45	1	He	2.484	30.4	2604	23.0	1000	
Al	27	45	1	He	0.400	66.7	2137	2.3	50	
K	39	45	1	He	12.560	21.5	37325	3.1	1000	
Ca	44	45	1	He	2.525	80.9	844	9.5	1000	
Ti	47	45	1	He	0.098	74.9	31	48.3	20	
V	51	45	1	He	0.103	44.3	636	38.4	2	
Cr	52	45	1	He	0.081	32.9	2438	3.9	2	
Mn	55	45	1	He	0.079	19.2	1318	5.3	2	
Fe	56	45	1	He	25.251	27.0	158410	28.0	50	
Co	59	103	1	He	0.024	44.6	296	37.5	1	
Ni	60	103	1	He	0.003	566.3	117	42.9	2	
Cu	63	103	1	He	0.067	16.1	1906	4.0	2	
Zn	66	103	1	He	-0.004	-2076.5	1642	5.7	20	
As	75	103	1	He	0.146	5.1	270	0.9	2	
Se	78	103	1	He	0.263	26.6	69	8.9	2	
Sr	88	103	1	He	0.035	40.5	358	28.8	10	
Mo	95	103	1	He	0.987	26.3	3384	25.0	2	
Ag	107	103	1	He	0.020	22.3	236	21.2	0.2	
Cd	111	103	1	He	0.127	15.1	1287	2.9	0.2	
Sn	118	115	1	He	0.376	9.6	2797	8.0	10	
Sb	123	115	1	He	0.462	22.4	2647	18.6	1	
Ba	137	115	1	He	0.029	50.0	149	23.9	5	
W	182	209	1	He	1.280	16.3	20099	14.2	10	
Tl	205	165	1	He	0.069	18.6	2268	18.3	0.5	
Pb	208	209	1	He	0.127	6.6	6467	5.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1211841	0.40	1631381	74.28	30	120	
Sc	45	1	He	617274	3.11	829696	74.40	30	120	
Sc	45	2	NoGas	5125709	0.27	6325638	81.03	30	120	
Rh	103	1	He	1960314	1.70	2345543	83.58	30	120	
In	115	1	He	1187598	2.64	1419467	83.67	30	120	
Tb	159	1	He	3411495	3.59	3888262	87.74	30	120	
Ho	165	1	He	3498974	1.50	3932562	88.97	30	120	
Bi	209	1	He	2566627	3.69	2874805	89.28	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-4-a
Data File Name	158SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:05:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.276	0.276	10.05	967	0.03	10000	
B	11	45	2	NoGas	152.047	152.047	0.50	407015	0.04	300	
Na	23	45	1	He	67835.352	67835.352	3.88	87393363	0.08	500000	
Mg	24	45	1	He	34329.060	34329.060	4.17	25136829	0.14	500000	
Al	27	45	1	He	7.173	7.173	9.31	4896	0.15	200000	
K	39	45	1	He	2355.331	2355.331	3.87	1651596	0.14	500000	
Ca	44	45	1	He	70528.197	70528.197	4.08	2668596	2.64	500000	
Ti	47	45	1	He	0.476	0.476	44.98	112	0.42	2500	
V	51	45	1	He	0.260	0.260	60.19	1431	0.02	10000	
Cr	52	45	1	He	1.032	1.032	6.16	8403	0.01	10000	
Mn	55	45	1	He	943.395	943.395	4.33	4698362	0.02	10000	
Fe	56	45	1	He	2529.715	2529.715	4.42	15116816	0.02	200000	
Co	59	103	1	He	12.775	12.775	0.13	121887	0.01	10000	
Ni	60	103	1	He	17.162	17.162	0.44	40684	0.04	10000	
Cu	63	103	1	He	1.255	1.255	1.41	9069	0.01	10000	
Zn	66	103	1	He	13.647	13.647	2.05	18600	0.07	10000	
As	75	103	1	He	0.545	0.545	3.03	562	0.10	10000	
Se	78	103	1	He	0.450	0.450	12.66	77	0.59	10000	
Sr	88	103	1	He	352.405	352.405	0.80	2317589	0.02	10000	
Mo	95	103	1	He	3.133	3.133	2.21	9406	0.03	2000	
Ag	107	103	1	He	0.022	0.022	9.82	232	0.01	300	
Cd	111	103	1	He	0.224	0.224	7.02	1310	0.02	4000	
Sn	118	115	1	He	0.795	0.795	15.18	4345	0.02	2000	
Sb	123	115	1	He	0.625	0.625	5.12	3029	0.02	300	
Ba	137	115	1	He	67.042	67.042	0.53	134649	0.05	10000	
W	182	209	1	He	0.522	0.522	3.64	9325	0.01	2500	
Tl	205	165	1	He	0.351	0.351	3.62	10837	0.00	5000	
Pb	208	209	1	He	0.228	0.228	6.79	10107	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1077086	3.01	1631381	66.02	30	120	
Sc	45	1	He	602497	3.40	829696	72.62	30	120	
Sc	45	2	NoGas	4670402	0.33	6325638	73.83	30	120	
Rh	103	1	He	1731727	0.71	2345543	73.83	30	120	
In	115	1	He	1060528	0.72	1419467	74.71	30	120	
Tb	159	1	He	3255591	1.17	3888262	83.73	30	120	
Ho	165	1	He	3342720	1.13	3932562	85.00	30	120	
Bi	209	1	He	2354007	0.43	2874805	81.88	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-5-a
Data File Name	159SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:09:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.239	0.239	12.70	830	0.03	10000	
B	11	45	2	NoGas	63.172	63.172	1.16	173195	0.04	300	
Na	23	45	1	He	53502.414	53502.414	2.25	68493979	0.08	500000	
Mg	24	45	1	He	23283.236	23283.236	3.03	16939002	0.14	500000	
Al	27	45	1	He	11.268	11.268	2.62	6556	0.17	200000	
K	39	45	1	He	1072.267	1072.267	2.85	762065	0.14	500000	
Ca	44	45	1	He	39217.407	39217.407	3.50	1474488	2.66	500000	
Ti	47	45	1	He	0.501	0.501	18.91	116	0.43	2500	
V	51	45	1	He	0.224	0.224	37.63	1248	0.02	10000	
Cr	52	45	1	He	0.838	0.838	8.24	7130	0.01	10000	
Mn	55	45	1	He	642.183	642.183	2.92	3178146	0.02	10000	
Fe	56	45	1	He	1011.760	1011.760	3.64	6008621	0.02	200000	
Co	59	103	1	He	7.518	7.518	1.94	72780	0.01	10000	
Ni	60	103	1	He	22.753	22.753	0.74	54684	0.04	10000	
Cu	63	103	1	He	0.807	0.807	5.27	6372	0.01	10000	
Zn	66	103	1	He	11.749	11.749	0.93	16451	0.07	10000	
As	75	103	1	He	0.362	0.362	12.63	419	0.09	10000	
Se	78	103	1	He	0.271	0.271	22.48	62	0.43	10000	
Sr	88	103	1	He	166.476	166.476	1.03	1110621	0.01	10000	
Mo	95	103	1	He	0.713	0.713	2.63	2207	0.03	2000	
Ag	107	103	1	He	0.033	0.033	18.17	343	0.01	300	
Cd	111	103	1	He	0.148	0.148	11.93	1191	0.01	4000	
Sn	118	115	1	He	0.397	0.397	28.25	2626	0.02	2000	
Sb	123	115	1	He	0.391	0.391	3.98	2108	0.02	300	
Ba	137	115	1	He	13.407	13.407	1.07	27411	0.05	10000	
W	182	209	1	He	0.258	0.258	8.99	6290	0.00	2500	
Tl	205	165	1	He	0.156	0.156	1.21	4934	0.00	5000	
Pb	208	209	1	He	0.173	0.173	3.34	8005	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058707	1.01	1631381	64.90	30	120	
Sc	45	1	He	598411	2.95	829696	72.12	30	120	
Sc	45	2	NoGas	4666563	2.20	6325638	73.77	30	120	
Rh	103	1	He	1756712	0.25	2345543	74.90	30	120	
In	115	1	He	1077160	0.51	1419467	75.88	30	120	
Tb	159	1	He	3293865	0.46	3888262	84.71	30	120	
Ho	165	1	He	3398869	0.89	3932562	86.43	30	120	
Bi	209	1	He	2404846	0.41	2874805	83.65	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-6-a
Data File Name	160SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:13:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.297	0.297	8.20	1037	0.03	10000	
B	11	45	2	NoGas	98.290	98.290	0.68	266596	0.04	300	
Na	23	45	1	He	412229.116	412229.116	4.21	515737135	0.08	500000	
Mg	24	45	1	He	98102.318	98102.318	3.39	69784019	0.14	500000	
Al	27	45	1	He	33.364	33.364	4.45	15321	0.22	200000	
K	39	45	1	He	4435.511	4435.511	4.65	2996752	0.15	500000	
Ca	44	45	1	He	111688.481	111688.481	4.30	4104244	2.72	500000	
Ti	47	45	1	He	0.475	0.475	7.80	108	0.44	2500	
V	51	45	1	He	-0.008	-0.008	-2412.74	43	-0.02	10000	
Cr	52	45	1	He	1.170	1.170	11.46	9005	0.01	10000	
Mn	55	45	1	He	5031.283	5031.283	2.98	24341941	0.02	10000	
Fe	56	45	1	He	317.386	317.386	2.34	1845915	0.02	200000	
Co	59	103	1	He	29.181	29.181	1.75	264603	0.01	10000	
Ni	60	103	1	He	183.894	183.894	1.33	413514	0.04	10000	
Cu	63	103	1	He	3.221	3.221	1.86	20257	0.02	10000	
Zn	66	103	1	He	178.949	178.949	1.38	215090	0.08	10000	
As	75	103	1	He	0.743	0.743	16.15	688	0.11	10000	
Se	78	103	1	He	0.543	0.543	6.25	81	0.67	10000	
Sr	88	103	1	He	814.023	814.023	1.32	5088816	0.02	10000	
Mo	95	103	1	He	0.500	0.500	7.38	1463	0.03	2000	
Ag	107	103	1	He	0.026	0.026	8.63	256	0.01	300	
Cd	111	103	1	He	1.023	1.023	3.75	2601	0.04	4000	
Sn	118	115	1	He	0.387	0.387	23.37	2463	0.02	2000	
Sb	123	115	1	He	0.361	0.361	1.37	1889	0.02	300	
Ba	137	115	1	He	21.575	21.575	1.09	41999	0.05	10000	
W	182	209	1	He	0.230	0.230	16.68	5427	0.00	2500	
Tl	205	165	1	He	0.175	0.175	5.16	5411	0.00	5000	
Pb	208	209	1	He	0.217	0.217	4.16	9013	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1072646	0.95	1631381	65.75	30	120	
Sc	45	1	He	585175	3.08	829696	70.53	30	120	
Sc	45	2	NoGas	4686355	0.11	6325638	74.09	30	120	
Rh	103	1	He	1646458	1.84	2345543	70.20	30	120	
In	115	1	He	1026681	0.36	1419467	72.33	30	120	
Tb	159	1	He	3223366	0.51	3888262	82.90	30	120	
Ho	165	1	He	3328362	0.80	3932562	84.64	30	120	
Bi	209	1	He	2196888	1.73	2874805	76.42	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-7-a
Data File Name	161SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:16:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.611	1.611	5.29	5305	0.03	10000	
B	11	45	2	NoGas	32.338	32.338	1.71	92075	0.04	300	
Na	23	45	1	He	116831.018	116831.018	2.15	146270205	0.08	500000	
Mg	24	45	1	He	27341.196	27341.196	1.55	19458682	0.14	500000	
Al	27	45	1	He	779.901	779.901	1.48	316483	0.25	200000	
K	39	45	1	He	1654.762	1654.762	2.22	1135706	0.15	500000	
Ca	44	45	1	He	29243.217	29243.217	1.78	1075834	2.72	500000	
Ti	47	45	1	He	0.577	0.577	26.80	129	0.45	2500	
V	51	45	1	He	-0.133	-0.133	-95.77	-604	0.02	10000	
Cr	52	45	1	He	2.870	2.870	4.12	19489	0.01	10000	
Mn	55	45	1	He	507.363	507.363	1.42	2456490	0.02	10000	
Fe	56	45	1	He	1858.302	1858.302	2.31	10794179	0.02	200000	
Co	59	103	1	He	45.493	45.493	1.49	432023	0.01	10000	
Ni	60	103	1	He	99.235	99.235	2.00	233727	0.04	10000	
Cu	63	103	1	He	20.309	20.309	1.58	127016	0.02	10000	
Zn	66	103	1	He	375.611	375.611	1.90	471190	0.08	10000	
As	75	103	1	He	0.432	0.432	8.84	469	0.09	10000	
Se	78	103	1	He	0.501	0.501	19.66	81	0.62	10000	
Sr	88	103	1	He	241.215	241.215	1.65	1579571	0.02	10000	
Mo	95	103	1	He	0.534	0.534	2.72	1633	0.03	2000	
Ag	107	103	1	He	0.066	0.066	6.70	676	0.01	300	
Cd	111	103	1	He	1.995	1.995	1.96	4453	0.04	4000	
Sn	118	115	1	He	0.409	0.409	6.47	2630	0.02	2000	
Sb	123	115	1	He	0.377	0.377	6.37	2010	0.02	300	
Ba	137	115	1	He	18.606	18.606	0.82	37279	0.05	10000	
W	182	209	1	He	0.211	0.211	7.59	5579	0.00	2500	
Tl	205	165	1	He	0.400	0.400	2.02	12484	0.00	5000	
Pb	208	209	1	He	1.684	1.684	1.39	70237	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1035941	0.81	1631381	63.50	30	120	
Sc	45	1	He	585113	0.99	829696	70.52	30	120	
Sc	45	2	NoGas	4658855	0.16	6325638	73.65	30	120	
Rh	103	1	He	1724288	1.72	2345543	73.51	30	120	
In	115	1	He	1056419	0.75	1419467	74.42	30	120	
Tb	159	1	He	3278094	1.48	3888262	84.31	30	120	
Ho	165	1	He	3380548	1.66	3932562	85.96	30	120	
Bi	209	1	He	2347285	0.34	2874805	81.65	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-8-a
Data File Name	162SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:20:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.462	1.462	11.05	4482	0.03	10000	
B	11	45	2	NoGas	126.860	126.860	1.27	318451	0.04	300	
Na	23	45	1	He	265259.427	265259.427	3.01	314598773	0.08	500000	
Mg	24	45	1	He	79807.504	79807.504	3.39	53799942	0.15	500000	
Al	27	45	1	He	1279.595	1279.595	3.73	490691	0.26	200000	
K	39	45	1	He	6461.668	6461.668	3.32	4126822	0.16	500000	
Ca	44	45	1	He	107452.236	107452.236	2.65	3743510	2.87	500000	
Ti	47	45	1	He	0.722	0.722	26.78	150	0.48	2500	
V	51	45	1	He	0.223	0.223	56.58	1169	0.02	10000	
Cr	52	45	1	He	1.026	1.026	6.69	7703	0.01	10000	
Mn	55	45	1	He	3603.917	3603.917	3.52	16522505	0.02	10000	
Fe	56	45	1	He	23317.575	23317.575	3.51	128264079	0.02	200000	
Co	59	103	1	He	203.901	203.901	0.55	1750257	0.01	10000	
Ni	60	103	1	He	342.045	342.045	0.59	728062	0.05	10000	
Cu	63	103	1	He	11.501	11.501	1.83	65509	0.02	10000	
Zn	66	103	1	He	1741.535	1741.535	1.74	1970059	0.09	10000	
As	75	103	1	He	0.786	0.786	1.40	681	0.12	10000	
Se	78	103	1	He	0.732	0.732	33.61	91	0.81	10000	
Sr	88	103	1	He	691.697	691.697	0.82	4093576	0.02	10000	
Mo	95	103	1	He	0.500	0.500	5.55	1385	0.04	2000	
Ag	107	103	1	He	0.023	0.023	26.86	213	0.01	300	
Cd	111	103	1	He	8.496	8.496	2.01	14476	0.06	4000	
Sn	118	115	1	He	0.292	0.292	24.15	1959	0.01	2000	
Sb	123	115	1	He	0.372	0.372	11.13	1842	0.02	300	
Ba	137	115	1	He	15.578	15.578	1.65	28933	0.05	10000	
W	182	209	1	He	0.244	0.244	9.17	5546	0.00	2500	
Tl	205	165	1	He	1.012	1.012	1.32	30282	0.00	5000	
Pb	208	209	1	He	0.203	0.203	6.37	8423	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	963774	1.43	1631381	59.08	30	120	
Sc	45	1	He	554653	3.78	829696	66.85	30	120	
Sc	45	2	NoGas	4364375	0.75	6325638	69.00	30	120	
Rh	103	1	He	1558483	0.94	2345543	66.44	30	120	
In	115	1	He	979028	0.88	1419467	68.97	30	120	
Tb	159	1	He	3168813	1.09	3888262	81.50	30	120	
Ho	165	1	He	3253811	1.13	3932562	82.74	30	120	
Bi	209	1	He	2181400	0.07	2874805	75.88	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-9-a
Data File Name	163SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:24:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.689	2.689	5.29	8317	0.03	10000	
B	11	45	2	NoGas	80.797	80.797	1.40	207829	0.04	300	
Na	23	45	1	He	145764.065	145764.065	3.26	172515660	0.08	500000	
Mg	24	45	1	He	38622.900	38622.900	2.99	25985510	0.15	500000	
Al	27	45	1	He	1497.912	1497.912	3.04	573008	0.26	200000	
K	39	45	1	He	6116.950	6116.950	3.13	3900130	0.16	500000	
Ca	44	45	1	He	53725.852	53725.852	3.26	1867909	2.88	500000	
Ti	47	45	1	He	0.785	0.785	28.92	163	0.48	2500	
V	51	45	1	He	0.290	0.290	44.87	1465	0.02	10000	
Cr	52	45	1	He	1.030	1.030	7.40	7710	0.01	10000	
Mn	55	45	1	He	828.934	828.934	3.09	3793503	0.02	10000	
Fe	56	45	1	He	34526.700	34526.700	2.52	189570988	0.02	200000	
Co	59	103	1	He	182.440	182.440	1.97	1633227	0.01	10000	
Ni	60	103	1	He	247.864	247.864	1.24	550248	0.05	10000	
Cu	63	103	1	He	10.127	10.127	0.85	60307	0.02	10000	
Zn	66	103	1	He	709.310	709.310	0.74	837674	0.08	10000	
As	75	103	1	He	0.439	0.439	4.12	447	0.10	10000	
Se	78	103	1	He	0.424	0.424	13.56	70	0.61	10000	
Sr	88	103	1	He	330.746	330.746	0.44	2041395	0.02	10000	
Mo	95	103	1	He	0.242	0.242	12.01	722	0.03	2000	
Ag	107	103	1	He	0.042	0.042	15.07	407	0.01	300	
Cd	111	103	1	He	2.757	2.757	3.44	5475	0.05	4000	
Sn	118	115	1	He	0.291	0.291	7.27	1974	0.01	2000	
Sb	123	115	1	He	0.347	0.347	12.07	1763	0.02	300	
Ba	137	115	1	He	19.406	19.406	0.71	36337	0.05	10000	
W	182	209	1	He	0.177	0.177	13.10	4945	0.00	2500	
Tl	205	165	1	He	3.625	3.625	0.51	109055	0.00	5000	
Pb	208	209	1	He	4.076	4.076	0.17	161994	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	975988	1.94	1631381	59.83	30	120	
Sc	45	1	He	553409	2.92	829696	66.70	30	120	
Sc	45	2	NoGas	4417842	0.77	6325638	69.84	30	120	
Rh	103	1	He	1625296	0.24	2345543	69.29	30	120	
In	115	1	He	987394	0.34	1419467	69.56	30	120	
Tb	159	1	He	3223483	0.85	3888262	82.90	30	120	
Ho	165	1	He	3276160	1.15	3932562	83.31	30	120	
Bi	209	1	He	2249061	0.33	2874805	78.23	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-10-a
Data File Name	164SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:28:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.788	2.788	5.40	8699	0.03	10000	
B	11	45	2	NoGas	82.234	82.234	1.34	212562	0.04	300	
Na	23	45	1	He	149324.688	149324.688	3.59	177958493	0.08	500000	
Mg	24	45	1	He	39752.877	39752.877	3.39	26931417	0.15	500000	
Al	27	45	1	He	1525.781	1525.781	3.29	587719	0.26	200000	
K	39	45	1	He	6236.093	6236.093	3.27	4003322	0.16	500000	
Ca	44	45	1	He	54100.915	54100.915	3.48	1894057	2.86	500000	
Ti	47	45	1	He	0.873	0.873	7.46	181	0.48	2500	
V	51	45	1	He	0.272	0.272	73.31	1387	0.02	10000	
Cr	52	45	1	He	1.074	1.074	8.54	8021	0.01	10000	
Mn	55	45	1	He	851.120	851.120	3.59	3921958	0.02	10000	
Fe	56	45	1	He	35149.528	35149.528	2.28	194346299	0.02	200000	
Co	59	103	1	He	185.026	185.026	0.61	1674267	0.01	10000	
Ni	60	103	1	He	249.678	249.678	0.30	560272	0.04	10000	
Cu	63	103	1	He	10.146	10.146	1.39	61065	0.02	10000	
Zn	66	103	1	He	721.541	721.541	0.72	861308	0.08	10000	
As	75	103	1	He	0.454	0.454	8.97	463	0.10	10000	
Se	78	103	1	He	0.486	0.486	12.12	76	0.64	10000	
Sr	88	103	1	He	336.368	336.368	0.50	2098563	0.02	10000	
Mo	95	103	1	He	0.246	0.246	9.00	740	0.03	2000	
Ag	107	103	1	He	0.037	0.037	18.62	364	0.01	300	
Cd	111	103	1	He	2.891	2.891	0.91	5762	0.05	4000	
Sn	118	115	1	He	0.249	0.249	12.72	1826	0.01	2000	
Sb	123	115	1	He	0.325	0.325	3.71	1706	0.02	300	
Ba	137	115	1	He	19.502	19.502	2.05	37054	0.05	10000	
W	182	209	1	He	0.158	0.158	13.92	4794	0.00	2500	
Tl	205	165	1	He	3.698	3.698	1.27	112002	0.00	5000	
Pb	208	209	1	He	4.029	4.029	0.91	162189	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	984136	0.46	1631381	60.33	30	120	
Sc	45	1	He	557261	2.69	829696	67.16	30	120	
Sc	45	2	NoGas	4442800	1.79	6325638	70.23	30	120	
Rh	103	1	He	1642879	0.42	2345543	70.04	30	120	
In	115	1	He	1002011	0.57	1419467	70.59	30	120	
Tb	159	1	He	3173575	0.19	3888262	81.62	30	120	
Ho	165	1	He	3298300	0.33	3932562	83.87	30	120	
Bi	209	1	He	2277503	0.42	2874805	79.22	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-1-a
Data File Name	165SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:32:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.143	0.143	24.71	541	0.03	10000	
B	11	45	2	NoGas	1219.827	1219.827	4.54	3317411	0.04	300	>LDR
Na	23	45	1	He	31295.177	31295.177	2.44	40808585	0.08	500000	
Mg	24	45	1	He	43368.653	43368.653	3.78	32130434	0.13	500000	
Al	27	45	1	He	24.296	24.296	2.74	12149	0.20	200000	
K	39	45	1	He	13796.256	13796.256	2.83	9652657	0.14	500000	
Ca	44	45	1	He	69244.092	69244.092	2.52	2651476	2.61	500000	
Ti	47	45	1	He	0.418	0.418	9.34	100	0.42	2500	
V	51	45	1	He	0.024	0.024	440.67	209	0.01	10000	
Cr	52	45	1	He	1.030	1.030	9.64	8490	0.01	10000	
Mn	55	45	1	He	11.270	11.270	1.61	57705	0.02	10000	
Fe	56	45	1	He	157.889	157.889	1.12	958406	0.02	200000	
Co	59	103	1	He	0.088	0.088	8.07	914	0.01	10000	
Ni	60	103	1	He	0.308	0.308	11.54	860	0.04	10000	
Cu	63	103	1	He	0.448	0.448	8.68	4236	0.01	10000	
Zn	66	103	1	He	13.081	13.081	1.20	18703	0.07	10000	
As	75	103	1	He	0.447	0.447	13.10	504	0.09	10000	
Se	78	103	1	He	0.189	0.189	46.51	57	0.33	10000	
Sr	88	103	1	He	1130.718	1130.718	1.31	7773710	0.01	10000	
Mo	95	103	1	He	0.072	0.072	18.60	273	0.03	2000	
Ag	107	103	1	He	0.019	0.019	24.90	204	0.01	300	
Cd	111	103	1	He	0.086	0.086	7.51	1112	0.01	4000	
Sn	118	115	1	He	0.321	0.321	5.06	2341	0.01	2000	
Sb	123	115	1	He	0.321	0.321	4.30	1856	0.02	300	
Ba	137	115	1	He	20.255	20.255	1.93	42297	0.05	10000	
W	182	209	1	He	0.524	0.524	3.30	9581	0.01	2500	
Tl	205	165	1	He	0.008	0.008	16.13	327	0.00	5000	
Pb	208	209	1	He	0.226	0.226	0.31	10290	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1128224	1.59	1631381	69.16	30	120	
Sc	45	1	He	609361	2.08	829696	73.44	30	120	
Sc	45	2	NoGas	4824002	2.49	6325638	76.26	30	120	
Rh	103	1	He	1810653	1.54	2345543	77.20	30	120	
In	115	1	He	1101447	1.37	1419467	77.60	30	120	
Tb	159	1	He	3392292	1.14	3888262	87.24	30	120	
Ho	165	1	He	3480263	0.97	3932562	88.50	30	120	
Bi	209	1	He	2412871	0.67	2874805	83.93	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-1-a
Data File Name	166SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:35:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.115	0.115	30.55	456	0.03	10000	
B	11	45	2	NoGas	1215.848	1215.848	2.33	3490350	0.03	300	>LDR
Na	23	45	1	He	32510.763	32510.763	3.04	44227067	0.07	500000	
Mg	24	45	1	He	44533.063	44533.063	2.16	34430300	0.13	500000	
Al	27	45	1	He	13.097	13.097	5.88	7767	0.17	200000	
K	39	45	1	He	14248.054	14248.054	2.43	10400468	0.14	500000	
Ca	44	45	1	He	71122.659	71122.659	2.14	2841453	2.50	500000	
Ti	47	45	1	He	0.212	0.212	31.15	58	0.37	2500	
V	51	45	1	He	0.118	0.118	111.73	747	0.02	10000	
Cr	52	45	1	He	0.969	0.969	5.59	8453	0.01	10000	
Mn	55	45	1	He	11.187	11.187	3.86	59749	0.02	10000	
Fe	56	45	1	He	119.420	119.420	1.85	756926	0.02	200000	
Co	59	103	1	He	0.075	0.075	5.22	802	0.01	10000	
Ni	60	103	1	He	0.431	0.431	10.81	1191	0.04	10000	
Cu	63	103	1	He	0.239	0.239	4.56	2946	0.01	10000	
Zn	66	103	1	He	9.562	9.562	5.23	14409	0.07	10000	
As	75	103	1	He	0.502	0.502	5.81	564	0.09	10000	
Se	78	103	1	He	0.144	0.144	11.61	54	0.27	10000	
Sr	88	103	1	He	1167.918	1167.918	2.13	8219353	0.01	10000	
Mo	95	103	1	He	0.073	0.073	6.11	282	0.03	2000	
Ag	107	103	1	He	0.015	0.015	6.70	167	0.01	300	
Cd	111	103	1	He	0.090	0.090	28.31	1145	0.01	4000	
Sn	118	115	1	He	0.415	0.415	15.17	2837	0.01	2000	
Sb	123	115	1	He	0.293	0.293	12.95	1780	0.02	300	
Ba	137	115	1	He	20.475	20.475	1.75	43762	0.05	10000	
W	182	209	1	He	0.505	0.505	9.29	9537	0.01	2500	
Tl	205	165	1	He	0.003	0.003	20.95	153	0.00	5000	
Pb	208	209	1	He	0.096	0.096	4.08	4860	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1166586	1.56	1631381	71.51	30	120	
Sc	45	1	He	635739	1.79	829696	76.62	30	120	
Sc	45	2	NoGas	5089148	1.17	6325638	80.45	30	120	
Rh	103	1	He	1853917	2.55	2345543	79.04	30	120	
In	115	1	He	1127244	0.69	1419467	79.41	30	120	
Tb	159	1	He	3441887	0.82	3888262	88.52	30	120	
Ho	165	1	He	3534772	0.97	3932562	89.88	30	120	
Bi	209	1	He	2462209	0.98	2874805	85.65	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-2-a
Data File Name	167SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:39:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.142	0.142	21.63	504	0.03	10000	
B	11	45	2	NoGas	102.376	102.376	1.60	278051	0.04	300	
Na	23	45	1	He	43838.812	43838.812	2.75	57356876	0.08	500000	
Mg	24	45	1	He	109968.060	109968.060	3.42	81753134	0.13	500000	
Al	27	45	1	He	32.762	32.762	2.65	15765	0.21	200000	
K	39	45	1	He	4647.914	4647.914	2.10	3282735	0.14	500000	
Ca	44	45	1	He	140720.068	140720.068	2.64	5406437	2.60	500000	
Ti	47	45	1	He	0.506	0.506	21.46	119	0.43	2500	
V	51	45	1	He	0.355	0.355	45.53	1971	0.02	10000	
Cr	52	45	1	He	1.303	1.303	3.92	10283	0.01	10000	
Mn	55	45	1	He	137.540	137.540	2.44	696474	0.02	10000	
Fe	56	45	1	He	9194.214	9194.214	3.57	55775411	0.02	200000	
Co	59	103	1	He	0.838	0.838	0.53	8190	0.01	10000	
Ni	60	103	1	He	0.740	0.740	2.61	1882	0.04	10000	
Cu	63	103	1	He	0.350	0.350	7.80	3510	0.01	10000	
Zn	66	103	1	He	4.058	4.058	2.55	6682	0.06	10000	
As	75	103	1	He	0.895	0.895	5.43	862	0.10	10000	
Se	78	103	1	He	0.227	0.227	55.79	59	0.39	10000	
Sr	88	103	1	He	270.281	270.281	1.00	1812300	0.01	10000	
Mo	95	103	1	He	0.590	0.590	5.93	1842	0.03	2000	
Ag	107	103	1	He	0.014	0.014	13.10	154	0.01	300	
Cd	111	103	1	He	0.102	0.102	30.15	1115	0.01	4000	
Sn	118	115	1	He	0.164	0.164	16.76	1567	0.01	2000	
Sb	123	115	1	He	0.236	0.236	11.22	1452	0.02	300	
Ba	137	115	1	He	233.365	233.365	0.42	471753	0.05	10000	
W	182	209	1	He	0.258	0.258	13.57	6127	0.00	2500	
Tl	205	165	1	He	0.001	0.001	50.77	101	0.00	5000	
Pb	208	209	1	He	0.105	0.105	3.35	4989	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058483	0.38	1631381	64.88	30	120	
Sc	45	1	He	611722	4.08	829696	73.73	30	120	
Sc	45	2	NoGas	4698009	0.53	6325638	74.27	30	120	
Rh	103	1	He	1765905	2.10	2345543	75.29	30	120	
In	115	1	He	1067845	0.80	1419467	75.23	30	120	
Tb	159	1	He	3324240	2.10	3888262	85.49	30	120	
Ho	165	1	He	3412186	0.70	3932562	86.77	30	120	
Bi	209	1	He	2341925	1.21	2874805	81.46	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	168_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:43:30-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	51.261	1.220	188912	0.55	50	102.5	89.5	110.5	
B	11	45	2	NoGas	62.351	0.668	189026	0.44	50	124.7	89.5	110.5	CCV Failed
Na	23	45	1	He	24673.674	3.372	34555152	0.25	25000	98.7	89.5	110.5	
Mg	24	45	1	He	24718.014	3.793	19667683	0.32	25000	98.9	89.5	110.5	
Al	27	45	1	He	239.105	3.105	109945	0.68	250	95.6	89.5	110.5	
K	39	45	1	He	25741.733	2.979	19317339	0.53	25000	103.0	89.5	110.5	
Ca	44	45	1	He	24990.156	3.448	1028075	0.14	25000	100.0	89.5	110.5	
Ti	47	45	1	He	49.500	3.263	11482	1.51	50	99.0	89.5	110.5	
V	51	45	1	He	50.512	1.925	289593	1.64	50	101.0	89.5	110.5	
Cr	52	45	1	He	50.054	3.209	346729	0.32	50	100.1	89.5	110.5	
Mn	55	45	1	He	255.445	3.460	1383308	0.16	250	102.2	89.5	110.5	
Fe	56	45	1	He	12719.591	2.780	82605223	0.79	12500	101.8	89.5	110.5	
Co	59	103	1	He	47.141	1.553	492502	0.86	50	94.3	89.5	110.5	
Ni	60	103	1	He	46.612	0.893	120843	0.46	50	93.2	89.5	110.5	
Cu	63	103	1	He	47.256	1.434	323301	0.52	50	94.5	89.5	110.5	
Zn	66	103	1	He	47.198	1.391	66536	0.47	50	94.4	89.5	110.5	
As	75	103	1	He	48.563	0.653	43186	0.65	50	97.1	89.5	110.5	
Se	78	103	1	He	49.426	2.032	4672	1.07	50	98.9	89.5	110.5	
Sr	88	103	1	He	49.359	1.245	355601	0.79	50	98.7	89.5	110.5	
Mo	95	103	1	He	49.930	1.821	163482	2.57	50	99.9	89.5	110.5	
Ag	107	103	1	He	49.651	1.042	558213	0.13	50	99.3	89.5	110.5	
Cd	111	103	1	He	50.352	1.563	99504	0.63	50	100.7	89.5	110.5	
Sn	118	115	1	He	50.847	0.944	244818	1.00	50	101.7	89.5	110.5	
Sb	123	115	1	He	52.633	1.495	233690	0.98	50	105.3	89.5	110.5	
Ba	137	115	1	He	51.960	0.683	113221	0.99	50	103.9	89.5	110.5	
W	182	209	1	He	48.408	1.274	628720	0.43	50	96.8	89.5	110.5	
Tl	205	165	1	He	49.481	4.116	1594389	3.61	50	99.0	89.5	110.5	
Pb	208	209	1	He	47.380	0.671	2112510	0.93	50	94.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1165870	1.74	1631381	71.47	30	120	
Sc	45	1	He	654684	3.56	829696	78.91	30	120	
Sc	45	2	NoGas	5156640	0.88	6325638	81.52	30	120	
Rh	103	1	He	1896806	0.96	2345543	80.87	30	120	
In	115	1	He	1150426	0.81	1419467	81.05	30	120	
Tb	159	1	He	3443810	0.69	3888262	88.57	30	120	
Ho	165	1	He	3511441	0.63	3932562	89.29	30	120	
Bi	209	1	He	2531986	0.93	2874805	88.08	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	169_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:47:17-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.099	6.4	407	6.9	1	
B	11	45	2	NoGas	16.158	0.7	54406	0.5	20	
Na	23	45	1	He	49.957	6.4	85245	3.6	400	
Mg	24	45	1	He	4.962	11.1	4575	9.1	1000	
Al	27	45	1	He	-0.136	-47.5	1959	0.9	50	
K	39	45	1	He	10.400	22.0	36723	3.2	1000	
Ca	44	45	1	He	3.487	30.0	904	6.0	1000	
Ti	47	45	1	He	0.132	57.1	40	44.1	20	
V	51	45	1	He	0.023	381.6	204	238.8	2	
Cr	52	45	1	He	0.048	53.9	2287	8.4	2	
Mn	55	45	1	He	0.073	12.1	1320	4.7	2	
Fe	56	45	1	He	24.028	26.3	154101	24.4	50	
Co	59	103	1	He	0.008	28.7	126	18.6	1	
Ni	60	103	1	He	0.004	236.1	120	19.4	2	
Cu	63	103	1	He	0.063	12.2	1915	3.7	2	
Zn	66	103	1	He	-0.033	-95.2	1635	2.6	20	
As	75	103	1	He	0.082	16.7	216	7.3	2	
Se	78	103	1	He	0.175	36.1	62	10.0	2	
Sr	88	103	1	He	0.031	19.5	338	12.9	10	
Mo	95	103	1	He	0.911	21.7	3198	21.3	2	
Ag	107	103	1	He	0.016	19.4	191	17.9	0.2	
Cd	111	103	1	He	0.096	10.7	1249	2.1	0.2	
Sn	118	115	1	He	0.298	5.3	2467	3.2	10	
Sb	123	115	1	He	0.393	15.6	2387	12.3	1	
Ba	137	115	1	He	0.008	49.8	104	9.8	5	
W	182	209	1	He	1.149	16.9	19109	14.0	10	
Tl	205	165	1	He	0.041	20.6	1423	19.9	0.5	
Pb	208	209	1	He	0.036	9.3	2462	6.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1196359	1.06	1631381	73.33	30	120	
Sc	45	1	He	632919	1.55	829696	76.28	30	120	
Sc	45	2	NoGas	5106029	1.08	6325638	80.72	30	120	
Rh	103	1	He	2000430	1.30	2345543	85.29	30	120	
In	115	1	He	1215339	0.89	1419467	85.62	30	120	
Tb	159	1	He	3505960	1.14	3888262	90.17	30	120	
Ho	165	1	He	3583759	0.62	3932562	91.13	30	120	
Bi	209	1	He	2668542	0.17	2874805	92.83	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-2-a
Data File Name	170SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:51:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.100	0.100	34.94	363	0.03	10000	
B	11	45	2	NoGas	96.116	96.116	0.56	263002	0.04	300	
Na	23	45	1	He	44261.231	44261.231	2.95	57202853	0.08	500000	
Mg	24	45	1	He	110997.298	110997.298	3.45	81518458	0.14	500000	
Al	27	45	1	He	28.769	28.769	3.87	13905	0.21	200000	
K	39	45	1	He	4725.548	4725.548	3.86	3295097	0.14	500000	
Ca	44	45	1	He	143617.161	143617.161	3.55	5449711	2.64	500000	
Ti	47	45	1	He	0.480	0.480	14.19	112	0.43	2500	
V	51	45	1	He	0.202	0.202	35.86	1153	0.02	10000	
Cr	52	45	1	He	0.901	0.901	6.54	7599	0.01	10000	
Mn	55	45	1	He	139.228	139.228	2.50	696404	0.02	10000	
Fe	56	45	1	He	8120.083	8120.083	2.27	48675733	0.02	200000	
Co	59	103	1	He	0.877	0.877	2.74	8319	0.01	10000	
Ni	60	103	1	He	0.700	0.700	5.66	1733	0.04	10000	
Cu	63	103	1	He	0.165	0.165	8.32	2268	0.01	10000	
Zn	66	103	1	He	7.727	7.727	0.97	11057	0.07	10000	
As	75	103	1	He	0.811	0.811	5.46	770	0.11	10000	
Se	78	103	1	He	0.192	0.192	14.75	54	0.35	10000	
Sr	88	103	1	He	281.469	281.469	1.15	1833221	0.02	10000	
Mo	95	103	1	He	0.946	0.946	10.66	2842	0.03	2000	
Ag	107	103	1	He	0.014	0.014	4.97	148	0.01	300	
Cd	111	103	1	He	0.129	0.129	14.44	1129	0.01	4000	
Sn	118	115	1	He	0.475	0.475	12.48	2908	0.02	2000	
Sb	123	115	1	He	0.481	0.481	6.41	2420	0.02	300	
Ba	137	115	1	He	235.998	235.998	1.59	469685	0.05	10000	
W	182	209	1	He	0.589	0.589	4.32	10059	0.01	2500	
Tl	205	165	1	He	0.011	0.011	22.57	412	0.00	5000	
Pb	208	209	1	He	0.092	0.092	5.84	4461	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1063302	1.51	1631381	65.18	30	120	
Sc	45	1	He	604142	2.85	829696	72.81	30	120	
Sc	45	2	NoGas	4724857	0.42	6325638	74.69	30	120	
Rh	103	1	He	1715150	0.74	2345543	73.12	30	120	
In	115	1	He	1051403	0.69	1419467	74.07	30	120	
Tb	159	1	He	3254139	0.71	3888262	83.69	30	120	
Ho	165	1	He	3353365	0.75	3932562	85.27	30	120	
Bi	209	1	He	2338294	0.72	2874805	81.34	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-3-a
Data File Name	171SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:54:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.096	0.096	11.70	382	0.03	10000	
B	11	45	2	NoGas	166.368	166.368	1.35	474339	0.04	300	
Na	23	45	1	He	24242.195	24242.195	2.47	33544858	0.07	500000	
Mg	24	45	1	He	87173.727	87173.727	2.22	68540118	0.13	500000	
Al	27	45	1	He	13.498	13.498	6.38	8075	0.17	200000	
K	39	45	1	He	5232.257	5232.257	2.92	3902631	0.13	500000	
Ca	44	45	1	He	127615.955	127615.955	3.21	5183582	2.46	500000	
Ti	47	45	1	He	0.446	0.446	13.21	112	0.40	2500	
V	51	45	1	He	0.090	0.090	209.24	611	0.01	10000	
Cr	52	45	1	He	0.909	0.909	2.94	8193	0.01	10000	
Mn	55	45	1	He	10.373	10.373	3.51	56412	0.02	10000	
Fe	56	45	1	He	36.223	36.223	6.73	235868	0.02	200000	
Co	59	103	1	He	0.128	0.128	2.48	1338	0.01	10000	
Ni	60	103	1	He	1.012	1.012	4.83	2644	0.04	10000	
Cu	63	103	1	He	0.300	0.300	5.81	3327	0.01	10000	
Zn	66	103	1	He	5.157	5.157	6.78	8425	0.06	10000	
As	75	103	1	He	0.829	0.829	3.59	842	0.10	10000	
Se	78	103	1	He	0.194	0.194	11.53	58	0.33	10000	
Sr	88	103	1	He	293.164	293.164	3.65	2047598	0.01	10000	
Mo	95	103	1	He	0.125	0.125	17.96	444	0.03	2000	
Ag	107	103	1	He	0.013	0.013	8.30	147	0.01	300	
Cd	111	103	1	He	0.124	0.124	19.41	1203	0.01	4000	
Sn	118	115	1	He	0.157	0.157	17.19	1611	0.01	2000	
Sb	123	115	1	He	0.260	0.260	16.50	1622	0.02	300	
Ba	137	115	1	He	16.888	16.888	4.54	35907	0.05	10000	
W	182	209	1	He	0.360	0.360	10.14	7606	0.00	2500	
Tl	205	165	1	He	0.004	0.004	44.99	178	0.00	5000	
Pb	208	209	1	He	0.095	0.095	8.05	4715	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1156824	0.44	1631381	70.91	30	120	
Sc	45	1	He	646609	2.65	829696	77.93	30	120	
Sc	45	2	NoGas	4982570	1.15	6325638	78.77	30	120	
Rh	103	1	He	1840364	2.60	2345543	78.46	30	120	
In	115	1	He	1122138	3.75	1419467	79.05	30	120	
Tb	159	1	He	3437898	4.12	3888262	88.42	30	120	
Ho	165	1	He	3500144	2.07	3932562	89.00	30	120	
Bi	209	1	He	2424565	2.54	2874805	84.34	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-3-a
Data File Name	172SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:58:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.086	0.086	38.22	344	0.02	10000	
B	11	45	2	NoGas	163.050	163.050	0.48	469841	0.03	300	
Na	23	45	1	He	23833.938	23833.938	3.23	32728238	0.07	500000	
Mg	24	45	1	He	85090.782	85090.782	3.51	66384527	0.13	500000	
Al	27	45	1	He	6.796	6.796	10.38	5051	0.13	200000	
K	39	45	1	He	5168.372	5168.372	2.90	3826482	0.14	500000	
Ca	44	45	1	He	125895.357	125895.357	2.80	5075672	2.48	500000	
Ti	47	45	1	He	0.274	0.274	36.55	72	0.38	2500	
V	51	45	1	He	0.048	0.048	684.36	311	0.02	10000	
Cr	52	45	1	He	0.959	0.959	7.18	8462	0.01	10000	
Mn	55	45	1	He	9.885	9.885	4.47	53387	0.02	10000	
Fe	56	45	1	He	15.030	15.030	3.70	99223	0.02	200000	
Co	59	103	1	He	0.123	0.123	4.38	1266	0.01	10000	
Ni	60	103	1	He	0.977	0.977	1.81	2526	0.04	10000	
Cu	63	103	1	He	0.128	0.128	9.83	2165	0.01	10000	
Zn	66	103	1	He	3.714	3.714	4.59	6425	0.06	10000	
As	75	103	1	He	0.859	0.859	3.10	856	0.10	10000	
Se	78	103	1	He	0.186	0.186	11.35	57	0.33	10000	
Sr	88	103	1	He	290.222	290.222	0.69	2002849	0.01	10000	
Mo	95	103	1	He	0.101	0.101	7.03	363	0.03	2000	
Ag	107	103	1	He	0.011	0.011	8.95	128	0.01	300	
Cd	111	103	1	He	0.115	0.115	21.37	1169	0.01	4000	
Sn	118	115	1	He	0.174	0.174	6.50	1678	0.01	2000	
Sb	123	115	1	He	0.276	0.276	2.07	1682	0.02	300	
Ba	137	115	1	He	16.519	16.519	0.41	34810	0.05	10000	
W	182	209	1	He	0.347	0.347	16.38	7280	0.00	2500	
Tl	205	165	1	He	0.001	0.001	61.38	103	0.00	5000	
Pb	208	209	1	He	0.081	0.081	3.53	4067	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1152621	1.17	1631381	70.65	30	120	
Sc	45	1	He	641884	3.56	829696	77.36	30	120	
Sc	45	2	NoGas	5033684	0.92	6325638	79.58	30	120	
Rh	103	1	He	1817255	0.29	2345543	77.48	30	120	
In	115	1	He	1110810	0.40	1419467	78.26	30	120	
Tb	159	1	He	3330439	0.22	3888262	85.65	30	120	
Ho	165	1	He	3478842	0.78	3932562	88.46	30	120	
Bi	209	1	He	2372950	0.20	2874805	82.54	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-4-a
Data File Name	173SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:02:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.071	0.071	39.98	282	0.03	10000	
B	11	45	2	NoGas	1579.863	1579.863	1.87	4294332	0.04	300	>LDR
Na	23	45	1	He	58506.750	58506.750	3.03	75806523	0.08	500000	
Mg	24	45	1	He	44678.905	44678.905	3.25	32902963	0.14	500000	
Al	27	45	1	He	20.946	20.946	3.36	10678	0.20	200000	
K	39	45	1	He	15642.645	15642.645	3.15	10873468	0.14	500000	
Ca	44	45	1	He	62919.010	62919.010	3.75	2394100	2.63	500000	
Ti	47	45	1	He	0.637	0.637	33.13	146	0.44	2500	
V	51	45	1	He	0.193	0.193	47.05	1095	0.02	10000	
Cr	52	45	1	He	1.712	1.712	6.57	12784	0.01	10000	
Mn	55	45	1	He	95.762	95.762	3.47	480461	0.02	10000	
Fe	56	45	1	He	1909.633	1909.633	2.31	11480060	0.02	200000	
Co	59	103	1	He	0.227	0.227	3.59	2239	0.01	10000	
Ni	60	103	1	He	0.571	0.571	3.82	1473	0.04	10000	
Cu	63	103	1	He	0.795	0.795	4.50	6327	0.01	10000	
Zn	66	103	1	He	7.266	7.266	2.46	10786	0.07	10000	
As	75	103	1	He	2.218	2.218	0.78	1952	0.11	10000	
Se	78	103	1	He	0.077	0.077	45.46	46	0.17	10000	
Sr	88	103	1	He	1124.672	1124.672	0.99	7536457	0.01	10000	
Mo	95	103	1	He	1.324	1.324	7.42	4077	0.03	2000	
Ag	107	103	1	He	0.012	0.012	21.83	130	0.01	300	
Cd	111	103	1	He	0.097	0.097	15.39	1103	0.01	4000	
Sn	118	115	1	He	0.237	0.237	14.47	1882	0.01	2000	
Sb	123	115	1	He	0.365	0.365	4.88	1972	0.02	300	
Ba	137	115	1	He	56.090	56.090	1.57	112850	0.05	10000	
W	182	209	1	He	0.220	0.220	12.59	5664	0.00	2500	
Tl	205	165	1	He	0.001	0.001	54.25	84	0.00	5000	
Pb	208	209	1	He	0.205	0.205	1.93	9120	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1112450	0.87	1631381	68.19	30	120	
Sc	45	1	He	605729	2.75	829696	73.01	30	120	
Sc	45	2	NoGas	4820867	1.14	6325638	76.21	30	120	
Rh	103	1	He	1764565	0.82	2345543	75.23	30	120	
In	115	1	He	1062358	1.20	1419467	74.84	30	120	
Tb	159	1	He	3293107	1.58	3888262	84.69	30	120	
Ho	165	1	He	3377658	1.41	3932562	85.89	30	120	
Bi	209	1	He	2341389	0.59	2874805	81.45	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-4-a
Data File Name	174SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:06:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.089	0.089	8.52	344	0.03	10000	
B	11	45	2	NoGas	1578.355	1578.355	1.36	4343048	0.04	300	>LDR
Na	23	45	1	He	57395.514	57395.514	2.96	75765101	0.08	500000	
Mg	24	45	1	He	43666.679	43666.679	2.63	32764408	0.13	500000	
Al	27	45	1	He	11.675	11.675	5.04	6931	0.17	200000	
K	39	45	1	He	15330.472	15330.472	4.60	10854142	0.14	500000	
Ca	44	45	1	He	61680.086	61680.086	3.74	2391083	2.58	500000	
Ti	47	45	1	He	0.240	0.240	26.54	62	0.39	2500	
V	51	45	1	He	0.057	0.057	97.57	393	0.01	10000	
Cr	52	45	1	He	1.138	1.138	9.49	9295	0.01	10000	
Mn	55	45	1	He	92.510	92.510	4.05	472819	0.02	10000	
Fe	56	45	1	He	1445.785	1445.785	4.40	8852102	0.02	200000	
Co	59	103	1	He	0.217	0.217	8.89	2166	0.01	10000	
Ni	60	103	1	He	0.630	0.630	6.49	1633	0.04	10000	
Cu	63	103	1	He	0.242	0.242	11.77	2858	0.01	10000	
Zn	66	103	1	He	6.663	6.663	2.01	10126	0.07	10000	
As	75	103	1	He	1.925	1.925	0.61	1730	0.11	10000	
Se	78	103	1	He	0.130	0.130	25.56	51	0.26	10000	
Sr	88	103	1	He	1100.646	1100.646	0.23	7458294	0.01	10000	
Mo	95	103	1	He	1.273	1.273	2.91	3965	0.03	2000	
Ag	107	103	1	He	0.011	0.011	14.49	116	0.01	300	
Cd	111	103	1	He	0.100	0.100	42.86	1122	0.01	4000	
Sn	118	115	1	He	0.956	0.956	15.29	5138	0.02	2000	
Sb	123	115	1	He	0.270	0.270	10.65	1605	0.02	300	
Ba	137	115	1	He	53.859	53.859	0.55	109878	0.05	10000	
W	182	209	1	He	0.188	0.188	17.51	5349	0.00	2500	
Tl	205	165	1	He	0.002	0.002	12.40	120	0.00	5000	
Pb	208	209	1	He	0.064	0.064	5.26	3350	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1113397	1.86	1631381	68.25	30	120	
Sc	45	1	He	617171	3.24	829696	74.39	30	120	
Sc	45	2	NoGas	4879925	0.78	6325638	77.15	30	120	
Rh	103	1	He	1784425	0.76	2345543	76.08	30	120	
In	115	1	He	1077112	0.32	1419467	75.88	30	120	
Tb	159	1	He	3345049	1.46	3888262	86.03	30	120	
Ho	165	1	He	3440917	0.70	3932562	87.50	30	120	
Bi	209	1	He	2369879	0.76	2874805	82.44	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-5-a
Data File Name	175SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:10:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.055	0.055	13.89	219	0.03	10000	
B	11	45	2	NoGas	140.150	140.150	1.56	389378	0.04	300	
Na	23	45	1	He	82128.863	82128.863	3.15	108176748	0.08	500000	
Mg	24	45	1	He	123606.123	123606.123	3.00	92543496	0.13	500000	
Al	27	45	1	He	7.793	7.793	11.12	5267	0.15	200000	
K	39	45	1	He	2987.071	2987.071	3.09	2133956	0.14	500000	
Ca	44	45	1	He	216834.846	216834.846	2.66	8388385	2.58	500000	
Ti	47	45	1	He	0.431	0.431	46.14	103	0.42	2500	
V	51	45	1	He	0.183	0.183	68.84	1050	0.02	10000	
Cr	52	45	1	He	0.685	0.685	9.40	6347	0.01	10000	
Mn	55	45	1	He	346.170	346.170	1.64	1764193	0.02	10000	
Fe	56	45	1	He	6812.919	6812.919	2.31	41633784	0.02	200000	
Co	59	103	1	He	35.965	35.965	0.98	335833	0.01	10000	
Ni	60	103	1	He	17.175	17.175	1.77	39853	0.04	10000	
Cu	63	103	1	He	1.163	1.163	4.45	8320	0.01	10000	
Zn	66	103	1	He	5.368	5.368	3.25	8029	0.07	10000	
As	75	103	1	He	1.649	1.649	2.41	1425	0.12	10000	
Se	78	103	1	He	0.319	0.319	25.87	64	0.50	10000	
Sr	88	103	1	He	533.894	533.894	0.93	3436717	0.02	10000	
Mo	95	103	1	He	1.368	1.368	3.35	4045	0.03	2000	
Ag	107	103	1	He	0.021	0.021	16.88	214	0.01	300	
Cd	111	103	1	He	0.130	0.130	24.77	1117	0.01	4000	
Sn	118	115	1	He	0.144	0.144	6.58	1471	0.01	2000	
Sb	123	115	1	He	0.178	0.178	15.21	1205	0.01	300	
Ba	137	115	1	He	77.590	77.590	1.46	155738	0.05	10000	
W	182	209	1	He	0.155	0.155	13.76	4742	0.00	2500	
Tl	205	165	1	He	0.007	0.007	3.30	286	0.00	5000	
Pb	208	209	1	He	0.135	0.135	3.79	6045	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1082813	1.29	1631381	66.37	30	120	
Sc	45	1	He	615969	3.89	829696	74.24	30	120	
Sc	45	2	NoGas	4840685	1.60	6325638	76.52	30	120	
Rh	103	1	He	1695172	1.02	2345543	72.27	30	120	
In	115	1	He	1059961	0.58	1419467	74.67	30	120	
Tb	159	1	He	3296492	1.45	3888262	84.78	30	120	
Ho	165	1	He	3378679	0.49	3932562	85.92	30	120	
Bi	209	1	He	2270030	1.41	2874805	78.96	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-5-a
Data File Name	176SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:13:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.085	0.085	13.08	319	0.03	10000	
B	11	45	2	NoGas	145.365	145.365	1.22	392847	0.04	300	
Na	23	45	1	He	82914.669	82914.669	2.50	105271814	0.08	500000	
Mg	24	45	1	He	123635.046	123635.046	2.36	89223993	0.14	500000	
Al	27	45	1	He	5.889	5.889	8.15	4299	0.14	200000	
K	39	45	1	He	3028.623	3028.623	3.49	2084834	0.15	500000	
Ca	44	45	1	He	216924.265	216924.265	2.62	8087699	2.68	500000	
Ti	47	45	1	He	0.366	0.366	14.62	87	0.42	2500	
V	51	45	1	He	0.054	0.054	97.34	358	0.01	10000	
Cr	52	45	1	He	0.980	0.980	4.40	7961	0.01	10000	
Mn	55	45	1	He	339.467	339.467	3.54	1666596	0.02	10000	
Fe	56	45	1	He	5691.547	5691.547	1.83	33522439	0.02	200000	
Co	59	103	1	He	34.865	34.865	0.76	320874	0.01	10000	
Ni	60	103	1	He	16.962	16.962	1.88	38797	0.04	10000	
Cu	63	103	1	He	0.439	0.439	6.02	3856	0.01	10000	
Zn	66	103	1	He	5.462	5.462	0.81	8025	0.07	10000	
As	75	103	1	He	1.614	1.614	3.18	1377	0.12	10000	
Se	78	103	1	He	0.338	0.338	17.96	65	0.52	10000	
Sr	88	103	1	He	517.882	517.882	1.13	3285773	0.02	10000	
Mo	95	103	1	He	1.375	1.375	6.82	4007	0.03	2000	
Ag	107	103	1	He	0.014	0.014	2.75	147	0.01	300	
Cd	111	103	1	He	0.112	0.112	14.11	1070	0.01	4000	
Sn	118	115	1	He	0.180	0.180	13.18	1578	0.01	2000	
Sb	123	115	1	He	0.320	0.320	19.66	1726	0.02	300	
Ba	137	115	1	He	76.322	76.322	0.68	148315	0.05	10000	
W	182	209	1	He	0.264	0.264	15.95	5842	0.00	2500	
Tl	205	165	1	He	0.007	0.007	34.68	278	0.00	5000	
Pb	208	209	1	He	0.069	0.069	10.50	3289	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1078303	0.73	1631381	66.10	30	120	
Sc	45	1	He	593521	2.68	829696	71.53	30	120	
Sc	45	2	NoGas	4711682	1.53	6325638	74.49	30	120	
Rh	103	1	He	1670808	0.80	2345543	71.23	30	120	
In	115	1	He	1026186	0.41	1419467	72.29	30	120	
Tb	159	1	He	3227037	0.39	3888262	82.99	30	120	
Ho	165	1	He	3315457	0.60	3932562	84.31	30	120	
Bi	209	1	He	2206935	1.15	2874805	76.77	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	177_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:17:40-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.766	1.551	182284	2.05	50	101.5	89.5	110.5	
B	11	45	2	NoGas	68.623	0.716	197593	0.87	50	137.2	89.5	110.5	CCV Failed
Na	23	45	1	He	24701.289	3.098	33310765	1.16	25000	98.8	89.5	110.5	
Mg	24	45	1	He	24847.748	3.218	19038622	0.80	25000	99.4	89.5	110.5	
Al	27	45	1	He	243.991	2.484	107998	1.55	250	97.6	89.5	110.5	
K	39	45	1	He	25581.753	4.388	18477226	0.69	25000	102.3	89.5	110.5	
Ca	44	45	1	He	25097.023	3.866	993982	0.63	25000	100.4	89.5	110.5	
Ti	47	45	1	He	49.122	1.505	10975	2.34	50	98.2	89.5	110.5	
V	51	45	1	He	50.012	2.674	276018	1.14	50	100.0	89.5	110.5	
Cr	52	45	1	He	50.250	2.946	335169	1.19	50	100.5	89.5	110.5	
Mn	55	45	1	He	251.493	3.441	1311284	0.36	250	100.6	89.5	110.5	
Fe	56	45	1	He	12892.494	3.607	80599470	0.68	12500	103.1	89.5	110.5	
Co	59	103	1	He	46.673	0.552	470696	0.45	50	93.3	89.5	110.5	
Ni	60	103	1	He	46.135	1.168	115459	1.60	50	92.3	89.5	110.5	
Cu	63	103	1	He	46.630	0.599	307986	1.51	50	93.3	89.5	110.5	
Zn	66	103	1	He	47.084	2.442	64069	1.67	50	94.2	89.5	110.5	
As	75	103	1	He	48.082	0.709	41274	0.95	50	96.2	89.5	110.5	
Se	78	103	1	He	49.844	0.974	4548	0.30	50	99.7	89.5	110.5	
Sr	88	103	1	He	49.624	0.919	345093	0.37	50	99.2	89.5	110.5	
Mo	95	103	1	He	50.212	2.838	158654	1.94	50	100.4	89.5	110.5	
Ag	107	103	1	He	49.715	0.529	539537	0.46	50	99.4	89.5	110.5	
Cd	111	103	1	He	50.328	0.639	96007	0.48	50	100.7	89.5	110.5	
Sn	118	115	1	He	50.397	1.604	235338	1.44	50	100.8	89.5	110.5	
Sb	123	115	1	He	52.806	0.066	227400	0.38	50	105.6	89.5	110.5	
Ba	137	115	1	He	52.192	0.782	110294	0.51	50	104.4	89.5	110.5	
W	182	209	1	He	49.004	3.438	615555	1.89	50	98.0	89.5	110.5	
Tl	205	165	1	He	48.138	0.821	1520269	0.25	50	96.3	89.5	110.5	
Pb	208	209	1	He	48.099	1.424	2074620	0.90	50	96.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1135782	1.37	1631381	69.62	30	120	
Sc	45	1	He	630379	3.83	829696	75.98	30	120	
Sc	45	2	NoGas	4916830	1.21	6325638	77.73	30	120	
Rh	103	1	He	1830896	0.92	2345543	78.06	30	120	
In	115	1	He	1115727	0.34	1419467	78.60	30	120	
Tb	159	1	He	3329750	0.26	3888262	85.64	30	120	
Ho	165	1	He	3441179	0.59	3932562	87.50	30	120	
Bi	209	1	He	2449722	1.75	2874805	85.21	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	178_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:21:30-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.089	5.8	359	7.1	1	
B	11	45	2	NoGas	16.941	1.9	54860	1.0	20	
Na	23	45	1	He	52.628	9.3	84999	6.2	400	
Mg	24	45	1	He	8.281	25.7	6809	21.8	1000	
Al	27	45	1	He	0.201	113.5	2015	3.8	50	
K	39	45	1	He	10.896	16.0	35480	2.2	1000	
Ca	44	45	1	He	12.046	36.6	1189	12.9	1000	
Ti	47	45	1	He	0.105	83.3	32	57.0	20	
V	51	45	1	He	0.057	87.4	377	68.5	2	
Cr	52	45	1	He	0.039	56.9	2125	5.9	2	
Mn	55	45	1	He	0.074	11.1	1269	2.2	2	
Fe	56	45	1	He	24.214	26.5	148554	24.6	50	
Co	59	103	1	He	0.010	72.1	141	52.4	1	
Ni	60	103	1	He	-0.010	-19.3	79	6.5	2	
Cu	63	103	1	He	0.059	10.2	1816	3.1	2	
Zn	66	103	1	He	0.009	930.9	1631	7.5	20	
As	75	103	1	He	0.061	35.9	188	9.8	2	
Se	78	103	1	He	0.111	25.2	53	4.2	2	
Sr	88	103	1	He	0.070	53.1	611	45.1	10	
Mo	95	103	1	He	0.894	28.1	3021	28.1	2	
Ag	107	103	1	He	0.014	18.3	168	18.5	0.2	
Cd	111	103	1	He	0.097	8.8	1203	2.2	0.2	
Sn	118	115	1	He	0.262	13.7	2204	7.9	10	
Sb	123	115	1	He	0.381	22.5	2247	17.1	1	
Ba	137	115	1	He	0.006	173.1	96	23.7	5	
W	182	209	1	He	1.159	13.8	18501	12.3	10	
Tl	205	165	1	He	0.041	25.2	1367	24.5	0.5	
Pb	208	209	1	He	0.026	19.9	1911	13.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1164687	1.84	1631381	71.39	30	120	
Sc	45	1	He	605489	1.29	829696	72.98	30	120	
Sc	45	2	NoGas	4944394	1.19	6325638	78.16	30	120	
Rh	103	1	He	1923636	0.84	2345543	82.01	30	120	
In	115	1	He	1173200	0.48	1419467	82.65	30	120	
Tb	159	1	He	3369179	0.57	3888262	86.65	30	120	
Ho	165	1	He	3438135	0.61	3932562	87.43	30	120	
Bi	209	1	He	2562681	1.19	2874805	89.14	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	179CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:25:23-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.033	1.033	5.803	3982	4.33	1	103.3	69.5	130.5	
B	11	2	NoGas	36.614	36.614	0.809	110853	1.47	20	183.1	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1093.029	1093.029	2.184	1505718	0.58	1000	109.3	69.5	130.5	
Mg	24	1	He	1061.237	1061.237	2.305	822052	1.00	1000	106.1	69.5	130.5	
Al	27	1	He	47.804	47.804	2.506	23000	1.07	50	95.6	69.5	130.5	
K	39	1	He	1083.854	1083.854	1.615	819145	0.56	1000	108.4	69.5	130.5	
Ca	44	1	He	1040.705	1040.705	1.910	42382	1.63	1000	104.1	69.5	130.5	
Ti	47	1	He	10.374	10.374	8.267	2347	6.91	10	103.7	69.5	130.5	
V	51	1	He	5.083	5.083	4.815	28397	3.51	5	101.7	69.5	130.5	
Cr	52	1	He	2.141	2.141	2.276	16314	1.22	2	107.0	69.5	130.5	
Mn	55	1	He	5.263	5.263	2.826	28644	1.17	5	105.3	69.5	130.5	
Fe	56	1	He	109.812	109.812	1.453	697033	0.29	100	109.8	69.5	130.5	
Co	59	1	He	0.927	0.927	1.276	9909	0.63	1	92.7	69.5	130.5	
Ni	60	1	He	1.867	1.867	5.684	5035	4.87	2	93.4	69.5	130.5	
Cu	63	1	He	1.859	1.859	5.340	14315	3.72	2	92.9	69.5	130.5	
Zn	66	1	He	19.080	19.080	1.818	28381	1.16	20	95.4	69.5	130.5	
As	75	1	He	4.766	4.766	1.801	4440	0.93	5	95.3	69.5	130.5	
Se	78	1	He	5.424	5.424	8.118	561	6.97	5	108.5	69.5	130.5	
Sr	88	1	He	9.836	9.836	2.366	72288	1.26	10	98.4	69.5	130.5	
Mo	95	1	He	10.277	10.277	2.848	34325	2.04	10	102.8	69.5	130.5	
Ag	107	1	He	1.027	1.027	0.328	11770	1.44	1	102.7	69.5	130.5	
Cd	111	1	He	1.135	1.135	4.467	3279	3.49	1	113.5	69.5	130.5	
Sn	118	1	He	10.170	10.170	1.782	50680	1.47	10	101.7	69.5	130.5	
Sb	123	1	He	2.071	2.071	2.341	9885	2.16	2	103.5	69.5	130.5	
Ba	137	1	He	5.130	5.130	3.383	11475	3.50	5	102.6	69.5	130.5	
W	182	1	He	9.457	9.457	1.786	127520	2.09	10	94.6	69.5	130.5	
Tl	205	1	He	2.027	2.027	1.661	64261	1.74	2	101.4	69.5	130.5	
Pb	208	1	He	1.004	1.004	1.228	46182	0.73	1	100.4	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1209607	1.49	1631381	74.15	30	120	
Sc	45	1	He	636361	1.60	829696	76.70	30	120	
Sc	45	2	NoGas	4999983	1.11	6325638	79.04	30	120	
Rh	103	1	He	1933186	1.12	2345543	82.42	30	120	
In	115	1	He	1173375	0.28	1419467	82.66	30	120	
Tb	159	1	He	3354976	0.32	3888262	86.28	30	120	
Ho	165	1	He	3450628	0.50	3932562	87.75	30	120	
Bi	209	1	He	2573069	0.80	2874805	89.50	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177625/1-a@2
Data File Name	180_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:29:14-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.055	31.0	219	28.0	1	
B	11	45	2	NoGas	22.075	1.7	64784	2.1	20	Blank Failed
Na	23	45	1	He	60.250	3.2	93465	0.2	400	
Mg	24	45	1	He	19.290	1.7	14703	1.1	1000	
Al	27	45	1	He	-1.470	-7.5	1297	2.3	50	
K	39	45	1	He	25.458	5.6	44897	2.4	1000	
Ca	44	45	1	He	59.690	6.3	2956	3.6	1000	
Ti	47	45	1	He	0.176	11.8	47	7.1	20	
V	51	45	1	He	0.195	80.7	1081	74.0	2	
Cr	52	45	1	He	0.928	6.8	7672	3.1	2	
Mn	55	45	1	He	0.198	1.3	1861	2.7	2	
Fe	56	45	1	He	17.272	5.1	105632	7.4	50	
Co	59	103	1	He	0.008	44.1	121	29.4	1	
Ni	60	103	1	He	0.089	19.3	326	12.1	2	
Cu	63	103	1	He	0.207	6.9	2717	2.9	2	
Zn	66	103	1	He	1.120	3.7	3047	2.7	20	
As	75	103	1	He	0.197	22.4	298	14.1	2	
Se	78	103	1	He	0.157	41.2	55	12.0	2	
Sr	88	103	1	He	0.162	7.6	1225	8.0	10	
Mo	95	103	1	He	0.324	21.0	1076	19.4	2	
Ag	107	103	1	He	0.014	46.6	162	44.7	0.2	
Cd	111	103	1	He	0.062	15.4	1085	0.7	0.2	
Sn	118	115	1	He	17.488	1.9	81075	2.1	10	Blank Failed
Sb	123	115	1	He	0.191	17.8	1303	11.2	1	
Ba	137	115	1	He	0.392	6.7	893	6.2	5	
W	182	209	1	He	0.765	6.7	12958	6.2	10	
Tl	205	165	1	He	0.014	13.0	507	11.9	0.5	
Pb	208	209	1	He	0.169	24.5	8126	24.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1083598	1.80	1631381	66.42	30	120	
Sc	45	1	He	596419	2.50	829696	71.88	30	120	
Sc	45	2	NoGas	4631771	0.86	6325638	73.22	30	120	
Rh	103	1	He	1842199	1.32	2345543	78.54	30	120	
In	115	1	He	1099924	0.48	1419467	77.49	30	120	
Tb	159	1	He	3274953	0.55	3888262	84.23	30	120	
Ho	165	1	He	3354706	0.48	3932562	85.31	30	120	
Bi	209	1	He	2489647	1.59	2874805	86.60	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177625/3-a@2
Data File Name	181LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:33:04-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	488.624	488.624	2.018	1516515	1.15	500	97.7	78.6	110.5	
B	11	2	NoGas	69.771	69.771	1.238	174470	0.83	50	139.5	79.5	120.5	LCSS Failed
Na	23	1	He	4911.757	4911.757	1.925	5823652	0.55	5000	98.2	79.5	120.5	
Mg	24	1	He	5014.577	5014.577	2.275	3371504	0.58	5000	100.3	79.5	120.5	
Al	27	1	He	4674.219	4674.219	2.807	1782695	1.04	5000	93.5	79.5	120.5	
K	39	1	He	5057.794	5057.794	2.106	3226575	0.17	5000	101.2	79.5	120.5	
Ca	44	1	He	4422.833	4422.833	1.788	154269	0.38	5000	88.5	79.5	120.5	
Ti	47	1	He	47.212	47.212	2.437	9251	2.06	50	94.4	79.5	120.5	
V	51	1	He	494.178	494.178	1.949	2392177	1.35	500	98.8	71.5	110.5	
Cr	52	1	He	500.384	500.384	2.321	2912568	0.43	500	100.1	69.5	110.5	
Mn	55	1	He	505.393	505.393	1.548	2311458	0.49	500	101.1	79.5	120.5	
Fe	56	1	He	5069.878	5069.878	2.112	27812824	0.45	5000	101.4	79.5	120.5	
Co	59	1	He	444.163	444.163	1.112	4130910	1.36	500	88.8	73.9	110.5	
Ni	60	1	He	429.273	429.273	0.305	989979	0.24	500	85.9	74.9	110.5	
Cu	63	1	He	458.515	458.515	0.265	2781958	0.39	500	91.7	72.6	110.5	
Zn	66	1	He	413.306	413.306	0.465	507691	0.71	500	82.7	71.5	113.4	
As	75	1	He	403.860	403.860	0.159	318852	0.15	500	80.8	73.4	110.5	
Se	78	1	He	403.293	403.293	0.260	33674	0.40	500	80.7	64.6	110.5	
Sr	88	1	He	482.488	482.488	0.371	3093762	0.07	500	96.5	79.5	120.5	
Mo	95	1	He	50.970	50.970	0.451	148549	0.69	50	101.9	29.5	140.5	
Ag	107	1	He	48.826	48.826	0.219	488688	0.09	50	97.7	59.5	114.5	
Cd	111	1	He	464.533	464.533	0.320	809985	0.60	500	92.9	73.5	110.5	
Sn	118	1	He	564.610	564.610	1.742	2378856	1.60	500	112.9	79.5	120.5	
Sb	123	1	He	49.583	49.583	0.833	193333	0.82	50	99.2	67.5	113.4	
Ba	137	1	He	500.415	500.415	0.781	956786	0.61	500	100.1	69.5	110.5	
W	182	1	He	47.656	47.656	0.826	579124	0.46	50	95.3	74.6	125.4	
Tl	205	1	He	125.377	125.377	3.247	3732067	0.95	125	100.3	70.6	110.5	
Pb	208	1	He	477.284	477.284	0.670	19902034	0.31	500	95.5	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	981994	0.92	1631381	60.19	30	120	
Sc	45	1	He	552775	1.96	829696	66.62	30	120	
Sc	45	2	NoGas	4272801	0.90	6325638	67.55	30	120	
Rh	103	1	He	1688518	0.30	2345543	71.99	30	120	
In	115	1	He	1010097	0.20	1419467	71.16	30	120	
Tb	159	1	He	3206287	0.94	3888262	82.46	30	120	
Ho	165	1	He	3245249	2.64	3932562	82.52	30	120	
Bi	209	1	He	2368775	0.90	2874805	82.40	30	120	

Sample Report

Sample Table

Sample Name	240-49628-c-13-d@2
Data File Name	182SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:36:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.340	1.340	14.21	4412	0.03	10000	
B	11	45	2	NoGas	53.562	53.562	0.41	143528	0.04	300	
Na	23	45	1	He	1002.147	1002.147	2.06	1212769	0.08	500000	
Mg	24	45	1	He	9988.026	9988.026	1.95	6782877	0.15	500000	
Al	27	45	1	He	23649.185	23649.185	2.01	9104403	0.26	200000	
K	39	45	1	He	4403.844	4403.844	0.95	2841666	0.15	500000	
Ca	44	45	1	He	1483455.104	1483455.104	1.40	52044179	2.85	500000	>LDR
Ti	47	45	1	He	1005.696	1005.696	2.08	198863	0.51	2500	
V	51	45	1	He	105.409	105.409	2.30	515412	0.02	10000	
Cr	52	45	1	He	46.180	46.180	2.06	273101	0.02	10000	
Mn	55	45	1	He	1184.968	1184.968	1.96	5472973	0.02	10000	
Fe	56	45	1	He	35838.345	35838.345	2.35	198569054	0.02	200000	
Co	59	103	1	He	9.810	9.810	1.15	75980	0.01	10000	
Ni	60	103	1	He	31.283	31.283	0.75	60130	0.05	10000	
Cu	63	103	1	He	17.479	17.479	0.64	89273	0.02	10000	
Zn	66	103	1	He	78.777	78.777	1.28	81512	0.10	10000	
As	75	103	1	He	28.635	28.635	0.46	18911	0.15	10000	
Se	78	103	1	He	2.968	2.968	8.74	237	1.25	10000	
Sr	88	103	1	He	1205.909	1205.909	0.41	6436943	0.02	10000	
Mo	95	103	1	He	3.775	3.775	2.20	9194	0.04	2000	
Ag	107	103	1	He	0.082	0.082	8.83	690	0.01	300	
Cd	111	103	1	He	1.085	1.085	8.21	2311	0.05	4000	
Sn	118	115	1	He	17.657	17.657	0.90	70342	0.03	2000	
Sb	123	115	1	He	0.905	0.905	0.75	3722	0.02	300	
Ba	137	115	1	He	237.340	237.340	0.16	424696	0.06	10000	
W	182	209	1	He	3.355	3.355	0.97	36669	0.01	2500	
Tl	205	165	1	He	0.280	0.280	15.15	7843	0.00	5000	
Pb	208	209	1	He	22.146	22.146	1.24	776608	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1035726	1.93	1631381	63.49	30	120	
Sc	45	1	He	558398	2.41	829696	67.30	30	120	
Sc	45	2	NoGas	4526275	1.04	6325638	71.55	30	120	
Rh	103	1	He	1405642	0.07	2345543	59.93	30	120	
In	115	1	He	945256	0.61	1419467	66.59	30	120	
Tb	159	1	He	2957995	0.63	3888262	76.07	30	120	
Ho	165	1	He	3030891	0.76	3932562	77.07	30	120	
Bi	209	1	He	1990891	1.50	2874805	69.25	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49628-c-13-d@10
Data File Name	183SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:40:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.339	0.339	13.95	1241	0.03	10000	
B	11	45	2	NoGas	22.886	22.886	1.92	71913	0.03	300	
Na	23	45	1	He	221.266	221.266	2.22	309010	0.07	500000	
Mg	24	45	1	He	2140.628	2140.628	1.76	1605828	0.13	500000	
Al	27	45	1	He	5031.654	5031.654	1.20	2140696	0.24	200000	
K	39	45	1	He	879.425	879.425	2.37	649248	0.14	500000	
Ca	44	45	1	He	304837.274	304837.274	2.46	11808331	2.58	500000	
Ti	47	45	1	He	204.191	204.191	2.12	44592	0.46	2500	
V	51	45	1	He	21.688	21.688	1.22	117180	0.02	10000	
Cr	52	45	1	He	9.438	9.438	0.80	63164	0.01	10000	
Mn	55	45	1	He	243.895	243.895	1.64	1244633	0.02	10000	
Fe	56	45	1	He	7534.177	7534.177	1.42	46102516	0.02	200000	
Co	59	103	1	He	1.847	1.847	3.58	17959	0.01	10000	
Ni	60	103	1	He	5.959	5.959	0.91	14433	0.04	10000	
Cu	63	103	1	He	3.368	3.368	3.08	22599	0.01	10000	
Zn	66	103	1	He	16.110	16.110	2.20	22072	0.07	10000	
As	75	103	1	He	5.068	5.068	1.32	4296	0.12	10000	
Se	78	103	1	He	0.467	0.467	13.95	80	0.59	10000	
Sr	88	103	1	He	211.327	211.327	0.66	1413809	0.01	10000	
Mo	95	103	1	He	0.672	0.672	5.95	2089	0.03	2000	
Ag	107	103	1	He	0.020	0.020	2.01	217	0.01	300	
Cd	111	103	1	He	0.310	0.310	5.84	1488	0.02	4000	
Sn	118	115	1	He	3.293	3.293	2.07	15971	0.02	2000	
Sb	123	115	1	He	0.136	0.136	7.60	1072	0.01	300	
Ba	137	115	1	He	46.532	46.532	1.42	96978	0.05	10000	
W	182	209	1	He	0.698	0.698	4.63	11594	0.01	2500	
Tl	205	165	1	He	0.051	0.051	2.68	1671	0.00	5000	
Pb	208	209	1	He	4.309	4.309	0.45	181575	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1128914	0.73	1631381	69.20	30	120	
Sc	45	1	He	616508	1.28	829696	74.31	30	120	
Sc	45	2	NoGas	4979062	1.65	6325638	78.71	30	120	
Rh	103	1	He	1761692	0.48	2345543	75.11	30	120	
In	115	1	He	1100238	0.53	1419467	77.51	30	120	
Tb	159	1	He	3333018	0.58	3888262	85.72	30	120	
Ho	165	1	He	3418499	1.36	3932562	86.93	30	120	
Bi	209	1	He	2385052	0.55	2874805	82.96	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49628-c-13-d@2
Data File Name	184SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:44:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	960.213	960.213	1.14	3249027	0.03	10000	
B	11	45	2	NoGas	150.819	150.819	1.26	404631	0.04	300	
Na	23	45	1	He	10967.334	10967.334	2.38	13388785	0.08	500000	
Mg	24	45	1	He	19621.826	19621.826	2.90	13600849	0.14	500000	
Al	27	45	1	He	32800.708	32800.708	2.03	12890679	0.25	200000	
K	39	45	1	He	14687.819	14687.819	1.75	9613167	0.15	500000	
Ca	44	45	1	He	1483195.767	1483195.767	2.83	53110322	2.79	500000	>LDR
Ti	47	45	1	He	1090.037	1090.037	2.45	220037	0.50	2500	
V	51	45	1	He	1118.271	1118.271	2.01	5581766	0.02	10000	
Cr	52	45	1	He	1017.621	1017.621	1.82	6107053	0.02	10000	
Mn	55	45	1	He	2122.853	2122.853	2.91	10007420	0.02	10000	
Fe	56	45	1	He	45129.869	45129.869	2.53	255263563	0.02	200000	
Co	59	103	1	He	979.026	979.026	4.70	8013666	0.01	10000	
Ni	60	103	1	He	989.638	989.638	3.76	2009138	0.05	10000	
Cu	63	103	1	He	929.900	929.900	4.01	4965471	0.02	10000	
Zn	66	103	1	He	890.892	890.892	4.11	961859	0.09	10000	
As	75	103	1	He	993.899	993.899	3.97	690616	0.14	10000	
Se	78	103	1	He	890.788	890.788	4.14	65432	1.36	10000	
Sr	88	103	1	He	2265.178	2265.178	3.61	12787083	0.02	10000	
Mo	95	103	1	He	123.343	123.343	4.40	316354	0.04	2000	
Ag	107	103	1	He	96.253	96.253	3.72	848121	0.01	300	
Cd	111	103	1	He	945.256	945.256	3.97	1450093	0.07	4000	
Sn	118	115	1	He	1149.266	1149.266	0.80	4539506	0.03	2000	
Sb	123	115	1	He	104.536	104.536	0.58	381714	0.03	300	
Ba	137	115	1	He	1405.787	1405.787	0.25	2520089	0.06	10000	
W	182	209	1	He	114.272	114.272	1.47	1182419	0.01	2500	
Tl	205	165	1	He	245.162	245.162	1.73	6861539	0.00	5000	
Pb	208	209	1	He	1039.024	1039.024	1.02	37005740	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1070513	0.61	1631381	65.62	30	120	
Sc	45	1	He	570064	2.39	829696	68.71	30	120	
Sc	45	2	NoGas	4680485	0.94	6325638	73.99	30	120	
Rh	103	1	He	1488085	4.28	2345543	63.44	30	120	
In	115	1	He	947098	0.52	1419467	66.72	30	120	
Tb	159	1	He	3009624	0.71	3888262	77.40	30	120	
Ho	165	1	He	3049799	0.54	3932562	77.55	30	120	
Bi	209	1	He	2023372	1.29	2874805	70.38	30	120	

Sample Report

Sample Table

Sample Name	240-49628-c-13-e ms@2
Data File Name	185SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:47:51-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	436.002	436.002	2.00	1416438	0.03	10000	
B	11	45	2	NoGas	105.826	105.826	0.63	277738	0.04	300	
Na	23	45	1	He	5743.937	5743.937	1.29	6736457	0.09	500000	
Mg	24	45	1	He	16847.085	16847.085	2.22	11206166	0.15	500000	
Al	27	45	1	He	34871.751	34871.751	2.14	13149878	0.27	200000	
K	39	45	1	He	10123.573	10123.573	2.70	6364472	0.16	500000	
Ca	44	45	1	He	1806936.287	1806936.287	1.33	62096050	2.91	500000	>LDR
Ti	47	45	1	He	1314.268	1314.268	1.62	254580	0.52	2500	
V	51	45	1	He	597.580	597.580	1.35	2862280	0.02	10000	
Cr	52	45	1	He	498.014	498.014	1.77	2868496	0.02	10000	
Mn	55	45	1	He	1872.312	1872.312	2.02	8470398	0.02	10000	
Fe	56	45	1	He	46504.231	46504.231	1.88	252412319	0.02	200000	
Co	59	103	1	He	471.665	471.665	0.36	3564462	0.01	10000	
Ni	60	103	1	He	460.769	460.769	0.67	863453	0.05	10000	
Cu	63	103	1	He	457.833	457.833	1.76	2257170	0.02	10000	
Zn	66	103	1	He	455.481	455.481	0.33	454515	0.10	10000	
As	75	103	1	He	486.574	486.574	0.30	312139	0.16	10000	
Se	78	103	1	He	412.664	412.664	0.92	27998	1.47	10000	
Sr	88	103	1	He	1987.248	1987.248	0.45	10354123	0.02	10000	
Mo	95	103	1	He	60.988	60.988	0.56	144427	0.04	2000	
Ag	107	103	1	He	45.214	45.214	0.44	367732	0.01	300	
Cd	111	103	1	He	441.501	441.501	0.42	625578	0.07	4000	
Sn	118	115	1	He	515.572	515.572	0.82	1982333	0.03	2000	
Sb	123	115	1	He	22.969	22.969	1.12	81953	0.03	300	
Ba	137	115	1	He	724.287	724.287	1.07	1263652	0.06	10000	
W	182	209	1	He	45.422	45.422	0.87	452053	0.01	2500	
Tl	205	165	1	He	114.039	114.039	0.74	3074298	0.00	5000	
Pb	208	209	1	He	487.307	487.307	0.80	16637143	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1027946	1.42	1631381	63.01	30	120	
Sc	45	1	He	546943	1.85	829696	65.92	30	120	
Sc	45	2	NoGas	4543478	0.39	6325638	71.83	30	120	
Rh	103	1	He	1372059	0.15	2345543	58.50	30	120	
In	115	1	He	921773	0.73	1419467	64.94	30	120	
Tb	159	1	He	2897667	0.67	3888262	74.52	30	120	
Ho	165	1	He	2937479	0.65	3932562	74.70	30	120	
Bi	209	1	He	1939436	0.64	2874805	67.46	30	120	

Sample Report

Sample Table

Sample Name	240-49628-c-13-f msd@2
Data File Name	186SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:51:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	432.990	432.990	3.64	1377704	0.03	10000	
B	11	45	2	NoGas	102.838	102.838	1.28	268825	0.04	300	
Na	23	45	1	He	5644.077	5644.077	0.90	6527655	0.09	500000	
Mg	24	45	1	He	16428.576	16428.576	0.68	10777367	0.15	500000	
Al	27	45	1	He	33579.836	33579.836	1.24	12487743	0.27	200000	
K	39	45	1	He	10168.890	10168.890	0.60	6305789	0.16	500000	
Ca	44	45	1	He	1812547.234	1812547.234	1.34	61420693	2.95	500000	>LDR
Ti	47	45	1	He	1264.642	1264.642	1.94	241549	0.52	2500	
V	51	45	1	He	595.399	595.399	2.04	2811905	0.02	10000	
Cr	52	45	1	He	494.594	494.594	2.03	2809137	0.02	10000	
Mn	55	45	1	He	1854.102	1854.102	0.58	8272302	0.02	10000	
Fe	56	45	1	He	48612.349	48612.349	1.21	260197199	0.02	200000	
Co	59	103	1	He	467.678	467.678	0.96	3505692	0.01	10000	
Ni	60	103	1	He	459.098	459.098	0.39	853339	0.05	10000	
Cu	63	103	1	He	454.604	454.604	0.92	2223056	0.02	10000	
Zn	66	103	1	He	450.166	450.166	0.47	445582	0.10	10000	
As	75	103	1	He	485.716	485.716	0.43	309059	0.16	10000	
Se	78	103	1	He	409.785	409.785	1.21	27577	1.49	10000	
Sr	88	103	1	He	1953.478	1953.478	0.35	10095565	0.02	10000	
Mo	95	103	1	He	59.661	59.661	0.45	140136	0.04	2000	
Ag	107	103	1	He	45.319	45.319	0.63	365588	0.01	300	
Cd	111	103	1	He	442.551	442.551	0.11	621973	0.07	4000	
Sn	118	115	1	He	512.921	512.921	1.15	1952305	0.03	2000	
Sb	123	115	1	He	22.267	22.267	0.66	78658	0.03	300	
Ba	137	115	1	He	720.811	720.811	0.80	1244954	0.06	10000	
W	182	209	1	He	43.778	43.778	2.77	431940	0.01	2500	
Tl	205	165	1	He	115.206	115.206	0.86	3087276	0.00	5000	
Pb	208	209	1	He	487.090	487.090	2.11	16484327	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1007097	2.25	1631381	61.73	30	120	
Sc	45	1	He	539307	1.66	829696	65.00	30	120	
Sc	45	2	NoGas	4522226	0.88	6325638	71.49	30	120	
Rh	103	1	He	1360921	0.31	2345543	58.02	30	120	
In	115	1	He	912471	0.14	1419467	64.28	30	120	
Tb	159	1	He	2870364	1.18	3888262	73.82	30	120	
Ho	165	1	He	2920141	1.14	3932562	74.26	30	120	
Bi	209	1	He	1922868	1.67	2874805	66.89	30	120	

Sample Report

Sample Table

Sample Name	310-53259-c-1-a@2
Data File Name	187SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:55:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	14.262	14.262	2.37	45374	0.03	10000	
B	11	45	2	NoGas	534.865	534.865	0.97	1797022	0.03	300	>LDR
Na	23	45	1	He	143469.755	143469.755	2.21	220230199	0.07	500000	
Mg	24	45	1	He	82626.610	82626.610	2.14	72094414	0.11	500000	
Al	27	45	1	He	302812.004	302812.004	1.40	149787354	0.20	200000	>LDR
K	39	45	1	He	16569.434	16569.434	1.80	13645429	0.12	500000	
Ca	44	45	1	He	344995.580	344995.580	1.32	15553869	2.22	500000	
Ti	47	45	1	He	16192.228	16192.228	2.89	4113635	0.39	2500	>LDR
V	51	45	1	He	603.803	603.803	1.48	3793790	0.02	10000	
Cr	52	45	1	He	198.569	198.569	2.08	1501608	0.01	10000	
Mn	55	45	1	He	1594.636	1594.636	1.25	9464614	0.02	10000	
Fe	56	45	1	He	182976.072	182976.072	2.59	1302680517	0.01	200000	
Co	59	103	1	He	237.673	237.673	0.46	1836701	0.01	10000	
Ni	60	103	1	He	138.967	138.967	0.29	266344	0.05	10000	
Cu	63	103	1	He	531.416	531.416	0.48	2678911	0.02	10000	
Zn	66	103	1	He	2698.591	2698.591	0.25	2747815	0.10	10000	
As	75	103	1	He	7.930	7.930	1.40	5298	0.15	10000	
Se	78	103	1	He	8.920	8.920	4.37	649	1.37	10000	
Sr	88	103	1	He	28447.878	28447.878	0.78	151566714	0.02	10000	>LDR
Mo	95	103	1	He	29.171	29.171	1.11	70660	0.04	2000	
Ag	107	103	1	He	0.293	0.293	9.32	2444	0.01	300	
Cd	111	103	1	He	2.715	2.715	1.85	4665	0.06	4000	
Sn	118	115	1	He	17.168	17.168	2.00	67638	0.03	2000	
Sb	123	115	1	He	1.360	1.360	2.79	5318	0.03	300	
Ba	137	115	1	He	60342.274	60342.274	0.49	106745114	0.06	10000	>LDR
W	182	209	1	He	3.514	3.514	1.98	38369	0.01	2500	
Tl	205	165	1	He	0.148	0.148	16.68	4214	0.00	5000	
Pb	208	209	1	He	5.317	5.317	1.85	187296	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1006120	1.21	1631381	61.67	30	120	
Sc	45	1	He	717506	2.12	829696	86.48	30	120	
Sc	45	2	NoGas	5938085	0.62	6325638	93.87	30	120	
Rh	103	1	He	1403008	0.40	2345543	59.82	30	120	
In	115	1	He	934607	0.42	1419467	65.84	30	120	
Tb	159	1	He	2970158	0.66	3888262	76.39	30	120	
Ho	165	1	He	3057155	0.36	3932562	77.74	30	120	
Bi	209	1	He	1995166	0.91	2874805	69.40	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177246/1-a@2
Data File Name	188_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:58:51-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.254	8.6	759	8.6	1	
B	11	45	2	NoGas	17.768	1.7	47807	1.8	20	
Na	23	45	1	He	88.434	7.9	109121	5.2	400	
Mg	24	45	1	He	41.830	7.8	26175	6.0	1000	
Al	27	45	1	He	33.526	38.0	13181	31.7	50	
K	39	45	1	He	27.686	13.8	39132	3.7	1000	
Ca	44	45	1	He	189.949	17.3	6600	13.9	1000	
Ti	47	45	1	He	18.279	28.8	3254	27.0	20	
V	51	45	1	He	0.410	11.8	1873	13.4	2	
Cr	52	45	1	He	1.023	5.2	6979	4.7	2	
Mn	55	45	1	He	0.593	7.7	3209	4.0	2	
Fe	56	45	1	He	74.104	28.6	371629	26.7	50	Blank Failed
Co	59	103	1	He	0.041	10.8	403	12.2	1	
Ni	60	103	1	He	0.140	9.0	404	5.0	2	
Cu	63	103	1	He	0.460	5.3	3922	1.5	2	
Zn	66	103	1	He	8.002	3.4	10937	2.6	20	
As	75	103	1	He	0.241	5.8	300	1.6	2	
Se	78	103	1	He	0.238	10.8	56	1.5	2	
Sr	88	103	1	He	2.080	32.5	13034	30.9	10	
Mo	95	103	1	He	0.747	21.8	2160	19.9	2	
Ag	107	103	1	He	0.046	8.6	450	8.1	0.2	
Cd	111	103	1	He	0.254	17.4	1295	3.7	0.2	Blank Failed
Sn	118	115	1	He	17.650	0.2	73470	1.3	10	Blank Failed
Sb	123	115	1	He	0.109	8.2	860	2.8	1	
Ba	137	115	1	He	5.733	30.5	10765	29.3	5	Blank Failed
W	182	209	1	He	0.527	3.6	9444	2.1	10	
Tl	205	165	1	He	0.051	12.8	1535	10.9	0.5	
Pb	208	209	1	He	0.334	20.3	14594	20.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	915040	1.32	1631381	56.09	30	120	
Sc	45	1	He	503073	1.95	829696	60.63	30	120	
Sc	45	2	NoGas	4134785	0.59	6325638	65.37	30	120	
Rh	103	1	He	1645943	2.24	2345543	70.17	30	120	
In	115	1	He	987693	1.19	1419467	69.58	30	120	
Tb	159	1	He	3111658	0.90	3888262	80.03	30	120	
Ho	165	1	He	3169138	2.02	3932562	80.59	30	120	
Bi	209	1	He	2368781	0.91	2874805	82.40	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	189_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:02:42-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	51.133	2.814	165433	2.58	50	102.3	89.5	110.5	
B	11	45	2	NoGas	56.047	1.925	153098	0.75	50	112.1	89.5	110.5	CCV Failed
Na	23	45	1	He	25622.349	0.518	30858544	2.33	25000	102.5	89.5	110.5	
Mg	24	45	1	He	25544.591	0.778	17479163	1.58	25000	102.2	89.5	110.5	
Al	27	45	1	He	260.687	1.223	102925	3.14	250	104.3	89.5	110.5	
K	39	45	1	He	26986.507	1.149	17410024	1.26	25000	107.9	89.5	110.5	
Ca	44	45	1	He	26138.408	0.191	924725	2.25	25000	104.6	89.5	110.5	
Ti	47	45	1	He	56.726	3.008	11316	4.77	50	113.5	89.5	110.5	CCV Failed
V	51	45	1	He	51.799	0.436	255295	2.27	50	103.6	89.5	110.5	
Cr	52	45	1	He	51.782	0.162	308399	2.28	50	103.6	89.5	110.5	
Mn	55	45	1	He	262.706	0.546	1223308	1.61	250	105.1	89.5	110.5	
Fe	56	45	1	He	13171.801	1.139	73542153	1.37	12500	105.4	89.5	110.5	
Co	59	103	1	He	45.869	0.911	438660	2.58	50	91.7	89.5	110.5	
Ni	60	103	1	He	44.825	0.886	106364	1.86	50	89.6	89.5	110.5	
Cu	63	103	1	He	45.813	0.157	286923	1.92	50	91.6	89.5	110.5	
Zn	66	103	1	He	46.070	0.211	59478	1.59	50	92.1	89.5	110.5	
As	75	103	1	He	47.673	0.842	38802	1.80	50	95.3	89.5	110.5	
Se	78	103	1	He	47.754	1.089	4134	2.82	50	95.5	89.5	110.5	
Sr	88	103	1	He	49.936	0.404	329285	1.96	50	99.9	89.5	110.5	
Mo	95	103	1	He	50.295	1.255	150690	1.37	50	100.6	89.5	110.5	
Ag	107	103	1	He	50.129	0.260	515855	2.00	50	100.3	89.5	110.5	
Cd	111	103	1	He	51.424	0.554	92992	1.35	50	102.8	89.5	110.5	
Sn	118	115	1	He	50.706	0.425	227055	0.62	50	101.4	89.5	110.5	
Sb	123	115	1	He	52.832	0.899	218184	1.88	50	105.7	89.5	110.5	
Ba	137	115	1	He	53.541	1.907	108514	2.88	50	107.1	89.5	110.5	
W	182	209	1	He	48.424	1.228	589770	1.15	50	96.8	89.5	110.5	
Tl	205	165	1	He	47.654	0.551	1467732	1.56	50	95.3	89.5	110.5	
Pb	208	209	1	He	47.915	1.077	2003423	2.02	50	95.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1023466	0.99	1631381	62.74	30	120	
Sc	45	1	He	562551	2.13	829696	67.80	30	120	
Sc	45	2	NoGas	4624866	1.59	6325638	73.11	30	120	
Rh	103	1	He	1735989	1.78	2345543	74.01	30	120	
In	115	1	He	1069925	1.00	1419467	75.38	30	120	
Tb	159	1	He	3254483	1.08	3888262	83.70	30	120	
Ho	165	1	He	3355769	1.06	3932562	85.33	30	120	
Bi	209	1	He	2374268	1.00	2874805	82.59	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	190_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:06:32-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.152	18.5	533	17.8	1	
B	11	45	2	NoGas	12.553	1.1	40003	1.2	20	
Na	23	45	1	He	51.981	6.1	79300	4.1	400	
Mg	24	45	1	He	3.601	58.1	3171	44.8	1000	
Al	27	45	1	He	3.076	24.7	3027	9.0	50	
K	39	45	1	He	11.143	12.7	33584	2.0	1000	
Ca	44	45	1	He	23.064	34.4	1514	17.8	1000	
Ti	47	45	1	He	0.555	33.3	121	30.2	20	
V	51	45	1	He	0.069	38.3	419	32.0	2	
Cr	52	45	1	He	0.044	84.7	2035	10.6	2	
Mn	55	45	1	He	0.060	60.4	1129	14.8	2	
Fe	56	45	1	He	21.047	21.3	122153	19.9	50	
Co	59	103	1	He	0.014	53.6	173	42.3	1	
Ni	60	103	1	He	-0.001	-1665.6	98	35.5	2	
Cu	63	103	1	He	0.100	40.6	1981	12.9	2	
Zn	66	103	1	He	-0.038	-90.4	1479	3.1	20	
As	75	103	1	He	0.079	15.4	194	5.3	2	
Se	78	103	1	He	0.198	8.0	58	2.6	2	
Sr	88	103	1	He	0.205	34.1	1510	32.1	10	
Mo	95	103	1	He	1.094	14.0	3480	13.7	2	
Ag	107	103	1	He	0.012	22.5	131	21.6	0.2	
Cd	111	103	1	He	0.108	25.3	1158	5.1	0.2	
Sn	118	115	1	He	0.308	10.8	2308	6.5	10	
Sb	123	115	1	He	0.375	17.7	2111	13.4	1	
Ba	137	115	1	He	0.389	12.5	898	11.5	5	
W	182	209	1	He	1.160	10.8	18014	8.1	10	
Tl	205	165	1	He	0.059	24.2	1863	22.7	0.5	
Pb	208	209	1	He	0.097	10.9	4947	8.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1050978	0.35	1631381	64.42	30	120	
Sc	45	1	He	570298	0.85	829696	68.74	30	120	
Sc	45	2	NoGas	4637405	0.90	6325638	73.31	30	120	
Rh	103	1	He	1818297	0.91	2345543	77.52	30	120	
In	115	1	He	1113969	0.20	1419467	78.48	30	120	
Tb	159	1	He	3272521	2.23	3888262	84.16	30	120	
Ho	165	1	He	3332090	1.00	3932562	84.73	30	120	
Bi	209	1	He	2496617	0.97	2874805	86.84	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177246/2-a@2
Data File Name	191LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:10:21-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	507.823	507.823	0.794	1441000	1.31	500	101.6	78.6	110.5	
B	11	2	NoGas	65.947	65.947	1.536	160256	0.78	50	131.9	79.5	120.5	LCSS Failed
Na	23	1	He	5069.575	5069.575	1.831	5665784	0.65	5000	101.4	79.5	120.5	
Mg	24	1	He	5187.100	5187.100	3.687	3286811	1.45	5000	103.7	79.5	120.5	
Al	27	1	He	4849.604	4849.604	2.503	1743521	0.30	5000	97.0	79.5	120.5	
K	39	1	He	5302.715	5302.715	1.002	3188808	2.65	5000	106.1	79.5	120.5	
Ca	44	1	He	4668.673	4668.673	1.183	153487	1.05	5000	93.4	79.5	120.5	
Ti	47	1	He	52.716	52.716	2.810	9743	4.99	50	105.4	79.5	120.5	
V	51	1	He	511.972	511.972	1.690	2336371	1.68	500	102.4	71.5	110.5	
Cr	52	1	He	524.976	524.976	1.160	2880974	1.30	500	105.0	69.5	110.5	
Mn	55	1	He	531.780	531.780	1.393	2293052	2.23	500	106.4	79.5	120.5	
Fe	56	1	He	5277.366	5277.366	1.863	27292653	0.93	5000	105.5	79.5	120.5	
Co	59	1	He	443.280	443.280	0.302	4042280	0.75	500	88.7	73.9	110.5	
Ni	60	1	He	429.006	429.006	0.802	970067	0.71	500	85.8	74.9	110.5	
Cu	63	1	He	455.602	455.602	1.929	2710190	1.26	500	91.1	72.6	110.5	
Zn	66	1	He	418.764	418.764	0.475	504362	1.22	500	83.8	71.5	113.4	
As	75	1	He	411.265	411.265	0.291	318370	0.74	500	82.3	73.4	110.5	
Se	78	1	He	406.386	406.386	0.584	33271	1.00	500	81.3	64.6	110.5	
Sr	88	1	He	492.396	492.396	1.201	3095778	1.36	500	98.5	79.5	120.5	
Mo	95	1	He	53.216	53.216	0.334	152073	1.17	50	106.4	29.5	140.5	
Ag	107	1	He	50.091	50.091	0.185	491587	0.93	50	100.2	59.5	114.5	
Cd	111	1	He	472.349	472.349	0.178	807556	0.97	500	94.5	73.5	110.5	
Sn	118	1	He	596.181	596.181	0.900	2439351	0.55	500	119.2	79.5	120.5	
Sb	123	1	He	53.026	53.026	0.745	200761	0.61	50	106.1	67.5	113.4	
Ba	137	1	He	520.087	520.087	0.843	965704	0.69	500	104.0	69.5	110.5	
W	182	1	He	49.874	49.874	0.991	590035	1.32	50	99.7	74.6	125.4	
Tl	205	1	He	124.799	124.799	0.803	3677475	1.21	125	99.8	70.6	110.5	
Pb	208	1	He	487.937	487.937	0.330	19812011	0.24	500	97.6	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	897734	1.34	1631381	55.03	30	120	
Sc	45	1	He	521102	2.22	829696	62.81	30	120	
Sc	45	2	NoGas	4143158	0.70	6325638	65.50	30	120	
Rh	103	1	He	1655646	1.03	2345543	70.59	30	120	
In	115	1	He	980979	0.92	1419467	69.11	30	120	
Tb	159	1	He	3104539	0.38	3888262	79.84	30	120	
Ho	165	1	He	3210759	0.68	3932562	81.65	30	120	
Bi	209	1	He	2306515	0.56	2874805	80.23	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-d@2
Data File Name	192SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:14:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.092	4.092	1.41	13053	0.03	10000	
B	11	45	2	NoGas	21.171	21.171	2.45	65728	0.03	300	
Na	23	45	1	He	306.221	306.221	2.80	403530	0.08	500000	
Mg	24	45	1	He	10009.255	10009.255	2.22	7194234	0.14	500000	
Al	27	45	1	He	63859.069	63859.069	2.52	26014036	0.25	200000	
K	39	45	1	He	3413.069	3413.069	3.05	2336622	0.15	500000	
Ca	44	45	1	He	2030.283	2030.283	2.25	76095	2.67	500000	
Ti	47	45	1	He	607.370	607.370	2.38	127111	0.48	2500	
V	51	45	1	He	145.457	145.457	1.64	752703	0.02	10000	
Cr	52	45	1	He	89.617	89.617	1.97	559133	0.02	10000	
Mn	55	45	1	He	16749.149	16749.149	1.52	81855923	0.02	10000	>LDR
Fe	56	45	1	He	124557.780	124557.780	1.32	730386584	0.02	200000	
Co	59	103	1	He	72.615	72.615	0.55	692540	0.01	10000	
Ni	60	103	1	He	91.717	91.717	1.44	216948	0.04	10000	
Cu	63	103	1	He	62.463	62.463	1.74	389638	0.02	10000	
Zn	66	103	1	He	282.130	282.130	1.75	355759	0.08	10000	
As	75	103	1	He	57.828	57.828	1.55	46915	0.12	10000	
Se	78	103	1	He	6.787	6.787	1.95	619	1.10	10000	
Sr	88	103	1	He	106.066	106.066	0.97	697411	0.02	10000	
Mo	95	103	1	He	13.317	13.317	2.15	39820	0.03	2000	
Ag	107	103	1	He	0.341	0.341	0.28	3502	0.01	300	
Cd	111	103	1	He	1.222	1.222	7.37	3092	0.04	4000	
Sn	118	115	1	He	19.038	19.038	3.36	83813	0.02	2000	
Sb	123	115	1	He	1.151	1.151	5.10	5102	0.02	300	
Ba	137	115	1	He	610.060	610.060	0.47	1207607	0.05	10000	
W	182	209	1	He	1.534	1.534	8.48	21675	0.01	2500	
Tl	205	165	1	He	1.282	1.282	1.67	39639	0.00	5000	
Pb	208	209	1	He	122.313	122.313	0.95	5117474	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1007062	0.90	1631381	61.73	30	120	
Sc	45	1	He	590793	1.12	829696	71.21	30	120	
Sc	45	2	NoGas	4877173	0.51	6325638	77.10	30	120	
Rh	103	1	He	1731548	2.53	2345543	73.82	30	120	
In	115	1	He	1045782	1.64	1419467	73.67	30	120	
Tb	159	1	He	3301949	2.41	3888262	84.92	30	120	
Ho	165	1	He	3363082	1.02	3932562	85.52	30	120	
Bi	209	1	He	2376442	1.16	2874805	82.66	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49233-a-1-d@10
Data File Name	193SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:17:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.969	0.969	6.38	3056	0.03	10000	
B	11	45	2	NoGas	10.833	10.833	0.32	34492	0.03	300	
Na	23	45	1	He	81.750	81.750	0.71	117512	0.07	500000	
Mg	24	45	1	He	2116.285	2116.285	1.83	1492355	0.14	500000	
Al	27	45	1	He	13505.362	13505.362	2.09	5397321	0.25	200000	
K	39	45	1	He	695.733	695.733	1.19	488463	0.14	500000	
Ca	44	45	1	He	416.986	416.986	0.57	15885	2.63	500000	
Ti	47	45	1	He	124.601	124.601	1.77	25581	0.49	2500	
V	51	45	1	He	30.103	30.103	0.60	152863	0.02	10000	
Cr	52	45	1	He	18.183	18.183	1.74	112703	0.02	10000	
Mn	55	45	1	He	3493.861	3493.861	1.34	16748289	0.02	10000	
Fe	56	45	1	He	25655.212	25655.212	1.25	147556047	0.02	200000	
Co	59	103	1	He	14.600	14.600	1.54	142844	0.01	10000	
Ni	60	103	1	He	18.315	18.315	1.93	44517	0.04	10000	
Cu	63	103	1	He	12.619	12.619	0.95	81800	0.02	10000	
Zn	66	103	1	He	61.361	61.361	1.08	80554	0.08	10000	
As	75	103	1	He	12.117	12.117	2.03	10181	0.12	10000	
Se	78	103	1	He	1.505	1.505	14.02	171	0.88	10000	
Sr	88	103	1	He	21.270	21.270	1.03	143543	0.01	10000	
Mo	95	103	1	He	2.553	2.553	2.83	7867	0.03	2000	
Ag	107	103	1	He	0.066	0.066	5.18	701	0.01	300	
Cd	111	103	1	He	0.305	0.305	14.09	1493	0.02	4000	
Sn	118	115	1	He	3.683	3.683	2.22	17513	0.02	2000	
Sb	123	115	1	He	0.167	0.167	6.70	1187	0.01	300	
Ba	137	115	1	He	120.036	120.036	1.78	246505	0.05	10000	
W	182	209	1	He	0.320	0.320	4.00	7176	0.00	2500	
Tl	205	165	1	He	0.260	0.260	2.62	8027	0.00	5000	
Pb	208	209	1	He	23.357	23.357	1.86	1007969	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	989089	1.86	1631381	60.63	30	120	
Sc	45	1	He	579511	1.61	829696	69.85	30	120	
Sc	45	2	NoGas	4503941	0.44	6325638	71.20	30	120	
Rh	103	1	He	1776163	1.37	2345543	75.73	30	120	
In	115	1	He	1084737	0.82	1419467	76.42	30	120	
Tb	159	1	He	3264580	0.52	3888262	83.96	30	120	
Ho	165	1	He	3344787	0.50	3932562	85.05	30	120	
Bi	209	1	He	2450129	1.27	2874805	85.23	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49233-a-1-d@2
Data File Name	194SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:21:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1021.402	1021.402	1.90	3059558	0.03	10000	
B	11	45	2	NoGas	113.994	113.994	1.23	298357	0.04	300	
Na	23	45	1	He	9965.074	9965.074	0.79	11932383	0.08	500000	
Mg	24	45	1	He	19330.092	19330.092	0.48	13141579	0.15	500000	
Al	27	45	1	He	71417.507	71417.507	1.09	27523586	0.26	200000	
K	39	45	1	He	13155.871	13155.871	1.31	8446560	0.16	500000	
Ca	44	45	1	He	10806.176	10806.176	0.83	380196	2.84	500000	
Ti	47	45	1	He	672.015	672.015	2.09	133053	0.51	2500	
V	51	45	1	He	1130.158	1130.158	1.08	5532250	0.02	10000	
Cr	52	45	1	He	1066.158	1066.158	1.42	6274363	0.02	10000	
Mn	55	45	1	He	17155.072	17155.072	0.84	79315846	0.02	10000	>LDR
Fe	56	45	1	He	129573.377	129573.377	0.57	718771545	0.02	200000	
Co	59	103	1	He	987.138	987.138	2.08	8906446	0.01	10000	
Ni	60	103	1	He	1017.079	1017.079	0.89	2275945	0.04	10000	
Cu	63	103	1	He	974.219	974.219	1.42	5733897	0.02	10000	
Zn	66	103	1	He	1123.183	1123.183	1.53	1336234	0.08	10000	
As	75	103	1	He	924.483	924.483	1.15	708066	0.13	10000	
Se	78	103	1	He	853.467	853.467	1.14	69105	1.24	10000	
Sr	88	103	1	He	1116.034	1116.034	0.67	6944208	0.02	10000	
Mo	95	103	1	He	121.730	121.730	0.81	344213	0.04	2000	
Ag	107	103	1	He	100.588	100.588	1.76	976744	0.01	300	
Cd	111	103	1	He	1030.133	1030.133	3.11	1741100	0.06	4000	
Sn	118	115	1	He	1180.382	1180.382	1.37	4761271	0.02	2000	
Sb	123	115	1	He	110.449	110.449	0.61	411806	0.03	300	
Ba	137	115	1	He	1837.959	1837.959	0.73	3364873	0.05	10000	
W	182	209	1	He	101.764	101.764	2.04	1195405	0.01	2500	
Tl	205	165	1	He	249.556	249.556	1.57	7420772	0.00	5000	
Pb	208	209	1	He	1109.207	1109.207	0.50	44831288	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	947867	1.85	1631381	58.10	30	120	
Sc	45	1	He	558856	0.87	829696	67.36	30	120	
Sc	45	2	NoGas	4539063	0.91	6325638	71.76	30	120	
Rh	103	1	He	1638751	3.05	2345543	69.87	30	120	
In	115	1	He	967184	1.73	1419467	68.14	30	120	
Tb	159	1	He	3139412	1.52	3888262	80.74	30	120	
Ho	165	1	He	3240671	2.02	3932562	82.41	30	120	
Bi	209	1	He	2295931	0.81	2874805	79.86	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-e du@2
Data File Name	195SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:25:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.164	4.164	0.78	13272	0.03	10000	
B	11	45	2	NoGas	21.708	21.708	0.68	66423	0.03	300	
Na	23	45	1	He	347.076	347.076	0.69	457928	0.08	500000	
Mg	24	45	1	He	10040.724	10040.724	0.62	7259543	0.14	500000	
Al	27	45	1	He	64078.074	64078.074	0.67	26260563	0.24	200000	
K	39	45	1	He	3750.897	3750.897	2.17	2580360	0.15	500000	
Ca	44	45	1	He	1947.409	1947.409	1.18	73451	2.65	500000	
Ti	47	45	1	He	500.811	500.811	0.54	105440	0.47	2500	
V	51	45	1	He	141.426	141.426	0.35	736251	0.02	10000	
Cr	52	45	1	He	86.947	86.947	0.24	545819	0.02	10000	
Mn	55	45	1	He	16974.387	16974.387	0.34	83456028	0.02	10000	>LDR
Fe	56	45	1	He	117088.009	117088.009	1.01	690737039	0.02	200000	
Co	59	103	1	He	79.449	79.449	1.83	768302	0.01	10000	
Ni	60	103	1	He	92.079	92.079	1.74	220872	0.04	10000	
Cu	63	103	1	He	64.427	64.427	1.80	407552	0.02	10000	
Zn	66	103	1	He	295.658	295.658	1.83	378040	0.08	10000	
As	75	103	1	He	55.637	55.637	2.01	45777	0.12	10000	
Se	78	103	1	He	6.647	6.647	3.67	615	1.08	10000	
Sr	88	103	1	He	99.272	99.272	1.63	661945	0.01	10000	
Mo	95	103	1	He	13.308	13.308	3.31	40353	0.03	2000	
Ag	107	103	1	He	0.352	0.352	4.78	3666	0.01	300	
Cd	111	103	1	He	1.221	1.221	1.94	3134	0.04	4000	
Sn	118	115	1	He	19.006	19.006	2.38	84830	0.02	2000	
Sb	123	115	1	He	1.129	1.129	1.09	5084	0.02	300	
Ba	137	115	1	He	609.535	609.535	0.40	1222809	0.05	10000	
W	182	209	1	He	1.873	1.873	10.00	25669	0.01	2500	
Tl	205	165	1	He	1.401	1.401	4.94	43570	0.00	5000	
Pb	208	209	1	He	122.327	122.327	1.22	5091805	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1006449	0.95	1631381	61.69	30	120	
Sc	45	1	He	594319	0.36	829696	71.63	30	120	
Sc	45	2	NoGas	4820287	1.10	6325638	76.20	30	120	
Rh	103	1	He	1756057	1.89	2345543	74.87	30	120	
In	115	1	He	1059845	0.17	1419467	74.67	30	120	
Tb	159	1	He	3311977	0.77	3888262	85.18	30	120	
Ho	165	1	He	3386130	1.69	3932562	86.10	30	120	
Bi	209	1	He	2364445	1.08	2874805	82.25	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-f ms@2
Data File Name	196SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:28:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	50.412	50.412	2.04	154524	0.03	10000	
B	11	45	2	NoGas	49.449	49.449	2.17	135275	0.04	300	
Na	23	45	1	He	4935.512	4935.512	2.03	5842059	0.08	500000	
Mg	24	45	1	He	15555.351	15555.351	0.23	10440276	0.15	500000	
Al	27	45	1	He	77904.449	77904.449	0.42	29638432	0.26	200000	
K	39	45	1	He	8453.436	8453.436	2.08	5366788	0.16	500000	
Ca	44	45	1	He	6713.534	6713.534	1.01	233434	2.88	500000	
Ti	47	45	1	He	583.374	583.374	1.33	114019	0.51	2500	
V	51	45	1	He	199.813	199.813	1.54	965659	0.02	10000	
Cr	52	45	1	He	141.724	141.724	1.99	824854	0.02	10000	
Mn	55	45	1	He	13955.936	13955.936	2.06	63701353	0.02	10000	>LDR
Fe	56	45	1	He	125523.844	125523.844	2.02	687435119	0.02	200000	
Co	59	103	1	He	110.473	110.473	1.88	986554	0.01	10000	
Ni	60	103	1	He	141.092	141.092	2.00	312482	0.05	10000	
Cu	63	103	1	He	107.105	107.105	1.86	624886	0.02	10000	
Zn	66	103	1	He	366.304	366.304	2.02	432183	0.08	10000	
As	75	103	1	He	97.894	97.894	1.74	74302	0.13	10000	
Se	78	103	1	He	44.275	44.275	2.45	3581	1.24	10000	
Sr	88	103	1	He	135.558	135.558	1.83	834679	0.02	10000	
Mo	95	103	1	He	59.555	59.555	0.78	166699	0.04	2000	
Ag	107	103	1	He	46.798	46.798	2.76	449668	0.01	300	
Cd	111	103	1	He	47.070	47.070	2.40	79562	0.06	4000	
Sn	118	115	1	He	59.047	59.047	0.87	243721	0.02	2000	
Sb	123	115	1	He	15.188	15.188	0.18	58158	0.03	300	
Ba	137	115	1	He	654.652	654.652	0.73	1222618	0.05	10000	
W	182	209	1	He	32.838	32.838	1.69	382809	0.01	2500	
Tl	205	165	1	He	43.484	43.484	0.49	1295118	0.00	5000	
Pb	208	209	1	He	167.522	167.522	1.42	6685244	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	969636	0.87	1631381	59.44	30	120	
Sc	45	1	He	551728	0.39	829696	66.50	30	120	
Sc	45	2	NoGas	4602360	1.39	6325638	72.76	30	120	
Rh	103	1	He	1621972	3.34	2345543	69.15	30	120	
In	115	1	He	986700	1.53	1419467	69.51	30	120	
Tb	159	1	He	3157656	0.70	3888262	81.21	30	120	
Ho	165	1	He	3245318	0.87	3932562	82.52	30	120	
Bi	209	1	He	2267135	1.82	2874805	78.86	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-2-b@2
Data File Name	197SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:32:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.594	3.594	4.96	10314	0.03	10000	
B	11	45	2	NoGas	19.634	19.634	1.22	54391	0.04	300	
Na	23	45	1	He	204.243	204.243	2.07	242451	0.08	500000	
Mg	24	45	1	He	10646.640	10646.640	1.97	6754781	0.16	500000	
Al	27	45	1	He	58237.105	58237.105	1.63	20944498	0.28	200000	
K	39	45	1	He	3777.822	3777.822	2.08	2280640	0.17	500000	
Ca	44	45	1	He	7733.072	7733.072	1.08	254081	3.04	500000	
Ti	47	45	1	He	476.905	476.905	1.75	88108	0.54	2500	
V	51	45	1	He	125.706	125.706	1.86	574266	0.02	10000	
Cr	52	45	1	He	89.345	89.345	2.84	492114	0.02	10000	
Mn	55	45	1	He	10070.230	10070.230	1.82	43448203	0.02	10000	>LDR
Fe	56	45	1	He	113681.266	113681.266	1.61	588489452	0.02	200000	
Co	59	103	1	He	51.137	51.137	2.29	424521	0.01	10000	
Ni	60	103	1	He	91.724	91.724	2.74	188850	0.05	10000	
Cu	63	103	1	He	53.629	53.629	3.94	291276	0.02	10000	
Zn	66	103	1	He	333.242	333.242	3.02	365540	0.09	10000	
As	75	103	1	He	48.633	48.633	2.97	34358	0.14	10000	
Se	78	103	1	He	5.276	5.276	4.49	426	1.24	10000	
Sr	88	103	1	He	44.952	44.952	2.66	257317	0.02	10000	
Mo	95	103	1	He	9.150	9.150	2.70	23833	0.04	2000	
Ag	107	103	1	He	0.616	0.616	1.87	5509	0.01	300	
Cd	111	103	1	He	1.418	1.418	5.91	2994	0.05	4000	
Sn	118	115	1	He	18.544	18.544	0.96	74348	0.02	2000	
Sb	123	115	1	He	0.944	0.944	0.89	3888	0.02	300	
Ba	137	115	1	He	512.058	512.058	1.06	922547	0.06	10000	
W	182	209	1	He	1.624	1.624	8.79	21345	0.01	2500	
Tl	205	165	1	He	1.117	1.117	1.69	32090	0.00	5000	
Pb	208	209	1	He	120.737	120.737	0.27	4733953	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	905793	1.30	1631381	55.52	30	120	
Sc	45	1	He	521587	1.02	829696	62.86	30	120	
Sc	45	2	NoGas	4312427	1.40	6325638	68.17	30	120	
Rh	103	1	He	1507966	3.76	2345543	64.29	30	120	
In	115	1	He	951868	1.14	1419467	67.06	30	120	
Tb	159	1	He	3039131	0.92	3888262	78.16	30	120	
Ho	165	1	He	3124046	1.84	3932562	79.44	30	120	
Bi	209	1	He	2227026	0.26	2874805	77.47	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-9-b@2
Data File Name	198SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:36:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.791	2.791	2.51	8050	0.03	10000	
B	11	45	2	NoGas	18.046	18.046	1.21	50373	0.04	300	
Na	23	45	1	He	140.874	140.874	3.62	165851	0.08	500000	
Mg	24	45	1	He	9712.533	9712.533	3.71	5950387	0.16	500000	
Al	27	45	1	He	58037.207	58037.207	2.29	20159738	0.29	200000	
K	39	45	1	He	2822.682	2822.682	3.28	1651322	0.17	500000	
Ca	44	45	1	He	939.552	939.552	2.80	30348	3.10	500000	
Ti	47	45	1	He	403.878	403.878	2.21	72075	0.56	2500	
V	51	45	1	He	109.278	109.278	2.23	482221	0.02	10000	
Cr	52	45	1	He	80.685	80.685	2.18	429434	0.02	10000	
Mn	55	45	1	He	2286.156	2286.156	3.69	9525203	0.02	10000	
Fe	56	45	1	He	111044.473	111044.473	3.21	555133009	0.02	200000	
Co	59	103	1	He	53.020	53.020	4.87	432166	0.01	10000	
Ni	60	103	1	He	76.831	76.831	4.89	155348	0.05	10000	
Cu	63	103	1	He	52.790	52.790	4.49	281723	0.02	10000	
Zn	66	103	1	He	246.772	246.772	5.13	266132	0.09	10000	
As	75	103	1	He	44.507	44.507	5.11	30884	0.14	10000	
Se	78	103	1	He	4.598	4.598	5.32	370	1.24	10000	
Sr	88	103	1	He	14.259	14.259	4.69	80208	0.02	10000	
Mo	95	103	1	He	7.323	7.323	5.41	18736	0.04	2000	
Ag	107	103	1	He	0.216	0.216	14.06	1893	0.01	300	
Cd	111	103	1	He	0.723	0.723	6.18	1885	0.04	4000	
Sn	118	115	1	He	17.774	17.774	6.25	69815	0.03	2000	
Sb	123	115	1	He	0.657	0.657	3.05	2782	0.02	300	
Ba	137	115	1	He	298.891	298.891	3.70	527687	0.06	10000	
W	182	209	1	He	0.638	0.638	4.35	10148	0.01	2500	
Tl	205	165	1	He	0.789	0.789	3.77	22265	0.00	5000	
Pb	208	209	1	He	82.225	82.225	3.15	3226059	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	909767	1.50	1631381	55.77	30	120	
Sc	45	1	He	503984	3.28	829696	60.74	30	120	
Sc	45	2	NoGas	4298433	0.55	6325638	67.95	30	120	
Rh	103	1	He	1482590	5.84	2345543	63.21	30	120	
In	115	1	He	933743	4.77	1419467	65.78	30	120	
Tb	159	1	He	2990955	4.39	3888262	76.92	30	120	
Ho	165	1	He	3069556	4.81	3932562	78.05	30	120	
Bi	209	1	He	2229840	3.25	2874805	77.56	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-10-b@2
Data File Name	199SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:40:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.521	3.521	1.04	10559	0.03	10000	
B	11	45	2	NoGas	17.469	17.469	0.61	51212	0.03	300	
Na	23	45	1	He	173.712	173.712	1.41	217662	0.08	500000	
Mg	24	45	1	He	10078.988	10078.988	1.00	6679505	0.15	500000	
Al	27	45	1	He	62600.269	62600.269	1.72	23516192	0.27	200000	
K	39	45	1	He	3923.805	3923.805	0.96	2473390	0.16	500000	
Ca	44	45	1	He	787.208	787.208	2.68	27609	2.85	500000	
Ti	47	45	1	He	396.276	396.276	1.44	76480	0.52	2500	
V	51	45	1	He	139.294	139.294	1.96	664685	0.02	10000	
Cr	52	45	1	He	86.630	86.630	1.21	498511	0.02	10000	
Mn	55	45	1	He	7316.733	7316.733	1.88	32976642	0.02	10000	
Fe	56	45	1	He	125944.687	125944.687	1.55	681051884	0.02	200000	
Co	59	103	1	He	59.851	59.851	1.10	540074	0.01	10000	
Ni	60	103	1	He	75.187	75.187	1.05	168297	0.04	10000	
Cu	63	103	1	He	43.223	43.223	0.89	255498	0.02	10000	
Zn	66	103	1	He	250.680	250.680	0.60	299276	0.08	10000	
As	75	103	1	He	51.554	51.554	0.27	39590	0.13	10000	
Se	78	103	1	He	4.752	4.752	5.53	421	1.13	10000	
Sr	88	103	1	He	40.217	40.217	0.29	250264	0.02	10000	
Mo	95	103	1	He	7.663	7.663	2.80	21707	0.04	2000	
Ag	107	103	1	He	0.261	0.261	4.00	2534	0.01	300	
Cd	111	103	1	He	0.860	0.860	12.91	2312	0.04	4000	
Sn	118	115	1	He	17.398	17.398	2.38	72585	0.02	2000	
Sb	123	115	1	He	0.721	0.721	2.70	3195	0.02	300	
Ba	137	115	1	He	418.964	418.964	0.34	784787	0.05	10000	
W	182	209	1	He	0.462	0.462	9.50	8388	0.01	2500	
Tl	205	165	1	He	0.944	0.944	2.50	27723	0.00	5000	
Pb	208	209	1	He	101.402	101.402	0.77	4098383	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	946485	1.79	1631381	58.02	30	120	
Sc	45	1	He	544795	1.14	829696	65.66	30	120	
Sc	45	2	NoGas	4494962	0.65	6325638	71.06	30	120	
Rh	103	1	He	1638191	1.24	2345543	69.84	30	120	
In	115	1	He	989580	1.27	1419467	69.71	30	120	
Tb	159	1	He	3127842	1.27	3888262	80.44	30	120	
Ho	165	1	He	3194729	2.29	3932562	81.24	30	120	
Bi	209	1	He	2295687	0.65	2874805	79.86	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-11-b@2
Data File Name	200SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:44:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.282	4.282	4.49	12523	0.03	10000	
B	11	45	2	NoGas	15.252	15.252	1.02	44525	0.03	300	
Na	23	45	1	He	158.236	158.236	2.06	197316	0.08	500000	
Mg	24	45	1	He	10308.687	10308.687	1.59	6752817	0.15	500000	
Al	27	45	1	He	67316.574	67316.574	2.07	24995516	0.27	200000	
K	39	45	1	He	3490.980	3490.980	0.93	2177784	0.16	500000	
Ca	44	45	1	He	901.450	901.450	0.89	31156	2.89	500000	
Ti	47	45	1	He	479.366	479.366	2.80	91442	0.52	2500	
V	51	45	1	He	149.178	149.178	2.21	703652	0.02	10000	
Cr	52	45	1	He	93.196	93.196	1.69	529957	0.02	10000	
Mn	55	45	1	He	6565.910	6565.910	1.34	29249223	0.02	10000	
Fe	56	45	1	He	129641.119	129641.119	0.96	692924524	0.02	200000	
Co	59	103	1	He	64.565	64.565	1.61	570771	0.01	10000	
Ni	60	103	1	He	87.291	87.291	2.00	191396	0.05	10000	
Cu	63	103	1	He	54.068	54.068	1.81	312838	0.02	10000	
Zn	66	103	1	He	267.231	267.231	1.84	312459	0.09	10000	
As	75	103	1	He	52.747	52.747	1.49	39682	0.13	10000	
Se	78	103	1	He	5.534	5.534	5.24	474	1.17	10000	
Sr	88	103	1	He	20.498	20.498	2.73	124977	0.02	10000	
Mo	95	103	1	He	9.112	9.112	1.80	25274	0.04	2000	
Ag	107	103	1	He	0.238	0.238	2.37	2264	0.01	300	
Cd	111	103	1	He	0.867	0.867	12.55	2275	0.04	4000	
Sn	118	115	1	He	17.702	17.702	1.49	72781	0.02	2000	
Sb	123	115	1	He	0.762	0.762	5.17	3301	0.02	300	
Ba	137	115	1	He	502.128	502.128	0.36	927361	0.05	10000	
W	182	209	1	He	0.489	0.489	6.46	8595	0.01	2500	
Tl	205	165	1	He	0.991	0.991	1.85	29132	0.00	5000	
Pb	208	209	1	He	108.956	108.956	1.06	4348457	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	923798	1.63	1631381	56.63	30	120	
Sc	45	1	He	538496	0.72	829696	64.90	30	120	
Sc	45	2	NoGas	4388757	0.59	6325638	69.38	30	120	
Rh	103	1	He	1605252	2.35	2345543	68.44	30	120	
In	115	1	He	975664	0.91	1419467	68.73	30	120	
Tb	159	1	He	3099093	0.60	3888262	79.70	30	120	
Ho	165	1	He	3195990	0.49	3932562	81.27	30	120	
Bi	209	1	He	2267006	1.61	2874805	78.86	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	201_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:47:51-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.261	1.739	137564	1.63	50	100.5	89.5	110.5	
B	11	45	2	NoGas	52.506	1.226	122083	0.76	50	105.0	89.5	110.5	
Na	23	45	1	He	25032.346	1.978	26535604	0.62	25000	100.1	89.5	110.5	
Mg	24	45	1	He	25160.069	1.895	15154873	0.66	25000	100.6	89.5	110.5	
Al	27	45	1	He	249.774	2.335	86855	1.24	250	99.9	89.5	110.5	
K	39	45	1	He	25868.069	1.448	14692739	0.04	25000	103.5	89.5	110.5	
Ca	44	45	1	He	25459.898	1.474	792855	0.71	25000	101.8	89.5	110.5	
Ti	47	45	1	He	51.368	4.359	9016	3.15	50	102.7	89.5	110.5	
V	51	45	1	He	50.749	1.438	220162	0.54	50	101.5	89.5	110.5	
Cr	52	45	1	He	51.353	1.366	269224	0.44	50	102.7	89.5	110.5	
Mn	55	45	1	He	259.050	1.366	1061910	0.33	250	103.6	89.5	110.5	
Fe	56	45	1	He	13215.505	1.347	64957997	0.14	12500	105.7	89.5	110.5	
Co	59	103	1	He	47.065	0.836	376744	0.29	50	94.1	89.5	110.5	
Ni	60	103	1	He	46.464	0.852	92293	0.45	50	92.9	89.5	110.5	
Cu	63	103	1	He	46.806	1.259	245361	0.60	50	93.6	89.5	110.5	
Zn	66	103	1	He	47.401	0.619	51194	0.32	50	94.8	89.5	110.5	
As	75	103	1	He	49.104	0.456	33455	0.33	50	98.2	89.5	110.5	
Se	78	103	1	He	49.092	0.608	3556	0.27	50	98.2	89.5	110.5	
Sr	88	103	1	He	51.591	0.664	284774	0.44	50	103.2	89.5	110.5	
Mo	95	103	1	He	52.802	1.511	132450	1.99	50	105.6	89.5	110.5	
Ag	107	103	1	He	52.304	1.108	450544	0.41	50	104.6	89.5	110.5	
Cd	111	103	1	He	53.552	0.866	81037	0.42	50	107.1	89.5	110.5	
Sn	118	115	1	He	50.616	0.310	201264	0.61	50	101.2	89.5	110.5	
Sb	123	115	1	He	53.388	0.492	195764	0.81	50	106.8	89.5	110.5	
Ba	137	115	1	He	53.091	0.587	95536	0.91	50	106.2	89.5	110.5	
W	182	209	1	He	48.506	2.000	546279	1.36	50	97.0	89.5	110.5	
Tl	205	165	1	He	48.378	1.908	1353517	0.40	50	96.8	89.5	110.5	
Pb	208	209	1	He	47.888	1.934	1851250	0.33	50	95.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	865762	0.20	1631381	53.07	30	120	
Sc	45	1	He	495242	1.44	829696	59.69	30	120	
Sc	45	2	NoGas	3923689	0.84	6325638	62.03	30	120	
Rh	103	1	He	1453258	0.70	2345543	61.96	30	120	
In	115	1	He	950044	0.37	1419467	66.93	30	120	
Tb	159	1	He	3016728	2.20	3888262	77.59	30	120	
Ho	165	1	He	3049089	1.55	3932562	77.53	30	120	
Bi	209	1	He	2195818	1.85	2874805	76.38	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	202_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:51:43-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.088	25.7	267	26.0	1	
B	11	45	2	NoGas	7.683	1.6	23404	1.7	20	
Na	23	45	1	He	26.036	9.2	40943	4.2	400	
Mg	24	45	1	He	2.435	40.5	2030	27.2	1000	
Al	27	45	1	He	2.927	28.2	2550	9.2	50	
K	39	45	1	He	11.899	26.4	29280	4.2	1000	
Ca	44	45	1	He	3.137	36.2	689	5.4	1000	
Ti	47	45	1	He	0.147	27.7	33	20.0	20	
V	51	45	1	He	0.137	53.3	651	48.1	2	
Cr	52	45	1	He	0.001	1171.2	1526	3.8	2	
Mn	55	45	1	He	0.494	7.8	2729	3.9	2	
Fe	56	45	1	He	33.546	18.6	165589	16.3	50	
Co	59	103	1	He	0.008	66.6	102	46.3	1	
Ni	60	103	1	He	-0.009	-115.2	69	34.3	2	
Cu	63	103	1	He	-0.020	-39.4	1081	4.6	2	
Zn	66	103	1	He	-0.043	-163.4	1332	6.7	20	
As	75	103	1	He	0.050	59.0	153	15.3	2	
Se	78	103	1	He	0.159	35.4	49	8.8	2	
Sr	88	103	1	He	0.008	38.3	134	16.1	10	
Mo	95	103	1	He	0.873	17.8	2525	19.2	2	
Ag	107	103	1	He	0.007	15.6	73	15.7	0.2	
Cd	111	103	1	He	0.066	36.3	975	4.8	0.2	
Sn	118	115	1	He	0.328	22.9	2156	14.4	10	
Sb	123	115	1	He	0.375	20.6	1898	15.4	1	
Ba	137	115	1	He	0.032	55.9	131	25.6	5	
W	182	209	1	He	1.124	15.8	16090	13.2	10	
Tl	205	165	1	He	0.061	16.9	1779	15.7	0.5	
Pb	208	209	1	He	0.076	5.3	3714	4.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	865944	2.64	1631381	53.08	30	120	
Sc	45	1	He	490312	1.96	829696	59.10	30	120	
Sc	45	2	NoGas	3976787	0.55	6325638	62.87	30	120	
Rh	103	1	He	1643809	1.73	2345543	70.08	30	120	
In	115	1	He	1001445	0.33	1419467	70.55	30	120	
Tb	159	1	He	2984429	1.34	3888262	76.75	30	120	
Ho	165	1	He	3093888	1.07	3932562	78.67	30	120	
Bi	209	1	He	2286541	0.88	2874805	79.54	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-12-b@2
Data File Name	203SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:55:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.926	3.926	5.70	10959	0.04	10000	
B	11	45	2	NoGas	14.540	14.540	0.61	41581	0.03	300	
Na	23	45	1	He	145.399	145.399	3.75	185017	0.08	500000	
Mg	24	45	1	He	9770.990	9770.990	3.73	6487659	0.15	500000	
Al	27	45	1	He	55919.580	55919.580	3.18	21047567	0.27	200000	
K	39	45	1	He	3438.654	3438.654	2.99	2174836	0.16	500000	
Ca	44	45	1	He	1439.874	1439.874	1.86	50058	2.88	500000	
Ti	47	45	1	He	479.717	479.717	3.52	92753	0.52	2500	
V	51	45	1	He	113.699	113.699	2.60	543675	0.02	10000	
Cr	52	45	1	He	79.148	79.148	2.68	456503	0.02	10000	
Mn	55	45	1	He	5269.344	5269.344	2.07	23798202	0.02	10000	
Fe	56	45	1	He	105905.316	105905.316	3.06	573787906	0.02	200000	
Co	59	103	1	He	57.631	57.631	0.33	507741	0.01	10000	
Ni	60	103	1	He	90.533	90.533	1.64	197835	0.05	10000	
Cu	63	103	1	He	53.407	53.407	1.61	307953	0.02	10000	
Zn	66	103	1	He	232.732	232.732	0.74	271376	0.09	10000	
As	75	103	1	He	44.162	44.162	1.11	33125	0.13	10000	
Se	78	103	1	He	5.135	5.135	4.80	441	1.16	10000	
Sr	88	103	1	He	19.482	19.482	0.62	118405	0.02	10000	
Mo	95	103	1	He	7.745	7.745	0.49	21418	0.04	2000	
Ag	107	103	1	He	0.200	0.200	5.20	1900	0.01	300	
Cd	111	103	1	He	1.060	1.060	5.90	2589	0.04	4000	
Sn	118	115	1	He	17.188	17.188	0.97	70308	0.02	2000	
Sb	123	115	1	He	0.881	0.881	1.43	3730	0.02	300	
Ba	137	115	1	He	469.180	469.180	0.39	861784	0.05	10000	
W	182	209	1	He	0.816	0.816	6.60	12513	0.01	2500	
Tl	205	165	1	He	0.924	0.924	1.93	26982	0.00	5000	
Pb	208	209	1	He	93.272	93.272	1.48	3760745	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	881233	0.83	1631381	54.02	30	120	
Sc	45	1	He	546090	2.28	829696	65.82	30	120	
Sc	45	2	NoGas	4267111	0.52	6325638	67.46	30	120	
Rh	103	1	He	1599444	0.66	2345543	68.19	30	120	
In	115	1	He	970366	0.33	1419467	68.36	30	120	
Tb	159	1	He	3100195	0.64	3888262	79.73	30	120	
Ho	165	1	He	3175869	0.95	3932562	80.76	30	120	
Bi	209	1	He	2290358	1.36	2874805	79.67	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-13-b@2
Data File Name	204SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:59:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.666	3.666	1.11	10566	0.03	10000	
B	11	45	2	NoGas	13.812	13.812	3.53	40653	0.03	300	
Na	23	45	1	He	132.402	132.402	1.94	169848	0.08	500000	
Mg	24	45	1	He	8201.977	8201.977	1.11	5446347	0.15	500000	
Al	27	45	1	He	54896.378	54896.378	1.35	20662509	0.27	200000	
K	39	45	1	He	3012.360	3012.360	2.66	1908038	0.16	500000	
Ca	44	45	1	He	862.327	862.327	4.47	30230	2.85	500000	
Ti	47	45	1	He	442.061	442.061	1.90	85471	0.52	2500	
V	51	45	1	He	121.982	121.982	1.85	583192	0.02	10000	
Cr	52	45	1	He	84.373	84.373	0.91	486494	0.02	10000	
Mn	55	45	1	He	6358.044	6358.044	2.06	28707628	0.02	10000	
Fe	56	45	1	He	105857.576	105857.576	1.02	573522608	0.02	200000	
Co	59	103	1	He	61.683	61.683	1.41	554638	0.01	10000	
Ni	60	103	1	He	72.922	72.922	2.16	162646	0.04	10000	
Cu	63	103	1	He	43.892	43.892	0.82	258555	0.02	10000	
Zn	66	103	1	He	214.391	214.391	1.36	255261	0.08	10000	
As	75	103	1	He	43.039	43.039	0.71	32955	0.13	10000	
Se	78	103	1	He	4.783	4.783	3.76	422	1.13	10000	
Sr	88	103	1	He	17.214	17.214	0.68	106801	0.02	10000	
Mo	95	103	1	He	7.662	7.662	1.89	21631	0.04	2000	
Ag	107	103	1	He	0.186	0.186	6.60	1809	0.01	300	
Cd	111	103	1	He	0.854	0.854	12.89	2294	0.04	4000	
Sn	118	115	1	He	18.723	18.723	1.35	77953	0.02	2000	
Sb	123	115	1	He	0.661	0.661	2.89	2963	0.02	300	
Ba	137	115	1	He	438.678	438.678	0.75	820845	0.05	10000	
W	182	209	1	He	0.512	0.512	2.64	8851	0.01	2500	
Tl	205	165	1	He	0.853	0.853	1.90	24986	0.00	5000	
Pb	208	209	1	He	94.096	94.096	0.73	3749201	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	909634	0.13	1631381	55.76	30	120	
Sc	45	1	He	545873	1.20	829696	65.79	30	120	
Sc	45	2	NoGas	4355000	0.41	6325638	68.85	30	120	
Rh	103	1	He	1632649	1.52	2345543	69.61	30	120	
In	115	1	He	988569	1.07	1419467	69.64	30	120	
Tb	159	1	He	3112999	0.40	3888262	80.06	30	120	
Ho	165	1	He	3184094	1.03	3932562	80.97	30	120	
Bi	209	1	He	2263170	1.26	2874805	78.72	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-15-b@2
Data File Name	205SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:03:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.716	3.716	1.73	10048	0.04	10000	
B	11	45	2	NoGas	18.622	18.622	1.57	49853	0.04	300	
Na	23	45	1	He	224.476	224.476	1.42	262615	0.09	500000	
Mg	24	45	1	He	11795.239	11795.239	1.17	7415343	0.16	500000	
Al	27	45	1	He	55784.290	55784.290	1.88	19878121	0.28	200000	
K	39	45	1	He	4033.203	4033.203	2.10	2410819	0.17	500000	
Ca	44	45	1	He	12654.008	12654.008	1.43	411562	3.07	500000	
Ti	47	45	1	He	484.339	484.339	1.69	88664	0.55	2500	
V	51	45	1	He	123.372	123.372	1.43	558494	0.02	10000	
Cr	52	45	1	He	102.111	102.111	1.42	557085	0.02	10000	
Mn	55	45	1	He	4938.523	4938.523	1.41	21113205	0.02	10000	
Fe	56	45	1	He	131729.360	131729.360	0.78	675723689	0.02	200000	
Co	59	103	1	He	49.555	49.555	1.87	400880	0.01	10000	
Ni	60	103	1	He	103.198	103.198	2.56	207035	0.05	10000	
Cu	63	103	1	He	67.562	67.562	1.74	357445	0.02	10000	
Zn	66	103	1	He	266.341	266.341	1.56	284990	0.09	10000	
As	75	103	1	He	89.754	89.754	2.04	61709	0.15	10000	
Se	78	103	1	He	5.187	5.187	5.97	409	1.27	10000	
Sr	88	103	1	He	70.219	70.219	1.56	391673	0.02	10000	
Mo	95	103	1	He	30.069	30.069	2.50	76229	0.04	2000	
Ag	107	103	1	He	0.202	0.202	5.06	1761	0.01	300	
Cd	111	103	1	He	1.263	1.263	1.68	2684	0.05	4000	
Sn	118	115	1	He	17.590	17.590	2.01	69575	0.03	2000	
Sb	123	115	1	He	0.846	0.846	2.85	3479	0.02	300	
Ba	137	115	1	He	488.729	488.729	0.89	868210	0.06	10000	
W	182	209	1	He	3.222	3.222	2.07	39297	0.01	2500	
Tl	205	165	1	He	0.859	0.859	1.64	24339	0.00	5000	
Pb	208	209	1	He	97.097	97.097	0.33	3786290	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	853478	0.67	1631381	52.32	30	120	
Sc	45	1	He	516816	0.98	829696	62.29	30	120	
Sc	45	2	NoGas	4139937	0.73	6325638	65.45	30	120	
Rh	103	1	He	1468826	1.52	2345543	62.62	30	120	
In	115	1	He	938538	0.94	1419467	66.12	30	120	
Tb	159	1	He	3015181	1.18	3888262	77.55	30	120	
Ho	165	1	He	3081207	1.33	3932562	78.35	30	120	
Bi	209	1	He	2214846	1.46	2874805	77.04	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-16-b@2
Data File Name	206SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:06:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.593	3.593	6.11	9481	0.04	10000	
B	11	45	2	NoGas	17.155	17.155	2.68	45360	0.04	300	
Na	23	45	1	He	178.879	178.879	1.35	205773	0.09	500000	
Mg	24	45	1	He	9614.646	9614.646	3.80	5860597	0.16	500000	
Al	27	45	1	He	52352.109	52352.109	1.12	18091816	0.29	200000	
K	39	45	1	He	3313.207	3313.207	1.60	1924733	0.17	500000	
Ca	44	45	1	He	8956.573	8956.573	1.03	282668	3.17	500000	
Ti	47	45	1	He	455.867	455.867	1.92	80925	0.56	2500	
V	51	45	1	He	121.226	121.226	1.55	532145	0.02	10000	
Cr	52	45	1	He	91.788	91.788	1.20	485770	0.02	10000	
Mn	55	45	1	He	8490.322	8490.322	1.51	35198353	0.02	10000	
Fe	56	45	1	He	123736.131	123736.131	1.36	615493024	0.02	200000	
Co	59	103	1	He	66.354	66.354	4.42	547309	0.01	10000	
Ni	60	103	1	He	82.580	82.580	5.00	168931	0.05	10000	
Cu	63	103	1	He	92.004	92.004	4.48	495922	0.02	10000	
Zn	66	103	1	He	350.274	350.274	4.94	381713	0.09	10000	
As	75	103	1	He	54.760	54.760	4.80	38427	0.14	10000	
Se	78	103	1	He	5.397	5.397	1.37	433	1.25	10000	
Sr	88	103	1	He	42.264	42.264	4.40	240407	0.02	10000	
Mo	95	103	1	He	12.192	12.192	5.47	31531	0.04	2000	
Ag	107	103	1	He	0.607	0.607	3.37	5394	0.01	300	
Cd	111	103	1	He	1.866	1.866	7.85	3667	0.05	4000	
Sn	118	115	1	He	18.655	18.655	1.71	72763	0.03	2000	
Sb	123	115	1	He	0.953	0.953	7.10	3815	0.02	300	
Ba	137	115	1	He	465.874	465.874	0.27	816655	0.06	10000	
W	182	209	1	He	0.727	0.727	5.38	10871	0.01	2500	
Tl	205	165	1	He	0.907	0.907	1.57	25655	0.00	5000	
Pb	208	209	1	He	134.712	134.712	0.55	5147853	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	832514	0.73	1631381	51.03	30	120	
Sc	45	1	He	501171	0.96	829696	60.40	30	120	
Sc	45	2	NoGas	4044417	0.77	6325638	63.94	30	120	
Rh	103	1	He	1499577	4.80	2345543	63.93	30	120	
In	115	1	He	926071	0.40	1419467	65.24	30	120	
Tb	159	1	He	3001058	1.17	3888262	77.18	30	120	
Ho	165	1	He	3073868	0.63	3932562	78.16	30	120	
Bi	209	1	He	2170586	0.82	2874805	75.50	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-17-b@2
Data File Name	207SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:10:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.059	3.059	6.34	8147	0.04	10000	
B	11	45	2	NoGas	18.995	18.995	1.24	50388	0.04	300	
Na	23	45	1	He	181.301	181.301	2.41	208824	0.09	500000	
Mg	24	45	1	He	11338.576	11338.576	1.88	6927803	0.16	500000	
Al	27	45	1	He	54595.736	54595.736	2.02	18909050	0.29	200000	
K	39	45	1	He	3779.572	3779.572	1.83	2197250	0.17	500000	
Ca	44	45	1	He	6948.260	6948.260	1.49	219922	3.16	500000	
Ti	47	45	1	He	396.704	396.704	2.31	70579	0.56	2500	
V	51	45	1	He	133.754	133.754	2.46	588398	0.02	10000	
Cr	52	45	1	He	90.338	90.338	2.01	479177	0.02	10000	
Mn	55	45	1	He	51618.348	51618.348	2.40	214454027	0.02	10000	>LDR
Fe	56	45	1	He	120768.135	120768.135	3.27	601960047	0.02	200000	
Co	59	103	1	He	52.161	52.161	3.41	422331	0.01	10000	
Ni	60	103	1	He	169.091	169.091	2.97	339549	0.05	10000	
Cu	63	103	1	He	82.292	82.292	2.90	435578	0.02	10000	
Zn	66	103	1	He	271.981	271.981	3.05	291282	0.09	10000	
As	75	103	1	He	55.589	55.589	3.49	38294	0.15	10000	
Se	78	103	1	He	4.929	4.929	4.68	390	1.26	10000	
Sr	88	103	1	He	55.813	55.813	2.65	311666	0.02	10000	
Mo	95	103	1	He	10.554	10.554	2.60	26814	0.04	2000	
Ag	107	103	1	He	0.210	0.210	3.96	1830	0.01	300	
Cd	111	103	1	He	1.009	1.009	2.67	2304	0.04	4000	
Sn	118	115	1	He	17.035	17.035	2.68	66713	0.03	2000	
Sb	123	115	1	He	1.092	1.092	0.57	4325	0.03	300	
Ba	137	115	1	He	824.629	824.629	0.49	1449752	0.06	10000	
W	182	209	1	He	3.746	3.746	3.22	44822	0.01	2500	
Tl	205	165	1	He	0.885	0.885	0.65	24997	0.00	5000	
Pb	208	209	1	He	99.785	99.785	0.61	3857680	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	840109	1.99	1631381	51.50	30	120	
Sc	45	1	He	502369	1.96	829696	60.55	30	120	
Sc	45	2	NoGas	4112330	0.36	6325638	65.01	30	120	
Rh	103	1	He	1470975	3.19	2345543	62.71	30	120	
In	115	1	He	928824	0.95	1419467	65.43	30	120	
Tb	159	1	He	3015207	0.37	3888262	77.55	30	120	
Ho	165	1	He	3070439	0.70	3932562	78.08	30	120	
Bi	209	1	He	2195817	0.39	2874805	76.38	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-18-b@2
Data File Name	208SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:14:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.380	3.380	4.22	8840	0.04	10000	
B	11	45	2	NoGas	17.311	17.311	0.50	46099	0.04	300	
Na	23	45	1	He	180.741	180.741	1.74	208143	0.09	500000	
Mg	24	45	1	He	14439.575	14439.575	2.07	8818121	0.16	500000	
Al	27	45	1	He	55741.047	55741.047	0.09	19298265	0.29	200000	
K	39	45	1	He	4234.910	4234.910	1.10	2458034	0.17	500000	
Ca	44	45	1	He	7250.006	7250.006	1.89	229316	3.16	500000	
Ti	47	45	1	He	390.118	390.118	0.48	69387	0.56	2500	
V	51	45	1	He	105.936	105.936	1.03	465870	0.02	10000	
Cr	52	45	1	He	94.160	94.160	1.74	499147	0.02	10000	
Mn	55	45	1	He	17317.103	17317.103	1.65	71916590	0.02	10000	>LDR
Fe	56	45	1	He	140412.021	140412.021	1.00	699688843	0.02	200000	
Co	59	103	1	He	54.628	54.628	2.95	429348	0.01	10000	
Ni	60	103	1	He	148.963	148.963	1.94	290395	0.05	10000	
Cu	63	103	1	He	104.447	104.447	2.34	536358	0.02	10000	
Zn	66	103	1	He	319.991	319.991	2.12	332465	0.10	10000	
As	75	103	1	He	75.367	75.367	1.70	50372	0.15	10000	
Se	78	103	1	He	5.717	5.717	3.95	435	1.32	10000	
Sr	88	103	1	He	58.733	58.733	2.45	318329	0.02	10000	
Mo	95	103	1	He	9.384	9.384	0.69	23151	0.04	2000	
Ag	107	103	1	He	0.133	0.133	0.96	1127	0.01	300	
Cd	111	103	1	He	1.156	1.156	4.04	2452	0.05	4000	
Sn	118	115	1	He	16.804	16.804	1.09	64819	0.03	2000	
Sb	123	115	1	He	0.830	0.830	1.99	3336	0.02	300	
Ba	137	115	1	He	995.920	995.920	1.39	1724555	0.06	10000	
W	182	209	1	He	1.230	1.230	3.30	16316	0.01	2500	
Tl	205	165	1	He	1.356	1.356	0.41	37960	0.00	5000	
Pb	208	209	1	He	86.345	86.345	1.16	3275203	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	825571	1.37	1631381	50.61	30	120	
Sc	45	1	He	502069	1.17	829696	60.51	30	120	
Sc	45	2	NoGas	4077817	0.59	6325638	64.46	30	120	
Rh	103	1	He	1427469	2.23	2345543	60.86	30	120	
In	115	1	He	914826	0.29	1419467	64.45	30	120	
Tb	159	1	He	3000751	0.52	3888262	77.17	30	120	
Ho	165	1	He	3046306	0.53	3932562	77.46	30	120	
Bi	209	1	He	2154479	0.72	2874805	74.94	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	209_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:18:18-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.314	0.890	131179	1.40	50	100.6	89.5	110.5	
B	11	45	2	NoGas	49.649	1.793	111797	1.36	50	99.3	89.5	110.5	
Na	23	45	1	He	24844.484	0.877	25622715	1.53	25000	99.4	89.5	110.5	
Mg	24	45	1	He	24993.265	2.255	14643117	0.61	25000	100.0	89.5	110.5	
Al	27	45	1	He	246.343	1.206	83368	2.29	250	98.5	89.5	110.5	
K	39	45	1	He	25946.497	1.193	14336399	1.26	25000	103.8	89.5	110.5	
Ca	44	45	1	He	25362.349	1.889	768240	0.58	25000	101.4	89.5	110.5	
Ti	47	45	1	He	50.106	2.384	8557	1.84	50	100.2	89.5	110.5	
V	51	45	1	He	50.376	2.008	212580	1.11	50	100.8	89.5	110.5	
Cr	52	45	1	He	50.951	1.223	259860	1.28	50	101.9	89.5	110.5	
Mn	55	45	1	He	260.693	1.781	1039466	0.72	250	104.3	89.5	110.5	
Fe	56	45	1	He	13048.969	2.276	62383826	0.55	12500	104.4	89.5	110.5	
Co	59	103	1	He	46.847	0.311	366004	0.32	50	93.7	89.5	110.5	
Ni	60	103	1	He	46.102	0.837	89378	0.84	50	92.2	89.5	110.5	
Cu	63	103	1	He	46.905	1.180	239986	1.17	50	93.8	89.5	110.5	
Zn	66	103	1	He	48.210	1.036	50798	1.03	50	96.4	89.5	110.5	
As	75	103	1	He	48.849	0.596	32483	0.60	50	97.7	89.5	110.5	
Se	78	103	1	He	49.555	1.782	3503	1.78	50	99.1	89.5	110.5	
Sr	88	103	1	He	51.684	1.289	278445	1.28	50	103.4	89.5	110.5	
Mo	95	103	1	He	52.674	1.752	128951	1.74	50	105.3	89.5	110.5	
Ag	107	103	1	He	52.387	0.620	440442	0.61	50	104.8	89.5	110.5	
Cd	111	103	1	He	53.696	1.470	79305	1.46	50	107.4	89.5	110.5	
Sn	118	115	1	He	50.820	1.175	197597	1.07	50	101.6	89.5	110.5	
Sb	123	115	1	He	53.212	0.546	190799	0.66	50	106.4	89.5	110.5	
Ba	137	115	1	He	53.114	0.966	93461	0.94	50	106.2	89.5	110.5	
W	182	209	1	He	47.743	0.493	533253	0.79	50	95.5	89.5	110.5	
Tl	205	165	1	He	48.590	0.981	1333170	0.95	50	97.2	89.5	110.5	
Pb	208	209	1	He	47.293	1.083	1813093	0.98	50	94.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	824681	0.74	1631381	50.55	30	120	
Sc	45	1	He	481796	2.40	829696	58.07	30	120	
Sc	45	2	NoGas	3788851	0.34	6325638	59.90	30	120	
Rh	103	1	He	1418359	0.02	2345543	60.47	30	120	
In	115	1	He	929021	0.23	1419467	65.45	30	120	
Tb	159	1	He	2908024	0.98	3888262	74.79	30	120	
Ho	165	1	He	2989532	0.17	3932562	76.02	30	120	
Bi	209	1	He	2177168	0.94	2874805	75.73	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	210_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:22:10-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.063	61.5	189	53.9	1	
B	11	45	2	NoGas	5.117	6.6	16719	6.0	20	
Na	23	45	1	He	21.468	3.5	34121	0.4	400	
Mg	24	45	1	He	2.749	12.5	2097	8.0	1000	
Al	27	45	1	He	2.697	6.6	2335	1.0	50	
K	39	45	1	He	13.026	22.6	28219	3.9	1000	
Ca	44	45	1	He	3.139	67.0	650	8.7	1000	
Ti	47	45	1	He	0.334	63.8	62	55.8	20	
V	51	45	1	He	0.062	155.4	313	126.2	2	
Cr	52	45	1	He	-0.004	-26.9	1415	2.0	2	
Mn	55	45	1	He	1.861	8.4	7798	6.0	2	
Fe	56	45	1	He	35.825	13.6	166841	12.4	50	
Co	59	103	1	He	0.006	56.0	88	34.5	1	
Ni	60	103	1	He	0.001	1365.1	89	31.9	2	
Cu	63	103	1	He	-0.035	-30.1	953	7.8	2	
Zn	66	103	1	He	-0.117	-85.2	1193	8.4	20	
As	75	103	1	He	0.041	3.7	140	1.3	2	
Se	78	103	1	He	0.107	61.4	43	11.3	2	
Sr	88	103	1	He	0.014	37.6	163	18.1	10	
Mo	95	103	1	He	0.934	14.9	2586	15.3	2	
Ag	107	103	1	He	0.010	27.6	93	25.0	0.2	
Cd	111	103	1	He	0.067	37.5	938	2.9	0.2	
Sn	118	115	1	He	0.305	10.6	1974	7.0	10	
Sb	123	115	1	He	0.330	16.1	1652	12.7	1	
Ba	137	115	1	He	0.034	85.3	130	40.3	5	
W	182	209	1	He	1.086	12.5	15163	9.7	10	
Tl	205	165	1	He	0.053	13.7	1487	11.7	0.5	
Pb	208	209	1	He	0.067	5.8	3244	4.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	834342	1.19	1631381	51.14	30	120	
Sc	45	1	He	462496	1.78	829696	55.74	30	120	
Sc	45	2	NoGas	3763584	1.83	6325638	59.50	30	120	
Rh	103	1	He	1578803	1.45	2345543	67.31	30	120	
In	115	1	He	960050	0.81	1419467	67.63	30	120	
Tb	159	1	He	2930798	0.71	3888262	75.38	30	120	
Ho	165	1	He	2969458	1.59	3932562	75.51	30	120	
Bi	209	1	He	2218201	0.42	2874805	77.16	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	211CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:26:01-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.143	1.143	3.491	3063	3.17	1	114.3	69.5	130.5	
B	11	2	NoGas	21.309	21.309	1.316	52805	1.33	20	106.5	69.5	130.5	
Na	23	1	He	1044.026	1044.026	0.630	1105674	0.60	1000	104.4	69.5	130.5	
Mg	24	1	He	1052.659	1052.659	0.718	626546	1.11	1000	105.3	69.5	130.5	
Al	27	1	He	47.628	47.628	1.350	17613	1.41	50	95.3	69.5	130.5	
K	39	1	He	1082.834	1082.834	0.898	628782	0.91	1000	108.3	69.5	130.5	
Ca	44	1	He	1043.835	1043.835	0.240	32658	0.90	1000	104.4	69.5	130.5	
Ti	47	1	He	10.678	10.678	1.435	1857	1.71	10	106.8	69.5	130.5	
V	51	1	He	5.384	5.384	3.256	23112	2.75	5	107.7	69.5	130.5	
Cr	52	1	He	2.062	2.062	1.748	12126	1.07	2	103.1	69.5	130.5	
Mn	55	1	He	6.658	6.658	1.514	27650	0.80	5	133.2	69.5	130.5	6020A CR1 Failed
Fe	56	1	He	118.023	118.023	0.518	575370	0.36	100	118.0	69.5	130.5	
Co	59	1	He	0.894	0.894	4.447	7688	4.36	1	89.4	69.5	130.5	
Ni	60	1	He	1.835	1.835	5.525	3980	5.24	2	91.7	69.5	130.5	
Cu	63	1	He	1.660	1.660	0.975	10402	0.54	2	83.0	69.5	130.5	
Zn	66	1	He	18.484	18.484	1.501	22152	1.58	20	92.4	69.5	130.5	
As	75	1	He	4.624	4.624	2.127	3468	2.31	5	92.5	69.5	130.5	
Se	78	1	He	4.932	4.932	6.985	413	6.72	5	98.6	69.5	130.5	
Sr	88	1	He	9.799	9.799	0.781	57919	0.44	10	98.0	69.5	130.5	
Mo	95	1	He	10.300	10.300	2.274	27669	2.54	10	103.0	69.5	130.5	
Ag	107	1	He	1.011	1.011	2.120	9323	2.30	1	101.1	69.5	130.5	
Cd	111	1	He	1.144	1.144	3.841	2651	2.32	1	114.4	69.5	130.5	
Sn	118	1	He	10.002	10.002	1.525	41392	1.41	10	100.0	69.5	130.5	
Sb	123	1	He	2.111	2.111	4.458	8358	4.45	2	105.5	69.5	130.5	
Ba	137	1	He	5.306	5.306	2.283	9852	2.52	5	106.1	69.5	130.5	
W	182	1	He	9.186	9.186	2.236	107879	3.02	10	91.9	69.5	130.5	
Tl	205	1	He	1.985	1.985	1.164	54945	1.52	2	99.2	69.5	130.5	
Pb	208	1	He	1.060	1.060	2.868	42387	1.96	1	106.0	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	841725	0.54	1631381	51.60	30	120	
Sc	45	1	He	488851	0.73	829696	58.92	30	120	
Sc	45	2	NoGas	3895567	0.49	6325638	61.58	30	120	
Rh	103	1	He	1554410	0.34	2345543	66.27	30	120	
In	115	1	He	974133	0.27	1419467	68.63	30	120	
Tb	159	1	He	2915710	0.45	3888262	74.99	30	120	
Ho	165	1	He	3013787	0.51	3932562	76.64	30	120	
Bi	209	1	He	2239001	0.86	2874805	77.88	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	212_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:29:54-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.071	2.466	126797	2.90	50	96.1	89.5	110.5	
B	11	45	2	NoGas	47.295	3.698	108862	3.23	50	94.6	89.5	110.5	
Na	23	45	1	He	23644.416	5.098	25590192	0.26	25000	94.6	89.5	110.5	
Mg	24	45	1	He	23814.495	4.937	14645632	0.59	25000	95.3	89.5	110.5	
Al	27	45	1	He	233.100	4.855	82873	0.32	250	93.2	89.5	110.5	
K	39	45	1	He	25177.870	3.635	14607732	1.57	25000	100.7	89.5	110.5	
Ca	44	45	1	He	24595.189	4.122	782196	0.75	25000	98.4	89.5	110.5	
Ti	47	45	1	He	48.091	3.279	8629	4.07	50	96.2	89.5	110.5	
V	51	45	1	He	49.705	5.194	220138	0.63	50	99.4	89.5	110.5	
Cr	52	45	1	He	48.881	4.058	261786	1.08	50	97.8	89.5	110.5	
Mn	55	45	1	He	249.649	4.483	1044995	0.62	250	99.9	89.5	110.5	
Fe	56	45	1	He	12572.005	5.654	63081204	2.02	12500	100.6	89.5	110.5	
Co	59	103	1	He	46.987	0.385	367541	0.21	50	94.0	89.5	110.5	
Ni	60	103	1	He	46.275	1.196	89823	1.15	50	92.6	89.5	110.5	
Cu	63	103	1	He	46.839	1.046	239938	0.90	50	93.7	89.5	110.5	
Zn	66	103	1	He	47.866	1.345	50504	1.11	50	95.7	89.5	110.5	
As	75	103	1	He	49.756	0.130	33125	0.34	50	99.5	89.5	110.5	
Se	78	103	1	He	51.968	0.768	3677	0.61	50	103.9	89.5	110.5	
Sr	88	103	1	He	52.697	0.618	284242	0.43	50	105.4	89.5	110.5	
Mo	95	103	1	He	52.510	1.426	128708	1.47	50	105.0	89.5	110.5	
Ag	107	103	1	He	52.380	0.423	440920	0.62	50	104.8	89.5	110.5	
Cd	111	103	1	He	53.787	1.056	79534	0.84	50	107.6	89.5	110.5	
Sn	118	115	1	He	50.213	0.916	197862	0.79	50	100.4	89.5	110.5	
Sb	123	115	1	He	53.115	1.001	192998	0.67	50	106.2	89.5	110.5	
Ba	137	115	1	He	52.572	1.040	93745	0.74	50	105.1	89.5	110.5	
W	182	209	1	He	48.032	0.772	528613	1.29	50	96.1	89.5	110.5	
Tl	205	165	1	He	47.611	1.464	1308629	0.41	50	95.2	89.5	110.5	
Pb	208	209	1	He	47.433	1.467	1791723	0.74	50	94.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	834267	0.44	1631381	51.14	30	120	
Sc	45	1	He	506373	4.95	829696	61.03	30	120	
Sc	45	2	NoGas	3863034	0.99	6325638	61.07	30	120	
Rh	103	1	He	1420086	0.21	2345543	60.54	30	120	
In	115	1	He	941465	0.35	1419467	66.33	30	120	
Tb	159	1	He	2916256	1.56	3888262	75.00	30	120	
Ho	165	1	He	2995231	1.36	3932562	76.16	30	120	
Bi	209	1	He	2145272	1.02	2874805	74.62	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	213_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:33:46-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.087	12.1	256	11.5	1	
B	11	45	2	NoGas	4.787	5.1	16363	2.6	20	
Na	23	45	1	He	20.392	5.3	33865	2.1	400	
Mg	24	45	1	He	2.074	26.4	1759	17.4	1000	
Al	27	45	1	He	0.559	77.2	1695	9.1	50	
K	39	45	1	He	13.074	6.5	28950	0.6	1000	
Ca	44	45	1	He	2.441	57.4	645	5.9	1000	
Ti	47	45	1	He	0.060	48.4	18	28.6	20	
V	51	45	1	He	-0.007	-151.1	31	148.4	2	
Cr	52	45	1	He	-0.011	-55.0	1415	3.4	2	
Mn	55	45	1	He	1.009	5.4	4656	4.7	2	
Fe	56	45	1	He	26.311	17.1	126331	16.7	50	
Co	59	103	1	He	0.005	68.3	73	39.6	1	
Ni	60	103	1	He	-0.008	-112.9	70	29.0	2	
Cu	63	103	1	He	-0.024	-40.4	1019	6.1	2	
Zn	66	103	1	He	-0.064	-208.6	1258	13.3	20	
As	75	103	1	He	0.036	38.8	137	7.3	2	
Se	78	103	1	He	0.166	21.0	48	6.7	2	
Sr	88	103	1	He	0.005	102.5	111	30.6	10	
Mo	95	103	1	He	0.958	18.7	2658	19.6	2	
Ag	107	103	1	He	0.008	8.5	76	9.2	0.2	
Cd	111	103	1	He	0.059	45.4	927	4.7	0.2	
Sn	118	115	1	He	0.342	9.4	2152	5.9	10	
Sb	123	115	1	He	0.358	6.9	1778	5.1	1	
Ba	137	115	1	He	0.027	23.5	119	9.8	5	
W	182	209	1	He	1.119	12.0	15701	9.6	10	
Tl	205	165	1	He	0.058	14.8	1672	13.8	0.5	
Pb	208	209	1	He	0.053	8.5	2732	6.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	843825	0.62	1631381	51.72	30	120	
Sc	45	1	He	473832	1.74	829696	57.11	30	120	
Sc	45	2	NoGas	3846200	0.80	6325638	60.80	30	120	
Rh	103	1	He	1580885	1.51	2345543	67.40	30	120	
In	115	1	He	972238	0.38	1419467	68.49	30	120	
Tb	159	1	He	2937155	1.22	3888262	75.54	30	120	
Ho	165	1	He	3015395	0.63	3932562	76.68	30	120	
Bi	209	1	He	2240143	0.31	2874805	77.92	30	120	

MTMSCCBDILH20-193 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/27/15 Analyst: AS Instrument: I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* = 90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

Level I Analyst: Anjali Sharma Date: 4/27/15 Time: ~~14:00~~ AS 4/27/15 14:00 – 16:16

Level I Analyst: Anjali Sharma Date: 4/28/15 Time: 14:00 – 22:08

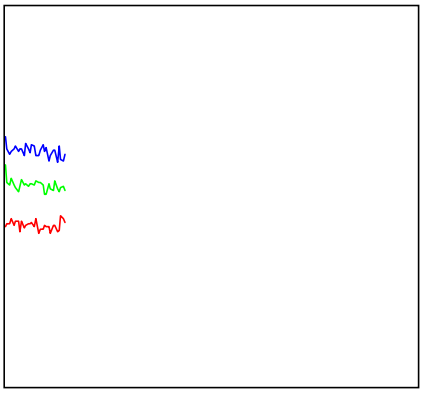
Level II Reviewer: [signature] Date: 4/27/15 Time: job 49171 only

Level II Reviewer: [signature] Date: 04/28/2015 Time: 14:00 – 22:08

Comments: _____

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	2149	2122.1	2.82
89	10000	5168	5293.5	2.78
205	10000	6124	6194.7	2.45
156/140	2	0.885 %	0.889 %	17.91
70/140	2	1.083 %	1.030 %	15.92
115	50	14	15.5	56.72
63	1000	483	487.5	7.49
60	1000	260	317.7	25.58
121	50	28	23.1	28.40
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

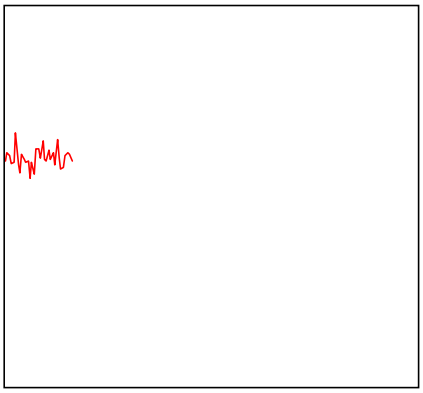
Cell Parameters

Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1187	1201.6	4.25
51	100	44	41.5	23.78
52	200	97	102.5	13.20
51/59	10	3.706 %	3.454 %	22.77
52/59	20	8.169 %	8.556 %	14.59
7	50	11	11.9	40.89
89	2000	1526	1512.5	4.18
205	5000	3572	3627.0	2.50
6	20	2	0.8	147.98
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

US EPA Tune Check Sample Report

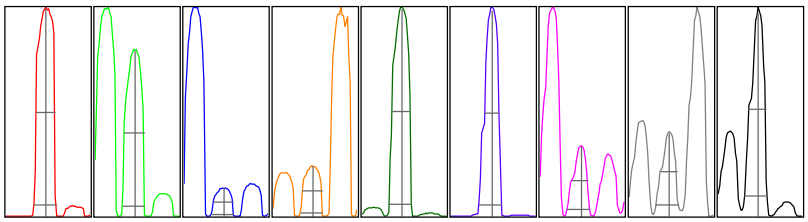
Batch Folder D:\Analytical Runs\I10042715B.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	28696	1.35	5.00	
24	134555	0.69	5.00	
25	18211	1.18	5.00	
26	21149	0.88	5.00	
59	154211	0.69	5.00	
115	297279	0.50	5.00	
206	112683	0.55	5.00	
207	101838	0.49	5.00	
208	235152	0.55	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	29039	29120	28699	28379	28242
24	134888	135701	134995	133722	133469
25	18473	18359	18164	18144	17917
26	21116	21228	21418	21058	20926
59	154560	154898	154843	154420	152335
115	297776	298530	298491	296533	295066
206	112851	113181	112722	113033	111626
207	102283	102370	101603	101757	101177
208	234284	235586	236327	236226	233334

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	4532	8.95	8.9 - 9.1		0.781	0.850	
24	21634	23.95	23.9 - 24.1		0.781	0.850	
25	2914	24.95	24.9 - 25.1		0.784	0.850	
26	3358	25.95	25.9 - 26.1		0.784	0.850	
59	25069	58.95	58.9 - 59.1		0.792	0.850	
115	52891	115.00	114.9 - 115.1		0.808	0.850	
206	20121	206.00	205.9 - 206.1		0.803	0.850	
207	17663	206.95	206.9 - 207.1		0.788	0.850	
208	43365	207.95	207.9 - 208.1		0.788	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

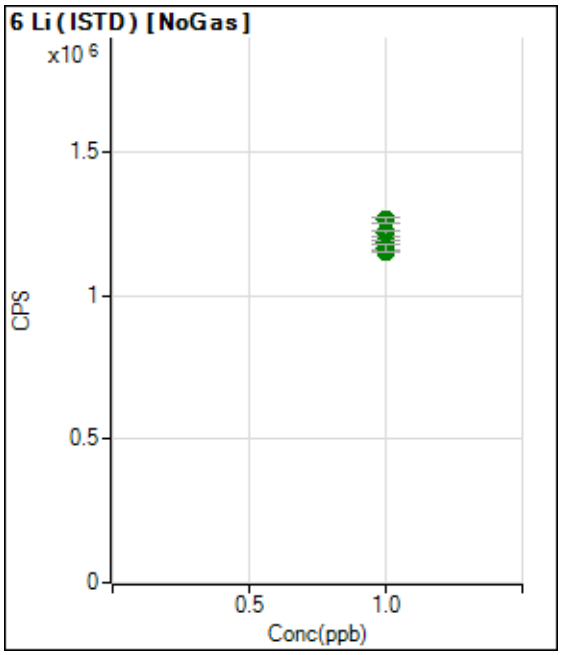
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

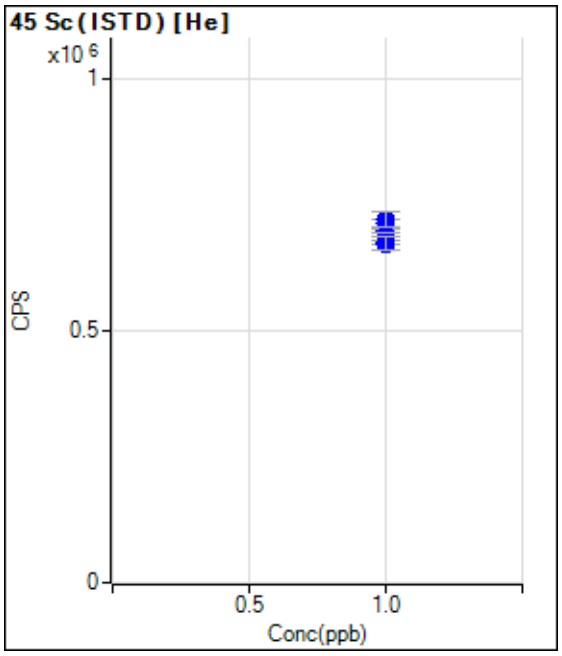
Calibration for 035_CCV.d

Batch Folder: D:\Analytical Runs\I10042715B.b\
Analysis File: I10042715B.batch.bin
DA Date-Time: 4/27/2015 4:11:21 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

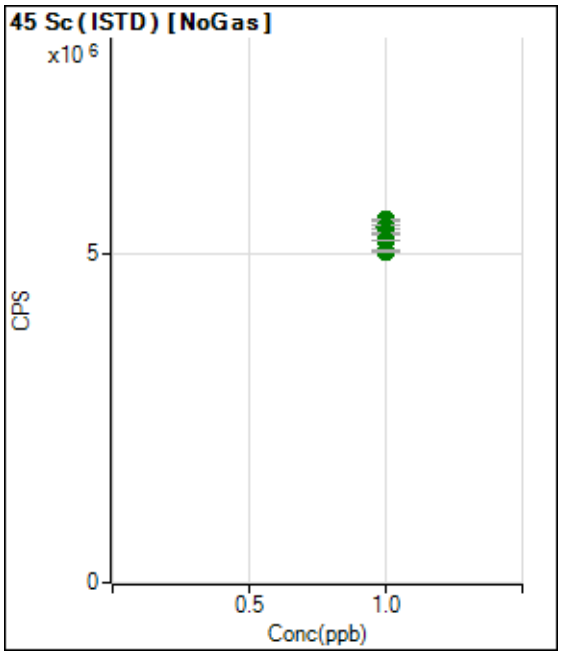
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/27/2015 2:04:11 PM
2	003CALS.d	STD1-1906323	4/27/2015 2:08:02 PM
3	004CALS.d	STD2-1904110	4/27/2015 2:11:49 PM
4	005CALS.d	STD3-1906333	4/27/2015 2:15:37 PM
5	006CALS.d	STD4-1906536	4/27/2015 2:19:33 PM



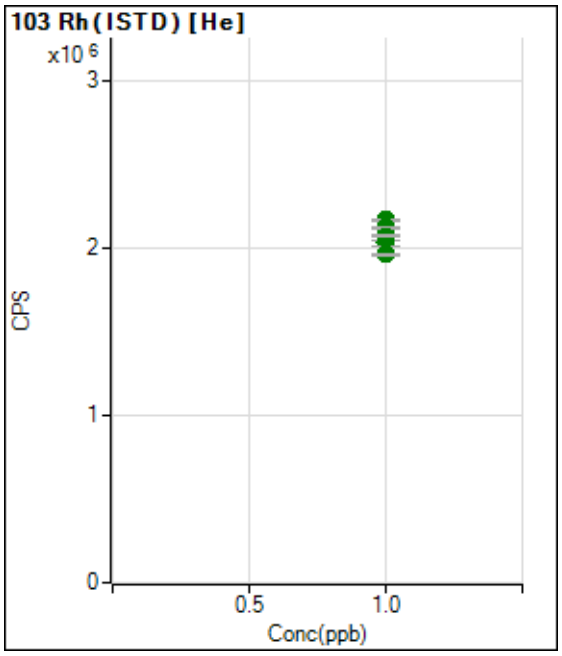
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1263758.73		A	1.4
2	☐	1.000		1218008.27		A	1.7
3	☐	1.000		1184464.92		A	1.3
4	☐	1.000		1155196.28		A	0.5
5	☐	1.000		1164762.67		A	2.3



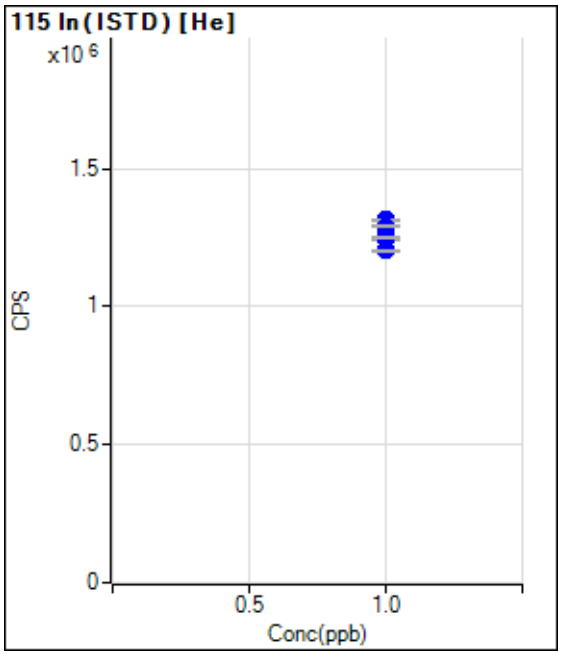
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		699621.97		P	1.0
2	☐	1.000		713004.86		P	2.2
3	☐	1.000		720021.47		P	4.1
4	☐	1.000		676112.60		P	1.4
5	☐	1.000		672923.79		P	3.7



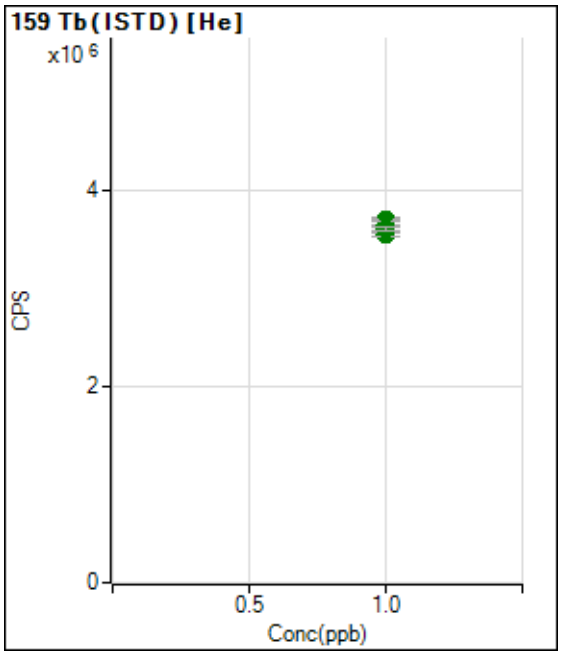
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5515924.50		A	0.5
2	☐	1.000		5395226.87		A	1.1
3	☐	1.000		5310356.04		A	0.3
4	☐	1.000		5209652.43		A	0.3
5	☐	1.000		5036397.86		A	0.7



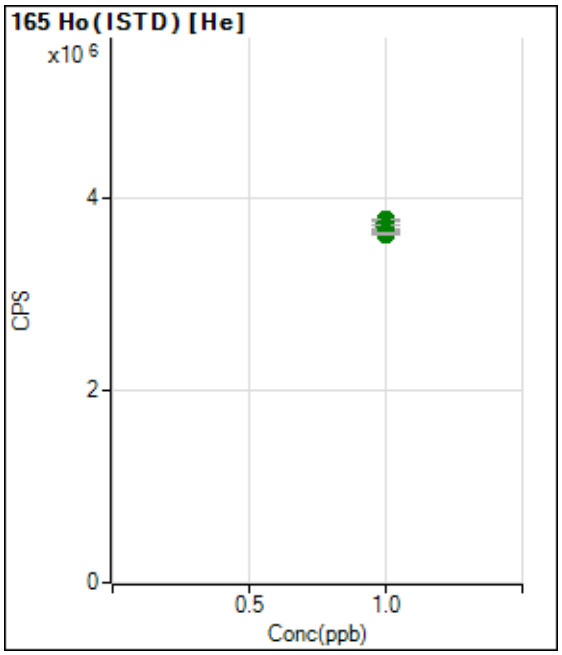
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2170249.15		A	0.7
2	☐	1.000		2123706.93		A	0.4
3	☐	1.000		2033757.49		A	1.6
4	☐	1.000		1962236.59		A	0.6
5	☐	1.000		2075817.91		A	0.7



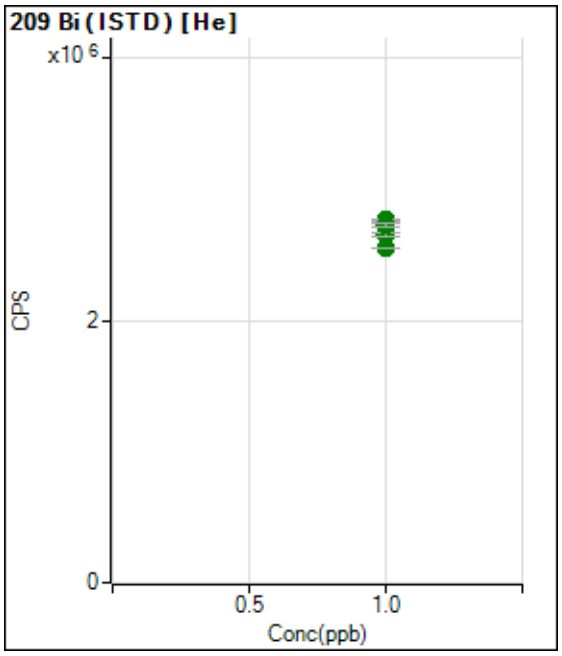
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1314134.78		P	0.2
2	☐	1.000		1291408.21		P	0.2
3	☐	1.000		1246885.89		P	0.6
4	☐	1.000		1201565.83		P	0.5
5	☐	1.000		1252960.30		P	0.5



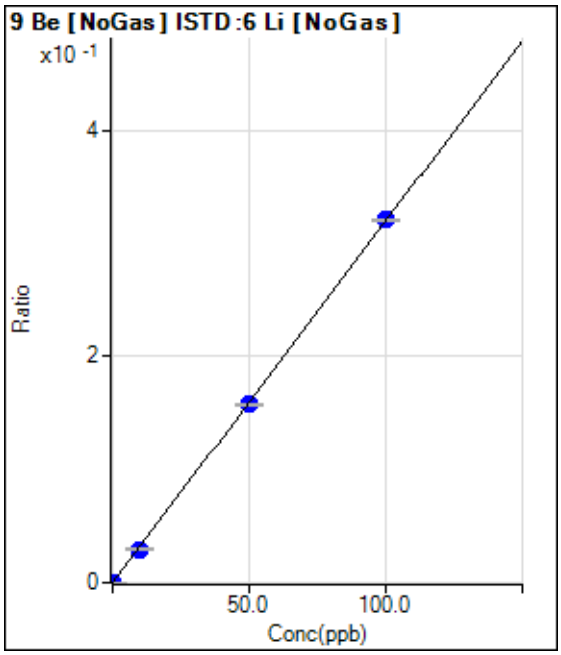
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3680733.61		A	2.0
2	☐	1.000		3696742.49		A	0.4
3	☐	1.000		3647592.63		A	1.5
4	☐	1.000		3544217.91		A	1.4
5	☐	1.000		3598622.77		A	1.1



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3781772.07		A	0.6
2	☐	1.000		3753665.41		A	1.6
3	☐	1.000		3705747.07		A	0.9
4	☐	1.000		3654613.33		A	0.9
5	☐	1.000		3633888.61		A	0.7



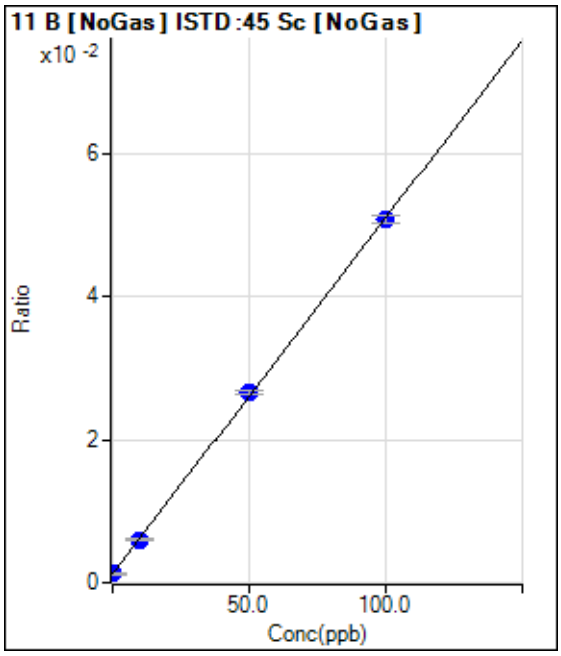
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2765316.97		A	0.8
2	☐	1.000		2737723.71		A	1.9
3	☐	1.000		2655830.86		A	1.2
4	☐	1.000		2548065.59		A	0.2
5	☐	1.000		2722814.61		A	1.1



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92.60	0.0001	P	42.8
2	☐	10.000	9.262	36144.03	0.0297	P	0.9
3	☐	50.000	49.292	186677.44	0.1576	P	0.5
4	☐	100.000	100.428	370860.76	0.3210	P	0.7
5	☐			255.57	0.0002	P	24.0

y = 0.0032 * x + 7.3356E-005
R = 0.9999
DL = 0.02949
BEC = 0.02295

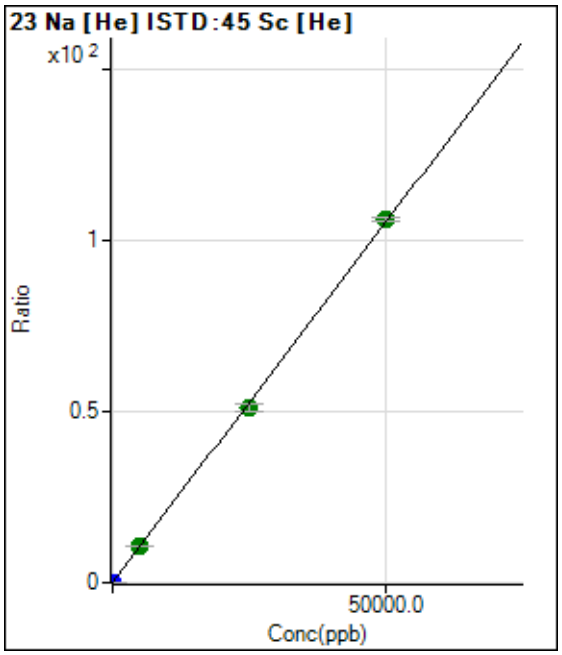
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6742.26	0.0012	P	4.6
2	☐	10.000	9.671	32514.79	0.0060	P	2.1
3	☐	50.000	51.028	141139.70	0.0266	P	2.2
4	☐			7557.45	0.0015	P	11.3
5	☐	100.000	99.519	255187.43	0.0507	P	2.0

y = 4.9689E-004 * x + 0.0012
R = 0.9999
DL = 0.3389
BEC = 2.46

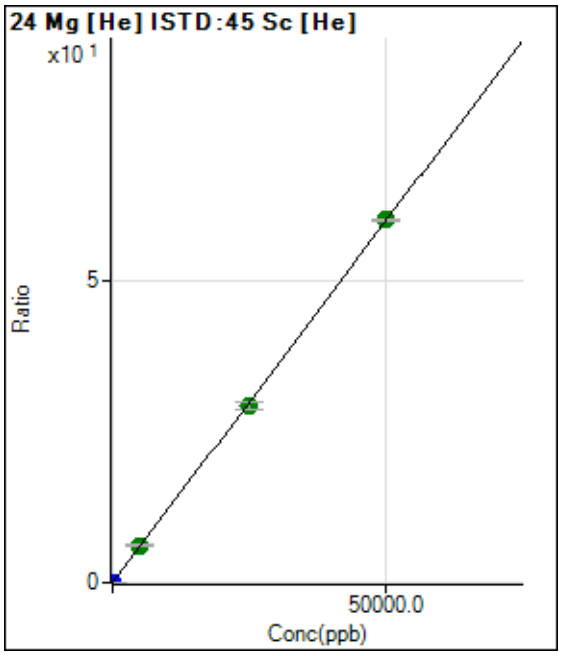
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18150.26	0.0260	P	4.1
2	☐	5000.000	5072.887	7622869.61	10.6929	A	1.1
3	☐	25000.000	24265.104	36713810.58	51.0490	A	4.3
4	☐	50000.000	50360.159	71606780.49	105.9198	A	1.1
5	☐			35576.44	0.0528	P	7.9

y = 0.0021 * x + 0.0260
R = 0.9998
DL = 1.51
BEC = 12.34

Weight: <None>
Min Conc: <None>

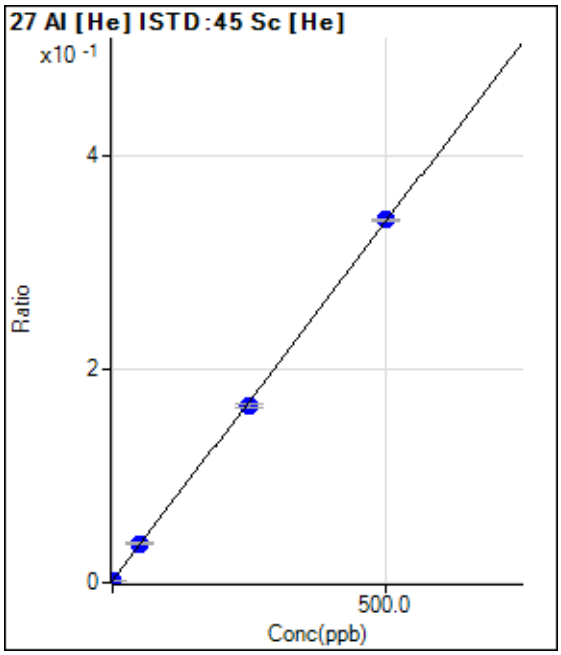


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1992.80	0.0028	P	10.1
2	☐	5000.000	5164.107	4397737.10	6.1679	A	1.1
3	☐	25000.000	24473.485	21019089.91	29.2201	A	3.5
4	☐	50000.000	50246.847	40560872.46	59.9893	A	0.5
5	☐			7335.17	0.0109	P	18.6

y = 0.0012 * x + 0.0028
R = 0.9999
DL = 0.7244
BEC = 2.386

Weight: <None>
Min Conc: <None>

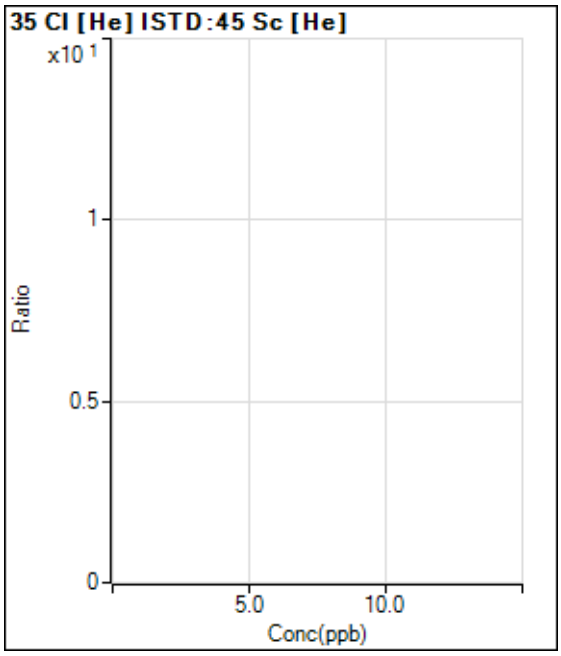
Calibration for 035_CCV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1373.41	0.0020	P	7.6
2	☐	50.000	51.863	26265.43	0.0368	P	1.0
3	☐	250.000	243.651	119282.75	0.1658	P	2.9
4	☐	500.000	502.988	229991.62	0.3402	P	0.3
5	☐			2220.16	0.0033	P	4.8

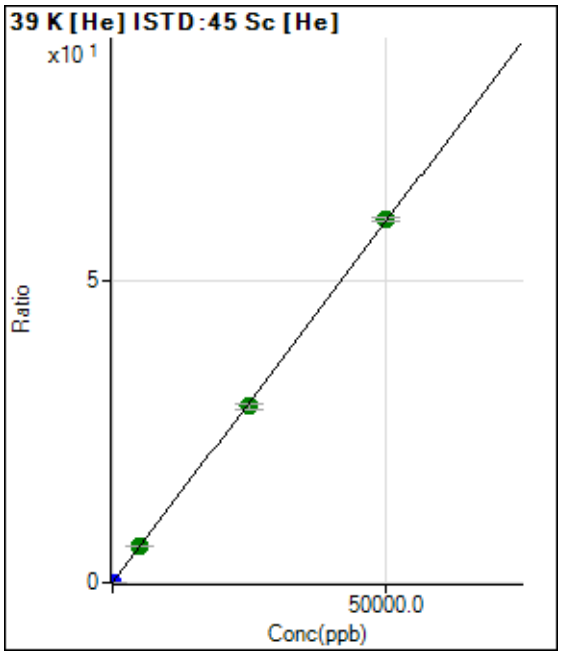
y = 6.7239E-004 * x + 0.0020
R = 0.9998
DL = 0.6692
BEC = 2.921

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			10882784.75	15.5558	A	0.7
2	☐			11309745.15	15.8634	A	0.6
3	☐			11153331.27	15.5037	A	3.3
4	☐			10729736.84	15.8711	A	1.0
5	☐			11334850.71	16.8598	A	3.8

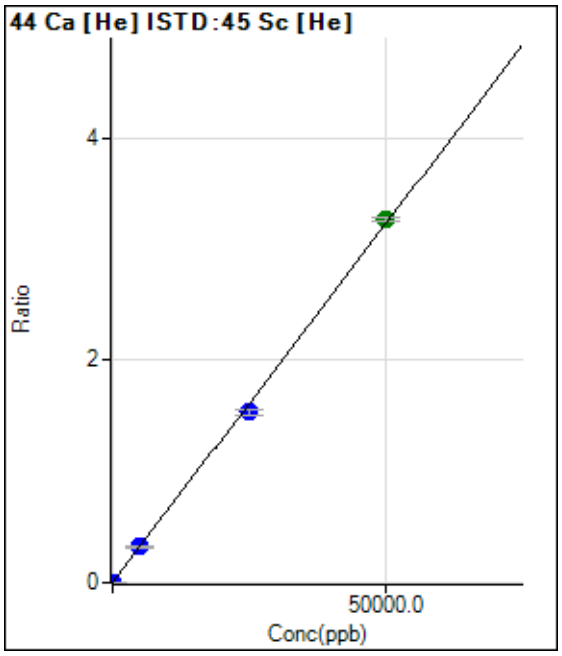
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33157.01	0.0474	P	2.1
2	☐	5000.000	5082.464	4362549.60	6.1193	A	1.2
3	☐	25000.000	24439.291	21035855.65	29.2443	A	3.6
4	☐	50000.000	50272.108	40634792.83	60.1061	A	1.1
5	☐			38564.15	0.0573	P	2.5

y = 0.0012 * x + 0.0474
R = 0.9999
DL = 2.447
BEC = 39.67

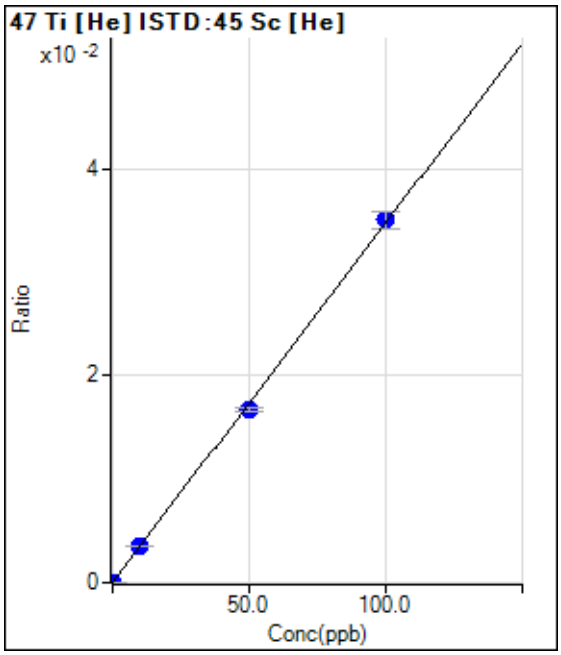
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	869.11	0.0012	P	6.7
2	☐	5000.000	4957.557	228944.73	0.3211	P	0.5
3	☐	25000.000	23786.463	1105138.22	1.5360	P	2.8
4	☐	50000.000	50611.013	2208907.24	3.2669	A	1.1
5	☐			1049.66	0.0016	P	4.1

y = 6.4524E-005 * x + 0.0012
R = 0.9995
DL = 3.869
BEC = 19.24

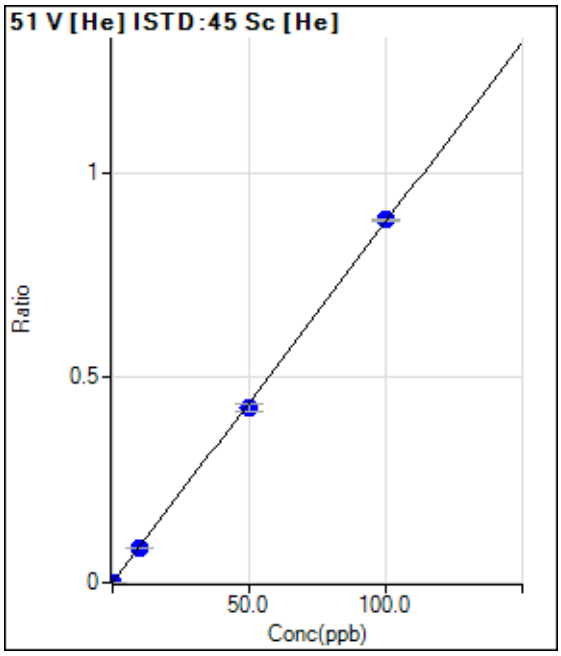
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	58.7
2	☐	10.000	10.290	2559.10	0.0036	P	0.1
3	☐	50.000	48.059	12025.19	0.0167	P	2.9
4	☐			20.00	0.0000	P	60.3
5	☐	100.000	100.941	23579.84	0.0351	P	5.1

y = 3.4742E-004 * x + 1.4346E-005
R = 0.9996
DL = 0.07266
BEC = 0.04129

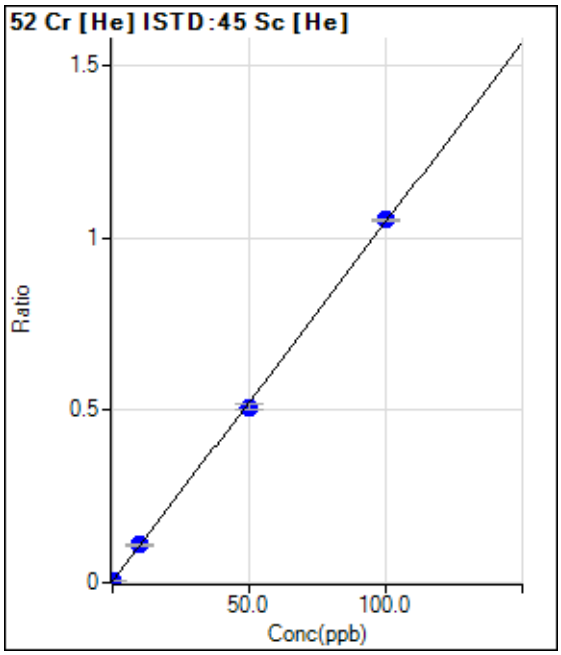
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	264.00	0.0004	P	241.5
2	☐	10.000	9.626	60565.37	0.0850	P	3.7
3	☐	50.000	48.734	308258.70	0.4286	P	4.2
4	☐	100.000	100.671	598382.10	0.8850	P	0.5
5	☐			369.90	0.0005	P	81.9

y = 0.0088 * x + 3.7638E-004
R = 0.9999
DL = 0.3104
BEC = 0.04283

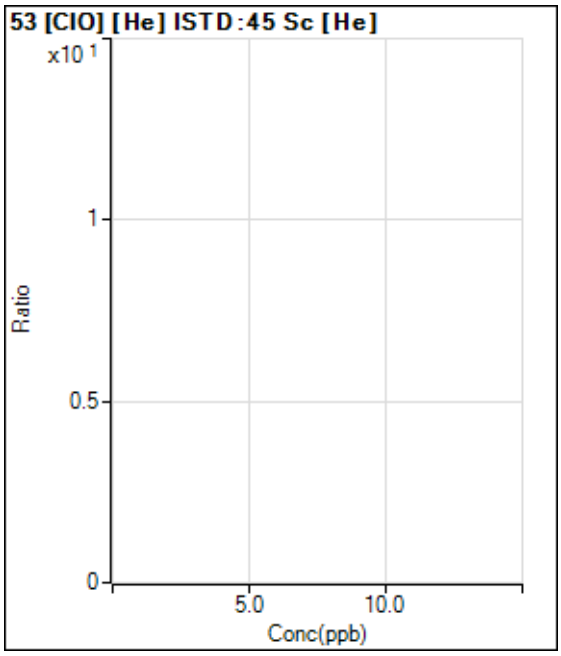
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2200.17	0.0031	P	1.4
2	☐	10.000	10.155	77759.84	0.1091	P	0.7
3	☐	50.000	48.623	367125.16	0.5103	P	3.2
4	☐	100.000	100.673	712074.24	1.0532	P	0.6
5	☐			3192.56	0.0047	P	6.1

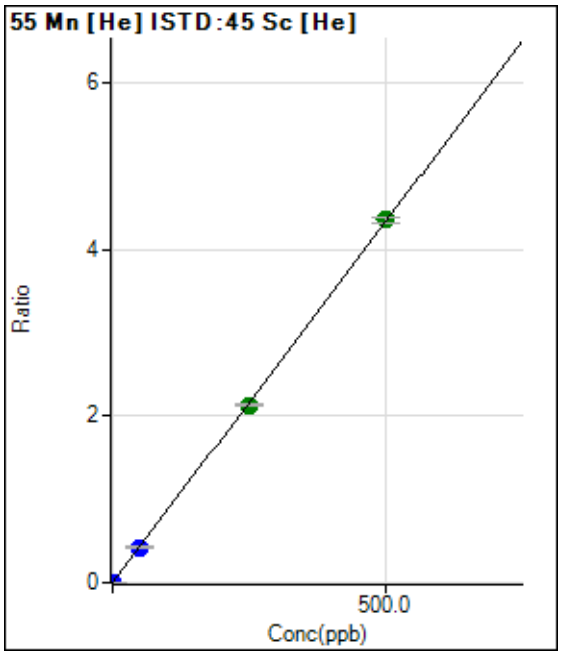
y = 0.0104 * x + 0.0031
R = 0.9998
DL = 0.013
BEC = 0.3015

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			781.55	0.0011	P	20.9
2	☐			10169.94	0.0143	P	3.9
3	☐			44719.75	0.0621	P	3.0
4	☐			87230.96	0.1290	P	1.7
5	☐			711.16	0.0011	P	9.6

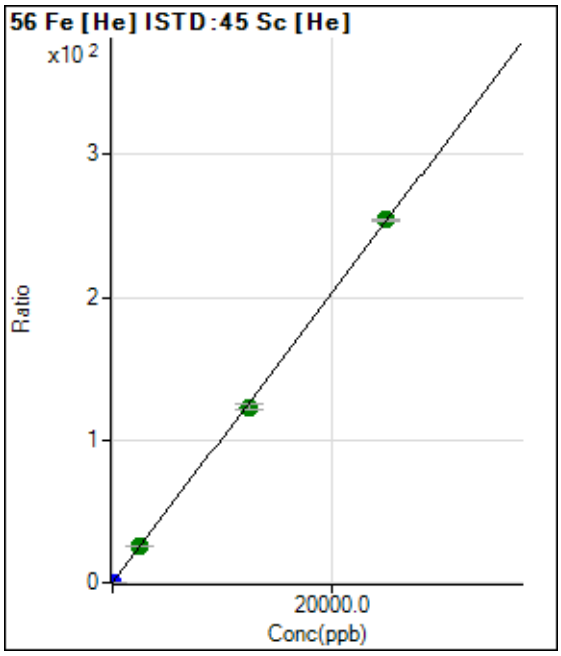
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1111.16	0.0016	P	1.4
2	☐	50.000	48.966	303847.52	0.4261	P	0.9
3	☐	250.000	245.109	1530897.93	2.1267	A	1.1
4	☐	500.000	502.549	2946722.59	4.3588	A	1.6
5	☐			1587.87	0.0024	P	10.6

y = 0.0087 * x + 0.0016
R = 0.9999
DL = 0.007725
BEC = 0.1832

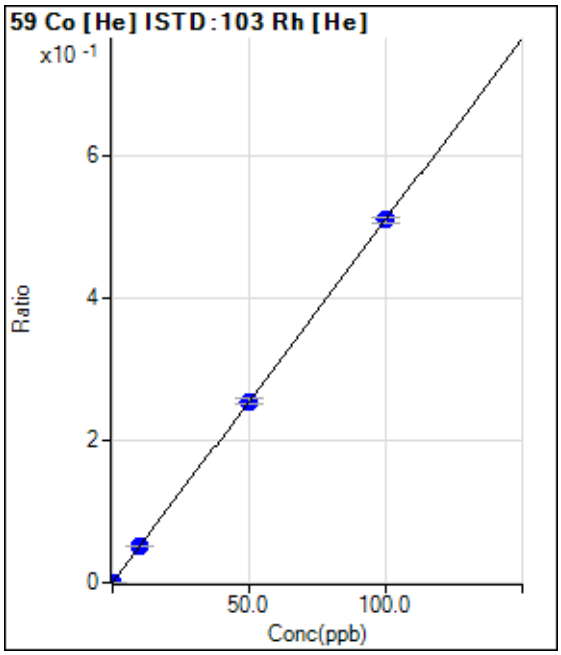
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7278.23	0.0104	P	1.1
2	☐	2500.000	2554.692	18416462.60	25.8333	A	1.2
3	☐	12500.000	12192.727	88675763.14	123.2550	A	3.2
4	☐	25000.000	25148.167	171866619.84	254.2092	A	0.7
5	☐			276695.34	0.4090	P	21.9

y = 0.0101 * x + 0.0104
R = 0.9999
DL = 0.03378
BEC = 1.029

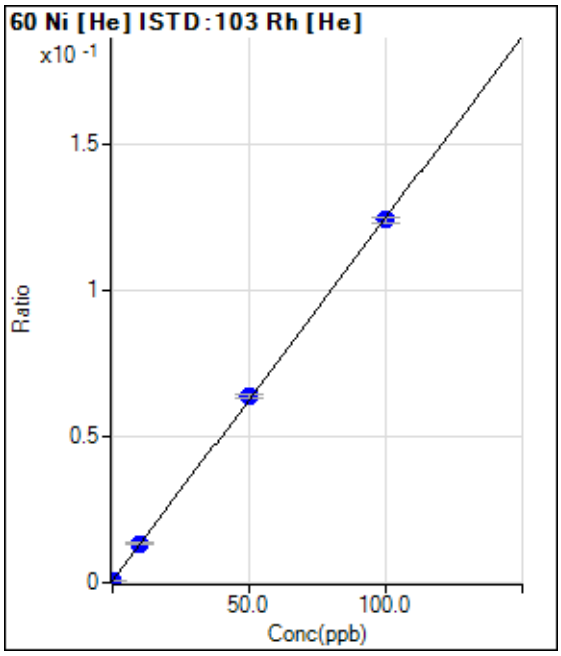
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	70.00	0.0000	P	17.8
2	☐	10.000	10.104	109303.05	0.0515	P	1.5
3	☐	50.000	50.006	517641.85	0.2546	P	2.8
4	☐	100.000	99.986	998782.15	0.5090	P	1.5
5	☐			185.56	0.0001	P	15.8

y = 0.0051 * x + 3.2277E-005
R = 1.0000
DL = 0.00338
BEC = 0.00634

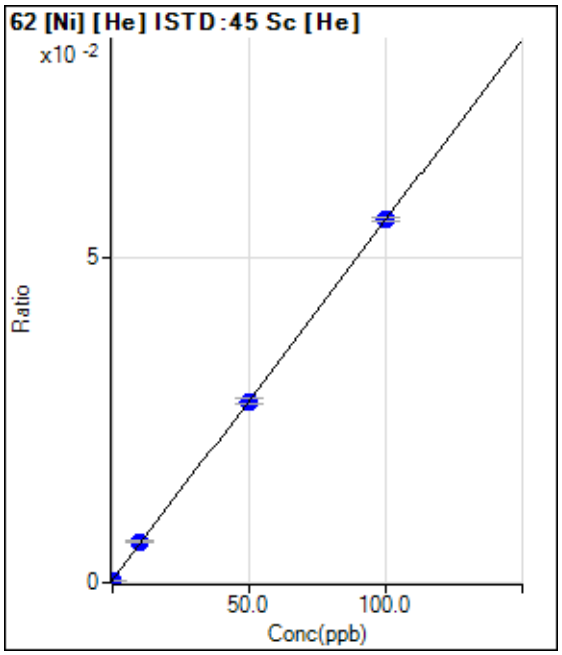
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1293.40	0.0006	P	5.0
2	☐	10.000	10.316	28448.10	0.0134	P	2.8
3	☐	50.000	50.983	129838.23	0.0639	P	2.7
4	☐	100.000	99.477	243367.01	0.1240	P	1.7
5	☐			1100.05	0.0005	P	3.4

y = 0.0012 * x + 5.9610E-004
R = 0.9999
DL = 0.07275
BEC = 0.4804

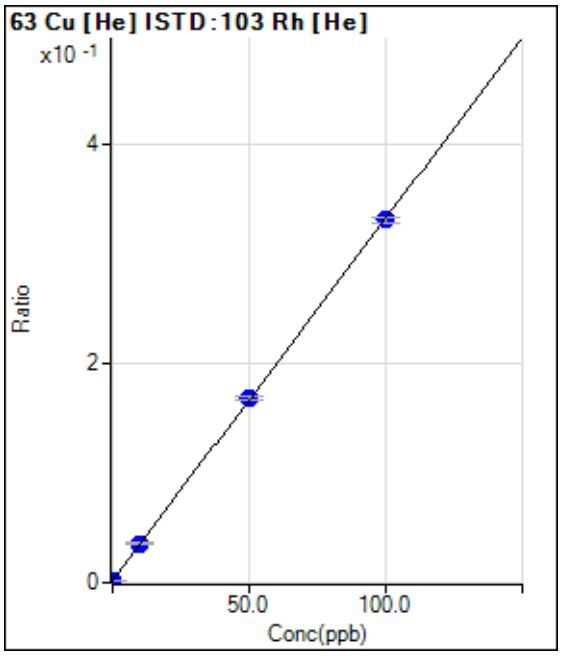
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	262.23	0.0004	P	1.0
2	☐	10.000	10.769	4519.52	0.0063	P	5.2
3	☐	50.000	49.702	20071.37	0.0279	P	3.1
4	☐	100.000	100.072	37718.37	0.0558	P	1.1
5	☐			297.78	0.0004	P	7.7

y = 5.5377E-004 * x + 3.7479E-004
R = 1.0000
DL = 0.02023
BEC = 0.6768

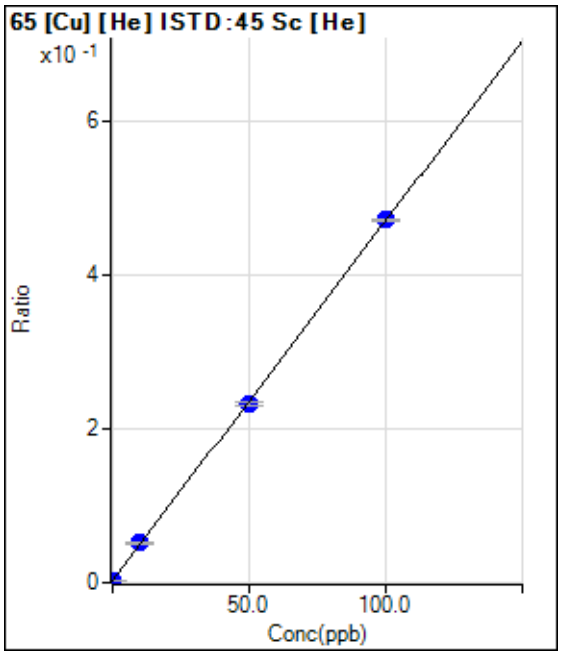
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3800.45	0.0018	P	0.9
2	☐	10.000	10.304	75944.67	0.0358	P	1.8
3	☐	50.000	50.591	343110.32	0.1687	P	2.3
4	☐	100.000	99.674	648988.51	0.3308	P	1.4
5	☐			3822.68	0.0018	P	2.0

y = 0.0033 * x + 0.0018
R = 1.0000
DL = 0.0146
BEC = 0.5305

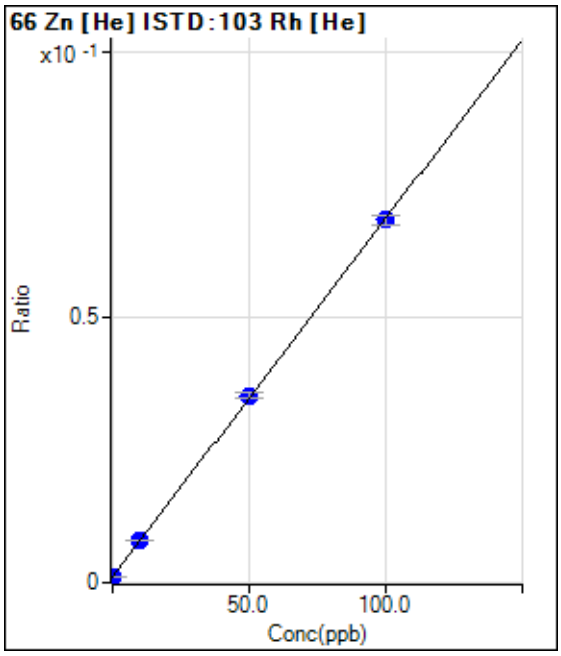
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	1826.78	0.0026	P	4.3
2		10.000	10.464	36715.42	0.0515	P	1.4
3		50.000	49.252	167471.03	0.2327	P	2.3
4		100.000	100.328	318694.15	0.4714	P	0.5
5				1841.24	0.0027	P	7.3

y = 0.0047 * x + 0.0026
R = 0.9999
DL = 0.07289
BEC = 0.559

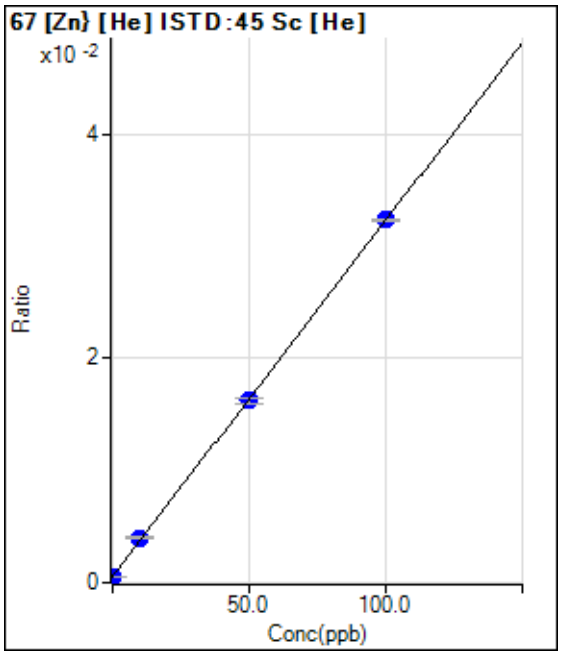
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	2363.52	0.0011	P	9.7
2		10.000	10.060	16714.58	0.0079	P	2.1
3		50.000	50.573	71526.97	0.0352	P	2.9
4		100.000	99.708	134010.03	0.0683	P	2.9
5				2115.71	0.0010	P	12.5

y = 6.7411E-004 * x + 0.0011
R = 1.0000
DL = 0.4694
BEC = 1.616

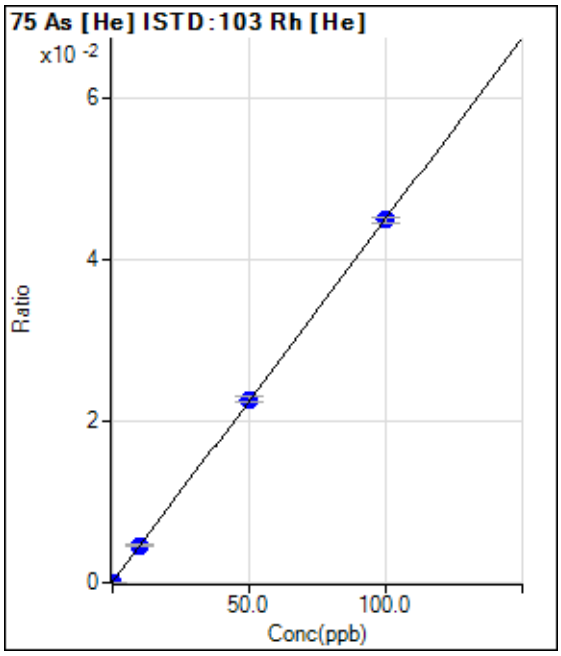
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	383.34	0.0005	P	16.1
2	☐	10.000	10.814	2838.04	0.0040	P	4.0
3	☐	50.000	49.389	11676.15	0.0162	P	2.8
4	☐	100.000	100.224	21882.41	0.0324	P	0.7
5	☐			354.45	0.0005	P	24.9

y = 3.1748E-004 * x + 5.4734E-004
R = 0.9999
DL = 0.8322
BEC = 1.724

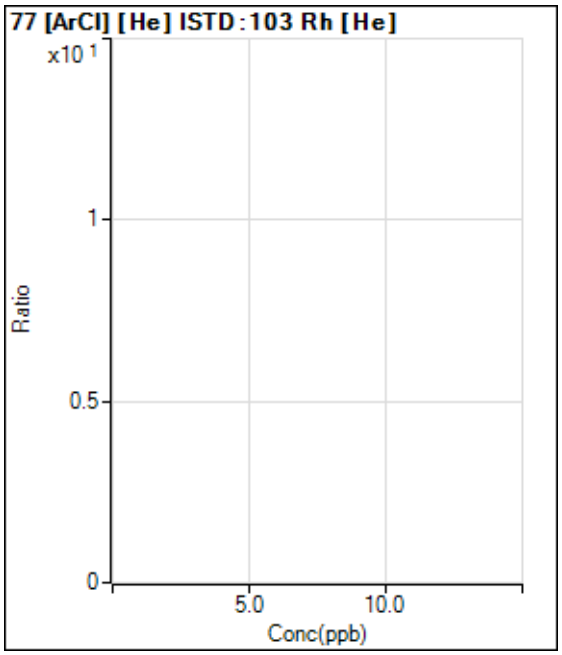
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.37	0.0000	P	14.0
2	☐	10.000	10.121	9779.39	0.0046	P	2.9
3	☐	50.000	50.386	46225.19	0.0227	P	2.5
4	☐	100.000	99.795	88253.90	0.0450	P	1.9
5	☐			460.98	0.0002	P	11.2

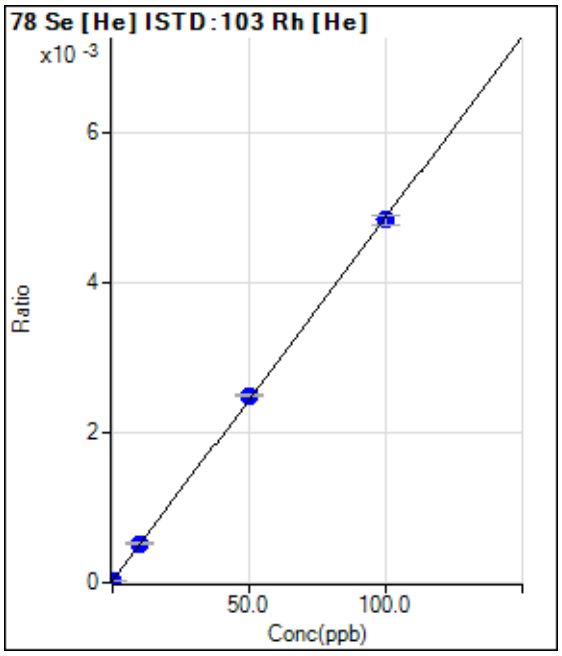
y = 4.5024E-004 * x + 4.8527E-005
R = 1.0000
DL = 0.04511
BEC = 0.1078

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			29.63	0.0000	P	115.0
2	☐			340.76	0.0002	P	27.4
3	☐			1663.13	0.0008	P	8.2
4	☐			2767.03	0.0014	P	11.4
5	☐			25.93	0.0000	P	173.2

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	49.25	0.0000	P	6.7
2	☐	10.000	10.230	1098.54	0.0005	P	3.6
3	☐	50.000	51.079	5068.88	0.0025	P	0.8
4	☐	100.000	99.438	9477.31	0.0048	P	2.9
5	☐			89.89	0.0000	P	6.4

y = 4.8349E-005 * x + 2.2700E-005

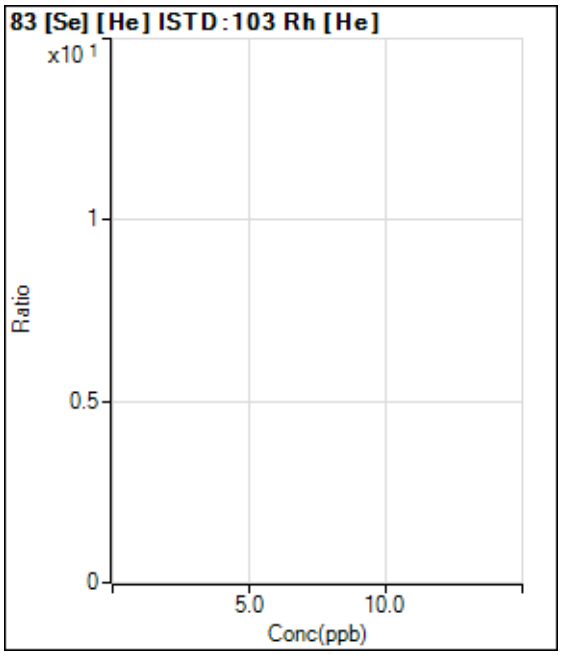
R = 0.9999

DL = 0.09442

BEC = 0.4695

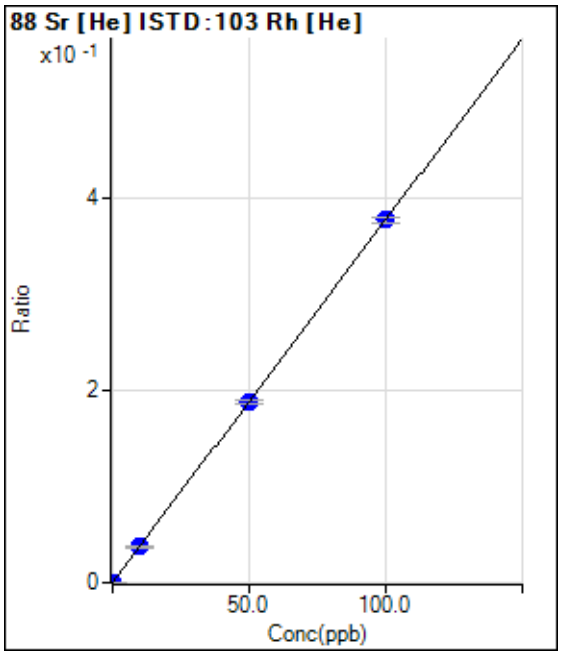
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			73.07	0.0000	P	21.7
2	☐			86.20	0.0000	P	17.2
3	☐			65.66	0.0000	P	14.8
4	☐			64.99	0.0000	P	9.9
5	☐			76.43	0.0000	P	12.9

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	135.56	0.0001	P	28.9
2	☐	10.000	9.874	79378.58	0.0374	P	2.3
3	☐	50.000	49.923	383784.37	0.1887	P	2.1
4	☐	100.000	100.051	742062.47	0.3782	P	1.7
5	☐			247.78	0.0001	P	17.4

y = 0.0038 * x + 6.2497E-005

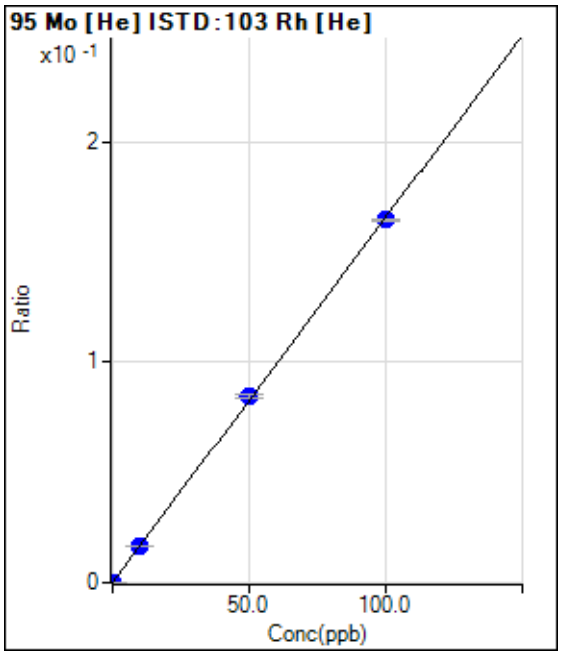
R = 1.0000

DL = 0.01433

BEC = 0.01654

Weight: <None>

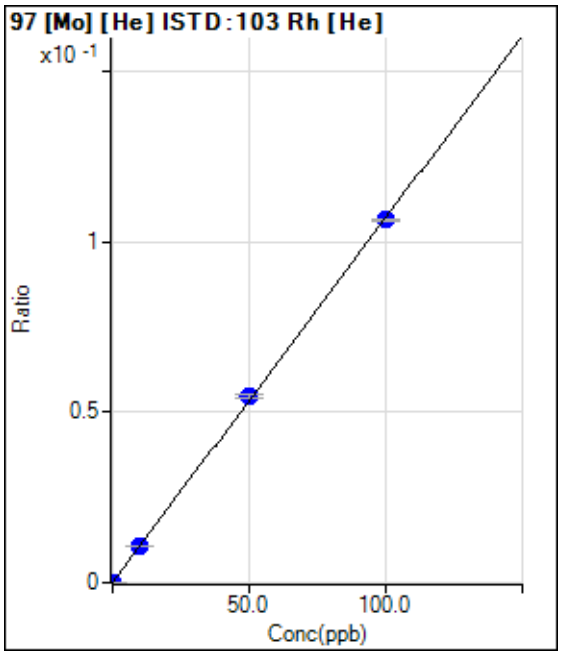
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	53.33	0.0000	P	33.2
2	☐	10.000	10.031	35304.51	0.0166	P	1.1
3	☐	50.000	51.122	172088.03	0.0846	P	1.6
4	☐			3432.62	0.0018	P	18.3
5	☐	100.000	99.436	341631.76	0.1646	P	0.7

y = 0.0017 * x + 2.4576E-005
R = 0.9999
DL = 0.01477
BEC = 0.01485

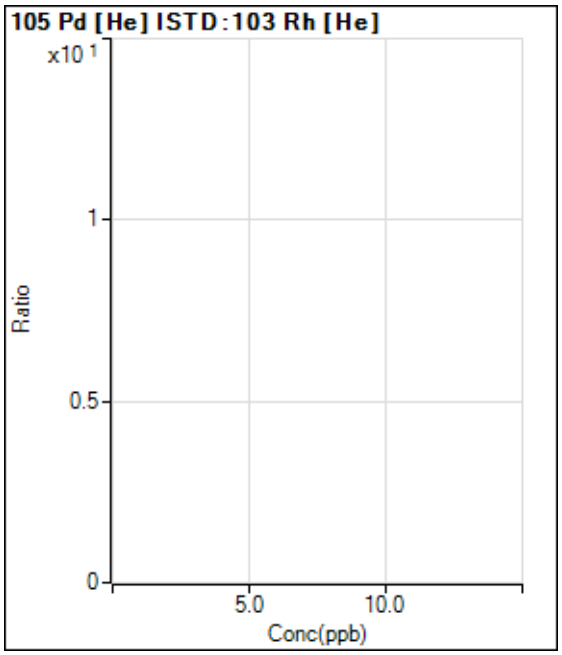
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51.85	0.0000	P	54.4
2	☐	10.000	9.845	22430.11	0.0106	P	1.2
3	☐	50.000	50.992	111036.92	0.0546	P	2.3
4	☐			1844.64	0.0009	P	20.8
5	☐	100.000	99.520	221188.68	0.1066	P	0.3

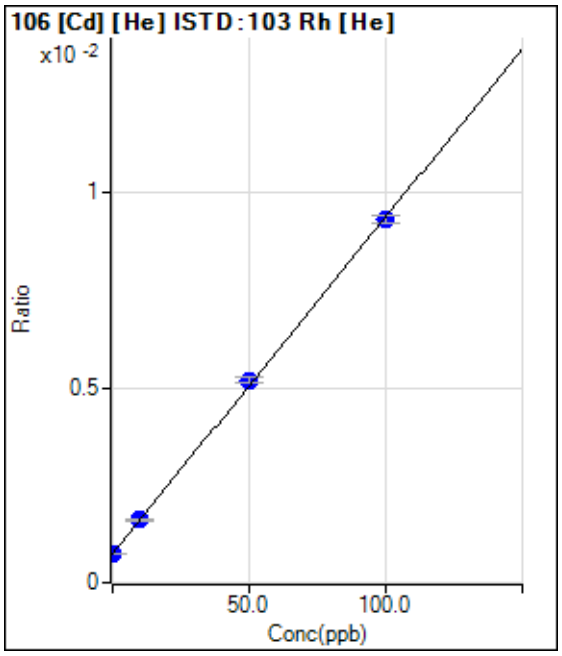
y = 0.0011 * x + 2.3950E-005
R = 0.9999
DL = 0.0365
BEC = 0.02237

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1629.79	0.0008	P	8.2
2	☐			1692.78	0.0008	P	2.0
3	☐			2085.43	0.0010	P	2.3
4	☐			2152.09	0.0011	P	6.1
5	☐			1337.15	0.0006	P	6.6

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1607.15	0.0007	P	1.4
2	☐	10.000	10.178	3437.73	0.0016	P	3.0
3	☐	50.000	51.550	10549.01	0.0052	P	2.9
4	☐	100.000	99.207	18248.61	0.0093	P	2.2
5	☐			1760.70	0.0008	P	3.7

y = 8.6286E-005 * x + 7.4053E-004

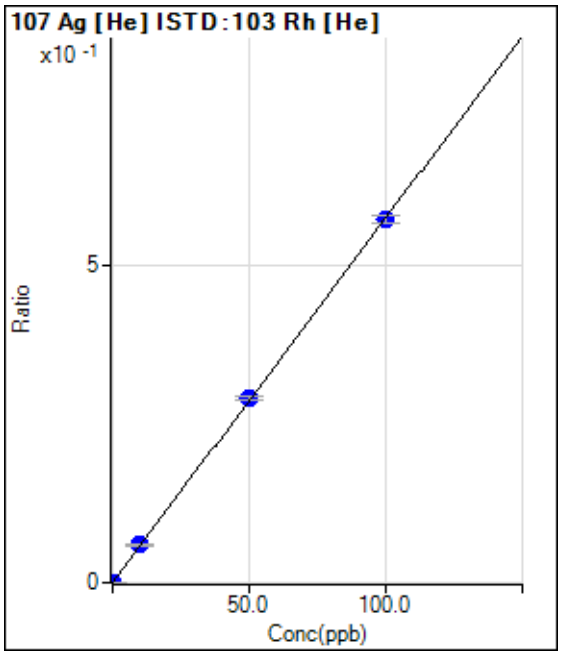
R = 0.9998

DL = 0.371

BEC = 8.582

Weight: <None>

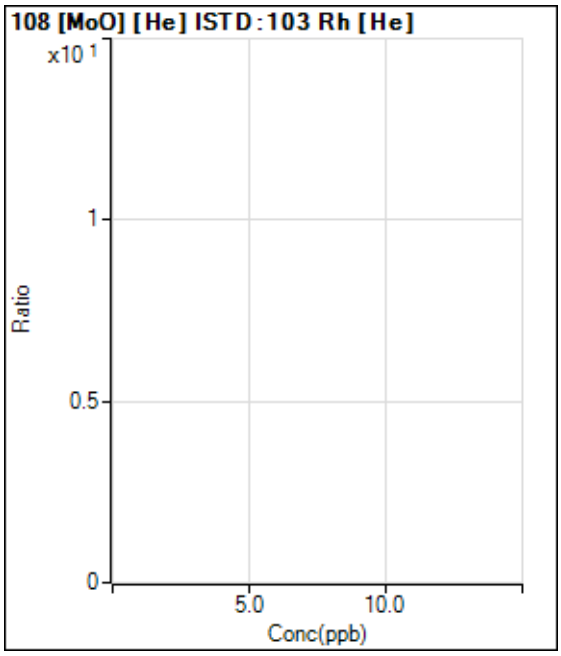
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.67	0.0000	P	44.4
2	☐	10.000	10.375	126717.49	0.0597	P	2.4
3	☐	50.000	50.750	593426.33	0.2918	P	2.0
4	☐	100.000	99.588	1123642.25	0.5727	P	2.1
5	☐			302.23	0.0001	P	28.7

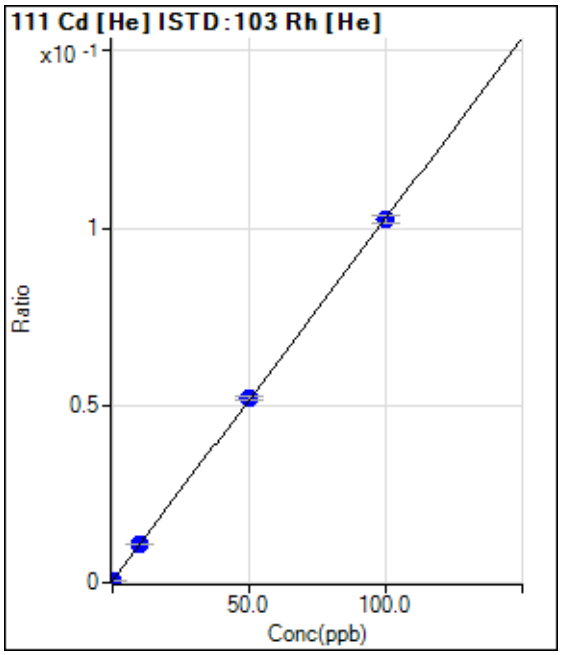
y = 0.0058 * x + 1.2267E-005
R = 0.9999
DL = 0.002843
BEC = 0.002133

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			0.00	0.0000	P	
2	☐			1281.60	0.0006	P	4.3
3	☐			6831.31	0.0034	P	2.8
4	☐			12130.78	0.0062	P	5.0
5	☐			174.08	0.0001	P	49.5

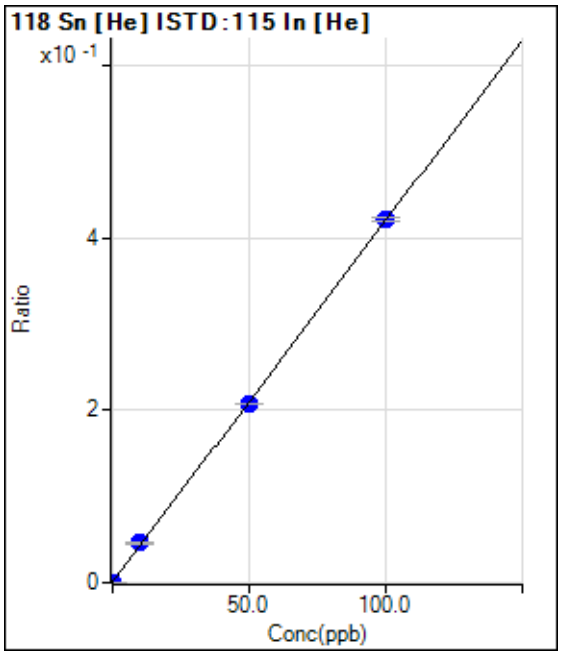
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1229.88	0.0006	P	1.4
2	☐	10.000	10.232	23367.35	0.0110	P	1.7
3	☐	50.000	50.552	106006.72	0.0521	P	2.2
4	☐	100.000	99.701	200660.13	0.1023	P	2.1
5	☐			1313.61	0.0006	P	4.9

y = 0.0010 * x + 5.6670E-004
R = 1.0000
DL = 0.02283
BEC = 0.5556

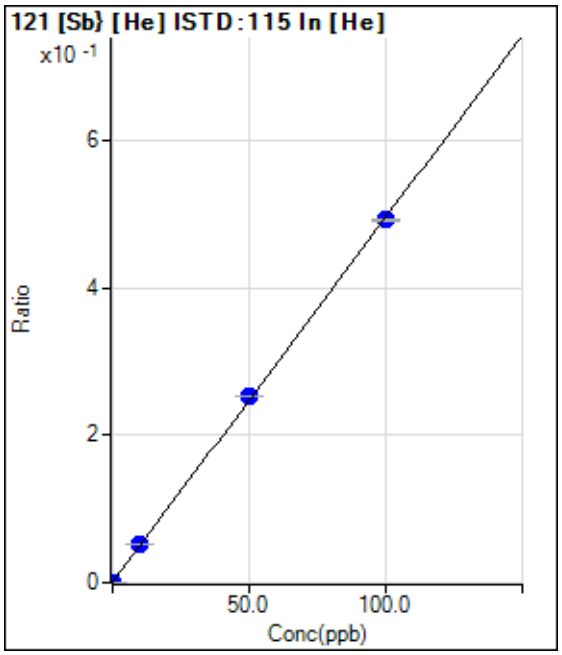
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	874.14	0.0007	P	17.9
2	☐	10.000	10.834	59474.74	0.0461	P	2.8
3	☐	50.000	49.327	258500.22	0.2073	P	1.0
4	☐			4171.11	0.0035	P	6.4
5	☐	100.000	100.253	527070.00	0.4207	P	1.2

y = 0.0042 * x + 6.6530E-004
R = 0.9999
DL = 0.08546
BEC = 0.1588

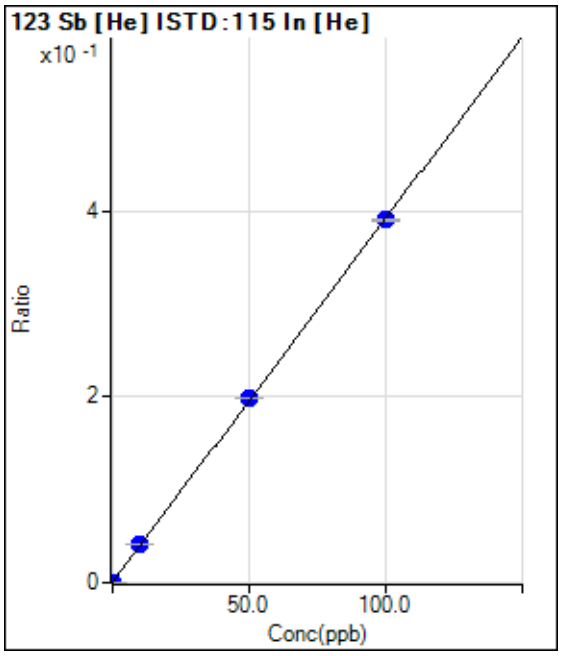
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	374.46	0.0003	P	7.8
2	☐	10.000	10.418	66909.80	0.0518	P	1.2
3	☐	50.000	51.115	315576.18	0.2531	P	0.6
4	☐			3979.41	0.0033	P	11.8
5	☐	100.000	99.401	616339.61	0.4919	P	0.4

y = 0.0049 * x + 2.8496E-004
R = 0.9999
DL = 0.01357
BEC = 0.05761

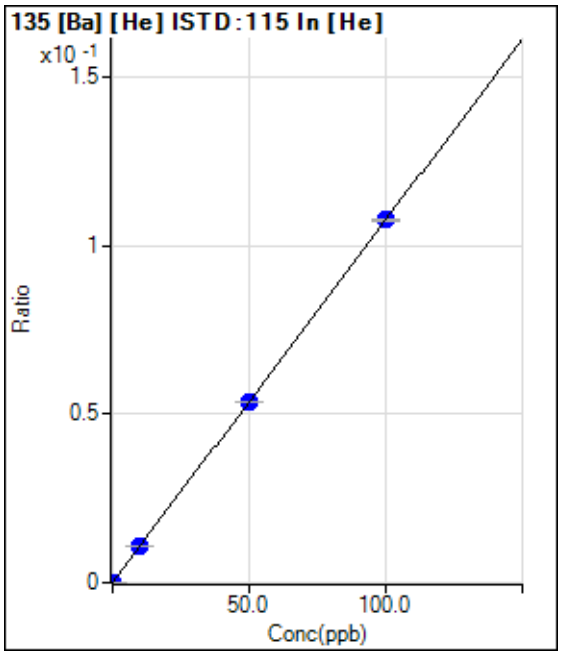
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	331.12	0.0003	P	25.4
2	☐	10.000	10.496	53400.65	0.0414	P	2.0
3	☐	50.000	50.548	247112.03	0.1982	P	0.4
4	☐			3140.33	0.0026	P	11.8
5	☐	100.000	99.677	489338.54	0.3906	P	0.6

y = 0.0039 * x + 2.5191E-004
R = 1.0000
DL = 0.04909
BEC = 0.06433

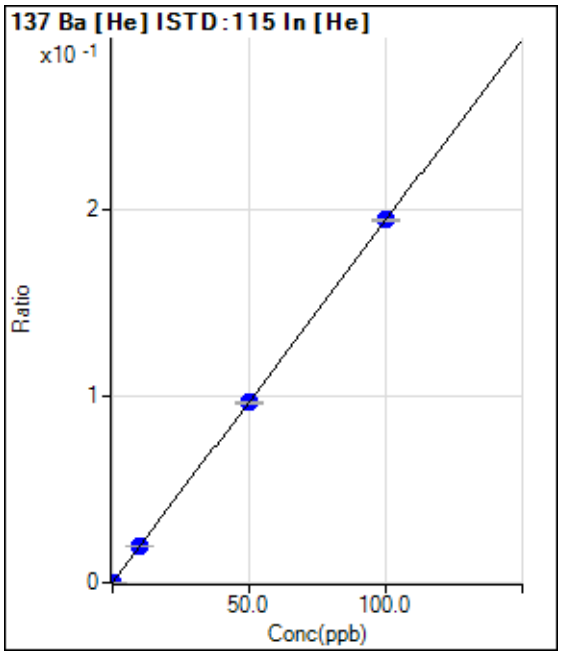
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	48.89	0.0000	P	20.8
2	☐	10.000	10.071	14033.72	0.0109	P	2.1
3	☐	50.000	49.712	66700.24	0.0535	P	0.4
4	☐	100.000	100.137	129429.00	0.1077	P	0.6
5	☐			74.45	0.0001	P	44.8

y = 0.0011 * x + 3.7201E-005
R = 1.0000
DL = 0.02159
BEC = 0.0346

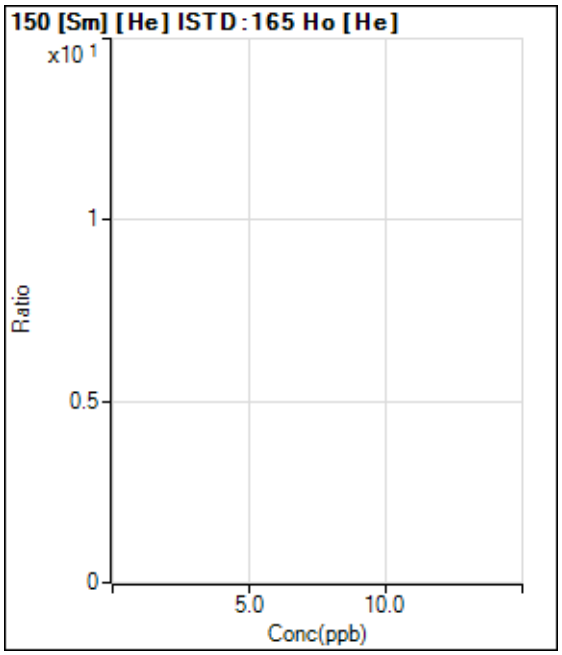
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	65.55	0.0000	P	25.4
2	☐	10.000	9.991	25156.57	0.0195	P	2.6
3	☐	50.000	49.659	120475.99	0.0966	P	0.5
4	☐	100.000	100.171	234139.12	0.1949	P	0.7
5	☐			221.12	0.0002	P	17.6

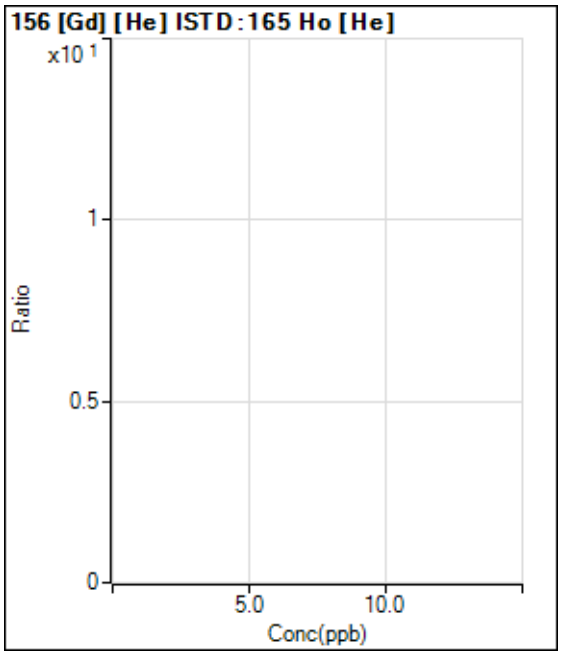
y = 0.0019 * x + 4.9867E-005
R = 1.0000
DL = 0.01954
BEC = 0.02564

Weight: <None>
Min Conc: <None>



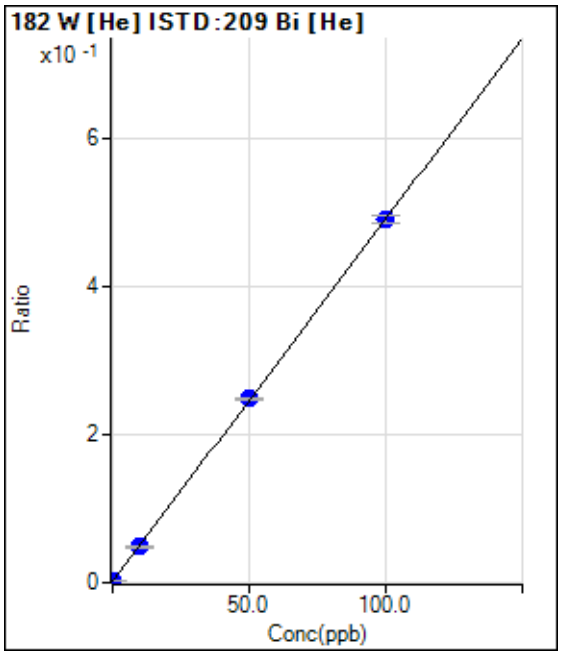
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			8.00	0.0000	P	24.8
2	☐			8.00	0.0000	P	66.5
3	☐			20.00	0.0000	P	45.5
4	☐			29.33	0.0000	P	38.9
5	☐			3.33	0.0000	P	125.4

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			17.33	0.0000	P	52.8
2	☐			21.33	0.0000	P	48.4
3	☐			25.33	0.0000	P	29.8
4	☐			26.67	0.0000	P	30.6
5	☐			7.33	0.0000	P	15.9

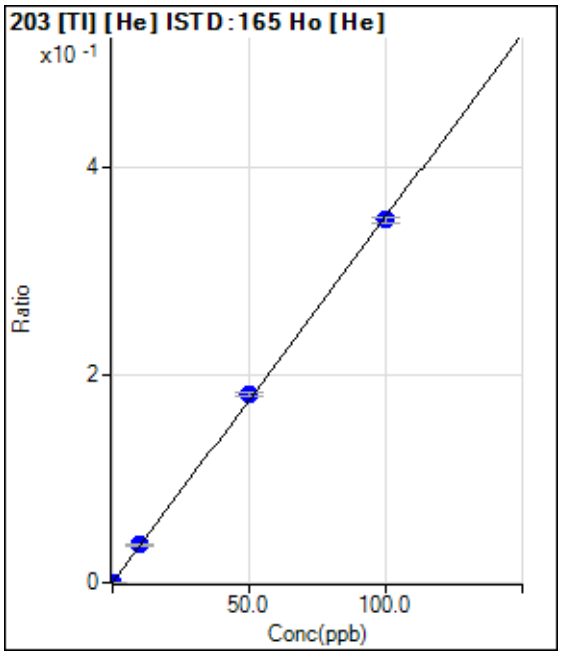
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3937.68	0.0014	P	7.2
2	☐	10.000	9.544	131733.78	0.0481	P	4.0
3	☐	50.000	50.405	658974.46	0.2482	P	1.9
4	☐			17158.03	0.0067	P	12.6
5	☐	100.000	99.843	1334372.40	0.4901	P	2.1

y = 0.0049 * x + 0.0014
R = 1.0000
DL = 0.06284
BEC = 0.291

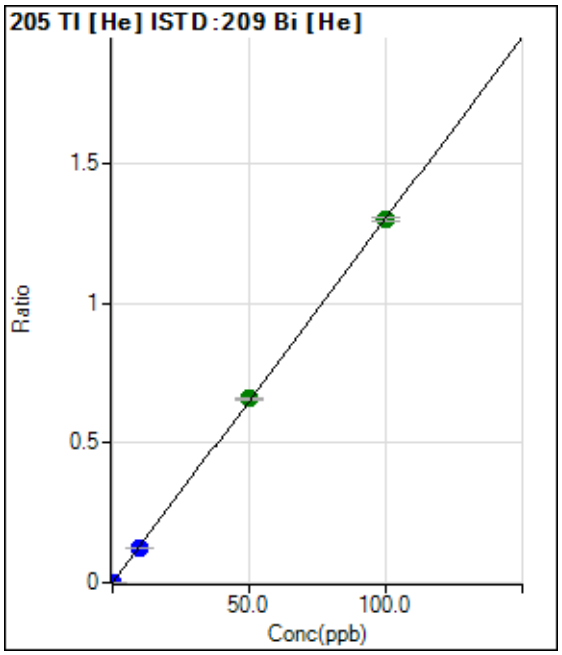
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	48.15	0.0000	P	93.5
2	☐	10.000	10.335	136855.69	0.0365	P	3.0
3	☐	50.000	51.558	673973.48	0.1819	P	1.7
4	☐	100.000	99.187	1278693.67	0.3499	P	1.3
5	☐			1903.93	0.0005	P	16.0

y = 0.0035 * x + 1.2780E-005
R = 0.9998
DL = 0.01016
BEC = 0.003623

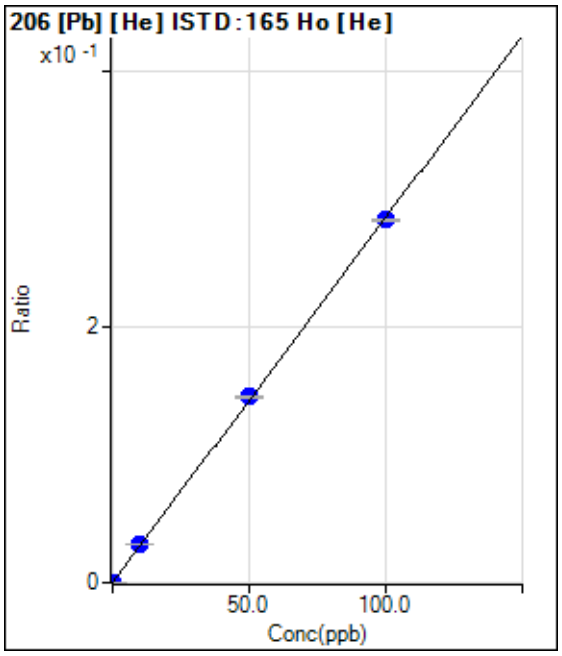
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	82.23	0.0000	P	26.4
2	☐	10.000	9.508	339261.85	0.1239	P	1.0
3	☐	50.000	50.648	1753090.31	0.6601	A	0.9
4	☐	100.000	99.725	3311652.37	1.2997	A	1.1
5	☐			3588.25	0.0013	P	29.1

y = 0.0130 * x + 2.9695E-005
R = 0.9999
DL = 0.001803
BEC = 0.002279

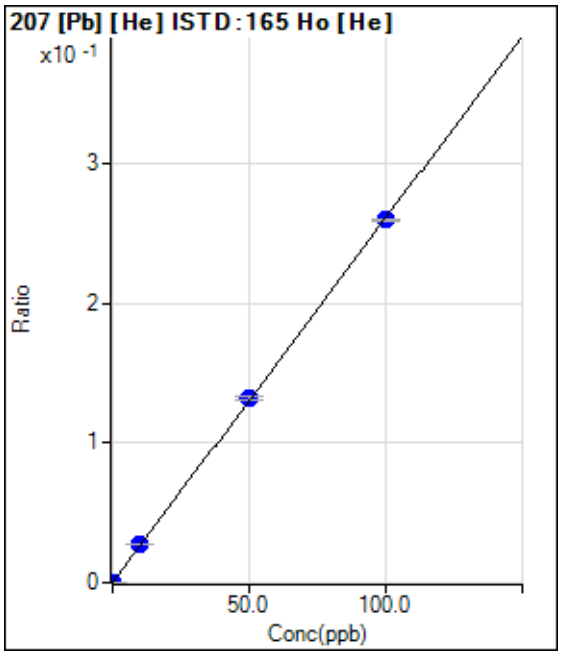
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	254.45	0.0001	P	9.4
2	☐	10.000	10.615	114023.80	0.0304	P	2.2
3	☐	50.000	50.933	539246.02	0.1455	P	1.4
4	☐	100.000	99.472	1038440.76	0.2841	P	0.5
5	☐			746.70	0.0002	P	11.8

y = 0.0029 * x + 6.7310E-005
R = 0.9999
DL = 0.006621
BEC = 0.02357

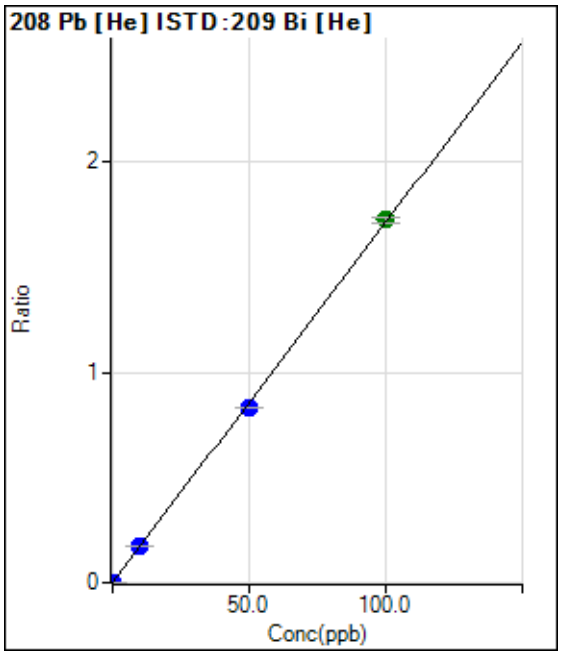
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	228.89	0.0001	P	17.9
2	☐	10.000	10.605	104088.76	0.0277	P	1.8
3	☐	50.000	50.715	490551.08	0.1324	P	1.6
4	☐	100.000	99.582	949775.87	0.2599	P	0.8
5	☐			707.81	0.0002	P	2.5

y = 0.0026 * x + 6.0513E-005
R = 0.9999
DL = 0.01246
BEC = 0.02319

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1100.03	0.0004	P	7.9
2	☐	10.000	9.936	467381.02	0.1707	P	0.6
3	☐	50.000	48.606	2214023.02	0.8337	P	0.7
4	☐	100.000	100.703	4399895.08	1.7268	A	1.9
5	☐			3175.74	0.0012	P	3.0

y = 0.0171 * x + 3.9791E-004
R = 0.9998
DL = 0.005533
BEC = 0.02321

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:00:23-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	174	20.19
B	11	45	2	NoGas	7320	0.05
Na	23	45	1	He	18347	0.02
Mg	24	45	1	He	1867	0.20
Al	27	45	1	He	1653	0.26
K	39	45	1	He	32935	0.00
Ca	44	45	1	He	783	0.44
Ti	47	45	1	He	16	286.79
V	51	45	1	He	177	268.82
Cr	52	45	1	He	2226	0.24
Mn	55	45	1	He	1128	1.16
Fe	56	45	1	He	7937	0.05
Co	59	103	1	He	80	32.52
Ni	60	103	1	He	1383	0.40
Cu	63	103	1	He	3991	0.04
Zn	66	103	1	He	2337	0.11
As	75	103	1	He	108	6.67
Se	78	103	1	He	50	19.38
Sr	88	103	1	He	124	8.70
Mo	95	103	1	He	354	3.97
Ag	107	103	1	He	16	420.82
Cd	111	103	1	He	1312	0.18
Sn	118	115	1	He	911	2.10
Sb	123	115	1	He	350	5.19
Ba	137	115	1	He	80	36.46
W	182	209	1	He	3967	0.10
Tl	205	209	1	He	140	0.00
Pb	208	209	1	He	1087	0.37

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1239552	2.51
Sc	45	1	He	690491	1.06
Sc	45	2	NoGas	5456368	1.65
Rh	103	1	He	2165579	2.78
In	115	1	He	1325590	0.25
Tb	159	1	He	3726101	0.31
Ho	165	1	He	3819237	1.34
Bi	209	1	He	2758498	0.79

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:04:11-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	93	45.51
B	11	45	2	NoGas	6742	0.07
Na	23	45	1	He	18150	0.02
Mg	24	45	1	He	1993	0.52
Al	27	45	1	He	1373	0.49
K	39	45	1	He	33157	0.00
Ca	44	45	1	He	869	0.88
Ti	47	45	1	He	10	576.97
V	51	45	1	He	264	91.37
Cr	52	45	1	He	2200	0.06
Mn	55	45	1	He	1111	0.22
Fe	56	45	1	He	7278	0.01
Co	59	103	1	He	70	24.52
Ni	60	103	1	He	1293	0.34
Cu	63	103	1	He	3800	0.03
Zn	66	103	1	He	2364	0.41
As	75	103	1	He	105	13.74
Se	78	103	1	He	49	12.49
Sr	88	103	1	He	136	21.03
Mo	95	103	1	He	53	62.00
Ag	107	103	1	He	27	169.00
Cd	111	103	1	He	1230	0.13
Sn	118	115	1	He	874	2.04
Sb	123	115	1	He	331	7.73
Ba	137	115	1	He	66	39.04
W	182	209	1	He	3938	0.16
Tl	205	209	1	He	82	32.83
Pb	208	209	1	He	1100	0.68

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1263759	1.40
Sc	45	1	He	699622	1.02
Sc	45	2	NoGas	5515925	0.47
Rh	103	1	He	2170249	0.66
In	115	1	He	1314135	0.19
Tb	159	1	He	3680734	2.04
Ho	165	1	He	3781772	0.65
Bi	209	1	He	2765317	0.77

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:08:02-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	36144	0.01
B	11	2	NoGas	32515	0.00
Na	23	1	He	7622870	0.00
Mg	24	1	He	4397737	0.00
Al	27	1	He	26265	0.01
K	39	1	He	4362550	0.00
Ca	44	1	He	228945	0.00
Ti	47	1	He	2559	0.08
V	51	1	He	60565	0.01
Cr	52	1	He	77760	0.00
Mn	55	1	He	303848	0.00
Fe	56	1	He	18416463	0.00
Co	59	1	He	109303	0.00
Ni	60	1	He	28448	0.01
Cu	63	1	He	75945	0.00
Zn	66	1	He	16715	0.01
As	75	1	He	9779	0.03
Se	78	1	He	1099	0.29
Sr	88	1	He	79379	0.00
Mo	95	1	He	35305	0.00
Ag	107	1	He	126717	0.00
Cd	111	1	He	23367	0.01
Sn	118	1	He	59475	0.00
Sb	123	1	He	53401	0.00
Ba	137	1	He	25157	0.01
W	182	1	He	131734	0.00
Tl	205	1	He	339262	0.00
Pb	208	1	He	467381	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1218008	1.66	1263759	96.38	30	120	
Sc	45	1	He	713005	2.20	699622	101.91	30	120	
Sc	45	2	NoGas	5395227	1.10	5515925	97.81	30	120	
Rh	103	1	He	2123707	0.43	2170249	97.86	30	120	
In	115	1	He	1291408	0.19	1314135	98.27	30	120	
Tb	159	1	He	3696742	0.38	3680734	100.43	30	120	
Ho	165	1	He	3753665	1.64	3781772	99.26	30	120	
Bi	209	1	He	2737724	1.89	2765317	99.00	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:11:49-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	186677	0.00
B	11	2	NoGas	141140	0.00
Na	23	1	He	36713811	0.00
Mg	24	1	He	21019090	0.00
Al	27	1	He	119283	0.00
K	39	1	He	21035856	0.00
Ca	44	1	He	1105138	0.00
Ti	47	1	He	12025	0.02
V	51	1	He	308259	0.00
Cr	52	1	He	367125	0.00
Mn	55	1	He	1530898	0.00
Fe	56	1	He	88675763	0.00
Co	59	1	He	517642	0.00
Ni	60	1	He	129838	0.00
Cu	63	1	He	343110	0.00
Zn	66	1	He	71527	0.00
As	75	1	He	46225	0.00
Se	78	1	He	5069	0.04
Sr	88	1	He	383784	0.00
Mo	95	1	He	172088	0.00
Ag	107	1	He	593426	0.00
Cd	111	1	He	106007	0.00
Sn	118	1	He	258500	0.00
Sb	123	1	He	247112	0.00
Ba	137	1	He	120476	0.00
W	182	1	He	658974	0.00
Tl	205	1	He	1753090	0.00
Pb	208	1	He	2214023	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1184465	1.27	1263759	93.73	30	120	
Sc	45	1	He	720021	4.06	699622	102.92	30	120	
Sc	45	2	NoGas	5310356	0.30	5515925	96.27	30	120	
Rh	103	1	He	2033757	1.63	2170249	93.71	30	120	
In	115	1	He	1246886	0.58	1314135	94.88	30	120	
Tb	159	1	He	3647593	1.45	3680734	99.10	30	120	
Ho	165	1	He	3705747	0.86	3781772	97.99	30	120	
Bi	209	1	He	2655831	1.16	2765317	96.04	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:15:37-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	370861	0.00
B	11	2	NoGas	7557	0.15
Na	23	1	He	71606780	0.00
Mg	24	1	He	40560872	0.00
Al	27	1	He	229992	0.00
K	39	1	He	40634793	0.00
Ca	44	1	He	2208907	0.00
Ti	47	1	He	20	300.40
V	51	1	He	598382	0.00
Cr	52	1	He	712074	0.00
Mn	55	1	He	2946723	0.00
Fe	56	1	He	171866620	0.00
Co	59	1	He	998782	0.00
Ni	60	1	He	243367	0.00
Cu	63	1	He	648989	0.00
Zn	66	1	He	134010	0.00
As	75	1	He	88254	0.00
Se	78	1	He	9477	0.02
Sr	88	1	He	742062	0.00
Mo	95	1	He	3433	0.52
Ag	107	1	He	1123642	0.00
Cd	111	1	He	200660	0.00
Sn	118	1	He	4171	0.14
Sb	123	1	He	3140	0.38
Ba	137	1	He	234139	0.00
W	182	1	He	17158	0.07
Tl	205	1	He	3311652	0.00
Pb	208	1	He	4399895	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1155196	0.49	1263759	91.41	30	120	
Sc	45	1	He	676113	1.36	699622	96.64	30	120	
Sc	45	2	NoGas	5209652	0.30	5515925	94.45	30	120	
Rh	103	1	He	1962237	0.65	2170249	90.42	30	120	
In	115	1	He	1201566	0.54	1314135	91.43	30	120	
Tb	159	1	He	3544218	1.37	3680734	96.29	30	120	
Ho	165	1	He	3654613	0.86	3781772	96.64	30	120	
Bi	209	1	He	2548066	0.18	2765317	92.14	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:19:33-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	256	10.35
B	11	2	NoGas	255187	0.00
Na	23	1	He	35576	0.03
Mg	24	1	He	7335	0.30
Al	27	1	He	2220	0.09
K	39	1	He	38564	0.01
Ca	44	1	He	1050	0.10
Ti	47	1	He	23580	0.01
V	51	1	He	370	21.96
Cr	52	1	He	3193	0.25
Mn	55	1	He	1588	0.91
Fe	56	1	He	276695	0.01
Co	59	1	He	186	8.78
Ni	60	1	He	1100	0.36
Cu	63	1	He	3823	0.04
Zn	66	1	He	2116	0.61
As	75	1	He	461	2.58
Se	78	1	He	90	7.92
Sr	88	1	He	248	7.29
Mo	95	1	He	341632	0.00
Ag	107	1	He	302	9.72
Cd	111	1	He	1314	0.42
Sn	118	1	He	527070	0.00
Sb	123	1	He	489339	0.00
Ba	137	1	He	221	7.99
W	182	1	He	1334372	0.00
Tl	205	1	He	3588	0.81
Pb	208	1	He	3176	0.11

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1164763	2.30	1263759	92.17	30	120	
Sc	45	1	He	672924	3.75	699622	96.18	30	120	
Sc	45	2	NoGas	5036398	0.70	5515925	91.31	30	120	
Rh	103	1	He	2075818	0.71	2170249	95.65	30	120	
In	115	1	He	1252960	0.46	1314135	95.34	30	120	
Tb	159	1	He	3598623	1.12	3680734	97.77	30	120	
Ho	165	1	He	3633889	0.74	3781772	96.09	30	120	
Bi	209	1	He	2722815	1.14	2765317	98.46	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:23:27-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	41.093	1.720	156302	1.31	40	102.7	89.5	110.5	
B	11	45	NoGas	43.491	2.522	121497	1.68	40	108.7	89.5	110.5	
Na	23	45	He	20998.261	2.418	30348877	1.23	20000	105.0	89.5	110.5	
Mg	24	45	He	21055.832	1.550	17271253	0.82	20000	105.3	89.5	110.5	
Al	27	45	He	208.007	1.409	97434	0.18	200	104.0	89.5	110.5	
K	39	45	He	20794.106	1.847	17098347	0.51	20000	104.0	89.5	110.5	
Ca	44	45	He	19822.296	0.596	879599	0.84	20000	99.1	89.5	110.5	
Ti	47	45	He	41.638	2.109	9947	0.85	40	104.1	89.5	110.5	
V	51	45	He	40.600	1.710	245347	0.51	40	101.5	89.5	110.5	
Cr	52	45	He	40.988	1.343	295876	0.79	40	102.5	89.5	110.5	
Mn	55	45	He	196.495	1.657	1171475	0.37	200	98.2	89.5	110.5	
Fe	56	45	He	10429.103	2.147	72424190	0.86	10000	104.3	89.5	110.5	
Co	59	103	He	40.183	1.155	414448	0.26	40	100.5	89.5	110.5	
Ni	60	103	He	41.254	1.659	104906	0.78	40	103.1	89.5	110.5	
Cu	63	103	He	41.013	0.977	277791	0.58	40	102.5	89.5	110.5	
Zn	66	103	He	41.226	0.288	58506	0.64	40	103.1	89.5	110.5	
As	75	103	He	40.323	1.365	36875	0.49	40	100.8	89.5	110.5	
Se	78	103	He	41.898	0.884	4150	0.35	40	104.7	89.5	110.5	
Sr	88	103	He	40.619	1.681	311102	0.79	40	101.5	89.5	110.5	
Mo	95	103	He	43.735	1.164	146682	1.94	40	109.3	89.5	110.5	
Ag	107	103	He	41.441	1.653	482741	0.77	40	103.6	89.5	110.5	
Cd	111	103	He	41.548	1.861	86999	1.01	40	103.9	89.5	110.5	
Sn	118	115	He	40.996	1.387	213777	1.22	40	102.5	89.5	110.5	
Sb	123	115	He	44.126	1.875	214546	1.35	40	110.3	89.5	110.5	
Ba	137	115	He	40.980	1.056	98879	0.76	40	102.4	89.5	110.5	
W	182	209	He	40.397	1.284	528589	0.83	40	101.0	89.5	110.5	
Tl	205	209	He	38.250	1.269	1323124	1.21	40	95.6	89.5	110.5	
Pb	208	209	He	40.181	0.362	1829340	0.47	40	100.5	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1189509	0.43	1263759	94.12	30	120	
Sc	45	He	687089	1.44	699622	98.21	30	120	
Sc	45	NoGas	5321775	0.74	5515925	96.48	30	120	
Rh	103	He	2025886	0.89	2170249	93.35	30	120	
In	115	He	1239981	0.51	1314135	94.36	30	120	
Tb	159	He	3633332	0.28	3680734	98.71	30	120	
Ho	165	He	3711110	1.24	3781772	98.13	30	120	
Bi	209	He	2654169	0.46	2765317	95.98	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:27:18-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.136	37.3	41	28.5	20	
W	182	1	He	1.160	14.6	19524	11.2	10	
Ca	44	1	He	-7.584	-7.8	501	4.7	1000	
Na	23	1	He	5.721	13.4	25292	4.3	400	
Mg	24	1	He	2.339	36.3	3756	17.9	1000	
K	39	1	He	3.816	43.6	34601	4.0	1000	
V	51	1	He	-0.047	-82.8	-24	-948.2	2	
Cr	52	1	He	0.003	380.9	2118	3.9	2	
Mn	55	1	He	-0.108	-13.2	433	18.7	2	
Fe	56	1	He	20.366	21.5	143983	20.3	50	
Co	59	1	He	0.004	66.5	109	24.6	1	
Ni	60	1	He	-0.075	-40.1	1074	7.4	2	
Cu	63	1	He	-0.153	-9.9	2668	4.2	2	
Zn	66	1	He	-0.668	-12.6	1367	9.1	20	
As	75	1	He	0.112	20.1	212	10.3	2	
Se	78	1	He	0.225	52.7	72	17.0	2	
Sr	88	1	He	0.012	17.6	233	7.6	10	
Mo	95	1	He	0.937	18.5	3370	18.4	2	
Ag	107	1	He	0.004	60.9	81	41.4	0.2	
Cd	111	1	He	0.012	79.5	1238	1.5	0.2	
Ba	137	1	He	-0.001	-690.7	61	36.3	5	
Sn	118	1	He	6.941	3.1	38355	3.1	10	
Tl	205	1	He	0.042	22.0	1597	20.3	0.5	
Pb	208	1	He	0.000	-639.7	1071	13.2	1	
Al	27	1	He	3.313	7.8	2791	4.3	50	
Sb	123	1	He	0.487	10.3	2784	9.1	1	
B	11	2	NoGas	1.116	19.7	9518	6.6	20	
Be	9	2	NoGas	0.019	41.4	163	17.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1224471	1.62	1263759	96.89	30	120	
Sc	45	1	He	665913	0.43	699622	95.18	30	120	
Sc	45	2	NoGas	5355553	0.57	5515925	97.09	30	120	
Rh	103	1	He	2138446	0.35	2170249	98.53	30	120	
In	115	1	He	1289508	0.10	1314135	98.13	30	120	

Tb	159	1	He	3673683	0.48	3680734	99.81	30	120	
Ho	165	1	He	3771047	1.47	3781772	99.72	30	120	
Bi	209	1	He	2750660	0.72	2765317	99.47	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:31:10-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.930	0.930	6.513	3715	5.73	1	93.0	69.5	130.5	
B	11	2	NoGas	19.701	19.701	1.125	59254	1.15	20	98.5	69.5	130.5	
Na	23	1	He	1078.101	1078.101	1.780	1608807	1.78	1000	107.8	69.5	130.5	
Mg	24	1	He	1043.476	1043.476	0.680	876059	0.64	1000	104.3	69.5	130.5	
Al	27	1	He	49.206	49.206	2.115	24591	1.61	50	98.4	69.5	130.5	
K	39	1	He	1018.150	1018.150	0.864	886698	0.70	1000	101.8	69.5	130.5	
Ca	44	1	He	991.456	991.456	1.077	45758	1.16	1000	99.1	69.5	130.5	
Ti	47	1	He	10.158	10.158	7.016	2486	6.59	10	101.6	69.5	130.5	
V	51	1	He	5.188	5.188	2.474	32257	3.19	5	103.8	69.5	130.5	
Cr	52	1	He	2.082	2.082	2.207	17443	1.81	2	104.1	69.5	130.5	
Mn	55	1	He	4.799	4.799	0.830	30310	1.11	5	96.0	69.5	130.5	
Fe	56	1	He	105.812	105.812	1.501	757708	0.94	100	105.8	69.5	130.5	
Co	59	1	He	0.996	0.996	2.931	11007	2.02	1	99.6	69.5	130.5	
Ni	60	1	He	1.951	1.951	4.699	6507	2.89	2	97.5	69.5	130.5	
Cu	63	1	He	1.859	1.859	2.022	17013	2.37	2	92.9	69.5	130.5	
Zn	66	1	He	19.770	19.770	0.886	31097	0.49	20	98.8	69.5	130.5	
As	75	1	He	4.980	4.980	0.725	4942	0.63	5	99.6	69.5	130.5	
Se	78	1	He	5.292	5.292	3.329	601	2.40	5	105.8	69.5	130.5	
Sr	88	1	He	9.489	9.489	0.568	77502	1.40	10	94.9	69.5	130.5	
Mo	95	1	He	10.396	10.396	1.470	37161	0.67	10	104.0	69.5	130.5	
Ag	107	1	He	0.999	0.999	2.484	12416	2.46	1	99.9	69.5	130.5	
Cd	111	1	He	1.017	1.017	8.476	3459	4.81	1	101.7	69.5	130.5	
Sn	118	1	He	10.004	10.004	0.660	55599	0.90	10	100.0	69.5	130.5	
Sb	123	1	He	2.081	2.081	2.948	10971	2.46	2	104.1	69.5	130.5	
Ba	137	1	He	5.029	5.029	1.425	12836	0.77	5	100.6	69.5	130.5	
W	182	1	He	9.671	9.671	1.696	135609	1.70	10	96.7	69.5	130.5	
Tl	205	1	He	1.877	1.877	0.842	68123	0.54	2	93.9	69.5	130.5	
Pb	208	1	He	1.009	1.009	2.645	49229	2.26	1	100.9	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1220846	2.73	1263759	96.60	30	120	
Sc	45	1	He	701668	1.04	699622	100.29	30	120	
Sc	45	2	NoGas	5381078	0.21	5515925	97.56	30	120	
Rh	103	1	He	2157195	0.92	2170249	99.40	30	120	
In	115	1	He	1305908	0.66	1314135	99.37	30	120	
Tb	159	1	He	3696552	0.47	3680734	100.43	30	120	
Ho	165	1	He	3788075	0.25	3781772	100.17	30	120	
Bi	209	1	He	2780848	0.33	2765317	100.56	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:35:02-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.023	29.1	152	15.2	1	
B	11	45	2	NoGas	1.432	12.8	9032	4.7	20	
Na	23	45	1	He	47599.875	5.4	65941831	0.9	75200	
Mg	24	45	1	He	47957.466	4.5	37727296	2.0	75200	
Al	27	45	1	He	46087.049	4.8	20417225	1.5	75200	
K	39	45	1	He	46905.131	4.5	36953872	1.8	75200	
Ca	44	45	1	He	48244.348	3.7	2052771	2.9	75200	
Ti	47	45	1	He	962.278	4.3	220315	2.1	1505	
V	51	45	1	He	0.020	158.0	372	54.1	4	
Cr	52	45	1	He	0.626	5.8	6377	2.8	4	
Mn	55	45	1	He	0.315	8.7	2842	1.4	4	
Fe	56	45	1	He	47613.530	4.7	317098272	1.7	75200	
Co	59	103	1	He	0.027	3.8	307	3.8	2	
Ni	60	103	1	He	-0.066	-30.8	924	5.4	4	
Cu	63	103	1	He	0.210	19.5	4401	5.5	4	
Zn	66	103	1	He	-0.532	-19.6	1315	9.0	10	
As	75	103	1	He	0.138	2.4	199	1.1	4	
Se	78	103	1	He	0.070	33.9	47	4.8	4	
Sr	88	103	1	He	0.345	7.5	2456	6.6	20	
Mo	95	103	1	He	1094.145	2.4	3258524	3.1	1505	
Ag	107	103	1	He	0.010	60.1	129	48.9	1	
Cd	111	103	1	He	0.009	1600.1	1037	25.5	1	
Sn	118	115	1	He	0.665	28.0	3936	23.1	20	
Sb	123	115	1	He	0.246	5.0	1387	4.9	1	
Ba	137	115	1	He	0.066	52.6	204	38.9	2	
W	182	209	1	He	0.544	3.4	10219	1.9	20	
Tl	205	209	1	He	0.010	15.6	408	12.1	1	
Pb	208	209	1	He	0.567	2.0	25308	1.3	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1024802	0.83	1263759	81.09	30	120	
Sc	45	1	He	660179	6.42	699622	94.36	30	120	
Sc	45	2	NoGas	4671329	1.00	5515925	84.69	30	120	
Rh	103	1	He	1799424	0.90	2170249	82.91	30	120	
In	115	1	He	1139337	1.04	1314135	86.70	30	120	
Tb	159	1	He	3389913	0.76	3680734	92.10	30	120	
Ho	165	1	He	3473468	0.80	3781772	91.85	30	120	
Bi	209	1	He	2500713	0.66	2765317	90.43	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:38:50-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	100.810	0.310	326419	0.69	100	100.8	79.5	120.5	
B	11	45	2	NoGas	102.938	1.667	240651	1.78	100	102.9	79.5	120.5	
Na	23	45	1	He	49573.237	3.028	63860712	1.31	50000	99.1	79.5	120.5	
Mg	24	45	1	He	50125.441	2.856	36655637	1.51	50000	100.3	79.5	120.5	
Al	27	45	1	He	47953.456	2.795	19751743	1.85	50000	95.9	79.5	120.5	
K	39	45	1	He	49116.225	2.662	35972984	1.88	50000	98.2	79.5	120.5	
Ca	44	45	1	He	49907.102	2.453	1973587	2.48	50000	99.8	79.5	120.5	
Ti	47	45	1	He	1097.238	2.885	233501	1.45	1100	99.7	79.5	120.5	
V	51	45	1	He	98.683	3.085	531346	1.36	100	98.7	79.5	120.5	
Cr	52	45	1	He	101.209	3.524	648419	1.10	100	101.2	79.5	120.5	
Mn	55	45	1	He	96.335	3.087	512540	1.31	100	96.3	79.5	120.5	
Fe	56	45	1	He	50605.244	3.868	313227339	0.50	50000	101.2	79.5	120.5	
Co	59	103	1	He	99.703	1.397	909164	1.21	100	99.7	79.5	120.5	
Ni	60	103	1	He	100.237	1.686	223850	1.57	100	100.2	79.5	120.5	
Cu	63	103	1	He	98.899	1.352	587843	1.03	100	98.9	79.5	120.5	
Zn	66	103	1	He	99.793	0.920	122441	0.50	100	99.8	79.5	120.5	
As	75	103	1	He	100.281	1.295	80957	1.07	100	100.3	79.5	120.5	
Se	78	103	1	He	101.007	0.863	8788	0.59	100	101.0	79.5	120.5	
Sr	88	103	1	He	100.133	1.802	677939	1.40	100	100.1	79.5	120.5	
Mo	95	103	1	He	1206.433	1.302	3575934	0.86	1100	109.7	79.5	120.5	
Ag	107	103	1	He	100.329	1.928	1033360	1.67	100	100.3	79.5	120.5	
Cd	111	103	1	He	100.999	1.543	185546	1.28	100	101.0	79.5	120.5	
Sn	118	115	1	He	99.560	1.917	462359	2.32	100	99.6	79.5	120.5	
Sb	123	115	1	He	107.768	1.156	467308	1.42	100	107.8	79.5	120.5	
Ba	137	115	1	He	102.179	0.975	219980	1.37	100	102.2	79.5	120.5	
W	182	209	1	He	104.375	0.963	1259788	0.32	100	104.4	79.5	120.5	
Tl	205	209	1	He	100.772	3.003	3229173	2.41	100	100.8	79.5	120.5	
Pb	208	209	1	He	102.061	2.079	4303187	1.56	100	102.1	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1012908	0.66	1263759	80.15	30	120	
Sc	45	1	He	613026	4.39	699622	87.62	30	120	
Sc	45	2	NoGas	4595004	0.15	5515925	83.30	30	120	
Rh	103	1	He	1791175	0.52	2170249	82.53	30	120	
In	115	1	He	1106740	0.71	1314135	84.22	30	120	
Tb	159	1	He	3379996	0.94	3680734	91.83	30	120	
Ho	165	1	He	3456675	0.89	3781772	91.40	30	120	
Bi	209	1	He	2459065	0.70	2765317	88.93	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:42:35-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.604	3.197	164818	0.91	50	95.2	89.5	110.5	
B	11	45	2	NoGas	49.528	0.913	126603	0.63	50	99.1	89.5	110.5	
Na	23	45	1	He	25457.432	2.283	33568313	1.36	25000	101.8	89.5	110.5	
Mg	24	45	1	He	25691.011	2.080	19226004	1.09	25000	102.8	89.5	110.5	
Al	27	45	1	He	258.205	1.086	110063	1.20	250	103.3	89.5	110.5	
K	39	45	1	He	25242.793	2.496	18930865	1.27	25000	101.0	89.5	110.5	
Ca	44	45	1	He	24528.843	1.607	992820	0.17	25000	98.1	89.5	110.5	
Ti	47	45	1	He	52.222	3.060	11380	2.14	50	104.4	89.5	110.5	
V	51	45	1	He	50.312	1.993	277357	1.48	50	100.6	89.5	110.5	
Cr	52	45	1	He	50.875	2.090	334578	1.08	50	101.7	89.5	110.5	
Mn	55	45	1	He	246.114	1.967	1338520	1.22	250	98.4	89.5	110.5	
Fe	56	45	1	He	13030.131	1.338	82564512	0.22	12500	104.2	89.5	110.5	
Co	59	103	1	He	48.677	0.956	475566	0.13	50	97.4	89.5	110.5	
Ni	60	103	1	He	48.962	1.269	117727	0.42	50	97.9	89.5	110.5	
Cu	63	103	1	He	49.033	0.475	313945	0.40	50	98.1	89.5	110.5	
Zn	66	103	1	He	49.105	2.269	65609	1.85	50	98.2	89.5	110.5	
As	75	103	1	He	48.960	1.083	42393	0.49	50	97.9	89.5	110.5	
Se	78	103	1	He	49.429	2.011	4629	1.25	50	98.9	89.5	110.5	
Sr	88	103	1	He	48.612	1.497	352661	0.65	50	97.2	89.5	110.5	
Mo	95	103	1	He	76.558	4.806	243235	5.65	50	153.1	89.5	110.5	CCV Failed
Ag	107	103	1	He	50.386	0.896	556000	0.18	50	100.8	89.5	110.5	
Cd	111	103	1	He	49.867	0.970	98697	0.39	50	99.7	89.5	110.5	
Sn	118	115	1	He	50.815	1.128	247632	0.74	50	101.6	89.5	110.5	
Sb	123	115	1	He	51.928	0.344	236089	0.34	50	103.9	89.5	110.5	
Ba	137	115	1	He	50.600	0.806	114178	1.36	50	101.2	89.5	110.5	
W	182	209	1	He	52.361	1.695	662636	1.03	50	104.7	89.5	110.5	
Tl	205	209	1	He	49.367	2.720	1654210	2.29	50	98.7	89.5	110.5	
Pb	208	209	1	He	48.500	0.869	2138902	0.92	50	97.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1083323	2.30	1263759	85.72	30	120	
Sc	45	1	He	626901	1.46	699622	89.61	30	120	
Sc	45	2	NoGas	4901113	0.88	5515925	88.85	30	120	
Rh	103	1	He	1919010	0.85	2170249	88.42	30	120	
In	115	1	He	1159674	0.57	1314135	88.25	30	120	
Tb	159	1	He	3494205	1.13	3680734	94.93	30	120	
Ho	165	1	He	3559669	1.20	3781772	94.13	30	120	
Bi	209	1	He	2571269	0.70	2765317	92.98	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:46:26-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.025	33.2	170	16.4	1	
B	11	45	2	NoGas	1.363	16.7	9473	6.4	20	
Na	23	45	1	He	10.524	18.4	30011	6.6	400	
Mg	24	45	1	He	4.700	29.1	5275	17.7	1000	
Al	27	45	1	He	2.533	20.6	2289	7.9	50	
K	39	45	1	He	9.356	10.5	36590	0.2	1000	
Ca	44	45	1	He	5.040	75.1	977	13.8	1000	
Ti	47	45	1	He	0.390	36.6	93	31.1	20	
V	51	45	1	He	0.051	119.6	519	65.6	2	
Cr	52	45	1	He	0.002	1148.2	1976	5.8	2	
Mn	55	45	1	He	0.033	91.6	1168	12.0	2	
Fe	56	45	1	He	31.425	19.1	204570	16.7	50	
Co	59	103	1	He	0.007	44.5	141	21.9	1	
Ni	60	103	1	He	-0.114	-24.6	933	6.3	2	
Cu	63	103	1	He	-0.177	-17.2	2395	7.3	2	
Zn	66	103	1	He	0.067	136.9	2329	6.7	20	
As	75	103	1	He	0.076	12.8	169	3.9	2	
Se	78	103	1	He	0.097	32.0	56	6.9	2	
Sr	88	103	1	He	0.007	38.7	184	12.0	10	
Mo	95	103	1	He	5.283	9.4	17978	7.8	2	CCB Failed
Ag	107	103	1	He	0.015	25.2	198	21.3	0.2	
Cd	111	103	1	He	0.019	114.7	1203	2.3	0.2	
Sn	118	115	1	He	0.539	5.0	3664	4.0	10	
Sb	123	115	1	He	0.527	8.7	2904	7.7	1	
Ba	137	115	1	He	0.008	101.6	81	23.4	5	
W	182	209	1	He	1.335	12.1	21582	10.4	10	
Tl	205	209	1	He	0.044	13.0	1639	12.5	0.5	
Pb	208	209	1	He	0.021	22.1	2065	11.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1103297	1.65	1263759	87.30	30	120	
Sc	45	1	He	624805	1.85	699622	89.31	30	120	
Sc	45	2	NoGas	4985962	0.97	5515925	90.39	30	120	
Rh	103	1	He	2052621	1.62	2170249	94.58	30	120	
In	115	1	He	1253446	0.19	1314135	95.38	30	120	
Tb	159	1	He	3600588	0.70	3680734	97.82	30	120	
Ho	165	1	He	3692111	0.62	3781772	97.63	30	120	
Bi	209	1	He	2710383	0.89	2765317	98.01	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177128/1-a@2
Data File Name	014_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:50:14-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.028	72.7	170	39.3	1	
B	11	45	2	NoGas	2.197	14.2	11156	5.7	20	
Na	23	45	1	He	39.702	1.9	69435	1.5	400	
Mg	24	45	1	He	32.278	2.0	26260	2.8	1000	
Al	27	45	1	He	4.354	6.1	3103	1.0	50	
K	39	45	1	He	22.961	9.7	47463	1.5	1000	
Ca	44	45	1	He	89.845	5.7	4466	4.6	1000	
Ti	47	45	1	He	0.643	26.5	151	25.6	20	
V	51	45	1	He	0.067	304.7	604	185.8	2	
Cr	52	45	1	He	0.832	7.6	7493	2.8	2	
Mn	55	45	1	He	0.183	4.0	2016	4.6	2	
Fe	56	45	1	He	30.728	10.7	204133	13.3	50	
Co	59	103	1	He	0.007	22.9	132	11.6	1	
Ni	60	103	1	He	0.123	28.0	1487	5.6	2	
Cu	63	103	1	He	1.179	8.4	11198	5.5	2	
Zn	66	103	1	He	2.444	7.5	5432	4.5	20	
As	75	103	1	He	0.153	17.4	233	10.4	2	
Se	78	103	1	He	0.118	54.4	56	11.1	2	
Sr	88	103	1	He	0.242	7.3	1938	6.9	10	
Mo	95	103	1	He	4.114	13.5	13558	13.2	2	Blank Failed
Ag	107	103	1	He	0.011	25.0	154	21.0	0.2	
Cd	111	103	1	He	-0.008	-133.2	1109	1.9	0.2	
Sn	118	115	1	He	18.314	2.6	91913	2.8	10	Blank Failed
Sb	123	115	1	He	0.568	13.0	2940	11.0	1	
Ba	137	115	1	He	0.763	5.7	1820	4.9	5	
W	182	209	1	He	0.624	3.8	12368	3.4	10	
Tl	205	209	1	He	0.027	26.4	1051	26.0	0.5	
Pb	208	209	1	He	0.201	10.6	10607	7.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1052081	0.77	1263759	83.25	30	120	
Sc	45	1	He	634664	2.87	699622	90.72	30	120	
Sc	45	2	NoGas	4822907	0.95	5515925	87.44	30	120	
Rh	103	1	He	1984767	0.27	2170249	91.45	30	120	
In	115	1	He	1187643	0.69	1314135	90.37	30	120	
Tb	159	1	He	3505997	0.22	3680734	95.25	30	120	
Ho	165	1	He	3596418	1.25	3781772	95.10	30	120	
Bi	209	1	He	2762823	2.01	2765317	99.91	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177128/2-a@2
Data File Name	015LCSS.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:54:05-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	463.002	463.002	2.174	1509028	0.29	500	92.6	78.6	110.5	
B	11	2	NoGas	53.998	53.998	0.441	127173	1.34	50	108.0	79.5	120.5	
Na	23	1	He	5041.765	5041.765	2.580	6251027	0.76	5000	100.8	79.5	120.5	
Mg	24	1	He	5093.628	5093.628	3.100	3578430	1.77	5000	101.9	79.5	120.5	
Al	27	1	He	4827.084	4827.084	1.383	1910680	1.61	5000	96.5	79.5	120.5	
K	39	1	He	4953.266	4953.266	0.198	3509823	2.20	5000	99.1	79.5	120.5	
Ca	44	1	He	4414.632	4414.632	2.101	168291	0.75	5000	88.3	79.5	120.5	
Ti	47	1	He	49.077	49.077	1.008	10041	2.03	50	98.2	79.5	120.5	
V	51	1	He	506.104	506.104	1.503	2616501	0.93	500	101.2	71.5	110.5	
Cr	52	1	He	516.090	516.090	1.278	3168769	1.14	500	103.2	69.5	110.5	
Mn	55	1	He	492.347	492.347	1.688	2512142	0.86	500	98.5	79.5	120.5	
Fe	56	1	He	5117.034	5117.034	1.744	30433870	1.09	5000	102.3	79.5	120.5	
Co	59	1	He	478.719	478.719	1.735	4500642	1.29	500	95.7	73.9	110.5	
Ni	60	1	He	466.995	466.995	1.432	1071264	0.93	500	93.4	74.9	110.5	
Cu	63	1	He	487.851	487.851	0.766	2977249	0.89	500	97.6	72.6	110.5	
Zn	66	1	He	443.774	443.774	1.439	554475	0.98	500	88.8	71.5	113.4	
As	75	1	He	419.219	419.219	1.249	348666	0.85	500	83.8	73.4	110.5	
Se	78	1	He	410.225	410.225	1.055	36672	1.09	500	82.0	64.6	110.5	
Sr	88	1	He	478.056	478.056	1.451	3337026	1.71	500	95.6	79.5	120.5	
Mo	95	1	He	52.717	52.717	1.301	161156	0.64	50	105.4	29.5	140.5	
Ag	107	1	He	49.327	49.327	1.175	523854	0.43	50	98.7	59.5	114.5	
Cd	111	1	He	463.061	463.061	0.782	873399	0.70	500	92.6	73.5	110.5	
Sn	118	1	He	550.974	550.974	0.485	2552178	0.42	500	110.2	79.5	120.5	
Sb	123	1	He	48.519	48.519	0.894	210287	1.13	50	97.0	67.5	113.4	
Ba	137	1	He	473.912	473.912	1.137	1018847	1.48	500	94.8	69.5	110.5	
W	182	1	He	48.997	48.997	0.532	618025	0.26	50	98.0	74.6	125.4	
Tl	205	1	He	116.705	116.705	0.505	3896211	0.30	125	93.4	70.6	110.5	
Pb	208	1	He	481.081	481.081	0.754	21127643	0.50	500	96.2	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1020035	2.02	1263759	80.71	30	120	
Sc	45	1	He	588428	2.40	699622	84.11	30	120	
Sc	45	2	NoGas	4533103	1.01	5515925	82.18	30	120	
Rh	103	1	He	1846876	0.80	2170249	85.10	30	120	
In	115	1	He	1105392	0.34	1314135	84.12	30	120	
Tb	159	1	He	3473534	0.87	3680734	94.37	30	120	
Ho	165	1	He	3524549	0.12	3781772	93.20	30	120	
Bi	209	1	He	2561661	0.27	2765317	92.64	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-d@20
Data File Name	016SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T14:57:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.312	0.312	17.52	1289	0.02	10000	
B	11	45	2	NoGas	7.420	7.420	4.11	27362	0.03	300	
Na	23	45	1	He	201.875	201.875	0.40	311101	0.06	500000	
Mg	24	45	1	He	1222.877	1222.877	1.21	1010264	0.12	500000	
Al	27	45	1	He	4863.554	4863.554	1.14	2259897	0.22	200000	
K	39	45	1	He	1727.523	1727.523	0.83	1458092	0.12	500000	
Ca	44	45	1	He	-6.950	-6.950	-117.49	549	-1.27	500000	
Ti	47	45	1	He	35.055	35.055	2.94	8421	0.42	2500	
V	51	45	1	He	8.040	8.040	3.07	49046	0.02	10000	
Cr	52	45	1	He	8.326	8.326	0.46	62155	0.01	10000	
Mn	55	45	1	He	1153.248	1153.248	1.55	6906398	0.02	10000	
Fe	56	45	1	He	10888.482	10888.482	0.53	76026926	0.01	200000	
Co	59	103	1	He	3.884	3.884	2.28	42143	0.01	10000	
Ni	60	103	1	He	9.749	9.749	3.17	27008	0.04	10000	
Cu	63	103	1	He	9.945	9.945	2.42	73585	0.01	10000	
Zn	66	103	1	He	23.772	23.772	2.60	36417	0.07	10000	
As	75	103	1	He	22.185	22.185	1.39	21362	0.10	10000	
Se	78	103	1	He	0.839	0.839	12.42	135	0.62	10000	
Sr	88	103	1	He	168.354	168.354	2.52	1354088	0.01	10000	
Mo	95	103	1	He	55.646	55.646	1.22	196046	0.03	2000	
Ag	107	103	1	He	0.016	0.016	33.60	216	0.01	300	
Cd	111	103	1	He	0.086	0.086	30.07	1394	0.01	4000	
Sn	118	115	1	He	2.274	2.274	1.81	13087	0.02	2000	
Sb	123	115	1	He	0.266	0.266	1.51	1663	0.02	300	
Ba	137	115	1	He	30.198	30.198	0.27	75478	0.04	10000	
W	182	209	1	He	2.163	2.163	2.41	33647	0.01	2500	
Tl	205	209	1	He	0.127	0.127	20.63	4714	0.00	5000	
Pb	208	209	1	He	37.274	37.274	0.19	1790771	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1203548	0.51	1263759	95.24	30	120	
Sc	45	1	He	690680	1.14	699622	98.72	30	120	
Sc	45	2	NoGas	5574493	0.55	5515925	101.06	30	120	
Rh	103	1	He	2128674	2.12	2170249	98.08	30	120	
In	115	1	He	1284143	1.03	1314135	97.72	30	120	
Tb	159	1	He	3776930	2.23	3680734	102.61	30	120	
Ho	165	1	He	3818388	0.88	3781772	100.97	30	120	
Bi	209	1	He	2800737	0.66	2765317	101.28	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-3-d@100
Data File Name	017SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:01:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.096	0.096	28.11	463	0.02	10000	
B	11	45	2	NoGas	2.029	2.029	21.38	12164	0.02	300	
Na	23	45	1	He	42.381	42.381	2.84	79557	0.05	500000	
Mg	24	45	1	He	246.556	246.556	1.68	205493	0.12	500000	
Al	27	45	1	He	982.052	982.052	1.40	457934	0.21	200000	
K	39	45	1	He	334.488	334.488	1.05	309094	0.11	500000	
Ca	44	45	1	He	-8.060	-8.060	-14.29	499	-1.61	500000	
Ti	47	45	1	He	7.621	7.621	5.27	1840	0.41	2500	
V	51	45	1	He	1.682	1.682	4.59	10481	0.02	10000	
Cr	52	45	1	He	1.667	1.667	6.90	14196	0.01	10000	
Mn	55	45	1	He	239.700	239.700	3.23	1437916	0.02	10000	
Fe	56	45	1	He	2222.926	2222.926	1.68	15543277	0.01	200000	
Co	59	103	1	He	0.767	0.767	3.22	8572	0.01	10000	
Ni	60	103	1	He	1.942	1.942	0.72	6545	0.03	10000	
Cu	63	103	1	He	1.773	1.773	0.91	16559	0.01	10000	
Zn	66	103	1	He	4.531	4.531	2.07	9021	0.05	10000	
As	75	103	1	He	4.438	4.438	0.97	4456	0.10	10000	
Se	78	103	1	He	0.115	0.115	54.38	62	0.19	10000	
Sr	88	103	1	He	33.634	33.634	0.66	276914	0.01	10000	
Mo	95	103	1	He	12.336	12.336	2.42	44501	0.03	2000	
Ag	107	103	1	He	0.004	0.004	51.61	74	0.01	300	
Cd	111	103	1	He	0.020	0.020	43.38	1279	0.00	4000	
Sn	118	115	1	He	0.467	0.467	7.60	3452	0.01	2000	
Sb	123	115	1	He	0.083	0.083	10.71	760	0.01	300	
Ba	137	115	1	He	6.156	6.156	2.46	15823	0.04	10000	
W	182	209	1	He	0.514	0.514	4.66	11245	0.00	2500	
Tl	205	209	1	He	0.022	0.022	4.02	907	0.00	5000	
Pb	208	209	1	He	7.412	7.412	1.32	363600	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1216854	1.02	1263759	96.29	30	120	
Sc	45	1	He	691518	1.12	699622	98.84	30	120	
Sc	45	2	NoGas	5455325	0.54	5515925	98.90	30	120	
Rh	103	1	He	2177376	0.53	2170249	100.33	30	120	
In	115	1	He	1316249	0.53	1314135	100.16	30	120	
Tb	159	1	He	3748992	0.36	3680734	101.85	30	120	
Ho	165	1	He	3816043	0.80	3781772	100.91	30	120	
Bi	209	1	He	2852594	0.40	2765317	103.16	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-3-d@20
Data File Name	018SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:05:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1002.971	1002.971	1.64	3516920	0.03	10000	
B	11	45	2	NoGas	112.422	112.422	0.76	288905	0.04	300	
Na	23	45	1	He	9871.986	9871.986	4.87	14676500	0.07	500000	
Mg	24	45	1	He	10935.273	10935.273	5.56	9217619	0.12	500000	
Al	27	45	1	He	13862.713	13862.713	5.94	6580098	0.21	200000	
K	39	45	1	He	11109.463	11109.463	5.62	9402151	0.12	500000	
Ca	44	45	1	He	8324.762	8324.762	4.29	380319	2.19	500000	
Ti	47	45	1	He	129.055	129.055	3.16	31698	0.41	2500	
V	51	45	1	He	973.855	973.855	4.05	6045659	0.02	10000	
Cr	52	45	1	He	984.029	984.029	5.63	7247294	0.01	10000	
Mn	55	45	1	He	2018.331	2018.331	4.61	12359707	0.02	10000	
Fe	56	45	1	He	19994.685	19994.685	4.62	142742483	0.01	200000	
Co	59	103	1	He	992.868	992.868	0.37	10357150	0.01	10000	
Ni	60	103	1	He	1036.023	1036.023	0.60	2635635	0.04	10000	
Cu	63	103	1	He	1011.690	1011.690	0.81	6846906	0.01	10000	
Zn	66	103	1	He	1034.278	1034.278	3.68	1431630	0.07	10000	
As	75	103	1	He	976.711	976.711	1.08	901200	0.11	10000	
Se	78	103	1	He	975.522	975.522	0.97	96686	1.01	10000	
Sr	88	103	1	He	1171.423	1171.423	0.70	9071306	0.01	10000	
Mo	95	103	1	He	153.083	153.083	3.04	518904	0.03	2000	
Ag	107	103	1	He	35.777	35.777	0.52	421574	0.01	300	
Cd	111	103	1	He	1050.207	1050.207	1.22	2195871	0.05	4000	
Sn	118	115	1	He	1099.808	1099.808	1.34	5506316	0.02	2000	
Sb	123	115	1	He	104.218	104.218	0.75	487906	0.02	300	
Ba	137	115	1	He	1133.165	1133.165	0.74	2633550	0.04	10000	
W	182	209	1	He	99.185	99.185	1.79	1302629	0.01	2500	
Tl	205	209	1	He	245.528	245.528	2.04	8560116	0.00	5000	
Pb	208	209	1	He	1054.069	1054.069	0.61	48349664	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1097282	1.32	1263759	86.83	30	120	
Sc	45	1	He	707822	7.33	699622	101.17	30	120	
Sc	45	2	NoGas	5061068	0.76	5515925	91.75	30	120	
Rh	103	1	He	2049050	2.20	2170249	94.42	30	120	
In	115	1	He	1194954	1.70	1314135	90.93	30	120	
Tb	159	1	He	3652064	2.02	3680734	99.22	30	120	
Ho	165	1	He	3757271	1.63	3781772	99.35	30	120	
Bi	209	1	He	2675777	1.79	2765317	96.76	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-e du@20
Data File Name	019SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:08:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.480	0.480	3.42	1904	0.03	10000	
B	11	45	2	NoGas	7.302	7.302	3.65	26208	0.03	300	
Na	23	45	1	He	189.239	189.239	1.40	280624	0.07	500000	
Mg	24	45	1	He	1102.553	1102.553	0.70	873327	0.13	500000	
Al	27	45	1	He	4295.306	4295.306	1.02	1913336	0.22	200000	
K	39	45	1	He	1569.924	1569.924	0.66	1273097	0.12	500000	
Ca	44	45	1	He	2.179	2.179	303.79	915	0.24	500000	
Ti	47	45	1	He	37.693	37.693	1.27	8680	0.43	2500	
V	51	45	1	He	7.607	7.607	0.63	44505	0.02	10000	
Cr	52	45	1	He	8.130	8.130	1.69	58224	0.01	10000	
Mn	55	45	1	He	554.662	554.662	1.64	3184877	0.02	10000	
Fe	56	45	1	He	10457.748	10457.748	1.07	69990968	0.01	200000	
Co	59	103	1	He	3.718	3.718	1.54	39174	0.01	10000	
Ni	60	103	1	He	9.371	9.371	1.33	25260	0.04	10000	
Cu	63	103	1	He	8.359	8.359	0.67	60630	0.01	10000	
Zn	66	103	1	He	21.501	21.501	1.10	32201	0.07	10000	
As	75	103	1	He	21.915	21.915	0.47	20489	0.11	10000	
Se	78	103	1	He	1.335	1.335	2.86	180	0.74	10000	
Sr	88	103	1	He	125.853	125.853	0.71	983038	0.01	10000	
Mo	95	103	1	He	57.063	57.063	0.39	195187	0.03	2000	
Ag	107	103	1	He	0.015	0.015	14.15	198	0.01	300	
Cd	111	103	1	He	0.189	0.189	27.01	1568	0.01	4000	
Sn	118	115	1	He	8.469	8.469	11.79	45325	0.02	2000	
Sb	123	115	1	He	0.867	0.867	17.88	4571	0.02	300	
Ba	137	115	1	He	27.029	27.029	0.55	66023	0.04	10000	
W	182	209	1	He	4.039	4.039	10.77	58455	0.01	2500	
Tl	205	209	1	He	0.186	0.186	17.84	6760	0.00	5000	
Pb	208	209	1	He	23.781	23.781	0.66	1125317	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1184701	1.44	1263759	93.74	30	120	
Sc	45	1	He	662062	0.59	699622	94.63	30	120	
Sc	45	2	NoGas	5403485	0.59	5515925	97.96	30	120	
Rh	103	1	He	2066378	1.12	2170249	95.21	30	120	
In	115	1	He	1254833	1.00	1314135	95.49	30	120	
Tb	159	1	He	3654040	0.78	3680734	99.27	30	120	
Ho	165	1	He	3721067	0.42	3781772	98.39	30	120	
Bi	209	1	He	2757599	0.48	2765317	99.72	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-f ms@20
Data File Name	020SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:12:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.834	4.834	2.01	19637	0.02	10000	
B	11	45	2	NoGas	11.018	11.018	1.82	38738	0.03	300	
Na	23	45	1	He	626.366	626.366	1.46	985320	0.06	500000	
Mg	24	45	1	He	1594.813	1594.813	1.31	1398941	0.11	500000	
Al	27	45	1	He	4669.167	4669.167	0.95	2304777	0.20	200000	
K	39	45	1	He	1928.295	1928.295	1.00	1724929	0.11	500000	
Ca	44	45	1	He	399.471	399.471	9.21	19815	2.02	500000	
Ti	47	45	1	He	44.959	44.959	2.55	11472	0.39	2500	
V	51	45	1	He	11.761	11.761	1.70	76102	0.02	10000	
Cr	52	45	1	He	11.987	11.987	1.37	94036	0.01	10000	
Mn	55	45	1	He	957.057	957.057	1.03	6089027	0.02	10000	
Fe	56	45	1	He	10057.850	10057.850	1.13	74596215	0.01	200000	
Co	59	103	1	He	8.036	8.036	1.12	91558	0.01	10000	
Ni	60	103	1	He	13.292	13.292	1.46	38218	0.03	10000	
Cu	63	103	1	He	13.290	13.290	1.00	102020	0.01	10000	
Zn	66	103	1	He	25.714	25.714	1.86	41204	0.06	10000	
As	75	103	1	He	24.234	24.234	0.49	24511	0.10	10000	
Se	78	103	1	He	5.030	5.030	1.97	595	0.85	10000	
Sr	88	103	1	He	193.692	193.692	1.96	1637161	0.01	10000	
Mo	95	103	1	He	56.759	56.759	1.48	210135	0.03	2000	
Ag	107	103	1	He	4.612	4.612	0.28	59338	0.01	300	
Cd	111	103	1	He	4.598	4.598	0.93	11757	0.04	4000	
Sn	118	115	1	He	7.438	7.438	2.40	42491	0.02	2000	
Sb	123	115	1	He	1.846	1.846	3.22	9990	0.02	300	
Ba	137	115	1	He	31.358	31.358	1.35	81484	0.04	10000	
W	182	209	1	He	5.483	5.483	1.96	80127	0.01	2500	
Tl	205	209	1	He	4.237	4.237	1.34	156631	0.00	5000	
Pb	208	209	1	He	40.943	40.943	0.34	1991189	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1265063	0.82	1263759	100.10	30	120	
Sc	45	1	He	733692	0.61	699622	104.87	30	120	
Sc	45	2	NoGas	5784601	0.65	5515925	104.87	30	120	
Rh	103	1	He	2236564	1.14	2170249	103.06	30	120	
In	115	1	He	1335223	1.09	1314135	101.60	30	120	
Tb	159	1	He	3821620	0.64	3680734	103.83	30	120	
Ho	165	1	He	3928299	1.42	3781772	103.87	30	120	
Bi	209	1	He	2835288	0.41	2765317	102.53	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-9-b@20
Data File Name	021SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:16:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.440	0.440	13.83	1963	0.02	10000	
B	11	45	2	NoGas	1.891	1.891	6.43	13494	0.01	300	
Na	23	45	1	He	21.471	21.471	1.23	56540	0.04	500000	
Mg	24	45	1	He	1676.028	1676.028	1.18	1593479	0.11	500000	
Al	27	45	1	He	7201.412	7201.412	0.57	3852231	0.19	200000	
K	39	45	1	He	572.846	572.846	1.40	581919	0.10	500000	
Ca	44	45	1	He	178.543	178.543	2.41	10148	1.76	500000	
Ti	47	45	1	He	43.159	43.159	2.90	11935	0.36	2500	
V	51	45	1	He	12.325	12.325	0.78	86428	0.01	10000	
Cr	52	45	1	He	10.823	10.823	0.35	92281	0.01	10000	
Mn	55	45	1	He	123.324	123.324	0.88	851576	0.01	10000	
Fe	56	45	1	He	15361.678	15361.678	0.78	123491617	0.01	200000	
Co	59	103	1	He	5.403	5.403	0.91	64963	0.01	10000	
Ni	60	103	1	He	12.934	12.934	1.76	39265	0.03	10000	
Cu	63	103	1	He	10.502	10.502	1.01	85902	0.01	10000	
Zn	66	103	1	He	31.030	31.030	1.11	51913	0.06	10000	
As	75	103	1	He	7.502	7.502	1.76	8083	0.09	10000	
Se	78	103	1	He	0.668	0.668	7.08	130	0.51	10000	
Sr	88	103	1	He	2.694	2.694	1.81	24168	0.01	10000	
Mo	95	103	1	He	1.844	1.844	10.75	7252	0.03	2000	
Ag	107	103	1	He	0.013	0.013	31.92	208	0.01	300	
Cd	111	103	1	He	0.086	0.086	45.37	1543	0.01	4000	
Sn	118	115	1	He	2.334	2.334	2.58	14826	0.02	2000	
Sb	123	115	1	He	0.180	0.180	13.63	1360	0.01	300	
Ba	137	115	1	He	36.606	36.606	1.49	101135	0.04	10000	
W	182	209	1	He	0.360	0.360	7.33	9448	0.00	2500	
Tl	205	209	1	He	0.113	0.113	2.64	4443	0.00	5000	
Pb	208	209	1	He	6.618	6.618	1.19	337369	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1325563	2.73	1263759	104.89	30	120	
Sc	45	1	He	795258	0.54	699622	113.67	30	120	
Sc	45	2	NoGas	6242347	1.82	5515925	113.17	30	120	
Rh	103	1	He	2359029	0.94	2170249	108.70	30	120	
In	115	1	He	1419721	0.57	1314135	108.03	30	120	
Tb	159	1	He	3989533	1.58	3680734	108.39	30	120	
Ho	165	1	He	4069912	0.85	3781772	107.62	30	120	
Bi	209	1	He	2963329	0.98	2765317	107.16	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-10-b@20
Data File Name	022SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:20:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.438	0.438	4.72	1945	0.02	10000	
B	11	45	2	NoGas	0.996	0.996	26.38	10700	0.01	300	
Na	23	45	1	He	19.064	19.064	2.76	52661	0.04	500000	
Mg	24	45	1	He	1123.782	1123.782	1.07	1072118	0.10	500000	
Al	27	45	1	He	6575.460	6575.460	1.85	3526990	0.19	200000	
K	39	45	1	He	382.045	382.045	2.04	401732	0.10	500000	
Ca	44	45	1	He	180.158	180.158	4.55	10257	1.76	500000	
Ti	47	45	1	He	54.964	54.964	1.19	15240	0.36	2500	
V	51	45	1	He	13.300	13.300	0.20	93504	0.01	10000	
Cr	52	45	1	He	9.438	9.438	1.76	81007	0.01	10000	
Mn	55	45	1	He	426.694	426.694	1.13	2951398	0.01	10000	
Fe	56	45	1	He	13573.659	13573.659	0.62	109421382	0.01	200000	
Co	59	103	1	He	6.273	6.273	1.12	75224	0.01	10000	
Ni	60	103	1	He	9.033	9.033	0.75	27782	0.03	10000	
Cu	63	103	1	He	6.769	6.769	1.05	56699	0.01	10000	
Zn	66	103	1	He	28.791	28.791	1.50	48235	0.06	10000	
As	75	103	1	He	6.191	6.191	1.26	6673	0.09	10000	
Se	78	103	1	He	0.619	0.619	7.69	124	0.50	10000	
Sr	88	103	1	He	2.128	2.128	1.40	19073	0.01	10000	
Mo	95	103	1	He	1.051	1.051	4.72	4148	0.03	2000	
Ag	107	103	1	He	0.016	0.016	21.47	244	0.01	300	
Cd	111	103	1	He	0.071	0.071	48.82	1503	0.00	4000	
Sn	118	115	1	He	1.947	1.947	1.53	12590	0.02	2000	
Sb	123	115	1	He	0.142	0.142	7.34	1152	0.01	300	
Ba	137	115	1	He	36.954	36.954	0.27	102627	0.04	10000	
W	182	209	1	He	0.151	0.151	28.27	6428	0.00	2500	
Tl	205	209	1	He	0.095	0.095	3.18	3757	0.00	5000	
Pb	208	209	1	He	7.516	7.516	1.44	383855	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1320810	1.40	1263759	104.51	30	120	
Sc	45	1	He	797495	1.33	699622	113.99	30	120	
Sc	45	2	NoGas	6230658	1.36	5515925	112.96	30	120	
Rh	103	1	He	2353482	1.39	2170249	108.44	30	120	
In	115	1	He	1427038	0.39	1314135	108.59	30	120	
Tb	159	1	He	3994100	0.67	3680734	108.51	30	120	
Ho	165	1	He	4045133	0.80	3781772	106.96	30	120	
Bi	209	1	He	2970098	1.14	2765317	107.41	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-1-b@20
Data File Name	023SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:24:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.303	0.303	11.06	1396	0.02	10000	
B	11	45	2	NoGas	1.808	1.808	16.71	12924	0.01	300	
Na	23	45	1	He	23.155	23.155	6.49	59114	0.04	500000	
Mg	24	45	1	He	1436.414	1436.414	1.76	1360581	0.11	500000	
Al	27	45	1	He	4853.273	4853.273	2.35	2586233	0.19	200000	
K	39	45	1	He	376.702	376.702	2.58	393995	0.10	500000	
Ca	44	45	1	He	2462.551	2462.551	1.67	126846	1.94	500000	
Ti	47	45	1	He	44.769	44.769	3.63	12329	0.36	2500	
V	51	45	1	He	9.204	9.204	1.34	64366	0.01	10000	
Cr	52	45	1	He	8.634	8.634	1.81	73822	0.01	10000	
Mn	55	45	1	He	279.949	279.949	1.04	1924047	0.01	10000	
Fe	56	45	1	He	11715.801	11715.801	2.15	93807296	0.01	200000	
Co	59	103	1	He	4.015	4.015	1.11	48596	0.01	10000	
Ni	60	103	1	He	10.171	10.171	0.52	31374	0.03	10000	
Cu	63	103	1	He	6.116	6.116	0.32	52078	0.01	10000	
Zn	66	103	1	He	24.170	24.170	0.88	41262	0.06	10000	
As	75	103	1	He	6.988	6.988	1.01	7584	0.09	10000	
Se	78	103	1	He	0.538	0.538	21.41	116	0.47	10000	
Sr	88	103	1	He	6.276	6.276	0.75	56454	0.01	10000	
Mo	95	103	1	He	0.783	0.783	5.11	3134	0.02	2000	
Ag	107	103	1	He	0.019	0.019	9.21	288	0.01	300	
Cd	111	103	1	He	0.062	0.062	4.66	1495	0.00	4000	
Sn	118	115	1	He	1.896	1.896	1.81	12123	0.02	2000	
Sb	123	115	1	He	0.176	0.176	5.27	1325	0.01	300	
Ba	137	115	1	He	28.089	28.089	1.60	76999	0.04	10000	
W	182	209	1	He	0.121	0.121	25.91	5938	0.00	2500	
Tl	205	209	1	He	0.073	0.073	4.04	2895	0.00	5000	
Pb	208	209	1	He	7.615	7.615	0.65	385397	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1341113	0.57	1263759	106.12	30	120	
Sc	45	1	He	792272	1.87	699622	113.24	30	120	
Sc	45	2	NoGas	6095953	0.84	5515925	110.52	30	120	
Rh	103	1	He	2373864	0.43	2170249	109.38	30	120	
In	115	1	He	1408410	0.72	1314135	107.17	30	120	
Tb	159	1	He	3940119	0.34	3680734	107.05	30	120	
Ho	165	1	He	4035353	0.83	3781772	106.71	30	120	
Bi	209	1	He	2943340	0.45	2765317	106.44	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	024_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:27:54-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.985	1.825	185048	1.75	50	96.0	89.5	110.5	
B	11	45	2	NoGas	49.675	1.505	143080	2.23	50	99.3	89.5	110.5	
Na	23	45	1	He	25040.101	2.251	38549183	2.37	25000	100.2	89.5	110.5	
Mg	24	45	1	He	25037.779	3.168	21869316	1.35	25000	100.2	89.5	110.5	
Al	27	45	1	He	247.430	4.173	123111	0.37	250	99.0	89.5	110.5	
K	39	45	1	He	24856.438	4.737	21748458	0.52	25000	99.4	89.5	110.5	
Ca	44	45	1	He	24026.992	3.598	1134937	1.14	25000	96.1	89.5	110.5	
Ti	47	45	1	He	50.098	4.778	12738	1.07	50	100.2	89.5	110.5	
V	51	45	1	He	50.223	3.126	323140	1.51	50	100.4	89.5	110.5	
Cr	52	45	1	He	50.227	3.155	385589	1.92	50	100.5	89.5	110.5	
Mn	55	45	1	He	247.898	2.794	1573721	1.70	250	99.2	89.5	110.5	
Fe	56	45	1	He	12668.371	3.816	93673367	1.49	12500	101.3	89.5	110.5	
Co	59	103	1	He	50.167	1.131	543477	1.56	50	100.3	89.5	110.5	
Ni	60	103	1	He	50.126	0.523	133626	1.78	50	100.3	89.5	110.5	
Cu	63	103	1	He	50.587	0.652	359016	0.87	50	101.2	89.5	110.5	
Zn	66	103	1	He	50.408	0.731	74622	1.37	50	100.8	89.5	110.5	
As	75	103	1	He	50.165	0.091	48164	1.50	50	100.3	89.5	110.5	
Se	78	103	1	He	50.625	1.625	5257	3.05	50	101.3	89.5	110.5	
Sr	88	103	1	He	49.157	0.882	395437	1.03	50	98.3	89.5	110.5	
Mo	95	103	1	He	51.267	3.190	180524	1.71	50	102.5	89.5	110.5	
Ag	107	103	1	He	50.714	0.805	620545	1.34	50	101.4	89.5	110.5	
Cd	111	103	1	He	49.916	0.194	109553	1.50	50	99.8	89.5	110.5	
Sn	118	115	1	He	49.831	0.325	269285	0.47	50	99.7	89.5	110.5	
Sb	123	115	1	He	51.197	0.265	258099	0.10	50	102.4	89.5	110.5	
Ba	137	115	1	He	50.089	1.083	125318	1.06	50	100.2	89.5	110.5	
W	182	209	1	He	51.413	1.248	687375	1.50	50	102.8	89.5	110.5	
Tl	205	209	1	He	51.571	1.534	1825378	1.30	50	103.1	89.5	110.5	
Pb	208	209	1	He	49.049	0.996	2284788	0.84	50	98.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1206254	2.16	1263759	95.45	30	120	
Sc	45	1	He	732270	4.56	699622	104.67	30	120	
Sc	45	2	NoGas	5522748	0.81	5515925	100.12	30	120	
Rh	103	1	He	2127889	1.51	2170249	98.05	30	120	
In	115	1	He	1285847	0.19	1314135	97.85	30	120	
Tb	159	1	He	3776300	0.95	3680734	102.60	30	120	
Ho	165	1	He	3876978	1.66	3781772	102.52	30	120	
Bi	209	1	He	2715920	0.29	2765317	98.21	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:31:42-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.045	23.1	270	15.6	1	
B	11	45	2	NoGas	0.503	29.9	8161	5.9	20	
Na	23	45	1	He	6.303	19.6	26772	5.4	400	
Mg	24	45	1	He	1.536	22.9	3197	7.8	1000	
Al	27	45	1	He	0.792	10.4	1706	2.5	50	
K	39	45	1	He	4.789	66.3	36275	5.9	1000	
Ca	44	45	1	He	2.882	102.1	975	12.3	1000	
Ti	47	45	1	He	0.103	46.1	34	34.0	20	
V	51	45	1	He	0.027	149.0	421	58.3	2	
Cr	52	45	1	He	0.004	371.6	2180	5.6	2	
Mn	55	45	1	He	0.040	34.0	1322	5.2	2	
Fe	56	45	1	He	25.300	23.4	181501	21.2	50	
Co	59	103	1	He	0.005	91.4	129	38.8	1	
Ni	60	103	1	He	-0.160	-27.6	881	13.6	2	
Cu	63	103	1	He	-0.267	-6.5	1931	4.8	2	
Zn	66	103	1	He	-0.016	-571.2	2394	5.4	20	
As	75	103	1	He	0.083	15.9	190	5.8	2	
Se	78	103	1	He	0.096	31.2	61	5.4	2	
Sr	88	103	1	He	0.009	96.1	212	32.2	10	
Mo	95	103	1	He	1.042	23.4	3872	21.2	2	
Ag	107	103	1	He	0.006	14.2	98	11.0	0.2	
Cd	111	103	1	He	-0.006	-355.6	1245	3.7	0.2	
Sn	118	115	1	He	0.477	13.9	3556	10.6	10	
Sb	123	115	1	He	0.436	13.0	2618	11.4	1	
Ba	137	115	1	He	0.018	114.4	114	47.9	5	
W	182	209	1	He	1.025	22.0	18152	16.4	10	
Tl	205	209	1	He	0.035	23.1	1361	20.5	0.5	
Pb	208	209	1	He	0.043	12.2	3216	7.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1237632	0.28	1263759	97.93	30	120	
Sc	45	1	He	683279	1.27	699622	97.66	30	120	
Sc	45	2	NoGas	5542695	1.07	5515925	100.49	30	120	
Rh	103	1	He	2219865	1.77	2170249	102.29	30	120	
In	115	1	He	1335899	0.14	1314135	101.66	30	120	
Tb	159	1	He	3803137	0.62	3680734	103.33	30	120	
Ho	165	1	He	3829343	0.45	3781772	101.26	30	120	
Bi	209	1	He	2820336	1.25	2765317	101.99	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-2-b@20
Data File Name	026SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:35:32-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.342	0.342	27.35	1519	0.02	10000	
B	11	45	2	NoGas	1.358	1.358	10.06	11423	0.01	300	
Na	23	45	1	He	17.409	17.409	0.92	46697	0.04	500000	
Mg	24	45	1	He	1009.713	1009.713	1.82	901922	0.11	500000	
Al	27	45	1	He	7041.594	7041.594	1.68	3535415	0.20	200000	
K	39	45	1	He	343.630	343.630	2.35	341823	0.10	500000	
Ca	44	45	1	He	378.883	378.883	3.15	19172	1.98	500000	
Ti	47	45	1	He	33.455	33.455	2.62	8686	0.39	2500	
V	51	45	1	He	13.788	13.788	4.15	90734	0.02	10000	
Cr	52	45	1	He	9.691	9.691	2.08	77792	0.01	10000	
Mn	55	45	1	He	338.128	338.128	1.53	2189746	0.02	10000	
Fe	56	45	1	He	12963.552	12963.552	1.28	97819309	0.01	200000	
Co	59	103	1	He	5.097	5.097	0.65	57654	0.01	10000	
Ni	60	103	1	He	9.188	9.188	0.53	26621	0.03	10000	
Cu	63	103	1	He	5.885	5.885	0.85	46990	0.01	10000	
Zn	66	103	1	He	32.618	32.618	0.94	51207	0.06	10000	
As	75	103	1	He	7.903	7.903	2.28	8004	0.10	10000	
Se	78	103	1	He	0.640	0.640	16.24	119	0.54	10000	
Sr	88	103	1	He	2.495	2.495	0.90	21063	0.01	10000	
Mo	95	103	1	He	0.946	0.946	4.93	3530	0.03	2000	
Ag	107	103	1	He	0.043	0.043	2.40	579	0.01	300	
Cd	111	103	1	He	0.101	0.101	19.80	1485	0.01	4000	
Sn	118	115	1	He	1.847	1.847	4.40	11215	0.02	2000	
Sb	123	115	1	He	0.270	0.270	4.96	1749	0.02	300	
Ba	137	115	1	He	35.127	35.127	1.74	91284	0.04	10000	
W	182	209	1	He	0.232	0.232	14.20	7328	0.00	2500	
Tl	205	209	1	He	0.110	0.110	2.26	4184	0.00	5000	
Pb	208	209	1	He	11.444	11.444	1.14	562728	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1304937	1.39	1263759	103.26	30	120	
Sc	45	1	He	746487	1.09	699622	106.70	30	120	
Sc	45	2	NoGas	6023144	1.28	5515925	109.20	30	120	
Rh	103	1	He	2218962	1.30	2170249	102.24	30	120	
In	115	1	He	1335521	1.66	1314135	101.63	30	120	
Tb	159	1	He	3777884	0.47	3680734	102.64	30	120	
Ho	165	1	He	3895113	0.60	3781772	103.00	30	120	
Bi	209	1	He	2862558	0.89	2765317	103.52	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-3-b@20
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:39:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.331	0.331	12.03	1571	0.02	10000	
B	11	45	2	NoGas	1.656	1.656	2.93	13113	0.01	300	
Na	23	45	1	He	18.417	18.417	2.53	52357	0.04	500000	
Mg	24	45	1	He	1002.251	1002.251	1.34	970886	0.10	500000	
Al	27	45	1	He	7062.969	7062.969	0.76	3846114	0.18	200000	
K	39	45	1	He	372.913	372.913	2.31	398995	0.09	500000	
Ca	44	45	1	He	707.771	707.771	1.89	37973	1.86	500000	
Ti	47	45	1	He	41.083	41.083	3.23	11569	0.36	2500	
V	51	45	1	He	14.068	14.068	2.58	100374	0.01	10000	
Cr	52	45	1	He	10.918	10.918	1.81	94726	0.01	10000	
Mn	55	45	1	He	405.425	405.425	0.87	2846883	0.01	10000	
Fe	56	45	1	He	13243.007	13243.007	0.25	108377833	0.01	200000	
Co	59	103	1	He	6.366	6.366	2.38	78152	0.01	10000	
Ni	60	103	1	He	9.728	9.728	2.19	30518	0.03	10000	
Cu	63	103	1	He	6.111	6.111	2.07	52816	0.01	10000	
Zn	66	103	1	He	33.153	33.153	1.16	56473	0.06	10000	
As	75	103	1	He	8.062	8.062	0.30	8863	0.09	10000	
Se	78	103	1	He	0.597	0.597	12.32	124	0.48	10000	
Sr	88	103	1	He	3.583	3.583	1.33	32781	0.01	10000	
Mo	95	103	1	He	0.968	0.968	2.07	3920	0.02	2000	
Ag	107	103	1	He	0.035	0.035	4.06	520	0.01	300	
Cd	111	103	1	He	0.101	0.101	46.58	1613	0.01	4000	
Sn	118	115	1	He	1.929	1.929	2.08	12613	0.02	2000	
Sb	123	115	1	He	0.285	0.285	0.97	1970	0.01	300	
Ba	137	115	1	He	33.944	33.944	1.27	95254	0.04	10000	
W	182	209	1	He	0.165	0.165	12.74	6709	0.00	2500	
Tl	205	209	1	He	0.105	0.105	4.12	4215	0.00	5000	
Pb	208	209	1	He	12.046	12.046	0.33	622294	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1387234	1.02	1263759	109.77	30	120	
Sc	45	1	He	809583	1.19	699622	115.72	30	120	
Sc	45	2	NoGas	6411943	1.06	5515925	116.24	30	120	
Rh	103	1	He	2409681	1.48	2170249	111.03	30	120	
In	115	1	He	1441886	0.33	1314135	109.72	30	120	
Tb	159	1	He	4040930	0.56	3680734	109.79	30	120	
Ho	165	1	He	4086252	1.00	3781772	108.05	30	120	
Bi	209	1	He	3007694	0.97	2765317	108.76	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-4-b@20
Data File Name	028SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:43:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.353	0.353	6.08	1615	0.02	10000	
B	11	45	2	NoGas	1.827	1.827	2.10	13061	0.01	300	
Na	23	45	1	He	26.270	26.270	1.44	64461	0.04	500000	
Mg	24	45	1	He	864.379	864.379	2.40	821404	0.11	500000	
Al	27	45	1	He	3792.551	3792.551	2.36	2025810	0.19	200000	
K	39	45	1	He	245.816	245.816	2.91	270736	0.09	500000	
Ca	44	45	1	He	2834.349	2834.349	2.49	146159	1.94	500000	
Ti	47	45	1	He	44.356	44.356	4.36	12241	0.36	2500	
V	51	45	1	He	8.565	8.565	4.83	60025	0.01	10000	
Cr	52	45	1	He	10.172	10.172	1.33	86731	0.01	10000	
Mn	55	45	1	He	424.868	424.868	2.17	2925590	0.01	10000	
Fe	56	45	1	He	11512.545	11512.545	1.92	92388427	0.01	200000	
Co	59	103	1	He	5.095	5.095	1.61	61927	0.01	10000	
Ni	60	103	1	He	10.890	10.890	2.43	33643	0.03	10000	
Cu	63	103	1	He	6.284	6.284	1.41	53634	0.01	10000	
Zn	66	103	1	He	23.546	23.546	3.08	40442	0.06	10000	
As	75	103	1	He	13.683	13.683	1.75	14806	0.09	10000	
Se	78	103	1	He	0.600	0.600	20.78	123	0.49	10000	
Sr	88	103	1	He	8.624	8.624	1.71	77874	0.01	10000	
Mo	95	103	1	He	0.787	0.787	1.15	3164	0.02	2000	
Ag	107	103	1	He	0.063	0.063	9.26	892	0.01	300	
Cd	111	103	1	He	0.097	0.097	7.92	1587	0.01	4000	
Sn	118	115	1	He	1.797	1.797	4.22	11679	0.02	2000	
Sb	123	115	1	He	0.316	0.316	3.75	2126	0.01	300	
Ba	137	115	1	He	42.095	42.095	1.22	116784	0.04	10000	
W	182	209	1	He	0.139	0.139	19.41	6283	0.00	2500	
Tl	205	209	1	He	0.077	0.077	7.50	3073	0.00	5000	
Pb	208	209	1	He	13.740	13.740	0.74	704389	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1343276	0.51	1263759	106.29	30	120	
Sc	45	1	He	794063	2.06	699622	113.50	30	120	
Sc	45	2	NoGas	6132625	0.79	5515925	111.18	30	120	
Rh	103	1	He	2384827	1.15	2170249	109.89	30	120	
In	115	1	He	1425759	0.48	1314135	108.49	30	120	
Tb	159	1	He	3990212	0.72	3680734	108.41	30	120	
Ho	165	1	He	4108643	0.78	3781772	108.64	30	120	
Bi	209	1	He	2985389	0.65	2765317	107.96	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-4-b@20
Data File Name	029SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:46:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.391	0.391	17.91	1871	0.02	10000	
B	11	45	2	NoGas	0.706	0.706	8.80	10418	0.01	300	
Na	23	45	1	He	16.916	16.916	4.00	51532	0.03	500000	
Mg	24	45	1	He	1019.505	1019.505	1.91	1021951	0.10	500000	
Al	27	45	1	He	6244.312	6244.312	2.00	3518787	0.18	200000	
K	39	45	1	He	293.903	293.903	2.40	333824	0.09	500000	
Ca	44	45	1	He	249.255	249.255	1.90	14513	1.72	500000	
Ti	47	45	1	He	49.953	49.953	3.20	14554	0.34	2500	
V	51	45	1	He	13.926	13.926	3.19	102817	0.01	10000	
Cr	52	45	1	He	8.467	8.467	3.23	76605	0.01	10000	
Mn	55	45	1	He	1729.487	1729.487	1.70	12562813	0.01	10000	
Fe	56	45	1	He	13303.003	13303.003	2.06	112648596	0.01	200000	
Co	59	103	1	He	6.325	6.325	2.02	80174	0.01	10000	
Ni	60	103	1	He	7.631	7.631	2.58	25037	0.03	10000	
Cu	63	103	1	He	4.942	4.942	1.91	44933	0.01	10000	
Zn	66	103	1	He	56.881	56.881	0.53	98090	0.06	10000	
As	75	103	1	He	6.909	6.909	1.90	7858	0.09	10000	
Se	78	103	1	He	0.557	0.557	15.91	123	0.45	10000	
Sr	88	103	1	He	3.156	3.156	1.03	29825	0.01	10000	
Mo	95	103	1	He	0.966	0.966	6.10	4038	0.02	2000	
Ag	107	103	1	He	0.171	0.171	1.16	2482	0.01	300	
Cd	111	103	1	He	0.121	0.121	8.57	1717	0.01	4000	
Sn	118	115	1	He	1.678	1.678	10.67	11560	0.01	2000	
Sb	123	115	1	He	0.111	0.111	15.56	1031	0.01	300	
Ba	137	115	1	He	47.845	47.845	3.39	140088	0.03	10000	
W	182	209	1	He	0.379	0.379	12.45	9981	0.00	2500	
Tl	205	209	1	He	0.119	0.119	4.16	4821	0.00	5000	
Pb	208	209	1	He	21.997	21.997	0.29	1149385	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1413793	2.09	1263759	111.87	30	120	
Sc	45	1	He	837845	1.50	699622	119.76	30	120	
Sc	45	2	NoGas	6624605	0.77	5515925	120.10	30	120	ISTD Failed
Rh	103	1	He	2487486	0.64	2170249	114.62	30	120	
In	115	1	He	1506088	4.01	1314135	114.61	30	120	
Tb	159	1	He	4130065	1.14	3680734	112.21	30	120	
Ho	165	1	He	4143678	0.82	3781772	109.57	30	120	
Bi	209	1	He	3044734	0.67	2765317	110.10	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-6-b@20
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:50:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.297	0.297	9.57	1415	0.02	10000	
B	11	45	2	NoGas	0.834	0.834	10.52	10741	0.01	300	
Na	23	45	1	He	14.843	14.843	2.39	48119	0.03	500000	
Mg	24	45	1	He	910.517	910.517	1.06	917482	0.10	500000	
Al	27	45	1	He	6288.944	6288.944	0.78	3561489	0.18	200000	
K	39	45	1	He	350.288	350.288	0.98	392194	0.09	500000	
Ca	44	45	1	He	86.801	86.801	2.51	5760	1.51	500000	
Ti	47	45	1	He	45.186	45.186	3.04	13226	0.34	2500	
V	51	45	1	He	13.941	13.941	1.56	103443	0.01	10000	
Cr	52	45	1	He	8.408	8.408	1.11	76478	0.01	10000	
Mn	55	45	1	He	774.436	774.436	1.01	5654075	0.01	10000	
Fe	56	45	1	He	12403.589	12403.589	1.34	105551609	0.01	200000	
Co	59	103	1	He	5.211	5.211	0.94	66358	0.01	10000	
Ni	60	103	1	He	7.848	7.848	3.54	25816	0.03	10000	
Cu	63	103	1	He	4.181	4.181	2.54	38851	0.01	10000	
Zn	66	103	1	He	29.200	29.200	2.48	51893	0.06	10000	
As	75	103	1	He	5.691	5.691	3.69	6522	0.09	10000	
Se	78	103	1	He	0.637	0.637	7.69	134	0.48	10000	
Sr	88	103	1	He	1.779	1.779	1.54	16951	0.01	10000	
Mo	95	103	1	He	0.754	0.754	5.97	3178	0.02	2000	
Ag	107	103	1	He	0.041	0.041	11.90	617	0.01	300	
Cd	111	103	1	He	0.065	0.065	53.75	1581	0.00	4000	
Sn	118	115	1	He	1.692	1.692	4.67	12079	0.01	2000	
Sb	123	115	1	He	0.099	0.099	10.31	999	0.01	300	
Ba	137	115	1	He	42.985	42.985	3.72	130328	0.03	10000	
W	182	209	1	He	0.099	0.099	37.80	5794	0.00	2500	
Tl	205	209	1	He	0.092	0.092	4.98	3747	0.00	5000	
Pb	208	209	1	He	10.547	10.547	0.62	550630	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1381397	1.02	1263759	109.31	30	120	
Sc	45	1	He	841890	1.08	699622	120.34	30	120	ISTD Failed
Sc	45	2	NoGas	6563636	0.50	5515925	118.99	30	120	
Rh	103	1	He	2498344	0.70	2170249	115.12	30	120	
In	115	1	He	1559685	4.10	1314135	118.69	30	120	
Tb	159	1	He	4108737	0.56	3680734	111.63	30	120	
Ho	165	1	He	4171053	0.47	3781772	110.29	30	120	
Bi	209	1	He	3038555	0.59	2765317	109.88	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-8-b@20
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:54:32-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.374	0.374	0.37	1796	0.02	10000	
B	11	45	2	NoGas	0.819	0.819	11.01	10574	0.01	300	
Na	23	45	1	He	13.985	13.985	2.64	46252	0.03	500000	
Mg	24	45	1	He	870.116	870.116	1.18	870132	0.10	500000	
Al	27	45	1	He	7040.179	7040.179	1.79	3955462	0.18	200000	
K	39	45	1	He	354.310	354.310	1.23	393166	0.09	500000	
Ca	44	45	1	He	130.014	130.014	1.51	8045	1.62	500000	
Ti	47	45	1	He	42.160	42.160	2.43	12245	0.34	2500	
V	51	45	1	He	14.492	14.492	2.31	106676	0.01	10000	
Cr	52	45	1	He	9.437	9.437	0.56	84858	0.01	10000	
Mn	55	45	1	He	719.518	719.518	2.02	5212141	0.01	10000	
Fe	56	45	1	He	12554.872	12554.872	1.61	106009754	0.01	200000	
Co	59	103	1	He	6.452	6.452	0.83	80917	0.01	10000	
Ni	60	103	1	He	10.188	10.188	1.28	32584	0.03	10000	
Cu	63	103	1	He	5.830	5.830	1.51	51674	0.01	10000	
Zn	66	103	1	He	31.037	31.037	0.78	54178	0.06	10000	
As	75	103	1	He	6.655	6.655	1.37	7495	0.09	10000	
Se	78	103	1	He	0.748	0.748	4.26	145	0.52	10000	
Sr	88	103	1	He	1.745	1.745	2.07	16388	0.01	10000	
Mo	95	103	1	He	0.827	0.827	2.45	3430	0.02	2000	
Ag	107	103	1	He	0.031	0.031	19.91	473	0.01	300	
Cd	111	103	1	He	0.103	0.103	17.19	1654	0.01	4000	
Sn	118	115	1	He	1.691	1.691	3.15	11430	0.01	2000	
Sb	123	115	1	He	0.128	0.128	12.37	1112	0.01	300	
Ba	137	115	1	He	47.504	47.504	1.33	136316	0.03	10000	
W	182	209	1	He	0.090	0.090	25.77	5627	0.00	2500	
Tl	205	209	1	He	0.104	0.104	5.37	4182	0.00	5000	
Pb	208	209	1	He	11.271	11.271	1.24	584645	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1414420	0.65	1263759	111.92	30	120	
Sc	45	1	He	835410	1.65	699622	119.41	30	120	
Sc	45	2	NoGas	6490042	0.56	5515925	117.66	30	120	
Rh	103	1	He	2461255	0.86	2170249	113.41	30	120	
In	115	1	He	1474705	0.51	1314135	112.22	30	120	
Tb	159	1	He	4065092	1.01	3680734	110.44	30	120	
Ho	165	1	He	4155215	0.59	3781772	109.87	30	120	
Bi	209	1	He	3019673	0.99	2765317	109.20	30	120	

Sample Report

Sample Table

Sample Name	240-49171-A-18-B@20
Data File Name	032SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T15:58:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.355	0.355	12.81	1711	0.02	10000	
B	11	45	2	NoGas	1.166	1.166	19.48	11749	0.01	300	
Na	23	45	1	He	19.122	19.122	4.24	55592	0.03	500000	
Mg	24	45	1	He	1575.672	1575.672	1.27	1582999	0.10	500000	
Al	27	45	1	He	6444.596	6444.596	1.34	3642618	0.18	200000	
K	39	45	1	He	440.308	440.308	1.67	481801	0.09	500000	
Ca	44	45	1	He	422.479	422.479	1.30	23950	1.76	500000	
Ti	47	45	1	He	47.173	47.173	2.20	13782	0.34	2500	
V	51	45	1	He	11.361	11.361	3.49	84184	0.01	10000	
Cr	52	45	1	He	9.745	9.745	0.32	88055	0.01	10000	
Mn	55	45	1	He	276.470	276.470	0.70	2015567	0.01	10000	
Fe	56	45	1	He	14647.247	14647.247	1.58	124412231	0.01	200000	
Co	59	103	1	He	5.561	5.561	2.75	70034	0.01	10000	
Ni	60	103	1	He	12.383	12.383	1.13	39450	0.03	10000	
Cu	63	103	1	He	10.478	10.478	1.04	89809	0.01	10000	
Zn	66	103	1	He	45.750	45.750	1.17	78911	0.06	10000	
As	75	103	1	He	7.128	7.128	0.37	8051	0.09	10000	
Se	78	103	1	He	0.615	0.615	21.11	130	0.47	10000	
Sr	88	103	1	He	2.909	2.909	0.86	27327	0.01	10000	
Mo	95	103	1	He	0.740	0.740	2.16	3088	0.02	2000	
Ag	107	103	1	He	0.014	0.014	22.15	233	0.01	300	
Cd	111	103	1	He	0.098	0.098	15.79	1647	0.01	4000	
Sn	118	115	1	He	1.616	1.616	5.37	10945	0.01	2000	
Sb	123	115	1	He	0.077	0.077	0.62	813	0.01	300	
Ba	137	115	1	He	33.907	33.907	1.01	97161	0.03	10000	
W	182	209	1	He	0.071	0.071	20.46	5327	0.00	2500	
Tl	205	209	1	He	0.090	0.090	1.10	3606	0.00	5000	
Pb	208	209	1	He	7.476	7.476	0.40	386780	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1418145	0.78	1263759	112.22	30	120	
Sc	45	1	He	840359	1.69	699622	120.12	30	120	ISTD Failed
Sc	45	2	NoGas	6524039	1.30	5515925	118.28	30	120	
Rh	103	1	He	2471465	0.78	2170249	113.88	30	120	
In	115	1	He	1472419	0.69	1314135	112.04	30	120	
Tb	159	1	He	4099048	1.31	3680734	111.36	30	120	
Ho	165	1	He	4154553	0.58	3781772	109.86	30	120	
Bi	209	1	He	3008629	1.27	2765317	108.80	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	033SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T16:02:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2089.612	2089.612	2.35	7271980	0.03	10000	
B	11	45	2	NoGas	208.875	208.875	0.96	529381	0.04	300	
Na	23	45	1	He	19743.882	19743.882	5.97	28829382	0.07	500000	
Mg	24	45	1	He	19933.566	19933.566	4.68	16526457	0.12	500000	
Al	27	45	1	He	19158.336	19158.336	4.94	8945574	0.21	200000	
K	39	45	1	He	19450.798	19450.798	3.84	16174801	0.12	500000	
Ca	44	45	1	He	17098.940	17098.940	4.75	766943	2.23	500000	
Ti	47	45	1	He	195.145	195.145	4.15	47101	0.41	2500	
V	51	45	1	He	1934.744	1934.744	3.91	11809679	0.02	10000	
Cr	52	45	1	He	1991.924	1991.924	4.91	14428159	0.01	10000	
Mn	55	45	1	He	1902.289	1902.289	5.82	11447732	0.02	10000	
Fe	56	45	1	He	19792.081	19792.081	4.80	138917252	0.01	200000	
Co	59	103	1	He	2004.770	2004.770	0.57	20548164	0.01	10000	
Ni	60	103	1	He	2036.490	2036.490	0.18	5088604	0.04	10000	
Cu	63	103	1	He	2041.655	2041.655	0.61	13570140	0.02	10000	
Zn	66	103	1	He	2079.293	2079.293	0.72	2824261	0.07	10000	
As	75	103	1	He	2041.870	2041.870	1.54	1850585	0.11	10000	
Se	78	103	1	He	1915.900	1915.900	0.40	186533	1.03	10000	
Sr	88	103	1	He	2032.856	2032.856	1.31	15467048	0.01	10000	
Mo	95	103	1	He	205.105	205.105	3.04	683109	0.03	2000	
Ag	107	103	1	He	214.983	214.983	0.69	2489068	0.01	300	
Cd	111	103	1	He	2085.337	2085.337	0.51	4283421	0.05	4000	
Sn	118	115	1	He	2259.713	2259.713	0.76	10968693	0.02	2000	>LDR
Sb	123	115	1	He	216.361	216.361	1.19	981784	0.02	300	
Ba	137	115	1	He	2213.400	2213.400	0.51	4987293	0.04	10000	
W	182	209	1	He	225.248	225.248	2.59	2886147	0.01	2500	
Tl	205	209	1	He	500.072	500.072	0.54	17040491	0.00	5000	
Pb	208	209	1	He	2068.661	2068.661	0.03	92732280	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1089215	2.04	1263759	86.19	30	120	
Sc	45	1	He	695869	6.86	699622	99.46	30	120	
Sc	45	2	NoGas	5041409	0.72	5515925	91.40	30	120	
Rh	103	1	He	2013251	2.01	2170249	92.77	30	120	
In	115	1	He	1158667	1.75	1314135	88.17	30	120	
Tb	159	1	He	3609043	1.65	3680734	98.05	30	120	
Ho	165	1	He	3749312	1.06	3781772	99.14	30	120	
Bi	209	1	He	2614805	1.20	2765317	94.56	30	120	

Sample Report

Sample Table

Sample Name	240-49171-A-18-B@50
Data File Name	034SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T16:05:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.539	0.539	17.54	2119	0.03	10000	
B	11	45	2	NoGas	1.957	1.957	8.57	11611	0.02	300	
Na	23	45	1	He	12.300	12.300	11.92	33706	0.04	500000	
Mg	24	45	1	He	662.722	662.722	0.86	516982	0.13	500000	
Al	27	45	1	He	2773.980	2773.980	1.76	1215476	0.23	200000	
K	39	45	1	He	189.500	189.500	2.17	178233	0.11	500000	
Ca	44	45	1	He	181.573	181.573	2.72	8436	2.15	500000	
Ti	47	45	1	He	20.557	20.557	1.20	4661	0.44	2500	
V	51	45	1	He	5.106	5.106	4.05	29450	0.02	10000	
Cr	52	45	1	He	4.356	4.356	4.70	31607	0.01	10000	
Mn	55	45	1	He	114.353	114.353	2.19	646411	0.02	10000	
Fe	56	45	1	He	6338.964	6338.964	2.97	41708668	0.02	200000	
Co	59	103	1	He	2.403	2.403	3.75	25693	0.01	10000	
Ni	60	103	1	He	4.980	4.980	3.88	14196	0.04	10000	
Cu	63	103	1	He	4.411	4.411	2.27	34175	0.01	10000	
Zn	66	103	1	He	19.284	19.284	2.62	29518	0.07	10000	
As	75	103	1	He	3.969	3.969	1.61	3846	0.10	10000	
Se	78	103	1	He	1.548	1.548	19.37	204	0.76	10000	
Sr	88	103	1	He	1.351	1.351	6.12	10831	0.01	10000	
Mo	95	103	1	He	3.959	3.959	20.68	13758	0.03	2000	
Ag	107	103	1	He	0.032	0.032	4.47	409	0.01	300	
Cd	111	103	1	He	0.287	0.287	20.20	1800	0.02	4000	
Sn	118	115	1	He	12.274	12.274	14.07	65458	0.02	2000	
Sb	123	115	1	He	1.172	1.172	19.83	6083	0.02	300	
Ba	137	115	1	He	14.028	14.028	1.30	34378	0.04	10000	
W	182	209	1	He	3.604	3.604	22.51	52849	0.01	2500	
Tl	205	209	1	He	0.287	0.287	22.08	10456	0.00	5000	
Pb	208	209	1	He	3.441	3.441	2.39	164632	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1180632	0.36	1263759	93.42	30	120	
Sc	45	1	He	651189	2.76	699622	93.08	30	120	
Sc	45	2	NoGas	5290135	0.93	5515925	95.91	30	120	
Rh	103	1	He	2095600	1.26	2170249	96.56	30	120	
In	115	1	He	1257856	0.99	1314135	95.72	30	120	
Tb	159	1	He	3652487	0.67	3680734	99.23	30	120	
Ho	165	1	He	3729976	1.54	3781772	98.63	30	120	
Bi	209	1	He	2772403	0.69	2765317	100.26	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	035_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T16:09:15-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.991	4.006	171443	3.32	50	96.0	89.5	110.5	
B	11	45	2	NoGas	50.655	0.891	133719	0.68	50	101.3	89.5	110.5	
Na	23	45	1	He	24942.382	4.083	35558925	0.95	25000	99.8	89.5	110.5	
Mg	24	45	1	He	24926.151	4.952	20161982	0.73	25000	99.7	89.5	110.5	
Al	27	45	1	He	245.808	3.260	113359	1.17	250	98.3	89.5	110.5	
K	39	45	1	He	24585.417	4.201	19934832	0.09	25000	98.3	89.5	110.5	
Ca	44	45	1	He	23845.014	3.754	1043548	0.62	25000	95.4	89.5	110.5	
Ti	47	45	1	He	48.928	2.331	11536	2.72	50	97.9	89.5	110.5	
V	51	45	1	He	48.482	3.499	289002	1.07	50	97.0	89.5	110.5	
Cr	52	45	1	He	49.143	3.582	349536	0.88	50	98.3	89.5	110.5	
Mn	55	45	1	He	248.300	4.540	1459725	0.36	250	99.3	89.5	110.5	
Fe	56	45	1	He	12355.931	5.065	84618059	1.02	12500	98.8	89.5	110.5	
Co	59	103	1	He	49.506	2.079	495893	0.77	50	99.0	89.5	110.5	
Ni	60	103	1	He	49.685	2.021	122472	0.89	50	99.4	89.5	110.5	
Cu	63	103	1	He	49.948	2.671	327790	0.94	50	99.9	89.5	110.5	
Zn	66	103	1	He	49.683	1.360	68045	1.52	50	99.4	89.5	110.5	
As	75	103	1	He	49.739	2.318	44152	0.59	50	99.5	89.5	110.5	
Se	78	103	1	He	49.770	2.913	4779	1.40	50	99.5	89.5	110.5	
Sr	88	103	1	He	48.884	2.284	363600	0.77	50	97.8	89.5	110.5	
Mo	95	103	1	He	51.473	2.378	167640	1.77	50	102.9	89.5	110.5	
Ag	107	103	1	He	50.353	2.093	569679	0.54	50	100.7	89.5	110.5	
Cd	111	103	1	He	50.032	2.584	101516	0.79	50	100.1	89.5	110.5	
Sn	118	115	1	He	52.104	0.969	260928	0.71	50	104.2	89.5	110.5	
Sb	123	115	1	He	51.433	0.703	240317	0.44	50	102.9	89.5	110.5	
Ba	137	115	1	He	50.023	2.055	115996	1.95	50	100.0	89.5	110.5	
W	182	209	1	He	51.517	1.188	655335	1.15	50	103.0	89.5	110.5	
Tl	205	209	1	He	50.204	2.230	1690873	2.26	50	100.4	89.5	110.5	
Pb	208	209	1	He	48.976	0.949	2170734	0.99	50	98.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1117463	0.86	1263759	88.42	30	120	
Sc	45	1	He	678449	4.37	699622	96.97	30	120	
Sc	45	2	NoGas	5066685	0.33	5515925	91.86	30	120	
Rh	103	1	He	1967905	1.89	2170249	90.68	30	120	
In	115	1	He	1191780	0.34	1314135	90.69	30	120	
Tb	159	1	He	3562303	0.47	3680734	96.78	30	120	
Ho	165	1	He	3659768	1.24	3781772	96.77	30	120	
Bi	209	1	He	2584187	0.04	2765317	93.45	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	036_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T16:13:03-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.135	14.4	585	12.1	1	
B	11	45	2	NoGas	0.881	26.5	8450	7.0	20	
Na	23	45	1	He	7.405	10.2	26368	2.3	400	
Mg	24	45	1	He	2.527	31.2	3719	14.5	1000	
Al	27	45	1	He	1.133	26.8	1730	5.8	50	
K	39	45	1	He	7.763	24.9	35989	2.3	1000	
Ca	44	45	1	He	26.284	10.4	1865	4.9	1000	
Ti	47	45	1	He	0.090	54.2	29	37.1	20	
V	51	45	1	He	0.003	3335.3	259	193.3	2	
Cr	52	45	1	He	0.002	368.9	2013	2.1	2	
Mn	55	45	1	He	0.334	15.0	2844	8.3	2	
Fe	56	45	1	He	27.164	20.3	180763	18.5	50	
Co	59	103	1	He	0.028	11.6	367	8.3	1	
Ni	60	103	1	He	-0.186	-17.6	764	10.3	2	
Cu	63	103	1	He	-0.187	-13.1	2371	8.1	2	
Zn	66	103	1	He	1.294	12.0	4104	4.7	20	
As	75	103	1	He	0.162	11.4	255	7.8	2	
Se	78	103	1	He	0.220	33.8	70	11.4	2	
Sr	88	103	1	He	0.033	20.5	388	12.5	10	
Mo	95	103	1	He	1.078	20.9	3784	20.5	2	
Ag	107	103	1	He	0.010	24.1	146	19.5	0.2	
Cd	111	103	1	He	0.023	132.1	1235	4.1	0.2	
Sn	118	115	1	He	1.485	10.8	8595	10.1	10	
Sb	123	115	1	He	0.518	11.7	2845	10.8	1	
Ba	137	115	1	He	0.035	36.8	148	20.8	5	
W	182	209	1	He	1.263	14.7	20551	12.0	10	
Tl	205	209	1	He	0.064	13.6	2320	13.2	0.5	
Pb	208	209	1	He	0.162	4.5	8563	4.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1159068	0.98	1263759	91.72	30	120	
Sc	45	1	He	635330	1.80	699622	90.81	30	120	
Sc	45	2	NoGas	5090140	0.45	5515925	92.28	30	120	
Rh	103	1	He	2093158	1.21	2170249	96.45	30	120	
In	115	1	He	1247522	0.47	1314135	94.93	30	120	
Tb	159	1	He	3580479	1.42	3680734	97.28	30	120	
Ho	165	1	He	3662748	1.05	3781772	96.85	30	120	
Bi	209	1	He	2701057	0.15	2765317	97.68	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	037CRIA.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T16:16:55-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.997	0.997	7.355	3808	5.02	1	99.7	69.5	130.5	
B	11	2	NoGas	20.484	20.484	3.179	60179	2.15	20	102.4	69.5	130.5	
Na	23	1	He	1092.902	1092.902	0.525	1582449	1.42	1000	109.3	69.5	130.5	
Mg	24	1	He	1050.993	1050.993	1.088	856223	0.92	1000	105.1	69.5	130.5	
Al	27	1	He	50.273	50.273	1.946	24352	1.56	50	100.5	69.5	130.5	
K	39	1	He	1015.904	1015.904	0.970	858609	0.64	1000	101.6	69.5	130.5	
Ca	44	1	He	989.273	989.273	0.801	44307	0.83	1000	98.9	69.5	130.5	
Ti	47	1	He	10.374	10.374	2.405	2464	1.79	10	103.7	69.5	130.5	
V	51	1	He	5.239	5.239	0.894	31600	0.50	5	104.8	69.5	130.5	
Cr	52	1	He	2.131	2.131	1.198	17276	0.96	2	106.6	69.5	130.5	
Mn	55	1	He	4.953	4.953	1.083	30322	1.93	5	99.1	69.5	130.5	
Fe	56	1	He	109.003	109.003	0.536	757285	0.95	100	109.0	69.5	130.5	
Co	59	1	He	1.038	1.038	3.134	11300	3.06	1	103.8	69.5	130.5	
Ni	60	1	He	1.821	1.821	2.830	6072	2.86	2	91.1	69.5	130.5	
Cu	63	1	He	1.801	1.801	3.133	16362	2.97	2	90.0	69.5	130.5	
Zn	66	1	He	19.728	19.728	0.840	30590	1.23	20	98.6	69.5	130.5	
As	75	1	He	5.020	5.020	1.557	4909	2.03	5	100.4	69.5	130.5	
Se	78	1	He	5.200	5.200	1.089	583	1.11	5	104.0	69.5	130.5	
Sr	88	1	He	9.404	9.404	1.273	75689	0.75	10	94.0	69.5	130.5	
Mo	95	1	He	10.507	10.507	2.950	37015	2.27	10	105.1	69.5	130.5	
Ag	107	1	He	1.056	1.056	1.114	12933	1.82	1	105.6	69.5	130.5	
Cd	111	1	He	0.995	0.995	4.991	3362	2.76	1	99.5	69.5	130.5	
Sn	118	1	He	10.925	10.925	1.018	59509	0.94	10	109.3	69.5	130.5	
Sb	123	1	He	2.091	2.091	0.772	10814	0.43	2	104.5	69.5	130.5	
Ba	137	1	He	4.844	4.844	3.681	12136	3.11	5	96.9	69.5	130.5	
W	182	1	He	9.848	9.848	1.684	138511	1.57	10	98.5	69.5	130.5	
Tl	205	1	He	1.879	1.879	0.631	68426	0.22	2	94.0	69.5	130.5	
Pb	208	1	He	1.127	1.127	1.443	55011	1.07	1	112.7	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1169968	2.36	1263759	92.58	30	120	
Sc	45	1	He	680888	0.93	699622	97.32	30	120	
Sc	45	2	NoGas	5279300	0.73	5515925	95.71	30	120	
Rh	103	1	He	2125979	0.72	2170249	97.96	30	120	
In	115	1	He	1281608	0.62	1314135	97.52	30	120	
Tb	159	1	He	3684389	0.74	3680734	100.10	30	120	
Ho	165	1	He	3748399	1.05	3781772	99.12	30	120	
Bi	209	1	He	2790923	0.41	2765317	100.93	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	038_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T16:34:38-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.767	1.484	185510	1.85	50	95.5	89.5	110.5	
B	11	45	2	NoGas	48.535	0.383	138990	0.30	50	97.1	89.5	110.5	
Na	23	45	1	He	24104.177	5.083	37666349	0.54	25000	96.4	89.5	110.5	
Mg	24	45	1	He	24181.341	4.433	21450214	1.23	25000	96.7	89.5	110.5	
Al	27	45	1	He	239.327	3.524	121062	2.27	250	95.7	89.5	110.5	
K	39	45	1	He	24051.533	5.414	21375125	0.44	25000	96.2	89.5	110.5	
Ca	44	45	1	He	23476.870	4.193	1126490	1.58	25000	93.9	89.5	110.5	
Ti	47	45	1	He	48.413	4.375	12508	1.64	50	96.8	89.5	110.5	
V	51	45	1	He	48.131	2.547	314731	3.09	50	96.3	89.5	110.5	
Cr	52	45	1	He	47.925	4.082	373790	1.77	50	95.9	89.5	110.5	
Mn	55	45	1	He	242.568	3.450	1564294	2.18	250	97.0	89.5	110.5	
Fe	56	45	1	He	12102.802	5.298	90868956	0.83	12500	96.8	89.5	110.5	
Co	59	103	1	He	49.896	1.329	527659	0.91	50	99.8	89.5	110.5	
Ni	60	103	1	He	50.201	1.923	130623	1.38	50	100.4	89.5	110.5	
Cu	63	103	1	He	49.885	1.252	345651	0.74	50	99.8	89.5	110.5	
Zn	66	103	1	He	49.922	2.084	72160	1.51	50	99.8	89.5	110.5	
As	75	103	1	He	49.990	1.662	46850	1.16	50	100.0	89.5	110.5	
Se	78	103	1	He	50.768	2.909	5145	2.32	50	101.5	89.5	110.5	
Sr	88	103	1	He	49.452	1.430	388332	0.93	50	98.9	89.5	110.5	
Mo	95	103	1	He	50.936	1.093	175142	1.47	50	101.9	89.5	110.5	
Ag	107	103	1	He	50.207	1.016	599700	0.62	50	100.4	89.5	110.5	
Cd	111	103	1	He	49.398	2.122	105836	1.59	50	98.8	89.5	110.5	
Sn	118	115	1	He	49.579	0.825	262488	1.15	50	99.2	89.5	110.5	
Sb	123	115	1	He	50.340	0.486	248626	0.68	50	100.7	89.5	110.5	
Ba	137	115	1	He	50.177	0.941	122987	1.10	50	100.4	89.5	110.5	
W	182	209	1	He	49.693	1.550	659010	0.58	50	99.4	89.5	110.5	
Tl	205	209	1	He	50.240	1.183	1763895	1.84	50	100.5	89.5	110.5	
Pb	208	209	1	He	48.019	0.271	2218638	1.09	50	96.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1214648	1.74	1263759	96.11	30	120	
Sc	45	1	He	744198	5.67	699622	106.37	30	120	
Sc	45	2	NoGas	5485290	0.48	5515925	99.44	30	120	
Rh	103	1	He	2077167	0.60	2170249	95.71	30	120	
In	115	1	He	1259707	0.33	1314135	95.86	30	120	
Tb	159	1	He	3657070	0.85	3680734	99.36	30	120	
Ho	165	1	He	3765742	1.76	3781772	99.58	30	120	
Bi	209	1	He	2693790	0.99	2765317	97.41	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	039_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T16:38:25-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.049	36.4	278	25.0	1	
B	11	45	2	NoGas	0.657	16.5	8232	2.9	20	
Na	23	45	1	He	6.562	11.5	26220	2.6	400	
Mg	24	45	1	He	2.213	41.0	3615	18.0	1000	
Al	27	45	1	He	1.061	33.0	1766	7.7	50	
K	39	45	1	He	7.787	23.5	37402	2.2	1000	
Ca	44	45	1	He	30.829	8.1	2132	5.2	1000	
Ti	47	45	1	He	0.133	55.0	40	43.3	20	
V	51	45	1	He	0.002	2504.0	259	101.4	2	
Cr	52	45	1	He	0.007	311.5	2122	5.7	2	
Mn	55	45	1	He	0.351	10.3	3055	5.1	2	
Fe	56	45	1	He	24.656	24.9	170877	22.1	50	
Co	59	103	1	He	0.003	88.4	97	26.0	1	
Ni	60	103	1	He	-0.234	-16.5	651	14.6	2	
Cu	63	103	1	He	-0.279	-6.8	1772	8.1	2	
Zn	66	103	1	He	1.436	7.3	4393	4.5	20	
As	75	103	1	He	0.077	33.8	177	12.9	2	
Se	78	103	1	He	0.150	76.3	64	17.6	2	
Sr	88	103	1	He	0.014	18.6	243	7.2	10	
Mo	95	103	1	He	0.920	17.7	3307	18.4	2	
Ag	107	103	1	He	0.011	35.2	161	30.1	0.2	
Cd	111	103	1	He	0.028	4.6	1272	1.3	0.2	
Sn	118	115	1	He	0.528	9.8	3730	7.6	10	
Sb	123	115	1	He	0.504	18.9	2888	16.9	1	
Ba	137	115	1	He	0.020	40.3	114	17.8	5	
W	182	209	1	He	1.056	17.4	18230	13.4	10	
Tl	205	209	1	He	0.034	11.5	1307	10.6	0.5	
Pb	208	209	1	He	0.078	2.9	4806	2.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1210481	0.87	1263759	95.78	30	120	
Sc	45	1	He	659916	1.66	699622	94.32	30	120	
Sc	45	2	NoGas	5315861	0.60	5515925	96.37	30	120	
Rh	103	1	He	2134942	1.12	2170249	98.37	30	120	
In	115	1	He	1297325	0.33	1314135	98.72	30	120	
Tb	159	1	He	3683536	0.06	3680734	100.08	30	120	
Ho	165	1	He	3754328	1.17	3781772	99.27	30	120	
Bi	209	1	He	2764660	0.35	2765317	99.98	30	120	

Sample Report

Sample Table

Sample Name	240-49130-a-1-b@5
Data File Name	040SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T16:42:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	20.481	20.481	2.30	77528	0.03	10000	
B	11	45	2	NoGas	384.007	384.007	3.68	1011792	0.04	300	>LDR
Na	23	45	1	He	9.209	9.209	7.71	31584	0.03	500000	
Mg	24	45	1	He	-0.625	-0.625	-9.60	1467	-0.04	500000	
Al	27	45	1	He	118.660	118.660	1.86	56995	0.21	200000	
K	39	45	1	He	1.563	1.563	107.00	34333	0.00	500000	
Ca	44	45	1	He	-78.994	-78.994	-4.99	-2687	2.94	500000	
Ti	47	45	1	He	0.120	0.120	67.66	39	0.31	2500	
V	51	45	1	He	57.146	57.146	1.10	350381	0.02	10000	
Cr	52	45	1	He	102.509	102.509	1.28	747729	0.01	10000	
Mn	55	45	1	He	154.919	154.919	1.09	937646	0.02	10000	
Fe	56	45	1	He	534.298	534.298	1.67	3772457	0.01	200000	
Co	59	103	1	He	108.010	108.010	1.40	1182627	0.01	10000	
Ni	60	103	1	He	109.688	109.688	1.10	294008	0.04	10000	
Cu	63	103	1	He	64.458	64.458	1.47	461348	0.01	10000	
Zn	66	103	1	He	232.632	232.632	0.52	339611	0.07	10000	
As	75	103	1	He	103.076	103.076	0.79	99912	0.10	10000	
Se	78	103	1	He	50.866	50.866	1.35	5338	0.95	10000	
Sr	88	103	1	He	83.547	83.547	0.93	679234	0.01	10000	
Mo	95	103	1	He	67.590	67.590	0.74	240604	0.03	2000	
Ag	107	103	1	He	147.284	147.284	0.95	1821442	0.01	300	
Cd	111	103	1	He	140.658	140.658	1.03	309802	0.05	4000	
Sn	118	115	1	He	0.432	0.432	4.98	3137	0.01	2000	
Sb	123	115	1	He	129.585	129.585	0.69	643068	0.02	300	
Ba	137	115	1	He	340.164	340.164	1.59	838048	0.04	10000	
W	182	209	1	He	0.219	0.219	4.05	7109	0.00	2500	
Tl	205	209	1	He	131.936	131.936	1.86	4900380	0.00	5000	
Pb	208	209	1	He	186.907	186.907	0.41	9133101	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1183430	2.17	1263759	93.64	30	120	
Sc	45	1	He	697361	2.50	699622	99.68	30	120	
Sc	45	2	NoGas	5270660	1.56	5515925	95.55	30	120	
Rh	103	1	He	2150640	0.61	2170249	99.10	30	120	
In	115	1	He	1266695	0.39	1314135	96.39	30	120	
Tb	159	1	He	3656821	1.21	3680734	99.35	30	120	
Ho	165	1	He	3772836	0.96	3781772	99.76	30	120	
Bi	209	1	He	2850051	0.81	2765317	103.06	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49130-a-1-b@25
Data File Name	041SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T16:45:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.259	3.259	2.24	12560	0.03	10000	
B	11	45	2	NoGas	65.919	65.919	1.96	182392	0.04	300	
Na	23	45	1	He	2.300	2.300	5.24	20850	0.01	500000	
Mg	24	45	1	He	-0.791	-0.791	-31.14	1289	-0.06	500000	
Al	27	45	1	He	23.762	23.762	2.72	12152	0.20	200000	
K	39	45	1	He	1.654	1.654	102.77	33428	0.00	500000	
Ca	44	45	1	He	-22.010	-22.010	-8.94	-121	18.13	500000	
Ti	47	45	1	He	-0.013	-0.013	-295.58	7	-0.19	2500	
V	51	45	1	He	11.674	11.674	5.54	69721	0.02	10000	
Cr	52	45	1	He	21.208	21.208	1.70	151926	0.01	10000	
Mn	55	45	1	He	32.221	32.221	1.72	190247	0.02	10000	
Fe	56	45	1	He	106.834	106.834	1.07	738327	0.01	200000	
Co	59	103	1	He	21.822	21.822	1.85	239296	0.01	10000	
Ni	60	103	1	He	21.948	21.948	1.99	59931	0.04	10000	
Cu	63	103	1	He	12.635	12.635	1.24	93591	0.01	10000	
Zn	66	103	1	He	47.100	47.100	1.85	70721	0.07	10000	
As	75	103	1	He	21.068	21.068	1.03	20533	0.10	10000	
Se	78	103	1	He	10.551	10.551	1.77	1147	0.92	10000	
Sr	88	103	1	He	16.932	16.932	1.59	137954	0.01	10000	
Mo	95	103	1	He	14.134	14.134	1.35	50425	0.03	2000	
Ag	107	103	1	He	27.606	27.606	1.49	341880	0.01	300	
Cd	111	103	1	He	28.472	28.472	2.04	63764	0.04	4000	
Sn	118	115	1	He	0.157	0.157	28.80	1689	0.01	2000	
Sb	123	115	1	He	26.932	26.932	1.57	134966	0.02	300	
Ba	137	115	1	He	68.267	68.267	1.16	169572	0.04	10000	
W	182	209	1	He	0.101	0.101	17.16	5390	0.00	2500	
Tl	205	209	1	He	25.496	25.496	0.84	934504	0.00	5000	
Pb	208	209	1	He	35.844	35.844	1.12	1729212	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1197713	2.07	1263759	94.77	30	120	
Sc	45	1	He	677214	1.04	699622	96.80	30	120	
Sc	45	2	NoGas	5368934	1.27	5515925	97.34	30	120	
Rh	103	1	He	2153692	1.02	2170249	99.24	30	120	
In	115	1	He	1276775	0.18	1314135	97.16	30	120	
Tb	159	1	He	3681941	0.65	3680734	100.03	30	120	
Ho	165	1	He	3762308	0.97	3781772	99.49	30	120	
Bi	209	1	He	2812237	0.70	2765317	101.70	30	120	

Sample Report

Sample Table

Sample Name	240-49130-a-1-c du@5
Data File Name	042SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T16:49:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	22.063	22.063	0.81	84235	0.03	10000	
B	11	45	2	NoGas	404.281	404.281	0.57	1080414	0.04	300	>LDR
Na	23	45	1	He	7.494	7.494	7.77	29306	0.03	500000	
Mg	24	45	1	He	-0.888	-0.888	-7.52	1256	-0.07	500000	
Al	27	45	1	He	123.816	123.816	1.93	59867	0.21	200000	
K	39	45	1	He	0.156	0.156	1128.42	33417	0.00	500000	
Ca	44	45	1	He	-72.386	-72.386	-8.28	-2411	3.00	500000	
Ti	47	45	1	He	0.037	0.037	82.89	19	0.19	2500	
V	51	45	1	He	58.248	58.248	0.59	359918	0.02	10000	
Cr	52	45	1	He	104.000	104.000	2.18	764268	0.01	10000	
Mn	55	45	1	He	156.488	156.488	2.03	954275	0.02	10000	
Fe	56	45	1	He	540.180	540.180	3.03	3842573	0.01	200000	
Co	59	103	1	He	110.954	110.954	2.14	1205799	0.01	10000	
Ni	60	103	1	He	112.770	112.770	2.25	299995	0.04	10000	
Cu	63	103	1	He	66.510	66.510	2.33	472360	0.01	10000	
Zn	66	103	1	He	244.128	244.128	2.25	353613	0.07	10000	
As	75	103	1	He	105.920	105.920	2.17	101904	0.10	10000	
Se	78	103	1	He	51.551	51.551	2.09	5369	0.96	10000	
Sr	88	103	1	He	85.982	85.982	2.16	693806	0.01	10000	
Mo	95	103	1	He	69.276	69.276	3.22	244738	0.03	2000	
Ag	107	103	1	He	149.336	149.336	2.76	1833055	0.01	300	
Cd	111	103	1	He	144.971	144.971	1.98	316889	0.05	4000	
Sn	118	115	1	He	0.375	0.375	1.16	2830	0.01	2000	
Sb	123	115	1	He	132.147	132.147	0.49	655587	0.02	300	
Ba	137	115	1	He	346.505	346.505	0.86	853399	0.04	10000	
W	182	209	1	He	0.098	0.098	33.83	5490	0.00	2500	
Tl	205	209	1	He	133.697	133.697	1.66	5026116	0.00	5000	
Pb	208	209	1	He	190.353	190.353	0.76	9414589	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1193437	2.22	1263759	94.44	30	120	
Sc	45	1	He	702724	2.27	699622	100.44	30	120	
Sc	45	2	NoGas	5345749	0.55	5515925	96.91	30	120	
Rh	103	1	He	2135243	2.02	2170249	98.39	30	120	
In	115	1	He	1266365	0.34	1314135	96.36	30	120	
Tb	159	1	He	3653324	0.80	3680734	99.26	30	120	
Ho	165	1	He	3759968	0.85	3781772	99.42	30	120	
Bi	209	1	He	2884752	0.75	2765317	104.32	30	120	

Sample Report

Sample Table

Sample Name	240-49130-a-1-e ms@5
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T16:53:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	229.099	229.099	0.82	848182	0.03	10000	
B	11	45	2	NoGas	422.366	422.366	1.72	1090287	0.04	300	>LDR
Na	23	45	1	He	2135.916	2135.916	3.49	3116337	0.07	500000	
Mg	24	45	1	He	2136.964	2136.964	2.54	1762271	0.12	500000	
Al	27	45	1	He	2118.112	2118.112	2.00	984190	0.22	200000	
K	39	45	1	He	2128.505	2128.505	2.87	1787232	0.12	500000	
Ca	44	45	1	He	1679.646	1679.646	3.48	75622	2.22	500000	
Ti	47	45	1	He	20.274	20.274	4.79	4875	0.42	2500	
V	51	45	1	He	275.843	275.843	1.94	1672967	0.02	10000	
Cr	52	45	1	He	316.431	316.431	3.40	2279095	0.01	10000	
Mn	55	45	1	He	367.985	367.985	0.50	2203613	0.02	10000	
Fe	56	45	1	He	2638.551	2638.551	2.11	18413024	0.01	200000	
Co	59	103	1	He	321.460	321.460	1.56	3413628	0.01	10000	
Ni	60	103	1	He	312.978	312.978	2.00	811316	0.04	10000	
Cu	63	103	1	He	287.551	287.551	2.03	1983519	0.01	10000	
Zn	66	103	1	He	440.928	440.928	1.80	622254	0.07	10000	
As	75	103	1	He	299.768	299.768	1.63	281633	0.11	10000	
Se	78	103	1	He	253.536	253.536	1.87	25616	0.99	10000	
Sr	88	103	1	He	297.602	297.602	1.53	2346357	0.01	10000	
Mo	95	103	1	He	89.882	89.882	2.49	310265	0.03	2000	
Ag	107	103	1	He	168.860	168.860	1.36	2025448	0.01	300	
Cd	111	103	1	He	346.770	346.770	1.29	739042	0.05	4000	
Sn	118	115	1	He	206.723	206.723	0.65	1071822	0.02	2000	
Sb	123	115	1	He	153.094	153.094	1.12	741682	0.02	300	
Ba	137	115	1	He	542.321	542.321	1.27	1304377	0.04	10000	
W	182	209	1	He	19.569	19.569	0.56	272550	0.01	2500	
Tl	205	209	1	He	180.584	180.584	1.42	6597759	0.00	5000	
Pb	208	209	1	He	390.755	390.755	1.71	18780272	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1158296	0.25	1263759	91.65	30	120	
Sc	45	1	He	690396	3.44	699622	98.68	30	120	
Sc	45	2	NoGas	5165525	1.18	5515925	93.65	30	120	
Rh	103	1	He	2086287	2.07	2170249	96.13	30	120	
In	115	1	He	1236699	0.50	1314135	94.11	30	120	
Tb	159	1	He	3640150	1.15	3680734	98.90	30	120	
Ho	165	1	He	3678725	1.60	3781772	97.28	30	120	
Bi	209	1	He	2803565	0.71	2765317	101.38	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	044_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T16:57:09-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.909	1.910	177434	2.30	50	93.8	89.5	110.5	
B	11	45	2	NoGas	57.439	1.205	155732	1.62	50	114.9	89.5	110.5	CCV Failed
Na	23	45	1	He	25757.985	1.375	36592914	0.76	25000	103.0	89.5	110.5	
Mg	24	45	1	He	25685.120	2.298	20708224	1.68	25000	102.7	89.5	110.5	
Al	27	45	1	He	254.522	2.387	116888	1.60	250	101.8	89.5	110.5	
K	39	45	1	He	25336.163	0.723	20472839	0.57	25000	101.3	89.5	110.5	
Ca	44	45	1	He	24731.940	2.134	1078427	1.37	25000	98.9	89.5	110.5	
Ti	47	45	1	He	51.904	1.638	12188	1.59	50	103.8	89.5	110.5	
V	51	45	1	He	50.526	2.468	300061	1.90	50	101.1	89.5	110.5	
Cr	52	45	1	He	50.877	1.808	360474	1.08	50	101.8	89.5	110.5	
Mn	55	45	1	He	254.203	1.879	1489377	1.13	250	101.7	89.5	110.5	
Fe	56	45	1	He	12996.979	1.684	88722050	1.06	12500	104.0	89.5	110.5	
Co	59	103	1	He	51.644	7.570	508634	1.25	50	103.3	89.5	110.5	
Ni	60	103	1	He	51.657	7.626	125151	1.28	50	103.3	89.5	110.5	
Cu	63	103	1	He	51.974	7.494	335276	1.09	50	103.9	89.5	110.5	
Zn	66	103	1	He	51.751	7.755	69593	1.20	50	103.5	89.5	110.5	
As	75	103	1	He	51.996	7.576	45380	1.25	50	104.0	89.5	110.5	
Se	78	103	1	He	52.339	8.269	4938	1.86	50	104.7	89.5	110.5	
Sr	88	103	1	He	50.816	7.468	371657	1.13	50	101.6	89.5	110.5	
Mo	95	103	1	He	53.974	5.393	172985	1.06	50	107.9	89.5	110.5	
Ag	107	103	1	He	52.003	7.336	578545	1.03	50	104.0	89.5	110.5	
Cd	111	103	1	He	52.141	7.584	103988	1.30	50	104.3	89.5	110.5	
Sn	118	115	1	He	51.976	7.550	256019	1.85	50	104.0	89.5	110.5	
Sb	123	115	1	He	53.372	5.946	245414	0.31	50	106.7	89.5	110.5	
Ba	137	115	1	He	51.707	5.939	118000	0.44	50	103.4	89.5	110.5	
W	182	209	1	He	52.831	4.602	665293	0.29	50	105.7	89.5	110.5	
Tl	205	209	1	He	52.205	6.332	1739957	2.04	50	104.4	89.5	110.5	
Pb	208	209	1	He	49.969	5.280	2192362	1.00	50	99.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1182903	1.05	1263759	93.60	30	120	
Sc	45	1	He	675337	0.76	699622	96.53	30	120	
Sc	45	2	NoGas	5232193	0.48	5515925	94.86	30	120	
Rh	103	1	He	1940405	6.10	2170249	89.41	30	120	
In	115	1	He	1175426	5.45	1314135	89.44	30	120	
Tb	159	1	He	3475436	6.03	3680734	94.42	30	120	
Ho	165	1	He	3602112	5.24	3781772	95.25	30	120	
Bi	209	1	He	2561899	4.24	2765317	92.64	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	045_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:00:55-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.064	29.4	337	20.9	1	
B	11	45	2	NoGas	5.434	3.7	20764	1.5	20	
Na	23	45	1	He	6.929	23.1	26561	7.1	400	
Mg	24	45	1	He	2.388	39.9	3730	18.3	1000	
Al	27	45	1	He	1.133	44.8	1789	13.3	50	
K	39	45	1	He	7.280	21.3	36783	1.7	1000	
Ca	44	45	1	He	30.240	18.6	2093	10.3	1000	
Ti	47	45	1	He	0.086	44.4	29	29.0	20	
V	51	45	1	He	-0.037	-201.6	40	1076.6	2	
Cr	52	45	1	He	-0.004	-108.1	2035	1.2	2	
Mn	55	45	1	He	0.329	16.9	2908	9.9	2	
Fe	56	45	1	He	24.982	24.7	172005	22.0	50	
Co	59	103	1	He	0.012	56.3	198	37.3	1	
Ni	60	103	1	He	-0.247	-7.5	614	8.6	2	
Cu	63	103	1	He	-0.281	-6.0	1749	6.5	2	
Zn	66	103	1	He	1.334	12.1	4225	6.2	20	
As	75	103	1	He	0.158	14.7	254	9.4	2	
Se	78	103	1	He	0.245	33.6	73	12.3	2	
Sr	88	103	1	He	0.017	32.1	270	16.7	10	
Mo	95	103	1	He	1.191	14.3	4242	14.6	2	
Ag	107	103	1	He	0.018	4.1	250	3.5	0.2	
Cd	111	103	1	He	0.014	77.7	1233	1.5	0.2	
Sn	118	115	1	He	0.650	4.4	4308	3.2	10	
Sb	123	115	1	He	0.820	4.1	4404	3.6	1	
Ba	137	115	1	He	0.022	25.6	118	11.4	5	
W	182	209	1	He	1.116	18.0	19057	13.8	10	
Tl	205	209	1	He	0.074	15.2	2735	14.2	0.5	
Pb	208	209	1	He	0.110	7.3	6318	5.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1211085	1.15	1263759	95.83	30	120	
Sc	45	1	He	655963	1.74	699622	93.76	30	120	
Sc	45	2	NoGas	5294790	1.38	5515925	95.99	30	120	
Rh	103	1	He	2124404	0.79	2170249	97.89	30	120	
In	115	1	He	1271901	0.41	1314135	96.79	30	120	
Tb	159	1	He	3660444	0.28	3680734	99.45	30	120	
Ho	165	1	He	3730019	1.38	3781772	98.63	30	120	
Bi	209	1	He	2769046	1.10	2765317	100.13	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-1
Data File Name	046_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:04:45-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.049	28.3	278	17.4	1	
B	11	45	2	NoGas	4.142	1.5	17839	1.2	20	
Na	23	45	1	He	0.890	57.1	18992	3.2	400	
Mg	24	45	1	He	-0.649	-19.8	1415	6.5	1000	
Al	27	45	1	He	-0.570	-27.2	1079	5.7	50	
K	39	45	1	He	2.861	30.2	34697	2.7	1000	
Ca	44	45	1	He	-6.198	-17.3	575	7.6	1000	
Ti	47	45	1	He	0.014	508.4	13	132.3	20	
V	51	45	1	He	-0.021	-62.9	129	61.9	2	
Cr	52	45	1	He	-0.009	-97.6	2085	3.8	2	
Mn	55	45	1	He	-0.053	-12.4	770	4.1	2	
Fe	56	45	1	He	3.914	4.6	34109	2.8	50	
Co	59	103	1	He	0.004	98.5	113	38.2	1	
Ni	60	103	1	He	-0.281	-8.4	534	12.3	2	
Cu	63	103	1	He	-0.329	-4.3	1440	7.4	2	
Zn	66	103	1	He	-0.264	-11.8	1969	2.8	20	
As	75	103	1	He	0.076	19.3	179	7.3	2	
Se	78	103	1	He	0.154	19.9	65	4.6	2	
Sr	88	103	1	He	0.001	249.9	143	14.1	10	
Mo	95	103	1	He	0.293	6.4	1100	5.5	2	
Ag	107	103	1	He	0.010	14.0	150	11.8	0.2	
Cd	111	103	1	He	0.010	118.9	1246	1.6	0.2	
Sn	118	115	1	He	0.197	15.5	1930	8.3	10	
Sb	123	115	1	He	0.314	4.8	1920	4.0	1	
Ba	137	115	1	He	0.019	17.6	113	7.8	5	
W	182	209	1	He	0.258	7.6	7465	3.4	10	
Tl	205	209	1	He	0.028	5.7	1098	5.4	0.5	
Pb	208	209	1	He	0.079	2.6	4874	1.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1204507	2.57	1263759	95.31	30	120	
Sc	45	1	He	682749	0.96	699622	97.59	30	120	
Sc	45	2	NoGas	5437783	0.53	5515925	98.58	30	120	
Rh	103	1	He	2161557	0.69	2170249	99.60	30	120	
In	115	1	He	1296610	0.26	1314135	98.67	30	120	
Tb	159	1	He	3656196	0.91	3680734	99.33	30	120	
Ho	165	1	He	3780234	1.69	3781772	99.96	30	120	
Bi	209	1	He	2776083	0.21	2765317	100.39	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-2
Data File Name	047_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:08:35-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.044	28.5	259	20.3	1	
B	11	45	2	NoGas	4.304	7.9	18681	4.5	20	
Na	23	45	1	He	0.354	37.7	18543	0.6	400	
Mg	24	45	1	He	-0.929	-3.7	1208	1.4	1000	
Al	27	45	1	He	-0.659	-19.3	1057	6.3	50	
K	39	45	1	He	1.979	46.6	34571	2.7	1000	
Ca	44	45	1	He	-6.770	-27.2	559	14.4	1000	
Ti	47	45	1	He	0.000	14600.1	10	33.3	20	
V	51	45	1	He	-0.030	-212.3	79	485.7	2	
Cr	52	45	1	He	0.010	198.5	2256	5.5	2	
Mn	55	45	1	He	-0.052	-24.7	791	9.3	2	
Fe	56	45	1	He	1.723	1.7	19327	1.9	50	
Co	59	103	1	He	0.002	277.4	89	56.4	1	
Ni	60	103	1	He	-0.304	-6.2	481	10.2	2	
Cu	63	103	1	He	-0.348	-7.8	1321	14.4	2	
Zn	66	103	1	He	-0.274	-11.8	1983	2.9	20	
As	75	103	1	He	0.082	1.2	187	0.7	2	
Se	78	103	1	He	0.114	7.2	62	2.0	2	
Sr	88	103	1	He	0.001	226.5	146	13.8	10	
Mo	95	103	1	He	0.163	6.9	644	7.0	2	
Ag	107	103	1	He	0.005	18.7	84	12.1	0.2	
Cd	111	103	1	He	0.007	70.3	1258	0.4	0.2	
Sn	118	115	1	He	0.158	27.2	1745	13.4	10	
Sb	123	115	1	He	0.191	13.3	1312	9.4	1	
Ba	137	115	1	He	0.027	15.4	134	7.6	5	
W	182	209	1	He	0.143	19.2	5972	6.2	10	
Tl	205	209	1	He	0.017	2.0	717	1.6	0.5	
Pb	208	209	1	He	0.067	5.1	4330	3.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1214548	2.24	1263759	96.11	30	120	
Sc	45	1	He	694676	0.98	699622	99.29	30	120	
Sc	45	2	NoGas	5559386	0.70	5515925	100.79	30	120	
Rh	103	1	He	2193323	0.75	2170249	101.06	30	120	
In	115	1	He	1313831	0.75	1314135	99.98	30	120	
Tb	159	1	He	3701585	1.13	3680734	100.57	30	120	
Ho	165	1	He	3812801	1.31	3781772	100.82	30	120	
Bi	209	1	He	2809899	0.77	2765317	101.61	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-3
Data File Name	048_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:12:27-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.044	33.6	267	23.2	1	
B	11	45	2	NoGas	4.203	8.2	18369	6.2	20	
Na	23	45	1	He	-0.644	-104.0	17446	4.9	400	
Mg	24	45	1	He	-1.301	-6.9	919	7.8	1000	
Al	27	45	1	He	-0.482	-50.9	1163	9.6	50	
K	39	45	1	He	0.030	3007.8	33651	1.4	1000	
Ca	44	45	1	He	-7.100	-10.8	556	6.3	1000	
Ti	47	45	1	He	-0.037	-20.9	1	173.2	20	
V	51	45	1	He	-0.025	-203.3	115	273.3	2	
Cr	52	45	1	He	-0.032	-10.8	1992	2.2	2	
Mn	55	45	1	He	-0.057	-12.5	774	4.8	2	
Fe	56	45	1	He	0.893	5.8	13788	3.5	50	
Co	59	103	1	He	0.000	1921.9	73	43.4	1	
Ni	60	103	1	He	-0.290	-7.0	523	10.3	2	
Cu	63	103	1	He	-0.358	-1.8	1262	3.2	2	
Zn	66	103	1	He	-0.337	-17.7	1912	4.4	20	
As	75	103	1	He	0.024	45.3	132	8.5	2	
Se	78	103	1	He	0.010	378.9	51	7.9	2	
Sr	88	103	1	He	-0.002	-437.3	122	57.8	10	
Mo	95	103	1	He	0.110	7.8	459	6.6	2	
Ag	107	103	1	He	0.005	45.3	87	30.5	0.2	
Cd	111	103	1	He	0.015	57.3	1290	1.4	0.2	
Sn	118	115	1	He	0.131	11.7	1619	5.2	10	
Sb	123	115	1	He	0.162	6.7	1182	4.9	1	
Ba	137	115	1	He	0.025	85.1	131	41.8	5	
W	182	209	1	He	0.095	38.7	5334	8.3	10	
Tl	205	209	1	He	0.011	18.1	500	15.6	0.5	
Pb	208	209	1	He	0.060	5.1	4054	3.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1244016	1.42	1263759	98.44	30	120	
Sc	45	1	He	709522	1.01	699622	101.42	30	120	
Sc	45	2	NoGas	5546190	1.02	5515925	100.55	30	120	
Rh	103	1	He	2218042	0.59	2170249	102.20	30	120	
In	115	1	He	1335041	0.10	1314135	101.59	30	120	
Tb	159	1	He	3799641	0.87	3680734	103.23	30	120	
Ho	165	1	He	3831437	2.42	3781772	101.31	30	120	
Bi	209	1	He	2826309	1.38	2765317	102.21	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-4
Data File Name	049_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:16:23-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.033	29.7	222	17.3	1	
B	11	45	2	NoGas	2.917	3.4	14777	1.5	20	
Na	23	45	1	He	-0.744	-100.6	17257	6.3	400	
Mg	24	45	1	He	-1.290	-26.8	926	31.8	1000	
Al	27	45	1	He	-0.077	-162.9	1353	3.8	50	
K	39	45	1	He	0.485	187.3	33959	2.7	1000	
Ca	44	45	1	He	-7.409	-14.2	540	8.7	1000	
Ti	47	45	1	He	-0.019	-83.6	6	69.3	20	
V	51	45	1	He	-0.002	-3558.3	256	132.5	2	
Cr	52	45	1	He	-0.021	-75.2	2069	6.3	2	
Mn	55	45	1	He	-0.066	-18.4	722	10.8	2	
Fe	56	45	1	He	0.367	12.1	9992	3.6	50	
Co	59	103	1	He	-0.001	-100.3	59	23.6	1	
Ni	60	103	1	He	-0.268	-19.5	584	24.8	2	
Cu	63	103	1	He	-0.351	-2.6	1313	3.4	2	
Zn	66	103	1	He	-0.359	-13.1	1883	5.3	20	
As	75	103	1	He	0.010	27.3	118	2.0	2	
Se	78	103	1	He	-0.013	-372.3	49	12.0	2	
Sr	88	103	1	He	-0.002	-101.5	124	13.5	10	
Mo	95	103	1	He	0.076	16.2	333	15.1	2	
Ag	107	103	1	He	0.002	98.7	47	39.8	0.2	
Cd	111	103	1	He	-0.026	-39.1	1199	1.2	0.2	
Sn	118	115	1	He	0.067	49.3	1252	14.4	10	
Sb	123	115	1	He	0.087	24.5	784	13.8	1	
Ba	137	115	1	He	0.018	37.2	111	15.1	5	
W	182	209	1	He	0.060	22.1	4838	3.8	10	
Tl	205	209	1	He	0.008	3.7	383	3.0	0.5	
Pb	208	209	1	He	0.054	7.1	3731	5.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1237010	0.56	1263759	97.88	30	120	
Sc	45	1	He	707741	0.59	699622	101.16	30	120	
Sc	45	2	NoGas	5531117	0.63	5515925	100.28	30	120	
Rh	103	1	He	2221821	1.64	2170249	102.38	30	120	
In	115	1	He	1322297	0.34	1314135	100.62	30	120	
Tb	159	1	He	3714362	0.46	3680734	100.91	30	120	
Ho	165	1	He	3830166	0.63	3781772	101.28	30	120	
Bi	209	1	He	2815683	0.50	2765317	101.82	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-5
Data File Name	050_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:20:18-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.018	74.2	163	30.7	1	
B	11	45	2	NoGas	2.509	6.7	13850	4.0	20	
Na	23	45	1	He	-0.872	-43.4	17042	2.2	400	
Mg	24	45	1	He	-1.411	-5.7	822	7.5	1000	
Al	27	45	1	He	-0.163	-138.1	1310	7.1	50	
K	39	45	1	He	-0.816	-160.3	32805	2.3	1000	
Ca	44	45	1	He	-6.035	-25.0	602	10.4	1000	
Ti	47	45	1	He	-0.010	-356.7	8	107.8	20	
V	51	45	1	He	-0.044	-78.8	-7	-3265.5	2	
Cr	52	45	1	He	-0.013	-8.3	2129	0.9	2	
Mn	55	45	1	He	-0.063	-0.3	733	1.2	2	
Fe	56	45	1	He	0.149	10.8	8421	2.3	50	
Co	59	103	1	He	-0.002	-66.8	50	26.7	1	
Ni	60	103	1	He	-0.245	-34.8	643	34.4	2	
Cu	63	103	1	He	-0.362	-3.5	1232	6.1	2	
Zn	66	103	1	He	-0.290	-5.0	1978	1.1	20	
As	75	103	1	He	0.017	7.6	124	0.7	2	
Se	78	103	1	He	0.063	30.5	57	5.3	2	
Sr	88	103	1	He	0.004	123.7	168	20.1	10	
Mo	95	103	1	He	0.054	16.6	252	14.6	2	
Ag	107	103	1	He	0.000	402.9	30	38.5	0.2	
Cd	111	103	1	He	0.014	171.3	1286	3.6	0.2	
Sn	118	115	1	He	0.004	604.1	904	14.9	10	
Sb	123	115	1	He	0.061	5.5	652	2.5	1	
Ba	137	115	1	He	0.009	112.5	89	28.6	5	
W	182	209	1	He	0.032	65.2	4434	7.1	10	
Tl	205	209	1	He	0.005	6.5	249	4.1	0.5	
Pb	208	209	1	He	0.046	9.1	3316	6.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1250649	2.31	1263759	98.96	30	120	
Sc	45	1	He	706817	1.20	699622	101.03	30	120	
Sc	45	2	NoGas	5609079	1.13	5515925	101.69	30	120	
Rh	103	1	He	2213203	1.75	2170249	101.98	30	120	
In	115	1	He	1325171	0.27	1314135	100.84	30	120	
Tb	159	1	He	3747805	1.30	3680734	101.82	30	120	
Ho	165	1	He	3814622	1.61	3781772	100.87	30	120	
Bi	209	1	He	2807461	1.65	2765317	101.52	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-6
Data File Name	051_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:24:09-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.041	44.9	259	29.2	1	
B	11	45	2	NoGas	2.725	8.4	14540	3.2	20	
Na	23	45	1	He	-0.695	-9.3	17565	1.1	400	
Mg	24	45	1	He	-1.204	-13.0	1011	12.5	1000	
Al	27	45	1	He	-0.554	-50.1	1141	11.5	50	
K	39	45	1	He	0.876	79.7	34749	2.5	1000	
Ca	44	45	1	He	-5.994	-10.0	613	3.7	1000	
Ti	47	45	1	He	-0.010	-72.5	8	24.7	20	
V	51	45	1	He	0.055	116.9	616	65.3	2	
Cr	52	45	1	He	-0.021	-23.4	2100	2.8	2	
Mn	55	45	1	He	-0.062	-7.8	752	4.5	2	
Fe	56	45	1	He	0.033	65.3	7704	2.5	50	
Co	59	103	1	He	-0.001	-102.9	56	30.2	1	
Ni	60	103	1	He	-0.277	-2.8	569	5.3	2	
Cu	63	103	1	He	-0.363	-2.9	1249	6.1	2	
Zn	66	103	1	He	-0.349	-11.0	1927	3.3	20	
As	75	103	1	He	0.018	48.6	128	7.3	2	
Se	78	103	1	He	0.050	104.2	57	10.5	2	
Sr	88	103	1	He	-0.005	-39.0	96	17.2	10	
Mo	95	103	1	He	0.042	11.0	211	9.5	2	
Ag	107	103	1	He	0.001	158.1	46	62.2	0.2	
Cd	111	103	1	He	0.017	158.0	1316	4.4	0.2	
Sn	118	115	1	He	0.019	129.2	1000	13.3	10	
Sb	123	115	1	He	0.065	13.6	678	6.4	1	
Ba	137	115	1	He	0.024	18.7	129	9.1	5	
W	182	209	1	He	0.034	59.8	4516	6.5	10	
Tl	205	209	1	He	0.005	27.8	260	19.2	0.5	
Pb	208	209	1	He	0.047	2.2	3389	2.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1268067	0.50	1263759	100.34	30	120	
Sc	45	1	He	717233	1.06	699622	102.52	30	120	
Sc	45	2	NoGas	5645992	1.23	5515925	102.36	30	120	
Rh	103	1	He	2255792	1.44	2170249	103.94	30	120	
In	115	1	He	1342738	0.52	1314135	102.18	30	120	
Tb	159	1	He	3809054	1.60	3680734	103.49	30	120	
Ho	165	1	He	3881407	0.33	3781772	102.63	30	120	
Bi	209	1	He	2834125	0.58	2765317	102.49	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-7
Data File Name	052_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:28:02-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.029	84.9	207	46.2	1	
B	11	45	2	NoGas	2.470	5.8	13783	4.0	20	
Na	23	45	1	He	-0.742	-52.7	17476	3.1	400	
Mg	24	45	1	He	-1.334	-3.7	900	5.4	1000	
Al	27	45	1	He	-0.627	-4.4	1106	2.2	50	
K	39	45	1	He	0.384	563.1	34293	5.4	1000	
Ca	44	45	1	He	-4.874	-27.3	664	8.3	1000	
Ti	47	45	1	He	-0.037	-21.1	1	173.2	20	
V	51	45	1	He	-0.005	-1029.6	239	137.4	2	
Cr	52	45	1	He	-0.013	-76.3	2153	2.5	2	
Mn	55	45	1	He	-0.064	-13.2	740	6.3	2	
Fe	56	45	1	He	-0.025	-231.2	7270	5.8	50	
Co	59	103	1	He	-0.002	-69.6	48	35.8	1	
Ni	60	103	1	He	-0.282	-2.9	554	3.9	2	
Cu	63	103	1	He	-0.362	-2.8	1256	6.5	2	
Zn	66	103	1	He	-0.356	-24.1	1912	6.5	20	
As	75	103	1	He	0.016	91.3	126	11.9	2	
Se	78	103	1	He	0.079	38.9	60	6.0	2	
Sr	88	103	1	He	-0.005	-96.1	102	35.8	10	
Mo	95	103	1	He	0.040	12.3	206	9.4	2	
Ag	107	103	1	He	0.003	27.6	63	15.8	0.2	
Cd	111	103	1	He	0.022	165.2	1327	5.9	0.2	
Sn	118	115	1	He	0.044	106.4	1148	23.3	10	
Sb	123	115	1	He	0.038	35.7	542	12.7	1	
Ba	137	115	1	He	0.022	42.0	126	19.9	5	
W	182	209	1	He	0.036	9.7	4568	1.3	10	
Tl	205	209	1	He	0.004	35.8	236	22.7	0.5	
Pb	208	209	1	He	0.043	6.5	3227	5.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1256279	1.82	1263759	99.41	30	120	
Sc	45	1	He	716587	1.02	699622	102.42	30	120	
Sc	45	2	NoGas	5625569	1.15	5515925	101.99	30	120	
Rh	103	1	He	2252821	0.44	2170249	103.80	30	120	
In	115	1	He	1350694	0.68	1314135	102.78	30	120	
Tb	159	1	He	3790004	1.61	3680734	102.97	30	120	
Ho	165	1	He	3887592	0.37	3781772	102.80	30	120	
Bi	209	1	He	2851620	1.00	2765317	103.12	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-8
Data File Name	053_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:31:53-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.036	31.1	237	19.5	1	
B	11	45	2	NoGas	1.681	8.0	11541	4.1	20	
Na	23	45	1	He	-1.176	-65.9	16738	6.5	400	
Mg	24	45	1	He	-1.320	-14.8	907	18.5	1000	
Al	27	45	1	He	-0.475	-49.8	1172	9.2	50	
K	39	45	1	He	0.417	306.3	34155	3.4	1000	
Ca	44	45	1	He	-7.877	-16.4	523	10.9	1000	
Ti	47	45	1	He	0.004	1511.0	11	124.9	20	
V	51	45	1	He	0.030	91.6	455	37.1	2	
Cr	52	45	1	He	-0.030	-19.3	2021	2.1	2	
Mn	55	45	1	He	-0.061	-19.8	753	10.0	2	
Fe	56	45	1	He	-0.107	-8.3	6649	0.6	50	
Co	59	103	1	He	-0.003	-13.8	34	14.8	1	
Ni	60	103	1	He	-0.284	-3.4	542	4.5	2	
Cu	63	103	1	He	-0.361	-3.5	1248	8.1	2	
Zn	66	103	1	He	-0.324	-15.3	1940	3.9	20	
As	75	103	1	He	-0.002	-963.2	106	15.7	2	
Se	78	103	1	He	0.013	674.1	52	17.3	2	
Sr	88	103	1	He	-0.003	-107.3	110	27.8	10	
Mo	95	103	1	He	0.031	8.2	168	6.4	2	
Ag	107	103	1	He	0.002	63.6	54	31.4	0.2	
Cd	111	103	1	He	-0.009	-50.2	1242	1.6	0.2	
Sn	118	115	1	He	0.015	95.4	978	8.0	10	
Sb	123	115	1	He	0.029	62.4	489	19.1	1	
Ba	137	115	1	He	0.024	34.4	130	16.8	5	
W	182	209	1	He	0.005	290.0	4086	4.7	10	
Tl	205	209	1	He	0.002	6.3	149	3.4	0.5	
Pb	208	209	1	He	0.041	10.9	3125	7.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1265294	0.98	1263759	100.12	30	120	
Sc	45	1	He	713063	0.44	699622	101.92	30	120	
Sc	45	2	NoGas	5608899	0.84	5515925	101.69	30	120	
Rh	103	1	He	2227449	0.90	2170249	102.64	30	120	
In	115	1	He	1342537	0.40	1314135	102.16	30	120	
Tb	159	1	He	3766812	0.51	3680734	102.34	30	120	
Ho	165	1	He	3845496	0.40	3781772	101.69	30	120	
Bi	209	1	He	2821622	1.05	2765317	102.04	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-9
Data File Name	054_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:35:45-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.029	57.3	207	30.9	1	
B	11	45	2	NoGas	2.096	6.7	12716	1.4	20	
Na	23	45	1	He	-1.055	-32.1	16901	2.9	400	
Mg	24	45	1	He	-1.423	-10.8	819	15.9	1000	
Al	27	45	1	He	-0.050	-377.0	1375	6.0	50	
K	39	45	1	He	1.004	88.1	34612	2.5	1000	
Ca	44	45	1	He	-7.301	-8.5	549	5.2	1000	
Ti	47	45	1	He	-0.019	-109.9	6	91.6	20	
V	51	45	1	He	0.011	425.4	334	84.9	2	
Cr	52	45	1	He	-0.004	-168.9	2207	2.9	2	
Mn	55	45	1	He	-0.063	-7.5	740	3.6	2	
Fe	56	45	1	He	-0.165	-9.2	6220	2.4	50	
Co	59	103	1	He	-0.003	-23.9	43	15.4	1	
Ni	60	103	1	He	-0.303	-12.3	493	21.6	2	
Cu	63	103	1	He	-0.355	-2.5	1299	4.6	2	
Zn	66	103	1	He	-0.298	-7.0	1987	2.2	20	
As	75	103	1	He	0.009	206.9	117	15.3	2	
Se	78	103	1	He	0.038	146.0	55	10.5	2	
Sr	88	103	1	He	0.002	123.3	153	10.9	10	
Mo	95	103	1	He	0.033	24.5	179	16.7	2	
Ag	107	103	1	He	0.000	966.9	29	48.0	0.2	
Cd	111	103	1	He	0.001	1991.2	1269	2.4	0.2	
Sn	118	115	1	He	0.001	3033.6	896	12.5	10	
Sb	123	115	1	He	0.026	49.1	474	14.4	1	
Ba	137	115	1	He	0.028	23.3	139	11.8	5	
W	182	209	1	He	0.009	283.2	4201	8.9	10	
Tl	205	209	1	He	0.002	42.6	146	17.8	0.5	
Pb	208	209	1	He	0.038	7.0	2981	4.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1251714	1.58	1263759	99.05	30	120	
Sc	45	1	He	712186	0.73	699622	101.80	30	120	
Sc	45	2	NoGas	5619024	1.71	5515925	101.87	30	120	
Rh	103	1	He	2236503	0.61	2170249	103.05	30	120	
In	115	1	He	1341430	0.46	1314135	102.08	30	120	
Tb	159	1	He	3803190	0.75	3680734	103.33	30	120	
Ho	165	1	He	3863662	1.09	3781772	102.17	30	120	
Bi	209	1	He	2859619	0.41	2765317	103.41	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-10
Data File Name	055_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:39:37-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.009	135.0	130	38.7	1	
B	11	45	2	NoGas	1.882	17.4	12382	7.3	20	
Na	23	45	1	He	-1.236	-18.9	16923	1.5	400	
Mg	24	45	1	He	-1.307	-4.9	933	6.0	1000	
Al	27	45	1	He	-0.073	-95.3	1388	3.1	50	
K	39	45	1	He	1.438	99.4	35591	2.6	1000	
Ca	44	45	1	He	-6.096	-19.9	615	8.4	1000	
Ti	47	45	1	He	0.007	103.7	12	15.7	20	
V	51	45	1	He	-0.008	-443.1	223	96.3	2	
Cr	52	45	1	He	-0.022	-13.8	2111	2.0	2	
Mn	55	45	1	He	-0.062	-1.9	763	1.6	2	
Fe	56	45	1	He	-0.175	-19.1	6254	3.5	50	
Co	59	103	1	He	-0.003	-54.4	43	35.2	1	
Ni	60	103	1	He	-0.256	-9.7	626	10.2	2	
Cu	63	103	1	He	-0.374	-3.3	1161	8.8	2	
Zn	66	103	1	He	-0.204	-21.8	2137	3.7	20	
As	75	103	1	He	-0.001	-1867.3	108	16.4	2	
Se	78	103	1	He	0.034	163.8	55	9.7	2	
Sr	88	103	1	He	0.001	1050.0	144	30.5	10	
Mo	95	103	1	He	0.021	31.9	133	17.5	2	
Ag	107	103	1	He	0.001	38.9	43	15.4	0.2	
Cd	111	103	1	He	0.008	409.9	1291	6.0	0.2	
Sn	118	115	1	He	0.008	379.9	970	22.7	10	
Sb	123	115	1	He	0.020	55.4	453	11.3	1	
Ba	137	115	1	He	0.025	40.9	134	16.5	5	
W	182	209	1	He	0.037	37.4	4556	4.0	10	
Tl	205	209	1	He	0.002	44.4	160	21.1	0.5	
Pb	208	209	1	He	0.035	8.7	2835	5.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1266007	0.90	1263759	100.18	30	120	
Sc	45	1	He	724789	1.00	699622	103.60	30	120	
Sc	45	2	NoGas	5740061	0.77	5515925	104.06	30	120	
Rh	103	1	He	2245015	1.24	2170249	103.45	30	120	
In	115	1	He	1381654	4.30	1314135	105.14	30	120	
Tb	159	1	He	3789353	0.99	3680734	102.95	30	120	
Ho	165	1	He	3868085	0.87	3781772	102.28	30	120	
Bi	209	1	He	2839229	0.23	2765317	102.67	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	056_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:43:31-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.412	2.490	188327	0.73	50	94.8	89.5	110.5	
B	11	45	2	NoGas	50.183	2.300	144638	3.04	50	100.4	89.5	110.5	
Na	23	45	1	He	23785.063	5.078	37596888	1.25	25000	95.1	89.5	110.5	
Mg	24	45	1	He	23959.391	6.008	21484876	0.44	25000	95.8	89.5	110.5	
Al	27	45	1	He	236.677	5.609	121028	1.78	250	94.7	89.5	110.5	
K	39	45	1	He	24061.467	4.040	21643199	2.33	25000	96.2	89.5	110.5	
Ca	44	45	1	He	23173.007	5.445	1124180	0.95	25000	92.7	89.5	110.5	
Ti	47	45	1	He	48.648	5.240	12709	1.28	50	97.3	89.5	110.5	
V	51	45	1	He	46.554	7.462	307369	1.95	50	93.1	89.5	110.5	
Cr	52	45	1	He	47.407	5.425	373836	0.94	50	94.8	89.5	110.5	
Mn	55	45	1	He	236.856	5.164	1544108	1.18	250	94.7	89.5	110.5	
Fe	56	45	1	He	12079.078	5.776	91721672	1.53	12500	96.6	89.5	110.5	
Co	59	103	1	He	49.840	2.331	528651	1.26	50	99.7	89.5	110.5	
Ni	60	103	1	He	50.671	2.358	132233	1.24	50	101.3	89.5	110.5	
Cu	63	103	1	He	49.925	2.438	346964	1.27	50	99.8	89.5	110.5	
Zn	66	103	1	He	50.111	0.551	72655	1.01	50	100.2	89.5	110.5	
As	75	103	1	He	50.105	1.536	47102	0.38	50	100.2	89.5	110.5	
Se	78	103	1	He	50.360	3.127	5120	2.26	50	100.7	89.5	110.5	
Sr	88	103	1	He	49.171	2.102	387298	0.96	50	98.3	89.5	110.5	
Mo	95	103	1	He	50.659	1.366	174738	1.92	50	101.3	89.5	110.5	
Ag	107	103	1	He	50.282	1.922	602416	0.79	50	100.6	89.5	110.5	
Cd	111	103	1	He	49.942	2.048	107315	0.88	50	99.9	89.5	110.5	
Sn	118	115	1	He	49.440	0.836	262437	0.64	50	98.9	89.5	110.5	
Sb	123	115	1	He	50.318	0.639	249176	0.68	50	100.6	89.5	110.5	
Ba	137	115	1	He	49.291	0.959	121138	1.30	50	98.6	89.5	110.5	
W	182	209	1	He	49.718	2.010	663281	1.63	50	99.4	89.5	110.5	
Tl	205	209	1	He	50.974	0.327	1800248	0.91	50	101.9	89.5	110.5	
Pb	208	209	1	He	48.043	0.195	2232942	0.79	50	96.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1242609	1.81	1263759	98.33	30	120	
Sc	45	1	He	752965	6.37	699622	107.62	30	120	
Sc	45	2	NoGas	5528773	0.87	5515925	100.23	30	120	
Rh	103	1	He	2083688	1.16	2170249	96.01	30	120	
In	115	1	He	1263048	0.34	1314135	96.11	30	120	
Tb	159	1	He	3736410	0.72	3680734	101.51	30	120	
Ho	165	1	He	3799794	0.10	3781772	100.48	30	120	
Bi	209	1	He	2709792	0.71	2765317	97.99	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	057_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:47:19-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.026	64.1	196	34.1	1	
B	11	45	2	NoGas	1.737	9.8	11582	3.7	20	
Na	23	45	1	He	5.686	23.3	25767	5.9	400	
Mg	24	45	1	He	1.760	46.2	3360	18.2	1000	
Al	27	45	1	He	0.953	5.6	1772	2.9	50	
K	39	45	1	He	6.388	19.0	37425	1.2	1000	
Ca	44	45	1	He	26.711	10.0	2016	5.1	1000	
Ti	47	45	1	He	0.057	86.4	23	51.5	20	
V	51	45	1	He	0.045	76.2	523	39.2	2	
Cr	52	45	1	He	0.012	113.6	2226	5.3	2	
Mn	55	45	1	He	0.313	13.3	2924	7.5	2	
Fe	56	45	1	He	23.838	24.7	170618	22.3	50	
Co	59	103	1	He	0.002	192.4	90	42.1	1	
Ni	60	103	1	He	-0.289	-6.6	518	10.5	2	
Cu	63	103	1	He	-0.317	-2.7	1539	3.5	2	
Zn	66	103	1	He	1.413	1.9	4458	0.3	20	
As	75	103	1	He	0.054	10.1	160	3.1	2	
Se	78	103	1	He	0.141	69.4	65	16.5	2	
Sr	88	103	1	He	0.005	121.6	178	28.6	10	
Mo	95	103	1	He	0.885	20.2	3254	20.3	2	
Ag	107	103	1	He	0.010	44.0	151	36.7	0.2	
Cd	111	103	1	He	0.004	614.6	1246	3.6	0.2	
Sn	118	115	1	He	0.387	22.4	3000	15.5	10	
Sb	123	115	1	He	0.471	21.0	2754	17.9	1	
Ba	137	115	1	He	0.019	43.4	114	18.9	5	
W	182	209	1	He	0.972	19.9	17459	15.2	10	
Tl	205	209	1	He	0.033	21.5	1302	20.2	0.5	
Pb	208	209	1	He	0.053	6.7	3709	4.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1257814	0.40	1263759	99.53	30	120	
Sc	45	1	He	680251	1.48	699622	97.23	30	120	
Sc	45	2	NoGas	5554285	0.45	5515925	100.70	30	120	
Rh	103	1	He	2184019	0.63	2170249	100.63	30	120	
In	115	1	He	1313948	0.60	1314135	99.99	30	120	
Tb	159	1	He	3761229	0.75	3680734	102.19	30	120	
Ho	165	1	He	3848866	0.20	3781772	101.77	30	120	
Bi	209	1	He	2823571	1.07	2765317	102.11	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177625/1-a@2
Data File Name	058_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:51:09-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.043	47.5	244	29.8	1	
B	11	45	2	NoGas	2.818	9.6	13843	6.0	20	
Na	23	45	1	He	29.449	5.5	60879	1.3	400	
Mg	24	45	1	He	16.897	8.4	15952	6.8	1000	
Al	27	45	1	He	0.761	31.9	1715	4.3	50	
K	39	45	1	He	18.395	9.0	48090	3.4	1000	
Ca	44	45	1	He	61.223	7.8	3596	4.1	1000	
Ti	47	45	1	He	0.105	61.8	36	47.2	20	
V	51	45	1	He	0.202	58.5	1496	48.0	2	
Cr	52	45	1	He	0.881	6.1	8542	1.8	2	
Mn	55	45	1	He	0.129	6.8	1878	2.1	2	
Fe	56	45	1	He	20.365	9.9	150183	12.2	50	
Co	59	103	1	He	0.006	47.1	136	24.6	1	
Ni	60	103	1	He	-0.148	-7.4	870	3.7	2	
Cu	63	103	1	He	0.410	25.6	6537	9.9	2	
Zn	66	103	1	He	1.150	6.7	3928	2.2	20	
As	75	103	1	He	0.146	8.1	241	3.2	2	
Se	78	103	1	He	0.150	63.4	63	13.9	2	
Sr	88	103	1	He	0.128	4.8	1152	5.4	10	
Mo	95	103	1	He	0.343	15.2	1247	13.1	2	
Ag	107	103	1	He	0.014	7.9	199	8.3	0.2	
Cd	111	103	1	He	-0.003	-626.4	1187	4.5	0.2	
Sn	118	115	1	He	17.267	1.8	92245	1.4	10	Blank Failed
Sb	123	115	1	He	0.376	9.5	2181	8.2	1	
Ba	137	115	1	He	0.434	3.7	1129	4.1	5	
W	182	209	1	He	0.338	9.4	9437	6.3	10	
Tl	205	209	1	He	0.021	29.8	933	29.4	0.5	
Pb	208	209	1	He	0.347	10.6	19419	7.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1159050	1.40	1263759	91.71	30	120	
Sc	45	1	He	693306	2.94	699622	99.10	30	120	
Sc	45	2	NoGas	5277067	0.94	5515925	95.67	30	120	
Rh	103	1	He	2107624	1.50	2170249	97.11	30	120	
In	115	1	He	1263673	0.67	1314135	96.16	30	120	
Tb	159	1	He	3653499	1.54	3680734	99.26	30	120	
Ho	165	1	He	3739510	1.18	3781772	98.88	30	120	
Bi	209	1	He	3062352	2.40	2765317	110.74	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	lcs 240-177625/3-a@2
Data File Name	059_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:55:01-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	472.110	2.3	1663715	0.0	1	Blank Failed
B	11	45	2	NoGas	56.183	2.3	139465	2.0	20	Blank Failed
Na	23	45	1	He	4938.800	2.9	6611760	1.2	400	Blank Failed
Mg	24	45	1	He	5046.560	2.5	3828803	2.3	1000	Blank Failed
Al	27	45	1	He	5234.855	2.1	2237014	1.6	50	Blank Failed
K	39	45	1	He	4869.965	2.0	3725744	1.7	1000	Blank Failed
Ca	44	45	1	He	4283.847	2.5	176345	1.2	1000	Blank Failed
Ti	47	45	1	He	48.147	1.6	10642	4.8	20	Blank Failed
V	51	45	1	He	497.425	0.7	2777849	3.4	2	Blank Failed
Cr	52	45	1	He	504.294	1.4	3343864	2.6	2	Blank Failed
Mn	55	45	1	He	484.251	2.4	2667680	1.2	2	Blank Failed
Fe	56	45	1	He	5012.194	2.5	32184255	1.2	50	Blank Failed
Co	59	103	1	He	475.690	2.4	4743535	1.4	1	Blank Failed
Ni	60	103	1	He	468.277	2.3	1139403	1.6	2	Blank Failed
Cu	63	103	1	He	492.997	1.5	3191230	0.8	2	Blank Failed
Zn	66	103	1	He	438.377	2.1	581040	1.8	20	Blank Failed
As	75	103	1	He	417.502	1.9	368324	1.3	2	Blank Failed
Se	78	103	1	He	405.560	1.3	38457	0.6	2	Blank Failed
Sr	88	103	1	He	480.061	1.4	3554649	1.8	10	Blank Failed
Mo	95	103	1	He	51.659	1.5	167518	1.1	2	Blank Failed
Ag	107	103	1	He	49.258	1.5	554891	0.6	0.2	Blank Failed
Cd	111	103	1	He	456.805	1.8	913916	1.3	0.2	Blank Failed
Sn	118	115	1	He	552.205	1.1	2664069	1.9	10	Blank Failed
Sb	123	115	1	He	48.414	0.8	218519	0.5	1	Blank Failed
Ba	137	115	1	He	475.820	0.4	1065366	1.5	5	Blank Failed
W	182	209	1	He	47.455	1.8	636682	1.1	10	Blank Failed
Tl	205	209	1	He	114.218	1.5	4055319	1.0	0.5	Blank Failed
Pb	208	209	1	He	468.969	0.8	21904265	0.1	1	Blank Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1102971	2.34	1263759	87.28	30	120	
Sc	45	1	He	635480	3.47	699622	90.83	30	120	
Sc	45	2	NoGas	4786818	1.79	5515925	86.78	30	120	
Rh	103	1	He	1959103	0.95	2170249	90.27	30	120	
In	115	1	He	1151242	1.31	1314135	87.60	30	120	
Tb	159	1	He	3552360	0.84	3680734	96.51	30	120	
Ho	165	1	He	3653577	0.22	3781772	96.61	30	120	
Bi	209	1	He	2724482	0.73	2765317	98.52	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	310-53259-c-1-a@5
Data File Name	060_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T17:58:39-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	5.839	1.3	20864	2.2	1	Blank Failed
B	11	45	2	NoGas	284.556	1.0	811278	0.6	20	Blank Failed
Na	23	45	1	He	68451.333	4.3	108810633	0.7	400	Blank Failed
Mg	24	45	1	He	39516.333	3.4	35669423	1.4	1000	Blank Failed
Al	27	45	1	He	144201.737	3.3	73306099	0.7	50	Blank Failed
K	39	45	1	He	7416.352	3.2	6734968	1.6	1000	Blank Failed
Ca	44	45	1	He	157497.732	3.7	7683642	1.5	1000	Blank Failed
Ti	47	45	1	He	7901.452	2.1	2076263	2.5	20	Blank Failed
V	51	45	1	He	276.429	4.7	1836074	1.0	2	Blank Failed
Cr	52	45	1	He	88.368	3.4	699209	0.5	2	Blank Failed
Mn	55	45	1	He	716.938	4.2	4699537	0.4	2	Blank Failed
Fe	56	45	1	He	84294.624	3.7	644116241	0.2	50	Blank Failed
Co	59	103	1	He	91.597	0.8	857693	1.1	1	Blank Failed
Ni	60	103	1	He	58.155	0.8	133822	1.1	2	Blank Failed
Cu	63	103	1	He	213.350	0.3	1298471	0.7	2	Blank Failed
Zn	66	103	1	He	1117.153	0.5	1387077	0.3	20	Blank Failed
As	75	103	1	He	3.275	1.4	2801	0.8	2	Blank Failed
Se	78	103	1	He	3.639	2.3	365	1.8	2	Blank Failed
Sr	88	103	1	He	10411.940	0.6	72375753	0.7	10	Blank Failed
Mo	95	103	1	He	10.369	2.7	31602	2.3	2	Blank Failed
Ag	107	103	1	He	0.085	11.8	923	11.9	0.2	
Cd	111	103	1	He	0.863	13.7	2662	8.6	0.2	Blank Failed
Sn	118	115	1	He	6.929	2.8	33753	3.1	10	
Sb	123	115	1	He	0.703	2.5	3416	2.8	1	
Ba	137	115	1	He	22792.162	0.5	50379954	0.8	5	Blank Failed
W	182	209	1	He	1.601	3.4	22635	3.3	10	
Tl	205	209	1	He	0.080	30.0	2639	29.7	0.5	
Pb	208	209	1	He	2.136	1.4	90486	1.0	1	Blank Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1113651	2.09	1263759	88.12	30	120	
Sc	45	1	He	756689	3.99	699622	108.16	30	120	
Sc	45	2	NoGas	5688784	0.86	5515925	103.13	30	120	
Rh	103	1	He	1839236	0.57	2170249	84.75	30	120	
In	115	1	He	1136613	0.73	1314135	86.49	30	120	
Tb	159	1	He	3497235	0.40	3680734	95.01	30	120	
Ho	165	1	He	3613121	0.44	3781772	95.54	30	120	
Bi	209	1	He	2444070	0.58	2765317	88.38	30	120	

Sample Report

Sample Table

Sample Name	310-53259-c-1-a@10
Data File Name	061SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:02:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.103	3.103	3.10	11082	0.03	10000	
B	11	45	2	NoGas	155.214	155.214	0.65	422085	0.04	300	
Na	23	45	1	He	37325.767	37325.767	1.53	54374770	0.07	500000	
Mg	24	45	1	He	21989.962	21989.962	1.29	18183832	0.12	500000	
Al	27	45	1	He	80383.414	80383.414	2.19	37429559	0.21	200000	
K	39	45	1	He	4146.034	4146.034	1.53	3463162	0.12	500000	
Ca	44	45	1	He	87641.442	87641.442	2.13	3917200	2.24	500000	
Ti	47	45	1	He	4062.674	4062.674	1.37	977547	0.42	2500	>LDR
V	51	45	1	He	147.165	147.165	0.83	895947	0.02	10000	
Cr	52	45	1	He	49.369	49.369	1.45	358829	0.01	10000	
Mn	55	45	1	He	405.763	405.763	0.95	2437743	0.02	10000	
Fe	56	45	1	He	46968.978	46968.978	1.36	328815551	0.01	200000	
Co	59	103	1	He	45.951	45.951	0.99	446854	0.01	10000	
Ni	60	103	1	He	28.956	28.956	1.12	69765	0.04	10000	
Cu	63	103	1	He	107.502	107.502	0.81	681096	0.02	10000	
Zn	66	103	1	He	574.784	574.784	0.89	742127	0.08	10000	
As	75	103	1	He	1.509	1.509	2.32	1390	0.11	10000	
Se	78	103	1	He	1.629	1.629	6.43	194	0.84	10000	
Sr	88	103	1	He	5117.469	5117.469	2.13	36938655	0.01	10000	
Mo	95	103	1	He	5.009	5.009	4.72	15875	0.03	2000	
Ag	107	103	1	He	0.047	0.047	13.43	540	0.01	300	
Cd	111	103	1	He	0.438	0.438	8.49	1937	0.02	4000	
Sn	118	115	1	He	3.243	3.243	3.85	16575	0.02	2000	
Sb	123	115	1	He	0.299	0.299	1.34	1657	0.02	300	
Ba	137	115	1	He	11458.415	11458.415	1.81	25917293	0.04	10000	>LDR
W	182	209	1	He	0.642	0.642	3.78	11612	0.01	2500	
Tl	205	209	1	He	0.016	0.016	7.28	596	0.00	5000	
Pb	208	209	1	He	1.106	1.106	1.67	49202	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1109831	2.08	1263759	87.82	30	120	
Sc	45	1	He	692710	2.28	699622	99.01	30	120	
Sc	45	2	NoGas	5387665	1.26	5515925	97.67	30	120	
Rh	103	1	He	1910051	0.97	2170249	88.01	30	120	
In	115	1	He	1163098	0.25	1314135	88.51	30	120	
Tb	159	1	He	3570986	0.91	3680734	97.02	30	120	
Ho	165	1	He	3646286	0.75	3781772	96.42	30	120	
Bi	209	1	He	2541594	0.74	2765317	91.91	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	062_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:06:08-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.644	3.045	181387	2.58	50	95.3	89.5	110.5	
B	11	45	2	NoGas	52.093	0.558	147555	1.66	50	104.2	89.5	110.5	
Na	23	45	1	He	25403.713	1.571	36450365	0.79	25000	101.6	89.5	110.5	
Mg	24	45	1	He	25458.540	1.783	20730542	0.39	25000	101.8	89.5	110.5	
Al	27	45	1	He	260.565	1.006	120843	1.24	250	104.2	89.5	110.5	
K	39	45	1	He	25282.511	2.846	20629035	0.86	25000	101.1	89.5	110.5	
Ca	44	45	1	He	24555.236	2.009	1081392	0.05	25000	98.2	89.5	110.5	
Ti	47	45	1	He	59.398	2.156	14083	0.64	50	118.8	89.5	110.5	CCV Failed
V	51	45	1	He	50.358	1.911	302050	0.74	50	100.7	89.5	110.5	
Cr	52	45	1	He	50.928	1.555	364446	0.60	50	101.9	89.5	110.5	
Mn	55	45	1	He	258.361	2.270	1528812	1.34	250	103.3	89.5	110.5	
Fe	56	45	1	He	12894.418	1.877	88897954	0.46	12500	103.2	89.5	110.5	
Co	59	103	1	He	48.987	1.710	516615	0.60	50	98.0	89.5	110.5	
Ni	60	103	1	He	48.848	1.526	126788	0.17	50	97.7	89.5	110.5	
Cu	63	103	1	He	49.248	2.121	340326	0.51	50	98.5	89.5	110.5	
Zn	66	103	1	He	48.917	2.729	70551	1.05	50	97.8	89.5	110.5	
As	75	103	1	He	48.968	1.601	45769	0.61	50	97.9	89.5	110.5	
Se	78	103	1	He	48.457	1.274	4901	2.16	50	96.9	89.5	110.5	
Sr	88	103	1	He	48.749	1.942	381749	0.59	50	97.5	89.5	110.5	
Mo	95	103	1	He	50.561	1.229	173388	1.85	50	101.1	89.5	110.5	
Ag	107	103	1	He	49.941	0.873	594909	0.73	50	99.9	89.5	110.5	
Cd	111	103	1	He	49.649	2.164	106071	0.56	50	99.3	89.5	110.5	
Sn	118	115	1	He	49.315	1.894	257851	1.17	50	98.6	89.5	110.5	
Sb	123	115	1	He	50.334	0.899	245529	0.30	50	100.7	89.5	110.5	
Ba	137	115	1	He	51.366	1.966	124338	1.03	50	102.7	89.5	110.5	
W	182	209	1	He	50.398	1.526	665586	1.42	50	100.8	89.5	110.5	
Tl	205	209	1	He	51.399	1.873	1796823	0.72	50	102.8	89.5	110.5	
Pb	208	209	1	He	48.581	2.190	2234922	0.80	50	97.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1190790	0.96	1263759	94.23	30	120	
Sc	45	1	He	682176	2.04	699622	97.51	30	120	
Sc	45	2	NoGas	5443429	1.47	5515925	98.69	30	120	
Rh	103	1	He	2071690	1.59	2170249	95.46	30	120	
In	115	1	He	1244227	0.94	1314135	94.68	30	120	
Tb	159	1	He	3727812	0.18	3680734	101.28	30	120	
Ho	165	1	He	3799095	0.51	3781772	100.46	30	120	
Bi	209	1	He	2682771	1.45	2765317	97.01	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	063_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:09:59-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.041	39.6	248	26.2	1	
B	11	45	2	NoGas	3.115	8.2	14910	4.1	20	
Na	23	45	1	He	10.330	13.2	32110	5.0	400	
Mg	24	45	1	He	2.602	34.7	4008	17.3	1000	
Al	27	45	1	He	4.048	4.9	3157	2.5	50	
K	39	45	1	He	5.497	16.3	36360	1.1	1000	
Ca	44	45	1	He	30.835	2.7	2177	0.9	1000	
Ti	47	45	1	He	0.789	3.6	194	4.0	20	
V	51	45	1	He	0.028	84.5	421	34.3	2	
Cr	52	45	1	He	-0.004	-690.6	2093	7.3	2	
Mn	55	45	1	He	0.346	10.5	3089	6.3	2	
Fe	56	45	1	He	24.103	18.1	170980	16.3	50	
Co	59	103	1	He	0.006	53.1	139	25.2	1	
Ni	60	103	1	He	-0.311	-3.5	460	7.6	2	
Cu	63	103	1	He	-0.307	-6.6	1617	8.2	2	
Zn	66	103	1	He	1.424	5.5	4493	1.9	20	
As	75	103	1	He	0.067	13.9	172	5.5	2	
Se	78	103	1	He	0.103	22.1	61	5.1	2	
Sr	88	103	1	He	0.160	11.0	1460	10.8	10	
Mo	95	103	1	He	1.010	24.6	3715	23.4	2	
Ag	107	103	1	He	0.013	23.4	196	20.5	0.2	
Cd	111	103	1	He	-0.004	-514.3	1234	3.8	0.2	
Sn	118	115	1	He	0.379	10.5	2945	7.3	10	
Sb	123	115	1	He	0.438	12.7	2571	10.8	1	
Ba	137	115	1	He	0.366	13.3	994	12.2	5	
W	182	209	1	He	0.975	17.3	17496	13.3	10	
Tl	205	209	1	He	0.036	24.1	1405	22.5	0.5	
Pb	208	209	1	He	0.089	7.3	5447	5.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1221538	1.10	1263759	96.66	30	120	
Sc	45	1	He	673834	1.06	699622	96.31	30	120	
Sc	45	2	NoGas	5384084	0.59	5515925	97.61	30	120	
Rh	103	1	He	2192861	1.19	2170249	101.04	30	120	
In	115	1	He	1306948	0.22	1314135	99.45	30	120	
Tb	159	1	He	3768666	1.65	3680734	102.39	30	120	
Ho	165	1	He	3819413	1.53	3781772	101.00	30	120	
Bi	209	1	He	2823632	0.61	2765317	102.11	30	120	

Sample Report

Sample Table

Sample Name	680-111548-A-3-G MS@10
Data File Name	064SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:13:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	91.530	91.530	1.60	285496	0.03	10000	
B	11	45	2	NoGas	13.911	13.911	3.91	41826	0.03	300	
Na	23	45	1	He	1244.839	1244.839	1.37	1847706	0.07	500000	
Mg	24	45	1	He	1456.919	1456.919	1.43	1217999	0.12	500000	
Al	27	45	1	He	4875.249	4875.249	3.01	2292024	0.21	200000	
K	39	45	1	He	805.895	805.895	2.08	705965	0.11	500000	
Ca	44	45	1	He	224599.961	224599.961	2.94	10126436	2.22	500000	
Ti	47	45	1	He	11205.828	11205.828	2.59	2720373	0.41	2500	>LDR
V	51	45	1	He	1285.830	1285.830	2.66	7895288	0.02	10000	
Cr	52	45	1	He	552.221	552.221	2.38	4027183	0.01	10000	
Mn	55	45	1	He	135.284	135.284	1.39	820943	0.02	10000	
Fe	56	45	1	He	4429.049	4429.049	2.33	31291928	0.01	200000	
Co	59	103	1	He	92.997	92.997	1.30	833126	0.01	10000	
Ni	60	103	1	He	93.488	93.488	1.72	205182	0.05	10000	
Cu	63	103	1	He	93.355	93.355	1.80	545324	0.02	10000	
Zn	66	103	1	He	142.503	142.503	2.08	170957	0.08	10000	
As	75	103	1	He	85.417	85.417	1.55	67759	0.13	10000	
Se	78	103	1	He	90.323	90.323	1.57	7725	1.17	10000	
Sr	88	103	1	He	5092.836	5092.836	1.46	33870014	0.02	10000	
Mo	95	103	1	He	10.701	10.701	0.28	31203	0.03	2000	
Ag	107	103	1	He	9.615	9.615	1.05	97310	0.01	300	
Cd	111	103	1	He	94.335	94.335	0.85	170325	0.06	4000	
Sn	118	115	1	He	107.924	107.924	0.18	496883	0.02	2000	
Sb	123	115	1	He	8.951	8.951	0.73	38740	0.02	300	
Ba	137	115	1	He	100.323	100.323	1.21	214168	0.05	10000	
W	182	209	1	He	4.190	4.190	2.73	54466	0.01	2500	
Tl	205	209	1	He	21.661	21.661	0.72	701095	0.00	5000	
Pb	208	209	1	He	103.863	103.863	0.84	4422666	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	975721	0.28	1263759	77.21	30	120	
Sc	45	1	He	699192	3.69	699622	99.94	30	120	
Sc	45	2	NoGas	5142611	0.93	5515925	93.23	30	120	
Rh	103	1	He	1759617	0.40	2170249	81.08	30	120	
In	115	1	He	1097369	0.85	1314135	83.51	30	120	
Tb	159	1	He	3365386	0.58	3680734	91.43	30	120	
Ho	165	1	He	3475231	0.95	3781772	91.89	30	120	
Bi	209	1	He	2483356	0.54	2765317	89.80	30	120	

Sample Report

Sample Table

Sample Name	680-111548-A-3-H MSD@10
Data File Name	065SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:17:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	98.574	98.574	1.87	287896	0.03	10000	
B	11	45	2	NoGas	14.395	14.395	1.02	40092	0.04	300	
Na	23	45	1	He	1313.897	1313.897	0.35	1770363	0.07	500000	
Mg	24	45	1	He	1523.734	1523.734	1.54	1156702	0.13	500000	
Al	27	45	1	He	5158.691	5158.691	2.15	2202637	0.23	200000	
K	39	45	1	He	863.678	863.678	1.20	685030	0.13	500000	
Ca	44	45	1	He	239223.936	239223.936	0.82	9800919	2.44	500000	
Ti	47	45	1	He	11620.020	11620.020	0.99	2563209	0.45	2500	>LDR
V	51	45	1	He	1355.453	1355.453	0.65	7561532	0.02	10000	
Cr	52	45	1	He	582.662	582.662	0.32	3860271	0.02	10000	
Mn	55	45	1	He	144.655	144.655	0.80	797141	0.02	10000	
Fe	56	45	1	He	4774.468	4774.468	0.52	30641843	0.02	200000	
Co	59	103	1	He	95.773	95.773	1.17	819259	0.01	10000	
Ni	60	103	1	He	97.268	97.268	1.83	203810	0.05	10000	
Cu	63	103	1	He	95.890	95.890	1.24	534750	0.02	10000	
Zn	66	103	1	He	143.598	143.598	0.91	164469	0.09	10000	
As	75	103	1	He	86.969	86.969	0.42	65873	0.13	10000	
Se	78	103	1	He	91.969	91.969	1.09	7509	1.22	10000	
Sr	88	103	1	He	5259.098	5259.098	1.21	33396232	0.02	10000	
Mo	95	103	1	He	10.696	10.696	0.27	29782	0.04	2000	
Ag	107	103	1	He	9.919	9.919	2.37	95873	0.01	300	
Cd	111	103	1	He	97.585	97.585	0.91	168203	0.06	4000	
Sn	118	115	1	He	114.391	114.391	1.06	495829	0.02	2000	
Sb	123	115	1	He	8.995	8.995	0.96	36649	0.02	300	
Ba	137	115	1	He	107.337	107.337	0.40	215727	0.05	10000	
W	182	209	1	He	3.875	3.875	3.72	49738	0.01	2500	
Tl	205	209	1	He	22.201	22.201	0.47	705792	0.00	5000	
Pb	208	209	1	He	107.152	107.152	0.49	4481624	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	913920	2.64	1263759	72.32	30	120	
Sc	45	1	He	634833	2.02	699622	90.74	30	120	
Sc	45	2	NoGas	4786934	0.73	5515925	86.78	30	120	
Rh	103	1	He	1680209	1.22	2170249	77.42	30	120	
In	115	1	He	1033198	0.70	1314135	78.62	30	120	
Tb	159	1	He	3297006	1.53	3680734	89.57	30	120	
Ho	165	1	He	3368076	0.55	3781772	89.06	30	120	
Bi	209	1	He	2439138	0.59	2765317	88.20	30	120	

Sample Report

Sample Table

Sample Name	680-111548-A-2-M@10
Data File Name	066SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:21:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.211	0.211	36.02	682	0.03	10000	
B	11	45	2	NoGas	5.453	5.453	2.59	19092	0.03	300	
Na	23	45	1	He	365.697	365.697	1.55	492949	0.07	500000	
Mg	24	45	1	He	717.153	717.153	0.93	532723	0.13	500000	
Al	27	45	1	He	4906.342	4906.342	0.72	2047144	0.24	200000	
K	39	45	1	He	39.040	39.040	4.31	58313	0.07	500000	
Ca	44	45	1	He	202299.688	202299.688	1.73	8095305	2.50	500000	
Ti	47	45	1	He	12747.065	12747.065	1.90	2746250	0.46	2500	>LDR
V	51	45	1	He	1464.530	1464.530	2.06	7980567	0.02	10000	
Cr	52	45	1	He	584.950	584.950	1.02	3785762	0.02	10000	
Mn	55	45	1	He	79.324	79.324	2.12	427475	0.02	10000	
Fe	56	45	1	He	4414.947	4414.947	1.37	27681722	0.02	200000	
Co	59	103	1	He	0.721	0.721	3.19	6147	0.01	10000	
Ni	60	103	1	He	2.240	2.240	3.91	5605	0.04	10000	
Cu	63	103	1	He	3.010	3.010	3.27	19405	0.02	10000	
Zn	66	103	1	He	53.451	53.451	0.88	61639	0.09	10000	
As	75	103	1	He	0.923	0.923	5.60	771	0.12	10000	
Se	78	103	1	He	0.495	0.495	10.41	77	0.64	10000	
Sr	88	103	1	He	3911.114	3911.114	1.98	24542686	0.02	10000	
Mo	95	103	1	He	2.034	2.034	1.28	5632	0.04	2000	
Ag	107	103	1	He	0.422	0.422	0.49	4051	0.01	300	
Cd	111	103	1	He	1.939	1.939	13.36	4223	0.05	4000	
Sn	118	115	1	He	14.573	14.573	1.09	63248	0.02	2000	
Sb	123	115	1	He	0.852	0.852	5.10	3678	0.02	300	
Ba	137	115	1	He	7.966	7.966	1.12	15928	0.05	10000	
W	182	209	1	He	2.173	2.173	1.10	29068	0.01	2500	
Tl	205	209	1	He	0.056	0.056	23.68	1822	0.00	5000	
Pb	208	209	1	He	13.066	13.066	0.64	540916	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	915835	2.17	1263759	72.47	30	120	
Sc	45	1	He	620204	1.21	699622	88.65	30	120	
Sc	45	2	NoGas	4856191	0.42	5515925	88.04	30	120	
Rh	103	1	He	1660588	1.19	2170249	76.52	30	120	
In	115	1	He	1024848	0.52	1314135	77.99	30	120	
Tb	159	1	He	3241309	0.62	3680734	88.06	30	120	
Ho	165	1	He	3345941	0.39	3781772	88.48	30	120	
Bi	209	1	He	2410547	0.62	2765317	87.17	30	120	

Sample Report

Sample Table

Sample Name	680-111548-A-4-E@10
Data File Name	067SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:25:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.110	0.110	10.39	389	0.03	10000	
B	11	45	2	NoGas	4.843	4.843	2.40	16953	0.03	300	
Na	23	45	1	He	370.071	370.071	2.02	483598	0.08	500000	
Mg	24	45	1	He	529.310	529.310	0.62	381762	0.14	500000	
Al	27	45	1	He	4063.492	4063.492	0.88	1644443	0.25	200000	
K	39	45	1	He	36.228	36.228	3.05	54538	0.07	500000	
Ca	44	45	1	He	201599.722	201599.722	0.37	7824075	2.58	500000	
Ti	47	45	1	He	9827.238	9827.238	0.64	2053381	0.48	2500	>LDR
V	51	45	1	He	1145.718	1145.718	0.84	6055322	0.02	10000	
Cr	52	45	1	He	448.493	448.493	0.86	2815354	0.02	10000	
Mn	55	45	1	He	44.584	44.584	0.87	233435	0.02	10000	
Fe	56	45	1	He	2995.096	2995.096	1.08	18214300	0.02	200000	
Co	59	103	1	He	0.438	0.438	4.87	3840	0.01	10000	
Ni	60	103	1	He	1.324	1.324	8.00	3799	0.03	10000	
Cu	63	103	1	He	1.484	1.484	2.92	11285	0.01	10000	
Zn	66	103	1	He	38.990	38.990	1.17	46466	0.08	10000	
As	75	103	1	He	0.809	0.809	3.53	700	0.12	10000	
Se	78	103	1	He	0.366	0.366	29.91	69	0.53	10000	
Sr	88	103	1	He	4086.604	4086.604	1.26	26217781	0.02	10000	
Mo	95	103	1	He	1.552	1.552	4.23	4401	0.04	2000	
Ag	107	103	1	He	0.428	0.428	3.48	4197	0.01	300	
Cd	111	103	1	He	1.919	1.919	11.48	4286	0.04	4000	
Sn	118	115	1	He	14.156	14.156	3.77	62140	0.02	2000	
Sb	123	115	1	He	0.404	0.404	2.16	1900	0.02	300	
Ba	137	115	1	He	6.417	6.417	1.65	12983	0.05	10000	
W	182	209	1	He	2.503	2.503	2.21	33811	0.01	2500	
Tl	205	209	1	He	0.023	0.023	1.49	813	0.00	5000	
Pb	208	209	1	He	10.394	10.394	1.01	441558	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	912642	0.42	1263759	72.22	30	120	
Sc	45	1	He	601426	0.30	699622	85.96	30	120	
Sc	45	2	NoGas	4671896	0.72	5515925	84.70	30	120	
Rh	103	1	He	1697645	1.21	2170249	78.22	30	120	
In	115	1	He	1036246	0.26	1314135	78.85	30	120	
Tb	159	1	He	3294363	1.16	3680734	89.50	30	120	
Ho	165	1	He	3396834	0.52	3781772	89.82	30	120	
Bi	209	1	He	2472603	0.93	2765317	89.41	30	120	

Sample Report

Sample Table

Sample Name	680-111548-A-5-E@10
Data File Name	068SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:28:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.706	1.706	6.34	5205	0.03	10000	
B	11	45	2	NoGas	15.216	15.216	1.29	38333	0.04	300	
Na	23	45	1	He	3167.069	3167.069	1.07	3650725	0.09	500000	
Mg	24	45	1	He	5932.510	5932.510	2.58	3868410	0.15	500000	
Al	27	45	1	He	22668.485	22668.485	0.92	8324050	0.27	200000	
K	39	45	1	He	2515.390	2515.390	3.08	1666755	0.15	500000	
Ca	44	45	1	He	6880.649	6880.649	1.85	243084	2.83	500000	
Ti	47	45	1	He	437.866	437.866	2.02	83067	0.53	2500	
V	51	45	1	He	97.479	97.479	2.99	467844	0.02	10000	
Cr	52	45	1	He	63.180	63.180	1.90	361531	0.02	10000	
Mn	55	45	1	He	460.547	460.547	2.27	2180998	0.02	10000	
Fe	56	45	1	He	38837.064	38837.064	1.96	214345294	0.02	200000	
Co	59	103	1	He	11.804	11.804	0.92	105573	0.01	10000	
Ni	60	103	1	He	14.488	14.488	2.31	32609	0.04	10000	
Cu	63	103	1	He	13.761	13.761	1.86	82827	0.02	10000	
Zn	66	103	1	He	56.713	56.713	1.61	69036	0.08	10000	
As	75	103	1	He	13.612	13.612	0.88	10846	0.13	10000	
Se	78	103	1	He	2.178	2.178	9.93	225	0.97	10000	
Sr	88	103	1	He	135.460	135.460	2.12	898937	0.02	10000	
Mo	95	103	1	He	1.837	1.837	2.64	5379	0.03	2000	
Ag	107	103	1	He	0.331	0.331	11.65	3358	0.01	300	
Cd	111	103	1	He	1.470	1.470	10.39	3626	0.04	4000	
Sn	118	115	1	He	4.951	4.951	1.50	22423	0.02	2000	
Sb	123	115	1	He	0.129	0.129	0.60	791	0.02	300	
Ba	137	115	1	He	51.045	51.045	0.51	104040	0.05	10000	
W	182	209	1	He	0.340	0.340	13.11	7821	0.00	2500	
Tl	205	209	1	He	0.226	0.226	1.83	7517	0.00	5000	
Pb	208	209	1	He	23.280	23.280	0.84	1011123	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	941499	0.58	1263759	74.50	30	120	
Sc	45	1	He	546110	1.62	699622	78.06	30	120	
Sc	45	2	NoGas	4364761	0.83	5515925	79.13	30	120	
Rh	103	1	He	1756040	1.57	2170249	80.91	30	120	
In	115	1	He	1047538	0.48	1314135	79.71	30	120	
Tb	159	1	He	3313677	0.26	3680734	90.03	30	120	
Ho	165	1	He	3434054	0.74	3781772	90.81	30	120	
Bi	209	1	He	2531053	0.28	2765317	91.53	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	069_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:32:38-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.322	3.537	145841	2.92	50	92.6	89.5	110.5	
B	11	45	2	NoGas	50.904	0.410	117128	1.53	50	101.8	89.5	110.5	
Na	23	45	1	He	26902.414	1.253	31140639	1.19	25000	107.6	89.5	110.5	
Mg	24	45	1	He	26943.738	0.258	17701235	0.77	25000	107.8	89.5	110.5	
Al	27	45	1	He	260.097	0.492	97312	0.81	250	104.0	89.5	110.5	
K	39	45	1	He	25980.919	1.164	17104442	0.70	25000	103.9	89.5	110.5	
Ca	44	45	1	He	25201.484	0.746	895444	0.91	25000	100.8	89.5	110.5	
Ti	47	45	1	He	61.890	2.027	11841	2.78	50	123.8	89.5	110.5	CCV Failed
V	51	45	1	He	52.002	2.321	251649	2.39	50	104.0	89.5	110.5	
Cr	52	45	1	He	52.723	1.295	304327	1.32	50	105.4	89.5	110.5	
Mn	55	45	1	He	250.538	0.939	1196146	1.18	250	100.2	89.5	110.5	
Fe	56	45	1	He	13419.110	0.982	74640986	0.89	12500	107.4	89.5	110.5	
Co	59	103	1	He	47.124	0.629	431141	0.90	50	94.2	89.5	110.5	
Ni	60	103	1	He	46.736	1.224	105281	1.00	50	93.5	89.5	110.5	
Cu	63	103	1	He	47.271	1.777	283523	1.63	50	94.5	89.5	110.5	
Zn	66	103	1	He	47.374	0.694	59342	0.59	50	94.7	89.5	110.5	
As	75	103	1	He	46.760	0.567	37918	0.40	50	93.5	89.5	110.5	
Se	78	103	1	He	46.538	3.387	4084	3.00	50	93.1	89.5	110.5	
Sr	88	103	1	He	47.432	1.249	322239	1.28	50	94.9	89.5	110.5	
Mo	95	103	1	He	50.644	0.988	150640	0.65	50	101.3	89.5	110.5	
Ag	107	103	1	He	50.077	0.733	517472	0.75	50	100.2	89.5	110.5	
Cd	111	103	1	He	50.665	1.376	93885	1.35	50	101.3	89.5	110.5	
Sn	118	115	1	He	49.267	0.884	223361	1.03	50	98.5	89.5	110.5	
Sb	123	115	1	He	51.322	0.722	217052	0.70	50	102.6	89.5	110.5	
Ba	137	115	1	He	49.894	1.012	104724	1.16	50	99.8	89.5	110.5	
W	182	209	1	He	50.176	0.301	617587	0.39	50	100.4	89.5	110.5	
Tl	205	209	1	He	47.137	1.394	1535798	0.70	50	94.3	89.5	110.5	
Pb	208	209	1	He	48.527	1.744	2080705	1.05	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	984933	2.36	1263759	77.94	30	120	
Sc	45	1	He	550255	0.76	699622	78.65	30	120	
Sc	45	2	NoGas	4417318	1.66	5515925	80.08	30	120	
Rh	103	1	He	1796940	0.37	2170249	82.80	30	120	
In	115	1	He	1078723	0.15	1314135	82.09	30	120	
Tb	159	1	He	3409493	0.47	3680734	92.63	30	120	
Ho	165	1	He	3488932	0.63	3781772	92.26	30	120	
Bi	209	1	He	2500099	0.69	2765317	90.41	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	070_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:36:27-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.043	9.7	211	5.3	1	
B	11	45	2	NoGas	1.725	14.6	9247	6.7	20	
Na	23	45	1	He	7.479	24.9	23638	8.3	400	
Mg	24	45	1	He	1.742	47.3	2793	18.9	1000	
Al	27	45	1	He	1.373	19.4	1638	5.3	50	
K	39	45	1	He	7.621	28.8	32059	3.6	1000	
Ca	44	45	1	He	32.324	23.7	1888	14.8	1000	
Ti	47	45	1	He	1.344	8.9	273	9.2	20	
V	51	45	1	He	0.057	23.1	498	12.2	2	
Cr	52	45	1	He	0.007	76.2	1823	0.7	2	
Mn	55	45	1	He	0.363	5.5	2685	2.6	2	
Fe	56	45	1	He	18.626	17.6	112630	15.6	50	
Co	59	103	1	He	0.001	289.2	68	24.3	1	
Ni	60	103	1	He	-0.329	-4.3	362	9.4	2	
Cu	63	103	1	He	-0.314	-10.0	1381	15.6	2	
Zn	66	103	1	He	1.294	4.3	3785	3.0	20	
As	75	103	1	He	0.122	10.0	200	5.2	2	
Se	78	103	1	He	0.166	89.3	59	22.4	2	
Sr	88	103	1	He	0.083	10.0	726	8.9	10	
Mo	95	103	1	He	0.912	21.3	2963	21.9	2	
Ag	107	103	1	He	0.016	38.4	200	34.9	0.2	
Cd	111	103	1	He	-0.038	-45.6	1018	2.8	0.2	
Sn	118	115	1	He	0.408	16.2	2708	11.5	10	
Sb	123	115	1	He	0.445	15.4	2275	13.2	1	
Ba	137	115	1	He	0.032	37.6	127	20.6	5	
W	182	209	1	He	0.992	14.6	16309	11.0	10	
Tl	205	209	1	He	0.035	20.1	1257	18.0	0.5	
Pb	208	209	1	He	0.084	0.4	4793	1.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1006393	2.90	1263759	79.63	30	120	
Sc	45	1	He	567565	1.06	699622	81.12	30	120	
Sc	45	2	NoGas	4446343	1.09	5515925	80.61	30	120	
Rh	103	1	He	1929237	1.13	2170249	88.89	30	120	
In	115	1	He	1139621	0.18	1314135	86.72	30	120	
Tb	159	1	He	3451994	2.12	3680734	93.79	30	120	
Ho	165	1	He	3558520	0.92	3781772	94.10	30	120	
Bi	209	1	He	2596947	1.40	2765317	93.91	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	071CRIA.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:40:18-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.917	0.917	7.748	3097	7.72	1	91.7	69.5	130.5	
B	11	2	NoGas	20.612	20.612	1.350	53734	1.28	20	103.1	69.5	130.5	
Na	23	1	He	1097.846	1097.846	2.276	1395525	1.53	1000	109.8	69.5	130.5	
Mg	24	1	He	1056.315	1056.315	0.662	755645	0.82	1000	105.6	69.5	130.5	
Al	27	1	He	50.918	50.918	0.871	21643	0.89	50	101.8	69.5	130.5	
K	39	1	He	1014.105	1014.105	1.222	752628	0.57	1000	101.4	69.5	130.5	
Ca	44	1	He	993.432	993.432	0.546	39067	1.27	1000	99.3	69.5	130.5	
Ti	47	1	He	11.241	11.241	0.593	2344	1.30	10	112.4	69.5	130.5	
V	51	1	He	5.272	5.272	1.955	27924	2.02	5	105.4	69.5	130.5	
Cr	52	1	He	2.106	2.106	1.374	15012	0.56	2	105.3	69.5	130.5	
Mn	55	1	He	5.035	5.035	1.096	27050	1.81	5	100.7	69.5	130.5	
Fe	56	1	He	109.507	109.507	0.481	668001	0.83	100	109.5	69.5	130.5	
Co	59	1	He	0.949	0.949	2.595	9491	3.09	1	94.9	69.5	130.5	
Ni	60	1	He	1.607	1.607	2.714	5054	1.52	2	80.3	69.5	130.5	
Cu	63	1	He	1.595	1.595	5.411	13693	3.85	2	79.8	69.5	130.5	
Zn	66	1	He	19.233	19.233	0.684	27430	0.24	20	96.2	69.5	130.5	
As	75	1	He	4.744	4.744	2.056	4263	1.19	5	94.9	69.5	130.5	
Se	78	1	He	4.779	4.779	2.653	495	1.61	5	95.6	69.5	130.5	
Sr	88	1	He	9.348	9.348	1.093	69072	0.38	10	93.5	69.5	130.5	
Mo	95	1	He	10.036	10.036	0.974	32461	1.02	10	100.4	69.5	130.5	
Ag	107	1	He	1.021	1.021	2.234	11483	2.86	1	102.1	69.5	130.5	
Cd	111	1	He	1.024	1.024	4.674	3146	3.82	1	102.4	69.5	130.5	
Sn	118	1	He	10.139	10.139	2.443	50687	2.10	10	101.4	69.5	130.5	
Sb	123	1	He	2.098	2.098	1.367	9947	1.09	2	104.9	69.5	130.5	
Ba	137	1	He	4.910	4.910	1.932	11278	1.64	5	98.2	69.5	130.5	
W	182	1	He	9.525	9.525	2.761	128083	2.92	10	95.3	69.5	130.5	
Tl	205	1	He	1.891	1.891	2.105	65767	1.03	2	94.6	69.5	130.5	
Pb	208	1	He	1.080	1.080	2.293	50402	1.16	1	108.0	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1031292	1.88	1263759	81.61	30	120	
Sc	45	1	He	597869	0.77	699622	85.46	30	120	
Sc	45	2	NoGas	4687089	0.56	5515925	84.97	30	120	
Rh	103	1	He	1951746	0.83	2170249	89.93	30	120	
In	115	1	He	1175003	0.30	1314135	89.41	30	120	
Tb	159	1	He	3484256	1.63	3680734	94.66	30	120	
Ho	165	1	He	3580527	0.74	3781772	94.68	30	120	
Bi	209	1	He	2665593	1.10	2765317	96.39	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177246/1-a@2
Data File Name	072_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:44:09-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.045	31.5	219	20.5	1	
B	11	45	2	NoGas	2.927	8.4	11597	4.5	20	
Na	23	45	1	He	33.331	2.3	54132	1.0	400	
Mg	24	45	1	He	31.352	4.7	22700	3.7	1000	
Al	27	45	1	He	3.477	12.5	2427	8.3	50	
K	39	45	1	He	23.927	3.5	42833	1.5	1000	
Ca	44	45	1	He	110.815	2.0	4730	0.8	1000	
Ti	47	45	1	He	1.870	3.6	374	4.0	20	
V	51	45	1	He	0.072	228.8	575	142.5	2	
Cr	52	45	1	He	0.894	1.9	7029	0.4	2	
Mn	55	45	1	He	0.328	5.1	2499	2.5	2	
Fe	56	45	1	He	22.467	7.1	133984	8.3	50	
Co	59	103	1	He	0.006	21.5	119	9.8	1	
Ni	60	103	1	He	-0.160	-15.3	727	6.8	2	
Cu	63	103	1	He	0.345	12.9	5291	4.1	2	
Zn	66	103	1	He	7.882	5.5	11715	3.6	20	
As	75	103	1	He	0.242	6.2	288	4.8	2	
Se	78	103	1	He	0.108	61.4	51	11.2	2	
Sr	88	103	1	He	0.341	6.0	2476	5.1	10	
Mo	95	103	1	He	0.666	15.9	2061	14.6	2	
Ag	107	103	1	He	0.016	9.3	192	7.8	0.2	
Cd	111	103	1	He	-0.011	-252.0	1016	4.2	0.2	
Sn	118	115	1	He	18.106	2.1	83995	1.5	10	Blank Failed
Sb	123	115	1	He	0.327	2.4	1682	2.1	1	
Ba	137	115	1	He	1.102	2.6	2407	2.9	5	
W	182	209	1	He	0.685	8.1	12746	7.4	10	
Tl	205	209	1	He	0.016	17.2	636	16.6	0.5	
Pb	208	209	1	He	0.200	6.3	10211	5.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1000759	1.01	1263759	79.19	30	120	
Sc	45	1	He	563748	1.55	699622	80.58	30	120	
Sc	45	2	NoGas	4333194	1.32	5515925	78.56	30	120	
Rh	103	1	He	1830367	1.01	2170249	84.34	30	120	
In	115	1	He	1097863	0.90	1314135	83.54	30	120	
Tb	159	1	He	3362536	0.47	3680734	91.36	30	120	
Ho	165	1	He	3470798	0.83	3781772	91.78	30	120	
Bi	209	1	He	2666266	2.20	2765317	96.42	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177246/2-a@2
Data File Name	073LCSS.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:48:03-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	480.924	480.924	2.650	1461378	2.42	500	96.2	78.6	110.5	
B	11	2	NoGas	57.830	57.830	0.774	127220	1.74	50	115.7	79.5	120.5	
Na	23	1	He	5266.579	5266.579	2.200	5990765	1.25	5000	105.3	79.5	120.5	
Mg	24	1	He	5311.659	5311.659	2.429	3423709	0.98	5000	106.2	79.5	120.5	
Al	27	1	He	5042.810	5042.810	2.941	1830844	1.51	5000	100.9	79.5	120.5	
K	39	1	He	5041.970	5041.970	1.724	3276525	0.48	5000	100.8	79.5	120.5	
Ca	44	1	He	4415.311	4415.311	0.660	154446	0.90	5000	88.3	79.5	120.5	
Ti	47	1	He	52.578	52.578	1.751	9867	1.50	50	105.2	79.5	120.5	
V	51	1	He	521.761	521.761	1.143	2474839	0.61	500	104.4	71.5	110.5	
Cr	52	1	He	526.305	526.305	0.411	2964964	1.47	500	105.3	69.5	110.5	
Mn	55	1	He	510.246	510.246	2.471	2388308	0.94	500	102.0	79.5	120.5	
Fe	56	1	He	5234.636	5234.636	1.335	28563650	0.21	5000	104.7	79.5	120.5	
Co	59	1	He	471.650	471.650	0.944	4225290	0.35	500	94.3	73.9	110.5	
Ni	60	1	He	456.704	456.704	0.412	998348	0.43	500	91.3	74.9	110.5	
Cu	63	1	He	486.939	486.939	1.043	2831577	0.78	500	97.4	72.6	110.5	
Zn	66	1	He	441.748	441.748	0.637	525957	0.46	500	88.3	71.5	113.4	
As	75	1	He	411.883	411.883	0.450	326431	0.30	500	82.4	73.4	110.5	
Se	78	1	He	400.412	400.412	0.182	34110	0.73	500	80.1	64.6	110.5	
Sr	88	1	He	482.802	482.802	1.084	3211290	1.25	500	96.6	79.5	120.5	
Mo	95	1	He	52.976	52.976	1.508	154317	1.27	50	106.0	29.5	140.5	
Ag	107	1	He	50.248	50.248	1.160	508483	0.54	50	100.5	59.5	114.5	
Cd	111	1	He	466.169	466.169	0.119	837840	0.82	500	93.2	73.5	110.5	
Sn	118	1	He	584.032	584.032	1.872	2510842	1.92	500	116.8	79.5	120.5	
Sb	123	1	He	51.456	51.456	0.661	206969	0.73	50	102.9	67.5	113.4	
Ba	137	1	He	488.338	488.338	0.265	974374	0.30	500	97.7	69.5	110.5	
W	182	1	He	50.617	50.617	2.004	626963	1.55	50	101.2	74.6	125.4	
Tl	205	1	He	118.635	118.635	1.541	3890081	0.89	125	94.9	70.6	110.5	
Pb	208	1	He	488.690	488.690	0.927	21080314	0.49	500	97.7	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	950781	0.50	1263759	75.23	30	120	
Sc	45	1	He	539802	1.55	699622	77.16	30	120	
Sc	45	2	NoGas	4246709	1.56	5515925	76.99	30	120	
Rh	103	1	He	1759835	0.76	2170249	81.09	30	120	
In	115	1	He	1025938	0.07	1314135	78.07	30	120	
Tb	159	1	He	3328346	0.93	3680734	90.43	30	120	
Ho	165	1	He	3382861	1.56	3781772	89.45	30	120	
Bi	209	1	He	2516213	0.90	2765317	90.99	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-d@20
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:51:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.506	0.506	5.06	1822	0.03	10000	
B	11	45	2	NoGas	3.170	3.170	4.59	13568	0.02	300	
Na	23	45	1	He	32.092	32.092	3.84	56996	0.06	500000	
Mg	24	45	1	He	1100.794	1100.794	1.60	803483	0.14	500000	
Al	27	45	1	He	7259.891	7259.891	2.39	2979237	0.24	200000	
K	39	45	1	He	334.582	334.582	1.25	272784	0.12	500000	
Ca	44	45	1	He	204.656	204.656	3.18	8816	2.32	500000	
Ti	47	45	1	He	66.534	66.534	4.73	14108	0.47	2500	
V	51	45	1	He	15.455	15.455	0.55	83091	0.02	10000	
Cr	52	45	1	He	9.547	9.547	0.81	62675	0.02	10000	
Mn	55	45	1	He	1756.554	1756.554	1.89	9292192	0.02	10000	
Fe	56	45	1	He	13222.660	13222.660	1.76	81545388	0.02	200000	
Co	59	103	1	He	7.756	7.756	0.99	77775	0.01	10000	
Ni	60	103	1	He	9.473	9.473	0.69	24312	0.04	10000	
Cu	63	103	1	He	6.612	6.612	1.62	46404	0.01	10000	
Zn	66	103	1	He	33.264	33.264	0.80	46280	0.07	10000	
As	75	103	1	He	6.542	6.542	3.53	5892	0.11	10000	
Se	78	103	1	He	1.055	1.055	3.83	145	0.73	10000	
Sr	88	103	1	He	10.415	10.415	0.33	77600	0.01	10000	
Mo	95	103	1	He	1.653	1.653	2.92	5433	0.03	2000	
Ag	107	103	1	He	0.050	0.050	13.04	587	0.01	300	
Cd	111	103	1	He	0.174	0.174	11.12	1465	0.01	4000	
Sn	118	115	1	He	2.400	2.400	3.71	12538	0.02	2000	
Sb	123	115	1	He	0.275	0.275	12.78	1553	0.02	300	
Ba	137	115	1	He	58.305	58.305	1.35	132697	0.04	10000	
W	182	209	1	He	0.676	0.676	18.84	12839	0.01	2500	
Tl	205	209	1	He	0.192	0.192	11.80	6847	0.00	5000	
Pb	208	209	1	He	12.227	12.227	0.24	569306	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1076988	1.87	1263759	85.22	30	120	
Sc	45	1	He	610150	1.12	699622	87.21	30	120	
Sc	45	2	NoGas	4850085	0.49	5515925	87.93	30	120	
Rh	103	1	He	1968315	0.66	2170249	90.70	30	120	
In	115	1	He	1169750	0.53	1314135	89.01	30	120	
Tb	159	1	He	3507665	1.11	3680734	95.30	30	120	
Ho	165	1	He	3645725	0.15	3781772	96.40	30	120	
Bi	209	1	He	2710815	0.10	2765317	98.03	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49233-a-1-d@100
Data File Name	075SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:55:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.137	0.137	8.16	578	0.02	10000	
B	11	45	2	NoGas	1.671	1.671	6.22	10244	0.02	300	
Na	23	45	1	He	16.663	16.663	4.03	38122	0.04	500000	
Mg	24	45	1	He	221.779	221.779	1.09	167294	0.13	500000	
Al	27	45	1	He	1457.304	1457.304	1.39	613768	0.24	200000	
K	39	45	1	He	69.209	69.209	0.58	81322	0.09	500000	
Ca	44	45	1	He	38.686	38.686	1.78	2337	1.66	500000	
Ti	47	45	1	He	14.453	14.453	1.04	3148	0.46	2500	
V	51	45	1	He	3.187	3.187	2.71	17738	0.02	10000	
Cr	52	45	1	He	1.913	1.913	4.20	14434	0.01	10000	
Mn	55	45	1	He	364.361	364.361	2.34	1975826	0.02	10000	
Fe	56	45	1	He	2684.327	2684.327	1.51	16967892	0.02	200000	
Co	59	103	1	He	1.578	1.578	1.70	16241	0.01	10000	
Ni	60	103	1	He	1.712	1.712	3.48	5476	0.03	10000	
Cu	63	103	1	He	1.056	1.056	7.50	10540	0.01	10000	
Zn	66	103	1	He	8.789	8.789	3.58	14118	0.06	10000	
As	75	103	1	He	1.347	1.347	3.41	1319	0.10	10000	
Se	78	103	1	He	0.229	0.229	68.29	68	0.34	10000	
Sr	88	103	1	He	2.097	2.097	0.62	16084	0.01	10000	
Mo	95	103	1	He	0.348	0.348	1.06	1209	0.03	2000	
Ag	107	103	1	He	0.009	0.009	13.37	129	0.01	300	
Cd	111	103	1	He	0.047	0.047	58.68	1237	0.00	4000	
Sn	118	115	1	He	0.472	0.472	0.82	3204	0.01	2000	
Sb	123	115	1	He	0.075	0.075	10.59	662	0.01	300	
Ba	137	115	1	He	11.520	11.520	1.11	27230	0.04	10000	
W	182	209	1	He	0.149	0.149	5.47	5946	0.00	2500	
Tl	205	209	1	He	0.037	0.037	3.36	1397	0.00	5000	
Pb	208	209	1	He	2.461	2.461	1.04	117670	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1127305	0.86	1263759	89.20	30	120	
Sc	45	1	He	625188	1.32	699622	89.36	30	120	
Sc	45	2	NoGas	4989831	1.05	5515925	90.46	30	120	
Rh	103	1	He	2013496	1.51	2170249	92.78	30	120	
In	115	1	He	1212702	0.65	1314135	92.28	30	120	
Tb	159	1	He	3583281	0.60	3680734	97.35	30	120	
Ho	165	1	He	3695203	0.54	3781772	97.71	30	120	
Bi	209	1	He	2762812	0.85	2765317	99.91	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49233-a-1-d@20
Data File Name	076SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T18:59:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1032.157	1032.157	1.76	3403464	0.03	10000	
B	11	45	2	NoGas	109.774	109.774	1.44	262246	0.04	300	
Na	23	45	1	He	10200.439	10200.439	3.25	13537625	0.08	500000	
Mg	24	45	1	He	11311.522	11311.522	2.70	8516038	0.13	500000	
Al	27	45	1	He	16585.401	16585.401	2.45	7032835	0.24	200000	
K	39	45	1	He	10328.891	10328.891	3.31	7808691	0.13	500000	
Ca	44	45	1	He	8844.864	8844.864	3.63	360519	2.45	500000	
Ti	47	45	1	He	159.151	159.151	3.46	34863	0.46	2500	
V	51	45	1	He	1041.834	1041.834	1.66	5774055	0.02	10000	
Cr	52	45	1	He	1043.958	1043.958	1.90	6868932	0.02	10000	
Mn	55	45	1	He	2602.288	2602.288	2.75	14226185	0.02	10000	
Fe	56	45	1	He	22328.571	22328.571	2.52	142314794	0.02	200000	
Co	59	103	1	He	973.633	973.633	1.91	9729398	0.01	10000	
Ni	60	103	1	He	1017.637	1017.637	0.49	2479531	0.04	10000	
Cu	63	103	1	He	984.429	984.429	0.71	6380856	0.02	10000	
Zn	66	103	1	He	995.083	995.083	0.24	1318740	0.08	10000	
As	75	103	1	He	928.397	928.397	0.28	820495	0.11	10000	
Se	78	103	1	He	935.908	935.908	0.43	88856	1.05	10000	
Sr	88	103	1	He	990.771	990.771	1.23	7350275	0.01	10000	
Mo	95	103	1	He	101.030	101.030	2.82	328125	0.03	2000	
Ag	107	103	1	He	33.747	33.747	0.85	380896	0.01	300	
Cd	111	103	1	He	1036.484	1036.484	2.02	2076170	0.05	4000	
Sn	118	115	1	He	1125.042	1125.042	0.57	5272515	0.02	2000	
Sb	123	115	1	He	106.207	106.207	0.33	465456	0.02	300	
Ba	137	115	1	He	1194.185	1194.185	2.34	2597522	0.05	10000	
W	182	209	1	He	99.318	99.318	3.11	1258387	0.01	2500	
Tl	205	209	1	He	252.335	252.335	0.98	8489704	0.00	5000	
Pb	208	209	1	He	1044.978	1044.978	1.56	46245806	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1031889	1.44	1263759	81.65	30	120	
Sc	45	1	He	630943	3.99	699622	90.18	30	120	
Sc	45	2	NoGas	4702707	1.00	5515925	85.26	30	120	
Rh	103	1	He	1962728	1.19	2170249	90.44	30	120	
In	115	1	He	1118552	0.62	1314135	85.12	30	120	
Tb	159	1	He	3549621	0.42	3680734	96.44	30	120	
Ho	165	1	He	3556555	0.31	3781772	94.04	30	120	
Bi	209	1	He	2581855	1.85	2765317	93.37	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-e du@20
Data File Name	077SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:02:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.645	0.645	1.16	2378	0.03	10000	
B	11	45	2	NoGas	2.797	2.797	7.64	13231	0.02	300	
Na	23	45	1	He	35.303	35.303	4.55	61704	0.06	500000	
Mg	24	45	1	He	1214.065	1214.065	0.82	894634	0.14	500000	
Al	27	45	1	He	8306.741	8306.741	1.50	3441637	0.24	200000	
K	39	45	1	He	380.029	380.029	1.55	308868	0.12	500000	
Ca	44	45	1	He	216.811	216.811	3.42	9383	2.31	500000	
Ti	47	45	1	He	60.860	60.860	1.72	13037	0.47	2500	
V	51	45	1	He	16.891	16.891	1.53	91658	0.02	10000	
Cr	52	45	1	He	10.516	10.516	0.96	69506	0.02	10000	
Mn	55	45	1	He	1934.344	1934.344	1.54	10331911	0.02	10000	
Fe	56	45	1	He	14204.288	14204.288	0.38	88470516	0.02	200000	
Co	59	103	1	He	9.437	9.437	1.96	94927	0.01	10000	
Ni	60	103	1	He	11.098	11.098	1.10	28371	0.04	10000	
Cu	63	103	1	He	7.706	7.706	2.09	53677	0.01	10000	
Zn	66	103	1	He	37.174	37.174	0.96	51636	0.07	10000	
As	75	103	1	He	7.211	7.211	0.66	6507	0.11	10000	
Se	78	103	1	He	1.598	1.598	6.13	197	0.81	10000	
Sr	88	103	1	He	10.680	10.680	0.97	79834	0.01	10000	
Mo	95	103	1	He	3.145	3.145	10.54	10317	0.03	2000	
Ag	107	103	1	He	0.044	0.044	13.95	522	0.01	300	
Cd	111	103	1	He	0.241	0.241	27.73	1604	0.02	4000	
Sn	118	115	1	He	8.065	8.065	11.21	40483	0.02	2000	
Sb	123	115	1	He	0.840	0.840	15.58	4158	0.02	300	
Ba	137	115	1	He	63.072	63.072	1.02	144349	0.04	10000	
W	182	209	1	He	2.165	2.165	17.49	32367	0.01	2500	
Tl	205	209	1	He	0.273	0.273	13.07	9654	0.00	5000	
Pb	208	209	1	He	12.612	12.612	1.54	583799	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1114833	0.65	1263759	88.22	30	120	
Sc	45	1	He	616115	2.29	699622	88.06	30	120	
Sc	45	2	NoGas	5067123	1.68	5515925	91.86	30	120	
Rh	103	1	He	1974652	1.11	2170249	90.99	30	120	
In	115	1	He	1176503	1.91	1314135	89.53	30	120	
Tb	159	1	He	3537718	1.66	3680734	96.11	30	120	
Ho	165	1	He	3601813	0.61	3781772	95.24	30	120	
Bi	209	1	He	2695474	1.29	2765317	97.47	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-f ms@20
Data File Name	078SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:06:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.297	5.297	2.00	20130	0.03	10000	
B	11	45	2	NoGas	5.868	5.868	3.88	22588	0.03	300	
Na	23	45	1	He	506.023	506.023	0.51	744028	0.07	500000	
Mg	24	45	1	He	1729.253	1729.253	2.30	1411139	0.12	500000	
Al	27	45	1	He	8471.393	8471.393	1.02	3889462	0.22	200000	
K	39	45	1	He	832.868	832.868	1.24	711518	0.12	500000	
Ca	44	45	1	He	675.841	675.841	1.17	30615	2.21	500000	
Ti	47	45	1	He	61.381	61.381	1.02	14567	0.42	2500	
V	51	45	1	He	20.381	20.381	1.87	122492	0.02	10000	
Cr	52	45	1	He	14.632	14.632	1.12	106332	0.01	10000	
Mn	55	45	1	He	1397.369	1397.369	0.30	8270994	0.02	10000	
Fe	56	45	1	He	12917.189	12917.189	0.43	89133725	0.01	200000	
Co	59	103	1	He	11.892	11.892	0.59	127948	0.01	10000	
Ni	60	103	1	He	15.162	15.162	2.08	41002	0.04	10000	
Cu	63	103	1	He	11.476	11.476	0.45	83716	0.01	10000	
Zn	66	103	1	He	42.036	42.036	0.40	62158	0.07	10000	
As	75	103	1	He	10.976	10.976	1.39	10542	0.10	10000	
Se	78	103	1	He	5.540	5.540	4.45	614	0.90	10000	
Sr	88	103	1	He	13.255	13.255	0.83	105955	0.01	10000	
Mo	95	103	1	He	5.926	5.926	1.58	20769	0.03	2000	
Ag	107	103	1	He	4.658	4.658	1.30	56609	0.01	300	
Cd	111	103	1	He	4.793	4.793	2.84	11527	0.04	4000	
Sn	118	115	1	He	6.924	6.924	3.31	37542	0.02	2000	
Sb	123	115	1	He	1.601	1.601	2.95	8248	0.02	300	
Ba	137	115	1	He	61.465	61.465	1.00	151308	0.04	10000	
W	182	209	1	He	3.462	3.462	1.05	50963	0.01	2500	
Tl	205	209	1	He	4.312	4.312	0.81	155992	0.00	5000	
Pb	208	209	1	He	16.205	16.205	0.29	771821	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1183831	1.42	1263759	93.68	30	120	
Sc	45	1	He	682594	1.05	699622	97.57	30	120	
Sc	45	2	NoGas	5459232	0.64	5515925	98.97	30	120	
Rh	103	1	He	2112332	0.76	2170249	97.33	30	120	
In	115	1	He	1265281	0.92	1314135	96.28	30	120	
Tb	159	1	He	3689993	0.54	3680734	100.25	30	120	
Ho	165	1	He	3802582	1.15	3781772	100.55	30	120	
Bi	209	1	He	2774374	0.80	2765317	100.33	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-2-b@20
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:10:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.443	0.443	16.23	1778	0.02	10000	
B	11	45	2	NoGas	2.344	2.344	10.55	13046	0.02	300	
Na	23	45	1	He	16.630	16.630	5.24	42279	0.04	500000	
Mg	24	45	1	He	1068.651	1068.651	1.43	887514	0.12	500000	
Al	27	45	1	He	6233.228	6233.228	1.15	2910529	0.21	200000	
K	39	45	1	He	352.299	352.299	2.07	325026	0.11	500000	
Ca	44	45	1	He	749.271	749.271	0.74	34423	2.18	500000	
Ti	47	45	1	He	48.322	48.322	1.45	11663	0.41	2500	
V	51	45	1	He	12.306	12.306	2.38	75311	0.02	10000	
Cr	52	45	1	He	8.936	8.936	1.44	66885	0.01	10000	
Mn	55	45	1	He	984.016	984.016	0.42	5923492	0.02	10000	
Fe	56	45	1	He	11204.086	11204.086	1.14	78617877	0.01	200000	
Co	59	103	1	He	5.190	5.190	1.01	56731	0.01	10000	
Ni	60	103	1	He	9.338	9.338	2.56	26125	0.04	10000	
Cu	63	103	1	He	5.311	5.311	3.07	41342	0.01	10000	
Zn	66	103	1	He	37.165	37.165	1.11	56064	0.07	10000	
As	75	103	1	He	5.148	5.148	0.36	5075	0.10	10000	
Se	78	103	1	He	0.628	0.628	16.37	114	0.55	10000	
Sr	88	103	1	He	4.116	4.116	1.65	33497	0.01	10000	
Mo	95	103	1	He	1.037	1.037	2.91	3733	0.03	2000	
Ag	107	103	1	He	0.065	0.065	11.02	828	0.01	300	
Cd	111	103	1	He	0.127	0.127	25.33	1492	0.01	4000	
Sn	118	115	1	He	2.287	2.287	5.17	13198	0.02	2000	
Sb	123	115	1	He	0.169	0.169	1.32	1177	0.01	300	
Ba	137	115	1	He	45.915	45.915	0.98	115123	0.04	10000	
W	182	209	1	He	0.347	0.347	1.37	8832	0.00	2500	
Tl	205	209	1	He	0.126	0.126	5.69	4734	0.00	5000	
Pb	208	209	1	He	11.507	11.507	1.04	559101	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1195791	1.86	1263759	94.62	30	120	
Sc	45	1	He	694188	1.23	699622	99.22	30	120	
Sc	45	2	NoGas	5466571	0.86	5515925	99.11	30	120	
Rh	103	1	He	2144726	1.40	2170249	98.82	30	120	
In	115	1	He	1288593	0.82	1314135	98.06	30	120	
Tb	159	1	He	3731144	0.21	3680734	101.37	30	120	
Ho	165	1	He	3857845	0.67	3781772	102.01	30	120	
Bi	209	1	He	2828553	0.96	2765317	102.29	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-9-b@20
Data File Name	080SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:14:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.344	0.344	1.84	1433	0.02	10000	
B	11	45	2	NoGas	1.802	1.802	3.98	11834	0.02	300	
Na	23	45	1	He	9.958	9.958	6.03	32889	0.03	500000	
Mg	24	45	1	He	975.379	975.379	0.28	818809	0.12	500000	
Al	27	45	1	He	6152.000	6152.000	0.74	2902973	0.21	200000	
K	39	45	1	He	262.670	262.670	1.24	253373	0.10	500000	
Ca	44	45	1	He	85.118	85.118	4.81	4724	1.80	500000	
Ti	47	45	1	He	40.716	40.716	1.85	9933	0.41	2500	
V	51	45	1	He	10.556	10.556	2.48	65333	0.02	10000	
Cr	52	45	1	He	8.118	8.118	0.22	61603	0.01	10000	
Mn	55	45	1	He	218.459	218.459	2.46	1329802	0.02	10000	
Fe	56	45	1	He	10969.723	10969.723	0.69	77788132	0.01	200000	
Co	59	103	1	He	5.433	5.433	0.82	60918	0.01	10000	
Ni	60	103	1	He	7.634	7.634	1.30	22152	0.03	10000	
Cu	63	103	1	He	5.121	5.121	1.78	41037	0.01	10000	
Zn	66	103	1	He	27.328	27.328	1.68	42921	0.06	10000	
As	75	103	1	He	4.748	4.748	1.07	4809	0.10	10000	
Se	78	103	1	He	0.508	0.508	8.54	104	0.49	10000	
Sr	88	103	1	He	1.304	1.304	1.37	10981	0.01	10000	
Mo	95	103	1	He	0.707	0.707	1.59	2628	0.03	2000	
Ag	107	103	1	He	0.022	0.022	25.58	307	0.01	300	
Cd	111	103	1	He	0.048	0.048	82.43	1353	0.00	4000	
Sn	118	115	1	He	2.048	2.048	2.44	12034	0.02	2000	
Sb	123	115	1	He	0.097	0.097	15.42	823	0.01	300	
Ba	137	115	1	He	27.216	27.216	0.34	68977	0.04	10000	
W	182	209	1	He	0.158	0.158	12.72	6309	0.00	2500	
Tl	205	209	1	He	0.083	0.083	2.79	3201	0.00	5000	
Pb	208	209	1	He	7.844	7.844	0.58	387085	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1223880	1.64	1263759	96.84	30	120	
Sc	45	1	He	701467	0.51	699622	100.26	30	120	
Sc	45	2	NoGas	5588200	0.58	5515925	101.31	30	120	
Rh	103	1	He	2199988	0.89	2170249	101.37	30	120	
In	115	1	He	1302014	0.89	1314135	99.08	30	120	
Tb	159	1	He	3778165	0.49	3680734	102.65	30	120	
Ho	165	1	He	3852792	1.34	3781772	101.88	30	120	
Bi	209	1	He	2869995	0.52	2765317	103.79	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	081_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:17:59-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.042	1.682	167040	0.69	50	92.1	89.5	110.5	
B	11	45	2	NoGas	49.583	1.820	128853	1.46	50	99.2	89.5	110.5	
Na	23	45	1	He	25140.676	2.678	34796804	0.91	25000	100.6	89.5	110.5	
Mg	24	45	1	He	25480.427	2.767	20014798	0.94	25000	101.9	89.5	110.5	
Al	27	45	1	He	248.762	1.781	111360	1.70	250	99.5	89.5	110.5	
K	39	45	1	He	24723.686	1.761	19467588	1.68	25000	98.9	89.5	110.5	
Ca	44	45	1	He	24259.037	2.267	1030726	1.19	25000	97.0	89.5	110.5	
Ti	47	45	1	He	51.456	1.264	11775	2.47	50	102.9	89.5	110.5	
V	51	45	1	He	50.031	0.888	289613	2.72	50	100.1	89.5	110.5	
Cr	52	45	1	He	50.369	1.814	347789	1.69	50	100.7	89.5	110.5	
Mn	55	45	1	He	252.855	1.720	1443700	1.77	250	101.1	89.5	110.5	
Fe	56	45	1	He	12728.057	1.657	84670839	1.88	12500	101.8	89.5	110.5	
Co	59	103	1	He	48.633	1.194	490378	1.50	50	97.3	89.5	110.5	
Ni	60	103	1	He	48.764	1.129	121024	1.88	50	97.5	89.5	110.5	
Cu	63	103	1	He	48.699	0.981	321839	1.72	50	97.4	89.5	110.5	
Zn	66	103	1	He	48.276	0.723	66608	1.19	50	96.6	89.5	110.5	
As	75	103	1	He	48.785	1.429	43596	1.55	50	97.6	89.5	110.5	
Se	78	103	1	He	48.868	1.176	4725	2.15	50	97.7	89.5	110.5	
Sr	88	103	1	He	48.067	0.960	359892	0.81	50	96.1	89.5	110.5	
Mo	95	103	1	He	50.435	3.573	165288	1.84	50	100.9	89.5	110.5	
Ag	107	103	1	He	49.998	1.333	569387	0.87	50	100.0	89.5	110.5	
Cd	111	103	1	He	49.789	1.505	101699	0.78	50	99.6	89.5	110.5	
Sn	118	115	1	He	49.897	1.039	249777	1.00	50	99.8	89.5	110.5	
Sb	123	115	1	He	50.993	0.540	238132	0.32	50	102.0	89.5	110.5	
Ba	137	115	1	He	50.044	0.709	115987	1.36	50	100.1	89.5	110.5	
W	182	209	1	He	50.365	1.508	645630	1.27	50	100.7	89.5	110.5	
Tl	205	209	1	He	50.827	0.185	1724887	0.53	50	101.7	89.5	110.5	
Pb	208	209	1	He	48.534	1.006	2167602	1.15	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1134897	2.32	1263759	89.80	30	120	
Sc	45	1	He	658310	3.46	699622	94.10	30	120	
Sc	45	2	NoGas	4983210	1.39	5515925	90.34	30	120	
Rh	103	1	He	1980621	1.77	2170249	91.26	30	120	
In	115	1	He	1191142	0.79	1314135	90.64	30	120	
Tb	159	1	He	3600350	1.23	3680734	97.82	30	120	
Ho	165	1	He	3685220	0.83	3781772	97.45	30	120	
Bi	209	1	He	2603899	0.37	2765317	94.16	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	082_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:21:46-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.061	24.1	304	18.4	1	
B	11	45	2	NoGas	1.415	11.3	9573	3.8	20	
Na	23	45	1	He	5.995	23.2	23883	6.4	400	
Mg	24	45	1	He	1.723	56.2	3034	22.2	1000	
Al	27	45	1	He	1.775	8.7	1957	3.4	50	
K	39	45	1	He	7.889	24.8	35206	2.7	1000	
Ca	44	45	1	He	30.018	15.4	1969	8.7	1000	
Ti	47	45	1	He	0.206	6.4	53	6.3	20	
V	51	45	1	He	-0.016	-358.9	146	219.9	2	
Cr	52	45	1	He	0.001	1871.0	1955	4.8	2	
Mn	55	45	1	He	0.363	13.5	2935	7.5	2	
Fe	56	45	1	He	23.649	21.9	154315	19.7	50	
Co	59	103	1	He	0.007	58.8	141	31.4	1	
Ni	60	103	1	He	-0.345	-6.2	348	15.3	2	
Cu	63	103	1	He	-0.320	-5.0	1433	7.5	2	
Zn	66	103	1	He	1.400	6.8	4197	3.4	20	
As	75	103	1	He	0.091	12.0	185	5.1	2	
Se	78	103	1	He	0.090	87.1	56	14.5	2	
Sr	88	103	1	He	0.020	27.4	286	14.8	10	
Mo	95	103	1	He	0.945	22.7	3280	22.5	2	
Ag	107	103	1	He	0.010	45.4	150	38.0	0.2	
Cd	111	103	1	He	-0.011	-83.6	1147	1.4	0.2	
Sn	118	115	1	He	0.610	12.4	3975	9.6	10	
Sb	123	115	1	He	0.438	18.5	2428	15.8	1	
Ba	137	115	1	He	0.022	75.8	114	35.1	5	
W	182	209	1	He	1.034	19.5	17573	16.2	10	
Tl	205	209	1	He	0.041	21.3	1535	21.0	0.5	
Pb	208	209	1	He	0.098	6.3	5639	5.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1124405	0.92	1263759	88.97	30	120	
Sc	45	1	He	619811	1.48	699622	88.59	30	120	
Sc	45	2	NoGas	4972612	0.71	5515925	90.15	30	120	
Rh	103	1	He	2064734	0.48	2170249	95.14	30	120	
In	115	1	He	1234522	0.31	1314135	93.94	30	120	
Tb	159	1	He	3624867	1.77	3680734	98.48	30	120	
Ho	165	1	He	3670312	0.75	3781772	97.05	30	120	
Bi	209	1	He	2707547	1.20	2765317	97.91	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-10-b@20
Data File Name	083SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:25:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.397	0.397	17.12	1519	0.03	10000	
B	11	45	2	NoGas	1.978	1.978	4.06	11523	0.02	300	
Na	23	45	1	He	16.156	16.156	3.36	38939	0.04	500000	
Mg	24	45	1	He	1075.263	1075.263	1.55	835866	0.13	500000	
Al	27	45	1	He	7000.229	7000.229	0.89	3059598	0.23	200000	
K	39	45	1	He	376.677	376.677	0.96	323193	0.12	500000	
Ca	44	45	1	He	77.395	77.395	6.20	4050	1.91	500000	
Ti	47	45	1	He	43.342	43.342	1.42	9793	0.44	2500	
V	51	45	1	He	14.156	14.156	2.34	81056	0.02	10000	
Cr	52	45	1	He	9.107	9.107	1.66	63759	0.01	10000	
Mn	55	45	1	He	754.024	754.024	2.71	4247866	0.02	10000	
Fe	56	45	1	He	13132.286	13132.286	1.86	86245905	0.02	200000	
Co	59	103	1	He	6.642	6.642	1.17	67648	0.01	10000	
Ni	60	103	1	He	8.275	8.275	2.24	21719	0.04	10000	
Cu	63	103	1	He	4.624	4.624	0.68	34009	0.01	10000	
Zn	66	103	1	He	29.674	29.674	0.79	42164	0.07	10000	
As	75	103	1	He	5.747	5.747	0.84	5269	0.11	10000	
Se	78	103	1	He	0.515	0.515	25.38	95	0.54	10000	
Sr	88	103	1	He	4.031	4.031	0.91	30579	0.01	10000	
Mo	95	103	1	He	0.911	0.911	5.12	3061	0.03	2000	
Ag	107	103	1	He	0.031	0.031	10.74	378	0.01	300	
Cd	111	103	1	He	0.087	0.087	11.95	1309	0.01	4000	
Sn	118	115	1	He	2.005	2.005	6.86	10889	0.02	2000	
Sb	123	115	1	He	0.218	0.218	8.90	1328	0.02	300	
Ba	137	115	1	He	40.496	40.496	1.18	94649	0.04	10000	
W	182	209	1	He	0.240	0.240	13.32	7065	0.00	2500	
Tl	205	209	1	He	0.097	0.097	2.42	3517	0.00	5000	
Pb	208	209	1	He	9.966	9.966	1.89	465387	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1134030	1.28	1263759	89.73	30	120	
Sc	45	1	He	649829	1.91	699622	92.88	30	120	
Sc	45	2	NoGas	5225898	0.65	5515925	94.74	30	120	
Rh	103	1	He	1998924	0.52	2170249	92.11	30	120	
In	115	1	He	1201104	0.59	1314135	91.40	30	120	
Tb	159	1	He	3561551	1.37	3680734	96.76	30	120	
Ho	165	1	He	3647760	0.62	3781772	96.46	30	120	
Bi	209	1	He	2717835	0.88	2765317	98.28	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-11-b@20
Data File Name	084SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:29:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.462	0.462	10.31	1900	0.02	10000	
B	11	45	2	NoGas	2.089	2.089	8.22	12735	0.02	300	
Na	23	45	1	He	13.074	13.074	1.18	38059	0.03	500000	
Mg	24	45	1	He	1077.740	1077.740	1.64	918287	0.12	500000	
Al	27	45	1	He	7408.204	7408.204	1.31	3548781	0.21	200000	
K	39	45	1	He	335.013	335.013	3.54	318757	0.11	500000	
Ca	44	45	1	He	88.956	88.956	5.69	4972	1.79	500000	
Ti	47	45	1	He	50.313	50.313	1.24	12459	0.40	2500	
V	51	45	1	He	15.202	15.202	1.94	95403	0.02	10000	
Cr	52	45	1	He	9.648	9.648	1.50	73906	0.01	10000	
Mn	55	45	1	He	661.833	661.833	1.54	4087543	0.02	10000	
Fe	56	45	1	He	13409.266	13409.266	1.73	96530223	0.01	200000	
Co	59	103	1	He	7.160	7.160	1.58	79177	0.01	10000	
Ni	60	103	1	He	9.597	9.597	0.85	27142	0.04	10000	
Cu	63	103	1	He	5.804	5.804	1.12	45381	0.01	10000	
Zn	66	103	1	He	31.611	31.611	1.44	48612	0.07	10000	
As	75	103	1	He	5.894	5.894	0.73	5865	0.10	10000	
Se	78	103	1	He	0.666	0.666	20.85	119	0.56	10000	
Sr	88	103	1	He	2.049	2.049	3.20	16937	0.01	10000	
Mo	95	103	1	He	0.953	0.953	2.60	3477	0.03	2000	
Ag	107	103	1	He	0.027	0.027	20.27	369	0.01	300	
Cd	111	103	1	He	0.053	0.053	22.22	1348	0.00	4000	
Sn	118	115	1	He	1.825	1.825	4.76	10819	0.02	2000	
Sb	123	115	1	He	0.149	0.149	11.57	1088	0.01	300	
Ba	137	115	1	He	46.680	46.680	0.31	118256	0.04	10000	
W	182	209	1	He	0.153	0.153	10.43	6220	0.00	2500	
Tl	205	209	1	He	0.098	0.098	8.51	3749	0.00	5000	
Pb	208	209	1	He	10.473	10.473	0.92	515270	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1226480	1.13	1263759	97.05	30	120	
Sc	45	1	He	712196	0.87	699622	101.80	30	120	
Sc	45	2	NoGas	5633169	0.67	5515925	102.13	30	120	
Rh	103	1	He	2170629	1.70	2170249	100.02	30	120	
In	115	1	He	1301953	1.14	1314135	99.07	30	120	
Tb	159	1	He	3743403	0.83	3680734	101.70	30	120	
Ho	165	1	He	3846906	0.93	3781772	101.72	30	120	
Bi	209	1	He	2863783	0.63	2765317	103.56	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-12-b@20
Data File Name	085SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:33:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.434	0.434	4.55	1796	0.02	10000	
B	11	45	2	NoGas	1.785	1.785	8.73	11975	0.01	300	
Na	23	45	1	He	13.032	13.032	3.31	38393	0.03	500000	
Mg	24	45	1	He	1059.434	1059.434	1.04	912229	0.12	500000	
Al	27	45	1	He	6374.133	6374.133	1.31	3085668	0.21	200000	
K	39	45	1	He	345.890	345.890	1.25	331467	0.10	500000	
Ca	44	45	1	He	143.886	143.886	1.88	7574	1.90	500000	
Ti	47	45	1	He	51.467	51.467	2.69	12878	0.40	2500	
V	51	45	1	He	12.073	12.073	0.49	76619	0.02	10000	
Cr	52	45	1	He	8.397	8.397	2.28	65290	0.01	10000	
Mn	55	45	1	He	549.081	549.081	0.90	3426995	0.02	10000	
Fe	56	45	1	He	11192.814	11192.814	0.47	81427655	0.01	200000	
Co	59	103	1	He	6.461	6.461	0.49	72669	0.01	10000	
Ni	60	103	1	He	10.111	10.111	2.47	29006	0.03	10000	
Cu	63	103	1	He	5.778	5.778	1.65	45959	0.01	10000	
Zn	66	103	1	He	29.346	29.346	1.36	46066	0.06	10000	
As	75	103	1	He	4.996	4.996	0.39	5073	0.10	10000	
Se	78	103	1	He	0.598	0.598	12.51	114	0.53	10000	
Sr	88	103	1	He	1.908	1.908	2.50	16057	0.01	10000	
Mo	95	103	1	He	0.780	0.780	2.05	2903	0.03	2000	
Ag	107	103	1	He	0.021	0.021	3.76	297	0.01	300	
Cd	111	103	1	He	0.103	0.103	21.97	1483	0.01	4000	
Sn	118	115	1	He	1.697	1.697	1.14	10300	0.02	2000	
Sb	123	115	1	He	0.098	0.098	7.71	844	0.01	300	
Ba	137	115	1	He	44.011	44.011	0.76	113463	0.04	10000	
W	182	209	1	He	0.115	0.115	43.59	5779	0.00	2500	
Tl	205	209	1	He	0.090	0.090	2.91	3517	0.00	5000	
Pb	208	209	1	He	9.143	9.143	0.97	457593	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1229087	0.71	1263759	97.26	30	120	
Sc	45	1	He	719651	0.90	699622	102.86	30	120	
Sc	45	2	NoGas	5678675	0.60	5515925	102.95	30	120	
Rh	103	1	He	2207267	0.80	2170249	101.71	30	120	
In	115	1	He	1324902	0.24	1314135	100.82	30	120	
Tb	159	1	He	3840765	1.06	3680734	104.35	30	120	
Ho	165	1	He	3926643	0.78	3781772	103.83	30	120	
Bi	209	1	He	2912151	0.70	2765317	105.31	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-13-b@20
Data File Name	086SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:36:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.328	0.328	9.69	1404	0.02	10000	
B	11	45	2	NoGas	1.656	1.656	47.27	11813	0.01	300	
Na	23	45	1	He	10.808	10.808	6.03	35361	0.03	500000	
Mg	24	45	1	He	870.501	870.501	1.10	757080	0.11	500000	
Al	27	45	1	He	6000.993	6000.993	1.86	2932787	0.20	200000	
K	39	45	1	He	292.961	292.961	1.55	288710	0.10	500000	
Ca	44	45	1	He	81.156	81.156	2.77	4706	1.72	500000	
Ti	47	45	1	He	46.600	46.600	2.17	11772	0.40	2500	
V	51	45	1	He	12.563	12.563	1.91	80484	0.02	10000	
Cr	52	45	1	He	8.768	8.768	0.49	68730	0.01	10000	
Mn	55	45	1	He	657.698	657.698	0.84	4144246	0.02	10000	
Fe	56	45	1	He	10830.420	10830.420	1.30	79544139	0.01	200000	
Co	59	103	1	He	6.775	6.775	0.88	77234	0.01	10000	
Ni	60	103	1	He	7.963	7.963	1.67	23441	0.03	10000	
Cu	63	103	1	He	4.598	4.598	2.56	37869	0.01	10000	
Zn	66	103	1	He	25.222	25.222	2.09	40471	0.06	10000	
As	75	103	1	He	4.828	4.828	0.19	4972	0.10	10000	
Se	78	103	1	He	0.515	0.515	5.22	106	0.48	10000	
Sr	88	103	1	He	1.700	1.700	0.53	14512	0.01	10000	
Mo	95	103	1	He	0.747	0.747	6.36	2820	0.03	2000	
Ag	107	103	1	He	0.024	0.024	19.43	332	0.01	300	
Cd	111	103	1	He	0.063	0.063	47.77	1412	0.00	4000	
Sn	118	115	1	He	1.790	1.790	2.77	10952	0.02	2000	
Sb	123	115	1	He	0.094	0.094	3.77	830	0.01	300	
Ba	137	115	1	He	40.773	40.773	1.51	106410	0.04	10000	
W	182	209	1	He	0.090	0.090	12.23	5375	0.00	2500	
Tl	205	209	1	He	0.080	0.080	2.07	3100	0.00	5000	
Pb	208	209	1	He	9.051	9.051	0.81	448528	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1250575	1.53	1263759	98.96	30	120	
Sc	45	1	He	726553	0.85	699622	103.85	30	120	
Sc	45	2	NoGas	5781749	1.40	5515925	104.82	30	120	
Rh	103	1	He	2237092	1.00	2170249	103.08	30	120	
In	115	1	He	1341222	0.69	1314135	102.06	30	120	
Tb	159	1	He	3840150	1.24	3680734	104.33	30	120	
Ho	165	1	He	3930254	1.85	3781772	103.93	30	120	
Bi	209	1	He	2883305	1.07	2765317	104.27	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-15-b@20
Data File Name	087SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:40:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.390	0.390	8.89	1715	0.02	10000	
B	11	45	2	NoGas	1.798	1.798	11.84	12564	0.01	300	
Na	23	45	1	He	21.467	21.467	3.59	52557	0.04	500000	
Mg	24	45	1	He	1403.556	1403.556	1.62	1241084	0.11	500000	
Al	27	45	1	He	6717.143	6717.143	1.79	3340723	0.20	200000	
K	39	45	1	He	418.578	418.578	2.18	404755	0.10	500000	
Ca	44	45	1	He	1370.313	1370.313	1.14	66294	2.07	500000	
Ti	47	45	1	He	55.206	55.206	4.06	14189	0.39	2500	
V	51	45	1	He	13.558	13.558	2.69	88355	0.02	10000	
Cr	52	45	1	He	11.503	11.503	1.44	91033	0.01	10000	
Mn	55	45	1	He	546.224	546.224	2.30	3502472	0.02	10000	
Fe	56	45	1	He	14890.162	14890.162	1.10	111293371	0.01	200000	
Co	59	103	1	He	5.677	5.677	0.20	65316	0.01	10000	
Ni	60	103	1	He	11.698	11.698	2.13	34117	0.03	10000	
Cu	63	103	1	He	7.607	7.607	1.86	60635	0.01	10000	
Zn	66	103	1	He	32.394	32.394	0.91	51759	0.06	10000	
As	75	103	1	He	10.130	10.130	0.88	10407	0.10	10000	
Se	78	103	1	He	0.603	0.603	2.77	117	0.52	10000	
Sr	88	103	1	He	7.182	7.182	1.25	61416	0.01	10000	
Mo	95	103	1	He	2.886	2.886	1.44	10838	0.03	2000	
Ag	107	103	1	He	0.020	0.020	12.72	292	0.01	300	
Cd	111	103	1	He	0.101	0.101	36.85	1510	0.01	4000	
Sn	118	115	1	He	1.876	1.876	3.88	11434	0.02	2000	
Sb	123	115	1	He	0.082	0.082	11.63	767	0.01	300	
Ba	137	115	1	He	49.767	49.767	0.83	129861	0.04	10000	
W	182	209	1	He	0.349	0.349	8.78	9096	0.00	2500	
Tl	205	209	1	He	0.086	0.086	3.24	3350	0.00	5000	
Pb	208	209	1	He	9.955	9.955	1.02	496219	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1298644	1.36	1263759	102.76	30	120	
Sc	45	1	He	739460	1.33	699622	105.69	30	120	
Sc	45	2	NoGas	5940704	1.63	5515925	107.70	30	120	
Rh	103	1	He	2257736	1.04	2170249	104.03	30	120	
In	115	1	He	1341067	0.76	1314135	102.05	30	120	
Tb	159	1	He	3835308	0.13	3680734	104.20	30	120	
Ho	165	1	He	3895273	0.57	3781772	103.00	30	120	
Bi	209	1	He	2901034	0.95	2765317	104.91	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-16-b@20
Data File Name	088SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:44:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.363	0.363	4.72	1504	0.02	10000	
B	11	45	2	NoGas	1.796	1.796	3.82	11738	0.02	300	
Na	23	45	1	He	14.474	14.474	5.45	41377	0.03	500000	
Mg	24	45	1	He	997.835	997.835	2.11	876245	0.11	500000	
Al	27	45	1	He	5758.901	5758.901	2.97	2842329	0.20	200000	
K	39	45	1	He	323.421	323.421	1.49	318364	0.10	500000	
Ca	44	45	1	He	902.196	902.196	2.44	43629	2.07	500000	
Ti	47	45	1	He	48.228	48.228	4.38	12300	0.39	2500	
V	51	45	1	He	12.513	12.513	1.13	80973	0.02	10000	
Cr	52	45	1	He	9.492	9.492	1.36	74970	0.01	10000	
Mn	55	45	1	He	860.920	860.920	1.68	5478814	0.02	10000	
Fe	56	45	1	He	12839.615	12839.615	0.40	95264423	0.01	200000	
Co	59	103	1	He	7.322	7.322	0.70	84011	0.01	10000	
Ni	60	103	1	He	9.010	9.010	1.92	26524	0.03	10000	
Cu	63	103	1	He	9.999	9.999	1.04	78255	0.01	10000	
Zn	66	103	1	He	40.944	40.944	0.56	64608	0.06	10000	
As	75	103	1	He	6.127	6.127	2.19	6319	0.10	10000	
Se	78	103	1	He	0.562	0.562	4.61	112	0.50	10000	
Sr	88	103	1	He	4.064	4.064	1.12	34729	0.01	10000	
Mo	95	103	1	He	1.223	1.223	1.20	4615	0.03	2000	
Ag	107	103	1	He	0.061	0.061	9.64	821	0.01	300	
Cd	111	103	1	He	0.183	0.183	5.36	1697	0.01	4000	
Sn	118	115	1	He	1.906	1.906	2.81	11693	0.02	2000	
Sb	123	115	1	He	0.103	0.103	9.83	883	0.01	300	
Ba	137	115	1	He	43.219	43.219	0.30	113678	0.04	10000	
W	182	209	1	He	0.092	0.092	33.23	5501	0.00	2500	
Tl	205	209	1	He	0.084	0.084	4.82	3294	0.00	5000	
Pb	208	209	1	He	12.958	12.958	0.83	652878	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1219989	0.97	1263759	96.54	30	120	
Sc	45	1	He	733988	2.55	699622	104.91	30	120	
Sc	45	2	NoGas	5550716	0.73	5515925	100.63	30	120	
Rh	103	1	He	2251859	1.82	2170249	103.76	30	120	
In	115	1	He	1351694	0.95	1314135	102.86	30	120	
Tb	159	1	He	3860249	1.06	3680734	104.88	30	120	
Ho	165	1	He	3942678	1.54	3781772	104.25	30	120	
Bi	209	1	He	2933821	1.19	2765317	106.09	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-17-b@20
Data File Name	089SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:48:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.334	0.334	9.55	1374	0.02	10000	
B	11	45	2	NoGas	1.972	1.972	12.33	12405	0.02	300	
Na	23	45	1	He	15.728	15.728	3.03	42480	0.04	500000	
Mg	24	45	1	He	1173.002	1173.002	1.02	1010000	0.12	500000	
Al	27	45	1	He	5985.225	5985.225	0.69	2898061	0.21	200000	
K	39	45	1	He	362.780	362.780	1.39	346063	0.10	500000	
Ca	44	45	1	He	686.756	686.756	2.04	32786	2.09	500000	
Ti	47	45	1	He	42.377	42.377	4.34	10604	0.40	2500	
V	51	45	1	He	13.596	13.596	1.38	86258	0.02	10000	
Cr	52	45	1	He	9.278	9.278	1.85	71920	0.01	10000	
Mn	55	45	1	He	5123.972	5123.972	1.65	31975320	0.02	10000	
Fe	56	45	1	He	12173.401	12173.401	1.48	88571143	0.01	200000	
Co	59	103	1	He	5.626	5.626	0.87	63968	0.01	10000	
Ni	60	103	1	He	18.391	18.391	1.52	52244	0.04	10000	
Cu	63	103	1	He	8.730	8.730	1.21	68191	0.01	10000	
Zn	66	103	1	He	31.021	31.021	2.09	49079	0.06	10000	
As	75	103	1	He	5.982	5.982	0.17	6117	0.10	10000	
Se	78	103	1	He	0.605	0.605	7.88	116	0.52	10000	
Sr	88	103	1	He	5.310	5.310	1.41	44908	0.01	10000	
Mo	95	103	1	He	1.023	1.023	6.31	3832	0.03	2000	
Ag	107	103	1	He	0.023	0.023	9.20	321	0.01	300	
Cd	111	103	1	He	0.084	0.084	12.10	1455	0.01	4000	
Sn	118	115	1	He	1.615	1.615	4.75	9803	0.02	2000	
Sb	123	115	1	He	0.108	0.108	5.40	891	0.01	300	
Ba	137	115	1	He	76.619	76.619	1.16	196654	0.04	10000	
W	182	209	1	He	0.349	0.349	3.89	9010	0.00	2500	
Tl	205	209	1	He	0.081	0.081	2.99	3130	0.00	5000	
Pb	208	209	1	He	9.697	9.697	1.05	479291	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1204432	1.21	1263759	95.31	30	120	
Sc	45	1	He	719812	1.20	699622	102.89	30	120	
Sc	45	2	NoGas	5633603	0.39	5515925	102.13	30	120	
Rh	103	1	He	2230947	0.56	2170249	102.80	30	120	
In	115	1	He	1319454	0.96	1314135	100.40	30	120	
Tb	159	1	He	3798279	0.40	3680734	103.19	30	120	
Ho	165	1	He	3890065	0.42	3781772	102.86	30	120	
Bi	209	1	He	2876308	0.99	2765317	104.01	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-17-b@50
Data File Name	090SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:52:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.126	0.126	22.74	585	0.02	10000	
B	11	45	2	NoGas	1.118	1.118	4.52	9825	0.01	300	
Na	23	45	1	He	5.727	5.727	5.61	26524	0.02	500000	
Mg	24	45	1	He	525.036	525.036	0.78	439496	0.12	500000	
Al	27	45	1	He	2658.374	2658.374	1.15	1249034	0.21	200000	
K	39	45	1	He	160.623	160.623	2.39	167010	0.10	500000	
Ca	44	45	1	He	301.927	301.927	2.50	14469	2.09	500000	
Ti	47	45	1	He	18.946	18.946	2.04	4604	0.41	2500	
V	51	45	1	He	5.885	5.885	2.17	36352	0.02	10000	
Cr	52	45	1	He	4.130	4.130	2.48	32257	0.01	10000	
Mn	55	45	1	He	2287.050	2287.050	0.79	13841990	0.02	10000	
Fe	56	45	1	He	5486.577	5486.577	0.79	38717248	0.01	200000	
Co	59	103	1	He	2.458	2.458	1.33	27553	0.01	10000	
Ni	60	103	1	He	7.860	7.860	2.07	22738	0.03	10000	
Cu	63	103	1	He	3.612	3.612	0.62	30043	0.01	10000	
Zn	66	103	1	He	13.332	13.332	1.74	22138	0.06	10000	
As	75	103	1	He	2.612	2.612	1.85	2690	0.10	10000	
Se	78	103	1	He	0.241	0.241	5.81	75	0.32	10000	
Sr	88	103	1	He	2.325	2.325	1.28	19444	0.01	10000	
Mo	95	103	1	He	0.428	0.428	6.50	1609	0.03	2000	
Ag	107	103	1	He	0.009	0.009	9.11	147	0.01	300	
Cd	111	103	1	He	0.021	0.021	49.81	1292	0.00	4000	
Sn	118	115	1	He	0.712	0.712	5.30	4805	0.01	2000	
Sb	123	115	1	He	0.043	0.043	26.06	552	0.01	300	
Ba	137	115	1	He	32.911	32.911	0.09	84314	0.04	10000	
W	182	209	1	He	0.153	0.153	31.12	6257	0.00	2500	
Tl	205	209	1	He	0.038	0.038	4.05	1503	0.00	5000	
Pb	208	209	1	He	4.206	4.206	0.27	208892	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1230751	2.12	1263759	97.39	30	120	
Sc	45	1	He	698046	1.40	699622	99.77	30	120	
Sc	45	2	NoGas	5527738	1.11	5515925	100.21	30	120	
Rh	103	1	He	2196886	0.74	2170249	101.23	30	120	
In	115	1	He	1316304	0.17	1314135	100.17	30	120	
Tb	159	1	He	3794518	0.77	3680734	103.09	30	120	
Ho	165	1	He	3895401	0.87	3781772	103.00	30	120	
Bi	209	1	He	2881334	0.62	2765317	104.20	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-18-b@20
Data File Name	091SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:55:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.317	0.317	4.87	1322	0.02	10000	
B	11	45	2	NoGas	1.783	1.783	7.21	11730	0.02	300	
Na	23	45	1	He	15.516	15.516	0.93	42216	0.04	500000	
Mg	24	45	1	He	1585.953	1585.953	0.96	1366614	0.12	500000	
Al	27	45	1	He	6295.862	6295.862	1.09	3052176	0.21	200000	
K	39	45	1	He	411.832	411.832	0.18	388750	0.11	500000	
Ca	44	45	1	He	727.176	727.176	1.37	34708	2.10	500000	
Ti	47	45	1	He	40.956	40.956	2.95	10265	0.40	2500	
V	51	45	1	He	11.033	11.033	1.41	70139	0.02	10000	
Cr	52	45	1	He	9.752	9.752	0.83	75574	0.01	10000	
Mn	55	45	1	He	1742.728	1742.728	0.87	10890523	0.02	10000	
Fe	56	45	1	He	14477.251	14477.251	1.87	105472045	0.01	200000	
Co	59	103	1	He	5.872	5.872	2.24	65409	0.01	10000	
Ni	60	103	1	He	16.046	16.046	1.39	44828	0.04	10000	
Cu	63	103	1	He	11.169	11.169	0.96	84420	0.01	10000	
Zn	66	103	1	He	35.601	35.601	0.79	54841	0.06	10000	
As	75	103	1	He	8.061	8.061	0.14	8039	0.10	10000	
Se	78	103	1	He	0.508	0.508	10.53	103	0.49	10000	
Sr	88	103	1	He	5.611	5.611	2.17	46494	0.01	10000	
Mo	95	103	1	He	0.842	0.842	2.72	3098	0.03	2000	
Ag	107	103	1	He	0.017	0.017	21.00	241	0.01	300	
Cd	111	103	1	He	0.104	0.104	31.67	1471	0.01	4000	
Sn	118	115	1	He	1.610	1.610	3.26	9740	0.02	2000	
Sb	123	115	1	He	0.085	0.085	13.99	767	0.01	300	
Ba	137	115	1	He	85.083	85.083	0.54	217545	0.04	10000	
W	182	209	1	He	0.112	0.112	26.85	5694	0.00	2500	
Tl	205	209	1	He	0.129	0.129	0.37	4917	0.00	5000	
Pb	208	209	1	He	8.343	8.343	0.58	413548	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1217464	2.27	1263759	96.34	30	120	
Sc	45	1	He	720712	0.92	699622	103.01	30	120	
Sc	45	2	NoGas	5565329	0.93	5515925	100.90	30	120	
Rh	103	1	He	2185967	0.22	2170249	100.72	30	120	
In	115	1	He	1314350	0.57	1314135	100.02	30	120	
Tb	159	1	He	3802988	0.65	3680734	103.32	30	120	
Ho	165	1	He	3871397	0.30	3781772	102.37	30	120	
Bi	209	1	He	2883227	0.50	2765317	104.26	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	092_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T19:59:42-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.984	1.279	167616	1.17	50	100.0	89.5	110.5	
B	11	45	2	NoGas	50.729	1.494	127090	1.86	50	101.5	89.5	110.5	
Na	23	45	1	He	25205.237	3.881	33735317	1.09	25000	100.8	89.5	110.5	
Mg	24	45	1	He	25382.279	4.105	19278798	0.95	25000	101.5	89.5	110.5	
Al	27	45	1	He	248.720	3.022	107682	2.21	250	99.5	89.5	110.5	
K	39	45	1	He	24795.096	3.544	18877852	1.40	25000	99.2	89.5	110.5	
Ca	44	45	1	He	24134.114	3.149	991734	1.71	25000	96.5	89.5	110.5	
Ti	47	45	1	He	50.496	4.083	11171	2.26	50	101.0	89.5	110.5	
V	51	45	1	He	50.295	3.023	281484	1.63	50	100.6	89.5	110.5	
Cr	52	45	1	He	50.381	3.486	336364	1.17	50	100.8	89.5	110.5	
Mn	55	45	1	He	242.494	1.100	1339779	3.66	250	97.0	89.5	110.5	
Fe	56	45	1	He	12725.823	3.382	81854846	1.29	12500	101.8	89.5	110.5	
Co	59	103	1	He	48.150	0.275	473020	1.38	50	96.3	89.5	110.5	
Ni	60	103	1	He	48.365	1.510	116964	2.82	50	96.7	89.5	110.5	
Cu	63	103	1	He	48.375	0.737	311460	0.99	50	96.7	89.5	110.5	
Zn	66	103	1	He	48.499	0.446	65187	1.88	50	97.0	89.5	110.5	
As	75	103	1	He	48.154	0.742	41930	2.22	50	96.3	89.5	110.5	
Se	78	103	1	He	48.083	1.444	4530	2.43	50	96.2	89.5	110.5	
Sr	88	103	1	He	48.148	0.694	351225	1.17	50	96.3	89.5	110.5	
Mo	95	103	1	He	50.662	2.589	161771	0.97	50	101.3	89.5	110.5	
Ag	107	103	1	He	49.887	0.235	553534	1.44	50	99.8	89.5	110.5	
Cd	111	103	1	He	49.740	0.650	99003	2.28	50	99.5	89.5	110.5	
Sn	118	115	1	He	49.998	1.324	242429	1.72	50	100.0	89.5	110.5	
Sb	123	115	1	He	51.606	0.771	233424	0.87	50	103.2	89.5	110.5	
Ba	137	115	1	He	50.276	1.296	112856	0.74	50	100.6	89.5	110.5	
W	182	209	1	He	50.364	2.914	636869	1.05	50	100.7	89.5	110.5	
Tl	205	209	1	He	50.515	2.396	1692115	4.26	50	101.0	89.5	110.5	
Pb	208	209	1	He	48.485	0.764	2136540	1.25	50	97.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1048897	1.83	1263759	83.00	30	120	
Sc	45	1	He	636966	4.71	699622	91.04	30	120	
Sc	45	2	NoGas	4808508	0.44	5515925	87.18	30	120	
Rh	103	1	He	1929554	1.66	2170249	88.91	30	120	
In	115	1	He	1153804	1.59	1314135	87.80	30	120	
Tb	159	1	He	3484108	0.98	3680734	94.66	30	120	
Ho	165	1	He	3597657	0.99	3781772	95.13	30	120	
Bi	209	1	He	2569480	2.00	2765317	92.92	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	093_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:03:31-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.025	88.7	163	46.4	1	
B	11	45	2	NoGas	0.685	12.3	7513	2.4	20	
Na	23	45	1	He	5.672	9.4	22559	2.0	400	
Mg	24	45	1	He	1.970	54.0	3093	23.5	1000	
Al	27	45	1	He	1.483	11.6	1763	3.1	50	
K	39	45	1	He	7.550	4.2	33606	0.4	1000	
Ca	44	45	1	He	26.497	11.1	1757	5.4	1000	
Ti	47	45	1	He	0.194	61.1	49	51.2	20	
V	51	45	1	He	0.002	4856.1	231	185.6	2	
Cr	52	45	1	He	-0.015	-59.9	1779	4.1	2	
Mn	55	45	1	He	0.425	6.7	3141	3.8	2	
Fe	56	45	1	He	25.572	18.1	160001	16.5	50	
Co	59	103	1	He	0.000	-1550.4	63	24.1	1	
Ni	60	103	1	He	-0.384	-3.8	239	15.4	2	
Cu	63	103	1	He	-0.338	-5.6	1270	9.2	2	
Zn	66	103	1	He	1.299	3.8	3918	1.3	20	
As	75	103	1	He	0.040	51.7	133	14.5	2	
Se	78	103	1	He	0.000	-36416.4	45	26.9	2	
Sr	88	103	1	He	0.008	40.3	182	12.2	10	
Mo	95	103	1	He	0.969	22.8	3247	22.6	2	
Ag	107	103	1	He	0.013	16.1	177	13.2	0.2	
Cd	111	103	1	He	-0.010	-127.5	1110	2.0	0.2	
Sn	118	115	1	He	0.400	18.8	2778	13.3	10	
Sb	123	115	1	He	0.427	21.8	2281	18.8	1	
Ba	137	115	1	He	0.018	16.9	101	6.9	5	
W	182	209	1	He	1.011	19.1	16880	15.5	10	
Tl	205	209	1	He	0.034	16.9	1251	16.4	0.5	
Pb	208	209	1	He	0.054	8.5	3512	5.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1070259	1.57	1263759	84.69	30	120	
Sc	45	1	He	595690	0.98	699622	85.14	30	120	
Sc	45	2	NoGas	4808736	0.36	5515925	87.18	30	120	
Rh	103	1	He	1994403	0.67	2170249	91.90	30	120	
In	115	1	He	1187037	0.19	1314135	90.33	30	120	
Tb	159	1	He	3473719	0.39	3680734	94.38	30	120	
Ho	165	1	He	3573135	0.96	3781772	94.48	30	120	
Bi	209	1	He	2647774	0.83	2765317	95.75	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	094CRIA.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:07:21-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.913	0.913	5.338	3263	3.98	1	91.3	69.5	130.5	
B	11	2	NoGas	19.437	19.437	2.521	52586	1.42	20	97.2	69.5	130.5	
Na	23	1	He	1085.685	1085.685	1.842	1437303	0.87	1000	108.6	69.5	130.5	
Mg	24	1	He	1045.413	1045.413	1.226	778741	0.53	1000	104.5	69.5	130.5	
Al	27	1	He	49.347	49.347	0.813	21880	0.51	50	98.7	69.5	130.5	
K	39	1	He	1019.997	1019.997	0.389	788164	0.80	1000	102.0	69.5	130.5	
Ca	44	1	He	1000.304	1000.304	0.410	40958	1.34	1000	100.0	69.5	130.5	
Ti	47	1	He	10.147	10.147	1.350	2203	0.66	10	101.5	69.5	130.5	
V	51	1	He	5.168	5.168	1.696	28503	0.77	5	103.4	69.5	130.5	
Cr	52	1	He	2.137	2.137	2.416	15840	2.95	2	106.9	69.5	130.5	
Mn	55	1	He	4.962	4.962	0.848	27776	1.32	5	99.2	69.5	130.5	
Fe	56	1	He	109.349	109.349	0.738	694602	0.55	100	109.3	69.5	130.5	
Co	59	1	He	0.936	0.936	1.592	9656	1.45	1	93.6	69.5	130.5	
Ni	60	1	He	1.548	1.548	6.329	5065	4.30	2	77.4	69.5	130.5	
Cu	63	1	He	1.557	1.557	1.994	13872	0.51	2	77.9	69.5	130.5	
Zn	66	1	He	18.890	18.890	1.349	27826	0.46	20	94.4	69.5	130.5	
As	75	1	He	4.760	4.760	2.120	4412	1.30	5	95.2	69.5	130.5	
Se	78	1	He	4.818	4.818	3.596	515	4.26	5	96.4	69.5	130.5	
Sr	88	1	He	9.184	9.184	1.550	70000	1.33	10	91.8	69.5	130.5	
Mo	95	1	He	10.170	10.170	2.515	33927	1.92	10	101.7	69.5	130.5	
Ag	107	1	He	1.005	1.005	1.791	11660	0.96	1	100.5	69.5	130.5	
Cd	111	1	He	0.981	0.981	6.419	3155	3.11	1	98.1	69.5	130.5	
Sn	118	1	He	9.991	9.991	0.968	51208	1.19	10	99.9	69.5	130.5	
Sb	123	1	He	2.060	2.060	2.150	10016	1.69	2	103.0	69.5	130.5	
Ba	137	1	He	4.875	4.875	2.304	11476	2.19	5	97.5	69.5	130.5	
W	182	1	He	9.499	9.499	1.432	129662	1.40	10	95.0	69.5	130.5	
Tl	205	1	He	1.847	1.847	0.955	65203	1.08	2	92.3	69.5	130.5	
Pb	208	1	He	1.043	1.043	1.968	49459	1.37	1	104.3	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1091222	1.48	1263759	86.35	30	120	
Sc	45	1	He	622591	0.97	699622	88.99	30	120	
Sc	45	2	NoGas	4833758	0.82	5515925	87.63	30	120	
Rh	103	1	He	2013208	1.00	2170249	92.76	30	120	
In	115	1	He	1204274	0.41	1314135	91.64	30	120	
Tb	159	1	He	3558908	1.26	3680734	96.69	30	120	
Ho	165	1	He	3618452	0.34	3781772	95.68	30	120	
Bi	209	1	He	2705861	0.75	2765317	97.85	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	lb 240-177528/3-c
Data File Name	095_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:11:11-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.044	39.5	211	26.3	1	
B	11	45	2	NoGas	54.215	1.9	121256	1.9	20	Blank Failed
Na	23	45	1	He	3606.135	2.9	4411307	1.6	400	Blank Failed
Mg	24	45	1	He	51.296	1.3	37190	4.9	1000	
Al	27	45	1	He	29.952	3.2	12816	2.0	50	
K	39	45	1	He	31.293	3.0	49175	2.8	1000	
Ca	44	45	1	He	190.167	4.6	7832	2.1	1000	
Ti	47	45	1	He	0.801	4.6	170	7.8	20	
V	51	45	1	He	0.182	62.7	1153	51.8	2	
Cr	52	45	1	He	1.121	5.7	8597	0.8	2	
Mn	55	45	1	He	0.222	19.2	2035	10.0	2	
Fe	56	45	1	He	24.635	4.2	150659	7.9	50	
Co	59	103	1	He	0.015	24.7	203	17.3	1	
Ni	60	103	1	He	-0.072	-104.0	933	17.8	2	
Cu	63	103	1	He	0.333	13.9	5244	5.1	2	
Zn	66	103	1	He	5.917	5.6	9347	4.1	20	
As	75	103	1	He	0.183	6.1	241	3.9	2	
Se	78	103	1	He	0.162	64.6	56	16.2	2	
Sr	88	103	1	He	0.310	2.7	2270	2.1	10	
Mo	95	103	1	He	0.470	7.6	1478	7.4	2	
Ag	107	103	1	He	0.020	29.1	233	26.0	0.2	
Cd	111	103	1	He	-0.031	-81.7	986	4.4	0.2	
Sn	118	115	1	He	1.193	16.3	6172	14.2	10	
Sb	123	115	1	He	0.562	2.3	2672	2.2	1	
Ba	137	115	1	He	2.811	3.8	6013	3.6	5	
W	182	209	1	He	0.391	5.4	9125	4.9	10	
Tl	205	209	1	He	0.012	7.2	522	8.1	0.5	
Pb	208	209	1	He	0.145	3.6	7870	1.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	983338	1.14	1263759	77.81	30	120	
Sc	45	1	He	580177	3.89	699622	82.93	30	120	
Sc	45	2	NoGas	4306141	1.74	5515925	78.07	30	120	
Rh	103	1	He	1840951	0.42	2170249	84.83	30	120	
In	115	1	He	1090027	0.16	1314135	82.95	30	120	
Tb	159	1	He	3320749	1.13	3680734	90.22	30	120	
Ho	165	1	He	3414402	1.20	3781772	90.29	30	120	
Bi	209	1	He	2733521	3.67	2765317	98.85	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177583/2-a
Data File Name	096_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:15:02-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.042	16.0	204	8.3	1	
B	11	45	2	NoGas	2.130	5.1	9959	2.0	20	
Na	23	45	1	He	16.963	8.6	35446	2.4	400	
Mg	24	45	1	He	-1.059	-9.0	911	6.8	1000	
Al	27	45	1	He	2.119	13.4	1949	3.2	50	
K	39	45	1	He	2.955	65.2	29302	2.8	1000	
Ca	44	45	1	He	-1.958	-44.5	643	7.7	1000	
Ti	47	45	1	He	0.153	45.0	39	34.6	20	
V	51	45	1	He	0.114	103.9	788	74.5	2	
Cr	52	45	1	He	0.711	5.2	6079	1.3	2	
Mn	55	45	1	He	0.038	16.8	1106	3.1	2	
Fe	56	45	1	He	3.447	6.3	26026	2.2	50	
Co	59	103	1	He	0.002	109.0	76	24.3	1	
Ni	60	103	1	He	-0.326	-3.9	356	6.2	2	
Cu	63	103	1	He	-0.170	-3.8	2215	3.6	2	
Zn	66	103	1	He	1.347	4.9	3716	4.4	20	
As	75	103	1	He	0.130	21.4	199	12.8	2	
Se	78	103	1	He	0.011	588.1	43	15.0	2	
Sr	88	103	1	He	0.032	20.3	338	11.4	10	
Mo	95	103	1	He	0.092	14.1	330	10.7	2	
Ag	107	103	1	He	0.012	41.1	148	33.9	0.2	
Cd	111	103	1	He	-0.035	-55.4	987	1.9	0.2	
Sn	118	115	1	He	0.532	6.8	3160	5.7	10	
Sb	123	115	1	He	0.459	6.0	2238	5.8	1	
Ba	137	115	1	He	0.097	15.2	260	12.2	5	
W	182	209	1	He	0.109	19.6	5101	4.7	10	
Tl	205	209	1	He	0.002	56.3	141	25.9	0.5	
Pb	208	209	1	He	0.054	5.8	3448	4.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	984858	3.23	1263759	77.93	30	120	
Sc	45	1	He	575749	2.72	699622	82.29	30	120	
Sc	45	2	NoGas	4367282	0.52	5515925	79.18	30	120	
Rh	103	1	He	1860196	2.12	2170249	85.71	30	120	
In	115	1	He	1091484	0.55	1314135	83.06	30	120	
Tb	159	1	He	3359575	0.86	3680734	91.27	30	120	
Ho	165	1	He	3396124	0.77	3781772	89.80	30	120	
Bi	209	1	He	2605858	0.64	2765317	94.23	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177583/3-a
Data File Name	097_LCS.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:18:53-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1038.798	1038.798	2.422	3155794	1.60	1000	103.9	79.5	120.5	
B	11	2	NoGas	171.542	171.542	1.295	369128	0.48	100	171.5	79.5	120.5	LCS Failed
Na	23	1	He	14262.368	14262.368	3.087	16765787	0.66	10000	142.6	79.5	120.5	LCS Failed
Mg	24	1	He	10630.239	10630.239	3.360	7090087	1.31	10000	106.3	79.5	120.5	
Al	27	1	He	10134.326	10134.326	3.574	3806809	0.45	10000	101.3	79.5	120.5	
K	39	1	He	10233.647	10233.647	3.149	6855363	0.82	10000	102.3	79.5	120.5	
Ca	44	1	He	9052.327	9052.327	2.657	327006	1.82	10000	90.5	79.5	120.5	
Ti	47	1	He	104.247	104.247	5.329	20228	2.16	100	104.2	79.5	120.5	
V	51	1	He	1062.781	1062.781	2.805	5216948	0.87	1000	106.3	79.5	120.5	
Cr	52	1	He	1076.128	1076.128	3.095	6271424	0.84	1000	107.6	79.5	120.5	
Mn	55	1	He	1026.685	1026.685	2.605	4973629	1.22	1000	102.7	79.5	120.5	
Fe	56	1	He	10756.079	10756.079	3.188	60734033	0.94	10000	107.6	79.5	120.5	
Co	59	1	He	996.620	996.620	0.267	8921019	0.21	1000	99.7	79.5	120.5	
Ni	60	1	He	1043.361	1043.361	0.734	2277529	0.66	1000	104.3	79.5	120.5	
Cu	63	1	He	1019.189	1019.189	1.003	5918396	0.82	1000	101.9	79.5	120.5	
Zn	66	1	He	967.399	967.399	1.338	1148570	1.17	1000	96.7	79.5	120.5	
As	75	1	He	931.437	931.437	0.843	737473	0.71	1000	93.1	79.5	120.5	
Se	78	1	He	931.707	931.707	1.237	79248	1.08	1000	93.2	79.5	120.5	
Sr	88	1	He	1004.944	1004.944	1.089	6678419	0.92	1000	100.5	79.5	120.5	
Mo	95	1	He	109.835	109.835	0.708	319644	0.84	100	109.8	79.5	120.5	
Ag	107	1	He	104.536	104.536	0.793	1056984	0.64	100	104.5	79.5	120.5	
Cd	111	1	He	1081.566	1081.566	0.158	1940924	0.34	1000	108.2	79.5	120.5	
Sn	118	1	He	1165.967	1165.967	0.426	4927954	0.68	1000	116.6	79.5	120.5	
Sb	123	1	He	110.278	110.278	0.850	435832	0.56	100	110.3	79.5	120.5	
Ba	137	1	He	1167.598	1167.598	0.387	2290552	0.42	1000	116.8	79.5	120.5	
W	182	1	He	105.259	105.259	1.315	1279074	0.70	100	105.3	79.5	120.5	
Tl	205	1	He	249.848	249.848	0.617	8061764	1.17	250	99.9	79.5	120.5	
Pb	208	1	He	1036.045	1036.045	1.352	43971459	0.39	1000	103.6	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	950671	1.18	1263759	75.23	30	120	
Sc	45	1	He	558985	3.69	699622	79.90	30	120	
Sc	45	2	NoGas	4269610	0.80	5515925	77.41	30	120	
Rh	103	1	He	1758346	0.19	2170249	81.02	30	120	
In	115	1	He	1008736	0.29	1314135	76.76	30	120	
Tb	159	1	He	3292551	1.08	3680734	89.45	30	120	
Ho	165	1	He	3362809	1.11	3781772	88.92	30	120	
Bi	209	1	He	2475890	1.20	2765317	89.53	30	120	

Sample Report

Sample Table

Sample Name	310-53259-a-1-w
Data File Name	098SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:22:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.221	0.221	12.62	756	0.03	10000	
B	11	45	2	NoGas	37.349	37.349	1.10	81665	0.05	300	
Na	23	45	1	He	1280.761	1280.761	1.77	1481558	0.09	500000	
Mg	24	45	1	He	300.918	300.918	2.60	197257	0.15	500000	
Al	27	45	1	He	787.630	787.630	2.10	289599	0.27	200000	
K	39	45	1	He	26.068	26.068	4.44	42792	0.06	500000	
Ca	44	45	1	He	964.467	964.467	3.50	34579	2.79	500000	
Ti	47	45	1	He	46.381	46.381	3.02	8786	0.53	2500	
V	51	45	1	He	1.836	1.836	7.00	9003	0.02	10000	
Cr	52	45	1	He	1.646	1.646	1.17	11074	0.01	10000	
Mn	55	45	1	He	3.963	3.963	1.08	19586	0.02	10000	
Fe	56	45	1	He	493.290	493.290	0.73	2722656	0.02	200000	
Co	59	103	1	He	0.396	0.396	7.35	3659	0.01	10000	
Ni	60	103	1	He	0.209	0.209	5.22	1526	0.01	10000	
Cu	63	103	1	He	1.867	1.867	6.12	14117	0.01	10000	
Zn	66	103	1	He	7.305	7.305	1.88	10726	0.07	10000	
As	75	103	1	He	0.991	0.991	14.01	883	0.11	10000	
Se	78	103	1	He	0.903	0.903	8.80	118	0.76	10000	
Sr	88	103	1	He	32.614	32.614	0.56	219969	0.01	10000	
Mo	95	103	1	He	1.046	1.046	19.04	3134	0.03	2000	
Ag	107	103	1	He	0.023	0.023	19.77	254	0.01	300	
Cd	111	103	1	He	0.067	0.067	13.32	1132	0.01	4000	
Sn	118	115	1	He	2.351	2.351	21.99	10997	0.02	2000	
Sb	123	115	1	He	0.689	0.689	7.72	3087	0.02	300	
Ba	137	115	1	He	49.285	49.285	0.91	100291	0.05	10000	
W	182	209	1	He	1.317	1.317	17.21	19669	0.01	2500	
Tl	205	209	1	He	0.189	0.189	31.77	6217	0.00	5000	
Pb	208	209	1	He	0.390	0.390	12.27	17695	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	968067	1.20	1263759	76.60	30	120	
Sc	45	1	He	544953	2.02	699622	77.89	30	120	
Sc	45	2	NoGas	4128764	0.77	5515925	74.85	30	120	
Rh	103	1	He	1783749	1.34	2170249	82.19	30	120	
In	115	1	He	1045848	0.24	1314135	79.58	30	120	
Tb	159	1	He	3258859	1.27	3680734	88.54	30	120	
Ho	165	1	He	3362163	0.56	3781772	88.90	30	120	
Bi	209	1	He	2498478	0.65	2765317	90.35	30	120	

Sample Report

Sample Table

Sample Name	SD 310-53259-a-1-w@5
Data File Name	099SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:26:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.117	0.117	42.26	456	0.03	10000	
B	11	45	2	NoGas	7.444	7.444	4.08	22129	0.03	300	
Na	23	45	1	He	251.922	251.922	0.72	320311	0.08	500000	
Mg	24	45	1	He	59.456	59.456	3.19	42558	0.14	500000	
Al	27	45	1	He	168.274	168.274	1.65	66354	0.25	200000	
K	39	45	1	He	5.445	5.445	2.51	31072	0.02	500000	
Ca	44	45	1	He	199.893	199.893	2.11	8151	2.45	500000	
Ti	47	45	1	He	9.457	9.457	4.52	1902	0.50	2500	
V	51	45	1	He	0.360	0.360	35.53	2042	0.02	10000	
Cr	52	45	1	He	0.335	0.335	10.36	3828	0.01	10000	
Mn	55	45	1	He	1.301	1.301	4.44	7416	0.02	10000	
Fe	56	45	1	He	93.626	93.626	1.10	551523	0.02	200000	
Co	59	103	1	He	0.072	0.072	13.87	756	0.01	10000	
Ni	60	103	1	He	-0.236	-0.236	-14.83	577	-0.04	10000	
Cu	63	103	1	He	0.095	0.095	16.93	3922	0.00	10000	
Zn	66	103	1	He	1.486	1.486	8.81	3973	0.04	10000	
As	75	103	1	He	0.182	0.182	0.37	248	0.07	10000	
Se	78	103	1	He	0.146	0.146	45.81	57	0.26	10000	
Sr	88	103	1	He	6.612	6.612	1.49	47595	0.01	10000	
Mo	95	103	1	He	0.158	0.158	10.41	544	0.03	2000	
Ag	107	103	1	He	0.005	0.005	68.39	82	0.01	300	
Cd	111	103	1	He	-0.019	-0.019	-223.64	1039	0.00	4000	
Sn	118	115	1	He	0.238	0.238	31.00	1867	0.01	2000	
Sb	123	115	1	He	0.104	0.104	11.02	738	0.01	300	
Ba	137	115	1	He	9.750	9.750	2.58	21344	0.05	10000	
W	182	209	1	He	0.183	0.183	4.18	6013	0.00	2500	
Tl	205	209	1	He	0.020	0.020	2.97	754	0.00	5000	
Pb	208	209	1	He	0.122	0.122	5.77	6456	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1017910	0.98	1263759	80.55	30	120	
Sc	45	1	He	576433	0.16	699622	82.39	30	120	
Sc	45	2	NoGas	4496877	0.77	5515925	81.53	30	120	
Rh	103	1	He	1899889	0.34	2170249	87.54	30	120	
In	115	1	He	1122635	0.23	1314135	85.43	30	120	
Tb	159	1	He	3379795	0.66	3680734	91.82	30	120	
Ho	165	1	He	3451990	0.61	3781772	91.28	30	120	
Bi	209	1	He	2590526	0.44	2765317	93.68	30	120	

Sample Report

Sample Table

Sample Name	PDS 310-53259-a-1-w
Data File Name	100SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:30:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1028.500	1028.500	3.49	3152098	0.03	10000	
B	11	45	2	NoGas	149.793	149.793	1.20	319160	0.05	300	
Na	23	45	1	He	11357.343	11357.343	3.76	13342537	0.09	500000	
Mg	24	45	1	He	10597.098	10597.098	3.56	7062488	0.15	500000	
Al	27	45	1	He	10433.881	10433.881	3.45	3916820	0.27	200000	
K	39	45	1	He	9893.831	9893.831	4.65	6621529	0.15	500000	
Ca	44	45	1	He	9447.534	9447.534	4.12	340870	2.77	500000	
Ti	47	45	1	He	139.221	139.221	5.74	26988	0.52	2500	
V	51	45	1	He	1009.699	1009.699	4.26	4951224	0.02	10000	
Cr	52	45	1	He	1021.618	1021.618	4.26	5948030	0.02	10000	
Mn	55	45	1	He	997.618	997.618	5.24	4826629	0.02	10000	
Fe	56	45	1	He	10690.116	10690.116	3.89	60310055	0.02	200000	
Co	59	103	1	He	964.518	964.518	0.80	8568903	0.01	10000	
Ni	60	103	1	He	1006.857	1006.857	1.31	2181297	0.05	10000	
Cu	63	103	1	He	989.364	989.364	2.45	5701334	0.02	10000	
Zn	66	103	1	He	947.929	947.929	1.46	1116988	0.08	10000	
As	75	103	1	He	907.523	907.523	1.38	713110	0.13	10000	
Se	78	103	1	He	919.792	919.792	2.23	77638	1.18	10000	
Sr	88	103	1	He	1006.589	1006.589	1.14	6639273	0.02	10000	
Mo	95	103	1	He	106.560	106.560	1.89	307760	0.03	2000	
Ag	107	103	1	He	33.328	33.328	1.13	334463	0.01	300	
Cd	111	103	1	He	1053.341	1053.341	1.02	1876127	0.06	4000	
Sn	118	115	1	He	1130.325	1130.325	0.52	4725319	0.02	2000	
Sb	123	115	1	He	107.822	107.822	0.33	421503	0.03	300	
Ba	137	115	1	He	1175.868	1175.868	1.55	2281591	0.05	10000	
W	182	209	1	He	103.041	103.041	1.14	1216706	0.01	2500	
Tl	205	209	1	He	245.210	245.210	0.31	7687256	0.00	5000	
Pb	208	209	1	He	1011.828	1011.828	0.80	41724388	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	959611	3.27	1263759	75.93	30	120	
Sc	45	1	He	558650	3.99	699622	79.85	30	120	
Sc	45	2	NoGas	4218646	0.52	5515925	76.48	30	120	
Rh	103	1	He	1745267	1.41	2170249	80.42	30	120	
In	115	1	He	997773	0.68	1314135	75.93	30	120	
Tb	159	1	He	3244408	0.81	3680734	88.15	30	120	
Ho	165	1	He	3285903	0.33	3781772	86.89	30	120	
Bi	209	1	He	2405452	0.85	2765317	86.99	30	120	

Sample Report

Sample Table

Sample Name	310-53259-a-1-x du
Data File Name	101SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:33:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.294	0.294	21.02	982	0.03	10000	
B	11	45	2	NoGas	38.692	38.692	1.71	84930	0.05	300	
Na	23	45	1	He	1354.791	1354.791	1.77	1558297	0.09	500000	
Mg	24	45	1	He	312.022	312.022	4.10	203400	0.15	500000	
Al	27	45	1	He	817.250	817.250	1.94	298923	0.27	200000	
K	39	45	1	He	26.623	26.623	7.06	42959	0.06	500000	
Ca	44	45	1	He	1023.255	1023.255	3.18	36456	2.81	500000	
Ti	47	45	1	He	47.824	47.824	6.73	9009	0.53	2500	
V	51	45	1	He	1.971	1.971	10.42	9602	0.02	10000	
Cr	52	45	1	He	1.682	1.682	2.97	11214	0.01	10000	
Mn	55	45	1	He	3.979	3.979	0.40	19567	0.02	10000	
Fe	56	45	1	He	504.525	504.525	1.50	2770307	0.02	200000	
Co	59	103	1	He	0.419	0.419	4.61	3825	0.01	10000	
Ni	60	103	1	He	0.217	0.217	9.87	1531	0.01	10000	
Cu	63	103	1	He	1.987	1.987	4.69	14692	0.01	10000	
Zn	66	103	1	He	12.806	12.806	1.60	17190	0.07	10000	
As	75	103	1	He	1.017	1.017	10.40	895	0.11	10000	
Se	78	103	1	He	1.087	1.087	13.04	133	0.82	10000	
Sr	88	103	1	He	33.423	33.423	0.29	223479	0.01	10000	
Mo	95	103	1	He	1.054	1.054	20.02	3123	0.03	2000	
Ag	107	103	1	He	0.017	0.017	19.65	194	0.01	300	
Cd	111	103	1	He	0.084	0.084	54.52	1153	0.01	4000	
Sn	118	115	1	He	2.509	2.509	19.18	11757	0.02	2000	
Sb	123	115	1	He	0.568	0.568	6.67	2606	0.02	300	
Ba	137	115	1	He	50.333	50.333	1.25	103061	0.05	10000	
W	182	209	1	He	1.302	1.302	21.82	19546	0.01	2500	
Tl	205	209	1	He	0.156	0.156	32.55	5178	0.00	5000	
Pb	208	209	1	He	0.449	0.449	10.78	20282	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	968370	1.24	1263759	76.63	30	120	
Sc	45	1	He	542184	2.00	699622	77.50	30	120	
Sc	45	2	NoGas	4153962	1.24	5515925	75.31	30	120	
Rh	103	1	He	1768279	1.06	2170249	81.48	30	120	
In	115	1	He	1052350	0.52	1314135	80.08	30	120	
Tb	159	1	He	3270784	0.37	3680734	88.86	30	120	
Ho	165	1	He	3359348	0.11	3781772	88.83	30	120	
Bi	209	1	He	2508303	1.00	2765317	90.71	30	120	

Sample Report

Sample Table

Sample Name	310-53259-a-1-y ms
Data File Name	102SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:37:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1084.827	1084.827	0.79	3274137	0.03	10000	
B	11	45	2	NoGas	158.149	158.149	0.80	335633	0.05	300	
Na	23	45	1	He	12116.290	12116.290	3.41	14201245	0.09	500000	
Mg	24	45	1	He	11072.848	11072.848	2.73	7363085	0.15	500000	
Al	27	45	1	He	11058.190	11058.190	1.14	4143010	0.27	200000	
K	39	45	1	He	10347.468	10347.468	2.47	6911421	0.15	500000	
Ca	44	45	1	He	9969.563	9969.563	1.98	358972	2.78	500000	
Ti	47	45	1	He	151.780	151.780	3.45	29370	0.52	2500	
V	51	45	1	He	1076.062	1076.062	4.13	5264473	0.02	10000	
Cr	52	45	1	He	1094.440	1094.440	3.23	6358443	0.02	10000	
Mn	55	45	1	He	1038.255	1038.255	3.18	5013765	0.02	10000	
Fe	56	45	1	He	11276.557	11276.557	3.64	63471724	0.02	200000	
Co	59	103	1	He	1024.737	1024.737	2.88	9009036	0.01	10000	
Ni	60	103	1	He	1060.597	1060.597	1.47	2274217	0.05	10000	
Cu	63	103	1	He	1052.548	1052.548	2.42	6003316	0.02	10000	
Zn	66	103	1	He	999.731	999.731	2.16	1165822	0.09	10000	
As	75	103	1	He	956.125	956.125	2.07	743581	0.13	10000	
Se	78	103	1	He	966.025	966.025	2.14	80707	1.20	10000	
Sr	88	103	1	He	1066.191	1066.191	1.75	6959980	0.02	10000	
Mo	95	103	1	He	113.598	113.598	1.62	324738	0.03	2000	
Ag	107	103	1	He	107.350	107.350	2.14	1066170	0.01	300	
Cd	111	103	1	He	1137.090	1137.090	1.71	2004497	0.06	4000	
Sn	118	115	1	He	1205.461	1205.461	0.65	5036817	0.02	2000	
Sb	123	115	1	He	112.123	112.123	1.00	438074	0.03	300	
Ba	137	115	1	He	1227.663	1227.663	0.32	2380971	0.05	10000	
W	182	209	1	He	108.795	108.795	0.77	1290923	0.01	2500	
Tl	205	209	1	He	257.981	257.981	0.94	8128460	0.00	5000	
Pb	208	209	1	He	1067.459	1067.459	0.29	44244202	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	944319	0.22	1263759	74.72	30	120	
Sc	45	1	He	557170	2.89	699622	79.64	30	120	
Sc	45	2	NoGas	4205485	0.83	5515925	76.24	30	120	
Rh	103	1	He	1727538	1.75	2170249	79.60	30	120	
In	115	1	He	997264	0.55	1314135	75.89	30	120	
Tb	159	1	He	3222640	0.33	3680734	87.55	30	120	
Ho	165	1	He	3352196	0.52	3781772	88.64	30	120	
Bi	209	1	He	2417675	0.39	2765317	87.43	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177603/1-a
Data File Name	103_Blk.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:41:06-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.382	12.5	1270	14.9	1	
B	11	45	2	NoGas	3.514	10.9	12609	4.7	20	
Na	23	45	1	He	77.019	2.7	102506	1.6	400	
Mg	24	45	1	He	46.550	6.5	31866	5.4	1000	
Al	27	45	1	He	9.712	3.6	4635	3.6	50	
K	39	45	1	He	15.081	5.2	35688	0.6	1000	
Ca	44	45	1	He	163.386	7.0	6426	4.9	1000	
Ti	47	45	1	He	0.227	62.0	51	53.1	20	
V	51	45	1	He	0.316	43.3	1720	37.8	2	
Cr	52	45	1	He	0.814	3.1	6351	3.7	2	
Mn	55	45	1	He	0.386	9.9	2694	8.2	2	
Fe	56	45	1	He	20.293	13.7	117743	14.6	50	
Co	59	103	1	He	0.136	15.4	1297	14.3	1	
Ni	60	103	1	He	-0.098	-15.7	849	3.5	2	
Cu	63	103	1	He	0.478	15.6	5949	6.7	2	
Zn	66	103	1	He	2.357	10.4	4785	5.3	20	
As	75	103	1	He	1.009	4.7	898	3.8	2	
Se	78	103	1	He	1.050	17.6	131	12.4	2	
Sr	88	103	1	He	0.442	10.1	3093	8.9	10	
Mo	95	103	1	He	0.972	15.5	2917	14.6	2	
Ag	107	103	1	He	0.025	24.7	280	22.0	0.2	
Cd	111	103	1	He	0.110	44.6	1214	6.8	0.2	
Sn	118	115	1	He	2.474	23.0	11605	21.0	10	
Sb	123	115	1	He	0.698	4.8	3141	3.9	1	
Ba	137	115	1	He	0.896	4.2	1887	4.4	5	
W	182	209	1	He	1.412	22.4	21156	17.9	10	
Tl	205	209	1	He	0.218	31.3	7271	30.3	0.5	
Pb	208	209	1	He	0.508	12.6	23125	11.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	978236	2.97	1263759	77.41	30	120	
Sc	45	1	He	545625	1.43	699622	77.99	30	120	
Sc	45	2	NoGas	4251368	2.10	5515925	77.07	30	120	
Rh	103	1	He	1787418	0.96	2170249	82.36	30	120	
In	115	1	He	1052686	0.73	1314135	80.10	30	120	
Tb	159	1	He	3233347	2.41	3680734	87.85	30	120	
Ho	165	1	He	3338895	1.27	3781772	88.29	30	120	
Bi	209	1	He	2539151	0.66	2765317	91.82	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	104_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:44:58-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.157	0.687	162628	1.94	50	94.3	89.5	110.5	
B	11	45	2	NoGas	51.911	1.311	128846	0.50	50	103.8	89.5	110.5	
Na	23	45	1	He	25349.095	4.881	33076136	0.79	25000	101.4	89.5	110.5	
Mg	24	45	1	He	25256.647	5.316	18700936	1.08	25000	101.0	89.5	110.5	
Al	27	45	1	He	244.073	4.844	103017	1.67	250	97.6	89.5	110.5	
K	39	45	1	He	24879.636	5.557	18459912	0.12	25000	99.5	89.5	110.5	
Ca	44	45	1	He	24128.945	5.223	966288	0.42	25000	96.5	89.5	110.5	
Ti	47	45	1	He	49.677	3.339	10720	2.32	50	99.4	89.5	110.5	
V	51	45	1	He	49.377	4.532	269403	1.76	50	98.8	89.5	110.5	
Cr	52	45	1	He	50.459	4.861	328396	0.82	50	100.9	89.5	110.5	
Mn	55	45	1	He	239.507	5.575	1288615	0.22	250	95.8	89.5	110.5	
Fe	56	45	1	He	12690.313	5.125	79559019	0.42	12500	101.5	89.5	110.5	
Co	59	103	1	He	48.946	2.650	463428	0.77	50	97.9	89.5	110.5	
Ni	60	103	1	He	49.024	3.237	114223	0.74	50	98.0	89.5	110.5	
Cu	63	103	1	He	48.957	3.191	303741	0.76	50	97.9	89.5	110.5	
Zn	66	103	1	He	49.071	3.327	63534	0.78	50	98.1	89.5	110.5	
As	75	103	1	He	49.208	3.184	41287	0.90	50	98.4	89.5	110.5	
Se	78	103	1	He	49.449	2.273	4489	1.04	50	98.9	89.5	110.5	
Sr	88	103	1	He	48.525	2.976	341142	0.48	50	97.0	89.5	110.5	
Mo	95	103	1	He	50.820	3.223	156466	2.88	50	101.6	89.5	110.5	
Ag	107	103	1	He	50.667	2.818	541813	0.58	50	101.3	89.5	110.5	
Cd	111	103	1	He	50.392	2.627	96646	0.98	50	100.8	89.5	110.5	
Sn	118	115	1	He	50.404	1.559	237426	0.35	50	100.8	89.5	110.5	
Sb	123	115	1	He	52.128	1.471	229077	0.92	50	104.3	89.5	110.5	
Ba	137	115	1	He	51.163	2.327	111576	1.26	50	102.3	89.5	110.5	
W	182	209	1	He	51.186	2.315	633191	1.50	50	102.4	89.5	110.5	
Tl	205	209	1	He	49.755	2.708	1629445	1.72	50	99.5	89.5	110.5	
Pb	208	209	1	He	49.240	1.299	2122420	0.98	50	98.5	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1078556	2.07	1263759	85.35	30	120	
Sc	45	1	He	621382	5.68	699622	88.82	30	120	
Sc	45	2	NoGas	4769439	0.77	5515925	86.47	30	120	
Rh	103	1	He	1860451	2.58	2170249	85.73	30	120	
In	115	1	He	1121008	1.21	1314135	85.30	30	120	
Tb	159	1	He	3442247	2.27	3680734	93.52	30	120	
Ho	165	1	He	3513780	2.20	3781772	92.91	30	120	
Bi	209	1	He	2513274	1.10	2765317	90.89	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	105_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:48:51-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.177	23.8	696	21.8	1	
B	11	45	2	NoGas	1.598	11.5	9492	4.0	20	
Na	23	45	1	He	7.809	17.5	24951	6.6	400	
Mg	24	45	1	He	1.707	57.1	2874	23.2	1000	
Al	27	45	1	He	1.204	2.4	1633	1.7	50	
K	39	45	1	He	7.850	5.6	33435	0.1	1000	
Ca	44	45	1	He	31.053	22.3	1911	13.8	1000	
Ti	47	45	1	He	0.100	17.4	29	13.3	20	
V	51	45	1	He	0.095	10.3	714	6.7	2	
Cr	52	45	1	He	0.025	130.2	2007	10.2	2	
Mn	55	45	1	He	0.361	4.0	2777	1.8	2	
Fe	56	45	1	He	22.513	23.2	140052	21.6	50	
Co	59	103	1	He	0.013	18.7	192	12.2	1	
Ni	60	103	1	He	-0.342	-5.8	334	14.7	2	
Cu	63	103	1	He	-0.302	-6.7	1470	8.7	2	
Zn	66	103	1	He	1.421	4.7	3991	1.8	20	
As	75	103	1	He	0.156	10.8	232	6.6	2	
Se	78	103	1	He	0.223	43.5	65	14.4	2	
Sr	88	103	1	He	0.022	30.3	283	17.4	10	
Mo	95	103	1	He	0.910	21.9	2984	21.7	2	
Ag	107	103	1	He	0.013	24.7	166	21.1	0.2	
Cd	111	103	1	He	-0.001	-2877.4	1103	3.6	0.2	
Sn	118	115	1	He	0.479	13.4	3115	10.1	10	
Sb	123	115	1	He	0.412	17.8	2178	15.8	1	
Ba	137	115	1	He	0.029	62.2	123	33.2	5	
W	182	209	1	He	1.070	11.7	17247	10.4	10	
Tl	205	209	1	He	0.051	20.0	1813	20.5	0.5	
Pb	208	209	1	He	0.144	3.8	7400	4.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1086622	0.82	1263759	85.98	30	120	
Sc	45	1	He	588934	0.96	699622	84.18	30	120	
Sc	45	2	NoGas	4708968	1.21	5515925	85.37	30	120	
Rh	103	1	He	1949508	0.42	2170249	89.83	30	120	
In	115	1	He	1166271	0.52	1314135	88.75	30	120	
Tb	159	1	He	3498829	0.47	3680734	95.06	30	120	
Ho	165	1	He	3515912	0.22	3781772	92.97	30	120	
Bi	209	1	He	2587057	1.49	2765317	93.55	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177603/2-a
Data File Name	106_LCS.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:52:44-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	980.036	980.036	1.918	2926457	1.81	1000	98.0	79.5	120.5	
B	11	2	NoGas	106.509	106.509	0.190	223443	0.48	100	106.5	79.5	120.5	
Na	23	1	He	9521.669	9521.669	3.337	11023470	1.72	10000	95.2	79.5	120.5	
Mg	24	1	He	9583.069	9583.069	4.483	6289985	0.83	10000	95.8	79.5	120.5	
Al	27	1	He	9074.970	9074.970	4.526	3354941	0.50	10000	90.7	79.5	120.5	
K	39	1	He	9265.414	9265.414	5.397	6108534	0.99	10000	92.7	79.5	120.5	
Ca	44	1	He	8025.763	8025.763	3.468	285417	1.43	10000	80.3	79.5	120.5	
Ti	47	1	He	93.144	93.144	3.822	17807	3.72	100	93.1	79.5	120.5	
V	51	1	He	957.292	957.292	4.132	4624752	1.70	1000	95.7	79.5	120.5	
Cr	52	1	He	967.656	967.656	4.601	5549223	0.51	1000	96.8	79.5	120.5	
Mn	55	1	He	926.625	926.625	4.782	4416361	0.36	1000	92.7	79.5	120.5	
Fe	56	1	He	9711.738	9711.738	4.334	53965443	0.48	10000	97.1	79.5	120.5	
Co	59	1	He	902.094	902.094	1.680	7892101	1.17	1000	90.2	79.5	120.5	
Ni	60	1	He	949.731	949.731	1.812	2026362	1.61	1000	95.0	79.5	120.5	
Cu	63	1	He	928.827	928.827	1.499	5272054	1.31	1000	92.9	79.5	120.5	
Zn	66	1	He	901.545	901.545	1.338	1046330	1.18	1000	90.2	79.5	120.5	
As	75	1	He	863.563	863.563	1.057	668282	0.63	1000	86.4	79.5	120.5	
Se	78	1	He	891.568	891.568	1.001	74123	1.05	1000	89.2	79.5	120.5	
Sr	88	1	He	910.850	910.850	1.794	5916115	1.23	1000	91.1	79.5	120.5	
Mo	95	1	He	98.233	98.233	0.940	279419	0.62	100	98.2	79.5	120.5	
Ag	107	1	He	94.326	94.326	1.250	932190	0.80	100	94.3	79.5	120.5	
Cd	111	1	He	1002.546	1002.546	0.591	1758578	0.99	1000	100.3	79.5	120.5	
Sn	118	1	He	1064.438	1064.438	1.671	4412023	2.25	1000	106.4	79.5	120.5	
Sb	123	1	He	100.237	100.237	0.412	388509	0.93	100	100.2	79.5	120.5	
Ba	137	1	He	1052.104	1052.104	0.966	2024075	1.49	1000	105.2	79.5	120.5	
W	182	1	He	92.817	92.817	2.260	1113422	1.40	100	92.8	79.5	120.5	
Tl	205	1	He	224.371	224.371	0.771	7144541	0.95	250	89.7	79.5	120.5	
Pb	208	1	He	934.143	934.143	1.273	39127171	0.75	1000	93.4	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	934339	0.98	1263759	73.93	30	120	
Sc	45	1	He	550459	4.93	699622	78.68	30	120	
Sc	45	2	NoGas	4126698	0.57	5515925	74.81	30	120	
Rh	103	1	He	1718640	0.56	2170249	79.19	30	120	
In	115	1	He	989198	0.59	1314135	75.27	30	120	
Tb	159	1	He	3163690	0.68	3680734	85.95	30	120	
Ho	165	1	He	3297227	0.76	3781772	87.19	30	120	
Bi	209	1	He	2443351	0.94	2765317	88.36	30	120	

Sample Report

Sample Table

Sample Name	240-49653-e-1-a
Data File Name	107SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T20:56:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.338	0.338	10.03	1207	0.03	10000	
B	11	45	2	NoGas	128.243	128.243	0.57	305109	0.04	300	
Na	23	45	1	He	53352.790	53352.790	3.33	64618073	0.08	500000	
Mg	24	45	1	He	43575.430	43575.430	1.85	29960476	0.15	500000	
Al	27	45	1	He	0.854	0.854	33.78	1462	0.06	200000	
K	39	45	1	He	2669.631	2669.631	2.18	1863947	0.14	500000	
Ca	44	45	1	He	126418.325	126418.325	2.18	4698342	2.69	500000	
Ti	47	45	1	He	0.336	0.336	13.92	76	0.45	2500	
V	51	45	1	He	0.130	0.130	66.99	876	0.01	10000	
Cr	52	45	1	He	0.895	0.895	7.06	7189	0.01	10000	
Mn	55	45	1	He	52.984	52.984	2.27	265464	0.02	10000	
Fe	56	45	1	He	110.517	110.517	1.23	649349	0.02	200000	
Co	59	103	1	He	0.251	0.251	5.24	2300	0.01	10000	
Ni	60	103	1	He	0.553	0.553	1.52	2250	0.02	10000	
Cu	63	103	1	He	0.821	0.821	7.69	7827	0.01	10000	
Zn	66	103	1	He	2.052	2.052	9.06	4334	0.05	10000	
As	75	103	1	He	1.712	1.712	5.09	1436	0.12	10000	
Se	78	103	1	He	1.330	1.330	11.93	152	0.87	10000	
Sr	88	103	1	He	255.982	255.982	2.02	1696692	0.02	10000	
Mo	95	103	1	He	1.550	1.550	14.84	4536	0.03	2000	
Ag	107	103	1	He	0.027	0.027	12.62	294	0.01	300	
Cd	111	103	1	He	0.090	0.090	28.36	1154	0.01	4000	
Sn	118	115	1	He	2.773	2.773	21.52	12883	0.02	2000	
Sb	123	115	1	He	0.611	0.611	11.07	2777	0.02	300	
Ba	137	115	1	He	385.197	385.197	0.32	787629	0.05	10000	
W	182	209	1	He	1.534	1.534	18.23	21256	0.01	2500	
Tl	205	209	1	He	0.208	0.208	33.66	6496	0.00	5000	
Pb	208	209	1	He	0.593	0.593	7.24	25156	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1048320	0.53	1263759	82.95	30	120	
Sc	45	1	He	575923	0.61	699622	82.32	30	120	
Sc	45	2	NoGas	4697902	0.33	5515925	85.17	30	120	
Rh	103	1	He	1754048	2.28	2170249	80.82	30	120	
In	115	1	He	1051393	1.67	1314135	80.01	30	120	
Tb	159	1	He	3310827	2.23	3680734	89.95	30	120	
Ho	165	1	He	3413852	1.40	3781772	90.27	30	120	
Bi	209	1	He	2383124	1.38	2765317	86.18	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	108_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:00:07-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.361	1.688	180918	1.63	50	100.7	89.5	110.5	
B	11	45	2	NoGas	53.056	0.816	139517	1.39	50	106.1	89.5	110.5	
Na	23	45	1	He	25213.323	4.316	34910183	1.11	25000	100.9	89.5	110.5	
Mg	24	45	1	He	25149.624	3.872	19764393	0.76	25000	100.6	89.5	110.5	
Al	27	45	1	He	246.610	4.279	110425	0.78	250	98.6	89.5	110.5	
K	39	45	1	He	24409.220	3.991	19224514	0.31	25000	97.6	89.5	110.5	
Ca	44	45	1	He	23965.366	3.790	1018644	0.17	25000	95.9	89.5	110.5	
Ti	47	45	1	He	49.572	4.209	11345	1.06	50	99.1	89.5	110.5	
V	51	45	1	He	48.905	3.437	283138	0.52	50	97.8	89.5	110.5	
Cr	52	45	1	He	49.801	4.130	343953	0.31	50	99.6	89.5	110.5	
Mn	55	45	1	He	249.769	3.799	1426475	0.83	250	99.9	89.5	110.5	
Fe	56	45	1	He	12591.438	4.527	83765197	0.72	12500	100.7	89.5	110.5	
Co	59	103	1	He	49.855	1.199	487541	0.62	50	99.7	89.5	110.5	
Ni	60	103	1	He	49.896	0.830	120070	0.52	50	99.8	89.5	110.5	
Cu	63	103	1	He	49.895	1.008	319701	0.11	50	99.8	89.5	110.5	
Zn	66	103	1	He	49.627	1.924	66349	1.53	50	99.3	89.5	110.5	
As	75	103	1	He	49.807	0.938	43166	0.39	50	99.6	89.5	110.5	
Se	78	103	1	He	50.681	1.160	4750	1.18	50	101.4	89.5	110.5	
Sr	88	103	1	He	48.986	0.936	355731	0.08	50	98.0	89.5	110.5	
Mo	95	103	1	He	51.474	1.811	163687	2.66	50	102.9	89.5	110.5	
Ag	107	103	1	He	50.972	1.280	563006	0.48	50	101.9	89.5	110.5	
Cd	111	103	1	He	50.640	1.413	100305	0.67	50	101.3	89.5	110.5	
Sn	118	115	1	He	50.088	0.213	247245	0.22	50	100.2	89.5	110.5	
Sb	123	115	1	He	51.620	1.257	237704	1.07	50	103.2	89.5	110.5	
Ba	137	115	1	He	50.396	1.573	115175	1.73	50	100.8	89.5	110.5	
W	182	209	1	He	50.088	1.636	646963	1.55	50	100.2	89.5	110.5	
Tl	205	209	1	He	49.862	0.767	1704927	0.95	50	99.7	89.5	110.5	
Pb	208	209	1	He	48.356	1.071	2175877	0.93	50	96.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1123542	0.24	1263759	88.90	30	120	
Sc	45	1	He	658879	3.99	699622	94.18	30	120	
Sc	45	2	NoGas	5057465	0.66	5515925	91.69	30	120	
Rh	103	1	He	1920866	0.90	2170249	88.51	30	120	
In	115	1	He	1174565	0.24	1314135	89.38	30	120	
Tb	159	1	He	3573470	1.15	3680734	97.09	30	120	
Ho	165	1	He	3684066	0.92	3781772	97.42	30	120	
Bi	209	1	He	2623543	0.19	2765317	94.87	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	109_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:03:56-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.152	2.7	644	3.0	1	
B	11	45	2	NoGas	2.085	5.9	11385	2.2	20	
Na	23	45	1	He	11.210	15.7	30319	5.9	400	
Mg	24	45	1	He	2.496	19.9	3567	8.7	1000	
Al	27	45	1	He	1.635	12.2	1877	4.7	50	
K	39	45	1	He	6.607	14.7	33873	1.6	1000	
Ca	44	45	1	He	31.307	6.5	1998	2.4	1000	
Ti	47	45	1	He	0.079	31.7	26	19.9	20	
V	51	45	1	He	0.032	118.6	406	51.4	2	
Cr	52	45	1	He	0.018	106.0	2041	5.3	2	
Mn	55	45	1	He	0.357	5.8	2870	2.8	2	
Fe	56	45	1	He	24.846	24.7	159859	22.1	50	
Co	59	103	1	He	0.010	22.0	172	14.0	1	
Ni	60	103	1	He	-0.339	-4.7	357	11.4	2	
Cu	63	103	1	He	-0.277	-9.3	1700	9.8	2	
Zn	66	103	1	He	1.320	3.4	4026	1.8	20	
As	75	103	1	He	0.141	18.7	228	10.9	2	
Se	78	103	1	He	0.188	63.5	65	18.5	2	
Sr	88	103	1	He	0.024	9.8	312	5.9	10	
Mo	95	103	1	He	0.975	28.7	3328	27.8	2	
Ag	107	103	1	He	0.018	22.2	240	19.4	0.2	
Cd	111	103	1	He	0.016	66.7	1187	1.6	0.2	
Sn	118	115	1	He	0.472	5.8	3219	4.3	10	
Sb	123	115	1	He	0.437	14.6	2391	12.3	1	
Ba	137	115	1	He	0.032	27.5	136	14.8	5	
W	182	209	1	He	1.186	23.2	19596	17.3	10	
Tl	205	209	1	He	0.049	31.7	1795	29.1	0.5	
Pb	208	209	1	He	0.127	10.1	6994	7.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1154105	0.99	1263759	91.32	30	120	
Sc	45	1	He	612721	1.61	699622	87.58	30	120	
Sc	45	2	NoGas	5042444	1.71	5515925	91.42	30	120	
Rh	103	1	He	2034333	0.47	2170249	93.74	30	120	
In	115	1	He	1218716	0.38	1314135	92.74	30	120	
Tb	159	1	He	3562436	1.95	3680734	96.79	30	120	
Ho	165	1	He	3642606	0.38	3781772	96.32	30	120	
Bi	209	1	He	2714589	1.30	2765317	98.17	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	110CRIA.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:07:48-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.097	1.097	6.714	4153	5.94	1	109.7	69.5	130.5	
B	11	2	NoGas	21.357	21.357	0.710	60837	0.59	20	106.8	69.5	130.5	
Na	23	1	He	1065.323	1065.323	0.528	1473081	0.85	1000	106.5	69.5	130.5	
Mg	24	1	He	1047.318	1047.318	1.409	814607	0.95	1000	104.7	69.5	130.5	
Al	27	1	He	49.604	49.604	3.041	22959	3.01	50	99.2	69.5	130.5	
K	39	1	He	1016.911	1016.911	1.600	820521	1.12	1000	101.7	69.5	130.5	
Ca	44	1	He	1001.239	1001.239	1.473	42808	2.26	1000	100.1	69.5	130.5	
Ti	47	1	He	11.041	11.041	4.840	2502	4.07	10	110.4	69.5	130.5	
V	51	1	He	5.401	5.401	2.736	31093	1.95	5	108.0	69.5	130.5	
Cr	52	1	He	2.120	2.120	2.500	16422	2.15	2	106.0	69.5	130.5	
Mn	55	1	He	4.939	4.939	1.694	28866	0.80	5	98.8	69.5	130.5	
Fe	56	1	He	107.586	107.586	1.166	713670	0.69	100	107.6	69.5	130.5	
Co	59	1	He	0.993	0.993	4.057	10339	2.20	1	99.3	69.5	130.5	
Ni	60	1	He	1.753	1.753	3.737	5634	2.00	2	87.6	69.5	130.5	
Cu	63	1	He	1.695	1.695	5.559	14931	2.54	2	84.7	69.5	130.5	
Zn	66	1	He	19.767	19.767	2.793	29304	0.56	20	98.8	69.5	130.5	
As	75	1	He	4.960	4.960	1.343	4639	0.92	5	99.2	69.5	130.5	
Se	78	1	He	5.204	5.204	2.971	558	1.96	5	104.1	69.5	130.5	
Sr	88	1	He	9.481	9.481	1.656	72985	1.32	10	94.8	69.5	130.5	
Mo	95	1	He	10.417	10.417	2.060	35101	1.51	10	104.2	69.5	130.5	
Ag	107	1	He	1.038	1.038	3.236	12159	2.49	1	103.8	69.5	130.5	
Cd	111	1	He	0.972	0.972	5.953	3167	1.84	1	97.2	69.5	130.5	
Sn	118	1	He	10.077	10.077	1.384	53106	1.01	10	100.8	69.5	130.5	
Sb	123	1	He	2.062	2.062	2.773	10313	2.85	2	103.1	69.5	130.5	
Ba	137	1	He	4.931	4.931	2.869	11939	2.53	5	98.6	69.5	130.5	
W	182	1	He	9.596	9.596	3.382	130834	3.33	10	96.0	69.5	130.5	
Tl	205	1	He	1.870	1.870	1.085	65972	1.13	2	93.5	69.5	130.5	
Pb	208	1	He	1.096	1.096	0.894	51863	0.83	1	109.6	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1160124	0.80	1263759	91.80	30	120	
Sc	45	1	He	650074	0.83	699622	92.92	30	120	
Sc	45	2	NoGas	5140713	0.05	5515925	93.20	30	120	
Rh	103	1	He	2033697	2.09	2170249	93.71	30	120	
In	115	1	He	1238557	0.36	1314135	94.25	30	120	
Tb	159	1	He	3551285	1.02	3680734	96.48	30	120	
Ho	165	1	He	3650399	1.16	3781772	96.53	30	120	
Bi	209	1	He	2703434	0.05	2765317	97.76	30	120	

Sample Report

Sample Table

Sample Name	240-49640-q-2-a
Data File Name	111SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:11:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.131	0.131	44.26	507	0.03	10000	
B	11	45	2	NoGas	20.555	20.555	1.73	52646	0.04	300	
Na	23	45	1	He	3792.608	3792.608	4.58	4665364	0.08	500000	
Mg	24	45	1	He	23325.411	23325.411	4.20	16240392	0.14	500000	
Al	27	45	1	He	0.651	0.651	57.11	1399	0.05	200000	
K	39	45	1	He	1001.066	1001.066	4.32	725048	0.14	500000	
Ca	44	45	1	He	64602.395	64602.395	3.90	2431669	2.66	500000	
Ti	47	45	1	He	0.367	0.367	29.96	83	0.44	2500	
V	51	45	1	He	1.551	1.551	28.96	8150	0.02	10000	
Cr	52	45	1	He	3.747	3.747	5.48	24622	0.02	10000	
Mn	55	45	1	He	1.130	1.130	5.58	6638	0.02	10000	
Fe	56	45	1	He	10.579	10.579	4.92	68555	0.02	200000	
Co	59	103	1	He	0.077	0.077	2.63	754	0.01	10000	
Ni	60	103	1	He	0.426	0.426	17.01	1990	0.02	10000	
Cu	63	103	1	He	0.511	0.511	7.13	6090	0.01	10000	
Zn	66	103	1	He	3.128	3.128	4.27	5667	0.06	10000	
As	75	103	1	He	0.775	0.775	3.09	705	0.11	10000	
Se	78	103	1	He	0.452	0.452	35.19	79	0.57	10000	
Sr	88	103	1	He	77.494	77.494	2.52	519077	0.01	10000	
Mo	95	103	1	He	0.570	0.570	11.54	1713	0.03	2000	
Ag	107	103	1	He	0.028	0.028	6.86	309	0.01	300	
Cd	111	103	1	He	0.003	0.003	1427.68	1009	0.00	4000	
Sn	118	115	1	He	0.915	0.915	9.40	4816	0.02	2000	
Sb	123	115	1	He	0.394	0.394	11.00	1921	0.02	300	
Ba	137	115	1	He	37.886	37.886	0.33	78986	0.05	10000	
W	182	209	1	He	1.900	1.900	5.03	27105	0.01	2500	
Tl	205	209	1	He	0.022	0.022	8.26	808	0.00	5000	
Pb	208	209	1	He	0.175	0.175	5.51	8597	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1034464	2.23	1263759	81.86	30	120	
Sc	45	1	He	583676	3.29	699622	83.43	30	120	
Sc	45	2	NoGas	4604074	1.09	5515925	83.47	30	120	
Rh	103	1	He	1772731	2.85	2170249	81.68	30	120	
In	115	1	He	1071304	1.27	1314135	81.52	30	120	
Tb	159	1	He	3335710	1.07	3680734	90.63	30	120	
Ho	165	1	He	3388293	1.28	3781772	89.60	30	120	
Bi	209	1	He	2527778	0.60	2765317	91.41	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49640-q-2-a@5
Data File Name	112SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:15:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.110	0.110	8.75	459	0.02	10000	
B	11	45	2	NoGas	4.860	4.860	6.99	17205	0.03	300	
Na	23	45	1	He	790.839	790.839	0.68	1034484	0.08	500000	
Mg	24	45	1	He	4963.494	4963.494	0.46	3631681	0.14	500000	
Al	27	45	1	He	-0.112	-0.112	-69.48	1157	-0.01	200000	
K	39	45	1	He	215.011	215.011	2.47	186346	0.12	500000	
Ca	44	45	1	He	13076.972	13076.972	0.43	517616	2.53	500000	
Ti	47	45	1	He	0.032	0.032	100.13	16	0.20	2500	
V	51	45	1	He	0.185	0.185	54.34	1230	0.02	10000	
Cr	52	45	1	He	0.798	0.798	3.36	7028	0.01	10000	
Mn	55	45	1	He	0.227	0.227	6.92	2180	0.01	10000	
Fe	56	45	1	He	1.058	1.058	6.45	12923	0.01	200000	
Co	59	103	1	He	0.016	0.016	31.28	220	0.01	10000	
Ni	60	103	1	He	-0.193	-0.193	-11.65	693	-0.03	10000	
Cu	63	103	1	He	-0.175	-0.175	-7.63	2284	-0.01	10000	
Zn	66	103	1	He	0.462	0.462	23.78	2722	0.02	10000	
As	75	103	1	He	0.165	0.165	16.24	239	0.07	10000	
Se	78	103	1	He	0.056	0.056	130.17	49	0.11	10000	
Sr	88	103	1	He	15.694	15.694	0.64	115470	0.01	10000	
Mo	95	103	1	He	0.128	0.128	19.36	461	0.03	2000	
Ag	107	103	1	He	0.010	0.010	11.48	137	0.01	300	
Cd	111	103	1	He	-0.001	-0.001	-2503.96	1100	0.00	4000	
Sn	118	115	1	He	0.054	0.054	6.55	1041	0.01	2000	
Sb	123	115	1	He	0.059	0.059	13.62	566	0.01	300	
Ba	137	115	1	He	7.635	7.635	1.80	17424	0.04	10000	
W	182	209	1	He	0.421	0.421	8.90	9333	0.00	2500	
Tl	205	209	1	He	0.006	0.006	13.18	298	0.00	5000	
Pb	208	209	1	He	0.079	0.079	7.83	4710	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1082444	1.68	1263759	85.65	30	120	
Sc	45	1	He	612567	1.43	699622	87.56	30	120	
Sc	45	2	NoGas	4729873	0.55	5515925	85.75	30	120	
Rh	103	1	He	1944697	1.27	2170249	89.61	30	120	
In	115	1	He	1169534	0.47	1314135	89.00	30	120	
Tb	159	1	He	3498930	1.55	3680734	95.06	30	120	
Ho	165	1	He	3577472	0.42	3781772	94.60	30	120	
Bi	209	1	He	2677928	1.24	2765317	96.84	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49640-q-2-a
Data File Name	113SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:19:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1040.719	1040.719	0.72	3103559	0.03	10000	
B	11	45	2	NoGas	133.476	133.476	0.65	281136	0.05	300	
Na	23	45	1	He	13724.506	13724.506	5.12	15852855	0.09	500000	
Mg	24	45	1	He	32071.555	32071.555	3.92	21023083	0.15	500000	
Al	27	45	1	He	9769.618	9769.618	3.60	3608032	0.27	200000	
K	39	45	1	He	10845.579	10845.579	4.66	7138258	0.15	500000	
Ca	44	45	1	He	69335.130	69335.130	5.67	2455592	2.82	500000	
Ti	47	45	1	He	100.114	100.114	5.26	19097	0.52	2500	
V	51	45	1	He	1023.546	1023.546	4.56	4937315	0.02	10000	
Cr	52	45	1	He	1024.788	1024.788	4.65	5869082	0.02	10000	
Mn	55	45	1	He	974.966	974.966	4.42	4641228	0.02	10000	
Fe	56	45	1	He	10172.818	10172.818	4.29	56455071	0.02	200000	
Co	59	103	1	He	966.822	966.822	1.82	8306096	0.01	10000	
Ni	60	103	1	He	992.444	992.444	0.71	2079454	0.05	10000	
Cu	63	103	1	He	975.335	975.335	0.89	5436166	0.02	10000	
Zn	66	103	1	He	923.736	923.736	0.78	1052730	0.09	10000	
As	75	103	1	He	920.084	920.084	0.28	699213	0.13	10000	
Se	78	103	1	He	917.363	917.363	0.92	74891	1.22	10000	
Sr	88	103	1	He	1060.898	1060.898	0.40	6766976	0.02	10000	
Mo	95	103	1	He	108.505	108.505	1.56	303069	0.04	2000	
Ag	107	103	1	He	31.890	31.890	1.13	309498	0.01	300	
Cd	111	103	1	He	1051.601	1051.601	1.73	1811237	0.06	4000	
Sn	118	115	1	He	1151.644	1151.644	0.29	4683684	0.02	2000	
Sb	123	115	1	He	108.998	108.998	0.77	414513	0.03	300	
Ba	137	115	1	He	1191.757	1191.757	0.43	2249728	0.05	10000	
W	182	209	1	He	105.900	105.900	2.23	1226532	0.01	2500	
Tl	205	209	1	He	245.926	245.926	1.09	7563428	0.00	5000	
Pb	208	209	1	He	1014.140	1014.140	0.69	41029719	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	933091	1.30	1263759	73.83	30	120	
Sc	45	1	He	549710	4.71	699622	78.57	30	120	
Sc	45	2	NoGas	4162293	0.80	5515925	75.46	30	120	
Rh	103	1	He	1687696	0.66	2170249	77.77	30	120	
In	115	1	He	970674	0.73	1314135	73.86	30	120	
Tb	159	1	He	3197859	1.24	3680734	86.88	30	120	
Ho	165	1	He	3263399	1.50	3781772	86.29	30	120	
Bi	209	1	He	2359987	0.96	2765317	85.34	30	120	

Sample Report

Sample Table

Sample Name	240-49640-q-2-b ms
Data File Name	114SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:22:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1009.735	1009.735	2.74	3064729	0.03	10000	
B	11	45	2	NoGas	132.521	132.521	1.72	284104	0.05	300	
Na	23	45	1	He	14069.944	14069.944	1.58	15853673	0.09	500000	
Mg	24	45	1	He	33036.345	33036.345	2.31	21115293	0.16	500000	
Al	27	45	1	He	9835.579	9835.579	1.05	3542031	0.28	200000	
K	39	45	1	He	10862.127	10862.127	2.58	6972134	0.16	500000	
Ca	44	45	1	He	72152.633	72152.633	1.75	2493172	2.89	500000	
Ti	47	45	1	He	101.622	101.622	0.80	18916	0.54	2500	
V	51	45	1	He	1049.458	1049.458	2.34	4937005	0.02	10000	
Cr	52	45	1	He	1046.374	1046.374	2.61	5844242	0.02	10000	
Mn	55	45	1	He	993.809	993.809	3.21	4613099	0.02	10000	
Fe	56	45	1	He	10350.415	10350.415	2.83	56010047	0.02	200000	
Co	59	103	1	He	963.888	963.888	1.38	8186796	0.01	10000	
Ni	60	103	1	He	999.540	999.540	0.87	2070350	0.05	10000	
Cu	63	103	1	He	979.873	979.873	1.58	5399027	0.02	10000	
Zn	66	103	1	He	926.934	926.934	0.98	1044329	0.09	10000	
As	75	103	1	He	923.220	923.220	1.04	693582	0.13	10000	
Se	78	103	1	He	917.769	917.769	1.05	74071	1.24	10000	
Sr	88	103	1	He	1075.431	1075.431	0.23	6781854	0.02	10000	
Mo	95	103	1	He	110.856	110.856	0.86	306119	0.04	2000	
Ag	107	103	1	He	102.700	102.700	1.15	985312	0.01	300	
Cd	111	103	1	He	1057.687	1057.687	1.39	1800959	0.06	4000	
Sn	118	115	1	He	1158.414	1158.414	1.11	4702351	0.02	2000	
Sb	123	115	1	He	108.340	108.340	0.16	411249	0.03	300	
Ba	137	115	1	He	1172.135	1172.135	2.08	2208509	0.05	10000	
W	182	209	1	He	107.693	107.693	2.22	1252075	0.01	2500	
Tl	205	209	1	He	246.520	246.520	1.39	7610928	0.00	5000	
Pb	208	209	1	He	1012.413	1012.413	1.33	41116965	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	950033	2.16	1263759	75.18	30	120	
Sc	45	1	He	535509	2.07	699622	76.54	30	120	
Sc	45	2	NoGas	4236059	0.72	5515925	76.80	30	120	
Rh	103	1	He	1668505	0.90	2170249	76.88	30	120	
In	115	1	He	968833	0.11	1314135	73.72	30	120	
Tb	159	1	He	3195274	1.94	3680734	86.81	30	120	
Ho	165	1	He	3293749	0.52	3781772	87.10	30	120	
Bi	209	1	He	2369309	1.68	2765317	85.68	30	120	

Sample Report

Sample Table

Sample Name	240-49640-q-2-c msd
Data File Name	115SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:26:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1031.896	1031.896	1.37	3085973	0.03	10000	
B	11	45	2	NoGas	137.299	137.299	1.34	289641	0.05	300	
Na	23	45	1	He	14450.142	14450.142	2.82	16177359	0.09	500000	
Mg	24	45	1	He	34273.992	34273.992	3.17	21765957	0.16	500000	
Al	27	45	1	He	10085.274	10085.274	2.54	3608590	0.28	200000	
K	39	45	1	He	11182.460	11182.460	2.46	7132226	0.16	500000	
Ca	44	45	1	He	74855.808	74855.808	2.82	2570138	2.91	500000	
Ti	47	45	1	He	103.205	103.205	1.83	19087	0.54	2500	
V	51	45	1	He	1064.550	1064.550	3.38	4975805	0.02	10000	
Cr	52	45	1	He	1056.288	1056.288	3.53	5861730	0.02	10000	
Mn	55	45	1	He	1013.441	1013.441	3.57	4674615	0.02	10000	
Fe	56	45	1	He	10555.204	10555.204	2.63	56763747	0.02	200000	
Co	59	103	1	He	975.793	975.793	0.68	8353850	0.01	10000	
Ni	60	103	1	He	1013.872	1013.872	0.29	2116715	0.05	10000	
Cu	63	103	1	He	986.567	986.567	0.27	5479318	0.02	10000	
Zn	66	103	1	He	923.644	923.644	0.44	1048903	0.09	10000	
As	75	103	1	He	921.039	921.039	0.45	697447	0.13	10000	
Se	78	103	1	He	912.699	912.699	0.68	74248	1.23	10000	
Sr	88	103	1	He	1071.467	1071.467	1.28	6810163	0.02	10000	
Mo	95	103	1	He	113.250	113.250	0.94	315207	0.04	2000	
Ag	107	103	1	He	104.472	104.472	0.87	1010265	0.01	300	
Cd	111	103	1	He	1062.409	1062.409	1.03	1823388	0.06	4000	
Sn	118	115	1	He	1184.849	1184.849	1.62	4790265	0.02	2000	
Sb	123	115	1	He	111.719	111.719	0.18	422372	0.03	300	
Ba	137	115	1	He	1193.224	1193.224	1.31	2239302	0.05	10000	
W	182	209	1	He	110.815	110.815	1.49	1285571	0.01	2500	
Tl	205	209	1	He	248.533	248.533	1.14	7656499	0.00	5000	
Pb	208	209	1	He	1027.192	1027.192	0.48	41628719	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	935794	1.24	1263759	74.05	30	120	
Sc	45	1	He	532235	2.89	699622	76.07	30	120	
Sc	45	2	NoGas	4171045	0.86	5515925	75.62	30	120	
Rh	103	1	He	1681690	0.46	2170249	77.49	30	120	
In	115	1	He	964964	0.40	1314135	73.43	30	120	
Tb	159	1	He	3157312	1.16	3680734	85.78	30	120	
Ho	165	1	He	3280641	1.09	3781772	86.75	30	120	
Bi	209	1	He	2364011	1.13	2765317	85.49	30	120	

Sample Report

Sample Table

Sample Name	240-49651-d-1-a
Data File Name	116SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:30:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.499	0.499	6.31	1637	0.03	10000	
B	11	45	2	NoGas	147.919	147.919	1.40	335436	0.04	300	
Na	23	45	1	He	345824.987	345824.987	2.03	408660710	0.08	500000	
Mg	24	45	1	He	28120.473	28120.473	2.20	18867636	0.15	500000	
Al	27	45	1	He	3.788	3.788	2.80	2536	0.15	200000	
K	39	45	1	He	8166.804	8166.804	1.65	5510108	0.15	500000	
Ca	44	45	1	He	110782.376	110782.376	2.31	4017570	2.76	500000	
Ti	47	45	1	He	0.511	0.511	4.47	108	0.47	2500	
V	51	45	1	He	0.381	0.381	82.71	2078	0.02	10000	
Cr	52	45	1	He	7.000	7.000	2.34	42799	0.02	10000	
Mn	55	45	1	He	439.803	439.803	1.71	2143884	0.02	10000	
Fe	56	45	1	He	2255.802	2255.802	1.85	12820024	0.02	200000	
Co	59	103	1	He	0.463	0.463	7.16	4022	0.01	10000	
Ni	60	103	1	He	163.746	163.746	0.55	342598	0.05	10000	
Cu	63	103	1	He	54.888	54.888	0.10	307537	0.02	10000	
Zn	66	103	1	He	343.094	343.094	0.74	390654	0.09	10000	
As	75	103	1	He	2.918	2.918	2.22	2291	0.13	10000	
Se	78	103	1	He	2.239	2.239	6.59	220	1.02	10000	
Sr	88	103	1	He	285.647	285.647	0.66	1815074	0.02	10000	
Mo	95	103	1	He	2.433	2.433	9.83	6813	0.04	2000	
Ag	107	103	1	He	0.051	0.051	13.23	513	0.01	300	
Cd	111	103	1	He	0.331	0.331	12.54	1520	0.02	4000	
Sn	118	115	1	He	2.621	2.621	24.57	11808	0.02	2000	
Sb	123	115	1	He	0.687	0.687	5.55	2985	0.02	300	
Ba	137	115	1	He	178.082	178.082	0.40	351481	0.05	10000	
W	182	209	1	He	1.812	1.812	11.38	23359	0.01	2500	
Tl	205	209	1	He	0.278	0.278	25.47	8283	0.00	5000	
Pb	208	209	1	He	3.360	3.360	3.59	131577	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	980097	2.84	1263759	77.55	30	120	
Sc	45	1	He	562130	2.21	699622	80.35	30	120	
Sc	45	2	NoGas	4489147	0.91	5515925	81.39	30	120	
Rh	103	1	He	1681207	0.50	2170249	77.47	30	120	
In	115	1	He	1014769	0.72	1314135	77.22	30	120	
Tb	159	1	He	3281750	1.80	3680734	89.16	30	120	
Ho	165	1	He	3368508	0.15	3781772	89.07	30	120	
Bi	209	1	He	2268713	0.32	2765317	82.04	30	120	

Sample Report

Sample Table

Sample Name	240-49651-d-2-a
Data File Name	117SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:33:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.306	0.306	6.44	1082	0.03	10000	
B	11	45	2	NoGas	142.941	142.941	1.26	332449	0.04	300	
Na	23	45	1	He	48093.535	48093.535	2.34	58847333	0.08	500000	
Mg	24	45	1	He	30663.233	30663.233	2.11	21297734	0.14	500000	
Al	27	45	1	He	2.049	2.049	14.78	1946	0.11	200000	
K	39	45	1	He	6023.228	6023.228	2.32	4213590	0.14	500000	
Ca	44	45	1	He	124121.177	124121.177	2.07	4659909	2.66	500000	
Ti	47	45	1	He	0.217	0.217	34.09	52	0.42	2500	
V	51	45	1	He	0.048	0.048	243.82	473	0.01	10000	
Cr	52	45	1	He	0.713	0.713	6.01	6154	0.01	10000	
Mn	55	45	1	He	636.841	636.841	3.49	3212331	0.02	10000	
Fe	56	45	1	He	1920.924	1920.924	2.09	11301941	0.02	200000	
Co	59	103	1	He	0.733	0.733	6.04	6685	0.01	10000	
Ni	60	103	1	He	5.159	5.159	2.19	12426	0.04	10000	
Cu	63	103	1	He	36.267	36.267	0.70	215702	0.02	10000	
Zn	66	103	1	He	269.991	269.991	0.70	325142	0.08	10000	
As	75	103	1	He	1.826	1.826	2.87	1546	0.12	10000	
Se	78	103	1	He	0.537	0.537	22.38	86	0.62	10000	
Sr	88	103	1	He	200.001	200.001	0.95	1342432	0.01	10000	
Mo	95	103	1	He	1.915	1.915	5.29	5669	0.03	2000	
Ag	107	103	1	He	0.032	0.032	13.33	347	0.01	300	
Cd	111	103	1	He	0.084	0.084	38.06	1159	0.01	4000	
Sn	118	115	1	He	0.760	0.760	4.11	4108	0.02	2000	
Sb	123	115	1	He	0.361	0.361	4.12	1777	0.02	300	
Ba	137	115	1	He	90.436	90.436	0.66	187733	0.05	10000	
W	182	209	1	He	0.423	0.423	3.50	8440	0.01	2500	
Tl	205	209	1	He	0.066	0.066	8.87	2156	0.00	5000	
Pb	208	209	1	He	6.591	6.591	1.56	273768	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1027741	0.84	1263759	81.32	30	120	
Sc	45	1	He	581955	2.54	699622	83.18	30	120	
Sc	45	2	NoGas	4601561	0.32	5515925	83.42	30	120	
Rh	103	1	He	1775894	0.76	2170249	81.83	30	120	
In	115	1	He	1067142	0.24	1314135	81.20	30	120	
Tb	159	1	He	3340477	0.37	3680734	90.76	30	120	
Ho	165	1	He	3475081	0.55	3781772	91.89	30	120	
Bi	209	1	He	2414696	1.24	2765317	87.32	30	120	

Sample Report

Sample Table

Sample Name	240-49640-j-1-a
Data File Name	118SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:37:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.222	0.222	24.63	789	0.03	10000	
B	11	45	2	NoGas	31.474	31.474	3.56	75275	0.04	300	
Na	23	45	1	He	9787.410	9787.410	2.80	11596922	0.08	500000	
Mg	24	45	1	He	39803.380	39803.380	2.70	26744883	0.15	500000	
Al	27	45	1	He	1.546	1.546	22.88	1689	0.09	200000	
K	39	45	1	He	1368.749	1368.749	2.71	946970	0.14	500000	
Ca	44	45	1	He	88406.244	88406.244	3.56	3210623	2.75	500000	
Ti	47	45	1	He	0.340	0.340	31.42	74	0.46	2500	
V	51	45	1	He	0.961	0.961	40.96	4938	0.02	10000	
Cr	52	45	1	He	3.036	3.036	3.14	19591	0.02	10000	
Mn	55	45	1	He	529.272	529.272	4.00	2583247	0.02	10000	
Fe	56	45	1	He	11.403	11.403	5.90	70809	0.02	200000	
Co	59	103	1	He	0.594	0.594	2.24	5284	0.01	10000	
Ni	60	103	1	He	1.790	1.790	3.56	4872	0.04	10000	
Cu	63	103	1	He	1.351	1.351	3.35	10742	0.01	10000	
Zn	66	103	1	He	2.908	2.908	1.65	5272	0.06	10000	
As	75	103	1	He	1.088	1.088	3.88	931	0.12	10000	
Se	78	103	1	He	0.678	0.678	12.90	96	0.71	10000	
Sr	88	103	1	He	125.481	125.481	0.96	820094	0.02	10000	
Mo	95	103	1	He	0.953	0.953	3.24	2768	0.03	2000	
Ag	107	103	1	He	0.029	0.029	14.04	314	0.01	300	
Cd	111	103	1	He	0.045	0.045	68.04	1059	0.00	4000	
Sn	118	115	1	He	0.564	0.564	13.43	3141	0.02	2000	
Sb	123	115	1	He	0.310	0.310	12.12	1522	0.02	300	
Ba	137	115	1	He	58.580	58.580	0.75	118276	0.05	10000	
W	182	209	1	He	14.285	14.285	2.02	171637	0.01	2500	
Tl	205	209	1	He	0.036	0.036	6.55	1212	0.00	5000	
Pb	208	209	1	He	0.293	0.293	4.96	13041	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1005231	1.29	1263759	79.54	30	120	
Sc	45	1	He	563054	2.57	699622	80.48	30	120	
Sc	45	2	NoGas	4464769	0.63	5515925	80.94	30	120	
Rh	103	1	He	1729171	1.42	2170249	79.68	30	120	
In	115	1	He	1037752	0.85	1314135	78.97	30	120	
Tb	159	1	He	3254648	0.92	3680734	88.42	30	120	
Ho	165	1	He	3365539	0.98	3781772	88.99	30	120	
Bi	209	1	He	2405538	0.78	2765317	86.99	30	120	

Sample Report

Sample Table

Sample Name	240-49640-j-3-a
Data File Name	119SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:41:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.181	0.181	14.91	619	0.03	10000	
B	11	45	2	NoGas	18.161	18.161	4.59	43664	0.04	300	
Na	23	45	1	He	4102.440	4102.440	2.91	4827676	0.08	500000	
Mg	24	45	1	He	4570.388	4570.388	2.79	3046185	0.15	500000	
Al	27	45	1	He	286.453	286.453	2.66	108572	0.26	200000	
K	39	45	1	He	533.410	533.410	3.57	381984	0.14	500000	
Ca	44	45	1	He	10493.763	10493.763	3.70	378411	2.77	500000	
Ti	47	45	1	He	14.604	14.604	1.68	2841	0.51	2500	
V	51	45	1	He	1.675	1.675	17.23	8393	0.02	10000	
Cr	52	45	1	He	1.973	1.973	5.71	13229	0.01	10000	
Mn	55	45	1	He	22.725	22.725	3.53	110807	0.02	10000	
Fe	56	45	1	He	393.754	393.754	4.07	2225873	0.02	200000	
Co	59	103	1	He	0.459	0.459	1.72	4229	0.01	10000	
Ni	60	103	1	He	1.575	1.575	1.25	4552	0.03	10000	
Cu	63	103	1	He	2.758	2.758	0.29	19375	0.01	10000	
Zn	66	103	1	He	5.815	5.815	5.18	8940	0.07	10000	
As	75	103	1	He	0.600	0.600	3.15	569	0.11	10000	
Se	78	103	1	He	0.523	0.523	25.90	86	0.61	10000	
Sr	88	103	1	He	13.592	13.592	0.10	91798	0.01	10000	
Mo	95	103	1	He	0.214	0.214	9.92	674	0.03	2000	
Ag	107	103	1	He	0.022	0.022	6.89	252	0.01	300	
Cd	111	103	1	He	-0.007	-0.007	-319.43	998	0.00	4000	
Sn	118	115	1	He	0.477	0.477	2.88	2804	0.02	2000	
Sb	123	115	1	He	0.297	0.297	7.17	1488	0.02	300	
Ba	137	115	1	He	9.928	9.928	2.42	20387	0.05	10000	
W	182	209	1	He	0.359	0.359	6.93	8017	0.00	2500	
Tl	205	209	1	He	0.018	0.018	9.11	678	0.00	5000	
Pb	208	209	1	He	0.365	0.365	3.19	16776	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	948671	2.03	1263759	75.07	30	120	
Sc	45	1	He	558399	4.02	699622	79.81	30	120	
Sc	45	2	NoGas	4260717	1.71	5515925	77.24	30	120	
Rh	103	1	He	1784854	1.30	2170249	82.24	30	120	
In	115	1	He	1053265	0.70	1314135	80.15	30	120	
Tb	159	1	He	3277803	0.23	3680734	89.05	30	120	
Ho	165	1	He	3365245	0.38	3781772	88.99	30	120	
Bi	209	1	He	2519082	1.16	2765317	91.10	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	120_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:45:14-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.063	1.709	173797	1.70	50	98.1	89.5	110.5	
B	11	45	2	NoGas	53.914	1.179	134903	0.30	50	107.8	89.5	110.5	
Na	23	45	1	He	25766.566	11.211	33030173	1.03	25000	103.1	89.5	110.5	
Mg	24	45	1	He	25974.931	10.497	18906230	1.20	25000	103.9	89.5	110.5	
Al	27	45	1	He	251.737	12.284	104274	2.25	250	100.7	89.5	110.5	
K	39	45	1	He	25103.273	12.330	18289997	2.26	25000	100.4	89.5	110.5	
Ca	44	45	1	He	24698.975	11.719	971529	1.66	25000	98.8	89.5	110.5	
Ti	47	45	1	He	52.061	9.928	11041	2.86	50	104.1	89.5	110.5	
V	51	45	1	He	51.352	10.704	275286	1.23	50	102.7	89.5	110.5	
Cr	52	45	1	He	51.529	10.893	329500	0.85	50	103.1	89.5	110.5	
Mn	55	45	1	He	245.558	12.506	1297192	2.40	250	98.2	89.5	110.5	
Fe	56	45	1	He	13054.938	12.659	80339763	2.70	12500	104.4	89.5	110.5	
Co	59	103	1	He	52.627	14.691	467863	1.56	50	105.3	89.5	110.5	
Ni	60	103	1	He	52.290	15.038	114315	1.20	50	104.6	89.5	110.5	
Cu	63	103	1	He	52.900	13.937	308190	1.02	50	105.8	89.5	110.5	
Zn	66	103	1	He	52.518	13.872	63792	2.01	50	105.0	89.5	110.5	
As	75	103	1	He	52.534	13.943	41411	0.55	50	105.1	89.5	110.5	
Se	78	103	1	He	52.781	15.463	4493	1.75	50	105.6	89.5	110.5	
Sr	88	103	1	He	51.982	14.061	343341	1.11	50	104.0	89.5	110.5	
Mo	95	103	1	He	54.552	15.652	157574	3.28	50	109.1	89.5	110.5	
Ag	107	103	1	He	54.374	14.432	546108	1.30	50	108.7	89.5	110.5	
Cd	111	103	1	He	53.829	14.285	96912	0.72	50	107.7	89.5	110.5	
Sn	118	115	1	He	53.919	13.625	237365	1.32	50	107.8	89.5	110.5	
Sb	123	115	1	He	56.114	14.372	230332	1.57	50	112.2	89.5	110.5	CCV Failed
Ba	137	115	1	He	54.724	13.942	111522	1.12	50	109.4	89.5	110.5	
W	182	209	1	He	52.668	13.230	629894	2.40	50	105.3	89.5	110.5	
Tl	205	209	1	He	51.939	14.295	1644001	4.85	50	103.9	89.5	110.5	
Pb	208	209	1	He	51.049	11.873	2129348	0.71	50	102.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1107903	1.20	1263759	87.67	30	120	
Sc	45	1	He	613771	9.67	699622	87.73	30	120	
Sc	45	2	NoGas	4816319	1.03	5515925	87.32	30	120	
Rh	103	1	He	1767945	12.63	2170249	81.46	30	120	
In	115	1	He	1059648	12.48	1314135	80.63	30	120	
Tb	159	1	He	3277178	11.25	3680734	89.04	30	120	
Ho	165	1	He	3368551	11.85	3781772	89.07	30	120	
Bi	209	1	He	2452526	10.58	2765317	88.69	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	121_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:49:04-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.161	19.9	648	18.5	1	
B	11	45	2	NoGas	3.163	7.1	13572	3.6	20	
Na	23	45	1	He	18.665	9.5	39061	4.4	400	
Mg	24	45	1	He	1.862	48.1	3034	19.8	1000	
Al	27	45	1	He	1.457	15.7	1765	5.6	50	
K	39	45	1	He	6.417	24.1	32997	2.1	1000	
Ca	44	45	1	He	29.417	14.5	1881	7.4	1000	
Ti	47	45	1	He	0.119	21.9	33	17.3	20	
V	51	45	1	He	0.043	215.9	451	108.3	2	
Cr	52	45	1	He	0.028	58.1	2062	4.6	2	
Mn	55	45	1	He	0.367	3.4	2857	2.6	2	
Fe	56	45	1	He	24.225	24.6	152690	22.3	50	
Co	59	103	1	He	0.008	31.6	152	18.4	1	
Ni	60	103	1	He	-0.363	-5.8	296	18.4	2	
Cu	63	103	1	He	-0.191	-10.7	2272	5.5	2	
Zn	66	103	1	He	1.353	4.5	4053	1.7	20	
As	75	103	1	He	0.098	1.9	188	1.3	2	
Se	78	103	1	He	0.072	90.5	53	11.9	2	
Sr	88	103	1	He	0.018	30.8	266	16.4	10	
Mo	95	103	1	He	0.941	18.9	3203	18.2	2	
Ag	107	103	1	He	0.016	3.3	214	2.4	0.2	
Cd	111	103	1	He	-0.021	-13.2	1104	0.6	0.2	
Sn	118	115	1	He	0.470	13.5	3149	10.0	10	
Sb	123	115	1	He	0.413	16.9	2232	14.7	1	
Ba	137	115	1	He	0.026	21.7	119	10.6	5	
W	182	209	1	He	1.085	20.3	18170	16.1	10	
Tl	205	209	1	He	0.046	19.4	1682	18.5	0.5	
Pb	208	209	1	He	0.099	1.1	5649	0.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1103117	1.81	1263759	87.29	30	120	
Sc	45	1	He	599421	1.36	699622	85.68	30	120	
Sc	45	2	NoGas	4859137	1.98	5515925	88.09	30	120	
Rh	103	1	He	2025600	0.59	2170249	93.33	30	120	
In	115	1	He	1195482	0.19	1314135	90.97	30	120	
Tb	159	1	He	3547211	0.88	3680734	96.37	30	120	
Ho	165	1	He	3618665	0.53	3781772	95.69	30	120	
Bi	209	1	He	2696764	0.75	2765317	97.52	30	120	

Sample Report

Sample Table

Sample Name	240-49640-j-4-a
Data File Name	122SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:52:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.154	0.154	23.35	552	0.03	10000	
B	11	45	2	NoGas	29.584	29.584	1.89	69883	0.04	300	
Na	23	45	1	He	33444.234	33444.234	2.85	38996877	0.09	500000	
Mg	24	45	1	He	19639.986	19639.986	3.68	12997812	0.15	500000	
Al	27	45	1	He	0.716	0.716	21.28	1356	0.05	200000	
K	39	45	1	He	1448.986	1448.986	3.74	985706	0.15	500000	
Ca	44	45	1	He	55660.624	55660.624	4.02	1991127	2.80	500000	
Ti	47	45	1	He	0.261	0.261	58.86	58	0.45	2500	
V	51	45	1	He	2.598	2.598	3.25	12866	0.02	10000	
Cr	52	45	1	He	1.937	1.937	8.90	12934	0.01	10000	
Mn	55	45	1	He	4.392	4.392	4.13	21985	0.02	10000	
Fe	56	45	1	He	12.618	12.618	9.99	76586	0.02	200000	
Co	59	103	1	He	0.116	0.116	8.54	1057	0.01	10000	
Ni	60	103	1	He	0.460	0.460	3.42	1972	0.02	10000	
Cu	63	103	1	He	0.283	0.283	10.53	4537	0.01	10000	
Zn	66	103	1	He	1.351	1.351	2.65	3380	0.04	10000	
As	75	103	1	He	0.711	0.711	8.12	623	0.11	10000	
Se	78	103	1	He	0.441	0.441	13.47	74	0.59	10000	
Sr	88	103	1	He	84.449	84.449	0.21	539633	0.02	10000	
Mo	95	103	1	He	1.108	1.108	2.14	3141	0.04	2000	
Ag	107	103	1	He	0.021	0.021	9.43	221	0.01	300	
Cd	111	103	1	He	-0.005	-0.005	-467.38	950	0.00	4000	
Sn	118	115	1	He	0.669	0.669	12.27	3564	0.02	2000	
Sb	123	115	1	He	0.423	0.423	4.42	1962	0.02	300	
Ba	137	115	1	He	36.779	36.779	0.88	73572	0.05	10000	
W	182	209	1	He	0.425	0.425	7.99	8569	0.00	2500	
Tl	205	209	1	He	0.020	0.020	6.05	702	0.00	5000	
Pb	208	209	1	He	0.173	0.173	1.12	8227	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	975784	2.25	1263759	77.21	30	120	
Sc	45	1	He	554565	2.39	699622	79.27	30	120	
Sc	45	2	NoGas	4389255	0.55	5515925	79.57	30	120	
Rh	103	1	He	1690388	0.87	2170249	77.89	30	120	
In	115	1	He	1027846	1.10	1314135	78.21	30	120	
Tb	159	1	He	3235471	0.51	3680734	87.90	30	120	
Ho	165	1	He	3332678	0.67	3781772	88.12	30	120	
Bi	209	1	He	2443557	1.20	2765317	88.36	30	120	

Sample Report

Sample Table

Sample Name	240-49640-a-5-a
Data File Name	123SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T21:56:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.183	0.183	32.99	637	0.03	10000	
B	11	45	2	NoGas	30.516	30.516	1.29	71604	0.04	300	
Na	23	45	1	He	34043.509	34043.509	3.03	39783769	0.09	500000	
Mg	24	45	1	He	20111.564	20111.564	1.68	13343562	0.15	500000	
Al	27	45	1	He	3.701	3.701	14.39	2472	0.15	200000	
K	39	45	1	He	1488.964	1488.964	3.11	1014576	0.15	500000	
Ca	44	45	1	He	57481.387	57481.387	3.13	2061212	2.79	500000	
Ti	47	45	1	He	0.317	0.317	34.10	69	0.46	2500	
V	51	45	1	He	2.558	2.558	1.63	12706	0.02	10000	
Cr	52	45	1	He	2.182	2.182	2.70	14395	0.02	10000	
Mn	55	45	1	He	0.120	0.120	23.52	1461	0.01	10000	
Fe	56	45	1	He	7.790	7.790	1.29	49542	0.02	200000	
Co	59	103	1	He	0.112	0.112	5.66	1036	0.01	10000	
Ni	60	103	1	He	2.191	2.191	5.35	5712	0.04	10000	
Cu	63	103	1	He	0.202	0.202	11.62	4165	0.00	10000	
Zn	66	103	1	He	1.476	1.476	2.47	3592	0.04	10000	
As	75	103	1	He	0.759	0.759	5.75	672	0.11	10000	
Se	78	103	1	He	0.434	0.434	22.94	75	0.58	10000	
Sr	88	103	1	He	84.330	84.330	1.18	549302	0.02	10000	
Mo	95	103	1	He	0.997	0.997	2.16	2886	0.03	2000	
Ag	107	103	1	He	0.019	0.019	16.43	209	0.01	300	
Cd	111	103	1	He	-0.004	-0.004	-317.52	970	0.00	4000	
Sn	118	115	1	He	0.344	0.344	14.50	2197	0.02	2000	
Sb	123	115	1	He	0.305	0.305	7.83	1510	0.02	300	
Ba	137	115	1	He	37.375	37.375	0.31	75895	0.05	10000	
W	182	209	1	He	0.276	0.276	11.92	6735	0.00	2500	
Tl	205	209	1	He	0.013	0.013	12.51	480	0.00	5000	
Pb	208	209	1	He	0.140	0.140	3.44	6790	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	970889	0.72	1263759	76.83	30	120	
Sc	45	1	He	555832	2.43	699622	79.45	30	120	
Sc	45	2	NoGas	4369987	0.22	5515925	79.22	30	120	
Rh	103	1	He	1723238	0.85	2170249	79.40	30	120	
In	115	1	He	1043462	0.24	1314135	79.40	30	120	
Tb	159	1	He	3278460	0.70	3680734	89.07	30	120	
Ho	165	1	He	3376975	0.67	3781772	89.30	30	120	
Bi	209	1	He	2425642	1.43	2765317	87.72	30	120	

Sample Report

Sample Table

Sample Name	240-49640-a-6-a
Data File Name	124SMPL.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T22:00:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.097	0.097	40.87	404	0.02	10000	
B	11	45	2	NoGas	5.977	5.977	4.86	19385	0.03	300	
Na	23	45	1	He	49.661	49.661	1.71	78218	0.06	500000	
Mg	24	45	1	He	1.298	1.298	21.20	2637	0.05	500000	
Al	27	45	1	He	0.566	0.566	33.92	1406	0.04	200000	
K	39	45	1	He	3.064	3.064	42.53	30619	0.01	500000	
Ca	44	45	1	He	-2.240	-2.240	-131.60	660	-0.34	500000	
Ti	47	45	1	He	0.081	0.081	109.67	26	0.32	2500	
V	51	45	1	He	-0.126	-0.126	-130.10	-445	0.03	10000	
Cr	52	45	1	He	0.848	0.848	2.12	7189	0.01	10000	
Mn	55	45	1	He	0.009	0.009	103.29	999	0.00	10000	
Fe	56	45	1	He	3.306	3.306	5.93	26265	0.01	200000	
Co	59	103	1	He	0.012	0.012	15.60	181	0.01	10000	
Ni	60	103	1	He	-0.293	-0.293	-7.36	451	-0.07	10000	
Cu	63	103	1	He	-0.075	-0.075	-46.25	2920	0.00	10000	
Zn	66	103	1	He	1.438	1.438	4.82	4002	0.04	10000	
As	75	103	1	He	0.298	0.298	10.46	355	0.08	10000	
Se	78	103	1	He	0.127	0.127	50.54	56	0.23	10000	
Sr	88	103	1	He	0.034	0.034	21.32	368	0.01	10000	
Mo	95	103	1	He	0.215	0.215	4.82	739	0.03	2000	
Ag	107	103	1	He	0.012	0.012	7.91	158	0.01	300	
Cd	111	103	1	He	-0.040	-0.040	-33.22	1022	0.00	4000	
Sn	118	115	1	He	0.346	0.346	11.44	2400	0.01	2000	
Sb	123	115	1	He	0.311	0.311	2.38	1666	0.02	300	
Ba	137	115	1	He	0.192	0.192	9.09	481	0.04	10000	
W	182	209	1	He	0.093	0.093	25.43	4997	0.00	2500	
Tl	205	209	1	He	0.004	0.004	18.06	229	0.00	5000	
Pb	208	209	1	He	0.143	0.143	2.10	7576	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1050326	0.21	1263759	83.11	30	120	
Sc	45	1	He	599831	2.69	699622	85.74	30	120	
Sc	45	2	NoGas	4623750	0.73	5515925	83.83	30	120	
Rh	103	1	He	1943667	0.82	2170249	89.56	30	120	
In	115	1	He	1134288	0.10	1314135	86.31	30	120	
Tb	159	1	He	3425470	1.16	3680734	93.06	30	120	
Ho	165	1	He	3529516	0.37	3781772	93.33	30	120	
Bi	209	1	He	2655404	0.03	2765317	96.03	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	125_CCV.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T22:04:23-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.757	1.966	170037	1.81	50	99.5	89.5	110.5	
B	11	45	2	NoGas	53.945	1.301	133153	1.19	50	107.9	89.5	110.5	
Na	23	45	1	He	24929.873	4.168	32679378	1.09	25000	99.7	89.5	110.5	
Mg	24	45	1	He	25351.579	4.426	18858525	1.00	25000	101.4	89.5	110.5	
Al	27	45	1	He	245.500	4.694	104061	0.57	250	98.2	89.5	110.5	
K	39	45	1	He	24574.646	5.537	18315036	1.28	25000	98.3	89.5	110.5	
Ca	44	45	1	He	23857.969	4.590	959829	0.67	25000	95.4	89.5	110.5	
Ti	47	45	1	He	48.885	3.714	10593	1.53	50	97.8	89.5	110.5	
V	51	45	1	He	48.813	4.545	267480	1.54	50	97.6	89.5	110.5	
Cr	52	45	1	He	49.762	3.974	325402	1.35	50	99.5	89.5	110.5	
Mn	55	45	1	He	235.863	3.717	1275415	1.52	250	94.3	89.5	110.5	
Fe	56	45	1	He	12498.240	4.422	78716557	0.79	12500	100.0	89.5	110.5	
Co	59	103	1	He	47.716	1.774	458449	1.48	50	95.4	89.5	110.5	
Ni	60	103	1	He	47.593	1.180	112570	0.58	50	95.2	89.5	110.5	
Cu	63	103	1	He	47.869	1.161	301483	0.90	50	95.7	89.5	110.5	
Zn	66	103	1	He	48.181	0.318	63349	0.48	50	96.4	89.5	110.5	
As	75	103	1	He	47.850	0.870	40749	1.11	50	95.7	89.5	110.5	
Se	78	103	1	He	48.114	0.065	4433	0.60	50	96.2	89.5	110.5	
Sr	88	103	1	He	47.312	1.064	337553	0.66	50	94.6	89.5	110.5	
Mo	95	103	1	He	50.276	2.229	157046	1.78	50	100.6	89.5	110.5	
Ag	107	103	1	He	49.425	1.405	536359	1.08	50	98.9	89.5	110.5	
Cd	111	103	1	He	49.551	1.224	96453	0.83	50	99.1	89.5	110.5	
Sn	118	115	1	He	49.564	0.417	235114	0.29	50	99.1	89.5	110.5	
Sb	123	115	1	He	51.540	0.557	228072	0.11	50	103.1	89.5	110.5	
Ba	137	115	1	He	50.081	1.415	109983	1.08	50	100.2	89.5	110.5	
W	182	209	1	He	49.989	2.140	626780	0.22	50	100.0	89.5	110.5	
Tl	205	209	1	He	48.399	4.164	1606127	2.62	50	96.8	89.5	110.5	
Pb	208	209	1	He	48.352	0.859	2112380	1.18	50	96.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1068824	1.05	1263759	84.58	30	120	
Sc	45	1	He	624014	5.31	699622	89.19	30	120	
Sc	45	2	NoGas	4750923	0.30	5515925	86.13	30	120	
Rh	103	1	He	1887166	0.63	2170249	86.96	30	120	
In	115	1	He	1128720	0.48	1314135	85.89	30	120	
Tb	159	1	He	3468988	0.90	3680734	94.25	30	120	
Ho	165	1	He	3559023	1.52	3781772	94.11	30	120	
Bi	209	1	He	2547441	2.03	2765317	92.12	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	126_CCB.d
Data Path Name	D:\Analytical Runs\I10042715B.b
Acq Date Time	2015-04-27T22:08:13-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.081	24.2	370	19.5	1	
B	11	45	2	NoGas	2.193	10.8	11082	4.4	20	
Na	23	45	1	He	16.860	12.2	35676	5.5	400	
Mg	24	45	1	He	1.887	43.5	2960	17.5	1000	
Al	27	45	1	He	1.621	9.8	1777	5.5	50	
K	39	45	1	He	8.244	32.7	33265	3.9	1000	
Ca	44	45	1	He	28.788	6.6	1801	2.1	1000	
Ti	47	45	1	He	0.042	82.2	17	40.0	20	
V	51	45	1	He	0.056	159.2	502	88.7	2	
Cr	52	45	1	He	0.031	8.3	2016	2.9	2	
Mn	55	45	1	He	0.345	7.8	2665	4.9	2	
Fe	56	45	1	He	26.271	25.0	160006	22.4	50	
Co	59	103	1	He	0.004	43.8	101	14.9	1	
Ni	60	103	1	He	-0.372	-2.9	264	11.3	2	
Cu	63	103	1	He	-0.217	-5.6	2038	3.3	2	
Zn	66	103	1	He	1.384	4.1	3986	1.3	20	
As	75	103	1	He	0.085	27.8	171	12.7	2	
Se	78	103	1	He	0.103	62.6	55	11.3	2	
Sr	88	103	1	He	0.014	52.1	226	22.4	10	
Mo	95	103	1	He	0.966	19.9	3195	18.3	2	
Ag	107	103	1	He	0.016	29.0	204	24.0	0.2	
Cd	111	103	1	He	-0.006	-157.6	1105	1.6	0.2	
Sn	118	115	1	He	0.452	11.9	3004	8.3	10	
Sb	123	115	1	He	0.407	8.4	2169	7.1	1	
Ba	137	115	1	He	0.027	53.1	121	27.6	5	
W	182	209	1	He	1.156	16.4	18864	13.4	10	
Tl	205	209	1	He	0.050	29.5	1801	28.5	0.5	
Pb	208	209	1	He	0.064	3.5	3998	2.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1113854	1.59	1263759	88.14	30	120	
Sc	45	1	He	581484	2.15	699622	83.11	30	120	
Sc	45	2	NoGas	4794466	0.73	5515925	86.92	30	120	
Rh	103	1	He	1971564	1.39	2170249	90.85	30	120	
In	115	1	He	1174828	0.48	1314135	89.40	30	120	
Tb	159	1	He	3443735	0.55	3680734	93.56	30	120	
Ho	165	1	He	3580581	1.06	3781772	94.68	30	120	
Bi	209	1	He	2661893	0.35	2765317	96.26	30	120	

MTMSCCBDILH20-195 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/28/15 Analyst: AS Instrument: I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within coutrol limits? (*ICV:* = 90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

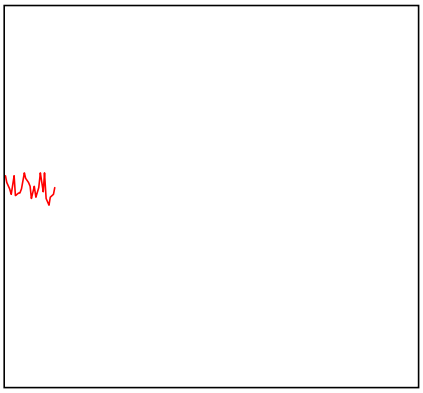
Level I Analyst: Anjali Sharma Date: 4/28/15 Time: 11:32 – 15:42
Level I Analyst: Date: Time:

Level II Reviewer: Date: 4/28/15 Time: 11:32 - 15:42
Level II Reviewer: Date: Time:

Comments:

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1046	1044.3	4.67
51	100	44	42.6	24.39
52	200	88	95.7	13.11
51/59	10	4.205 %	4.083 %	23.53
52/59	20	8.411 %	9.202 %	15.30
7	50	16	12.3	42.48
89	2000	1396	1318.8	4.71
205	5000	3280	3265.2	2.99
6	20	3	1.2	96.23
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

US EPA Tune Check Sample Report

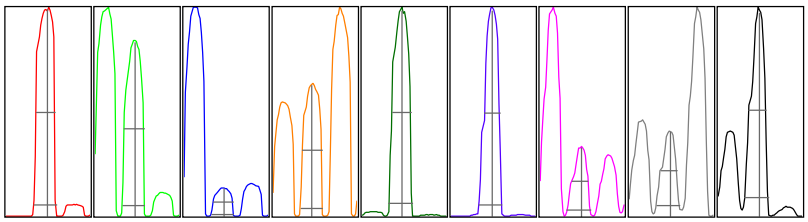
Batch Folder D:\Analytical Runs\I10042815A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	26808	1.36	5.00	
24	95703	0.93	5.00	
25	12904	0.72	5.00	
26	15055	1.27	5.00	
59	144118	0.82	5.00	
115	276194	0.82	5.00	
206	105047	0.62	5.00	
207	95124	0.50	5.00	
208	219613	1.00	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	26992	26210	27097	26720	27023
24	97281	95308	95497	95296	95136
25	12891	12825	12979	12808	13018
26	15113	14928	15367	14948	14921
59	143379	142832	145139	143674	145567
115	275918	273824	277915	274270	279040
206	105444	104867	105529	103988	105409
207	95478	94852	95340	94424	95529
208	219002	218383	221483	216962	222233

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	4202	9.00	8.9 - 9.1		0.782	0.850	
24	15289	23.95	23.9 - 24.1		0.784	0.850	
25	2048	24.95	24.9 - 25.1		0.787	0.850	
26	2377	25.90	25.9 - 26.1		0.786	0.850	
59	23078	58.95	58.9 - 59.1		0.816	0.850	
115	48535	115.00	114.9 - 115.1		0.808	0.850	
206	18289	206.00	205.9 - 206.1		0.817	0.850	
207	16211	207.00	206.9 - 207.1		0.816	0.850	
208	39353	208.00	207.9 - 208.1		0.811	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

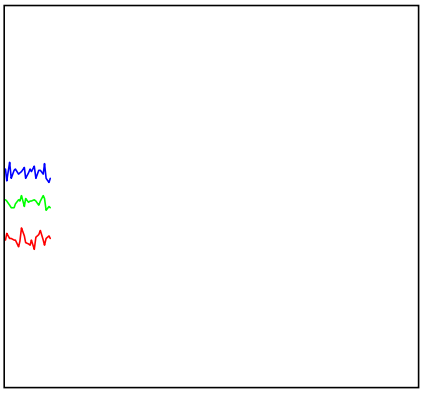
Cell Parameters

US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	1943	1932.9	3.48
89	10000	4691	4837.1	2.19
205	10000	5470	5628.1	2.48
156/140	2	0.845 %	0.837 %	15.97
70/140	2	0.935 %	1.006 %	14.16
115	50	29	26.2	30.82
63	2000	1265	1211.5	4.26
60	500	158	213.4	15.62
121	100	41	34.8	25.06
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

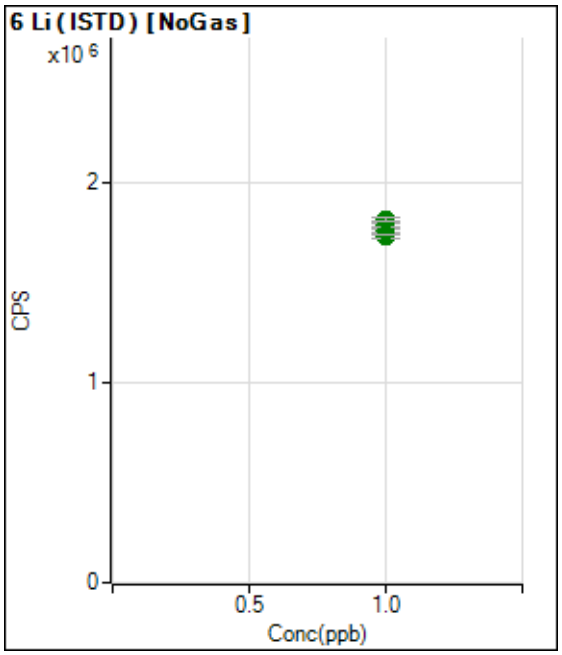
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

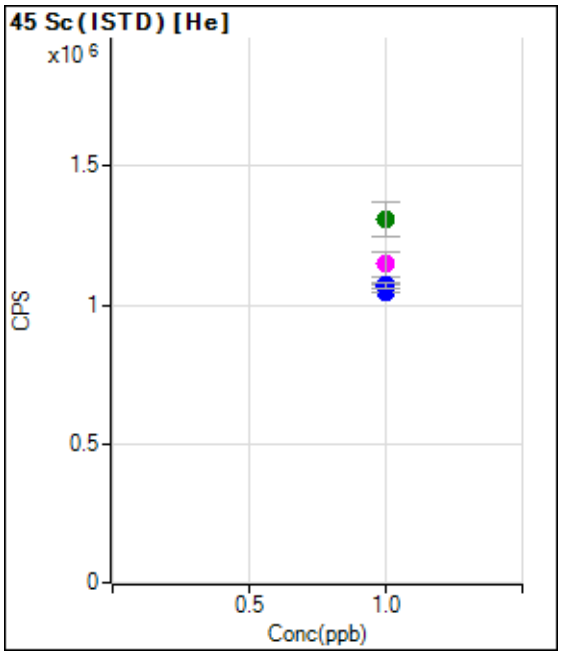
Calibration for 013_CCB.d

Batch Folder: D:\Analytical Runs\I10042815C.b\
Analysis File: I10042815C.batch.bin
DA Date-Time: 4/28/2015 12:20:04 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

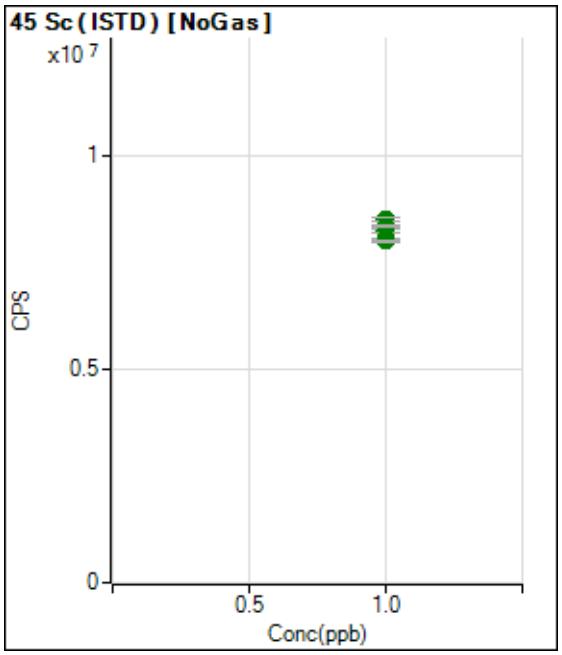
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/28/2015 11:36:07 AM
2	003CALS.d	STD1-1906323	4/28/2015 11:39:58 AM
3	004CALS.d	STD2-1904110	4/28/2015 11:43:47 AM
4	005CALS.d	STD3-1906333	4/28/2015 11:47:36 AM
5	006CALS.d	STD4-1906536	4/28/2015 11:51:20 AM



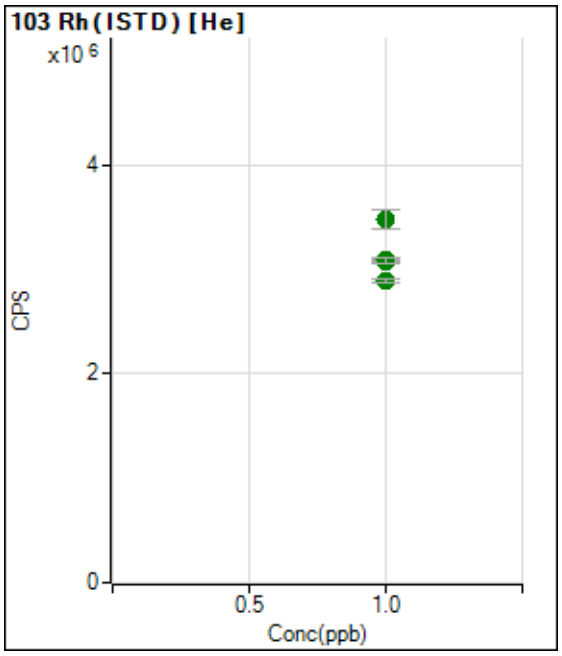
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1729956.15		A	1.7
2	☐	1.000		1752847.12		A	1.5
3	☐	1.000		1809070.55		A	2.0
4	☐	1.000		1788351.62		A	1.6
5	☐	1.000		1811248.90		A	1.2



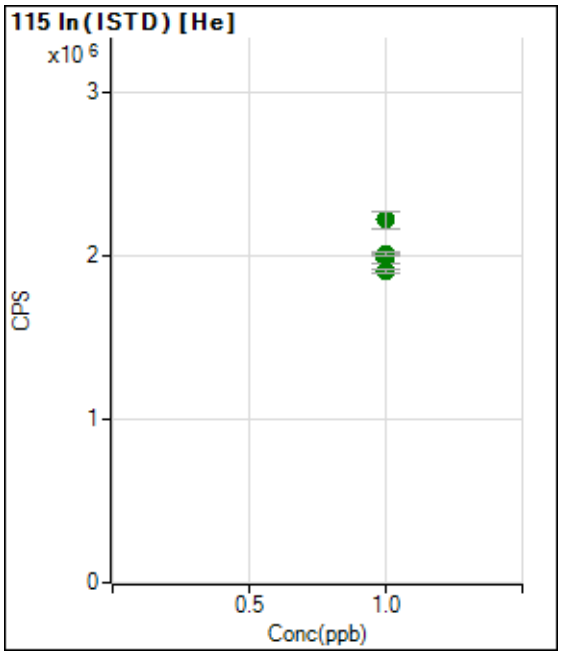
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1045873.45		P	0.5
2	☐	1.000		1068201.65		P	1.5
3	☐	1.000		1148490.48		M	8.0
4	☐	1.000		1071349.59		P	1.8
5	☐	1.000		1306222.32		A	9.6



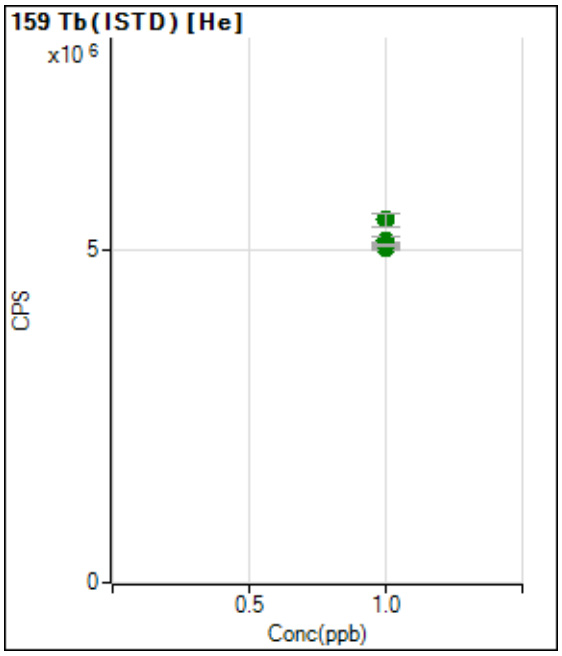
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		8041241.07		A	0.6
2	☐	1.000		8223474.67		A	1.4
3	☐	1.000		8480977.44		A	0.9
4	☐	1.000		8334682.17		A	0.5
5	☐	1.000		7987039.41		A	0.2



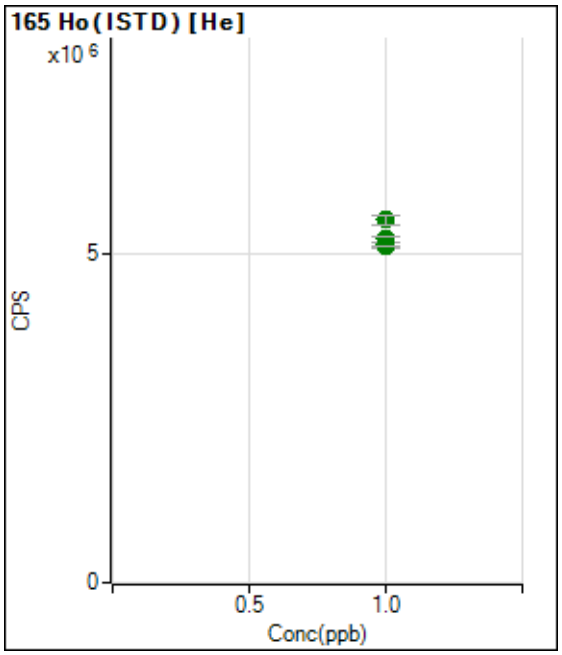
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3067945.57		A	1.4
2	☐	1.000		3067096.06		A	1.0
3	☐	1.000		3086914.53		A	2.0
4	☐	1.000		2889294.74		A	1.1
5	☐	1.000		3472422.64		A	5.4



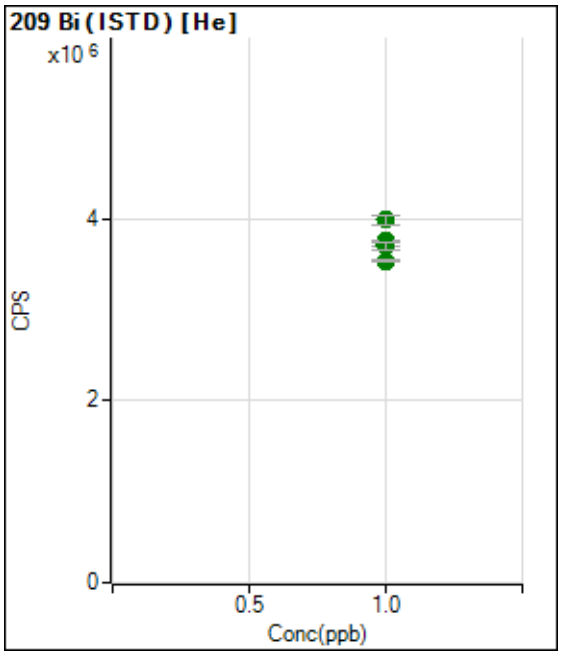
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1978772.15		A	2.0
2	☐	1.000		1986211.70		A	2.8
3	☐	1.000		2015769.81		A	1.1
4	☐	1.000		1908885.61		A	0.9
5	☐	1.000		2222143.76		A	4.9



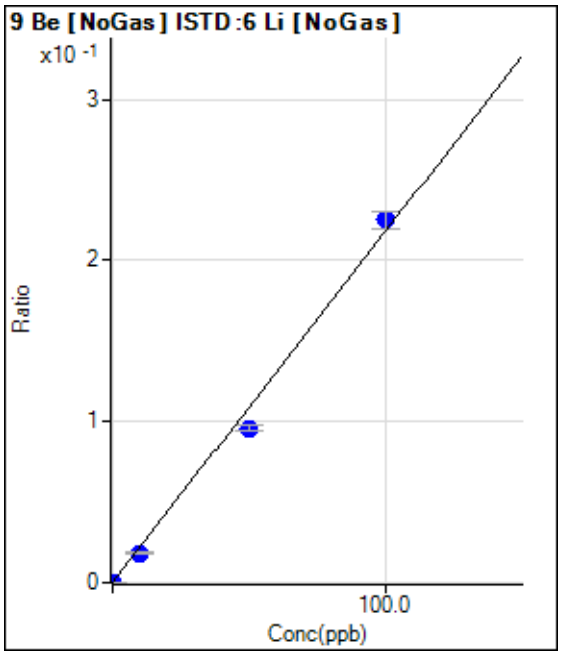
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5013528.97		A	0.4
2	☐	1.000		5081680.63		A	0.8
3	☐	1.000		5146691.32		A	1.5
4	☐	1.000		5071302.99		A	0.3
5	☐	1.000		5449425.75		A	3.8



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5115781.32		A	0.2
2	☐	1.000		5165339.38		A	0.9
3	☐	1.000		5235488.82		A	1.7
4	☐	1.000		5134278.69		A	0.3
5	☐	1.000		5529301.45		A	2.7



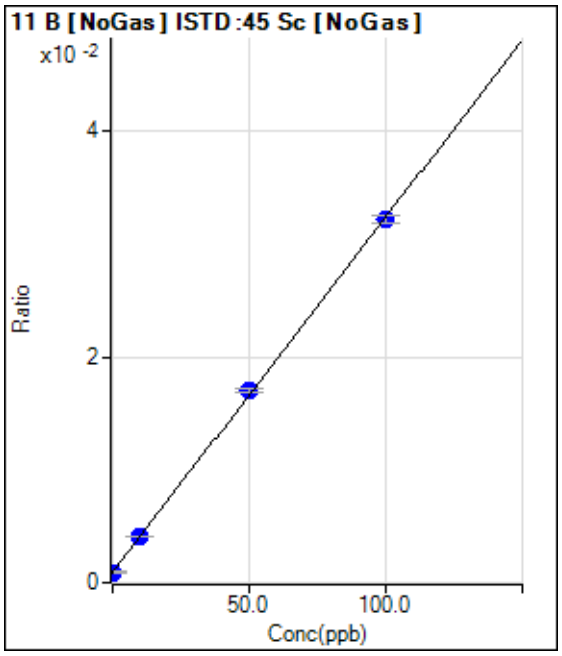
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3723642.91		A	0.9
2	☐	1.000		3755227.07		A	0.8
3	☐	1.000		3700168.74		A	2.1
4	☐	1.000		3536229.30		A	0.7
5	☐	1.000		3986621.78		A	2.8



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	311.13	0.0002	P	38.4
2	☐	10.000	8.372	32295.62	0.0184	P	3.9
3	☐	50.000	43.816	173047.39	0.0957	P	3.4
4	☐	100.000	103.255	402688.61	0.2252	P	4.6
5	☐			429.65	0.0002	P	19.7

y = 0.0022 * x + 1.8035E-004
R = 0.9969
DL = 0.09524
BEC = 0.08274

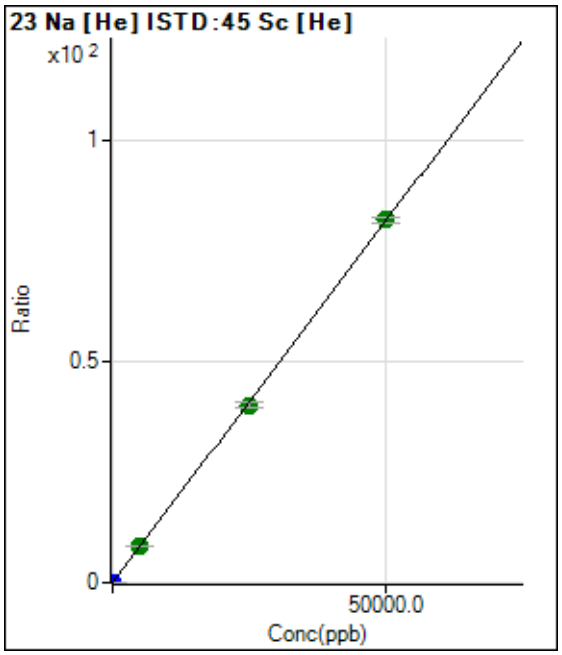
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7335.10	0.0009	P	9.4
2	☐	10.000	10.132	33694.71	0.0041	P	2.5
3	☐	50.000	51.323	144539.25	0.0170	P	2.8
4	☐			8376.29	0.0010	P	3.8
5	☐	100.000	99.326	256667.99	0.0321	P	2.0

y = 3.1435E-004 * x + 9.1204E-004
R = 0.9998
DL = 0.8191
BEC = 2.901

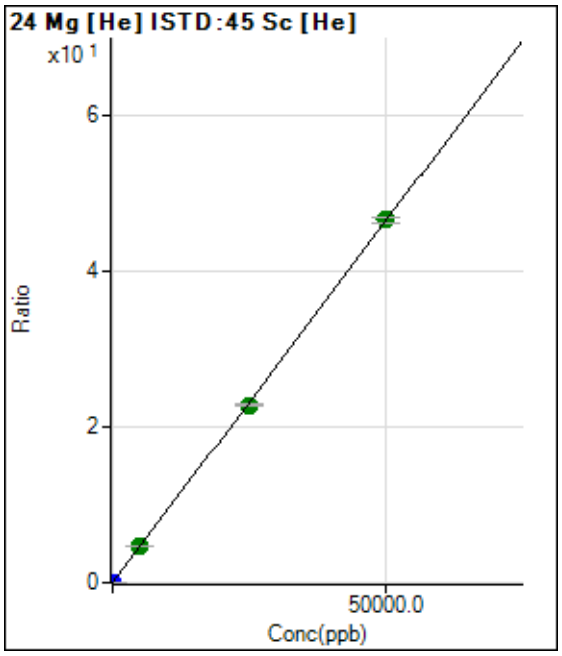
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22303.29	0.0213	P	3.0
2	☐	5000.000	5013.087	8780379.97	8.2205	A	0.9
3	☐	25000.000	24592.021	46134574.09	40.2429	A	3.5
4	☐	50000.000	50202.681	87976342.80	82.1305	A	1.4
5	☐			46167.44	0.0353	P	5.2

y = 0.0016 * x + 0.0213
R = 0.9999
DL = 1.179
BEC = 13.04

Weight: <None>
Min Conc: <None>

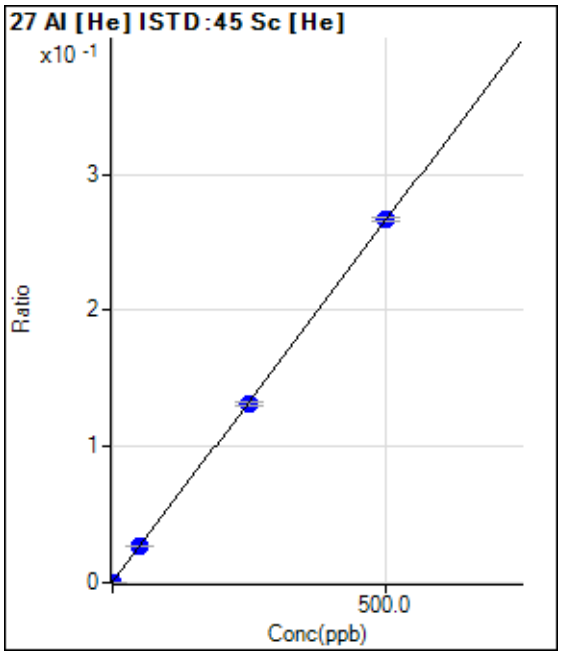


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1485.33	0.0014	P	3.0
2	☐	5000.000	5116.224	5075040.54	4.7509	A	2.0
3	☐	25000.000	24540.184	26145648.03	22.7826	A	1.5
4	☐	50000.000	50218.286	49936218.39	46.6201	A	1.8
5	☐			6812.71	0.0052	P	9.6

y = 9.2832E-004 * x + 0.0014
R = 0.9999
DL = 0.1391
BEC = 1.53

Weight: <None>
Min Conc: <None>

Calibration for 013_CCB.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	655.58	0.0006	P	4.1
2	☐	50.000	49.643	28764.64	0.0269	P	2.5
3	☐	250.000	247.101	150983.34	0.1316	P	1.7
4	☐	500.000	501.485	285349.62	0.2664	P	1.2
5	☐			2119.05	0.0016	P	4.0

y = 5.2994E-004 * x + 6.2675E-004

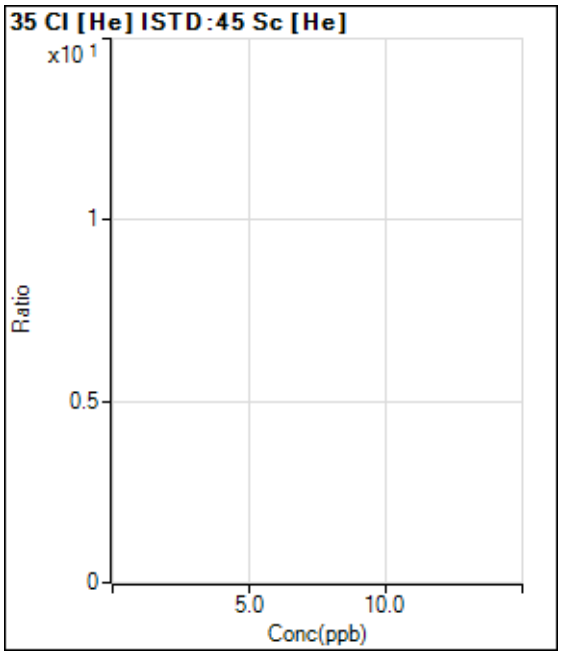
R = 1.0000

DL = 0.147

BEC = 1.183

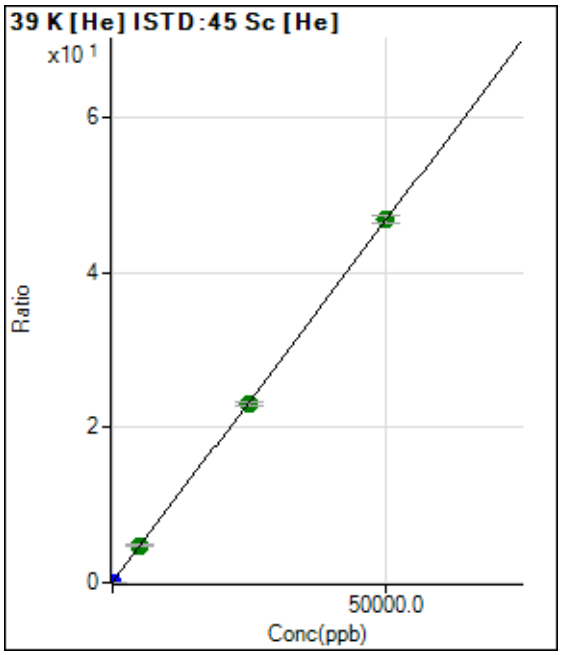
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			13514623.54	12.9217	A	0.5
2	☐			14067811.02	13.1705	A	0.7
3	☐			14914827.19	13.0069	A	3.0
4	☐			13809023.06	12.8934	A	2.7
5	☐			17622409.49	13.4909	A	2.6

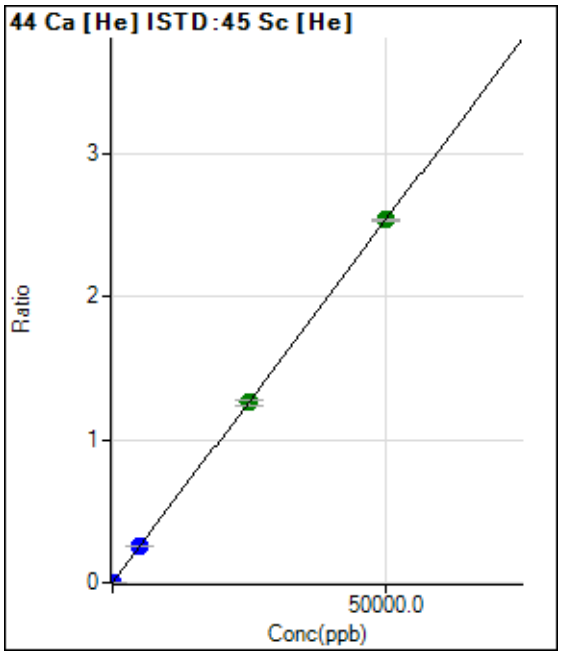
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	40442.42	0.0387	P	2.2
2	☐	5000.000	5119.138	5147060.10	4.8192	A	2.0
3	☐	25000.000	24712.187	26509817.47	23.1162	A	2.8
4	☐	50000.000	50131.993	50186677.64	46.8546	A	2.1
5	☐			61494.09	0.0469	P	5.0

y = 9.3385E-004 * x + 0.0387
R = 1.0000
DL = 2.79
BEC = 41.41

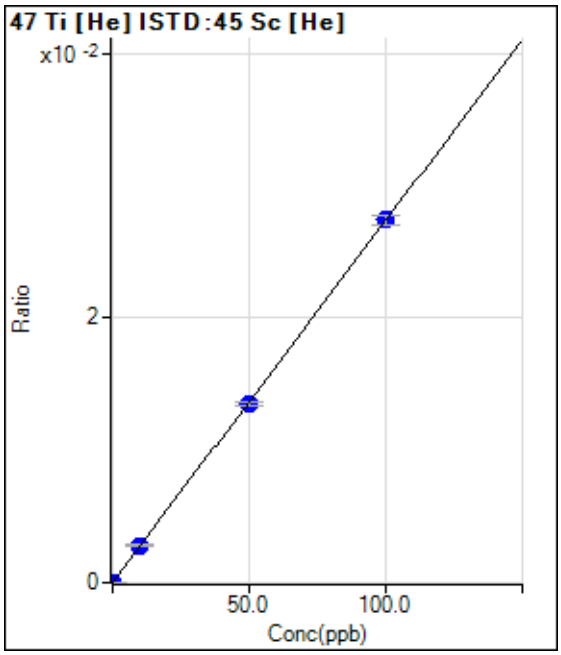
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	567.83	0.0005	P	15.1
2	☐	5000.000	4976.958	270205.90	0.2530	P	0.7
3	☐	25000.000	24887.624	1447545.95	1.2627	A	3.5
4	☐	50000.000	50058.492	2720376.30	2.5393	A	0.4
5	☐			951.96	0.0007	P	8.9

y = 5.0716E-005 * x + 5.4281E-004
R = 1.0000
DL = 4.853
BEC = 10.7

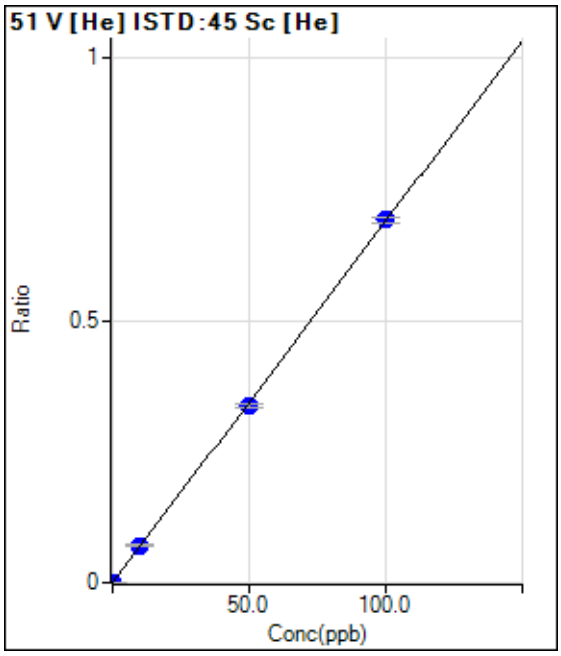
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.89	0.0000	P	94.1
2	☐	10.000	10.310	3020.29	0.0028	P	3.4
3	☐	50.000	49.481	15542.44	0.0135	P	2.2
4	☐			30.00	0.0000	P	39.8
5	☐	100.000	100.229	35789.29	0.0274	P	2.8

y = 2.7336E-004 * x + 8.4797E-006
R = 1.0000
DL = 0.08758
BEC = 0.03102

Weight: <None>
Min Conc: <None>

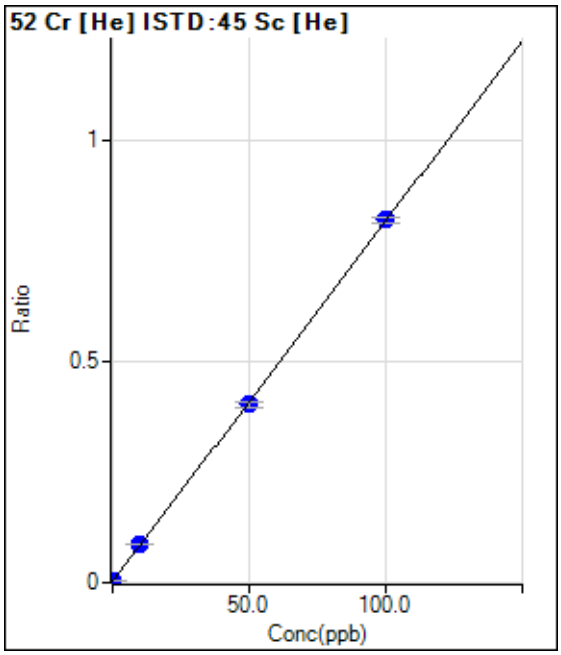


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-209.86	-0.0002	P	-149.2
2	☐	10.000	10.305	75548.63	0.0707	P	2.3
3	☐	50.000	48.994	386438.26	0.3370	P	3.1
4	☐	100.000	100.473	740614.06	0.6913	P	1.3
5	☐			211.76	0.0001	P	450.8

y = 0.0069 * x - 1.9962E-004
R = 0.9999
DL = 0.1298
BEC = -0.029

Weight: <None>
Min Conc: <None>

Calibration for 013_CCB.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2323.51	0.0022	P	3.0
2	☐	10.000	10.319	92108.49	0.0862	P	2.2
3	☐	50.000	49.159	461503.30	0.4025	P	2.9
4	☐	100.000	100.389	877876.98	0.8195	P	1.3
5	☐			4800.72	0.0037	P	2.4

y = 0.0081 * x + 0.0022

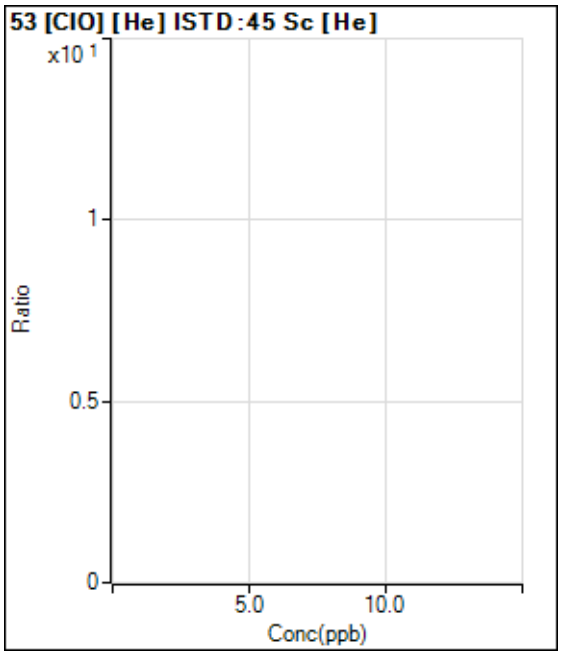
R = 0.9999

DL = 0.02485

BEC = 0.2729

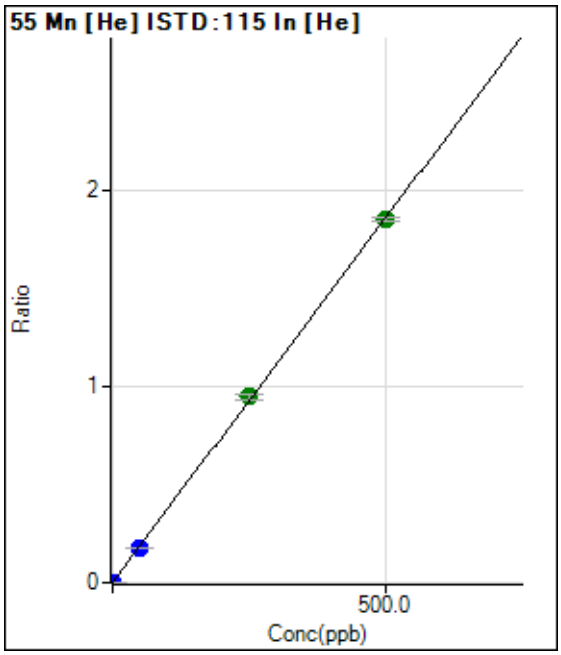
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1040.83	0.0010	P	6.6
2	☐			11485.68	0.0108	P	0.9
3	☐			57229.23	0.0499	P	3.0
4	☐			109428.13	0.1022	P	3.8
5	☐			1351.97	0.0010	P	13.6

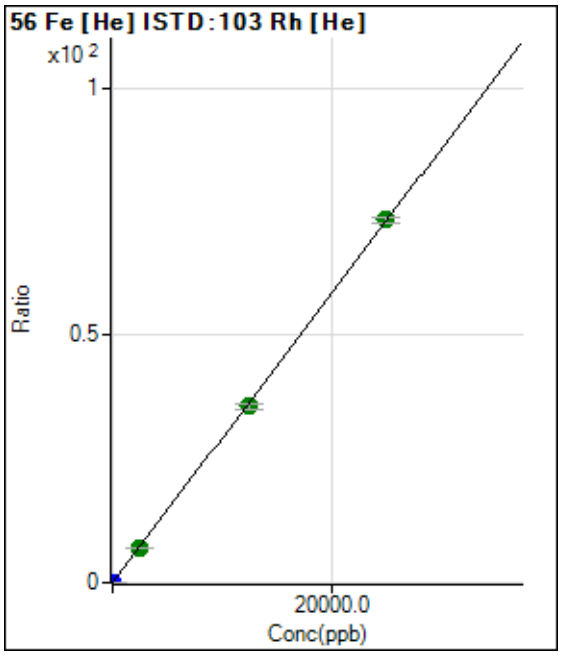
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	835.59	0.0004	P	11.1
2	☐	50.000	48.083	356063.54	0.1793	P	1.3
3	☐	250.000	255.081	1913977.63	0.9494	A	2.7
4	☐	500.000	497.651	3534734.72	1.8518	A	1.2
5	☐			1984.59	0.0009	P	3.0

y = 0.0037 * x + 4.2212E-004
R = 0.9999
DL = 0.03765
BEC = 0.1135

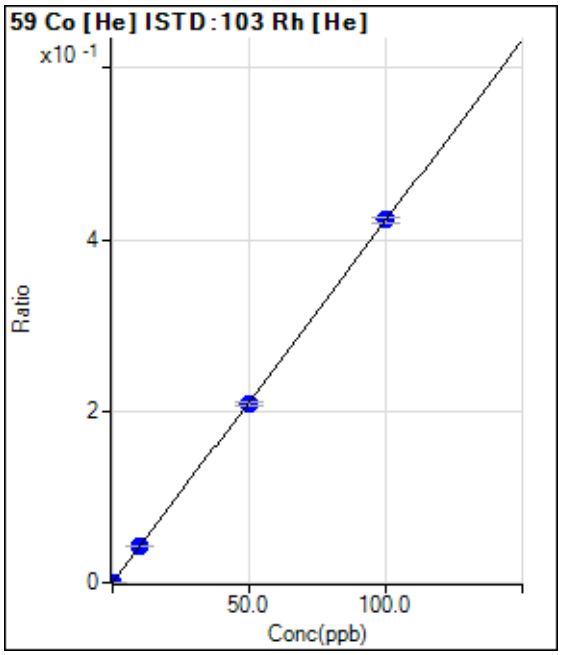
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14131.19	0.0046	P	4.1
2	☐	2500.000	2419.771	21665588.03	7.0641	A	1.2
3	☐	12500.000	12223.660	110143751.18	35.6662	A	3.0
4	☐	25000.000	25146.193	211952244.91	73.3668	A	1.8
5	☐			303802.19	0.0874	P	20.8

y = 0.0029 * x + 0.0046
R = 0.9999
DL = 0.1965
BEC = 1.579

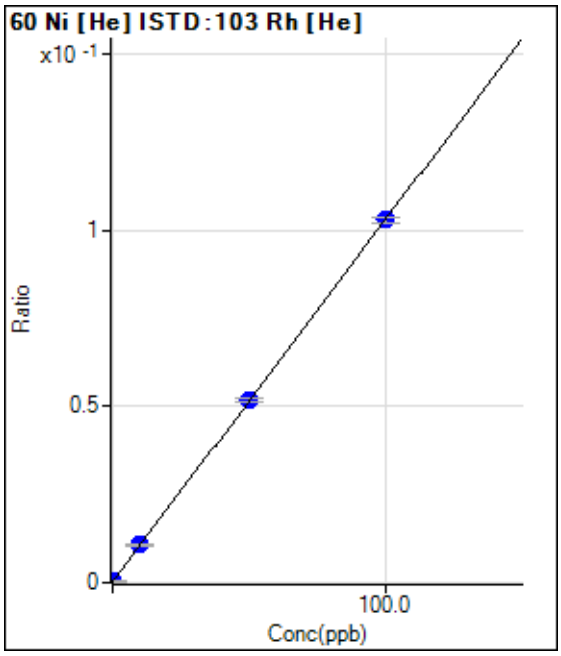
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	70.00	0.0000	P	26.7
2	☐	10.000	9.917	128418.24	0.0419	P	1.1
3	☐	50.000	49.448	644404.11	0.2087	P	2.9
4	☐	100.000	100.284	1222558.15	0.4232	P	1.4
5	☐			221.11	0.0001	P	13.1

y = 0.0042 * x + 2.2871E-005
R = 1.0000
DL = 0.004339
BEC = 0.00542

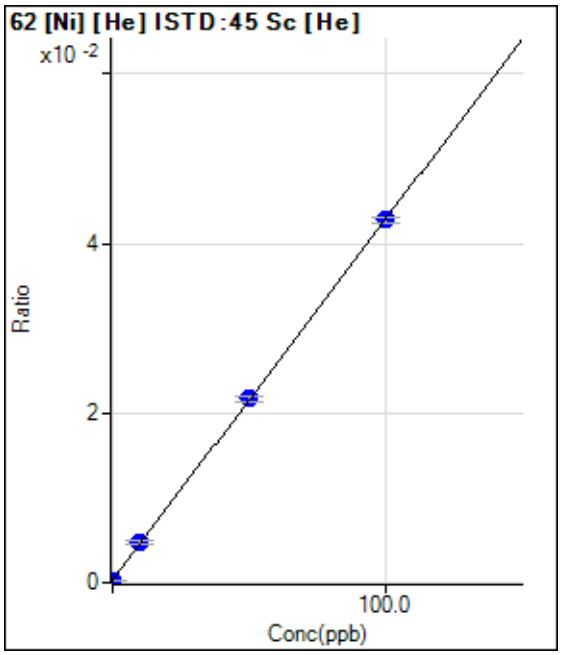
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	875.59	0.0003	P	10.7
2	☐	10.000	10.116	32785.63	0.0107	P	2.0
3	☐	50.000	50.140	160090.66	0.0518	P	2.4
4	☐	100.000	99.918	297648.49	0.1030	P	1.7
5	☐			1145.61	0.0003	P	8.2

y = 0.0010 * x + 2.8566E-004
R = 1.0000
DL = 0.08888
BEC = 0.2778

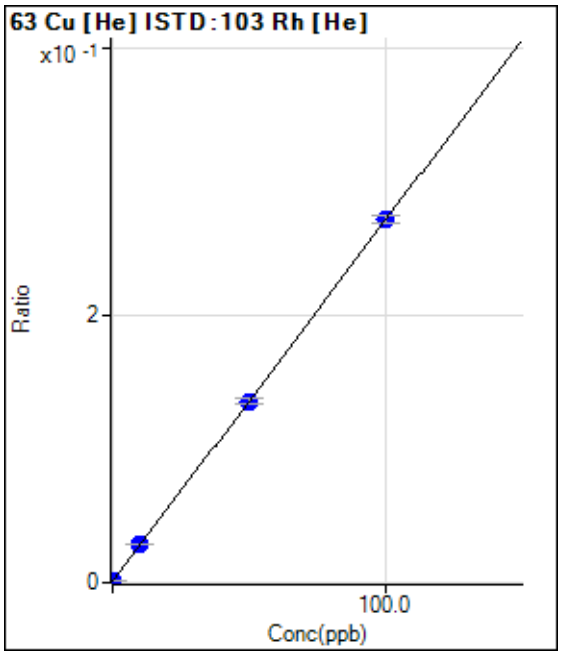
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	328.90	0.0003	P	14.3
2	☐	10.000	10.672	5180.82	0.0049	P	9.2
3	☐	50.000	50.176	24822.86	0.0217	P	4.1
4	☐	100.000	99.845	45831.63	0.0428	P	1.8
5	☐			415.56	0.0003	P	2.8

y = 4.2540E-004 * x + 3.1461E-004
R = 1.0000
DL = 0.3164
BEC = 0.7396

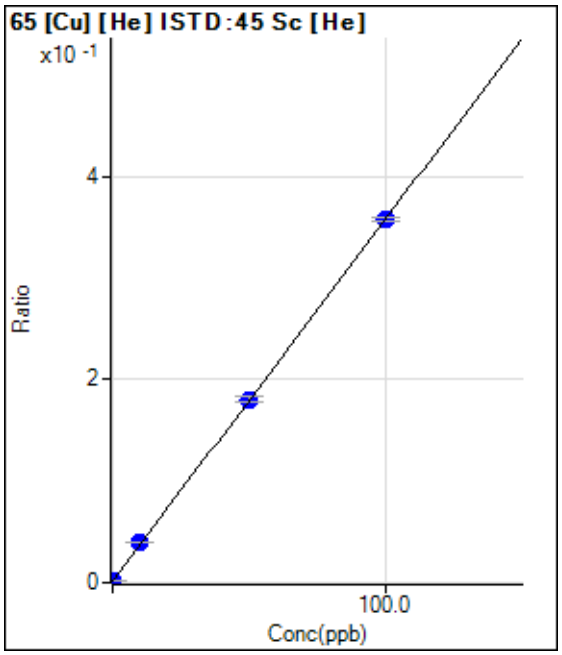
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3801.56	0.0012	P	4.2
2	☐	10.000	10.198	88268.79	0.0288	P	0.5
3	☐	50.000	49.816	419260.27	0.1358	P	2.7
4	☐	100.000	100.072	784292.35	0.2715	P	2.1
5	☐			4123.87	0.0012	P	5.0

y = 0.0027 * x + 0.0012
R = 1.0000
DL = 0.05778
BEC = 0.4587

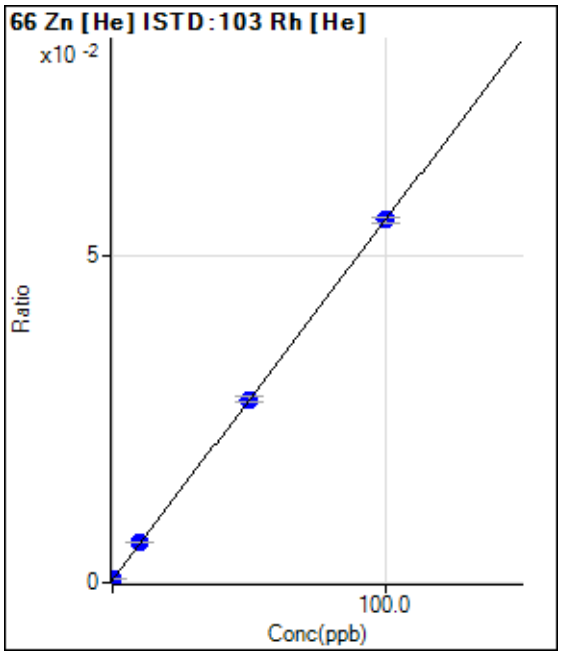
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1803.45	0.0017	P	5.6
2	☐	10.000	10.863	43227.56	0.0405	P	0.8
3	☐	50.000	50.266	207518.61	0.1810	P	3.2
4	☐	100.000	99.781	383058.70	0.3576	P	1.2
5	☐			1922.36	0.0015	P	10.2

y = 0.0036 * x + 0.0017
R = 1.0000
DL = 0.08178
BEC = 0.4836

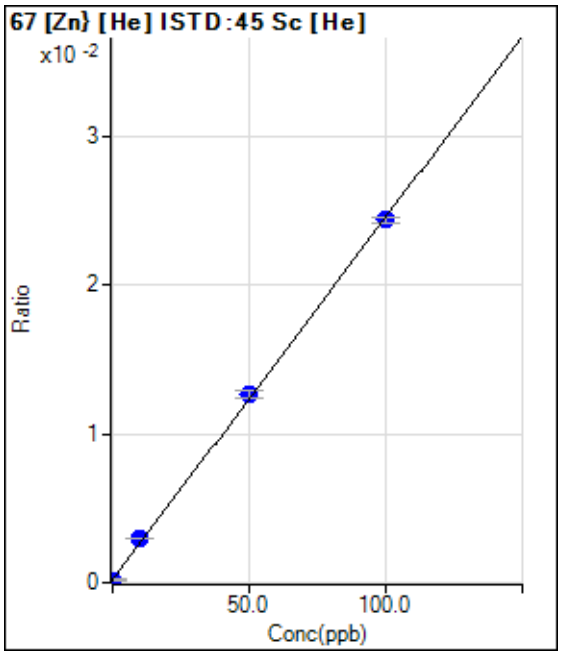
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1447.86	0.0005	P	7.8
2	☐	10.000	10.210	18714.38	0.0061	P	1.5
3	☐	50.000	50.020	86623.26	0.0281	P	3.2
4	☐	100.000	99.969	160597.44	0.0556	P	1.7
5	☐			1708.99	0.0005	P	10.6

y = 5.5136E-004 * x + 4.7184E-004
R = 1.0000
DL = 0.2006
BEC = 0.8558

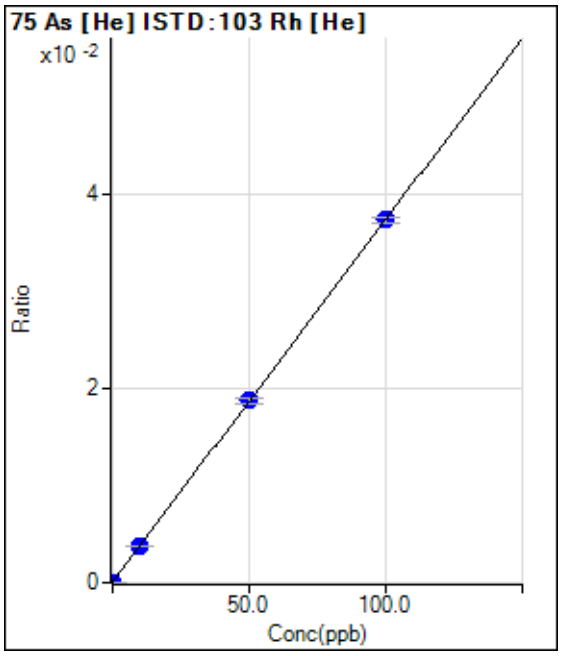
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	197.78	0.0002	P	29.1
2	☐	10.000	11.199	3113.65	0.0029	P	0.5
3	☐	50.000	51.058	14454.89	0.0126	P	4.4
4	☐	100.000	99.351	26101.36	0.0244	P	1.9
5	☐			255.56	0.0002	P	20.0

y = 2.4337E-004 * x + 1.8928E-004
R = 0.9999
DL = 0.6799
BEC = 0.7778

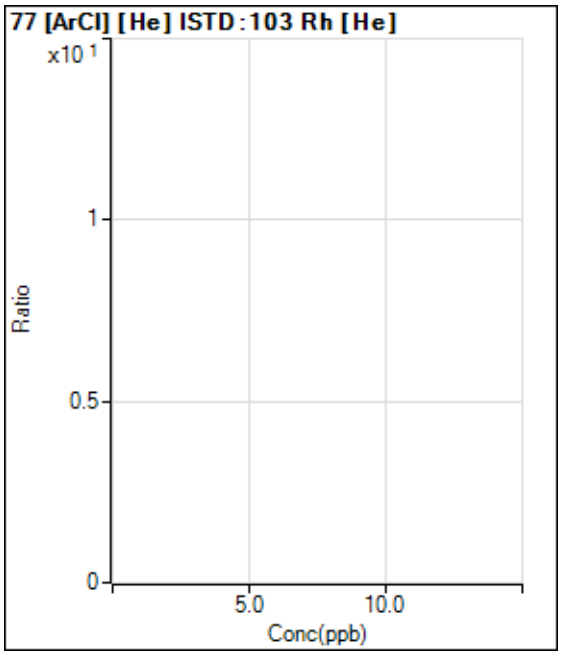
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	141.69	0.0000	P	17.4
2	☐	10.000	9.882	11437.87	0.0037	P	0.9
3	☐	50.000	50.027	57716.11	0.0187	P	2.7
4	☐	100.000	99.998	107799.00	0.0373	P	1.3
5	☐			699.22	0.0002	P	6.0

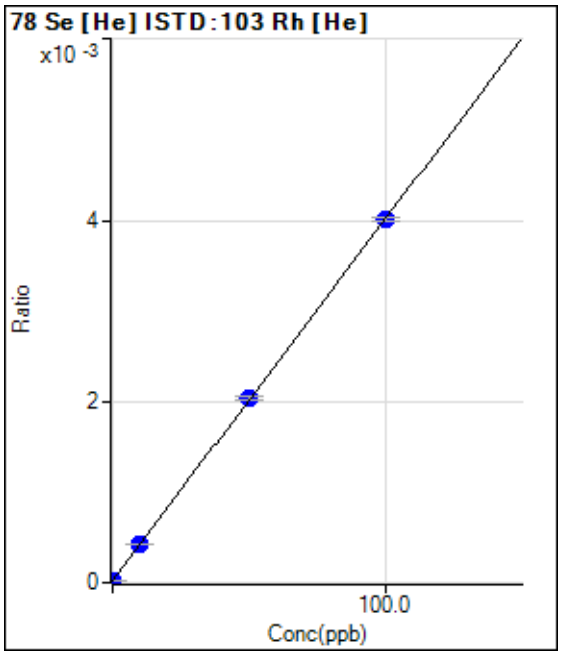
y = 3.7268E-004 * x + 4.6245E-005
R = 1.0000
DL = 0.0649
BEC = 0.1241

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			7.41	0.0000	P	86.6
2	☐			355.57	0.0001	P	27.6
3	☐			1959.48	0.0006	P	14.6
4	☐			3470.90	0.0012	P	6.9
5	☐			3.70	0.0000	P	173.2

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69.15	0.0000	P	13.6
2	☐	10.000	10.073	1303.37	0.0004	P	2.1
3	☐	50.000	50.540	6303.44	0.0020	P	2.6
4	☐	100.000	99.723	11573.23	0.0040	P	0.9
5	☐			133.50	0.0000	P	5.6

y = 3.9943E-005 * x + 2.2568E-005

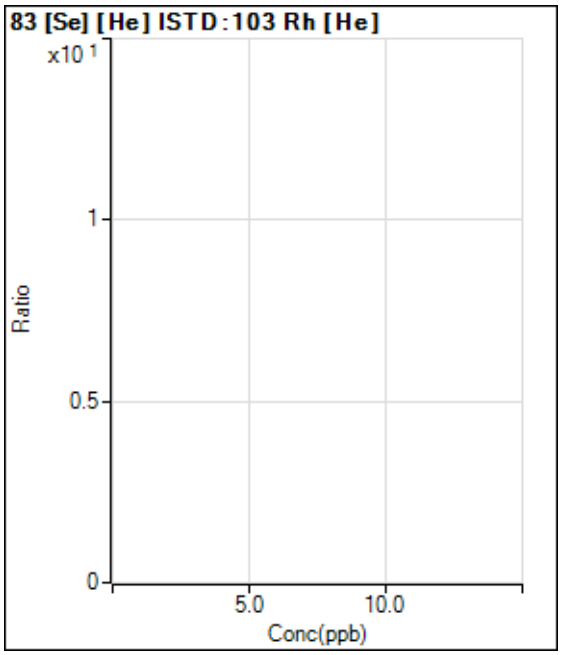
R = 1.0000

DL = 0.2303

BEC = 0.565

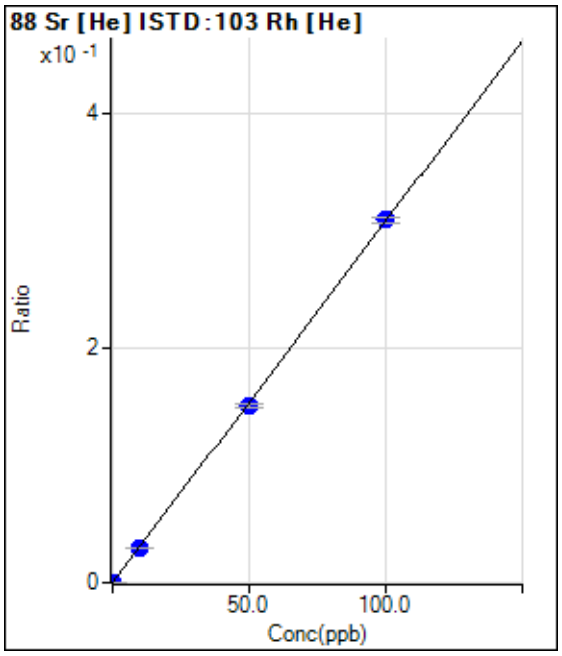
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			81.48	0.0000	P	14.5
2	☐			98.65	0.0000	P	17.9
3	☐			100.67	0.0000	P	4.3
4	☐			86.87	0.0000	P	11.0
5	☐			95.62	0.0000	P	9.4

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	145.56	0.0000	P	31.9
2	☐	10.000	9.694	91840.91	0.0299	P	0.5
3	☐	50.000	49.122	467870.66	0.1515	P	1.8
4	☐	100.000	100.470	895243.68	0.3099	P	1.4
5	☐			242.23	0.0001	P	8.2

y = 0.0031 * x + 4.7518E-005

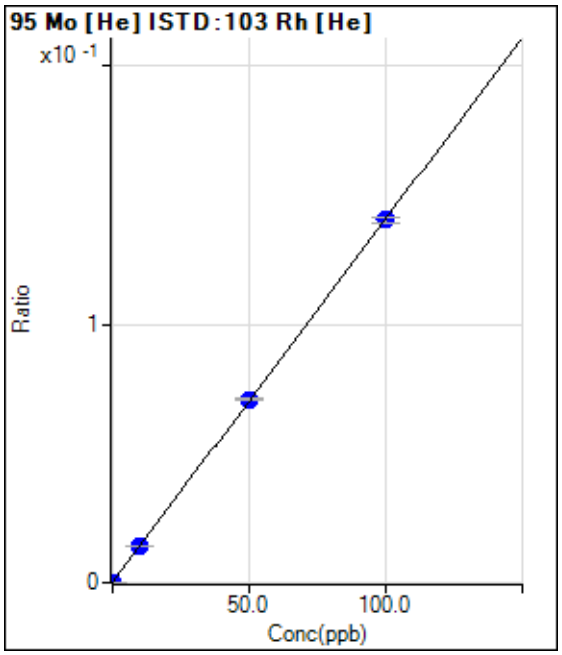
R = 0.9999

DL = 0.01474

BEC = 0.01541

Weight: <None>

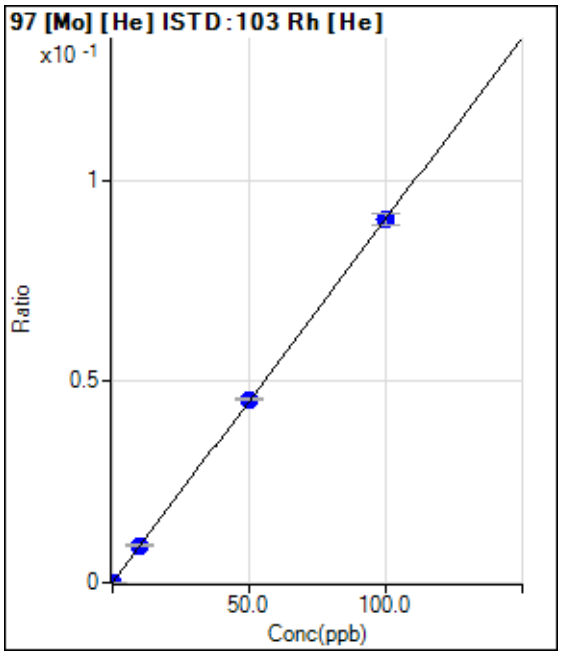
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	311.12	0.0001	P	10.3
2	☐	10.000	10.164	44157.78	0.0144	P	1.6
3	☐	50.000	50.338	218854.78	0.0709	P	1.1
4	☐			2910.29	0.0010	P	13.0
5	☐	100.000	99.814	488129.62	0.1405	P	1.6

y = 0.0014 * x + 1.0149E-004
R = 1.0000
DL = 0.02238
BEC = 0.07216

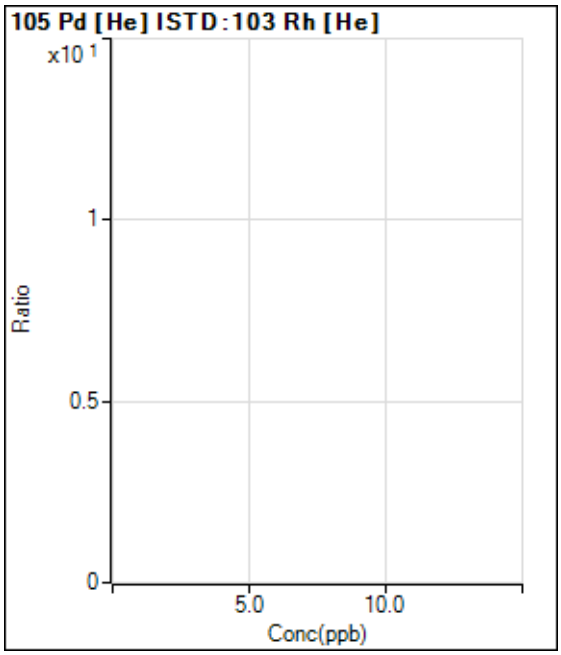
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92.59	0.0000	P	65.4
2	☐	10.000	10.118	28105.26	0.0092	P	4.4
3	☐	50.000	50.318	140310.06	0.0455	P	1.0
4	☐			1674.25	0.0006	P	7.4
5	☐	100.000	99.829	313365.19	0.0901	P	3.2

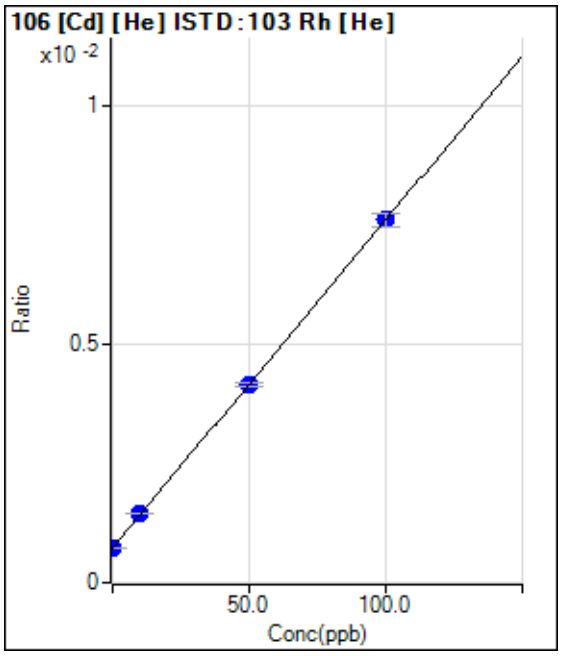
y = 9.0268E-004 * x + 3.0148E-005
R = 1.0000
DL = 0.0655
BEC = 0.0334

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2452.15	0.0008	P	6.0
2	☐			2578.09	0.0008	P	4.6
3	☐			2859.62	0.0009	P	10.1
4	☐			3263.42	0.0011	P	6.3
5	☐			3211.57	0.0009	P	13.6

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2231.80	0.0007	P	2.8
2	☐	10.000	10.520	4449.41	0.0015	P	2.3
3	☐	50.000	49.780	12813.49	0.0042	P	1.4
4	☐	100.000	100.058	21974.43	0.0076	P	3.4
5	☐			2767.91	0.0008	P	4.8

y = 6.8761E-005 * x + 7.2727E-004

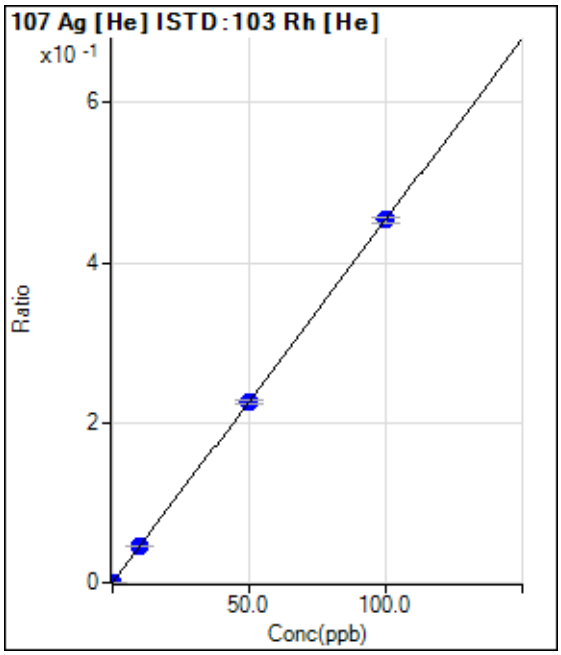
R = 1.0000

DL = 0.8873

BEC = 10.58

Weight: <None>

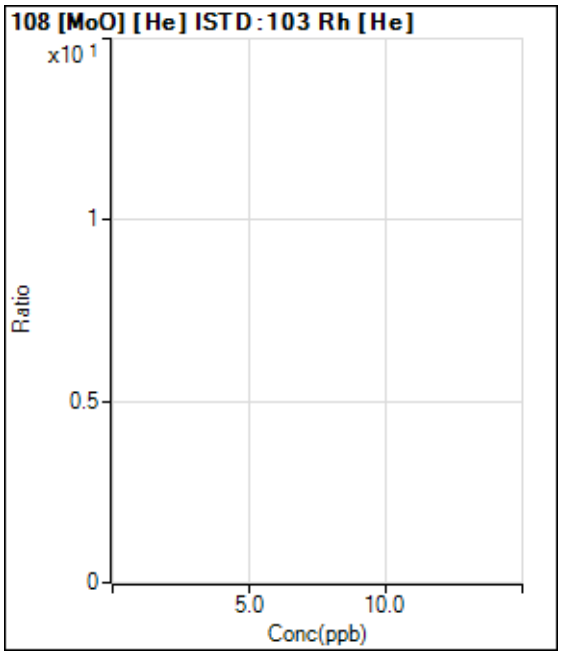
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.33	0.0000	P	25.9
2	☐	10.000	10.129	140914.60	0.0459	P	0.8
3	☐	50.000	49.940	699076.29	0.2264	P	1.7
4	☐	100.000	100.017	1309942.76	0.4534	P	1.6
5	☐			427.79	0.0001	P	10.5

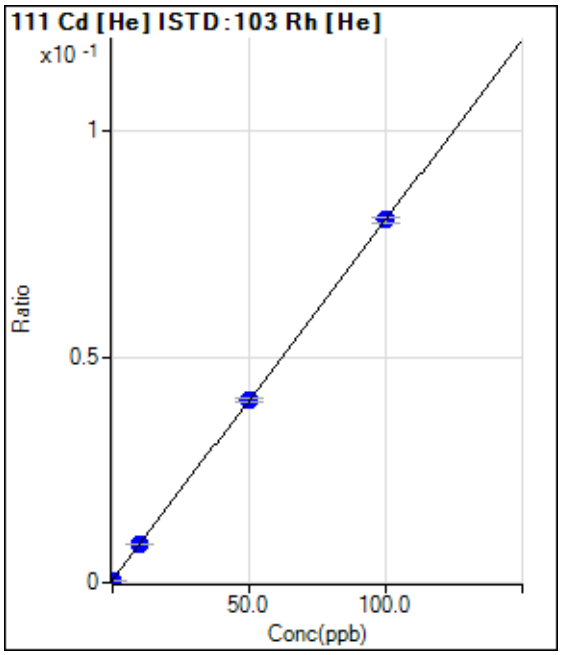
y = 0.0045 * x + 2.7227E-005
R = 1.0000
DL = 0.00466
BEC = 0.006006

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			7.41	0.0000	P	173.2
2	☐			1681.64	0.0005	P	15.8
3	☐			7709.53	0.0025	P	7.1
4	☐			15155.52	0.0052	P	1.6
5	☐			151.86	0.0000	P	18.1

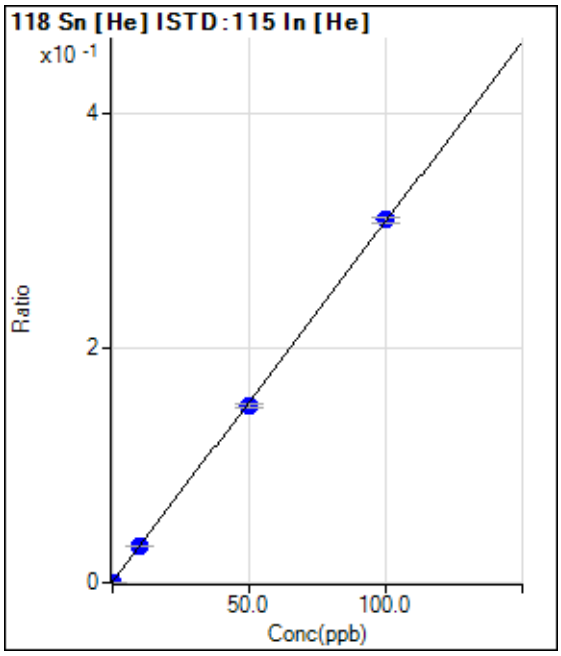
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1702.20	0.0006	P	3.7
2	☐	10.000	10.155	26564.69	0.0087	P	0.1
3	☐	50.000	49.873	124644.61	0.0404	P	2.1
4	☐	100.000	100.048	232329.25	0.0804	P	1.6
5	☐			2131.88	0.0006	P	4.8

y = 7.9827E-004 * x + 5.5464E-004
R = 1.0000
DL = 0.07742
BEC = 0.6948

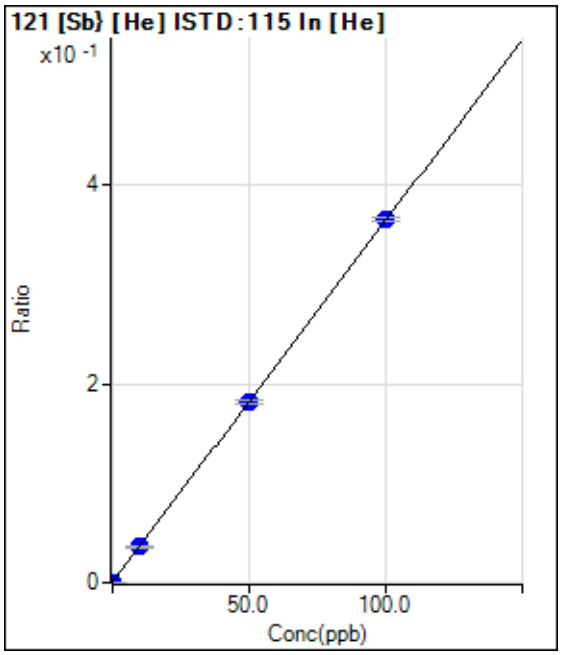
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1137.14	0.0006	P	20.5
2	☐	10.000	9.802	60809.07	0.0306	P	1.2
3	☐	50.000	49.025	304151.99	0.1509	P	2.4
4	☐			4623.06	0.0024	P	3.0
5	☐	100.000	100.507	686200.33	0.3087	P	1.3

y = 0.0031 * x + 5.7376E-004
R = 0.9999
DL = 0.1149
BEC = 0.1872

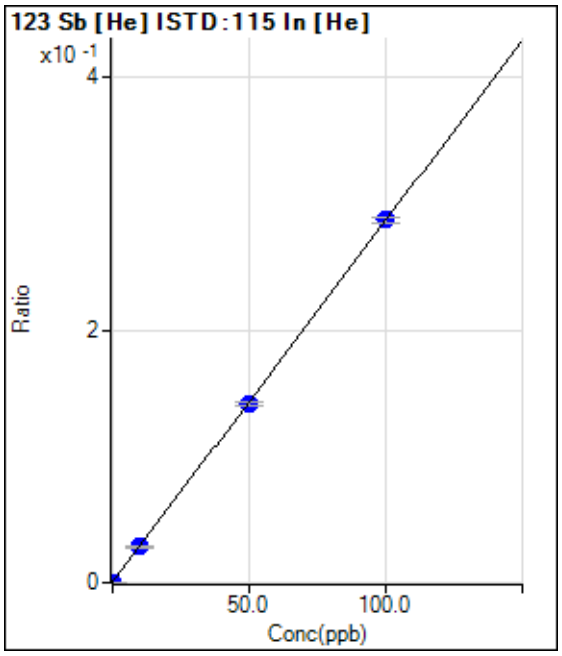
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1202.28	0.0006	P	4.6
2	☐	10.000	9.772	71703.29	0.0361	P	2.5
3	☐	50.000	49.632	364808.11	0.1810	P	2.0
4	☐			4780.74	0.0025	P	10.2
5	☐	100.000	100.207	810810.59	0.3647	P	1.1

y = 0.0036 * x + 6.0727E-004
R = 1.0000
DL = 0.02295
BEC = 0.1671

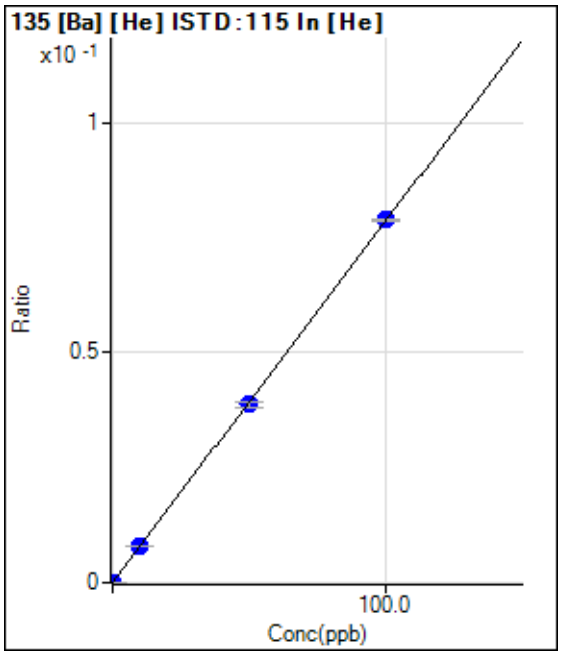
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	983.37	0.0005	P	10.6
2	☐	10.000	9.707	56119.44	0.0283	P	3.1
3	☐	50.000	49.535	286714.82	0.1422	P	2.0
4	☐			3809.37	0.0020	P	9.9
5	☐	100.000	100.262	638826.56	0.2874	P	1.3

y = 0.0029 * x + 4.9685E-004
R = 1.0000
DL = 0.05497
BEC = 0.1737

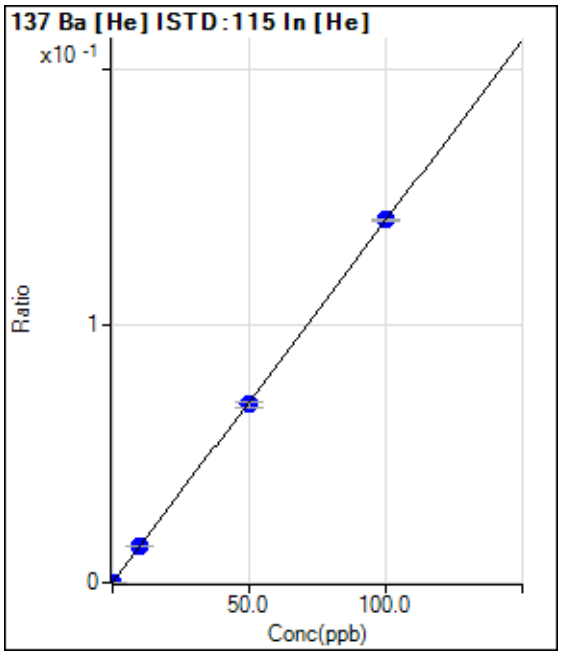
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.78	0.0000	P	21.8
2	☐	10.000	9.999	15648.46	0.0079	P	2.8
3	☐	50.000	49.281	78128.60	0.0388	P	2.6
4	☐	100.000	100.360	150601.32	0.0789	P	0.8
5	☐			102.22	0.0000	P	16.2

y = 7.8592E-004 * x + 2.4213E-005
R = 1.0000
DL = 0.02013
BEC = 0.03081

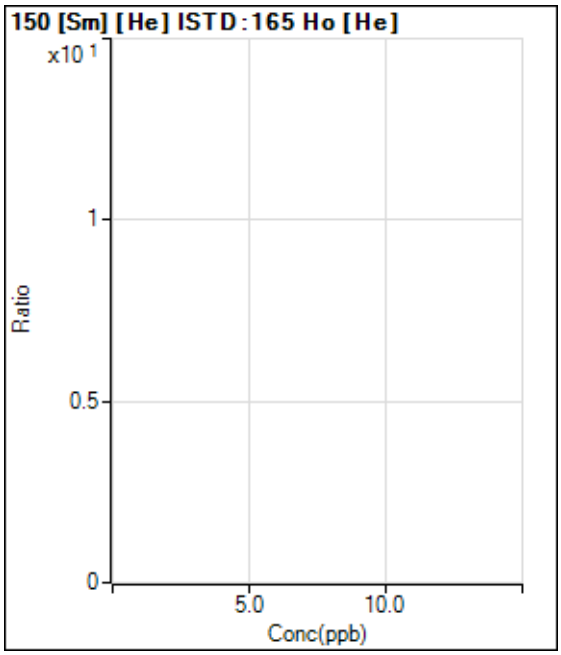
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52.22	0.0000	P	23.0
2	☐	10.000	9.986	27958.84	0.0141	P	1.6
3	☐	50.000	49.398	140156.81	0.0695	P	3.3
4	☐	100.000	100.303	269422.68	0.1411	P	0.4
5	☐			231.12	0.0001	P	9.9

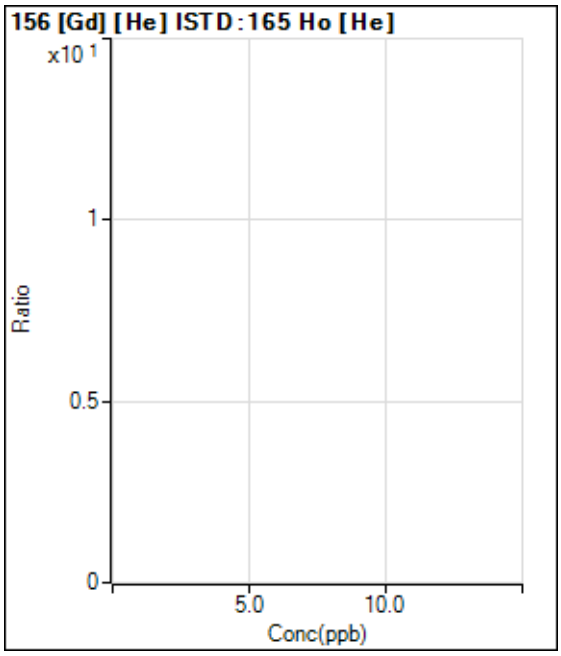
y = 0.0014 * x + 2.6409E-005
R = 1.0000
DL = 0.01296
BEC = 0.01877

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2.00	0.0000	P	0.2
2	☐			11.33	0.0000	P	27.1
3	☐			10.67	0.0000	P	48.0
4	☐			34.67	0.0000	P	49.1
5	☐			5.33	0.0000	P	59.0

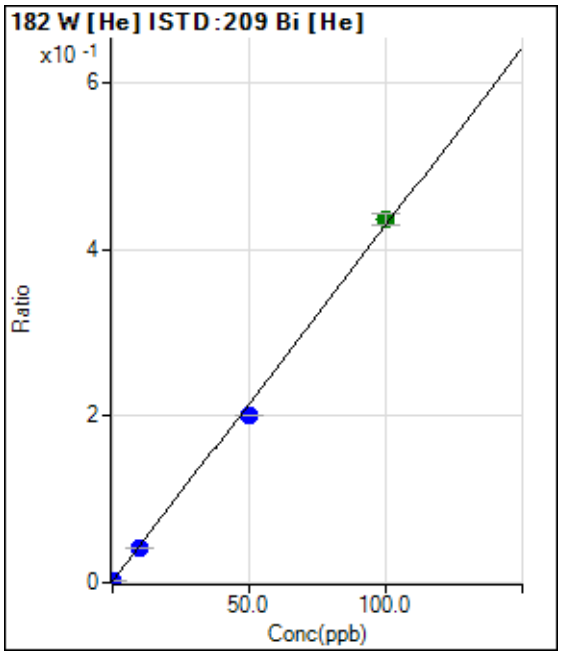
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			24.00	0.0000	P	33.3
2	☐			16.67	0.0000	P	47.8
3	☐			20.00	0.0000	P	44.3
4	☐			23.33	0.0000	P	9.6
5	☐			12.67	0.0000	P	37.3

Excluded

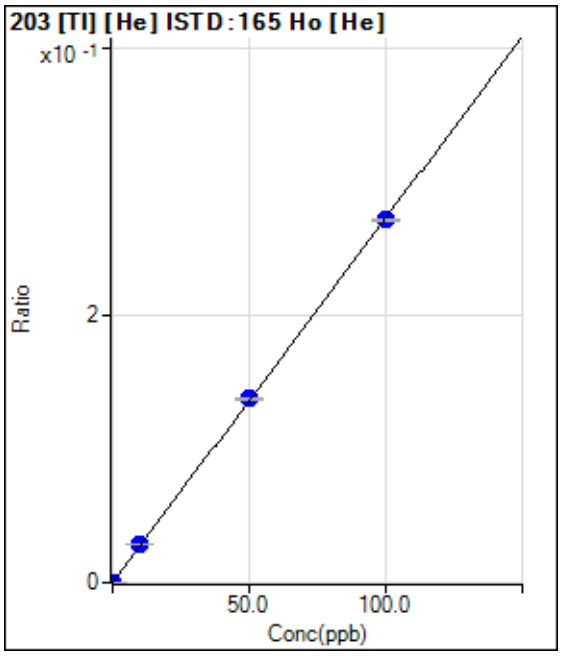
Calibration for 013_CCB.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5579.07	0.0015	P	7.0
2	☐	10.000	9.166	152609.57	0.0406	P	0.9
3	☐	50.000	46.895	746581.80	0.2018	P	0.2
4	☐			15841.81	0.0045	P	7.2
5	☐	100.000	101.636	1736480.60	0.4355	A	3.1

y = 0.0043 * x + 0.0015
R = 0.9992
DL = 0.07411
BEC = 0.3507

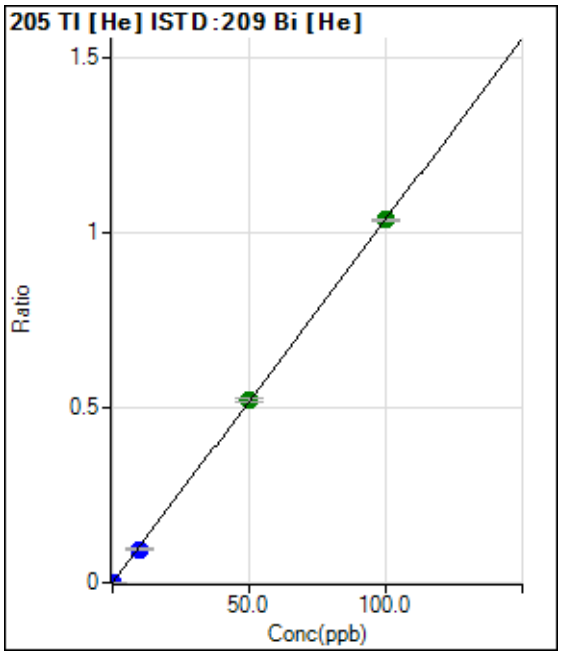
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	48.15	0.0000	P	104.0
2	☐	10.000	10.511	148073.57	0.0287	P	0.7
3	☐	50.000	50.639	722937.46	0.1381	P	0.9
4	☐	100.000	99.629	1394647.28	0.2716	P	0.2
5	☐			1552.01	0.0003	P	18.2

y = 0.0027 * x + 9.4032E-006
R = 1.0000
DL = 0.01076
BEC = 0.003449

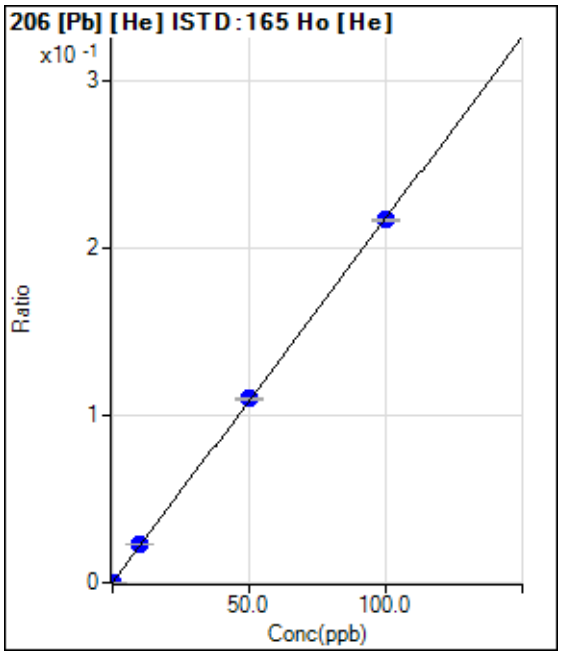
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	114.44	0.0000	P	28.6
2	☐	10.000	9.245	360093.82	0.0959	P	1.4
3	☐	50.000	50.244	1927785.41	0.5211	A	1.9
4	☐	100.000	99.954	3665287.49	1.0365	A	0.7
5	☐			1866.80	0.0005	P	19.7

y = 0.0104 * x + 3.0687E-005
R = 1.0000
DL = 0.002535
BEC = 0.002959

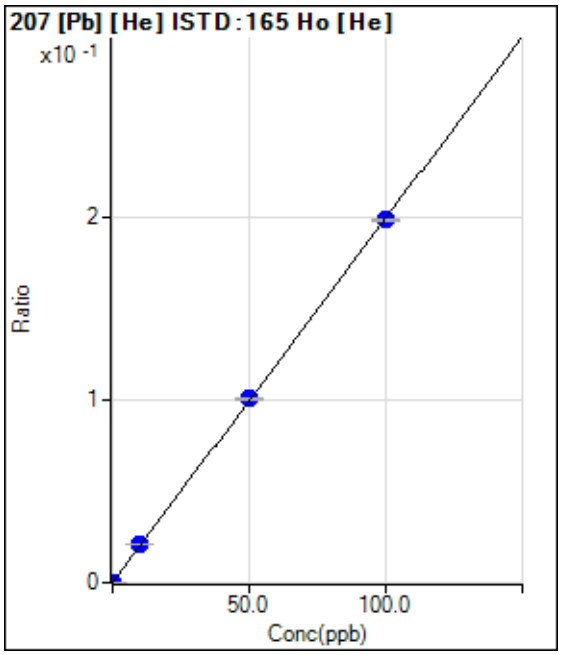
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	450.01	0.0001	P	11.0
2	☐	10.000	10.707	120828.00	0.0234	P	1.1
3	☐	50.000	50.554	576553.94	0.1101	P	1.2
4	☐	100.000	99.652	1113984.68	0.2170	P	0.4
5	☐			1580.10	0.0003	P	2.4

y = 0.0022 * x + 8.7961E-005
R = 1.0000
DL = 0.01331
BEC = 0.04042

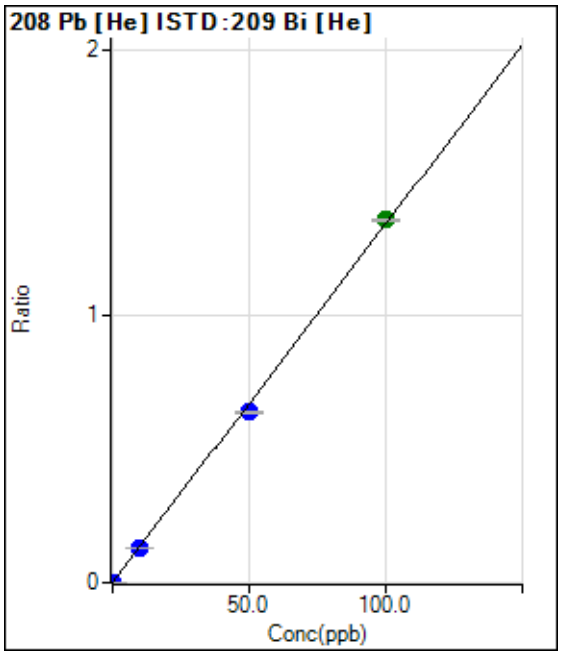
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	367.79	0.0001	P	10.2
2	☐	10.000	10.520	108727.95	0.0210	P	1.8
3	☐	50.000	50.558	528293.50	0.1009	P	1.5
4	☐	100.000	99.669	1020838.92	0.1988	P	0.6
5	☐			1296.74	0.0002	P	7.6

y = 0.0020 * x + 7.1887E-005
R = 1.0000
DL = 0.011
BEC = 0.03605

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1823.40	0.0005	P	5.7
2	☐	10.000	9.726	492510.23	0.1312	P	2.0
3	☐	50.000	47.620	2369327.39	0.6403	P	1.2
4	☐	100.000	101.218	4810705.85	1.3604	A	0.6
5	☐			6128.32	0.0015	P	6.8

y = 0.0134 * x + 4.8980E-004
R = 0.9995
DL = 0.006236
BEC = 0.03645

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:32:14-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	396	4.32
B	11	45	2	NoGas	7717	0.06
Na	23	45	1	He	22429	0.01
Mg	24	45	1	He	1530	0.29
Al	27	45	1	He	710	2.38
K	39	45	1	He	40699	0.01
Ca	44	45	1	He	531	0.79
Ti	47	45	1	He	16	210.41
V	51	45	1	He	172	149.62
Cr	52	45	1	He	2294	0.10
Mn	55	115	1	He	800	0.59
Fe	56	103	1	He	17144	0.05
Co	59	103	1	He	92	11.97
Ni	60	103	1	He	866	1.06
Cu	63	103	1	He	3984	0.12
Zn	66	103	1	He	1599	0.46
As	75	103	1	He	136	7.26
Se	78	103	1	He	61	29.80
Sr	88	103	1	He	109	11.71
Mo	95	103	1	He	487	4.75
Ag	107	103	1	He	72	51.25
Cd	111	103	1	He	1748	0.09
Sn	118	115	1	He	1189	1.36
Sb	123	115	1	He	1505	1.44
Ba	137	115	1	He	48	36.75
W	182	209	1	He	6750	0.11
Tl	205	209	1	He	122	5.61
Pb	208	209	1	He	2045	0.12

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1728429	1.86
Sc	45	1	He	1024267	0.41
Sc	45	2	NoGas	7990312	1.83
Rh	103	1	He	3056668	1.07
In	115	1	He	1970412	1.18
Tb	159	1	He	5065116	1.48
Ho	165	1	He	5171103	1.07
Bi	209	1	He	3732371	1.40

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:36:07-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	311	12.09
B	11	45	2	NoGas	7335	0.13
Na	23	45	1	He	22303	0.01
Mg	24	45	1	He	1485	0.24
Al	27	45	1	He	656	0.70
K	39	45	1	He	40442	0.01
Ca	44	45	1	He	568	2.70
Ti	47	45	1	He	9	1061.63
Cr	52	45	1	He	2324	0.13
Mn	55	115	1	He	836	1.39
Fe	56	103	1	He	14131	0.02
Co	59	103	1	He	70	36.00
Ni	60	103	1	He	876	1.07
Cu	63	103	1	He	3802	0.14
Zn	66	103	1	He	1448	0.57
As	75	103	1	He	142	11.55
Se	78	103	1	He	69	17.68
Sr	88	103	1	He	146	21.47
Mo	95	103	1	He	311	2.93
Ag	107	103	1	He	83	29.20
Cd	111	103	1	He	1702	0.30
Sn	118	115	1	He	1137	1.89
Sb	123	115	1	He	983	1.11
Ba	137	115	1	He	52	42.92
W	182	209	1	He	5579	0.14
Tl	205	209	1	He	114	25.62
Pb	208	209	1	He	1823	0.28

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1729956	1.68
Sc	45	1	He	1045873	0.53
Sc	45	2	NoGas	8041241	0.61
Rh	103	1	He	3067946	1.41
In	115	1	He	1978772	1.99
Tb	159	1	He	5013529	0.37
Ho	165	1	He	5115781	0.16
Bi	209	1	He	3723643	0.89

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:39:58-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	32296	0.01
B	11	2	NoGas	33695	0.01
Na	23	1	He	8780380	0.00
Mg	24	1	He	5075041	0.00
Al	27	1	He	28765	0.00
K	39	1	He	5147060	0.00
Ca	44	1	He	270206	0.00
Ti	47	1	He	3020	0.15
V	51	1	He	75549	0.00
Cr	52	1	He	92108	0.00
Mn	55	1	He	356064	0.00
Fe	56	1	He	21665588	0.00
Co	59	1	He	128418	0.00
Ni	60	1	He	32786	0.01
Cu	63	1	He	88269	0.00
Zn	66	1	He	18714	0.01
As	75	1	He	11438	0.02
Se	78	1	He	1303	0.20
Sr	88	1	He	91841	0.00
Mo	95	1	He	44158	0.00
Ag	107	1	He	140915	0.00
Cd	111	1	He	26565	0.00
Sn	118	1	He	60809	0.00
Sb	123	1	He	56119	0.00
Ba	137	1	He	27959	0.01
W	182	1	He	152610	0.00
Tl	205	1	He	360094	0.00
Pb	208	1	He	492510	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1752847	1.49	1729956	101.32	30	120	
Sc	45	1	He	1068202	1.53	1045873	102.13	30	120	
Sc	45	2	NoGas	8223475	1.43	8041241	102.27	30	120	
Rh	103	1	He	3067096	0.95	3067946	99.97	30	120	
In	115	1	He	1986212	2.78	1978772	100.38	30	120	
Tb	159	1	He	5081681	0.75	5013529	101.36	30	120	
Ho	165	1	He	5165339	0.86	5115781	100.97	30	120	
Bi	209	1	He	3755227	0.79	3723643	100.85	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:43:47-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	173047	0.00
B	11	2	NoGas	144539	0.00
Na	23	1	He	46134574	0.00
Mg	24	1	He	26145648	0.00
Al	27	1	He	150983	0.00
K	39	1	He	26509817	0.00
Ca	44	1	He	1447546	0.00
Ti	47	1	He	15542	0.05
V	51	1	He	386438	0.00
Cr	52	1	He	461503	0.00
Mn	55	1	He	1913978	0.00
Fe	56	1	He	110143751	0.00
Co	59	1	He	644404	0.00
Ni	60	1	He	160091	0.00
Cu	63	1	He	419260	0.00
Zn	66	1	He	86623	0.01
As	75	1	He	57716	0.01
Se	78	1	He	6303	0.07
Sr	88	1	He	467871	0.00
Mo	95	1	He	218855	0.00
Ag	107	1	He	699076	0.00
Cd	111	1	He	124645	0.00
Sn	118	1	He	304152	0.00
Sb	123	1	He	286715	0.00
Ba	137	1	He	140157	0.00
W	182	1	He	746582	0.00
Tl	205	1	He	1927785	0.00
Pb	208	1	He	2369327	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1809071	2.03	1729956	104.57	30	120	
Sc	45	1	He	1148490	7.97	1045873	109.81	30	120	
Sc	45	2	NoGas	8480977	0.93	8041241	105.47	30	120	
Rh	103	1	He	3086915	2.04	3067946	100.62	30	120	
In	115	1	He	2015770	1.13	1978772	101.87	30	120	
Tb	159	1	He	5146691	1.48	5013529	102.66	30	120	
Ho	165	1	He	5235489	1.66	5115781	102.34	30	120	
Bi	209	1	He	3700169	2.10	3723643	99.37	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:47:36-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	402689	0.00
B	11	2	NoGas	8376	0.05
Na	23	1	He	87976343	0.00
Mg	24	1	He	49936218	0.00
Al	27	1	He	285350	0.00
K	39	1	He	50186678	0.00
Ca	44	1	He	2720376	0.00
Ti	47	1	He	30	133.51
V	51	1	He	740614	0.00
Cr	52	1	He	877877	0.00
Mn	55	1	He	3534735	0.00
Fe	56	1	He	211952245	0.00
Co	59	1	He	1222558	0.00
Ni	60	1	He	297648	0.00
Cu	63	1	He	784292	0.00
Zn	66	1	He	160597	0.00
As	75	1	He	107799	0.00
Se	78	1	He	11573	0.00
Sr	88	1	He	895244	0.00
Mo	95	1	He	2910	0.41
Ag	107	1	He	1309943	0.00
Cd	111	1	He	232329	0.00
Sn	118	1	He	4623	0.07
Sb	123	1	He	3809	0.24
Ba	137	1	He	269423	0.00
W	182	1	He	15842	0.05
Tl	205	1	He	3665287	0.00
Pb	208	1	He	4810706	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1788352	1.56	1729956	103.38	30	120	
Sc	45	1	He	1071350	1.76	1045873	102.44	30	120	
Sc	45	2	NoGas	8334682	0.51	8041241	103.65	30	120	
Rh	103	1	He	2889295	1.11	3067946	94.18	30	120	
In	115	1	He	1908886	0.95	1978772	96.47	30	120	
Tb	159	1	He	5071303	0.25	5013529	101.15	30	120	
Ho	165	1	He	5134279	0.35	5115781	100.36	30	120	
Bi	209	1	He	3536229	0.65	3723643	94.97	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:51:20-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	430	4.56
B	11	2	NoGas	256668	0.00
Na	23	1	He	46167	0.03
Mg	24	1	He	6813	0.24
Al	27	1	He	2119	0.36
K	39	1	He	61494	0.02
Ca	44	1	He	952	0.92
Ti	47	1	He	35789	0.03
V	51	1	He	212	175.87
Cr	52	1	He	4801	0.25
Mn	55	1	He	1985	0.40
Fe	56	1	He	303802	0.01
Co	59	1	He	221	7.90
Ni	60	1	He	1146	1.14
Cu	63	1	He	4124	0.09
Zn	66	1	He	1709	0.95
As	75	1	He	699	1.29
Se	78	1	He	134	4.01
Sr	88	1	He	242	5.69
Mo	95	1	He	488130	0.00
Ag	107	1	He	428	3.36
Cd	111	1	He	2132	0.48
Sn	118	1	He	686200	0.00
Sb	123	1	He	638827	0.00
Ba	137	1	He	231	6.25
W	182	1	He	1736481	0.00
Tl	205	1	He	1867	1.01
Pb	208	1	He	6128	0.11

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1811249	1.21	1729956	104.70	30	120	
Sc	45	1	He	1306222	9.56	1045873	124.89	30	120	ISTD Failed
Sc	45	2	NoGas	7987039	0.22	8041241	99.33	30	120	
Rh	103	1	He	3472423	5.43	3067946	113.18	30	120	
In	115	1	He	2222144	4.94	1978772	112.30	30	120	
Tb	159	1	He	5449426	3.81	5013529	108.69	30	120	
Ho	165	1	He	5529301	2.66	5115781	108.08	30	120	
Bi	209	1	He	3986622	2.79	3723643	107.06	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:55:12-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	40.978	4.110	157461	2.11	40	102.4	89.5	110.5	
B	11	45	NoGas	47.642	1.228	130334	1.88	40	119.1	89.5	110.5	ICV Failed
Na	23	45	He	20348.572	3.436	36388536	4.24	20000	101.7	89.5	110.5	
Mg	24	45	He	20232.237	4.731	20510267	2.91	20000	101.2	89.5	110.5	
Al	27	45	He	201.972	3.719	117618	3.94	200	101.0	89.5	110.5	
K	39	45	He	20424.619	4.028	20877189	3.67	20000	102.1	89.5	110.5	
Ca	44	45	He	20002.109	1.724	1110012	6.03	20000	100.0	89.5	110.5	
Ti	47	45	He	41.547	8.815	12385	2.17	40	103.9	89.5	110.5	
V	51	45	He	40.675	5.184	305408	2.43	40	101.7	89.5	110.5	
Cr	52	45	He	40.483	4.965	362283	2.71	40	101.2	89.5	110.5	
Mn	55	115	He	205.345	2.166	1487765	4.91	200	102.7	89.5	110.5	
Fe	56	103	He	10067.527	1.838	86733988	1.55	10000	100.7	89.5	110.5	
Co	59	103	He	40.328	2.604	502488	2.31	40	100.8	89.5	110.5	
Ni	60	103	He	41.564	2.821	127033	2.51	40	103.9	89.5	110.5	
Cu	63	103	He	41.515	2.730	334677	2.40	40	103.8	89.5	110.5	
Zn	66	103	He	42.085	2.020	69903	1.69	40	105.2	89.5	110.5	
As	75	103	He	39.997	3.438	44145	3.13	40	100.0	89.5	110.5	
Se	78	103	He	41.761	2.863	4992	2.54	40	104.4	89.5	110.5	
Sr	88	103	He	40.817	2.901	371779	2.62	40	102.0	89.5	110.5	
Mo	95	103	He	43.355	0.593	180359	0.38	40	108.4	89.5	110.5	
Ag	107	103	He	41.615	2.452	557078	2.16	40	104.0	89.5	110.5	
Cd	111	103	He	41.190	2.663	98718	2.33	40	103.0	89.5	110.5	
Sn	118	115	He	41.069	1.465	246030	1.86	40	102.7	89.5	110.5	
Sb	123	115	He	36.019	5.578	201252	2.39	40	90.0	89.5	110.5	
Ba	137	115	He	41.027	1.749	112325	1.58	40	102.6	89.5	110.5	
W	182	209	He	38.154	0.555	596380	0.66	40	95.4	89.5	110.5	
Tl	205	209	He	39.013	5.130	1467933	6.27	40	97.5	89.5	110.5	
Pb	208	209	He	39.619	0.144	1932450	1.26	40	99.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1760309	2.05	1729956	101.75	30	120	
Sc	45	He	1094611	7.79	1045873	104.66	30	120	
Sc	45	NoGas	8203026	1.19	8041241	102.01	30	120	
Rh	103	He	2952662	0.29	3067946	96.24	30	120	
In	115	He	1945842	3.27	1978772	98.34	30	120	
Tb	159	He	5011007	0.73	5013529	99.95	30	120	
Ho	165	He	5181310	1.92	5115781	101.28	30	120	
Bi	209	He	3626875	1.13	3723643	97.40	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:58:58-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.056	53.7	27	33.1	20	
W	182	1	He	0.933	9.3	20989	6.3	10	
Ca	44	1	He	-0.609	-57.7	578	5.6	1000	
Na	23	1	He	6.077	22.3	35257	6.4	400	
Mg	24	1	He	2.146	23.2	3838	10.0	1000	
K	39	1	He	7.131	7.9	51148	3.8	1000	
V	51	1	He	0.074	66.8	341	111.2	2	
Cr	52	1	He	0.025	52.0	2736	7.9	2	
Mn	55	1	He	-0.029	-8.4	667	4.1	2	
Fe	56	1	He	14.706	17.0	155249	14.1	50	
Co	59	1	He	0.002	27.1	108	7.1	1	
Ni	60	1	He	-0.013	-150.5	891	9.7	2	
Cu	63	1	He	-0.141	-4.9	2807	0.3	2	
Zn	66	1	He	-0.328	-8.7	951	4.2	20	
As	75	1	He	0.058	28.5	222	11.4	2	
Se	78	1	He	0.116	103.5	89	20.1	2	
Sr	88	1	He	0.007	62.2	224	17.2	10	
Mo	95	1	He	0.666	13.4	3396	11.7	2	
Ag	107	1	He	0.009	13.1	223	6.0	0.2	
Cd	111	1	He	0.038	10.5	1913	1.9	0.2	
Ba	137	1	He	0.007	76.6	78	21.6	5	
Sn	118	1	He	0.274	8.0	2989	4.3	10	
Tl	205	1	He	0.021	12.3	969	10.2	0.5	
Pb	208	1	He	0.025	16.8	3174	6.9	1	
Al	27	1	He	0.169	76.6	811	13.6	50	
Sb	123	1	He	1.730	23.7	11487	20.1	1	ICB Failed
B	11	2	NoGas	0.763	20.7	9607	4.7	20	
Be	9	2	NoGas	0.051	19.0	515	6.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1766210	1.96	1729956	102.10	30	120	
Sc	45	1	He	1128728	4.60	1045873	107.92	30	120	
Sc	45	2	NoGas	8340200	0.74	8041241	103.72	30	120	
Rh	103	1	He	3272473	2.42	3067946	106.67	30	120	
In	115	1	He	2113848	2.08	1978772	106.83	30	120	

Tb	159	1	He	5271839	0.70	5013529	105.15	30	120	
Ho	165	1	He	5325749	0.89	5115781	104.10	30	120	
Bi	209	1	He	3830932	1.16	3723643	102.88	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:02:50-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.890	0.890	10.566	3860	9.00	1	89.0	69.5	130.5	
B	11	2	NoGas	21.481	21.481	1.349	64100	2.16	20	107.4	69.5	130.5	
Na	23	1	He	1061.480	1061.480	0.728	1884862	1.52	1000	106.1	69.5	130.5	
Mg	24	1	He	1054.877	1054.877	1.611	1051701	1.33	1000	105.5	69.5	130.5	
Al	27	1	He	51.398	51.398	3.762	29879	3.04	50	102.8	69.5	130.5	
K	39	1	He	1048.518	1048.518	1.035	1091530	0.14	1000	104.9	69.5	130.5	
Ca	44	1	He	1013.082	1013.082	0.487	55687	1.40	1000	101.3	69.5	130.5	
Ti	47	1	He	10.490	10.490	8.883	3086	9.70	10	104.9	69.5	130.5	
V	51	1	He	5.263	5.263	4.090	38628	3.43	5	105.3	69.5	130.5	
Cr	52	1	He	2.184	2.184	4.340	21449	2.93	2	109.2	69.5	130.5	
Mn	55	1	He	4.881	4.881	1.919	37331	0.34	5	97.6	69.5	130.5	
Fe	56	1	He	98.654	98.654	1.095	916328	0.96	100	98.7	69.5	130.5	
Co	59	1	He	1.004	1.004	4.519	13350	4.75	1	100.4	69.5	130.5	
Ni	60	1	He	2.059	2.059	0.755	7529	1.20	2	102.9	69.5	130.5	
Cu	63	1	He	1.927	1.927	3.338	20188	3.28	2	96.3	69.5	130.5	
Zn	66	1	He	20.153	20.153	0.880	36298	0.82	20	100.8	69.5	130.5	
As	75	1	He	4.905	4.905	1.189	5873	0.53	5	98.1	69.5	130.5	
Se	78	1	He	4.981	4.981	3.086	694	3.07	5	99.6	69.5	130.5	
Sr	88	1	He	9.504	9.504	0.840	91989	1.02	10	95.0	69.5	130.5	
Mo	95	1	He	10.382	10.382	0.562	46081	1.04	10	103.8	69.5	130.5	
Ag	107	1	He	1.038	1.038	2.644	14828	2.00	1	103.8	69.5	130.5	
Cd	111	1	He	1.033	1.033	2.414	4323	1.03	1	103.3	69.5	130.5	
Sn	118	1	He	10.092	10.092	1.560	63310	0.33	10	100.9	69.5	130.5	
Sb	123	1	He	2.358	2.358	1.673	14554	1.92	2	117.9	69.5	130.5	
Ba	137	1	He	4.904	4.904	2.754	13914	1.93	5	98.1	69.5	130.5	
W	182	1	He	9.390	9.390	1.752	157553	1.18	10	93.9	69.5	130.5	
Tl	205	1	He	1.883	1.883	2.382	74056	0.85	2	94.1	69.5	130.5	
Pb	208	1	He	1.047	1.047	4.158	55137	2.71	1	104.7	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1820391	1.08	1729956	105.23	30	120	
Sc	45	1	He	1072475	0.93	1045873	102.54	30	120	
Sc	45	2	NoGas	8362492	1.10	8041241	104.00	30	120	
Rh	103	1	He	3133637	0.66	3067946	102.14	30	120	
In	115	1	He	2009360	1.68	1978772	101.55	30	120	
Tb	159	1	He	5098378	1.39	5013529	101.69	30	120	
Ho	165	1	He	5202484	0.41	5115781	101.69	30	120	
Bi	209	1	He	3787947	1.58	3723643	101.73	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:06:40-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	-0.002	-768.9	256	22.6	1	
B	11	45	2	NoGas	0.916	29.6	8317	6.8	20	
Na	23	45	1	He	50017.876	3.0	78586460	2.3	75200	
Mg	24	45	1	He	50354.575	2.4	44902710	2.8	75200	
Al	27	45	1	He	48425.801	2.3	24652261	3.0	75200	
K	39	45	1	He	50083.296	2.2	44966578	3.0	75200	
Ca	44	45	1	He	50740.460	1.9	2472822	3.3	75200	
Ti	47	45	1	He	1022.609	2.3	268536	2.9	1505	
V	51	45	1	He	-0.013	-732.1	-279	-221.0	4	
Cr	52	45	1	He	0.718	1.8	7753	4.5	4	
Mn	55	115	1	He	0.274	7.1	2485	5.2	4	
Fe	56	103	1	He	50197.847	0.8	378278376	2.7	75200	
Co	59	103	1	He	0.030	16.3	387	15.8	2	
Ni	60	103	1	He	0.083	26.2	958	6.5	4	
Cu	63	103	1	He	0.205	3.1	4626	1.3	4	
Zn	66	103	1	He	1.260	7.2	3015	6.3	10	
As	75	103	1	He	0.121	17.9	235	7.5	4	
Se	78	103	1	He	0.115	43.9	70	8.2	4	
Sr	88	103	1	He	0.351	1.0	2916	2.3	20	
Mo	95	103	1	He	1110.912	2.9	4034454	0.9	1505	
Ag	107	103	1	He	0.014	2.7	232	2.2	1	
Cd	111	103	1	He	0.063	93.4	1563	9.6	1	
Sn	118	115	1	He	0.232	15.6	2211	8.3	20	
Sb	123	115	1	He	0.278	9.2	2222	5.6	1	
Ba	137	115	1	He	0.074	16.3	226	12.6	2	
W	182	209	1	He	0.417	7.7	10997	5.6	20	
Tl	205	209	1	He	0.009	7.6	408	7.6	1	
Pb	208	209	1	He	0.133	6.0	7611	2.9	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1456523	1.37	1729956	84.19	30	120	
Sc	45	1	He	961371	5.25	1045873	91.92	30	120	
Sc	45	2	NoGas	6932466	0.26	8041241	86.21	30	120	
Rh	103	1	He	2582709	2.02	3067946	84.18	30	120	
In	115	1	He	1721626	0.68	1978772	87.00	30	120	
Tb	159	1	He	4672224	1.31	5013529	93.19	30	120	
Ho	165	1	He	4775108	1.49	5115781	93.34	30	120	
Bi	209	1	He	3353837	1.83	3723643	90.07	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:10:27-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	114.434	2.445	352374	1.79	100	114.4	79.5	120.5	
B	11	45	2	NoGas	124.343	3.608	273484	2.71	100	124.3	79.5	120.5	Fail
Na	23	45	1	He	49423.954	0.492	72888697	1.75	50000	98.8	79.5	120.5	
Mg	24	45	1	He	50209.640	0.952	42018165	1.83	50000	100.4	79.5	120.5	
Al	27	45	1	He	48015.172	1.853	22934493	1.29	50000	96.0	79.5	120.5	
K	39	45	1	He	49704.585	1.368	41872167	0.94	50000	99.4	79.5	120.5	
Ca	44	45	1	He	50804.764	2.083	2322646	0.57	50000	101.6	79.5	120.5	
Ti	47	45	1	He	1127.651	1.336	277854	1.11	1100	102.5	79.5	120.5	
V	51	45	1	He	100.503	1.359	623321	0.96	100	100.5	79.5	120.5	
Cr	52	45	1	He	102.519	1.344	754337	1.29	100	102.5	79.5	120.5	
Mn	55	115	1	He	94.687	1.879	592850	1.19	100	94.7	79.5	120.5	
Fe	56	103	1	He	48799.623	1.911	360415737	1.59	50000	97.6	79.5	120.5	
Co	59	103	1	He	98.965	1.764	1057174	1.43	100	99.0	79.5	120.5	
Ni	60	103	1	He	98.821	1.294	257965	0.95	100	98.8	79.5	120.5	
Cu	63	103	1	He	99.089	1.188	680557	0.84	100	99.1	79.5	120.5	
Zn	66	103	1	He	99.041	0.562	139435	0.38	100	99.0	79.5	120.5	
As	75	103	1	He	99.848	1.397	94317	1.07	100	99.8	79.5	120.5	
Se	78	103	1	He	100.958	1.807	10265	1.46	100	101.0	79.5	120.5	
Sr	88	103	1	He	99.434	1.650	776374	1.34	100	99.4	79.5	120.5	
Mo	95	103	1	He	1188.977	1.627	4234253	1.95	1100	108.1	79.5	120.5	
Ag	107	103	1	He	101.183	1.589	1161229	1.27	100	101.2	79.5	120.5	
Cd	111	103	1	He	102.179	1.922	207886	1.57	100	102.2	79.5	120.5	
Sn	118	115	1	He	101.590	2.428	524460	1.62	100	101.6	79.5	120.5	
Sb	123	115	1	He	107.269	1.908	516738	1.11	100	107.3	79.5	120.5	
Ba	137	115	1	He	102.734	1.984	243002	1.25	100	102.7	79.5	120.5	
W	182	209	1	He	98.138	0.867	1395966	0.41	100	98.1	79.5	120.5	
Tl	205	209	1	He	100.755	0.503	3467870	0.84	100	100.8	79.5	120.5	
Pb	208	209	1	He	102.765	0.966	4584183	0.32	100	102.8	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1411840	1.04	1729956	81.61	30	120	
Sc	45	1	He	901520	2.24	1045873	86.20	30	120	
Sc	45	2	NoGas	6838680	0.96	8041241	85.05	30	120	
Rh	103	1	He	2531576	0.34	3067946	82.52	30	120	
In	115	1	He	1681118	0.82	1978772	84.96	30	120	
Tb	159	1	He	4616590	0.63	5013529	92.08	30	120	
Ho	165	1	He	4708815	0.29	5115781	92.04	30	120	
Bi	209	1	He	3319185	1.25	3723643	89.14	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:14:12-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.096	4.570	187889	2.34	50	96.2	89.5	110.5	
B	11	45	2	NoGas	56.634	0.126	159559	0.28	50	113.3	89.5	110.5	CCV Failed
Na	23	45	1	He	25187.538	0.912	43792403	1.75	25000	100.8	89.5	110.5	
Mg	24	45	1	He	25215.365	2.782	24864462	0.81	25000	100.9	89.5	110.5	
Al	27	45	1	He	258.511	1.684	146198	0.64	250	103.4	89.5	110.5	
K	39	45	1	He	25552.248	1.829	25390135	0.87	25000	102.2	89.5	110.5	
Ca	44	45	1	He	25348.992	1.388	1366736	3.04	25000	101.4	89.5	110.5	
Ti	47	45	1	He	52.193	3.200	15167	3.06	50	104.4	89.5	110.5	
V	51	45	1	He	51.443	0.855	375983	1.70	50	102.9	89.5	110.5	
Cr	52	45	1	He	51.211	0.525	445373	1.98	50	102.4	89.5	110.5	
Mn	55	115	1	He	253.617	1.508	1827546	1.06	250	101.4	89.5	110.5	
Fe	56	103	1	He	12467.245	0.149	108037689	0.98	12500	99.7	89.5	110.5	
Co	59	103	1	He	49.580	1.056	621374	0.99	50	99.2	89.5	110.5	
Ni	60	103	1	He	49.704	0.815	152646	1.52	50	99.4	89.5	110.5	
Cu	63	103	1	He	50.098	0.744	405477	0.78	50	100.2	89.5	110.5	
Zn	66	103	1	He	49.905	0.525	83121	1.25	50	99.8	89.5	110.5	
As	75	103	1	He	49.755	0.497	55207	1.07	50	99.5	89.5	110.5	
Se	78	103	1	He	50.193	1.481	6021	1.52	50	100.4	89.5	110.5	
Sr	88	103	1	He	49.516	0.739	453652	1.06	50	99.0	89.5	110.5	
Mo	95	103	1	He	70.061	4.695	292947	4.39	50	140.1	89.5	110.5	CCV Failed
Ag	107	103	1	He	50.969	0.996	686287	0.99	50	101.9	89.5	110.5	
Cd	111	103	1	He	50.797	0.752	122073	0.11	50	101.6	89.5	110.5	
Sn	118	115	1	He	50.275	1.472	299493	0.19	50	100.5	89.5	110.5	
Sb	123	115	1	He	51.184	1.867	284499	1.85	50	102.4	89.5	110.5	
Ba	137	115	1	He	49.961	1.507	136134	0.81	50	99.9	89.5	110.5	
W	182	209	1	He	48.816	1.412	762081	1.04	50	97.6	89.5	110.5	
Tl	205	209	1	He	51.244	0.891	1928872	1.12	50	102.5	89.5	110.5	
Pb	208	209	1	He	48.708	0.949	2377075	0.53	50	97.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1790337	2.22	1729956	103.49	30	120	
Sc	45	1	He	1062584	2.22	1045873	101.60	30	120	
Sc	45	2	NoGas	8525852	0.18	8041241	106.03	30	120	
Rh	103	1	He	2969932	0.84	3067946	96.81	30	120	
In	115	1	He	1936235	1.29	1978772	97.85	30	120	
Tb	159	1	He	5070344	0.50	5013529	101.13	30	120	
Ho	165	1	He	5216019	1.53	5115781	101.96	30	120	
Bi	209	1	He	3629597	0.44	3723643	97.47	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:17:57-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	-0.009	-240.3	274	28.5	1	
B	11	45	2	NoGas	1.444	8.0	11274	2.4	20	
Na	23	45	1	He	9.429	12.6	39588	11.1	400	
Mg	24	45	1	He	3.407	19.0	4949	18.6	1000	
Al	27	45	1	He	1.467	30.8	1519	22.9	50	
K	39	45	1	He	9.099	17.8	50773	9.1	1000	
Ca	44	45	1	He	2.311	38.1	711	11.5	1000	
Ti	47	45	1	He	0.303	12.5	98	8.6	20	
V	51	45	1	He	0.096	61.0	494	84.5	2	
Cr	52	45	1	He	0.027	46.3	2626	9.2	2	
Mn	55	115	1	He	0.021	26.9	1021	8.5	2	
Fe	56	103	1	He	19.193	15.4	194945	19.5	50	
Co	59	103	1	He	0.005	71.1	136	29.5	1	
Ni	60	103	1	He	-0.040	-34.0	781	0.9	2	
Cu	63	103	1	He	-0.130	-10.9	2848	8.8	2	
Zn	66	103	1	He	-0.071	-71.2	1389	11.2	20	
As	75	103	1	He	0.041	23.0	198	10.9	2	
Se	78	103	1	He	-0.036	-89.7	68	7.8	2	
Sr	88	103	1	He	0.001	254.9	164	16.4	10	
Mo	95	103	1	He	3.016	5.2	13929	10.0	2	CCB Failed
Ag	107	103	1	He	0.017	24.1	341	21.6	0.2	
Cd	111	103	1	He	0.027	74.6	1847	7.9	0.2	
Sn	118	115	1	He	0.321	6.5	3178	7.5	10	
Sb	123	115	1	He	0.456	18.2	3687	17.5	1	
Ba	137	115	1	He	0.015	68.8	98	34.1	5	
W	182	209	1	He	0.840	10.6	19231	9.5	10	
Tl	205	209	1	He	0.031	18.1	1337	18.4	0.5	
Pb	208	209	1	He	0.041	17.1	3916	10.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1716057	1.87	1729956	99.20	30	120	
Sc	45	1	He	1075162	5.78	1045873	102.80	30	120	
Sc	45	2	NoGas	8254136	0.82	8041241	102.65	30	120	
Rh	103	1	He	3201913	5.03	3067946	104.37	30	120	
In	115	1	He	2039389	4.31	1978772	103.06	30	120	
Tb	159	1	He	5191375	1.29	5013529	103.55	30	120	
Ho	165	1	He	5284059	2.19	5115781	103.29	30	120	
Bi	209	1	He	3777838	1.98	3723643	101.46	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	014SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:21:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2342.362	2342.362	0.67	7608882	0.03	10000	
B	11	45	2	NoGas	263.033	263.033	0.48	595960	0.04	300	
Na	23	45	1	He	19741.763	19741.763	2.40	34074339	0.06	500000	
Mg	24	45	1	He	20282.171	20282.171	1.78	19856732	0.10	500000	
Al	27	45	1	He	19351.285	19351.285	2.00	10814603	0.18	200000	
K	39	45	1	He	20054.988	20054.988	2.89	19786914	0.10	500000	
Ca	44	45	1	He	19003.263	19003.263	5.79	1017523	1.87	500000	
Ti	47	45	1	He	200.760	200.760	1.35	57886	0.35	2500	
V	51	45	1	He	1947.821	1947.821	1.73	14138799	0.01	10000	
Cr	52	45	1	He	1996.836	1996.836	1.54	17148243	0.01	10000	
Mn	55	115	1	He	2037.357	2037.357	1.08	13803006	0.01	10000	
Fe	56	103	1	He	20158.120	20158.120	1.93	165606905	0.01	200000	
Co	59	103	1	He	2034.302	2034.302	1.59	24169325	0.01	10000	
Ni	60	103	1	He	2074.219	2074.219	1.88	6006542	0.03	10000	
Cu	63	103	1	He	2066.485	2066.485	2.91	15717181	0.01	10000	
Zn	66	103	1	He	2133.063	2133.063	1.91	3312879	0.06	10000	
As	75	103	1	He	2086.263	2086.263	2.18	2189397	0.10	10000	
Se	78	103	1	He	1985.185	1985.185	2.97	223338	0.89	10000	
Sr	88	103	1	He	2082.288	2082.288	1.64	18081739	0.01	10000	
Mo	95	103	1	He	209.869	209.869	1.68	831540	0.03	2000	
Ag	107	103	1	He	221.135	221.135	3.35	2822716	0.01	300	
Cd	111	103	1	He	2164.188	2164.188	1.41	4865902	0.04	4000	
Sn	118	115	1	He	2240.883	2240.883	0.86	12506427	0.02	2000	>LDR
Sb	123	115	1	He	213.306	213.306	1.10	1111865	0.02	300	
Ba	137	115	1	He	2208.907	2208.907	1.50	5656607	0.04	10000	
W	182	209	1	He	210.589	210.589	1.14	3164048	0.01	2500	
Tl	205	209	1	He	504.067	504.067	1.39	18359761	0.00	5000	
Pb	208	209	1	He	2099.215	2099.215	1.41	99070113	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1490227	0.51	1729956	86.14	30	120	
Sc	45	1	He	1054836	3.91	1045873	100.86	30	120	
Sc	45	2	NoGas	7129021	0.30	8041241	88.66	30	120	
Rh	103	1	He	2815774	0.86	3067946	91.78	30	120	
In	115	1	He	1820636	2.69	1978772	92.01	30	120	
Tb	159	1	He	4934141	1.06	5013529	98.42	30	120	
Ho	165	1	He	4978308	1.19	5115781	97.31	30	120	
Bi	209	1	He	3512577	0.87	3723643	94.33	30	120	

Sample Report

Sample Table

Sample Name	240-49171-A-18-B@50
Data File Name	015SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:25:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.489	0.489	5.82	2004	0.02	10000	
B	11	45	2	NoGas	2.961	2.961	3.33	13817	0.02	300	
Na	23	45	1	He	13.538	13.538	3.38	40390	0.03	500000	
Mg	24	45	1	He	672.209	672.209	2.19	581062	0.12	500000	
Al	27	45	1	He	2816.701	2816.701	1.07	1387610	0.20	200000	
K	39	45	1	He	200.348	200.348	1.28	209773	0.10	500000	
Ca	44	45	1	He	198.680	198.680	1.20	9868	2.01	500000	
Ti	47	45	1	He	21.401	21.401	2.74	5445	0.39	2500	
V	51	45	1	He	5.026	5.026	2.09	31954	0.02	10000	
Cr	52	45	1	He	4.383	4.383	1.41	35220	0.01	10000	
Mn	55	115	1	He	107.715	107.715	1.05	732765	0.01	10000	
Fe	56	103	1	He	5778.791	5778.791	1.16	47001120	0.01	200000	
Co	59	103	1	He	2.339	2.339	0.52	27570	0.01	10000	
Ni	60	103	1	He	4.997	4.997	0.57	15118	0.03	10000	
Cu	63	103	1	He	4.729	4.729	2.05	39046	0.01	10000	
Zn	66	103	1	He	20.029	20.029	2.16	32091	0.06	10000	
As	75	103	1	He	3.867	3.867	0.48	4145	0.09	10000	
Se	78	103	1	He	1.141	1.141	6.60	190	0.60	10000	
Sr	88	103	1	He	1.278	1.278	1.96	11116	0.01	10000	
Mo	95	103	1	He	3.555	3.555	14.13	14215	0.03	2000	
Ag	107	103	1	He	0.038	0.038	26.45	550	0.01	300	
Cd	111	103	1	He	0.166	0.166	26.92	1916	0.01	4000	
Sn	118	115	1	He	9.662	9.662	8.77	55120	0.02	2000	
Sb	123	115	1	He	0.617	0.617	19.97	4131	0.01	300	
Ba	137	115	1	He	14.389	14.389	1.45	37024	0.04	10000	
W	182	209	1	He	2.633	2.633	15.70	46264	0.01	2500	
Tl	205	209	1	He	0.252	0.252	19.09	9581	0.00	5000	
Pb	208	209	1	He	3.588	3.588	2.71	176867	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1607074	1.78	1729956	92.90	30	120	
Sc	45	1	He	929298	1.94	1045873	88.85	30	120	
Sc	45	2	NoGas	7496735	0.79	8041241	93.23	30	120	
Rh	103	1	He	2787039	0.31	3067946	90.84	30	120	
In	115	1	He	1826723	1.29	1978772	92.32	30	120	
Tb	159	1	He	4784689	1.27	5013529	95.44	30	120	
Ho	165	1	He	4904334	1.45	5115781	95.87	30	120	
Bi	209	1	He	3632775	0.97	3723643	97.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177128/1-a@2
Data File Name	016_Blk.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:29:12-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.293	13.9	1259	18.5	1	
B	11	45	2	NoGas	3.114	9.7	13257	5.4	20	
Na	23	45	1	He	40.287	1.5	81337	5.5	400	
Mg	24	45	1	He	33.801	2.1	30582	5.3	1000	
Al	27	45	1	He	6.133	4.0	3619	8.6	50	
K	39	45	1	He	25.816	9.1	58620	8.8	1000	
Ca	44	45	1	He	109.077	3.2	5666	6.3	1000	
Ti	47	45	1	He	0.520	49.2	138	39.4	20	
V	51	45	1	He	0.197	132.8	1013	162.6	2	
Cr	52	45	1	He	0.946	2.5	9256	5.2	2	
Mn	55	115	1	He	0.325	8.7	2898	9.3	2	
Fe	56	103	1	He	31.202	9.7	264888	11.9	50	
Co	59	103	1	He	0.050	1.4	652	4.0	1	
Ni	60	103	1	He	0.159	2.4	1242	4.2	2	
Cu	63	103	1	He	2.601	11.4	22916	13.5	2	Blank Failed
Zn	66	103	1	He	3.563	7.2	6740	7.5	20	
As	75	103	1	He	0.574	2.1	720	5.5	2	
Se	78	103	1	He	0.428	16.9	110	11.5	2	
Sr	88	103	1	He	0.277	4.4	2491	6.6	10	
Mo	95	103	1	He	1.712	6.2	6953	9.7	2	
Ag	107	103	1	He	0.027	25.0	416	22.1	0.2	
Cd	111	103	1	He	0.040	37.3	1622	3.9	0.2	
Sn	118	115	1	He	24.436	6.9	133982	9.8	10	Blank Failed
Sb	123	115	1	He	0.613	6.7	3986	1.8	1	
Ba	137	115	1	He	0.928	3.0	2359	1.5	5	
W	182	209	1	He	0.897	3.6	19835	5.5	10	
Tl	205	209	1	He	0.110	17.5	4373	20.0	0.5	
Pb	208	209	1	He	0.508	5.3	27220	7.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1530541	10.72	1729956	88.47	30	120	
Sc	45	1	He	933034	6.54	1045873	89.21	30	120	
Sc	45	2	NoGas	7032697	10.13	8041241	87.46	30	120	
Rh	103	1	He	2766594	4.49	3067946	90.18	30	120	
In	115	1	He	1772760	3.70	1978772	89.59	30	120	
Tb	159	1	He	4682591	2.94	5013529	93.40	30	120	
Ho	165	1	He	4860417	2.27	5115781	95.01	30	120	
Bi	209	1	He	3719713	2.92	3723643	99.89	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177128/2-a@2
Data File Name	017LCSS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:33:03-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	536.948	536.948	0.844	1695345	0.80	500	107.4	78.6	110.5	
B	11	2	NoGas	69.957	69.957	2.010	154561	1.09	50	139.9	79.5	120.5	LCSS Failed
Na	23	1	He	5145.331	5145.331	0.623	7827808	1.88	5000	102.9	79.5	120.5	
Mg	24	1	He	5115.956	5115.956	1.480	4408023	2.67	5000	102.3	79.5	120.5	
Al	27	1	He	4895.304	4895.304	0.324	2407371	1.17	5000	97.9	79.5	120.5	
K	39	1	He	5026.386	5026.386	3.015	4391842	4.24	5000	100.5	79.5	120.5	
Ca	44	1	He	4683.936	4683.936	1.835	220928	3.08	5000	93.7	79.5	120.5	
Ti	47	1	He	50.810	50.810	1.572	12896	2.83	50	101.6	79.5	120.5	
V	51	1	He	508.481	508.481	1.689	3247168	2.77	500	101.7	71.5	110.5	
Cr	52	1	He	510.278	510.278	0.769	3856283	1.05	500	102.1	69.5	110.5	
Mn	55	1	He	476.135	476.135	0.185	3100347	2.48	500	95.2	79.5	120.5	
Fe	56	1	He	4689.362	4689.362	0.799	37508822	1.47	5000	93.8	79.5	120.5	
Co	59	1	He	475.607	475.607	1.081	5500645	2.05	500	95.1	73.9	110.5	
Ni	60	1	He	478.453	478.453	4.489	1349630	5.60	500	95.7	74.9	110.5	
Cu	63	1	He	488.840	488.840	0.777	3621844	2.02	500	97.8	72.6	110.5	
Zn	66	1	He	442.553	442.553	1.941	670075	2.48	500	88.5	71.5	113.4	
As	75	1	He	422.855	422.855	0.893	432046	1.64	500	84.6	73.4	110.5	
Se	78	1	He	409.231	409.231	1.033	44866	2.12	500	81.8	64.6	110.5	
Sr	88	1	He	476.847	476.847	1.950	4030517	2.33	500	95.4	79.5	120.5	
Mo	95	1	He	50.867	50.867	0.988	196383	1.77	50	101.7	29.5	140.5	
Ag	107	1	He	50.208	50.208	1.017	623890	1.61	50	100.4	59.5	114.5	
Cd	111	1	He	468.779	468.779	1.312	1027140	1.70	500	93.8	73.5	110.5	
Sn	118	1	He	559.597	559.597	1.449	3002230	1.23	500	111.9	79.5	120.5	
Sb	123	1	He	48.573	48.573	1.264	244011	1.72	50	97.1	67.5	113.4	
Ba	137	1	He	482.267	482.267	1.712	1186994	1.01	500	96.5	69.5	110.5	
W	182	1	He	45.855	45.855	1.981	699837	2.32	50	91.7	74.6	125.4	
Tl	205	1	He	118.390	118.390	0.513	4353994	0.65	125	94.7	70.6	110.5	
Pb	208	1	He	489.246	489.246	1.011	23313569	0.59	500	97.8	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1448294	0.37	1729956	83.72	30	120	
Sc	45	1	He	927770	1.26	1045873	88.71	30	120	
Sc	45	2	NoGas	6749472	1.28	8041241	83.94	30	120	
Rh	103	1	He	2741002	1.99	3067946	89.34	30	120	
In	115	1	He	1749895	2.65	1978772	88.43	30	120	
Tb	159	1	He	4796619	1.70	5013529	95.67	30	120	
Ho	165	1	He	4849093	1.57	5115781	94.79	30	120	
Bi	209	1	He	3546583	1.13	3723643	95.24	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-d@20
Data File Name	018SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:36:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.466	0.466	6.97	2160	0.02	10000	
B	11	45	2	NoGas	8.890	8.890	2.21	32188	0.03	300	
Na	23	45	1	He	209.761	209.761	2.12	401598	0.05	500000	
Mg	24	45	1	He	1276.265	1276.265	0.24	1307623	0.10	500000	
Al	27	45	1	He	4973.094	4973.094	1.51	2904908	0.17	200000	
K	39	45	1	He	1770.324	1770.324	1.37	1865218	0.09	500000	
Ca	44	45	1	He	28.548	28.548	52.14	2211	1.29	500000	
Ti	47	45	1	He	36.375	36.375	1.71	10969	0.33	2500	
V	51	45	1	He	8.287	8.287	3.53	62645	0.01	10000	
Cr	52	45	1	He	8.677	8.677	1.99	80292	0.01	10000	
Mn	55	115	1	He	1148.126	1148.126	2.23	8726192	0.01	10000	
Fe	56	103	1	He	10401.682	10401.682	2.28	96219427	0.01	200000	
Co	59	103	1	He	3.906	3.906	3.60	52305	0.01	10000	
Ni	60	103	1	He	10.188	10.188	2.04	34122	0.03	10000	
Cu	63	103	1	He	10.370	10.370	2.46	92716	0.01	10000	
Zn	66	103	1	He	24.970	24.970	2.76	45137	0.06	10000	
As	75	103	1	He	22.631	22.631	1.93	26887	0.08	10000	
Se	78	103	1	He	0.710	0.710	8.33	162	0.44	10000	
Sr	88	103	1	He	185.481	185.481	2.56	1813461	0.01	10000	
Mo	95	103	1	He	56.143	56.143	0.79	250782	0.02	2000	
Ag	107	103	1	He	0.018	0.018	19.53	338	0.01	300	
Cd	111	103	1	He	0.144	0.144	13.43	2123	0.01	4000	
Sn	118	115	1	He	2.338	2.338	6.18	15797	0.01	2000	
Sb	123	115	1	He	0.128	0.128	19.88	1759	0.01	300	
Ba	137	115	1	He	31.048	31.048	2.57	89261	0.03	10000	
W	182	209	1	He	2.023	2.023	1.92	38551	0.01	2500	
Tl	205	209	1	He	0.119	0.119	10.64	4817	0.00	5000	
Pb	208	209	1	He	38.499	38.499	2.46	1968736	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1807053	0.98	1729956	104.46	30	120	
Sc	45	1	He	1102358	3.43	1045873	105.40	30	120	
Sc	45	2	NoGas	8684356	0.53	8041241	108.00	30	120	
Rh	103	1	He	3172135	3.95	3067946	103.40	30	120	
In	115	1	He	2043484	3.57	1978772	103.27	30	120	
Tb	159	1	He	5227727	1.97	5013529	104.27	30	120	
Ho	165	1	He	5323212	0.84	5115781	104.05	30	120	
Bi	209	1	He	3803745	2.24	3723643	102.15	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-3-d@100
Data File Name	019SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:40:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.207	0.207	4.68	1104	0.02	10000	
B	11	45	2	NoGas	2.123	2.123	12.51	13294	0.02	300	
Na	23	45	1	He	40.736	40.736	0.11	92400	0.04	500000	
Mg	24	45	1	He	252.266	252.266	3.20	247526	0.10	500000	
Al	27	45	1	He	995.712	995.712	3.52	555014	0.18	200000	
K	39	45	1	He	348.864	348.864	1.30	382885	0.09	500000	
Ca	44	45	1	He	8.557	8.557	49.91	1027	0.83	500000	
Ti	47	45	1	He	6.732	6.732	1.26	1942	0.35	2500	
V	51	45	1	He	1.828	1.828	5.39	13008	0.01	10000	
Cr	52	45	1	He	1.790	1.790	3.37	17642	0.01	10000	
Mn	55	115	1	He	229.911	229.911	1.05	1704545	0.01	10000	
Fe	56	103	1	He	2059.264	2059.264	4.25	18490541	0.01	200000	
Co	59	103	1	He	0.776	0.776	3.28	10139	0.01	10000	
Ni	60	103	1	He	1.919	1.919	3.79	6947	0.03	10000	
Cu	63	103	1	He	1.939	1.939	4.01	19915	0.01	10000	
Zn	66	103	1	He	5.375	5.375	2.40	10567	0.05	10000	
As	75	103	1	He	4.631	4.631	3.43	5450	0.08	10000	
Se	78	103	1	He	0.176	0.176	20.75	91	0.19	10000	
Sr	88	103	1	He	34.140	34.140	3.65	323924	0.01	10000	
Mo	95	103	1	He	11.908	11.908	2.74	51823	0.02	2000	
Ag	107	103	1	He	0.005	0.005	26.93	152	0.00	300	
Cd	111	103	1	He	0.051	0.051	35.17	1830	0.00	4000	
Sn	118	115	1	He	0.557	0.557	3.75	4542	0.01	2000	
Sb	123	115	1	He	-0.039	-0.039	-13.54	769	-0.01	300	
Ba	137	115	1	He	6.179	6.179	3.67	17368	0.04	10000	
W	182	209	1	He	0.450	0.450	7.95	13013	0.00	2500	
Tl	205	209	1	He	0.026	0.026	15.29	1155	0.00	5000	
Pb	208	209	1	He	7.569	7.569	2.97	388711	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1749071	2.33	1729956	101.10	30	120	
Sc	45	1	He	1050579	0.30	1045873	100.45	30	120	
Sc	45	2	NoGas	8422769	1.63	8041241	104.74	30	120	
Rh	103	1	He	3075815	0.82	3067946	100.26	30	120	
In	115	1	He	1991741	0.82	1978772	100.66	30	120	
Tb	159	1	He	5110080	0.97	5013529	101.93	30	120	
Ho	165	1	He	5158695	0.30	5115781	100.84	30	120	
Bi	209	1	He	3803539	0.58	3723643	102.15	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-3-d@20
Data File Name	020SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:44:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1137.555	1137.555	1.30	3863295	0.03	10000	
B	11	45	2	NoGas	137.717	137.717	2.21	330293	0.04	300	
Na	23	45	1	He	10127.209	10127.209	4.73	18225072	0.06	500000	
Mg	24	45	1	He	11142.639	11142.639	3.68	11376225	0.10	500000	
Al	27	45	1	He	14181.381	14181.381	3.88	8263717	0.17	200000	
K	39	45	1	He	11578.770	11578.770	4.15	11930353	0.10	500000	
Ca	44	45	1	He	9070.947	9070.947	3.49	506611	1.79	500000	
Ti	47	45	1	He	134.429	134.429	4.81	40388	0.33	2500	
V	51	45	1	He	1001.391	1001.391	3.80	7578627	0.01	10000	
Cr	52	45	1	He	1010.067	1010.067	4.68	9039125	0.01	10000	
Mn	55	115	1	He	2155.032	2155.032	3.37	15358457	0.01	10000	
Fe	56	103	1	He	20450.394	20450.394	2.43	177277002	0.01	200000	
Co	59	103	1	He	1023.482	1023.482	2.26	12830601	0.01	10000	
Ni	60	103	1	He	1062.197	1062.197	2.52	3245925	0.03	10000	
Cu	63	103	1	He	1056.105	1056.105	3.36	8478861	0.01	10000	
Zn	66	103	1	He	1096.035	1096.035	2.19	1796758	0.06	10000	
As	75	103	1	He	1005.112	1005.112	2.35	1113041	0.09	10000	
Se	78	103	1	He	999.090	999.090	2.39	118634	0.84	10000	
Sr	88	103	1	He	1212.290	1212.290	2.32	11107323	0.01	10000	
Mo	95	103	1	He	157.339	157.339	0.62	657497	0.02	2000	
Ag	107	103	1	He	37.391	37.391	1.59	503612	0.01	300	
Cd	111	103	1	He	1092.242	1092.242	1.13	2591496	0.04	4000	
Sn	118	115	1	He	1102.675	1102.675	0.64	6473738	0.02	2000	
Sb	123	115	1	He	105.248	105.248	1.33	577554	0.02	300	
Ba	137	115	1	He	1130.828	1130.828	2.57	3046216	0.04	10000	
W	182	209	1	He	104.722	104.722	2.31	1623994	0.01	2500	
Tl	205	209	1	He	250.485	250.485	1.86	9402907	0.00	5000	
Pb	208	209	1	He	1089.867	1089.867	2.29	53012975	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1558000	1.11	1729956	90.06	30	120	
Sc	45	1	He	1102436	10.32	1045873	105.41	30	120	
Sc	45	2	NoGas	7472352	0.44	8041241	92.93	30	120	
Rh	103	1	He	2969739	2.84	3067946	96.80	30	120	
In	115	1	He	1914622	3.32	1978772	96.76	30	120	
Tb	159	1	He	4987693	2.81	5013529	99.48	30	120	
Ho	165	1	He	5108223	3.03	5115781	99.85	30	120	
Bi	209	1	He	3619460	1.38	3723643	97.20	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-e du@20
Data File Name	021SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:47:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.563	0.563	7.34	2282	0.02	10000	
B	11	45	2	NoGas	8.955	8.955	1.32	28489	0.03	300	
Na	23	45	1	He	188.390	188.390	0.81	316639	0.06	500000	
Mg	24	45	1	He	1109.868	1109.868	1.02	991606	0.11	500000	
Al	27	45	1	He	4230.773	4230.773	1.54	2155410	0.20	200000	
K	39	45	1	He	1578.003	1578.003	0.13	1453502	0.11	500000	
Ca	44	45	1	He	48.739	48.739	15.65	2898	1.68	500000	
Ti	47	45	1	He	36.855	36.855	4.03	9690	0.38	2500	
V	51	45	1	He	7.674	7.674	2.58	50570	0.02	10000	
Cr	52	45	1	He	8.119	8.119	0.56	65662	0.01	10000	
Mn	55	115	1	He	514.608	514.608	2.73	3543512	0.01	10000	
Fe	56	103	1	He	9370.245	9370.245	1.56	78277530	0.01	200000	
Co	59	103	1	He	3.597	3.597	0.72	43527	0.01	10000	
Ni	60	103	1	He	9.214	9.214	2.52	27941	0.03	10000	
Cu	63	103	1	He	8.040	8.040	1.11	65712	0.01	10000	
Zn	66	103	1	He	21.029	21.029	0.81	34552	0.06	10000	
As	75	103	1	He	21.279	21.279	0.34	22839	0.09	10000	
Se	78	103	1	He	1.162	1.162	6.75	198	0.59	10000	
Sr	88	103	1	He	124.467	124.467	0.32	1099154	0.01	10000	
Mo	95	103	1	He	55.199	55.199	0.10	222608	0.02	2000	
Ag	107	103	1	He	0.012	0.012	28.22	237	0.01	300	
Cd	111	103	1	He	0.140	0.140	9.39	1908	0.01	4000	
Sn	118	115	1	He	7.287	7.287	9.36	42380	0.02	2000	
Sb	123	115	1	He	0.189	0.189	9.86	1922	0.01	300	
Ba	137	115	1	He	27.345	27.345	2.88	71241	0.04	10000	
W	182	209	1	He	3.247	3.247	5.32	55775	0.01	2500	
Tl	205	209	1	He	0.200	0.200	18.08	7659	0.00	5000	
Pb	208	209	1	He	23.873	23.873	0.89	1166087	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1619890	1.72	1729956	93.64	30	120	
Sc	45	1	He	961123	0.32	1045873	91.90	30	120	
Sc	45	2	NoGas	7644821	1.77	8041241	95.07	30	120	
Rh	103	1	He	2863296	1.19	3067946	93.33	30	120	
In	115	1	He	1850950	1.41	1978772	93.54	30	120	
Tb	159	1	He	4852136	0.22	5013529	96.78	30	120	
Ho	165	1	He	4931971	0.48	5115781	96.41	30	120	
Bi	209	1	He	3629808	0.37	3723643	97.48	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-f ms@20
Data File Name	022SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:51:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.171	5.171	3.99	19567	0.03	10000	
B	11	45	2	NoGas	13.811	13.811	4.01	42861	0.03	300	
Na	23	45	1	He	664.163	664.163	1.83	1141277	0.06	500000	
Mg	24	45	1	He	1631.717	1631.717	1.10	1562275	0.10	500000	
Al	27	45	1	He	4839.629	4839.629	0.41	2643300	0.18	200000	
K	39	45	1	He	1982.818	1982.818	0.70	1947808	0.10	500000	
Ca	44	45	1	He	469.864	469.864	2.59	25114	1.87	500000	
Ti	47	45	1	He	47.366	47.366	2.82	13351	0.35	2500	
V	51	45	1	He	12.451	12.451	1.23	88100	0.01	10000	
Cr	52	45	1	He	12.446	12.446	0.83	106697	0.01	10000	
Mn	55	115	1	He	954.385	954.385	2.37	6843676	0.01	10000	
Fe	56	103	1	He	9626.159	9626.159	2.08	84262672	0.01	200000	
Co	59	103	1	He	8.067	8.067	1.07	102183	0.01	10000	
Ni	60	103	1	He	13.689	13.689	1.35	43091	0.03	10000	
Cu	63	103	1	He	13.754	13.754	0.69	115149	0.01	10000	
Zn	66	103	1	He	26.834	26.834	1.25	45802	0.06	10000	
As	75	103	1	He	24.578	24.578	0.21	27621	0.09	10000	
Se	78	103	1	He	4.922	4.922	4.44	658	0.75	10000	
Sr	88	103	1	He	196.959	196.959	1.64	1822315	0.01	10000	
Mo	95	103	1	He	57.320	57.320	1.78	242181	0.02	2000	
Ag	107	103	1	He	4.833	4.833	0.66	65816	0.01	300	
Cd	111	103	1	He	4.809	4.809	0.25	13181	0.04	4000	
Sn	118	115	1	He	7.472	7.472	1.53	45261	0.02	2000	
Sb	123	115	1	He	1.691	1.691	0.96	10284	0.02	300	
Ba	137	115	1	He	32.695	32.695	3.81	88681	0.04	10000	
W	182	209	1	He	5.230	5.230	0.66	88090	0.01	2500	
Tl	205	209	1	He	4.283	4.283	1.64	164253	0.00	5000	
Pb	208	209	1	He	41.406	41.406	1.18	2058062	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1708667	0.59	1729956	98.77	30	120	
Sc	45	1	He	1030402	0.11	1045873	98.52	30	120	
Sc	45	2	NoGas	8159414	1.10	8041241	101.47	30	120	
Rh	103	1	He	3000275	0.96	3067946	97.79	30	120	
In	115	1	He	1928000	2.49	1978772	97.43	30	120	
Tb	159	1	He	5068342	0.45	5013529	101.09	30	120	
Ho	165	1	He	5097508	0.64	5115781	99.64	30	120	
Bi	209	1	He	3696183	0.37	3723643	99.26	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-9-b@20
Data File Name	023SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:55:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.557	0.557	5.77	2623	0.02	10000	
B	11	45	2	NoGas	2.793	2.793	3.59	16126	0.02	300	
Na	23	45	1	He	20.485	20.485	2.61	61942	0.03	500000	
Mg	24	45	1	He	1722.676	1722.676	1.68	1808113	0.10	500000	
Al	27	45	1	He	7357.788	7357.788	0.72	4405416	0.17	200000	
K	39	45	1	He	606.952	606.952	1.89	683993	0.09	500000	
Ca	44	45	1	He	202.327	202.327	1.08	12205	1.66	500000	
Ti	47	45	1	He	45.755	45.755	0.79	14139	0.32	2500	
V	51	45	1	He	12.755	12.755	1.42	98949	0.01	10000	
Cr	52	45	1	He	11.399	11.399	0.59	107345	0.01	10000	
Mn	55	115	1	He	127.044	127.044	0.38	980314	0.01	10000	
Fe	56	103	1	He	15101.665	15101.665	0.93	140862297	0.01	200000	
Co	59	103	1	He	5.608	5.608	1.59	75721	0.01	10000	
Ni	60	103	1	He	13.178	13.178	1.56	44230	0.03	10000	
Cu	63	103	1	He	10.924	10.924	1.58	98273	0.01	10000	
Zn	66	103	1	He	32.517	32.517	2.04	58823	0.06	10000	
As	75	103	1	He	7.728	7.728	1.30	9354	0.08	10000	
Se	78	103	1	He	0.778	0.778	9.51	171	0.45	10000	
Sr	88	103	1	He	2.694	2.694	1.83	26710	0.01	10000	
Mo	95	103	1	He	1.477	1.477	4.09	6965	0.02	2000	
Ag	107	103	1	He	0.016	0.016	10.51	326	0.01	300	
Cd	111	103	1	He	0.098	0.098	25.05	2023	0.00	4000	
Sn	118	115	1	He	2.393	2.393	4.88	16398	0.01	2000	
Sb	123	115	1	He	0.017	0.017	69.92	1129	0.00	300	
Ba	137	115	1	He	38.293	38.293	0.67	111695	0.03	10000	
W	182	209	1	He	0.258	0.258	15.97	10015	0.00	2500	
Tl	205	209	1	He	0.119	0.119	9.56	4860	0.00	5000	
Pb	208	209	1	He	6.843	6.843	0.81	355925	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1879473	0.82	1729956	108.64	30	120	
Sc	45	1	He	1129646	0.37	1045873	108.01	30	120	
Sc	45	2	NoGas	9009492	0.35	8041241	112.04	30	120	
Rh	103	1	He	3196796	0.54	3067946	104.20	30	120	
In	115	1	He	2072300	1.34	1978772	104.73	30	120	
Tb	159	1	He	5205689	1.47	5013529	103.83	30	120	
Ho	165	1	He	5330134	0.37	5115781	104.19	30	120	
Bi	209	1	He	3850676	0.84	3723643	103.41	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	024_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:59:09-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.987	4.800	181552	5.26	50	92.0	89.5	110.5	
B	11	45	2	NoGas	55.255	2.689	153968	3.61	50	110.5	89.5	110.5	CCV Failed
Na	23	45	1	He	25273.266	2.843	47743804	5.45	25000	101.1	89.5	110.5	
Mg	24	45	1	He	25293.690	3.507	27101475	5.12	25000	101.2	89.5	110.5	
Al	27	45	1	He	253.136	1.557	155575	4.76	250	101.3	89.5	110.5	
K	39	45	1	He	25729.363	1.743	27796254	6.32	25000	102.9	89.5	110.5	
Ca	44	45	1	He	25330.147	2.338	1483843	5.58	25000	101.3	89.5	110.5	
Ti	47	45	1	He	50.211	3.507	15839	2.16	50	100.4	89.5	110.5	
V	51	45	1	He	49.646	1.780	394139	4.16	50	99.3	89.5	110.5	
Cr	52	45	1	He	49.884	2.354	471273	4.31	50	99.8	89.5	110.5	
Mn	55	115	1	He	258.511	1.494	1934889	4.33	250	103.4	89.5	110.5	
Fe	56	103	1	He	12664.508	2.399	113332262	4.96	12500	101.3	89.5	110.5	
Co	59	103	1	He	50.841	1.529	657918	4.09	50	101.7	89.5	110.5	
Ni	60	103	1	He	50.946	1.057	161495	3.25	50	101.9	89.5	110.5	
Cu	63	103	1	He	51.241	1.384	428087	3.58	50	102.5	89.5	110.5	
Zn	66	103	1	He	50.966	1.870	87628	4.58	50	101.9	89.5	110.5	
As	75	103	1	He	51.103	2.298	58551	4.81	50	102.2	89.5	110.5	
Se	78	103	1	He	51.310	0.806	6354	3.68	50	102.6	89.5	110.5	
Sr	88	103	1	He	49.934	1.654	472357	4.13	50	99.9	89.5	110.5	
Mo	95	103	1	He	51.378	2.159	221977	5.09	50	102.8	89.5	110.5	
Ag	107	103	1	He	50.935	0.904	707940	2.53	50	101.9	89.5	110.5	
Cd	111	103	1	He	50.688	1.339	125726	1.89	50	101.4	89.5	110.5	
Sn	118	115	1	He	49.763	0.543	307861	3.02	50	99.5	89.5	110.5	
Sb	123	115	1	He	50.317	1.489	290410	2.98	50	100.6	89.5	110.5	
Ba	137	115	1	He	49.975	1.073	141388	2.41	50	100.0	89.5	110.5	
W	182	209	1	He	47.810	0.696	753096	1.29	50	95.6	89.5	110.5	
Tl	205	209	1	He	51.337	1.402	1949388	1.88	50	102.7	89.5	110.5	
Pb	208	209	1	He	48.405	0.922	2383024	0.38	50	96.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1807948	2.11	1729956	104.51	30	120	
Sc	45	1	He	1154690	5.42	1045873	110.40	30	120	
Sc	45	2	NoGas	8421554	2.06	8041241	104.73	30	120	
Rh	103	1	He	3066013	3.09	3067946	99.94	30	120	
In	115	1	He	2010544	3.18	1978772	101.61	30	120	
Tb	159	1	He	5186523	1.71	5013529	103.45	30	120	
Ho	165	1	He	5256524	1.84	5115781	102.75	30	120	
Bi	209	1	He	3661626	1.30	3723643	98.33	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:02:57-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.129	17.2	859	21.9	1	
B	11	45	2	NoGas	1.029	5.0	10722	13.3	20	
Na	23	45	1	He	4.632	9.9	30300	8.7	400	
Mg	24	45	1	He	1.183	18.2	2634	7.7	1000	
Al	27	45	1	He	0.392	35.6	871	3.9	50	
K	39	45	1	He	6.834	28.5	47152	6.0	1000	
Ca	44	45	1	He	0.302	550.3	584	14.5	1000	
Ti	47	45	1	He	0.065	30.7	28	25.0	20	
V	51	45	1	He	0.111	66.2	600	89.5	2	
Cr	52	45	1	He	0.013	108.9	2439	8.8	2	
Mn	55	115	1	He	0.040	27.0	1140	8.7	2	
Fe	56	103	1	He	17.002	12.8	167748	9.5	50	
Co	59	103	1	He	0.010	15.2	203	11.5	1	
Ni	60	103	1	He	-0.097	-5.7	577	5.5	2	
Cu	63	103	1	He	-0.176	-7.7	2369	5.9	2	
Zn	66	103	1	He	-0.103	-7.6	1287	3.4	20	
As	75	103	1	He	0.072	27.4	227	12.6	2	
Se	78	103	1	He	0.054	93.1	77	8.5	2	
Sr	88	103	1	He	0.013	41.0	276	21.3	10	
Mo	95	103	1	He	0.724	7.7	3467	4.5	2	
Ag	107	103	1	He	0.008	5.0	198	5.4	0.2	
Cd	111	103	1	He	0.024	116.2	1778	5.6	0.2	
Sn	118	115	1	He	0.463	5.2	3978	6.0	10	
Sb	123	115	1	He	0.348	20.9	2969	11.8	1	
Ba	137	115	1	He	0.010	80.6	82	30.4	5	
W	182	209	1	He	0.734	10.2	17162	6.8	10	
Tl	205	209	1	He	0.032	10.7	1350	8.8	0.5	
Pb	208	209	1	He	0.106	1.6	7083	2.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1848927	12.10	1729956	106.88	30	120	
Sc	45	1	He	1047333	6.25	1045873	100.14	30	120	
Sc	45	2	NoGas	8669846	12.05	8041241	107.82	30	120	
Rh	103	1	He	3099703	2.57	3067946	101.04	30	120	
In	115	1	He	1994091	2.42	1978772	100.77	30	120	
Tb	159	1	He	5076802	2.66	5013529	101.26	30	120	
Ho	165	1	He	5131175	2.01	5115781	100.30	30	120	
Bi	209	1	He	3706498	1.92	3723643	99.54	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-10-b@20
Data File Name	026SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:06:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.459	0.459	14.61	2052	0.02	10000	
B	11	45	2	NoGas	1.812	1.812	10.01	12353	0.01	300	
Na	23	45	1	He	19.981	19.981	3.25	54626	0.04	500000	
Mg	24	45	1	He	1171.854	1171.854	1.16	1101563	0.11	500000	
Al	27	45	1	He	6573.057	6573.057	2.42	3522943	0.19	200000	
K	39	45	1	He	397.308	397.308	2.72	414306	0.10	500000	
Ca	44	45	1	He	191.257	191.257	0.35	10359	1.85	500000	
Ti	47	45	1	He	56.533	56.533	3.08	15635	0.36	2500	
V	51	45	1	He	13.593	13.593	2.72	94405	0.01	10000	
Cr	52	45	1	He	9.569	9.569	1.39	81030	0.01	10000	
Mn	55	115	1	He	427.185	427.185	2.58	2966584	0.01	10000	
Fe	56	103	1	He	12832.892	12832.892	1.37	109663622	0.01	200000	
Co	59	103	1	He	6.121	6.121	1.43	75708	0.01	10000	
Ni	60	103	1	He	8.990	8.990	2.91	27904	0.03	10000	
Cu	63	103	1	He	6.804	6.804	2.66	57432	0.01	10000	
Zn	66	103	1	He	28.980	28.980	1.46	48179	0.06	10000	
As	75	103	1	He	5.962	5.962	1.60	6643	0.09	10000	
Se	78	103	1	He	0.597	0.597	9.86	136	0.44	10000	
Sr	88	103	1	He	2.077	2.077	3.64	18895	0.01	10000	
Mo	95	103	1	He	0.878	0.878	8.35	3918	0.02	2000	
Ag	107	103	1	He	0.016	0.016	14.63	288	0.01	300	
Cd	111	103	1	He	0.073	0.073	63.62	1793	0.00	4000	
Sn	118	115	1	He	1.856	1.856	8.04	11690	0.02	2000	
Sb	123	115	1	He	0.123	0.123	23.13	1587	0.01	300	
Ba	137	115	1	He	39.240	39.240	1.86	103076	0.04	10000	
W	182	209	1	He	0.169	0.169	5.43	8158	0.00	2500	
Tl	205	209	1	He	0.098	0.098	3.48	3861	0.00	5000	
Pb	208	209	1	He	7.797	7.797	0.96	386533	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1736844	0.45	1729956	100.40	30	120	
Sc	45	1	He	1011356	1.02	1045873	96.70	30	120	
Sc	45	2	NoGas	8339062	0.88	8041241	103.70	30	120	
Rh	103	1	He	2929272	2.00	3067946	95.48	30	120	
In	115	1	He	1866305	0.49	1978772	94.32	30	120	
Tb	159	1	He	4927556	0.48	5013529	98.29	30	120	
Ho	165	1	He	5027113	1.36	5115781	98.27	30	120	
Bi	209	1	He	3672743	0.85	3723643	98.63	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-1-b@20
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:10:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.402	0.402	14.15	2137	0.02	10000	
B	11	45	2	NoGas	2.474	2.474	9.07	16171	0.02	300	
Na	23	45	1	He	24.190	24.190	1.94	68649	0.04	500000	
Mg	24	45	1	He	1491.575	1491.575	0.39	1562301	0.10	500000	
Al	27	45	1	He	5048.877	5048.877	2.30	3018064	0.17	200000	
K	39	45	1	He	405.790	405.790	0.46	470705	0.09	500000	
Ca	44	45	1	He	2618.208	2618.208	1.35	150342	1.74	500000	
Ti	47	45	1	He	47.684	47.684	1.28	14706	0.32	2500	
V	51	45	1	He	9.360	9.360	0.78	72381	0.01	10000	
Cr	52	45	1	He	8.969	8.969	0.74	84825	0.01	10000	
Mn	55	115	1	He	283.164	283.164	3.64	2172521	0.01	10000	
Fe	56	103	1	He	11451.838	11451.838	0.92	106636094	0.01	200000	
Co	59	103	1	He	4.154	4.154	1.58	56023	0.01	10000	
Ni	60	103	1	He	10.382	10.382	0.37	34979	0.03	10000	
Cu	63	103	1	He	6.501	6.501	2.41	59997	0.01	10000	
Zn	66	103	1	He	25.832	25.832	1.89	46969	0.05	10000	
As	75	103	1	He	7.121	7.121	0.63	8617	0.08	10000	
Se	78	103	1	He	0.496	0.496	1.98	135	0.37	10000	
Sr	88	103	1	He	6.528	6.528	2.34	64407	0.01	10000	
Mo	95	103	1	He	0.635	0.635	3.70	3173	0.02	2000	
Ag	107	103	1	He	0.022	0.022	7.45	401	0.01	300	
Cd	111	103	1	He	0.121	0.121	32.31	2080	0.01	4000	
Sn	118	115	1	He	1.896	1.896	2.43	13161	0.01	2000	
Sb	123	115	1	He	0.114	0.114	14.56	1698	0.01	300	
Ba	137	115	1	He	28.906	28.906	2.22	83878	0.03	10000	
W	182	209	1	He	0.129	0.129	27.87	7865	0.00	2500	
Tl	205	209	1	He	0.070	0.070	6.68	2890	0.00	5000	
Pb	208	209	1	He	7.745	7.745	0.87	401722	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2022785	2.24	1729956	116.93	30	120	
Sc	45	1	He	1127174	4.47	1045873	107.77	30	120	
Sc	45	2	NoGas	9577115	2.86	8041241	119.10	30	120	
Rh	103	1	He	3191129	2.53	3067946	104.02	30	120	
In	115	1	He	2060729	1.67	1978772	104.14	30	120	
Tb	159	1	He	5220866	2.01	5013529	104.14	30	120	
Ho	165	1	He	5317480	1.21	5115781	103.94	30	120	
Bi	209	1	He	3842649	2.12	3723643	103.20	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-2-b@20
Data File Name	028SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:14:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.448	0.448	20.42	2482	0.02	10000	
B	11	45	2	NoGas	1.831	1.831	4.33	15666	0.01	300	
Na	23	45	1	He	15.366	15.366	1.81	55881	0.03	500000	
Mg	24	45	1	He	1061.327	1061.327	2.36	1186542	0.09	500000	
Al	27	45	1	He	7377.718	7377.718	0.63	4703164	0.16	200000	
K	39	45	1	He	371.798	371.798	2.14	464063	0.08	500000	
Ca	44	45	1	He	420.266	420.266	2.24	26289	1.60	500000	
Ti	47	45	1	He	35.484	35.484	1.88	11677	0.30	2500	
V	51	45	1	He	14.837	14.837	2.88	122558	0.01	10000	
Cr	52	45	1	He	10.337	10.337	1.66	103895	0.01	10000	
Mn	55	115	1	He	352.898	352.898	1.60	2848053	0.01	10000	
Fe	56	103	1	He	13081.001	13081.001	0.68	128417386	0.01	200000	
Co	59	103	1	He	5.310	5.310	1.77	75458	0.01	10000	
Ni	60	103	1	He	9.814	9.814	2.76	34908	0.03	10000	
Cu	63	103	1	He	6.349	6.349	1.31	61856	0.01	10000	
Zn	66	103	1	He	34.467	34.467	2.48	65515	0.05	10000	
As	75	103	1	He	8.284	8.284	1.59	10543	0.08	10000	
Se	78	103	1	He	0.714	0.714	3.21	172	0.42	10000	
Sr	88	103	1	He	2.665	2.665	1.41	27812	0.01	10000	
Mo	95	103	1	He	0.823	0.823	2.30	4239	0.02	2000	
Ag	107	103	1	He	0.046	0.046	6.15	797	0.01	300	
Cd	111	103	1	He	0.121	0.121	5.12	2192	0.01	4000	
Sn	118	115	1	He	1.787	1.787	2.26	13128	0.01	2000	
Sb	123	115	1	He	0.069	0.069	7.80	1506	0.00	300	
Ba	137	115	1	He	36.731	36.731	1.54	112114	0.03	10000	
W	182	209	1	He	0.060	0.060	86.07	6961	0.00	2500	
Tl	205	209	1	He	0.107	0.107	3.39	4532	0.00	5000	
Pb	208	209	1	He	11.753	11.753	1.15	629314	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2158345	4.75	1729956	124.76	30	120	ISTD Failed
Sc	45	1	He	1202786	1.16	1045873	115.00	30	120	
Sc	45	2	NoGas	10527699	4.03	8041241	130.92	30	120	ISTD Failed
Rh	103	1	He	3364810	1.54	3067946	109.68	30	120	
In	115	1	He	2168675	1.08	1978772	109.60	30	120	
Tb	159	1	He	5414526	1.27	5013529	108.00	30	120	
Ho	165	1	He	5560378	0.77	5115781	108.69	30	120	
Bi	209	1	He	3973206	0.96	3723643	106.70	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-3-b@20
Data File Name	029SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:18:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.402	0.402	17.43	1982	0.02	10000	
B	11	45	2	NoGas	2.042	2.042	11.17	14328	0.01	300	
Na	23	45	1	He	16.983	16.983	3.82	60117	0.03	500000	
Mg	24	45	1	He	1030.263	1030.263	1.51	1172531	0.09	500000	
Al	27	45	1	He	7172.812	7172.812	1.95	4652772	0.15	200000	
K	39	45	1	He	390.936	390.936	1.73	494189	0.08	500000	
Ca	44	45	1	He	732.770	732.770	1.57	46153	1.59	500000	
Ti	47	45	1	He	43.974	43.974	3.15	14724	0.30	2500	
V	51	45	1	He	14.262	14.262	2.45	119941	0.01	10000	
Cr	52	45	1	He	11.274	11.274	1.88	115085	0.01	10000	
Mn	55	115	1	He	428.872	428.872	1.86	3460781	0.01	10000	
Fe	56	103	1	He	12699.655	12699.655	1.22	128166528	0.01	200000	
Co	59	103	1	He	6.425	6.425	1.06	93871	0.01	10000	
Ni	60	103	1	He	9.841	9.841	1.28	35992	0.03	10000	
Cu	63	103	1	He	6.305	6.305	0.88	63197	0.01	10000	
Zn	66	103	1	He	33.658	33.658	2.41	65803	0.05	10000	
As	75	103	1	He	8.107	8.107	2.51	10608	0.08	10000	
Se	78	103	1	He	0.786	0.786	28.71	186	0.42	10000	
Sr	88	103	1	He	3.603	3.603	1.76	38594	0.01	10000	
Mo	95	103	1	He	0.802	0.802	4.58	4252	0.02	2000	
Ag	107	103	1	He	0.039	0.039	3.58	710	0.01	300	
Cd	111	103	1	He	0.095	0.095	21.24	2182	0.00	4000	
Sn	118	115	1	He	1.871	1.871	9.03	13677	0.01	2000	
Sb	123	115	1	He	0.116	0.116	0.90	1797	0.01	300	
Ba	137	115	1	He	35.360	35.360	1.81	107939	0.03	10000	
W	182	209	1	He	0.065	0.065	18.95	7057	0.00	2500	
Tl	205	209	1	He	0.106	0.106	1.75	4497	0.00	5000	
Pb	208	209	1	He	12.373	12.373	1.27	663303	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1875541	0.60	1729956	108.42	30	120	
Sc	45	1	He	1224653	5.19	1045873	117.09	30	120	
Sc	45	2	NoGas	9223958	1.46	8041241	114.71	30	120	
Rh	103	1	He	3459629	3.88	3067946	112.77	30	120	
In	115	1	He	2168190	1.47	1978772	109.57	30	120	
Tb	159	1	He	5442788	2.27	5013529	108.56	30	120	
Ho	165	1	He	5530669	1.81	5115781	108.11	30	120	
Bi	209	1	He	3979179	2.62	3723643	106.86	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-4-b@20
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:21:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.397	0.397	13.23	2141	0.02	10000	
B	11	45	2	NoGas	2.948	2.948	7.23	18009	0.02	300	
Na	23	45	1	He	24.457	24.457	4.44	79364	0.03	500000	
Mg	24	45	1	He	891.774	891.774	2.07	1073339	0.08	500000	
Al	27	45	1	He	3848.143	3848.143	1.74	2641297	0.15	200000	
K	39	45	1	He	257.401	257.401	1.76	361303	0.07	500000	
Ca	44	45	1	He	2931.521	2931.521	0.72	193210	1.52	500000	
Ti	47	45	1	He	45.786	45.786	2.60	16230	0.28	2500	
V	51	45	1	He	8.656	8.656	0.99	76894	0.01	10000	
Cr	52	45	1	He	10.269	10.269	1.72	111124	0.01	10000	
Mn	55	115	1	He	435.854	435.854	1.30	3664089	0.01	10000	
Fe	56	103	1	He	11408.524	11408.524	1.92	117022115	0.01	200000	
Co	59	103	1	He	5.266	5.266	0.36	78187	0.01	10000	
Ni	60	103	1	He	11.474	11.474	0.86	42478	0.03	10000	
Cu	63	103	1	He	6.689	6.689	1.18	67841	0.01	10000	
Zn	66	103	1	He	25.166	25.166	1.68	50441	0.05	10000	
As	75	103	1	He	14.125	14.125	0.72	18667	0.08	10000	
Se	78	103	1	He	0.504	0.504	18.62	150	0.34	10000	
Sr	88	103	1	He	9.019	9.019	0.74	97928	0.01	10000	
Mo	95	103	1	He	0.682	0.682	4.17	3729	0.02	2000	
Ag	107	103	1	He	0.058	0.058	5.42	1016	0.01	300	
Cd	111	103	1	He	0.120	0.120	32.34	2286	0.01	4000	
Sn	118	115	1	He	1.936	1.936	0.86	14703	0.01	2000	
Sb	123	115	1	He	0.172	0.172	11.80	2232	0.01	300	
Ba	137	115	1	He	43.029	43.029	0.50	136810	0.03	10000	
W	182	209	1	He	0.044	0.044	32.18	6842	0.00	2500	
Tl	205	209	1	He	0.079	0.079	3.21	3444	0.00	5000	
Pb	208	209	1	He	13.970	13.970	0.89	764101	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2047532	0.92	1729956	118.36	30	120	
Sc	45	1	He	1294969	3.90	1045873	123.82	30	120	ISTD Failed
Sc	45	2	NoGas	9796648	0.65	8041241	121.83	30	120	ISTD Failed
Rh	103	1	He	3514929	2.31	3067946	114.57	30	120	
In	115	1	He	2258870	1.12	1978772	114.16	30	120	
Tb	159	1	He	5540108	1.31	5013529	110.50	30	120	
Ho	165	1	He	5629881	1.50	5115781	110.05	30	120	
Bi	209	1	He	4060322	0.44	3723643	109.04	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-4-b@20
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:25:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.374	0.374	4.62	2237	0.02	10000	
B	11	45	2	NoGas	0.978	0.978	6.85	13420	0.01	300	
Na	23	45	1	He	13.840	13.840	5.98	54764	0.03	500000	
Mg	24	45	1	He	970.844	970.844	2.08	1124700	0.09	500000	
Al	27	45	1	He	5769.995	5769.995	2.69	3810398	0.15	200000	
K	39	45	1	He	290.311	290.311	2.16	385997	0.08	500000	
Ca	44	45	1	He	252.329	252.329	5.64	16620	1.52	500000	
Ti	47	45	1	He	48.538	48.538	0.82	16548	0.29	2500	
V	51	45	1	He	13.286	13.286	2.14	113688	0.01	10000	
Cr	52	45	1	He	8.000	8.000	2.93	83910	0.01	10000	
Mn	55	115	1	He	1671.979	1671.979	3.54	13667485	0.01	10000	
Fe	56	103	1	He	12017.630	12017.630	1.68	121686026	0.01	200000	
Co	59	103	1	He	5.919	5.919	1.34	86764	0.01	10000	
Ni	60	103	1	He	7.232	7.232	0.97	26798	0.03	10000	
Cu	63	103	1	He	4.791	4.791	1.99	49192	0.01	10000	
Zn	66	103	1	He	54.104	54.104	1.81	105166	0.05	10000	
As	75	103	1	He	6.540	6.540	2.51	8620	0.08	10000	
Se	78	103	1	He	0.468	0.468	11.77	143	0.33	10000	
Sr	88	103	1	He	2.977	2.977	1.97	32024	0.01	10000	
Mo	95	103	1	He	0.793	0.793	1.48	4225	0.02	2000	
Ag	107	103	1	He	0.167	0.167	0.73	2718	0.01	300	
Cd	111	103	1	He	0.156	0.156	24.60	2355	0.01	4000	
Sn	118	115	1	He	1.657	1.657	4.55	12427	0.01	2000	
Sb	123	115	1	He	-0.005	-0.005	-284.00	1057	0.00	300	
Ba	137	115	1	He	46.580	46.580	2.38	144051	0.03	10000	
W	182	209	1	He	0.318	0.318	4.69	11401	0.00	2500	
Tl	205	209	1	He	0.117	0.117	1.21	4974	0.00	5000	
Pb	208	209	1	He	20.805	20.805	0.45	1117901	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2250543	4.95	1729956	130.09	30	120	ISTD Failed
Sc	45	1	He	1246624	3.92	1045873	119.19	30	120	
Sc	45	2	NoGas	11000008	3.46	8041241	136.79	30	120	ISTD Failed
Rh	103	1	He	3470398	0.80	3067946	113.12	30	120	
In	115	1	He	2197665	1.36	1978772	111.06	30	120	
Tb	159	1	He	5488929	0.32	5013529	109.48	30	120	
Ho	165	1	He	5628898	0.96	5115781	110.03	30	120	
Bi	209	1	He	3992032	0.69	3723643	107.21	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-6-b@20
Data File Name	032SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:29:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.276	0.276	20.04	1515	0.02	10000	
B	11	45	2	NoGas	1.365	1.365	5.22	12671	0.01	300	
Na	23	45	1	He	13.116	13.116	0.08	52401	0.03	500000	
Mg	24	45	1	He	905.283	905.283	0.94	1031328	0.09	500000	
Al	27	45	1	He	6091.522	6091.522	1.13	3955761	0.15	200000	
K	39	45	1	He	352.012	352.012	0.28	450057	0.08	500000	
Ca	44	45	1	He	98.955	98.955	3.33	6811	1.45	500000	
Ti	47	45	1	He	44.839	44.839	1.37	15023	0.30	2500	
V	51	45	1	He	13.716	13.716	1.10	115409	0.01	10000	
Cr	52	45	1	He	8.452	8.452	1.20	87024	0.01	10000	
Mn	55	115	1	He	765.649	765.649	2.19	6277906	0.01	10000	
Fe	56	103	1	He	11344.023	11344.023	1.86	115088073	0.01	200000	
Co	59	103	1	He	5.009	5.009	1.28	73566	0.01	10000	
Ni	60	103	1	He	7.604	7.604	3.92	28186	0.03	10000	
Cu	63	103	1	He	4.176	4.176	2.71	43522	0.01	10000	
Zn	66	103	1	He	28.801	28.801	1.74	56854	0.05	10000	
As	75	103	1	He	5.461	5.461	2.56	7237	0.08	10000	
Se	78	103	1	He	0.585	0.585	13.31	160	0.37	10000	
Sr	88	103	1	He	1.687	1.687	2.35	18260	0.01	10000	
Mo	95	103	1	He	0.662	0.662	7.63	3586	0.02	2000	
Ag	107	103	1	He	0.043	0.043	14.26	764	0.01	300	
Cd	111	103	1	He	0.115	0.115	15.40	2246	0.01	4000	
Sn	118	115	1	He	1.758	1.758	7.01	13143	0.01	2000	
Sb	123	115	1	He	-0.004	-0.004	-369.58	1067	0.00	300	
Ba	137	115	1	He	44.138	44.138	2.71	136906	0.03	10000	
W	182	209	1	He	0.053	0.053	36.29	6843	0.00	2500	
Tl	205	209	1	He	0.092	0.092	7.43	3902	0.00	5000	
Pb	208	209	1	He	10.338	10.338	1.80	552731	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1939869	1.42	1729956	112.13	30	120	
Sc	45	1	He	1224957	2.33	1045873	117.12	30	120	
Sc	45	2	NoGas	9447691	1.54	8041241	117.49	30	120	
Rh	103	1	He	3476614	1.61	3067946	113.32	30	120	
In	115	1	He	2203704	1.43	1978772	111.37	30	120	
Tb	159	1	He	5497977	1.18	5013529	109.66	30	120	
Ho	165	1	He	5608270	0.50	5115781	109.63	30	120	
Bi	209	1	He	3965252	0.25	3723643	106.49	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-8-b@20
Data File Name	033SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:33:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.382	0.382	4.89	1967	0.02	10000	
B	11	45	2	NoGas	1.572	1.572	13.20	13042	0.01	300	
Na	23	45	1	He	12.944	12.944	6.61	50920	0.03	500000	
Mg	24	45	1	He	898.362	898.362	0.35	1001113	0.09	500000	
Al	27	45	1	He	7093.477	7093.477	1.62	4505163	0.16	200000	
K	39	45	1	He	370.364	370.364	0.94	460789	0.08	500000	
Ca	44	45	1	He	154.041	154.041	3.93	10016	1.54	500000	
Ti	47	45	1	He	42.486	42.486	1.80	13930	0.30	2500	
V	51	45	1	He	15.354	15.354	1.03	126414	0.01	10000	
Cr	52	45	1	He	9.798	9.798	0.33	98263	0.01	10000	
Mn	55	115	1	He	732.788	732.788	2.03	5917697	0.01	10000	
Fe	56	103	1	He	12245.035	12245.035	1.28	121889817	0.01	200000	
Co	59	103	1	He	6.468	6.468	1.49	93191	0.01	10000	
Ni	60	103	1	He	10.002	10.002	1.13	36063	0.03	10000	
Cu	63	103	1	He	6.005	6.005	0.30	59555	0.01	10000	
Zn	66	103	1	He	31.597	31.597	0.71	61043	0.05	10000	
As	75	103	1	He	6.598	6.598	1.72	8546	0.08	10000	
Se	78	103	1	He	0.714	0.714	13.04	174	0.41	10000	
Sr	88	103	1	He	1.764	1.764	2.04	18717	0.01	10000	
Mo	95	103	1	He	0.768	0.768	3.47	4034	0.02	2000	
Ag	107	103	1	He	0.035	0.035	3.18	629	0.01	300	
Cd	111	103	1	He	0.071	0.071	56.21	2084	0.00	4000	
Sn	118	115	1	He	1.668	1.668	1.35	12346	0.01	2000	
Sb	123	115	1	He	0.010	0.010	128.51	1140	0.00	300	
Ba	137	115	1	He	49.581	49.581	1.11	151449	0.03	10000	
W	182	209	1	He	0.029	0.029	37.04	6428	0.00	2500	
Tl	205	209	1	He	0.103	0.103	1.69	4354	0.00	5000	
Pb	208	209	1	He	11.464	11.464	0.59	613063	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1941653	1.29	1729956	112.24	30	120	
Sc	45	1	He	1198390	1.22	1045873	114.58	30	120	
Sc	45	2	NoGas	9274866	0.90	8041241	115.34	30	120	
Rh	103	1	He	3411563	0.14	3067946	111.20	30	120	
In	115	1	He	2170528	1.47	1978772	109.69	30	120	
Tb	159	1	He	5414558	0.47	5013529	108.00	30	120	
Ho	165	1	He	5495907	1.62	5115781	107.43	30	120	
Bi	209	1	He	3967618	1.01	3723643	106.55	30	120	

Sample Report

Sample Table

Sample Name	240-49171-A-18-B@20
Data File Name	034SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:37:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.399	0.399	6.23	2011	0.02	10000	
B	11	45	2	NoGas	1.452	1.452	8.39	12916	0.01	300	
Na	23	45	1	He	18.739	18.739	4.40	61953	0.03	500000	
Mg	24	45	1	He	1615.820	1615.820	1.60	1789674	0.09	500000	
Al	27	45	1	He	6588.311	6588.311	0.87	4162564	0.16	200000	
K	39	45	1	He	464.259	464.259	1.12	562890	0.08	500000	
Ca	44	45	1	He	455.034	455.034	2.02	28154	1.62	500000	
Ti	47	45	1	He	50.287	50.287	3.54	16395	0.31	2500	
V	51	45	1	He	12.023	12.023	2.02	98397	0.01	10000	
Cr	52	45	1	He	10.104	10.104	1.56	100707	0.01	10000	
Mn	55	115	1	He	291.129	291.129	0.21	2300158	0.01	10000	
Fe	56	103	1	He	14484.102	14484.102	1.93	141878199	0.01	200000	
Co	59	103	1	He	5.615	5.615	1.93	79619	0.01	10000	
Ni	60	103	1	He	12.527	12.527	2.29	44201	0.03	10000	
Cu	63	103	1	He	10.684	10.684	1.61	101031	0.01	10000	
Zn	66	103	1	He	47.402	47.402	2.14	89325	0.05	10000	
As	75	103	1	He	7.296	7.296	0.58	9285	0.08	10000	
Se	78	103	1	He	0.565	0.565	9.62	152	0.37	10000	
Sr	88	103	1	He	2.978	2.978	1.13	31001	0.01	10000	
Mo	95	103	1	He	0.696	0.696	6.13	3627	0.02	2000	
Ag	107	103	1	He	0.014	0.014	19.66	302	0.00	300	
Cd	111	103	1	He	0.118	0.118	25.92	2178	0.01	4000	
Sn	118	115	1	He	1.742	1.742	1.94	12553	0.01	2000	
Sb	123	115	1	He	-0.039	-0.039	-31.41	818	0.00	300	
Ba	137	115	1	He	35.838	35.838	1.43	107085	0.03	10000	
W	182	209	1	He	0.012	0.012	191.64	6202	0.00	2500	
Tl	205	209	1	He	0.089	0.089	4.12	3796	0.00	5000	
Pb	208	209	1	He	7.563	7.563	1.21	408372	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1916947	1.52	1729956	110.81	30	120	
Sc	45	1	He	1192047	0.63	1045873	113.98	30	120	
Sc	45	2	NoGas	9439305	0.23	8041241	117.39	30	120	
Rh	103	1	He	3357836	1.56	3067946	109.45	30	120	
In	115	1	He	2122899	1.03	1978772	107.28	30	120	
Tb	159	1	He	5367580	0.53	5013529	107.06	30	120	
Ho	165	1	He	5452384	0.63	5115781	106.58	30	120	
Bi	209	1	He	3999820	0.59	3723643	107.42	30	120	

Sample Report

Sample Table

Sample Name	240-49171-A-18-B@50
Data File Name	035SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:40:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.141	0.141	16.60	937	0.02	10000	
B	11	45	2	NoGas	0.766	0.766	3.23	10685	0.01	300	
Na	23	45	1	He	6.865	6.865	2.37	38100	0.02	500000	
Mg	24	45	1	He	665.017	665.017	1.44	724155	0.09	500000	
Al	27	45	1	He	2836.368	2836.368	1.12	1759875	0.16	200000	
K	39	45	1	He	197.245	197.245	1.12	260829	0.08	500000	
Ca	44	45	1	He	194.479	194.479	0.72	12178	1.60	500000	
Ti	47	45	1	He	20.877	20.877	3.60	6688	0.31	2500	
V	51	45	1	He	4.970	4.970	1.06	39802	0.01	10000	
Cr	52	45	1	He	4.208	4.208	0.73	42691	0.01	10000	
Mn	55	115	1	He	113.625	113.625	0.32	902560	0.01	10000	
Fe	56	103	1	He	5935.622	5935.622	1.14	57865193	0.01	200000	
Co	59	103	1	He	2.295	2.295	0.99	32435	0.01	10000	
Ni	60	103	1	He	4.989	4.989	1.55	18093	0.03	10000	
Cu	63	103	1	He	4.241	4.241	1.70	42404	0.01	10000	
Zn	66	103	1	He	21.279	21.279	2.87	40777	0.05	10000	
As	75	103	1	He	2.959	2.959	1.40	3838	0.08	10000	
Se	78	103	1	He	0.268	0.268	33.68	111	0.24	10000	
Sr	88	103	1	He	1.218	1.218	3.73	12706	0.01	10000	
Mo	95	103	1	He	0.265	0.265	5.11	1585	0.02	2000	
Ag	107	103	1	He	0.006	0.006	6.01	180	0.00	300	
Cd	111	103	1	He	0.052	0.052	27.78	1991	0.00	4000	
Sn	118	115	1	He	0.630	0.630	7.97	5346	0.01	2000	
Sb	123	115	1	He	-0.088	-0.088	-6.56	522	-0.02	300	
Ba	137	115	1	He	14.428	14.428	2.74	43347	0.03	10000	
W	182	209	1	He	0.028	0.028	67.24	6413	0.00	2500	
Tl	205	209	1	He	0.037	0.037	1.81	1649	0.00	5000	
Pb	208	209	1	He	3.129	3.129	1.22	168468	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1916051	2.61	1729956	110.76	30	120	
Sc	45	1	He	1170328	0.49	1045873	111.90	30	120	
Sc	45	2	NoGas	9267485	0.36	8041241	115.25	30	120	
Rh	103	1	He	3340887	0.79	3067946	108.90	30	120	
In	115	1	He	2133050	1.18	1978772	107.80	30	120	
Tb	159	1	He	5347932	0.18	5013529	106.67	30	120	
Ho	165	1	He	5425260	0.58	5115781	106.05	30	120	
Bi	209	1	He	3961728	1.24	3723643	106.39	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	036_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:44:38-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.666	3.968	209868	8.56	50	101.3	89.5	110.5	
B	11	45	2	NoGas	58.641	1.791	172663	7.06	50	117.3	89.5	110.5	CCV Failed
Na	23	45	1	He	25269.291	2.247	43221992	0.52	25000	101.1	89.5	110.5	
Mg	24	45	1	He	25299.913	2.554	24549634	0.52	25000	101.2	89.5	110.5	
Al	27	45	1	He	254.273	2.542	141495	0.52	250	101.7	89.5	110.5	
K	39	45	1	He	25531.555	2.467	24961268	0.42	25000	102.1	89.5	110.5	
Ca	44	45	1	He	26025.732	2.096	1380357	1.60	25000	104.1	89.5	110.5	
Ti	47	45	1	He	51.671	4.052	14769	2.17	50	103.3	89.5	110.5	
V	51	45	1	He	51.147	2.886	367729	1.10	50	102.3	89.5	110.5	
Cr	52	45	1	He	51.375	1.652	439568	1.12	50	102.7	89.5	110.5	
Mn	55	115	1	He	257.552	4.324	1811459	2.94	250	103.0	89.5	110.5	
Fe	56	103	1	He	12311.818	1.724	104938111	1.61	12500	98.5	89.5	110.5	
Co	59	103	1	He	49.660	0.990	612172	0.90	50	99.3	89.5	110.5	
Ni	60	103	1	He	50.378	1.166	152161	1.12	50	100.8	89.5	110.5	
Cu	63	103	1	He	50.489	1.083	401915	0.94	50	101.0	89.5	110.5	
Zn	66	103	1	He	49.928	1.193	81793	1.04	50	99.9	89.5	110.5	
As	75	103	1	He	49.976	1.204	54541	1.09	50	100.0	89.5	110.5	
Se	78	103	1	He	49.756	1.900	5871	1.73	50	99.5	89.5	110.5	
Sr	88	103	1	He	48.874	0.576	440418	0.43	50	97.7	89.5	110.5	
Mo	95	103	1	He	50.960	1.332	209690	1.35	50	101.9	89.5	110.5	
Ag	107	103	1	He	50.847	0.626	673423	0.50	50	101.7	89.5	110.5	
Cd	111	103	1	He	50.440	0.831	119241	0.68	50	100.9	89.5	110.5	
Sn	118	115	1	He	49.938	3.791	290398	2.44	50	99.9	89.5	110.5	
Sb	123	115	1	He	51.132	1.760	277459	0.41	50	102.3	89.5	110.5	
Ba	137	115	1	He	50.438	2.167	134175	1.10	50	100.9	89.5	110.5	
W	182	209	1	He	48.127	0.289	730768	0.20	50	96.3	89.5	110.5	
Tl	205	209	1	He	51.961	0.651	1902021	0.52	50	103.9	89.5	110.5	
Pb	208	209	1	He	49.172	1.065	2333745	1.06	50	98.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1897340	7.91	1729956	109.68	30	120	
Sc	45	1	He	1045690	2.77	1045873	99.98	30	120	
Sc	45	2	NoGas	8922547	6.25	8041241	110.96	30	120	
Rh	103	1	He	2921200	0.15	3067946	95.22	30	120	
In	115	1	He	1890470	1.41	1978772	95.54	30	120	
Tb	159	1	He	4967557	0.31	5013529	99.08	30	120	
Ho	165	1	He	5089373	0.42	5115781	99.48	30	120	
Bi	209	1	He	3529772	0.13	3723643	94.79	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	037_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:48:27-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.027	68.1	407	15.0	1	
B	11	45	2	NoGas	0.358	12.3	8247	1.7	20	
Na	23	45	1	He	4.098	25.7	30059	9.7	400	
Mg	24	45	1	He	1.889	24.8	3386	8.8	1000	
Al	27	45	1	He	0.345	12.4	868	6.9	50	
K	39	45	1	He	6.513	38.4	48039	10.6	1000	
Ca	44	45	1	He	0.427	450.9	601	11.7	1000	
Ti	47	45	1	He	0.082	33.6	33	30.0	20	
V	51	45	1	He	-0.001	-9378.9	-207	-395.1	2	
Cr	52	45	1	He	0.026	39.4	2607	2.5	2	
Mn	55	115	1	He	0.009	41.5	929	8.3	2	
Fe	56	103	1	He	18.009	15.8	181841	19.0	50	
Co	59	103	1	He	0.003	61.7	110	19.9	1	
Ni	60	103	1	He	-0.152	-12.0	411	17.5	2	
Cu	63	103	1	He	-0.232	-6.2	1941	10.4	2	
Zn	66	103	1	He	-0.267	-15.0	1028	4.7	20	
As	75	103	1	He	0.040	31.4	193	3.8	2	
Se	78	103	1	He	0.049	80.8	78	3.4	2	
Sr	88	103	1	He	0.001	315.8	164	27.6	10	
Mo	95	103	1	He	0.625	17.0	3121	19.4	2	
Ag	107	103	1	He	0.006	46.5	172	20.1	0.2	
Cd	111	103	1	He	0.015	130.7	1797	7.0	0.2	
Sn	118	115	1	He	0.223	19.4	2567	16.2	10	
Sb	123	115	1	He	0.319	11.2	2874	13.7	1	
Ba	137	115	1	He	0.015	40.7	98	23.9	5	
W	182	209	1	He	0.694	10.9	16724	9.1	10	
Tl	205	209	1	He	0.023	16.5	1003	16.9	0.5	
Pb	208	209	1	He	0.036	3.0	3631	1.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1713581	1.84	1729956	99.05	30	120	
Sc	45	1	He	1071837	5.96	1045873	102.48	30	120	
Sc	45	2	NoGas	8049052	0.37	8041241	100.10	30	120	
Rh	103	1	He	3168920	4.27	3067946	103.29	30	120	
In	115	1	He	2033835	6.38	1978772	102.78	30	120	
Tb	159	1	He	5123038	3.43	5013529	102.18	30	120	
Ho	165	1	He	5197677	3.30	5115781	101.60	30	120	
Bi	209	1	He	3746504	2.63	3723643	100.61	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	038_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:52:18-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.594	1.933	184292	0.89	50	97.2	89.5	110.5	
B	11	45	2	NoGas	56.720	3.125	152835	2.61	50	113.4	89.5	110.5	CCV Failed
Na	23	45	1	He	24672.970	1.465	44419763	10.12	25000	98.7	89.5	110.5	
Mg	24	45	1	He	24789.763	2.373	25306139	9.46	25000	99.2	89.5	110.5	
Al	27	45	1	He	249.055	1.536	145961	10.84	250	99.6	89.5	110.5	
K	39	45	1	He	24963.715	1.612	25708065	11.19	25000	99.9	89.5	110.5	
Ca	44	45	1	He	25050.768	2.110	1397742	9.58	25000	100.2	89.5	110.5	
Ti	47	45	1	He	50.060	3.379	15043	8.21	50	100.1	89.5	110.5	
V	51	45	1	He	48.861	3.815	369331	8.85	50	97.7	89.5	110.5	
Cr	52	45	1	He	49.267	3.172	443156	8.37	50	98.5	89.5	110.5	
Mn	55	115	1	He	254.924	3.122	1833652	8.79	250	102.0	89.5	110.5	
Fe	56	103	1	He	12358.188	2.040	106211482	7.76	12500	98.9	89.5	110.5	
Co	59	103	1	He	49.853	1.735	619663	7.65	50	99.7	89.5	110.5	
Ni	60	103	1	He	50.138	1.665	152692	7.55	50	100.3	89.5	110.5	
Cu	63	103	1	He	50.008	1.750	401338	7.16	50	100.0	89.5	110.5	
Zn	66	103	1	He	49.775	1.151	82201	6.91	50	99.5	89.5	110.5	
As	75	103	1	He	50.031	2.548	55068	8.32	50	100.1	89.5	110.5	
Se	78	103	1	He	50.361	3.232	5995	9.14	50	100.7	89.5	110.5	
Sr	88	103	1	He	48.975	1.894	444996	7.67	50	98.0	89.5	110.5	
Mo	95	103	1	He	50.857	0.932	210935	6.78	50	101.7	89.5	110.5	
Ag	107	103	1	He	50.080	0.774	668289	5.78	50	100.2	89.5	110.5	
Cd	111	103	1	He	50.084	1.536	119263	4.83	50	100.2	89.5	110.5	
Sn	118	115	1	He	48.913	1.812	290719	7.17	50	97.8	89.5	110.5	
Sb	123	115	1	He	50.075	1.223	277572	6.18	50	100.2	89.5	110.5	
Ba	137	115	1	He	49.299	1.488	133953	6.13	50	98.6	89.5	110.5	
W	182	209	1	He	47.436	0.914	725998	3.04	50	94.9	89.5	110.5	
Tl	205	209	1	He	51.031	1.916	1882520	3.15	50	102.1	89.5	110.5	
Pb	208	209	1	He	48.479	1.050	2318603	2.35	50	97.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1737189	1.24	1729956	100.42	30	120	
Sc	45	1	He	1101412	11.65	1045873	105.31	30	120	
Sc	45	2	NoGas	8155390	0.57	8041241	101.42	30	120	
Rh	103	1	He	2943475	5.87	3067946	95.94	30	120	
In	115	1	He	1930964	6.41	1978772	97.58	30	120	
Tb	159	1	He	4993017	3.95	5013529	99.59	30	120	
Ho	165	1	He	5104367	3.59	5115781	99.78	30	120	
Bi	209	1	He	3557093	2.33	3723643	95.53	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	039_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:56:04-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.039	84.6	448	25.4	1	
B	11	45	2	NoGas	0.661	40.4	8747	7.4	20	
Na	23	45	1	He	4.327	10.9	29465	2.1	400	
Mg	24	45	1	He	1.332	18.7	2752	5.9	1000	
Al	27	45	1	He	0.380	14.3	859	2.4	50	
K	39	45	1	He	7.703	9.8	47601	3.9	1000	
Ca	44	45	1	He	-0.050	-1177.2	561	7.8	1000	
Ti	47	45	1	He	0.059	108.9	26	71.8	20	
V	51	45	1	He	0.124	84.8	663	108.5	2	
Cr	52	45	1	He	0.025	14.5	2515	3.7	2	
Mn	55	115	1	He	0.005	26.4	876	2.9	2	
Fe	56	103	1	He	16.696	15.7	166566	13.4	50	
Co	59	103	1	He	0.004	46.6	122	20.8	1	
Ni	60	103	1	He	-0.128	-2.7	482	0.8	2	
Cu	63	103	1	He	-0.237	-4.2	1873	5.9	2	
Zn	66	103	1	He	-0.240	-26.1	1061	9.6	20	
As	75	103	1	He	0.039	30.8	190	6.2	2	
Se	78	103	1	He	0.040	241.2	75	14.9	2	
Sr	88	103	1	He	0.000	-1542.2	147	15.9	10	
Mo	95	103	1	He	0.644	12.7	3147	10.5	2	
Ag	107	103	1	He	0.006	35.3	177	16.8	0.2	
Cd	111	103	1	He	0.031	71.5	1811	1.7	0.2	
Sn	118	115	1	He	0.290	7.1	2911	2.3	10	
Sb	123	115	1	He	0.332	17.3	2879	10.0	1	
Ba	137	115	1	He	0.010	99.5	80	33.1	5	
W	182	209	1	He	0.720	15.3	16880	9.7	10	
Tl	205	209	1	He	0.023	16.8	993	14.2	0.5	
Pb	208	209	1	He	0.039	14.3	3754	6.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1696496	1.87	1729956	98.07	30	120	
Sc	45	1	He	1037756	2.85	1045873	99.22	30	120	
Sc	45	2	NoGas	7811222	1.22	8041241	97.14	30	120	
Rh	103	1	He	3126729	1.55	3067946	101.92	30	120	
In	115	1	He	1991055	1.94	1978772	100.62	30	120	
Tb	159	1	He	5145001	2.68	5013529	102.62	30	120	
Ho	165	1	He	5194482	2.14	5115781	101.54	30	120	
Bi	209	1	He	3693918	0.70	3723643	99.20	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	040CRIA.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:59:55-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.853	0.853	4.692	3467	4.85	1	85.3	69.5	130.5	
B	11	2	NoGas	21.081	21.081	3.297	59284	2.69	20	105.4	69.5	130.5	
Na	23	1	He	1064.679	1064.679	0.955	1789719	1.24	1000	106.5	69.5	130.5	
Mg	24	1	He	1058.311	1058.311	1.415	998985	1.72	1000	105.8	69.5	130.5	
Al	27	1	He	51.959	51.959	1.652	28595	1.91	50	103.9	69.5	130.5	
K	39	1	He	1059.820	1059.820	1.006	1044172	1.29	1000	106.0	69.5	130.5	
Ca	44	1	He	1040.308	1040.308	1.958	54122	2.19	1000	104.0	69.5	130.5	
Ti	47	1	He	10.910	10.910	3.019	3037	3.32	10	109.1	69.5	130.5	
V	51	1	He	5.317	5.317	0.763	36955	0.59	5	106.3	69.5	130.5	
Cr	52	1	He	2.184	2.184	2.048	20306	2.14	2	109.2	69.5	130.5	
Mn	55	1	He	4.773	4.773	1.456	35429	2.03	5	95.5	69.5	130.5	
Fe	56	1	He	99.272	99.272	1.998	880255	1.37	100	99.3	69.5	130.5	
Co	59	1	He	1.003	1.003	2.340	12728	1.95	1	100.3	69.5	130.5	
Ni	60	1	He	1.910	1.910	2.679	6729	1.79	2	95.5	69.5	130.5	
Cu	63	1	He	1.833	1.833	3.713	18515	2.44	2	91.7	69.5	130.5	
Zn	66	1	He	20.489	20.489	2.218	35210	1.86	20	102.4	69.5	130.5	
As	75	1	He	4.915	4.915	1.570	5619	0.99	5	98.3	69.5	130.5	
Se	78	1	He	5.050	5.050	2.904	671	2.27	5	101.0	69.5	130.5	
Sr	88	1	He	9.530	9.530	2.434	88064	1.94	10	95.3	69.5	130.5	
Mo	95	1	He	10.194	10.194	2.430	43201	1.84	10	101.9	69.5	130.5	
Ag	107	1	He	1.042	1.042	1.268	14220	1.15	1	104.2	69.5	130.5	
Cd	111	1	He	1.034	1.034	4.801	4128	2.55	1	103.4	69.5	130.5	
Sn	118	1	He	9.812	9.812	1.075	59743	1.98	10	98.1	69.5	130.5	
Sb	123	1	He	1.951	1.951	2.439	11848	1.44	2	97.6	69.5	130.5	
Ba	137	1	He	4.860	4.860	1.520	13377	0.48	5	97.2	69.5	130.5	
W	182	1	He	9.347	9.347	0.878	152803	0.76	10	93.5	69.5	130.5	
Tl	205	1	He	1.851	1.851	1.452	70930	1.46	2	92.5	69.5	130.5	
Pb	208	1	He	1.042	1.042	1.687	53448	1.64	1	104.2	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1700386	1.76	1729956	98.29	30	120	
Sc	45	1	He	1015331	0.32	1045873	97.08	30	120	
Sc	45	2	NoGas	7864041	0.37	8041241	97.80	30	120	
Rh	103	1	He	2991999	0.61	3067946	97.52	30	120	
In	115	1	He	1948906	1.05	1978772	98.49	30	120	
Tb	159	1	He	4931169	0.98	5013529	98.36	30	120	
Ho	165	1	He	5090132	1.69	5115781	99.50	30	120	
Bi	209	1	He	3689565	0.09	3723643	99.08	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-178129/1-a
Data File Name	041_Blk.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:03:47-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.015	132.9	333	23.3	1	
B	11	45	2	NoGas	2.165	7.5	11452	3.1	20	
Na	23	45	1	He	91.722	0.6	183379	6.9	400	
Mg	24	45	1	He	49.628	2.8	50782	5.4	1000	
Al	27	45	1	He	3.647	4.1	2736	4.3	50	
K	39	45	1	He	34.970	8.2	76348	8.1	1000	
Ca	44	45	1	He	158.896	3.0	9195	4.5	1000	
Ti	47	45	1	He	0.176	30.4	61	31.5	20	
V	51	45	1	He	0.200	36.7	1254	44.0	2	
Cr	52	45	1	He	0.729	1.9	8724	6.0	2	
Mn	55	115	1	He	0.624	9.0	5315	10.8	2	
Fe	56	103	1	He	15.405	5.3	151157	7.9	50	
Co	59	103	1	He	0.005	9.0	140	6.3	1	
Ni	60	103	1	He	-0.041	-50.7	741	10.5	2	
Cu	63	103	1	He	0.662	12.9	9241	10.6	2	
Zn	66	103	1	He	4.412	4.9	8860	7.4	20	
As	75	103	1	He	0.149	20.6	310	12.1	2	
Se	78	103	1	He	0.083	106.1	79	15.5	2	
Sr	88	103	1	He	0.316	3.5	3118	6.1	10	
Mo	95	103	1	He	0.181	19.1	1087	16.7	2	
Ag	107	103	1	He	0.011	25.8	234	19.3	0.2	
Cd	111	103	1	He	0.024	63.5	1750	5.5	0.2	
Sn	118	115	1	He	1.029	1.1	7213	4.3	10	
Sb	123	115	1	He	0.372	7.7	3019	5.8	1	
Ba	137	115	1	He	0.776	7.3	2166	9.4	5	
W	182	209	1	He	0.203	5.9	9314	6.0	10	
Tl	205	209	1	He	0.007	13.7	416	13.3	0.5	
Pb	208	209	1	He	0.132	1.7	8902	2.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1562962	3.06	1729956	90.35	30	120	
Sc	45	1	He	1070399	7.19	1045873	102.34	30	120	
Sc	45	2	NoGas	7191691	0.55	8041241	89.44	30	120	
Rh	103	1	He	3047639	3.36	3067946	99.34	30	120	
In	115	1	He	1935039	3.42	1978772	97.79	30	120	
Tb	159	1	He	5007940	3.75	5013529	99.89	30	120	
Ho	165	1	He	5118986	3.27	5115781	100.06	30	120	
Bi	209	1	He	3933651	3.87	3723643	105.64	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-178129/3-a
Data File Name	042_LCS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:07:38-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1066.790	1066.790	2.732	3275233	1.95	1000	106.7	79.5	120.5	
B	11	2	NoGas	134.671	134.671	1.938	280493	1.85	100	134.7	79.5	120.5	LCS Failed
Na	23	1	He	9671.940	9671.940	0.857	13505662	2.50	10000	96.7	79.5	120.5	
Mg	24	1	He	9790.590	9790.590	1.757	7748462	0.90	10000	97.9	79.5	120.5	
Al	27	1	He	9189.989	9189.989	0.815	4152481	1.86	10000	91.9	79.5	120.5	
K	39	1	He	9517.625	9517.625	0.886	7611160	2.57	10000	95.2	79.5	120.5	
Ca	44	1	He	8736.220	8736.220	0.977	378195	2.00	10000	87.4	79.5	120.5	
Ti	47	1	He	95.119	95.119	1.692	22171	1.15	100	95.1	79.5	120.5	
V	51	1	He	953.775	953.775	0.404	5596956	2.37	1000	95.4	79.5	120.5	
Cr	52	1	He	961.017	961.017	0.235	6672723	2.22	1000	96.1	79.5	120.5	
Mn	55	1	He	897.564	897.564	0.780	5405282	1.62	1000	89.8	79.5	120.5	
Fe	56	1	He	8915.503	8915.503	1.495	65462755	1.66	10000	89.2	79.5	120.5	
Co	59	1	He	915.620	915.620	1.933	9721415	1.59	1000	91.6	79.5	120.5	
Ni	60	1	He	951.977	951.977	2.079	2463720	1.26	1000	95.2	79.5	120.5	
Cu	63	1	He	951.985	951.985	0.371	6472329	0.63	1000	95.2	79.5	120.5	
Zn	66	1	He	910.326	910.326	1.369	1264206	1.71	1000	91.0	79.5	120.5	
As	75	1	He	884.841	884.841	1.237	829907	1.43	1000	88.5	79.5	120.5	
Se	78	1	He	923.761	923.761	1.098	92906	1.36	1000	92.4	79.5	120.5	
Sr	88	1	He	920.810	920.810	0.945	7145910	1.56	1000	92.1	79.5	120.5	
Mo	95	1	He	96.318	96.318	0.877	341162	0.62	100	96.3	79.5	120.5	
Ag	107	1	He	97.517	97.517	0.965	1112463	1.09	100	97.5	79.5	120.5	
Cd	111	1	He	1032.330	1032.330	0.858	2075183	1.71	1000	103.2	79.5	120.5	
Sn	118	1	He	1030.893	1030.893	2.204	5116418	3.03	1000	103.1	79.5	120.5	
Sb	123	1	He	96.578	96.578	0.626	448026	1.19	100	96.6	79.5	120.5	
Ba	137	1	He	1032.263	1032.263	1.053	2350461	1.15	1000	103.2	79.5	120.5	
W	182	1	He	86.614	86.614	0.153	1245593	0.64	100	86.6	79.5	120.5	
Tl	205	1	He	224.698	224.698	0.337	7814849	0.78	250	89.9	79.5	120.5	
Pb	208	1	He	950.427	950.427	0.563	42830545	1.09	1000	95.0	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1408641	1.25	1729956	81.43	30	120	
Sc	45	1	He	852626	2.43	1045873	81.52	30	120	
Sc	45	2	NoGas	6486606	1.58	8041241	80.67	30	120	
Rh	103	1	He	2516387	0.96	3067946	82.02	30	120	
In	115	1	He	1618461	0.91	1978772	81.79	30	120	
Tb	159	1	He	4456463	1.39	5013529	88.89	30	120	
Ho	165	1	He	4597371	1.20	5115781	89.87	30	120	
Bi	209	1	He	3353837	0.53	3723643	90.07	30	120	

Sample Report

Sample Table

Sample Name	240-49777-a-1-a
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:11:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.291	0.291	15.56	1108	0.03	10000	
B	11	45	2	NoGas	51.606	51.606	0.76	106957	0.05	300	
Na	23	45	1	He	59897.084	59897.084	1.51	79646947	0.08	500000	
Mg	24	45	1	He	9015.339	9015.339	1.61	6803594	0.13	500000	
Al	27	45	1	He	160.503	160.503	3.44	69629	0.23	200000	
K	39	45	1	He	6846.681	6846.681	1.18	5229080	0.13	500000	
Ca	44	45	1	He	49255.399	49255.399	1.32	2030982	2.43	500000	
Ti	47	45	1	He	2.098	2.098	47.69	471	0.45	2500	
V	51	45	1	He	0.537	0.537	33.23	2856	0.02	10000	
Cr	52	45	1	He	3.010	3.010	2.02	21724	0.01	10000	
Mn	55	115	1	He	140.213	140.213	1.02	750181	0.02	10000	
Fe	56	103	1	He	388.504	388.504	1.73	2712600	0.01	200000	
Co	59	103	1	He	0.228	0.228	4.24	2350	0.01	10000	
Ni	60	103	1	He	0.980	0.980	8.36	3081	0.03	10000	
Cu	63	103	1	He	3.822	3.822	5.70	27555	0.01	10000	
Zn	66	103	1	He	10.233	10.233	3.04	14573	0.07	10000	
As	75	103	1	He	1.673	1.673	3.76	1596	0.10	10000	
Se	78	103	1	He	1.038	1.038	14.70	153	0.68	10000	
Sr	88	103	1	He	182.721	182.721	1.80	1343211	0.01	10000	
Mo	95	103	1	He	8.465	8.465	1.58	28622	0.03	2000	
Ag	107	103	1	He	1.396	1.396	1.24	15146	0.01	300	
Cd	111	103	1	He	0.080	0.080	28.91	1475	0.01	4000	
Sn	118	115	1	He	2.718	2.718	12.33	12805	0.02	2000	
Sb	123	115	1	He	0.659	0.659	3.31	3423	0.02	300	
Ba	137	115	1	He	43.712	43.712	1.05	88411	0.05	10000	
W	182	209	1	He	1.044	1.044	16.60	19057	0.01	2500	
Tl	205	209	1	He	0.144	0.144	30.05	4874	0.00	5000	
Pb	208	209	1	He	0.530	0.530	6.35	24335	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1358948	0.98	1729956	78.55	30	120	
Sc	45	1	He	812945	1.66	1045873	77.73	30	120	
Sc	45	2	NoGas	6242227	0.77	8041241	77.63	30	120	
Rh	103	1	He	2383630	0.25	3067946	77.69	30	120	
In	115	1	He	1436938	0.74	1978772	72.62	30	120	
Tb	159	1	He	4338536	0.80	5013529	86.54	30	120	
Ho	165	1	He	4493212	1.14	5115781	87.83	30	120	
Bi	209	1	He	3198130	0.63	3723643	85.89	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	044_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:15:01-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.273	4.475	185783	1.90	50	96.5	89.5	110.5	
B	11	45	2	NoGas	55.552	1.839	151656	0.34	50	111.1	89.5	110.5	CCV Failed
Na	23	45	1	He	25036.663	1.491	41050375	0.33	25000	100.1	89.5	110.5	
Mg	24	45	1	He	25054.928	2.364	23305291	1.62	25000	100.2	89.5	110.5	
Al	27	45	1	He	250.686	1.934	133733	1.00	250	100.3	89.5	110.5	
K	39	45	1	He	25366.360	3.406	23771995	2.74	25000	101.5	89.5	110.5	
Ca	44	45	1	He	24615.826	2.943	1251465	2.86	25000	98.5	89.5	110.5	
Ti	47	45	1	He	50.701	3.447	13893	2.30	50	101.4	89.5	110.5	
V	51	45	1	He	49.488	1.528	341086	0.81	50	99.0	89.5	110.5	
Cr	52	45	1	He	50.096	1.745	410883	0.94	50	100.2	89.5	110.5	
Mn	55	115	1	He	246.316	2.141	1682805	0.50	250	98.5	89.5	110.5	
Fe	56	103	1	He	12105.467	0.466	98942647	1.73	12500	96.8	89.5	110.5	
Co	59	103	1	He	48.855	1.521	577443	1.00	50	97.7	89.5	110.5	
Ni	60	103	1	He	49.289	1.110	142762	1.30	50	98.6	89.5	110.5	
Cu	63	103	1	He	49.625	1.405	378844	1.54	50	99.2	89.5	110.5	
Zn	66	103	1	He	49.677	1.313	78037	0.93	50	99.4	89.5	110.5	
As	75	103	1	He	49.141	0.706	51429	1.49	50	98.3	89.5	110.5	
Se	78	103	1	He	49.059	2.095	5551	0.33	50	98.1	89.5	110.5	
Sr	88	103	1	He	48.318	1.408	417476	0.85	50	96.6	89.5	110.5	
Mo	95	103	1	He	50.268	1.331	198386	3.12	50	100.5	89.5	110.5	
Ag	107	103	1	He	50.397	1.187	639976	1.01	50	100.8	89.5	110.5	
Cd	111	103	1	He	50.297	1.767	114002	0.46	50	100.6	89.5	110.5	
Sn	118	115	1	He	48.681	2.637	274961	0.28	50	97.4	89.5	110.5	
Sb	123	115	1	He	49.548	1.186	261170	1.46	50	99.1	89.5	110.5	
Ba	137	115	1	He	49.347	2.374	127478	0.44	50	98.7	89.5	110.5	
W	182	209	1	He	47.628	0.403	712401	1.03	50	95.3	89.5	110.5	
Tl	205	209	1	He	51.505	1.768	1856917	1.13	50	103.0	89.5	110.5	
Pb	208	209	1	He	48.354	1.164	2260421	0.32	50	96.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1763914	2.51	1729956	101.96	30	120	
Sc	45	1	He	1002074	1.16	1045873	95.81	30	120	
Sc	45	2	NoGas	8255278	1.83	8041241	102.66	30	120	
Rh	103	1	He	2801399	2.19	3067946	91.31	30	120	
In	115	1	He	1836223	2.64	1978772	92.80	30	120	
Tb	159	1	He	4876060	1.27	5013529	97.26	30	120	
Ho	165	1	He	4946617	1.27	5115781	96.69	30	120	
Bi	209	1	He	3476868	0.86	3723643	93.37	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	045_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:18:50-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.082	43.7	656	19.5	1	
B	11	45	2	NoGas	0.899	22.1	10025	4.1	20	
Na	23	45	1	He	7.515	26.3	38457	11.0	400	
Mg	24	45	1	He	0.898	56.2	2582	22.1	1000	
Al	27	45	1	He	0.400	22.6	959	6.1	50	
K	39	45	1	He	6.621	10.6	51270	3.0	1000	
Ca	44	45	1	He	-1.263	-62.2	547	7.1	1000	
Ti	47	45	1	He	0.058	58.0	28	38.6	20	
V	51	45	1	He	0.026	244.3	-19	-2697.6	2	
Cr	52	45	1	He	0.029	51.3	2814	6.2	2	
Mn	55	115	1	He	0.002	920.8	906	19.3	2	
Fe	56	103	1	He	15.924	18.7	168621	19.4	50	
Co	59	103	1	He	0.007	35.4	176	21.0	1	
Ni	60	103	1	He	-0.149	-4.9	437	3.3	2	
Cu	63	103	1	He	-0.182	-5.0	2465	5.6	2	
Zn	66	103	1	He	-0.191	-35.3	1208	11.8	20	
As	75	103	1	He	0.087	28.3	259	11.7	2	
Se	78	103	1	He	0.084	40.2	85	7.6	2	
Sr	88	103	1	He	0.006	77.1	214	22.7	10	
Mo	95	103	1	He	0.622	15.0	3223	15.7	2	
Ag	107	103	1	He	0.009	28.3	220	18.6	0.2	
Cd	111	103	1	He	0.026	103.4	1896	6.0	0.2	
Sn	118	115	1	He	0.269	13.3	2934	6.7	10	
Sb	123	115	1	He	0.420	18.4	3573	15.2	1	
Ba	137	115	1	He	0.008	92.4	80	30.0	5	
W	182	209	1	He	0.771	14.2	18226	11.3	10	
Tl	205	209	1	He	0.029	13.6	1266	13.6	0.5	
Pb	208	209	1	He	0.075	4.6	5695	4.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1830074	3.13	1729956	105.79	30	120	
Sc	45	1	He	1142948	1.58	1045873	109.28	30	120	
Sc	45	2	NoGas	8395724	1.10	8041241	104.41	30	120	
Rh	103	1	He	3293187	2.44	3067946	107.34	30	120	
In	115	1	He	2100904	2.61	1978772	106.17	30	120	
Tb	159	1	He	5238660	1.90	5013529	104.49	30	120	
Ho	165	1	He	5328692	1.78	5115781	104.16	30	120	
Bi	209	1	He	3799397	1.74	3723643	102.03	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177246/1-a@2
Data File Name	046_Blk.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:22:39-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.099	53.6	667	26.8	1	
B	11	45	2	NoGas	1.754	7.5	11701	4.7	20	
Na	23	45	1	He	33.883	4.2	77385	3.8	400	
Mg	24	45	1	He	33.665	2.4	32934	0.6	1000	
Al	27	45	1	He	5.857	2.6	3760	1.1	50	
K	39	45	1	He	23.339	5.9	60970	3.2	1000	
Ca	44	45	1	He	112.262	1.9	6289	3.3	1000	
Ti	47	45	1	He	0.183	29.7	59	23.6	20	
V	51	45	1	He	0.290	13.4	1805	13.5	2	
Cr	52	45	1	He	1.004	5.0	10479	2.0	2	
Mn	55	115	1	He	0.422	0.7	3727	1.2	2	
Fe	56	103	1	He	20.744	5.3	192194	6.0	50	
Co	59	103	1	He	0.017	17.2	284	11.9	1	
Ni	60	103	1	He	0.032	122.3	939	11.4	2	
Cu	63	103	1	He	0.697	0.4	9205	1.3	2	
Zn	66	103	1	He	9.044	1.4	16104	2.4	20	
As	75	103	1	He	0.210	15.6	367	8.6	2	
Se	78	103	1	He	0.136	35.4	83	6.0	2	
Sr	88	103	1	He	0.269	2.4	2590	2.6	10	
Mo	95	103	1	He	0.294	0.9	1520	2.0	2	
Ag	107	103	1	He	0.016	11.1	299	8.5	0.2	
Cd	111	103	1	He	0.022	76.8	1689	1.3	0.2	
Sn	118	115	1	He	17.794	3.7	103129	3.0	10	Blank Failed
Sb	123	115	1	He	0.364	8.0	2876	4.8	1	
Ba	137	115	1	He	1.112	1.4	2978	2.0	5	
W	182	209	1	He	0.348	7.6	11034	2.9	10	
Tl	205	209	1	He	0.020	16.3	883	14.1	0.5	
Pb	208	209	1	He	0.194	3.8	11477	3.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1694066	2.30	1729956	97.93	30	120	
Sc	45	1	He	1008352	2.18	1045873	96.41	30	120	
Sc	45	2	NoGas	7993476	2.09	8041241	99.41	30	120	
Rh	103	1	He	2950190	1.30	3067946	96.16	30	120	
In	115	1	He	1871177	0.65	1978772	94.56	30	120	
Tb	159	1	He	4909370	1.34	5013529	97.92	30	120	
Ho	165	1	He	4961311	1.25	5115781	96.98	30	120	
Bi	209	1	He	3698415	0.86	3723643	99.32	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177246/2-a@2
Data File Name	047LCSS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:26:29-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	555.702	555.702	0.708	1869965	0.97	500	111.1	78.6	110.5	LCSS Failed
B	11	2	NoGas	71.942	71.942	1.177	168113	0.78	50	143.9	79.5	120.5	LCSS Failed
Na	23	1	He	5266.596	5266.596	2.589	8079768	4.78	5000	105.3	79.5	120.5	
Mg	24	1	He	5289.300	5289.300	1.581	4597183	5.30	5000	105.8	79.5	120.5	
Al	27	1	He	5007.110	5007.110	2.514	2482854	4.00	5000	100.1	79.5	120.5	
K	39	1	He	5089.586	5089.586	0.176	4487615	6.68	5000	101.8	79.5	120.5	
Ca	44	1	He	4797.054	4797.054	1.097	228374	6.86	5000	95.9	79.5	120.5	
Ti	47	1	He	52.003	52.003	1.167	13318	6.16	50	104.0	79.5	120.5	
V	51	1	He	507.990	507.990	1.882	3271606	4.68	500	101.6	71.5	110.5	
Cr	52	1	He	516.736	516.736	2.302	3939147	5.08	500	103.3	69.5	110.5	
Mn	55	1	He	492.841	492.841	1.268	3219530	4.52	500	98.6	79.5	120.5	
Fe	56	1	He	4886.951	4886.951	2.278	38872626	5.11	5000	97.7	79.5	120.5	
Co	59	1	He	492.206	492.206	1.072	5659939	4.16	500	98.4	73.9	110.5	
Ni	60	1	He	493.450	493.450	5.749	1384885	8.90	500	98.7	74.9	110.5	
Cu	63	1	He	511.948	511.948	2.229	3771937	5.31	500	102.4	72.6	110.5	
Zn	66	1	He	455.177	455.177	2.235	685368	5.29	500	91.0	71.5	113.4	
As	75	1	He	432.141	432.141	2.181	439110	5.26	500	86.4	73.4	110.5	
Se	78	1	He	423.626	423.626	2.501	46187	5.57	500	84.7	64.6	110.5	
Sr	88	1	He	491.966	491.966	0.516	4134026	3.44	500	98.4	79.5	120.5	
Mo	95	1	He	52.453	52.453	0.135	201297	3.06	50	104.9	29.5	140.5	
Ag	107	1	He	51.454	51.454	0.930	635647	3.58	50	102.9	59.5	114.5	
Cd	111	1	He	474.186	474.186	1.097	1033062	4.14	500	94.8	73.5	110.5	
Sn	118	1	He	575.563	575.563	0.686	3098263	4.03	500	115.1	79.5	120.5	
Sb	123	1	He	50.041	50.041	0.431	252144	3.21	50	100.1	67.5	113.4	
Ba	137	1	He	489.039	489.039	0.980	1207692	3.83	500	97.8	69.5	110.5	
W	182	1	He	48.394	48.394	0.865	716707	2.73	50	96.8	74.6	125.4	
Tl	205	1	He	123.165	123.165	1.496	4397724	3.34	125	98.5	70.6	110.5	
Pb	208	1	He	511.728	511.728	0.334	23672485	2.26	500	102.3	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1543557	0.71	1729956	89.23	30	120	
Sc	45	1	He	936504	6.54	1045873	89.54	30	120	
Sc	45	2	NoGas	7145747	0.54	8041241	88.86	30	120	
Rh	103	1	He	2724582	3.09	3067946	88.81	30	120	
In	115	1	He	1755082	3.34	1978772	88.70	30	120	
Tb	159	1	He	4726152	1.79	5013529	94.27	30	120	
Ho	165	1	He	4772234	2.54	5115781	93.28	30	120	
Bi	209	1	He	3442606	1.94	3723643	92.45	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-d@20
Data File Name	048SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:30:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.594	0.594	4.53	2634	0.02	10000	
B	11	45	2	NoGas	1.901	1.901	18.15	12757	0.01	300	
Na	23	45	1	He	29.656	29.656	4.73	75872	0.04	500000	
Mg	24	45	1	He	1081.978	1081.978	1.97	1092637	0.10	500000	
Al	27	45	1	He	7059.295	7059.295	1.24	4065781	0.17	200000	
K	39	45	1	He	342.053	342.053	1.69	388977	0.09	500000	
Ca	44	45	1	He	214.667	214.667	4.80	12405	1.73	500000	
Ti	47	45	1	He	63.477	63.477	1.39	18869	0.34	2500	
V	51	45	1	He	15.080	15.080	0.95	112557	0.01	10000	
Cr	52	45	1	He	9.379	9.379	1.58	85353	0.01	10000	
Mn	55	115	1	He	1687.721	1687.721	0.79	12379468	0.01	10000	
Fe	56	103	1	He	11907.159	11907.159	1.01	107772311	0.01	200000	
Co	59	103	1	He	7.922	7.922	1.98	103769	0.01	10000	
Ni	60	103	1	He	10.167	10.167	0.72	33311	0.03	10000	
Cu	63	103	1	He	6.909	6.909	2.44	61731	0.01	10000	
Zn	66	103	1	He	34.069	34.069	1.74	59732	0.06	10000	
As	75	103	1	He	6.675	6.675	2.43	7861	0.08	10000	
Se	78	103	1	He	1.039	1.039	6.49	199	0.52	10000	
Sr	88	103	1	He	10.407	10.407	2.22	99709	0.01	10000	
Mo	95	103	1	He	1.338	1.338	3.63	6153	0.02	2000	
Ag	107	103	1	He	0.043	0.043	11.17	688	0.01	300	
Cd	111	103	1	He	0.145	0.145	9.63	2080	0.01	4000	
Sn	118	115	1	He	2.227	2.227	3.37	14588	0.02	2000	
Sb	123	115	1	He	0.134	0.134	7.89	1736	0.01	300	
Ba	137	115	1	He	57.694	57.694	0.81	160068	0.04	10000	
W	182	209	1	He	0.461	0.461	7.65	13009	0.00	2500	
Tl	205	209	1	He	0.172	0.172	13.11	6809	0.00	5000	
Pb	208	209	1	He	12.072	12.072	2.22	610664	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1785404	1.56	1729956	103.21	30	120	
Sc	45	1	He	1086683	4.20	1045873	103.90	30	120	
Sc	45	2	NoGas	8448324	0.63	8041241	105.06	30	120	
Rh	103	1	He	3101824	1.36	3067946	101.10	30	120	
In	115	1	He	1971307	1.83	1978772	99.62	30	120	
Tb	159	1	He	5093849	2.50	5013529	101.60	30	120	
Ho	165	1	He	5161066	2.04	5115781	100.89	30	120	
Bi	209	1	He	3753418	0.51	3723643	100.80	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49233-a-1-d@100
Data File Name	049SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:33:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.117	0.117	25.03	741	0.02	10000	
B	11	45	2	NoGas	0.863	0.863	22.26	9381	0.01	300	
Na	23	45	1	He	15.779	15.779	6.55	56443	0.03	500000	
Mg	24	45	1	He	221.783	221.783	2.62	248609	0.09	500000	
Al	27	45	1	He	1455.562	1455.562	2.80	925611	0.16	200000	
K	39	45	1	He	73.308	73.308	3.42	128371	0.06	500000	
Ca	44	45	1	He	49.459	49.459	4.55	3651	1.35	500000	
Ti	47	45	1	He	12.857	12.857	4.37	4232	0.30	2500	
V	51	45	1	He	3.134	3.134	4.25	25686	0.01	10000	
Cr	52	45	1	He	1.953	1.953	4.56	21702	0.01	10000	
Mn	55	115	1	He	357.366	357.366	3.02	2829073	0.01	10000	
Fe	56	103	1	He	2500.208	2500.208	4.07	24339190	0.01	200000	
Co	59	103	1	He	1.636	1.636	5.01	23102	0.01	10000	
Ni	60	103	1	He	2.042	2.042	4.13	7953	0.03	10000	
Cu	63	103	1	He	1.304	1.304	4.85	15869	0.01	10000	
Zn	66	103	1	He	9.604	9.604	5.23	19235	0.05	10000	
As	75	103	1	He	1.406	1.406	0.54	1900	0.07	10000	
Se	78	103	1	He	0.244	0.244	32.83	108	0.23	10000	
Sr	88	103	1	He	2.190	2.190	4.22	22686	0.01	10000	
Mo	95	103	1	He	0.266	0.266	13.24	1586	0.02	2000	
Ag	107	103	1	He	0.009	0.009	30.68	227	0.00	300	
Cd	111	103	1	He	0.068	0.068	33.76	2028	0.00	4000	
Sn	118	115	1	He	0.428	0.428	2.20	4008	0.01	2000	
Sb	123	115	1	He	-0.050	-0.050	-4.22	753	-0.01	300	
Ba	137	115	1	He	11.405	11.405	1.10	34161	0.03	10000	
W	182	209	1	He	0.105	0.105	2.24	7498	0.00	2500	
Tl	205	209	1	He	0.033	0.033	5.77	1420	0.00	5000	
Pb	208	209	1	He	2.472	2.472	2.15	130017	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1700042	1.76	1729956	98.27	30	120	
Sc	45	1	He	1199297	8.92	1045873	114.67	30	120	
Sc	45	2	NoGas	7927414	0.67	8041241	98.58	30	120	
Rh	103	1	He	3331608	3.58	3067946	108.59	30	120	
In	115	1	He	2125326	4.46	1978772	107.41	30	120	
Tb	159	1	He	5325481	2.08	5013529	106.22	30	120	
Ho	165	1	He	5381525	3.40	5115781	105.19	30	120	
Bi	209	1	He	3855942	2.27	3723643	103.55	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49233-a-1-d@20
Data File Name	050SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:37:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1177.066	1177.066	1.76	3891130	0.03	10000	
B	11	45	2	NoGas	131.899	131.899	1.88	307126	0.04	300	
Na	23	45	1	He	10074.000	10074.000	2.72	16291990	0.06	500000	
Mg	24	45	1	He	11226.982	11226.982	2.44	10294280	0.11	500000	
Al	27	45	1	He	16498.732	16498.732	2.06	8636415	0.19	200000	
K	39	45	1	He	10436.368	10436.368	2.77	9662270	0.11	500000	
Ca	44	45	1	He	9395.217	9395.217	3.18	471000	1.99	500000	
Ti	47	45	1	He	162.084	162.084	3.09	43757	0.37	2500	
V	51	45	1	He	1020.815	1020.815	1.59	6940634	0.01	10000	
Cr	52	45	1	He	1026.709	1026.709	2.37	8257719	0.01	10000	
Mn	55	115	1	He	2647.117	2647.117	1.38	17426579	0.02	10000	
Fe	56	103	1	He	21651.960	21651.960	0.75	174852962	0.01	200000	
Co	59	103	1	He	1009.408	1009.408	1.00	11789392	0.01	10000	
Ni	60	103	1	He	1058.641	1058.641	0.31	3013767	0.04	10000	
Cu	63	103	1	He	1036.800	1036.800	1.45	7753811	0.01	10000	
Zn	66	103	1	He	1103.442	1103.442	1.38	1685259	0.07	10000	
As	75	103	1	He	969.716	969.716	0.74	1000406	0.10	10000	
Se	78	103	1	He	979.842	979.842	0.54	108390	0.90	10000	
Sr	88	103	1	He	1019.192	1019.192	0.59	8698734	0.01	10000	
Mo	95	103	1	He	102.548	102.548	0.95	399476	0.03	2000	
Ag	107	103	1	He	37.128	37.128	0.61	465896	0.01	300	
Cd	111	103	1	He	1090.126	1090.126	1.01	2409836	0.05	4000	
Sn	118	115	1	He	1122.287	1122.287	0.98	6088331	0.02	2000	
Sb	123	115	1	He	105.869	105.869	1.06	536899	0.02	300	
Ba	137	115	1	He	1176.596	1176.596	1.18	2928976	0.04	10000	
W	182	209	1	He	92.131	92.131	1.61	1378873	0.01	2500	
Tl	205	209	1	He	247.993	247.993	0.70	8978925	0.00	5000	
Pb	208	209	1	He	1052.286	1052.286	0.55	49368736	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1516515	0.62	1729956	87.66	30	120	
Sc	45	1	He	988347	4.73	1045873	94.50	30	120	
Sc	45	2	NoGas	7247623	0.78	8041241	90.13	30	120	
Rh	103	1	He	2767719	1.42	3067946	90.21	30	120	
In	115	1	He	1769441	1.29	1978772	89.42	30	120	
Tb	159	1	He	4776695	1.13	5013529	95.28	30	120	
Ho	165	1	He	4933723	1.13	5115781	96.44	30	120	
Bi	209	1	He	3491703	1.33	3723643	93.77	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-e du@20
Data File Name	051SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:41:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.718	0.718	7.17	3034	0.02	10000	
B	11	45	2	NoGas	2.609	2.609	9.64	14365	0.02	300	
Na	23	45	1	He	33.642	33.642	4.01	75239	0.04	500000	
Mg	24	45	1	He	1248.170	1248.170	0.36	1143552	0.11	500000	
Al	27	45	1	He	8266.259	8266.259	0.51	4318384	0.19	200000	
K	39	45	1	He	395.515	395.515	2.12	402184	0.10	500000	
Ca	44	45	1	He	225.945	225.945	1.75	11829	1.91	500000	
Ti	47	45	1	He	61.716	61.716	0.31	16638	0.37	2500	
V	51	45	1	He	17.196	17.196	0.91	116459	0.01	10000	
Cr	52	45	1	He	10.773	10.773	0.84	88646	0.01	10000	
Mn	55	115	1	He	1870.857	1870.857	1.54	12996233	0.01	10000	
Fe	56	103	1	He	12972.434	12972.434	1.79	110134285	0.01	200000	
Co	59	103	1	He	9.736	9.736	0.62	119624	0.01	10000	
Ni	60	103	1	He	11.555	11.555	2.08	35403	0.03	10000	
Cu	63	103	1	He	7.940	7.940	2.42	65986	0.01	10000	
Zn	66	103	1	He	38.492	38.492	1.44	63129	0.06	10000	
As	75	103	1	He	7.194	7.194	0.89	7937	0.09	10000	
Se	78	103	1	He	1.551	1.551	4.00	246	0.63	10000	
Sr	88	103	1	He	10.988	10.988	0.83	98759	0.01	10000	
Mo	95	103	1	He	2.714	2.714	9.04	11391	0.02	2000	
Ag	107	103	1	He	0.042	0.042	13.75	633	0.01	300	
Cd	111	103	1	He	0.212	0.212	4.49	2106	0.01	4000	
Sn	118	115	1	He	7.072	7.072	9.57	41485	0.02	2000	
Sb	123	115	1	He	0.222	0.222	22.65	2110	0.01	300	
Ba	137	115	1	He	64.305	64.305	2.52	168939	0.04	10000	
W	182	209	1	He	1.614	1.614	17.69	30478	0.01	2500	
Tl	205	209	1	He	0.279	0.279	13.43	10613	0.00	5000	
Pb	208	209	1	He	12.826	12.826	1.25	628294	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1739353	2.66	1729956	100.54	30	120	
Sc	45	1	He	985690	1.25	1045873	94.25	30	120	
Sc	45	2	NoGas	8291860	0.60	8041241	103.12	30	120	
Rh	103	1	He	2910599	2.69	3067946	94.87	30	120	
In	115	1	He	1867700	3.08	1978772	94.39	30	120	
Tb	159	1	He	4929601	1.17	5013529	98.33	30	120	
Ho	165	1	He	5011185	1.61	5115781	97.96	30	120	
Bi	209	1	He	3635987	1.34	3723643	97.65	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-f ms@20
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:45:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.635	5.635	4.85	23697	0.02	10000	
B	11	45	2	NoGas	6.724	6.724	4.74	27554	0.02	300	
Na	23	45	1	He	517.034	517.034	1.01	974579	0.05	500000	
Mg	24	45	1	He	1696.385	1696.385	1.31	1771697	0.10	500000	
Al	27	45	1	He	8334.873	8334.873	0.58	4965683	0.17	200000	
K	39	45	1	He	863.877	863.877	1.08	950336	0.09	500000	
Ca	44	45	1	He	694.655	694.655	1.16	40211	1.73	500000	
Ti	47	45	1	He	59.988	59.988	0.24	18443	0.33	2500	
V	51	45	1	He	20.619	20.619	1.68	159290	0.01	10000	
Cr	52	45	1	He	14.847	14.847	1.03	138371	0.01	10000	
Mn	55	115	1	He	1358.733	1358.733	0.19	10435999	0.01	10000	
Fe	56	103	1	He	12268.899	12268.899	1.43	113460213	0.01	200000	
Co	59	103	1	He	12.314	12.314	1.08	164755	0.01	10000	
Ni	60	103	1	He	16.257	16.257	0.81	53890	0.03	10000	
Cu	63	103	1	He	12.195	12.195	2.42	108294	0.01	10000	
Zn	66	103	1	He	44.132	44.132	1.16	78619	0.06	10000	
As	75	103	1	He	11.318	11.318	0.58	13516	0.08	10000	
Se	78	103	1	He	5.432	5.432	1.09	759	0.72	10000	
Sr	88	103	1	He	13.586	13.586	1.62	132946	0.01	10000	
Mo	95	103	1	He	5.833	5.833	1.53	26328	0.02	2000	
Ag	107	103	1	He	4.815	4.815	1.52	69262	0.01	300	
Cd	111	103	1	He	4.953	4.953	0.00	14292	0.03	4000	
Sn	118	115	1	He	6.841	6.841	1.10	44474	0.02	2000	
Sb	123	115	1	He	1.418	1.418	0.65	9403	0.02	300	
Ba	137	115	1	He	61.035	61.035	0.86	177307	0.03	10000	
W	182	209	1	He	3.279	3.279	0.85	58670	0.01	2500	
Tl	205	209	1	He	4.326	4.326	2.16	169833	0.00	5000	
Pb	208	209	1	He	16.245	16.245	1.63	827710	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1901796	0.64	1729956	109.93	30	120	
Sc	45	1	He	1124108	0.99	1045873	107.48	30	120	
Sc	45	2	NoGas	9107010	0.43	8041241	113.25	30	120	
Rh	103	1	He	3169800	1.29	3067946	103.32	30	120	
In	115	1	He	2064382	1.59	1978772	104.33	30	120	
Tb	159	1	He	5175647	0.99	5013529	103.23	30	120	
Ho	165	1	He	5277051	1.20	5115781	103.15	30	120	
Bi	209	1	He	3784362	1.39	3723643	101.63	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-2-b@20
Data File Name	053SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:48:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.464	0.464	6.00	2689	0.02	10000	
B	11	45	2	NoGas	3.283	3.283	2.65	20483	0.02	300	
Na	23	45	1	He	30.222	30.222	1.33	96489	0.03	500000	
Mg	24	45	1	He	1088.275	1088.275	1.39	1379222	0.08	500000	
Al	27	45	1	He	5966.937	5966.937	2.77	4310555	0.14	200000	
K	39	45	1	He	368.778	368.778	0.87	522211	0.07	500000	
Ca	44	45	1	He	756.544	756.544	1.58	53053	1.43	500000	
Ti	47	45	1	He	48.272	48.272	4.02	17990	0.27	2500	
V	51	45	1	He	12.495	12.495	2.59	116935	0.01	10000	
Cr	52	45	1	He	8.876	8.876	1.23	101537	0.01	10000	
Mn	55	115	1	He	1021.490	1021.490	2.13	8713883	0.01	10000	
Fe	56	103	1	He	11214.101	11214.101	0.79	117329893	0.01	200000	
Co	59	103	1	He	5.514	5.514	0.39	83503	0.01	10000	
Ni	60	103	1	He	10.132	10.132	1.17	38382	0.03	10000	
Cu	63	103	1	He	5.891	5.891	0.96	61471	0.01	10000	
Zn	66	103	1	He	39.249	39.249	0.79	79283	0.05	10000	
As	75	103	1	He	5.526	5.526	1.75	7547	0.07	10000	
Se	78	103	1	He	0.764	0.764	6.80	190	0.40	10000	
Sr	88	103	1	He	4.352	4.352	1.55	48276	0.01	10000	
Mo	95	103	1	He	0.910	0.910	3.48	4949	0.02	2000	
Ag	107	103	1	He	0.063	0.063	5.95	1118	0.01	300	
Cd	111	103	1	He	0.222	0.222	6.42	2624	0.01	4000	
Sn	118	115	1	He	2.436	2.436	2.49	18440	0.01	2000	
Sb	123	115	1	He	0.029	0.029	48.94	1327	0.00	300	
Ba	137	115	1	He	46.970	46.970	2.57	151519	0.03	10000	
W	182	209	1	He	0.304	0.304	20.35	11386	0.00	2500	
Tl	205	209	1	He	0.127	0.127	5.51	5501	0.00	5000	
Pb	208	209	1	He	11.695	11.695	1.37	641344	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2262163	11.08	1729956	130.76	30	120	ISTD Failed
Sc	45	1	He	1363497	2.93	1045873	130.37	30	120	ISTD Failed
Sc	45	2	NoGas	10534016	8.34	8041241	131.00	30	120	ISTD Failed
Rh	103	1	He	3585372	2.50	3067946	116.87	30	120	
In	115	1	He	2292837	2.28	1978772	115.87	30	120	
Tb	159	1	He	5588161	2.06	5013529	111.46	30	120	
Ho	165	1	He	5696051	0.83	5115781	111.34	30	120	
Bi	209	1	He	4069285	1.05	3723643	109.28	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-9-b@20
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:52:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.432	0.432	13.21	2256	0.02	10000	
B	11	45	2	NoGas	1.697	1.697	6.03	13924	0.01	300	
Na	23	45	1	He	9.533	9.533	5.29	44588	0.02	500000	
Mg	24	45	1	He	996.437	996.437	3.58	1117501	0.09	500000	
Al	27	45	1	He	6134.421	6134.421	2.89	3923159	0.16	200000	
K	39	45	1	He	270.833	270.833	3.14	351841	0.08	500000	
Ca	44	45	1	He	97.744	97.744	4.33	6637	1.47	500000	
Ti	47	45	1	He	42.751	42.751	1.34	14125	0.30	2500	
V	51	45	1	He	11.183	11.183	2.75	92669	0.01	10000	
Cr	52	45	1	He	8.302	8.302	3.21	84234	0.01	10000	
Mn	55	115	1	He	229.229	229.229	2.04	1821763	0.01	10000	
Fe	56	103	1	He	10695.345	10695.345	1.03	104462689	0.01	200000	
Co	59	103	1	He	5.797	5.797	1.19	81926	0.01	10000	
Ni	60	103	1	He	8.448	8.448	2.35	30043	0.03	10000	
Cu	63	103	1	He	5.690	5.690	1.90	55588	0.01	10000	
Zn	66	103	1	He	29.417	29.417	0.66	55871	0.05	10000	
As	75	103	1	He	4.932	4.932	0.90	6306	0.08	10000	
Se	78	103	1	He	0.432	0.432	8.53	133	0.32	10000	
Sr	88	103	1	He	1.376	1.376	5.24	14357	0.01	10000	
Mo	95	103	1	He	0.652	0.652	6.99	3406	0.02	2000	
Ag	107	103	1	He	0.024	0.024	17.98	461	0.01	300	
Cd	111	103	1	He	0.130	0.130	21.18	2204	0.01	4000	
Sn	118	115	1	He	2.045	2.045	0.40	14607	0.01	2000	
Sb	123	115	1	He	-0.029	-0.029	-50.79	882	0.00	300	
Ba	137	115	1	He	28.072	28.072	1.09	84362	0.03	10000	
W	182	209	1	He	0.099	0.099	31.73	7521	0.00	2500	
Tl	205	209	1	He	0.085	0.085	3.35	3593	0.00	5000	
Pb	208	209	1	He	8.142	8.142	0.51	430495	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2014683	2.51	1729956	116.46	30	120	
Sc	45	1	He	1208037	6.51	1045873	115.51	30	120	
Sc	45	2	NoGas	9628353	3.52	8041241	119.74	30	120	
Rh	103	1	He	3346930	2.94	3067946	109.09	30	120	
In	115	1	He	2134536	2.15	1978772	107.87	30	120	
Tb	159	1	He	5303459	1.31	5013529	105.78	30	120	
Ho	165	1	He	5431456	2.67	5115781	106.17	30	120	
Bi	209	1	He	3917608	1.37	3723643	105.21	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-10-b@20
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:56:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.545	0.545	0.75	2967	0.02	10000	
B	11	45	2	NoGas	1.835	1.835	7.49	15440	0.01	300	
Na	23	45	1	He	13.888	13.888	6.48	59341	0.02	500000	
Mg	24	45	1	He	1139.455	1139.455	2.01	1427079	0.08	500000	
Al	27	45	1	He	7028.385	7028.385	1.56	5018670	0.14	200000	
K	39	45	1	He	401.400	401.400	2.27	557149	0.07	500000	
Ca	44	45	1	He	92.614	92.614	0.51	7057	1.31	500000	
Ti	47	45	1	He	43.295	43.295	2.13	15946	0.27	2500	
V	51	45	1	He	14.805	14.805	1.16	136991	0.01	10000	
Cr	52	45	1	He	9.207	9.207	0.65	103936	0.01	10000	
Mn	55	115	1	He	799.204	799.204	0.95	6794111	0.01	10000	
Fe	56	103	1	He	13476.034	13476.034	2.20	138992052	0.01	200000	
Co	59	103	1	He	7.438	7.438	1.10	111012	0.01	10000	
Ni	60	103	1	He	9.465	9.465	2.32	35408	0.03	10000	
Cu	63	103	1	He	5.284	5.284	2.88	54823	0.01	10000	
Zn	66	103	1	He	32.891	32.891	1.84	65750	0.05	10000	
As	75	103	1	He	6.445	6.445	2.56	8655	0.07	10000	
Se	78	103	1	He	0.741	0.741	13.30	185	0.40	10000	
Sr	88	103	1	He	4.346	4.346	2.07	47544	0.01	10000	
Mo	95	103	1	He	0.732	0.732	3.89	3996	0.02	2000	
Ag	107	103	1	He	0.026	0.026	13.57	518	0.01	300	
Cd	111	103	1	He	0.163	0.163	19.21	2422	0.01	4000	
Sn	118	115	1	He	1.949	1.949	2.95	14955	0.01	2000	
Sb	123	115	1	He	-0.022	-0.022	-38.84	993	0.00	300	
Ba	137	115	1	He	41.101	41.101	1.17	132143	0.03	10000	
W	182	209	1	He	0.079	0.079	15.85	7313	0.00	2500	
Tl	205	209	1	He	0.099	0.099	2.28	4221	0.00	5000	
Pb	208	209	1	He	10.410	10.410	0.88	558555	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2169910	1.63	1729956	125.43	30	120	ISTD Failed
Sc	45	1	He	1346761	3.78	1045873	128.77	30	120	ISTD Failed
Sc	45	2	NoGas	10372313	1.02	8041241	128.99	30	120	ISTD Failed
Rh	103	1	He	3534299	3.14	3067946	115.20	30	120	
In	115	1	He	2284338	2.83	1978772	115.44	30	120	
Tb	159	1	He	5543101	1.81	5013529	110.56	30	120	
Ho	165	1	He	5626815	1.90	5115781	109.99	30	120	
Bi	209	1	He	3979892	2.22	3723643	106.88	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	056_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:00:10-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.673	4.093	186539	3.88	50	97.3	89.5	110.5	
B	11	45	2	NoGas	55.754	3.241	150388	2.78	50	111.5	89.5	110.5	CCV Failed
Na	23	45	1	He	25330.611	1.875	44198894	1.72	25000	101.3	89.5	110.5	
Mg	24	45	1	He	25267.440	1.940	25012779	1.77	25000	101.1	89.5	110.5	
Al	27	45	1	He	253.753	1.429	144085	2.76	250	101.5	89.5	110.5	
K	39	45	1	He	25664.776	1.116	25601981	2.49	25000	102.7	89.5	110.5	
Ca	44	45	1	He	25099.374	1.559	1358268	3.14	25000	100.4	89.5	110.5	
Ti	47	45	1	He	50.474	0.505	14729	4.05	50	100.9	89.5	110.5	
V	51	45	1	He	50.440	1.672	369992	1.96	50	100.9	89.5	110.5	
Cr	52	45	1	He	50.861	1.057	444000	2.59	50	101.7	89.5	110.5	
Mn	55	115	1	He	260.029	0.997	1849337	2.75	250	104.0	89.5	110.5	
Fe	56	103	1	He	12574.543	2.081	107364876	2.45	12500	100.6	89.5	110.5	
Co	59	103	1	He	49.916	1.554	616398	1.92	50	99.8	89.5	110.5	
Ni	60	103	1	He	50.265	2.798	152086	3.05	50	100.5	89.5	110.5	
Cu	63	103	1	He	50.321	2.147	401294	2.56	50	100.6	89.5	110.5	
Zn	66	103	1	He	50.088	2.802	82193	3.00	50	100.2	89.5	110.5	
As	75	103	1	He	50.425	1.988	55127	2.43	50	100.9	89.5	110.5	
Se	78	103	1	He	50.766	1.780	6000	2.35	50	101.5	89.5	110.5	
Sr	88	103	1	He	49.019	2.032	442488	2.30	50	98.0	89.5	110.5	
Mo	95	103	1	He	50.492	0.928	208111	0.38	50	101.0	89.5	110.5	
Ag	107	103	1	He	50.224	1.565	666300	1.70	50	100.4	89.5	110.5	
Cd	111	103	1	He	50.098	2.211	118650	2.53	50	100.2	89.5	110.5	
Sn	118	115	1	He	49.178	0.860	289169	2.46	50	98.4	89.5	110.5	
Sb	123	115	1	He	50.006	0.369	274319	1.98	50	100.0	89.5	110.5	
Ba	137	115	1	He	50.021	0.047	134509	1.75	50	100.0	89.5	110.5	
W	182	209	1	He	47.623	0.464	719049	0.57	50	95.2	89.5	110.5	
Tl	205	209	1	He	51.476	1.034	1873612	1.47	50	103.0	89.5	110.5	
Pb	208	209	1	He	48.720	1.197	2299280	1.95	50	97.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1755527	1.66	1729956	101.48	30	120	
Sc	45	1	He	1066777	3.61	1045873	102.00	30	120	
Sc	45	2	NoGas	8156957	0.82	8041241	101.44	30	120	
Rh	103	1	He	2926159	0.66	3067946	95.38	30	120	
In	115	1	He	1910632	1.77	1978772	96.56	30	120	
Tb	159	1	He	5008671	1.40	5013529	99.90	30	120	
Ho	165	1	He	5079069	2.42	5115781	99.28	30	120	
Bi	209	1	He	3509738	0.98	3723643	94.26	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	057_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:03:58-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.044	52.9	519	21.1	1	
B	11	45	2	NoGas	0.813	36.4	10129	8.2	20	
Na	23	45	1	He	3.775	35.2	29565	6.3	400	
Mg	24	45	1	He	0.958	35.0	2482	11.9	1000	
Al	27	45	1	He	0.575	12.2	1002	3.3	50	
K	39	45	1	He	5.965	13.2	47593	0.8	1000	
Ca	44	45	1	He	-0.212	-316.2	572	4.9	1000	
Ti	47	45	1	He	0.101	13.8	39	9.9	20	
V	51	45	1	He	0.008	1137.2	-147	-465.8	2	
Cr	52	45	1	He	0.041	31.2	2754	5.5	2	
Mn	55	115	1	He	0.007	24.0	907	1.3	2	
Fe	56	103	1	He	18.610	14.3	184709	13.1	50	
Co	59	103	1	He	0.005	16.9	140	8.2	1	
Ni	60	103	1	He	-0.141	-3.0	442	3.4	2	
Cu	63	103	1	He	-0.258	-0.6	1698	0.8	2	
Zn	66	103	1	He	-0.211	-3.8	1114	1.0	20	
As	75	103	1	He	0.049	22.6	202	6.6	2	
Se	78	103	1	He	0.015	218.8	73	5.3	2	
Sr	88	103	1	He	0.001	462.0	156	19.4	10	
Mo	95	103	1	He	0.612	14.2	3017	12.6	2	
Ag	107	103	1	He	0.005	51.9	151	22.3	0.2	
Cd	111	103	1	He	0.057	44.4	1882	3.6	0.2	
Sn	118	115	1	He	0.345	2.2	3293	1.9	10	
Sb	123	115	1	He	0.346	26.5	3004	18.5	1	
Ba	137	115	1	He	0.003	204.6	63	32.9	5	
W	182	209	1	He	0.737	12.0	17039	7.6	10	
Tl	205	209	1	He	0.025	12.5	1051	10.7	0.5	
Pb	208	209	1	He	0.058	10.5	4631	5.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1865448	2.55	1729956	107.83	30	120	
Sc	45	1	He	1076036	1.75	1045873	102.88	30	120	
Sc	45	2	NoGas	8673582	1.26	8041241	107.86	30	120	
Rh	103	1	He	3136216	0.31	3067946	102.23	30	120	
In	115	1	He	2019973	0.84	1978772	102.08	30	120	
Tb	159	1	He	5124876	0.82	5013529	102.22	30	120	
Ho	165	1	He	5192950	0.38	5115781	101.51	30	120	
Bi	209	1	He	3667538	0.53	3723643	98.49	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-11-b@20
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:07:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.460	0.460	17.67	2215	0.02	10000	
B	11	45	2	NoGas	1.460	1.460	3.55	12375	0.01	300	
Na	23	45	1	He	13.293	13.293	6.22	49211	0.03	500000	
Mg	24	45	1	He	1137.991	1137.991	2.45	1210033	0.09	500000	
Al	27	45	1	He	7383.718	7383.718	2.33	4473154	0.17	200000	
K	39	45	1	He	350.034	350.034	2.11	417760	0.08	500000	
Ca	44	45	1	He	99.081	99.081	4.82	6359	1.56	500000	
Ti	47	45	1	He	50.759	50.759	2.36	15865	0.32	2500	
V	51	45	1	He	15.238	15.238	1.94	119658	0.01	10000	
Cr	52	45	1	He	9.739	9.739	3.08	93169	0.01	10000	
Mn	55	115	1	He	678.092	678.092	2.43	5115513	0.01	10000	
Fe	56	103	1	He	13020.779	13020.779	2.26	120376564	0.01	200000	
Co	59	103	1	He	7.375	7.375	3.05	98672	0.01	10000	
Ni	60	103	1	He	10.034	10.034	3.43	33596	0.03	10000	
Cu	63	103	1	He	6.106	6.106	2.10	56176	0.01	10000	
Zn	66	103	1	He	32.777	32.777	3.01	58756	0.06	10000	
As	75	103	1	He	6.095	6.095	3.88	7343	0.08	10000	
Se	78	103	1	He	0.684	0.684	12.73	158	0.43	10000	
Sr	88	103	1	He	2.087	2.087	0.37	20548	0.01	10000	
Mo	95	103	1	He	0.878	0.878	2.89	4236	0.02	2000	
Ag	107	103	1	He	0.026	0.026	11.22	461	0.01	300	
Cd	111	103	1	He	0.129	0.129	10.78	2084	0.01	4000	
Sn	118	115	1	He	1.849	1.849	2.48	12653	0.01	2000	
Sb	123	115	1	He	0.108	0.108	13.95	1631	0.01	300	
Ba	137	115	1	He	48.067	48.067	1.48	137152	0.04	10000	
W	182	209	1	He	0.194	0.194	13.32	8747	0.00	2500	
Tl	205	209	1	He	0.101	0.101	2.70	4045	0.00	5000	
Pb	208	209	1	He	10.767	10.767	1.14	545927	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1868440	1.60	1729956	108.01	30	120	
Sc	45	1	He	1143434	4.36	1045873	109.33	30	120	
Sc	45	2	NoGas	9025819	0.43	8041241	112.24	30	120	
Rh	103	1	He	3168564	0.24	3067946	103.28	30	120	
In	115	1	He	2027266	0.58	1978772	102.45	30	120	
Tb	159	1	He	5112999	0.90	5013529	101.98	30	120	
Ho	165	1	He	5209711	1.02	5115781	101.84	30	120	
Bi	209	1	He	3760877	0.42	3723643	101.00	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-12-b@20
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:11:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.468	0.468	10.98	2389	0.02	10000	
B	11	45	2	NoGas	1.239	1.239	2.40	12453	0.01	300	
Na	23	45	1	He	11.966	11.966	0.39	48416	0.02	500000	
Mg	24	45	1	He	1085.666	1085.666	0.14	1194836	0.09	500000	
Al	27	45	1	He	6395.483	6395.483	1.21	4013134	0.16	200000	
K	39	45	1	He	366.852	366.852	1.74	451364	0.08	500000	
Ca	44	45	1	He	165.945	165.945	4.21	10606	1.56	500000	
Ti	47	45	1	He	54.485	54.485	1.44	17643	0.31	2500	
V	51	45	1	He	12.426	12.426	2.00	101017	0.01	10000	
Cr	52	45	1	He	8.759	8.759	1.51	87051	0.01	10000	
Mn	55	115	1	He	551.339	551.339	2.07	4381997	0.01	10000	
Fe	56	103	1	He	10989.580	10989.580	1.40	105906369	0.01	200000	
Co	59	103	1	He	6.844	6.844	1.26	95452	0.01	10000	
Ni	60	103	1	He	10.900	10.900	2.63	37959	0.03	10000	
Cu	63	103	1	He	6.258	6.258	1.57	59903	0.01	10000	
Zn	66	103	1	He	31.589	31.589	0.01	59082	0.05	10000	
As	75	103	1	He	5.336	5.336	1.89	6720	0.08	10000	
Se	78	103	1	He	0.660	0.660	6.62	162	0.41	10000	
Sr	88	103	1	He	2.030	2.030	1.89	20831	0.01	10000	
Mo	95	103	1	He	0.772	0.772	6.39	3923	0.02	2000	
Ag	107	103	1	He	0.020	0.020	21.68	397	0.01	300	
Cd	111	103	1	He	0.150	0.150	20.14	2228	0.01	4000	
Sn	118	115	1	He	1.735	1.735	3.55	12587	0.01	2000	
Sb	123	115	1	He	0.037	0.037	63.29	1287	0.00	300	
Ba	137	115	1	He	44.979	44.979	1.21	135209	0.03	10000	
W	182	209	1	He	0.119	0.119	14.34	7776	0.00	2500	
Tl	205	209	1	He	0.094	0.094	4.94	3904	0.00	5000	
Pb	208	209	1	He	9.502	9.502	0.74	496971	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1993988	2.15	1729956	115.26	30	120	
Sc	45	1	He	1183862	0.36	1045873	113.19	30	120	
Sc	45	2	NoGas	9568324	0.52	8041241	118.99	30	120	
Rh	103	1	He	3302821	1.33	3067946	107.66	30	120	
In	115	1	He	2135929	1.20	1978772	107.94	30	120	
Tb	159	1	He	5274848	0.84	5013529	105.21	30	120	
Ho	165	1	He	5403713	0.41	5115781	105.63	30	120	
Bi	209	1	He	3877885	1.03	3723643	104.14	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-13-b@20
Data File Name	060SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:15:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.403	0.403	12.06	2119	0.02	10000	
B	11	45	2	NoGas	1.127	1.127	14.28	12030	0.01	300	
Na	23	45	1	He	10.038	10.038	6.83	45631	0.02	500000	
Mg	24	45	1	He	890.543	890.543	0.69	1001099	0.09	500000	
Al	27	45	1	He	6056.672	6056.672	0.25	3880756	0.16	200000	
K	39	45	1	He	310.334	310.334	0.43	397083	0.08	500000	
Ca	44	45	1	He	98.887	98.887	5.08	6718	1.47	500000	
Ti	47	45	1	He	47.617	47.617	1.84	15746	0.30	2500	
V	51	45	1	He	12.934	12.934	1.67	107372	0.01	10000	
Cr	52	45	1	He	9.014	9.014	0.76	91399	0.01	10000	
Mn	55	115	1	He	659.343	659.343	0.35	5341605	0.01	10000	
Fe	56	103	1	He	10512.303	10512.303	1.84	103901349	0.01	200000	
Co	59	103	1	He	7.003	7.003	1.65	100171	0.01	10000	
Ni	60	103	1	He	8.415	8.415	2.88	30278	0.03	10000	
Cu	63	103	1	He	4.933	4.933	1.95	49321	0.01	10000	
Zn	66	103	1	He	26.848	26.848	1.93	51741	0.05	10000	
As	75	103	1	He	5.039	5.039	2.05	6517	0.08	10000	
Se	78	103	1	He	0.593	0.593	7.37	157	0.38	10000	
Sr	88	103	1	He	1.766	1.766	1.95	18603	0.01	10000	
Mo	95	103	1	He	0.683	0.683	1.13	3600	0.02	2000	
Ag	107	103	1	He	0.017	0.017	19.68	358	0.00	300	
Cd	111	103	1	He	0.147	0.147	11.53	2278	0.01	4000	
Sn	118	115	1	He	1.867	1.867	0.73	13710	0.01	2000	
Sb	123	115	1	He	-0.013	-0.013	-144.26	1001	0.00	300	
Ba	137	115	1	He	41.372	41.372	1.21	126778	0.03	10000	
W	182	209	1	He	0.082	0.082	12.22	7184	0.00	2500	
Tl	205	209	1	He	0.083	0.083	6.16	3465	0.00	5000	
Pb	208	209	1	He	9.251	9.251	0.27	484944	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1998827	1.78	1729956	115.54	30	120	
Sc	45	1	He	1208865	0.46	1045873	115.58	30	120	
Sc	45	2	NoGas	9500708	0.67	8041241	118.15	30	120	
Rh	103	1	He	3387777	1.13	3067946	110.42	30	120	
In	115	1	He	2177244	0.95	1978772	110.03	30	120	
Tb	159	1	He	5319384	0.63	5013529	106.10	30	120	
Ho	165	1	He	5421425	0.77	5115781	105.97	30	120	
Bi	209	1	He	3886118	0.82	3723643	104.36	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-15-b@20
Data File Name	061SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:19:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.449	0.449	13.21	2282	0.02	10000	
B	11	45	2	NoGas	2.000	2.000	4.93	14559	0.01	300	
Na	23	45	1	He	21.194	21.194	3.88	67253	0.03	500000	
Mg	24	45	1	He	1442.887	1442.887	3.30	1610302	0.09	500000	
Al	27	45	1	He	6850.345	6850.345	1.84	4360821	0.16	200000	
K	39	45	1	He	443.253	443.253	2.47	543546	0.08	500000	
Ca	44	45	1	He	1448.309	1448.309	1.79	88869	1.63	500000	
Ti	47	45	1	He	57.069	57.069	2.16	18746	0.30	2500	
V	51	45	1	He	14.321	14.321	1.29	118162	0.01	10000	
Cr	52	45	1	He	11.985	11.985	1.40	119868	0.01	10000	
Mn	55	115	1	He	569.021	569.021	0.89	4471064	0.01	10000	
Fe	56	103	1	He	14749.263	14749.263	1.23	142699661	0.01	200000	
Co	59	103	1	He	6.017	6.017	0.12	84258	0.01	10000	
Ni	60	103	1	He	12.659	12.659	1.39	44109	0.03	10000	
Cu	63	103	1	He	8.293	8.293	0.77	78374	0.01	10000	
Zn	66	103	1	He	34.669	34.669	0.59	64949	0.05	10000	
As	75	103	1	He	10.744	10.744	0.46	13430	0.08	10000	
Se	78	103	1	He	0.696	0.696	4.87	167	0.42	10000	
Sr	88	103	1	He	7.525	7.525	0.22	77104	0.01	10000	
Mo	95	103	1	He	2.922	2.922	3.42	13965	0.02	2000	
Ag	107	103	1	He	0.021	0.021	10.91	406	0.01	300	
Cd	111	103	1	He	0.188	0.188	10.45	2337	0.01	4000	
Sn	118	115	1	He	1.865	1.865	4.87	13284	0.01	2000	
Sb	123	115	1	He	-0.009	-0.009	-103.38	992	0.00	300	
Ba	137	115	1	He	51.052	51.052	1.34	151721	0.03	10000	
W	182	209	1	He	0.348	0.348	13.80	11453	0.00	2500	
Tl	205	209	1	He	0.091	0.091	5.36	3754	0.00	5000	
Pb	208	209	1	He	10.373	10.373	0.75	536863	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1968171	0.73	1729956	113.77	30	120	
Sc	45	1	He	1201277	1.97	1045873	114.86	30	120	
Sc	45	2	NoGas	9450371	1.56	8041241	117.52	30	120	
Rh	103	1	He	3315935	0.42	3067946	108.08	30	120	
In	115	1	He	2111671	0.36	1978772	106.72	30	120	
Tb	159	1	He	5300684	0.64	5013529	105.73	30	120	
Ho	165	1	He	5362466	0.30	5115781	104.82	30	120	
Bi	209	1	He	3838658	0.69	3723643	103.09	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-16-b@20
Data File Name	062SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:22:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.411	0.411	6.99	2237	0.02	10000	
B	11	45	2	NoGas	1.353	1.353	14.07	13339	0.01	300	
Na	23	45	1	He	14.423	14.423	0.83	54499	0.03	500000	
Mg	24	45	1	He	1022.983	1022.983	0.28	1154016	0.09	500000	
Al	27	45	1	He	5807.485	5807.485	0.97	3734860	0.16	200000	
K	39	45	1	He	342.220	342.220	2.11	434651	0.08	500000	
Ca	44	45	1	He	932.663	932.663	1.28	58049	1.61	500000	
Ti	47	45	1	He	49.581	49.581	1.19	16455	0.30	2500	
V	51	45	1	He	12.965	12.965	1.76	108041	0.01	10000	
Cr	52	45	1	He	9.881	9.881	0.55	100306	0.01	10000	
Mn	55	115	1	He	876.812	876.812	0.98	7043203	0.01	10000	
Fe	56	103	1	He	12381.021	12381.021	1.82	121880586	0.01	200000	
Co	59	103	1	He	7.714	7.714	1.15	109900	0.01	10000	
Ni	60	103	1	He	9.675	9.675	1.33	34532	0.03	10000	
Cu	63	103	1	He	10.787	10.787	1.26	102469	0.01	10000	
Zn	66	103	1	He	43.754	43.754	2.45	82979	0.05	10000	
As	75	103	1	He	6.485	6.485	0.17	8310	0.08	10000	
Se	78	103	1	He	0.647	0.647	12.79	163	0.40	10000	
Sr	88	103	1	He	4.282	4.282	1.96	44710	0.01	10000	
Mo	95	103	1	He	1.153	1.153	5.05	5817	0.02	2000	
Ag	107	103	1	He	0.060	0.060	5.55	1006	0.01	300	
Cd	111	103	1	He	0.239	0.239	2.73	2515	0.01	4000	
Sn	118	115	1	He	1.866	1.866	4.41	13591	0.01	2000	
Sb	123	115	1	He	-0.015	-0.015	-30.54	979	0.00	300	
Ba	137	115	1	He	44.181	44.181	0.16	134249	0.03	10000	
W	182	209	1	He	0.079	0.079	28.69	7109	0.00	2500	
Tl	205	209	1	He	0.089	0.089	1.62	3689	0.00	5000	
Pb	208	209	1	He	13.338	13.338	1.02	695578	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2080472	0.85	1729956	120.26	30	120	ISTD Failed
Sc	45	1	He	1213382	0.81	1045873	116.02	30	120	
Sc	45	2	NoGas	9976567	1.28	8041241	124.07	30	120	ISTD Failed
Rh	103	1	He	3374139	0.81	3067946	109.98	30	120	
In	115	1	He	2158892	0.38	1978772	109.10	30	120	
Tb	159	1	He	5344636	0.68	5013529	106.60	30	120	
Ho	165	1	He	5442150	1.06	5115781	106.38	30	120	
Bi	209	1	He	3871039	0.92	3723643	103.96	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-17-b@100
Data File Name	063SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:26:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.088	0.088	15.26	815	0.01	10000	
B	11	45	2	NoGas	0.140	0.140	100.47	10133	0.00	300	
Na	23	45	1	He	2.032	2.032	52.47	34129	0.01	500000	
Mg	24	45	1	He	244.841	244.841	5.81	316803	0.08	500000	
Al	27	45	1	He	1221.964	1221.964	4.26	898522	0.14	200000	
K	39	45	1	He	78.005	78.005	4.58	154675	0.05	500000	
Ca	44	45	1	He	144.729	144.729	6.10	10927	1.32	500000	
Ti	47	45	1	He	8.567	8.567	0.77	3264	0.26	2500	
V	51	45	1	He	2.791	2.791	3.32	26371	0.01	10000	
Cr	52	45	1	He	1.922	1.922	5.39	24764	0.01	10000	
Mn	55	115	1	He	1090.842	1090.842	1.65	9602694	0.01	10000	
Fe	56	103	1	He	2504.365	2504.365	0.62	26891312	0.01	200000	
Co	59	103	1	He	1.212	1.212	1.53	18895	0.01	10000	
Ni	60	103	1	He	3.875	3.875	2.85	15714	0.02	10000	
Cu	63	103	1	He	1.684	1.684	2.94	21284	0.01	10000	
Zn	66	103	1	He	6.305	6.305	4.37	14531	0.04	10000	
As	75	103	1	He	1.314	1.314	3.62	1971	0.07	10000	
Se	78	103	1	He	0.160	0.160	23.06	106	0.15	10000	
Sr	88	103	1	He	1.122	1.122	3.28	12902	0.01	10000	
Mo	95	103	1	He	0.178	0.178	1.48	1292	0.01	2000	
Ag	107	103	1	He	0.005	0.005	54.74	177	0.00	300	
Cd	111	103	1	He	0.091	0.091	8.91	2309	0.00	4000	
Sn	118	115	1	He	0.279	0.279	10.87	3386	0.01	2000	
Sb	123	115	1	He	-0.090	-0.090	-6.33	566	-0.02	300	
Ba	137	115	1	He	15.550	15.550	2.63	51806	0.03	10000	
W	182	209	1	He	0.100	0.100	22.46	7813	0.00	2500	
Tl	205	209	1	He	0.017	0.017	7.78	857	0.00	5000	
Pb	208	209	1	He	1.985	1.985	2.41	110170	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2192305	1.95	1729956	126.73	30	120	ISTD Failed
Sc	45	1	He	1389110	7.37	1045873	132.82	30	120	ISTD Failed
Sc	45	2	NoGas	10600426	1.41	8041241	131.83	30	120	ISTD Failed
Rh	103	1	He	3678553	2.07	3067946	119.90	30	120	
In	115	1	He	2366469	3.07	1978772	119.59	30	120	
Tb	159	1	He	5658718	1.28	5013529	112.87	30	120	
Ho	165	1	He	5744712	2.31	5115781	112.29	30	120	
Bi	209	1	He	4058163	1.70	3723643	108.98	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-18-b@20
Data File Name	064SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:30:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.363	0.363	10.12	2093	0.02	10000	
B	11	45	2	NoGas	1.266	1.266	6.03	14054	0.01	300	
Na	23	45	1	He	14.016	14.016	5.77	64610	0.02	500000	
Mg	24	45	1	He	1560.296	1560.296	1.65	2118068	0.07	500000	
Al	27	45	1	He	6137.704	6137.704	0.69	4752746	0.13	200000	
K	39	45	1	He	427.021	427.021	0.46	639121	0.07	500000	
Ca	44	45	1	He	754.303	754.303	2.38	56661	1.33	500000	
Ti	47	45	1	He	40.512	40.512	5.64	16170	0.25	2500	
V	51	45	1	He	11.019	11.019	2.72	110489	0.01	10000	
Cr	52	45	1	He	9.752	9.752	2.09	119198	0.01	10000	
Mn	55	115	1	He	1870.067	1870.067	3.17	16629413	0.01	10000	
Fe	56	103	1	He	15187.412	15187.412	2.31	162846127	0.01	200000	
Co	59	103	1	He	6.343	6.343	3.80	98433	0.01	10000	
Ni	60	103	1	He	17.875	17.875	2.25	68596	0.03	10000	
Cu	63	103	1	He	12.331	12.331	2.94	126927	0.01	10000	
Zn	66	103	1	He	39.242	39.242	2.93	81241	0.05	10000	
As	75	103	1	He	8.953	8.953	4.19	12431	0.07	10000	
Se	78	103	1	He	0.746	0.746	11.69	192	0.39	10000	
Sr	88	103	1	He	5.993	5.993	3.19	68097	0.01	10000	
Mo	95	103	1	He	0.834	0.834	0.22	4685	0.02	2000	
Ag	107	103	1	He	0.011	0.011	14.28	290	0.00	300	
Cd	111	103	1	He	0.199	0.199	18.62	2624	0.01	4000	
Sn	118	115	1	He	1.626	1.626	2.66	13287	0.01	2000	
Sb	123	115	1	He	-0.033	-0.033	-18.59	959	0.00	300	
Ba	137	115	1	He	86.247	86.247	2.13	290064	0.03	10000	
W	182	209	1	He	0.133	0.133	18.68	8432	0.00	2500	
Tl	205	209	1	He	0.133	0.133	1.46	5746	0.00	5000	
Pb	208	209	1	He	8.523	8.523	0.34	469508	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2155578	0.54	1729956	124.60	30	120	ISTD Failed
Sc	45	1	He	1461212	4.20	1045873	139.71	30	120	ISTD Failed
Sc	45	2	NoGas	10728136	0.98	8041241	133.41	30	120	ISTD Failed
Rh	103	1	He	3675043	0.89	3067946	119.79	30	120	
In	115	1	He	2390084	1.13	1978772	120.79	30	120	ISTD Failed
Tb	159	1	He	5716095	0.81	5013529	114.01	30	120	
Ho	165	1	He	5817148	0.77	5115781	113.71	30	120	
Bi	209	1	He	4082310	1.34	3723643	109.63	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	065_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:34:26-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	52.898	1.077	233806	2.55	50	105.8	89.5	110.5	
B	11	45	2	NoGas	58.856	1.860	185505	2.01	50	117.7	89.5	110.5	CCV Failed
Na	23	45	1	He	24695.867	2.180	54390229	0.75	25000	98.8	89.5	110.5	
Mg	24	45	1	He	24679.533	2.351	30837102	1.39	25000	98.7	89.5	110.5	
Al	27	45	1	He	250.367	1.999	179425	1.43	250	100.1	89.5	110.5	
K	39	45	1	He	25607.468	3.069	32231035	0.22	25000	102.4	89.5	110.5	
Ca	44	45	1	He	25274.237	2.517	1725771	0.67	25000	101.1	89.5	110.5	
Ti	47	45	1	He	49.791	1.569	18335	2.58	50	99.6	89.5	110.5	
V	51	45	1	He	48.543	1.411	449468	1.49	50	97.1	89.5	110.5	
Cr	52	45	1	He	48.676	2.122	536363	0.79	50	97.4	89.5	110.5	
Mn	55	115	1	He	272.589	1.688	2207848	0.91	250	109.0	89.5	110.5	
Fe	56	103	1	He	13279.109	1.636	128434426	1.41	12500	106.2	89.5	110.5	
Co	59	103	1	He	52.901	1.066	740026	1.11	50	105.8	89.5	110.5	
Ni	60	103	1	He	53.036	2.121	181730	2.14	50	106.1	89.5	110.5	
Cu	63	103	1	He	52.915	1.257	477814	1.46	50	105.8	89.5	110.5	
Zn	66	103	1	He	52.539	0.677	97593	1.12	50	105.1	89.5	110.5	
As	75	103	1	He	52.972	0.443	65595	0.53	50	105.9	89.5	110.5	
Se	78	103	1	He	52.750	1.958	7059	1.85	50	105.5	89.5	110.5	
Sr	88	103	1	He	51.067	0.465	522200	0.44	50	102.1	89.5	110.5	
Mo	95	103	1	He	51.769	1.400	241722	1.42	50	103.5	89.5	110.5	
Ag	107	103	1	He	51.273	1.539	770574	1.42	50	102.5	89.5	110.5	
Cd	111	103	1	He	50.440	0.671	135313	0.71	50	100.9	89.5	110.5	
Sn	118	115	1	He	48.984	2.919	328033	2.35	50	98.0	89.5	110.5	
Sb	123	115	1	He	49.669	1.382	310346	0.61	50	99.3	89.5	110.5	
Ba	137	115	1	He	49.807	1.935	152562	1.87	50	99.6	89.5	110.5	
W	182	209	1	He	47.903	1.717	773027	1.48	50	95.8	89.5	110.5	
Tl	205	209	1	He	51.768	1.085	2013962	1.34	50	103.5	89.5	110.5	
Pb	208	209	1	He	48.536	0.855	2448218	0.91	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2024361	1.48	1729956	117.02	30	120	
Sc	45	1	He	1346438	2.92	1045873	128.74	30	120	ISTD Failed
Sc	45	2	NoGas	9556210	1.69	8041241	118.84	30	120	
Rh	103	1	He	3314928	0.49	3067946	108.05	30	120	
In	115	1	He	2176404	0.78	1978772	109.99	30	120	
Tb	159	1	He	5417604	1.29	5013529	108.06	30	120	
Ho	165	1	He	5465156	0.59	5115781	106.83	30	120	
Bi	209	1	He	3751370	0.32	3723643	100.74	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	066_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:38:12-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.024	83.6	422	19.0	1	
B	11	45	2	NoGas	0.163	73.5	8121	4.1	20	
Na	23	45	1	He	3.059	44.2	27922	7.5	400	
Mg	24	45	1	He	0.999	22.2	2489	7.7	1000	
Al	27	45	1	He	0.466	24.2	927	6.3	50	
K	39	45	1	He	5.598	12.6	46568	0.6	1000	
Ca	44	45	1	He	0.180	1044.1	586	17.8	1000	
Ti	47	45	1	He	0.038	31.4	20	16.7	20	
V	51	45	1	He	0.083	29.7	395	46.5	2	
Cr	52	45	1	He	0.024	38.8	2564	2.3	2	
Mn	55	115	1	He	0.041	25.1	1146	5.6	2	
Fe	56	103	1	He	19.179	18.6	188216	15.6	50	
Co	59	103	1	He	0.002	119.9	94	28.7	1	
Ni	60	103	1	He	-0.164	-5.3	366	7.8	2	
Cu	63	103	1	He	-0.268	-2.2	1603	2.3	2	
Zn	66	103	1	He	-0.230	-30.3	1076	12.5	20	
As	75	103	1	He	0.036	50.1	185	10.0	2	
Se	78	103	1	He	0.061	45.4	78	3.5	2	
Sr	88	103	1	He	-0.003	-91.0	123	18.9	10	
Mo	95	103	1	He	0.602	20.8	2948	17.0	2	
Ag	107	103	1	He	0.007	25.7	183	14.2	0.2	
Cd	111	103	1	He	0.051	120.3	1853	7.1	0.2	
Sn	118	115	1	He	0.257	21.1	2711	10.6	10	
Sb	123	115	1	He	0.323	23.5	2829	13.7	1	
Ba	137	115	1	He	0.003	172.0	62	27.5	5	
W	182	209	1	He	0.756	17.2	17277	10.8	10	
Tl	205	209	1	He	0.022	22.0	940	18.4	0.5	
Pb	208	209	1	He	0.027	14.2	3134	5.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1814179	0.20	1729956	104.87	30	120	
Sc	45	1	He	1060994	1.09	1045873	101.45	30	120	
Sc	45	2	NoGas	8430761	0.82	8041241	104.84	30	120	
Rh	103	1	He	3113265	1.52	3067946	101.48	30	120	
In	115	1	He	1994175	1.82	1978772	100.78	30	120	
Tb	159	1	He	5087015	0.96	5013529	101.47	30	120	
Ho	165	1	He	5159960	1.45	5115781	100.86	30	120	
Bi	209	1	He	3658598	1.02	3723643	98.25	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	067CRIA.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:42:03-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

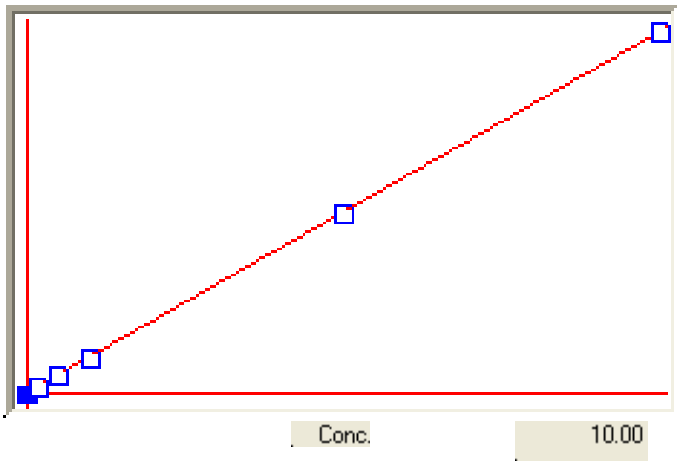
QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.956	0.956	7.167	4760	7.60	1	95.6	69.5	130.5	
B	11	2	NoGas	21.421	21.421	3.660	74442	1.90	20	107.1	69.5	130.5	
Na	23	1	He	1064.401	1064.401	1.011	2224686	0.83	1000	106.4	69.5	130.5	
Mg	24	1	He	1084.735	1084.735	1.023	1273021	0.34	1000	108.5	69.5	130.5	
Al	27	1	He	51.833	51.833	3.096	35462	1.86	50	103.7	69.5	130.5	
K	39	1	He	1093.903	1093.903	0.275	1338525	1.16	1000	109.4	69.5	130.5	
Ca	44	1	He	1028.541	1028.541	1.165	66536	0.19	1000	102.9	69.5	130.5	
Ti	47	1	He	10.429	10.429	4.764	3609	4.32	10	104.3	69.5	130.5	
V	51	1	He	5.105	5.105	2.644	44112	3.58	5	102.1	69.5	130.5	
Cr	52	1	He	2.138	2.138	0.680	24778	1.09	2	106.9	69.5	130.5	
Mn	55	1	He	5.196	5.196	2.939	42964	2.03	5	103.9	69.5	130.5	
Fe	56	1	He	105.844	105.844	0.719	1068865	0.80	100	105.8	69.5	130.5	
Co	59	1	He	1.046	1.046	1.699	15123	0.29	1	104.6	69.5	130.5	
Ni	60	1	He	1.949	1.949	1.266	7812	2.12	2	97.5	69.5	130.5	
Cu	63	1	He	1.869	1.869	4.538	21437	2.25	2	93.5	69.5	130.5	
Zn	66	1	He	21.016	21.016	3.017	41120	1.57	20	105.1	69.5	130.5	
As	75	1	He	5.204	5.204	0.675	6773	0.76	5	104.1	69.5	130.5	
Se	78	1	He	5.441	5.441	5.159	818	3.81	5	108.8	69.5	130.5	
Sr	88	1	He	9.996	9.996	1.771	105288	0.85	10	100.0	69.5	130.5	
Mo	95	1	He	10.457	10.457	1.376	50507	0.53	10	104.6	69.5	130.5	
Ag	107	1	He	1.067	1.067	2.393	16584	2.59	1	106.7	69.5	130.5	
Cd	111	1	He	1.117	1.117	3.957	4933	2.12	1	111.7	69.5	130.5	
Sn	118	1	He	10.065	10.065	2.113	68367	1.88	10	100.6	69.5	130.5	
Sb	123	1	He	2.012	2.012	3.095	13604	2.53	2	100.6	69.5	130.5	
Ba	137	1	He	5.068	5.068	1.239	15567	0.22	5	101.4	69.5	130.5	
W	182	1	He	9.439	9.439	0.861	161509	0.80	10	94.4	69.5	130.5	
Tl	205	1	He	1.878	1.878	3.006	75340	2.08	2	93.9	69.5	130.5	
Pb	208	1	He	1.051	1.051	2.711	56430	1.71	1	105.1	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2102247	4.47	1729956	121.52	30	120	ISTD Failed
Sc	45	1	He	1262525	1.31	1045873	120.71	30	120	ISTD Failed
Sc	45	2	NoGas	9744924	4.45	8041241	121.19	30	120	ISTD Failed
Rh	103	1	He	3410744	1.42	3067946	111.17	30	120	
In	115	1	He	2175483	1.18	1978772	109.94	30	120	
Tb	159	1	He	5381724	1.29	5013529	107.34	30	120	
Ho	165	1	He	5435650	0.87	5115781	106.25	30	120	
Bi	209	1	He	3863084	0.95	3723643	103.74	30	120	

Protocol: Hg-7471A



Linear

Calibrated

Accepted

A

B 2.30936e-4

C 4.01826e-3

Rhc .999996

Accepted Date: 16-Apr-15 08:25

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
01	.00000	.0107	.0107	30	0	29				
02	.20000	.2019	.0019	857	0%	857				
03	.50000	.4961	-.0039	2132	0%	2131				
04	1.0000	.9823	-.0177	4236	0%	4236				
05	5.0000	5.014	.0142	21696	0%	21695				
06	10.000	9.995	-.0052	43263	0%	43262				
07										
08										
09										
10										

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Standard: 1 Rep: 1				Seq: 1		08:15:13 16 Apr 15			HG
Hg	.0000	ppb	29						
*** Standard: 2 Rep: 1				Seq: 2		08:16:59 16 Apr 15			HG
Hg	.2000	ppb	857						
*** Standard: 3 Rep: 1				Seq: 3		08:19:09 16 Apr 15			HG
Hg	.5000	ppb	2131						
*** Standard: 4 Rep: 1				Seq: 4		08:21:09 16 Apr 15			HG
Hg	1.000	ppb	4236						
*** Standard: 5 Rep: 1				Seq: 5		08:23:32 16 Apr 15			HG
Hg	5.000	ppb	21695						
*** Standard: 6 Rep: 1				Seq: 6		08:25:35 16 Apr 15			HG
Hg	10.00	ppb	43262						

*** Check Standard: 2 Ck2ICV Seq: 7 08:27:36 16 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		95.31	4.766	5.000	ppb	.0000

*** Check Standard: 3 Ck3ICB Seq: 8 08:29:39 16 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		^^^^^^	-.0378	.0000	ppb	.0000

*** Check Standard: 4 Ck4CRA\MRL Seq: 9 08:31:38 16 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.77	.1975	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 10 09:06:50 16 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.23	4.961	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 11 09:08:47 16 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0403	.2400	ppb	.0000

*** Sample ID: lb 240-176438/1-c				Seq: 12	09:11:25 16 Apr 15	HG	
Hg	.0172	ppb	.0000	.0172			
*** Sample ID: mb 240-176549/2-a				Seq: 13	09:13:25 16 Apr 15	HG	
Hg	.0190	ppb	.0000	.0190			
*** Sample ID: lcs 240-176549/3-a				Seq: 14	09:15:22 16 Apr 15	HG	
Hg	5.001	ppb	.0000	5.001			
*** Sample ID: 460-93001-e-1-m				Seq: 15	09:17:30 16 Apr 15	HG	
Hg	-.0207	ppb	.0000	-.0207			
*** Sample ID: 460-93001-e-1-n ms				Seq: 16	09:19:21 16 Apr 15	HG	
Hg	4.527	ppb	.0000	4.527			

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:				Seq: 17		09:21:18 16 Apr 15			HG
				460-93001-e-1-o msd					
Hg	4.492	ppb	.0000	4.492					
*** Sample ID:				Seq: 18		09:23:16 16 Apr 15			HG
				460-93185-c-4-c					
Hg	-.0507	ppb	.0000	-.0507					
*** Sample ID:				Seq: 19		09:25:05 16 Apr 15			HG
				mb 240-176570/1-a					
Hg	-.0011	ppb	.0000	-.0011					
*** Sample ID:				Seq: 20		09:27:24 16 Apr 15			HG
				lcs 240-176570/2-a					
Hg	5.014	ppb	.0000	5.014					
*** Sample ID:				Seq: 21		09:29:25 16 Apr 15			HG
				240-49071-a-2-m					
Hg	.2096	ppb	.0000	.2096					

*** Check Standard: 6 Ck6CCV Seq: 22 09:31:17 16 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.3	5.116	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 23 09:33:14 16 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0516	.2400	ppb	.0000

*** Sample ID:				Seq: 24		09:35:24 16 Apr 15			HG
				240-49071-a-2-n du					
Hg	.2144	ppb	.0000	.2144					
*** Sample ID:				Seq: 25		09:37:12 16 Apr 15			HG
				240-49071-a-2-o ms					
Hg	1.264	ppb	.0000	1.264					
*** Sample ID:				Seq: 26		09:39:12 16 Apr 15			HG
				240-49071-a-3-c					
Hg	.1500	ppb	.0000	.1500					
*** Sample ID:				Seq: 27		09:40:59 16 Apr 15			HG
				240-49071-a-4-c					
Hg	.1617	ppb	.0000	.1617					
*** Sample ID:				Seq: 28		09:42:48 16 Apr 15			HG
				240-49085-f-8-e					
Hg	.0308	ppb	.0000	.0308					
*** Sample ID:				Seq: 29		09:44:54 16 Apr 15			HG
				240-49085-f-15-g					
Hg	.0620	ppb	.0000	.0620					
*** Sample ID:				Seq: 30		09:47:02 16 Apr 15			HG
				240-49085-f-22-e					
Hg	.0514	ppb	.0000	.0514					
*** Sample ID:				Seq: 31		09:48:49 16 Apr 15			HG
				240-49085-f-34-e					
Hg	.0257	ppb	.0000	.0257					
*** Sample ID:				Seq: 32		09:51:10 16 Apr 15			HG
				240-49171-b-19-b					
Hg	.0230	ppb	.0000	.0230					

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 33 09:52:57 16 Apr 15 HG
240-49171-a-6-i
Hg .2089 ppb .0000 .2089

*** Check Standard: 6 Ck6CCV Seq: 34 09:55:34 16 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.6	5.181	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 35 09:57:32 16 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0364	.2400	ppb	.0000

*** Sample ID: Seq: 36 10:00:00 16 Apr 15 HG
240-49171-a-8-g
Hg .2162 ppb .0000 .2162

*** Sample ID: Seq: 37 10:02:08 16 Apr 15 HG
240-49171-a-10-i
Hg .1199 ppb .0000 .1199

*** Sample ID: Seq: 38 10:03:57 16 Apr 15 HG
240-49306-d-1-f
Hg .1858 ppb .0000 .1858

*** Sample ID: Seq: 39 10:05:49 16 Apr 15 HG
240-49306-d-2-b
Hg .2123 ppb .0000 .2123

*** Sample ID: Seq: 40 10:08:05 16 Apr 15 HG
240-49306-c-3-b
Hg .1574 ppb .0000 .1574

*** Sample ID: Seq: 41 10:09:52 16 Apr 15 HG
240-49306-d-4-b
Hg .1906 ppb .0000 .1906

*** Sample ID: Seq: 42 10:11:54 16 Apr 15 HG
240-49316-f-1-b
Hg .1534 ppb .0000 .1534

*** Check Standard: 4 Ck4CRA\MRL Seq: 43 10:13:42 16 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.7	.2054	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 44 10:15:38 16 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.8	5.140	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 45 10:17:35 16 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0431	.2400	ppb	.0000

TestAmerica North Canton Hg Data Review Checklist

Run/Project Information:

Circle Methods used: 7470A / 245.1 (7471) Batch: 176708

Run Date: 4-16-15 Analyst: B Waltzle Instrument: H4

Review Items				
A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRA run?	✓			✓
B. Sample Results				
1. Were samples with concentrations > high calibration standard diluted and reanalyzed?			✓	✓
2. All reported results bracketed by in control QC?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/ Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current IDL/MDL data on file?	✓			✓
3. Calculations and Transcription checked for error?	✓			✓
4. All client/project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Level I

Analyst: B Waltzle Date/Time: 4-16-15 Reviewed from 8:15 to 10:17

Analyst: _____ Date/Time: _____ Reviewed from _____ to _____

Comments: _____

Level II

Reviewer: [signature] Date/Time: 4/16/15 Reviewed from 8:15 to 10:17

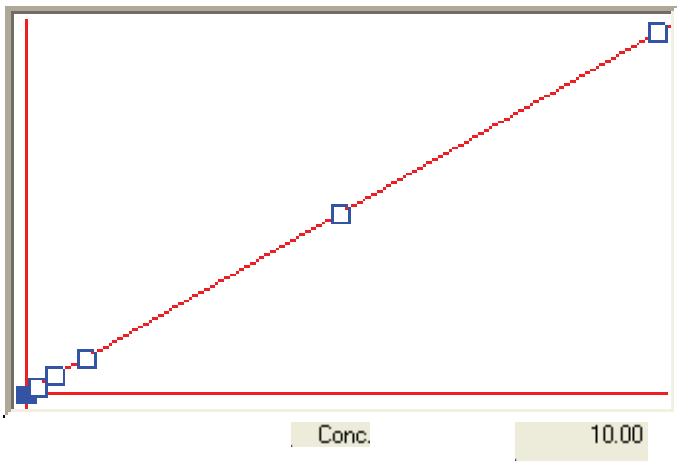
Reviewer: _____ Date/Time: _____ Reviewed from _____ to _____

Comments _____

Curve Date 4-15-15 Curve Time 8:32 - 10 BSD 04/16/15 9:02 DILUTION H20 NA

Revised 11/29/2012

Protocol: Hg-7471A



S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
01	.00000	.0117	.0117	73	0	73				
02	.20000	.1972	-.0028	884	0%	883				
03	.50000	.4909	-.0091	2166	0%	2166				
04	1.0000	1.002	.0020	4398	0%	4398				
05	5.0000	4.996	-.0043	21841	0%	21841				
06	10.000	10.00	.0024	43709	0%	43708				
07										
08										
09										
10										

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Standard: 1 Rep: 1				Seq: 1		09:43:19 20 Apr 15			HG
Hg	.0000	ppb	73						
*** Standard: 2 Rep: 1				Seq: 2		09:45:37 20 Apr 15			HG
Hg	.2000	ppb	883						
*** Standard: 3 Rep: 1				Seq: 3		09:47:24 20 Apr 15			HG
Hg	.5000	ppb	2166						
*** Standard: 4 Rep: 1				Seq: 4		09:49:21 20 Apr 15			HG
Hg	1.000	ppb	4398						
*** Standard: 5 Rep: 1				Seq: 5		09:51:44 20 Apr 15			HG
Hg	5.000	ppb	21841						
*** Standard: 6 Rep: 1				Seq: 6		09:53:44 20 Apr 15			HG
Hg	10.00	ppb	43708						

*** Check Standard: 2 Ck2ICV Seq: 7 09:56:05 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		94.96	4.748	5.000	ppb	.0000

*** Check Standard: 3 Ck3ICB Seq: 8 09:58:05 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		^^^^^^	-.0361	.0000	ppb	.0000

*** Check Standard: 4 Ck4CRA\MRL Seq: 9 10:00:05 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.7	.2054	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 10 10:07:03 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.3	5.066	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 11 10:10:31 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0052	.2400	ppb	.0000

*** Sample ID:				Seq: 12	10:13:53 20 Apr 15		HG
				mb 240-176869/1-a			
Hg	-.0036	ppb	.0000	-.0036			
*** Sample ID:				Seq: 13	10:15:39 20 Apr 15		HG
				lcs 240-176869/2-a			
Hg	4.991	ppb	.0000	4.991			
*** Sample ID:				Seq: 14	10:18:05 20 Apr 15		HG
				680-111357-a-2-m			
Hg	.0133	ppb	.0000	.0133			
*** Sample ID:				Seq: 15	10:20:31 20 Apr 15		HG
				680-111357-a-2-n ms			
Hg	1.050	ppb	.0000	1.050			
*** Sample ID:				Seq: 16	10:22:28 20 Apr 15		HG
				680-111357-a-2-o msd			
Hg	1.032	ppb	.0000	1.032			

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:					Seq: 17		10:24:26 20 Apr 15		HG
				180-38087-b-1-e@10					
Hg	.6579	ppb	.0000	.6579					
*** Sample ID:					Seq: 18		10:26:27 20 Apr 15		HG
				180-38087-b-2-c@10					
Hg	.7275	ppb	.0000	.7275					
*** Sample ID:					Seq: 19		10:28:15 20 Apr 15		HG
				180-38087-b-3-c@10					
Hg	.4126	ppb	.0000	.4126					
*** Sample ID:					Seq: 20		10:30:31 20 Apr 15		HG
				180-38087-b-4-c@10					
Hg	.3059	ppb	.0000	.3059					
*** Sample ID:					Seq: 21		10:33:00 20 Apr 15		HG
				180-38667-b-1-c@10					
Hg	1.054	ppb	.0000	1.054					

*** Check Standard: 6 Ck6CCV Seq: 22 10:34:59 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		100.1	5.004	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 23 10:36:58 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0563	.2400	ppb	.0000

*** Sample ID:					Seq: 24		10:38:56 20 Apr 15		HG
				180-38667-b-2-c@10					
Hg	3.671	ppb	.0000	3.671					
*** Sample ID:					Seq: 25		10:40:54 20 Apr 15		HG
				180-38667-b-5-c@10					
Hg	8.988	ppb	.0000	8.988					
*** Sample ID:					Seq: 26		10:42:50 20 Apr 15		HG
				240-49330-a-2-h					
Hg	-.0535	ppb	.0000	-.0535					
*** Sample ID:					Seq: 27		10:44:36 20 Apr 15		HG
				240-49330-a-3-h					
Hg	.0321	ppb	.0000	.0321					
*** Sample ID:					Seq: 28		10:46:26 20 Apr 15		HG
				240-49409-f-1-b					
Hg	.0378	ppb	.0000	.0378					
*** Sample ID:					Seq: 29		10:48:16 20 Apr 15		HG
				240-49409-f-2-b					
Hg	.0207	ppb	.0000	.0207					
*** Sample ID:					Seq: 30		10:50:23 20 Apr 15		HG
				240-49409-f-3-b					
Hg	.0834	ppb	.0000	.0834					
*** Sample ID:					Seq: 31		10:52:35 20 Apr 15		HG
				240-49409-f-4-b					
Hg	.0481	ppb	.0000	.0481					
*** Sample ID:					Seq: 32		10:54:34 20 Apr 15		HG
				240-49409-f-5-b					
Hg	.1129	ppb	.0000	.1129					

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 33 10:56:21 20 Apr 15 HG
680-111357-a-3-f

Hg	.0037	ppb	.0000	.0037				

*** Check Standard: 6 Ck6CCV Seq: 34 10:58:33 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.1	5.056	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 35 11:00:39 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0290	.2400	ppb	.0000

*** Sample ID: Seq: 36 11:02:47 20 Apr 15 HG
680-111357-a-4-f

Hg	.0159	ppb	.0000	.0159				

*** Sample ID: Seq: 37 11:04:45 20 Apr 15 HG
680-111357-a-5-f

Hg	.9722	ppb	.0000	.9722				

*** Sample ID: Seq: 38 11:06:54 20 Apr 15 HG
680-111357-a-6-f

Hg	.1118	ppb	.0000	.1118				

*** Sample ID: Seq: 39 11:09:02 20 Apr 15 HG
190-7083-a-1-a

Hg	44.29 H	ppb	.0000	44.29				

*** Sample ID: Seq: 40 11:11:48 20 Apr 15 HG
mb 240-176711/1-a

Hg	-.0503	ppb	.0000	-.0503				

*** Sample ID: Seq: 41 11:13:36 20 Apr 15 HG
lcs 240-176711/2-a

Hg	5.035	ppb	.0000	5.035				

*** Sample ID: Seq: 42 11:15:33 20 Apr 15 HG
240-49171-a-1-g

Hg	.0571	ppb	.0000	.0571				

*** Sample ID: Seq: 43 11:17:20 20 Apr 15 HG
240-49171-a-1-h du

Hg	.1008	ppb	.0000	.1008				

*** Sample ID: Seq: 44 11:19:47 20 Apr 15 HG
240-49171-a-1-i ms

Hg	1.116	ppb	.0000	1.116				

*** Sample ID: Seq: 45 11:21:44 20 Apr 15 HG
240-49171-a-2-c

Hg	.1500	ppb	.0000	.1500				

*** Check Standard: 6 Ck6CCV Seq: 46 11:23:33 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.7	5.085	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 47 11:25:32 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0480	.2400	ppb	.0000

*** Sample ID: Seq: 48 11:27:19 20 Apr 15 HG
240-49171-a-4-c

Hg	.1198	ppb	.0000	.1198				

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 240-49171-a-11-c				Seq: 49	11:30:57 20 Apr 15	HG		
Hg	.2739	ppb	.0000	.2739				
*** Sample ID: 240-49171-a-13-c				Seq: 50	11:32:47 20 Apr 15	HG		
Hg	.1109	ppb	.0000	.1109				
*** Sample ID: 240-49171-a-14-c				Seq: 51	11:34:37 20 Apr 15	HG		
Hg	.2128	ppb	.0000	.2128				
*** Sample ID: 240-49171-a-15-c				Seq: 52	11:36:27 20 Apr 15	HG		
Hg	.1596	ppb	.0000	.1596				
*** Sample ID: 240-49171-a-16-c				Seq: 53	11:38:19 20 Apr 15	HG		
Hg	.1148	ppb	.0000	.1148				
*** Sample ID: 240-49171-a-17-c				Seq: 54	11:40:39 20 Apr 15	HG		
Hg	.1910	ppb	.0000	.1910				
*** Sample ID: 240-49171-a-18-c				Seq: 55	11:42:27 20 Apr 15	HG		
Hg	.1573	ppb	.0000	.1573				
*** Sample ID: 240-49171-a-20-c				Seq: 56	11:44:55 20 Apr 15	HG		
Hg	.1374	ppb	.0000	.1374				
*** Sample ID: 240-49171-a-21-c				Seq: 57	11:46:47 20 Apr 15	HG		
Hg	.0985	ppb	.0000	.0985				

*** Check Standard: 6 Ck6CCV Seq: 58 11:49:09 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.1	5.055	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 59 11:51:27 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0130	.2400	ppb	.0000

*** Sample ID: 240-49172-a-1-c				Seq: 60	11:53:16 20 Apr 15	HG		
Hg	.2125	ppb	.0000	.2125				
*** Sample ID: 240-49172-a-2-c				Seq: 61	11:55:18 20 Apr 15	HG		
Hg	.3069	ppb	.0000	.3069				
*** Sample ID: 240-49172-a-3-c				Seq: 62	11:57:16 20 Apr 15	HG		
Hg	.2304	ppb	.0000	.2304				
*** Sample ID: 240-49172-a-4-c				Seq: 63	11:59:08 20 Apr 15	HG		
Hg	.2817	ppb	.0000	.2817				
*** Sample ID: 240-49172-a-5-c				Seq: 64	12:00:57 20 Apr 15	HG		
Hg	.3719	ppb	.0000	.3719				

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 65	12:02:47 20 Apr 15	HG		
				240-49172-a-6-c				
Hg	.5521	ppb	.0000	.5521				
*** Sample ID:				Seq: 66	12:04:47 20 Apr 15	HG		
				240-49172-a-7-c				
Hg	.1063	ppb	.0000	.1063				
*** Sample ID:				Seq: 67	12:06:39 20 Apr 15	HG		
				240-49172-a-8-c				
Hg	.1663	ppb	.0000	.1663				

*** Check Standard: 4 Ck4CRA\MRL Seq: 68 12:08:51 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		100.3	.2006	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 69 12:10:37 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.5	5.124	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 70 12:12:38 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0297	.2400	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 71 12:21:19 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.2	5.108	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 72 12:23:23 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0096	.2400	ppb	.0000

*** Sample ID:				Seq: 73	12:25:22 20 Apr 15	HG		
				180-38087-b-1-e				
Hg	6.536	ppb	.0000	6.536				
*** Sample ID:				Seq: 74	12:27:43 20 Apr 15	HG		
				180-38087-b-2-c				
Hg	7.227	ppb	.0000	7.227				
*** Sample ID:				Seq: 75	12:29:42 20 Apr 15	HG		
				180-38087-b-3-c				
Hg	4.243	ppb	.0000	4.243				
*** Sample ID:				Seq: 76	12:32:05 20 Apr 15	HG		
				180-38087-b-4-c				
Hg	3.344	ppb	.0000	3.344				
*** Sample ID:				Seq: 77	12:34:58 20 Apr 15	HG		
				190-7083-a-1-a@10				
Hg	4.569	ppb	.0000	4.569				
*** Sample ID:				Seq: 78	12:36:57 20 Apr 15	HG		
				mb 240-176885/1-a				
Hg	-.0505	ppb	.0000	-.0505				
*** Sample ID:				Seq: 79	12:38:48 20 Apr 15	HG		
				lcs 240-176885/2-a				
Hg	4.848	ppb	.0000	4.848				
*** Sample ID:				Seq: 80	12:40:40 20 Apr 15	HG		
				240-49402-b-2-d				
Hg	-.0279	ppb	.0000	-.0279				

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 81 12:42:28 20 Apr 15 HG
240-49402-b-2-e ms
Hg 1.070 ppb .0000 1.070

*** Sample ID: Seq: 82 12:44:36 20 Apr 15 HG
240-49402-b-2-f msd
Hg 1.062 ppb .0000 1.062

*** Check Standard: 6 Ck6CCV Seq: 83 12:46:34 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		100.5	5.023	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 84 12:48:26 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0947	.2400	ppb	.0000

*** Sample ID: Seq: 85 12:50:22 20 Apr 15 HG
240-49412-k-1-b
Hg .0758 ppb .0000 .0758

*** Sample ID: Seq: 86 12:52:22 20 Apr 15 HG
240-49419-b-1-b
Hg .1003 ppb .0000 .1003

*** Sample ID: Seq: 87 12:54:10 20 Apr 15 HG
240-49419-b-2-b
Hg -.0235 ppb .0000 -.0235

*** Sample ID: Seq: 88 12:55:57 20 Apr 15 HG
240-49419-b-3-b
Hg .1031 ppb .0000 .1031

*** Sample ID: Seq: 89 12:57:46 20 Apr 15 HG
240-49419-b-4-b
Hg .0291 ppb .0000 .0291

*** Sample ID: Seq: 90 12:59:48 20 Apr 15 HG
240-49419-b-5-b
Hg .0960 ppb .0000 .0960

*** Sample ID: Seq: 91 13:01:42 20 Apr 15 HG
240-49419-b-6-b
Hg .0612 ppb .0000 .0612

*** Sample ID: Seq: 92 13:03:32 20 Apr 15 HG
240-49419-b-7-b
Hg .0848 ppb .0000 .0848

*** Sample ID: Seq: 93 13:06:05 20 Apr 15 HG
240-49419-b-8-b
Hg .2063 ppb .0000 .2063

*** Sample ID: Seq: 94 13:07:53 20 Apr 15 HG
240-49419-b-9-b
Hg .0568 ppb .0000 .0568

*** Check Standard: 6 Ck6CCV Seq: 95 13:09:42 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.5	5.076	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 96 13:11:39 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0517	.2400	ppb	.0000

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:					Seq: 97		13:13:50 20 Apr 15		HG
				240-49419-b-10-b					
Hg	.1461	ppb	.0000	.1461					
*** Sample ID:					Seq: 98		13:15:50 20 Apr 15		HG
				240-49419-b-11-b					
Hg	.1205	ppb	.0000	.1205					
*** Sample ID:					Seq: 99		13:17:41 20 Apr 15		HG
				240-49419-b-12-b					
Hg	.0307	ppb	.0000	.0307					
*** Sample ID:					Seq: 100		13:19:33 20 Apr 15		HG
				240-49330-a-8-h					
Hg	-.0089	ppb	.0000	-.0089					
*** Sample ID:					Seq: 101		13:21:36 20 Apr 15		HG
				240-49330-a-9-h					
Hg	.0149	ppb	.0000	.0149					
*** Sample ID:					Seq: 102		13:23:47 20 Apr 15		HG
				240-49330-a-4-i					
Hg	.0681	ppb	.0000	.0681					
*** Sample ID:					Seq: 103		13:25:50 20 Apr 15		HG
				240-49330-a-5-h					
Hg	.0690	ppb	.0000	.0690					
*** Sample ID:					Seq: 104		13:27:51 20 Apr 15		HG
				240-49330-a-6-h					
Hg	.0142	ppb	.0000	.0142					
*** Sample ID:					Seq: 105		13:29:55 20 Apr 15		HG
				240-49330-a-7-h					
Hg	.0046	ppb	.0000	.0046					

*** Check Standard: 6 Ck6CCV					Seq: 106		13:31:49 20 Apr 15		HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		101.5	5.077	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB					Seq: 107		13:33:47 20 Apr 15		HG
Line	Flag	Found	Range(+/-)	Units		SD/RSD			
Hg		-.0579	.2400	ppb		.0000			
*** Check Standard: 6 Ck6CCV					Seq: 108		13:51:11 20 Apr 15		HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		101.2	5.058	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB					Seq: 109		13:53:09 20 Apr 15		HG
Line	Flag	Found	Range(+/-)	Units		SD/RSD			
Hg		-.0412	.2400	ppb		.0000			

*** Sample ID:					Seq: 110		13:55:24 20 Apr 15		HG
				mb 240-177023/1-a					
Hg	.0081	ppb	.0000	.0081					
*** Sample ID:					Seq: 111		13:57:10 20 Apr 15		HG
				lcs 240-177023/2-a					
Hg	5.208	ppb	.0000	5.208					
*** Sample ID:					Seq: 112		13:59:07 20 Apr 15		HG
				180-38696-b-19-a@10					
Hg	26.55 H	ppb	.0000	26.55					

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:					Seq: 113		14:01:37 20 Apr 15		HG
				180-38696-b19b ms@10					
Hg	23.54 H	ppb	.0000	23.54					
*** Sample ID:					Seq: 114		14:03:35 20 Apr 15		HG
				180-38696b19c msd@10					
Hg	22.74 H	ppb	.0000	22.74					
*** Sample ID:					Seq: 115		14:05:37 20 Apr 15		HG
				180-38696-b-20-a@10					
Hg	33.75 H	ppb	.0000	33.75					
*** Sample ID:					Seq: 116		14:08:14 20 Apr 15		HG
				180-38696-b-21-a@10					
Hg	22.99 H	ppb	.0000	22.99					
*** Sample ID:					Seq: 117		14:10:22 20 Apr 15		HG
				180-38696-b-22-a@10					
Hg	21.01 H	ppb	.0000	21.01					
*** Sample ID:					Seq: 118		14:12:32 20 Apr 15		HG
				180-38696-b-23-a@10					
Hg	53.41 H	ppb	.0000	53.41					
*** Sample ID:					Seq: 119		14:14:41 20 Apr 15		HG
				180-38696-b-24-a@10					
Hg	63.39 H	ppb	.0000	63.39					

*** Check Standard: 6 Ck6CCV Seq: 120 14:17:28 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		96.74	4.837	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 121 14:19:18 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.1632	.2400	ppb	.0000

*** Sample ID:					Seq: 122		14:21:44 20 Apr 15		HG
				180-38622-c-1-a@10					
Hg	7.612	ppb	.0000	7.612					
*** Sample ID:					Seq: 123		14:24:04 20 Apr 15		HG
				180-38622-b-11-a@10					
Hg	10.37 H	ppb	.0000	10.37					
*** Sample ID:					Seq: 124		14:26:11 20 Apr 15		HG
				180-38622-b-12-a@10					
Hg	10.01 H	ppb	.0000	10.01					
*** Sample ID:					Seq: 125		14:28:21 20 Apr 15		HG
				180-38622-b-13-a@10					
Hg	7.689	ppb	.0000	7.689					
*** Sample ID:					Seq: 126		14:30:53 20 Apr 15		HG
				180-38622-b-14-a@10					
Hg	7.153	ppb	.0000	7.153					
*** Sample ID:					Seq: 127		14:33:00 20 Apr 15		HG
				180-38622-b-21-a@10					
Hg	8.089	ppb	.0000	8.089					
*** Sample ID:					Seq: 128		14:34:59 20 Apr 15		HG
				180-38622-b-22-a@10					
Hg	9.446	ppb	.0000	9.446					

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 129 14:36:59 20 Apr 15 HG
180-38622-b-23-a@10

Hg	12.01 H	ppb	.0000	12.01				

*** Sample ID: Seq: 130 14:39:41 20 Apr 15 HG
180-38622-b-24-a@10

Hg	9.162	ppb	.0000	9.162				

*** Sample ID: Seq: 131 14:42:08 20 Apr 15 HG
180-38890-c-1-a@10

Hg	7.306	ppb	.0000	7.306				

*** Check Standard: 6 Ck6CCV Seq: 132 14:44:19 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.4	5.118	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 133 14:46:38 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0176	.2400	ppb	.0000

*** Sample ID: Seq: 134 14:48:50 20 Apr 15 HG
180-38890-b-7-a@10

Hg	12.99 H	ppb	.0000	12.99				

*** Sample ID: Seq: 135 14:50:58 20 Apr 15 HG
180-38890-b-8-a@10

Hg	16.59 H	ppb	.0000	16.59				

*** Sample ID: Seq: 136 14:53:08 20 Apr 15 HG
180-38890-b-9-a@10

Hg	10.80 H	ppb	.0000	10.80				

*** Sample ID: Seq: 137 14:55:09 20 Apr 15 HG
180-38890-b-10-a@10

Hg	7.926	ppb	.0000	7.926				

*** Check Standard: 6 Ck6CCV Seq: 138 14:57:06 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		100.8	5.038	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 139 14:59:07 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0331	.2400	ppb	.0000

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 6 Ck6CCV Seq: 140 15:05:15 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.7	5.187	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 141 15:07:14 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0409	.2400	ppb	.0000

*** Sample ID: Seq: 142 15:09:12 20 Apr 15 HG
180-38696-b-19-a@50

Hg	5.226	ppb	.0000	5.226

*** Sample ID: Seq: 143 15:11:22 20 Apr 15 HG
180-38696-b19b ms@50

Hg	4.683	ppb	.0000	4.683

*** Sample ID: Seq: 144 15:13:18 20 Apr 15 HG
180-38696b19c msd@50

Hg	4.505	ppb	.0000	4.505

*** Sample ID: Seq: 145 15:15:18 20 Apr 15 HG
180-38696-b-21-a@50

Hg	4.472	ppb	.0000	4.472

*** Sample ID: Seq: 146 15:17:16 20 Apr 15 HG
180-38696-b-22-a@50

Hg	4.152	ppb	.0000	4.152

*** Sample ID: Seq: 147 15:19:07 20 Apr 15 HG
180-38622-b-11-a@20

Hg	4.680	ppb	.0000	4.680

*** Sample ID: Seq: 148 15:21:36 20 Apr 15 HG
180-38622-b-12-a@20

Hg	4.811	ppb	.0000	4.811

*** Sample ID: Seq: 149 15:23:36 20 Apr 15 HG
180-38622-b-23-a@20

Hg	5.654	ppb	.0000	5.654

*** Sample ID: Seq: 150 15:25:29 20 Apr 15 HG
180-38696-b-23-a@100

Hg	5.545	ppb	.0000	5.545

*** Sample ID: Seq: 151 15:27:31 20 Apr 15 HG
180-38696-b-24-a@100

Hg	6.776	ppb	.0000	6.776

*** Check Standard: 6 Ck6CCV Seq: 152 15:29:28 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.1	5.155	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 153 15:31:49 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0192	.2400	ppb	.0000

*** Sample ID: Seq: 154 15:33:57 20 Apr 15 HG
180-38696-b-20-a@100

Hg	3.583	ppb	.0000	3.583

*** Sample ID: Seq: 155 15:36:15 20 Apr 15 HG
180-38890-b-7-a@20

Hg	6.271	ppb	.0000	6.271

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 156 15:38:12 20 Apr 15 HG
180-38890-b-8-a@20

Hg	7.980	ppb	.0000	7.980

*** Sample ID: Seq: 157 15:40:19 20 Apr 15 HG
180-38890-b-9-a@20

Hg	5.122	ppb	.0000	5.122

*** Check Standard: 6 Ck6CCV Seq: 158 15:42:18 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.3	5.113	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 159 15:44:19 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0549	.2400	ppb	.0000

TestAmerica North Canton Hg Data Review Checklist

Run/Project Information:

Circle Methods used: 7470A / 245.1 (7471) Batch: 177149

Run Date: 4-20-15 Analyst: BWaeppe Instrument: H4

A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRA run?	✓			✓
B. Sample Results				
1. Were samples with concentrations > high calibration standard diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/ Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current IDL/MDL data on file?	✓			✓
3. Calculations and Transcription checked for error?	✓			✓
4. All client/project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Level I

Analyst: BWaeppe Date/Time: 4/20/15 Reviewed from 9:43 to 14:59

Analyst: BWaeppe Date/Time: 4-21-15 Reviewed from 15:05 to 15:44

Comments:

Level II

Reviewer: [signature] Date/Time: 4/20/15 Reviewed from 9:43 to 14:59

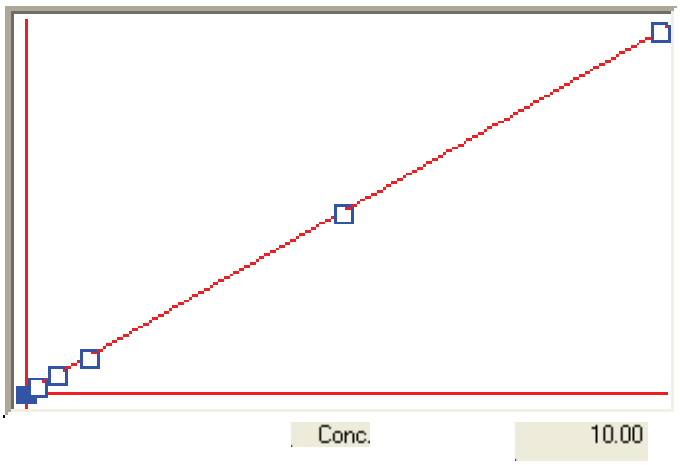
Reviewer: [signature] Date/Time: 04/21/2015 Reviewed from 15:05 to 15:44

Comments

Curve Date 4-20-15 Curve Time 8:28-8:58 DILUTION H20 00024

Revised 11/29/2012

Protocol: Hg-7471A



S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
01	.00000	.0040	.0040	59	1	59				
02	.20000	.1989	-.0011	911	0%	911				
03	.50000	.4893	-.0107	2181	0%	2181				
04	1.0000	1.000	.0003	4416	0%	4415				
05	5.0000	5.014	.0141	21964	0%	21964				
06	10.000	9.993	-.0065	43736	0%	43735				
07										
08										
09										
10										

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Standard: 1 Rep: 1              Seq:  1       08:18:41 21 Apr 15   HG

Hg    .0000   ppb      59

*** Standard: 2 Rep: 1              Seq:  2       08:21:29 21 Apr 15   HG

Hg    .2000   ppb      911

*** Standard: 3 Rep: 1              Seq:  3       08:23:16 21 Apr 15   HG

Hg    .5000   ppb      2181

*** Standard: 4 Rep: 1              Seq:  4       08:25:23 21 Apr 15   HG

Hg    1.000   ppb      4415

*** Standard: 5 Rep: 1              Seq:  5       08:27:15 21 Apr 15   HG

Hg    5.000   ppb      21964

*** Standard: 6 Rep: 1              Seq:  6       08:29:22 21 Apr 15   HG

Hg    10.00   ppb      43735

*** Check Standard: 2  Ck2ICV       Seq:  7       08:31:40 21 Apr 15   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          94.60    4.730   5.000  ppb         .0000

*** Check Standard: 3  Ck3ICB       Seq:  8       08:33:39 21 Apr 15   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          ^^^^^^  -.0532   .0000  ppb         .0000

*** Check Standard: 4  Ck4CRA\MRL   Seq:  9       08:35:28 21 Apr 15   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          98.06    .1961   .2000  ppb         .0000

*** Check Standard: 6  Ck6CCV       Seq:  10      08:52:19 21 Apr 15   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          101.3    5.066   5.000  ppb         .0000

*** Check Standard: 1  Ck1CCB       Seq:  11      08:54:15 21 Apr 15   HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.0559    .2400    ppb         .0000

*** Sample ID:                      Seq:  12      08:56:01 21 Apr 15   HG
                          mb 240-177025/1-a
Hg   -.0017   ppb       .0000    -.0017

*** Sample ID:                      Seq:  13      08:57:47 21 Apr 15   HG
                          lcs 240-177025/2-a
Hg    5.042   ppb       .0000     5.042

*** Sample ID:                      Seq:  14      09:00:26 21 Apr 15   HG
                          180-38961-c-1-a
Hg    12.64 H ppb       .0000     12.64

*** Sample ID:                      Seq:  15      09:02:26 21 Apr 15   HG
                          180-38961-c1b ms@10
Hg    15.17 H ppb       .0000     15.17

*** Sample ID:                      Seq:  16      09:04:34 21 Apr 15   HG
                          180-38961c1c msd@10
Hg    14.17 H ppb       .0000     14.17
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Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:				Seq: 17		09:07:30 21 Apr 15			HG
				180-38961-c-2-a@10					
Hg	13.09 H	ppb	.0000	13.09					
*** Sample ID:				Seq: 18		09:09:38 21 Apr 15			HG
				180-38961-c-17-a@10					
Hg	32.45 H	ppb	.0000	32.45					
*** Sample ID:				Seq: 19		09:12:05 21 Apr 15			HG
				180-38961-c-18-a@10					
Hg	69.17 H	ppb	.0000	69.17					
*** Sample ID:				Seq: 20		09:14:43 21 Apr 15			HG
				180-38961-c-19-a@10					
Hg	53.94 H	ppb	.0000	53.94					
*** Sample ID:				Seq: 21		09:17:25 21 Apr 15			HG
				180-38961-c-20-a@10					
Hg	83.65 H	ppb	.0000	83.65					
*** Check Standard: 6 Ck6CCV				Seq: 22		09:19:35 21 Apr 15			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		94.18	4.709	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB				Seq: 23		09:21:31 21 Apr 15			HG
Line	Flag	Found	Range(+/-)	Units		SD/RSD			
Hg		.0035	.2400	ppb		.0000			
*** Sample ID:				Seq: 24		09:23:50 21 Apr 15			HG
				180-38890-b-11-a@10					
Hg	7.914	ppb	.0000	7.914					
*** Sample ID:				Seq: 25		09:25:57 21 Apr 15			HG
				180-38890-b-12-a@10					
Hg	8.252	ppb	.0000	8.252					
*** Sample ID:				Seq: 26		09:27:55 21 Apr 15			HG
				180-38841-b-9-a@10					
Hg	6.572	ppb	.0000	6.572					
*** Sample ID:				Seq: 27		09:30:11 21 Apr 15			HG
				180-38841-b-10-a@10					
Hg	8.294	ppb	.0000	8.294					
*** Sample ID:				Seq: 28		09:32:19 21 Apr 15			HG
				180-38841-b-11-a@10					
Hg	3.580	ppb	.0000	3.580					
*** Sample ID:				Seq: 29		09:34:39 21 Apr 15			HG
				180-38841-b-12-a@10					
Hg	.0902	ppb	.0000	.0902					
*** Sample ID:				Seq: 30		09:36:40 21 Apr 15			HG
				180-38394-c-1-a@10					
Hg	28.35 H	ppb	.0000	28.35					
*** Sample ID:				Seq: 31		09:39:02 21 Apr 15			HG
				180-38618-b-6-a@10					
Hg	1.611	ppb	.0000	1.611					
*** Sample ID:				Seq: 32		09:40:54 21 Apr 15			HG
				180-38392-b-1-b@10					
Hg	4.541	ppb	.0000	4.541					

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 33 09:42:46 21 Apr 15 HG
180-38392-b-2-b@10

Hg	11.34 H	ppb	.0000	11.34

*** Check Standard: 6 Ck6CCV Seq: 34 09:45:04 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.6	5.080	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 35 09:47:03 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0626	.2400	ppb	.0000

*** Sample ID: Seq: 36 09:48:49 21 Apr 15 HG
180-38392-b-5-b@10

Hg	10.94 H	ppb	.0000	10.94

*** Sample ID: Seq: 37 09:51:50 21 Apr 15 HG
240-49430-a-1-a

Hg	.1870	ppb	.0000	.1870

*** Sample ID: Seq: 38 09:53:49 21 Apr 15 HG
240-49430-a-2-a

Hg	.2913	ppb	.0000	.2913

*** Sample ID: Seq: 39 09:55:36 21 Apr 15 HG
240-49430-a-3-a

Hg	.0228	ppb	.0000	.0228

*** Check Standard: 6 Ck6CCV Seq: 40 09:57:23 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.3	5.267	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 41 09:59:43 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0411	.2400	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 42 10:02:14 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.8	5.239	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 43 10:04:21 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0287	.2400	ppb	.0000

*** Sample ID: Seq: 44 10:06:21 21 Apr 15 HG
mb 240-177100/1-a

Hg	.0266	ppb	.0000	.0266

*** Sample ID: Seq: 45 10:08:19 21 Apr 15 HG
lcs 240-177100/2-a

Hg	5.037	ppb	.0000	5.037

*** Sample ID: Seq: 46 10:11:08 21 Apr 15 HG
240-49422-h-1-d

Hg	.0260	ppb	.0000	.0260

*** Sample ID: Seq: 47 10:13:08 21 Apr 15 HG
240-49422-h-1-e ms

Hg	1.307	ppb	.0000	1.307

*** Sample ID: Seq: 48 10:15:05 21 Apr 15 HG
240-49422-h-1-f msd

Hg	1.047	ppb	.0000	1.047

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 49 10:17:02 21 Apr 15 HG
240-49422-f-2-b
Hg .0269 ppb .0000 .0269

*** Sample ID: Seq: 50 10:18:50 21 Apr 15 HG
240-49422-g-3-b
Hg .2076 ppb .0000 .2076

*** Sample ID: Seq: 51 10:20:40 21 Apr 15 HG
240-49422-f-4-b
Hg .1595 ppb .0000 .1595

*** Sample ID: Seq: 52 10:23:18 21 Apr 15 HG
240-49422-h-5-b
Hg .0616 ppb .0000 .0616

*** Sample ID: Seq: 53 10:25:16 21 Apr 15 HG
240-49422-h-7-b
Hg .0781 ppb .0000 .0781

*** Check Standard: 6 Ck6CCV Seq: 54 10:27:02 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.2	5.158	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 55 10:29:00 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.1213	.2400	ppb	.0000

*** Sample ID: Seq: 56 10:31:38 21 Apr 15 HG
240-49422-h-8-b
Hg .0683 ppb .0000 .0683

*** Sample ID: Seq: 57 10:33:40 21 Apr 15 HG
240-49422-g-9-b
Hg .2078 ppb .0000 .2078

*** Sample ID: Seq: 58 10:35:58 21 Apr 15 HG
240-49422-g-10-b
Hg .0632 ppb .0000 .0632

*** Sample ID: Seq: 59 10:38:06 21 Apr 15 HG
240-49422-f-13-b
Hg .0820 ppb .0000 .0820

*** Sample ID: Seq: 60 10:40:04 21 Apr 15 HG
240-49422-f-14-b
Hg .0591 ppb .0000 .0591

*** Sample ID: Seq: 61 10:42:06 21 Apr 15 HG
240-49422-b-15-b
Hg .0710 ppb .0000 .0710

*** Sample ID: Seq: 62 10:44:03 21 Apr 15 HG
240-49419-b-13-b
Hg .0296 ppb .0000 .0296

*** Sample ID: Seq: 63 10:45:51 21 Apr 15 HG
240-49419-b-14-b
Hg .0424 ppb .0000 .0424

*** Sample ID: Seq: 64 10:47:41 21 Apr 15 HG
240-49419-b-15-b
Hg .0390 ppb .0000 .0390

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 65 10:50:11 21 Apr 15 HG
240-49419-b-16-b

Hg	.0834	ppb	.0000	.0834				

*** Check Standard: 6 Ck6CCV Seq: 66 10:52:48 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.2	5.158	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 67 10:54:47 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0706	.2400	ppb	.0000

*** Sample ID: Seq: 68 10:56:57 21 Apr 15 HG
240-49419-b-17-b

Hg	.0472	ppb	.0000	.0472				

*** Sample ID: Seq: 69 10:58:45 21 Apr 15 HG
240-49419-b-18-b

Hg	.0205	ppb	.0000	.0205				

*** Sample ID: Seq: 70 11:00:42 21 Apr 15 HG
240-49419-b-19-b

Hg	.0568	ppb	.0000	.0568				

*** Sample ID: Seq: 71 11:02:31 21 Apr 15 HG
240-49419-b-20-b

Hg	.0916	ppb	.0000	.0916				

*** Sample ID: Seq: 72 11:04:48 21 Apr 15 HG
mb 240-177137/1-a

Hg	-.0003	ppb	.0000	-.0003				

*** Sample ID: Seq: 73 11:06:49 21 Apr 15 HG
lcs 240-177137/2-a

Hg	4.947	ppb	.0000	4.947				

*** Sample ID: Seq: 74 11:08:52 21 Apr 15 HG
240-49171-a-3-g

Hg	.0459	ppb	.0000	.0459				

*** Sample ID: Seq: 75 11:10:41 21 Apr 15 HG
240-49171-a-3-h du

Hg	.0774	ppb	.0000	.0774				

*** Sample ID: Seq: 76 11:12:32 21 Apr 15 HG
240-49171-a-3-i ms

Hg	1.069	ppb	.0000	1.069				

*** Sample ID: Seq: 77 11:14:25 21 Apr 15 HG
240-49172-a-9-c

Hg	.1117	ppb	.0000	.1117				

*** Check Standard: 6 Ck6CCV Seq: 78 11:16:14 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.3	5.163	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 79 11:18:13 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0690	.2400	ppb	.0000

*** Sample ID: Seq: 80 11:20:00 21 Apr 15 HG
240-49172-a-10-c

Hg	.2137	ppb	.0000	.2137				

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:					Seq: 81		11:21:48 21 Apr 15		HG
				240-49173-a-1-c					
Hg	.2304	ppb	.0000	.2304					
*** Sample ID:					Seq: 82		11:23:36 21 Apr 15		HG
				240-49173-a-2-c					
Hg	.2602	ppb	.0000	.2602					
*** Sample ID:					Seq: 83		11:25:38 21 Apr 15		HG
				240-49173-a-3-c					
Hg	.2483	ppb	.0000	.2483					
*** Sample ID:					Seq: 84		11:27:26 21 Apr 15		HG
				240-49173-a-4-c					
Hg	.2053	ppb	.0000	.2053					
*** Sample ID:					Seq: 85		11:29:35 21 Apr 15		HG
				240-49233-a-4-c					
Hg	.3301	ppb	.0000	.3301					
*** Sample ID:					Seq: 86		11:31:23 21 Apr 15		HG
				240-49233-a-6-c					
Hg	.2871	ppb	.0000	.2871					
*** Sample ID:					Seq: 87		11:33:21 21 Apr 15		HG
				240-49233-a-8-c					
Hg	.3116	ppb	.0000	.3116					
*** Sample ID:					Seq: 88		11:35:30 21 Apr 15		HG
				180-38618-c-1-b@10					
Hg	1.198	ppb	.0000	1.198					
*** Sample ID:					Seq: 89		11:37:23 21 Apr 15		HG
				180-38618-c-2-b@10					
Hg	2.510	ppb	.0000	2.510					
*** Check Standard: 6 Ck6CCV					Seq: 90		11:39:30 21 Apr 15		HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		104.5	5.226	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB					Seq: 91		11:41:28 21 Apr 15		HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg		-.0559	.2400	ppb	.0000				
*** Sample ID:					Seq: 92		11:43:26 21 Apr 15		HG
				180-38618-c-5-b@10					
Hg	16.31 H	ppb	.0000	16.31					
*** Sample ID:					Seq: 93		11:45:50 21 Apr 15		HG
				180-38618-b-7-b@10					
Hg	31.17 H	ppb	.0000	31.17					
*** Sample ID:					Seq: 94		11:48:00 21 Apr 15		HG
				180-38618-b-8-b@10					
Hg	45.04 H	ppb	.0000	45.04					
*** Sample ID:					Seq: 95		11:51:03 21 Apr 15		HG
				180-38618-b-9-b@10					
Hg	5.506	ppb	.0000	5.506					
*** Sample ID:					Seq: 96		11:53:01 21 Apr 15		HG
				180-38618-b-10-b@10					
Hg	1.102	ppb	.0000	1.102					

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 97 11:54:49 21 Apr 15 HG
190-7098-a-1-d

Hg	-.0061	ppb	.0000	-.0061				

*** Sample ID: Seq: 98 11:56:42 21 Apr 15 HG
190-7098-a-2-b

Hg	.0404	ppb	.0000	.0404				

*** Check Standard: 4 Ck4CRA\MRL Seq: 99 11:58:31 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		97.60	.1952	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 100 12:00:19 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.2	5.209	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 101 12:02:27 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0433	.2400	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 102 12:06:00 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.7	5.236	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 103 12:07:56 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0811	.2400	ppb	.0000

*** Sample ID: Seq: 104 12:09:46 21 Apr 15 HG
180-38841-b-12-a

Hg	1.167	ppb	.0000	1.167				

*** Sample ID: Seq: 105 12:11:39 21 Apr 15 HG
180-38961-c-1-a@20

Hg	6.395	ppb	.0000	6.395				

*** Sample ID: Seq: 106 12:13:58 21 Apr 15 HG
180-38961-c1b ms@20

Hg	7.656	ppb	.0000	7.656				

*** Sample ID: Seq: 107 12:16:09 21 Apr 15 HG
180-38961c1c msd@20

Hg	7.332	ppb	.0000	7.332				

*** Sample ID: Seq: 108 12:18:07 21 Apr 15 HG
180-38961-c-2-a@20

Hg	6.528	ppb	.0000	6.528				

*** Sample ID: Seq: 109 12:20:27 21 Apr 15 HG
180-38392-b-2-b@20

Hg	2.224	ppb	.0000	2.224				

*** Sample ID: Seq: 110 12:22:20 21 Apr 15 HG
180-38392-b-5-b@20

Hg	5.622	ppb	.0000	5.622				

*** Sample ID: Seq: 111 12:24:18 21 Apr 15 HG
180-38394-c-1-a@50

Hg	1.605	ppb	.0000	1.605				

*** Sample ID: Seq: 112 12:26:17 21 Apr 15 HG
180-38961-c-17-a@100

Hg	3.425	ppb	.0000	3.425				

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 113 12:28:35 21 Apr 15 HG
180-38961-c-18-a@100

Hg	7.682	ppb	.0000	7.682

*** Check Standard: 6 Ck6CCV Seq: 114 12:31:04 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.5	5.224	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 115 12:33:01 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0834	.2400	ppb	.0000

*** Sample ID: Seq: 116 12:34:50 21 Apr 15 HG
180-38961-c-19-a@100

Hg	5.616	ppb	.0000	5.616

*** Sample ID: Seq: 117 12:37:20 21 Apr 15 HG
180-38961-c-20-a@200

Hg	4.816	ppb	.0000	4.816

*** Sample ID: Seq: 118 12:39:19 21 Apr 15 HG
180-38618-c-5-b@50

Hg	3.404	ppb	.0000	3.404

*** Sample ID: Seq: 119 12:41:21 21 Apr 15 HG
180-38618-b-7-b@100

Hg	3.210	ppb	.0000	3.210

*** Sample ID: Seq: 120 12:43:13 21 Apr 15 HG
180-38618-b-8-b@100

Hg	4.663	ppb	.0000	4.663

*** Check Standard: 6 Ck6CCV Seq: 121 12:45:37 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.9	5.294	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 122 12:47:53 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0253	.2400	ppb	.0000

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 6 Ck6CCV Seq: 123 13:13:02 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		106.1	5.304	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 124 13:14:59 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0697	.2400	ppb	.0000

*** Sample ID: Seq: 125 13:16:49 21 Apr 15 HG
mb 240-177215/1-a

Hg	.0234	ppb	.0000	.0234

*** Sample ID: Seq: 126 13:19:05 21 Apr 15 HG
lcs 240-177215/2-a

Hg	5.337	ppb	.0000	5.337

*** Sample ID: Seq: 127 13:21:03 21 Apr 15 HG
680-111445-a-3-r

Hg	-.0303	ppb	.0000	-.0303

*** Sample ID: Seq: 128 13:22:53 21 Apr 15 HG
680-111445-a-3-s ms

Hg	1.057	ppb	.0000	1.057

*** Sample ID: Seq: 129 13:24:59 21 Apr 15 HG
680-111445-a-3-t msd

Hg	1.062	ppb	.0000	1.062

*** Sample ID: Seq: 130 13:26:49 21 Apr 15 HG
680-111445-a-2-m

Hg	-.0479	ppb	.0000	-.0479

*** Sample ID: Seq: 131 13:28:56 21 Apr 15 HG
680-111445-a-4-h

Hg	-.0022	ppb	.0000	-.0022

*** Sample ID: Seq: 132 13:30:55 21 Apr 15 HG
680-111445-a-5-h

Hg	.6170	ppb	.0000	.6170

*** Sample ID: Seq: 133 13:32:58 21 Apr 15 HG
680-111445-a-6-h

Hg	.0664	ppb	.0000	.0664

*** Sample ID: Seq: 134 13:34:45 21 Apr 15 HG
180-38392-b-6-b@10

Hg	6.166	ppb	.0000	6.166

*** Check Standard: 6 Ck6CCV Seq: 135 13:36:42 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.2	5.208	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 136 13:38:39 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0708	.2400	ppb	.0000

*** Sample ID: Seq: 137 13:40:37 21 Apr 15 HG
180-38392-c-7-b@10

Hg	7.965	ppb	.0000	7.965

*** Sample ID: Seq: 138 13:42:39 21 Apr 15 HG
180-38392-b-8-b@10

Hg	1.060	ppb	.0000	1.060

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 139 13:44:45 21 Apr 15 HG
180-38667-c-6-b@10
Hg 8.623 ppb .0000 8.623

*** Sample ID: Seq: 140 13:47:03 21 Apr 15 HG
180-38669-c-1-a@10
Hg 5.104 ppb .0000 5.104

*** Sample ID: Seq: 141 13:49:01 21 Apr 15 HG
180-38669-c-31-a@10
Hg 16.94 H ppb .0000 16.94

*** Sample ID: Seq: 142 13:51:19 21 Apr 15 HG
180-38669-c-32-a@10
Hg 19.27 H ppb .0000 19.27

*** Sample ID: Seq: 143 13:53:32 21 Apr 15 HG
180-38669-c-33-a@10
Hg 22.09 H ppb .0000 22.09

*** Sample ID: Seq: 144 13:55:45 21 Apr 15 HG
180-38669-c-34-a@10
Hg 31.49 H ppb .0000 31.49

*** Sample ID: Seq: 145 13:58:06 21 Apr 15 HG
180-38669-a-35-a@10
Hg 25.34 H ppb .0000 25.34

*** Sample ID: Seq: 146 14:00:13 21 Apr 15 HG
180-38669-b-36-a@10
Hg 21.91 H ppb .0000 21.91

*** Check Standard: 6 Ck6CCV Seq: 147 14:02:22 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.3	5.163	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 148 14:04:41 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0276	.2400	ppb	.0000

*** Sample ID: Seq: 149 14:06:28 21 Apr 15 HG
180-38669-b-37-a@10
Hg 18.03 H ppb .0000 18.03

*** Sample ID: Seq: 150 14:08:37 21 Apr 15 HG
180-38669-b-38-a@10
Hg 15.77 H ppb .0000 15.77

*** Sample ID: Seq: 151 14:10:37 21 Apr 15 HG
180-38394-b-16-a@10
Hg 34.90 H ppb .0000 34.90

*** Sample ID: Seq: 152 14:12:37 21 Apr 15 HG
180-38394-b-17-a@10
Hg 39.27 H ppb .0000 39.27

*** Check Standard: 6 Ck6CCV Seq: 153 14:14:55 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.7	5.087	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 154 14:16:54 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0877	.2400	ppb	.0000

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 6 Ck6CCV Seq: 155 14:30:17 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.2	5.162	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 156 14:32:14 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0802	.2400	ppb	.0000

*** Sample ID: Seq: 157 14:34:03 21 Apr 15 HG
180-38669-c-31-a@50

Hg	3.315	ppb	.0000	3.315

*** Sample ID: Seq: 158 14:36:02 21 Apr 15 HG
180-38669-c-32-a@50

Hg	3.871	ppb	.0000	3.871

*** Sample ID: Seq: 159 14:37:51 21 Apr 15 HG
180-38669-c-33-a@50

Hg	4.268	ppb	.0000	4.268

*** Sample ID: Seq: 160 14:39:50 21 Apr 15 HG
180-38669-c-34-a@50

Hg	6.279	ppb	.0000	6.279

*** Sample ID: Seq: 161 14:41:59 21 Apr 15 HG
180-38669-a-35-a@50

Hg	4.924	ppb	.0000	4.924

*** Sample ID: Seq: 162 14:44:06 21 Apr 15 HG
180-38669-b-36-a@50

Hg	4.303	ppb	.0000	4.303

*** Sample ID: Seq: 163 14:46:14 21 Apr 15 HG
180-38669-b-37-a@50

Hg	3.579	ppb	.0000	3.579

*** Sample ID: Seq: 164 14:48:16 21 Apr 15 HG
180-38669-b-38-a@50

Hg	3.069	ppb	.0000	3.069

*** Sample ID: Seq: 165 14:50:16 21 Apr 15 HG
180-38394-b-16-a@50

Hg	7.262	ppb	.0000	7.262

*** Sample ID: Seq: 166 14:52:14 21 Apr 15 HG
180-38394-b-17-a@50

Hg	7.886	ppb	.0000	7.886

*** Check Standard: 6 Ck6CCV Seq: 167 14:54:13 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.5	5.124	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 168 14:56:09 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0838	.2400	ppb	.0000

TestAmerica North Canton Hg Data Review Checklist

Run/Project Information:

Circle Methods used: 7470A / 245.1 (7471) Batch: 177294

Run Date: 4-21-15 Analyst: B. Walpole Instrument: #4

Review Items				
A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRA run?	✓			✓
B. Sample Results				
1. Were samples with concentrations > high calibration standard diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/ Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?		✓		✓
4. MSD or DU run at required frequency and RPD within SOP limits?		✓		✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current IDL/MDL data on file?	✓			✓
3. Calculations and Transcription checked for error?	✓			✓
4. All client/project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Level I

Analyst: B Walpole Date/Time: 4-21-15 Reviewed from 8:18 to 14:56

Analyst: _____ Date/Time: _____ Reviewed from _____ to _____

Comments: _____

Level II

Reviewer: [signature] Date/Time: 04/22/2015 Reviewed from 08:18 to 14:56

Reviewer: _____ Date/Time: _____ Reviewed from _____ to _____

Comments _____

Curve Date 4-20-15 Curve Time 8:28-8:58 DILUTION H20 00034

Revised 11/29/2012

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176562 Batch Start Date: 04/15/15 11:42 Batch Analyst: Elshaw, Dale

Batch Method: 3050B Batch End Date: 04/15/15 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	MT1TO1HN03 00946	MTH202 00041	MTICPMS2 00020
MB 240-176562/1		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	
LCS 240-176562/2		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	1 mL
240-49171-B-19	079SB-0362-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.03 g	100 mL	10 mL	10 mL	
240-49171-A-6-A	079SB-0352M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.17 g	100 mL	10 mL	10 mL	
240-49171-A-8-A	079SB-0353M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.06 g	100 mL	10 mL	10 mL	
240-49171-A-10-A	079SB-0354M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.10 g	100 mL	10 mL	10 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICPMSA 00022	MTICPMSB 00022	MTTMHCL 00062	MTTMHNO3 00054		
MB 240-176562/1		3050B, 6020				10 mL	5 mL		
LCS 240-176562/2		3050B, 6020		1 mL	1 mL	10 mL	5 mL		
240-49171-B-19	079SB-0362-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49171-A-6-A	079SB-0352M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49171-A-8-A	079SB-0353M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49171-A-10-A	079SB-0354M-0001-SO	3050B, 6020	T			10 mL	5 mL		

Batch Notes	
Balance ID	b039
Blank Soil Lot Number	K565-4i009
Filter Paper Lot Number	9605292
Hot Block ID number	a1 a2
Pipette ID	64-66
Digestion Tube/Cup Lot #	150204

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176562 Batch Start Date: 04/15/15 11:42 Batch Analyst: Elshaw, Dale

Batch Method: 3050B Batch End Date: 04/15/15 17:00

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176698 Batch Start Date: 04/16/15 09:58 Batch Analyst: Sutherland, Aaron

Batch Method: 3050B Batch End Date: 04/16/15 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	MT1TO1HN03 00947	MTH202 00041	MTICPMS2 00020
MB 240-176698/1		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	
LCS 240-176698/2		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	1 mL
240-49171-A-1-A	079SB-0339M-0001, 0002-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.15 g	100 mL	10 mL	10 mL	
240-49171-A-1-B DU	079SB-0339M-0001, 0002-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.15 g	100 mL	10 mL	10 mL	
240-49171-A-1-C MS	079SB-0339M-0001, 0002-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.15 g	100 mL	10 mL	10 mL	1 mL
240-49171-A-2-A	079SB-0340M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.05 g	100 mL	10 mL	10 mL	
240-49171-A-4-A	079SB-0351M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.23 g	100 mL	10 mL	10 mL	
240-49171-A-11-A	079SB-0357M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.22 g	100 mL	10 mL	10 mL	
240-49171-A-13-A	079SB-0355M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.32 g	100 mL	10 mL	10 mL	
240-49171-A-14-A	079SB-0356M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.32 g	100 mL	10 mL	10 mL	
240-49171-A-15-A	079SB-0358M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.40 g	100 mL	10 mL	10 mL	
240-49171-A-16-A	079SB-0359M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.09 g	100 mL	10 mL	10 mL	
240-49171-A-17-A	079SB-0360M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.17 g	100 mL	10 mL	10 mL	
240-49171-A-18-A	079SB-0361M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.13 g	100 mL	10 mL	10 mL	
240-49171-A-20-A	079SB-0363M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.03 g	100 mL	10 mL	10 mL	
240-49171-A-21-A	079SB-0364M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.14 g	100 mL	10 mL	10 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICPMSA 00021	MTICPMSA 00022	MTICPMSB 00021	MTICPMSB 00022	MTTMHCL 00062	MTTMHNO3 00054
MB 240-176698/1		3050B, 6020						10 mL	5 mL
LCS 240-176698/2		3050B, 6020			1 mL		1 mL	10 mL	5 mL
240-49171-A-1-A	079SB-0339M-0001, 0002-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-1-B DU	079SB-0339M-0001, 0002-SO	3050B, 6020	T					10 mL	5 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176698 Batch Start Date: 04/16/15 09:58 Batch Analyst: Sutherland, Aaron

Batch Method: 3050B Batch End Date: 04/16/15 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICPMSA 00021	MTICPMSA 00022	MTICPMSB 00021	MTICPMSB 00022	MTTMHCL 00062	MTTMHNO3 00054
240-49171-A-1-CMS	079SB-0339M-0001, 0002-SO	3050B, 6020	T	1 mL		1 mL		10 mL	5 mL
240-49171-A-2-A	079SB-0340M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-4-A	079SB-0351M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-11-A	079SB-0357M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-13-A	079SB-0355M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-14-A	079SB-0356M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-15-A	079SB-0358M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-16-A	079SB-0359M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-17-A	079SB-0360M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-18-A	079SB-0361M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-20-A	079SB-0363M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-21-A	079SB-0364M-0001-SO	3050B, 6020	T					10 mL	5 mL

Batch Notes	
Balance ID	b038
Blank Soil Lot Number	K565-4i009
Filter Paper Lot Number	9605292
Hot Block ID number	a1 a2 c3
Pipette ID	59L-66
Digestion Tube/Cup Lot #	150204

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 177128 Batch Start Date: 04/20/15 12:52 Batch Analyst: Elshaw, Dale

Batch Method: 3050B Batch End Date: 04/20/15 17:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	MT1TO1HN03 00949	MTH202 00042	MTICPMS2 00020
MB 240-177128/1		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	
LCS 240-177128/2		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	1 mL
240-49171-A-3-A	079SB-0341M-0001, 0002-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.03 g	100 mL	10 mL	10 mL	
240-49171-A-3-B DU	079SB-0341M-0001, 0002-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.03 g	100 mL	10 mL	10 mL	
240-49171-A-3-C MS	079SB-0341M-0001, 0002-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.03 g	100 mL	10 mL	10 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICPMSA 00021	MTICPMSA 00022	MTICPMSB 00021	MTICPMSB 00022	MTTMHCL 00063	MTTMHNO3 00054
MB 240-177128/1		3050B, 6020						10 mL	5 mL
LCS 240-177128/2		3050B, 6020			1 mL		1 mL	10 mL	5 mL
240-49171-A-3-A	079SB-0341M-0001, 0002-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-3-B DU	079SB-0341M-0001, 0002-SO	3050B, 6020	T					10 mL	5 mL
240-49171-A-3-C MS	079SB-0341M-0001, 0002-SO	3050B, 6020	T	1 mL		1 mL		10 mL	5 mL

Batch Notes	
Balance ID	b039
Blank Soil Lot Number	K565-4i009
Filter Paper Lot Number	9605292
Hot Block ID number	a1 a2 c3
Pipette ID	64-66
Digestion Tube/Cup Lot #	150204

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176499 Batch Start Date: 04/15/15 08:32 Batch Analyst: Walpole, Barbara

Batch Method: 7471A Batch End Date: 04/15/15 09:02

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 00995	MTHGCALW 00881	MTHgStd 00016	MTKMN04W 00081
ICV 240-176499/7		7471A, 7471A		100 mL	100 mL	5 mL		0.5 mL	15 mL
ICB 240-176499/8		7471A, 7471A		100 mL	100 mL	5 mL			15 mL
CRA 240-176499/9		7471A, 7471A		100 mL	100 mL	5 mL	0.2 mL		15 mL
CCV 240-176499/10		7471A, 7471A		100 mL	100 mL	5 mL	5 mL		15 mL
CCB 240-176499/11		7471A, 7471A		100 mL	100 mL	5 mL			15 mL

Batch Notes	
Hot Block ID number	C1
Pipette ID	59L-64-66
Digestion Tube/Cup Lot #	1408268

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176570 Batch Start Date: 04/15/15 15:00 Batch Analyst: Elshaw, Dale

Batch Method: 7471A Batch End Date: 04/15/15 15:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 00996	MTHGCALW 00881	MTKMN04W 00081	
MB 240-176570/1		7471A, 7471A		0.60 g	100 mL	5 mL		15 mL	
LCS 240-176570/2		7471A, 7471A		0.60 g	100 mL	5 mL	5 mL	15 mL	
240-49171-B-19	079SB-0362-0001-SO	7471A, 7471A	T	0.62 g	100 mL	5 mL		15 mL	
240-49171-A-6-A	079SB-0352M-0001-SO	7471A, 7471A	T	0.53 g	100 mL	5 mL		15 mL	
240-49171-A-8-A	079SB-0353M-0001-SO	7471A, 7471A	T	0.59 g	100 mL	5 mL		15 mL	
240-49171-A-10-A	079SB-0354M-0001-SO	7471A, 7471A	T	0.56 g	100 mL	5 mL		15 mL	

Batch Notes	
Balance ID	b039
Blank Soil Lot Number	K565-4i009
Hot Block ID number	c3
Pipette ID	383364-383366-66
Digestion Tube/Cup Lot #	1408268

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176711 Batch Start Date: 04/16/15 14:45 Batch Analyst: Sutherland, Aaron

Batch Method: 7471A Batch End Date: 04/16/15 15:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 00997	MTHGCALW 00883	MTKMN04W 00081	
MB 240-176711/1		7471A, 7471A		0.60 g	100 mL	5 mL		15 mL	
LCS 240-176711/2		7471A, 7471A		0.60 g	100 mL	5 mL	5 mL	15 mL	
240-49171-A-1-A	079SB-0339M-0001, 0002-SO	7471A, 7471A	T	0.52 g	100 mL	5 mL		15 mL	
240-49171-A-1-B DU	079SB-0339M-0001, 0002-SO	7471A, 7471A	T	0.52 g	100 mL	5 mL		15 mL	
240-49171-A-1-C MS	079SB-0339M-0001, 0002-SO	7471A, 7471A	T	0.52 g	100 mL	5 mL	1 mL	15 mL	
240-49171-A-2-A	079SB-0340M-0001-SO	7471A, 7471A	T	0.59 g	100 mL	5 mL		15 mL	
240-49171-A-4-A	079SB-0351M-0001-SO	7471A, 7471A	T	0.68 g	100 mL	5 mL		15 mL	
240-49171-A-11-A	079SB-0357M-0001-SO	7471A, 7471A	T	0.58 g	100 mL	5 mL		15 mL	
240-49171-A-13-A	079SB-0355M-0001-SO	7471A, 7471A	T	0.56 g	100 mL	5 mL		15 mL	
240-49171-A-14-A	079SB-0356M-0001-SO	7471A, 7471A	T	0.64 g	100 mL	5 mL		15 mL	
240-49171-A-15-A	079SB-0358M-0001-SO	7471A, 7471A	T	0.60 g	100 mL	5 mL		15 mL	
240-49171-A-16-A	079SB-0359M-0001-SO	7471A, 7471A	T	0.57 g	100 mL	5 mL		15 mL	
240-49171-A-17-A	079SB-0360M-0001-SO	7471A, 7471A	T	0.63 g	100 mL	5 mL		15 mL	
240-49171-A-18-A	079SB-0361M-0001-SO	7471A, 7471A	T	0.68 g	100 mL	5 mL		15 mL	
240-49171-A-20-A	079SB-0363M-0001-SO	7471A, 7471A	T	0.62 g	100 mL	5 mL		15 mL	
240-49171-A-21-A	079SB-0364M-0001-SO	7471A, 7471A	T	0.61 g	100 mL	5 mL		15 mL	

Batch Notes	
Balance ID	b038
Blank Soil Lot Number	K565-4i009
Hot Block ID number	c2 c1 b1
Pipette ID	59L-64-66
Digestion Tube/Cup Lot #	1408268

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176711 Batch Start Date: 04/16/15 14:45 Batch Analyst: Sutherland, Aaron

Batch Method: 7471A Batch End Date: 04/16/15 15:15

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 177030 Batch Start Date: 04/20/15 08:28 Batch Analyst: Walpole, Barbara

Batch Method: 7471A Batch End Date: 04/20/15 08:58

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 01001	MTHGCALW 00885	MTHgStd 00016	MTKMN04W 00081
ICV 240-177030/7		7471A, 7471A		100 mL	100 mL	5 mL		0.5 mL	15 mL
ICB 240-177030/8		7471A, 7471A		100 mL	100 mL	5 mL			15 mL
CRA 240-177030/9		7471A, 7471A		100 mL	100 mL	5 mL	0.2 mL		15 mL
CCV 240-177030/10		7471A, 7471A		100 mL	100 mL	5 mL	5 mL		15 mL
CCB 240-177030/11		7471A, 7471A		100 mL	100 mL	5 mL			15 mL

Batch Notes	
Hot Block ID number	C1
Pipette ID	59L-64-66
Digestion Tube/Cup Lot #	1408268

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 177137 Batch Start Date: 04/20/15 15:40 Batch Analyst: Elshaw, Dale

Batch Method: 7471A Batch End Date: 04/20/15 16:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 01002	MTHGCALW 00885	MTKMN04W 00081	
MB 240-177137/1		7471A, 7471A		0.60 g	100 mL	5 mL		15 mL	
LCS 240-177137/2		7471A, 7471A		0.60 g	100 mL	5 mL	5 mL	15 mL	
240-49171-A-3-A	079SB-0341M-0001, 0002-SO	7471A, 7471A	T	0.54 g	100 mL	5 mL		15 mL	
240-49171-A-3-B DU	079SB-0341M-0001, 0002-SO	7471A, 7471A	T	0.54 g	100 mL	5 mL		15 mL	
240-49171-A-3-C MS	079SB-0341M-0001, 0002-SO	7471A, 7471A	T	0.54 g	100 mL	5 mL	1 mL	15 mL	

Batch Notes	
Balance ID	b039
Blank Soil Lot Number	K565-4i009
Hot Block ID number	c2 c1
Pipette ID	59L-64-66
Digestion Tube/Cup Lot #	1408268

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG No.:

Project: RVAAP - ECC

Client Sample ID	Lab Sample ID
079SB-0339M-0001, 0002-SO	240-49171-1
079SB-0340M-0001-SO	240-49171-2
079SB-0341M-0001, 0002-SO	240-49171-3
079SB-0351M-0001-SO	240-49171-4
079SB-0352M-0001-SO	240-49171-5
079SB-0352M-0001-SO	240-49171-6
079SB-0353M-0001-SO	240-49171-7
079SB-0353M-0001-SO	240-49171-8
079SB-0354M-0001-SO	240-49171-9
079SB-0354M-0001-SO	240-49171-10
079SB-0357M-0001-SO	240-49171-11
079SB-0355M-0001-SO	240-49171-13
079SB-0356M-0001-SO	240-49171-14
079SB-0358M-0001-SO	240-49171-15
079SB-0359M-0001-SO	240-49171-16
079SB-0360M-0001-SO	240-49171-17
079SB-0361M-0001-SO	240-49171-18
079SB-0362-0001-SO	240-49171-19
079SB-0363M-0001-SO	240-49171-20
079SB-0364M-0001-SO	240-49171-21

Comments:

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Sacramento Job Number: 240-49171-1

SDG No.:

Project: RVAAP - ECC

Client Sample ID	Lab Sample ID
079SB-0352M-0001-SO	240-49171-6
079SB-0353M-0001-SO	240-49171-8
079SB-0354M-0001-SO	240-49171-10

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 079SB-0352M-0001-SO
Lab Sample ID: 240-49171-6
Lab Name: TestAmerica Sacramento
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 10:27
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrocellulose	0.99	5.1	1.9	0.80	mg/Kg	J		1	WS-WC-0050

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 079SB-0353M-0001-SO
Lab Sample ID: 240-49171-8
Lab Name: TestAmerica Sacramento
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 09:57
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.6

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrocellulose	0.99	5.1	1.9	0.80	mg/Kg	J		1	WS-WC-0050

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: 079SB-0354M-0001-SO
Lab Sample ID: 240-49171-10
Lab Name: TestAmerica Sacramento
Job No.: 240-49171-1
SDG ID.:
Matrix: Solid
Date Sampled: 04/08/2015 11:30
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrocellulose	0.97	5.0	1.8	0.78	mg/Kg	J		1	WS-WC-0050

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Analyst: JCB Batch Start Date: 04/22/2015

Reporting Units: mg/L Analytical Batch No.: 72011

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
9	ICV	13:32	Nitrocellulose	8.13	8.33	98	90-110		WC-353.2-ICV_00046
10	ICB	13:34	Nitrocellulose	1.0				U	
28	CCV	14:15	Nitrocellulose	8.39	8.33	101	90-110		WC-353.2-L4_00042
29	CCB	14:17	Nitrocellulose	1.0				U	
37	CCV	14:33	Nitrocellulose	8.35	8.33	100	90-110		WC-353.2-L4_00042
38	CCB	14:35	Nitrocellulose	1.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 72011	Date: 04/22/2015 13:53	Prep Batch: 71631	Date: 04/21/2015 06:29				
WS-WC-0050	MB 320-71507/1-B	Nitrocellulose	1.07	J	mg/Kg	5.0	1

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 72011	Date: 04/22/2015 13:55		Prep Batch: 71631			Date: 04/21/2015 06:29					
						LCS Source: HPNCSP_00013					
WS-WC-0050	LCS 320-71507/2-B	Nitrocellulose	24.3		mg/Kg	50.7	48	34-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
METHOD REPORTING LIMIT CHECK
GENERAL CHEMISTRY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 72011	Date: 04/22/2015 13:36										
						LCS Source: WC-353.2-L1_00051					
WS-WC-0050	MRL 320-72011/11	Nitrocellulose	0.492	J	mg/L	0.417	118	70-130			
Batch ID: 72011	Date: 04/22/2015 14:13										
						LCS Source: WC-353.2-L1_00051					
WS-WC-0050	MRL 320-72011/27	Nitrocellulose	1.0	U	mg/L	0.417	114	70-130			
Batch ID: 72011	Date: 04/22/2015 14:31										
						LCS Source: WC-353.2-L1_00051					
WS-WC-0050	MRL 320-72011/36	Nitrocellulose	1.0	U	mg/L	0.417	114	70-130			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture LOQ Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	XRL (mg/L)	
Percent Moisture		10	
Percent Solids		10	

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture LOQ Date: 01/28/2010 09:24

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	XRL (mg/L)	
Percent Moisture		10	
Percent Solids		10	

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Sacramento Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: FS4

Method: WS-WC-0050 DL Date: 03/15/2011 14:37

Prep Method: 353 (NCell-Hyd)

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Nitrocellulose		5	0.78

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Sacramento Job Number: 240-49171-1

SDG Number:

Matrix: Solid Instrument ID: FS4

Method: WS-WC-0050 XMDL Date: 03/15/2011 14:36

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrocellulose		2	0.475

11-IN
LINEAR RANGES
GENERAL CHEMISTRY

Lab Name: TestAmerica Sacramento Job No: 240-49171-1

SDG No.:

Instrument ID: FS4 Date: 07/31/2011 19:29

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Nitrocellulose		16.8	WS-WC-0050

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Prep Method: 353 (NCell-Hyd)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 320-71507/1-B	04/21/2015 06:29	71631		45.00	40.00
LCS 320-71507/2-B	04/21/2015 06:29	71631		45.00	40.00
240-49171-6	04/21/2015 06:29	71631		45.00	40.00
240-49171-8	04/21/2015 06:29	71631		45.00	40.00
240-49171-10	04/21/2015 06:29	71631		45.00	40.00

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/10/2015 08:35 End Date: 04/10/2015 18:22

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			08:35																										
ZZZZZZ			08:35																										
ZZZZZZ			08:35																										
ZZZZZZ			08:35																										
240-49171-19 DU	1	T	08:35	X	X																								
240-49171-19	1	T	08:35	X	X																								
ZZZZZZ			08:35																										
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/10/2015 08:35 End Date: 04/10/2015 18:22

Lab Sample Id	D/F	Type	Time	Analytes																										
				% Sol	Moist																									
ZZZZZZ			17:14																											
ZZZZZZ			17:36																											
240-49171-5	1	T	18:17	X	X																									
240-49171-7	1	T	18:17	X	X																									
240-49171-9	1	T	18:17	X	X																									
ZZZZZZ			18:17																											
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Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/13/2015 11:34 End Date: 04/13/2015 15:59

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			11:34	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/13/2015 11:34 End Date: 04/13/2015 15:59

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			11:34																										
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/13/2015 11:34 End Date: 04/13/2015 15:59

Lab Sample Id	D/F	Type	Time	Analytes																										
				% Sol	Moist																									
ZZZZZZ			15:59																											
ZZZZZZ			15:59																											
240-49171-6	1	T	15:59	X	X																									
240-49171-8	1	T	15:59	X	X																									
240-49171-10	1	T	15:59	X	X																									
ZZZZZZ			15:59																											
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Prep Types:
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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			10:47																										
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240-49171-2	1	T	16:38	X	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
240-49171-4	1	T	16:38	X	X																								
240-49171-11	1	T	16:38	X	X																								
240-49171-13	1	T	16:38	X	X																								
240-49171-14	1	T	16:38	X	X																								
240-49171-15	1	T	16:38	X	X																								
240-49171-16	1	T	16:38	X	X																								
240-49171-17	1	T	16:38	X	X																								
240-49171-1 DU	1	T	16:38	X	X																								
240-49171-1	1	T	16:38	X	X																								
240-49171-18	1	T	16:38	X	X																								
240-49171-20	1	T	16:38	X	X																								
240-49171-21	1	T	16:43	X	X																								
ZZZZZZ			16:43																										
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240-49171-3 DU	1	T	16:43	X	X																								
240-49171-3	1	T	16:43	X	X																								
ZZZZZZ			16:43																										
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			16:43																										
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			17:37																										
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			17:48																										
ZZZZZZ			17:48																										
ZZZZZZ			17:48																										
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ZZZZZZ			17:51																										
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Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Instrument ID: FS4 Analysis Method: WS-WC-0050

Start Date: 04/22/2015 13:16 End Date: 04/22/2015 14:37

Lab Sample Id	D/F	Type	Time	Analytes																									
				NCL																									
ZZZZZZ			13:16																										
ZZZZZZ			13:18																										
STD5 320-72011/3 IC			13:20	X																									
STD4 320-72011/4 IC			13:22	X																									
STD3 320-72011/5 IC			13:24	X																									
STD2 320-72011/6 IC			13:26	X																									
STD1 320-72011/7 IC			13:28	X																									
STD0 320-72011/8 IC			13:30	X																									
ICV 320-72011/9	1		13:32	X																									
ICB 320-72011/10	1		13:34	X																									
MRL 320-72011/11	1	T	13:36	X																									
ZZZZZZ			13:43																										
ZZZZZZ			13:45																										
ZZZZZZ			13:47																										
ZZZZZZ			13:49																										
ZZZZZZ			13:51																										
MB 320-71507/1-B	1	T	13:53	X																									
LCS 320-71507/2-B	1	T	13:55	X																									
ZZZZZZ			13:57																										
ZZZZZZ			13:59																										
ZZZZZZ			14:01																										
ZZZZZZ			14:03																										
ZZZZZZ			14:05																										
ZZZZZZ			14:07																										
ZZZZZZ			14:09																										
240-49171-6	1	T	14:11	X																									
MRL 320-72011/27	1	T	14:13	X																									
CCV 320-72011/28	1		14:15	X																									
CCB 320-72011/29	1		14:17	X																									
ZZZZZZ			14:19																										
240-49171-8	1	T	14:21	X																									
240-49171-10	1	T	14:23	X																									
ZZZZZZ			14:25																										
ZZZZZZ			14:27																										
ZZZZZZ			14:29																										
MRL 320-72011/36	1	T	14:31	X																									
CCV 320-72011/37	1		14:33	X																									
CCB 320-72011/38	1		14:35	X																									
ZZZZZZ			14:37																										

Prep Types:
T = Total/NA

FORM XIII-IN

Peak Table:Nitrite/Nitrate

File name: C:\ALPKEM\ALPKEM~2\2015\NITROC~1\042215A.RST
Date: 22-Apr-15
Operator: JCB

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppm)	Flags
1	103	Sync	1	SYNC	1	1	165334	0.991916	
B	0	Baseline	1	RB	1	1	0	0.024784	BL
3	102	Cal 5	1	C	1	1	338988	2.007720	HI
4	103	Cal 4	1	C	1	1	166056	0.996143	
5	104	Cal 3	1	C	1	1	60177	0.376796	
6	105	Cal 2	1	C	1	1	27609	0.186283	
7	106	Cal 1	1	C	1	1	5818	0.058817	
8	0	Cal 0	1	C	1	1	-93	0.024240	
9	107	ICV	1	U	1	1	162452	0.975061	
10	110	BLANK/ICB	1	BLNK	1	1	477	0.027571	
11	106	MRL	1	U	1	1	5875	0.059151	
12	108	NO2 1PPM	1	U	1	1	165634	0.993675	
13	109	NO3 1PPM	1	U	1	1	160908	0.966030	
14	0	Blank	1	BLNK	1	1	183	0.025853	
B	0	Baseline	1	RB	1	1	0	0.024784	BL
B	0	Baseline	2	RB	1	1	0	0.024784	BL
17	118	mb 320-71507/1-b 1	U		1	1	1287	0.032311	
18	119	lcs 320-71507/2-b 1	U		1	1	120629	0.730413	
19	120	240-49071-e-2-h 1	U		1	1	2512	0.039476	
20	121	240-49085-e-8-j 1	U		1	1	753	0.029186	
21	122	240-49085-e-8-k ms 1	U		1	1	102859	0.626463	
22	123	240-49085-e-8-l msd 1	U		1	1	92231	0.564296	
23	124	240-49085-e-15-d 1	U		1	1	1040	0.030867	
24	125	240-49085-e-22-d 1	U		1	1	724	0.029018	
25	126	240-49085-e-34-d 1	U		1	1	675	0.028733	
26	127	240-49171-c-6-d 1	U		1	1	724	0.029018	
27	106	MRL	1	U	1	1	5474	0.056805	
28	103	CCV	1	U	1	1	167881	1.006816	
29	0	CCB	1	BLNK	1	1	139	0.025597	
B	0	Baseline	1	RB	1	1	0	0.024784	BL
31	128	240-49171-c-8-d 1	U		1	1	716	0.028972	
32	129	240-49171-c-10-d 1	U		1	1	746	0.029146	
33	130	240-49233-c-4-d 1	U		1	1	1481	0.033449	
34	131	240-49233-c-6-d 1	U		1	1	1445	0.033237	
35	132	240-49233-c-8-d 1	U		1	1	578	0.028167	
36	106	MRL	1	U	1	1	5472	0.056790	
37	103	CCV	1	U	1	1	167018	1.001767	
38	0	CCB	1	BLNK	1	1	268	0.026353	
B	0	Baseline	1	RB	1	1	0	0.024784	BL

Report Results by Sample
Result path: C:\ALPKEM\ALPKEM~2\2015\NITROC~1\042215A.RST
Sample table path: C:\ALPKEM\ALPKEM~2\2015\NITROC~1\042215a.tbl
Method path: C:\ALPKEM\no3_no2.mth
Date acquired: 22-Apr-15
Time acquired: 14:40

Facility Name:
Facility Location:
Department:

Operator Name: JCB
Operator ID: JCB

Platform: FS III/IV/3100
Software Rev Code: 222
Data system ID: 57

Channel: 3
Analysis: Nitrite/Nitrate
CAS Number:
Methodology: NO2+NO3-353.2/N02-353.2/WS-WC-0050

	Temp	Warmup	Run time	Reps
rack 1	Off	1134:03:50	1:38:15	14
rack 2	Off	1134:03:50	1:38:15	14
rack 3	Off	1134:03:50	1:38:15	14

Notes

Cup	Name	S	1:Time	1:Value	1:S
0	Baseline	C	13:18:49	0.02	[C]
102	Cal 5	C	13:20:49	2.01	[C]
103	Cal 4	C	13:22:50	1.00	[C]
104	Cal 3	C	13:24:50	0.38	[C]
105	Cal 2	C	13:26:50	0.19	[C]
106	Cal 1	C	13:28:50	0.06	[C]
0	Cal 0	C	13:30:50	0.02	[C]
107	ICV	-	13:32:51	0.98	[-]
110	BLANK/ICB	C	13:34:51	0.03	[C]
106	MRL	-	13:36:51	0.06	[-]
108	NO2 1PPM	-	13:43:00	0.99	[-]
109	NO3 1PPM	-	13:45:00	0.97	[-]
0	Blank	C	13:47:00	0.03	[C]
0	Baseline	C	13:49:00	0.02	[C]
0	Baseline	C	13:51:01	0.02	[C]
118	mb 320-71507/1-b	-	13:53:01	0.03	[-]
119	lcs 320-71507/2-b	-	13:55:01	0.73	[-]
120	240-49071-e-2-h	-	13:57:01	0.04	[-]
121	240-49085-e-8-j	-	13:59:01	0.03	[-]
122	240-49085-e-8-k ms	-	14:01:02	0.63	[-]
123	240-49085-e-8-l msd	-	14:03:02	0.56	[-]
124	240-49085-e-15-d	-	14:05:02	0.03	[-]
125	240-49085-e-22-d	-	14:07:02	0.03	[-]
126	240-49085-e-34-d	-	14:09:02	0.03	[-]
127	240-49171-c-6-d	-	14:11:03	0.03	[-]
106	MRL	-	14:13:03	0.06	[-]
103	CCV	-	14:15:03	1.01	[-]
0	CCB	C	14:17:03	0.03	[C]
0	Baseline	C	14:19:03	0.02	[C]
128	240-49171-c-8-d	-	14:21:04	0.03	[-]
129	240-49171-c-10-d	-	14:23:04	0.03	[-]
130	240-49233-c-4-d	-	14:25:04	0.03	[-]
131	240-49233-c-6-d	-	14:27:04	0.03	[-]
132	240-49233-c-8-d	-	14:29:04	0.03	[-]
106	MRL	-	14:31:05	0.06	[-]
103	CCV	-	14:33:05	1.00	[-]
0	CCB	C	14:35:05	0.03	[C]
0	Baseline	C	14:37:05	0.02	[C]

Nitrite/Nitrate:Calibration 1: Peak 3-39

File name: C:\ALPKEM\ALPKEM~2\2015\NITROC~1\042215A.RST
Date: 22-Apr-15
Operator: JCB

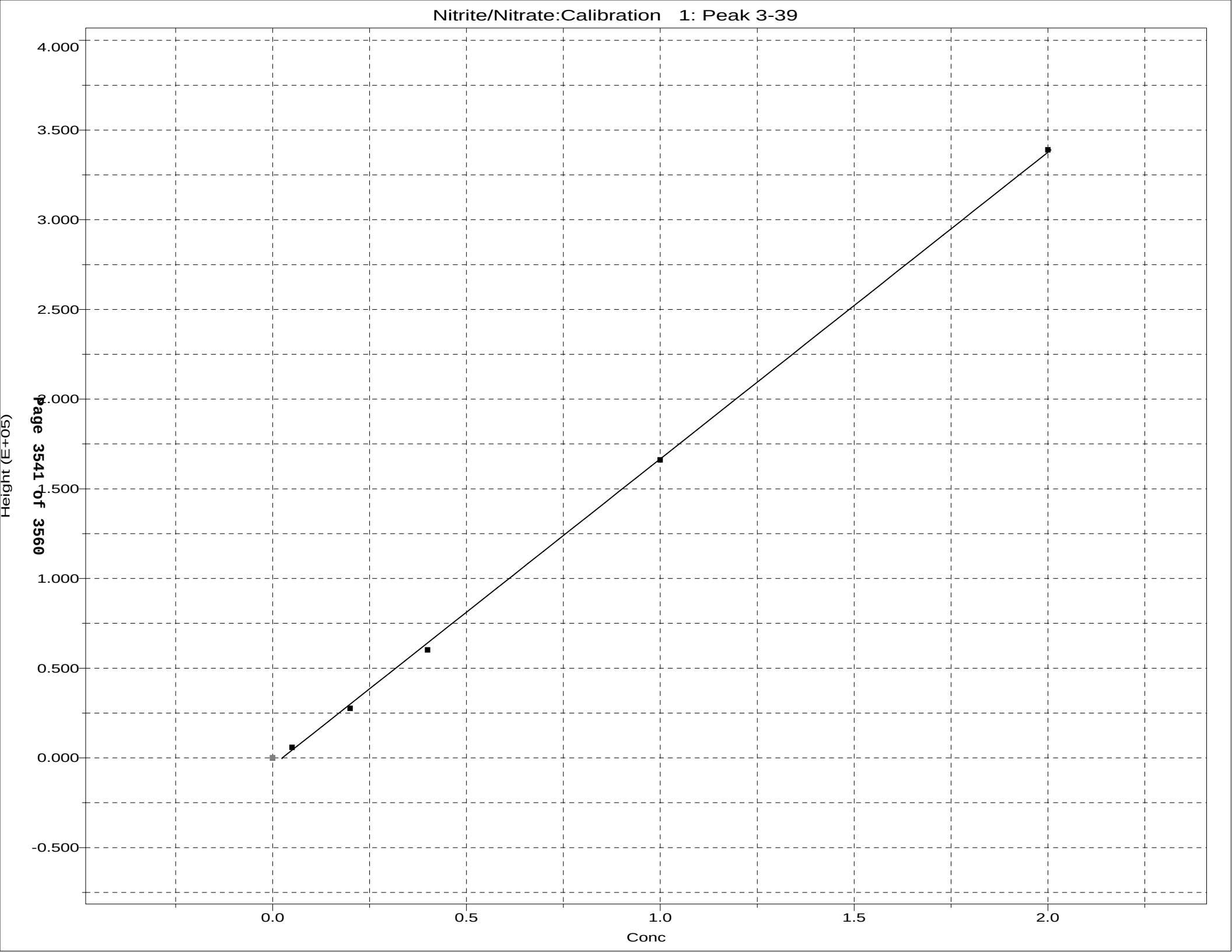
*	Name	Conc	Height
*	Cal 5	2.000000	338988.000000
*	Cal 4	1.000000	166056.375000
*	Cal 3	0.400000	60177.363281
*	Cal 2	0.200000	27608.751953
*	Cal 1	0.050000	5818.102539
*	Cal 0	0.000000	-92.848877

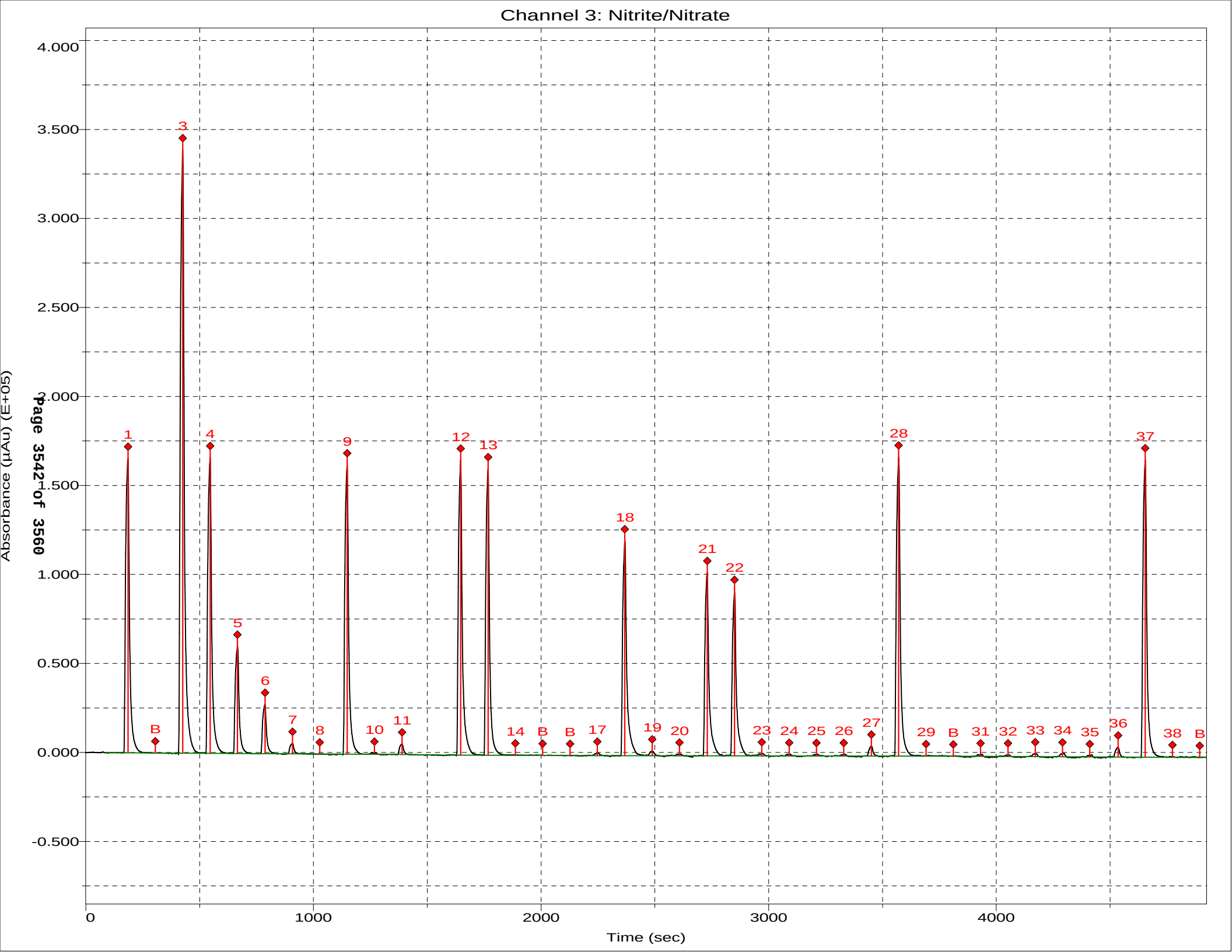
Calib Coef:
y=bx+a
a: (intercept) -4.2368e+03
b: 1.7095e+05

Corr Coef: 0.999754

Carryover: n/a

No Drift Peaks


Nitrite/Nitrate:Calibration 1: Peak 3-39
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
Height (E+05)
0.0
0.5
1.0
1.5
2.0
Conc


Channel 3: Nitrite/Nitrate
Absorbance (µAu) (E+05)
Time (sec)
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
0
1000
2000
3000
4000
1
B
3
4
5
6
7
8
9
10
11
12
13
14
B
B
17
18
19
20
21
22
23
24
25
26
27
28
29
B
31
32
33
34
35
36
37
38
B

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Level I and Level II Review Checklist
General Chemistry

Instrument ID FS4			ws-wc-0050 NCell
Batch 72011	File # 042215A	Date 4/22/15	Analyst JS

Lot Numbers 240-49071, 240-49085, 240-49171,	YES	NO	NA
LEVEL 1 Review: 240-49233			
1. Samples properly preserved/verified	✓		
2. Run setup meets Std criteria (Curve, ICV/ICB, CCV etc.)	✓		
3. Calibration criteria met (R=0.995, R^2=0.990)	✓		
4. Interception criteria for ~~quadratic~~ fits + or – ½ the RL (1 min JS 4/27/15)	✓		
5. Second source std in control	✓		
6. Batch QC in control (LCS,MB,MS/MSD,DCS if necessary)	✓		
7. Calculations checked	✓		
8. QAS/QAPP consulted for client specific requirements	✓		
9. Standard tracking #'s recorded on runlog/benchsheet	✓		
10. Manual integration performed, documented & approved			✓
11. Copy of run log included with data package	✓		
12. Copy of conductivity screen logbook (314.0 only)			✓
LEVEL 1 Data Review:			
1. Benchsheet complete	✓		
2. QAS/QAPP Consulted for client specific data entry	✓		
3. Copy of prep sheet/checklist submitted	✓		
4. NCM(s) submitted			✓

COMMENTS: _____

REVIEWED BY: LW
DATE: 4/28/15

DATA ENTERED BY: JS
DATE: 4/27/15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Preparation Data Review Checklist

Preparation Batch Number(s): 320-71507 Test: NCell-S

Earliest Holding Time: 5-2-15 / 5-3-15 / 5-4-15

Sample List Tab	1st Level Reviewer	2nd Level Reviewer
Samples identified to the correct method	✓	✓
All necessary NCMs filed (including holding time)	NA ✓	NA
Method/sample/login/QAS checked and correct		✓
Worksheet Tab	**1st Level Reviewer**	**2nd Level Reviewer**
All samples properly preserved	NA ✓	NA
Weights in anticipated range and not targeted		✓
All additional test requirements performed, documented, and uploaded to TALS correctly (e.g. final amount, initial amount, turbidity, and CI Check)	✓	✓
The pH is transcribed correctly in TALS	NA ✓	NA
All additional information transcribed into TALS is correct and raw data is attached		✓
Comments are transcribed correctly in TALS	✓	✓
Reagents Tab	**1st Level Reviewer**	**2nd Level Reviewer**
All necessary reagents not expired and entered into TALS	✓	✓
All spike amounts correct and added to necessary samples and QC	✓	✓
Batch Information	**1st Level Reviewer**	**2nd Level Reviewer**
Date and time accurate and entered into TALS correctly	✓	✓
All necessary 'batch information' complete and entered into TALS correctly		✓

1st Level Reviewer: HJA Date: 4-20-15

2nd Level Reviewer: [signature] Date: 4/20/15

Comments: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Preparation Data Review Checklist

Preparation Batch Number(s): 320-71631 Test: Ncell- S (Hydrolysis)

Earliest Holding Time: 4-23-15

Sample List Tab	1st Level Reviewer	2nd Level Reviewer
Samples identified to the correct method	✓	✓
All necessary NCMs filed (including holding time)	NA	NA
Method/sample/login/QAS checked and correct	✓	✓
Worksheet Tab	1st Level Reviewer	2nd Level Reviewer
All samples properly preserved	NA	NA
Weights in anticipated range and not targeted	✓	✓
All additional test requirements performed, documented, and uploaded to TALS correctly (e.g. final amount, initial amount, turbidity, and Cl Check)	✓	✓
The pH is transcribed correctly in TALS	✓	✓
All additional information transcribed into TALS is correct and raw data is attached	✓	✓
Comments are transcribed correctly in TALS	✓	✓
Reagents Tab	1st Level Reviewer	2nd Level Reviewer
All necessary reagents not expired and entered into TALS	✓	✓
All spike amounts correct and added to necessary samples and QC	✓	✓
Batch Information	1st Level Reviewer	2nd Level Reviewer
Date and time accurate and entered into TALS correctly	✓	✓
All necessary 'batch information' complete and entered into TALS correctly	✓	✓

1st Level Reviewer: HJA Date: 4-21-15

2nd Level Reviewer: SNE Date: 4/21/15

Comments: _____

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 175905 Batch Start Date: 04/10/15 08:34 Batch Analyst: Matheny, Sarah

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-49171-A-19 DU	079SB-0362-0001-SO	Moisture	T	4.2418 g	9.7360 g	9.0638 g			
240-49171-A-19	079SB-0362-0001-SO	Moisture	T	4.2418 g	11.8858 g	10.9878 g			
240-49171-D-5	079SB-0352M-0001-SO	Moisture	T	4.2418 g	10.1665 g	8.6408 g			
240-49171-D-7	079SB-0353M-0001-SO	Moisture	T	4.2418 g	10.0038 g	8.9582 g			
240-49171-D-9	079SB-0354M-0001-SO	Moisture	T	4.2418 g	10.3226 g	9.4276 g			

Batch Notes	
Balance ID	B047 No Unit
Date samples were placed in the oven	4/10/2015
Oven Temp when samples are put in oven	103.6 Degrees C
Time samples were place in the oven	8:41
Date samples were removed from oven	4/11/15
Oven Temp when samples removed from oven	103.6 Degrees C
Time Samples were removed from oven	09:05
Oven ID	002
ID number of the thermometer	Tempguard Box-C #6

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176189 Batch Start Date: 04/13/15 11:34 Batch Analyst: Matheny, Sarah

Batch Method: Moisture Batch End Date: 04/14/15 10:36

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-49171-A-6-A	079SB-0352M-0001-SO	Moisture	T	4.2418 g	18.6481 g	18.3305 g			
240-49171-A-8-A	079SB-0353M-0001-SO	Moisture	T	4.2418 g	19.2460 g	18.8874 g			
240-49171-A-10-A	079SB-0354M-0001-SO	Moisture	T	4.2418 g	20.7399 g	20.5550 g			

Batch Notes	
Balance ID	B047 No Unit
Date samples were placed in the oven	4/13/2015
Oven Temp when samples are put in oven	103.2 Degrees C
Time samples were place in the oven	17:23
Date samples were removed from oven	4/14/2015
Oven Temp when samples removed from oven	103.5 Degrees C
Time Samples were removed from oven	8:10
Oven ID	002
ID number of the thermometer	Tempguard Box-C #6

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176546 Batch Start Date: 04/15/15 10:46 Batch Analyst: Matheny, Sarah

Batch Method: Moisture Batch End Date: 04/16/15 09:48

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-49171-A-2-A	079SB-0340M-0001-SO	Moisture	T	4.2418 g	22.9626 g	22.5350 g			
240-49171-A-4-A	079SB-0351M-0001-SO	Moisture	T	4.2418 g	26.0969 g	25.8785 g			
240-49171-A-11-A	079SB-0357M-0001-SO	Moisture	T	4.2418 g	19.0276 g	18.8231 g			
240-49171-A-13-A	079SB-0355M-0001-SO	Moisture	T	4.2418 g	21.2548 g	21.0874 g			
240-49171-A-14-A	079SB-0356M-0001-SO	Moisture	T	4.2418 g	27.2750 g	26.9982 g			
240-49171-A-15-A	079SB-0358M-0001-SO	Moisture	T	4.2418 g	20.8936 g	20.5487 g			
240-49171-A-16-A	079SB-0359M-0001-SO	Moisture	T	4.2418 g	23.9501 g	23.5938 g			
240-49171-A-17-A	079SB-0360M-0001-SO	Moisture	T	4.2418 g	22.7609 g	22.3882 g			
240-49171-A-1-BDU	079SB-0339M-0001, 0002-SO	Moisture	T	4.2418 g	23.6827 g	23.3087 g			
240-49171-A-1-A	079SB-0339M-0001, 0002-SO	Moisture	T	4.2418 g	22.4453 g	22.0886 g			
240-49171-A-18-A	079SB-0361M-0001-SO	Moisture	T	4.2418 g	22.0706 g	21.7256 g			
240-49171-A-20-A	079SB-0363M-0001-SO	Moisture	T	4.2418 g	22.1193 g	21.7348 g			
240-49171-A-21-A	079SB-0364M-0001-SO	Moisture	T	4.2418 g	19.3272 g	19.0045 g			
240-49171-A-3-BDU	079SB-0341M-0001, 0002-SO	Moisture	T	4.2418 g	22.0906 g	21.8825 g			
240-49171-A-3-A	079SB-0341M-0001, 0002-SO	Moisture	T	4.2418 g	21.0106 g	20.8339 g			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49171-1

SDG No.:

Batch Number: 176546 Batch Start Date: 04/15/15 10:46 Batch Analyst: Matheny, Sarah

Batch Method: Moisture Batch End Date: 04/16/15 09:48

Batch Notes	
Balance ID	B047 No Unit
Date and Time Samples in Desiccator	4/15/15; 05:30
Date and Time Samples out of Desiccator	4/15/15; 10:15
Date samples were placed in the oven	4/15/2015
Oven Temp when samples are put in oven	103.1 Degrees C
Time samples were place in the oven	18:20
Date samples were removed from oven	4/16/15
Oven Temp when samples removed from oven	103.9 Degrees C
Time Samples were removed from oven	6:30
Oven ID	002
ID number of the thermometer	Tempguard Box-C #6

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Batch Number: 71507 Batch Start Date: 04/20/15 08:52 Batch Analyst: Arauz, Horacio J

Batch Method: 353.2 (NCell) Batch End Date: 04/20/15 14:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	HPNCSP 00013			
MB 320-71507/1		353.2 (NCell), 353 (NCell-Hyd), WS-WC-0050		10.00 g	45.00 mL				
LCS 320-71507/2		353.2 (NCell), 353 (NCell-Hyd), WS-WC-0050		10.00 g	45.00 mL	1 mL			
240-49171-C-6	079SB-0352M-0001 -SO	353.2 (NCell), 353 (NCell-Hyd), WS-WC-0050	T	10.03 g	45.00 mL				
240-49171-C-8	079SB-0353M-0001 -SO	353.2 (NCell), 353 (NCell-Hyd), WS-WC-0050	T	10.02 g	45.00 mL				
240-49171-C-10	079SB-0354M-0001 -SO	353.2 (NCell), 353 (NCell-Hyd), WS-WC-0050	T	10.06 g	45.00 mL				

Batch Notes	
1:1 MeOH/H2O	394159
Acetone Lot #	J.T.BAKER 0000090987
Batch Comment	Pipette HD05018
Centrifuge Tube	BD FALCON 24214177

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Batch Number: 71631 Batch Start Date: 04/21/15 06:29 Batch Analyst: Arauz, Horacio J

Batch Method: 353 (NCell-Hyd) Batch End Date: 04/21/15 10:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
MB 320-71507/1-A		353 (NCell-Hyd), WS-WC-0050		45.00 mL	40.00 mL	PH-6,3			
LCS 320-71507/2-A		353 (NCell-Hyd), WS-WC-0050		45.00 mL	40.00 mL	PH-6,3			
240-49171-C-6-C	079SB-0352M-0001 -SO	353 (NCell-Hyd), WS-WC-0050	T	45.00 mL	40.00 mL	PH-6,3			
240-49171-C-8-C	079SB-0353M-0001 -SO	353 (NCell-Hyd), WS-WC-0050	T	45.00 mL	40.00 mL	PH-6,3			
240-49171-C-10-C	079SB-0354M-0001 -SO	353 (NCell-Hyd), WS-WC-0050	T	45.00 mL	40.00 mL	PH-6,3			

Batch Notes	
0.45 Filter Vendor/Lot	Millipore R4NA21509
Batch Comment	Pipette HD05018
Centrifuge Tube	BD FALCON 24214177
Sulfuric Acid Lot Number	263550
Millipore Water Dispense Date	4-14-15
NaOH Lot #	361079

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 240-49171-1

SDG No.:

Batch Number: 72011 Batch Start Date: 04/22/15 13:16 Batch Analyst: Baynes, Jason

Batch Method: WS-WC-0050 Batch End Date: 04/22/15 14:37

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC-353.2-ICV 00046	WC-353.2-L1 00051	WC-353.2-L4 00042			
ICV 320-72011/9		WS-WC-0050		# mL					
MRL 320-72011/11		WS-WC-0050			# mL				
MRL 320-72011/27		WS-WC-0050			# mL				
CCV 320-72011/28		WS-WC-0050				# mL			
MRL 320-72011/36		WS-WC-0050			# mL				
CCV 320-72011/37		WS-WC-0050				# mL			

Batch Notes	
Nitrocellulose Assay	0.120
Color Reagent 1 ID	WC-353.2Color_00007 e. 06/30/15
NO2/NO3 Indicator ID #	WC-NOxBuffer_00021 e. 10/01/15

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Subcontract Data

Shipping and Receiving Documents

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS

4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Test America Project #: 24009157

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/9/2015	COC No: 004
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	1 of 2 COCs
33 Boston Post Rd. W	Analysis Turnaround Time			For Lab Use Only:
Marlborough, MA, 01752	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☑ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Main Storage Area	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler:MG -AW

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW7471A/ Mercury	SW3260B/5030	Sample Specific Notes:
079SB-0339M-0001-SO	8-Apr-15	1106	ISM	SO	1	N	N			X						X		
079SB-0339M-0002-SO	8-Apr-15	1106	ISM	SO	2	N	Y			X						X		MS/MSD
079SB-0340M-0001-SO	8-Apr-15	0000	ISM	SO	1	N	N			X						X		
079SB-0341M-0001-SO	8-Apr-15	1130	ISM	SO	1	N	N			X						X		
079SB-0341M-0002-SO	8-Apr-15	1130	ISM	SO	1	N	Y			X						X		MS/MSD
079SB-0351M-0001-SO	8-Apr-15	0000	ISM	SO	1	N	N			X						X		
079SB-0352M-0001-SO	8-Apr-15	1027	ISM	SO	5	N	N	X	X	X	X	X	X	X	X	X		Full Suite
079SB-0353M-0001-SO	8-Apr-15	0957	ISM	SO	5	N	N	X	X	X	X	X	X	X	X	X		Full Suite
079SB-0354M-0001-SO	8-Apr-15	1130	ISM	SO	5	N	N	X	X	X	X	X	X	X	X	X		Full Suite
079SB-0357M-0001-SO	8-Apr-15	0912	ISM	SO	1	N	N			X						X		
079SB-0380-0001-TB	8-Apr-15	0800	Lab Supplied	DI	2	N	N										X	Trip Blank
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	1,2	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments: ISM preparation required for samples with "M" in sample name.

Custody Seals Intact: ☒Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Bel	4-9-15	R. Tobin	TestAm.	4-9-15 1116
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
R Tobin	TestAm 4/9/15	1950		TA	4-9-15 1451
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

Test America Project #: 24009157

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/9/2015	COC No: 004
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	2 of 2 COCs
33 Boston Post Rd. W	**Analysis Turnaround Time**			**For Lab Use Only:**
Marlborough, MA, 01752	☑CALENDAR DAYS ☐WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☐ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Main Storage Area	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler:MG -AW

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW7471A/ Mercury	Sample Specific Notes:
079SB-0355M-0001-SO	8-Apr-15	1330	ISM	SO	1	N	N			X						X	
079SB-0356M-0001-SO	8-Apr-15	1310	ISM	SO	1	N	N			X						X	
079SB-0358M-0001-SO	8-Apr-15	1441	ISM	SO	1	N	N			X						X	
079SB-0359M-0001-SO	8-Apr-15	1500	ISM	SO	1	N	N			X						X	
079SB-0360M-0001-SO	8-Apr-15	1628	ISM	SO	1	N	N			X						X	
079SB-0361M-0001-SO	8-Apr-15	1641	ISM	SO	1	N	N			X						X	
079SB-0362-0001-SO	8-Apr-15	1653	C	SO	1	N	N			X						X	composite do not dry
079SB-0363M-0001-SO	8-Apr-15	1537	ISM	SO	1	N	N			X						X	
079SB-0364M-0001-SO	8-Apr-15	0000	ISM	SO	1	N	N			X						X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments: ISM preparation required for samples with "M" in sample name. Sample 079SB-0362-0001-SO is a composite sample, not ISM, do not dry.

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	KEC	4-9-15		TestAm	4-9-15 1116
Relinquished by:	TestAm	4-9-15 1451		TA	4-10-15 1451
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 49171**
Canton Facility

Client ECC Site Name

Cooler unpacked by:

Cooler Received on 4-9-15 Opened on 4.9.15

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off ~~TestAmerica Courier~~ Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box (Other)

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

~~IR GUN# A (CF +4.0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C ☑ See Multiple Cooler Form

~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 4	(Yes)	No
-Were custody seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were custody seals on the bottle(s)?	Yes	(No)
3. Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the sampler(s) clearly identified on the COC?	Yes	(No)
7. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8. Could all bottle labels be reconciled with the COC?	(Yes)	No
9. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
10. Sufficient quantity received to perform indicated analyses?	(Yes)	No
11. Were sample(s) at the correct pH upon receipt?	Yes	No (NA) pH Strip Lot# **HC425511**
12. Were VOAs on the COC?	(Yes)	No
13. Were air bubbles >6 mm in any VOA vials?	Yes	(No) NA
14. Was a trip blank present in the cooler(s)? Trip Blank Lot #	(Yes)	No

Contacted PM Date by via Verbal Voice Mail Other

Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.

Time preserved: Preservative(s) added/Lot number(s):

TestAmerica Multiple Cooler Receipt Form/Narrative
Canton Facility

Login # : 49171

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
client	4	2.8	3.3	ice
↓	↓	4.0	4.5	↓
		3.6	4.1	
		3.8	4.3	

Login Sample Receipt Checklist

Client: Environmental Chemical Corp.

Job Number: 240-49171-1

Login Number: 49171
List Number: 2
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 04/14/15 12:04 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Job Number: 240-49172-1

SDG Number: CC RVAAP-79 Load Line 3

Job Description: Ravenna Army Ammunition Plant

For:
Environmental Chemical Corp.
33 Boston Post Road West
Suite 420
Marlborough, MA 01752

Attention: Mr. Jackson Kiker

Approved for release.
Mark J Loeb
Project Manager II
4/30/2015 5:24 PM

Mark J Loeb, Project Manager II
4101 Shuffel Street NW, North Canton, OH, 44720
(330)966-9387
mark.loeb@testamericainc.com
04/30/2015

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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Qualifiers

Metals

Qualifier	Qualifier Description
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.
Q	One or more quality control criteria failed.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Environmental Chemical Corp.

Project: Ravenna Army Ammunition Plant

Report Number: 240-49172-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

TestAmerica utilizes USEPA approved methods and DOD QSM, where applicable, in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A summary of QC data for these analyses is included at the back of the report.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

All parameters for which TestAmerica North Canton has certification were evaluated to the limit of detection (LOD) and include qualified results where applicable. Parameters not certified under QSM, if any, were evaluated to the detection limit (DL) and include qualified results where applicable.

The sample(s) that contain constituents flagged with U are undetected. The result associated with this flag is the limit of detection (LOD).

RECEIPT

The samples were received on 4/9/2015 2:51 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.3º C, 4.1º C, 4.3º C and 4.5º C.

TOTAL METALS (ICPMS) WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SS-0369M-0001-SO (240-49172-1), 079SS-0370M-0001-SO (240-49172-2), 079SS-0371M-0001-SO (240-49172-3), 079SS-0372M-0001-SO (240-49172-4), 079SS-0373M-0001-SO (240-49172-5), 079SS-0374M-0001-SO (240-49172-6), 079SS-0375M-0001-SO (240-49172-7), 079SS-0376M-0001-SO (240-49172-8), 079SS-0377M-0001-SO (240-49172-9) and 079SS-0378M-0001-SO (240-49172-10) were analyzed for total metals (ICPMS) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 6020 DoD. The samples began the drying process on on 04/10/2015 and 04/14/2015, were prepared on 04/16/2015 and 04/20/2015 and analyzed on 04/20/2015, 04/22/2015, 04/24/2015 and 04/28/2015.

Several analytes were detected in method blank MB 240-176698/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Lead was detected in method blank MB 240-177128/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples 079SS-0369M-0001-SO (240-49172-1)[20X], 079SS-0370M-0001-SO (240-49172-2)[20X], 079SS-0371M-0001-SO (240-49172-3)[20X], 079SS-0372M-0001-SO (240-49172-4)[20X], 079SS-0373M-0001-SO (240-49172-5)[20X], 079SS-0374M-0001-SO (240-49172-6)[20X], 079SS-0375M-0001-SO (240-49172-7)[20X], 079SS-0376M-0001-SO (240-49172-8)[20X], 079SS-0377M-0001-SO (240-49172-9)[20X] and 079SS-0378M-0001-SO (240-49172-10)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MERCURY WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SS-0369M-0001-SO (240-49172-1), 079SS-0370M-0001-SO (240-49172-2), 079SS-0371M-0001-SO (240-49172-3), 079SS-0372M-0001-SO (240-49172-4), 079SS-0373M-0001-SO (240-49172-5), 079SS-0374M-0001-SO (240-49172-6), 079SS-0375M-0001-SO (240-49172-7), 079SS-0376M-0001-SO (240-49172-8), 079SS-0377M-0001-SO (240-49172-9) and 079SS-0378M-0001-SO (240-49172-10) were analyzed for mercury with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 7471A DOD. The samples began the drying process on 04/10/2015 and 04/14/2015, were prepared on 04/16/2015 and 04/20/2015 and analyzed on 04/20/2015 and 04/21/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL SOLIDS/PERCENT MOISTURE

Samples 079SS-0369M-0001-SO (240-49172-1), 079SS-0370M-0001-SO (240-49172-2), 079SS-0371M-0001-SO (240-49172-3), 079SS-0372M-0001-SO (240-49172-4), 079SS-0373M-0001-SO (240-49172-5), 079SS-0374M-0001-SO (240-49172-6), 079SS-0375M-0001-SO (240-49172-7), 079SS-0376M-0001-SO (240-49172-8), 079SS-0377M-0001-SO (240-49172-9) and 079SS-0378M-0001-SO (240-49172-10) were analyzed for Total Solids/Percent Moisture in accordance with Percent Moisture method. The samples began the drying process on 04/10/2015 and 04/14/2015 and were analyzed on 04/15/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49172-1
SDG: CC RVAAP-79 Load Line 3

Client Sample ID: 079SS-0369M-0001-SO — Lab Sample ID: 240-49172-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11000	D	15	0.48	mg/Kg	2	☼	6020	Total/NA
Antimony	2.2	D	0.31	0.011	mg/Kg	2	☼	6020	Total/NA
Arsenic	11	D	0.77	0.020	mg/Kg	2	☼	6020	Total/NA
Barium	73	D	0.77	0.17	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.59	D	0.15	0.0085	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.18	J D	0.31	0.0029	mg/Kg	2	☼	6020	Total/NA
Calcium	4900	D	310	17	mg/Kg	2	☼	6020	Total/NA
Chromium	17	D	0.77	0.046	mg/Kg	2	☼	6020	Total/NA
Cobalt	9.1	D	0.15	0.0013	mg/Kg	2	☼	6020	Total/NA
Copper	11	D	0.62	0.075	mg/Kg	2	☼	6020	Total/NA
Iron	27000	D	770	25	mg/Kg	20	☼	6020	Total/NA
Lead	15	D	0.46	0.035	mg/Kg	2	☼	6020	Total/NA
Magnesium	3000	D	150	3.1	mg/Kg	2	☼	6020	Total/NA
Manganese	480	D	7.7	0.93	mg/Kg	20	☼	6020	Total/NA
Nickel	19	D	0.77	0.030	mg/Kg	2	☼	6020	Total/NA
Potassium	960	D	150	3.8	mg/Kg	2	☼	6020	Total/NA
Selenium	0.83	D	0.77	0.031	mg/Kg	2	☼	6020	Total/NA
Silver	0.052	J D	0.15	0.0011	mg/Kg	2	☼	6020	Total/NA
Sodium	44	J D	150	6.7	mg/Kg	2	☼	6020	Total/NA
Thallium	0.16	J D	0.31	0.015	mg/Kg	2	☼	6020	Total/NA
Vanadium	21	D	0.77	0.029	mg/Kg	2	☼	6020	Total/NA
Zinc	53	D	6.2	0.39	mg/Kg	2	☼	6020	Total/NA
Mercury	0.032	J	0.091	0.013	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SS-0370M-0001-SO — Lab Sample ID: 240-49172-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11000	D	18	0.56	mg/Kg	2	☼	6020	Total/NA
Antimony	0.70	D	0.36	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	11	D	0.91	0.024	mg/Kg	2	☼	6020	Total/NA
Barium	80	D	0.91	0.20	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.65	D	0.18	0.010	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.17	J D	0.36	0.0034	mg/Kg	2	☼	6020	Total/NA
Calcium	410	D	360	20	mg/Kg	2	☼	6020	Total/NA
Chromium	17	D	0.91	0.054	mg/Kg	2	☼	6020	Total/NA
Cobalt	9.6	D	0.18	0.0015	mg/Kg	2	☼	6020	Total/NA
Copper	12	D	0.73	0.088	mg/Kg	2	☼	6020	Total/NA
Iron	24000	D	910	29	mg/Kg	20	☼	6020	Total/NA
Lead	18	D	0.54	0.041	mg/Kg	2	☼	6020	Total/NA
Magnesium	1900	D	180	3.6	mg/Kg	2	☼	6020	Total/NA
Manganese	940	D	9.1	1.1	mg/Kg	20	☼	6020	Total/NA
Nickel	19	D	0.91	0.035	mg/Kg	2	☼	6020	Total/NA
Potassium	720	D	180	4.4	mg/Kg	2	☼	6020	Total/NA
Selenium	0.95	D	0.91	0.036	mg/Kg	2	☼	6020	Total/NA
Silver	0.049	J D	0.18	0.0013	mg/Kg	2	☼	6020	Total/NA
Sodium	27	J D	180	7.9	mg/Kg	2	☼	6020	Total/NA
Thallium	0.17	J D	0.36	0.017	mg/Kg	2	☼	6020	Total/NA
Vanadium	24	D	0.91	0.034	mg/Kg	2	☼	6020	Total/NA
Zinc	53	D	7.3	0.45	mg/Kg	2	☼	6020	Total/NA
Mercury	0.047	J	0.092	0.013	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49172-1
SDG: CC RVAAP-79 Load Line 3

Client Sample ID: 079SS-0371M-0001-SO — Lab Sample ID: 240-49172-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11000	D	17	0.52	mg/Kg	2	☼	6020	Total/NA
Antimony	0.16	J D	0.34	0.012	mg/Kg	2	☼	6020	Total/NA
Arsenic	13	D	0.84	0.022	mg/Kg	2	☼	6020	Total/NA
Barium	100	D	0.84	0.18	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.79	D	0.17	0.0092	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.19	J D	0.34	0.0031	mg/Kg	2	☼	6020	Total/NA
Calcium	340	D	340	18	mg/Kg	2	☼	6020	Total/NA
Chromium	19	D	0.84	0.050	mg/Kg	2	☼	6020	Total/NA
Cobalt	12	D	0.17	0.0014	mg/Kg	2	☼	6020	Total/NA
Copper	13	D	0.67	0.081	mg/Kg	2	☼	6020	Total/NA
Iron	29000	D	840	27	mg/Kg	20	☼	6020	Total/NA
Lead	17	D	0.50	0.038	mg/Kg	2	☼	6020	Total/NA
Magnesium	2200	D	170	3.4	mg/Kg	2	☼	6020	Total/NA
Manganese	1200	D	8.4	1.0	mg/Kg	20	☼	6020	Total/NA
Nickel	24	D	0.84	0.033	mg/Kg	2	☼	6020	Total/NA
Potassium	780	D	170	4.1	mg/Kg	2	☼	6020	Total/NA
Selenium	1.0	D	0.84	0.034	mg/Kg	2	☼	6020	Total/NA
Silver	0.045	J D	0.17	0.0012	mg/Kg	2	☼	6020	Total/NA
Sodium	28	J D	170	7.3	mg/Kg	2	☼	6020	Total/NA
Thallium	0.17	J D	0.34	0.016	mg/Kg	2	☼	6020	Total/NA
Vanadium	27	D	0.84	0.031	mg/Kg	2	☼	6020	Total/NA
Zinc	60	D	6.7	0.42	mg/Kg	2	☼	6020	Total/NA
Mercury	0.037	J	0.097	0.014	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SS-0372M-0001-SO — Lab Sample ID: 240-49172-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11000	D	15	0.47	mg/Kg	2	☼	6020	Total/NA
Antimony	0.11	J D	0.30	0.011	mg/Kg	2	☼	6020	Total/NA
Arsenic	9.4	D	0.75	0.020	mg/Kg	2	☼	6020	Total/NA
Barium	60	D	0.75	0.17	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.50	D	0.15	0.0083	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.16	J D	0.30	0.0028	mg/Kg	2	☼	6020	Total/NA
Calcium	370	D	300	17	mg/Kg	2	☼	6020	Total/NA
Chromium	15	D	0.75	0.045	mg/Kg	2	☼	6020	Total/NA
Cobalt	8.2	D	0.15	0.0013	mg/Kg	2	☼	6020	Total/NA
Copper	8.2	D	0.60	0.073	mg/Kg	2	☼	6020	Total/NA
Iron	22000	D	750	24	mg/Kg	20	☼	6020	Total/NA
Lead	17	D	0.45	0.034	mg/Kg	2	☼	6020	Total/NA
Magnesium	1700	D	150	3.0	mg/Kg	2	☼	6020	Total/NA
Manganese	670	D	7.5	0.90	mg/Kg	20	☼	6020	Total/NA
Nickel	15	D	0.75	0.029	mg/Kg	2	☼	6020	Total/NA
Potassium	540	D	150	3.7	mg/Kg	2	☼	6020	Total/NA
Selenium	0.84	D	0.75	0.030	mg/Kg	2	☼	6020	Total/NA
Silver	0.038	J D	0.15	0.0011	mg/Kg	2	☼	6020	Total/NA
Sodium	23	J D	150	6.5	mg/Kg	2	☼	6020	Total/NA
Thallium	0.15	J D	0.30	0.014	mg/Kg	2	☼	6020	Total/NA
Vanadium	23	D	0.75	0.028	mg/Kg	2	☼	6020	Total/NA
Zinc	57	D	6.0	0.38	mg/Kg	2	☼	6020	Total/NA
Mercury	0.044	J	0.094	0.013	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49172-1
SDG: CC RVAAP-79 Load Line 3

Client Sample ID: 079SS-0373M-0001-SO — Lab Sample ID: 240-49172-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11000	D	18	0.55	mg/Kg	2	☼	6020	Total/NA
Antimony	0.19	J D	0.36	0.012	mg/Kg	2	☼	6020	Total/NA
Arsenic	9.4	D	0.89	0.023	mg/Kg	2	☼	6020	Total/NA
Barium	92	D	0.89	0.20	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.59	D	0.18	0.0098	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.22	J D	0.36	0.0033	mg/Kg	2	☼	6020	Total/NA
Calcium	940	D	360	20	mg/Kg	2	☼	6020	Total/NA
Chromium	17	D	0.89	0.053	mg/Kg	2	☼	6020	Total/NA
Cobalt	9.5	D	0.18	0.0015	mg/Kg	2	☼	6020	Total/NA
Copper	9.0	D	0.71	0.086	mg/Kg	2	☼	6020	Total/NA
Iron	22000	D	890	28	mg/Kg	20	☼	6020	Total/NA
Lead	18	D	0.53	0.040	mg/Kg	2	☼	6020	Total/NA
Magnesium	1800	D	180	3.6	mg/Kg	2	☼	6020	Total/NA
Manganese	1300	D	8.9	1.1	mg/Kg	20	☼	6020	Total/NA
Nickel	18	D	0.89	0.035	mg/Kg	2	☼	6020	Total/NA
Potassium	670	D	180	4.4	mg/Kg	2	☼	6020	Total/NA
Selenium	0.96	D	0.89	0.036	mg/Kg	2	☼	6020	Total/NA
Silver	0.049	J D	0.18	0.0012	mg/Kg	2	☼	6020	Total/NA
Sodium	27	J D	180	7.7	mg/Kg	2	☼	6020	Total/NA
Thallium	0.17	J D	0.36	0.017	mg/Kg	2	☼	6020	Total/NA
Vanadium	24	D	0.89	0.033	mg/Kg	2	☼	6020	Total/NA
Zinc	54	D	7.1	0.44	mg/Kg	2	☼	6020	Total/NA
Mercury	0.054	J	0.088	0.012	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SS-0374M-0001-SO — Lab Sample ID: 240-49172-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11000	D	19	0.59	mg/Kg	2	☼	6020	Total/NA
Antimony	0.30	J D	0.38	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	9.6	D	0.95	0.025	mg/Kg	2	☼	6020	Total/NA
Barium	110	D	0.95	0.21	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.57	D	0.19	0.011	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.21	J D	0.38	0.0035	mg/Kg	2	☼	6020	Total/NA
Calcium	2000	D	380	21	mg/Kg	2	☼	6020	Total/NA
Chromium	17	D	0.95	0.057	mg/Kg	2	☼	6020	Total/NA
Cobalt	8.1	D	0.19	0.0016	mg/Kg	2	☼	6020	Total/NA
Copper	13	D	0.76	0.093	mg/Kg	2	☼	6020	Total/NA
Iron	21000	D	950	31	mg/Kg	20	☼	6020	Total/NA
Lead	23	D	0.57	0.043	mg/Kg	2	☼	6020	Total/NA
Magnesium	2000	D	190	3.8	mg/Kg	2	☼	6020	Total/NA
Manganese	670	D	9.5	1.1	mg/Kg	20	☼	6020	Total/NA
Nickel	20	D	0.95	0.037	mg/Kg	2	☼	6020	Total/NA
Potassium	700	D	190	4.7	mg/Kg	2	☼	6020	Total/NA
Selenium	0.91	J D	0.95	0.038	mg/Kg	2	☼	6020	Total/NA
Silver	0.046	J D	0.19	0.0013	mg/Kg	2	☼	6020	Total/NA
Sodium	32	J D	190	8.3	mg/Kg	2	☼	6020	Total/NA
Thallium	0.16	J D	0.38	0.018	mg/Kg	2	☼	6020	Total/NA
Vanadium	24	D	0.95	0.035	mg/Kg	2	☼	6020	Total/NA
Zinc	67	D	7.6	0.48	mg/Kg	2	☼	6020	Total/NA
Mercury	0.084	J	0.092	0.013	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49172-1
SDG: CC RVAAP-79 Load Line 3

Client Sample ID: 079SS-0375M-0001-SO — Lab Sample ID: 240-49172-7

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8600	D	19	0.60	mg/Kg	2	☼	6020	Total/NA
Antimony	0.069	J D	0.38	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	10	D	0.96	0.025	mg/Kg	2	☼	6020	Total/NA
Barium	52	D	0.96	0.21	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.65	D	0.19	0.011	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.12	J D	0.38	0.0036	mg/Kg	2	☼	6020	Total/NA
Calcium	400	D	380	21	mg/Kg	2	☼	6020	Total/NA
Chromium	26	D	0.96	0.058	mg/Kg	2	☼	6020	Total/NA
Cobalt	8.5	D	0.19	0.0016	mg/Kg	2	☼	6020	Total/NA
Copper	16	D	0.77	0.093	mg/Kg	2	☼	6020	Total/NA
Iron	26000	D	960	31	mg/Kg	20	☼	6020	Total/NA
Lead	15	D	0.58	0.043	mg/Kg	2	☼	6020	Total/NA
Magnesium	2100	D	190	3.8	mg/Kg	2	☼	6020	Total/NA
Manganese	330	D	9.6	1.2	mg/Kg	20	☼	6020	Total/NA
Nickel	27	D	0.96	0.037	mg/Kg	2	☼	6020	Total/NA
Potassium	1200	D	190	4.7	mg/Kg	2	☼	6020	Total/NA
Selenium	0.92	J D	0.96	0.038	mg/Kg	2	☼	6020	Total/NA
Silver	0.031	J D	0.19	0.0013	mg/Kg	2	☼	6020	Total/NA
Sodium	39	J D	190	8.4	mg/Kg	2	☼	6020	Total/NA
Thallium	0.14	J D	0.38	0.018	mg/Kg	2	☼	6020	Total/NA
Vanadium	16	D	0.96	0.036	mg/Kg	2	☼	6020	Total/NA
Zinc	41	D	7.7	0.48	mg/Kg	2	☼	6020	Total/NA
Mercury	0.016	J	0.090	0.013	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SS-0376M-0001-SO — Lab Sample ID: 240-49172-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	15000	D	20	0.60	mg/Kg	2	☼	6020	Total/NA
Antimony	0.13	J D	0.39	0.014	mg/Kg	2	☼	6020	Total/NA
Arsenic	14	D	0.98	0.025	mg/Kg	2	☼	6020	Total/NA
Barium	67	D	0.98	0.21	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.69	D	0.20	0.011	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.13	J D	0.39	0.0036	mg/Kg	2	☼	6020	Total/NA
Calcium	260	J D	390	21	mg/Kg	2	☼	6020	Total/NA
Chromium	21	D	0.98	0.059	mg/Kg	2	☼	6020	Total/NA
Cobalt	7.6	D	0.20	0.0017	mg/Kg	2	☼	6020	Total/NA
Copper	18	D	0.78	0.095	mg/Kg	2	☼	6020	Total/NA
Iron	30000	D	980	31	mg/Kg	20	☼	6020	Total/NA
Lead	14	D	0.59	0.044	mg/Kg	2	☼	6020	Total/NA
Magnesium	2500	D	200	3.9	mg/Kg	2	☼	6020	Total/NA
Manganese	150	D	9.8	1.2	mg/Kg	20	☼	6020	Total/NA
Nickel	19	D	0.98	0.038	mg/Kg	2	☼	6020	Total/NA
Potassium	1200	D	200	4.8	mg/Kg	2	☼	6020	Total/NA
Selenium	1.2	D	0.98	0.039	mg/Kg	2	☼	6020	Total/NA
Silver	0.039	J D	0.20	0.0014	mg/Kg	2	☼	6020	Total/NA
Sodium	36	J D	200	8.5	mg/Kg	2	☼	6020	Total/NA
Thallium	0.20	J D	0.39	0.019	mg/Kg	2	☼	6020	Total/NA
Vanadium	26	D	0.98	0.036	mg/Kg	2	☼	6020	Total/NA
Zinc	50	D	7.8	0.49	mg/Kg	2	☼	6020	Total/NA
Mercury	0.029	J	0.10	0.015	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49172-1
SDG: CC RVAAP-79 Load Line 3

Client Sample ID: 079SS-0377M-0001-SO — Lab Sample ID: 240-49172-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	12000	D	18	0.57	mg/Kg	2	☼	6020	Total/NA
Antimony	0.16	J D	0.37	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	13	D	0.91	0.024	mg/Kg	2	☼	6020	Total/NA
Barium	69	D	0.91	0.20	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.67	D	0.18	0.010	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.15	J D	0.37	0.0034	mg/Kg	2	☼	6020	Total/NA
Calcium	340	J D	370	20	mg/Kg	2	☼	6020	Total/NA
Chromium	19	D	0.91	0.055	mg/Kg	2	☼	6020	Total/NA
Cobalt	9.8	D	0.18	0.0016	mg/Kg	2	☼	6020	Total/NA
Copper	19	D	0.73	0.089	mg/Kg	2	☼	6020	Total/NA
Iron	26000	D	91	2.9	mg/Kg	2	☼	6020	Total/NA
Lead	12	D	5.5	0.41	mg/Kg	20	☼	6020	Total/NA
Magnesium	2800	D	180	3.7	mg/Kg	2	☼	6020	Total/NA
Manganese	260	D	9.1	1.1	mg/Kg	20	☼	6020	Total/NA
Nickel	23	D	0.91	0.036	mg/Kg	2	☼	6020	Total/NA
Potassium	1000	D	180	4.5	mg/Kg	2	☼	6020	Total/NA
Selenium	1.1	D	0.91	0.037	mg/Kg	2	☼	6020	Total/NA
Silver	0.028	J D	0.18	0.0013	mg/Kg	2	☼	6020	Total/NA
Sodium	34	J D	180	7.9	mg/Kg	2	☼	6020	Total/NA
Thallium	0.18	J D	0.37	0.017	mg/Kg	2	☼	6020	Total/NA
Vanadium	22	D	0.91	0.034	mg/Kg	2	☼	6020	Total/NA
Zinc	53	D	7.3	0.46	mg/Kg	2	☼	6020	Total/NA
Mercury	0.021	J	0.11	0.016	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SS-0378M-0001-SO — Lab Sample ID: 240-49172-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	10000	D	17	0.52	mg/Kg	2	☼	6020	Total/NA
Antimony	0.13	J D	0.34	0.012	mg/Kg	2	☼	6020	Total/NA
Arsenic	9.8	D	0.84	0.022	mg/Kg	2	☼	6020	Total/NA
Barium	64	D	0.84	0.19	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.55	D	0.17	0.0093	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.12	J D	0.34	0.0031	mg/Kg	2	☼	6020	Total/NA
Calcium	300	J D	340	19	mg/Kg	2	☼	6020	Total/NA
Chromium	15	D	0.84	0.051	mg/Kg	2	☼	6020	Total/NA
Cobalt	10	D	0.17	0.0014	mg/Kg	2	☼	6020	Total/NA
Copper	12	D	0.68	0.082	mg/Kg	2	☼	6020	Total/NA
Iron	22000	D	84	2.7	mg/Kg	2	☼	6020	Total/NA
Lead	13	D	5.1	0.38	mg/Kg	20	☼	6020	Total/NA
Magnesium	1800	D	170	3.4	mg/Kg	2	☼	6020	Total/NA
Manganese	770	D	8.4	1.0	mg/Kg	20	☼	6020	Total/NA
Nickel	15	D	0.84	0.033	mg/Kg	2	☼	6020	Total/NA
Potassium	640	D	170	4.1	mg/Kg	2	☼	6020	Total/NA
Selenium	0.86	D	0.84	0.034	mg/Kg	2	☼	6020	Total/NA
Silver	0.028	J D	0.17	0.0012	mg/Kg	2	☼	6020	Total/NA
Sodium	27	J D	170	7.3	mg/Kg	2	☼	6020	Total/NA
Thallium	0.16	J D	0.34	0.016	mg/Kg	2	☼	6020	Total/NA
Vanadium	22	D	0.84	0.031	mg/Kg	2	☼	6020	Total/NA
Zinc	44	D	6.8	0.42	mg/Kg	2	☼	6020	Total/NA
Mercury	0.038	J	0.11	0.015	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SS-0369M-0001-SO

Lab Sample ID: 240-49172-1

Date Collected: 04/08/15 10:20
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	D	15	0.48	mg/Kg	☼	04/16/15 09:59	04/22/15 18:15	2
Antimony	2.2	D	0.31	0.011	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Arsenic	11	D	0.77	0.020	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Barium	73	D	0.77	0.17	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Beryllium	0.59	D	0.15	0.0085	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Cadmium	0.18	J D	0.31	0.0029	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Calcium	4900	D	310	17	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Chromium	17	D	0.77	0.046	mg/Kg	☼	04/16/15 09:59	04/22/15 18:15	2
Cobalt	9.1	D	0.15	0.0013	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Copper	11	D	0.62	0.075	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Iron	27000	D	770	25	mg/Kg	☼	04/16/15 09:59	04/24/15 16:53	20
Lead	15	D	0.46	0.035	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Magnesium	3000	D	150	3.1	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Manganese	480	D	7.7	0.93	mg/Kg	☼	04/16/15 09:59	04/24/15 16:53	20
Nickel	19	D	0.77	0.030	mg/Kg	☼	04/16/15 09:59	04/22/15 18:15	2
Potassium	960	D	150	3.8	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Selenium	0.83	D	0.77	0.031	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Silver	0.052	J D	0.15	0.0011	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Sodium	44	J D	150	6.7	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Thallium	0.16	J D	0.31	0.015	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Vanadium	21	D	0.77	0.029	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2
Zinc	53	D	6.2	0.39	mg/Kg	☼	04/16/15 09:59	04/20/15 20:54	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032	J	0.091	0.013	mg/Kg	☼	04/16/15 14:45	04/20/15 11:53	1

Client Sample ID: 079SS-0370M-0001-SO

Lab Sample ID: 240-49172-2

Date Collected: 04/08/15 12:40
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	D	18	0.56	mg/Kg	☼	04/16/15 09:59	04/22/15 18:19	2
Antimony	0.70	D	0.36	0.013	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Arsenic	11	D	0.91	0.024	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Barium	80	D	0.91	0.20	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Beryllium	0.65	D	0.18	0.010	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Cadmium	0.17	J D	0.36	0.0034	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Calcium	410	D	360	20	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Chromium	17	D	0.91	0.054	mg/Kg	☼	04/16/15 09:59	04/22/15 18:19	2
Cobalt	9.6	D	0.18	0.0015	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Copper	12	D	0.73	0.088	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Iron	24000	D	910	29	mg/Kg	☼	04/16/15 09:59	04/24/15 17:04	20
Lead	18	D	0.54	0.041	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Magnesium	1900	D	180	3.6	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Manganese	940	D	9.1	1.1	mg/Kg	☼	04/16/15 09:59	04/24/15 17:04	20
Nickel	19	D	0.91	0.035	mg/Kg	☼	04/16/15 09:59	04/22/15 18:19	2
Potassium	720	D	180	4.4	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Selenium	0.95	D	0.91	0.036	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2

Client Sample ID: 079SS-0370M-0001-SO

Lab Sample ID: 240-49172-2

Date Collected: 04/08/15 12:40
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.6

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.049	J D	0.18	0.0013	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Sodium	27	J D	180	7.9	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Thallium	0.17	J D	0.36	0.017	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Vanadium	24	D	0.91	0.034	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2
Zinc	53	D	7.3	0.45	mg/Kg	☼	04/16/15 09:59	04/20/15 21:06	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047	J	0.092	0.013	mg/Kg	☼	04/16/15 14:45	04/20/15 11:55	1

Client Sample ID: 079SS-0371M-0001-SO

Lab Sample ID: 240-49172-3

Date Collected: 04/08/15 11:50
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	D	17	0.52	mg/Kg	☼	04/16/15 09:59	04/22/15 18:23	2
Antimony	0.16	J D	0.34	0.012	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Arsenic	13	D	0.84	0.022	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Barium	100	D	0.84	0.18	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Beryllium	0.79	D	0.17	0.0092	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Cadmium	0.19	J D	0.34	0.0031	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Calcium	340	D	340	18	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Chromium	19	D	0.84	0.050	mg/Kg	☼	04/16/15 09:59	04/22/15 18:23	2
Cobalt	12	D	0.17	0.0014	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Copper	13	D	0.67	0.081	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Iron	29000	D	840	27	mg/Kg	☼	04/16/15 09:59	04/24/15 17:08	20
Lead	17	D	0.50	0.038	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Magnesium	2200	D	170	3.4	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Manganese	1200	D	8.4	1.0	mg/Kg	☼	04/16/15 09:59	04/24/15 17:08	20
Nickel	24	D	0.84	0.033	mg/Kg	☼	04/16/15 09:59	04/22/15 18:23	2
Potassium	780	D	170	4.1	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Selenium	1.0	D	0.84	0.034	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Silver	0.045	J D	0.17	0.0012	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Sodium	28	J D	170	7.3	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Thallium	0.17	J D	0.34	0.016	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Vanadium	27	D	0.84	0.031	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2
Zinc	60	D	6.7	0.42	mg/Kg	☼	04/16/15 09:59	04/20/15 21:10	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037	J	0.097	0.014	mg/Kg	☼	04/16/15 14:45	04/20/15 11:57	1

Client Sample ID: 079SS-0372M-0001-SO

Lab Sample ID: 240-49172-4

Date Collected: 04/08/15 11:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	D	15	0.47	mg/Kg	☼	04/16/15 09:59	04/22/15 18:27	2

Client Sample ID: 079SS-0372M-0001-SO

Lab Sample ID: 240-49172-4

Date Collected: 04/08/15 11:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.11	J D	0.30	0.011	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Arsenic	9.4	D	0.75	0.020	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Barium	60	D	0.75	0.17	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Beryllium	0.50	D	0.15	0.0083	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Cadmium	0.16	J D	0.30	0.0028	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Calcium	370	D	300	17	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Chromium	15	D	0.75	0.045	mg/Kg	☼	04/16/15 09:59	04/22/15 18:27	2
Cobalt	8.2	D	0.15	0.0013	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Copper	8.2	D	0.60	0.073	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Iron	22000	D	750	24	mg/Kg	☼	04/16/15 09:59	04/24/15 17:12	20
Lead	17	D	0.45	0.034	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Magnesium	1700	D	150	3.0	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Manganese	670	D	7.5	0.90	mg/Kg	☼	04/16/15 09:59	04/24/15 17:12	20
Nickel	15	D	0.75	0.029	mg/Kg	☼	04/16/15 09:59	04/22/15 18:27	2
Potassium	540	D	150	3.7	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Selenium	0.84	D	0.75	0.030	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Silver	0.038	J D	0.15	0.0011	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Sodium	23	J D	150	6.5	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Thallium	0.15	J D	0.30	0.014	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Vanadium	23	D	0.75	0.028	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2
Zinc	57	D	6.0	0.38	mg/Kg	☼	04/16/15 09:59	04/20/15 21:13	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044	J	0.094	0.013	mg/Kg	☼	04/16/15 14:45	04/20/15 11:59	1

Client Sample ID: 079SS-0373M-0001-SO

Lab Sample ID: 240-49172-5

Date Collected: 04/08/15 13:40
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	D	18	0.55	mg/Kg	☼	04/16/15 09:59	04/22/15 18:30	2
Antimony	0.19	J D	0.36	0.012	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Arsenic	9.4	D	0.89	0.023	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Barium	92	D	0.89	0.20	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Beryllium	0.59	D	0.18	0.0098	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Cadmium	0.22	J D	0.36	0.0033	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Calcium	940	D	360	20	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Chromium	17	D	0.89	0.053	mg/Kg	☼	04/16/15 09:59	04/22/15 18:30	2
Cobalt	9.5	D	0.18	0.0015	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Copper	9.0	D	0.71	0.086	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Iron	22000	D	890	28	mg/Kg	☼	04/16/15 09:59	04/24/15 17:16	20
Lead	18	D	0.53	0.040	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Magnesium	1800	D	180	3.6	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Manganese	1300	D	8.9	1.1	mg/Kg	☼	04/16/15 09:59	04/24/15 17:16	20
Nickel	18	D	0.89	0.035	mg/Kg	☼	04/16/15 09:59	04/22/15 18:30	2
Potassium	670	D	180	4.4	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Selenium	0.96	D	0.89	0.036	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Silver	0.049	J D	0.18	0.0012	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2

Client Sample ID: 079SS-0373M-0001-SO

Lab Sample ID: 240-49172-5

Date Collected: 04/08/15 13:40
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	27	J D	180	7.7	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Thallium	0.17	J D	0.36	0.017	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Vanadium	24	D	0.89	0.033	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2
Zinc	54	D	7.1	0.44	mg/Kg	☼	04/16/15 09:59	04/20/15 21:17	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.054	J	0.088	0.012	mg/Kg	☼	04/16/15 14:45	04/20/15 12:00	1

Client Sample ID: 079SS-0374M-0001-SO

Lab Sample ID: 240-49172-6

Date Collected: 04/08/15 14:20
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	D	19	0.59	mg/Kg	☼	04/16/15 09:59	04/22/15 18:42	2
Antimony	0.30	J D	0.38	0.013	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Arsenic	9.6	D	0.95	0.025	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Barium	110	D	0.95	0.21	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Beryllium	0.57	D	0.19	0.011	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Cadmium	0.21	J D	0.38	0.0035	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Calcium	2000	D	380	21	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Chromium	17	D	0.95	0.057	mg/Kg	☼	04/16/15 09:59	04/22/15 18:42	2
Cobalt	8.1	D	0.19	0.0016	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Copper	13	D	0.76	0.093	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Iron	21000	D	950	31	mg/Kg	☼	04/16/15 09:59	04/24/15 17:19	20
Lead	23	D	0.57	0.043	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Magnesium	2000	D	190	3.8	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Manganese	670	D	9.5	1.1	mg/Kg	☼	04/16/15 09:59	04/24/15 17:19	20
Nickel	20	D	0.95	0.037	mg/Kg	☼	04/16/15 09:59	04/22/15 18:42	2
Potassium	700	D	190	4.7	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Selenium	0.91	J D	0.95	0.038	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Silver	0.046	J D	0.19	0.0013	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Sodium	32	J D	190	8.3	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Thallium	0.16	J D	0.38	0.018	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Vanadium	24	D	0.95	0.035	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2
Zinc	67	D	7.6	0.48	mg/Kg	☼	04/16/15 09:59	04/20/15 21:21	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.084	J	0.092	0.013	mg/Kg	☼	04/16/15 14:45	04/20/15 12:02	1

Client Sample ID: 079SS-0375M-0001-SO

Lab Sample ID: 240-49172-7

Date Collected: 04/07/15 14:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8600	D	19	0.60	mg/Kg	☼	04/16/15 09:59	04/22/15 18:46	2
Antimony	0.069	J D	0.38	0.013	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2

Client Sample ID: 079SS-0375M-0001-SO

Lab Sample ID: 240-49172-7

Date Collected: 04/07/15 14:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.2

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	D	0.96	0.025	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Barium	52	D	0.96	0.21	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Beryllium	0.65	D	0.19	0.011	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Cadmium	0.12	J D	0.38	0.0036	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Calcium	400	D	380	21	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Chromium	26	D	0.96	0.058	mg/Kg	☼	04/16/15 09:59	04/22/15 18:46	2
Cobalt	8.5	D	0.19	0.0016	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Copper	16	D	0.77	0.093	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Iron	26000	D	960	31	mg/Kg	☼	04/16/15 09:59	04/24/15 17:23	20
Lead	15	D	0.58	0.043	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Magnesium	2100	D	190	3.8	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Manganese	330	D	9.6	1.2	mg/Kg	☼	04/16/15 09:59	04/24/15 17:23	20
Nickel	27	D	0.96	0.037	mg/Kg	☼	04/16/15 09:59	04/22/15 18:46	2
Potassium	1200	D	190	4.7	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Selenium	0.92	J D	0.96	0.038	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Silver	0.031	J D	0.19	0.0013	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Sodium	39	J D	190	8.4	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Thallium	0.14	J D	0.38	0.018	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Vanadium	16	D	0.96	0.036	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2
Zinc	41	D	7.7	0.48	mg/Kg	☼	04/16/15 09:59	04/20/15 21:25	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.090	0.013	mg/Kg	☼	04/16/15 14:45	04/20/15 12:04	1

Client Sample ID: 079SS-0376M-0001-SO

Lab Sample ID: 240-49172-8

Date Collected: 04/07/15 15:40
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15000	D	20	0.60	mg/Kg	☼	04/16/15 09:59	04/22/15 18:49	2
Antimony	0.13	J D	0.39	0.014	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Arsenic	14	D	0.98	0.025	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Barium	67	D	0.98	0.21	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Beryllium	0.69	D	0.20	0.011	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Cadmium	0.13	J D	0.39	0.0036	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Calcium	260	J D	390	21	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Chromium	21	D	0.98	0.059	mg/Kg	☼	04/16/15 09:59	04/22/15 18:49	2
Cobalt	7.6	D	0.20	0.0017	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Copper	18	D	0.78	0.095	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Iron	30000	D	980	31	mg/Kg	☼	04/16/15 09:59	04/24/15 17:27	20
Lead	14	D	0.59	0.044	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Magnesium	2500	D	200	3.9	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Manganese	150	D	9.8	1.2	mg/Kg	☼	04/16/15 09:59	04/24/15 17:27	20
Nickel	19	D	0.98	0.038	mg/Kg	☼	04/16/15 09:59	04/22/15 18:49	2
Potassium	1200	D	200	4.8	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Selenium	1.2	D	0.98	0.039	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Silver	0.039	J D	0.20	0.0014	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Sodium	36	J D	200	8.5	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2

Client Sample ID: 079SS-0376M-0001-SO

Lab Sample ID: 240-49172-8

Date Collected: 04/07/15 15:40
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.7

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.20	J D	0.39	0.019	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Vanadium	26	D	0.98	0.036	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2
Zinc	50	D	7.8	0.49	mg/Kg	☼	04/16/15 09:59	04/20/15 21:29	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029	J	0.10	0.015	mg/Kg	☼	04/16/15 14:45	04/20/15 12:06	1

Client Sample ID: 079SS-0377M-0001-SO

Lab Sample ID: 240-49172-9

Date Collected: 04/07/15 16:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000	D	18	0.57	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Antimony	0.16	J D	0.37	0.013	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Arsenic	13	D	0.91	0.024	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Barium	69	D	0.91	0.20	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Beryllium	0.67	D	0.18	0.010	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Cadmium	0.15	J D	0.37	0.0034	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Calcium	340	J D	370	20	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Chromium	19	D	0.91	0.055	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Cobalt	9.8	D	0.18	0.0016	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Copper	19	D	0.73	0.089	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Iron	26000	D	91	2.9	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Lead	12	D	5.5	0.41	mg/Kg	☼	04/20/15 12:52	04/28/15 12:55	20
Magnesium	2800	D	180	3.7	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Manganese	260	D	9.1	1.1	mg/Kg	☼	04/20/15 12:52	04/24/15 14:44	20
Nickel	23	D	0.91	0.036	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Potassium	1000	D	180	4.5	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Selenium	1.1	D	0.91	0.037	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Silver	0.028	J D	0.18	0.0013	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Sodium	34	J D	180	7.9	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Thallium	0.18	J D	0.37	0.017	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Vanadium	22	D	0.91	0.034	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2
Zinc	53	D	7.3	0.46	mg/Kg	☼	04/20/15 12:52	04/22/15 19:31	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021	J	0.11	0.016	mg/Kg	☼	04/20/15 15:40	04/21/15 11:14	1

Client Sample ID: 079SS-0378M-0001-SO

Lab Sample ID: 240-49172-10

Date Collected: 04/07/15 16:10
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10000	D	17	0.52	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Antimony	0.13	J D	0.34	0.012	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Arsenic	9.8	D	0.84	0.022	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2

Client Sample ID: 079SS-0378M-0001-SO
Date Collected: 04/07/15 16:10
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49172-10
Matrix: Solid
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	64	D	0.84	0.19	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Beryllium	0.55	D	0.17	0.0093	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Cadmium	0.12	J D	0.34	0.0031	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Calcium	300	J D	340	19	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Chromium	15	D	0.84	0.051	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Cobalt	10	D	0.17	0.0014	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Copper	12	D	0.68	0.082	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Iron	22000	D	84	2.7	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Lead	13	D	5.1	0.38	mg/Kg	☼	04/20/15 12:52	04/28/15 13:06	20
Magnesium	1800	D	170	3.4	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Manganese	770	D	8.4	1.0	mg/Kg	☼	04/20/15 12:52	04/24/15 14:48	20
Nickel	15	D	0.84	0.033	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Potassium	640	D	170	4.1	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Selenium	0.86	D	0.84	0.034	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Silver	0.028	J D	0.17	0.0012	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Sodium	27	J D	170	7.3	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Thallium	0.16	J D	0.34	0.016	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Vanadium	22	D	0.84	0.031	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2
Zinc	44	D	6.8	0.42	mg/Kg	☼	04/20/15 12:52	04/22/15 19:35	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038	J	0.11	0.015	mg/Kg	☼	04/20/15 15:40	04/21/15 11:20	1

Default Detection Limits

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49172-1
SDG: CC RVAAP-79 Load Line 3

Method: 6020 - Metals (ICP/MS)

Analyte	LOQ	DL	Units	Method
Aluminum	20	0.62	mg/Kg	6020
Antimony	0.40	0.014	mg/Kg	6020
Arsenic	1.0	0.026	mg/Kg	6020
Barium	1.0	0.22	mg/Kg	6020
Beryllium	0.20	0.011	mg/Kg	6020
Cadmium	0.40	0.0037	mg/Kg	6020
Calcium	400	22	mg/Kg	6020
Chromium	1.0	0.060	mg/Kg	6020
Cobalt	0.20	0.0017	mg/Kg	6020
Copper	0.80	0.097	mg/Kg	6020
Iron	100	3.2	mg/Kg	6020
Lead	0.60	0.045	mg/Kg	6020
Magnesium	200	4.0	mg/Kg	6020
Manganese	1.0	0.12	mg/Kg	6020
Nickel	1.0	0.039	mg/Kg	6020
Potassium	200	4.9	mg/Kg	6020
Selenium	1.0	0.040	mg/Kg	6020
Silver	0.20	0.0014	mg/Kg	6020
Sodium	200	8.7	mg/Kg	6020
Thallium	0.40	0.019	mg/Kg	6020
Vanadium	1.0	0.037	mg/Kg	6020
Zinc	8.0	0.50	mg/Kg	6020

Method: 7471A - Mercury (CVAA)

Analyte	LOQ	DL	Units	Method
Mercury	0.10	0.014	mg/Kg	7471A

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-176698/1-A ^2
Matrix: Solid
Analysis Batch: 177115

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176698

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5.48	J D	20	0.62	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Antimony	0.0160	J D	0.40	0.014	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Arsenic	0.101	J D	1.0	0.026	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Barium	0.30	U	1.0	0.22	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Beryllium	0.0162	J D	0.20	0.011	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Cadmium	0.00860	J D	0.40	0.0037	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Calcium	26.1	J D	400	22	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Cobalt	0.0196	J D	0.20	0.0017	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Copper	0.30	U	0.80	0.097	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Lead	0.0506	J D	0.60	0.045	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Magnesium	7.60	J D	200	4.0	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Potassium	8.33	J D	200	4.9	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Selenium	0.0960	J D	1.0	0.040	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Silver	0.00180	J D	0.20	0.0014	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Sodium	9.54	J D	200	8.7	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Thallium	0.0656	J D	0.40	0.019	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Vanadium	0.0556	J D	1.0	0.037	mg/Kg		04/16/15 09:59	04/20/15 19:38	2
Zinc	0.673	J D	8.0	0.50	mg/Kg		04/16/15 09:59	04/20/15 19:38	2

Lab Sample ID: MB 240-176698/1-A ^2
Matrix: Solid
Analysis Batch: 177559

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176698

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4.72	J D	20	0.62	mg/Kg		04/16/15 09:59	04/22/15 16:52	2
Chromium	0.164	J D	1.0	0.060	mg/Kg		04/16/15 09:59	04/22/15 16:52	2
Nickel	0.0558	J D	1.0	0.039	mg/Kg		04/16/15 09:59	04/22/15 16:52	2

Lab Sample ID: MB 240-176698/1-A ^2
Matrix: Solid
Analysis Batch: 177880

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176698

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4.34	J D	100	3.2	mg/Kg		04/16/15 09:59	04/24/15 15:37	2
Lead	0.20	U Q	0.60	0.045	mg/Kg		04/16/15 09:59	04/24/15 15:37	2
Manganese	0.40	U	1.0	0.12	mg/Kg		04/16/15 09:59	04/24/15 15:37	2

Lab Sample ID: LCS 240-176698/2-A ^2
Matrix: Solid
Analysis Batch: 177115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1000	950	D	mg/Kg		95	80 - 120
Antimony	10.0	10.1	D	mg/Kg		101	68 - 113
Arsenic	100	87.9	D	mg/Kg		88	73 - 110
Barium	100	103	D	mg/Kg		103	70 - 110
Beryllium	100	101	D	mg/Kg		101	79 - 110
Cadmium	100	95.2	D	mg/Kg		95	74 - 110
Calcium	1000	910	D	mg/Kg		91	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-176698/2-A ^2
Matrix: Solid
Analysis Batch: 177115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	100	92.1	D	mg/Kg		92	74 - 110
Copper	100	94.3	D	mg/Kg		94	73 - 110
Lead	100	95.9	D	mg/Kg		96	75 - 110
Magnesium	1000	1000	D	mg/Kg		100	80 - 120
Potassium	1000	1020	D	mg/Kg		102	80 - 120
Selenium	100	87.4	D	mg/Kg		87	65 - 110
Silver	10.0	9.84	D	mg/Kg		98	60 - 114
Sodium	1000	1010	D	mg/Kg		101	80 - 120
Thallium	25.0	23.6	D	mg/Kg		94	71 - 110
Vanadium	100	103	D	mg/Kg		103	72 - 110
Zinc	100	88.9	D	mg/Kg		89	72 - 113

Lab Sample ID: LCS 240-176698/2-A ^2
Matrix: Solid
Analysis Batch: 177559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1000	913	D	mg/Kg		91	80 - 120
Chromium	100	98.6	D	mg/Kg		99	70 - 110
Nickel	100	89.2	D	mg/Kg		89	75 - 110

Lab Sample ID: LCS 240-176698/2-A ^2
Matrix: Solid
Analysis Batch: 177880

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	987	D	mg/Kg		99	80 - 120
Lead	100	91.2	D Q	mg/Kg		91	75 - 110
Manganese	100	99.0	D	mg/Kg		99	80 - 120

Lab Sample ID: MB 240-177128/1-A ^2
Matrix: Solid
Analysis Batch: 177880

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177128

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.173	J D	0.60	0.045	mg/Kg		04/20/15 12:52	04/24/15 14:18	2
Manganese	0.40	U	1.0	0.12	mg/Kg		04/20/15 12:52	04/24/15 14:18	2

Lab Sample ID: MB 240-177128/1-A ^2
Matrix: Solid
Analysis Batch: 178352

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177128

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.102	J D	0.60	0.045	mg/Kg		04/20/15 12:52	04/28/15 12:29	2

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-177128/2-A ^2
Matrix: Solid
Analysis Batch: 177880

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	100	94.0	D	mg/Kg		94	75 - 110
Manganese	100	100	D	mg/Kg		100	80 - 120

Lab Sample ID: LCS 240-177128/2-A ^2
Matrix: Solid
Analysis Batch: 178352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	100	97.8	D	mg/Kg		98	75 - 110

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-176711/1-A
Matrix: Solid
Analysis Batch: 177149

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176711

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033	U	0.10	0.014	mg/Kg		04/16/15 14:45	04/20/15 11:11	1

Lab Sample ID: LCS 240-176711/2-A
Matrix: Solid
Analysis Batch: 177149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.839		mg/Kg		101	80 - 120

Lab Sample ID: MB 240-177137/1-A
Matrix: Solid
Analysis Batch: 177294

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177137

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033	U	0.10	0.014	mg/Kg		04/20/15 15:40	04/21/15 11:04	1

Lab Sample ID: LCS 240-177137/2-A
Matrix: Solid
Analysis Batch: 177294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177137

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.825		mg/Kg		99	80 - 120

Metals

ISM Prep Batch: 176431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-1	079SS-0369M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-2	079SS-0370M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-3	079SS-0371M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-4	079SS-0372M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-5	079SS-0373M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-6	079SS-0374M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-7	079SS-0375M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-8	079SS-0376M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-9	079SS-0377M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-10	079SS-0378M-0001-SO	Total/NA	Solid	Increment, Prep	

Prep Batch: 176698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-1	079SS-0369M-0001-SO	Total/NA	Solid	3050B	176431
240-49172-2	079SS-0370M-0001-SO	Total/NA	Solid	3050B	176431
240-49172-3	079SS-0371M-0001-SO	Total/NA	Solid	3050B	176431
240-49172-4	079SS-0372M-0001-SO	Total/NA	Solid	3050B	176431
240-49172-5	079SS-0373M-0001-SO	Total/NA	Solid	3050B	176431
240-49172-6	079SS-0374M-0001-SO	Total/NA	Solid	3050B	176431
240-49172-7	079SS-0375M-0001-SO	Total/NA	Solid	3050B	176431
240-49172-8	079SS-0376M-0001-SO	Total/NA	Solid	3050B	176431
LCS 240-176698/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-176698/1-A ^2	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 176711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-1	079SS-0369M-0001-SO	Total/NA	Solid	7471A	176431
240-49172-2	079SS-0370M-0001-SO	Total/NA	Solid	7471A	176431
240-49172-3	079SS-0371M-0001-SO	Total/NA	Solid	7471A	176431
240-49172-4	079SS-0372M-0001-SO	Total/NA	Solid	7471A	176431
240-49172-5	079SS-0373M-0001-SO	Total/NA	Solid	7471A	176431
240-49172-6	079SS-0374M-0001-SO	Total/NA	Solid	7471A	176431
240-49172-7	079SS-0375M-0001-SO	Total/NA	Solid	7471A	176431
240-49172-8	079SS-0376M-0001-SO	Total/NA	Solid	7471A	176431
LCS 240-176711/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-176711/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 177030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CRA 240-177030/9-A	DL		Solid	7471A	

Analysis Batch: 177115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-1	079SS-0369M-0001-SO	Total/NA	Solid	6020	176698
240-49172-2	079SS-0370M-0001-SO	Total/NA	Solid	6020	176698
240-49172-3	079SS-0371M-0001-SO	Total/NA	Solid	6020	176698
240-49172-4	079SS-0372M-0001-SO	Total/NA	Solid	6020	176698
240-49172-5	079SS-0373M-0001-SO	Total/NA	Solid	6020	176698
240-49172-6	079SS-0374M-0001-SO	Total/NA	Solid	6020	176698
240-49172-7	079SS-0375M-0001-SO	Total/NA	Solid	6020	176698
240-49172-8	079SS-0376M-0001-SO	Total/NA	Solid	6020	176698

Metals (Continued)

Analysis Batch: 177115 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CRI 240-177115/10	DL		Solid	6020	
CRI 240-177115/175	DL		Solid	6020	
ICSA 240-177115/11	ICS		Solid	6020	
ICSAB 240-177115/12	ICS		Solid	6020	
LCS 240-176698/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	176698
MB 240-176698/1-A ^2	Method Blank	Total/NA	Solid	6020	176698

Prep Batch: 177128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-9	079SS-0377M-0001-SO	Total/NA	Solid	3050B	176431
240-49172-10	079SS-0378M-0001-SO	Total/NA	Solid	3050B	176431
LCS 240-177128/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-177128/1-A ^2	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 177137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-9	079SS-0377M-0001-SO	Total/NA	Solid	7471A	176431
240-49172-10	079SS-0378M-0001-SO	Total/NA	Solid	7471A	176431
LCS 240-177137/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-177137/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 177149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-1	079SS-0369M-0001-SO	Total/NA	Solid	7471A	176711
240-49172-2	079SS-0370M-0001-SO	Total/NA	Solid	7471A	176711
240-49172-3	079SS-0371M-0001-SO	Total/NA	Solid	7471A	176711
240-49172-4	079SS-0372M-0001-SO	Total/NA	Solid	7471A	176711
240-49172-5	079SS-0373M-0001-SO	Total/NA	Solid	7471A	176711
240-49172-6	079SS-0374M-0001-SO	Total/NA	Solid	7471A	176711
240-49172-7	079SS-0375M-0001-SO	Total/NA	Solid	7471A	176711
240-49172-8	079SS-0376M-0001-SO	Total/NA	Solid	7471A	176711
CRA 240-177030/9-A	DL		Solid	7471A	177030
CRA 240-177030/9-A	DL		Solid	7471A	177030
LCS 240-176711/2-A	Lab Control Sample	Total/NA	Solid	7471A	176711
MB 240-176711/1-A	Method Blank	Total/NA	Solid	7471A	176711

Analysis Batch: 177294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-9	079SS-0377M-0001-SO	Total/NA	Solid	7471A	177137
240-49172-10	079SS-0378M-0001-SO	Total/NA	Solid	7471A	177137
CRA 240-177030/9-A	DL		Solid	7471A	177030
CRA 240-177030/9-A	DL		Solid	7471A	177030
LCS 240-177137/2-A	Lab Control Sample	Total/NA	Solid	7471A	177137
MB 240-177137/1-A	Method Blank	Total/NA	Solid	7471A	177137

Analysis Batch: 177559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-1	079SS-0369M-0001-SO	Total/NA	Solid	6020	176698
240-49172-2	079SS-0370M-0001-SO	Total/NA	Solid	6020	176698
240-49172-3	079SS-0371M-0001-SO	Total/NA	Solid	6020	176698
240-49172-4	079SS-0372M-0001-SO	Total/NA	Solid	6020	176698

Metals (Continued)

Analysis Batch: 177559 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-5	079SS-0373M-0001-SO	Total/NA	Solid	6020	176698
240-49172-6	079SS-0374M-0001-SO	Total/NA	Solid	6020	176698
240-49172-7	079SS-0375M-0001-SO	Total/NA	Solid	6020	176698
240-49172-8	079SS-0376M-0001-SO	Total/NA	Solid	6020	176698
240-49172-9	079SS-0377M-0001-SO	Total/NA	Solid	6020	177128
240-49172-10	079SS-0378M-0001-SO	Total/NA	Solid	6020	177128
CRI 240-177559/67	DL		Solid	6020	
CRI 240-177559/9	DL		Solid	6020	
ICSA 240-177559/10	ICS		Solid	6020	
ICSAB 240-177559/11	ICS		Solid	6020	
LCS 240-176698/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	176698
MB 240-176698/1-A ^2	Method Blank	Total/NA	Solid	6020	176698

Analysis Batch: 177880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-1	079SS-0369M-0001-SO	Total/NA	Solid	6020	176698
240-49172-2	079SS-0370M-0001-SO	Total/NA	Solid	6020	176698
240-49172-3	079SS-0371M-0001-SO	Total/NA	Solid	6020	176698
240-49172-4	079SS-0372M-0001-SO	Total/NA	Solid	6020	176698
240-49172-5	079SS-0373M-0001-SO	Total/NA	Solid	6020	176698
240-49172-6	079SS-0374M-0001-SO	Total/NA	Solid	6020	176698
240-49172-7	079SS-0375M-0001-SO	Total/NA	Solid	6020	176698
240-49172-8	079SS-0376M-0001-SO	Total/NA	Solid	6020	176698
240-49172-9	079SS-0377M-0001-SO	Total/NA	Solid	6020	177128
240-49172-10	079SS-0378M-0001-SO	Total/NA	Solid	6020	177128
CRI 240-177880/118	DL		Solid	6020	
CRI 240-177880/85	DL		Solid	6020	
CRI 240-177880/9	DL		Solid	6020	
ICSA 240-177880/10	ICS		Solid	6020	
ICSAB 240-177880/11	ICS		Solid	6020	
LCS 240-176698/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	176698
LCS 240-177128/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	177128
MB 240-176698/1-A ^2	Method Blank	Total/NA	Solid	6020	176698
MB 240-177128/1-A ^2	Method Blank	Total/NA	Solid	6020	177128

Analysis Batch: 178352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-9	079SS-0377M-0001-SO	Total/NA	Solid	6020	177128
240-49172-10	079SS-0378M-0001-SO	Total/NA	Solid	6020	177128
CRI 240-178352/40	DL		Solid	6020	
CRI 240-178352/9	DL		Solid	6020	
ICSA 240-178352/10	ICS		Solid	6020	
ICSAB 240-178352/11	ICS		Solid	6020	
LCS 240-177128/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	177128
MB 240-177128/1-A ^2	Method Blank	Total/NA	Solid	6020	177128

General Chemistry

ISM Prep Batch: 176431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-1	079SS-0369M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-2	079SS-0370M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-3	079SS-0371M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-4	079SS-0372M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-5	079SS-0373M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-6	079SS-0374M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-7	079SS-0375M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-8	079SS-0376M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-9	079SS-0377M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-9 DU	079SS-0377M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49172-10	079SS-0378M-0001-SO	Total/NA	Solid	Increment, Prep	

Analysis Batch: 176546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49172-1	079SS-0369M-0001-SO	Total/NA	Solid	Moisture	176431
240-49172-2	079SS-0370M-0001-SO	Total/NA	Solid	Moisture	176431
240-49172-3	079SS-0371M-0001-SO	Total/NA	Solid	Moisture	176431
240-49172-4	079SS-0372M-0001-SO	Total/NA	Solid	Moisture	176431
240-49172-5	079SS-0373M-0001-SO	Total/NA	Solid	Moisture	176431
240-49172-6	079SS-0374M-0001-SO	Total/NA	Solid	Moisture	176431
240-49172-7	079SS-0375M-0001-SO	Total/NA	Solid	Moisture	176431
240-49172-8	079SS-0376M-0001-SO	Total/NA	Solid	Moisture	176431
240-49172-9	079SS-0377M-0001-SO	Total/NA	Solid	Moisture	176431
240-49172-9 DU	079SS-0377M-0001-SO	Total/NA	Solid	Moisture	176431
240-49172-10	079SS-0378M-0001-SO	Total/NA	Solid	Moisture	176431

Lab Chronicle

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49172-1
SDG: CC RVAAP-79 Load Line 3

Client Sample ID: 079SS-0369M-0001-SO

Lab Sample ID: 240-49172-1

Date Collected: 04/08/15 10:20
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 20:54	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 18:15	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 16:53	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:53	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SS-0370M-0001-SO

Lab Sample ID: 240-49172-2

Date Collected: 04/08/15 12:40
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 21:06	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 18:19	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 17:04	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:55	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SS-0371M-0001-SO

Lab Sample ID: 240-49172-3

Date Collected: 04/08/15 11:50
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 21:10	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN

Client Sample ID: 079SS-0371M-0001-SO

Lab Sample ID: 240-49172-3

Date Collected: 04/08/15 11:50
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 18:23	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 17:08	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:57	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SS-0372M-0001-SO

Lab Sample ID: 240-49172-4

Date Collected: 04/08/15 11:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 21:13	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 18:27	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 17:12	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 11:59	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/10/15 14:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SS-0373M-0001-SO

Lab Sample ID: 240-49172-5

Date Collected: 04/08/15 13:40
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 21:17	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 18:30	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN

Client Sample ID: 079SS-0373M-0001-SO

Lab Sample ID: 240-49172-5

Date Collected: 04/08/15 13:40
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		20	177880	04/24/15 17:16	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 12:00	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SS-0374M-0001-SO

Lab Sample ID: 240-49172-6

Date Collected: 04/08/15 14:20
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 21:21	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 18:42	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 17:19	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 12:02	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SS-0375M-0001-SO

Lab Sample ID: 240-49172-7

Date Collected: 04/07/15 14:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 21:25	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 18:46	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 17:23	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 12:04	BW	TAL CAN

Client Sample ID: 079SS-0375M-0001-SO

Lab Sample ID: 240-49172-7

Date Collected: 04/07/15 14:00

Matrix: Solid

Date Received: 04/09/15 14:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SS-0376M-0001-SO

Lab Sample ID: 240-49172-8

Date Collected: 04/07/15 15:40

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177115	04/20/15 21:29	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 18:49	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			176698	04/16/15 09:59	ADS	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 17:27	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	7471A			176711	04/16/15 14:45	ADS	TAL CAN
Total/NA	Analysis	7471A		1	177149	04/20/15 12:06	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SS-0377M-0001-SO

Lab Sample ID: 240-49172-9

Date Collected: 04/07/15 16:00

Matrix: Solid

Date Received: 04/09/15 14:51

Percent Solids: 97.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 19:31	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 14:44	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	178352	04/28/15 12:55	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	7471A			177137	04/20/15 15:40	DEE	TAL CAN
Total/NA	Analysis	7471A		1	177294	04/21/15 11:14	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Lab Chronicle

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49172-1
SDG: CC RVAAP-79 Load Line 3

Client Sample ID: 079SS-0378M-0001-SO
Date Collected: 04/07/15 16:10
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49172-10
Matrix: Solid
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 19:35	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 14:48	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	178352	04/28/15 13:06	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	7471A			177137	04/20/15 15:40	DEE	TAL CAN
Total/NA	Analysis	7471A		1	177294	04/21/15 11:20	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49172-1
SDG: CC RVAAP-79 Load Line 3

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-15 *
Connecticut	State Program	1	PH-0590	12-31-15
Florida	NELAP	4	E87225	06-30-15 *
Georgia	State Program	4	N/A	06-30-15 *
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	04-30-15 *
Kentucky (UST)	State Program	4	58	06-30-15 *
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	10-31-15
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49172-1
SDG: CC RVAAP-79 Load Line 3

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49172-1
SDG: CC RVAAP-79 Load Line 3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-49172-1	079SS-0369M-0001-SO	Solid	04/08/15 10:20	04/09/15 14:51
240-49172-2	079SS-0370M-0001-SO	Solid	04/08/15 12:40	04/09/15 14:51
240-49172-3	079SS-0371M-0001-SO	Solid	04/08/15 11:50	04/09/15 14:51
240-49172-4	079SS-0372M-0001-SO	Solid	04/08/15 11:00	04/09/15 14:51
240-49172-5	079SS-0373M-0001-SO	Solid	04/08/15 13:40	04/09/15 14:51
240-49172-6	079SS-0374M-0001-SO	Solid	04/08/15 14:20	04/09/15 14:51
240-49172-7	079SS-0375M-0001-SO	Solid	04/07/15 14:00	04/09/15 14:51
240-49172-8	079SS-0376M-0001-SO	Solid	04/07/15 15:40	04/09/15 14:51
240-49172-9	079SS-0377M-0001-SO	Solid	04/07/15 16:00	04/09/15 14:51
240-49172-10	079SS-0378M-0001-SO	Solid	04/07/15 16:10	04/09/15 14:51

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MT1TO1HN03_00947	04/16/15	04/16/15	DIWATER, Lot DI WATER	800 mL	MTTMHNO3_00054	400 mL	Nitric acid	0.5 mL/mL
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MT1TO1HN03_00949	04/20/15	04/20/15	DIWATER, Lot DI WATER	800 mL	MTTMHNO3_00054	400 mL	Nitric acid	0.5 mL/mL
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_00997	04/16/15	04/16/15	NA, Lot NA	360 mL	MTTMHCL_00062	270 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00054	90 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00062	04/02/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_01001	04/20/15	04/20/15	NA, Lot NA	80 mL	MTTMHCL_00062	60 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00054	20 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00062	04/02/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_01002	04/20/15	04/20/15	NA, Lot NA	320 mL	MTTMHCL_00062	240 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00054	80 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00062	04/02/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTH202_00041	05/13/16	Macron, Lot 0000079375			(Purchased Reagent)		Hydrogen Peroxide	30 %
MTH202_00042	10/01/16	Macron, Lot 0000092419			(Purchased Reagent)		Hydrogen Peroxide	30 %
MTHGCALW_00883	04/16/15	04/16/15	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00016	1 mL	Mercury	100 ug/L
					MTTMHNO3_00054	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00016	05/09/17	INORGANIC VENTURES, Lot H2-HG02126			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTHGCALW_00885	04/20/15	04/20/15	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00016	1 mL	Mercury	100 ug/L
					MTTMHNO3_00054	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00016	05/09/17	INORGANIC VENTURES, Lot H2-HG02126			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTHgStd_00016	10/07/15	HPS, Lot 1509117			(Purchased Reagent)		Mercury	1 ug/mL
MTICPMS2_00020	02/01/16	Inorganic Ventures, Lot H2-MEB559070			(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
MTICPMSA_00022	02/01/16	Inorganic Ventures, Lot H2-MEB552051			(Purchased Reagent)		Arsenic	100 ug/mL
							Barium	100 ug/mL
							Beryllium	100 ug/mL
							Cadmium	100 ug/mL
							Chromium	100 ug/mL
							Cobalt	100 ug/mL
							Copper	100 ug/mL
							Lead	100 ug/mL
							Manganese	100 ug/mL
							Nickel	100 ug/mL
							Selenium	100 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sr	100 ug/mL
							Thallium	25 ug/mL
							Vanadium	100 ug/mL
							Zinc	100 ug/mL
MTICPMSB_00022	02/01/16	Inorganic Ventures, Lot H2-MEB559071			(Purchased Reagent)		Antimony	10 ug/mL
							B	10 ug/mL
							Mo	10 ug/mL
							Silver	10 ug/mL
							Sn	100 ug/mL
							Ti	10 ug/mL
							W	10 ug/mL
MTKMN04W_00081	04/07/17	04/07/15	DIWATER, Lot DIWATER	2.5 L	MTKMN04_00022	125 g	Potassium Permanganate	0.05 g/g
.MTKMN04_00022	02/18/20	Fisher, Lot 121666			(Purchased Reagent)		Potassium Permanganate	1 g/g
MTMSCAL2CCVW_00110	10/01/15	03/10/15	DIWATER, Lot DIWATER	500 mL	MTMSCAL3_00008	5 mL	Aluminum	250 ug/L
							Arsenic	50 ug/L
							Barium	50 ug/L
							Beryllium	50 ug/L
							Cadmium	50 ug/L
							Calcium	25000 ug/L
							Chromium	50 ug/L
							Cobalt	50 ug/L
							Copper	50 ug/L
							Iron	12500 ug/L
							Lead	50 ug/L
							Magnesium	25000 ug/L
							Manganese	250 ug/L
							Nickel	50 ug/L
							Potassium	25000 ug/L
							Selenium	50 ug/L
							Silver	50 ug/L
							Sodium	25000 ug/L
							Thallium	50 ug/L
							Vanadium	50 ug/L
							Zinc	50 ug/L
					MTMSCAL4_00009	5 mL	Antimony	50 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCAL2CCVW_00116	10/01/15	04/09/15	DIWATER, Lot DIWATER	500 mL	MTMSCAL3_00008	5 mL	Aluminum	250 ug/L
							Arsenic	50 ug/L
							Barium	50 ug/L
							Beryllium	50 ug/L
							Cadmium	50 ug/L
							Calcium	25000 ug/L
							Chromium	50 ug/L
							Cobalt	50 ug/L
							Copper	50 ug/L
							Iron	12500 ug/L
							Lead	50 ug/L
							Magnesium	25000 ug/L
							Manganese	250 ug/L
							Nickel	50 ug/L
							Potassium	25000 ug/L
							Selenium	50 ug/L
							Silver	50 ug/L
							Sodium	25000 ug/L
							Thallium	50 ug/L
							Vanadium	50 ug/L
							Zinc	50 ug/L
					MTMSCAL4_00009	5 mL	Antimony	50 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCAL3W_00039	10/01/15	03/11/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL3_00008	5 mL	Aluminum	500 ug/L
							Arsenic	100 ug/L
							Barium	100 ug/L
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Calcium	50000 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Iron	25000 ug/L
							Lead	100 ug/L
							Magnesium	50000 ug/L
							Manganese	500 ug/L
							Nickel	100 ug/L
							Potassium	50000 ug/L
							Selenium	100 ug/L
							Silver	100 ug/L
							Sodium	50000 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L
							Zinc	100 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
MTMSCAL4W_00035	10/01/15	03/11/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL4_00009	5 mL	Antimony	100 ug/L
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCRI6020AW_00019	05/18/15	03/16/15	DIWATER, Lot DIWATER	500 mL	MS6020ACRIA_00002	0.5 mL	Aluminum	50 ug/L
							Arsenic	5 ug/L
							Barium	5 ug/L
							Beryllium	1 ug/L
							Cadmium	1 ug/L
							Calcium	1000 ug/L
							Chromium	2 ug/L
							Cobalt	1 ug/L
							Copper	2 ug/L
							Iron	100 ug/L
							Lead	1 ug/L
							Magnesium	1000 ug/L
							Manganese	5 ug/L
							Nickel	2 ug/L
							Potassium	1000 ug/L
							Selenium	5 ug/L
							Sodium	1000 ug/L
							Thallium	2 ug/L
							Vanadium	5 ug/L
							Zinc	20 ug/L
					MS6020ACRIB_00002	0.5 mL	Antimony	2 ug/L
					MTAGSPIKEW_00045	0.2 mL	Silver	1 ug/L
.MS6020ACRIA_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537060			(Purchased Reagent)		Aluminum	50 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	1 ug/mL
							Cadmium	1 ug/mL
							Calcium	1000 ug/mL
							Chromium	2 ug/mL
							Cobalt	1 ug/mL
							Copper	2 ug/mL
							Iron	100 ug/mL
							Lead	1 ug/mL
							Magnesium	1000 ug/mL
							Manganese	5 ug/mL
							Nickel	2 ug/mL
							Potassium	1000 ug/mL
							Selenium	5 ug/mL
							Sodium	1000 ug/mL
							Thallium	2 ug/mL
							Vanadium	5 ug/mL
							Zinc	20 ug/mL
.MS6020ACRIB_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537061			(Purchased Reagent)		Antimony	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MTAGSPIKEW_00045	05/18/15	11/18/14	DIWATER, Lot DIWATER	1000 mL	MTAG_00005	2.5 mL	Silver	2500 ug/L
..MTAG_00005	12/27/15	HIGH PURITY STANDARDS, Lot 1401302			(Purchased Reagent)		Silver	1000 ug/mL
MTMSCRI6020AW_00021	05/18/15	04/20/15	DIWATER, Lot DIWATER	500 mL	MS6020ACRIA_00002	0.5 mL	Aluminum	50 ug/L
							Arsenic	5 ug/L
							Barium	5 ug/L
							Beryllium	1 ug/L
							Cadmium	1 ug/L
							Calcium	1000 ug/L
							Chromium	2 ug/L
							Cobalt	1 ug/L
							Copper	2 ug/L
							Iron	100 ug/L
							Lead	1 ug/L
							Magnesium	1000 ug/L
							Manganese	5 ug/L
							Nickel	2 ug/L
							Potassium	1000 ug/L
							Selenium	5 ug/L
							Sodium	1000 ug/L
							Thallium	2 ug/L
							Vanadium	5 ug/L
							Zinc	20 ug/L
					MS6020ACRIB_00002	0.5 mL	Antimony	2 ug/L
					MTAGSPIKEW_00045	0.2 mL	Silver	1 ug/L
.MS6020ACRIA_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537060			(Purchased Reagent)		Aluminum	50 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	1 ug/mL
							Cadmium	1 ug/mL
							Calcium	1000 ug/mL
							Chromium	2 ug/mL
							Cobalt	1 ug/mL
							Copper	2 ug/mL
							Iron	100 ug/mL
							Lead	1 ug/mL
							Magnesium	1000 ug/mL
							Manganese	5 ug/mL
							Nickel	2 ug/mL
							Potassium	1000 ug/mL
							Selenium	5 ug/mL
							Sodium	1000 ug/mL
							Thallium	2 ug/mL
							Vanadium	5 ug/mL
							Zinc	20 ug/mL
.MS6020ACRIB_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537061			(Purchased Reagent)		Antimony	2 ug/mL
.MTAGSPIKEW_00045	05/18/15	11/18/14	DIWATER, Lot DIWATER	1000 mL	MTAG_00005	2.5 mL	Silver	2500 ug/L
..MTAG_00005	12/27/15	HIGH PURITY STANDARDS, Lot 1401302			(Purchased Reagent)		Silver	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MTMSICSABW_00043	05/01/15	02/20/15	DIWATER, Lot DIWATER	200 mL	MTMSICSA_00009	10 mL	Aluminum	50000 ug/L
							Calcium	50000 ug/L
							Iron	50000 ug/L
							Magnesium	50000 ug/L
							Mo	1100 ug/L
							Potassium	50000 ug/L
							Sodium	50000 ug/L
							Ti	1100 ug/L
					MTMSICSABSOLA_00006	1 mL	Arsenic	100 ug/L
							B	100 ug/L
							Barium	100 ug/L
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Lead	100 ug/L
							Manganese	100 ug/L
							Nickel	100 ug/L
							Selenium	100 ug/L
							Sr	100 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L
							Zinc	100 ug/L
					MTMSICSABSOLB_00006	1 mL	Antimony	100 ug/L
							Mo	1100 ug/L
							Silver	100 ug/L
							Sn	100 ug/L
							Ti	1100 ug/L
							W	100 ug/L
.MTMSICSA_00009	05/01/15	INORGANIC VENTURES, Lot G2-MEB476152MCA			(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Mo	20 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
							Ti	20 ug/mL
.MTMSICSABSOLA_00006	02/10/16	HIGH PURITY STANDARDS, Lot 1503726			(Purchased Reagent)		Arsenic	20 ug/mL
							B	20 ug/mL
							Barium	20 ug/mL
							Beryllium	20 ug/mL
							Cadmium	20 ug/mL
							Chromium	20 ug/mL
							Cobalt	20 ug/mL
							Copper	20 ug/mL
							Lead	20 ug/mL
							Manganese	20 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nickel	20 ug/mL
							Selenium	20 ug/mL
							Sr	20 ug/mL
							Thallium	20 ug/mL
							Vanadium	20 ug/mL
							Zinc	20 ug/mL
.MTMSICSABSOLB_00006	02/10/16	HIGH PURITY STANDARDS, Lot 1504002			(Purchased Reagent)		Antimony	20 ug/mL
							Mo	20 ug/mL
							Silver	20 ug/mL
							Sn	20 ug/mL
							Ti	20 ug/mL
							W	20 ug/mL
MTMSICSAW_00044	05/01/15	03/16/15	DIWATER, Lot DIWATER	200 mL	MTMSICSA_00009	10 mL	Aluminum	50000 ug/L
							Calcium	50000 ug/L
							Iron	50000 ug/L
							Magnesium	50000 ug/L
							Mo	1000 ug/L
							Potassium	50000 ug/L
							Sodium	50000 ug/L
							Ti	1000 ug/L
.MTMSICSA_00009	05/01/15	INORGANIC VENTURES, Lot G2-MEB476152MCA			(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Mo	20 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
							Ti	20 ug/mL
MTMSICVW_00043	08/01/15	03/11/15	DIWATER, Lot DIWATER	250 mL	MTMSICVA_00005	2.5 mL	Aluminum	200 ug/L
							Antimony	40 ug/L
							Arsenic	40 ug/L
							Barium	40 ug/L
							Beryllium	40 ug/L
							Cadmium	40 ug/L
							Chromium	40 ug/L
							Cobalt	40 ug/L
							Copper	40 ug/L
							Lead	40 ug/L
							Manganese	200 ug/L
							Nickel	40 ug/L
							Selenium	40 ug/L
							Silver	40 ug/L
							Thallium	40 ug/L
							Vanadium	40 ug/L
							Zinc	40 ug/L
					MTMSICVB_00005	2.5 mL	Calcium	20000 ug/L
							Iron	10000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Magnesium	20000 ug/L
							Potassium	20000 ug/L
							Sodium	20000 ug/L
.MTMSICVA_00005	08/01/15		CPI, Lot 1063211		(Purchased Reagent)		Aluminum	20 mg/L
							Antimony	4 mg/L
							Arsenic	4 mg/L
							Barium	4 mg/L
							Beryllium	4 mg/L
							Cadmium	4 mg/L
							Chromium	4 mg/L
							Cobalt	4 mg/L
							Copper	4 mg/L
							Lead	4 mg/L
							Manganese	20 mg/L
							Nickel	4 mg/L
							Selenium	4 mg/L
							Silver	4 mg/L
							Thallium	4 mg/L
							Vanadium	4 mg/L
							Zinc	4 mg/L
.MTMSICVB_00005	08/01/15		CPI, Lot 1063211		(Purchased Reagent)		Calcium	2000 mg/L
							Iron	1000 mg/L
							Magnesium	2000 mg/L
							Potassium	2000 mg/L
							Sodium	2000 mg/L
MTMSSCAL1_00014	10/01/15	03/11/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL3_00008	0.5 mL	Aluminum	50 ug/L
							Arsenic	10 ug/L
							Barium	10 ug/L
							Beryllium	10 ug/L
							Cadmium	10 ug/L
							Calcium	5000 ug/L
							Chromium	10 ug/L
							Cobalt	10 ug/L
							Copper	10 ug/L
							Iron	2500 ug/L
							Lead	10 ug/L
							Magnesium	5000 ug/L
							Manganese	50 ug/L
							Nickel	10 ug/L
							Potassium	5000 ug/L
							Selenium	10 ug/L
							Silver	10 ug/L
							Sodium	5000 ug/L
							Thallium	10 ug/L
							Vanadium	10 ug/L
							Zinc	10 ug/L
					MTMSCAL4_00009	0.5 mL	Antimony	10 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTTMHCL_00062	04/02/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
MTTMHCL_00063	04/15/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %

Reagent

MS6020ACRIA_00002

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-6020A-CRI-A
Lot Number:	H2-MEB537060
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Ca, K, Mg, Na, 100 µg/mL ea: Fe, 50 µg/mL ea: Al, 20 µg/mL ea: B, Zn, 10 µg/mL ea: Sr, 5 µg/mL ea: As, Ba, Mn, Se, V, 2 µg/mL ea: Cr3, Cu, Ni, Tl, 1 µg/mL ea: Be, Cd, Co, Pb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	50.02 ± 0.30 µg/mL	Arsenic, As	5.001 ± 0.032 µg/mL	Barium, Ba	5.001 ± 0.032 µg/mL
Beryllium, Be	1.000 ± 0.007 µg/mL	Boron, B	20.00 ± 0.13 µg/mL	Cadmium, Cd	0.999 ± 0.008 µg/mL
Calcium, Ca	1,000 ± 6 µg/mL	Chromium+3, Cr3	2.000 ± 0.012 µg/mL	Cobalt, Co	0.999 ± 0.008 µg/mL
Copper, Cu	2.001 ± 0.013 µg/mL	Iron, Fe	100.0 ± 0.5 µg/mL	Lead, Pb	1.000 ± 0.006 µg/mL
Magnesium, Mg	1,000 ± 5 µg/mL	Manganese, Mn	5.000 ± 0.029 µg/mL	Nickel, Ni	2.000 ± 0.012 µg/mL
Potassium, K	1,001 ± 4 µg/mL	Selenium, Se	5.000 ± 0.029 µg/mL	Sodium, Na	999 ± 4 µg/mL
Strontium, Sr	10.00 ± 0.06 µg/mL	Thallium, Tl	2.001 ± 0.013 µg/mL	Vanadium, V	5.000 ± 0.032 µg/mL
Zinc, Zn	20.02 ± 0.11 µg/mL				

Certified Density: 1.036 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$

$(\bar{x})$ = mean
x_i = individual results
n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$

2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 14, 2014

11.2 Expiration Date

EXPIRES
1 Aug 2015

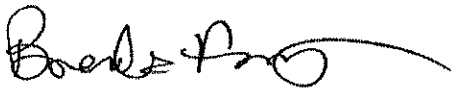
11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

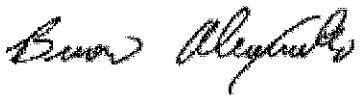
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

MS6020ACRIB_00002

INORGANIC VENTURES™
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-6020A-CRI-B
Lot Number:	H2-MEB537061
Matrix:	5% (v/v) HNO3 tr HF
Value / Analyte(s):	10 µg/mL ea: Mo, Sn, Ti, W, 2 µg/mL ea: Sb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	2.001 ± 0.013 µg/mL	Molybdenum, Mo	10.00 ± 0.06 µg/mL	Tin, Sn	10.00 ± 0.06 µg/mL
Titanium, Ti	10.00 ± 0.07 µg/mL	Tungsten, W	10.00 ± 0.06 µg/mL		

Certified Density: 1.023 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2
W	ICP Assay	3163	060331

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 14, 2014

11.2 Expiration Date

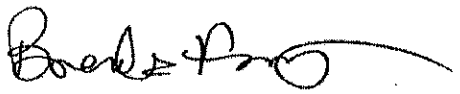
11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

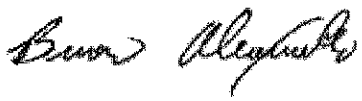
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



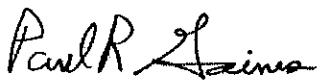
Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTAG_00005

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	Silver	Source Material:	Silver metal
Part Number:	**100051-1**	Material Purity:	99.999%
Lot Number:	**1401302**	Matrix:	2% (v/v) HNO_3

Certified Value: 1000 µg/mL ± 3 µg/mL

The Certified value is based on gravimetric and volumetric preparation, and confirmed against SRM 3151 (lot number 992212) by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

Density: 1.008 g/mL ± 0.002 g/mL @ 21.6°C

Uncertified Values:

Trace Metal Impurity Scan: The data reported are based upon a scan of this specific lot at 1000 µg/mL via ICP analysis. The values are reported in µg/L.

Ag		M	Cu	<	0.1	Li	<	0.5	Rb	<	0.02	Th	<	0.02
Al	<	0.1	Dy	<	0.02	Lu	<	0.02	Re	<	0.02	Ti	<	0.02
As	<	0.05	Er	<	0.02	Mg	<	0.5	Rh	<	0.02	Tl	<	0.02
Au	<	0.02	Eu	<	0.02	Mn	<	0.1	Ru	<	0.02	Tm	<	0.02
B	<	1	Fe	<	1	Mo	<	0.02	Sb	<	0.02	U	<	0.1
Ba	<	0.02	Ga	<	0.02	Na	<	3	Sc	<	0.02	V	<	0.05
Be	<	0.02	Gd	<	0.02	Nb	<	0.02	Se	<	0.1	W	<	0.02
Bi	<	0.02	Ge	<	0.02	Nd	<	0.02	Si	<	50	Y	<	0.02
Ca	<	1	Hf	<	0.02	Ni	<	0.1	Sm	<	0.02	Yb	<	0.02
Cd	<	0.02	Ho	<	0.02	Os	<	0.02	Sn	<	1	Zn	<	1
Ce	<	0.02	In	<	0.02	Pb	<	0.05	Sr	<	0.02	Zr	<	0.02
Co	<	1	Ir	<	0.02	Pd	<	0.1	Ta	<	0.02			
Cr	<	0.1	K	<	1	Pr	<	0.02	Tb	<	0.02			
Cs	<	6	La	<	0.02	Pt	<	0.02	Te	<	0.02			

Preparation Information:

The standard solution is prepared using high purity materials and assayed by analytical methods for conformity prior to use. This standard was prepared using the methods developed at NIST for SRM Spectrometric Standard Solutions under appropriate laboratory conditions.

Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Intended Use:

This Certified Reference Material (CRM) is intended for use as a calibration standard for the quantitative determination of silver, calibration of instruments such as ICPOES, ICPMS, AAS and XRF, and validation of analytical methods. It also can be used in EPA, ASTM and other methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
   The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
   The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.
b. **Volumetric Device**
   The calibration of volumetric vessels is checked annually using the ASTM method E542.
c. **Thermometer**
   The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.
d. **Calibration Standards:**
   The Calibration Standard is directly traceable to SRM 3100 Series Spectrometric Standard Solutions.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for eighteen months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**January 13, 2014**
Shipped Date:	**6/27/14**
Expiration Date:	**12/27/15**
Certificate Issue Date:	**February 28, 2014**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Certificate Revision History: Rev No.: **5.2.1** –modified uncertainty. Rev No.: **5.2.0** – Original Certificate.

Reagent

MTHGCAL_00016

INORGANIC VENTURES™
300 Technology Drive
Christiansburg, VA 24073 • USA
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CERTIFICATE OF ANALYSIS

tel: 800.669.6799 • 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHGN-10PPM
Lot Number:	H2-HG02126
Matrix:	10% (v/v) HNO3
Value/Analyte(s):	10 µg/mL Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1780
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.009 ± 0.077 µg/mL

Certified Density: 1.050 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1

ICP Assay NIST SRM 3133 Lot Number: 061204

Assay Method #2

EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

No correction has been applied for transpiration that will occur after the CRM/RM bottle has been removed from the sealed aluminized bag. See Sec. 7.0 (Instructions for the Correct Use of this Reference Material) for more information.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004113	M	Er	<	0.010282	M	Mn	<	0.008226	O	S	<	0.025000	M	V	<	0.004113
O	Al			M	Eu	<	0.006169	M	Mo	<	0.004113	M	Sb	<	0.001028	M	W	<	0.020564
M	As	<	0.020564	O	Fe	<	0.001100	O	Na		0.000005	M	Sc	<	0.020564	M	Y	<	0.082257
M	Au	<	0.006169	M	Ga	<	0.002056	M	Nb	<	0.001028	M	Se	<	0.016451	M	Yb	<	0.002056
M	B	<	0.143950	M	Gd	<	0.002056	M	Nd	<	0.004113	O	Si	<	0.003400	M	Zn	<	0.041129
M	Ba	<	0.020564	O	Ge	<	0.018000	O	Ni	<	0.001000	M	Sm	<	0.002056	M	Zr	<	0.010282
M	Be	<	0.001028	M	Hf	<	0.004113	n	Os	<		M	Sn	<	0.010282				
M	Bi	<	0.000823	s	Hg	<		O	P	<	0.002600	M	Sr	<	0.001028				
O	Ca		0.000022	M	Ho	<	0.001028	M	Pb	<	0.006169	M	Ta	<	0.014395				
O	Cd	<	0.004600	M	In	<	0.020564	O	Pd	<	0.003800	M	Tb	<	0.000617				
M	Ce	<	0.010282	M	Ir	<	0.010282	M	Pr	<	0.000617	M	Te	<	0.061693				
M	Co	<	0.006169	O	K	<	0.002000	M	Pt	<	0.004113	M	Th	<	0.002056				
M	Cr	<	0.010282	M	La	<	0.001028	M	Rb	<	0.002056	M	Ti	<	0.102822				
M	Cs	<	0.000617	O	Li	<	0.000020	M	Re	<	0.002056	O	Tl	<	0.006000				
M	Cu	<	0.012339	M	Lu	<	0.000823	M	Rh	<	0.002056	M	Tm	<	0.000823				
M	Dy	<	0.012339	O	Mg		0.000006	M	Ru	<	0.004113	M	U	<	0.004113				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30°C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT.**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO_3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO_3 / LDPE container, stable in 10% HNO_3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO_3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO_3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxide (Soluble in HNO_3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

- May 09, 2014

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec. 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of opening the sealed TCT bag or after the date given in Sec. 11.3, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.3 Lot Expiration Date

- May 09, 2017

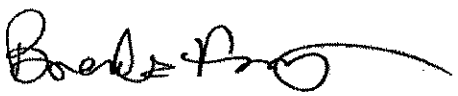
- The date after which this CRM/RM should not be used (See Sec. 11.2).

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

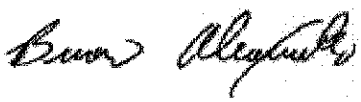
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



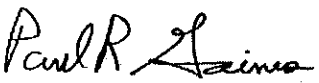
Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTHgStd_00016

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	Mercury	Source Material:	Mercury Metal
Part Number:	**1 33-1**	Material Purity:	99.9998%
Lot Number:	**1509117**	Matrix:	5% (v/v) HNO_3

Certified Value: 1.00 µg/mL ± 0.02 µg/mL

The Certified value is based on gravimetric and volumetric preparation, and confirmed against SRM 3133 (lot number 061204) by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

Preparation Information:

The standard solution is prepared using high purity materials and assayed by analytical methods for conformity prior to use. This standard was prepared using the methods developed at NIST for SRM Spectrometric Standard Solutions under appropriate laboratory conditions.

Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product.

Intended Use:

This Certified Reference Material (CRM) is intended for use as a calibration standard for the quantitative determination of mercury, calibration of instruments such as ICPOES, ICPMS, AAS and XRF, and validation of analytical methods. It also can be used in EPA, ASTM and other methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards:**
The Calibration Standard is directly traceable to SRM 3100 Series Spectrometric Standard Solutions.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for six months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**April 2, 2015**
Shipped Date:	**April 7, 2015**
Expiration Date:	**October 7, 2015**
Certificate Issue Date:	**April 2, 2015**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTICPMS2_00020

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CERTIFICATE OF ANALYSIS

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fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: TA-84

Lot Number: H2-MEB559070

Matrix: 3% (v/v) HNO3

Value / Analyte(s): 1 000 µg/mL ea:

Al,	Ca,	Fe,
K,	Mg,	Na

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum	1 000 ± 5 µg/mL	Calcium	1 000 ± 4 µg/mL
Iron	1 000 ± 5 µg/mL	Magnesium	1 000 ± 5 µg/mL
Potassium	1 000 ± 4 µg/mL	Sodium	1 000 ± 4 µg/mL

Certified Density: 1.035 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2 [\Sigma(s_i)^2]^{1/2}$ 2 = the coverage factor.
$[\Sigma(s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 30, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date EXPIRES 1 FEB 2016

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

MTICPMSA_00022

INORGANIC VENTURES™
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CERTIFICATE OF ANALYSIS

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: TA-ICPMS-1A

Lot Number: H2-MEB552051

Matrix: 5% (v/v) HNO3

Value / Analyte(s): 100 µg/mL ea:

As,	Ba,	Be,
Cd,	Co,	Cr3,
Cu,	Mn,	Ni,
Pb,	Se,	Sr,
V,	Zn,	

25 µg/mL ea:
Tl

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic	100.0 ± 0.9 µg/mL	Barium	100.0 ± 0.5 µg/mL
Beryllium	100.0 ± 0.5 µg/mL	Cadmium	100.0 ± 0.5 µg/mL
Chromium+3	100.0 ± 0.6 µg/mL	Cobalt	100.0 ± 0.6 µg/mL
Copper	100.0 ± 0.6 µg/mL	Lead	100.0 ± 0.6 µg/mL
Manganese	100.0 ± 0.6 µg/mL	Nickel	100.0 ± 0.6 µg/mL
Selenium	100.0 ± 0.6 µg/mL	Strontium	100.0 ± 0.5 µg/mL
Thallium	25.01 ± 0.15 µg/mL	Vanadium	100.0 ± 0.6 µg/mL
Zinc	100.0 ± 0.7 µg/mL		

Certified Density: 1.029 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$

$(\bar{x})$ = mean
x_i = individual results
n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$

2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 22, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date

EXPIRES
1 FEB 2016

Reagent

MTICPMSB_00022

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 · ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-1BREV1
Lot Number:	H2-MEB559071
Matrix:	5% (v/v) HNO3 tr HF
Value / Analyte(s):	100 µg/mL ea: Sn, 10 µg/mL ea: Ag, B, Mo, Sb, Ti, W

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony	10.01 ± 0.07 µg/mL	Boron	10.00 ± 0.06 µg/mL
Molybdenum	10.00 ± 0.06 µg/mL	Silver	10.00 ± 0.07 µg/mL
Tin	100.0 ± 0.5 µg/mL	Titanium	10.01 ± 0.06 µg/mL
Tungsten	10.00 ± 0.06 µg/mL		

Certified Density: 1.025 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2
W	ICP Assay	3163	080331

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2\ [\ \Sigma(s_i)^2\ ]^{½}$ 2 = the coverage factor.
$[\ \Sigma(s_i)^2\ ]^{½}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

- **HF Note:** This standard should not be prepared or stored in glass.

- **Low Silver Note:** This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 30, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date EXPIRES 15 FEB 2016

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Donna Senn

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

Reagent

MTMSCAL3_00008

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: STLPA-CAL-SPECA-REV

Lot Number: H2-MEB544052

Matrix: 3% (v/v) HNO3

Value / Analyte(s):

2 500 µg/mL ea:
Ca, K, Mg, Na,
1 250 µg/mL ea:
Fe,
25 µg/mL ea:
Al, Mn,
5 µg/mL ea:
Ag, As, Ba, Be, Cd, Co,
Cr3, Cu, Ni, Pb, Se, Sr,
Tl, V, Zn

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	25.01 ± 0.17 µg/mL	Arsenic, As	5.000 ± 0.032 µg/mL	Barium, Ba	5.002 ± 0.029 µg/mL
Beryllium, Be	4.999 ± 0.029 µg/mL	Cadmium, Cd	4.999 ± 0.032 µg/mL	Calcium, Ca	2 500 ± 11 µg/mL
Chromium+3, Cr3	5.002 ± 0.029 µg/mL	Cobalt, Co	5.000 ± 0.032 µg/mL	Copper, Cu	4.998 ± 0.032 µg/mL
Iron, Fe	1 250 ± 6 µg/mL	Lead, Pb	5.002 ± 0.025 µg/mL	Magnesium, Mg	2 500 ± 12 µg/mL
Manganese, Mn	25.01 ± 0.17 µg/mL	Nickel, Ni	5.000 ± 0.029 µg/mL	Potassium, K	2 501 ± 11 µg/mL
Selenium, Se	5.001 ± 0.029 µg/mL	Silver, Ag	4.999 ± 0.036 µg/mL	Sodium, Na	2 500 ± 11 µg/mL
Strontium, Sr	5.001 ± 0.032 µg/mL	Thallium, Tl	4.998 ± 0.032 µg/mL	Vanadium, V	5.000 ± 0.032 µg/mL
Zinc, Zn	5.002 ± 0.029 µg/mL				

Certified Density: 1.052 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 22, 2014

11.2 Expiration Date

EXPIRES
1 2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Christy Shortridge
Product Documentation Technician

Christy Shortridge

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

Reagent

MTMSCAL4_00009

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CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 — ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CAL-SPECC
Lot Number:	H2-MEB544053
Matrix:	3% (v/v) HNO_3 tr. HF
Value / Analyte(s):	5 µg/mL ea: B, Mo, Sb, Sn, Ti, W

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	5.001 ± 0.047 µg/mL	Boron, B	5.000 ± 0.032 µg/mL	Molybdenum, Mo	5.001 ± 0.039 µg/mL
Tin, Sn	5.001 ± 0.036 µg/mL	Titanium, Ti	5.001 ± 0.043 µg/mL	Tungsten, W	5.002 ± 0.032 µg/mL

Certified Density: 1.017 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2
W	ICP Assay	3163	080331

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2\ [\ \Sigma(s_i)^2\ ]^{1/2}$ 2 = the coverage factor.
$[\ \Sigma(s_i)^2\ ]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 22, 2014

11.2 Expiration Date

EXPIRES
1 2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Christy Shortridge
Product Documentation Technician

Christy Shortridge

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

Reagent

MTMSICSA_00009

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CERTIFICATE OF ANALYSIS

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 960.02

2.0 **DESCRIPTION OF CRM**

Stock Solution

Catalog No.: 6020ICS-0A

Lot Number: **G2-MEB476152MCA**

Matrix: 1.4% HNO3(v/v)

10,000 µg/mL ea:
Chloride,

2,000 µg/mL ea:
C,

1,000 µg/mL ea:
Al, Ca, Fe, K, Mg, Na, P, S,

20 µg/mL ea:
Mo, Ti

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	1,002 ± 6 µg/mL	Calcium, Ca	1,002 ± 6 µg/mL	Carbon, C	2,004 ± 13 µg/mL
Chloride, Chloride	10,020.0 ± 50.0 µg/mL	Iron, Fe	1,002 ± 7 µg/mL	Magnesium, Mg	1,002 ± 4 µg/mL
Molybdenum, Mo	20.04 ± 0.14 µg/mL	Phosphorus, P	1,002 ± 7 µg/mL	Potassium, K	1,002 ± 4 µg/mL
Sodium, Na	1,002 ± 7 µg/mL	Sulfur, S	1,002 ± 5 µg/mL	Titanium, Ti	20.04 ± 0.13 µg/mL

Certified Density: 1.034 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

$$\text{Uncertainty } (\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$$

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.
- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
C	Gravimetric		See Sec. 4.2
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Chloride	Acidimetric	84L	84L
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	010728
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84k	84k
Ti	ICP Assay	3162a	060808

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 THERMOMETER CALIBRATION - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 GLASSWARE CALIBRATION - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL

Custom-Grade solutions are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Al		M	Dy	< 0.000100	O	Li	0.002000	M	Pr	< 0.000100	M	Te	< 0.012007
M	Sb	< 0.000600	M	Er	< 0.000100	M	Lu	< 0.000100	M	Re	< 0.000100	M	Tb	< 0.000100
O	As	< 0.020000	M	Eu	< 0.000100	s	Mg		M	Rh	< 0.000100	M	Tl	< 0.000100
O	Ba	< 0.000200	M	Gd	< 0.000100	O	Mn	0.003000	M	Rb	< 0.020012	M	Th	< 0.000100
O	Be	< 0.000090	M	Ga	< 0.001001	O	Hg	< 0.005000	M	Ru	< 0.000100	M	Tm	< 0.000100
M	Bi	< 0.005003	O	Ge	< 0.015000	s	Mo		M	Sm	< 0.000100	M	Sn	< 0.003002
O	B	< 0.005000	M	Au	< 0.001001	M	Nd	< 0.000100	O	Sc	< 0.000700	s	Tl	
O	Cd	0.003400	M	Hf	< 0.002001	O	Ni	< 0.002000	M	Se	< 0.050029	O	W	< 0.007000
s	Ca		M	Ho	< 0.000100	M	Nb	< 0.002001	n	Si		M	U	< 0.000100
M	Ce	< 0.000500	M	In	< 0.001001	n	Os		M	Ag	< 0.001001	O	V	< 0.004000
M	Cs	< 0.001001	M	Ir	< 0.000100	M	Pd	< 0.003002	s	Na		M	Yb	< 0.000100
O	Cr	< 0.010000	s	Fe		s	P		O	Sr	0.005000	M	Y	< 0.000100
M	Co	< 0.001001	M	La	< 0.000200	M	Pt	< 0.000100	s	S		M	Zn	0.016610
O	Cu	< 0.020000	M	Pb	0.002001	s	K		M	Ta	< 0.001001	M	Zr	< 0.004002

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- SAI Global File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: July 12, 2013

Expiration Date:

EXPIRES
01 Mo 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Zach Saunders
Product Documentation Technician

Certificate Approved By: Allyson Gulliams
Quality Control Supervisor

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Reagent

MTMSICSABSOLA_00006

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Part Number:	**SM-606-031**
	Solution A
Lot Number:	**1503726**
Matrix:	2% HNO_3
Purity:	99.99% - 99.9995%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
As	20.0 ± 0.2	3103a	100818	Pb	20.00 ± 0.12	3128	101026
Ba	20.00 ± 0.12	3104a	070222	Mn	20.0 ± 0.2	3132	050429
Be	20.0 ± 0.2	3105a	090514	Ni	20.0 ± 0.1	3136	120619
B	20.0 ± 0.1	3107	070514	Se	20.0 ± 0.2	3149	100901
Cd	20.0 ± 0.1	3108	130116	Sr	20.0 ± 0.1	3153a	990906
Cr	20.0 ± 0.1	3112a	030730	Tl	20.0 ± 0.1	3158	993012
Co	20.0 ± 0.1	3113	000630	V	20.00 ± 0.12	3165	992706
Cu	20.0 ± 0.1	3114	121207	Zn	20.0 ± 0.1	3168a	120629

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2
* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**February 6, 2015**
Shipped Date:	**February 10, 2015**
Expiration Date:	**February 10, 2016**
Certificate Issue Date:	**February 6, 2015**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTMSICSABSOLB_00006

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7908

Certificate of Analysis

Product Description:

Part Number:	**SM-606-031**
	Solution B
Lot Number:	**1504002**
Matrix:	2% HNO_3 + Tr HF
Purity:	99.92% - 99.999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Sb	20.00 ± 0.12	*		Ti	20.00 ± 0.12	3162a	130925
Mo	20.00 ± 0.12	3134	891307	W	20.00 ± 0.12	3163	080331
Ag	20.0 ± 0.1	3151	992212	Zr	20.00 ± 0.12	3169	130920
Sn	20.00 ± 0.12	3161a	070330				

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**February 9, 2015**
Shipped Date:	**February 10, 2015**
Expiration Date:	**February 10, 2016**
Certificate Issue Date:	**February 9, 2015**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTMSICVA_00005

USA

5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe

P.O. Box 2704 P: +31 20 638 05 97
1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Additional Information:

Date Received: 29/Aug/2014

Container: 4 oz (125 mL) Narrow Mouth, LDPE clean

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

Element	Symbol	CAS No	SRM No	NIST Lot No	Source Lot No	Purity %	Concentration mg/L	Uncertainty ± mg/L
Aluminum	Al	7429-90-5	3101	060502	7001.46.7P	99.9995	20	0.09
Manganese	Mn	7439-96-5	3132	050429	7017.46.5P	99.95	20	0.07
Silver	Ag	7440-22-4	3151	992212	7000.29.1P	99.999	4	0.04001
Arsenic	As	7440-38-2	3103	010713	7002.46.5P	99.9999	4	0.04
Boron	B	7440-42-8	3107	070514	7003.46.5P	99.999	4	0.04
Barium	Ba	7440-39-3	3104	070222	7004.29.2P	99.997	4	0.04
Beryllium	Be	7440-41-7	3105	892707	7005.46.5P	99.999	4	0.04
Cadmium	Cd	7440-43-9	3108	060531	7007.46.3P	99.9999	4	0.04002
Cobalt	Co	7440-48-4	3113	000630	7008.46.8P	99.995	4	0.04003
Chromium	Cr	7440-47-3	3112	030730	7009.46.3P	99.998	4	0.044
Copper	Cu	7440-50-8	3114	011017	7011.46.5P	99.9995	4	0.04001
Molybdenum	Mo	7439-98-7	3134	891307	7018.29.3P	99.999	4	0.04
Nickel	Ni	7440-02-0	3136	000612	7021.46.8P	99.995	4	0.04001
Lead	Pb	7439-92-1	3128	030721	7023.29.2P	99.999	4	0.04001
Antimony	Sb	7440-36-0	3102	061229	7026.46.3P	99.999	4	0.04002
Selenium	Se	7782-49-2	3149	992106	7027.46.4P	99.999	4	0.04001
Tin	Sn	7440-31-5	3161	070330	7029.46.4P	99.999	4	0.04
Strontium	Sr	7440-24-6	3153	990906	7030.46.4P	99.998	4	0.04001
Titanium	Ti	7440-32-6	3162	060808	7033.343.1P	99.995	4	0.04001
Thallium	Tl	7440-28-0	3158	993012	7034.29.3P	99.999	4	0.04
Vanadium	V	7440-62-2	3165	992706	7036.46.5P	99.99	4	0.04
Tungsten	W	7440-33-7	3163	080331	7072.46.2P	99.99	4	0.044011
Zinc	Zn	7440-66-6	3168	080123	7037.46.5P	99.9995	4	0.04002
Calcium	Ca	7440-70-2	3109	050825	7006.29.2P	99.999	2000	7
Potassium	K	7440-09-7	3141	051220	7013.46.9P	99.999	2000	7
Magnesium	Mg	7439-95-4	3131	050302	7016.46.5P	99.99	2000	7
Sodium	Na	7440-23-5	3152	010728	7020.46.7P	99.999	2000	7
Iron	Fe	7439-89-6	3126	051031	7012.46.14P	99.99	1000	3.5

USA

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The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Intended Uses:

This Certified Reference material, CRM, is intended for use as a calibration standard or a quality control standard for Inorganic Speetrometry Equipment such as ICP-OES, ICP-MS, AA, and XRF, It may aslo be used for various USEPA and ASTM methods.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

Packaging and Storage:

The Solution should be kept trightly capped and stored under normal laboratory conditions. Pre-cleaned polyethlene bottles are used to package this material. Special storage information: Ambient

Glassware Calibration:

Only Class A glassware is used in the manufacture and quality control of Standards. All Glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used perform daily checks on balances calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to the National Institute of Standards and Technology (NIST). Balances are checked daily in accordance to in house procedure O2-LB-004. Balances are calibrated annually by an ISO 17025 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-10 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC Guide 17025:2005 and ISO Guide 34:2009. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous information:

Refer to MSDS

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Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
$u_c = \sqrt{\sum u_i^2}$ where u_i are the individual uncertainty components for raw material, transportation, homogeneity, and shelf life.

Expiration Information:

The Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. This standard is guaranteed until the expiration date listed above.

Accreditation:

This standard was manufactured by an ISO 17025 Chemical Testing Lab (Certificate number 3031.01) and ISO Guide 34 Reference Material Producer (RMP) Certificate number 3031.02 accredited by The American Association of Laboratory Accreditation (A2LA). Manufacturer's Quality System audited and registered by NSF-ISR to ISO 9001:2008 (Certificate number IZ391-IS4).

Manufactured By:

Tiffany Kwasigroch

Manufacture Date: 7/18/2014

Certified By:

Zachary Spinelli

Certified Date:7/21/2014

Released By:

HuiChen Stavros, Ph.D.

Original Issue Date: 7/22/2014

Reagent

MTMSICVB_00005

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Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Additional Information:

Date Received: 29/Aug/2014

Container: 4 oz (125 mL) Narrow Mouth, LDPE clean

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
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Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
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Hazardous information:

Refer to MSDS

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Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
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Expiration Information:

The Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. This standard is guaranteed until the expiration date listed above.

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Manufactured By:

Tiffany Kwasigroch

Manufacture Date: 7/18/2014

Certified By:

Zachary Spinelli

Certified Date:7/21/2014

Released By:

HuiChen Stavros, Ph.D.

Original Issue Date: 7/22/2014

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Project: Ravenna Army Ammunition Plant

Client Sample ID	Lab Sample ID
079SS-0369M-0001-SO	240-49172-1
079SS-0370M-0001-SO	240-49172-2
079SS-0371M-0001-SO	240-49172-3
079SS-0372M-0001-SO	240-49172-4
079SS-0373M-0001-SO	240-49172-5
079SS-0374M-0001-SO	240-49172-6
079SS-0375M-0001-SO	240-49172-7
079SS-0376M-0001-SO	240-49172-8
079SS-0377M-0001-SO	240-49172-9
079SS-0378M-0001-SO	240-49172-10

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0369M-0001-SO
Lab Sample ID: 240-49172-1
Lab Name: TestAmerica Canton
Job No.: 240-49172-1
SDG ID.: CC RVAAP-79 Load Line 3
Matrix: Solid
Date Sampled: 04/08/2015 10:20
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.0

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	15	3.1	0.48	mg/Kg		D	2	6020
Antimony	2.2	0.31	0.12	0.011	mg/Kg		D	2	6020
Arsenic	11	0.77	0.12	0.020	mg/Kg		D	2	6020
Barium	73	0.77	0.23	0.17	mg/Kg		D	2	6020
Beryllium	0.59	0.15	0.077	0.0085	mg/Kg		D	2	6020
Cadmium	0.18	0.31	0.0077	0.0029	mg/Kg	J	D	2	6020
Calcium	4900	310	77	17	mg/Kg		D	2	6020
Chromium	17	0.77	0.35	0.046	mg/Kg		D	2	6020
Cobalt	9.1	0.15	0.012	0.0013	mg/Kg		D	2	6020
Copper	11	0.62	0.23	0.075	mg/Kg		D	2	6020
Iron	27000	770	230	25	mg/Kg		D	20	6020
Lead	15	0.46	0.15	0.035	mg/Kg		D	2	6020
Magnesium	3000	150	19	3.1	mg/Kg		D	2	6020
Manganese	480	7.7	3.1	0.93	mg/Kg		D	20	6020
Nickel	19	0.77	0.19	0.030	mg/Kg		D	2	6020
Potassium	960	150	7.7	3.8	mg/Kg		D	2	6020
Selenium	0.83	0.77	0.046	0.031	mg/Kg		D	2	6020
Silver	0.052	0.15	0.039	0.0011	mg/Kg	J	D	2	6020
Sodium	44	150	31	6.7	mg/Kg	J	D	2	6020
Thallium	0.16	0.31	0.12	0.015	mg/Kg	J	D	2	6020
Vanadium	21	0.77	0.077	0.029	mg/Kg		D	2	6020
Zinc	53	6.2	1.5	0.39	mg/Kg		D	2	6020
Mercury	0.032	0.091	0.030	0.013	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0370M-0001-SO
Lab Sample ID: 240-49172-2
Lab Name: TestAmerica Canton
Job No.: 240-49172-1
SDG ID.: CC RVAAP-79 Load Line 3
Matrix: Solid
Date Sampled: 04/08/2015 12:40
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.6

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	18	3.6	0.56	mg/Kg		D	2	6020
Antimony	0.70	0.36	0.14	0.013	mg/Kg		D	2	6020
Arsenic	11	0.91	0.14	0.024	mg/Kg		D	2	6020
Barium	80	0.91	0.27	0.20	mg/Kg		D	2	6020
Beryllium	0.65	0.18	0.091	0.010	mg/Kg		D	2	6020
Cadmium	0.17	0.36	0.0091	0.0034	mg/Kg	J	D	2	6020
Calcium	410	360	91	20	mg/Kg		D	2	6020
Chromium	17	0.91	0.41	0.054	mg/Kg		D	2	6020
Cobalt	9.6	0.18	0.014	0.0015	mg/Kg		D	2	6020
Copper	12	0.73	0.27	0.088	mg/Kg		D	2	6020
Iron	24000	910	270	29	mg/Kg		D	20	6020
Lead	18	0.54	0.18	0.041	mg/Kg		D	2	6020
Magnesium	1900	180	23	3.6	mg/Kg		D	2	6020
Manganese	940	9.1	3.6	1.1	mg/Kg		D	20	6020
Nickel	19	0.91	0.23	0.035	mg/Kg		D	2	6020
Potassium	720	180	9.1	4.4	mg/Kg		D	2	6020
Selenium	0.95	0.91	0.054	0.036	mg/Kg		D	2	6020
Silver	0.049	0.18	0.045	0.0013	mg/Kg	J	D	2	6020
Sodium	27	180	36	7.9	mg/Kg	J	D	2	6020
Thallium	0.17	0.36	0.14	0.017	mg/Kg	J	D	2	6020
Vanadium	24	0.91	0.091	0.034	mg/Kg		D	2	6020
Zinc	53	7.3	1.8	0.45	mg/Kg		D	2	6020
Mercury	0.047	0.092	0.030	0.013	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0371M-0001-SO
Lab Sample ID: 240-49172-3
Lab Name: TestAmerica Canton
Job No.: 240-49172-1
SDG ID.: CC RVAAP-79 Load Line 3
Matrix: Solid
Date Sampled: 04/08/2015 11:50
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.7

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	17	3.4	0.52	mg/Kg		D	2	6020
Antimony	0.16	0.34	0.13	0.012	mg/Kg	J	D	2	6020
Arsenic	13	0.84	0.13	0.022	mg/Kg		D	2	6020
Barium	100	0.84	0.25	0.18	mg/Kg		D	2	6020
Beryllium	0.79	0.17	0.084	0.0092	mg/Kg		D	2	6020
Cadmium	0.19	0.34	0.0084	0.0031	mg/Kg	J	D	2	6020
Calcium	340	340	84	18	mg/Kg		D	2	6020
Chromium	19	0.84	0.38	0.050	mg/Kg		D	2	6020
Cobalt	12	0.17	0.013	0.0014	mg/Kg		D	2	6020
Copper	13	0.67	0.25	0.081	mg/Kg		D	2	6020
Iron	29000	840	250	27	mg/Kg		D	20	6020
Lead	17	0.50	0.17	0.038	mg/Kg		D	2	6020
Magnesium	2200	170	21	3.4	mg/Kg		D	2	6020
Manganese	1200	8.4	3.4	1.0	mg/Kg		D	20	6020
Nickel	24	0.84	0.21	0.033	mg/Kg		D	2	6020
Potassium	780	170	8.4	4.1	mg/Kg		D	2	6020
Selenium	1.0	0.84	0.050	0.034	mg/Kg		D	2	6020
Silver	0.045	0.17	0.042	0.0012	mg/Kg	J	D	2	6020
Sodium	28	170	34	7.3	mg/Kg	J	D	2	6020
Thallium	0.17	0.34	0.13	0.016	mg/Kg	J	D	2	6020
Vanadium	27	0.84	0.084	0.031	mg/Kg		D	2	6020
Zinc	60	6.7	1.7	0.42	mg/Kg		D	2	6020
Mercury	0.037	0.097	0.032	0.014	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0372M-0001-SO
Lab Sample ID: 240-49172-4
Lab Name: TestAmerica Canton
Job No.: 240-49172-1
SDG ID.: CC RVAAP-79 Load Line 3
Matrix: Solid
Date Sampled: 04/08/2015 11:00
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	15	3.0	0.47	mg/Kg		D	2	6020
Antimony	0.11	0.30	0.11	0.011	mg/Kg	J	D	2	6020
Arsenic	9.4	0.75	0.11	0.020	mg/Kg		D	2	6020
Barium	60	0.75	0.23	0.17	mg/Kg		D	2	6020
Beryllium	0.50	0.15	0.075	0.0083	mg/Kg		D	2	6020
Cadmium	0.16	0.30	0.0075	0.0028	mg/Kg	J	D	2	6020
Calcium	370	300	75	17	mg/Kg		D	2	6020
Chromium	15	0.75	0.34	0.045	mg/Kg		D	2	6020
Cobalt	8.2	0.15	0.011	0.0013	mg/Kg		D	2	6020
Copper	8.2	0.60	0.23	0.073	mg/Kg		D	2	6020
Iron	22000	750	230	24	mg/Kg		D	20	6020
Lead	17	0.45	0.15	0.034	mg/Kg		D	2	6020
Magnesium	1700	150	19	3.0	mg/Kg		D	2	6020
Manganese	670	7.5	3.0	0.90	mg/Kg		D	20	6020
Nickel	15	0.75	0.19	0.029	mg/Kg		D	2	6020
Potassium	540	150	7.5	3.7	mg/Kg		D	2	6020
Selenium	0.84	0.75	0.045	0.030	mg/Kg		D	2	6020
Silver	0.038	0.15	0.038	0.0011	mg/Kg	J	D	2	6020
Sodium	23	150	30	6.5	mg/Kg	J	D	2	6020
Thallium	0.15	0.30	0.11	0.014	mg/Kg	J	D	2	6020
Vanadium	23	0.75	0.075	0.028	mg/Kg		D	2	6020
Zinc	57	6.0	1.5	0.38	mg/Kg		D	2	6020
Mercury	0.044	0.094	0.031	0.013	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0373M-0001-SO
Lab Sample ID: 240-49172-5
Lab Name: TestAmerica Canton
Job No.: 240-49172-1
SDG ID.: CC RVAAP-79 Load Line 3
Matrix: Solid
Date Sampled: 04/08/2015 13:40
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	18	3.6	0.55	mg/Kg		D	2	6020
Antimony	0.19	0.36	0.13	0.012	mg/Kg	J	D	2	6020
Arsenic	9.4	0.89	0.13	0.023	mg/Kg		D	2	6020
Barium	92	0.89	0.27	0.20	mg/Kg		D	2	6020
Beryllium	0.59	0.18	0.089	0.0098	mg/Kg		D	2	6020
Cadmium	0.22	0.36	0.0089	0.0033	mg/Kg	J	D	2	6020
Calcium	940	360	89	20	mg/Kg		D	2	6020
Chromium	17	0.89	0.40	0.053	mg/Kg		D	2	6020
Cobalt	9.5	0.18	0.013	0.0015	mg/Kg		D	2	6020
Copper	9.0	0.71	0.27	0.086	mg/Kg		D	2	6020
Iron	22000	890	270	28	mg/Kg		D	20	6020
Lead	18	0.53	0.18	0.040	mg/Kg		D	2	6020
Magnesium	1800	180	22	3.6	mg/Kg		D	2	6020
Manganese	1300	8.9	3.6	1.1	mg/Kg		D	20	6020
Nickel	18	0.89	0.22	0.035	mg/Kg		D	2	6020
Potassium	670	180	8.9	4.4	mg/Kg		D	2	6020
Selenium	0.96	0.89	0.053	0.036	mg/Kg		D	2	6020
Silver	0.049	0.18	0.044	0.0012	mg/Kg	J	D	2	6020
Sodium	27	180	36	7.7	mg/Kg	J	D	2	6020
Thallium	0.17	0.36	0.13	0.017	mg/Kg	J	D	2	6020
Vanadium	24	0.89	0.089	0.033	mg/Kg		D	2	6020
Zinc	54	7.1	1.8	0.44	mg/Kg		D	2	6020
Mercury	0.054	0.088	0.029	0.012	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0374M-0001-SO
Lab Sample ID: 240-49172-6
Lab Name: TestAmerica Canton
Job No.: 240-49172-1
SDG ID.: CC RVAAP-79 Load Line 3
Matrix: Solid
Date Sampled: 04/08/2015 14:20
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	19	3.8	0.59	mg/Kg		D	2	6020
Antimony	0.30	0.38	0.14	0.013	mg/Kg	J	D	2	6020
Arsenic	9.6	0.95	0.14	0.025	mg/Kg		D	2	6020
Barium	110	0.95	0.29	0.21	mg/Kg		D	2	6020
Beryllium	0.57	0.19	0.095	0.011	mg/Kg		D	2	6020
Cadmium	0.21	0.38	0.0095	0.0035	mg/Kg	J	D	2	6020
Calcium	2000	380	95	21	mg/Kg		D	2	6020
Chromium	17	0.95	0.43	0.057	mg/Kg		D	2	6020
Cobalt	8.1	0.19	0.014	0.0016	mg/Kg		D	2	6020
Copper	13	0.76	0.29	0.093	mg/Kg		D	2	6020
Iron	21000	950	290	31	mg/Kg		D	20	6020
Lead	23	0.57	0.19	0.043	mg/Kg		D	2	6020
Magnesium	2000	190	24	3.8	mg/Kg		D	2	6020
Manganese	670	9.5	3.8	1.1	mg/Kg		D	20	6020
Nickel	20	0.95	0.24	0.037	mg/Kg		D	2	6020
Potassium	700	190	9.5	4.7	mg/Kg		D	2	6020
Selenium	0.91	0.95	0.057	0.038	mg/Kg	J	D	2	6020
Silver	0.046	0.19	0.048	0.0013	mg/Kg	J	D	2	6020
Sodium	32	190	38	8.3	mg/Kg	J	D	2	6020
Thallium	0.16	0.38	0.14	0.018	mg/Kg	J	D	2	6020
Vanadium	24	0.95	0.095	0.035	mg/Kg		D	2	6020
Zinc	67	7.6	1.9	0.48	mg/Kg		D	2	6020
Mercury	0.084	0.092	0.030	0.013	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0375M-0001-SO
Lab Sample ID: 240-49172-7
Lab Name: TestAmerica Canton
Job No.: 240-49172-1
SDG ID.: CC RVAAP-79 Load Line 3
Matrix: Solid
Date Sampled: 04/07/2015 14:00
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	8600	19	3.8	0.60	mg/Kg		D	2	6020
Antimony	0.069	0.38	0.14	0.013	mg/Kg	J	D	2	6020
Arsenic	10	0.96	0.14	0.025	mg/Kg		D	2	6020
Barium	52	0.96	0.29	0.21	mg/Kg		D	2	6020
Beryllium	0.65	0.19	0.096	0.011	mg/Kg		D	2	6020
Cadmium	0.12	0.38	0.0096	0.0036	mg/Kg	J	D	2	6020
Calcium	400	380	96	21	mg/Kg		D	2	6020
Chromium	26	0.96	0.43	0.058	mg/Kg		D	2	6020
Cobalt	8.5	0.19	0.014	0.0016	mg/Kg		D	2	6020
Copper	16	0.77	0.29	0.093	mg/Kg		D	2	6020
Iron	26000	960	290	31	mg/Kg		D	20	6020
Lead	15	0.58	0.19	0.043	mg/Kg		D	2	6020
Magnesium	2100	190	24	3.8	mg/Kg		D	2	6020
Manganese	330	9.6	3.8	1.2	mg/Kg		D	20	6020
Nickel	27	0.96	0.24	0.037	mg/Kg		D	2	6020
Potassium	1200	190	9.6	4.7	mg/Kg		D	2	6020
Selenium	0.92	0.96	0.058	0.038	mg/Kg	J	D	2	6020
Silver	0.031	0.19	0.048	0.0013	mg/Kg	J	D	2	6020
Sodium	39	190	38	8.4	mg/Kg	J	D	2	6020
Thallium	0.14	0.38	0.14	0.018	mg/Kg	J	D	2	6020
Vanadium	16	0.96	0.096	0.036	mg/Kg		D	2	6020
Zinc	41	7.7	1.9	0.48	mg/Kg		D	2	6020
Mercury	0.016	0.090	0.030	0.013	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0376M-0001-SO
Lab Sample ID: 240-49172-8
Lab Name: TestAmerica Canton
Job No.: 240-49172-1
SDG ID.: CC RVAAP-79 Load Line 3
Matrix: Solid
Date Sampled: 04/07/2015 15:40
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.7

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	15000	20	3.9	0.60	mg/Kg		D	2	6020
Antimony	0.13	0.39	0.15	0.014	mg/Kg	J	D	2	6020
Arsenic	14	0.98	0.15	0.025	mg/Kg		D	2	6020
Barium	67	0.98	0.29	0.21	mg/Kg		D	2	6020
Beryllium	0.69	0.20	0.098	0.011	mg/Kg		D	2	6020
Cadmium	0.13	0.39	0.0098	0.0036	mg/Kg	J	D	2	6020
Calcium	260	390	98	21	mg/Kg	J	D	2	6020
Chromium	21	0.98	0.44	0.059	mg/Kg		D	2	6020
Cobalt	7.6	0.20	0.015	0.0017	mg/Kg		D	2	6020
Copper	18	0.78	0.29	0.095	mg/Kg		D	2	6020
Iron	30000	980	290	31	mg/Kg		D	20	6020
Lead	14	0.59	0.20	0.044	mg/Kg		D	2	6020
Magnesium	2500	200	24	3.9	mg/Kg		D	2	6020
Manganese	150	9.8	3.9	1.2	mg/Kg		D	20	6020
Nickel	19	0.98	0.24	0.038	mg/Kg		D	2	6020
Potassium	1200	200	9.8	4.8	mg/Kg		D	2	6020
Selenium	1.2	0.98	0.059	0.039	mg/Kg		D	2	6020
Silver	0.039	0.20	0.049	0.0014	mg/Kg	J	D	2	6020
Sodium	36	200	39	8.5	mg/Kg	J	D	2	6020
Thallium	0.20	0.39	0.15	0.019	mg/Kg	J	D	2	6020
Vanadium	26	0.98	0.098	0.036	mg/Kg		D	2	6020
Zinc	50	7.8	2.0	0.49	mg/Kg		D	2	6020
Mercury	0.029	0.10	0.034	0.015	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0377M-0001-SO
Lab Sample ID: 240-49172-9
Lab Name: TestAmerica Canton
Job No.: 240-49172-1
SDG ID.: CC RVAAP-79 Load Line 3
Matrix: Solid
Date Sampled: 04/07/2015 16:00
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	12000	18	3.7	0.57	mg/Kg		D	2	6020
Antimony	0.16	0.37	0.14	0.013	mg/Kg	J	D	2	6020
Arsenic	13	0.91	0.14	0.024	mg/Kg		D	2	6020
Barium	69	0.91	0.27	0.20	mg/Kg		D	2	6020
Beryllium	0.67	0.18	0.091	0.010	mg/Kg		D	2	6020
Cadmium	0.15	0.37	0.0091	0.0034	mg/Kg	J	D	2	6020
Calcium	340	370	91	20	mg/Kg	J	D	2	6020
Chromium	19	0.91	0.41	0.055	mg/Kg		D	2	6020
Cobalt	9.8	0.18	0.014	0.0016	mg/Kg		D	2	6020
Copper	19	0.73	0.27	0.089	mg/Kg		D	2	6020
Iron	26000	91	27	2.9	mg/Kg		D	2	6020
Lead	12	5.5	1.8	0.41	mg/Kg		D	20	6020
Magnesium	2800	180	23	3.7	mg/Kg		D	2	6020
Manganese	260	9.1	3.7	1.1	mg/Kg		D	20	6020
Nickel	23	0.91	0.23	0.036	mg/Kg		D	2	6020
Potassium	1000	180	9.1	4.5	mg/Kg		D	2	6020
Selenium	1.1	0.91	0.055	0.037	mg/Kg		D	2	6020
Silver	0.028	0.18	0.046	0.0013	mg/Kg	J	D	2	6020
Sodium	34	180	37	7.9	mg/Kg	J	D	2	6020
Thallium	0.18	0.37	0.14	0.017	mg/Kg	J	D	2	6020
Vanadium	22	0.91	0.091	0.034	mg/Kg		D	2	6020
Zinc	53	7.3	1.8	0.46	mg/Kg		D	2	6020
Mercury	0.021	0.11	0.037	0.016	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0378M-0001-SO
Lab Sample ID: 240-49172-10
Lab Name: TestAmerica Canton
Job No.: 240-49172-1
SDG ID.: CC RVAAP-79 Load Line 3
Matrix: Solid
Date Sampled: 04/07/2015 16:10
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	10000	17	3.4	0.52	mg/Kg		D	2	6020
Antimony	0.13	0.34	0.13	0.012	mg/Kg	J	D	2	6020
Arsenic	9.8	0.84	0.13	0.022	mg/Kg		D	2	6020
Barium	64	0.84	0.25	0.19	mg/Kg		D	2	6020
Beryllium	0.55	0.17	0.084	0.0093	mg/Kg		D	2	6020
Cadmium	0.12	0.34	0.0084	0.0031	mg/Kg	J	D	2	6020
Calcium	300	340	84	19	mg/Kg	J	D	2	6020
Chromium	15	0.84	0.38	0.051	mg/Kg		D	2	6020
Cobalt	10	0.17	0.013	0.0014	mg/Kg		D	2	6020
Copper	12	0.68	0.25	0.082	mg/Kg		D	2	6020
Iron	22000	84	25	2.7	mg/Kg		D	2	6020
Lead	13	5.1	1.7	0.38	mg/Kg		D	20	6020
Magnesium	1800	170	21	3.4	mg/Kg		D	2	6020
Manganese	770	8.4	3.4	1.0	mg/Kg		D	20	6020
Nickel	15	0.84	0.21	0.033	mg/Kg		D	2	6020
Potassium	640	170	8.4	4.1	mg/Kg		D	2	6020
Selenium	0.86	0.84	0.051	0.034	mg/Kg		D	2	6020
Silver	0.028	0.17	0.042	0.0012	mg/Kg	J	D	2	6020
Sodium	27	170	34	7.3	mg/Kg	J	D	2	6020
Thallium	0.16	0.34	0.13	0.016	mg/Kg	J	D	2	6020
Vanadium	22	0.84	0.084	0.031	mg/Kg		D	2	6020
Zinc	44	6.8	1.7	0.42	mg/Kg		D	2	6020
Mercury	0.038	0.11	0.035	0.015	mg/Kg	J		1	7471A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-177115/7 04/20/2015 10:44				CCV 240-177115/140 04/20/2015 19:27				CCV 240-177115/152 04/20/2015 20:12			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	206		200	103	249		250	99	251		250	100
Antimony	38.3		40.0	96	53.0		50.0	106	53.1		50.0	106
Arsenic	39.0		40.0	97	49.7		50.0	99	49.4		50.0	99
Barium	41.3		40.0	103	53.0		50.0	106	52.7		50.0	105
Beryllium	41.0		40.0	102	47.6		50.0	95	47.3		50.0	95
Cadmium	41.7		40.0	104	51.9		50.0	104	52.9		50.0	106
Calcium	20100		20000	100	24900		25000	100	25400		25000	102
Cobalt	40.9		40.0	102	48.4		50.0	97	47.4		50.0	95
Copper	42.0		40.0	105	47.9		50.0	96	47.4		50.0	95
Lead	40.3		40.0	101	48.5		50.0	97	48.3		50.0	97
Magnesium	20800		20000	104	25200		25000	101	25400		25000	102
Potassium	20800		20000	104	25700		25000	103	26200		25000	105
Selenium	42.2		40.0	106	48.9		50.0	98	48.7		50.0	97
Silver	41.8		40.0	104	52.3		50.0	105	51.8		50.0	104
Sodium	20800		20000	104	25300		25000	101	25500		25000	102
Thallium	39.0		40.0	97	46.7		50.0	93	47.1		50.0	94
Vanadium	41.2		40.0	103	51.8		50.0	104	52.3		50.0	105
Zinc	42.4		40.0	106	49.0		50.0	98	49.2		50.0	98
Chromium	41.8		40.0	105	50.7		50.0	101	52.0		50.0	104
Iron	10400		10000	104	12900		12500	103	13300		12500	106
Manganese	205		200	103	253		250	101	261		250	104
Nickel	42.3		40.0	106	48.1		50.0	96	47.4		50.0	95

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-177115/164 04/20/2015 20:58				CCV 240-177115/173 04/20/2015 21:32							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	253		250	101	250		250	100				
Antimony	53.5		50.0	107	53.3		50.0	107				
Arsenic	49.2		50.0	98	48.2		50.0	96				
Barium	53.4		50.0	107	53.0		50.0	106				
Beryllium	46.0		50.0	92	46.9		50.0	94				
Cadmium	52.2		50.0	104	52.6		50.0	105				
Calcium	25400		25000	102	25300		25000	101				
Cobalt	47.2		50.0	94	46.9		50.0	94				
Copper	47.0		50.0	94	46.8		50.0	94				
Lead	48.8		50.0	98	48.1		50.0	96				
Magnesium	25500		25000	102	25000		25000	100				
Potassium	26300		25000	105	26100		25000	105				
Selenium	49.3		50.0	99	48.0		50.0	96				
Silver	51.5		50.0	103	51.2		50.0	102				
Sodium	25500		25000	102	25100		25000	100				
Thallium	47.0		50.0	94	46.6		50.0	93				
Vanadium	51.6		50.0	103	51.5		50.0	103				
Zinc	48.5		50.0	97	48.3		50.0	97				
Chromium	51.6		50.0	103	51.2		50.0	102				
Iron	13200		12500	105								
Manganese	260		250	104	261		250	104				
Nickel	47.2		50.0	94	46.3		50.0	93				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-177559/7 04/22/2015 15:15				CCV 240-177559/24 04/22/2015 16:19				CCV 240-177559/36 04/22/2015 17:03			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	205		200	103	241		250	96	246		250	98
Antimony	41.6		40.0	104	50.6		50.0	101	50.9		50.0	102
Arsenic	39.7		40.0	99	49.6		50.0	99	47.5		50.0	95
Barium	40.8		40.0	102	49.6		50.0	99	49.4		50.0	99
Beryllium	39.0		40.0	98	47.3		50.0	95	45.7		50.0	91
Cadmium	40.9		40.0	102	50.4		50.0	101	49.2		50.0	98
Calcium	20100		20000	100	24000		25000	96	24200		25000	97
Chromium	41.0		40.0	103	49.7		50.0	99	50.5		50.0	101
Cobalt	40.1		40.0	100	49.1		50.0	98	47.4		50.0	95
Copper	41.5		40.0	104	49.6		50.0	99	48.4		50.0	97
Iron	10300		10000	103	12300		12500	99	12600		12500	101
Magnesium	20800		20000	104	24700		25000	99	25000		25000	100
Nickel	40.7		40.0	102	49.5		50.0	99	47.5		50.0	95
Potassium	20700		20000	104	24500		25000	98	24600		25000	98
Selenium	41.5		40.0	104	49.8		50.0	100	46.4		50.0	93
Silver	41.2		40.0	103	50.3		50.0	101	49.7		50.0	99
Sodium	20900		20000	104	25100		25000	100	25200		25000	101
Thallium	37.2		40.0	93	47.7		50.0	95	46.0		50.0	92
Vanadium	41.1		40.0	103	49.4		50.0	99	49.6		50.0	99
Zinc	42.0		40.0	105	48.7		50.0	97	47.1		50.0	94
Lead	39.1		40.0	98	47.6		50.0	95	47.7		50.0	95
Manganese	201		200	100	239		250	96	243		250	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-177559/48 04/22/2015 17:49				CCV 240-177559/60 04/22/2015 18:34				CCV 240-177559/65 04/22/2015 18:53			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	251		250	100	250		250	100	252		250	101
Antimony	51.2		50.0	102	51.7		50.0	103	51.3		50.0	103
Arsenic	47.5		50.0	95	47.8		50.0	96	51.1		50.0	102
Barium	50.6		50.0	101	50.4		50.0	101	50.5		50.0	101
Beryllium	46.5		50.0	93	46.8		50.0	94	47.4		50.0	95
Cadmium	50.1		50.0	100	50.3		50.0	101	53.7		50.0	107
Calcium	24700		25000	99	24600		25000	99	24800		25000	99
Chromium	51.6		50.0	103	51.0		50.0	102	51.4		50.0	103
Cobalt	46.8		50.0	94	47.2		50.0	94	49.9		50.0	100
Copper	47.6		50.0	95	47.4		50.0	95	50.3		50.0	101
Iron	13100		12500	105	12900		12500	103	13000		12500	104
Magnesium	25400		25000	102	24900		25000	100	25000		25000	100
Nickel	47.1		50.0	94	46.8		50.0	94	49.8		50.0	100
Potassium	25100		25000	100	25200		25000	101	25200		25000	101
Selenium	46.9		50.0	94	47.3		50.0	95	51.5		50.0	103
Silver	50.2		50.0	100	50.4		50.0	101	53.6		50.0	107
Sodium	25400		25000	102	25000		25000	100	25100		25000	100
Thallium	46.9		50.0	94	45.7		50.0	91	46.1		50.0	92
Vanadium	50.9		50.0	102	51.2		50.0	102	50.9		50.0	102
Zinc	47.5		50.0	95	47.7		50.0	95	50.6		50.0	101
Lead	48.6		50.0	97	47.1		50.0	94	47.7		50.0	95
Manganese	249		250	100	248		250	99	249		250	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-177880/7 04/24/2015 09:22				CCV 240-177880/62 04/24/2015 14:06				CCV 240-177880/74 04/24/2015 14:51			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	10200		10000	102	12900		12500	103	12700		12500	102
Lead	39.6		40.0	99	49.4		50.0	99	47.7		50.0	95
Manganese	208		200	104	256		250	102	255		250	102
Aluminum	203		200	101	244		250	98	242		250	97
Antimony	43.8		40.0	110	53.1		50.0	106	52.1		50.0	104
Arsenic	39.7		40.0	99	47.9		50.0	96	47.7		50.0	95
Barium	40.1		40.0	100	52.2		50.0	104	51.3		50.0	103
Beryllium	39.7		40.0	99	46.9		50.0	94	48.1		50.0	96
Cadmium	40.5		40.0	101	51.2		50.0	102	50.2		50.0	100
Calcium	20100		20000	100	25200		25000	101	24800		25000	99
Chromium	41.1		40.0	103	51.5		50.0	103	50.5		50.0	101
Cobalt	40.2		40.0	101	46.7		50.0	93	45.9		50.0	92
Copper	40.6		40.0	101	46.7		50.0	93	46.1		50.0	92
Magnesium	20600		20000	103	24900		25000	99	24400		25000	98
Nickel	40.8		40.0	102	46.1		50.0	92	45.7		50.0	91
Potassium	20600		20000	103	25400		25000	102	25100		25000	100
Selenium	42.1		40.0	105	48.4		50.0	97	48.2		50.0	96
Silver	41.0		40.0	103	50.6		50.0	101	49.5		50.0	99
Sodium	20300		20000	102	25000		25000	100	24400		25000	97
Thallium	39.2		40.0	98	51.0		50.0	102	51.4		50.0	103
Vanadium	40.7		40.0	102	51.2		50.0	102	50.5		50.0	101
Zinc	41.1		40.0	103	47.2		50.0	94	46.7		50.0	93

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-177880/83 04/24/2015 15:26				CCV 240-177880/95 04/24/2015 16:11				CCV 240-177880/107 04/24/2015 16:57			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	12600		12500	101	12700		12500	101	12800		12500	103
Lead	47.9		50.0	96	47.4		50.0	95	47.8		50.0	96
Manganese	255		250	102	256		250	103	252		250	101
Aluminum	236		250	95	241		250	96	241		250	97
Antimony	52.1		50.0	104	51.7		50.0	103	52.1		50.0	104
Arsenic	49.1		50.0	98	48.0		50.0	96	47.8		50.0	96
Barium	51.5		50.0	103	51.2		50.0	102	51.1		50.0	102
Beryllium	50.0		50.0	100	48.1		50.0	96	47.8		50.0	96
Cadmium	50.2		50.0	100	49.7		50.0	99	50.5		50.0	101
Calcium	24600		25000	98	24800		25000	99	24900		25000	100
Chromium	50.1		50.0	100	50.5		50.0	101	50.3		50.0	101
Cobalt	47.4		50.0	95	46.3		50.0	93	46.3		50.0	93
Copper	47.3		50.0	95	46.7		50.0	93	46.2		50.0	92
Magnesium	24000		25000	96	24600		25000	98	24800		25000	99
Nickel	46.7		50.0	93	46.0		50.0	92	45.8		50.0	92
Potassium	25100		25000	100	25300		25000	101	25200		25000	101
Selenium	49.1		50.0	98	48.0		50.0	96	48.1		50.0	96
Silver	49.9		50.0	100	49.3		50.0	99	49.9		50.0	100
Sodium	24100		25000	96	24400		25000	98	24600		25000	99
Thallium	51.0		50.0	102	50.1		50.0	100	48.1		50.0	96
Vanadium	50.7		50.0	101	50.2		50.0	100	51.0		50.0	102
Zinc	47.9		50.0	96	47.0		50.0	94	47.5		50.0	95

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-177880/116 04/24/2015 17:31											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	12700		12500	101								
Lead	48.1		50.0	96								
Manganese	251		250	100								
Aluminum	240		250	96								
Antimony	52.2		50.0	104								
Arsenic	48.4		50.0	97								
Barium	51.4		50.0	103								
Beryllium	48.0		50.0	96								
Cadmium	51.1		50.0	102								
Calcium	24800		25000	99								
Chromium	49.8		50.0	100								
Cobalt	47.2		50.0	94								
Copper	47.2		50.0	94								
Magnesium	24500		25000	98								
Nickel	47.2		50.0	94								
Potassium	25200		25000	101								
Selenium	49.1		50.0	98								
Silver	50.7		50.0	101								
Sodium	24400		25000	98								
Thallium	48.3		50.0	97								
Vanadium	49.4		50.0	99								
Zinc	47.8		50.0	96								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-178352/7 04/28/2015 11:55				CCV 240-178352/12 04/28/2015 12:14				CCV 240-178352/24 04/28/2015 12:59			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Lead	39.6		40.0	99	48.7		50.0	97	48.4		50.0	97
Aluminum	202		200	101	259		250	103	253		250	101
Arsenic	40.0		40.0	100	49.8		50.0	100	51.1		50.0	102
Barium	41.0		40.0	103	50.0		50.0	100	50.0		50.0	100
Beryllium	41.0		40.0	102	48.1		50.0	96	46.0		50.0	92
Cadmium	41.2		40.0	103	50.8		50.0	102	50.7		50.0	101
Calcium	20000		20000	100	25300		25000	101	25300		25000	101
Cobalt	40.3		40.0	101	49.6		50.0	99	50.8		50.0	102
Copper	41.5		40.0	104	50.1		50.0	100	51.2		50.0	102
Iron	10100		10000	101	12500		12500	100	12700		12500	101
Magnesium	20200		20000	101	25200		25000	101	25300		25000	101
Manganese	205		200	103	254		250	101	259		250	103
Nickel	41.6		40.0	104	49.7		50.0	99	50.9		50.0	102
Potassium	20400		20000	102	25600		25000	102	25700		25000	103
Selenium	41.8		40.0	104	50.2		50.0	100	51.3		50.0	103
Silver	41.6		40.0	104	51.0		50.0	102	50.9		50.0	102
Sodium	20300		20000	102	25200		25000	101	25300		25000	101
Zinc	42.1		40.0	105	49.9		50.0	100	51.0		50.0	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-178352/36 04/28/2015 13:44											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Lead	49.2		50.0	98								
Aluminum	254		250	102								
Arsenic	50.0		50.0	100								
Barium	50.4		50.0	101								
Beryllium	50.7		50.0	101								
Cadmium	50.4		50.0	101								
Calcium	26000		25000	104								
Cobalt	49.7		50.0	99								
Copper	50.5		50.0	101								
Iron	12300		12500	98								
Magnesium	25300		25000	101								
Manganese	258		250	103								
Nickel	50.4		50.0	101								
Potassium	25500		25000	102								
Selenium	49.8		50.0	100								
Silver	50.8		50.0	102								
Sodium	25300		25000	101								
Zinc	49.9		50.0	100								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00885

Analyte	ICV 240-177030/7-A 04/20/2015 09:56				CCV 240-177030/10-A 04/20/2015 10:58				CCV 240-177030/10-A 04/20/2015 11:23			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.75		5.00	95	5.06		5.00	101	5.09		5.00	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00885

Analyte	CCV 240-177030/10-A 04/20/2015 11:49				CCV 240-177030/10-A 04/20/2015 12:10							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.06		5.00	101	5.12		5.00	102				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00885

Analyte	ICV 240-177030/7-A 04/21/2015 08:31				CCV 240-177030/10-A 04/21/2015 10:52				CCV 240-177030/10-A 04/21/2015 11:16			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.73		5.00	95	5.16		5.00	103	5.16		5.00	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00885

Analyte	CCV 240-177030/10-A 04/21/2015 11:39											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.23		5.00	105								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177115/10 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	50.6	J	101	70-130
Antimony	2.00	2.06		103	70-130
Arsenic	5.00	4.96	J	99	70-130
Barium	5.00	4.98	J	100	70-130
Beryllium	1.00	0.864	J	86	70-130
Cadmium	1.00	1.04	J	104	70-130
Calcium	1000	1020	J	102	70-130
Chromium	2.00	2.14		107	70-130
Cobalt	1.00	1.05		105	70-130
Copper	2.00	2.03	J	101	70-130
Iron	100	107	J	107	70-130
Lead	1.00	1.05		105	70-130
Magnesium	1000	1080		108	70-130
Manganese	5.00	5.31		106	70-130
Nickel	2.00	2.08	J	104	70-130
Potassium	1000	1050		105	70-130
Selenium	5.00	5.27		105	70-130
Silver	1.00	1.05		105	70-130
Sodium	1000	1080		108	70-130
Thallium	2.00	1.95	J	98	70-130
Vanadium	5.00	5.26		105	70-130
Zinc	20.0	20.2	J	101	70-130

Lab Sample ID: CRI 240-177115/175 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	49.8	J	100	70-130
Antimony	2.00	1.87	J	93	70-130
Arsenic	5.00	4.83	J	97	70-130
Barium	5.00	5.37		107	70-130
Beryllium	1.00	0.919	J	92	70-130
Cadmium	1.00	1.04	J	104	70-130
Calcium	1000	1030	J	103	70-130
Chromium	2.00	3.94		197	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177115/175 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cobalt	1.00	0.967	J	97	70-130
Copper	2.00	1.74	J	87	70-130
Iron	100	141	J	141	70-130
Lead	1.00	1.03		103	70-130
Magnesium	1000	1010		101	70-130
Manganese	5.00	6.95		139	70-130
Nickel	2.00	2.71	J	136	70-130
Potassium	1000	1040		104	70-130
Selenium	5.00	4.85	J	97	70-130
Silver	1.00	1.05		105	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	1.87	J	94	70-130
Vanadium	5.00	5.20		104	70-130
Zinc	20.0	19.4	J	97	70-130

Lab Sample ID: CRI 240-177559/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	51.2	J	102	70-130
Antimony	2.00	2.34		117	70-130
Arsenic	5.00	5.07		101	70-130
Barium	5.00	5.02		100	70-130
Beryllium	1.00	0.901	J	90	70-130
Cadmium	1.00	1.03	J	103	70-130
Calcium	1000	1020	J	102	70-130
Chromium	2.00	2.14		107	70-130
Cobalt	1.00	1.03		103	70-130
Copper	2.00	2.13	J	106	70-130
Iron	100	106	J	106	70-130
Lead	1.00	1.02		102	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	5.11		102	70-130
Nickel	2.00	2.12	J	106	70-130
Potassium	1000	1050		105	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177559/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Selenium	5.00	5.36		107	70-130
Silver	1.00	1.07		107	70-130
Sodium	1000	1070		107	70-130
Thallium	2.00	1.88	J	94	70-130
Vanadium	5.00	5.43		109	70-130
Zinc	20.0	20.7	J	103	70-130

Lab Sample ID: CRI 240-177559/67 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	51.7	J	103	70-130
Chromium	2.00	2.21		110	70-130
Nickel	2.00	1.94	J	97	70-130

Lab Sample ID: CRI 240-177880/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	48.1	J	96	70-130
Antimony	2.00	2.20		110	70-130
Arsenic	5.00	5.11		102	70-130
Barium	5.00	4.94	J	99	70-130
Beryllium	1.00	1.04		104	70-130
Cadmium	1.00	1.04	J	104	70-130
Calcium	1000	1020	J	102	70-130
Chromium	2.00	2.13		106	70-130
Cobalt	1.00	1.01		101	70-130
Copper	2.00	2.01	J	101	70-130
Iron	100	109	J	109	70-130
Lead	1.00	1.04		104	70-130
Magnesium	1000	1080		108	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177880/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Manganese	5.00	5.21		104	70-130
Nickel	2.00	2.06	J	103	70-130
Potassium	1000	1080		108	70-130
Selenium	5.00	5.26		105	70-130
Silver	1.00	1.03		103	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	2.05		102	70-130
Vanadium	5.00	5.33		107	70-130
Zinc	20.0	20.6	J	103	70-130

Lab Sample ID: CRI 240-177880/85 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	46.8	J	94	70-130
Antimony	2.00	2.06		103	70-130
Arsenic	5.00	4.90	J	98	70-130
Barium	5.00	5.16		103	70-130
Beryllium	1.00	0.987	J	99	70-130
Cadmium	1.00	1.09	J	109	70-130
Calcium	1000	1030	J	103	70-130
Chromium	2.00	2.14		107	70-130
Cobalt	1.00	0.957	J	96	70-130
Copper	2.00	1.85	J	93	70-130
Iron	100	112	J	112	70-130
Lead	1.00	1.04		104	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	5.22		104	70-130
Nickel	2.00	1.94	J	97	70-130
Potassium	1000	1070		107	70-130
Selenium	5.00	5.14		103	70-130
Silver	1.00	1.06		106	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	2.06		103	70-130
Vanadium	5.00	5.30		106	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177880/85 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Zinc	20.0	19.4	J	97	70-130

Lab Sample ID: CRI 240-177880/118 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	46.9	J	94	70-130
Antimony	2.00	2.10		105	70-130
Arsenic	5.00	4.66	J	93	70-130
Barium	5.00	4.97	J	99	70-130
Beryllium	1.00	0.940	J	94	70-130
Cadmium	1.00	1.08	J	108	70-130
Calcium	1000	1050	J	105	70-130
Chromium	2.00	2.14		107	70-130
Cobalt	1.00	0.911	J	91	70-130
Copper	2.00	1.79	J	89	70-130
Iron	100	113	J	113	70-130
Lead	1.00	1.01		101	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	5.23		105	70-130
Nickel	2.00	1.85	J	93	70-130
Potassium	1000	1080		108	70-130
Selenium	5.00	4.77	J	95	70-130
Silver	1.00	1.03		103	70-130
Sodium	1000	1080		108	70-130
Thallium	2.00	2.02		101	70-130
Vanadium	5.00	5.15		103	70-130
Zinc	20.0	19.0	J	95	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-178352/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	51.4	J	103	70-130
Antimony	2.00	2.36		118	70-130
Arsenic	5.00	4.91	J	98	70-130
Barium	5.00	4.90	J	98	70-130
Beryllium	1.00	0.890	J	89	70-130
Cadmium	1.00	1.03	J	103	70-130
Calcium	1000	1010	J	101	70-130
Chromium	2.00	2.18		109	70-130
Cobalt	1.00	1.00		100	70-130
Copper	2.00	1.93	J	96	70-130
Iron	100	98.7	J	99	70-130
Lead	1.00	1.05		105	70-130
Magnesium	1000	1050		105	70-130
Manganese	5.00	4.88	J	98	70-130
Nickel	2.00	2.06	J	103	70-130
Potassium	1000	1050		105	70-130
Selenium	5.00	4.98	J	100	70-130
Silver	1.00	1.04		104	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	1.88	J	94	70-130
Vanadium	5.00	5.26		105	70-130
Zinc	20.0	20.2	J	101	70-130

Lab Sample ID: CRI 240-178352/40 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	52.0	J	104	70-130
Antimony	2.00	1.95	J	98	70-130
Arsenic	5.00	4.92	J	98	70-130
Barium	5.00	4.86	J	97	70-130
Beryllium	1.00	0.853	J	85	70-130
Cadmium	1.00	1.03	J	103	70-130
Calcium	1000	1040	J	104	70-130
Chromium	2.00	2.18		109	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-178352/40 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cobalt	1.00	1.00		100	70-130
Copper	2.00	1.83	J	92	70-130
Iron	100	99.3	J	99	70-130
Lead	1.00	1.04		104	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	4.77	J	95	70-130
Nickel	2.00	1.91	J	96	70-130
Potassium	1000	1060		106	70-130
Selenium	5.00	5.05		101	70-130
Silver	1.00	1.04		104	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	1.85	J	93	70-130
Vanadium	5.00	5.32		106	70-130
Zinc	20.0	20.5	J	102	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Method: 7471A Instrument ID: H4

Lab Sample ID: CRA 240-177030/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00885

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.205		103	

Lab Sample ID: CRA 240-177030/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00885

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.201		100	

Lab Sample ID: CRA 240-177030/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00885

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.196	J	98	

Lab Sample ID: CRA 240-177030/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00885

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.195	J	98	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: ug/L

Analyte	RL	ICB 240-177115/8 04/20/2015 10:48		CCB 240-177115/141 04/20/2015 19:30		CCB 240-177115/153 04/20/2015 20:16		CCB 240-177115/165 04/20/2015 21:02	
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	60	U	9.57	J	9.21	J	10.1	J
Antimony	2.0	1.14	J	0.50	U	0.50	U	0.50	U
Arsenic	5.0	1.0	U	1.0	U	1.0	U	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	0.50	U	0.0560	J	0.112	J	0.50	U
Cadmium	2.0	0.40	U	0.40	U	0.40	U	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Cobalt	1.0	0.20	U	0.20	U	0.0240	J	0.0280	J
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Lead	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Magnesium	1000	300	U	300	U	300	U	300	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.50	U	0.50	U	0.50	U	0.50	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	400	U	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	40	20	U	20	U	20	U	20	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Iron	150	100	U	17.4	J	24.5	J	35.9	J
Manganese	5.0	3.0	U	3.0	U	1.41	J	1.43	J
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: ug/L

Analyte	RL	CCB 240-177115/174 04/20/2015 21:36							
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	10.6	J						
Antimony	2.0	0.50	U						
Arsenic	5.0	1.0	U						
Barium	5.0	4.0	U						
Beryllium	1.0	0.50	U						
Cadmium	2.0	0.40	U						
Calcium	2000	1000	U						
Cobalt	1.0	0.0210	J						
Copper	4.0	4.0	U						
Lead	1.0	0.50	U						
Magnesium	1000	300	U						
Potassium	1000	50	U						
Selenium	5.0	0.50	U						
Silver	1.0	0.25	U						
Sodium	1000	400	U						
Thallium	2.0	1.0	U						
Vanadium	5.0	1.5	U						
Zinc	40	20	U						
Chromium	2.0	1.5	U						
Iron	150	42.5	J						
Manganese	5.0	1.63	J						
Nickel	5.0	1.5	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: ug/L

Analyte	RL	ICB 240-177559/8 04/22/2015 15:19		CCB 240-177559/25 04/22/2015 16:23		CCB 240-177559/37 04/22/2015 17:07		CCB 240-177559/49 04/22/2015 17:53	
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	60	U	60	U	60	U	60	U
Antimony	2.0	1.06	J	0.674	J	0.648	J	0.538	J
Arsenic	5.0	1.0	U	0.195	J	1.0	U	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	0.50	U	0.120	J	0.140	J	0.50	U
Cadmium	2.0	0.40	U	0.40	U	0.40	U	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Cobalt	1.0	0.20	U	0.0500	J	0.0370	J	0.20	U
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Iron	150	100	U	21.6	J	31.5	J	33.5	J
Magnesium	1000	300	U	300	U	300	U	300	U
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.331	J	0.264	J	0.50	U	0.50	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	118	J	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	40	20	U	20	U	20	U	20	U
Lead	1.0	0.50	U	0.125	J	0.50	U	0.50	U
Manganese	5.0	3.0	U	3.0	U	3.0	U	3.0	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: ug/L

Analyte	RL	CCB 240-177559/61 04/22/2015 18:38		CCB 240-177559/66 04/22/2015 18:57					
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	60	U	60	U				
Antimony	2.0	0.582	J	0.579	J				
Arsenic	5.0	1.0	U	1.0	U				
Barium	5.0	4.0	U	4.0	U				
Beryllium	1.0	0.50	U	0.50	U				
Cadmium	2.0	0.40	U	0.40	U				
Calcium	2000	1000	U	1000	U				
Chromium	2.0	1.5	U	1.5	U				
Cobalt	1.0	0.20	U	0.20	U				
Copper	4.0	4.0	U	4.0	U				
Iron	150	36.7	J	38.4	J				
Magnesium	1000	300	U	300	U				
Nickel	5.0	1.5	U	1.5	U				
Potassium	1000	50	U	50	U				
Selenium	5.0	0.50	U	0.50	U				
Silver	1.0	0.25	U	0.25	U				
Sodium	1000	400	U	400	U				
Thallium	2.0	1.0	U	1.0	U				
Vanadium	5.0	1.5	U	1.5	U				
Zinc	40	20	U	20	U				
Lead	1.0	0.50	U	0.50	U				
Manganese	5.0	1.10	J	3.0	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: ug/L

Analyte	RL	ICB 240-177880/8 04/24/2015 09:26		CCB 240-177880/63 04/24/2015 14:10		CCB 240-177880/75 04/24/2015 14:55		CCB 240-177880/84 04/24/2015 15:29	
		Found	C	Found	C	Found	C	Found	C
Iron	150	19.4	J	17.7	J	22.4	J	23.7	J
Lead	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Manganese	5.0	3.0	U	3.0	U	3.0	U	3.0	U
Aluminum	60	60	U	60	U	60	U	60	U
Antimony	2.0	0.522	J	0.552	J	0.523	J	0.497	J
Arsenic	5.0	1.0	U	1.0	U	1.0	U	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	0.50	U	0.0660	J	0.103	J	0.0780	J
Cadmium	2.0	0.40	U	0.40	U	0.40	U	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Cobalt	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Magnesium	1000	300	U	300	U	300	U	300	U
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.50	U	0.50	U	0.50	U	0.50	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	400	U	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	40	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: ug/L

Analyte	RL	CCB 240-177880/96 04/24/2015 16:15		CCB 240-177880/108 04/24/2015 17:00		CCB 240-177880/117 04/24/2015 17:35			
		Found	C	Found	C	Found	C	Found	C
Iron	150	24.2	J	23.0	J	24.3	J		
Lead	1.0	0.50	U	0.50	U	0.50	U		
Manganese	5.0	3.0	U	3.0	U	3.0	U		
Aluminum	60	60	U	60	U	60	U		
Antimony	2.0	0.545	J	0.518	J	0.496	J		
Arsenic	5.0	1.0	U	1.0	U	1.0	U		
Barium	5.0	4.0	U	4.0	U	4.0	U		
Beryllium	1.0	0.0730	J	0.0600	J	0.50	U		
Cadmium	2.0	0.40	U	0.0670	J	0.0680	J		
Calcium	2000	1000	U	1000	U	1000	U		
Chromium	2.0	1.5	U	1.5	U	1.5	U		
Cobalt	1.0	0.20	U	0.20	U	0.20	U		
Copper	4.0	4.0	U	4.0	U	4.0	U		
Magnesium	1000	300	U	300	U	300	U		
Nickel	5.0	1.5	U	1.5	U	1.5	U		
Potassium	1000	50	U	50	U	50	U		
Selenium	5.0	0.50	U	0.50	U	0.50	U		
Silver	1.0	0.25	U	0.25	U	0.25	U		
Sodium	1000	400	U	400	U	400	U		
Thallium	2.0	1.0	U	1.0	U	1.0	U		
Vanadium	5.0	1.5	U	1.5	U	1.5	U		
Zinc	40	20	U	20	U	20	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: ug/L

Analyte	RL	ICB 240-178352/8 04/28/2015 11:58		CCB 240-178352/13 04/28/2015 12:17		CCB 240-178352/25 04/28/2015 13:02		CCB 240-178352/37 04/28/2015 13:48	
		Found	C	Found	C	Found	C	Found	C
Lead	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Aluminum	60	60	U	60	U	60	U	60	U
Antimony	2.0	1.73	J	0.456	J	0.348	J	0.319	J
Arsenic	5.0	1.0	U	1.0	U	1.0	U	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	0.50	U	0.50	U	0.129	J	0.50	U
Cadmium	2.0	0.40	U	0.40	U	0.40	U	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Cobalt	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Iron	150	100	U	19.2	J	17.0	J	18.0	J
Magnesium	1000	300	U	300	U	300	U	300	U
Manganese	5.0	3.0	U	3.0	U	3.0	U	3.0	U
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.50	U	0.50	U	0.50	U	0.50	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	400	U	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	40	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: ug/L

Analyte	RL	ICB 240-177030/8-A 04/20/2015 09:58		CCB 240-177030/11-A 04/20/2015 11:00		CCB 240-177030/11-A 04/20/2015 11:25		CCB 240-177030/11-A 04/20/2015 11:51	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: ug/L

Analyte	RL	CCB 240-177030/11-A 04/20/2015 12:12							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: ug/L

Analyte	RL	ICB 240-177030/8-A 04/21/2015 08:33		CCB 240-177030/11-A 04/21/2015 10:54		CCB 240-177030/11-A 04/21/2015 11:18		CCB 240-177030/11-A 04/21/2015 11:41	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: mg/Kg Lab Sample ID: MB 240-176698/1-A ^2

Instrument Code: I10 Batch No.: 177115

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	5.48	J	D	6020_DoD
7440-36-0	Antimony	0.0160	J	D	6020_DoD
7440-38-2	Arsenic	0.101	J	D	6020_DoD
7440-39-3	Barium	0.30	U		6020_DoD
7440-41-7	Beryllium	0.0162	J	D	6020_DoD
7440-43-9	Cadmium	0.00860	J	D	6020_DoD
7440-70-2	Calcium	26.1	J	D	6020_DoD
7440-48-4	Cobalt	0.0196	J	D	6020_DoD
7440-50-8	Copper	0.30	U		6020_DoD
7439-92-1	Lead	0.0506	J	D	6020_DoD
7439-95-4	Magnesium	7.60	J	D	6020_DoD
7440-09-7	Potassium	8.33	J	D	6020_DoD
7782-49-2	Selenium	0.0960	J	D	6020_DoD
7440-22-4	Silver	0.00180	J	D	6020_DoD
7440-23-5	Sodium	9.54	J	D	6020_DoD
7440-28-0	Thallium	0.0656	J	D	6020_DoD
7440-62-2	Vanadium	0.0556	J	D	6020_DoD
7440-66-6	Zinc	0.673	J	D	6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: mg/Kg Lab Sample ID: MB 240-176698/1-A ^2

Instrument Code: I10 Batch No.: 177559

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	4.72	J	D	6020_DoD
7440-47-3	Chromium	0.164	J	D	6020_DoD
7440-02-0	Nickel	0.0558	J	D	6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: mg/Kg Lab Sample ID: MB 240-176698/1-A ^2

Instrument Code: I10 Batch No.: 177880

CAS No.	Analyte	Concentration	C	Q	Method
7439-89-6	Iron	4.34	J	D	6020_DoD
7439-92-1	Lead	0.20	U	Q	6020_DoD
7439-96-5	Manganese	0.40	U		6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: mg/Kg Lab Sample ID: MB 240-177128/1-A ^2

Instrument Code: I10 Batch No.: 177880

CAS No.	Analyte	Concentration	C	Q	Method
7439-92-1	Lead	0.173	J	D	6020_DoD
7439-96-5	Manganese	0.40	U		6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: mg/Kg Lab Sample ID: MB 240-177128/1-A ^2

Instrument Code: I10 Batch No.: 178352

CAS No.	Analyte	Concentration	C	Q	Method
7439-92-1	Lead	0.102	J	D	6020_DoD

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: mg/Kg Lab Sample ID: MB 240-176711/1-A

Instrument Code: H4 Batch No.: 177149

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.033	U		7471_DOD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Concentration Units: mg/Kg Lab Sample ID: MB 240-177137/1-A

Instrument Code: H4 Batch No.: 177294

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.033	U		7471_DOD

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Lab Sample ID: ICSA 240-177115/11 Instrument ID: I10

Lab File ID: 011ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**50000**	**47667**	**95**
Antimony		**0.218**	
Arsenic		**0.0610**	
Barium		**0.0600**	
Beryllium		**0.0120**	
Cadmium		**0.119**	
Calcium	**50000**	**49075**	**98**
Cobalt		**0.0260**	
Copper		**0.336**	
Lead		**0.100**	
Magnesium	**50000**	**49308**	**99**
Potassium	**50000**	**49452**	**99**
Selenium		**0.0850**	
Silver		**0.0080**	
Sodium	**50000**	**48900**	**98**
Thallium		**0.0030**	
Vanadium		**0.0290**	
Zinc		**1.02**	
Boron		*0.906*	
Chromium		*0.665*	
Iron	*50000*	*49433*	*99*
Manganese		*0.357*	
Molybdenum	*1000*	*1075*	*107*
Nickel		*0.115*	
Strontium		*0.336*	
Ti	*1000*	*989*	*99*
Tin		*0.320*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Lab Sample ID: ICSAB 240-177115/12 Instrument ID: I10

Lab File ID: 012ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**50000**	**47834**	**96**
Antimony	**100**	**106**	**106**
Arsenic	**100**	**105**	**105**
Barium	**100**	**104**	**104**
Beryllium	**100**	**111**	**111**
Cadmium	**100**	**106**	**106**
Calcium	**50000**	**50013**	**100**
Cobalt	**100**	**104**	**104**
Copper	**100**	**104**	**104**
Lead	**100**	**103**	**103**
Magnesium	**50000**	**49743**	**99**
Potassium	**50000**	**49468**	**99**
Selenium	**100**	**106**	**106**
Silver	**100**	**103**	**103**
Sodium	**50000**	**49722**	**99**
Thallium	**100**	**102**	**102**
Vanadium	**100**	**101**	**101**
Zinc	**100**	**106**	**106**
Boron	*100*	*116*	*116*
Chromium	*100*	*101*	*101*
Iron	*50000*	*49899*	*100*
Manganese	*100*	*100*	*100*
Molybdenum	*1100*	*1188*	*108*
Nickel	*100*	*105*	*105*
Strontium	*100*	*105*	*105*
Ti	*1100*	*1097*	*100*
Tin	*100*	*100*	*100*
Tungsten	*100*	*99.0*	*99*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Lab Sample ID: ICSA 240-177559/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**50000**	**45805**	**92**
Antimony		**0.296**	
Arsenic		**0.314**	
Barium		**0.0520**	
Beryllium		**0.0100**	
Cadmium		**0.0480**	
Calcium	**50000**	**48824**	**98**
Chromium		**0.639**	
Cobalt		**0.0340**	
Copper		**0.340**	
Iron	**50000**	**47490**	**95**
Magnesium	**50000**	**47896**	**96**
Nickel		**0.100**	
Potassium	**50000**	**47596**	**95**
Selenium		**0.485**	
Silver		**0.0100**	
Sodium	**50000**	**47575**	**95**
Thallium		**0.0120**	
Vanadium		**0.0630**	
Zinc		**0.0880**	
Manganese		*0.417*	
Molybdenum	*1000*	*1062*	*106*
Strontium		*0.342*	
Ti	*1000*	*963*	*96*
Tin		*0.434*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Lab Sample ID: ICSAB 240-177559/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**50000**	**47367**	**95**
Antimony	**100**	**104**	**104**
Arsenic	**100**	**101**	**101**
Barium	**100**	**99.9**	**100**
Beryllium	**100**	**101**	**101**
Cadmium	**100**	**101**	**101**
Calcium	**50000**	**49369**	**99**
Chromium	**100**	**100**	**100**
Cobalt	**100**	**99.1**	**99**
Copper	**100**	**98.2**	**98**
Iron	**50000**	**49442**	**99**
Magnesium	**50000**	**49322**	**99**
Nickel	**100**	**97.8**	**98**
Potassium	**50000**	**49182**	**98**
Selenium	**100**	**102**	**102**
Silver	**100**	**99.7**	**100**
Sodium	**50000**	**49210**	**98**
Thallium	**100**	**101**	**101**
Vanadium	**100**	**99.2**	**99**
Zinc	**100**	**98.8**	**99**
Boron	*100*	*101*	*101*
Lead	*100*	*100*	*100*
Manganese	*100*	*97.3*	*97*
Molybdenum	*1100*	*1195*	*109*
Strontium	*100*	*99.2*	*99*
Ti	*1100*	*1082*	*98*
Tin	*100*	*98.7*	*99*
Tungsten	*100*	*102*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Lab Sample ID: ICSA 240-177880/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Iron	**50000**	**47084**	**94**
Manganese		**0.324**	
Aluminum	*50000*	*44548*	*89*
Antimony		*0.275*	
Arsenic		*0.0960*	
Barium		*0.0330*	
Beryllium		*0.0370*	
Boron		*0.854*	
Cadmium		*-0.0090*	
Calcium	*50000*	*48547*	*97*
Chromium		*0.640*	
Cobalt		*0.0320*	
Copper		*0.233*	
Magnesium	*50000*	*46830*	*94*
Molybdenum	*1000*	*1024*	*102*
Nickel		*0.111*	
Potassium	*50000*	*47217*	*94*
Selenium		*0.186*	
Silver		*0.0150*	
Sodium	*50000*	*46893*	*94*
Strontium		*0.338*	
Thallium		*0.0070*	
Ti	*1000*	*954*	*95*
Tin		*0.376*	
Vanadium		*0.0100*	
Zinc		*-0.0740*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Lab Sample ID: ICSAB 240-177880/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Iron	**50000**	**49769**	**100**
Lead	**100**	**101**	**101**
Manganese	**100**	**100.0**	**100**
Aluminum	*50000*	*46452*	*93*
Antimony	*100*	*107*	*107*
Arsenic	*100*	*100*	*100*
Barium	*100*	*101*	*101*
Beryllium	*100*	*103*	*103*
Boron	*100*	*102*	*102*
Cadmium	*100*	*99.8*	*100*
Calcium	*50000*	*49399*	*99*
Chromium	*100*	*101*	*101*
Cobalt	*100*	*99.5*	*100*
Copper	*100*	*98.4*	*98*
Magnesium	*50000*	*49499*	*99*
Molybdenum	*1100*	*1150*	*105*
Nickel	*100*	*98.3*	*98*
Potassium	*50000*	*49333*	*99*
Selenium	*100*	*102*	*102*
Silver	*100*	*99.7*	*100*
Sodium	*50000*	*48906*	*98*
Strontium	*100*	*99.2*	*99*
Thallium	*100*	*101*	*101*
Ti	*1100*	*1090*	*99*
Tin	*100*	*100*	*100*
Tungsten	*100*	*104*	*104*
Vanadium	*100*	*99.8*	*100*
Zinc	*100*	*98.3*	*98*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Lab Sample ID: ICSA 240-178352/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Lead		**0.133**	
Aluminum	*50000*	*48426*	*97*
Antimony		*0.278*	
Arsenic		*0.121*	
Barium		*0.0740*	
Beryllium		*-0.0020*	
Boron		*0.916*	
Cadmium		*0.0630*	
Calcium	*50000*	*50740*	*101*
Chromium		*0.718*	
Cobalt		*0.0300*	
Copper		*0.205*	
Iron	*50000*	*50198*	*100*
Magnesium	*50000*	*50355*	*101*
Manganese		*0.274*	
Molybdenum	*1000*	*1111*	*111*
Nickel		*0.0830*	
Potassium	*50000*	*50083*	*100*
Selenium		*0.115*	
Silver		*0.0140*	
Sodium	*50000*	*50018*	*100*
Strontium		*0.351*	
Thallium		*0.0090*	
Ti	*1000*	*1023*	*102*
Tin		*0.232*	
Vanadium		*-0.0130*	
Zinc		*1.26*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Lab Sample ID: ICSAB 240-178352/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Lead	**100**	**103**	**103**
Aluminum	*50000*	*48015*	*96*
Antimony	*100*	*107*	*107*
Arsenic	*100*	*99.8*	*100*
Barium	*100*	*103*	*103*
Beryllium	*100*	*114*	*114*
Cadmium	*100*	*102*	*102*
Calcium	*50000*	*50805*	*102*
Chromium	*100*	*103*	*103*
Cobalt	*100*	*99.0*	*99*
Copper	*100*	*99.1*	*99*
Iron	*50000*	*48800*	*98*
Magnesium	*50000*	*50210*	*100*
Manganese	*100*	*94.7*	*95*
Molybdenum	*1100*	*1189*	*108*
Nickel	*100*	*98.8*	*99*
Potassium	*50000*	*49705*	*99*
Selenium	*100*	*101*	*101*
Silver	*100*	*101*	*101*
Sodium	*50000*	*49424*	*99*
Strontium	*100*	*99.4*	*99*
Thallium	*100*	*101*	*101*
Ti	*1100*	*1128*	*103*
Tin	*100*	*102*	*102*
Tungsten	*100*	*98.1*	*98*
Vanadium	*100*	*101*	*101*
Zinc	*100*	*99.0*	*99*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-176698/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49172-1

Sample Matrix: Solid LCS Source: MTICPMS2_00020

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	1000	950		95	80	120	D	6020
Antimony	10.0	10.1		101	68	113	D	6020
Arsenic	100	87.9		88	73	110	D	6020
Barium	100	103		103	70	110	D	6020
Beryllium	100	101		101	79	110	D	6020
Cadmium	100	95.2		95	74	110	D	6020
Calcium	1000	910		91	80	120	D	6020
Cobalt	100	92.1		92	74	110	D	6020
Copper	100	94.3		94	73	110	D	6020
Lead	100	95.9		96	75	110	D	6020
Magnesium	1000	1000		100	80	120	D	6020
Potassium	1000	1020		102	80	120	D	6020
Selenium	100	87.4		87	65	110	D	6020
Silver	10.0	9.84		98	60	114	D	6020
Sodium	1000	1010		101	80	120	D	6020
Thallium	25.0	23.6		94	71	110	D	6020
Vanadium	100	103		103	72	110	D	6020
Zinc	100	88.9		89	72	113	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-176698/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49172-1

Sample Matrix: Solid LCS Source: MTICPMS2_00020

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	1000	913		91	80	120	D	6020
Chromium	100	98.6		99	70	110	D	6020
Nickel	100	89.2		89	75	110	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-177128/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49172-1

Sample Matrix: Solid LCS Source: MTICPMSA_00022

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Lead	100	94.0		94	75	110	D	6020
Manganese	100	100		100	80	120	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-176698/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49172-1

Sample Matrix: Solid LCS Source: MTICPMS2_00020

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Iron	1000	987		99	80	120	D	6020
Lead	100	91.2		91	75	110	D Q	6020
Manganese	100	99.0		99	80	120	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-177128/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49172-1

Sample Matrix: Solid LCS Source: MTICPMSA_00022

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Lead	100	97.8		98	75	110	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-176711/2-A

Lab Name: TestAmerica Canton Job No.: 240-49172-1

Sample Matrix: Solid LCS Source: MTHGCALW_00883

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.839		101	80	120		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-177137/2-A

Lab Name: TestAmerica Canton Job No.: 240-49172-1

Sample Matrix: Solid LCS Source: MTHGCALW_00885

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.825		99	80	120		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49172-1

SDG Number: CC RVAAP-79 Load Line 3

Matrix: Solid Instrument ID: I10

Method: 6020 DL Date: 09/15/2014 17:22

Prep Method: 3050B

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Aluminum	27.00	20	0.62
Antimony	121.00	0.4	0.014
Arsenic	75.00	1	0.026
Barium	137.00	1	0.22
Beryllium	9.00	0.2	0.011
Cadmium	111.00	0.4	0.0037
Calcium	43.00	400	22
Chromium	52.00	1	0.06
Cobalt	59.00	0.2	0.0017
Copper	65.00	0.8	0.097
Iron	56.00	100	3.2
Lead	208.00	0.6	0.045
Magnesium	25.00	200	4
Manganese	55.00	1	0.12
Nickel	60.00	1	0.039
Potassium	39.00	200	4.9
Selenium	78.00	1	0.04
Silver	107.00	0.2	0.0014
Sodium	23.00	200	8.7
Thallium	205.00	0.4	0.019
Vanadium	51.00	1	0.037
Zinc	66.00	8	0.5

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49172-1

SDG Number: CC RVAAP-79 Load Line 3

Matrix: Solid Instrument ID: I10

Method: 6020 XMDL Date: 09/15/2014 17:24

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum	27.00	60	9
Antimony	121.00	2	0.16
Arsenic	75.00	5	0.18
Barium	137.00	5	1.1
Beryllium	9.00	1	0.053
Cadmium	111.00	2	0.061
Calcium	43.00	2000	240
Chromium	52.00	2	0.2
Cobalt	59.00	1	0.021
Copper	65.00	4	0.75
Iron	56.00	150	16
Lead	208.00	1	0.11
Magnesium	25.00	1000	48
Manganese	55.00	5	1.1
Nickel	60.00	5	0.23
Potassium	39.00	1000	30
Selenium	78.00	5	0.25
Silver	107.00	1	0.02
Sodium	23.00	1000	68
Thallium	205.00	2	0.074
Vanadium	51.00	5	0.23
Zinc	66.00	40	7.3

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49172-1

SDG Number: CC RVAAP-79 Load Line 3

Matrix: Solid Instrument ID: H4

Method: 7471A DL Date: 02/16/2010 09:46

Prep Method: 7471A

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Mercury	253.7	0.1	0.014

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49172-1

SDG Number: CC RVAAP-79 Load Line 3

Matrix: Solid Instrument ID: H4

Method: 7471A XMDL Date: 09/17/2014 14:14

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.09

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Date: 10/20/2014 13:19

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Aluminum		200000	6020
Antimony		300	6020
Arsenic		10000	6020
Barium		10000	6020
Beryllium		10000	6020
Cadmium		4000	6020
Calcium		500000	6020
Chromium		10000	6020
Cobalt		10000	6020
Copper		10000	6020
Iron		200000	6020
Lead		4000	6020
Magnesium		500000	6020
Manganese		10000	6020
Nickel		10000	6020
Potassium		500000	6020
Selenium		10000	6020
Silver		300	6020
Sodium		500000	6020
Thallium		5000	6020
Vanadium		10000	6020
Zinc		10000	6020

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: H4 Date: 12/10/2013 15:55

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		10	7471A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-176698/1-A ^2	04/16/2015 09:59	176698	1.00		100
LCS 240-176698/2-A ^2	04/16/2015 09:59	176698	1.00		100
240-49172-1	04/16/2015 09:59	176698	1.32		100
240-49172-2	04/16/2015 09:59	176698	1.13		100
240-49172-3	04/16/2015 09:59	176698	1.22		100
240-49172-4	04/16/2015 09:59	176698	1.36		100
240-49172-5	04/16/2015 09:59	176698	1.15		100
240-49172-6	04/16/2015 09:59	176698	1.07		100
240-49172-7	04/16/2015 09:59	176698	1.06		100
240-49172-8	04/16/2015 09:59	176698	1.05		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-177128/1-A ^2	04/20/2015 12:52	177128	1.00		100
LCS 240-177128/2-A ^2	04/20/2015 12:52	177128	1.00		100
240-49172-9	04/20/2015 12:52	177128	1.12		100
240-49172-10	04/20/2015 12:52	177128	1.21		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-176711/1-A	04/16/2015 14:45	176711	0.60		100
LCS 240-176711/2-A	04/16/2015 14:45	176711	0.60		100
240-49172-1	04/16/2015 14:45	176711	0.67		100
240-49172-2	04/16/2015 14:45	176711	0.67		100
240-49172-3	04/16/2015 14:45	176711	0.63		100
240-49172-4	04/16/2015 14:45	176711	0.65		100
240-49172-5	04/16/2015 14:45	176711	0.70		100
240-49172-6	04/16/2015 14:45	176711	0.67		100
240-49172-7	04/16/2015 14:45	176711	0.68		100
240-49172-8	04/16/2015 14:45	176711	0.59		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-177137/1-A	04/20/2015 15:40	177137	0.60		100
LCS 240-177137/2-A	04/20/2015 15:40	177137	0.60		100
240-49172-9	04/20/2015 15:40	177137	0.54		100
240-49172-10	04/20/2015 15:40	177137	0.57		100

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/20/2015 10:21 End Date: 04/20/2015 21:48

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cu	K	Mg	Na	Pb	Sb	Se	Tl	V	Zn								
ZZZZZZ			10:21																										
ICIS 240-177115/2			10:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD1 240-177115/3 IC	1		10:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD2 240-177115/4 IC	1		10:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD3 240-177115/5 IC	1		10:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD4 240-177115/6 IC	1		10:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICV 240-177115/7	1		10:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICB 240-177115/8	1		10:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			10:51																										
CRI 240-177115/10	1		10:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSA 240-177115/11	1		10:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSAB 240-177115/12	1		11:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 240-177115/13			11:08																										
CCB 240-177115/14			11:12																										
ZZZZZZ			11:16																										
ZZZZZZ			11:19																										
CCV 240-177115/17			11:23																										
CCB 240-177115/18			11:27																										
ZZZZZZ			11:31																										
ZZZZZZ			11:35																										
ZZZZZZ			11:39																										
ZZZZZZ			11:42																										
ZZZZZZ			11:46																										
CCV 240-177115/24			11:50																										
CCB 240-177115/25			11:54																										
ZZZZZZ			12:15																										
ZZZZZZ			12:19																										
CCV 240-177115/28			12:23																										
CCB 240-177115/29			12:27																										
ZZZZZZ			12:31																										
ZZZZZZ			12:35																										
ZZZZZZ			12:39																										
ZZZZZZ			12:42																										
ZZZZZZ			12:46																										
ZZZZZZ			12:50																										
ZZZZZZ			12:54																										
ZZZZZZ			12:57																										
ZZZZZZ			13:01																										
CCV 240-177115/39			13:05																										
CCB 240-177115/40			13:09																										
CRI 240-177115/41			13:13																										
ZZZZZZ			13:16																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/20/2015 10:21 End Date: 04/20/2015 21:48

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cu	K	Mg	Na	Pb	Sb	Se	Tl	V	Zn									
ZZZZZZ			13:20																											
ZZZZZZ			13:24																											
ZZZZZZ			13:28																											
ZZZZZZ			13:31																											
ZZZZZZ			13:35																											
ZZZZZZ			13:39																											
ZZZZZZ			13:43																											
ZZZZZZ			13:46																											
CCV 240-177115/51			13:50																											
CCB 240-177115/52			13:54																											
ZZZZZZ			13:58																											
ZZZZZZ			14:01																											
ZZZZZZ			14:05																											
ZZZZZZ			14:09																											
ZZZZZZ			14:12																											
ZZZZZZ			14:16																											
ZZZZZZ			14:20																											
ZZZZZZ			14:24																											
ZZZZZZ			14:27																											
ZZZZZZ			14:31																											
CCV 240-177115/63			14:35																											
CCB 240-177115/64			14:39																											
ZZZZZZ			14:43																											
ZZZZZZ			14:46																											
ZZZZZZ			14:50																											
CCV 240-177115/68			14:54																											
CCB 240-177115/69			14:58																											
CRI 240-177115/70			15:02																											
ZZZZZZ			15:06																											
ZZZZZZ			15:09																											
ZZZZZZ			15:13																											
ZZZZZZ			15:17																											
ZZZZZZ			15:21																											
ZZZZZZ			15:25																											
ZZZZZZ			15:29																											
ZZZZZZ			15:33																											
ZZZZZZ			15:36																											
CCV 240-177115/80			15:40																											
CCB 240-177115/81			15:44																											
ZZZZZZ			15:48																											
ZZZZZZ			15:51																											
ZZZZZZ			15:55																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/20/2015 10:21 End Date: 04/20/2015 21:48

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cu	K	Mg	Na	Pb	Sb	Se	Tl	V	Zn									
ZZZZZZ			15:59																											
ZZZZZZ			16:03																											
ZZZZZZ			16:06																											
ZZZZZZ			16:10																											
ZZZZZZ			16:14																											
ZZZZZZ			16:18																											
ZZZZZZ			16:21																											
CCV 240-177115/92			16:25																											
CCB 240-177115/93			16:29																											
ZZZZZZ			16:33																											
ZZZZZZ			16:36																											
ZZZZZZ			16:40																											
ZZZZZZ			16:44																											
ZZZZZZ			16:48																											
ZZZZZZ			16:52																											
ZZZZZZ			16:55																											
ZZZZZZ			16:59																											
ZZZZZZ			17:02																											
ZZZZZZ			17:06																											
CCV 240-177115/104			17:10																											
CCB 240-177115/105			17:14																											
ZZZZZZ			17:18																											
ZZZZZZ			17:21																											
ZZZZZZ			17:25																											
ZZZZZZ			17:29																											
ZZZZZZ			17:32																											
ZZZZZZ			17:36																											
ZZZZZZ			17:40																											
ZZZZZZ			17:44																											
ZZZZZZ			17:47																											
ZZZZZZ			17:51																											
CCV 240-177115/116			17:55																											
CCB 240-177115/117			17:59																											
CCV 240-177115/118			18:03																											
CCB 240-177115/119			18:07																											
CRI 240-177115/120			18:11																											
ZZZZZZ			18:14																											
ZZZZZZ			18:18																											
ZZZZZZ			18:22																											
ZZZZZZ			18:26																											
ZZZZZZ			18:30																											
ZZZZZZ			18:33																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/20/2015 10:21 End Date: 04/20/2015 21:48

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cu	K	Mg	Na	Pb	Sb	Se	Tl	V	Zn								
ZZZZZZ			18:37																									
ZZZZZZ			18:41																									
ZZZZZZ			18:45																									
CCV 240-177115/130			18:48																									
CCB 240-177115/131			18:52																									
ZZZZZZ			18:56																									
ZZZZZZ			19:00																									
ZZZZZZ			19:04																									
ZZZZZZ			19:08																									
ZZZZZZ			19:11																									
ZZZZZZ			19:15																									
ZZZZZZ			19:19																									
ZZZZZZ			19:23																									
CCV 240-177115/140	1		19:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCB 240-177115/141	1		19:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CRI 240-177115/142			19:34																									
MB 240-176698/1-A ^2	2	T	19:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
LCS 240-176698/2-A ^2	2	T	19:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ZZZZZZ			19:46																									
ZZZZZZ			19:50																									
ZZZZZZ			19:53																									
ZZZZZZ			19:57																									
ZZZZZZ			20:01																									
ZZZZZZ			20:05																									
ZZZZZZ			20:08																									
CCV 240-177115/152	1		20:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCB 240-177115/153	1		20:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ZZZZZZ			20:20																									
ZZZZZZ			20:24																									
ZZZZZZ			20:27																									
ZZZZZZ			20:31																									
ZZZZZZ			20:35																									
ZZZZZZ			20:39																									
ZZZZZZ			20:43																									
ZZZZZZ			20:47																									
ZZZZZZ			20:50																									
240-49172-1	2	T	20:54	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCV 240-177115/164	1		20:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCB 240-177115/165	1		21:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
240-49172-2	2	T	21:06	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
240-49172-3	2	T	21:10	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
240-49172-4	2	T	21:13	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/20/2015 10:21 End Date: 04/20/2015 21:48

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cu	K	Mg	Na	Pb	Sb	Se	Tl	V	Zn									
240-49172-5	2	T	21:17	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
240-49172-6	2	T	21:21	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
240-49172-7	2	T	21:25	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
240-49172-8	2	T	21:29	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCV 240-177115/173	1		21:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCB 240-177115/174	1		21:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CRI 240-177115/175	1		21:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCV 240-177115/176			21:44																											
CCB 240-177115/177			21:48																											

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/22/2015 14:52 End Date: 04/22/2015 20:28

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Na	Ni	Sb	Se	Tl	V	Zn						
ZZZZZZ			14:52																										
ICIS 240-177559/2			14:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD1 240-177559/3 IC	1		15:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD2 240-177559/4 IC	1		15:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD3 240-177559/5 IC	1		15:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD4 240-177559/6 IC	1		15:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICV 240-177559/7	1		15:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICB 240-177559/8	1		15:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CRI 240-177559/9	1		15:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSA 240-177559/10	1		15:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSAB 240-177559/11	1		15:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCV 240-177559/12			15:34																										
CCB 240-177559/13			15:38																										
ZZZZZZ			15:42																										
ZZZZZZ			15:46																										
ZZZZZZ			15:49																										
ZZZZZZ			15:53																										
ZZZZZZ			15:57																										
ZZZZZZ			16:00																										
ZZZZZZ			16:04																										
ZZZZZZ			16:08																										
ZZZZZZ			16:11																										
ZZZZZZ			16:15																										
CCV 240-177559/24	1		16:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177559/25	1		16:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			16:26																										
ZZZZZZ			16:30																										
ZZZZZZ			16:34																										
ZZZZZZ			16:37																										
ZZZZZZ			16:41																										
ZZZZZZ			16:45																										
ZZZZZZ			16:48																										
MB 240-176698/1-A ^2	2	T	16:52		X							X						X											
LCS 240-176698/2-A ^2	2	T	16:56		X							X						X											
ZZZZZZ			17:00																										
CCV 240-177559/36	1		17:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177559/37	1		17:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			17:11																										
ZZZZZZ			17:15																										
ZZZZZZ			17:18																										
ZZZZZZ			17:22																										
ZZZZZZ			17:26																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/22/2015 14:52 End Date: 04/22/2015 20:28

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Na	Ni	Sb	Se	Tl	V	Zn						
ZZZZZZ			17:30																										
ZZZZZZ			17:34																										
ZZZZZZ			17:37																										
ZZZZZZ			17:41																										
ZZZZZZ			17:45																										
CCV 240-177559/48	1		17:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177559/49	1		17:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			17:56																										
ZZZZZZ			18:00																										
ZZZZZZ			18:04																										
ZZZZZZ			18:08																										
ZZZZZZ			18:12																										
240-49172-1	2	T	18:15		X							X						X											
240-49172-2	2	T	18:19		X							X						X											
240-49172-3	2	T	18:23		X							X						X											
240-49172-4	2	T	18:27		X							X						X											
240-49172-5	2	T	18:30		X							X						X											
CCV 240-177559/60	1		18:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177559/61	1		18:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-49172-6	2	T	18:42		X							X						X											
240-49172-7	2	T	18:46		X							X						X											
240-49172-8	2	T	18:49		X							X						X											
CCV 240-177559/65	1		18:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177559/66	1		18:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CRI 240-177559/67	1		19:01		X							X						X											
ZZZZZZ			19:05																										
ZZZZZZ			19:09																										
ZZZZZZ			19:12																										
ZZZZZZ			19:16																										
ZZZZZZ			19:20																										
ZZZZZZ			19:23																										
ZZZZZZ			19:27																										
240-49172-9	2	T	19:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-49172-10	2	T	19:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCV 240-177559/77			19:39																										
CCB 240-177559/78			19:42																										
ZZZZZZ			19:46																										
ZZZZZZ			19:50																										
ZZZZZZ			19:54																										
ZZZZZZ			19:58																										
ZZZZZZ			20:01																										
ZZZZZZ			20:05																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/22/2015 14:52 End Date: 04/22/2015 20:28

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Na	Ni	Sb	Se	Tl	V	Zn							
ZZZZZZ			20:09																											
CCV 240-177559/86			20:13																											
CCB 240-177559/87			20:17																											
CRI 240-177559/88			20:20																											
CCV 240-177559/89			20:24																											
CCB 240-177559/90			20:28																											

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																										
				Fe	Mn	Pb																								
ZZZZZZ			08:59																											
ICIS 240-177880/2			09:03	X	X	X																								
STD1 240-177880/3 IC	1		09:07	X	X	X																								
STD2 240-177880/4 IC	1		09:10	X	X	X																								
STD3 240-177880/5 IC	1		09:14	X	X	X																								
STD4 240-177880/6 IC	1		09:18	X	X	X																								
ICV 240-177880/7	1		09:22	X	X	X																								
ICB 240-177880/8	1		09:26	X	X	X																								
CRI 240-177880/9	1		09:30	X	X	X																								
ICSA 240-177880/10	1		09:33	X	X																									
ICSAB 240-177880/11	1		09:37	X	X	X																								
CCV 240-177880/12			09:41																											
CCB 240-177880/13			09:45																											
ZZZZZZ			10:21																											
ZZZZZZ			10:26																											
ZZZZZZ			10:30																											
ZZZZZZ			10:33																											
ZZZZZZ			10:37																											
ZZZZZZ			10:41																											
ZZZZZZ			10:44																											
ZZZZZZ			11:24																											
ZZZZZZ			11:28																											
ZZZZZZ			11:32																											
ZZZZZZ			11:36																											
ZZZZZZ			11:39																											
ZZZZZZ			11:43																											
CCV 240-177880/27			11:52																											
CCB 240-177880/28			11:56																											
ZZZZZZ			12:00																											
ZZZZZZ			12:04																											
CCV 240-177880/31			12:07																											
CCB 240-177880/32			12:11																											
CCV 240-177880/33			12:17																											
CCB 240-177880/34			12:21																											
ZZZZZZ			12:25																											
ZZZZZZ			12:29																											
CCV 240-177880/37			12:33																											
CCB 240-177880/38			12:36																											
ZZZZZZ			12:40																											
ZZZZZZ			12:44																											
ZZZZZZ			12:48																											
ZZZZZZ			12:51																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																										
				Fe	Mn	Pb																								
ZZZZZZ			12:55																											
ZZZZZZ			12:59																											
ZZZZZZ			13:03																											
ZZZZZZ			13:06																											
ZZZZZZ			13:10																											
ZZZZZZ			13:13																											
CCV 240-177880/49			13:17																											
CCB 240-177880/50			13:21																											
ZZZZZZ			13:25																											
ZZZZZZ			13:28																											
ZZZZZZ			13:32																											
ZZZZZZ			13:36																											
ZZZZZZ			13:40																											
ZZZZZZ			13:43																											
ZZZZZZ			13:47																											
ZZZZZZ			13:51																											
CCV 240-177880/59			13:55																											
CCB 240-177880/60			13:59																											
CRI 240-177880/61			14:03																											
CCV 240-177880/62	1		14:06	X	X	X																								
CCB 240-177880/63	1		14:10	X	X	X																								
ZZZZZZ			14:14																											
MB 240-177128/1-A ^2	2	T	14:18		X	X																								
LCS 240-177128/2-A ^2	2	T	14:21		X	X																								
ZZZZZZ			14:25																											
ZZZZZZ			14:29																											
ZZZZZZ			14:33																											
ZZZZZZ			14:36																											
ZZZZZZ			14:40																											
240-49172-9	20	T	14:44		X																									
240-49172-10	20	T	14:48		X																									
CCV 240-177880/74	1		14:51	X	X	X																								
CCB 240-177880/75	1		14:55	X	X	X																								
ZZZZZZ			14:59																											
ZZZZZZ			15:03																											
ZZZZZZ			15:07																											
ZZZZZZ			15:11																											
ZZZZZZ			15:14																											
ZZZZZZ			15:18																											
ZZZZZZ			15:22																											
CCV 240-177880/83	1		15:26	X	X	X																								
CCB 240-177880/84	1		15:29	X	X	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																										
				Fe	Mn	Pb																								
CRI 240-177880/85	1		15:33	X	X	X																								
MB 240-176698/1-A ^2	2	T	15:37	X	X	X																								
LCS 240-176698/2-A ^2	2	T	15:41	X	X	X																								
ZZZZZZ			15:45																											
ZZZZZZ			15:48																											
ZZZZZZ			15:52																											
ZZZZZZ			15:56																											
ZZZZZZ			16:00																											
ZZZZZZ			16:03																											
ZZZZZZ			16:07																											
CCV 240-177880/95	1		16:11	X	X	X																								
CCB 240-177880/96	1		16:15	X	X	X																								
ZZZZZZ			16:19																											
ZZZZZZ			16:22																											
ZZZZZZ			16:26																											
ZZZZZZ			16:30																											
ZZZZZZ			16:34																											
ZZZZZZ			16:38																											
ZZZZZZ			16:41																											
ZZZZZZ			16:45																											
ZZZZZZ			16:49																											
240-49172-1	20	T	16:53	X	X																									
CCV 240-177880/107	1		16:57	X	X	X																								
CCB 240-177880/108	1		17:00	X	X	X																								
240-49172-2	20	T	17:04	X	X																									
240-49172-3	20	T	17:08	X	X																									
240-49172-4	20	T	17:12	X	X																									
240-49172-5	20	T	17:16	X	X																									
240-49172-6	20	T	17:19	X	X																									
240-49172-7	20	T	17:23	X	X																									
240-49172-8	20	T	17:27	X	X																									
CCV 240-177880/116	1		17:31	X	X	X																								
CCB 240-177880/117	1		17:35	X	X	X																								
CRI 240-177880/118	1		17:39	X	X	X																								
ZZZZZZ			17:42																											
ZZZZZZ			17:46																											
ZZZZZZ			17:50																											
ZZZZZZ			17:54																											
ZZZZZZ			17:57																											
ZZZZZZ			18:01																											
ZZZZZZ			18:04																											
ZZZZZZ			18:08																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																										
				Fe	Mn	Pb																								
ZZZZZZ			18:12																											
CCV 240-177880/128			18:15																											
CCB 240-177880/129			18:19																											
ZZZZZZ			18:23																											
ZZZZZZ			18:27																											
ZZZZZZ			18:30																											
ZZZZZZ			18:34																											
ZZZZZZ			18:38																											
ZZZZZZ			18:42																											
ZZZZZZ			18:46																											
ZZZZZZ			18:49																											
ZZZZZZ			18:53																											
ZZZZZZ			18:57																											
CCV 240-177880/140			19:01																											
CCB 240-177880/141			19:05																											
ZZZZZZ			19:09																											
CCV 240-177880/143			19:13																											
CCB 240-177880/144			19:16																											
CRI 240-177880/145			19:20																											
ZZZZZZ			19:24																											
ZZZZZZ			19:28																											
ZZZZZZ			19:32																											
ZZZZZZ			19:35																											
ZZZZZZ			19:39																											
ZZZZZZ			19:43																											
ZZZZZZ			19:46																											
ZZZZZZ			19:50																											
ZZZZZZ			19:54																											
CCV 240-177880/155			19:57																											
CCB 240-177880/156			20:01																											
ZZZZZZ			20:05																											
ZZZZZZ			20:09																											
ZZZZZZ			20:13																											
ZZZZZZ			20:16																											
ZZZZZZ			20:20																											
ZZZZZZ			20:24																											
ZZZZZZ			20:28																											
ZZZZZZ			20:32																											
ZZZZZZ			20:35																											
ZZZZZZ			20:39																											
CCV 240-177880/167			20:43																											
CCB 240-177880/168			20:47																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																										
				Fe	Mn	Pb																								
ZZZZZZ			20:51																											
ZZZZZZ			20:54																											
ZZZZZZ			20:58																											
ZZZZZZ			21:02																											
ZZZZZZ			21:06																											
ZZZZZZ			21:10																											
ZZZZZZ			21:13																											
CCV 240-177880/176			21:17																											
CCB 240-177880/177			21:21																											
CRI 240-177880/178			21:25																											
ZZZZZZ			21:29																											
ZZZZZZ			21:33																											
ZZZZZZ			21:36																											
ZZZZZZ			21:40																											
ZZZZZZ			21:44																											
ZZZZZZ			21:47																											
ZZZZZZ			21:51																											
ZZZZZZ			21:55																											
ZZZZZZ			21:58																											
CCV 240-177880/188			22:02																											
CCB 240-177880/189			22:06																											
ZZZZZZ			22:10																											
ZZZZZZ			22:14																											
ZZZZZZ			22:17																											
ZZZZZZ			22:21																											
ZZZZZZ			22:25																											
ZZZZZZ			22:28																											
ZZZZZZ			22:32																											
ZZZZZZ			22:36																											
ZZZZZZ			22:40																											
ZZZZZZ			22:44																											
CCV 240-177880/200			22:47																											
CCB 240-177880/201			22:51																											
ZZZZZZ			22:55																											
ZZZZZZ			22:59																											
ZZZZZZ			23:03																											
ZZZZZZ			23:06																											
ZZZZZZ			23:10																											
ZZZZZZ			23:14																											
CCV 240-177880/208			23:18																											
CCB 240-177880/209			23:22																											
CRI 240-177880/210			23:26																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																									
				Fe	Mn	Pb																							
CCV 240-177880/211			23:29																										
CCB 240-177880/212			23:33																										

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/28/2015 11:32 End Date: 04/28/2015 15:42

Lab Sample Id	D/F	Type	Time	Analytes
				Pb
ZZZZZZ			11:32	
ICIS 240-178352/2			11:36	X
STD1 240-178352/3 IC			11:39	X
STD2 240-178352/4 IC			11:43	X
STD3 240-178352/5 IC			11:47	X
STD4 240-178352/6 IC	1		11:51	X
ICV 240-178352/7	1		11:55	X
ICB 240-178352/8	1		11:58	X
CRI 240-178352/9	1		12:02	X
ICSA 240-178352/10	1		12:06	X
ICSAB 240-178352/11	1		12:10	X
CCV 240-178352/12	1		12:14	X
CCB 240-178352/13	1		12:17	X
ZZZZZZ			12:21	
ZZZZZZ			12:25	
MB 240-177128/1-A ^2	2	T	12:29	X
LCS 240-177128/2-A ^2	2	T	12:33	X
ZZZZZZ			12:36	
ZZZZZZ			12:40	
ZZZZZZ			12:44	
ZZZZZZ			12:47	
ZZZZZZ			12:51	
240-49172-9	20	T	12:55	X
CCV 240-178352/24	1		12:59	X
CCB 240-178352/25	1		13:02	X
240-49172-10	20	T	13:06	X
ZZZZZZ			13:10	
ZZZZZZ			13:14	
ZZZZZZ			13:18	
ZZZZZZ			13:21	
ZZZZZZ			13:25	
ZZZZZZ			13:29	
ZZZZZZ			13:33	
ZZZZZZ			13:37	
ZZZZZZ			13:40	
CCV 240-178352/36	1		13:44	X
CCB 240-178352/37	1		13:48	X
CCV 240-178352/38			13:52	
CCB 240-178352/39			13:56	
CRI 240-178352/40	1		13:59	X
ZZZZZZ			14:03	
ZZZZZZ			14:07	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/28/2015 11:32 End Date: 04/28/2015 15:42

Lab Sample Id	D/F	Type	Time	Analytes																								
				Pb																								
ZZZZZZ			14:11																									
CCV 240-178352/44			14:15																									
CCB 240-178352/45			14:18																									
ZZZZZZ			14:22																									
ZZZZZZ			14:26																									
ZZZZZZ			14:30																									
ZZZZZZ			14:33																									
ZZZZZZ			14:37																									
ZZZZZZ			14:41																									
ZZZZZZ			14:45																									
ZZZZZZ			14:48																									
ZZZZZZ			14:52																									
ZZZZZZ			14:56																									
CCV 240-178352/56			15:00																									
CCB 240-178352/57			15:03																									
ZZZZZZ			15:07																									
ZZZZZZ			15:11																									
ZZZZZZ			15:15																									
ZZZZZZ			15:19																									
ZZZZZZ			15:22																									
ZZZZZZ			15:26																									
ZZZZZZ			15:30																									
CCV 240-178352/65			15:34																									
CCB 240-178352/66			15:38																									
CRI 240-178352/67			15:42																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/20/2015 09:43 End Date: 04/20/2015 15:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
IC 240-177030/1-A			09:43	X																								
IC 240-177030/2-A			09:45	X																								
IC 240-177030/3-A			09:47	X																								
IC 240-177030/4-A			09:49	X																								
IC 240-177030/5-A			09:51	X																								
IC 240-177030/6-A			09:53	X																								
ICV 240-177030/7-A	1		09:56	X																								
ICB 240-177030/8-A	1		09:58	X																								
CRA 240-177030/9-A	1		10:00	X																								
CCV 240-177030/10-A			10:07																									
CCB 240-177030/11-A			10:10																									
ZZZZZZ			10:13																									
ZZZZZZ			10:15																									
ZZZZZZ			10:18																									
ZZZZZZ			10:20																									
ZZZZZZ			10:22																									
ZZZZZZ			10:24																									
ZZZZZZ			10:26																									
ZZZZZZ			10:28																									
ZZZZZZ			10:30																									
ZZZZZZ			10:33																									
CCV 240-177030/10-A			10:34																									
CCB 240-177030/11-A			10:36																									
ZZZZZZ			10:38																									
ZZZZZZ			10:40																									
ZZZZZZ			10:42																									
ZZZZZZ			10:44																									
ZZZZZZ			10:46																									
ZZZZZZ			10:48																									
ZZZZZZ			10:50																									
ZZZZZZ			10:52																									
ZZZZZZ			10:54																									
ZZZZZZ			10:56																									
CCV 240-177030/10-A	1		10:58	X																								
CCB 240-177030/11-A	1		11:00	X																								
ZZZZZZ			11:02																									
ZZZZZZ			11:04																									
ZZZZZZ			11:06																									
ZZZZZZ			11:09																									
MB 240-176711/1-A	1	T	11:11	X																								
LCS 240-176711/2-A	1	T	11:13	X																								
ZZZZZZ			11:15																									

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/20/2015 09:43 End Date: 04/20/2015 15:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			11:17																									
ZZZZZZ			11:19																									
ZZZZZZ			11:21																									
CCV 240-177030/10-A	1		11:23	X																								
CCB 240-177030/11-A	1		11:25	X																								
ZZZZZZ			11:27																									
ZZZZZZ			11:30																									
ZZZZZZ			11:32																									
ZZZZZZ			11:34																									
ZZZZZZ			11:36																									
ZZZZZZ			11:38																									
ZZZZZZ			11:40																									
ZZZZZZ			11:42																									
ZZZZZZ			11:44																									
ZZZZZZ			11:46																									
CCV 240-177030/10-A	1		11:49	X																								
CCB 240-177030/11-A	1		11:51	X																								
240-49172-1	1	T	11:53	X																								
240-49172-2	1	T	11:55	X																								
240-49172-3	1	T	11:57	X																								
240-49172-4	1	T	11:59	X																								
240-49172-5	1	T	12:00	X																								
240-49172-6	1	T	12:02	X																								
240-49172-7	1	T	12:04	X																								
240-49172-8	1	T	12:06	X																								
CRA 240-177030/9-A	1		12:08	X																								
CCV 240-177030/10-A	1		12:10	X																								
CCB 240-177030/11-A	1		12:12	X																								
CCV 240-177030/10-A			12:21																									
CCB 240-177030/11-A			12:23																									
ZZZZZZ			12:25																									
ZZZZZZ			12:27																									
ZZZZZZ			12:29																									
ZZZZZZ			12:32																									
ZZZZZZ			12:34																									
ZZZZZZ			12:36																									
ZZZZZZ			12:38																									
ZZZZZZ			12:40																									
ZZZZZZ			12:42																									
ZZZZZZ			12:44																									
CCV 240-177030/10-A			12:46																									
CCB 240-177030/11-A			12:48																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/20/2015 09:43 End Date: 04/20/2015 15:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			12:50																									
ZZZZZZ			12:52																									
ZZZZZZ			12:54																									
ZZZZZZ			12:55																									
ZZZZZZ			12:57																									
ZZZZZZ			12:59																									
ZZZZZZ			13:01																									
ZZZZZZ			13:03																									
ZZZZZZ			13:06																									
ZZZZZZ			13:07																									
CCV 240-177030/10-A			13:09																									
CCB 240-177030/11-A			13:11																									
ZZZZZZ			13:13																									
ZZZZZZ			13:15																									
ZZZZZZ			13:17																									
ZZZZZZ			13:19																									
ZZZZZZ			13:21																									
ZZZZZZ			13:23																									
ZZZZZZ			13:25																									
ZZZZZZ			13:27																									
ZZZZZZ			13:29																									
CCV 240-177030/10-A			13:31																									
CCB 240-177030/11-A			13:33																									
CCV 240-177030/10-A			13:51																									
CCB 240-177030/11-A			13:53																									
ZZZZZZ			13:55																									
ZZZZZZ			13:57																									
ZZZZZZ			13:59																									
ZZZZZZ			14:01																									
ZZZZZZ			14:03																									
ZZZZZZ			14:05																									
ZZZZZZ			14:08																									
ZZZZZZ			14:10																									
ZZZZZZ			14:12																									
ZZZZZZ			14:14																									
CCV 240-177030/10-A			14:17																									
CCB 240-177030/11-A			14:19																									
ZZZZZZ			14:21																									
ZZZZZZ			14:24																									
ZZZZZZ			14:26																									
ZZZZZZ			14:28																									
ZZZZZZ			14:30																									

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/20/2015 09:43 End Date: 04/20/2015 15:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			14:33																									
ZZZZZZ			14:34																									
ZZZZZZ			14:36																									
ZZZZZZ			14:39																									
ZZZZZZ			14:42																									
CCV 240-177030/10-A			14:44																									
CCB 240-177030/11-A			14:46																									
ZZZZZZ			14:48																									
ZZZZZZ			14:50																									
ZZZZZZ			14:53																									
ZZZZZZ			14:55																									
CCV 240-177030/10-A			14:57																									
CCB 240-177030/11-A			14:59																									
CCV 240-177030/10-A			15:05																									
CCB 240-177030/11-A			15:07																									
ZZZZZZ			15:09																									
ZZZZZZ			15:11																									
ZZZZZZ			15:13																									
ZZZZZZ			15:15																									
ZZZZZZ			15:17																									
ZZZZZZ			15:19																									
ZZZZZZ			15:21																									
ZZZZZZ			15:23																									
ZZZZZZ			15:25																									
ZZZZZZ			15:27																									
CCV 240-177030/10-A			15:29																									
CCB 240-177030/11-A			15:31																									
ZZZZZZ			15:33																									
ZZZZZZ			15:36																									
ZZZZZZ			15:38																									
ZZZZZZ			15:40																									
CCV 240-177030/10-A			15:42																									
CCB 240-177030/11-A			15:44																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
IC 240-177030/1-A			08:18	X
IC 240-177030/2-A			08:21	X
IC 240-177030/3-A			08:23	X
IC 240-177030/4-A			08:25	X
IC 240-177030/5-A			08:27	X
IC 240-177030/6-A			08:29	X
ICV 240-177030/7-A	1		08:31	X
ICB 240-177030/8-A	1		08:33	X
CRA 240-177030/9-A	1		08:35	X
CCV 240-177030/10-A			08:52	
CCB 240-177030/11-A			08:54	
ZZZZZZ			08:56	
ZZZZZZ			08:57	
ZZZZZZ			09:00	
ZZZZZZ			09:02	
ZZZZZZ			09:04	
ZZZZZZ			09:07	
ZZZZZZ			09:09	
ZZZZZZ			09:12	
ZZZZZZ			09:14	
ZZZZZZ			09:17	
CCV 240-177030/10-A			09:19	
CCB 240-177030/11-A			09:21	
ZZZZZZ			09:23	
ZZZZZZ			09:25	
ZZZZZZ			09:27	
ZZZZZZ			09:30	
ZZZZZZ			09:32	
ZZZZZZ			09:34	
ZZZZZZ			09:36	
ZZZZZZ			09:39	
ZZZZZZ			09:40	
ZZZZZZ			09:42	
CCV 240-177030/10-A			09:45	
CCB 240-177030/11-A			09:47	
ZZZZZZ			09:48	
ZZZZZZ			09:51	
ZZZZZZ			09:53	
ZZZZZZ			09:55	
CCV 240-177030/10-A			09:57	
CCB 240-177030/11-A			09:59	
CCV 240-177030/10-A			10:02	

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
CCB 240-177030/11-A			10:04	
ZZZZZZ			10:06	
ZZZZZZ			10:08	
ZZZZZZ			10:11	
ZZZZZZ			10:13	
ZZZZZZ			10:15	
ZZZZZZ			10:17	
ZZZZZZ			10:18	
ZZZZZZ			10:20	
ZZZZZZ			10:23	
ZZZZZZ			10:25	
CCV 240-177030/10-A			10:27	
CCB 240-177030/11-A			10:29	
ZZZZZZ			10:31	
ZZZZZZ			10:33	
ZZZZZZ			10:35	
ZZZZZZ			10:38	
ZZZZZZ			10:40	
ZZZZZZ			10:42	
ZZZZZZ			10:44	
ZZZZZZ			10:45	
ZZZZZZ			10:47	
ZZZZZZ			10:50	
CCV 240-177030/10-A	1		10:52	X
CCB 240-177030/11-A	1		10:54	X
ZZZZZZ			10:56	
ZZZZZZ			10:58	
ZZZZZZ			11:00	
ZZZZZZ			11:02	
MB 240-177137/1-A	1	T	11:04	X
LCS 240-177137/2-A	1	T	11:06	X
ZZZZZZ			11:08	
ZZZZZZ			11:10	
ZZZZZZ			11:12	
240-49172-9	1	T	11:14	X
CCV 240-177030/10-A	1		11:16	X
CCB 240-177030/11-A	1		11:18	X
240-49172-10	1	T	11:20	X
ZZZZZZ			11:21	
ZZZZZZ			11:23	
ZZZZZZ			11:25	
ZZZZZZ			11:27	

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13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
ZZZZZZ			11:29	
ZZZZZZ			11:31	
ZZZZZZ			11:33	
ZZZZZZ			11:35	
ZZZZZZ			11:37	
CCV 240-177030/10-A	1		11:39	X
CCB 240-177030/11-A	1		11:41	X
ZZZZZZ			11:43	
ZZZZZZ			11:45	
ZZZZZZ			11:48	
ZZZZZZ			11:51	
ZZZZZZ			11:53	
ZZZZZZ			11:54	
ZZZZZZ			11:56	
CRA 240-177030/9-A	1		11:58	X
CCV 240-177030/10-A			12:00	
CCB 240-177030/11-A			12:02	
CCV 240-177030/10-A			12:06	
CCB 240-177030/11-A			12:07	
ZZZZZZ			12:09	
ZZZZZZ			12:11	
ZZZZZZ			12:13	
ZZZZZZ			12:16	
ZZZZZZ			12:18	
ZZZZZZ			12:20	
ZZZZZZ			12:22	
ZZZZZZ			12:24	
ZZZZZZ			12:26	
ZZZZZZ			12:28	
CCV 240-177030/10-A			12:31	
CCB 240-177030/11-A			12:33	
ZZZZZZ			12:34	
ZZZZZZ			12:37	
ZZZZZZ			12:39	
ZZZZZZ			12:41	
ZZZZZZ			12:43	
CCV 240-177030/10-A			12:45	
CCB 240-177030/11-A			12:47	
CCV 240-177030/10-A			13:13	
CCB 240-177030/11-A			13:14	
ZZZZZZ			13:16	
ZZZZZZ			13:19	

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
ZZZZZZ			13:21	
ZZZZZZ			13:22	
ZZZZZZ			13:24	
ZZZZZZ			13:26	
ZZZZZZ			13:28	
ZZZZZZ			13:30	
ZZZZZZ			13:32	
ZZZZZZ			13:34	
CCV 240-177030/10-A			13:36	
CCB 240-177030/11-A			13:38	
ZZZZZZ			13:40	
ZZZZZZ			13:42	
ZZZZZZ			13:44	
ZZZZZZ			13:47	
ZZZZZZ			13:49	
ZZZZZZ			13:51	
ZZZZZZ			13:53	
ZZZZZZ			13:55	
ZZZZZZ			13:58	
ZZZZZZ			14:00	
CCV 240-177030/10-A			14:02	
CCB 240-177030/11-A			14:04	
ZZZZZZ			14:06	
ZZZZZZ			14:08	
ZZZZZZ			14:10	
ZZZZZZ			14:12	
CCV 240-177030/10-A			14:14	
CCB 240-177030/11-A			14:16	
CCV 240-177030/10-A			14:30	
CCB 240-177030/11-A			14:32	
ZZZZZZ			14:34	
ZZZZZZ			14:36	
ZZZZZZ			14:37	
ZZZZZZ			14:39	
ZZZZZZ			14:41	
ZZZZZZ			14:44	
ZZZZZZ			14:46	
ZZZZZZ			14:48	
ZZZZZZ			14:50	
ZZZZZZ			14:52	
CCV 240-177030/10-A			14:54	
CCB 240-177030/11-A			14:56	

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								

Prep Types:
T = Total/NA

FORM XIII-IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICP-MS Instrument ID: I10 Start Date: 04/20/2015 End Date: 04/20/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-177115/3 IC	10:29	102		102		100		98		99	
STD2 240-177115/4 IC	10:32	99		104		101		95		96	
STD3 240-177115/5 IC	10:36	97		103		101		94		96	
STD4 240-177115/6 IC	10:40	100		104		99		102		101	
ICV 240-177115/7	10:44	100		105		104		98		99	
ICB 240-177115/8	10:48	104		102		106		103		104	
CRI 240-177115/10	10:55	103		106		105		103		104	
ICSA 240-177115/11	10:59	92		101		96		88		93	
ICSAB 240-177115/12	11:04	92		101		96		90		94	
CCV 240-177115/140	19:27	82		89		94		86		92	
CCB 240-177115/141	19:30	83		89		94		96		97	
MB 240-176698/1-A ^2	19:38	83		89		92		91		93	
LCS 240-176698/2-A ^:	19:42	83		88		91		89		90	
CCV 240-177115/152	20:12	78		85		90		85		92	
CCB 240-177115/153	20:16	79		86		91		89		94	
240-49172-1	20:54	73		81		86		77		81	
CCV 240-177115/164	20:58	74		80		85		81		87	
CCB 240-177115/165	21:02	72		77		84		82		86	
240-49172-2	21:06	73		86		89		80		85	
240-49172-3	21:10	73		85		88		79		84	
240-49172-4	21:13	73		85		89		80		85	
240-49172-5	21:17	71		82		86		80		85	
240-49172-6	21:21	72		82		86		79		85	
240-49172-7	21:25	71		84		89		79		84	
240-49172-8	21:29	71		86		90		79		84	
CCV 240-177115/173	21:32	71		81		85		82		88	
CCB 240-177115/174	21:36	69		77		82		82		87	
CRI 240-177115/175	21:40	72		80		83		83		89	

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICP-MS Instrument ID: I10 Start Date: 04/20/2015 End Date: 04/20/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-177115/3 IC	10:29	99		100		100					
STD2 240-177115/4 IC	10:32	98		100		96					
STD3 240-177115/5 IC	10:36	98		98		93					
STD4 240-177115/6 IC	10:40	100		102		101					
ICV 240-177115/7	10:44	101		103		101					
ICB 240-177115/8	10:48	104		104		104					
CRI 240-177115/10	10:55	103		103		104					
ICSA 240-177115/11	10:59	96		98		91					
ICSAB 240-177115/12	11:04	97		100		94					
CCV 240-177115/140	19:27	100		102		100					
CCB 240-177115/141	19:30	101		103		103					
MB 240-176698/1-A ^2	19:38	99		102		102					
LCS 240-176698/2-A ^:	19:42	99		101		100					
CCV 240-177115/152	20:12	99		101		99					
CCB 240-177115/153	20:16	98		101		103					
240-49172-1	20:54	92		94		86					
CCV 240-177115/164	20:58	95		98		94					
CCB 240-177115/165	21:02	92		94		92					
240-49172-2	21:06	94		96		94					
240-49172-3	21:10	95		98		93					
240-49172-4	21:13	96		97		95					
240-49172-5	21:17	94		97		96					
240-49172-6	21:21	95		96		93					
240-49172-7	21:25	96		98		92					
240-49172-8	21:29	96		98		92					
CCV 240-177115/173	21:32	96		99		97					
CCB 240-177115/174	21:36	93		95		95					
CRI 240-177115/175	21:40	95		98		98					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICP-MS Instrument ID: I10 Start Date: 04/22/2015 End Date: 04/22/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-177559/3 IC	15:00	98		101		97		99		98	
STD2 240-177559/4 IC	15:04	98		100		98		95		94	
STD3 240-177559/5 IC	15:08	101		101		102		94		93	
STD4 240-177559/6 IC	15:11	100		103		100		103		100	
ICV 240-177559/7	15:15	103		102		101		99		96	
ICB 240-177559/8	15:19	102		100		101		102		100	
CRI 240-177559/9	15:23	101		102		101		102		100	
ICSA 240-177559/10	15:27	86		95		89		87		88	
ICSAB 240-177559/11	15:30	85		91		89		87		88	
CCV 240-177559/24	16:19	94		101		98		98		95	
CCB 240-177559/25	16:23	97		95		97		102		98	
MB 240-176698/1-A ^2	16:52	87		93		90		95		92	
LCS 240-176698/2-A ^:	16:56	82		87		85		89		84	
CCV 240-177559/36	17:03	86		90		87		91		87	
CCB 240-177559/37	17:07	87		86		89		95		92	
CCV 240-177559/48	17:49	77		83		82		87		84	
CCB 240-177559/49	17:53	80		82		83		92		88	
240-49172-1	18:15	73		82		81		79		79	
240-49172-2	18:19	73		82		82		79		79	
240-49172-3	18:23	70		80		81		77		78	
240-49172-4	18:27	70		79		81		77		78	
240-49172-5	18:30	70		78		78		74		77	
CCV 240-177559/60	18:34	72		79		78		82		81	
CCB 240-177559/61	18:38	71		76		78		87		83	
240-49172-6	18:42	68		80		77		74		78	
240-49172-7	18:46	68		79		80		73		76	
240-49172-8	18:49	69		78		79		72		75	
CCV 240-177559/65	18:53	69		76		76		75		79	
CCB 240-177559/66	18:57	71		75		78		85		83	
CRI 240-177559/67	19:01	72		79		79		86		84	
240-49172-9	19:31	66		76		77		69		73	
240-49172-10	19:35	65		73		74		68		72	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICP-MS Instrument ID: I10 Start Date: 04/22/2015 End Date: 04/22/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-177559/3 IC	15:00	99		99		97					
STD2 240-177559/4 IC	15:04	97		98		93					
STD3 240-177559/5 IC	15:08	98		98		91					
STD4 240-177559/6 IC	15:11	100		100		98					
ICV 240-177559/7	15:15	99		99		95					
ICB 240-177559/8	15:19	100		100		99					
CRI 240-177559/9	15:23	100		100		99					
ICSA 240-177559/10	15:27	94		93		89					
ICSAB 240-177559/11	15:30	95		94		90					
CCV 240-177559/24	16:19	101		101		97					
CCB 240-177559/25	16:23	101		101		99					
MB 240-176698/1-A ^2	16:52	98		98		95					
LCS 240-176698/2-A ^2	16:56	94		94		91					
CCV 240-177559/36	17:03	96		97		92					
CCB 240-177559/37	17:07	96		96		95					
CCV 240-177559/48	17:49	93		93		87					
CCB 240-177559/49	17:53	93		94		92					
240-49172-1	18:15	90		90		84					
240-49172-2	18:19	90		90		84					
240-49172-3	18:23	89		89		84					
240-49172-4	18:27	88		89		84					
240-49172-5	18:30	88		88		84					
CCV 240-177559/60	18:34	89		90		87					
CCB 240-177559/61	18:38	89		90		88					
240-49172-6	18:42	86		86		83					
240-49172-7	18:46	87		87		82					
240-49172-8	18:49	86		86		81					
CCV 240-177559/65	18:53	87		87		83					
CCB 240-177559/66	18:57	89		88		87					
CRI 240-177559/67	19:01	89		90		88					
240-49172-9	19:31	84		85		80					
240-49172-10	19:35	82		82		78					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICP-MS Instrument ID: I10 Start Date: 04/24/2015 End Date: 04/24/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-177880/3 IC	09:07	94		99		94		97		96	
STD2 240-177880/4 IC	09:10	94		97		94		91		91	
STD3 240-177880/5 IC	09:14	95		95		97		91		91	
STD4 240-177880/6 IC	09:18	92		97		93		97		96	
ICV 240-177880/7	09:22	98		98		100		95		95	
ICB 240-177880/8	09:26	100		96		100		101		100	
CRI 240-177880/9	09:30	92		102		92		103		101	
ICSA 240-177880/10	09:33	81		94		86		87		88	
ICSAB 240-177880/11	09:37	79		88		85		85		87	
CCV 240-177880/62	14:06	69		75		77		80		80	
CCB 240-177880/63	14:10	69		73		77		84		83	
MB 240-177128/1-A ^2	14:18	64		70		71		79		78	
LCS 240-177128/2-A ^2	14:21	63		70		70		78		75	
240-49172-9	14:44	76		84		85		90		88	
240-49172-10	14:48	75		84		86		91		91	
CCV 240-177880/74	14:51	71		80		80		84		84	
CCB 240-177880/75	14:55	73		76		79		88		88	
CCV 240-177880/83	15:26	75		86		84		86		87	
CCB 240-177880/84	15:29	76		81		84		91		90	
CRI 240-177880/85	15:33	77		84		85		91		90	
MB 240-176698/1-A ^2	15:37	71		79		79		85		84	
LCS 240-176698/2-A ^2	15:41	67		72		72		79		76	
CCV 240-177880/95	16:11	72		81		80		84		84	
CCB 240-177880/96	16:15	73		76		79		87		86	
240-49172-1	16:53	72		79		79		85		83	
CCV 240-177880/107	16:57	67		74		73		77		78	
CCB 240-177880/108	17:00	68		71		73		81		81	
240-49172-2	17:04	73		79		79		84		83	
240-49172-3	17:08	74		81		82		86		85	
240-49172-4	17:12	75		82		82		88		87	
240-49172-5	17:16	75		79		82		85		84	
240-49172-6	17:19	74		81		81		86		86	
240-49172-7	17:23	74		81		82		86		86	
240-49172-8	17:27	73		83		82		87		86	
CCV 240-177880/116	17:31	67		76		74		77		78	
CCB 240-177880/117	17:35	68		71		73		80		81	
CRI 240-177880/118	17:39	69		74		73		82		81	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICP-MS Instrument ID: I10 Start Date: 04/24/2015 End Date: 04/24/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-177880/3 IC	09:07	97		98		97					
STD2 240-177880/4 IC	09:10	96		97		93					
STD3 240-177880/5 IC	09:14	96		96		91					
STD4 240-177880/6 IC	09:18	98		98		99					
ICV 240-177880/7	09:22	98		98		95					
ICB 240-177880/8	09:26	100		100		100					
CRI 240-177880/9	09:30	101		101		100					
ICSA 240-177880/10	09:33	93		94		90					
ICSAB 240-177880/11	09:37	92		93		90					
CCV 240-177880/62	14:06	88		90		87					
CCB 240-177880/63	14:10	89		90		91					
MB 240-177128/1-A ^2	14:18	87		88		93					
LCS 240-177128/2-A ^2	14:21	87		88		89					
240-49172-9	14:44	95		95		97					
240-49172-10	14:48	96		97		98					
CCV 240-177880/74	14:51	92		94		91					
CCB 240-177880/75	14:55	93		93		95					
CCV 240-177880/83	15:26	95		96		92					
CCB 240-177880/84	15:29	94		95		96					
CRI 240-177880/85	15:33	95		96		97					
MB 240-176698/1-A ^2	15:37	89		91		97					
LCS 240-176698/2-A ^2	15:41	88		88		90					
CCV 240-177880/95	16:11	90		92		90					
CCB 240-177880/96	16:15	91		92		93					
240-49172-1	16:53	89		91		91					
CCV 240-177880/107	16:57	86		88		85					
CCB 240-177880/108	17:00	86		87		89					
240-49172-2	17:04	89		91		92					
240-49172-3	17:08	91		92		92					
240-49172-4	17:12	92		93		94					
240-49172-5	17:16	89		90		91					
240-49172-6	17:19	91		92		94					
240-49172-7	17:23	91		92		93					
240-49172-8	17:27	92		92		94					
CCV 240-177880/116	17:31	86		88		85					
CCB 240-177880/117	17:35	87		88		87					
CRI 240-177880/118	17:39	86		88		89					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICP-MS Instrument ID: I10 Start Date: 04/28/2015 End Date: 04/28/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD4 240-178352/6 IC	11:51	105				99		113		112	
ICV 240-178352/7	11:55	102		105		102		96		98	
ICB 240-178352/8	11:58	102		108		104		107		107	
CRI 240-178352/9	12:02	105		103		104		102		102	
ICSA 240-178352/10	12:06	84		92		86		84		87	
ICSAB 240-178352/11	12:10	82		86		85		83		85	
CCV 240-178352/12	12:14	104		102		106		97		98	
CCB 240-178352/13	12:17	99		103		103		104		103	
MB 240-177128/1-A ^2	12:29	89		89		88		90		90	
LCS 240-177128/2-A ^2	12:33	84		89		84		89		88	
240-49172-9	12:55	109		108		112		104		105	
CCV 240-178352/24	12:59	105		110		105		100		102	
CCB 240-178352/25	13:02	107		100		108		101		101	
240-49172-10	13:06	100		97		104		96		94	
CCV 240-178352/36	13:44	110		100		111		95		96	
CCB 240-178352/37	13:48	99		103		100		103		103	
CRI 240-178352/40	13:59	98		97		98		98		99	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

ICP-MS Instrument ID: I10 Start Date: 04/28/2015 End Date: 04/28/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD4 240-178352/6 IC	11:51	109		108		107					
ICV 240-178352/7	11:55	100		101		97					
ICB 240-178352/8	11:58	105		104		103					
CRI 240-178352/9	12:02	102		102		102					
ICSA 240-178352/10	12:06	93		93		90					
ICSAB 240-178352/11	12:10	92		92		89					
CCV 240-178352/12	12:14	101		102		98					
CCB 240-178352/13	12:17	104		103		102					
MB 240-177128/1-A ^2	12:29	93		95		100					
LCS 240-177128/2-A ^2	12:33	96		95		95					
240-49172-9	12:55	104		104		103					
CCV 240-178352/24	12:59	104		103		98					
CCB 240-178352/25	13:02	101		100		100					
240-49172-10	13:06	98		98		99					
CCV 240-178352/36	13:44	99		100		95					
CCB 240-178352/37	13:48	102		102		101					
CRI 240-178352/40	13:59	98		100		99					

MTMSCCBDILH20-192 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/20/15 Analyst: AS Instrument: I10

Review Items A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV*: = 90 – 110%) (*CCV*: 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

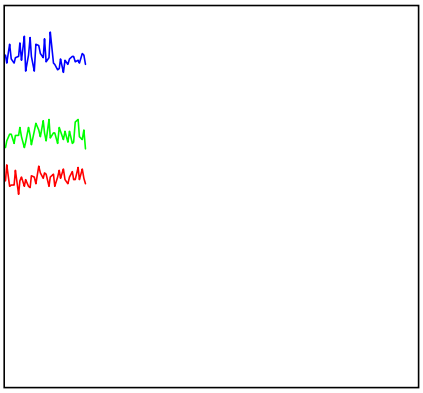
Level I Analyst: Anjali Sharma Date: 4/20/15 Time: 10:21 – 11:54
Level I Analyst: [signature] Date: 4/22/15 Time: 12:15 - 21:48

Level II Reviewer: [signature] Date: 4/20/15 Time: 10:21 - 11:54
Level II Reviewer: [signature] Date: 04/22/2015 Time: 10:21 - 21:48

Comments:

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	2676	2738.7	3.22
89	5000	3124	3309.1	3.11
205	5000	4243	4339.8	2.96
156/140	1	0.385 %	0.605 %	28.72
70/140	2	1.130 %	1.054 %	19.83
115	200	42	47.2	37.88
63	500	349	335.9	7.57
60	50	30	27.6	23.31
121	50	21	10.9	41.42
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

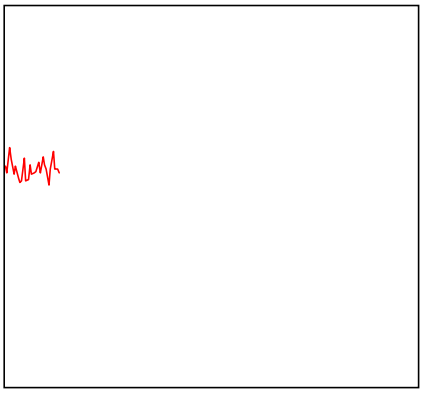
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	15.00	L/min
MU./Dil. Gas	0.55	L/min	Ar Gas Tank Press	5.98E+2	kPa			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1122	1142.2	4.30
51	50	43	34.7	20.79
52	200	152	130.1	11.15
51/59	5	3.831 %	3.040 %	20.85
52/59	20	13.544 %	11.413 %	12.10
7	50	12	12.7	34.09
89	2000	987	968.1	4.69
205	5000	2637	2699.8	2.23
6	20	0	1.0	120.89
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	14.96	L/min
MU./Dil. Gas	0.55	L/min	Ar Gas Tank Press	5.99E+2	kPa			

US EPA Tune Check Sample Report

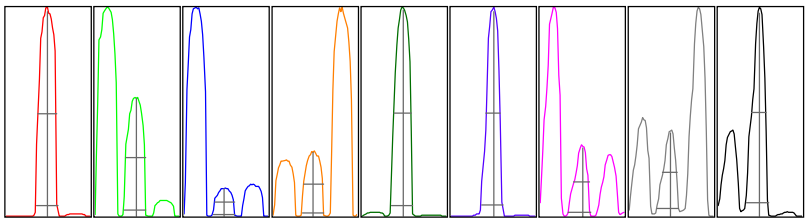
Batch Folder D:\Analytical Runs\I10042015A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	38955	0.57	5.00	
24	116148	0.70	5.00	
25	15543	0.46	5.00	
26	17843	1.11	5.00	
59	121722	0.31	5.00	
115	177741	0.47	5.00	
206	67089	0.73	5.00	
207	59450	0.80	5.00	
208	141248	0.69	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	38879	38729	39235	39138	38793
24	117215	116559	116280	115461	115225
25	15626	15604	15473	15536	15473
26	18178	17828	17816	17706	17687
59	121286	121564	122263	121555	121942
115	178829	176828	176965	178198	177885
206	67780	66533	66753	67055	67321
207	60273	59204	59323	59384	59069
208	142385	140451	142008	141271	140124

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6273	9.00	8.9 - 9.1		0.752	0.850	
24	18643	24.00	23.9 - 24.1		0.783	0.850	
25	2474	24.95	24.9 - 25.1		0.788	0.850	
26	2829	25.95	25.9 - 26.1		0.789	0.850	
59	20345	59.00	58.9 - 59.1		0.785	0.850	
115	33723	115.05	114.9 - 115.1		0.751	0.850	
206	12822	206.05	205.9 - 206.1		0.763	0.850	
207	11267	207.00	206.9 - 207.1		0.766	0.850	
208	27545	208.00	207.9 - 208.1		0.785	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

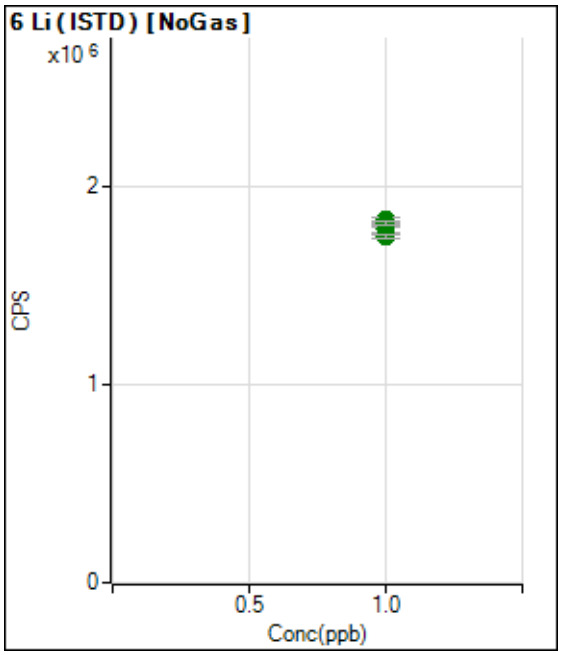
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

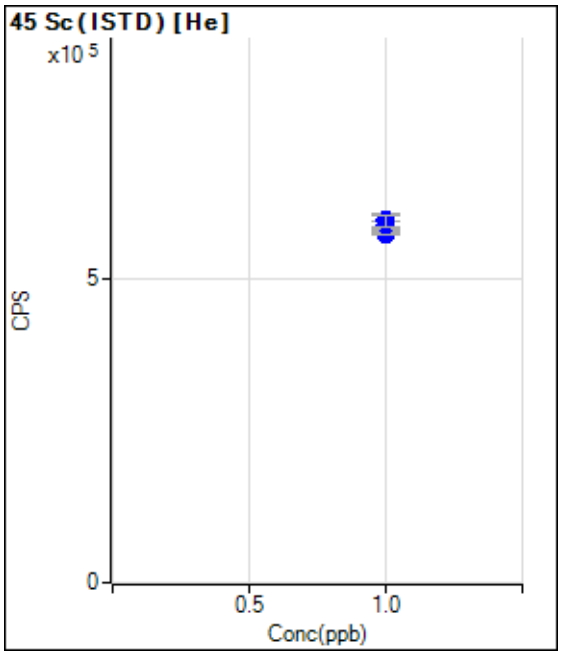
Calibration for 017_CCV.d

Batch Folder: D:\Analytical Runs\I10042015B.b\
Analysis File: I10042015B.batch.bin
DA Date-Time: 4/20/2015 11:54:19 AM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

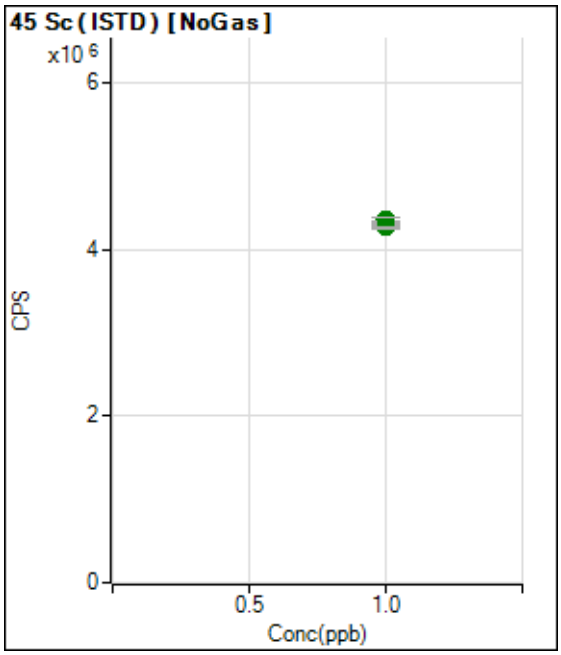
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/20/2015 10:25:17 AM
2	003CALS.d	STD1-1906323	4/20/2015 10:29:07 AM
3	004CALS.d	STD2-1904110	4/20/2015 10:32:55 AM
4	005CALS.d	STD3-1906333	4/20/2015 10:36:43 AM
5	006CALS.d	STD4-1906536	4/20/2015 10:40:29 AM



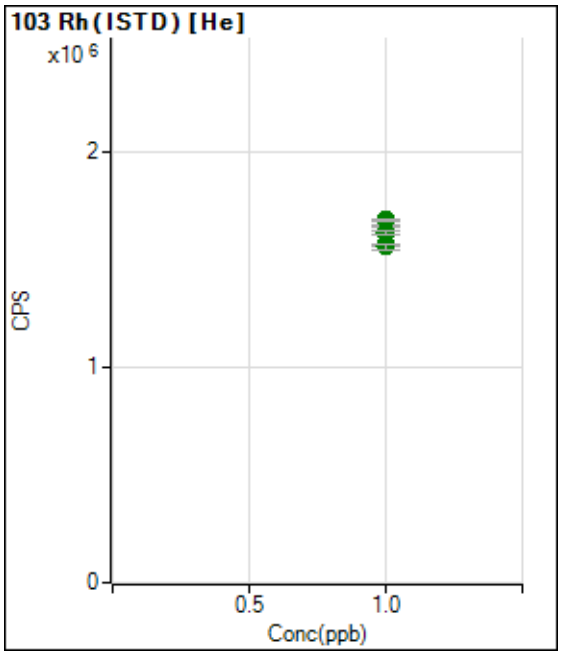
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1803796.89		A	1.2
2	☐	1.000		1829983.13		A	1.2
3	☐	1.000		1782193.55		A	1.6
4	☐	1.000		1742537.93		A	1.0
5	☐	1.000		1809459.47		A	1.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		574766.30		P	0.8
2	☐	1.000		588684.67		P	2.5
3	☐	1.000		597812.59		P	4.0
4	☐	1.000		589733.43		P	2.3
5	☐	1.000		595610.05		P	3.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4296856.77		A	0.3
2	☐	1.000		4298089.13		A	0.5
3	☐	1.000		4333353.30		A	0.1
4	☐	1.000		4352110.38		A	1.8
5	☐	1.000		4264431.08		A	0.5



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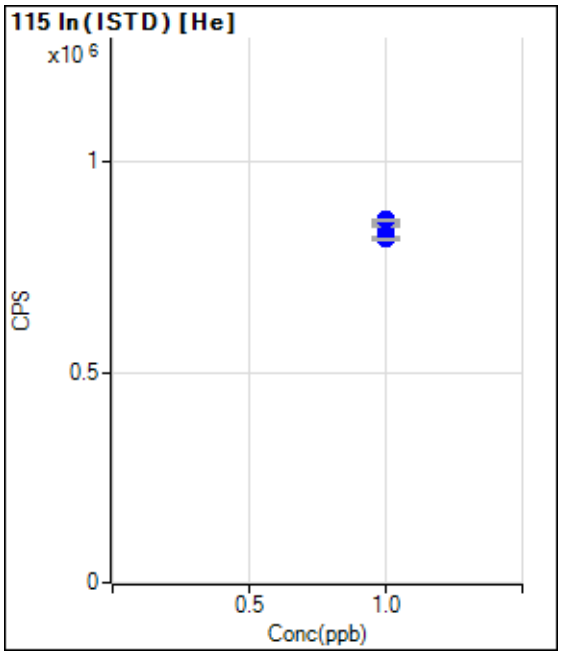
1	☐	1.000		1652712.47		A	1.0
2	☐	1.000		1620297.75		A	1.3
3	☐	1.000		1565924.42		A	0.5
4	☐	1.000		1556491.19		A	2.0
5	☐	1.000		1681733.06		A	0.4



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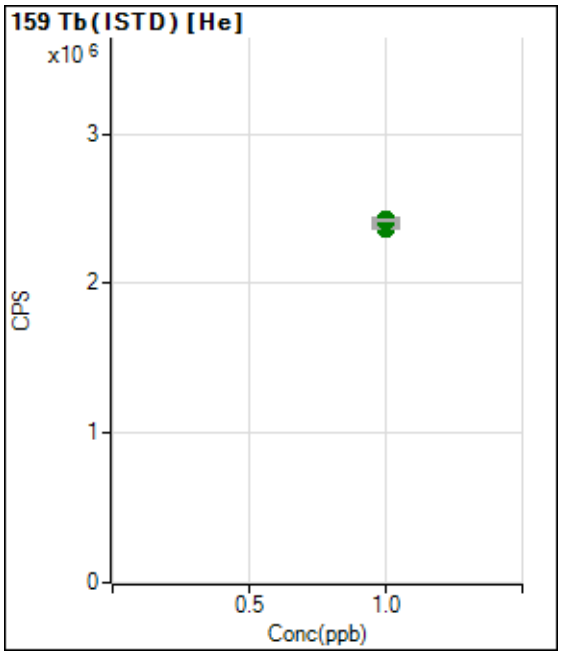
1	☐	1.000		852389.20		P	0.8
2	☐	1.000		847101.31		P	0.4
3	☐	1.000		820615.51		P	0.6
4	☐	1.000		815922.78		P	0.5
5	☐	1.000		861709.70		P	0.7



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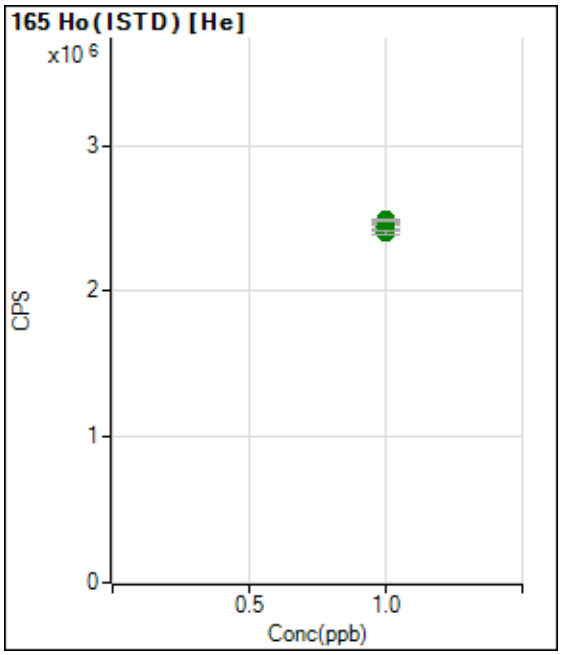
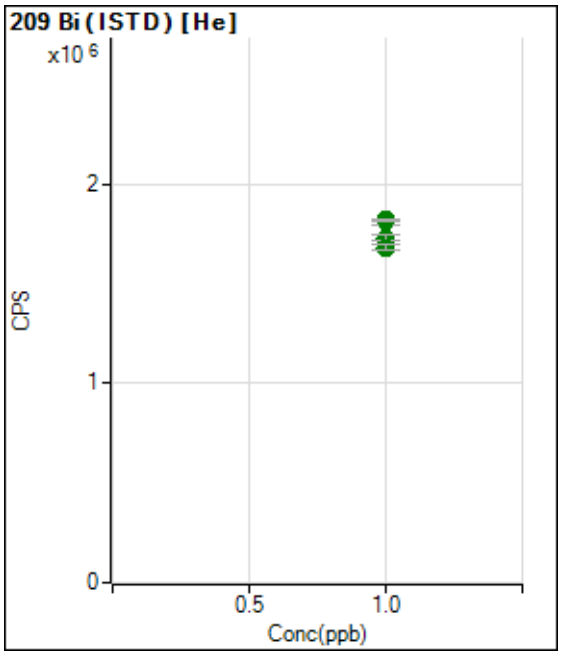
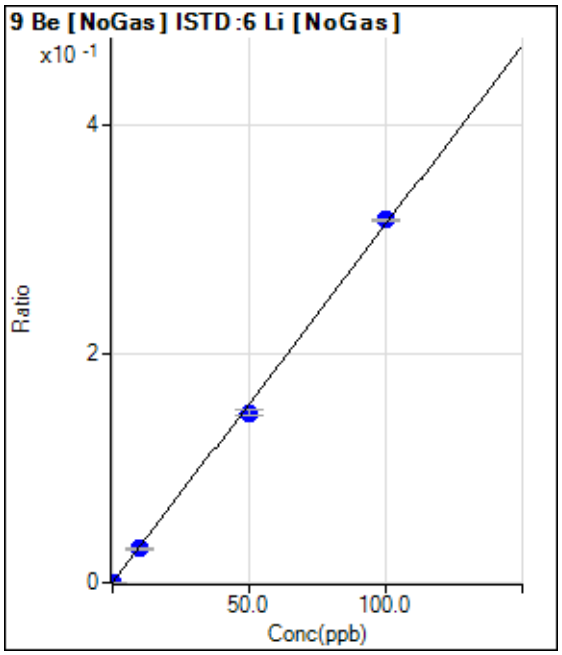
1	☐	1.000		2425956.29		A	1.3
2	☐	1.000		2406371.22		A	1.5
3	☐	1.000		2383879.77		A	1.2
4	☐	1.000		2370841.99		A	0.8
5	☐	1.000		2422876.64		A	0.7



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2452679.83		A	1.7
2	☐	1.000		2463165.67		A	0.9
3	☐	1.000		2444894.69		A	1.4
4	☐	1.000		2398504.97		A	0.8
5	☐	1.000		2489280.81		A	0.3



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1810472.84		A	1.3
2	☐	1.000		1809267.22		A	1.7
3	☐	1.000		1729560.25		A	2.0
4	☐	1.000		1682428.75		A	1.6
5	☐	1.000		1820015.13		A	0.7



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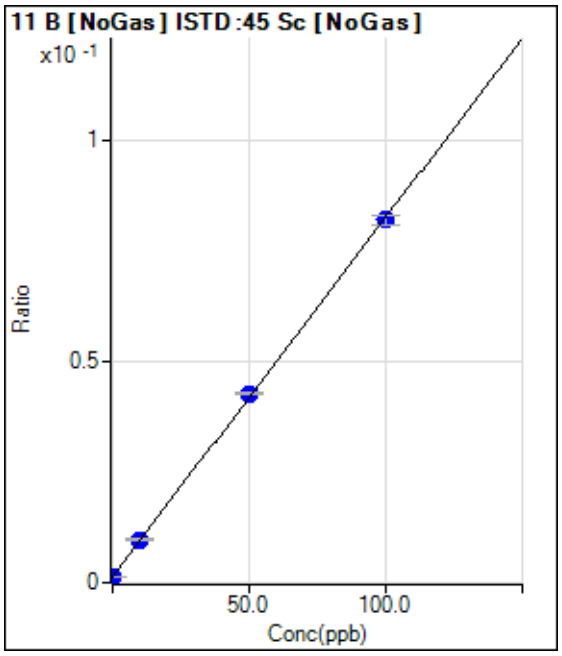
1	☐	0.000	0.000	3.70	0.0000	P	173.2
2	☐	10.000	9.493	54361.39	0.0297	P	5.6
3	☐	50.000	47.431	264560.43	0.1485	P	3.0
4	☐	100.000	101.335	552758.80	0.3172	P	0.5
5	☐			103.71	0.0001	P	17.4

y = 0.0031 * x + 2.0263E-006
R = 0.9994
DL = 0.003363
BEC = 0.0006473

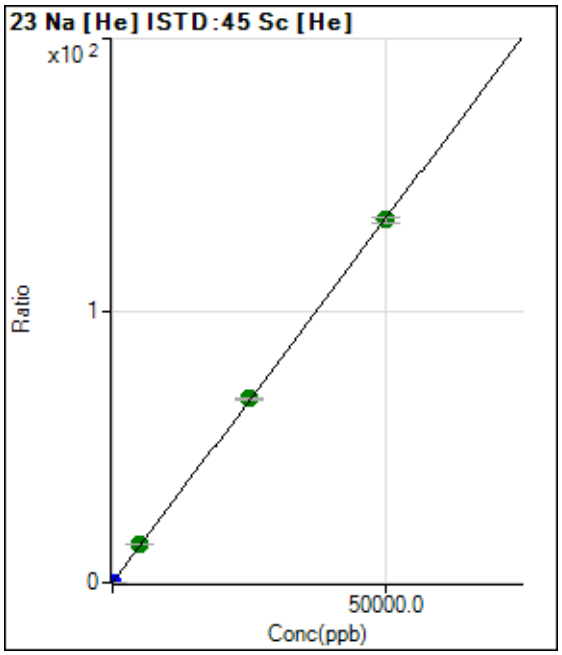
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5845.61	0.0014	P	7.2
2	☐	10.000	10.375	42104.10	0.0098	P	2.8
3	☐	50.000	51.094	185912.75	0.0429	P	1.4
4	☐			8795.10	0.0020	P	1.7
5	☐	100.000	99.415	350463.83	0.0822	P	2.7

y = 8.1306E-004 * x + 0.0014
R = 0.9999
DL = 0.359
BEC = 1.673

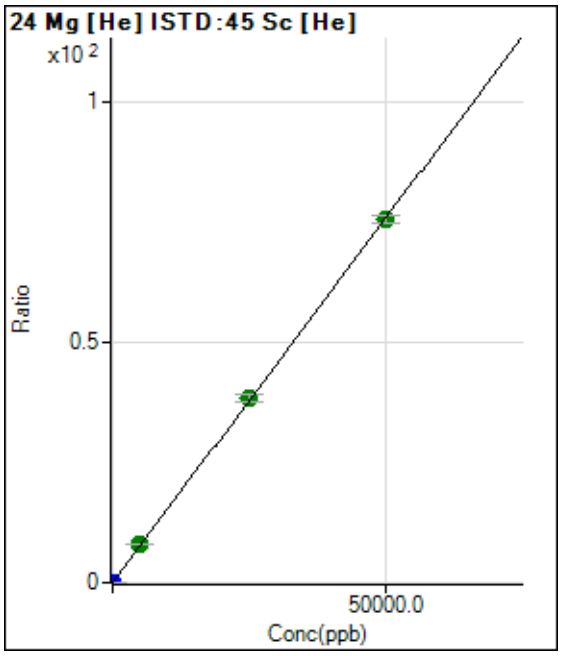
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33509.39	0.0583	P	5.1
2	☐	5000.000	5254.690	8305773.52	14.1169	A	3.4
3	☐	25000.000	25229.736	40367945.62	67.5589	A	1.8
4	☐	50000.000	49859.663	78687391.32	133.4548	A	1.4
5	☐			51450.97	0.0863	P	6.1

y = 0.0027 * x + 0.0583
R = 1.0000
DL = 3.336
BEC = 21.79

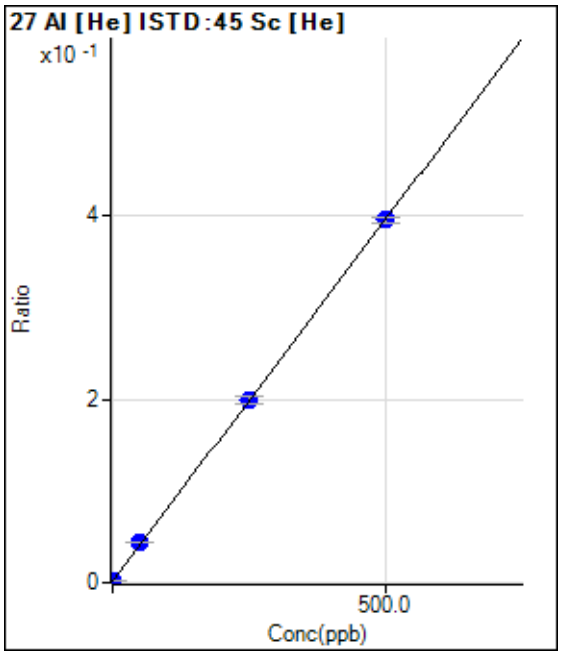
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	926.00	0.0016	P	2.4
2	☐	5000.000	5290.034	4722367.29	8.0264	A	3.5
3	☐	25000.000	25330.341	22951103.26	38.4268	A	3.4
4	☐	50000.000	49805.826	44543324.15	75.5552	A	2.1
5	☐			6953.57	0.0116	P	19.0

y = 0.0015 * x + 0.0016
R = 1.0000
DL = 0.07731
BEC = 1.062

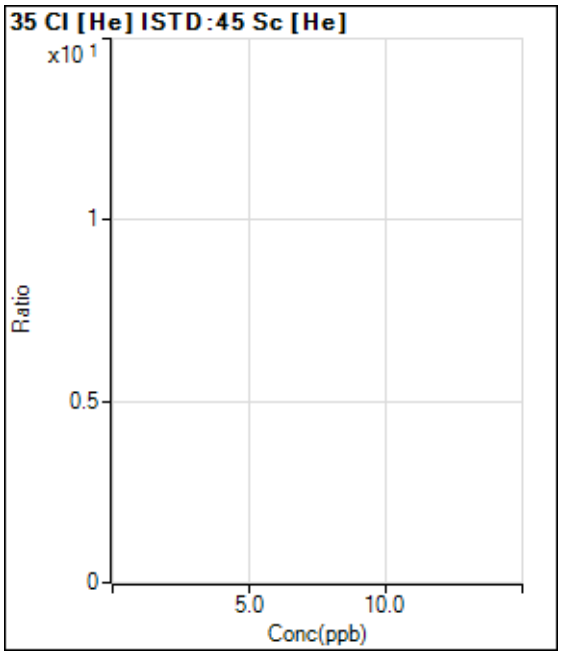
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	748.92	0.0013	P	3.3
2	☐	50.000	54.305	25975.05	0.0441	P	2.8
3	☐	250.000	250.431	118769.83	0.1989	P	3.7
4	☐	500.000	499.354	233035.80	0.3952	P	1.6
5	☐			2339.07	0.0039	P	3.5

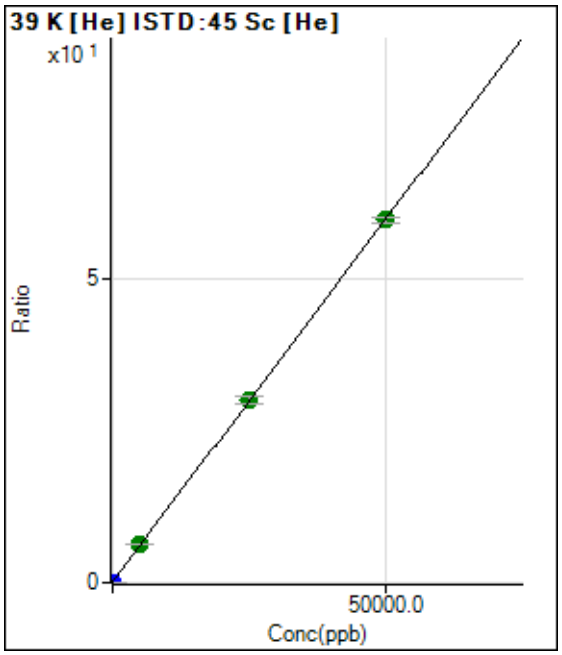
y = 7.8891E-004 * x + 0.0013
R = 1.0000
DL = 0.1646
BEC = 1.651

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			13317558.27	23.1714	A	1.2
2	☐			13306259.19	22.6098	A	1.9
3	☐			13738800.84	23.0067	A	4.1
4	☐			13733662.88	23.2947	A	2.0
5	☐			13788611.95	23.1636	A	3.0

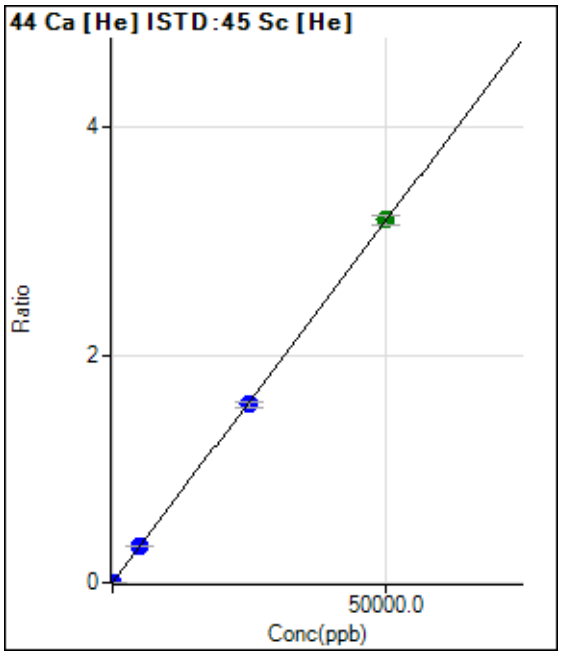
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64779.15	0.1127	P	0.1
2	☐	5000.000	5227.338	3730768.02	6.3381	A	1.3
3	☐	25000.000	25071.484	17899162.71	29.9709	A	3.7
4	☐	50000.000	49941.524	35133648.61	59.5891	A	1.6
5	☐			74501.09	0.1251	P	1.6

y = 0.0012 * x + 0.1127
R = 1.0000
DL = 0.2061
BEC = 94.64

Weight: <None>
Min Conc: <None>



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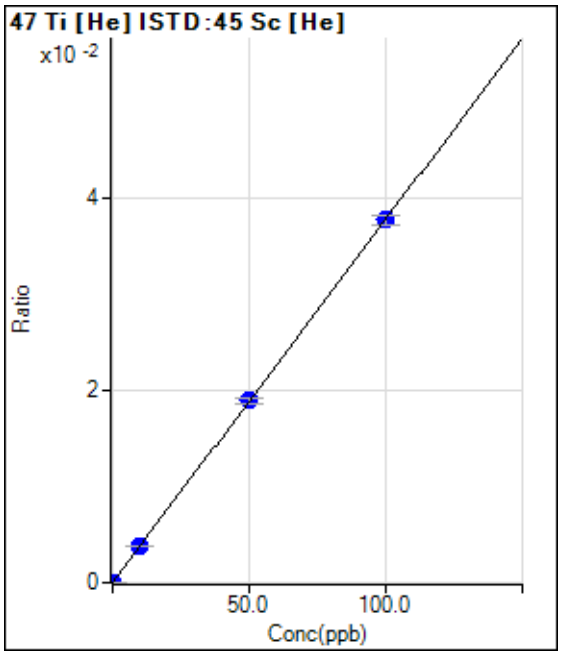
1	☐	0.000	0.000	574.55	0.0010	P	5.4
2	☐	5000.000	5038.607	188854.50	0.3209	P	1.4
3	☐	25000.000	24635.115	934803.66	1.5650	P	3.0
4	☐	50000.000	50178.582	1878505.18	3.1866	A	2.7
5	☐			1412.29	0.0024	P	5.0

y = 6.3485E-005 * x + 9.9986E-004
R = 1.0000
DL = 2.534
BEC = 15.75

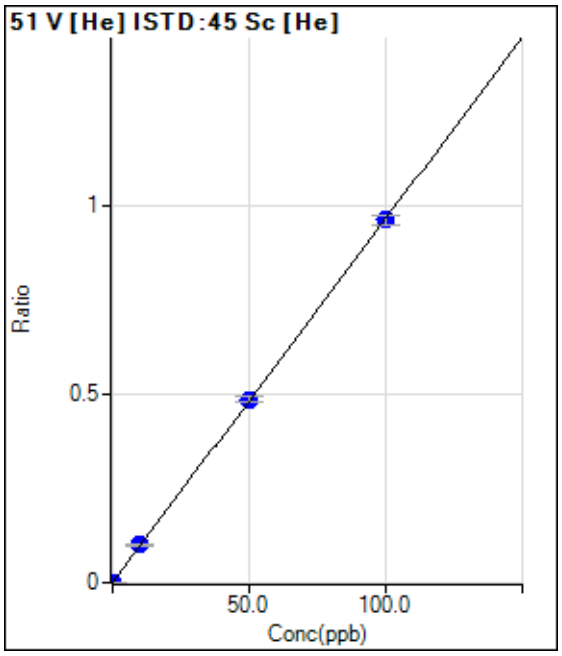
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.2
2	☐	10.000	9.998	2224.61	0.0038	P	3.6
3	☐	50.000	50.088	11311.41	0.0189	P	3.1
4	☐			23.34	0.0000	P	47.0
5	☐	100.000	99.956	22495.20	0.0378	P	2.5

y = 3.7802E-004 * x + 1.9224E-006
R = 1.0000
DL = 0.02643
BEC = 0.005086

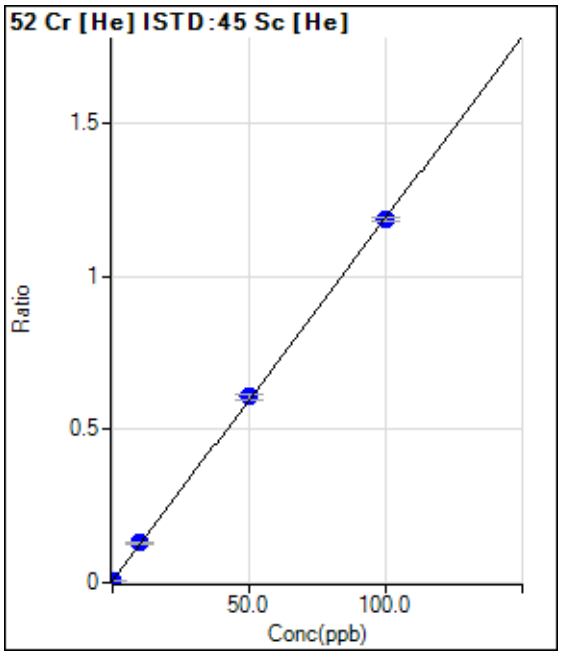
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	264.79	0.0005	P	182.4
2	☐	10.000	10.390	59298.95	0.1008	P	4.7
3	☐	50.000	50.381	290945.49	0.4870	P	2.8
4	☐	100.000	99.770	568327.17	0.9641	P	2.6
5	☐			584.23	0.0010	P	100.3

y = 0.0097 * x + 4.5623E-004
R = 1.0000
DL = 0.2585
BEC = 0.04724

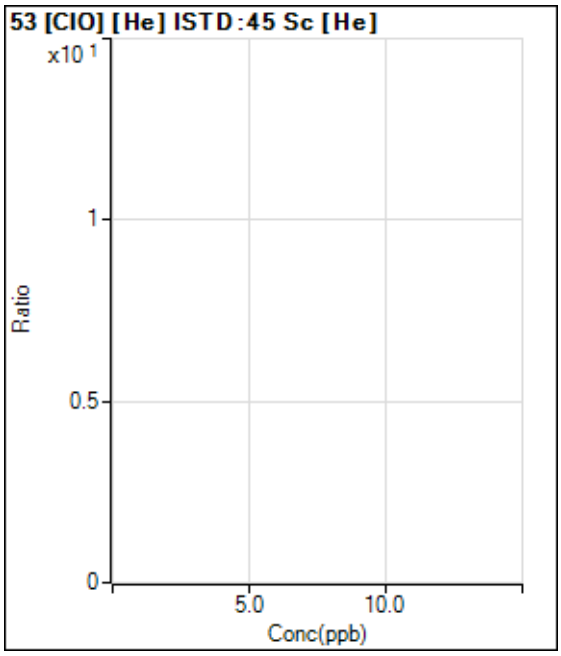
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3008.07	0.0052	P	4.9
2	☐	10.000	10.531	76509.00	0.1300	P	2.1
3	☐	50.000	50.821	362777.56	0.6074	P	3.3
4	☐	100.000	99.537	698462.14	1.1846	P	1.2
5	☐			3163.65	0.0053	P	1.4

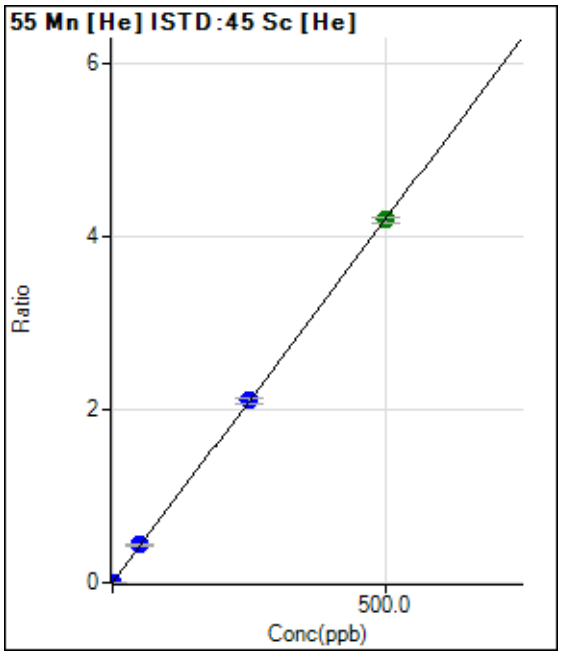
y = 0.0118 * x + 0.0052
R = 0.9999
DL = 0.06547
BEC = 0.4418

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			929.72	0.0016	P	20.9
2	☐			9451.07	0.0160	P	3.4
3	☐			44868.20	0.0751	P	4.4
4	☐			84923.37	0.1440	P	1.3
5	☐			640.78	0.0011	P	25.2

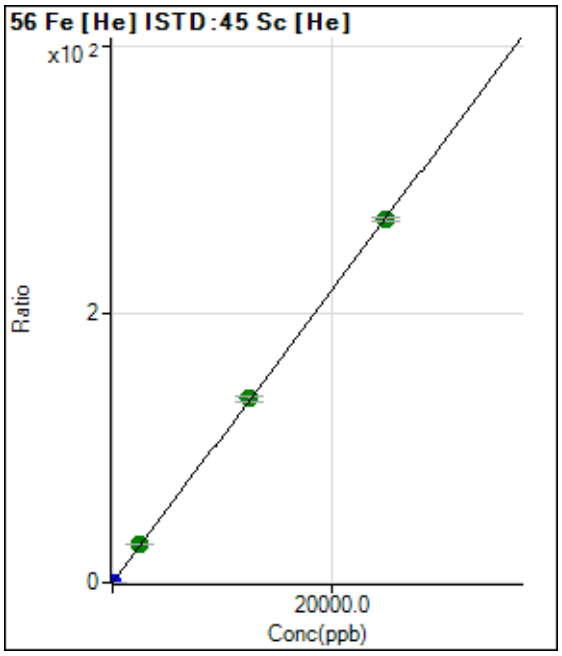
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	167.78	0.0003	P	11.3
2	☐	50.000	51.842	255892.60	0.4348	P	2.3
3	☐	250.000	251.149	1257657.31	2.1055	P	3.1
4	☐	500.000	499.241	2467533.30	4.1851	A	1.4
5	☐			780.03	0.0013	P	20.3

y = 0.0084 * x + 2.9200E-004
R = 1.0000
DL = 0.01179
BEC = 0.03483

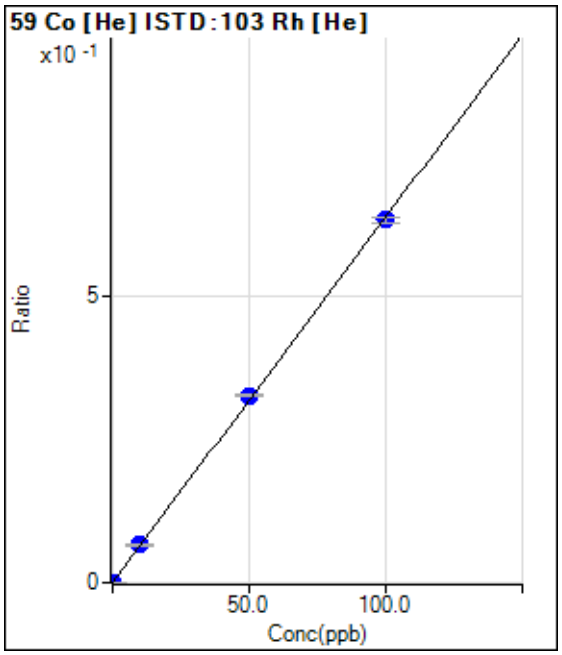
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6091.12	0.0106	P	3.4
2	☐	2500.000	2615.834	16713658.78	28.3945	A	0.6
3	☐	12500.000	12662.444	82076887.85	137.4083	A	3.3
4	☐	25000.000	24907.195	159363620.33	270.2737	A	1.1
5	☐			156745.49	0.2616	P	29.5

y = 0.0109 * x + 0.0106
R = 1.0000
DL = 0.1004
BEC = 0.9765

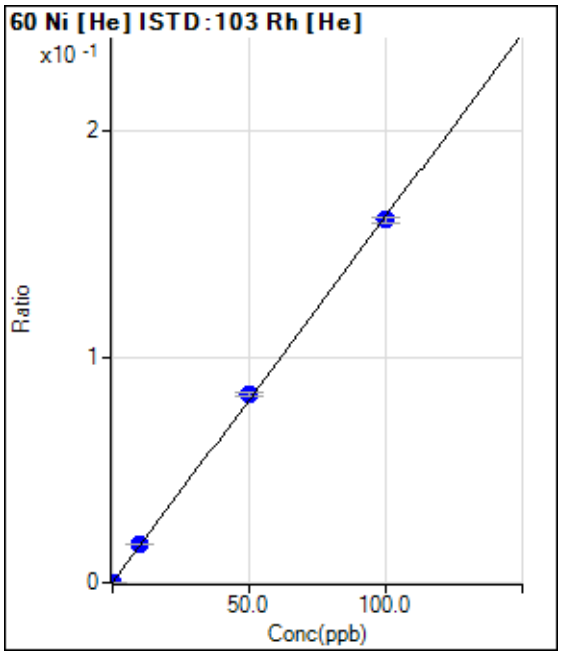
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	54.44	0.0000	P	37.5
2	☐	10.000	10.268	106199.60	0.0656	P	1.4
3	☐	50.000	51.277	512381.01	0.3272	P	1.4
4	☐	100.000	99.335	986451.91	0.6339	P	1.3
5	☐			173.34	0.0001	P	30.4

y = 0.0064 * x + 3.2979E-005
R = 0.9999
DL = 0.00581
BEC = 0.005169

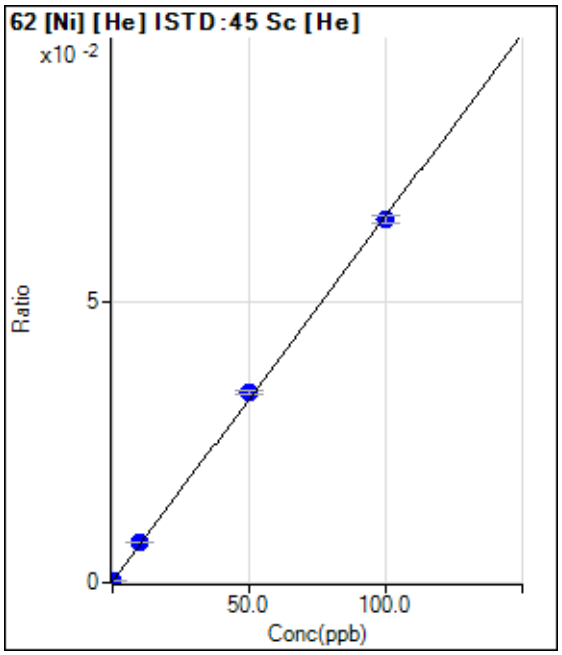
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	95.56	0.0001	P	57.0
2	☐	10.000	10.448	27565.71	0.0170	P	0.8
3	☐	50.000	51.677	131388.63	0.0839	P	1.9
4	☐	100.000	99.117	250363.12	0.1609	P	1.7
5	☐			251.12	0.0001	P	9.6

y = 0.0016 * x + 5.7991E-005
R = 0.9998
DL = 0.06111
BEC = 0.03574

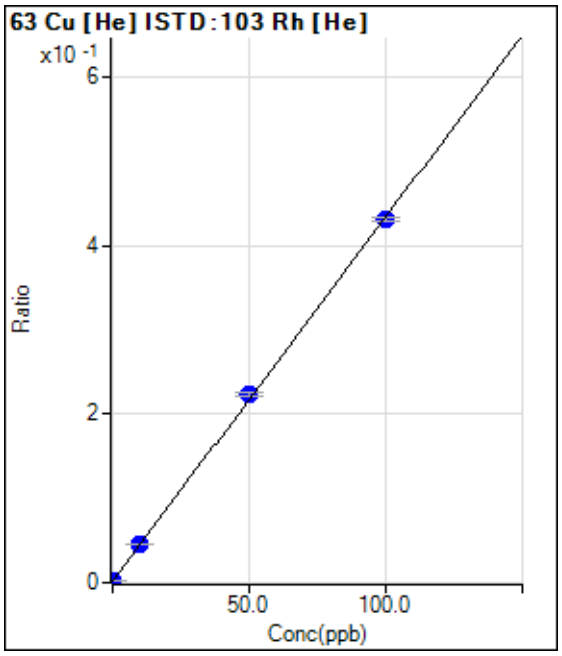
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.11	0.0002	P	21.9
2	☐	10.000	10.708	4211.66	0.0072	P	2.3
3	☐	50.000	51.776	20229.39	0.0339	P	2.6
4	☐	100.000	99.041	38083.66	0.0646	P	2.0
5	☐			151.12	0.0003	P	17.5

y = 6.5028E-004 * x + 1.9313E-004
R = 0.9997
DL = 0.1952
BEC = 0.297

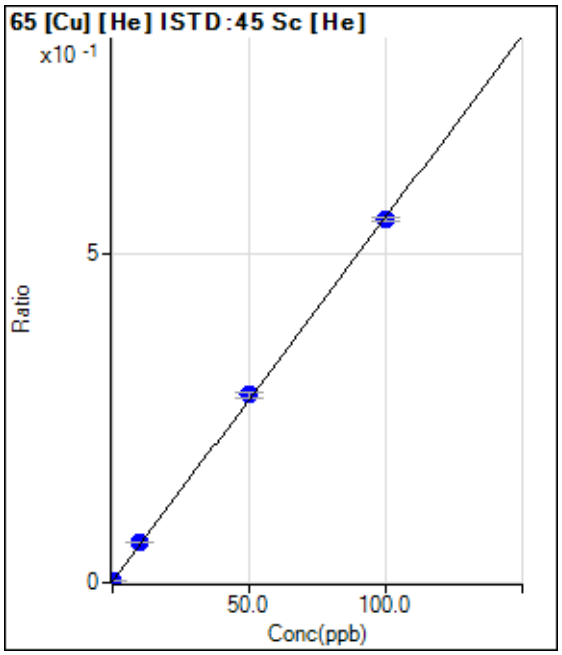
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2489.10	0.0015	P	4.6
2	☐	10.000	10.394	75327.95	0.0465	P	1.1
3	☐	50.000	51.334	350202.36	0.2237	P	2.0
4	☐	100.000	99.294	671068.15	0.4312	P	1.0
5	☐			3062.53	0.0018	P	2.4

y = 0.0043 * x + 0.0015
R = 0.9998
DL = 0.04755
BEC = 0.348

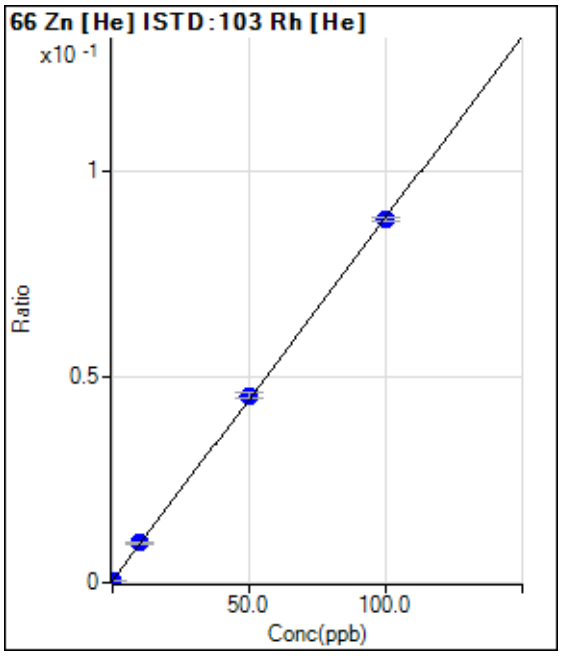
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1071.16	0.0019	P	7.5
2	☐	10.000	10.830	36473.84	0.0620	P	3.1
3	☐	50.000	51.213	170970.41	0.2862	P	2.5
4	☐	100.000	99.310	326181.73	0.5532	P	1.2
5	☐			1393.41	0.0023	P	1.4

y = 0.0056 * x + 0.0019
R = 0.9999
DL = 0.07546
BEC = 0.3357

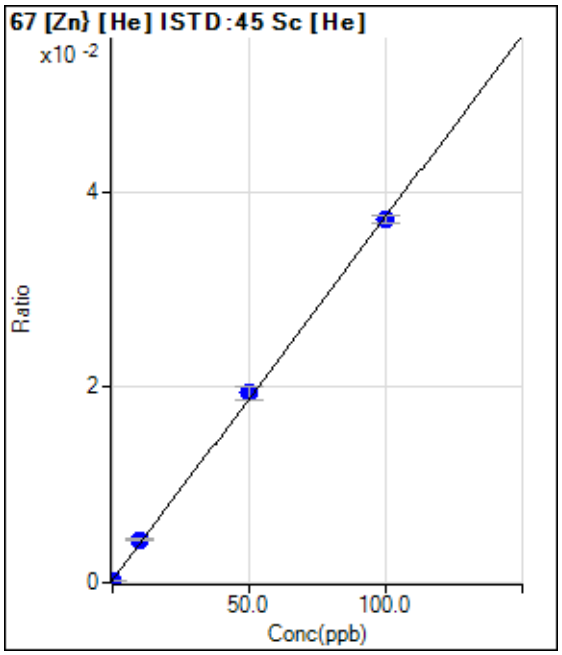
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	847.81	0.0005	P	10.1
2	☐	10.000	10.374	15620.29	0.0096	P	2.6
3	☐	50.000	51.083	71190.50	0.0455	P	2.6
4	☐	100.000	99.421	136960.26	0.0880	P	1.0
5	☐			2756.92	0.0016	P	1.0

y = 8.8000E-004 * x + 5.1281E-004
R = 0.9999
DL = 0.1768
BEC = 0.5827

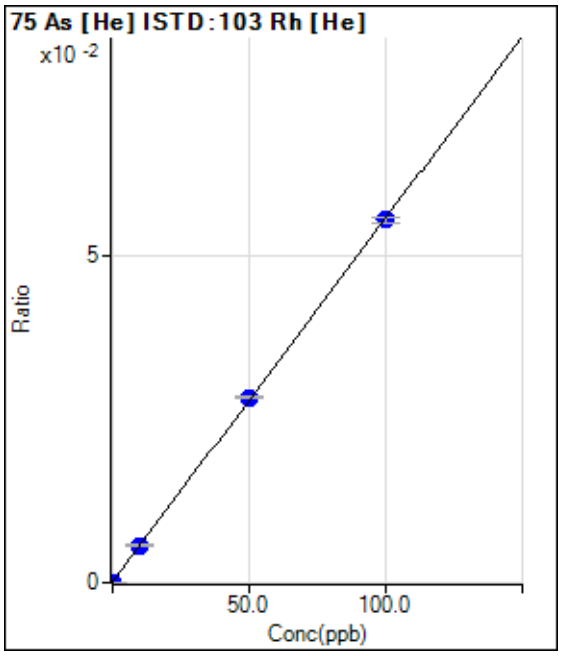
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	138.89	0.0002	P	4.3
2	☐	10.000	11.180	2592.45	0.0044	P	4.0
3	☐	50.000	51.458	11578.33	0.0194	P	6.3
4	☐	100.000	99.153	21907.98	0.0372	P	2.1
5	☐			387.79	0.0007	P	18.5

y = 3.7232E-004 * x + 2.4170E-004
R = 0.9998
DL = 0.08392
BEC = 0.6492

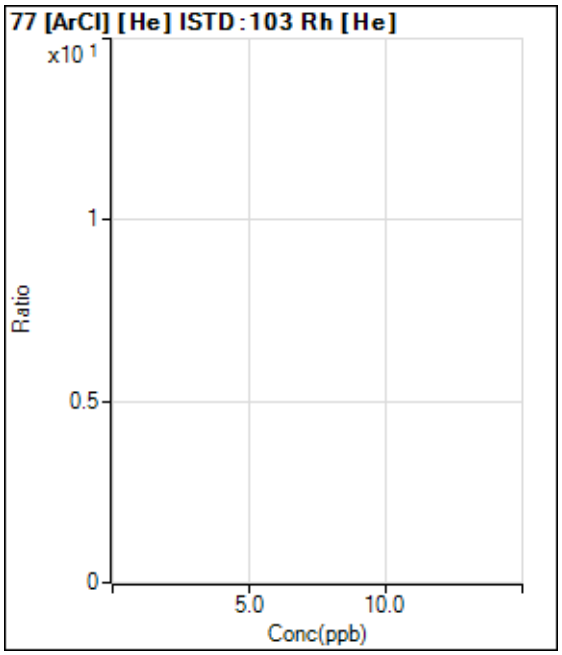
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	196.89	0.0001	P	10.6
2	☐	10.000	10.079	9289.18	0.0057	P	1.4
3	☐	50.000	50.822	44515.56	0.0284	P	1.2
4	☐	100.000	99.581	86503.94	0.0556	P	1.8
5	☐			179.23	0.0001	P	8.3

y = 5.5703E-004 * x + 1.1921E-004
R = 0.9999
DL = 0.06779
BEC = 0.214

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			29.63	0.0000	P	22.4
2	☐			262.98	0.0002	P	30.4
3	☐			1203.82	0.0008	P	3.2
4	☐			2144.67	0.0014	P	5.0
5	☐			44.45	0.0000	P	65.8

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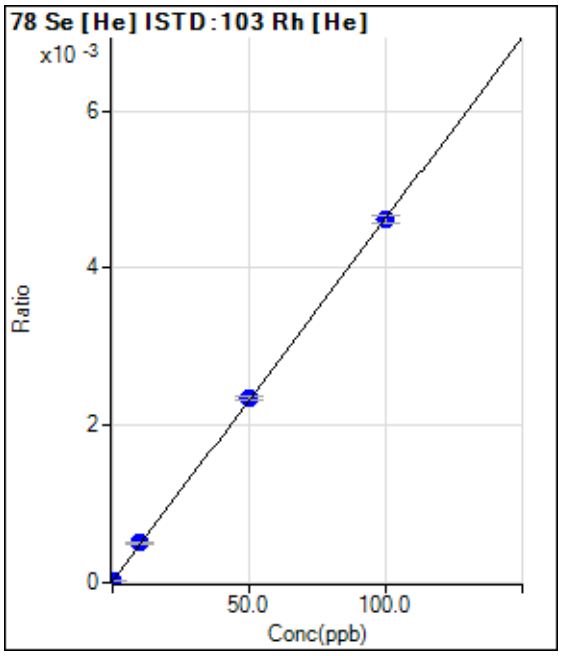


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	29.69	0.0000	P	16.4
2	☐	10.000	10.563	818.10	0.0005	P	4.6
3	☐	50.000	50.587	3680.98	0.0024	P	1.4
4	☐	100.000	99.650	7178.73	0.0046	P	2.1
5	☐			33.83	0.0000	P	13.0

y = 4.6114E-005 * x + 1.7980E-005

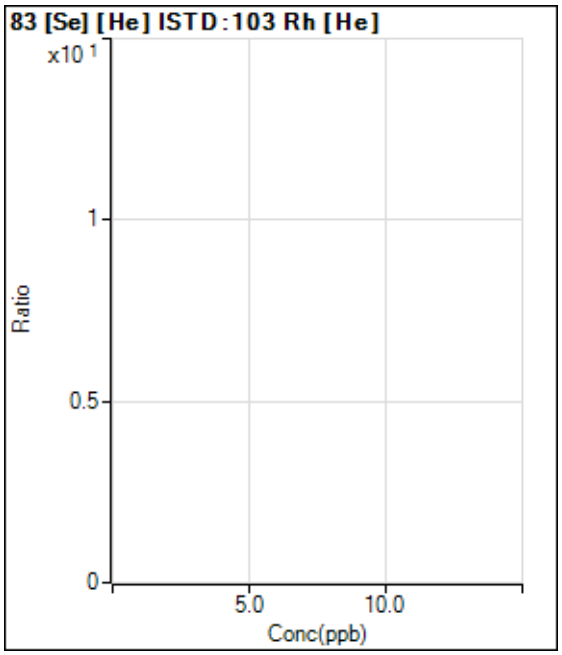
R = 1.0000

DL = 0.1916

BEC = 0.3899

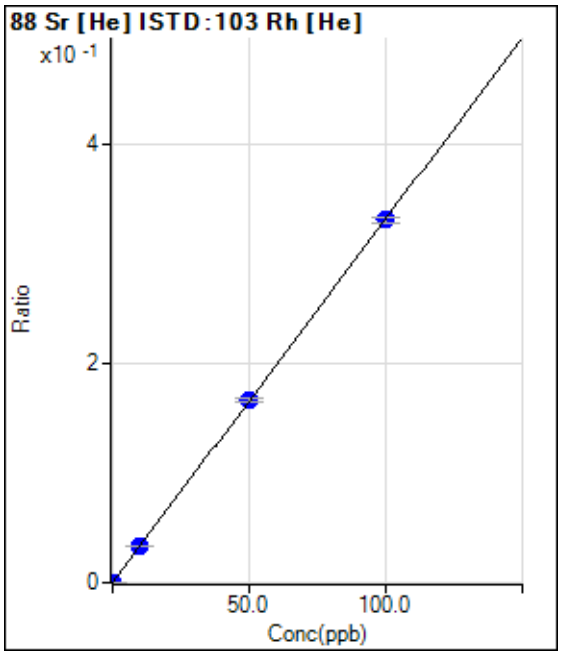
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			208.08	0.0001	P	3.0
2	☐			199.66	0.0001	P	6.8
3	☐			198.32	0.0001	P	2.3
4	☐			212.12	0.0001	P	9.7
5	☐			208.42	0.0001	P	16.6

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	142.23	0.0001	P	22.0
2	☐	10.000	10.030	54009.08	0.0333	P	0.9
3	☐	50.000	50.340	261429.42	0.1670	P	1.6
4	☐	100.000	99.827	515085.29	0.3310	P	1.7
5	☐			148.89	0.0001	P	16.0

y = 0.0033 * x + 8.6169E-005

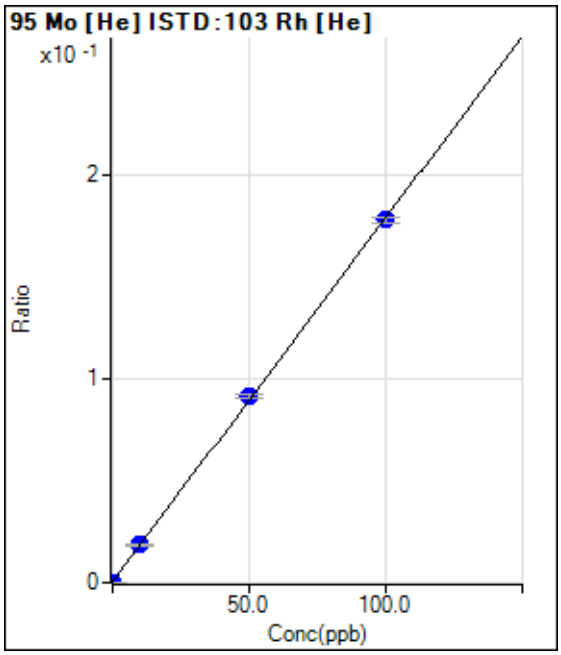
R = 1.0000

DL = 0.01713

BEC = 0.02599

Weight: <None>

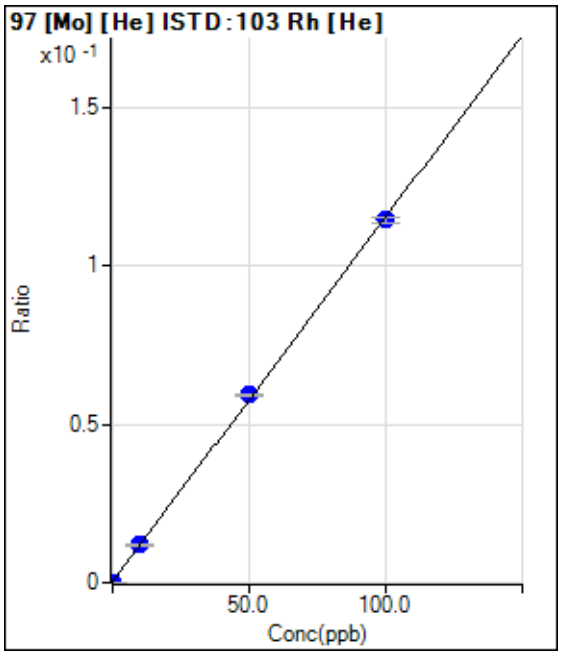
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	695.58	0.0004	P	7.7
2	☐	10.000	10.168	30097.13	0.0186	P	3.6
3	☐	50.000	50.923	143084.08	0.0914	P	2.2
4	☐			2521.33	0.0016	P	15.9
5	☐	100.000	99.522	299628.89	0.1782	P	1.6

y = 0.0018 * x + 4.2079E-004
R = 0.9999
DL = 0.05472
BEC = 0.2356

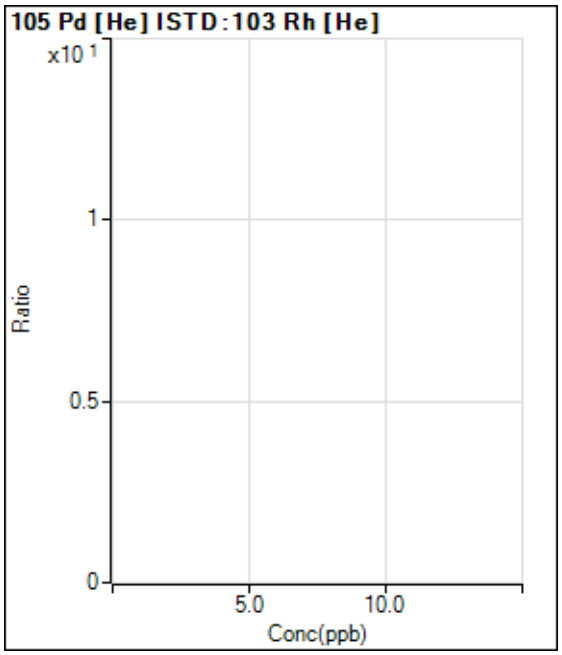
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	448.17	0.0003	P	13.0
2	☐	10.000	10.156	19359.72	0.0119	P	2.2
3	☐	50.000	51.346	92874.07	0.0593	P	1.5
4	☐			1622.38	0.0010	P	10.6
5	☐	100.000	99.312	192497.01	0.1145	P	1.7

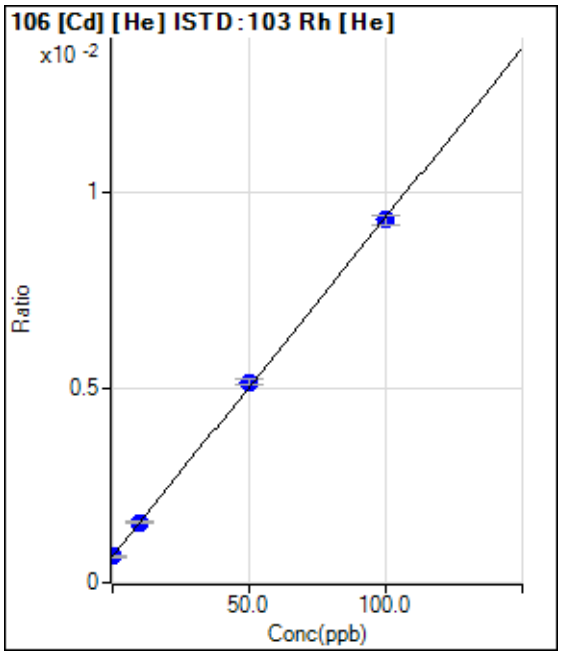
y = 0.0011 * x + 2.7132E-004
R = 0.9998
DL = 0.09188
BEC = 0.236

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1074.17	0.0006	P	10.0
2	☐			1129.73	0.0007	P	8.1
3	☐			1207.51	0.0008	P	1.9
4	☐			1211.22	0.0008	P	9.5
5	☐			1148.24	0.0007	P	17.2

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1110.48	0.0007	P	5.6
2	☐	10.000	9.930	2485.04	0.0015	P	2.7
3	☐	50.000	51.420	8043.97	0.0051	P	2.8
4	☐	100.000	99.297	14462.92	0.0093	P	2.8
5	☐			1160.99	0.0007	P	7.5

y = 8.6849E-005 * x + 6.7167E-004

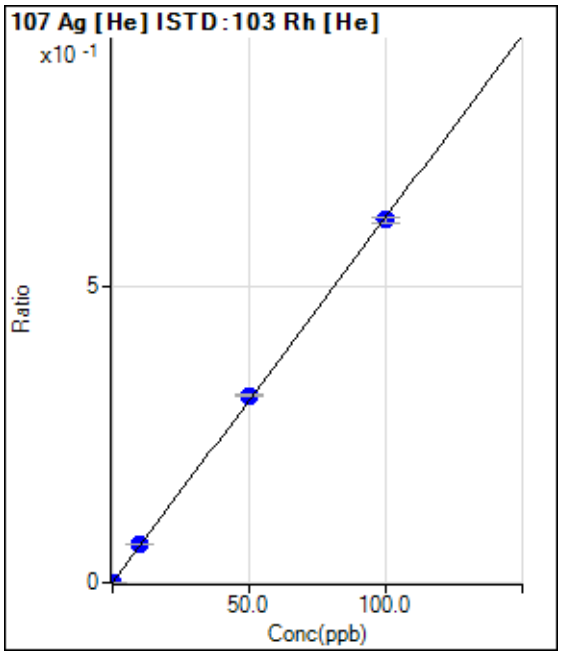
R = 0.9998

DL = 1.297

BEC = 7.734

Weight: <None>

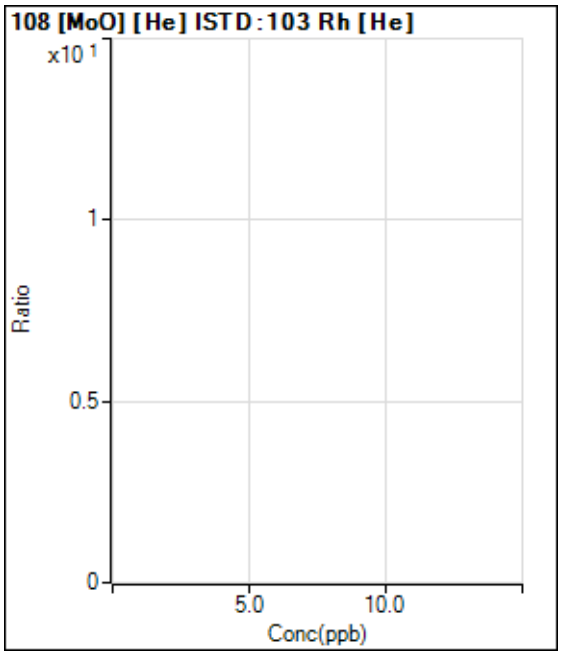
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	32.22	0.0000	P	36.6
2	☐	10.000	10.371	103935.16	0.0642	P	1.9
3	☐	50.000	51.220	496033.94	0.3168	P	1.1
4	☐	100.000	99.353	956216.56	0.6145	P	1.4
5	☐			237.79	0.0001	P	22.5

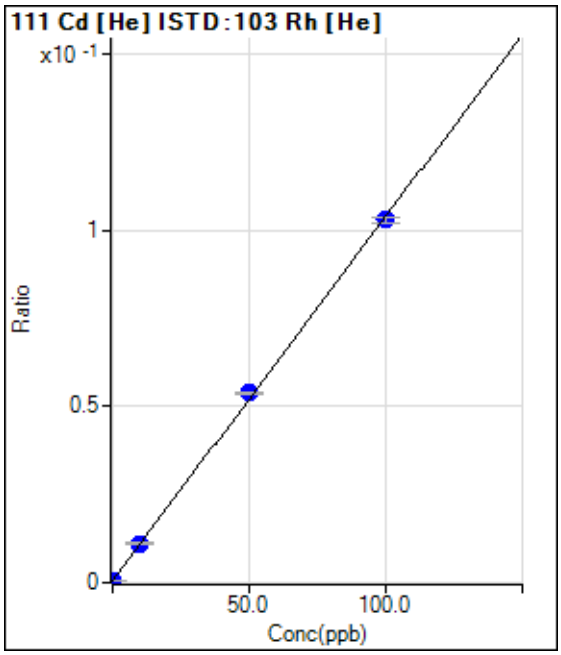
y = 0.0062 * x + 1.9521E-005
R = 0.9999
DL = 0.003468
BEC = 0.003157

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			7.41	0.0000	P	173.2
2	☐			1185.28	0.0007	P	1.7
3	☐			5364.06	0.0034	P	8.5
4	☐			10273.98	0.0066	P	5.8
5	☐			144.45	0.0001	P	34.9

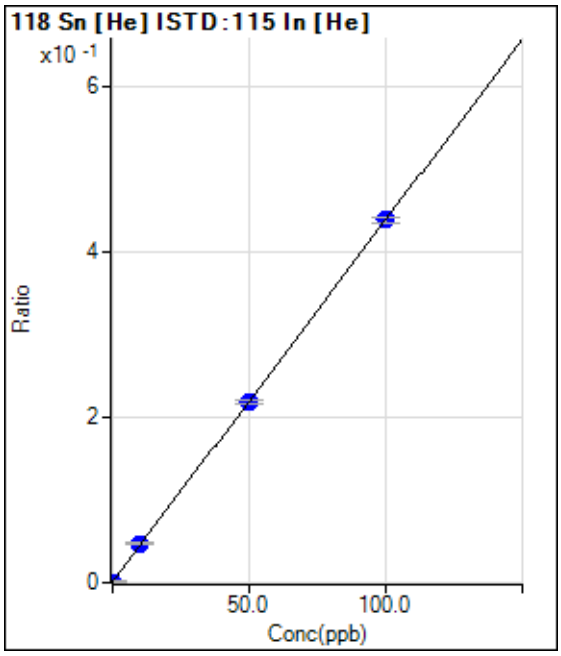
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	850.22	0.0005	P	5.0
2	☐	10.000	10.297	18064.48	0.0112	P	1.5
3	☐	50.000	51.615	84288.22	0.0538	P	1.3
4	☐	100.000	99.163	160190.11	0.1029	P	1.8
5	☐			873.75	0.0005	P	9.7

y = 0.0010 * x + 5.1428E-004
R = 0.9998
DL = 0.07421
BEC = 0.4979

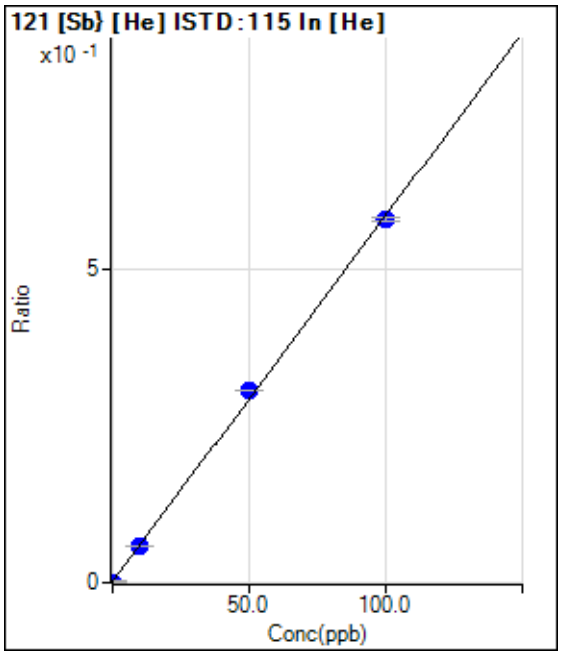
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	863.67	0.0010	P	77.2
2	☐	10.000	10.641	40323.00	0.0476	P	0.8
3	☐	50.000	49.690	179339.46	0.2185	P	2.1
4	☐			1874.27	0.0023	P	11.3
5	☐	100.000	100.091	378485.42	0.4392	P	1.7

y = 0.0044 * x + 0.0010
R = 1.0000
DL = 0.5379
BEC = 0.2323

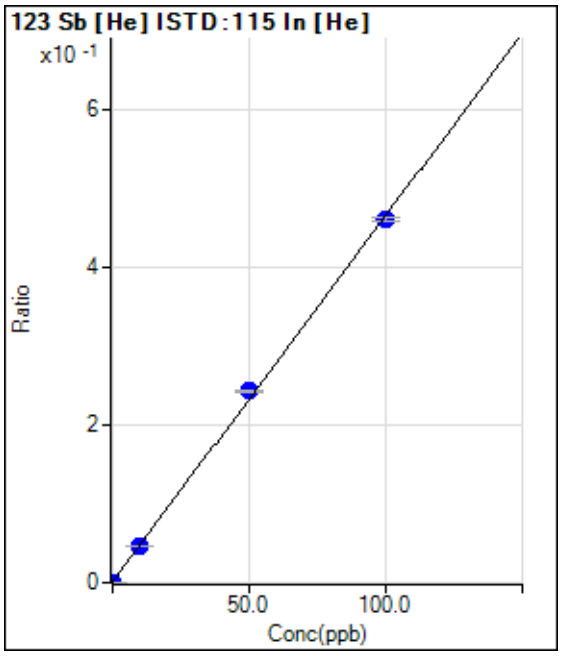
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1270.07	0.0015	P	10.9
2	☐	10.000	9.844	50036.10	0.0591	P	1.9
3	☐	50.000	52.256	252037.16	0.3071	P	0.5
4	☐			2603.57	0.0032	P	4.7
5	☐	100.000	98.888	499688.10	0.5799	P	1.1

y = 0.0058 * x + 0.0015
R = 0.9995
DL = 0.08319
BEC = 0.2546

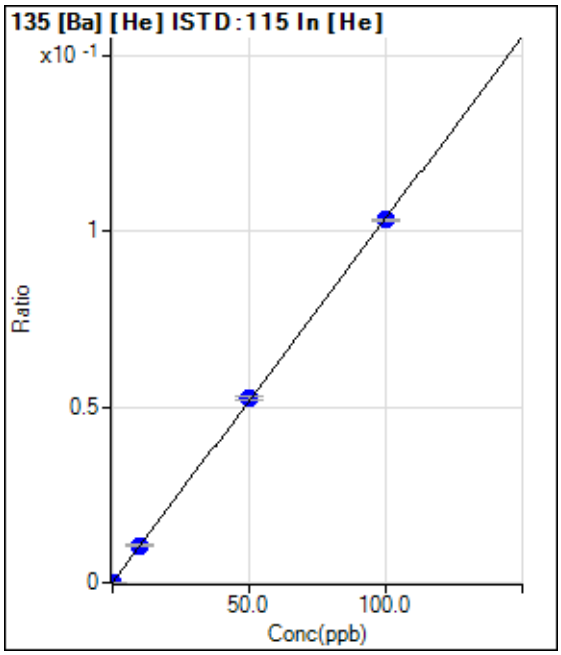
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	897.81	0.0011	P	2.6
2	☐	10.000	9.890	39777.24	0.0470	P	0.1
3	☐	50.000	52.138	199442.64	0.2430	P	0.4
4	☐			2011.26	0.0025	P	5.4
5	☐	100.000	98.942	396610.21	0.4603	P	1.0

y = 0.0046 * x + 0.0011
R = 0.9996
DL = 0.01776
BEC = 0.2269

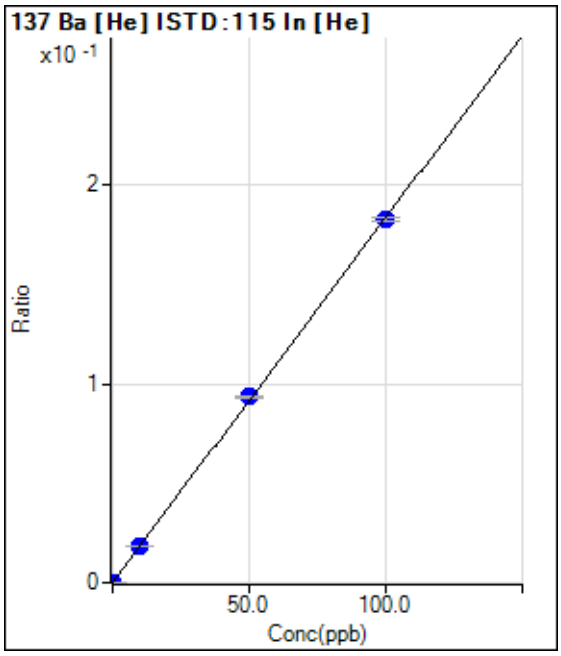
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24.45	0.0000	P	27.8
2	☐	10.000	10.268	9028.08	0.0107	P	1.9
3	☐	50.000	50.618	43024.61	0.0524	P	1.6
4	☐	100.000	99.664	84200.88	0.1032	P	0.8
5	☐			46.67	0.0001	P	56.9

y = 0.0010 * x + 2.8640E-005
R = 1.0000
DL = 0.02304
BEC = 0.02767

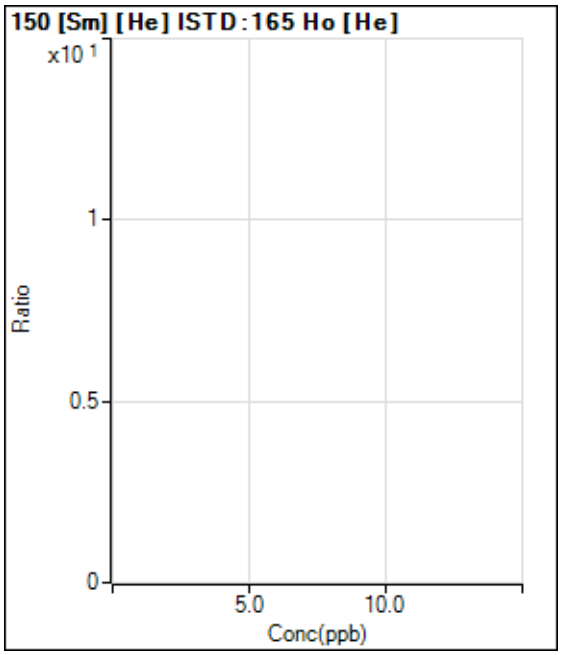
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	42.7
2	☐	10.000	10.158	15805.34	0.0187	P	1.5
3	☐	50.000	50.931	76712.62	0.0935	P	1.3
4	☐	100.000	99.519	149033.97	0.1827	P	0.9
5	☐			108.89	0.0001	P	32.1

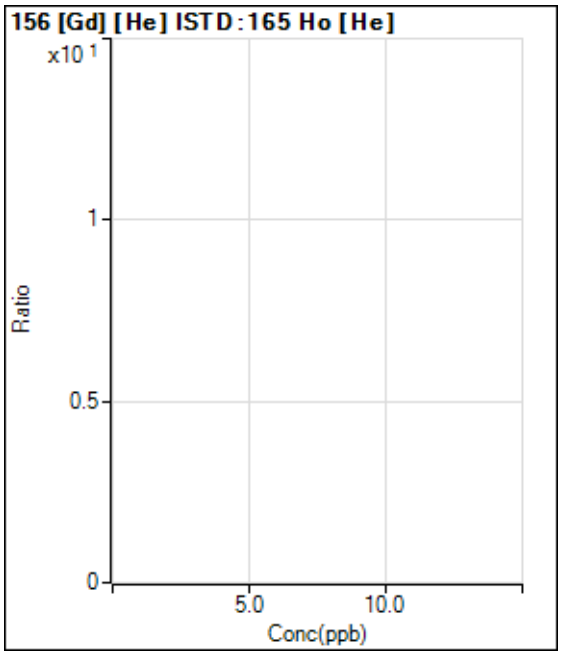
y = 0.0018 * x + 1.5621E-005
R = 0.9999
DL = 0.01092
BEC = 0.008512

Weight: <None>
Min Conc: <None>



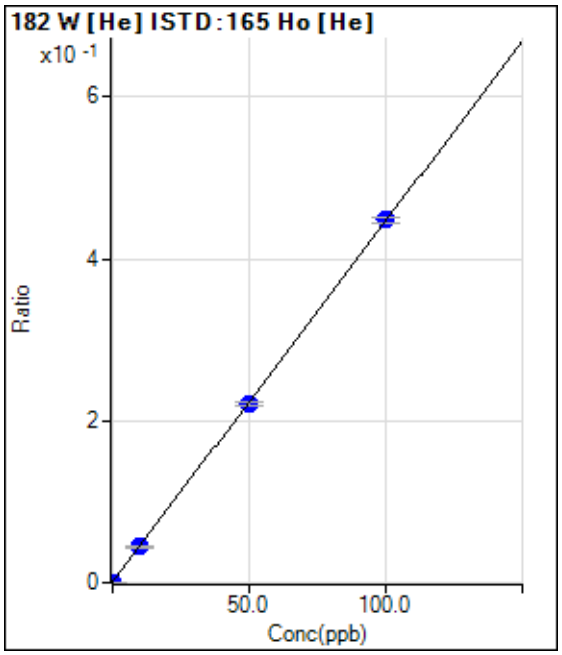
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			8.00	0.0000	P	113.8
2	☐			4.67	0.0000	P	98.8
3	☐			7.33	0.0000	P	79.5
4	☐			11.33	0.0000	P	36.4
5	☐			3.33	0.0000	P	91.5

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			10.67	0.0000	P	9.4
2	☐			8.00	0.0000	P	49.9
3	☐			12.67	0.0000	P	25.2
4	☐			23.33	0.0000	P	30.7
5	☐			12.00	0.0000	P	57.9

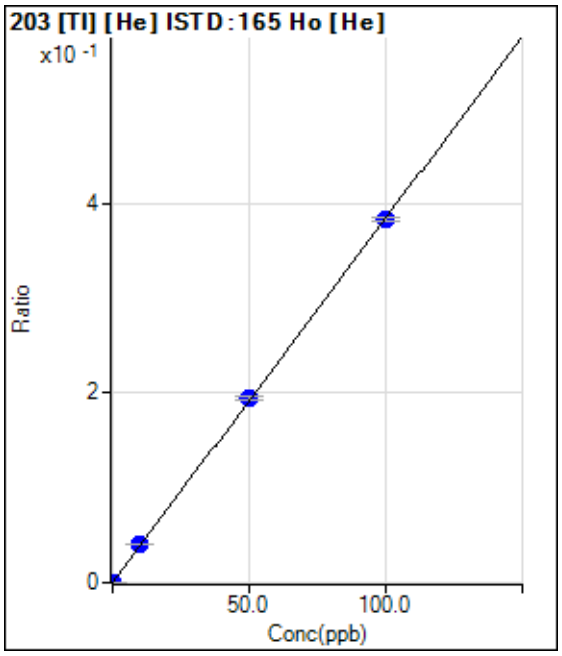
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2685.55	0.0011	P	3.2
2	☐	10.000	9.638	108334.51	0.0440	P	2.5
3	☐	50.000	49.208	537979.96	0.2201	P	1.9
4	☐			11093.20	0.0046	P	14.2
5	☐	100.000	100.432	1115299.47	0.4480	P	1.5

y = 0.0045 * x + 0.0011
R = 0.9999
DL = 0.02365
BEC = 0.246

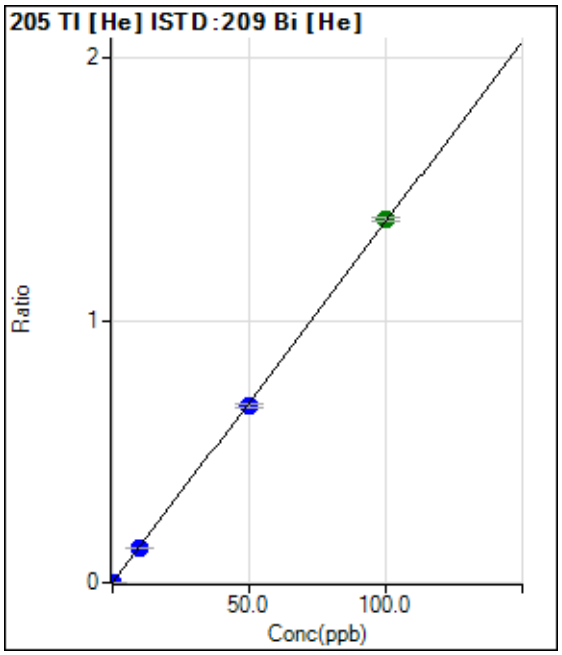
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	159.27	0.0001	P	45.8
2	☐	10.000	10.595	100381.30	0.0408	P	1.6
3	☐	50.000	50.600	475267.21	0.1944	P	1.6
4	☐	100.000	99.641	917907.78	0.3827	P	1.2
5	☐			1437.17	0.0006	P	13.6

y = 0.0038 * x + 6.4689E-005
R = 1.0000
DL = 0.02314
BEC = 0.01684

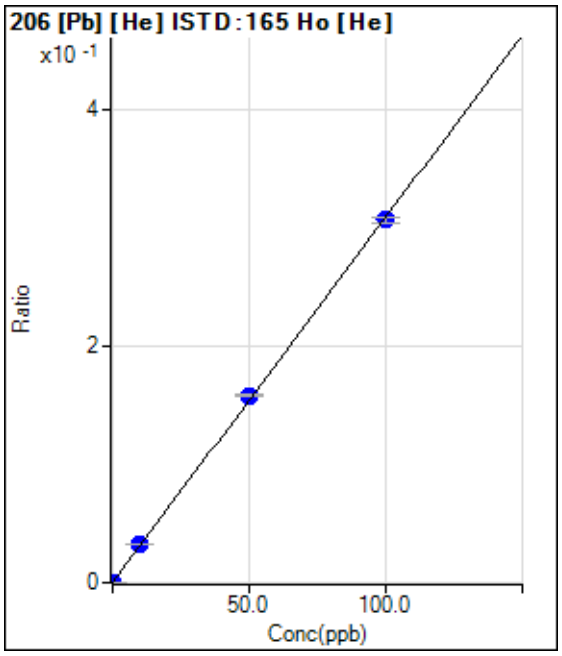
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	396.68	0.0002	P	9.7
2	☐	10.000	9.729	242680.86	0.1341	P	0.8
3	☐	50.000	48.996	1166609.26	0.6747	P	2.1
4	☐	100.000	100.529	2328363.66	1.3841	A	1.0
5	☐			2518.02	0.0014	P	22.6

y = 0.0138 * x + 2.1922E-004
R = 0.9999
DL = 0.004643
BEC = 0.01593

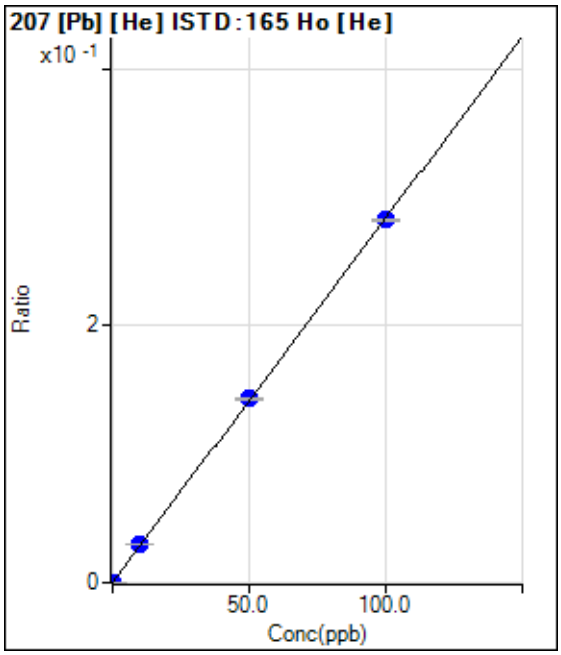
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	232.23	0.0001	P	19.9
2	☐	10.000	10.521	80072.52	0.0325	P	0.0
3	☐	50.000	51.141	385419.91	0.1577	P	1.0
4	☐	100.000	99.378	734533.63	0.3063	P	1.3
5	☐			412.23	0.0002	P	10.0

y = 0.0031 * x + 9.4829E-005
R = 0.9999
DL = 0.01842
BEC = 0.03078

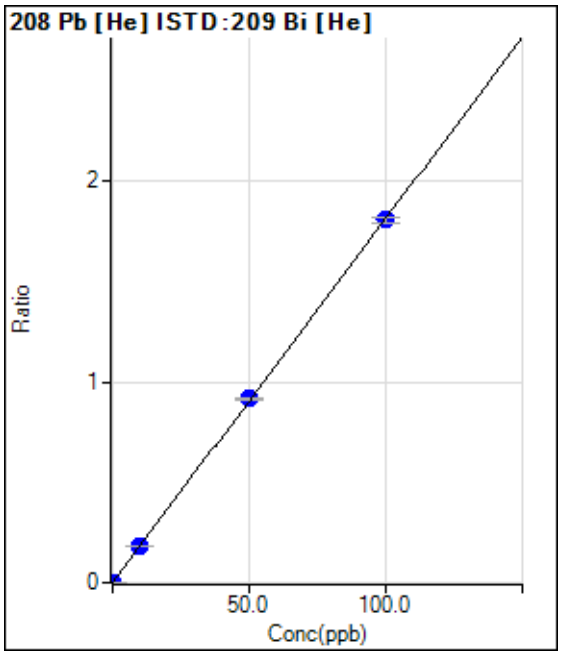
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	208.89	0.0001	P	7.8
2	☐	10.000	10.526	73731.49	0.0299	P	0.8
3	☐	50.000	50.629	351194.74	0.1437	P	1.2
4	☐	100.000	99.633	677846.48	0.2826	P	0.7
5	☐			367.79	0.0001	P	13.4

y = 0.0028 * x + 8.5230E-005
R = 1.0000
DL = 0.007045
BEC = 0.03006

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	886.69	0.0005	P	8.8
2	☐	10.000	10.055	330383.93	0.1826	P	0.8
3	☐	50.000	50.496	1582566.99	0.9152	P	1.4
4	☐	100.000	99.746	3040136.13	1.8073	P	1.4
5	☐			1635.61	0.0009	P	8.3

y = 0.0181 * x + 4.9001E-004
R = 1.0000
DL = 0.007179
BEC = 0.02705

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:21:26-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	37	123.76
B	11	45	2	NoGas	6338	0.08
Na	23	45	1	He	35728	0.00
Mg	24	45	1	He	1037	2.07
Al	27	45	1	He	909	0.27
K	39	45	1	He	65051	0.00
Ca	44	45	1	He	547	2.02
Ti	47	45	1	He	11	412.30
V	51	45	1	He	290	60.25
Cr	52	45	1	He	3050	0.09
Mn	55	45	1	He	188	23.47
Fe	56	45	1	He	16236	0.13
Co	59	103	1	He	39	12.71
Ni	60	103	1	He	81	7.74
Cu	63	103	1	He	2405	0.10
Zn	66	103	1	He	816	1.33
As	75	103	1	He	174	9.30
Se	78	103	1	He	33	44.40
Sr	88	103	1	He	134	17.13
Mo	95	103	1	He	6436	0.49
Ag	107	103	1	He	17	432.78
Cd	111	103	1	He	841	0.32
Sn	118	115	1	He	722	2.40
Sb	123	115	1	He	1014	1.04
Ba	137	115	1	He	27	214.81
W	182	165	1	He	2937	0.31
Tl	205	209	1	He	424	1.68
Pb	208	209	1	He	887	1.20

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1769055	1.62
Sc	45	1	He	573396	0.75
Sc	45	2	NoGas	4318826	0.63
Rh	103	1	He	1618667	1.87
In	115	1	He	840916	0.36
Tb	159	1	He	2408243	0.83
Ho	165	1	He	2439408	1.85
Bi	209	1	He	1797343	2.47

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:25:17-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	4	4677.00
B	11	45	2	NoGas	5846	0.13
Na	23	45	1	He	33509	0.02
Mg	24	45	1	He	926	0.33
Al	27	45	1	He	749	0.55
K	39	45	1	He	64779	0.00
Ca	44	45	1	He	575	0.82
Ti	47	45	1	He	1	15604.06
V	51	45	1	He	265	68.20
Cr	52	45	1	He	3008	0.15
Mn	55	45	1	He	168	6.52
Fe	56	45	1	He	6091	0.07
Co	59	103	1	He	54	67.79
Ni	60	103	1	He	96	58.68
Cu	63	103	1	He	2489	0.19
Zn	66	103	1	He	848	1.26
As	75	103	1	He	197	4.93
Se	78	103	1	He	30	52.45
Sr	88	103	1	He	142	14.77
Mo	95	103	1	He	696	1.17
Ag	107	103	1	He	32	112.75
Cd	111	103	1	He	850	0.70
Sn	118	115	1	He	864	8.85
Sb	123	115	1	He	898	0.35
Ba	137	115	1	He	13	324.76
W	182	165	1	He	2686	0.17
Tl	205	209	1	He	397	2.23
Pb	208	209	1	He	887	0.91

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1803797	1.24
Sc	45	1	He	574766	0.80
Sc	45	2	NoGas	4296857	0.28
Rh	103	1	He	1652712	0.98
In	115	1	He	852389	0.75
Tb	159	1	He	2425956	1.35
Ho	165	1	He	2452680	1.70
Bi	209	1	He	1810473	1.35

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:29:07-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	54361	0.01
B	11	2	NoGas	42104	0.01
Na	23	1	He	8305774	0.00
Mg	24	1	He	4722367	0.00
Al	27	1	He	25975	0.00
K	39	1	He	3730768	0.00
Ca	44	1	He	188855	0.00
Ti	47	1	He	2225	0.06
V	51	1	He	59299	0.00
Cr	52	1	He	76509	0.00
Mn	55	1	He	255893	0.00
Fe	56	1	He	16713659	0.00
Co	59	1	He	106200	0.00
Ni	60	1	He	27566	0.01
Cu	63	1	He	75328	0.00
Zn	66	1	He	15620	0.01
As	75	1	He	9289	0.00
Se	78	1	He	818	0.41
Sr	88	1	He	54009	0.00
Mo	95	1	He	30097	0.01
Ag	107	1	He	103935	0.00
Cd	111	1	He	18064	0.00
Sn	118	1	He	40323	0.00
Sb	123	1	He	39777	0.00
Ba	137	1	He	15805	0.01
W	182	1	He	108335	0.00
Tl	205	1	He	242681	0.00
Pb	208	1	He	330384	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1829983	1.25	1803797	101.45	30	120	
Sc	45	1	He	588685	2.48	574766	102.42	30	120	
Sc	45	2	NoGas	4298089	0.50	4296857	100.03	30	120	
Rh	103	1	He	1620298	1.28	1652712	98.04	30	120	
In	115	1	He	847101	0.44	852389	99.38	30	120	
Tb	159	1	He	2406371	1.55	2425956	99.19	30	120	
Ho	165	1	He	2463166	0.85	2452680	100.43	30	120	
Bi	209	1	He	1809267	1.68	1810473	99.93	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:32:55-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	264560	0.00
B	11	2	NoGas	185913	0.00
Na	23	1	He	40367946	0.00
Mg	24	1	He	22951103	0.00
Al	27	1	He	118770	0.00
K	39	1	He	17899163	0.00
Ca	44	1	He	934804	0.00
Ti	47	1	He	11311	0.01
V	51	1	He	290945	0.00
Cr	52	1	He	362778	0.00
Mn	55	1	He	1257657	0.00
Fe	56	1	He	82076888	0.00
Co	59	1	He	512381	0.00
Ni	60	1	He	131389	0.00
Cu	63	1	He	350202	0.00
Zn	66	1	He	71190	0.00
As	75	1	He	44516	0.00
Se	78	1	He	3681	0.03
Sr	88	1	He	261429	0.00
Mo	95	1	He	143084	0.00
Ag	107	1	He	496034	0.00
Cd	111	1	He	84288	0.00
Sn	118	1	He	179339	0.00
Sb	123	1	He	199443	0.00
Ba	137	1	He	76713	0.00
W	182	1	He	537980	0.00
Tl	205	1	He	1166609	0.00
Pb	208	1	He	1582567	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1782194	1.59	1803797	98.80	30	120	
Sc	45	1	He	597813	4.04	574766	104.01	30	120	
Sc	45	2	NoGas	4333353	0.11	4296857	100.85	30	120	
Rh	103	1	He	1565924	0.54	1652712	94.75	30	120	
In	115	1	He	820616	0.59	852389	96.27	30	120	
Tb	159	1	He	2383880	1.20	2425956	98.27	30	120	
Ho	165	1	He	2444895	1.41	2452680	99.68	30	120	
Bi	209	1	He	1729560	1.96	1810473	95.53	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:36:43-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	552759	0.00
B	11	2	NoGas	8795	0.03
Na	23	1	He	78687391	0.00
Mg	24	1	He	44543324	0.00
Al	27	1	He	233036	0.00
K	39	1	He	35133649	0.00
Ca	44	1	He	1878505	0.00
Ti	47	1	He	23	212.03
V	51	1	He	568327	0.00
Cr	52	1	He	698462	0.00
Mn	55	1	He	2467533	0.00
Fe	56	1	He	159363620	0.00
Co	59	1	He	986452	0.00
Ni	60	1	He	250363	0.00
Cu	63	1	He	671068	0.00
Zn	66	1	He	136960	0.00
As	75	1	He	86504	0.00
Se	78	1	He	7179	0.01
Sr	88	1	He	515085	0.00
Mo	95	1	He	2521	0.71
Ag	107	1	He	956217	0.00
Cd	111	1	He	160190	0.00
Sn	118	1	He	1874	0.59
Sb	123	1	He	2011	0.25
Ba	137	1	He	149034	0.00
W	182	1	He	11093	0.12
Tl	205	1	He	2328364	0.00
Pb	208	1	He	3040136	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1742538	0.95	1803797	96.60	30	120	
Sc	45	1	He	589733	2.32	574766	102.60	30	120	
Sc	45	2	NoGas	4352110	1.80	4296857	101.29	30	120	
Rh	103	1	He	1556491	2.05	1652712	94.18	30	120	
In	115	1	He	815923	0.48	852389	95.72	30	120	
Tb	159	1	He	2370842	0.83	2425956	97.73	30	120	
Ho	165	1	He	2398505	0.81	2452680	97.79	30	120	
Bi	209	1	He	1682429	1.64	1810473	92.93	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:40:29-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	104	15.78
B	11	2	NoGas	350464	0.00
Na	23	1	He	51451	0.02
Mg	24	1	He	6954	0.32
Al	27	1	He	2339	0.24
K	39	1	He	74501	0.00
Ca	44	1	He	1412	0.38
Ti	47	1	He	22495	0.00
V	51	1	He	584	16.75
Cr	52	1	He	3164	0.10
Mn	55	1	He	780	2.96
Fe	56	1	He	156745	0.02
Co	59	1	He	173	17.61
Ni	60	1	He	251	3.97
Cu	63	1	He	3063	0.09
Zn	66	1	He	2757	0.05
As	75	1	He	179	4.46
Se	78	1	He	34	39.14
Sr	88	1	He	149	10.88
Mo	95	1	He	299629	0.00
Ag	107	1	He	238	9.44
Cd	111	1	He	874	1.11
Sn	118	1	He	378485	0.00
Sb	123	1	He	396610	0.00
Ba	137	1	He	109	30.06
W	182	1	He	1115299	0.00
Tl	205	1	He	2518	0.93
Pb	208	1	He	1636	0.55

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1809459	1.04	1803797	100.31	30	120	
Sc	45	1	He	595610	3.05	574766	103.63	30	120	
Sc	45	2	NoGas	4264431	0.55	4296857	99.25	30	120	
Rh	103	1	He	1681733	0.43	1652712	101.76	30	120	
In	115	1	He	861710	0.74	852389	101.09	30	120	
Tb	159	1	He	2422877	0.68	2425956	99.87	30	120	
Ho	165	1	He	2489281	0.34	2452680	101.49	30	120	
Bi	209	1	He	1820015	0.70	1810473	100.53	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:44:19-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	40.965	1.605	230876	0.61	40	102.4	89.5	110.5	
B	11	45	NoGas	45.370	1.287	170418	0.84	40	113.4	89.5	110.5	ICV Failed
Na	23	45	He	20795.316	1.676	33581053	0.97	20000	104.0	89.5	110.5	
Mg	24	45	He	20805.660	1.284	19031299	0.73	20000	104.0	89.5	110.5	
Al	27	45	He	206.303	1.209	98922	0.83	200	103.2	89.5	110.5	
K	39	45	He	20829.253	2.095	15024729	1.62	20000	104.1	89.5	110.5	
Ca	44	45	He	20086.972	0.584	769535	0.35	20000	100.4	89.5	110.5	
Ti	47	45	He	42.257	2.065	9633	1.51	40	105.6	89.5	110.5	
V	51	45	He	41.190	1.421	240167	1.89	40	103.0	89.5	110.5	
Cr	52	45	He	41.828	0.567	301986	0.57	40	104.6	89.5	110.5	
Mn	55	45	He	205.489	0.544	1038796	0.43	200	102.7	89.5	110.5	
Fe	56	45	He	10360.675	0.701	67794453	0.55	10000	103.6	89.5	110.5	
Co	59	103	He	40.900	1.658	420531	1.12	40	102.2	89.5	110.5	
Ni	60	103	He	42.303	2.218	110687	1.78	40	105.8	89.5	110.5	
Cu	63	103	He	41.961	0.491	295006	0.53	40	104.9	89.5	110.5	
Zn	66	103	He	42.373	0.631	60907	0.36	40	105.9	89.5	110.5	
As	75	103	He	38.994	0.557	35189	0.15	40	97.5	89.5	110.5	
Se	78	103	He	42.244	1.122	3168	1.52	40	105.6	89.5	110.5	
Sr	88	103	He	41.708	0.268	222908	0.29	40	104.3	89.5	110.5	
Mo	95	103	He	42.867	1.729	124048	2.03	40	107.2	89.5	110.5	
Ag	107	103	He	41.783	1.228	416376	0.77	40	104.5	89.5	110.5	
Cd	111	103	He	41.701	0.762	70231	0.34	40	104.3	89.5	110.5	
Sn	118	115	He	40.842	0.285	152100	0.48	40	102.1	89.5	110.5	
Sb	123	115	He	38.278	1.488	151174	1.90	40	95.7	89.5	110.5	
Ba	137	115	He	41.258	0.589	64062	1.06	40	103.1	89.5	110.5	
W	182	165	He	38.736	1.039	437847	1.42	40	96.8	89.5	110.5	
Tl	205	209	He	38.983	2.080	976920	0.35	40	97.5	89.5	110.5	
Pb	208	209	He	40.332	2.151	1330335	0.42	40	100.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1800589	1.38	1803797	99.82	30	120	
Sc	45	He	603000	0.88	574766	104.91	30	120	
Sc	45	NoGas	4456082	1.67	4296857	103.71	30	120	
Rh	103	He	1611284	0.55	1652712	97.49	30	120	
In	115	He	845874	0.48	852389	99.24	30	120	
Tb	159	He	2454423	0.98	2425956	101.17	30	120	
Ho	165	He	2523947	0.68	2452680	102.91	30	120	
Bi	209	He	1820352	2.42	1810473	100.55	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:48:07-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.065	24.4	16	24.8	20	
W	182	1	He	0.924	11.0	13332	10.3	10	
Ca	44	1	He	0.873	218.1	621	13.4	1000	
Na	23	1	He	4.822	52.2	41774	7.3	400	
Mg	24	1	He	2.282	33.9	2971	21.1	1000	
K	39	1	He	8.026	24.2	71820	0.7	1000	
V	51	1	He	0.011	694.5	327	126.7	2	
Cr	52	1	He	-0.008	-186.6	3019	4.9	2	
Mn	55	1	He	0.044	22.4	387	12.1	2	
Fe	56	1	He	12.742	33.3	87092	28.9	50	
Co	59	1	He	0.002	52.7	73	12.0	1	
Ni	60	1	He	-0.003	-101.0	91	8.4	2	
Cu	63	1	He	-0.011	-34.5	2474	1.7	2	
Zn	66	1	He	-0.093	-30.3	731	6.3	20	
As	75	1	He	-0.005	-387.9	197	10.1	2	
Se	78	1	He	-0.097	-41.0	23	13.6	2	
Sr	88	1	He	0.003	181.8	162	17.7	10	
Mo	95	1	He	0.603	22.7	2538	16.4	2	
Ag	107	1	He	0.004	63.6	76	35.9	0.2	
Cd	111	1	He	0.020	121.9	907	4.1	0.2	
Ba	137	1	He	0.016	64.1	40	41.7	5	
Sn	118	1	He	0.339	5.3	2222	3.1	10	
Tl	205	1	He	0.031	18.5	1207	11.7	0.5	
Pb	208	1	He	0.008	64.2	1199	14.3	1	
Al	27	1	He	3.511	6.7	2394	5.8	50	
Sb	123	1	He	1.144	17.4	5658	14.7	1	ICB Failed
B	11	2	NoGas	1.720	6.6	12575	2.8	20	
Be	9	2	NoGas	0.004	89.8	30	78.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1875044	0.26	1803797	103.95	30	120	
Sc	45	1	He	587571	2.16	574766	102.23	30	120	
Sc	45	2	NoGas	4558911	0.87	4296857	106.10	30	120	
Rh	103	1	He	1694640	0.62	1652712	102.54	30	120	
In	115	1	He	888773	0.18	852389	104.27	30	120	

Tb	159	1	He	2511691	0.78	2425956	103.53	30	120	
Ho	165	1	He	2559212	1.70	2452680	104.34	30	120	
Bi	209	1	He	1878525	0.79	1810473	103.76	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	XCRI-1912660
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:51:57-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.771	0.771	8.192	4527	7.19	1	77.1	69.5	130.5	
B	11	2	NoGas	18.995	18.995	2.194	75449	1.05	20	95.0	69.5	130.5	
Na	23	1	He	1093.029	1093.029	1.599	1826107	0.45	1000	109.3	69.5	130.5	
Mg	24	1	He	1082.098	1082.098	1.201	1006047	0.90	1000	108.2	69.5	130.5	
Al	27	1	He	53.980	53.980	0.349	26874	1.50	50	108.0	69.5	130.5	
K	39	1	He	1063.572	1063.572	1.618	844506	0.57	1000	106.4	69.5	130.5	
Ca	44	1	He	1035.093	1035.093	2.574	40846	2.22	1000	103.5	69.5	130.5	
Ti	47	1	He	10.408	10.408	1.427	2410	1.23	10	104.1	69.5	130.5	
V	51	1	He	5.416	5.416	0.762	32315	2.45	5	108.3	69.5	130.5	
Cr	52	1	He	2.110	2.110	2.464	18516	3.10	2	105.5	69.5	130.5	
Mn	55	1	He	5.267	5.267	4.091	27202	2.79	5	105.3	69.5	130.5	
Fe	56	1	He	107.243	107.243	0.986	719018	1.36	100	107.2	69.5	130.5	
Co	59	1	He	1.021	1.021	0.322	11297	0.68	1	102.1	69.5	130.5	
Ni	60	1	He	2.107	2.107	2.881	5997	1.97	2	105.3	69.5	130.5	
Cu	63	1	He	2.054	2.054	3.254	17935	1.84	2	102.7	69.5	130.5	
Zn	66	1	He	21.027	21.027	2.084	32806	1.15	20	105.1	69.5	130.5	
As	75	1	He	5.004	5.004	4.785	5013	3.64	5	100.1	69.5	130.5	
Se	78	1	He	5.008	5.008	4.359	429	3.40	5	100.2	69.5	130.5	
Sr	88	1	He	9.826	9.826	2.542	56338	1.94	10	98.3	69.5	130.5	
Mo	95	1	He	10.346	10.346	2.664	32603	1.68	10	103.5	69.5	130.5	
Ag	107	1	He	1.031	1.031	0.360	11033	1.36	1	103.1	69.5	130.5	
Cd	111	1	He	1.035	1.035	4.114	2731	2.65	1	103.5	69.5	130.5	
Sn	118	1	He	9.741	9.741	2.572	39053	2.48	10	97.4	69.5	130.5	
Sb	123	1	He	2.255	2.255	3.570	10303	3.19	2	112.7	69.5	130.5	
Ba	137	1	He	5.125	5.125	2.006	8427	2.05	5	102.5	69.5	130.5	
W	182	1	He	9.909	9.909	3.027	115587	2.36	10	99.1	69.5	130.5	
Tl	205	1	He	1.945	1.945	0.449	51140	1.06	2	97.2	69.5	130.5	
Pb	208	1	He	1.018	1.018	1.354	35872	0.29	1	101.8	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1875342	1.04	1803797	103.97	30	120	
Sc	45	1	He	612363	1.84	574766	106.54	30	120	
Sc	45	2	NoGas	4491024	2.03	4296857	104.52	30	120	
Rh	103	1	He	1725327	1.00	1652712	104.39	30	120	
In	115	1	He	894477	0.07	852389	104.94	30	120	
Tb	159	1	He	2490587	1.23	2425956	102.66	30	120	
Ho	165	1	He	2558230	1.23	2452680	104.30	30	120	
Bi	209	1	He	1894755	1.09	1810473	104.66	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	010CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:55:45-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.864	0.864	5.977	5034	6.10	1	86.4	69.5	130.5	
B	11	2	NoGas	20.277	20.277	2.601	80459	1.70	20	101.4	69.5	130.5	
Na	23	1	He	1082.374	1082.374	0.735	1797738	0.80	1000	108.2	69.5	130.5	
Mg	24	1	He	1076.324	1076.324	0.629	994587	0.63	1000	107.6	69.5	130.5	
Al	27	1	He	50.620	50.620	0.625	25097	1.71	50	101.2	69.5	130.5	
K	39	1	He	1051.718	1051.718	1.760	830739	0.51	1000	105.2	69.5	130.5	
Ca	44	1	He	1018.514	1018.514	1.269	39955	0.22	1000	101.9	69.5	130.5	
Ti	47	1	He	10.517	10.517	2.873	2420	1.81	10	105.2	69.5	130.5	
V	51	1	He	5.259	5.259	0.958	31192	1.97	5	105.2	69.5	130.5	
Cr	52	1	He	2.144	2.144	1.472	18645	1.06	2	107.2	69.5	130.5	
Mn	55	1	He	5.314	5.314	1.742	27286	2.19	5	106.3	69.5	130.5	
Fe	56	1	He	106.639	106.639	0.703	710614	0.70	100	106.6	69.5	130.5	
Co	59	1	He	1.052	1.052	2.449	11483	1.39	1	105.2	69.5	130.5	
Ni	60	1	He	2.078	2.078	2.089	5841	1.05	2	103.9	69.5	130.5	
Cu	63	1	He	2.029	2.029	1.801	17513	0.52	2	101.4	69.5	130.5	
Zn	66	1	He	20.233	20.233	1.286	31193	0.58	20	101.2	69.5	130.5	
As	75	1	He	4.959	4.959	2.001	4907	0.88	5	99.2	69.5	130.5	
Se	78	1	He	5.265	5.265	6.605	444	5.39	5	105.3	69.5	130.5	
Sr	88	1	He	9.777	9.777	1.164	55338	0.12	10	97.8	69.5	130.5	
Mo	95	1	He	10.532	10.532	1.755	32749	0.90	10	105.3	69.5	130.5	
Ag	107	1	He	1.054	1.054	1.797	11136	0.75	1	105.4	69.5	130.5	
Cd	111	1	He	1.039	1.039	2.111	2704	1.60	1	103.9	69.5	130.5	
Sn	118	1	He	9.889	9.889	3.545	39146	3.47	10	98.9	69.5	130.5	
Sb	123	1	He	2.061	2.061	4.285	9379	3.53	2	103.0	69.5	130.5	
Ba	137	1	He	4.979	4.979	0.821	8088	1.06	5	99.6	69.5	130.5	
W	182	1	He	10.116	10.116	3.077	116750	1.53	10	101.2	69.5	130.5	
Tl	205	1	He	1.953	1.953	2.828	50895	1.09	2	97.7	69.5	130.5	
Pb	208	1	He	1.046	1.046	4.419	36473	2.44	1	104.6	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1860202	0.65	1803797	103.13	30	120	
Sc	45	1	He	608582	1.25	574766	105.88	30	120	
Sc	45	2	NoGas	4508914	0.75	4296857	104.94	30	120	
Rh	103	1	He	1703021	1.04	1652712	103.04	30	120	
In	115	1	He	883492	0.34	852389	103.65	30	120	
Tb	159	1	He	2493784	1.34	2425956	102.80	30	120	
Ho	165	1	He	2532687	1.51	2452680	103.26	30	120	
Bi	209	1	He	1878254	1.91	1810473	103.74	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	011ICSA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T10:59:37-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.012	29.7	67	28.9	1	
B	11	45	2	NoGas	0.906	11.2	8680	4.1	20	
Na	23	45	1	He	48899.721	4.6	75663828	0.5	75200	
Mg	24	45	1	He	49308.370	4.8	43237583	0.3	75200	
Al	27	45	1	He	47667.175	4.6	21739361	0.5	75200	
K	39	45	1	He	49452.379	3.4	34125213	1.8	75200	
Ca	44	45	1	He	49074.734	5.0	1801510	1.6	75200	
Ti	47	45	1	He	989.188	4.1	216202	1.0	1505	
V	51	45	1	He	0.029	572.9	407	217.6	4	
Cr	52	45	1	He	0.665	8.6	7581	1.4	4	
Mn	55	45	1	He	0.357	5.7	1900	0.8	4	
Fe	56	45	1	He	49432.637	4.4	310102370	1.0	75200	
Co	59	103	1	He	0.026	5.1	286	3.8	2	
Ni	60	103	1	He	0.115	13.4	356	11.3	4	
Cu	63	103	1	He	0.336	1.9	4308	2.1	4	
Zn	66	103	1	He	1.015	5.6	2045	2.7	10	
As	75	103	1	He	0.061	84.5	223	19.1	4	
Se	78	103	1	He	0.085	145.4	32	26.1	4	
Sr	88	103	1	He	0.336	7.2	1746	8.1	20	
Mo	95	103	1	He	1074.771	2.6	2792445	2.7	1505	
Ag	107	103	1	He	0.008	11.0	97	6.9	1	
Cd	111	103	1	He	0.119	46.7	926	7.6	1	
Sn	118	115	1	He	0.320	15.4	1919	9.0	20	
Sb	123	115	1	He	0.218	11.6	1638	5.6	1	
Ba	137	115	1	He	0.060	28.6	100	25.2	2	
W	182	165	1	He	0.275	14.5	5583	7.3	20	
Tl	205	209	1	He	0.003	122.8	422	18.2	1	
Pb	208	209	1	He	0.100	1.4	3779	0.5	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1663903	0.65	1803797	92.24	30	120	
Sc	45	1	He	579008	5.21	574766	100.74	30	120	
Sc	45	2	NoGas	4139083	1.16	4296857	96.33	30	120	
Rh	103	1	He	1454480	1.71	1652712	88.01	30	120	
In	115	1	He	793250	0.23	852389	93.06	30	120	
Tb	159	1	He	2331791	1.13	2425956	96.12	30	120	
Ho	165	1	He	2408673	0.72	2452680	98.21	30	120	
Bi	209	1	He	1643463	0.67	1810473	90.78	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	012ICAB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:04:36-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	110.524	2.123	576296	1.96	100	110.5	79.5	120.5	
B	11	45	2	NoGas	116.481	0.645	397951	2.23	100	116.5	79.5	120.5	
Na	23	45	1	He	49722.182	5.040	76840101	0.60	50000	99.4	79.5	120.5	
Mg	24	45	1	He	49742.960	4.510	43576156	0.77	50000	99.5	79.5	120.5	
Al	27	45	1	He	47833.884	4.121	21794703	0.39	50000	95.7	79.5	120.5	
K	39	45	1	He	49467.828	4.942	34081673	1.30	50000	98.9	79.5	120.5	
Ca	44	45	1	He	50012.837	3.861	1834470	1.19	50000	100.0	79.5	120.5	
Ti	47	45	1	He	1097.078	4.668	239473	0.49	1100	99.7	79.5	120.5	
V	51	45	1	He	100.543	4.525	561018	0.06	100	100.5	79.5	120.5	
Cr	52	45	1	He	101.480	4.748	697295	0.35	100	101.5	79.5	120.5	
Mn	55	45	1	He	100.102	4.137	484761	0.34	100	100.1	79.5	120.5	
Fe	56	45	1	He	49899.187	4.385	312681570	0.10	50000	99.8	79.5	120.5	
Co	59	103	1	He	104.365	1.568	985989	0.78	100	104.4	79.5	120.5	
Ni	60	103	1	He	104.976	1.513	252277	0.58	100	105.0	79.5	120.5	
Cu	63	103	1	He	103.575	1.497	665828	0.46	100	103.6	79.5	120.5	
Zn	66	103	1	He	105.734	1.910	138514	1.02	100	105.7	79.5	120.5	
As	75	103	1	He	104.869	1.344	86662	0.31	100	104.9	79.5	120.5	
Se	78	103	1	He	106.356	1.587	7288	0.74	100	106.4	79.5	120.5	
Sr	88	103	1	He	105.046	1.778	515656	0.87	100	105.0	79.5	120.5	
Mo	95	103	1	He	1187.610	1.129	3141395	1.54	1100	108.0	79.5	120.5	
Ag	107	103	1	He	103.004	1.433	943145	0.42	100	103.0	79.5	120.5	
Cd	111	103	1	He	105.831	1.518	162609	0.90	100	105.8	79.5	120.5	
Sn	118	115	1	He	100.152	1.437	350361	1.33	100	100.2	79.5	120.5	
Sb	123	115	1	He	106.343	1.013	394335	0.85	100	106.3	79.5	120.5	
Ba	137	115	1	He	103.974	0.508	152144	0.33	100	104.0	79.5	120.5	
W	182	165	1	He	99.019	1.407	1077620	0.14	100	99.0	79.5	120.5	
Tl	205	209	1	He	102.342	1.354	2397189	1.53	100	102.3	79.5	120.5	
Pb	208	209	1	He	102.533	1.387	3160447	0.70	100	102.5	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1665825	1.58	1803797	92.35	30	120	
Sc	45	1	He	578252	4.55	574766	100.61	30	120	
Sc	45	2	NoGas	4142398	2.04	4296857	96.41	30	120	
Rh	103	1	He	1480677	1.04	1652712	89.59	30	120	
In	115	1	He	797267	0.18	852389	93.53	30	120	
Tb	159	1	He	2355384	0.55	2425956	97.09	30	120	
Ho	165	1	He	2439765	1.31	2452680	99.47	30	120	
Bi	209	1	He	1701344	0.79	1810473	93.97	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	013_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:08:20-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.225	2.425	261374	2.81	50	96.5	89.5	110.5	
B	11	45	2	NoGas	53.743	2.374	191061	3.04	50	107.5	89.5	110.5	
Na	23	45	1	He	25852.707	2.209	40235570	0.86	25000	103.4	89.5	110.5	
Mg	24	45	1	He	26017.402	2.763	22937867	0.58	25000	104.1	89.5	110.5	
Al	27	45	1	He	259.046	2.219	119536	0.40	250	103.6	89.5	110.5	
K	39	45	1	He	25513.553	2.352	17724977	0.25	25000	102.1	89.5	110.5	
Ca	44	45	1	He	25138.273	2.432	928102	0.21	25000	100.6	89.5	110.5	
Ti	47	45	1	He	52.979	3.785	11638	1.66	50	106.0	89.5	110.5	
V	51	45	1	He	51.610	1.146	290022	1.17	50	103.2	89.5	110.5	
Cr	52	45	1	He	51.995	1.440	361150	1.22	50	104.0	89.5	110.5	
Mn	55	45	1	He	257.081	2.132	1252656	0.44	250	102.8	89.5	110.5	
Fe	56	45	1	He	12931.990	2.048	81566581	0.83	12500	103.5	89.5	110.5	
Co	59	103	1	He	49.813	4.036	510104	0.57	50	99.6	89.5	110.5	
Ni	60	103	1	He	50.118	3.456	130610	0.07	50	100.2	89.5	110.5	
Cu	63	103	1	He	50.242	4.031	351314	0.66	50	100.5	89.5	110.5	
Zn	66	103	1	He	50.821	4.076	72589	0.84	50	101.6	89.5	110.5	
As	75	103	1	He	49.534	3.588	44473	0.44	50	99.1	89.5	110.5	
Se	78	103	1	He	50.456	4.039	3763	1.46	50	100.9	89.5	110.5	
Sr	88	103	1	He	49.815	3.436	265163	0.77	50	99.6	89.5	110.5	
Mo	95	103	1	He	76.495	9.731	219633	6.21	50	153.0	89.5	110.5	CCV Failed
Ag	107	103	1	He	50.853	3.948	504702	0.52	50	101.7	89.5	110.5	
Cd	111	103	1	He	50.776	3.781	84994	0.35	50	101.6	89.5	110.5	
Sn	118	115	1	He	50.506	0.665	184281	0.27	50	101.0	89.5	110.5	
Sb	123	115	1	He	53.192	0.104	205697	0.60	50	106.4	89.5	110.5	
Ba	137	115	1	He	51.332	0.072	78173	0.51	50	102.7	89.5	110.5	
W	182	165	1	He	51.559	0.845	569157	1.00	50	103.1	89.5	110.5	
Tl	205	209	1	He	48.485	0.067	1193984	0.73	50	97.0	89.5	110.5	
Pb	208	209	1	He	50.075	0.673	1622945	0.08	50	100.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1731215	0.41	1803797	95.98	30	120	
Sc	45	1	He	581408	2.33	574766	101.16	30	120	
Sc	45	2	NoGas	4239984	0.73	4296857	98.68	30	120	
Rh	103	1	He	1606171	3.43	1652712	97.18	30	120	
In	115	1	He	829658	0.50	852389	97.33	30	120	
Tb	159	1	He	2438423	1.00	2425956	100.51	30	120	
Ho	165	1	He	2468805	0.49	2452680	100.66	30	120	
Bi	209	1	He	1788372	0.75	1810473	98.78	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	014_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:12:10-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.011	45.9	67	44.1	1	
B	11	45	2	NoGas	1.448	8.4	10763	3.0	20	
Na	23	45	1	He	10.355	20.6	48245	4.6	400	
Mg	24	45	1	He	4.438	36.0	4668	26.9	1000	
Al	27	45	1	He	1.844	25.1	1546	11.3	50	
K	39	45	1	He	14.728	38.1	73084	3.0	1000	
Ca	44	45	1	He	3.764	85.0	696	17.5	1000	
Ti	47	45	1	He	0.256	23.9	56	25.0	20	
V	51	45	1	He	0.019	918.8	356	273.6	2	
Cr	52	45	1	He	0.007	163.4	2985	0.8	2	
Mn	55	45	1	He	0.018	57.5	247	17.6	2	
Fe	56	45	1	He	18.650	27.3	119188	23.9	50	
Co	59	103	1	He	0.007	46.6	131	26.0	1	
Ni	60	103	1	He	0.018	45.6	147	15.9	2	
Cu	63	103	1	He	-0.018	-8.5	2387	0.6	2	
Zn	66	103	1	He	0.027	229.4	898	9.2	20	
As	75	103	1	He	-0.018	-85.1	183	6.5	2	
Se	78	103	1	He	0.008	1158.9	31	23.5	2	
Sr	88	103	1	He	0.005	49.9	173	8.4	10	
Mo	95	103	1	He	4.338	10.2	13662	8.9	2	CCB Failed
Ag	107	103	1	He	0.007	10.3	108	6.4	0.2	
Cd	111	103	1	He	0.008	309.6	874	4.6	0.2	
Sn	118	115	1	He	0.370	18.4	2274	11.4	10	
Sb	123	115	1	He	0.273	4.9	2001	2.9	1	
Ba	137	115	1	He	0.011	47.1	31	27.0	5	
W	182	165	1	He	1.086	19.9	14745	15.6	10	
Tl	205	209	1	He	0.050	19.8	1681	14.6	0.5	
Pb	208	209	1	He	0.011	45.1	1273	12.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1788417	2.49	1803797	99.15	30	120	
Sc	45	1	He	561517	2.03	574766	97.69	30	120	
Sc	45	2	NoGas	4242354	1.28	4296857	98.73	30	120	
Rh	103	1	He	1673248	1.10	1652712	101.24	30	120	
In	115	1	He	863146	0.38	852389	101.26	30	120	
Tb	159	1	He	2456728	0.96	2425956	101.27	30	120	
Ho	165	1	He	2490020	0.60	2452680	101.52	30	120	
Bi	209	1	He	1853457	0.91	1810473	102.37	30	120	

Sample Report

Sample Table

Sample Name	LIN 2
Data File Name	015SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:16:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.061	3.061	1.93	17012	0.02	10000	
B	11	45	2	NoGas	11.858	11.858	2.28	50121	0.02	300	
Na	23	45	1	He	120.183	120.183	2.78	243944	0.05	500000	
Mg	24	45	1	He	7435.125	7435.125	1.43	7245908	0.10	500000	
Al	27	45	1	He	38687.656	38687.656	2.30	19602610	0.20	200000	
K	39	45	1	He	3184.621	3184.621	0.69	2508724	0.13	500000	
Ca	44	45	1	He	628.842	628.842	4.34	26275	2.39	500000	
Ti	47	45	1	He	329.204	329.204	0.97	79940	0.41	2500	
V	51	45	1	He	110.212	110.212	1.29	684071	0.02	10000	
Cr	52	45	1	He	94.299	94.299	1.62	720992	0.01	10000	
Mn	55	45	1	He	7717.550	7717.550	1.56	41554453	0.02	10000	
Fe	56	45	1	He	195732.989	195732.989	2.33	1364036035	0.01	200000	
Co	59	103	1	He	60.540	60.540	1.43	633251	0.01	10000	
Ni	60	103	1	He	91.634	91.634	1.25	243825	0.04	10000	
Cu	63	103	1	He	60.839	60.839	0.67	434052	0.01	10000	
Zn	66	103	1	He	204.714	204.714	1.68	296128	0.07	10000	
As	75	103	1	He	73.865	73.865	0.77	67643	0.11	10000	
Se	78	103	1	He	5.025	5.025	7.07	409	1.23	10000	
Sr	88	103	1	He	21.855	21.855	0.91	118913	0.02	10000	
Mo	95	103	1	He	9.907	9.907	1.87	29702	0.03	2000	
Ag	107	103	1	He	0.091	0.091	2.51	958	0.01	300	
Cd	111	103	1	He	0.547	0.547	6.64	1769	0.03	4000	
Sn	118	115	1	He	17.678	17.678	2.89	65594	0.03	2000	
Sb	123	115	1	He	1.035	1.035	9.71	4899	0.02	300	
Ba	137	115	1	He	304.437	304.437	0.32	467360	0.07	10000	
W	182	165	1	He	0.535	0.535	9.14	8873	0.01	2500	
Tl	205	209	1	He	0.809	0.809	1.10	20887	0.00	5000	
Pb	208	209	1	He	69.044	69.044	1.79	2300013	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1774961	0.31	1803797	98.40	30	120	
Sc	45	1	He	642438	2.04	574766	111.77	30	120	
Sc	45	2	NoGas	4555411	1.31	4296857	106.02	30	120	
Rh	103	1	He	1639351	1.31	1652712	99.19	30	120	
In	115	1	He	836463	0.76	852389	98.13	30	120	
Tb	159	1	He	2517791	0.64	2425956	103.79	30	120	
Ho	165	1	He	2553262	1.19	2452680	104.10	30	120	
Bi	209	1	He	1838786	2.13	1810473	101.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	BLANK
Data File Name	016_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:19:53-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.571	6.3	2767	5.6	1	
B	11	45	2	NoGas	2.957	9.2	13706	5.6	20	
Na	23	45	1	He	28.371	1.4	69315	1.4	400	
Mg	24	45	1	He	1630.488	2.7	1278062	1.0	1000	Blank Failed
Al	27	45	1	He	8279.169	1.3	3374000	0.6	50	Blank Failed
K	39	45	1	He	651.591	1.0	459009	1.0	1000	
Ca	44	45	1	He	132.218	1.9	4852	1.2	1000	
Ti	47	45	1	He	69.559	0.9	13583	1.8	20	Blank Failed
V	51	45	1	He	22.530	0.8	112628	1.1	2	Blank Failed
Cr	52	45	1	He	20.066	1.8	125487	0.3	2	Blank Failed
Mn	55	45	1	He	1658.479	1.3	7180059	0.6	2	Blank Failed
Fe	56	45	1	He	41793.746	1.1	234227777	0.8	50	Blank Failed
Co	59	103	1	He	11.970	0.3	109026	0.9	1	Blank Failed
Ni	60	103	1	He	18.014	1.7	41786	0.8	2	Blank Failed
Cu	63	103	1	He	12.261	0.6	77856	0.9	2	Blank Failed
Zn	66	103	1	He	42.181	1.9	53691	1.0	20	Blank Failed
As	75	103	1	He	14.561	0.5	11743	0.7	2	Blank Failed
Se	78	103	1	He	0.944	10.5	88	6.9	2	
Sr	88	103	1	He	4.254	1.9	20244	2.7	10	
Mo	95	103	1	He	1.846	3.4	5306	3.3	2	
Ag	107	103	1	He	0.020	32.4	202	29.0	0.2	
Cd	111	103	1	He	0.105	10.8	888	2.8	0.2	
Sn	118	115	1	He	3.373	1.9	11704	1.7	10	
Sb	123	115	1	He	0.182	1.9	1407	0.9	1	
Ba	137	115	1	He	61.185	0.9	83280	0.8	5	Blank Failed
W	182	165	1	He	0.070	39.2	3275	8.7	10	
Tl	205	209	1	He	0.161	2.4	4045	2.3	0.5	
Pb	208	209	1	He	14.353	2.9	432795	1.0	1	Blank Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1545848	2.94	1803797	85.70	30	120	
Sc	45	1	He	516554	1.88	574766	89.87	30	120	
Sc	45	2	NoGas	3641954	1.70	4296857	84.76	30	120	
Rh	103	1	He	1426887	0.98	1652712	86.34	30	120	
In	115	1	He	741560	0.24	852389	87.00	30	120	
Tb	159	1	He	2263899	1.89	2425956	93.32	30	120	
Ho	165	1	He	2330877	0.12	2452680	95.03	30	120	
Bi	209	1	He	1662485	2.94	1810473	91.83	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	017_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:23:44-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.835	3.532	218134	2.34	50	91.7	89.5	110.5	
B	11	45	2	NoGas	51.677	1.845	160197	1.43	50	103.4	89.5	110.5	
Na	23	45	1	He	25724.312	2.623	35484959	1.03	25000	102.9	89.5	110.5	
Mg	24	45	1	He	25636.297	3.807	20029243	0.64	25000	102.5	89.5	110.5	
Al	27	45	1	He	250.535	2.564	102492	0.95	250	100.2	89.5	110.5	
K	39	45	1	He	25167.075	3.297	15495805	0.55	25000	100.7	89.5	110.5	
Ca	44	45	1	He	24660.498	3.108	806925	0.43	25000	98.6	89.5	110.5	
Ti	47	45	1	He	49.817	5.237	9697	2.46	50	99.6	89.5	110.5	
V	51	45	1	He	50.571	4.734	251726	1.40	50	101.1	89.5	110.5	
Cr	52	45	1	He	51.573	3.414	317422	0.27	50	103.1	89.5	110.5	
Mn	55	45	1	He	255.401	3.009	1102900	0.37	250	102.2	89.5	110.5	
Fe	56	45	1	He	12876.573	3.544	71967057	0.19	12500	103.0	89.5	110.5	
Co	59	103	1	He	50.318	0.939	452525	0.58	50	100.6	89.5	110.5	
Ni	60	103	1	He	50.428	2.002	115394	1.57	50	100.9	89.5	110.5	
Cu	63	103	1	He	51.297	1.743	314956	1.36	50	102.6	89.5	110.5	
Zn	66	103	1	He	51.218	1.261	64242	1.19	50	102.4	89.5	110.5	
As	75	103	1	He	49.760	1.226	39230	0.82	50	99.5	89.5	110.5	
Se	78	103	1	He	50.058	2.171	3278	1.39	50	100.1	89.5	110.5	
Sr	88	103	1	He	49.668	0.399	232154	0.50	50	99.3	89.5	110.5	
Mo	95	103	1	He	51.852	3.317	131128	3.83	50	103.7	89.5	110.5	
Ag	107	103	1	He	51.941	0.776	452719	0.36	50	103.9	89.5	110.5	
Cd	111	103	1	He	52.349	1.156	76927	0.40	50	104.7	89.5	110.5	
Sn	118	115	1	He	50.660	2.049	166232	2.50	50	101.3	89.5	110.5	
Sb	123	115	1	He	53.102	0.868	184662	0.61	50	106.2	89.5	110.5	
Ba	137	115	1	He	50.923	0.904	69735	0.37	50	101.8	89.5	110.5	
W	182	165	1	He	49.789	1.852	518291	1.06	50	99.6	89.5	110.5	
Tl	205	209	1	He	50.649	0.286	1122247	0.62	50	101.3	89.5	110.5	
Pb	208	209	1	He	52.256	0.302	1523914	0.83	50	104.5	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1520695	1.41	1803797	84.31	30	120	
Sc	45	1	He	515454	3.42	574766	89.68	30	120	
Sc	45	2	NoGas	3693378	0.80	4296857	85.96	30	120	
Rh	103	1	He	1409341	0.81	1652712	85.27	30	120	
In	115	1	He	746084	0.53	852389	87.53	30	120	
Tb	159	1	He	2261577	0.29	2425956	93.22	30	120	
Ho	165	1	He	2328023	1.43	2452680	94.92	30	120	
Bi	209	1	He	1609126	0.54	1810473	88.88	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	018_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:27:36-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.008	112.0	41	103.3	1	
B	11	45	2	NoGas	1.153	8.8	8558	2.9	20	
Na	23	45	1	He	7.427	12.5	39031	2.1	400	
Mg	24	45	1	He	2.389	21.4	2611	13.7	1000	
Al	27	45	1	He	1.460	16.1	1226	6.8	50	
K	39	45	1	He	19.837	14.3	68080	1.4	1000	
Ca	44	45	1	He	2.649	40.0	583	5.8	1000	
Ti	47	45	1	He	0.113	36.9	22	34.7	20	
V	51	45	1	He	0.021	446.3	330	135.6	2	
Cr	52	45	1	He	0.007	258.7	2655	2.9	2	
Mn	55	45	1	He	0.185	21.3	921	16.9	2	
Fe	56	45	1	He	19.205	24.1	109193	21.8	50	
Co	59	103	1	He	0.005	49.5	101	24.7	1	
Ni	60	103	1	He	-0.002	-200.1	82	9.4	2	
Cu	63	103	1	He	0.015	12.9	2341	1.0	2	
Zn	66	103	1	He	-0.010	-266.4	751	4.5	20	
As	75	103	1	He	-0.037	-40.9	147	9.4	2	
Se	78	103	1	He	0.066	102.9	31	15.6	2	
Sr	88	103	1	He	0.004	140.8	147	18.0	10	
Mo	95	103	1	He	0.832	21.2	2840	16.3	2	
Ag	107	103	1	He	0.002	99.4	47	37.1	0.2	
Cd	111	103	1	He	0.000	-62476.3	766	4.1	0.2	
Sn	118	115	1	He	0.200	17.4	1482	8.8	10	
Sb	123	115	1	He	0.186	20.7	1499	8.9	1	
Ba	137	115	1	He	0.019	80.0	39	55.1	5	
W	182	165	1	He	0.836	17.5	11423	13.6	10	
Tl	205	209	1	He	0.039	26.3	1315	17.8	0.5	
Pb	208	209	1	He	0.016	3.8	1341	1.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1540364	0.52	1803797	85.40	30	120	
Sc	45	1	He	499468	1.12	574766	86.90	30	120	
Sc	45	2	NoGas	3724923	0.80	4296857	86.69	30	120	
Rh	103	1	He	1489356	0.79	1652712	90.12	30	120	
In	115	1	He	781890	0.83	852389	91.73	30	120	
Tb	159	1	He	2290537	1.88	2425956	94.42	30	120	
Ho	165	1	He	2373285	0.41	2452680	96.76	30	120	
Bi	209	1	He	1730085	1.32	1810473	95.56	30	120	

Sample Report

Sample Table

Sample Name	240-49214-b-4 RAW
Data File Name	019SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:31:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.008	0.008	97.81	44	0.02	10000	
B	11	45	2	NoGas	28.938	28.938	1.36	82602	0.04	300	
Na	23	45	1	He	29578.952	29578.952	8.23	29069430	0.10	500000	
Mg	24	45	1	He	11478.239	11478.239	8.70	6390132	0.18	500000	
Al	27	45	1	He	2.993	2.993	13.34	1346	0.22	200000	
K	39	45	1	He	2424.269	2424.269	8.66	1101046	0.22	500000	
Ca	44	45	1	He	68993.117	68993.117	9.38	1607044	4.29	500000	
Ti	47	45	1	He	0.204	0.204	14.65	29	0.71	2500	
V	51	45	1	He	0.135	0.135	22.86	646	0.02	10000	
Cr	52	45	1	He	0.018	0.018	168.03	2002	0.00	10000	
Mn	55	45	1	He	0.672	0.672	6.19	2178	0.03	10000	
Fe	56	45	1	He	9.373	9.373	7.34	41258	0.02	200000	
Co	59	103	1	He	0.103	0.103	14.93	1030	0.01	10000	
Ni	60	103	1	He	0.233	0.233	17.04	651	0.04	10000	
Cu	63	103	1	He	0.214	0.214	7.47	3628	0.01	10000	
Zn	66	103	1	He	0.794	0.794	14.76	1807	0.04	10000	
As	75	103	1	He	0.213	0.213	13.30	355	0.06	10000	
Se	78	103	1	He	0.170	0.170	54.42	38	0.44	10000	
Sr	88	103	1	He	93.649	93.649	2.09	463383	0.02	10000	
Mo	95	103	1	He	15.222	15.222	7.78	41179	0.04	2000	
Ag	107	103	1	He	0.003	0.003	65.72	56	0.01	300	
Cd	111	103	1	He	0.022	0.022	45.03	801	0.00	4000	
Sn	118	115	1	He	-0.163	-0.163	-0.35	241	-0.07	2000	
Sb	123	115	1	He	0.319	0.319	14.91	1990	0.02	300	
Ba	137	115	1	He	72.018	72.018	8.03	103827	0.07	10000	
W	182	165	1	He	248.491	248.491	2.07	2722891	0.01	2500	
Tl	205	209	1	He	0.032	0.032	21.78	487	0.01	5000	
Pb	208	209	1	He	0.084	0.084	17.89	1486	0.01	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1610468	1.18	1803797	89.28	30	120	
Sc	45	1	He	368770	8.46	574766	64.16	30	120	
Sc	45	2	NoGas	3319068	0.62	4296857	77.24	30	120	
Rh	103	1	He	1492683	1.93	1652712	90.32	30	120	
In	115	1	He	788106	6.26	852389	92.46	30	120	
Tb	159	1	He	2402791	2.16	2425956	99.05	30	120	
Ho	165	1	He	2459462	1.42	2452680	100.28	30	120	
Bi	209	1	He	743339	7.61	1810473	41.06	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176862/1-a
Data File Name	020_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:35:20-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.005	121.4	26	107.9	1	
B	11	45	2	NoGas	4.215	5.2	17190	4.6	20	
Na	23	45	1	He	70.872	3.6	127048	2.3	400	
Mg	24	45	1	He	59.216	5.1	46838	2.9	1000	
Al	27	45	1	He	5.430	2.3	2864	2.8	50	
K	39	45	1	He	46.226	15.6	85903	0.8	1000	
Ca	44	45	1	He	197.410	6.5	6928	1.9	1000	
Ti	47	45	1	He	0.162	34.4	32	31.6	20	
V	51	45	1	He	0.203	86.7	1256	71.9	2	
Cr	52	45	1	He	1.098	2.5	9363	6.2	2	
Mn	55	45	1	He	0.357	9.9	1680	4.8	2	
Fe	56	45	1	He	17.065	2.1	100396	4.7	50	
Co	59	103	1	He	0.007	25.8	113	15.6	1	
Ni	60	103	1	He	0.167	5.3	468	3.6	2	
Cu	63	103	1	He	1.084	9.7	8831	6.6	2	
Zn	66	103	1	He	6.259	2.6	8580	1.7	20	
As	75	103	1	He	0.344	3.3	443	2.1	2	
Se	78	103	1	He	0.068	190.9	30	27.5	2	
Sr	88	103	1	He	0.386	8.8	1947	8.2	10	
Mo	95	103	1	He	1.379	25.5	4106	21.0	2	
Ag	107	103	1	He	0.000	-50.3	24	7.9	0.2	
Cd	111	103	1	He	-0.012	-246.2	715	5.6	0.2	
Sn	118	115	1	He	0.620	10.2	2774	6.8	10	
Sb	123	115	1	He	0.386	10.7	2116	6.6	1	
Ba	137	115	1	He	0.939	1.1	1293	1.1	5	
W	182	165	1	He	21.408	23.4	221072	23.2	10	Blank Failed
Tl	205	209	1	He	0.011	10.2	639	4.3	0.5	
Pb	208	209	1	He	0.139	6.2	5188	5.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1562757	2.04	1803797	86.64	30	120	
Sc	45	1	He	512870	4.59	574766	89.23	30	120	
Sc	45	2	NoGas	3589745	0.90	4296857	83.54	30	120	
Rh	103	1	He	1425311	0.89	1652712	86.24	30	120	
In	115	1	He	743617	0.62	852389	87.24	30	120	
Tb	159	1	He	2201295	1.62	2425956	90.74	30	120	
Ho	165	1	He	2293927	0.30	2452680	93.53	30	120	
Bi	209	1	He	1727727	2.48	1810473	95.43	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176862/2-a
Data File Name	021_LCS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:39:09-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1021.217	1021.217	4.124	4865319	2.21	1000	102.1	79.5	120.5	
B	11	2	NoGas	126.871	126.871	1.142	373085	0.68	100	126.9	79.5	120.5	LCS Failed
Na	23	1	He	10463.892	10463.892	3.081	13989874	1.81	10000	104.6	79.5	120.5	
Mg	24	1	He	10353.980	10353.980	1.905	7834380	1.06	10000	103.5	79.5	120.5	
Al	27	1	He	9465.293	9465.293	1.096	3725935	2.67	10000	94.7	79.5	120.5	
K	39	1	He	9950.713	9950.713	1.592	5966699	0.77	10000	99.5	79.5	120.5	
Ca	44	1	He	9624.847	9624.847	1.405	305263	0.98	10000	96.2	79.5	120.5	
Ti	47	1	He	100.468	100.468	0.983	18947	2.20	100	100.5	79.5	120.5	
V	51	1	He	993.447	993.447	1.794	4785592	0.55	1000	99.3	79.5	120.5	
Cr	52	1	He	1016.538	1016.538	2.168	6009206	0.53	1000	101.7	79.5	120.5	
Mn	55	1	He	1004.315	1004.315	3.058	4197917	0.74	1000	100.4	79.5	120.5	
Fe	56	1	He	10336.654	10336.654	1.709	55945024	0.70	10000	103.4	79.5	120.5	
Co	59	1	He	985.877	985.877	1.817	8665185	1.59	1000	98.6	79.5	120.5	
Ni	60	1	He	1017.188	1017.188	0.899	2273721	1.26	1000	101.7	79.5	120.5	
Cu	63	1	He	1011.315	1011.315	0.972	6030643	1.16	1000	101.1	79.5	120.5	
Zn	66	1	He	990.864	990.864	0.530	1201816	0.47	1000	99.1	79.5	120.5	
As	75	1	He	942.804	942.804	0.211	723587	0.65	1000	94.3	79.5	120.5	
Se	78	1	He	971.239	971.239	0.417	61720	0.70	1000	97.1	79.5	120.5	
Sr	88	1	He	979.396	979.396	0.214	4472263	0.65	1000	97.9	79.5	120.5	
Mo	95	1	He	107.004	107.004	0.618	263841	0.18	100	107.0	79.5	120.5	
Ag	107	1	He	103.464	103.464	1.178	881409	1.00	100	103.5	79.5	120.5	
Cd	111	1	He	1017.685	1017.685	0.203	1448729	0.56	1000	101.8	79.5	120.5	
Sn	118	1	He	1055.371	1055.371	1.666	3258825	1.54	1000	105.5	79.5	120.5	
Sb	123	1	He	102.289	102.289	0.531	335537	0.65	100	102.3	79.5	120.5	
Ba	137	1	He	997.521	997.521	1.012	1290984	0.51	1000	99.8	79.5	120.5	
W	182	1	He	102.278	102.278	0.459	1036578	0.63	100	102.3	79.5	120.5	
Tl	205	1	He	247.190	247.190	0.963	5340216	1.14	250	98.9	79.5	120.5	
Pb	208	1	He	1014.066	1014.066	0.169	28826383	0.30	1000	101.4	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1522762	2.10	1803797	84.42	30	120	
Sc	45	1	He	498876	2.34	574766	86.80	30	120	
Sc	45	2	NoGas	3569975	1.15	4296857	83.08	30	120	
Rh	103	1	He	1377496	0.44	1652712	83.35	30	120	
In	115	1	He	705215	0.70	852389	82.73	30	120	
Tb	159	1	He	2227901	0.83	2425956	91.84	30	120	
Ho	165	1	He	2272050	1.08	2452680	92.64	30	120	
Bi	209	1	He	1569295	0.40	1810473	86.68	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176862/1-a
Data File Name	022_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:42:48-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.111	30.7	533	28.9	1	
B	11	45	2	NoGas	5.431	2.3	20568	3.4	20	
Na	23	45	1	He	69.264	3.8	122066	1.3	400	
Mg	24	45	1	He	61.332	1.1	47447	2.6	1000	
Al	27	45	1	He	4.300	9.5	2351	4.6	50	
K	39	45	1	He	48.889	5.1	85667	1.5	1000	
Ca	44	45	1	He	199.841	5.6	6859	4.6	1000	
Ti	47	45	1	He	0.264	43.1	51	42.4	20	
V	51	45	1	He	0.111	138.6	755	95.8	2	
Cr	52	45	1	He	1.113	1.4	9234	1.7	2	
Mn	55	45	1	He	0.429	11.1	1955	13.0	2	
Fe	56	45	1	He	17.323	3.9	99597	6.1	50	
Co	59	103	1	He	0.101	9.9	972	9.1	1	
Ni	60	103	1	He	0.330	4.6	851	4.3	2	
Cu	63	103	1	He	1.246	9.4	9906	7.1	2	
Zn	66	103	1	He	6.864	0.8	9410	0.9	20	
As	75	103	1	He	0.497	9.2	569	6.1	2	
Se	78	103	1	He	0.504	11.1	59	6.6	2	
Sr	88	103	1	He	0.431	8.3	2175	7.5	10	
Mo	95	103	1	He	0.704	12.9	2410	9.5	2	
Ag	107	103	1	He	0.010	34.9	118	26.3	0.2	
Cd	111	103	1	He	0.203	28.4	1039	7.8	0.2	Blank Failed
Sn	118	115	1	He	1.848	21.7	6757	19.0	10	
Sb	123	115	1	He	0.674	7.9	3104	5.7	1	
Ba	137	115	1	He	1.085	6.1	1489	5.9	5	
W	182	165	1	He	2.142	5.1	24112	2.9	10	
Tl	205	209	1	He	0.187	31.3	4671	28.2	0.5	
Pb	208	209	1	He	0.243	15.7	8192	13.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1527820	2.20	1803797	84.70	30	120	
Sc	45	1	He	501317	2.65	574766	87.22	30	120	
Sc	45	2	NoGas	3560094	1.69	4296857	82.85	30	120	
Rh	103	1	He	1435938	0.47	1652712	86.88	30	120	
In	115	1	He	742133	0.23	852389	87.07	30	120	
Tb	159	1	He	2237654	1.78	2425956	92.24	30	120	
Ho	165	1	He	2270264	2.04	2452680	92.56	30	120	
Bi	209	1	He	1674636	3.30	1810473	92.50	30	120	

Sample Report

Sample Table

Sample Name	240-49214-b-4-c
Data File Name	023SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:46:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.042	0.042	26.74	207	0.02	10000	
B	11	45	2	NoGas	32.016	32.016	0.65	99074	0.03	300	
Na	23	45	1	He	20488.236	20488.236	2.48	27182449	0.08	500000	
Mg	24	45	1	He	8014.370	8014.370	3.59	6022005	0.13	500000	
Al	27	45	1	He	7.132	7.132	2.41	3433	0.21	200000	
K	39	45	1	He	1611.788	1611.788	1.99	1006732	0.16	500000	
Ca	44	45	1	He	45115.306	45115.306	2.78	1419185	3.18	500000	
Ti	47	45	1	He	0.251	0.251	44.28	48	0.53	2500	
V	51	45	1	He	0.411	0.411	57.57	2191	0.02	10000	
Cr	52	45	1	He	1.251	1.251	5.68	9934	0.01	10000	
Mn	55	45	1	He	0.660	0.660	11.30	2882	0.02	10000	
Fe	56	45	1	He	7.842	7.842	2.58	47405	0.02	200000	
Co	59	103	1	He	0.149	0.149	7.32	1362	0.01	10000	
Ni	60	103	1	He	0.468	0.468	6.71	1129	0.04	10000	
Cu	63	103	1	He	1.137	1.137	4.81	8875	0.01	10000	
Zn	66	103	1	He	4.504	4.504	2.09	6180	0.07	10000	
As	75	103	1	He	0.907	0.907	2.62	862	0.11	10000	
Se	78	103	1	He	0.233	0.233	3.29	40	0.59	10000	
Sr	88	103	1	He	89.905	89.905	0.36	411609	0.02	10000	
Mo	95	103	1	He	26.321	26.321	0.99	65492	0.04	2000	
Ag	107	103	1	He	0.006	0.006	81.37	74	0.01	300	
Cd	111	103	1	He	0.042	0.042	166.08	769	0.01	4000	
Sn	118	115	1	He	0.742	0.742	9.33	3078	0.02	2000	
Sb	123	115	1	He	0.936	0.936	1.95	3896	0.02	300	
Ba	137	115	1	He	69.376	69.376	1.36	91908	0.08	10000	
W	182	165	1	He	419.245	419.245	1.04	4265468	0.01	2500	
Tl	205	209	1	He	0.032	0.032	7.29	1054	0.00	5000	
Pb	208	209	1	He	0.069	0.069	12.57	2746	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1542984	1.48	1803797	85.54	30	120	
Sc	45	1	He	495515	2.09	574766	86.21	30	120	
Sc	45	2	NoGas	3616941	0.22	4296857	84.18	30	120	
Rh	103	1	He	1380763	0.69	1652712	83.55	30	120	
In	115	1	He	721796	0.47	852389	84.68	30	120	
Tb	159	1	He	2195525	0.90	2425956	90.50	30	120	
Ho	165	1	He	2285058	1.07	2452680	93.17	30	120	
Bi	209	1	He	1584624	0.40	1810473	87.53	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	024_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:50:31-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.516	2.192	237932	3.34	50	93.0	89.5	110.5	
B	11	45	2	NoGas	52.634	2.442	175447	1.47	50	105.3	89.5	110.5	
Na	23	45	1	He	25616.060	2.658	37949572	0.52	25000	102.5	89.5	110.5	
Mg	24	45	1	He	25495.275	3.188	21396286	0.59	25000	102.0	89.5	110.5	
Al	27	45	1	He	248.641	2.259	109258	1.22	250	99.5	89.5	110.5	
K	39	45	1	He	25079.458	2.817	16586378	0.21	25000	100.3	89.5	110.5	
Ca	44	45	1	He	24715.180	2.692	868631	0.23	25000	98.9	89.5	110.5	
Ti	47	45	1	He	50.422	4.367	10543	1.76	50	100.8	89.5	110.5	
V	51	45	1	He	51.002	2.342	272799	0.65	50	102.0	89.5	110.5	
Cr	52	45	1	He	51.395	2.388	339816	0.56	50	102.8	89.5	110.5	
Mn	55	45	1	He	252.886	2.326	1173015	0.60	250	101.2	89.5	110.5	
Fe	56	45	1	He	12918.178	2.524	77562781	1.19	12500	103.3	89.5	110.5	
Co	59	103	1	He	50.748	1.936	480324	1.14	50	101.5	89.5	110.5	
Ni	60	103	1	He	50.810	2.056	122369	1.22	50	101.6	89.5	110.5	
Cu	63	103	1	He	51.354	1.199	331860	0.43	50	102.7	89.5	110.5	
Zn	66	103	1	He	51.527	2.870	68014	2.37	50	103.1	89.5	110.5	
As	75	103	1	He	50.482	0.918	41887	0.60	50	101.0	89.5	110.5	
Se	78	103	1	He	51.996	2.358	3583	1.99	50	104.0	89.5	110.5	
Sr	88	103	1	He	50.413	1.335	247994	0.49	50	100.8	89.5	110.5	
Mo	95	103	1	He	51.702	1.431	137604	1.68	50	103.4	89.5	110.5	
Ag	107	103	1	He	52.507	1.173	481683	0.68	50	105.0	89.5	110.5	
Cd	111	103	1	He	52.411	0.490	81065	0.79	50	104.8	89.5	110.5	
Sn	118	115	1	He	50.093	1.407	173918	1.13	50	100.2	89.5	110.5	
Sb	123	115	1	He	52.533	1.194	193308	0.83	50	105.1	89.5	110.5	
Ba	137	115	1	He	51.054	0.717	73980	0.76	50	102.1	89.5	110.5	
W	182	165	1	He	53.701	0.334	585698	1.54	50	107.4	89.5	110.5	
Tl	205	209	1	He	49.174	2.968	1156283	0.87	50	98.3	89.5	110.5	
Pb	208	209	1	He	50.819	2.474	1572878	0.30	50	101.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1633705	1.25	1803797	90.57	30	120	
Sc	45	1	He	553547	2.96	574766	96.31	30	120	
Sc	45	2	NoGas	3974103	1.27	4296857	92.49	30	120	
Rh	103	1	He	1483353	0.85	1652712	89.75	30	120	
In	115	1	He	789448	0.48	852389	92.62	30	120	
Tb	159	1	He	2360098	0.34	2425956	97.29	30	120	
Ho	165	1	He	2439601	1.23	2452680	99.47	30	120	
Bi	209	1	He	1708419	2.35	1810473	94.36	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T11:54:22-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.028	16.4	152	15.2	1	
B	11	45	2	NoGas	1.575	17.5	10681	8.8	20	
Na	23	45	1	He	5.036	27.8	38422	3.9	400	
Mg	24	45	1	He	2.197	19.3	2645	11.7	1000	
Al	27	45	1	He	0.900	33.1	1079	12.7	50	
K	39	45	1	He	13.784	10.1	69154	0.8	1000	
Ca	44	45	1	He	2.200	34.4	611	5.2	1000	
Ti	47	45	1	He	0.105	7.8	22	8.7	20	
V	51	45	1	He	0.033	91.3	418	38.6	2	
Cr	52	45	1	He	0.000	-57446.9	2804	7.0	2	
Mn	55	45	1	He	0.043	10.6	348	5.5	2	
Fe	56	45	1	He	13.338	32.9	82989	29.4	50	
Co	59	103	1	He	0.005	42.3	109	23.0	1	
Ni	60	103	1	He	0.006	89.6	110	13.9	2	
Cu	63	103	1	He	0.002	1089.1	2436	7.5	2	
Zn	66	103	1	He	0.007	498.7	833	6.4	20	
As	75	103	1	He	-0.023	-59.4	171	5.6	2	
Se	78	103	1	He	0.071	54.5	34	8.3	2	
Sr	88	103	1	He	0.009	61.1	189	17.7	10	
Mo	95	103	1	He	0.671	25.7	2602	19.8	2	
Ag	107	103	1	He	0.004	40.6	72	21.3	0.2	
Cd	111	103	1	He	-0.002	-1410.5	822	4.9	0.2	
Sn	118	115	1	He	0.234	22.9	1689	12.0	10	
Sb	123	115	1	He	0.250	7.0	1831	3.8	1	
Ba	137	115	1	He	0.021	47.4	46	34.6	5	
W	182	165	1	He	1.794	10.2	21994	8.9	10	
Tl	205	209	1	He	0.044	8.8	1491	5.7	0.5	
Pb	208	209	1	He	0.020	27.5	1557	11.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1707924	0.85	1803797	94.68	30	120	
Sc	45	1	He	535624	1.28	574766	93.19	30	120	
Sc	45	2	NoGas	4045138	1.73	4296857	94.14	30	120	
Rh	103	1	He	1606323	1.61	1652712	97.19	30	120	
In	115	1	He	826938	0.86	852389	97.01	30	120	
Tb	159	1	He	2390257	0.81	2425956	98.53	30	120	
Ho	165	1	He	2423193	1.61	2452680	98.80	30	120	
Bi	209	1	He	1823342	0.82	1810473	100.71	30	120	

Sample Report

Sample Table

Sample Name	LIN 2
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:15:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.015	0.015	8.35	81	0.02	10000	
B	11	45	2	NoGas	0.740	0.740	17.25	7720	0.01	300	
Na	23	45	1	He	-0.458	-0.458	-199.83	32378	0.00	500000	
Mg	24	45	1	He	0.057	0.057	132.55	967	0.01	500000	
Al	27	45	1	He	9.652	9.652	0.46	5067	0.19	200000	
K	39	45	1	He	2.898	2.898	138.17	65928	0.00	500000	
Ca	44	45	1	He	0.945	0.945	23.81	603	0.16	500000	
Ti	47	45	1	He	298.148	298.148	3.45	63967	0.47	2500	
V	51	45	1	He	-0.040	-0.040	-154.48	47	-0.09	10000	
Cr	52	45	1	He	-0.040	-0.040	-48.64	2698	0.00	10000	
Mn	55	45	1	He	0.068	0.068	25.68	487	0.01	10000	
Fe	56	45	1	He	0.075	0.075	85.40	6470	0.00	200000	
Co	59	103	1	He	0.009	0.009	37.20	136	0.01	10000	
Ni	60	103	1	He	0.060	0.060	23.18	241	0.02	10000	
Cu	63	103	1	He	-0.075	-0.075	-16.65	1832	0.00	10000	
Zn	66	103	1	He	0.168	0.168	28.25	1026	0.02	10000	
As	75	103	1	He	-0.022	-0.022	-100.63	166	-0.01	10000	
Se	78	103	1	He	-0.001	-0.001	-9362.61	28	0.00	10000	
Sr	88	103	1	He	-0.001	-0.001	-861.88	129	0.00	10000	
Mo	95	103	1	He	295.076	295.076	0.71	818420	0.04	2000	
Ag	107	103	1	He	309.990	309.990	0.93	2974897	0.01	300	>LDR
Cd	111	103	1	He	0.861	0.861	13.95	2177	0.04	4000	
Sn	118	115	1	He	299.941	299.941	0.87	1076909	0.03	2000	
Sb	123	115	1	He	248.726	248.726	3.74	946605	0.03	300	
Ba	137	115	1	He	0.144	0.144	5.65	230	0.06	10000	
W	182	165	1	He	311.460	311.460	1.72	3327136	0.01	2500	
Tl	205	209	1	He	0.000	0.000	-62.01	388	0.00	5000	
Pb	208	209	1	He	0.006	0.006	39.16	1084	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1658320	0.53	1803797	91.93	30	120	
Sc	45	1	He	568220	5.33	574766	98.86	30	120	
Sc	45	2	NoGas	3934103	1.84	4296857	91.56	30	120	
Rh	103	1	He	1551682	0.89	1652712	93.89	30	120	
In	115	1	He	819490	1.27	852389	96.14	30	120	
Tb	159	1	He	2328348	0.75	2425956	95.98	30	120	
Ho	165	1	He	2398783	1.19	2452680	97.80	30	120	
Bi	209	1	He	1820572	1.07	1810473	100.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	BLANK
Data File Name	028_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:19:41-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.009	73.9	52	68.9	1	
B	11	45	2	NoGas	0.144	89.4	5812	6.3	20	
Na	23	45	1	He	0.469	132.7	31172	1.2	400	
Mg	24	45	1	He	-0.475	-11.9	467	10.4	1000	
Al	27	45	1	He	9.644	2.9	4666	3.1	50	
K	39	45	1	He	6.394	38.4	63017	3.9	1000	
Ca	44	45	1	He	16.348	8.5	1067	3.6	1000	
Ti	47	45	1	He	0.272	54.9	54	52.1	20	
V	51	45	1	He	0.039	18.1	437	9.5	2	
Cr	52	45	1	He	0.009	127.4	2795	1.0	2	
Mn	55	45	1	He	0.178	5.4	933	2.8	2	
Fe	56	45	1	He	-0.047	-57.9	5280	3.1	50	
Co	59	103	1	He	0.001	91.5	63	18.2	1	
Ni	60	103	1	He	0.017	95.5	131	30.5	2	
Cu	63	103	1	He	-0.060	-6.1	1919	1.1	2	
Zn	66	103	1	He	0.859	8.8	1953	5.3	20	
As	75	103	1	He	-0.055	-116.6	136	40.8	2	
Se	78	103	1	He	-0.037	-130.5	25	14.0	2	
Sr	88	103	1	He	0.003	86.7	149	9.3	10	
Mo	95	103	1	He	4.774	15.4	13778	14.5	2	Blank Failed
Ag	107	103	1	He	0.021	24.8	227	21.4	0.2	
Cd	111	103	1	He	0.000	8053.4	792	1.2	0.2	
Sn	118	115	1	He	1.119	7.3	4756	6.4	10	
Sb	123	115	1	He	7.969	21.1	30601	20.9	1	Blank Failed
Ba	137	115	1	He	0.023	34.8	47	25.8	5	
W	182	165	1	He	3.428	14.3	38960	14.1	10	
Tl	205	209	1	He	-0.004	-40.4	292	14.3	0.5	
Pb	208	209	1	He	0.000	15138.8	872	7.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1660894	0.77	1803797	92.08	30	120	
Sc	45	1	He	523629	1.65	574766	91.10	30	120	
Sc	45	2	NoGas	3936636	0.94	4296857	91.62	30	120	
Rh	103	1	He	1540110	0.15	1652712	93.19	30	120	
In	115	1	He	804036	0.42	852389	94.33	30	120	
Tb	159	1	He	2337884	1.71	2425956	96.37	30	120	
Ho	165	1	He	2381142	0.80	2452680	97.08	30	120	
Bi	209	1	He	1779493	0.74	1810473	98.29	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	029_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:23:32-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.520	3.299	245583	3.65	50	93.0	89.5	110.5	
B	11	45	2	NoGas	51.492	2.053	174649	2.75	50	103.0	89.5	110.5	
Na	23	45	1	He	25755.478	3.667	38030344	0.37	25000	103.0	89.5	110.5	
Mg	24	45	1	He	25921.702	3.129	21687573	0.56	25000	103.7	89.5	110.5	
Al	27	45	1	He	252.964	2.720	110793	1.04	250	101.2	89.5	110.5	
K	39	45	1	He	25495.072	2.931	16808272	0.65	25000	102.0	89.5	110.5	
Ca	44	45	1	He	25157.706	3.084	881391	0.31	25000	100.6	89.5	110.5	
Ti	47	45	1	He	52.769	3.996	11000	0.68	50	105.5	89.5	110.5	
V	51	45	1	He	50.867	3.048	271238	1.90	50	101.7	89.5	110.5	
Cr	52	45	1	He	51.354	3.531	338430	0.75	50	102.7	89.5	110.5	
Mn	55	45	1	He	254.796	3.077	1178068	0.30	250	101.9	89.5	110.5	
Fe	56	45	1	He	12953.331	3.185	77521321	0.22	12500	103.6	89.5	110.5	
Co	59	103	1	He	50.530	0.801	478202	0.72	50	101.1	89.5	110.5	
Ni	60	103	1	He	50.838	1.383	122414	0.18	50	101.7	89.5	110.5	
Cu	63	103	1	He	51.156	1.541	330516	0.47	50	102.3	89.5	110.5	
Zn	66	103	1	He	51.239	1.593	67636	2.25	50	102.5	89.5	110.5	
As	75	103	1	He	50.758	1.275	42105	0.18	50	101.5	89.5	110.5	
Se	78	103	1	He	52.001	1.740	3583	0.36	50	104.0	89.5	110.5	
Sr	88	103	1	He	50.576	2.041	248729	0.80	50	101.2	89.5	110.5	
Mo	95	103	1	He	52.745	1.692	140334	1.73	50	105.5	89.5	110.5	
Ag	107	103	1	He	51.753	1.358	474658	0.06	50	103.5	89.5	110.5	
Cd	111	103	1	He	52.210	1.502	80735	0.23	50	104.4	89.5	110.5	
Sn	118	115	1	He	49.672	1.466	172940	1.35	50	99.3	89.5	110.5	
Sb	123	115	1	He	55.156	1.544	203470	1.15	50	110.3	89.5	110.5	
Ba	137	115	1	He	50.394	2.103	73219	1.64	50	100.8	89.5	110.5	
W	182	165	1	He	50.320	1.426	539759	1.22	50	100.6	89.5	110.5	
Tl	205	209	1	He	48.973	4.206	1144816	0.75	50	97.9	89.5	110.5	
Pb	208	209	1	He	50.479	3.399	1553403	0.70	50	101.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1686338	1.57	1803797	93.49	30	120	
Sc	45	1	He	551902	3.43	574766	96.02	30	120	
Sc	45	2	NoGas	4040222	1.60	4296857	94.03	30	120	
Rh	103	1	He	1483119	1.41	1652712	89.74	30	120	
In	115	1	He	791609	0.46	852389	92.87	30	120	
Tb	159	1	He	2358420	1.13	2425956	97.22	30	120	
Ho	165	1	He	2398719	0.44	2452680	97.80	30	120	
Bi	209	1	He	1699299	3.48	1810473	93.86	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	030_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:27:23-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.018	61.4	96	58.1	1	
B	11	45	2	NoGas	1.177	10.4	9332	3.9	20	
Na	23	45	1	He	2.356	39.0	34764	3.0	400	
Mg	24	45	1	He	0.943	65.9	1634	30.1	1000	
Al	27	45	1	He	0.638	11.7	972	4.3	50	
K	39	45	1	He	11.716	18.9	68169	1.0	1000	
Ca	44	45	1	He	0.315	822.4	549	16.1	1000	
Ti	47	45	1	He	0.049	82.4	11	75.5	20	
V	51	45	1	He	0.091	41.1	716	27.3	2	
Cr	52	45	1	He	-0.006	-895.7	2777	11.3	2	
Mn	55	45	1	He	0.012	51.0	213	12.8	2	
Fe	56	45	1	He	9.622	32.5	61787	28.5	50	
Co	59	103	1	He	0.002	85.2	77	26.5	1	
Ni	60	103	1	He	0.005	40.8	106	4.8	2	
Cu	63	103	1	He	-0.074	-15.4	1901	4.2	2	
Zn	66	103	1	He	-0.001	-1835.6	821	4.2	20	
As	75	103	1	He	-0.045	-39.9	151	10.7	2	
Se	78	103	1	He	0.061	79.0	33	10.8	2	
Sr	88	103	1	He	0.001	299.8	144	12.7	10	
Mo	95	103	1	He	0.959	24.9	3424	19.9	2	
Ag	107	103	1	He	0.007	28.6	97	19.2	0.2	
Cd	111	103	1	He	0.013	165.5	846	4.0	0.2	
Sn	118	115	1	He	0.440	15.4	2423	9.8	10	
Sb	123	115	1	He	1.268	7.5	5711	6.2	1	CCB Failed
Ba	137	115	1	He	0.010	90.3	28	48.5	5	
W	182	165	1	He	1.129	16.7	14793	13.8	10	
Tl	205	209	1	He	0.032	22.1	1187	15.7	0.5	
Pb	208	209	1	He	0.009	34.5	1186	9.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1690080	1.49	1803797	93.70	30	120	
Sc	45	1	He	538291	1.06	574766	93.65	30	120	
Sc	45	2	NoGas	4028241	1.92	4296857	93.75	30	120	
Rh	103	1	He	1604725	0.15	1652712	97.10	30	120	
In	115	1	He	823231	0.31	852389	96.58	30	120	
Tb	159	1	He	2387734	0.88	2425956	98.42	30	120	
Ho	165	1	He	2417889	0.14	2452680	98.58	30	120	
Bi	209	1	He	1793356	0.94	1810473	99.05	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	lb 240-176803/1-d@10
Data File Name	031_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:31:20-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.017	52.0	93	50.0	1	
B	11	45	2	NoGas	2.845	6.2	15225	3.4	20	
Na	23	45	1	He	154217.073	0.8	230387295	0.9	400	Blank Failed
Mg	24	45	1	He	5.166	6.9	5275	6.1	1000	
Al	27	45	1	He	11.547	0.9	5813	1.2	50	
K	39	45	1	He	28.861	11.2	82115	2.8	1000	
Ca	44	45	1	He	117.951	5.3	4738	3.9	1000	
Ti	47	45	1	He	0.079	64.8	18	60.3	20	
V	51	45	1	He	0.025	76.2	390	26.0	2	
Cr	52	45	1	He	0.317	8.6	5019	4.1	2	
Mn	55	45	1	He	0.255	9.2	1355	8.5	2	
Fe	56	45	1	He	10.513	1.5	69610	1.9	50	
Co	59	103	1	He	0.007	18.3	119	11.3	1	
Ni	60	103	1	He	0.372	7.1	984	5.8	2	
Cu	63	103	1	He	0.575	1.3	5940	1.8	2	
Zn	66	103	1	He	2.579	12.2	4135	9.3	20	
As	75	103	1	He	-0.002	-628.2	175	8.4	2	
Se	78	103	1	He	0.130	43.8	36	11.9	2	
Sr	88	103	1	He	0.344	7.5	1821	6.8	10	
Mo	95	103	1	He	0.617	6.3	2265	3.6	2	
Ag	107	103	1	He	0.010	31.4	118	23.6	0.2	
Cd	111	103	1	He	0.056	20.2	851	2.5	0.2	
Sn	118	115	1	He	0.208	19.4	1559	9.2	10	
Sb	123	115	1	He	0.867	4.1	4106	3.2	1	
Ba	137	115	1	He	0.954	5.2	1429	5.0	5	
W	182	165	1	He	0.340	10.2	6294	4.3	10	
Tl	205	209	1	He	0.004	54.3	478	10.5	0.5	
Pb	208	209	1	He	0.185	1.9	6720	2.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1680864	0.63	1803797	93.18	30	120	
Sc	45	1	He	558311	0.76	574766	97.14	30	120	
Sc	45	2	NoGas	4144906	0.59	4296857	96.46	30	120	
Rh	103	1	He	1486996	0.98	1652712	89.97	30	120	
In	115	1	He	808893	0.26	852389	94.90	30	120	
Tb	159	1	He	2352053	1.05	2425956	96.95	30	120	
Ho	165	1	He	2415370	2.24	2452680	98.48	30	120	
Bi	209	1	He	1751328	2.32	1810473	96.73	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176851/2-a10
Data File Name	032_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:35:13-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.019	58.9	107	57.0	1	
B	11	45	2	NoGas	0.547	8.8	7509	3.0	20	
Na	23	45	1	He	21.812	14.7	65253	8.1	400	
Mg	24	45	1	He	-0.381	-1.3	578	0.0	1000	
Al	27	45	1	He	8.197	3.3	4344	2.0	50	
K	39	45	1	He	6.207	6.7	67158	1.1	1000	
Ca	44	45	1	He	4.662	46.3	725	10.4	1000	
Ti	47	45	1	He	0.016	150.9	4	114.6	20	
V	51	45	1	He	0.040	339.6	473	155.5	2	
Cr	52	45	1	He	0.125	18.7	3755	4.3	2	
Mn	55	45	1	He	0.069	24.5	486	16.2	2	
Fe	56	45	1	He	3.176	3.3	25197	3.0	50	
Co	59	103	1	He	0.000	304.9	58	24.0	1	
Ni	60	103	1	He	0.010	26.9	120	5.6	2	
Cu	63	103	1	He	0.046	237.3	2743	28.7	2	
Zn	66	103	1	He	0.568	3.6	1628	3.4	20	
As	75	103	1	He	-0.002	-1208.5	189	12.6	2	
Se	78	103	1	He	-0.018	-465.6	28	22.1	2	
Sr	88	103	1	He	0.001	113.8	146	7.4	10	
Mo	95	103	1	He	-0.027	-93.1	597	10.3	2	
Ag	107	103	1	He	0.002	121.1	56	53.8	0.2	
Cd	111	103	1	He	0.011	109.4	845	2.9	0.2	
Sn	118	115	1	He	0.088	83.0	1170	22.3	10	
Sb	123	115	1	He	0.598	9.1	3199	6.6	1	
Ba	137	115	1	He	0.024	40.5	50	30.5	5	
W	182	165	1	He	0.174	15.8	4649	7.4	10	
Tl	205	209	1	He	-0.003	-37.0	333	6.9	0.5	
Pb	208	209	1	He	0.013	22.6	1318	7.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1719855	0.02	1803797	95.35	30	120	
Sc	45	1	He	559193	0.73	574766	97.29	30	120	
Sc	45	2	NoGas	4159884	0.93	4296857	96.81	30	120	
Rh	103	1	He	1606999	2.04	1652712	97.23	30	120	
In	115	1	He	835275	0.59	852389	97.99	30	120	
Tb	159	1	He	2399693	0.94	2425956	98.92	30	120	
Ho	165	1	He	2488815	0.97	2452680	101.47	30	120	
Bi	209	1	He	1827082	0.52	1810473	100.92	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176851/3-a@10
Data File Name	033_LCS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:39:04-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	101.610	101.610	1.109	540411	1.60	1000	10.2	79.5	120.5	LCS Failed
B	11	2	NoGas	13.531	13.531	2.181	51064	2.51	100	13.5	79.5	120.5	LCS Failed
Na	23	1	He	152633.288	152633.288	1.332	227392443	1.24	10000	1526.3	79.5	120.5	LCS Failed
Mg	24	1	He	1069.106	1069.106	1.671	903834	1.41	10000	10.7	79.5	120.5	LCS Failed
Al	27	1	He	1051.279	1051.279	1.377	462475	1.03	10000	10.5	79.5	120.5	LCS Failed
K	39	1	He	1067.110	1067.110	2.221	770225	0.84	10000	10.7	79.5	120.5	LCS Failed
Ca	44	1	He	1055.472	1055.472	1.970	37861	1.34	10000	10.6	79.5	120.5	LCS Failed
Ti	47	1	He	10.970	10.970	4.922	2310	5.15	100	11.0	79.5	120.5	LCS Failed
V	51	1	He	103.828	103.828	1.287	558568	1.08	1000	10.4	79.5	120.5	LCS Failed
Cr	52	1	He	105.106	105.106	1.448	696245	0.99	1000	10.5	79.5	120.5	LCS Failed
Mn	55	1	He	103.510	103.510	1.416	483227	0.99	1000	10.4	79.5	120.5	LCS Failed
Fe	56	1	He	1065.130	1065.130	2.399	6439505	0.09	10000	10.7	79.5	120.5	LCS Failed
Co	59	1	He	104.219	104.219	1.215	989918	1.22	1000	10.4	79.5	120.5	LCS Failed
Ni	60	1	He	103.808	103.808	1.361	250822	1.54	1000	10.4	79.5	120.5	LCS Failed
Cu	63	1	He	104.420	104.420	1.118	674880	1.35	1000	10.4	79.5	120.5	LCS Failed
Zn	66	1	He	106.385	106.385	1.481	140115	1.34	1000	10.6	79.5	120.5	LCS Failed
As	75	1	He	103.550	103.550	1.942	86040	2.35	1000	10.4	79.5	120.5	LCS Failed
Se	78	1	He	106.815	106.815	2.331	7359	2.72	1000	10.7	79.5	120.5	LCS Failed
Sr	88	1	He	103.133	103.133	1.461	509031	1.86	1000	10.3	79.5	120.5	LCS Failed
Mo	95	1	He	10.968	10.968	2.582	29788	2.68	100	11.0	79.5	120.5	LCS Failed
Ag	107	1	He	10.465	10.465	1.659	96361	1.63	100	10.5	79.5	120.5	LCS Failed
Cd	111	1	He	106.320	106.320	1.058	164241	1.43	1000	10.6	79.5	120.5	LCS Failed
Sn	118	1	He	102.173	102.173	1.308	358680	1.11	1000	10.2	79.5	120.5	LCS Failed
Sb	123	1	He	10.898	10.898	1.795	41319	2.74	100	10.9	79.5	120.5	LCS Failed
Ba	137	1	He	103.052	103.052	1.239	151337	1.71	1000	10.3	79.5	120.5	LCS Failed
W	182	1	He	9.971	9.971	0.620	110530	1.86	100	10.0	79.5	120.5	LCS Failed
Tl	205	1	He	23.751	23.751	1.524	570442	1.07	250	9.5	79.5	120.5	LCS Failed
Pb	208	1	He	102.075	102.075	1.391	3224726	1.02	1000	10.2	79.5	120.5	LCS Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1698998	1.42	1803797	94.19	30	120	
Sc	45	1	He	556870	2.36	574766	96.89	30	120	
Sc	45	2	NoGas	4130465	0.57	4296857	96.13	30	120	
Rh	103	1	He	1488575	1.10	1652712	90.07	30	120	
In	115	1	He	800171	1.70	852389	93.87	30	120	
Tb	159	1	He	2359317	1.87	2425956	97.25	30	120	
Ho	165	1	He	2431030	1.54	2452680	99.12	30	120	
Bi	209	1	He	1744000	2.43	1810473	96.33	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-e@10
Data File Name	034SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:42:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.018	0.018	24.40	100	0.02	10000	
B	11	45	2	NoGas	12.051	12.051	1.95	49121	0.02	300	
Na	23	45	1	He	152841.175	152841.175	1.74	230966317	0.07	500000	
Mg	24	45	1	He	2231.584	2231.584	1.32	1912812	0.12	500000	
Al	27	45	1	He	11.379	11.379	0.72	5807	0.20	200000	
K	39	45	1	He	101.922	101.922	3.56	132230	0.08	500000	
Ca	44	45	1	He	133449.920	133449.920	0.14	4785783	2.79	500000	
Ti	47	45	1	He	0.157	0.157	46.18	34	0.46	2500	
V	51	45	1	He	1.432	1.432	3.69	8070	0.02	10000	
Cr	52	45	1	He	0.170	0.170	21.99	4092	0.00	10000	
Mn	55	45	1	He	1881.152	1881.152	0.66	8906061	0.02	10000	
Fe	56	45	1	He	1.574	1.574	18.12	15620	0.01	200000	
Co	59	103	1	He	1.004	1.004	2.81	9614	0.01	10000	
Ni	60	103	1	He	2.277	2.277	3.00	5609	0.04	10000	
Cu	63	103	1	He	0.238	0.238	2.37	3788	0.01	10000	
Zn	66	103	1	He	1.331	1.331	6.90	2515	0.05	10000	
As	75	103	1	He	0.163	0.163	4.29	314	0.05	10000	
Se	78	103	1	He	0.204	0.204	35.79	41	0.50	10000	
Sr	88	103	1	He	2915.294	2915.294	1.18	14431121	0.02	10000	
Mo	95	103	1	He	0.134	0.134	19.35	984	0.01	2000	
Ag	107	103	1	He	0.002	0.002	100.93	47	0.00	300	
Cd	111	103	1	He	0.093	0.093	14.31	912	0.01	4000	
Sn	118	115	1	He	0.707	0.707	12.22	3338	0.02	2000	
Sb	123	115	1	He	0.417	0.417	5.94	2427	0.02	300	
Ba	137	115	1	He	1.240	1.240	1.45	1860	0.07	10000	
W	182	165	1	He	0.264	0.264	7.51	5535	0.00	2500	
Tl	205	209	1	He	0.020	0.020	36.62	847	0.00	5000	
Pb	208	209	1	He	0.018	0.018	29.06	1380	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1760524	1.49	1803797	97.60	30	120	
Sc	45	1	He	564819	1.22	574766	98.27	30	120	
Sc	45	2	NoGas	4401855	0.85	4296857	102.44	30	120	
Rh	103	1	He	1493540	2.65	1652712	90.37	30	120	
In	115	1	He	811715	1.12	852389	95.23	30	120	
Tb	159	1	He	2382040	1.83	2425956	98.19	30	120	
Ho	165	1	He	2441411	1.78	2452680	99.54	30	120	
Bi	209	1	He	1709283	1.35	1810473	94.41	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111357-a-2-e@50
Data File Name	035SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:46:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.007	0.007	68.69	41	0.02	10000	
B	11	45	2	NoGas	2.146	2.146	7.09	13135	0.02	300	
Na	23	45	1	He	31152.450	31152.450	0.11	47396885	0.07	500000	
Mg	24	45	1	He	441.000	441.000	0.52	381053	0.12	500000	
Al	27	45	1	He	9.469	9.469	4.47	4984	0.19	200000	
K	39	45	1	He	25.118	25.118	10.67	81025	0.03	500000	
Ca	44	45	1	He	26436.258	26436.258	0.44	954293	2.77	500000	
Ti	47	45	1	He	0.062	0.062	75.73	14	0.43	2500	
V	51	45	1	He	0.223	0.223	40.96	1486	0.01	10000	
Cr	52	45	1	He	0.045	0.045	43.29	3277	0.00	10000	
Mn	55	45	1	He	389.981	389.981	1.94	1857453	0.02	10000	
Fe	56	45	1	He	0.158	0.158	36.84	6990	0.00	200000	
Co	59	103	1	He	0.198	0.198	1.31	2060	0.01	10000	
Ni	60	103	1	He	0.451	0.451	8.95	1255	0.04	10000	
Cu	63	103	1	He	-0.014	-0.014	-140.67	2297	0.00	10000	
Zn	66	103	1	He	0.226	0.226	23.97	1131	0.02	10000	
As	75	103	1	He	0.033	0.033	32.08	219	0.02	10000	
Se	78	103	1	He	0.002	0.002	2477.86	29	0.01	10000	
Sr	88	103	1	He	572.858	572.858	0.35	3017411	0.02	10000	
Mo	95	103	1	He	-0.094	-0.094	-14.02	402	-0.02	2000	
Ag	107	103	1	He	0.000	0.000	1207.98	32	0.00	300	
Cd	111	103	1	He	0.054	0.054	36.95	906	0.01	4000	
Sn	118	115	1	He	0.111	0.111	29.44	1256	0.01	2000	
Sb	123	115	1	He	0.198	0.198	11.73	1647	0.01	300	
Ba	137	115	1	He	0.245	0.245	15.91	389	0.06	10000	
W	182	165	1	He	0.096	0.096	24.49	3767	0.00	2500	
Tl	205	209	1	He	-0.001	-0.001	-310.76	367	0.00	5000	
Pb	208	209	1	He	0.005	0.005	30.59	1038	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1729087	0.59	1803797	95.86	30	120	
Sc	45	1	He	568268	1.79	574766	98.87	30	120	
Sc	45	2	NoGas	4230438	0.88	4296857	98.45	30	120	
Rh	103	1	He	1588966	1.16	1652712	96.14	30	120	
In	115	1	He	835306	0.67	852389	98.00	30	120	
Tb	159	1	He	2429937	0.59	2425956	100.16	30	120	
Ho	165	1	He	2478541	1.66	2452680	101.05	30	120	
Bi	209	1	He	1813732	1.08	1810473	100.18	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111357-a-2-e@10
Data File Name	036SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:50:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1123.212	1123.212	0.52	5868346	0.02	10000	
B	11	45	2	NoGas	131.743	131.743	1.76	448173	0.03	300	
Na	23	45	1	He	158275.279	158275.279	3.41	232885939	0.07	500000	
Mg	24	45	1	He	12434.062	12434.062	3.73	10372012	0.12	500000	
Al	27	45	1	He	10161.649	10161.649	4.71	4407561	0.23	200000	
K	39	45	1	He	10422.981	10422.981	4.88	6885273	0.15	500000	
Ca	44	45	1	He	139299.843	139299.843	3.40	4863447	2.86	500000	
Ti	47	45	1	He	104.358	104.358	4.92	21686	0.48	2500	
V	51	45	1	He	1043.763	1043.763	3.61	5543522	0.02	10000	
Cr	52	45	1	He	1022.183	1022.183	4.13	6661429	0.02	10000	
Mn	55	45	1	He	2821.415	2821.415	3.26	13005478	0.02	10000	
Fe	56	45	1	He	10387.029	10387.029	3.43	61981711	0.02	200000	
Co	59	103	1	He	1059.106	1059.106	0.34	9463869	0.01	10000	
Ni	60	103	1	He	1078.857	1078.857	0.71	2451629	0.04	10000	
Cu	63	103	1	He	1039.676	1039.676	0.28	6302761	0.02	10000	
Zn	66	103	1	He	1033.769	1033.769	0.10	1274683	0.08	10000	
As	75	103	1	He	1066.602	1066.602	0.24	832185	0.13	10000	
Se	78	103	1	He	1085.876	1085.876	0.51	70150	1.55	10000	
Sr	88	103	1	He	4022.232	4022.232	0.72	18671942	0.02	10000	
Mo	95	103	1	He	110.865	110.865	2.19	277892	0.04	2000	
Ag	107	103	1	He	104.937	104.937	0.82	908838	0.01	300	
Cd	111	103	1	He	1089.582	1089.582	2.04	1576837	0.07	4000	
Sn	118	115	1	He	1104.527	1104.527	0.79	3647990	0.03	2000	
Sb	123	115	1	He	105.167	105.167	0.45	368959	0.03	300	
Ba	137	115	1	He	1034.687	1034.687	0.05	1432303	0.07	10000	
W	182	165	1	He	98.727	98.727	1.41	1048185	0.01	2500	
Tl	205	209	1	He	263.703	263.703	1.77	5728340	0.00	5000	
Pb	208	209	1	He	1076.344	1076.344	1.82	30765444	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1668975	0.16	1803797	92.53	30	120	
Sc	45	1	He	550342	3.66	574766	95.75	30	120	
Sc	45	2	NoGas	4131710	0.37	4296857	96.16	30	120	
Rh	103	1	He	1400401	0.14	1652712	84.73	30	120	
In	115	1	He	754278	0.52	852389	88.49	30	120	
Tb	159	1	He	2362573	0.35	2425956	97.39	30	120	
Ho	165	1	He	2380069	1.83	2452680	97.04	30	120	
Bi	209	1	He	1578154	1.08	1810473	87.17	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-f ms@10
Data File Name	037SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:54:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	105.538	105.538	1.43	558218	0.02	10000	
B	11	45	2	NoGas	24.120	24.120	2.91	89217	0.03	300	
Na	23	45	1	He	153297.825	153297.825	0.81	232515620	0.07	500000	
Mg	24	45	1	He	3246.528	3246.528	0.81	2792521	0.12	500000	
Al	27	45	1	He	1036.939	1036.939	0.53	464445	0.22	200000	
K	39	45	1	He	1134.128	1134.128	1.47	829499	0.14	500000	
Ca	44	45	1	He	134586.339	134586.339	1.37	4843902	2.78	500000	
Ti	47	45	1	He	10.687	10.687	5.33	2291	0.47	2500	
V	51	45	1	He	104.233	104.233	1.25	570915	0.02	10000	
Cr	52	45	1	He	102.007	102.007	0.70	688057	0.01	10000	
Mn	55	45	1	He	1955.423	1955.423	0.80	9291040	0.02	10000	
Fe	56	45	1	He	1059.117	1059.117	0.44	6520176	0.02	200000	
Co	59	103	1	He	104.839	104.839	0.68	986660	0.01	10000	
Ni	60	103	1	He	105.930	105.930	0.74	253587	0.04	10000	
Cu	63	103	1	He	103.940	103.940	1.45	665614	0.02	10000	
Zn	66	103	1	He	105.069	105.069	0.84	137121	0.08	10000	
As	75	103	1	He	106.141	106.141	0.40	87374	0.12	10000	
Se	78	103	1	He	109.184	109.184	1.02	7452	1.47	10000	
Sr	88	103	1	He	3048.245	3048.245	0.29	14902969	0.02	10000	
Mo	95	103	1	He	12.951	12.951	0.76	34738	0.04	2000	
Ag	107	103	1	He	10.435	10.435	2.01	95208	0.01	300	
Cd	111	103	1	He	104.610	104.610	0.25	160125	0.07	4000	
Sn	118	115	1	He	105.201	105.201	1.74	374677	0.03	2000	
Sb	123	115	1	He	11.211	11.211	2.03	43094	0.03	300	
Ba	137	115	1	He	100.958	100.958	1.08	150416	0.07	10000	
W	182	165	1	He	11.527	11.527	4.13	128647	0.01	2500	
Tl	205	209	1	He	24.237	24.237	1.70	566205	0.00	5000	
Pb	208	209	1	He	101.555	101.555	0.64	3121190	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1689510	1.07	1803797	93.66	30	120	
Sc	45	1	He	566836	0.41	574766	98.62	30	120	
Sc	45	2	NoGas	4255014	1.05	4296857	99.03	30	120	
Rh	103	1	He	1474866	0.50	1652712	89.24	30	120	
In	115	1	He	811756	0.08	852389	95.23	30	120	
Tb	159	1	He	2383950	0.91	2425956	98.27	30	120	
Ho	165	1	He	2455930	0.69	2452680	100.13	30	120	
Bi	209	1	He	1696413	2.17	1810473	93.70	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-g msd@10
Data File Name	038SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T12:57:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	103.577	103.577	2.22	549315	0.02	10000	
B	11	45	2	NoGas	23.981	23.981	2.28	87944	0.03	300	
Na	23	45	1	He	158057.038	158057.038	1.43	234293768	0.07	500000	
Mg	24	45	1	He	3350.247	3350.247	1.93	2816164	0.12	500000	
Al	27	45	1	He	1048.977	1048.977	1.32	459167	0.23	200000	
K	39	45	1	He	1144.717	1144.717	1.57	817651	0.14	500000	
Ca	44	45	1	He	136410.818	136410.818	0.68	4798344	2.84	500000	
Ti	47	45	1	He	10.570	10.570	9.12	2214	0.48	2500	
V	51	45	1	He	103.838	103.838	0.84	555885	0.02	10000	
Cr	52	45	1	He	103.199	103.199	0.97	680303	0.02	10000	
Mn	55	45	1	He	2033.559	2033.559	1.64	9443096	0.02	10000	
Fe	56	45	1	He	1061.033	1061.033	1.68	6383666	0.02	200000	
Co	59	103	1	He	106.091	106.091	0.53	969250	0.01	10000	
Ni	60	103	1	He	107.573	107.573	1.00	249998	0.04	10000	
Cu	63	103	1	He	105.519	105.519	0.57	655920	0.02	10000	
Zn	66	103	1	He	106.394	106.394	1.71	134778	0.08	10000	
As	75	103	1	He	106.916	106.916	0.26	85437	0.13	10000	
Se	78	103	1	He	109.413	109.413	2.24	7249	1.51	10000	
Sr	88	103	1	He	3188.768	3188.768	0.61	15133988	0.02	10000	
Mo	95	103	1	He	11.702	11.702	2.10	30527	0.04	2000	
Ag	107	103	1	He	10.485	10.485	0.41	92866	0.01	300	
Cd	111	103	1	He	105.848	105.848	0.40	157272	0.07	4000	
Sn	118	115	1	He	103.782	103.782	1.01	359653	0.03	2000	
Sb	123	115	1	He	10.995	10.995	1.37	41136	0.03	300	
Ba	137	115	1	He	102.583	102.583	1.62	148701	0.07	10000	
W	182	165	1	He	10.052	10.052	0.86	111519	0.01	2500	
Tl	205	209	1	He	24.350	24.350	1.82	557144	0.00	5000	
Pb	208	209	1	He	102.510	102.510	3.15	3084779	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1694012	0.86	1803797	93.91	30	120	
Sc	45	1	He	554051	1.46	574766	96.40	30	120	
Sc	45	2	NoGas	4216430	0.97	4296857	98.13	30	120	
Rh	103	1	He	1431719	0.28	1652712	86.63	30	120	
In	115	1	He	789823	0.37	852389	92.66	30	120	
Tb	159	1	He	2353732	1.08	2425956	97.02	30	120	
Ho	165	1	He	2433463	0.67	2452680	99.22	30	120	
Bi	209	1	He	1661348	1.41	1810473	91.76	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176851/3-a@10
Data File Name	039_LCS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:01:44-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1180.541	1180.541	2.719	5759506	1.19	1000	118.1	79.5	120.5	
B	11	2	NoGas	150.816	150.816	1.515	485769	0.42	100	150.8	79.5	120.5	LCS Failed
Na	23	1	He	1500747.454	1500747.454	1.280	2133557071	0.78	10000	15007.5	79.5	120.5	LCS Failed
Mg	24	1	He	10700.591	10700.591	0.677	8626686	1.00	10000	107.0	79.5	120.5	
Al	27	1	He	10337.429	10337.429	0.825	4334265	0.66	10000	103.4	79.5	120.5	
K	39	1	He	10643.195	10643.195	1.228	6795026	0.43	10000	106.4	79.5	120.5	
Ca	44	1	He	10279.484	10279.484	1.133	347301	0.74	10000	102.8	79.5	120.5	
Ti	47	1	He	106.444	106.444	2.051	21383	2.02	100	106.4	79.5	120.5	
V	51	1	He	1055.626	1055.626	0.944	5417883	0.49	1000	105.6	79.5	120.5	
Cr	52	1	He	1032.598	1032.598	0.379	6504413	1.40	1000	103.3	79.5	120.5	
Mn	55	1	He	1018.477	1018.477	0.761	4536677	0.68	1000	101.8	79.5	120.5	
Fe	56	1	He	10327.741	10327.741	1.454	59552691	0.97	10000	103.3	79.5	120.5	
Co	59	1	He	1095.741	1095.741	1.023	8971614	1.27	1000	109.6	79.5	120.5	
Ni	60	1	He	1115.191	1115.191	0.653	2322033	0.96	1000	111.5	79.5	120.5	
Cu	63	1	He	1085.197	1085.197	1.387	6027855	1.49	1000	108.5	79.5	120.5	
Zn	66	1	He	1078.699	1078.699	0.373	1218696	0.55	1000	107.9	79.5	120.5	
As	75	1	He	1175.858	1175.858	0.679	840588	0.37	1000	117.6	79.5	120.5	
Se	78	1	He	1263.240	1263.240	1.562	74769	1.33	1000	126.3	79.5	120.5	LCS Failed
Sr	88	1	He	1171.440	1171.440	1.607	4982743	1.57	1000	117.1	79.5	120.5	
Mo	95	1	He	125.385	125.385	0.459	287898	0.27	100	125.4	79.5	120.5	LCS Failed
Ag	107	1	He	105.873	105.873	0.883	840174	0.87	100	105.9	79.5	120.5	
Cd	111	1	He	1079.111	1079.111	0.529	1430904	0.36	1000	107.9	79.5	120.5	
Sn	118	1	He	1122.265	1122.265	0.791	3461871	0.82	1000	112.2	79.5	120.5	
Sb	123	1	He	109.693	109.693	1.201	359392	0.57	100	109.7	79.5	120.5	
Ba	137	1	He	1069.389	1069.389	1.038	1382584	0.46	1000	106.9	79.5	120.5	
W	182	1	He	102.482	102.482	0.372	1031753	1.01	100	102.5	79.5	120.5	
Tl	205	1	He	261.419	261.419	0.588	5251564	1.22	250	104.6	79.5	120.5	
Pb	208	1	He	1074.447	1074.447	0.797	28399619	0.14	1000	107.4	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1558934	1.67	1803797	86.43	30	120	
Sc	45	1	He	531420	1.38	574766	92.46	30	120	
Sc	45	2	NoGas	3918790	1.91	4296857	91.20	30	120	
Rh	103	1	He	1283151	0.31	1652712	77.64	30	120	
In	115	1	He	704498	0.66	852389	82.65	30	120	
Tb	159	1	He	2163312	0.09	2425956	89.17	30	120	
Ho	165	1	He	2256979	1.38	2452680	92.02	30	120	
Bi	209	1	He	1459227	0.66	1810473	80.60	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	040_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:05:26-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.540	4.864	265392	2.23	50	97.1	89.5	110.5	
B	11	45	2	NoGas	52.367	2.721	188473	1.39	50	104.7	89.5	110.5	
Na	23	45	1	He	25748.965	2.338	39270976	0.50	25000	103.0	89.5	110.5	
Mg	24	45	1	He	25915.595	3.433	22388757	1.22	25000	103.7	89.5	110.5	
Al	27	45	1	He	258.242	2.401	116779	0.11	250	103.3	89.5	110.5	
K	39	45	1	He	25993.985	3.309	17693591	1.04	25000	104.0	89.5	110.5	
Ca	44	45	1	He	25026.431	2.239	905516	0.22	25000	100.1	89.5	110.5	
Ti	47	45	1	He	51.010	4.526	10982	3.24	50	102.0	89.5	110.5	
V	51	45	1	He	50.891	2.222	280218	0.49	50	101.8	89.5	110.5	
Cr	52	45	1	He	50.955	2.593	346831	0.39	50	101.9	89.5	110.5	
Mn	55	45	1	He	253.493	2.492	1210389	0.21	250	101.4	89.5	110.5	
Fe	56	45	1	He	12886.000	2.894	79637897	0.51	12500	103.1	89.5	110.5	
Co	59	103	1	He	50.178	3.062	488005	0.17	50	100.4	89.5	110.5	
Ni	60	103	1	He	50.153	3.563	124100	0.53	50	100.3	89.5	110.5	
Cu	63	103	1	He	50.665	3.142	336434	0.14	50	101.3	89.5	110.5	
Zn	66	103	1	He	51.636	2.866	70036	0.41	50	103.3	89.5	110.5	
As	75	103	1	He	51.054	1.790	43535	1.47	50	102.1	89.5	110.5	
Se	78	103	1	He	52.545	2.154	3721	1.81	50	105.1	89.5	110.5	
Sr	88	103	1	He	51.376	2.766	259695	0.49	50	102.8	89.5	110.5	
Mo	95	103	1	He	52.082	1.803	142462	2.12	50	104.2	89.5	110.5	
Ag	107	103	1	He	50.902	2.790	479814	0.44	50	101.8	89.5	110.5	
Cd	111	103	1	He	52.183	3.046	82932	0.22	50	104.4	89.5	110.5	
Sn	118	115	1	He	51.466	1.822	184329	1.54	50	102.9	89.5	110.5	
Sb	123	115	1	He	52.321	0.491	198643	0.65	50	104.6	89.5	110.5	
Ba	137	115	1	He	50.101	1.153	74903	1.33	50	100.2	89.5	110.5	
W	182	165	1	He	49.618	0.981	545539	1.30	50	99.2	89.5	110.5	
Tl	205	209	1	He	47.794	1.012	1164183	0.78	50	95.6	89.5	110.5	
Pb	208	209	1	He	49.320	0.328	1581193	0.24	50	98.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1748074	2.75	1803797	96.91	30	120	
Sc	45	1	He	569786	2.45	574766	99.13	30	120	
Sc	45	2	NoGas	4290450	1.24	4296857	99.85	30	120	
Rh	103	1	He	1525047	3.27	1652712	92.28	30	120	
In	115	1	He	814484	0.27	852389	95.55	30	120	
Tb	159	1	He	2391371	1.16	2425956	98.57	30	120	
Ho	165	1	He	2458477	0.97	2452680	100.24	30	120	
Bi	209	1	He	1768968	0.54	1810473	97.71	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	041_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:09:16-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.047	39.3	267	41.7	1	
B	11	45	2	NoGas	1.914	5.6	12586	4.8	20	
Na	23	45	1	He	87.437	6.3	163297	4.3	400	
Mg	24	45	1	He	0.923	48.3	1682	21.9	1000	
Al	27	45	1	He	7.287	1.3	3942	1.7	50	
K	39	45	1	He	3.913	68.8	65592	2.1	1000	
Ca	44	45	1	He	5.995	7.4	772	1.6	1000	
Ti	47	45	1	He	0.069	35.8	16	32.7	20	
V	51	45	1	He	0.047	41.4	506	20.0	2	
Cr	52	45	1	He	0.042	57.8	3204	4.3	2	
Mn	55	45	1	He	0.084	5.4	556	3.3	2	
Fe	56	45	1	He	12.177	33.5	79657	30.3	50	
Co	59	103	1	He	0.019	1.9	252	1.5	1	
Ni	60	103	1	He	0.013	84.9	129	20.9	2	
Cu	63	103	1	He	0.118	34.5	3310	8.7	2	
Zn	66	103	1	He	0.436	10.7	1473	4.9	20	
As	75	103	1	He	-0.023	-97.5	174	12.3	2	
Se	78	103	1	He	0.105	17.6	37	4.3	2	
Sr	88	103	1	He	0.051	23.4	419	16.2	10	
Mo	95	103	1	He	0.749	26.0	2889	20.1	2	
Ag	107	103	1	He	0.005	20.4	79	12.9	0.2	
Cd	111	103	1	He	0.125	20.2	1057	2.9	0.2	
Sn	118	115	1	He	0.709	16.3	3519	11.9	10	
Sb	123	115	1	He	0.434	10.7	2619	6.7	1	
Ba	137	115	1	He	0.039	15.8	74	12.9	5	
W	182	165	1	He	1.007	18.2	13840	14.6	10	
Tl	205	209	1	He	0.059	24.4	1916	18.4	0.5	
Pb	208	209	1	He	0.048	7.0	2530	3.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1774176	3.39	1803797	98.36	30	120	
Sc	45	1	He	558939	0.76	574766	97.25	30	120	
Sc	45	2	NoGas	4314480	1.84	4296857	100.41	30	120	
Rh	103	1	He	1643202	1.24	1652712	99.42	30	120	
In	115	1	He	853873	0.42	852389	100.17	30	120	
Tb	159	1	He	2407580	0.84	2425956	99.24	30	120	
Ho	165	1	He	2481647	0.07	2452680	101.18	30	120	
Bi	209	1	He	1854076	0.97	1810473	102.41	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	042CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:13:08-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.904	0.904	3.079	5075	4.97	1	90.4	69.5	130.5	
B	11	2	NoGas	20.290	20.290	1.369	77648	1.51	20	101.5	69.5	130.5	
Na	23	1	He	1146.883	1146.883	0.547	1824489	0.70	1000	114.7	69.5	130.5	
Mg	24	1	He	1071.153	1071.153	0.672	949077	0.23	1000	107.1	69.5	130.5	
Al	27	1	He	52.355	52.355	0.431	24861	0.46	50	104.7	69.5	130.5	
K	39	1	He	1055.997	1055.997	0.861	799591	0.65	1000	105.6	69.5	130.5	
Ca	44	1	He	1037.850	1037.850	2.125	39031	2.33	1000	103.8	69.5	130.5	
Ti	47	1	He	11.049	11.049	4.184	2438	3.76	10	110.5	69.5	130.5	
V	51	1	He	5.035	5.035	0.986	28643	0.53	5	100.7	69.5	130.5	
Cr	52	1	He	2.315	2.315	2.793	19059	2.62	2	115.7	69.5	130.5	
Mn	55	1	He	5.287	5.287	3.133	26030	3.45	5	105.7	69.5	130.5	
Fe	56	1	He	107.358	107.358	1.419	685928	1.37	100	107.4	69.5	130.5	
Co	59	1	He	1.002	1.002	3.353	10513	2.51	1	100.2	69.5	130.5	
Ni	60	1	He	2.225	2.225	3.650	6002	2.47	2	111.3	69.5	130.5	
Cu	63	1	He	2.105	2.105	3.616	17366	1.81	2	105.2	69.5	130.5	
Zn	66	1	He	20.614	20.614	1.538	30524	0.31	20	103.1	69.5	130.5	
As	75	1	He	4.984	4.984	1.015	4739	2.29	5	99.7	69.5	130.5	
Se	78	1	He	5.635	5.635	3.212	455	3.46	5	112.7	69.5	130.5	
Sr	88	1	He	9.902	9.902	1.300	53855	0.32	10	99.0	69.5	130.5	
Mo	95	1	He	10.430	10.430	0.932	31175	0.78	10	104.3	69.5	130.5	
Ag	107	1	He	1.055	1.055	1.429	10706	0.71	1	105.5	69.5	130.5	
Cd	111	1	He	1.074	1.074	2.620	2658	0.79	1	107.4	69.5	130.5	
Sn	118	1	He	10.479	10.479	3.522	40227	3.20	10	104.8	69.5	130.5	
Sb	123	1	He	2.076	2.076	5.038	9170	4.99	2	103.8	69.5	130.5	
Ba	137	1	He	5.141	5.141	1.589	8109	2.00	5	102.8	69.5	130.5	
W	182	1	He	9.973	9.973	3.055	113376	2.23	10	99.7	69.5	130.5	
Tl	205	1	He	1.959	1.959	1.473	50397	1.41	2	98.0	69.5	130.5	
Pb	208	1	He	1.067	1.067	3.303	36725	3.36	1	106.7	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1791672	2.04	1803797	99.33	30	120	
Sc	45	1	He	583517	0.46	574766	101.52	30	120	
Sc	45	2	NoGas	4348117	0.25	4296857	101.19	30	120	
Rh	103	1	He	1636646	1.35	1652712	99.03	30	120	
In	115	1	He	857951	0.46	852389	100.65	30	120	
Tb	159	1	He	2435256	1.07	2425956	100.38	30	120	
Ho	165	1	He	2493469	0.77	2452680	101.66	30	120	
Bi	209	1	He	1853699	0.32	1810473	102.39	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176863/1-a@2
Data File Name	043_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:16:58-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.057	31.8	326	31.7	1	
B	11	45	2	NoGas	2.334	9.4	13813	4.4	20	
Na	23	45	1	He	81.286	2.1	155595	2.1	400	
Mg	24	45	1	He	32.923	0.8	29087	1.3	1000	
Al	27	45	1	He	10.374	2.5	5352	1.8	50	
K	39	45	1	He	21.388	7.5	77952	0.3	1000	
Ca	44	45	1	He	192.191	4.1	7446	2.9	1000	
Ti	47	45	1	He	0.370	32.6	80	32.5	20	
V	51	45	1	He	0.373	53.2	2283	46.5	2	
Cr	52	45	1	He	1.681	2.9	14186	1.1	2	
Mn	55	45	1	He	1.116	4.8	5444	4.4	2	
Fe	56	45	1	He	17.026	2.2	110234	3.2	50	
Co	59	103	1	He	0.029	20.8	343	18.1	1	
Ni	60	103	1	He	0.242	3.0	710	2.5	2	
Cu	63	103	1	He	0.982	8.7	9070	6.0	2	
Zn	66	103	1	He	4.264	6.2	6719	5.0	20	
As	75	103	1	He	0.362	9.4	505	5.3	2	
Se	78	103	1	He	0.144	42.4	39	11.2	2	
Sr	88	103	1	He	0.396	8.4	2207	8.4	10	
Mo	95	103	1	He	0.220	37.5	1282	17.5	2	
Ag	107	103	1	He	0.001	192.9	42	52.6	0.2	
Cd	111	103	1	He	0.151	2.0	1057	0.5	0.2	
Sn	118	115	1	He	22.138	2.7	80762	2.4	10	Blank Failed
Sb	123	115	1	He	0.341	22.0	2174	12.9	1	
Ba	137	115	1	He	0.821	3.7	1256	3.5	5	
W	182	165	1	He	0.546	12.2	8584	9.7	10	
Tl	205	209	1	He	0.060	25.8	1949	20.9	0.5	
Pb	208	209	1	He	0.351	6.8	12747	7.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1803396	0.86	1803797	99.98	30	120	
Sc	45	1	He	564216	1.25	574766	98.16	30	120	
Sc	45	2	NoGas	4242019	1.79	4296857	98.72	30	120	
Rh	103	1	He	1575630	0.59	1652712	95.34	30	120	
In	115	1	He	824714	0.46	852389	96.75	30	120	
Tb	159	1	He	2406862	0.08	2425956	99.21	30	120	
Ho	165	1	He	2432842	1.33	2452680	99.19	30	120	
Bi	209	1	He	1859649	0.77	1810473	102.72	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176863/3-a@2
Data File Name	044LCSS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:20:48-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	546.624	546.624	3.057	2924885	0.97	500	109.3	78.6	110.5	
B	11	2	NoGas	62.891	62.891	2.098	212827	2.58	50	125.8	79.5	120.5	LCSS Failed
Na	23	1	He	5267.811	5267.811	0.818	7703521	1.74	5000	105.4	79.5	120.5	
Mg	24	1	He	5340.941	5340.941	1.387	4410679	1.08	5000	106.8	79.5	120.5	
Al	27	1	He	5091.250	5091.250	0.812	2187062	1.69	5000	101.8	79.5	120.5	
K	39	1	He	5205.907	5205.907	1.483	3436158	2.08	5000	104.1	79.5	120.5	
Ca	44	1	He	5061.663	5061.663	1.440	175443	1.03	5000	101.2	79.5	120.5	
Ti	47	1	He	51.232	51.232	1.450	10542	1.31	50	102.5	79.5	120.5	
V	51	1	He	520.872	520.872	0.997	2738596	1.56	500	104.2	71.5	110.5	
Cr	52	1	He	523.030	523.030	0.548	3376557	2.54	500	104.6	69.5	110.5	
Mn	55	1	He	529.104	529.104	1.414	2414156	1.30	500	105.8	79.5	120.5	
Fe	56	1	He	5306.679	5306.679	1.139	31348690	1.58	5000	106.1	79.5	120.5	
Co	59	1	He	491.095	491.095	2.651	4753952	0.56	500	98.2	73.9	110.5	
Ni	60	1	He	487.972	487.972	1.447	1201577	1.39	500	97.6	74.9	110.5	
Cu	63	1	He	508.504	508.504	3.236	3340461	1.31	500	101.7	72.6	110.5	
Zn	66	1	He	481.933	481.933	2.532	644193	0.80	500	96.4	71.5	113.4	
As	75	1	He	467.017	467.017	1.853	394890	0.86	500	93.4	73.4	110.5	
Se	78	1	He	471.029	471.029	1.974	32986	1.69	500	94.2	64.6	110.5	
Sr	88	1	He	508.804	508.804	2.268	2559044	0.80	500	101.8	79.5	120.5	
Mo	95	1	He	53.953	53.953	1.921	146850	0.78	50	107.9	29.5	140.5	
Ag	107	1	He	50.645	50.645	1.778	475255	0.92	50	101.3	59.5	114.5	
Cd	111	1	He	490.690	490.690	1.704	769830	0.99	500	98.1	73.5	110.5	
Sn	118	1	He	558.275	558.275	0.237	1901228	0.13	500	111.7	79.5	120.5	
Sb	123	1	He	50.320	50.320	0.756	182422	0.64	50	100.6	67.5	113.4	
Ba	137	1	He	495.249	495.249	0.425	706765	0.29	500	99.0	69.5	110.5	
W	182	1	He	48.935	48.935	0.934	526725	1.00	50	97.9	74.6	125.4	
Tl	205	1	He	120.157	120.157	1.643	2897840	1.16	125	96.1	70.6	110.5	
Pb	208	1	He	486.935	486.935	0.724	15452682	0.95	500	97.4	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1710007	2.05	1803797	94.80	30	120	
Sc	45	1	He	544410	2.48	574766	94.72	30	120	
Sc	45	2	NoGas	4054027	0.81	4296857	94.35	30	120	
Rh	103	1	He	1517786	2.70	1652712	91.84	30	120	
In	115	1	He	777598	0.26	852389	91.23	30	120	
Tb	159	1	He	2330696	0.75	2425956	96.07	30	120	
Ho	165	1	He	2406665	0.36	2452680	98.12	30	120	
Bi	209	1	He	1752004	1.67	1810473	96.77	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-j@2
Data File Name	045SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:24:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.143	1.143	6.60	5664	0.02	10000	
B	11	45	2	NoGas	21.146	21.146	1.25	121162	0.02	300	
Na	23	45	1	He	811.573	811.573	0.92	2014877	0.04	500000	
Mg	24	45	1	He	2819.857	2819.857	1.33	3866874	0.07	500000	
Al	27	45	1	He	17706.894	17706.894	0.90	12625012	0.14	200000	
K	39	45	1	He	124.628	124.628	3.63	235954	0.05	500000	
Ca	44	45	1	He	787165.533	787165.533	1.29	45161652	1.74	500000	>LDR
Ti	47	45	1	He	44672.256	44672.256	1.32	15259694	0.29	2500	>LDR
V	51	45	1	He	3694.843	3694.843	1.52	32246935	0.01	10000	
Cr	52	45	1	He	1651.828	1651.828	2.19	17689022	0.01	10000	
Mn	55	45	1	He	5450.127	5450.127	1.08	41283339	0.01	10000	
Fe	56	45	1	He	198513.944	198513.944	0.85	1946565469	0.01	200000	
Co	59	103	1	He	45.318	45.318	0.58	372666	0.01	10000	
Ni	60	103	1	He	93.912	93.912	1.38	196435	0.05	10000	
Cu	63	103	1	He	129.763	129.763	0.60	725562	0.02	10000	
Zn	66	103	1	He	592.883	592.883	1.01	672969	0.09	10000	
As	75	103	1	He	17.218	17.218	1.20	12513	0.14	10000	
Se	78	103	1	He	5.095	5.095	6.45	326	1.56	10000	
Sr	88	103	1	He	28060.450	28060.450	1.10	119860271	0.02	10000	>LDR
Mo	95	103	1	He	19.910	19.910	1.35	46369	0.04	2000	
Ag	107	103	1	He	1.830	1.830	7.90	14612	0.01	300	
Cd	111	103	1	He	9.005	9.005	5.79	12650	0.07	4000	
Sn	118	115	1	He	75.530	75.530	0.81	239508	0.03	2000	
Sb	123	115	1	He	1.005	1.005	0.24	4128	0.02	300	
Ba	137	115	1	He	62.881	62.881	1.94	83345	0.08	10000	
W	182	165	1	He	37.282	37.282	1.38	380253	0.01	2500	
Tl	205	209	1	He	0.212	0.212	15.21	4544	0.00	5000	
Pb	208	209	1	He	110.881	110.881	0.45	2913467	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1581593	1.62	1803797	87.68	30	120	
Sc	45	1	He	903727	1.12	574766	157.23	30	120	ISTD Failed
Sc	45	2	NoGas	6531167	1.33	4296857	152.00	30	120	ISTD Failed
Rh	103	1	He	1288657	0.82	1652712	77.97	30	120	
In	115	1	He	722126	0.19	852389	84.72	30	120	
Tb	159	1	He	2210046	2.05	2425956	91.10	30	120	
Ho	165	1	He	2277071	0.91	2452680	92.84	30	120	
Bi	209	1	He	1450223	0.38	1810473	80.10	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111357-a-2-j@10
Data File Name	046SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:28:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.263	0.263	3.62	1311	0.02	10000	
B	11	45	2	NoGas	6.750	6.750	2.61	30341	0.02	300	
Na	23	45	1	He	260.979	260.979	0.78	457752	0.06	500000	
Mg	24	45	1	He	870.336	870.336	0.64	799841	0.11	500000	
Al	27	45	1	He	5545.922	5545.922	1.21	2648157	0.21	200000	
K	39	45	1	He	38.953	38.953	9.48	96254	0.04	500000	
Ca	44	45	1	He	242934.059	242934.059	1.29	9332495	2.60	500000	
Ti	47	45	1	He	13914.419	13914.419	1.66	3182436	0.44	2500	>LDR
V	51	45	1	He	1171.678	1171.678	2.10	6847179	0.02	10000	
Cr	52	45	1	He	527.872	527.872	0.74	3787498	0.01	10000	
Mn	55	45	1	He	1723.812	1723.812	1.08	8742989	0.02	10000	
Fe	56	45	1	He	64108.917	64108.917	0.76	420929281	0.02	200000	
Co	59	103	1	He	8.845	8.845	0.65	81993	0.01	10000	
Ni	60	103	1	He	18.663	18.663	1.63	44055	0.04	10000	
Cu	63	103	1	He	25.967	25.967	0.94	165340	0.02	10000	
Zn	66	103	1	He	121.547	121.547	0.68	156043	0.08	10000	
As	75	103	1	He	2.909	2.909	2.19	2526	0.12	10000	
Se	78	103	1	He	0.856	0.856	7.27	83	1.03	10000	
Sr	88	103	1	He	5237.359	5237.359	0.92	25207120	0.02	10000	
Mo	95	103	1	He	3.599	3.599	3.61	9944	0.04	2000	
Ag	107	103	1	He	0.318	0.318	1.58	2887	0.01	300	
Cd	111	103	1	He	1.570	1.570	11.85	3103	0.05	4000	
Sn	118	115	1	He	15.029	15.029	2.87	51846	0.03	2000	
Sb	123	115	1	He	0.239	0.239	12.67	1679	0.01	300	
Ba	137	115	1	He	13.015	13.015	1.31	18544	0.07	10000	
W	182	165	1	He	7.669	7.669	0.75	86822	0.01	2500	
Tl	205	209	1	He	0.035	0.035	7.94	1248	0.00	5000	
Pb	208	209	1	He	20.995	20.995	0.11	673296	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1586930	0.59	1803797	87.98	30	120	
Sc	45	1	He	605098	0.93	574766	105.28	30	120	
Sc	45	2	NoGas	4429995	0.77	4296857	103.10	30	120	
Rh	103	1	He	1451890	0.49	1652712	87.85	30	120	
In	115	1	He	775890	1.07	852389	91.03	30	120	
Tb	159	1	He	2381427	0.34	2425956	98.16	30	120	
Ho	165	1	He	2464880	0.45	2452680	100.50	30	120	
Bi	209	1	He	1768118	0.27	1810473	97.66	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-j@2
Data File Name	047SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:31:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.045	1.045	5.38	4627	0.02	10000	
B	11	45	2	NoGas	20.219	20.219	0.48	107404	0.02	300	
Na	23	45	1	He	818.727	818.727	1.41	1941545	0.04	500000	
Mg	24	45	1	He	2820.090	2820.090	0.99	3695097	0.08	500000	
Al	27	45	1	He	17151.717	17151.717	0.94	11684310	0.15	200000	
K	39	45	1	He	122.264	122.264	3.05	223024	0.05	500000	
Ca	44	45	1	He	778765.557	778765.557	1.63	42686900	1.82	500000	>LDR
Ti	47	45	1	He	44478.002	44478.002	1.42	14516773	0.31	2500	>LDR
V	51	45	1	He	3728.224	3728.224	1.34	31089928	0.01	10000	
Cr	52	45	1	He	1667.698	1667.698	1.28	17065163	0.01	10000	
Mn	55	45	1	He	5414.027	5414.027	0.42	39184185	0.01	10000	
Fe	56	45	1	He	199405.669	199405.669	0.36	1868187730	0.01	200000	
Co	59	103	1	He	45.223	45.223	0.89	364765	0.01	10000	
Ni	60	103	1	He	93.377	93.377	0.76	191581	0.05	10000	
Cu	63	103	1	He	129.375	129.375	0.64	709534	0.02	10000	
Zn	66	103	1	He	585.548	585.548	0.43	651928	0.09	10000	
As	75	103	1	He	16.593	16.593	0.96	11833	0.14	10000	
Se	78	103	1	He	4.370	4.370	4.03	277	1.58	10000	
Sr	88	103	1	He	27043.881	27043.881	1.91	113306338	0.02	10000	>LDR
Mo	95	103	1	He	19.400	19.400	1.50	44326	0.04	2000	
Ag	107	103	1	He	2.214	2.214	0.76	17328	0.01	300	
Cd	111	103	1	He	10.848	10.848	2.15	14813	0.07	4000	
Sn	118	115	1	He	75.698	75.698	1.72	229413	0.03	2000	
Sb	123	115	1	He	0.913	0.913	1.78	3652	0.03	300	
Ba	137	115	1	He	64.428	64.428	0.49	81617	0.08	10000	
W	182	165	1	He	38.643	38.643	0.94	388219	0.01	2500	
Tl	205	209	1	He	0.124	0.124	11.23	2716	0.00	5000	
Pb	208	209	1	He	112.023	112.023	0.54	2868180	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1413045	0.26	1803797	78.34	30	120	
Sc	45	1	He	863418	0.37	574766	150.22	30	120	ISTD Failed
Sc	45	2	NoGas	6034112	0.38	4296857	140.43	30	120	ISTD Failed
Rh	103	1	He	1263931	0.25	1652712	76.48	30	120	
In	115	1	He	690185	0.59	852389	80.97	30	120	
Tb	159	1	He	2173236	0.90	2425956	89.58	30	120	
Ho	165	1	He	2243293	0.62	2452680	91.46	30	120	
Bi	209	1	He	1413134	0.18	1810473	78.05	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-j@10
Data File Name	048SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:35:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.237	0.237	4.66	1096	0.02	10000	
B	11	45	2	NoGas	6.408	6.408	2.42	27184	0.02	300	
Na	23	45	1	He	261.446	261.446	0.82	436170	0.06	500000	
Mg	24	45	1	He	869.063	869.063	0.14	759749	0.11	500000	
Al	27	45	1	He	5440.408	5440.408	1.10	2471234	0.22	200000	
K	39	45	1	He	40.223	40.223	3.02	92446	0.04	500000	
Ca	44	45	1	He	238429.139	238429.139	1.46	8713138	2.74	500000	
Ti	47	45	1	He	13732.917	13732.917	1.77	2987896	0.46	2500	>LDR
V	51	45	1	He	1185.742	1185.742	0.07	6592036	0.02	10000	
Cr	52	45	1	He	539.328	539.328	1.05	3680971	0.01	10000	
Mn	55	45	1	He	1714.507	1714.507	1.31	8272114	0.02	10000	
Fe	56	45	1	He	63613.230	63613.230	1.38	397292633	0.02	200000	
Co	59	103	1	He	8.801	8.801	1.43	79718	0.01	10000	
Ni	60	103	1	He	18.221	18.221	2.28	42026	0.04	10000	
Cu	63	103	1	He	25.645	25.645	1.16	159576	0.02	10000	
Zn	66	103	1	He	118.510	118.510	0.31	148678	0.08	10000	
As	75	103	1	He	2.781	2.781	1.98	2367	0.12	10000	
Se	78	103	1	He	0.791	0.791	19.46	77	1.02	10000	
Sr	88	103	1	He	5112.913	5112.913	1.41	24044544	0.02	10000	
Mo	95	103	1	He	3.581	3.581	1.93	9671	0.04	2000	
Ag	107	103	1	He	0.317	0.317	8.35	2806	0.01	300	
Cd	111	103	1	He	1.589	1.589	7.08	3059	0.05	4000	
Sn	118	115	1	He	15.152	15.152	0.98	50416	0.03	2000	
Sb	123	115	1	He	0.178	0.178	16.98	1407	0.01	300	
Ba	137	115	1	He	12.818	12.818	1.71	17623	0.07	10000	
W	182	165	1	He	7.700	7.700	1.41	83894	0.01	2500	
Tl	205	209	1	He	0.024	0.024	6.38	918	0.00	5000	
Pb	208	209	1	He	21.514	21.514	2.30	655538	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1471874	2.62	1803797	81.60	30	120	
Sc	45	1	He	575589	0.47	574766	100.14	30	120	
Sc	45	2	NoGas	4137730	1.02	4296857	96.30	30	120	
Rh	103	1	He	1418670	0.11	1652712	85.84	30	120	
In	115	1	He	748604	0.54	852389	87.82	30	120	
Tb	159	1	He	2318206	0.18	2425956	95.56	30	120	
Ho	165	1	He	2372269	0.84	2452680	96.72	30	120	
Bi	209	1	He	1680675	2.41	1810473	92.83	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-j@2
Data File Name	049SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:39:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.187	1.187	8.94	4956	0.02	10000	
B	11	45	2	NoGas	19.846	19.846	3.01	98471	0.02	300	
Na	23	45	1	He	825.274	825.274	1.47	1839582	0.04	500000	
Mg	24	45	1	He	2833.932	2833.932	0.99	3490989	0.08	500000	
Al	27	45	1	He	16844.074	16844.074	1.31	10787690	0.16	200000	
K	39	45	1	He	122.339	122.339	1.45	209755	0.06	500000	
Ca	44	45	1	He	772882.872	772882.872	0.91	39830014	1.94	500000	>LDR
Ti	47	45	1	He	44166.021	44166.021	1.32	13552353	0.33	2500	>LDR
V	51	45	1	He	3734.148	3734.148	1.00	29275970	0.01	10000	
Cr	52	45	1	He	1692.062	1692.062	0.38	16278779	0.01	10000	
Mn	55	45	1	He	5398.330	5398.330	1.08	36731325	0.01	10000	
Fe	56	45	1	He	199700.915	199700.915	1.13	1758950615	0.01	200000	
Co	59	103	1	He	44.608	44.608	0.11	345143	0.01	10000	
Ni	60	103	1	He	92.867	92.867	0.22	182774	0.05	10000	
Cu	63	103	1	He	127.612	127.612	0.39	671374	0.02	10000	
Zn	66	103	1	He	575.355	575.355	0.28	614495	0.09	10000	
As	75	103	1	He	15.997	15.997	1.14	10948	0.15	10000	
Se	78	103	1	He	4.282	4.282	4.30	261	1.64	10000	
Sr	88	103	1	He	26458.186	26458.186	0.68	106335947	0.02	10000	>LDR
Mo	95	103	1	He	19.414	19.414	0.39	42553	0.05	2000	
Ag	107	103	1	He	2.226	2.226	2.12	16715	0.01	300	
Cd	111	103	1	He	10.225	10.225	7.18	13428	0.08	4000	
Sn	118	115	1	He	76.503	76.503	1.19	219149	0.03	2000	
Sb	123	115	1	He	0.814	0.814	4.05	3151	0.03	300	
Ba	137	115	1	He	64.004	64.004	0.75	76638	0.08	10000	
W	182	165	1	He	38.248	38.248	1.81	367382	0.01	2500	
Tl	205	209	1	He	0.108	0.108	3.00	2310	0.00	5000	
Pb	208	209	1	He	111.399	111.399	0.40	2726503	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1332912	0.46	1803797	73.89	30	120	
Sc	45	1	He	811779	0.87	574766	141.24	30	120	ISTD Failed
Sc	45	2	NoGas	5628807	1.23	4296857	131.00	30	120	ISTD Failed
Rh	103	1	He	1212444	0.38	1652712	73.36	30	120	
In	115	1	He	652363	0.27	852389	76.53	30	120	
Tb	159	1	He	2065113	0.48	2425956	85.13	30	120	
Ho	165	1	He	2144946	1.24	2452680	87.45	30	120	
Bi	209	1	He	1350873	0.52	1810473	74.61	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111357-a-2-j@2
Data File Name	050SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:43:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1059.722	1059.722	1.21	4402547	0.02	10000	
B	11	45	2	NoGas	89.475	89.475	1.68	415821	0.02	300	
Na	23	45	1	He	7156.648	7156.648	1.19	15341000	0.05	500000	
Mg	24	45	1	He	8849.688	8849.688	0.98	10725134	0.08	500000	
Al	27	45	1	He	22147.273	22147.273	1.40	13957203	0.16	200000	
K	39	45	1	He	6112.783	6112.783	0.60	5905430	0.10	500000	
Ca	44	45	1	He	778113.591	778113.591	0.16	39462145	1.97	500000	>LDR
Ti	47	45	1	He	43937.982	43937.982	0.67	13268249	0.33	2500	>LDR
V	51	45	1	He	4382.348	4382.348	1.38	33809767	0.01	10000	
Cr	52	45	1	He	2284.416	2284.416	0.47	21625502	0.01	10000	
Mn	55	45	1	He	5914.191	5914.191	1.18	39600081	0.01	10000	
Fe	56	45	1	He	204324.841	204324.841	1.41	1771002739	0.01	200000	>LDR
Co	59	103	1	He	1085.025	1085.025	1.34	8478439	0.01	10000	
Ni	60	103	1	He	1163.190	1163.190	1.39	2311551	0.05	10000	
Cu	63	103	1	He	1152.947	1152.947	2.04	6111482	0.02	10000	
Zn	66	103	1	He	1582.331	1582.331	2.35	1705785	0.09	10000	
As	75	103	1	He	1059.533	1059.533	0.59	722943	0.15	10000	
Se	78	103	1	He	1070.342	1070.342	0.39	60471	1.77	10000	
Sr	88	103	1	He	26859.094	26859.094	1.03	109036031	0.02	10000	>LDR
Mo	95	103	1	He	139.783	139.783	0.59	306279	0.05	2000	
Ag	107	103	1	He	105.053	105.053	1.13	795655	0.01	300	
Cd	111	103	1	He	1011.867	1011.867	0.90	1280620	0.08	4000	
Sn	118	115	1	He	1206.690	1206.690	1.52	3385196	0.04	2000	
Sb	123	115	1	He	107.135	107.135	0.67	319253	0.03	300	
Ba	137	115	1	He	1092.336	1092.336	0.15	1284413	0.09	10000	
W	182	165	1	He	140.500	140.500	0.85	1360581	0.01	2500	
Tl	205	209	1	He	275.741	275.741	0.73	5066416	0.01	5000	
Pb	208	209	1	He	1215.633	1215.633	0.41	29389987	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1327234	1.12	1803797	73.58	30	120	
Sc	45	1	He	798846	1.10	574766	138.99	30	120	ISTD Failed
Sc	45	2	NoGas	5610672	0.51	4296857	130.58	30	120	ISTD Failed
Rh	103	1	He	1224743	1.24	1652712	74.11	30	120	
In	115	1	He	640700	0.28	852389	75.17	30	120	
Tb	159	1	He	2086862	1.10	2425956	86.02	30	120	
Ho	165	1	He	2172217	0.43	2452680	88.57	30	120	
Bi	209	1	He	1334678	0.65	1810473	73.72	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-k ms@2
Data File Name	051SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:46:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	526.443	526.443	1.74	2188379	0.02	10000	
B	11	45	2	NoGas	53.818	53.818	0.30	252247	0.02	300	
Na	23	45	1	He	3981.577	3981.577	0.71	8533863	0.05	500000	
Mg	24	45	1	He	5656.745	5656.745	0.68	6838357	0.08	500000	
Al	27	45	1	He	18856.999	18856.999	1.60	11852845	0.16	200000	
K	39	45	1	He	3086.446	3086.446	0.46	3018587	0.10	500000	
Ca	44	45	1	He	803470.563	803470.563	1.51	40644872	1.98	500000	>LDR
Ti	47	45	1	He	43231.215	43231.215	0.75	13020955	0.33	2500	>LDR
V	51	45	1	He	3965.121	3965.121	1.14	30514915	0.01	10000	
Cr	52	45	1	He	1950.083	1950.083	0.62	18414681	0.01	10000	
Mn	55	45	1	He	5496.904	5496.904	2.25	36709232	0.01	10000	
Fe	56	45	1	He	200259.253	200259.253	0.78	1731396767	0.01	200000	>LDR
Co	59	103	1	He	562.670	562.670	1.04	4459399	0.01	10000	
Ni	60	103	1	He	584.263	584.263	1.06	1177632	0.05	10000	
Cu	63	103	1	He	634.265	634.265	0.50	3410955	0.02	10000	
Zn	66	103	1	He	993.062	993.062	0.80	1086027	0.09	10000	
As	75	103	1	He	508.980	508.980	0.41	352286	0.14	10000	
Se	78	103	1	He	510.836	510.836	1.43	29281	1.74	10000	
Sr	88	103	1	He	26301.579	26301.579	1.12	108287749	0.02	10000	>LDR
Mo	95	103	1	He	76.188	76.188	0.47	169537	0.04	2000	
Ag	107	103	1	He	51.613	51.613	0.21	396478	0.01	300	
Cd	111	103	1	He	494.007	494.007	0.70	634428	0.08	4000	
Sn	118	115	1	He	629.026	629.026	1.80	1797558	0.03	2000	
Sb	123	115	1	He	45.541	45.541	1.66	138603	0.03	300	
Ba	137	115	1	He	558.561	558.561	1.38	668907	0.08	10000	
W	182	165	1	He	68.909	68.909	0.80	673644	0.01	2500	
Tl	205	209	1	He	135.005	135.005	0.45	2498211	0.01	5000	
Pb	208	209	1	He	650.045	650.045	0.21	15827355	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1328048	1.16	1803797	73.63	30	120	
Sc	45	1	He	796815	1.59	574766	138.63	30	120	ISTD Failed
Sc	45	2	NoGas	5590893	1.19	4296857	130.12	30	120	ISTD Failed
Rh	103	1	He	1242050	0.49	1652712	75.15	30	120	
In	115	1	He	652613	1.58	852389	76.56	30	120	
Tb	159	1	He	2116942	0.66	2425956	87.26	30	120	
Ho	165	1	He	2188985	0.66	2452680	89.25	30	120	
Bi	209	1	He	1344111	0.47	1810473	74.24	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	052_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:50:19-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.523	3.587	228206	1.17	50	91.0	89.5	110.5	
B	11	45	2	NoGas	53.647	1.673	182629	0.16	50	107.3	89.5	110.5	
Na	23	45	1	He	28058.160	0.136	38882048	1.19	25000	112.2	89.5	110.5	CCV Failed
Mg	24	45	1	He	27685.742	0.874	21736059	0.67	25000	110.7	89.5	110.5	CCV Failed
Al	27	45	1	He	255.816	0.275	105123	0.88	250	102.3	89.5	110.5	
K	39	45	1	He	26796.612	0.724	16574973	1.41	25000	107.2	89.5	110.5	
Ca	44	45	1	He	25916.511	0.929	852027	1.09	25000	103.7	89.5	110.5	
Ti	47	45	1	He	103.353	6.950	20211	5.85	50	206.7	89.5	110.5	CCV Failed
V	51	45	1	He	55.229	0.530	276299	0.56	50	110.5	89.5	110.5	
Cr	52	45	1	He	55.469	1.834	342803	0.74	50	110.9	89.5	110.5	CCV Failed
Mn	55	45	1	He	267.717	1.848	1161428	0.79	250	107.1	89.5	110.5	
Fe	56	45	1	He	13980.863	1.491	78511632	0.41	12500	111.8	89.5	110.5	CCV Failed
Co	59	103	1	He	48.043	2.817	491021	0.78	50	96.1	89.5	110.5	
Ni	60	103	1	He	48.089	2.439	125075	1.15	50	96.2	89.5	110.5	
Cu	63	103	1	He	48.885	2.676	341230	0.89	50	97.8	89.5	110.5	
Zn	66	103	1	He	48.633	2.707	69364	0.28	50	97.3	89.5	110.5	
As	75	103	1	He	47.002	3.033	42120	0.44	50	94.0	89.5	110.5	
Se	78	103	1	He	45.733	2.419	3407	0.32	50	91.5	89.5	110.5	
Sr	88	103	1	He	49.005	2.216	260391	2.85	50	98.0	89.5	110.5	
Mo	95	103	1	He	51.387	2.903	147672	1.36	50	102.8	89.5	110.5	
Ag	107	103	1	He	50.321	3.084	498420	1.02	50	100.6	89.5	110.5	
Cd	111	103	1	He	50.039	1.716	83619	1.10	50	100.1	89.5	110.5	
Sn	118	115	1	He	51.701	0.474	178316	0.65	50	103.4	89.5	110.5	
Sb	123	115	1	He	54.264	0.482	198356	0.47	50	108.5	89.5	110.5	
Ba	137	115	1	He	52.661	1.367	75812	1.12	50	105.3	89.5	110.5	
W	182	165	1	He	51.144	2.002	571471	1.37	50	102.3	89.5	110.5	
Tl	205	209	1	He	49.167	1.795	1187699	0.43	50	98.3	89.5	110.5	
Pb	208	209	1	He	50.496	1.300	1605543	0.45	50	101.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1602330	2.55	1803797	88.83	30	120	
Sc	45	1	He	517552	1.08	574766	90.05	30	120	
Sc	45	2	NoGas	4061027	1.51	4296857	94.51	30	120	
Rh	103	1	He	1602318	2.60	1652712	96.95	30	120	
In	115	1	He	784319	0.28	852389	92.01	30	120	
Tb	159	1	He	2446425	1.95	2425956	100.84	30	120	
Ho	165	1	He	2499075	0.83	2452680	101.89	30	120	
Bi	209	1	He	1754592	1.40	1810473	96.91	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	053_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:54:09-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.079	1.9	433	2.6	1	
B	11	45	2	NoGas	2.668	4.2	15455	1.0	20	
Na	23	45	1	He	22.883	3.5	67583	1.6	400	
Mg	24	45	1	He	1.145	23.4	1893	12.0	1000	
Al	27	45	1	He	7.605	2.6	4129	2.3	50	
K	39	45	1	He	6.357	30.2	68013	1.8	1000	
Ca	44	45	1	He	40.276	4.2	2011	2.8	1000	
Ti	47	45	1	He	6.330	11.2	1355	11.5	20	
V	51	45	1	He	0.216	45.5	1439	37.5	2	
Cr	52	45	1	He	0.081	20.5	3506	3.3	2	
Mn	55	45	1	He	0.339	5.3	1772	4.6	2	
Fe	56	45	1	He	18.377	12.1	118734	11.3	50	
Co	59	103	1	He	0.017	14.3	248	9.5	1	
Ni	60	103	1	He	0.007	60.5	122	9.6	2	
Cu	63	103	1	He	-0.039	-29.9	2365	2.1	2	
Zn	66	103	1	He	0.427	16.4	1572	5.6	20	
As	75	103	1	He	0.094	22.2	303	5.1	2	
Se	78	103	1	He	0.071	57.8	38	10.8	2	
Sr	88	103	1	He	0.619	9.5	3782	7.5	10	
Mo	95	103	1	He	0.693	22.8	2931	15.8	2	
Ag	107	103	1	He	0.005	74.1	88	44.0	0.2	
Cd	111	103	1	He	0.064	32.5	1028	2.7	0.2	
Sn	118	115	1	He	0.436	12.2	2523	8.2	10	
Sb	123	115	1	He	0.379	10.9	2422	6.2	1	
Ba	137	115	1	He	0.026	29.2	54	21.5	5	
W	182	165	1	He	1.001	13.2	14351	10.2	10	
Tl	205	209	1	He	0.067	14.3	2164	12.3	0.5	
Pb	208	209	1	He	0.034	9.9	2093	6.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1739593	0.86	1803797	96.44	30	120	
Sc	45	1	He	565487	0.22	574766	98.39	30	120	
Sc	45	2	NoGas	4380268	1.60	4296857	101.94	30	120	
Rh	103	1	He	1769845	1.80	1652712	107.09	30	120	
In	115	1	He	861503	0.67	852389	101.07	30	120	
Tb	159	1	He	2536549	0.40	2425956	104.56	30	120	
Ho	165	1	He	2587277	0.54	2452680	105.49	30	120	
Bi	209	1	He	1889898	0.74	1810473	104.39	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-I msd@2
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T13:58:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	534.427	534.427	0.70	2327804	0.02	10000	
B	11	45	2	NoGas	53.929	53.929	0.88	259650	0.02	300	
Na	23	45	1	He	4003.013	4003.013	1.03	8562597	0.05	500000	
Mg	24	45	1	He	5670.677	5670.677	0.79	6841611	0.08	500000	
Al	27	45	1	He	18802.148	18802.148	1.25	11795828	0.16	200000	
K	39	45	1	He	3198.061	3198.061	1.84	3118117	0.10	500000	
Ca	44	45	1	He	789209.056	789209.056	0.96	39841152	1.98	500000	>LDR
Ti	47	45	1	He	42291.452	42291.452	0.56	12712339	0.33	2500	>LDR
V	51	45	1	He	3854.099	3854.099	1.45	29599512	0.01	10000	
Cr	52	45	1	He	1899.438	1899.438	1.52	17899277	0.01	10000	
Mn	55	45	1	He	5234.739	5234.739	1.32	34891420	0.02	10000	
Fe	56	45	1	He	191674.271	191674.271	0.50	1653825072	0.01	200000	
Co	59	103	1	He	562.963	562.963	0.55	4497769	0.01	10000	
Ni	60	103	1	He	583.300	583.300	0.53	1185145	0.05	10000	
Cu	63	103	1	He	635.430	635.430	0.64	3444748	0.02	10000	
Zn	66	103	1	He	985.002	985.002	0.92	1085931	0.09	10000	
As	75	103	1	He	518.456	518.456	0.96	361724	0.14	10000	
Se	78	103	1	He	528.900	528.900	0.33	30560	1.73	10000	
Sr	88	103	1	He	25295.257	25295.257	0.19	104985485	0.02	10000	>LDR
Mo	95	103	1	He	76.733	76.733	0.58	172129	0.04	2000	
Ag	107	103	1	He	51.879	51.879	0.29	401729	0.01	300	
Cd	111	103	1	He	500.641	500.641	0.53	648104	0.08	4000	
Sn	118	115	1	He	629.584	629.584	1.17	1827202	0.03	2000	
Sb	123	115	1	He	46.811	46.811	1.35	144678	0.03	300	
Ba	137	115	1	He	565.874	565.874	0.40	688247	0.08	10000	
W	182	165	1	He	70.530	70.530	1.57	697713	0.01	2500	
Tl	205	209	1	He	133.981	133.981	0.93	2569057	0.01	5000	
Pb	208	209	1	He	637.795	637.795	0.93	16091236	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1391394	0.29	1803797	77.14	30	120	
Sc	45	1	He	795174	0.23	574766	138.35	30	120	ISTD Failed
Sc	45	2	NoGas	5743711	0.61	4296857	133.67	30	120	ISTD Failed
Rh	103	1	He	1252064	0.74	1652712	75.76	30	120	
In	115	1	He	662709	0.52	852389	77.75	30	120	
Tb	159	1	He	2156106	0.54	2425956	88.88	30	120	
Ho	165	1	He	2215055	0.75	2452680	90.31	30	120	
Bi	209	1	He	1392807	0.49	1810473	76.93	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-3-e@2
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:01:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.038	1.038	12.10	4312	0.02	10000	
B	11	45	2	NoGas	23.050	23.050	0.31	111002	0.02	300	
Na	23	45	1	He	608.376	608.376	0.12	1333335	0.05	500000	
Mg	24	45	1	He	3728.411	3728.411	1.13	4473975	0.08	500000	
Al	27	45	1	He	16143.579	16143.579	1.06	10072690	0.16	200000	
K	39	45	1	He	128.580	128.580	0.88	210229	0.06	500000	
Ca	44	45	1	He	589194.017	589194.017	0.06	29582101	1.99	500000	>LDR
Ti	47	45	1	He	42297.817	42297.817	0.36	12645198	0.33	2500	>LDR
V	51	45	1	He	3615.180	3615.180	0.26	27613392	0.01	10000	
Cr	52	45	1	He	1643.698	1643.698	0.29	15405674	0.01	10000	
Mn	55	45	1	He	4897.584	4897.584	0.44	32466380	0.02	10000	
Fe	56	45	1	He	188103.063	188103.063	0.61	1614133589	0.01	200000	
Co	59	103	1	He	38.327	38.327	0.18	311854	0.01	10000	
Ni	60	103	1	He	79.527	79.527	0.62	164605	0.05	10000	
Cu	63	103	1	He	110.977	110.977	0.42	614242	0.02	10000	
Zn	66	103	1	He	514.373	514.373	0.90	577775	0.09	10000	
As	75	103	1	He	12.937	12.937	0.49	9340	0.14	10000	
Se	78	103	1	He	3.221	3.221	4.33	212	1.52	10000	
Sr	88	103	1	He	22396.271	22396.271	0.49	94656476	0.02	10000	>LDR
Mo	95	103	1	He	17.288	17.288	1.18	39904	0.04	2000	
Ag	107	103	1	He	1.757	1.757	1.50	13879	0.01	300	
Cd	111	103	1	He	8.358	8.358	3.78	11663	0.07	4000	
Sn	118	115	1	He	61.539	61.539	0.67	182927	0.03	2000	
Sb	123	115	1	He	0.823	0.823	0.72	3295	0.02	300	
Ba	137	115	1	He	58.361	58.361	0.60	72463	0.08	10000	
W	182	165	1	He	31.425	31.425	2.17	316210	0.01	2500	
Tl	205	209	1	He	0.217	0.217	12.13	4593	0.00	5000	
Pb	208	209	1	He	92.440	92.440	0.38	2395275	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1328417	1.81	1803797	73.65	30	120	
Sc	45	1	He	790841	0.56	574766	137.59	30	120	ISTD Failed
Sc	45	2	NoGas	5522134	0.49	4296857	128.52	30	120	ISTD Failed
Rh	103	1	He	1275006	0.20	1652712	77.15	30	120	
In	115	1	He	676450	0.38	852389	79.36	30	120	
Tb	159	1	He	2167521	0.40	2425956	89.35	30	120	
Ho	165	1	He	2244211	2.07	2452680	91.50	30	120	
Bi	209	1	He	1430094	0.39	1810473	78.99	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-4-e@2
Data File Name	056SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:05:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.061	1.061	6.28	4382	0.02	10000	
B	11	45	2	NoGas	18.105	18.105	1.85	89269	0.02	300	
Na	23	45	1	He	552.474	552.474	1.11	1203089	0.05	500000	
Mg	24	45	1	He	2965.555	2965.555	0.68	3523905	0.08	500000	
Al	27	45	1	He	16361.135	16361.135	1.19	10108054	0.16	200000	
K	39	45	1	He	118.827	118.827	1.25	199066	0.06	500000	
Ca	44	45	1	He	593233.491	593233.491	0.33	29491819	2.01	500000	>LDR
Ti	47	45	1	He	43738.924	43738.924	0.16	12947234	0.34	2500	>LDR
V	51	45	1	He	3751.568	3751.568	0.66	28373456	0.01	10000	
Cr	52	45	1	He	1700.950	1700.950	0.46	15785293	0.01	10000	
Mn	55	45	1	He	4960.891	4960.891	0.88	32561948	0.02	10000	
Fe	56	45	1	He	187070.285	187070.285	0.47	1589495439	0.01	200000	
Co	59	103	1	He	37.368	37.368	0.34	304254	0.01	10000	
Ni	60	103	1	He	81.597	81.597	0.10	169000	0.05	10000	
Cu	63	103	1	He	115.707	115.707	1.24	640735	0.02	10000	
Zn	66	103	1	He	519.798	519.798	1.03	584237	0.09	10000	
As	75	103	1	He	12.665	12.665	2.14	9152	0.14	10000	
Se	78	103	1	He	2.899	2.899	0.29	194	1.50	10000	
Sr	88	103	1	He	21678.249	21678.249	0.98	91681776	0.02	10000	>LDR
Mo	95	103	1	He	17.165	17.165	2.71	39650	0.04	2000	
Ag	107	103	1	He	2.062	2.062	1.02	16291	0.01	300	
Cd	111	103	1	He	9.284	9.284	4.90	12889	0.07	4000	
Sn	118	115	1	He	63.086	63.086	0.61	187844	0.03	2000	
Sb	123	115	1	He	0.742	0.742	5.39	3047	0.02	300	
Ba	137	115	1	He	54.850	54.850	1.18	68224	0.08	10000	
W	182	165	1	He	35.765	35.765	2.45	356361	0.01	2500	
Tl	205	209	1	He	0.140	0.140	3.71	3071	0.00	5000	
Pb	208	209	1	He	95.148	95.148	0.17	2471041	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1319121	1.53	1803797	73.13	30	120	
Sc	45	1	He	783058	0.38	574766	136.24	30	120	ISTD Failed
Sc	45	2	NoGas	5551579	0.87	4296857	129.20	30	120	ISTD Failed
Rh	103	1	He	1275849	0.69	1652712	77.20	30	120	
In	115	1	He	677661	0.39	852389	79.50	30	120	
Tb	159	1	He	2168879	1.91	2425956	89.40	30	120	
Ho	165	1	He	2224127	1.22	2452680	90.68	30	120	
Bi	209	1	He	1433345	0.36	1810473	79.17	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-5-e@2
Data File Name	057SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:09:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.496	2.496	2.08	11823	0.02	10000	
B	11	45	2	NoGas	51.822	51.822	1.04	179744	0.03	300	
Na	23	45	1	He	1278.848	1278.848	1.65	1818041	0.07	500000	
Mg	24	45	1	He	9880.426	9880.426	1.24	7831616	0.13	500000	
Al	27	45	1	He	42099.926	42099.926	1.23	17353930	0.24	200000	
K	39	45	1	He	2788.811	2788.811	2.98	1794295	0.16	500000	
Ca	44	45	1	He	65043.380	65043.380	1.00	2158312	3.01	500000	
Ti	47	45	1	He	1127.178	1127.178	0.54	222658	0.51	2500	
V	51	45	1	He	187.074	187.074	0.43	944337	0.02	10000	
Cr	52	45	1	He	220.925	220.925	0.29	1370526	0.02	10000	
Mn	55	45	1	He	2054.405	2054.405	1.58	8996922	0.02	10000	
Fe	56	45	1	He	206518.247	206518.247	0.68	1170968167	0.02	200000	>LDR
Co	59	103	1	He	28.361	28.361	2.50	263739	0.01	10000	
Ni	60	103	1	He	98.413	98.413	2.95	232745	0.04	10000	
Cu	63	103	1	He	429.891	429.891	3.56	2712385	0.02	10000	
Zn	66	103	1	He	1580.583	1580.583	2.22	2027761	0.08	10000	
As	75	103	1	He	43.481	43.481	2.70	35464	0.12	10000	
Se	78	103	1	He	3.715	3.715	3.70	276	1.35	10000	
Sr	88	103	1	He	1400.276	1400.276	3.28	6762298	0.02	10000	
Mo	95	103	1	He	12.952	12.952	1.01	34344	0.04	2000	
Ag	107	103	1	He	3.018	3.018	2.51	27229	0.01	300	
Cd	111	103	1	He	6.655	6.655	3.64	10769	0.06	4000	
Sn	118	115	1	He	451.445	451.445	0.44	1450677	0.03	2000	
Sb	123	115	1	He	9.941	9.941	1.24	34626	0.03	300	
Ba	137	115	1	He	543.696	543.696	0.28	732071	0.07	10000	
W	182	165	1	He	5.430	5.430	0.74	61744	0.01	2500	
Tl	205	209	1	He	0.431	0.431	5.74	10261	0.00	5000	
Pb	208	209	1	He	1470.645	1470.645	3.40	44442037	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1513009	1.80	1803797	83.88	30	120	
Sc	45	1	He	522526	1.55	574766	90.91	30	120	
Sc	45	2	NoGas	4132783	1.06	4296857	96.18	30	120	
Rh	103	1	He	1458035	3.80	1652712	88.22	30	120	
In	115	1	He	733675	1.19	852389	86.07	30	120	
Tb	159	1	He	2333748	3.44	2425956	96.20	30	120	
Ho	165	1	He	2444335	2.82	2452680	99.66	30	120	
Bi	209	1	He	1669802	4.03	1810473	92.23	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-6-e@2
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:12:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.809	0.809	3.66	3752	0.02	10000	
B	11	45	2	NoGas	15.590	15.590	0.71	55424	0.03	300	
Na	23	45	1	He	1071.210	1071.210	1.74	1514699	0.07	500000	
Mg	24	45	1	He	4079.386	4079.386	0.03	3206373	0.13	500000	
Al	27	45	1	He	22800.070	22800.070	0.89	9317848	0.24	200000	
K	39	45	1	He	921.205	921.205	1.07	626673	0.15	500000	
Ca	44	45	1	He	72616.321	72616.321	1.46	2388617	3.04	500000	
Ti	47	45	1	He	565.467	565.467	0.80	110728	0.51	2500	
V	51	45	1	He	114.856	114.856	0.25	574857	0.02	10000	
Cr	52	45	1	He	90.052	90.052	0.24	555399	0.02	10000	
Mn	55	45	1	He	325.499	325.499	1.23	1413438	0.02	10000	
Fe	56	45	1	He	34652.209	34652.209	1.43	194769543	0.02	200000	
Co	59	103	1	He	3.751	3.751	1.59	35082	0.01	10000	
Ni	60	103	1	He	18.566	18.566	0.93	44185	0.04	10000	
Cu	63	103	1	He	284.334	284.334	2.33	1803255	0.02	10000	
Zn	66	103	1	He	185.681	185.681	2.32	239920	0.08	10000	
As	75	103	1	He	9.837	9.837	0.67	8196	0.12	10000	
Se	78	103	1	He	2.726	2.726	5.33	210	1.30	10000	
Sr	88	103	1	He	1582.434	1582.434	0.75	7678989	0.02	10000	
Mo	95	103	1	He	2.429	2.429	0.28	6967	0.03	2000	
Ag	107	103	1	He	1.341	1.341	2.29	12168	0.01	300	
Cd	111	103	1	He	0.866	0.866	7.71	2063	0.04	4000	
Sn	118	115	1	He	66.929	66.929	1.90	219903	0.03	2000	
Sb	123	115	1	He	0.861	0.861	4.88	3776	0.02	300	
Ba	137	115	1	He	122.979	122.979	0.83	168832	0.07	10000	
W	182	165	1	He	0.718	0.718	4.65	10230	0.01	2500	
Tl	205	209	1	He	0.246	0.246	2.05	6195	0.00	5000	
Pb	208	209	1	He	163.565	163.565	0.88	5091665	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1480539	1.03	1803797	82.08	30	120	
Sc	45	1	He	518002	0.40	574766	90.12	30	120	
Sc	45	2	NoGas	3948750	1.08	4296857	91.90	30	120	
Rh	103	1	He	1463962	1.11	1652712	88.58	30	120	
In	115	1	He	748015	0.98	852389	87.76	30	120	
Tb	159	1	He	2349214	1.11	2425956	96.84	30	120	
Ho	165	1	He	2386279	1.61	2452680	97.29	30	120	
Bi	209	1	He	1718339	0.76	1810473	94.91	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111357-a-2-j@50
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:16:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.077	0.077	25.60	389	0.02	10000	
B	11	45	2	NoGas	2.303	2.303	3.14	13528	0.02	300	
Na	23	45	1	He	75.711	75.711	1.89	145519	0.05	500000	
Mg	24	45	1	He	198.795	198.795	0.50	169139	0.12	500000	
Al	27	45	1	He	1210.733	1210.733	0.99	533587	0.23	200000	
K	39	45	1	He	13.634	13.634	10.16	71932	0.02	500000	
Ca	44	45	1	He	56498.808	56498.808	1.07	2001673	2.82	500000	
Ti	47	45	1	He	3017.129	3017.129	0.28	636299	0.47	2500	>LDR
V	51	45	1	He	277.560	277.560	0.79	1495772	0.02	10000	
Cr	52	45	1	He	120.440	120.440	0.79	799019	0.02	10000	
Mn	55	45	1	He	409.573	409.573	0.92	1915505	0.02	10000	
Fe	56	45	1	He	14723.828	14723.828	0.45	89138639	0.02	200000	
Co	59	103	1	He	1.670	1.670	1.66	17835	0.01	10000	
Ni	60	103	1	He	3.556	3.556	3.23	9725	0.04	10000	
Cu	63	103	1	He	5.067	5.067	1.48	39105	0.01	10000	
Zn	66	103	1	He	25.263	25.263	1.05	37950	0.07	10000	
As	75	103	1	He	0.516	0.516	6.35	679	0.08	10000	
Se	78	103	1	He	0.231	0.231	20.47	48	0.48	10000	
Sr	88	103	1	He	980.772	980.772	1.60	5424899	0.02	10000	
Mo	95	103	1	He	0.485	0.485	10.77	2148	0.02	2000	
Ag	107	103	1	He	0.019	0.019	15.20	228	0.01	300	
Cd	111	103	1	He	0.121	0.121	28.93	1066	0.01	4000	
Sn	118	115	1	He	3.162	3.162	4.24	12279	0.03	2000	
Sb	123	115	1	He	-0.036	-0.036	-71.22	733	0.00	300	
Ba	137	115	1	He	2.670	2.670	3.16	4063	0.07	10000	
W	182	165	1	He	1.340	1.340	2.65	17733	0.01	2500	
Tl	205	209	1	He	0.010	0.010	15.91	666	0.00	5000	
Pb	208	209	1	He	4.157	4.157	1.66	142098	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1588343	2.70	1803797	88.06	30	120	
Sc	45	1	He	557889	0.70	574766	97.06	30	120	
Sc	45	2	NoGas	4184894	0.70	4296857	97.39	30	120	
Rh	103	1	He	1668618	0.63	1652712	100.96	30	120	
In	115	1	He	826344	0.37	852389	96.94	30	120	
Tb	159	1	He	2495076	2.04	2425956	102.85	30	120	
Ho	165	1	He	2512189	1.23	2452680	102.43	30	120	
Bi	209	1	He	1875236	1.60	1810473	103.58	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111357-a-2-j@10
Data File Name	060SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:20:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1078.227	1078.227	2.90	4955215	0.02	10000	
B	11	45	2	NoGas	108.133	108.133	1.65	388261	0.03	300	
Na	23	45	1	He	9721.912	9721.912	0.89	14911008	0.07	500000	
Mg	24	45	1	He	10243.012	10243.012	0.59	8888556	0.12	500000	
Al	27	45	1	He	13770.843	13770.843	1.10	6214381	0.22	200000	
K	39	45	1	He	9227.919	9227.919	1.18	6350047	0.15	500000	
Ca	44	45	1	He	247439.013	247439.013	0.58	8985583	2.75	500000	
Ti	47	45	1	He	13772.160	13772.160	0.80	2977818	0.46	2500	>LDR
V	51	45	1	He	2123.566	2123.566	0.93	11731703	0.02	10000	
Cr	52	45	1	He	1477.805	1477.805	0.56	10017762	0.01	10000	
Mn	55	45	1	He	2607.099	2607.099	0.65	12499715	0.02	10000	
Fe	56	45	1	He	72313.060	72313.060	0.30	448812489	0.02	200000	
Co	59	103	1	He	1029.677	1029.677	1.02	9289992	0.01	10000	
Ni	60	103	1	He	1075.458	1075.458	0.61	2467517	0.04	10000	
Cu	63	103	1	He	1048.872	1048.872	0.40	6419817	0.02	10000	
Zn	66	103	1	He	1083.498	1083.498	0.96	1348924	0.08	10000	
As	75	103	1	He	997.971	997.971	0.25	786175	0.13	10000	
Se	78	103	1	He	972.230	972.230	0.37	63418	1.53	10000	
Sr	88	103	1	He	6122.770	6122.770	1.32	28695468	0.02	10000	
Mo	95	103	1	He	115.412	115.412	1.69	292033	0.04	2000	
Ag	107	103	1	He	104.457	104.457	0.36	913407	0.01	300	
Cd	111	103	1	He	1020.338	1020.338	0.18	1490903	0.07	4000	
Sn	118	115	1	He	1144.157	1144.157	1.21	3659081	0.03	2000	
Sb	123	115	1	He	106.296	106.296	0.33	361088	0.03	300	
Ba	137	115	1	He	1064.023	1064.023	0.65	1426238	0.07	10000	
W	182	165	1	He	107.448	107.448	2.38	1151378	0.01	2500	
Tl	205	209	1	He	261.602	261.602	4.94	5801672	0.00	5000	
Pb	208	209	1	He	1088.903	1088.903	3.96	31785142	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1468633	1.97	1803797	81.42	30	120	
Sc	45	1	He	571973	0.55	574766	99.51	30	120	
Sc	45	2	NoGas	4349225	1.08	4296857	101.22	30	120	
Rh	103	1	He	1413921	0.69	1652712	85.55	30	120	
In	115	1	He	730369	0.51	852389	85.68	30	120	
Tb	159	1	He	2341259	0.24	2425956	96.51	30	120	
Ho	165	1	He	2403484	2.82	2452680	97.99	30	120	
Bi	209	1	He	1613242	4.24	1810473	89.11	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-k ms@10
Data File Name	061SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:24:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	104.762	104.762	2.20	474513	0.02	10000	
B	11	45	2	NoGas	15.711	15.711	2.40	60637	0.03	300	
Na	23	45	1	He	1233.598	1233.598	0.44	1933769	0.06	500000	
Mg	24	45	1	He	1764.203	1764.203	0.74	1541789	0.11	500000	
Al	27	45	1	He	5930.195	5930.195	1.57	2694292	0.22	200000	
K	39	45	1	He	912.361	912.361	0.46	690477	0.13	500000	
Ca	44	45	1	He	245560.682	245560.682	0.81	8976326	2.74	500000	
Ti	47	45	1	He	13178.057	13178.057	1.18	2868189	0.46	2500	>LDR
V	51	45	1	He	1210.097	1210.097	0.41	6729337	0.02	10000	
Cr	52	45	1	He	596.540	596.540	0.85	4072463	0.01	10000	
Mn	55	45	1	He	1677.565	1677.565	0.28	8096320	0.02	10000	
Fe	56	45	1	He	61320.103	61320.103	0.13	383095034	0.02	200000	
Co	59	103	1	He	106.671	106.671	0.29	966436	0.01	10000	
Ni	60	103	1	He	116.481	116.481	0.47	268443	0.04	10000	
Cu	63	103	1	He	122.836	122.836	0.54	756869	0.02	10000	
Zn	66	103	1	He	207.896	207.896	0.89	260478	0.08	10000	
As	75	103	1	He	96.970	96.970	0.90	76863	0.13	10000	
Se	78	103	1	He	94.533	94.533	2.32	6215	1.52	10000	
Sr	88	103	1	He	5180.024	5180.024	0.95	24379367	0.02	10000	
Mo	95	103	1	He	15.445	15.445	1.31	39767	0.04	2000	
Ag	107	103	1	He	10.412	10.412	0.27	91452	0.01	300	
Cd	111	103	1	He	102.650	102.650	0.43	151275	0.07	4000	
Sn	118	115	1	He	119.874	119.874	0.98	394981	0.03	2000	
Sb	123	115	1	He	9.472	9.472	2.70	33816	0.03	300	
Ba	137	115	1	He	112.457	112.457	1.01	155050	0.07	10000	
W	182	165	1	He	14.651	14.651	1.94	158110	0.01	2500	
Tl	205	209	1	He	23.991	23.991	4.46	556106	0.00	5000	
Pb	208	209	1	He	121.127	121.127	4.46	3692933	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1447338	2.12	1803797	80.24	30	120	
Sc	45	1	He	575750	0.33	574766	100.17	30	120	
Sc	45	2	NoGas	4290755	1.08	4296857	99.86	30	120	
Rh	103	1	He	1419824	0.64	1652712	85.91	30	120	
In	115	1	He	751191	0.42	852389	88.13	30	120	
Tb	159	1	He	2329869	0.33	2425956	96.04	30	120	
Ho	165	1	He	2385111	0.41	2452680	97.25	30	120	
Bi	209	1	He	1684774	4.03	1810473	93.06	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-2-l msd@10
Data File Name	062SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:27:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	105.068	105.068	1.01	474359	0.02	10000	
B	11	45	2	NoGas	15.578	15.578	0.81	59006	0.03	300	
Na	23	45	1	He	1243.279	1243.279	2.28	1896018	0.07	500000	
Mg	24	45	1	He	1777.311	1777.311	1.36	1511304	0.12	500000	
Al	27	45	1	He	5802.675	5802.675	1.68	2565587	0.23	200000	
K	39	45	1	He	943.363	943.363	0.60	692558	0.14	500000	
Ca	44	45	1	He	236546.799	236546.799	0.21	8413943	2.81	500000	
Ti	47	45	1	He	12878.474	12878.474	1.53	2727296	0.47	2500	>LDR
V	51	45	1	He	1183.004	1183.004	1.28	6401351	0.02	10000	
Cr	52	45	1	He	583.788	583.788	0.69	3878243	0.02	10000	
Mn	55	45	1	He	1610.475	1610.475	0.73	7563139	0.02	10000	
Fe	56	45	1	He	59091.184	59091.184	0.70	359221212	0.02	200000	
Co	59	103	1	He	106.587	106.587	0.41	954216	0.01	10000	
Ni	60	103	1	He	116.205	116.205	0.66	264631	0.04	10000	
Cu	63	103	1	He	122.371	122.371	0.40	745059	0.02	10000	
Zn	66	103	1	He	203.617	203.617	1.37	252098	0.08	10000	
As	75	103	1	He	97.413	97.413	0.75	76294	0.13	10000	
Se	78	103	1	He	94.049	94.049	2.32	6110	1.54	10000	
Sr	88	103	1	He	4908.508	4908.508	1.10	22827527	0.02	10000	
Mo	95	103	1	He	14.323	14.323	1.64	36480	0.04	2000	
Ag	107	103	1	He	10.598	10.598	0.16	91980	0.01	300	
Cd	111	103	1	He	103.283	103.283	0.36	150399	0.07	4000	
Sn	118	115	1	He	118.462	118.462	0.63	384530	0.03	2000	
Sb	123	115	1	He	9.449	9.449	1.15	33230	0.03	300	
Ba	137	115	1	He	113.243	113.243	1.41	153794	0.07	10000	
W	182	165	1	He	14.048	14.048	2.62	152314	0.01	2500	
Tl	205	209	1	He	24.647	24.647	2.91	556003	0.00	5000	
Pb	208	209	1	He	123.647	123.647	2.42	3669153	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1442252	1.73	1803797	79.96	30	120	
Sc	45	1	He	560253	0.79	574766	97.47	30	120	
Sc	45	2	NoGas	4206816	0.33	4296857	97.90	30	120	
Rh	103	1	He	1402979	0.60	1652712	84.89	30	120	
In	115	1	He	740003	0.85	852389	86.82	30	120	
Tb	159	1	He	2311569	0.78	2425956	95.28	30	120	
Ho	165	1	He	2394389	0.98	2452680	97.62	30	120	
Bi	209	1	He	1638410	2.19	1810473	90.50	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-3-e@10
Data File Name	063SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:31:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.288	0.288	13.10	1326	0.02	10000	
B	11	45	2	NoGas	6.873	6.873	4.50	29313	0.02	300	
Na	23	45	1	He	184.760	184.760	1.42	311410	0.06	500000	
Mg	24	45	1	He	1089.618	1089.618	1.23	932346	0.12	500000	
Al	27	45	1	He	4976.179	4976.179	0.70	2212955	0.22	200000	
K	39	45	1	He	40.764	40.764	3.71	90867	0.04	500000	
Ca	44	45	1	He	176218.883	176218.883	0.88	6304834	2.79	500000	
Ti	47	45	1	He	12757.285	12757.285	0.67	2717575	0.47	2500	>LDR
V	51	45	1	He	1080.627	1080.627	1.20	5881752	0.02	10000	
Cr	52	45	1	He	495.703	495.703	0.15	3312573	0.01	10000	
Mn	55	45	1	He	1474.410	1474.410	1.51	6964666	0.02	10000	
Fe	56	45	1	He	57433.001	57433.001	0.51	351186919	0.02	200000	
Co	59	103	1	He	7.471	7.471	1.20	67809	0.01	10000	
Ni	60	103	1	He	15.741	15.741	3.00	36389	0.04	10000	
Cu	63	103	1	He	21.996	21.996	0.45	137444	0.02	10000	
Zn	66	103	1	He	106.258	106.258	0.39	133642	0.08	10000	
As	75	103	1	He	2.451	2.451	2.72	2110	0.12	10000	
Se	78	103	1	He	0.781	0.781	7.00	77	1.02	10000	
Sr	88	103	1	He	4398.098	4398.098	1.00	20723189	0.02	10000	
Mo	95	103	1	He	3.320	3.320	0.87	9027	0.04	2000	
Ag	107	103	1	He	0.249	0.249	5.71	2220	0.01	300	
Cd	111	103	1	He	1.172	1.172	12.31	2451	0.05	4000	
Sn	118	115	1	He	12.722	12.722	1.01	42762	0.03	2000	
Sb	123	115	1	He	0.132	0.132	14.65	1257	0.01	300	
Ba	137	115	1	He	11.503	11.503	0.71	15929	0.07	10000	
W	182	165	1	He	6.284	6.284	0.53	69565	0.01	2500	
Tl	205	209	1	He	0.071	0.071	14.76	2036	0.00	5000	
Pb	208	209	1	He	17.374	17.374	1.60	537570	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1471531	2.15	1803797	81.58	30	120	
Sc	45	1	He	563512	0.33	574766	98.04	30	120	
Sc	45	2	NoGas	4217895	1.11	4296857	98.16	30	120	
Rh	103	1	He	1421431	0.13	1652712	86.01	30	120	
In	115	1	He	754012	0.82	852389	88.46	30	120	
Tb	159	1	He	2327851	0.51	2425956	95.96	30	120	
Ho	165	1	He	2393732	0.92	2452680	97.60	30	120	
Bi	209	1	He	1705598	1.23	1810473	94.21	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	064_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:35:21-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.380	1.882	223424	2.29	50	90.8	89.5	110.5	
B	11	45	2	NoGas	49.476	1.860	168522	2.11	50	99.0	89.5	110.5	
Na	23	45	1	He	27469.003	0.924	38235593	0.68	25000	109.9	89.5	110.5	
Mg	24	45	1	He	27038.595	0.712	21323701	0.44	25000	108.2	89.5	110.5	
Al	27	45	1	He	250.511	0.088	103421	0.87	250	100.2	89.5	110.5	
K	39	45	1	He	26862.484	0.922	16689519	0.77	25000	107.4	89.5	110.5	
Ca	44	45	1	He	25610.221	0.303	845760	0.68	25000	102.4	89.5	110.5	
Ti	47	45	1	He	74.415	3.486	14623	2.75	50	148.8	89.5	110.5	CCV Failed
V	51	45	1	He	54.618	1.192	274465	0.65	50	109.2	89.5	110.5	
Cr	52	45	1	He	54.317	1.411	337269	0.62	50	108.6	89.5	110.5	
Mn	55	45	1	He	262.650	0.893	1144673	0.58	250	105.1	89.5	110.5	
Fe	56	45	1	He	13595.127	1.380	76692739	1.00	12500	108.8	89.5	110.5	
Co	59	103	1	He	49.034	2.521	481359	0.25	50	98.1	89.5	110.5	
Ni	60	103	1	He	48.840	2.490	122001	0.17	50	97.7	89.5	110.5	
Cu	63	103	1	He	49.300	2.405	330524	0.83	50	98.6	89.5	110.5	
Zn	66	103	1	He	49.570	2.046	67900	1.11	50	99.1	89.5	110.5	
As	75	103	1	He	47.726	2.252	41082	0.45	50	95.5	89.5	110.5	
Se	78	103	1	He	46.294	2.752	3312	0.55	50	92.6	89.5	110.5	
Sr	88	103	1	He	48.517	2.023	247565	1.17	50	97.0	89.5	110.5	
Mo	95	103	1	He	51.619	3.111	142467	1.23	50	103.2	89.5	110.5	
Ag	107	103	1	He	51.383	2.674	488854	0.34	50	102.8	89.5	110.5	
Cd	111	103	1	He	51.822	2.165	83140	0.51	50	103.6	89.5	110.5	
Sn	118	115	1	He	51.384	1.849	178320	1.42	50	102.8	89.5	110.5	
Sb	123	115	1	He	53.366	1.399	196291	0.72	50	106.7	89.5	110.5	
Ba	137	115	1	He	51.784	1.346	75012	1.01	50	103.6	89.5	110.5	
W	182	165	1	He	51.005	1.622	552934	1.32	50	102.0	89.5	110.5	
Tl	205	209	1	He	48.308	0.953	1177216	0.47	50	96.6	89.5	110.5	
Pb	208	209	1	He	49.515	1.348	1588083	0.54	50	99.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1572664	0.47	1803797	87.19	30	120	
Sc	45	1	He	519876	0.78	574766	90.45	30	120	
Sc	45	2	NoGas	4052086	0.31	4296857	94.30	30	120	
Rh	103	1	He	1538941	2.40	1652712	93.12	30	120	
In	115	1	He	789202	0.68	852389	92.59	30	120	
Tb	159	1	He	2383980	0.45	2425956	98.27	30	120	
Ho	165	1	He	2424597	1.37	2452680	98.86	30	120	
Bi	209	1	He	1769783	0.83	1810473	97.75	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	065_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:39:11-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.062	20.9	315	18.1	1	
B	11	45	2	NoGas	1.514	6.2	10792	2.7	20	
Na	23	45	1	He	18.395	9.1	57788	2.7	400	
Mg	24	45	1	He	0.918	61.2	1611	26.9	1000	
Al	27	45	1	He	6.933	5.9	3640	3.6	50	
K	39	45	1	He	7.455	37.7	65363	1.2	1000	
Ca	44	45	1	He	12.341	16.0	960	8.4	1000	
Ti	47	45	1	He	2.650	6.2	540	7.5	20	
V	51	45	1	He	0.104	55.2	787	38.7	2	
Cr	52	45	1	He	0.004	463.8	2839	3.5	2	
Mn	55	45	1	He	0.129	19.2	740	14.6	2	
Fe	56	45	1	He	11.112	16.5	70457	14.0	50	
Co	59	103	1	He	0.004	12.6	96	7.3	1	
Ni	60	103	1	He	0.002	563.6	102	30.3	2	
Cu	63	103	1	He	-0.106	-9.9	1745	2.3	2	
Zn	66	103	1	He	0.433	12.9	1490	5.1	20	
As	75	103	1	He	0.165	13.8	352	5.9	2	
Se	78	103	1	He	0.213	28.0	46	11.9	2	
Sr	88	103	1	He	0.208	12.8	1292	9.9	10	
Mo	95	103	1	He	0.638	12.0	2602	8.7	2	
Ag	107	103	1	He	0.002	62.8	58	29.0	0.2	
Cd	111	103	1	He	0.042	45.1	930	2.9	0.2	
Sn	118	115	1	He	0.408	9.1	2337	6.0	10	
Sb	123	115	1	He	0.227	15.8	1758	8.0	1	
Ba	137	115	1	He	0.033	34.2	63	27.3	5	
W	182	165	1	He	0.864	20.6	12465	15.6	10	
Tl	205	209	1	He	0.048	17.2	1620	12.4	0.5	
Pb	208	209	1	He	0.026	8.1	1765	3.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1614146	2.43	1803797	89.49	30	120	
Sc	45	1	He	537742	1.52	574766	93.56	30	120	
Sc	45	2	NoGas	4165235	1.08	4296857	96.94	30	120	
Rh	103	1	He	1667236	2.08	1652712	100.88	30	120	
In	115	1	He	833613	0.28	852389	97.80	30	120	
Tb	159	1	He	2468774	1.64	2425956	101.76	30	120	
Ho	165	1	He	2524028	1.50	2452680	102.91	30	120	
Bi	209	1	He	1848137	0.48	1810473	102.08	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-4-e@10
Data File Name	066SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:43:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.214	0.214	13.39	1011	0.02	10000	
B	11	45	2	NoGas	5.461	5.461	4.02	24825	0.02	300	
Na	23	45	1	He	164.960	164.960	1.04	291337	0.06	500000	
Mg	24	45	1	He	855.069	855.069	0.93	757288	0.11	500000	
Al	27	45	1	He	5070.762	5070.762	0.17	2333214	0.22	200000	
K	39	45	1	He	37.766	37.766	2.69	91943	0.04	500000	
Ca	44	45	1	He	176045.945	176045.945	1.42	6516160	2.70	500000	
Ti	47	45	1	He	13170.887	13170.887	1.85	2902496	0.45	2500	>LDR
V	51	45	1	He	1129.456	1129.456	0.46	6360448	0.02	10000	
Cr	52	45	1	He	511.423	511.423	0.81	3535810	0.01	10000	
Mn	55	45	1	He	1482.308	1482.308	0.65	7244304	0.02	10000	
Fe	56	45	1	He	55620.727	55620.727	1.08	351867995	0.02	200000	
Co	59	103	1	He	7.467	7.467	0.64	68243	0.01	10000	
Ni	60	103	1	He	16.417	16.417	1.34	38207	0.04	10000	
Cu	63	103	1	He	23.378	23.378	2.04	146951	0.02	10000	
Zn	66	103	1	He	110.425	110.425	1.32	139810	0.08	10000	
As	75	103	1	He	2.502	2.502	5.04	2165	0.12	10000	
Se	78	103	1	He	0.726	0.726	15.18	74	0.99	10000	
Sr	88	103	1	He	4385.454	4385.454	1.10	20805933	0.02	10000	
Mo	95	103	1	He	3.176	3.176	1.57	8722	0.04	2000	
Ag	107	103	1	He	0.184	0.184	14.05	1658	0.01	300	
Cd	111	103	1	He	0.974	0.974	11.15	2175	0.04	4000	
Sn	118	115	1	He	12.634	12.634	3.03	43334	0.03	2000	
Sb	123	115	1	He	0.146	0.146	36.77	1331	0.01	300	
Ba	137	115	1	He	10.966	10.966	0.36	15493	0.07	10000	
W	182	165	1	He	6.616	6.616	2.73	73560	0.01	2500	
Tl	205	209	1	He	0.043	0.043	6.08	1373	0.00	5000	
Pb	208	209	1	He	18.420	18.420	2.96	562035	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1507396	1.94	1803797	83.57	30	120	
Sc	45	1	He	583056	1.33	574766	101.44	30	120	
Sc	45	2	NoGas	4279839	0.48	4296857	99.60	30	120	
Rh	103	1	He	1431229	0.57	1652712	86.60	30	120	
In	115	1	He	769238	0.79	852389	90.24	30	120	
Tb	159	1	He	2342516	0.81	2425956	96.56	30	120	
Ho	165	1	He	2409342	1.69	2452680	98.23	30	120	
Bi	209	1	He	1682870	2.95	1810473	92.95	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-5-e@10
Data File Name	067SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:46:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.522	0.522	8.05	2523	0.02	10000	
B	11	45	2	NoGas	10.519	10.519	2.02	38994	0.03	300	
Na	23	45	1	He	267.966	267.966	1.26	402914	0.07	500000	
Mg	24	45	1	He	2117.859	2117.859	0.72	1670764	0.13	500000	
Al	27	45	1	He	8994.933	8994.933	0.44	3689056	0.24	200000	
K	39	45	1	He	564.412	564.412	2.03	407977	0.14	500000	
Ca	44	45	1	He	13347.079	13347.079	0.94	440924	3.03	500000	
Ti	47	45	1	He	239.111	239.111	0.57	46982	0.51	2500	
V	51	45	1	He	38.684	38.684	1.73	194414	0.02	10000	
Cr	52	45	1	He	45.077	45.077	1.44	280299	0.02	10000	
Mn	55	45	1	He	438.662	438.662	0.24	1911379	0.02	10000	
Fe	56	45	1	He	43605.009	43605.009	1.05	245926968	0.02	200000	
Co	59	103	1	He	5.450	5.450	1.19	54829	0.01	10000	
Ni	60	103	1	He	18.965	18.965	2.23	48559	0.04	10000	
Cu	63	103	1	He	80.404	80.404	0.81	550379	0.01	10000	
Zn	66	103	1	He	306.818	306.818	1.15	426048	0.07	10000	
As	75	103	1	He	8.543	8.543	1.39	7682	0.11	10000	
Se	78	103	1	He	0.731	0.731	15.20	81	0.90	10000	
Sr	88	103	1	He	271.712	271.712	3.78	1418683	0.02	10000	
Mo	95	103	1	He	2.267	2.267	1.64	7042	0.03	2000	
Ag	107	103	1	He	0.610	0.610	2.28	5972	0.01	300	
Cd	111	103	1	He	1.484	1.484	1.71	3225	0.05	4000	
Sn	118	115	1	He	89.628	89.628	1.96	307650	0.03	2000	
Sb	123	115	1	He	1.934	1.934	1.07	7843	0.02	300	
Ba	137	115	1	He	108.492	108.492	1.46	155716	0.07	10000	
W	182	165	1	He	1.148	1.148	4.38	15200	0.01	2500	
Tl	205	209	1	He	0.089	0.089	3.19	2651	0.00	5000	
Pb	208	209	1	He	289.970	289.970	1.60	9642706	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1542377	1.35	1803797	85.51	30	120	
Sc	45	1	He	519786	1.14	574766	90.43	30	120	
Sc	45	2	NoGas	3933334	0.73	4296857	91.54	30	120	
Rh	103	1	He	1575044	0.78	1652712	95.30	30	120	
In	115	1	He	782050	0.67	852389	91.75	30	120	
Tb	159	1	He	2373624	0.56	2425956	97.84	30	120	
Ho	165	1	He	2449846	0.48	2452680	99.88	30	120	
Bi	209	1	He	1835921	1.26	1810473	101.41	30	120	

Sample Report

Sample Table

Sample Name	680-111357-a-6-e@10
Data File Name	068SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:50:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.160	0.160	5.52	785	0.02	10000	
B	11	45	2	NoGas	3.395	3.395	9.31	16349	0.02	300	
Na	23	45	1	He	226.723	226.723	0.81	346032	0.07	500000	
Mg	24	45	1	He	835.677	835.677	0.36	660595	0.13	500000	
Al	27	45	1	He	4949.286	4949.286	1.66	2032651	0.24	200000	
K	39	45	1	He	201.104	201.104	1.48	183299	0.11	500000	
Ca	44	45	1	He	14508.277	14508.277	0.25	479882	3.02	500000	
Ti	47	45	1	He	119.664	119.664	2.10	23542	0.51	2500	
V	51	45	1	He	24.207	24.207	0.19	121915	0.02	10000	
Cr	52	45	1	He	18.654	18.654	1.44	117747	0.02	10000	
Mn	55	45	1	He	65.799	65.799	0.64	287200	0.02	10000	
Fe	56	45	1	He	7329.021	7329.021	1.69	41392151	0.02	200000	
Co	59	103	1	He	0.727	0.727	1.07	7427	0.01	10000	
Ni	60	103	1	He	3.562	3.562	1.10	9287	0.04	10000	
Cu	63	103	1	He	53.335	53.335	0.88	369534	0.01	10000	
Zn	66	103	1	He	38.146	38.146	0.57	54214	0.07	10000	
As	75	103	1	He	1.928	1.928	0.54	1898	0.10	10000	
Se	78	103	1	He	0.560	0.560	15.18	70	0.80	10000	
Sr	88	103	1	He	322.101	322.101	1.03	1698534	0.02	10000	
Mo	95	103	1	He	0.344	0.344	4.71	1646	0.02	2000	
Ag	107	103	1	He	0.260	0.260	4.05	2588	0.01	300	
Cd	111	103	1	He	0.213	0.213	22.29	1167	0.02	4000	
Sn	118	115	1	He	13.805	13.805	2.23	48953	0.03	2000	
Sb	123	115	1	He	0.092	0.092	18.64	1179	0.01	300	
Ba	137	115	1	He	24.648	24.648	0.72	36047	0.07	10000	
W	182	165	1	He	0.188	0.188	19.58	4775	0.00	2500	
Tl	205	209	1	He	0.054	0.054	8.05	1771	0.00	5000	
Pb	208	209	1	He	31.662	31.662	0.08	1050899	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1559225	0.58	1803797	86.44	30	120	
Sc	45	1	He	520447	0.58	574766	90.55	30	120	
Sc	45	2	NoGas	3968212	0.49	4296857	92.35	30	120	
Rh	103	1	He	1590792	1.14	1652712	96.25	30	120	
In	115	1	He	796606	0.30	852389	93.46	30	120	
Tb	159	1	He	2370330	1.78	2425956	97.71	30	120	
Ho	165	1	He	2472211	1.16	2452680	100.80	30	120	
Bi	209	1	He	1830814	0.53	1810473	101.12	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	069_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:54:26-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.161	3.075	227864	2.34	50	90.3	89.5	110.5	
B	11	45	2	NoGas	50.010	2.449	172876	2.38	50	100.0	89.5	110.5	
Na	23	45	1	He	26879.862	1.466	39185035	0.26	25000	107.5	89.5	110.5	
Mg	24	45	1	He	26668.971	1.430	22026499	0.15	25000	106.7	89.5	110.5	
Al	27	45	1	He	247.565	1.486	107043	0.78	250	99.0	89.5	110.5	
K	39	45	1	He	26342.897	1.278	17142103	0.71	25000	105.4	89.5	110.5	
Ca	44	45	1	He	25459.410	0.951	880554	0.61	25000	101.8	89.5	110.5	
Ti	47	45	1	He	59.636	2.122	12278	3.17	50	119.3	89.5	110.5	CCV Failed
V	51	45	1	He	54.063	0.885	284549	0.94	50	108.1	89.5	110.5	
Cr	52	45	1	He	53.440	1.381	347576	0.47	50	106.9	89.5	110.5	
Mn	55	45	1	He	259.518	1.471	1184496	0.17	250	103.8	89.5	110.5	
Fe	56	45	1	He	13371.996	0.938	79006244	0.75	12500	107.0	89.5	110.5	
Co	59	103	1	He	48.318	1.315	495582	0.58	50	96.6	89.5	110.5	
Ni	60	103	1	He	48.284	2.027	126012	1.07	50	96.6	89.5	110.5	
Cu	63	103	1	He	48.405	0.677	339125	1.30	50	96.8	89.5	110.5	
Zn	66	103	1	He	48.849	3.717	69896	1.89	50	97.7	89.5	110.5	
As	75	103	1	He	47.498	1.048	42719	1.35	50	95.0	89.5	110.5	
Se	78	103	1	He	46.767	1.873	3495	1.84	50	93.5	89.5	110.5	
Sr	88	103	1	He	47.574	1.850	253593	0.80	50	95.1	89.5	110.5	
Mo	95	103	1	He	51.077	2.200	147288	0.46	50	102.2	89.5	110.5	
Ag	107	103	1	He	50.305	1.134	500071	0.64	50	100.6	89.5	110.5	
Cd	111	103	1	He	50.468	1.525	84616	1.42	50	100.9	89.5	110.5	
Sn	118	115	1	He	51.572	1.065	183540	1.12	50	103.1	89.5	110.5	
Sb	123	115	1	He	53.090	0.479	200271	0.84	50	106.2	89.5	110.5	
Ba	137	115	1	He	52.501	0.596	77989	0.13	50	105.0	89.5	110.5	
W	182	165	1	He	49.285	1.286	552171	0.88	50	98.6	89.5	110.5	
Tl	205	209	1	He	48.663	1.184	1192118	0.14	50	97.3	89.5	110.5	
Pb	208	209	1	He	49.781	0.887	1605131	0.65	50	99.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1612029	0.82	1803797	89.37	30	120	
Sc	45	1	He	544513	1.50	574766	94.74	30	120	
Sc	45	2	NoGas	4114009	0.51	4296857	95.74	30	120	
Rh	103	1	He	1607510	1.76	1652712	97.26	30	120	
In	115	1	He	809313	0.68	852389	94.95	30	120	
Tb	159	1	He	2449654	1.34	2425956	100.98	30	120	
Ho	165	1	He	2505225	0.77	2452680	102.14	30	120	
Bi	209	1	He	1779235	1.28	1810473	98.27	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	070_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T14:58:17-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.037	27.7	189	25.6	1	
B	11	45	2	NoGas	1.258	3.5	9885	0.7	20	
Na	23	45	1	He	17.344	7.7	56788	2.8	400	
Mg	24	45	1	He	0.980	72.4	1678	34.0	1000	
Al	27	45	1	He	6.295	2.3	3400	1.3	50	
K	39	45	1	He	7.320	19.2	65868	1.2	1000	
Ca	44	45	1	He	5.875	46.2	744	12.1	1000	
Ti	47	45	1	He	0.975	6.3	201	6.9	20	
V	51	45	1	He	0.096	87.9	751	59.0	2	
Cr	52	45	1	He	0.018	174.4	2954	7.4	2	
Mn	55	45	1	He	0.089	26.0	562	18.2	2	
Fe	56	45	1	He	9.757	19.9	63142	17.5	50	
Co	59	103	1	He	0.006	81.9	117	43.2	1	
Ni	60	103	1	He	0.000	1016.9	99	12.8	2	
Cu	63	103	1	He	-0.112	-16.8	1716	7.2	2	
Zn	66	103	1	He	0.467	18.5	1556	7.6	20	
As	75	103	1	He	0.098	10.4	293	4.1	2	
Se	78	103	1	He	0.125	31.4	40	6.9	2	
Sr	88	103	1	He	0.094	9.1	671	7.9	10	
Mo	95	103	1	He	0.648	14.1	2659	10.7	2	
Ag	107	103	1	He	0.003	52.9	67	26.0	0.2	
Cd	111	103	1	He	0.034	34.6	925	2.7	0.2	
Sn	118	115	1	He	0.326	6.0	2045	3.0	10	
Sb	123	115	1	He	0.187	24.9	1608	11.4	1	
Ba	137	115	1	He	0.025	34.1	52	25.8	5	
W	182	165	1	He	0.784	16.0	11686	11.6	10	
Tl	205	209	1	He	0.036	16.1	1331	11.4	0.5	
Pb	208	209	1	He	0.018	17.1	1539	6.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1604701	1.56	1803797	88.96	30	120	
Sc	45	1	He	542486	0.68	574766	94.38	30	120	
Sc	45	2	NoGas	4148603	0.94	4296857	96.55	30	120	
Rh	103	1	He	1684049	0.80	1652712	101.90	30	120	
In	115	1	He	837292	0.46	852389	98.23	30	120	
Tb	159	1	He	2480584	0.91	2425956	102.25	30	120	
Ho	165	1	He	2551975	0.61	2452680	104.05	30	120	
Bi	209	1	He	1877441	0.39	1810473	103.70	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	071CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:02:09-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.918	0.918	6.951	4786	6.24	1	91.8	69.5	130.5	
B	11	2	NoGas	18.797	18.797	1.488	70106	1.02	20	94.0	69.5	130.5	
Na	23	1	He	1131.123	1131.123	1.981	1700259	1.68	1000	113.1	69.5	130.5	
Mg	24	1	He	1077.990	1077.990	1.026	902291	0.66	1000	107.8	69.5	130.5	
Al	27	1	He	50.727	50.727	2.079	22779	2.24	50	101.5	69.5	130.5	
K	39	1	He	1068.406	1068.406	0.572	763524	0.83	1000	106.8	69.5	130.5	
Ca	44	1	He	1037.578	1037.578	0.196	36862	0.58	1000	103.8	69.5	130.5	
Ti	47	1	He	11.757	11.757	4.311	2451	4.71	10	117.6	69.5	130.5	
V	51	1	He	5.434	5.434	2.481	29180	2.06	5	108.7	69.5	130.5	
Cr	52	1	He	3.141	3.141	1.295	23399	0.95	2	157.0	69.5	130.5	6020A CR1 Failed
Mn	55	1	He	5.512	5.512	0.831	25628	1.18	5	110.2	69.5	130.5	
Fe	56	1	He	116.170	116.170	0.829	700686	0.50	100	116.2	69.5	130.5	
Co	59	1	He	0.985	0.985	4.154	10643	5.32	1	98.5	69.5	130.5	
Ni	60	1	He	2.463	2.463	1.760	6829	1.86	2	123.1	69.5	130.5	
Cu	63	1	He	1.822	1.822	1.246	15820	1.04	2	91.1	69.5	130.5	
Zn	66	1	He	19.379	19.379	0.574	29592	1.69	20	96.9	69.5	130.5	
As	75	1	He	4.610	4.610	1.362	4526	0.54	5	92.2	69.5	130.5	
Se	78	1	He	4.673	4.673	1.557	393	2.78	5	93.5	69.5	130.5	
Sr	88	1	He	9.344	9.344	1.393	52319	0.66	10	93.4	69.5	130.5	
Mo	95	1	He	9.916	9.916	0.864	30545	1.85	10	99.2	69.5	130.5	
Ag	107	1	He	1.019	1.019	1.130	10651	0.80	1	101.9	69.5	130.5	
Cd	111	1	He	1.007	1.007	2.388	2619	3.40	1	100.7	69.5	130.5	
Sn	118	1	He	10.282	10.282	2.077	38845	2.38	10	102.8	69.5	130.5	
Sb	123	1	He	1.990	1.990	2.083	8683	2.28	2	99.5	69.5	130.5	
Ba	137	1	He	5.107	5.107	2.467	7923	2.70	5	102.1	69.5	130.5	
W	182	1	He	9.598	9.598	0.507	112931	0.79	10	96.0	69.5	130.5	
Tl	205	1	He	1.978	1.978	1.101	50993	0.86	2	98.9	69.5	130.5	
Pb	208	1	He	1.073	1.073	0.640	37037	0.88	1	107.3	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1665752	1.92	1803797	92.35	30	120	
Sc	45	1	He	551240	0.40	574766	95.91	30	120	
Sc	45	2	NoGas	4212441	0.82	4296857	98.04	30	120	
Rh	103	1	He	1684609	1.80	1652712	101.93	30	120	
In	115	1	He	843911	0.46	852389	99.01	30	120	
Tb	159	1	He	2491240	0.85	2425956	102.69	30	120	
Ho	165	1	He	2578089	0.96	2452680	105.11	30	120	
Bi	209	1	He	1858153	0.26	1810473	102.63	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-1-a@2
Data File Name	072SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:06:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.261	1.261	2.49	6201	0.02	10000	
B	11	45	2	NoGas	2.440	2.440	4.46	13769	0.02	300	
Na	23	45	1	He	296.912	296.912	0.49	462315	0.06	500000	
Mg	24	45	1	He	261.147	261.147	0.48	215677	0.12	500000	
Al	27	45	1	He	8540.584	8540.584	0.81	3653861	0.23	200000	
K	39	45	1	He	725.265	725.265	0.40	529442	0.14	500000	
Ca	44	45	1	He	333.308	333.308	1.52	12015	2.77	500000	
Ti	47	45	1	He	131.429	131.429	2.83	26937	0.49	2500	
V	51	45	1	He	46.210	46.210	1.07	242230	0.02	10000	
Cr	52	45	1	He	36.138	36.138	0.65	234997	0.02	10000	
Mn	55	45	1	He	82.210	82.210	0.42	373813	0.02	10000	
Fe	56	45	1	He	88661.842	88661.842	0.91	521635250	0.02	200000	
Co	59	103	1	He	7.081	7.081	2.27	69184	0.01	10000	
Ni	60	103	1	He	3.591	3.591	0.59	9007	0.04	10000	
Cu	63	103	1	He	105.602	105.602	1.79	701598	0.02	10000	
Zn	66	103	1	He	69.305	69.305	3.39	94082	0.07	10000	
As	75	103	1	He	8.702	8.702	2.81	7598	0.11	10000	
Se	78	103	1	He	2.101	2.101	9.23	176	1.20	10000	
Sr	88	103	1	He	5.947	5.947	4.63	30282	0.02	10000	
Mo	95	103	1	He	3.157	3.157	2.17	9273	0.03	2000	
Ag	107	103	1	He	0.029	0.029	12.40	300	0.01	300	
Cd	111	103	1	He	0.232	0.232	9.98	1154	0.02	4000	
Sn	118	115	1	He	16.893	16.893	4.46	57494	0.03	2000	
Sb	123	115	1	He	0.218	0.218	20.03	1585	0.01	300	
Ba	137	115	1	He	41.761	41.761	1.17	58799	0.07	10000	
W	182	165	1	He	0.506	0.506	11.61	8177	0.01	2500	
Tl	205	209	1	He	0.295	0.295	1.84	7701	0.00	5000	
Pb	208	209	1	He	24.021	24.021	2.22	783190	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1570437	2.65	1803797	87.06	30	120	
Sc	45	1	He	542213	0.81	574766	94.34	30	120	
Sc	45	2	NoGas	4117762	1.53	4296857	95.83	30	120	
Rh	103	1	He	1530656	2.60	1652712	92.61	30	120	
In	115	1	He	767078	0.92	852389	89.99	30	120	
Tb	159	1	He	2384003	1.43	2425956	98.27	30	120	
Ho	165	1	He	2445205	1.61	2452680	99.70	30	120	
Bi	209	1	He	1798413	1.63	1810473	99.33	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-2-a@2
Data File Name	073SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:09:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.555	1.555	11.10	7431	0.02	10000	
B	11	45	2	NoGas	4.957	4.957	7.10	22863	0.02	300	
Na	23	45	1	He	1222.094	1222.094	1.37	1956166	0.06	500000	
Mg	24	45	1	He	1081.704	1081.704	0.48	965574	0.11	500000	
Al	27	45	1	He	12729.164	12729.164	0.79	5904077	0.22	200000	
K	39	45	1	He	3141.426	3141.426	1.78	2265177	0.14	500000	
Ca	44	45	1	He	509.813	509.813	0.80	19614	2.60	500000	
Ti	47	45	1	He	237.965	237.965	0.70	52882	0.45	2500	
V	51	45	1	He	240.862	240.862	0.39	1367968	0.02	10000	
Cr	52	45	1	He	104.305	104.305	1.47	729481	0.01	10000	
Mn	55	45	1	He	54.592	54.592	1.57	269143	0.02	10000	
Fe	56	45	1	He	91820.152	91820.152	1.01	585676297	0.02	200000	
Co	59	103	1	He	2.631	2.631	3.21	26129	0.01	10000	
Ni	60	103	1	He	4.507	4.507	5.29	11448	0.04	10000	
Cu	63	103	1	He	33.041	33.041	1.57	224546	0.01	10000	
Zn	66	103	1	He	24.913	24.913	1.20	34871	0.07	10000	
As	75	103	1	He	3.026	3.026	2.54	2804	0.11	10000	
Se	78	103	1	He	5.476	5.476	5.56	420	1.30	10000	
Sr	88	103	1	He	12.981	12.981	1.62	67006	0.02	10000	
Mo	95	103	1	He	0.360	0.360	7.36	1653	0.02	2000	
Ag	107	103	1	He	0.020	0.020	11.83	224	0.01	300	
Cd	111	103	1	He	0.864	0.864	3.10	2187	0.04	4000	
Sn	118	115	1	He	17.224	17.224	1.31	59349	0.03	2000	
Sb	123	115	1	He	0.348	0.348	4.62	2071	0.02	300	
Ba	137	115	1	He	94.097	94.097	0.71	134136	0.07	10000	
W	182	165	1	He	0.198	0.198	7.62	5105	0.00	2500	
Tl	205	209	1	He	0.544	0.544	3.86	13563	0.00	5000	
Pb	208	209	1	He	42.624	42.624	0.73	1358591	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1527612	1.44	1803797	84.69	30	120	
Sc	45	1	He	587900	2.04	574766	102.29	30	120	
Sc	45	2	NoGas	4241264	0.40	4296857	98.71	30	120	
Rh	103	1	He	1554548	2.95	1652712	94.06	30	120	
In	115	1	He	776660	0.79	852389	91.12	30	120	
Tb	159	1	He	2485686	0.79	2425956	102.46	30	120	
Ho	165	1	He	2582571	1.24	2452680	105.30	30	120	
Bi	209	1	He	1758533	0.32	1810473	97.13	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-3-a@2
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:13:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.591	0.591	10.07	2871	0.02	10000	
B	11	45	2	NoGas	2.159	2.159	3.23	12879	0.02	300	
Na	23	45	1	He	586.049	586.049	0.36	882600	0.07	500000	
Mg	24	45	1	He	1668.745	1668.745	2.91	1375035	0.12	500000	
Al	27	45	1	He	33952.907	33952.907	0.63	14538209	0.23	200000	
K	39	45	1	He	1253.568	1253.568	0.48	871436	0.14	500000	
Ca	44	45	1	He	1778.020	1778.020	0.73	61804	2.88	500000	
Ti	47	45	1	He	214.439	214.439	1.63	43992	0.49	2500	
V	51	45	1	He	190.911	190.911	0.38	1000983	0.02	10000	
Cr	52	45	1	He	60.672	60.672	0.20	392999	0.02	10000	
Mn	55	45	1	He	70.329	70.329	0.31	320109	0.02	10000	
Fe	56	45	1	He	59555.703	59555.703	1.14	350708919	0.02	200000	
Co	59	103	1	He	5.242	5.242	2.41	49581	0.01	10000	
Ni	60	103	1	He	9.548	9.548	3.29	23026	0.04	10000	
Cu	63	103	1	He	43.830	43.830	2.21	283125	0.02	10000	
Zn	66	103	1	He	32.250	32.250	1.70	42798	0.08	10000	
As	75	103	1	He	8.932	8.932	1.61	7546	0.12	10000	
Se	78	103	1	He	2.034	2.034	11.56	165	1.23	10000	
Sr	88	103	1	He	7.882	7.882	4.15	38810	0.02	10000	
Mo	95	103	1	He	2.735	2.735	1.60	7861	0.03	2000	
Ag	107	103	1	He	0.020	0.020	14.44	212	0.01	300	
Cd	111	103	1	He	0.287	0.287	19.57	1202	0.02	4000	
Sn	118	115	1	He	16.509	16.509	0.63	56048	0.03	2000	
Sb	123	115	1	He	0.218	0.218	10.00	1580	0.01	300	
Ba	137	115	1	He	92.160	92.160	1.68	129327	0.07	10000	
W	182	165	1	He	0.196	0.196	21.31	4716	0.00	2500	
Tl	205	209	1	He	0.582	0.582	2.43	14289	0.00	5000	
Pb	208	209	1	He	31.214	31.214	1.73	981940	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1550391	0.86	1803797	85.95	30	120	
Sc	45	1	He	542743	1.24	574766	94.43	30	120	
Sc	45	2	NoGas	4133994	0.83	4296857	96.21	30	120	
Rh	103	1	He	1481554	2.90	1652712	89.64	30	120	
In	115	1	He	764702	1.63	852389	89.71	30	120	
Tb	159	1	He	2352794	1.12	2425956	96.98	30	120	
Ho	165	1	He	2394898	2.17	2452680	97.64	30	120	
Bi	209	1	He	1735620	2.26	1810473	95.87	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-4-a@2
Data File Name	075SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:17:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.733	0.733	1.03	3367	0.02	10000	
B	11	45	2	NoGas	2.363	2.363	7.65	12942	0.02	300	
Na	23	45	1	He	290.962	290.962	1.04	443693	0.07	500000	
Mg	24	45	1	He	150.200	150.200	1.21	121673	0.12	500000	
Al	27	45	1	He	7309.844	7309.844	1.11	3058754	0.24	200000	
K	39	45	1	He	1570.264	1570.264	0.71	1051396	0.15	500000	
Ca	44	45	1	He	164.881	164.881	1.56	6081	2.71	500000	
Ti	47	45	1	He	215.432	215.432	2.08	43183	0.50	2500	
V	51	45	1	He	95.176	95.176	1.17	487701	0.02	10000	
Cr	52	45	1	He	26.261	26.261	1.34	167770	0.02	10000	
Mn	55	45	1	He	86.252	86.252	1.63	383538	0.02	10000	
Fe	56	45	1	He	38369.394	38369.394	1.15	220779356	0.02	200000	
Co	59	103	1	He	1.511	1.511	0.33	14306	0.01	10000	
Ni	60	103	1	He	2.384	2.384	3.94	5803	0.04	10000	
Cu	63	103	1	He	30.820	30.820	0.43	199390	0.02	10000	
Zn	66	103	1	He	35.734	35.734	1.62	47242	0.08	10000	
As	75	103	1	He	10.165	10.165	1.16	8546	0.12	10000	
Se	78	103	1	He	3.218	3.218	6.17	246	1.31	10000	
Sr	88	103	1	He	9.201	9.201	1.54	45215	0.02	10000	
Mo	95	103	1	He	1.914	1.914	4.51	5674	0.03	2000	
Ag	107	103	1	He	0.054	0.054	11.10	527	0.01	300	
Cd	111	103	1	He	0.411	0.411	8.22	1388	0.03	4000	
Sn	118	115	1	He	17.608	17.608	1.18	58836	0.03	2000	
Sb	123	115	1	He	0.263	0.263	15.77	1713	0.02	300	
Ba	137	115	1	He	59.823	59.823	1.06	82719	0.07	10000	
W	182	165	1	He	0.053	0.053	72.94	3289	0.00	2500	
Tl	205	209	1	He	0.287	0.287	5.19	7051	0.00	5000	
Pb	208	209	1	He	51.003	51.003	1.80	1563207	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1466392	1.38	1803797	81.29	30	120	
Sc	45	1	He	530278	0.47	574766	92.26	30	120	
Sc	45	2	NoGas	3944061	0.67	4296857	91.79	30	120	
Rh	103	1	He	1478270	0.25	1652712	89.45	30	120	
In	115	1	He	753318	0.30	852389	88.38	30	120	
Tb	159	1	He	2424072	3.97	2425956	99.92	30	120	
Ho	165	1	He	2477215	3.88	2452680	101.00	30	120	
Bi	209	1	He	1691415	1.27	1810473	93.42	30	120	

Sample Report

Sample Table

Sample Name	240-49409-f-5-a@2
Data File Name	076SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:21:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.865	3.865	1.71	18061	0.02	10000	
B	11	45	2	NoGas	3.353	3.353	2.14	17935	0.02	300	
Na	23	45	1	He	797.126	797.126	0.54	1284666	0.06	500000	
Mg	24	45	1	He	54999.045	54999.045	0.75	48920972	0.11	500000	
Al	27	45	1	He	79557.995	79557.995	1.09	36801433	0.22	200000	
K	39	45	1	He	9081.979	9081.979	0.60	6408245	0.14	500000	
Ca	44	45	1	He	12298.736	12298.736	0.17	458402	2.68	500000	
Ti	47	45	1	He	2700.753	2700.753	0.80	598620	0.45	2500	>LDR
V	51	45	1	He	266.536	266.536	0.43	1509703	0.02	10000	
Cr	52	45	1	He	1093.574	1093.574	1.11	7600198	0.01	10000	
Mn	55	45	1	He	2018.579	2018.579	1.25	9921257	0.02	10000	
Fe	56	45	1	He	121203.409	121203.409	0.48	771144787	0.02	200000	
Co	59	103	1	He	91.606	91.606	1.06	811625	0.01	10000	
Ni	60	103	1	He	298.110	298.110	0.04	671738	0.04	10000	
Cu	63	103	1	He	208.579	208.579	0.49	1255369	0.02	10000	
Zn	66	103	1	He	221.390	221.390	1.20	271222	0.08	10000	
As	75	103	1	He	9.139	9.139	0.58	7234	0.13	10000	
Se	78	103	1	He	3.283	3.283	0.74	235	1.40	10000	
Sr	88	103	1	He	51.453	51.453	0.51	236937	0.02	10000	
Mo	95	103	1	He	1.624	1.624	2.57	4612	0.04	2000	
Ag	107	103	1	He	0.060	0.060	5.64	542	0.01	300	
Cd	111	103	1	He	0.653	0.653	10.11	1650	0.04	4000	
Sn	118	115	1	He	17.644	17.644	2.65	56536	0.03	2000	
Sb	123	115	1	He	0.165	0.165	7.93	1313	0.01	300	
Ba	137	115	1	He	492.559	492.559	0.84	653000	0.08	10000	
W	182	165	1	He	0.359	0.359	7.98	6446	0.01	2500	
Tl	205	209	1	He	0.790	0.790	0.91	17492	0.00	5000	
Pb	208	209	1	He	64.717	64.717	0.62	1849932	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1492500	1.32	1803797	82.74	30	120	
Sc	45	1	He	586357	0.69	574766	102.02	30	120	
Sc	45	2	NoGas	4388766	1.74	4296857	102.14	30	120	
Rh	103	1	He	1388513	0.60	1652712	84.01	30	120	
In	115	1	He	722394	0.78	852389	84.75	30	120	
Tb	159	1	He	2348383	0.69	2425956	96.80	30	120	
Ho	165	1	He	2393825	0.86	2452680	97.60	30	120	
Bi	209	1	He	1577458	0.60	1810473	87.13	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-b
Data File Name	077SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:25:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.035	0.035	19.90	167	0.02	10000	
B	11	45	2	NoGas	45.569	45.569	1.74	144440	0.03	300	
Na	23	45	1	He	261697.783	261697.783	1.27	345379920	0.08	500000	
Mg	24	45	1	He	22549.998	22549.998	1.07	16873647	0.13	500000	
Al	27	45	1	He	19.192	19.192	8.06	8111	0.24	200000	
K	39	45	1	He	7314.416	7314.416	1.98	4352370	0.17	500000	
Ca	44	45	1	He	59399.891	59399.891	0.25	1860564	3.19	500000	
Ti	47	45	1	He	2.444	2.444	11.37	457	0.54	2500	
V	51	45	1	He	0.343	0.343	36.96	1859	0.02	10000	
Cr	52	45	1	He	1.275	1.275	0.70	10032	0.01	10000	
Mn	55	45	1	He	8967.892	8967.892	1.07	37078520	0.02	10000	
Fe	56	45	1	He	16290.255	16290.255	1.10	87193334	0.02	200000	
Co	59	103	1	He	593.384	593.384	0.59	5133748	0.01	10000	
Ni	60	103	1	He	32.799	32.799	0.81	72239	0.05	10000	
Cu	63	103	1	He	3.691	3.691	2.17	23699	0.02	10000	
Zn	66	103	1	He	24.180	24.180	1.89	29545	0.08	10000	
As	75	103	1	He	0.953	0.953	4.53	881	0.11	10000	
Se	78	103	1	He	0.340	0.340	21.81	46	0.74	10000	
Sr	88	103	1	He	213.380	213.380	0.44	959144	0.02	10000	
Mo	95	103	1	He	1.294	1.294	4.84	3704	0.03	2000	
Ag	107	103	1	He	0.003	0.003	36.24	53	0.01	300	
Cd	111	103	1	He	0.152	0.152	21.71	910	0.02	4000	
Sn	118	115	1	He	0.387	0.387	8.85	1956	0.02	2000	
Sb	123	115	1	He	0.157	0.157	16.72	1286	0.01	300	
Ba	137	115	1	He	164.625	164.625	0.88	217905	0.08	10000	
W	182	165	1	He	0.057	0.057	78.86	3156	0.00	2500	
Tl	205	209	1	He	0.558	0.558	3.36	12112	0.00	5000	
Pb	208	209	1	He	0.226	0.226	4.56	7021	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1480468	1.85	1803797	82.08	30	120	
Sc	45	1	He	493259	0.29	574766	85.82	30	120	
Sc	45	2	NoGas	3760878	1.20	4296857	87.53	30	120	
Rh	103	1	He	1355874	0.53	1652712	82.04	30	120	
In	115	1	He	721215	0.39	852389	84.61	30	120	
Tb	159	1	He	2268202	0.58	2425956	93.50	30	120	
Ho	165	1	He	2336361	0.80	2452680	95.26	30	120	
Bi	209	1	He	1533362	0.54	1810473	84.69	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49409-g-6-b@5
Data File Name	078SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:29:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.032	0.032	51.52	163	0.02	10000	
B	11	45	2	NoGas	8.943	8.943	3.73	34255	0.03	300	
Na	23	45	1	He	52680.910	52680.910	2.31	74022006	0.07	500000	
Mg	24	45	1	He	4623.738	4623.738	1.43	3683217	0.13	500000	
Al	27	45	1	He	11.645	11.645	2.55	5509	0.21	200000	
K	39	45	1	He	1438.295	1438.295	2.58	958368	0.15	500000	
Ca	44	45	1	He	11518.005	11518.005	0.63	384444	3.00	500000	
Ti	47	45	1	He	0.674	0.674	57.94	136	0.50	2500	
V	51	45	1	He	0.091	0.091	67.52	703	0.01	10000	
Cr	52	45	1	He	0.263	0.263	6.15	4383	0.01	10000	
Mn	55	45	1	He	1836.432	1836.432	2.40	8081239	0.02	10000	
Fe	56	45	1	He	3338.008	3338.008	1.86	19020274	0.02	200000	
Co	59	103	1	He	114.203	114.203	1.37	1112987	0.01	10000	
Ni	60	103	1	He	6.560	6.560	2.26	16344	0.04	10000	
Cu	63	103	1	He	0.623	0.623	4.40	6415	0.01	10000	
Zn	66	103	1	He	5.046	5.046	3.58	7567	0.07	10000	
As	75	103	1	He	0.137	0.137	12.08	298	0.05	10000	
Se	78	103	1	He	0.097	0.097	109.39	34	0.28	10000	
Sr	88	103	1	He	41.099	41.099	1.45	208202	0.02	10000	
Mo	95	103	1	He	0.072	0.072	19.32	839	0.01	2000	
Ag	107	103	1	He	-0.002	-0.002	-34.36	16	-0.01	300	
Cd	111	103	1	He	0.061	0.061	20.77	881	0.01	4000	
Sn	118	115	1	He	-0.006	-0.006	-703.31	782	0.00	2000	
Sb	123	115	1	He	-0.006	-0.006	-208.51	810	0.00	300	
Ba	137	115	1	He	32.687	32.687	1.67	47404	0.07	10000	
W	182	165	1	He	0.008	0.008	436.61	2767	0.00	2500	
Tl	205	209	1	He	0.100	0.100	6.97	2865	0.00	5000	
Pb	208	209	1	He	0.041	0.041	5.90	2203	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1569380	1.78	1803797	87.00	30	120	
Sc	45	1	He	525065	1.43	574766	91.35	30	120	
Sc	45	2	NoGas	3969693	1.24	4296857	92.39	30	120	
Rh	103	1	He	1527472	1.44	1652712	92.42	30	120	
In	115	1	He	790014	0.49	852389	92.68	30	120	
Tb	159	1	He	2379986	0.72	2425956	98.11	30	120	
Ho	165	1	He	2453740	1.31	2452680	100.04	30	120	
Bi	209	1	He	1789957	0.49	1810473	98.87	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49409-g-6-b
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:33:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1081.530	1081.530	1.03	5139117	0.02	10000	
B	11	45	2	NoGas	160.094	160.094	0.59	512600	0.03	300	
Na	23	45	1	He	263104.248	263104.248	0.73	347467742	0.08	500000	
Mg	24	45	1	He	32171.113	32171.113	1.11	24088234	0.13	500000	
Al	27	45	1	He	9879.716	9879.716	0.47	3847726	0.26	200000	
K	39	45	1	He	17565.227	17565.227	0.85	10380649	0.17	500000	
Ca	44	45	1	He	68166.462	68166.462	1.11	2136597	3.19	500000	
Ti	47	45	1	He	106.996	106.996	2.67	19963	0.54	2500	
V	51	45	1	He	1110.223	1110.223	0.44	5292899	0.02	10000	
Cr	52	45	1	He	1074.701	1074.701	1.59	6287284	0.02	10000	
Mn	55	45	1	He	9780.885	9780.885	1.41	40466282	0.02	10000	
Fe	56	45	1	He	26486.486	26486.486	1.64	141855648	0.02	200000	
Co	59	103	1	He	1604.147	1604.147	1.81	13733379	0.01	10000	
Ni	60	103	1	He	1082.986	1082.986	0.74	2357924	0.05	10000	
Cu	63	103	1	He	1038.189	1038.189	1.44	6029737	0.02	10000	
Zn	66	103	1	He	1015.128	1015.128	1.22	1199258	0.08	10000	
As	75	103	1	He	1022.966	1022.966	0.86	764700	0.13	10000	
Se	78	103	1	He	987.936	987.936	1.47	61148	1.62	10000	
Sr	88	103	1	He	1283.459	1283.459	1.96	5708110	0.02	10000	
Mo	95	103	1	He	117.358	117.358	1.26	281796	0.04	2000	
Ag	107	103	1	He	104.755	104.755	1.18	869227	0.01	300	
Cd	111	103	1	He	1044.272	1044.272	1.36	1447892	0.07	4000	
Sn	118	115	1	He	1140.531	1140.531	0.88	3473621	0.03	2000	
Sb	123	115	1	He	111.221	111.221	0.61	359800	0.03	300	
Ba	137	115	1	He	1346.453	1346.453	1.36	1718895	0.08	10000	
W	182	165	1	He	101.462	101.462	0.78	1048309	0.01	2500	
Tl	205	209	1	He	264.444	264.444	1.38	5346615	0.00	5000	
Pb	208	209	1	He	1116.063	1116.063	0.96	29693049	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1517966	0.61	1803797	84.15	30	120	
Sc	45	1	He	493590	0.53	574766	85.88	30	120	
Sc	45	2	NoGas	3897439	0.87	4296857	90.70	30	120	
Rh	103	1	He	1341791	1.02	1652712	81.19	30	120	
In	115	1	He	695575	0.59	852389	81.60	30	120	
Tb	159	1	He	2244205	0.77	2425956	92.51	30	120	
Ho	165	1	He	2316194	0.61	2452680	94.44	30	120	
Bi	209	1	He	1468769	0.69	1810473	81.13	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-c ms
Data File Name	080SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:36:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1100.348	1100.348	2.09	5297342	0.02	10000	
B	11	45	2	NoGas	177.127	177.127	0.98	564618	0.03	300	
Na	23	45	1	He	302965.338	302965.338	0.32	399580117	0.08	500000	
Mg	24	45	1	He	36094.151	36094.151	0.66	26988802	0.13	500000	
Al	27	45	1	He	10457.208	10457.208	1.34	4066725	0.26	200000	
K	39	45	1	He	19101.177	19101.177	1.88	11267276	0.17	500000	
Ca	44	45	1	He	77083.051	77083.051	1.91	2412387	3.20	500000	
Ti	47	45	1	He	109.609	109.609	2.03	20422	0.54	2500	
V	51	45	1	He	1117.600	1117.600	0.97	5320469	0.02	10000	
Cr	52	45	1	He	1096.555	1096.555	0.77	6406887	0.02	10000	
Mn	55	45	1	He	11135.796	11135.796	2.15	46008024	0.02	10000	>LDR
Fe	56	45	1	He	29255.512	29255.512	1.81	156460265	0.02	200000	
Co	59	103	1	He	1742.053	1742.053	1.15	14792129	0.01	10000	
Ni	60	103	1	He	1135.870	1135.870	0.33	2452969	0.05	10000	
Cu	63	103	1	He	1067.810	1067.810	1.34	6151368	0.02	10000	
Zn	66	103	1	He	1040.540	1040.540	0.75	1219226	0.09	10000	
As	75	103	1	He	1051.695	1051.695	1.75	779675	0.13	10000	
Se	78	103	1	He	1012.191	1012.191	2.36	62130	1.63	10000	
Sr	88	103	1	He	1371.976	1371.976	0.38	6052956	0.02	10000	
Mo	95	103	1	He	125.590	125.590	0.69	299081	0.04	2000	
Ag	107	103	1	He	108.837	108.837	2.54	895584	0.01	300	
Cd	111	103	1	He	1066.405	1066.405	1.78	1466394	0.07	4000	
Sn	118	115	1	He	1180.849	1180.849	0.74	3581636	0.03	2000	
Sb	123	115	1	He	114.008	114.008	1.67	367244	0.03	300	
Ba	137	115	1	He	1398.024	1398.024	0.71	1777255	0.08	10000	
W	182	165	1	He	105.376	105.376	1.05	1105227	0.01	2500	
Tl	205	209	1	He	271.187	271.187	1.51	5492239	0.00	5000	
Pb	208	209	1	He	1136.134	1136.134	0.22	30277872	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1537872	0.42	1803797	85.26	30	120	
Sc	45	1	He	492920	1.15	574766	85.76	30	120	
Sc	45	2	NoGas	3883934	0.29	4296857	90.39	30	120	
Rh	103	1	He	1330859	1.48	1652712	80.53	30	120	
In	115	1	He	692712	0.64	852389	81.27	30	120	
Tb	159	1	He	2263675	0.32	2425956	93.31	30	120	
Ho	165	1	He	2351570	1.27	2452680	95.88	30	120	
Bi	209	1	He	1471222	0.36	1810473	81.26	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	081_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:40:21-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	43.579	0.944	234995	1.25	50	87.2	89.5	110.5	CCV Failed
B	11	45	2	NoGas	50.728	1.116	183849	1.03	50	101.5	89.5	110.5	
Na	23	45	1	He	26417.616	2.084	39895391	0.72	25000	105.7	89.5	110.5	
Mg	24	45	1	He	26130.965	0.974	22361647	1.62	25000	104.5	89.5	110.5	
Al	27	45	1	He	247.589	1.798	110907	1.44	250	99.0	89.5	110.5	
K	39	45	1	He	25947.104	1.602	17493261	1.26	25000	103.8	89.5	110.5	
Ca	44	45	1	He	24847.785	2.093	890238	0.54	25000	99.4	89.5	110.5	
Ti	47	45	1	He	51.288	0.961	10939	2.39	50	102.6	89.5	110.5	
V	51	45	1	He	51.691	1.322	281866	1.34	50	103.4	89.5	110.5	
Cr	52	45	1	He	51.395	1.464	346439	1.52	50	102.8	89.5	110.5	
Mn	55	45	1	He	253.245	1.681	1197479	0.97	250	101.3	89.5	110.5	
Fe	56	45	1	He	13018.614	1.097	79690559	1.52	12500	104.1	89.5	110.5	
Co	59	103	1	He	48.200	2.250	497170	1.68	50	96.4	89.5	110.5	
Ni	60	103	1	He	48.095	1.477	126238	0.79	50	96.2	89.5	110.5	
Cu	63	103	1	He	48.462	1.430	341423	1.07	50	96.9	89.5	110.5	
Zn	66	103	1	He	47.798	2.671	68809	1.29	50	95.6	89.5	110.5	
As	75	103	1	He	48.891	2.085	44210	0.97	50	97.8	89.5	110.5	
Se	78	103	1	He	47.846	1.535	3595	0.50	50	95.7	89.5	110.5	
Sr	88	103	1	He	47.852	1.369	256534	0.64	50	95.7	89.5	110.5	
Mo	95	103	1	He	50.810	1.483	147370	0.95	50	101.6	89.5	110.5	
Ag	107	103	1	He	49.548	2.434	495271	1.10	50	99.1	89.5	110.5	
Cd	111	103	1	He	49.816	1.862	84000	0.77	50	99.6	89.5	110.5	
Sn	118	115	1	He	51.517	1.781	186710	1.95	50	103.0	89.5	110.5	
Sb	123	115	1	He	52.742	1.156	202604	0.96	50	105.5	89.5	110.5	
Ba	137	115	1	He	51.586	0.396	78037	0.45	50	103.2	89.5	110.5	
W	182	165	1	He	49.335	1.831	558588	1.54	50	98.7	89.5	110.5	
Tl	205	209	1	He	47.309	1.908	1192879	1.33	50	94.6	89.5	110.5	
Pb	208	209	1	He	48.698	1.370	1616170	0.84	50	97.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1722576	0.96	1803797	95.50	30	120	
Sc	45	1	He	564194	2.60	574766	98.16	30	120	
Sc	45	2	NoGas	4315154	0.19	4296857	100.43	30	120	
Rh	103	1	He	1616566	1.35	1652712	97.81	30	120	
In	115	1	He	824152	0.49	852389	96.69	30	120	
Tb	159	1	He	2469425	1.24	2425956	101.79	30	120	
Ho	165	1	He	2531799	0.99	2452680	103.23	30	120	
Bi	209	1	He	1831269	0.82	1810473	101.15	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	082_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:44:12-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.106	20.9	593	20.7	1	
B	11	45	2	NoGas	2.714	1.7	15670	1.2	20	
Na	23	45	1	He	35.977	5.1	86722	2.1	400	
Mg	24	45	1	He	1.939	17.5	2552	10.1	1000	
Al	27	45	1	He	8.106	4.7	4319	3.0	50	
K	39	45	1	He	6.506	51.9	67603	3.4	1000	
Ca	44	45	1	He	5.406	20.9	754	6.7	1000	
Ti	47	45	1	He	0.335	17.5	72	18.7	20	
V	51	45	1	He	0.039	180.5	464	80.2	2	
Cr	52	45	1	He	0.022	13.9	3081	1.3	2	
Mn	55	45	1	He	0.284	5.5	1500	5.4	2	
Fe	56	45	1	He	12.204	22.8	80125	19.8	50	
Co	59	103	1	He	0.037	9.5	457	6.7	1	
Ni	60	103	1	He	0.015	76.8	141	22.3	2	
Cu	63	103	1	He	-0.038	-85.5	2278	8.6	2	
Zn	66	103	1	He	0.437	35.3	1526	13.9	20	
As	75	103	1	He	0.186	4.8	379	2.7	2	
Se	78	103	1	He	0.245	57.1	50	21.3	2	
Sr	88	103	1	He	0.069	33.2	537	26.4	10	
Mo	95	103	1	He	0.764	23.7	3031	16.4	2	
Ag	107	103	1	He	0.005	23.3	81	11.9	0.2	
Cd	111	103	1	He	0.114	31.1	1077	7.4	0.2	
Sn	118	115	1	He	0.502	19.1	2752	13.0	10	
Sb	123	115	1	He	0.229	28.4	1812	14.1	1	
Ba	137	115	1	He	0.043	50.3	81	42.2	5	
W	182	165	1	He	1.099	10.3	15326	8.5	10	
Tl	205	209	1	He	0.079	18.2	2500	15.7	0.5	
Pb	208	209	1	He	0.042	5.5	2382	3.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1771092	0.68	1803797	98.19	30	120	
Sc	45	1	He	561275	1.43	574766	97.65	30	120	
Sc	45	2	NoGas	4392850	0.99	4296857	102.23	30	120	
Rh	103	1	He	1701631	2.11	1652712	102.96	30	120	
In	115	1	He	856698	0.22	852389	100.51	30	120	
Tb	159	1	He	2498692	0.11	2425956	103.00	30	120	
Ho	165	1	He	2561509	0.35	2452680	104.44	30	120	
Bi	209	1	He	1902516	0.56	1810473	105.08	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-d msd
Data File Name	083SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:48:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1016.052	1016.052	1.54	5024832	0.02	10000	
B	11	45	2	NoGas	163.713	163.713	1.58	532465	0.03	300	
Na	23	45	1	He	270557.568	270557.568	2.73	371710111	0.07	500000	
Mg	24	45	1	He	32473.827	32473.827	1.80	25297617	0.13	500000	
Al	27	45	1	He	9325.301	9325.301	1.72	3778557	0.25	200000	
K	39	45	1	He	17140.908	17140.908	1.70	10540691	0.16	500000	
Ca	44	45	1	He	69626.377	69626.377	2.48	2270215	3.07	500000	
Ti	47	45	1	He	97.806	97.806	2.53	18986	0.52	2500	
V	51	45	1	He	1008.954	1008.954	2.86	5003937	0.02	10000	
Cr	52	45	1	He	987.675	987.675	1.58	6012190	0.02	10000	
Mn	55	45	1	He	10078.276	10078.276	0.43	43388068	0.02	10000	>LDR
Fe	56	45	1	He	26312.291	26312.291	1.79	146620856	0.02	200000	
Co	59	103	1	He	1596.990	1596.990	0.56	13795805	0.01	10000	
Ni	60	103	1	He	1030.927	1030.927	0.82	2264739	0.05	10000	
Cu	63	103	1	He	987.938	987.938	1.08	5790008	0.02	10000	
Zn	66	103	1	He	964.420	964.420	0.66	1149683	0.08	10000	
As	75	103	1	He	970.897	970.897	0.43	732322	0.13	10000	
Se	78	103	1	He	939.651	939.651	1.96	58683	1.60	10000	
Sr	88	103	1	He	1255.444	1255.444	1.00	5634194	0.02	10000	
Mo	95	103	1	He	113.231	113.231	0.96	274356	0.04	2000	
Ag	107	103	1	He	98.841	98.841	0.57	827555	0.01	300	
Cd	111	103	1	He	974.261	974.261	0.82	1363055	0.07	4000	
Sn	118	115	1	He	1066.161	1066.161	0.32	3312200	0.03	2000	
Sb	123	115	1	He	103.416	103.416	1.54	341256	0.03	300	
Ba	137	115	1	He	1260.843	1260.843	0.70	1641654	0.08	10000	
W	182	165	1	He	95.414	95.414	1.01	999640	0.01	2500	
Tl	205	209	1	He	242.349	242.349	0.78	4988115	0.00	5000	
Pb	208	209	1	He	1024.937	1024.937	0.38	27758291	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1580131	2.03	1803797	87.60	30	120	
Sc	45	1	He	513615	1.58	574766	89.36	30	120	
Sc	45	2	NoGas	3959765	1.27	4296857	92.15	30	120	
Rh	103	1	He	1353815	0.55	1652712	81.91	30	120	
In	115	1	He	709484	0.82	852389	83.23	30	120	
Tb	159	1	He	2253922	0.25	2425956	92.91	30	120	
Ho	165	1	He	2348246	0.57	2452680	95.74	30	120	
Bi	209	1	He	1495119	0.31	1810473	82.58	30	120	

Sample Report

Sample Table

Sample Name	240-49423-i-1-b
Data File Name	084SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:51:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.185	0.185	13.62	989	0.02	10000	
B	11	45	2	NoGas	63.592	63.592	1.27	224341	0.03	300	
Na	23	45	1	He	3435.126	3435.126	1.55	4952034	0.07	500000	
Mg	24	45	1	He	10789.554	10789.554	1.82	8764260	0.12	500000	
Al	27	45	1	He	13.428	13.428	4.39	6369	0.21	200000	
K	39	45	1	He	4736.702	4736.702	0.31	3080929	0.15	500000	
Ca	44	45	1	He	69129.098	69129.098	0.52	2350513	2.94	500000	
Ti	47	45	1	He	0.714	0.714	20.33	146	0.49	2500	
V	51	45	1	He	0.375	0.375	17.26	2183	0.02	10000	
Cr	52	45	1	He	1.278	1.278	4.22	10915	0.01	10000	
Mn	55	45	1	He	69.185	69.185	1.77	310662	0.02	10000	
Fe	56	45	1	He	59.864	59.864	2.49	353551	0.02	200000	
Co	59	103	1	He	0.283	0.283	10.55	2834	0.01	10000	
Ni	60	103	1	He	0.706	0.706	7.22	1857	0.04	10000	
Cu	63	103	1	He	1.816	1.816	3.32	14452	0.01	10000	
Zn	66	103	1	He	11.608	11.608	0.31	16556	0.07	10000	
As	75	103	1	He	1.771	1.771	1.93	1706	0.10	10000	
Se	78	103	1	He	0.922	0.922	4.63	93	0.99	10000	
Sr	88	103	1	He	106.702	106.702	0.73	545972	0.02	10000	
Mo	95	103	1	He	0.786	0.786	22.77	2817	0.03	2000	
Ag	107	103	1	He	0.009	0.009	64.65	112	0.01	300	
Cd	111	103	1	He	0.220	0.220	26.27	1144	0.02	4000	
Sn	118	115	1	He	2.568	2.568	16.43	9692	0.03	2000	
Sb	123	115	1	He	0.584	0.584	8.36	2976	0.02	300	
Ba	137	115	1	He	29.460	29.460	2.09	42779	0.07	10000	
W	182	165	1	He	1.198	1.198	21.39	15883	0.01	2500	
Tl	205	209	1	He	0.189	0.189	27.75	5070	0.00	5000	
Pb	208	209	1	He	0.231	0.231	12.06	8424	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1705083	2.10	1803797	94.53	30	120	
Sc	45	1	He	535472	0.84	574766	93.16	30	120	
Sc	45	2	NoGas	4227900	0.55	4296857	98.40	30	120	
Rh	103	1	He	1543224	0.43	1652712	93.38	30	120	
In	115	1	He	791129	1.07	852389	92.81	30	120	
Tb	159	1	He	2379284	1.54	2425956	98.08	30	120	
Ho	165	1	He	2469800	0.43	2452680	100.70	30	120	
Bi	209	1	He	1803450	1.51	1810473	99.61	30	120	

Sample Report

Sample Table

Sample Name	190-7066-a-1-a
Data File Name	085SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:55:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.122	0.122	21.91	630	0.02	10000	
B	11	45	2	NoGas	83.813	83.813	2.45	292463	0.03	300	
Na	23	45	1	He	248255.041	248255.041	0.82	353453364	0.07	500000	
Mg	24	45	1	He	8340.834	8340.834	1.53	6733350	0.12	500000	
Al	27	45	1	He	28.428	28.428	1.52	12627	0.23	200000	
K	39	45	1	He	143291.824	143291.824	1.74	90860124	0.16	500000	
Ca	44	45	1	He	14438.800	14438.800	1.15	488282	2.96	500000	
Ti	47	45	1	He	1.692	1.692	17.51	341	0.50	2500	
V	51	45	1	He	1.957	1.957	6.37	10298	0.02	10000	
Cr	52	45	1	He	1.718	1.718	2.52	13617	0.01	10000	
Mn	55	45	1	He	42.603	42.603	1.22	190172	0.02	10000	
Fe	56	45	1	He	129.264	129.264	0.74	751977	0.02	200000	
Co	59	103	1	He	0.300	0.300	2.54	2754	0.01	10000	
Ni	60	103	1	He	288.952	288.952	0.67	663503	0.04	10000	
Cu	63	103	1	He	2.404	2.404	0.37	16850	0.01	10000	
Zn	66	103	1	He	60.959	60.959	1.36	76629	0.08	10000	
As	75	103	1	He	1.945	1.945	1.93	1702	0.11	10000	
Se	78	103	1	He	0.739	0.739	6.13	74	1.00	10000	
Sr	88	103	1	He	66.661	66.661	0.39	312790	0.02	10000	
Mo	95	103	1	He	9.309	9.309	0.56	24121	0.04	2000	
Ag	107	103	1	He	0.008	0.008	6.13	96	0.01	300	
Cd	111	103	1	He	0.173	0.173	26.14	981	0.02	4000	
Sn	118	115	1	He	2.787	2.787	5.53	10174	0.03	2000	
Sb	123	115	1	He	2.987	2.987	4.00	11478	0.03	300	
Ba	137	115	1	He	2.962	2.962	3.63	4195	0.07	10000	
W	182	165	1	He	0.512	0.512	5.10	8028	0.01	2500	
Tl	205	209	1	He	0.120	0.120	11.67	2987	0.00	5000	
Pb	208	209	1	He	0.242	0.242	1.52	7789	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1635241	0.65	1803797	90.66	30	120	
Sc	45	1	He	532122	0.60	574766	92.58	30	120	
Sc	45	2	NoGas	4208065	0.82	4296857	97.93	30	120	
Rh	103	1	He	1414984	0.52	1652712	85.62	30	120	
In	115	1	He	769373	0.84	852389	90.26	30	120	
Tb	159	1	He	2340454	0.71	2425956	96.48	30	120	
Ho	165	1	He	2380016	0.62	2452680	97.04	30	120	
Bi	209	1	He	1600051	0.20	1810473	88.38	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176522/1-a
Data File Name	086_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T15:59:28-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.101	9.1	552	7.6	1	
B	11	45	2	NoGas	4.115	0.6	20060	2.5	20	
Na	23	45	1	He	104.679	4.3	189293	4.9	400	
Mg	24	45	1	He	51.931	4.2	44945	2.9	1000	
Al	27	45	1	He	4.310	8.2	2629	4.7	50	
K	39	45	1	He	43.645	2.4	92110	2.0	1000	
Ca	44	45	1	He	169.842	2.0	6589	1.7	1000	
Ti	47	45	1	He	0.590	29.8	126	28.4	20	
V	51	45	1	He	0.278	36.1	1758	31.2	2	
Cr	52	45	1	He	1.130	6.0	10409	3.2	2	
Mn	55	45	1	He	0.627	5.2	3103	3.7	2	
Fe	56	45	1	He	12.826	4.7	83732	3.1	50	
Co	59	103	1	He	0.133	0.8	1441	0.7	1	
Ni	60	103	1	He	0.268	8.8	808	7.9	2	
Cu	63	103	1	He	0.506	0.9	6060	0.8	2	
Zn	66	103	1	He	3.565	2.4	5988	2.2	20	
As	75	103	1	He	0.285	11.4	456	6.4	2	
Se	78	103	1	He	0.136	60.5	40	15.7	2	
Sr	88	103	1	He	0.641	6.7	3627	6.4	10	
Mo	95	103	1	He	-0.062	-45.2	510	16.1	2	
Ag	107	103	1	He	0.001	88.3	43	23.1	0.2	
Cd	111	103	1	He	0.118	13.4	1043	2.4	0.2	
Sn	118	115	1	He	0.848	2.4	3952	1.9	10	
Sb	123	115	1	He	0.369	6.5	2311	4.1	1	
Ba	137	115	1	He	1.061	11.0	1640	10.8	5	
W	182	165	1	He	0.135	17.5	4282	5.3	10	
Tl	205	209	1	He	0.022	23.6	996	12.8	0.5	
Pb	208	209	1	He	0.150	1.4	6064	1.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1736362	1.44	1803797	96.26	30	120	
Sc	45	1	He	559280	1.30	574766	97.31	30	120	
Sc	45	2	NoGas	4262211	2.17	4296857	99.19	30	120	
Rh	103	1	He	1640240	0.22	1652712	99.25	30	120	
In	115	1	He	835422	0.02	852389	98.01	30	120	
Tb	159	1	He	2456919	0.11	2425956	101.28	30	120	
Ho	165	1	He	2525394	1.04	2452680	102.96	30	120	
Bi	209	1	He	1888342	1.05	1810473	104.30	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176522/3-a
Data File Name	087_LCS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:03:22-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	984.293	984.293	1.326	4931816	1.01	1000	98.4	79.5	120.5	
B	11	2	NoGas	110.343	110.343	1.621	358741	2.42	100	110.3	79.5	120.5	
Na	23	1	He	10110.072	10110.072	2.028	14076489	0.35	10000	101.1	79.5	120.5	
Mg	24	1	He	9984.358	9984.358	1.707	7866374	0.73	10000	99.8	79.5	120.5	
Al	27	1	He	9258.220	9258.220	2.270	3793434	0.74	10000	92.6	79.5	120.5	
K	39	1	He	9940.367	9940.367	2.725	6205337	0.49	10000	99.4	79.5	120.5	
Ca	44	1	He	9167.062	9167.062	1.821	302752	1.20	10000	91.7	79.5	120.5	
Ti	47	1	He	97.622	97.622	3.496	19160	1.36	100	97.6	79.5	120.5	
V	51	1	He	990.709	990.709	1.533	4969539	1.06	1000	99.1	79.5	120.5	
Cr	52	1	He	995.485	995.485	1.623	6128049	0.86	1000	99.5	79.5	120.5	
Mn	55	1	He	983.431	983.431	2.794	4280359	0.52	1000	98.3	79.5	120.5	
Fe	56	1	He	9988.728	9988.728	1.447	56294417	0.96	10000	99.9	79.5	120.5	
Co	59	1	He	930.372	930.372	2.510	8800922	0.56	1000	93.0	79.5	120.5	
Ni	60	1	He	966.017	966.017	2.443	2323975	1.05	1000	96.6	79.5	120.5	
Cu	63	1	He	948.804	948.804	2.480	6089253	0.47	1000	94.9	79.5	120.5	
Zn	66	1	He	923.171	923.171	2.708	1205084	0.60	1000	92.3	79.5	120.5	
As	75	1	He	898.089	898.089	2.631	741797	0.53	1000	89.8	79.5	120.5	
Se	78	1	He	908.582	908.582	2.107	62145	0.33	1000	90.9	79.5	120.5	
Sr	88	1	He	950.087	950.087	1.991	4669471	0.64	1000	95.0	79.5	120.5	
Mo	95	1	He	100.606	100.606	2.834	267002	0.77	100	100.6	79.5	120.5	
Ag	107	1	He	97.077	97.077	3.220	889962	1.12	100	97.1	79.5	120.5	
Cd	111	1	He	956.731	956.731	2.775	1465754	0.68	1000	95.7	79.5	120.5	
Sn	118	1	He	1055.257	1055.257	0.704	3420737	0.55	1000	105.5	79.5	120.5	
Sb	123	1	He	101.762	101.762	0.128	350435	0.36	100	101.8	79.5	120.5	
Ba	137	1	He	998.836	998.836	1.019	1357067	0.84	1000	99.9	79.5	120.5	
W	182	1	He	92.242	92.242	0.767	997172	1.32	100	92.2	79.5	120.5	
Tl	205	1	He	229.026	229.026	1.373	5512480	0.44	250	91.6	79.5	120.5	
Pb	208	1	He	939.638	939.638	1.165	29759577	0.11	1000	94.0	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1600653	0.72	1803797	88.74	30	120	
Sc	45	1	He	519458	2.40	574766	90.38	30	120	
Sc	45	2	NoGas	3938908	1.80	4296857	91.67	30	120	
Rh	103	1	He	1483003	2.08	1652712	89.73	30	120	
In	115	1	He	740317	0.26	852389	86.85	30	120	
Tb	159	1	He	2348256	0.67	2425956	96.80	30	120	
Ho	165	1	He	2422702	0.59	2452680	98.78	30	120	
Bi	209	1	He	1748587	1.27	1810473	96.58	30	120	

Sample Report

Sample Table

Sample Name	240-49304-k-1-a
Data File Name	088SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:06:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.252	0.252	8.91	1152	0.02	10000	
B	11	45	2	NoGas	267.730	267.730	0.94	847764	0.03	300	
Na	23	45	1	He	651044.409	651044.409	1.19	850675522	0.08	500000	>LDR
Mg	24	45	1	He	221618.219	221618.219	0.84	164187119	0.13	500000	
Al	27	45	1	He	26.746	26.746	7.38	10944	0.24	200000	
K	39	45	1	He	44784.096	44784.096	0.84	26101937	0.17	500000	
Ca	44	45	1	He	199251.602	199251.602	1.00	6178730	3.22	500000	
Ti	47	45	1	He	1.631	1.631	7.32	302	0.54	2500	
V	51	45	1	He	2.204	2.204	4.02	10617	0.02	10000	
Cr	52	45	1	He	2.988	2.988	2.15	19845	0.02	10000	
Mn	55	45	1	He	3259.670	3259.670	0.67	13344517	0.02	10000	
Fe	56	45	1	He	154342.072	154342.072	0.12	817936963	0.02	200000	
Co	59	103	1	He	24.140	24.140	0.44	197291	0.01	10000	
Ni	60	103	1	He	19.297	19.297	0.07	40172	0.05	10000	
Cu	63	103	1	He	1.692	1.692	16.55	11296	0.01	10000	
Zn	66	103	1	He	32.681	32.681	1.49	37485	0.09	10000	
As	75	103	1	He	3.539	3.539	5.76	2676	0.13	10000	
Se	78	103	1	He	1.988	1.988	18.67	140	1.42	10000	
Sr	88	103	1	He	1722.893	1722.893	1.06	7313327	0.02	10000	
Mo	95	103	1	He	1.134	1.134	14.89	3130	0.04	2000	
Ag	107	103	1	He	0.010	0.010	51.69	108	0.01	300	
Cd	111	103	1	He	2.797	2.797	2.15	4359	0.06	4000	
Sn	118	115	1	He	2.233	2.233	19.01	7584	0.03	2000	
Sb	123	115	1	He	0.665	0.665	10.35	2911	0.02	300	
Ba	137	115	1	He	64.223	64.223	1.03	82881	0.08	10000	
W	182	165	1	He	1.175	1.175	18.89	14237	0.01	2500	
Tl	205	209	1	He	0.210	0.210	31.76	4442	0.00	5000	
Pb	208	209	1	He	0.297	0.297	9.14	8410	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1455203	1.83	1803797	80.67	30	120	
Sc	45	1	He	488399	1.05	574766	84.97	30	120	
Sc	45	2	NoGas	3870338	0.42	4296857	90.07	30	120	
Rh	103	1	He	1280620	1.14	1652712	77.49	30	120	
In	115	1	He	703079	0.51	852389	82.48	30	120	
Tb	159	1	He	2186447	0.63	2425956	90.13	30	120	
Ho	165	1	He	2250664	0.53	2452680	91.76	30	120	
Bi	209	1	He	1433217	0.73	1810473	79.16	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49304-k-1-a@5
Data File Name	089SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:10:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.135	0.135	10.08	689	0.02	10000	
B	11	45	2	NoGas	54.328	54.328	0.54	192757	0.03	300	
Na	23	45	1	He	129767.302	129767.302	1.59	189150607	0.07	500000	
Mg	24	45	1	He	44605.454	44605.454	2.50	36856242	0.12	500000	
Al	27	45	1	He	6.264	6.264	9.54	3401	0.18	200000	
K	39	45	1	He	8981.532	8981.532	0.81	5888253	0.15	500000	
Ca	44	45	1	He	40702.573	40702.573	0.76	1408197	2.89	500000	
Ti	47	45	1	He	0.679	0.679	42.33	141	0.48	2500	
V	51	45	1	He	0.481	0.481	24.92	2784	0.02	10000	
Cr	52	45	1	He	0.609	0.609	9.62	6779	0.01	10000	
Mn	55	45	1	He	665.835	665.835	1.99	3040410	0.02	10000	
Fe	56	45	1	He	30875.427	30875.427	1.43	182499699	0.02	200000	
Co	59	103	1	He	4.634	4.634	0.83	44835	0.01	10000	
Ni	60	103	1	He	3.827	3.827	2.17	9491	0.04	10000	
Cu	63	103	1	He	0.204	0.204	1.56	3616	0.01	10000	
Zn	66	103	1	He	6.478	6.478	2.30	9410	0.07	10000	
As	75	103	1	He	0.462	0.462	3.48	570	0.08	10000	
Se	78	103	1	He	0.339	0.339	4.07	51	0.67	10000	
Sr	88	103	1	He	336.920	336.920	2.60	1691288	0.02	10000	
Mo	95	103	1	He	0.010	0.010	113.73	664	0.00	2000	
Ag	107	103	1	He	0.003	0.003	81.04	53	0.00	300	
Cd	111	103	1	He	0.622	0.622	5.47	1753	0.04	4000	
Sn	118	115	1	He	0.182	0.182	20.29	1463	0.01	2000	
Sb	123	115	1	He	0.114	0.114	11.19	1277	0.01	300	
Ba	137	115	1	He	12.688	12.688	1.57	18799	0.07	10000	
W	182	165	1	He	0.204	0.204	13.25	5068	0.00	2500	
Tl	205	209	1	He	0.030	0.030	17.35	1107	0.00	5000	
Pb	208	209	1	He	0.068	0.068	5.28	3025	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1625837	1.13	1803797	90.13	30	120	
Sc	45	1	He	544771	1.06	574766	94.78	30	120	
Sc	45	2	NoGas	4233285	0.93	4296857	98.52	30	120	
Rh	103	1	He	1514647	1.77	1652712	91.65	30	120	
In	115	1	He	806842	0.41	852389	94.66	30	120	
Tb	159	1	He	2446667	1.60	2425956	100.85	30	120	
Ho	165	1	He	2532488	1.48	2452680	103.25	30	120	
Bi	209	1	He	1750306	0.21	1810473	96.68	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49304-k-1-a
Data File Name	090SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:14:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2143.042	2143.042	0.36	9742743	0.02	10000	
B	11	45	2	NoGas	493.301	493.301	1.99	1537637	0.03	300	>LDR
Na	23	45	1	He	629588.825	629588.825	1.38	832118456	0.08	500000	>LDR
Mg	24	45	1	He	226078.022	226078.022	1.40	169415538	0.13	500000	
Al	27	45	1	He	19154.831	19154.831	1.57	7465766	0.26	200000	
K	39	45	1	He	61733.272	61733.272	1.06	36374290	0.17	500000	
Ca	44	45	1	He	202799.244	202799.244	0.33	6360561	3.19	500000	
Ti	47	45	1	He	205.789	205.789	1.11	38431	0.54	2500	
V	51	45	1	He	2085.203	2085.203	0.97	9949184	0.02	10000	
Cr	52	45	1	He	2031.225	2031.225	0.34	11891372	0.02	10000	
Mn	55	45	1	He	4988.969	4988.969	1.16	20658573	0.02	10000	
Fe	56	45	1	He	161829.842	161829.842	0.71	867458383	0.02	200000	
Co	59	103	1	He	2080.611	2080.611	0.55	16865900	0.01	10000	
Ni	60	103	1	He	2060.785	2060.785	0.81	4248157	0.05	10000	
Cu	63	103	1	He	1993.707	1993.707	0.96	10962490	0.02	10000	
Zn	66	103	1	He	2068.767	2068.767	1.38	2313343	0.09	10000	
As	75	103	1	He	2118.780	2118.780	0.57	1499481	0.14	10000	
Se	78	103	1	He	2125.487	2125.487	1.02	124539	1.71	10000	
Sr	88	103	1	He	3849.942	3849.942	0.55	16212933	0.02	10000	
Mo	95	103	1	He	239.461	239.461	1.09	543864	0.04	2000	
Ag	107	103	1	He	214.980	214.980	1.66	1689047	0.01	300	
Cd	111	103	1	He	2175.912	2175.912	0.93	2855912	0.08	4000	
Sn	118	115	1	He	2361.697	2361.697	1.03	6785763	0.03	2000	>LDR
Sb	123	115	1	He	228.683	228.683	0.48	697245	0.03	300	
Ba	137	115	1	He	2470.265	2470.265	0.30	2975334	0.08	10000	
W	182	165	1	He	216.569	216.569	0.79	2193103	0.01	2500	
Tl	205	209	1	He	539.234	539.234	1.80	10359884	0.01	5000	
Pb	208	209	1	He	2217.361	2217.361	1.36	56056760	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1452282	0.33	1803797	80.51	30	120	
Sc	45	1	He	493998	0.18	574766	85.95	30	120	
Sc	45	2	NoGas	3820963	0.57	4296857	88.92	30	120	
Rh	103	1	He	1270395	0.36	1652712	76.87	30	120	
In	115	1	He	656288	0.56	852389	76.99	30	120	
Tb	159	1	He	2199902	1.33	2425956	90.68	30	120	
Ho	165	1	He	2272853	1.04	2452680	92.67	30	120	
Bi	209	1	He	1395658	0.38	1810473	77.09	30	120	

Sample Report

Sample Table

Sample Name	240-49304-k-1-d ms
Data File Name	091SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:18:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1193.098	1193.098	23.33	4944129	0.02	10000	
B	11	45	2	NoGas	419.119	419.119	26.02	1238937	0.03	300	>LDR
Na	23	45	1	He	633260.040	633260.040	0.44	836212559	0.08	500000	>LDR
Mg	24	45	1	He	221546.066	221546.066	0.40	165869405	0.13	500000	
Al	27	45	1	He	10038.341	10038.341	0.78	3909117	0.26	200000	
K	39	45	1	He	53241.179	53241.179	0.40	31349464	0.17	500000	
Ca	44	45	1	He	198254.181	198254.181	1.11	6212156	3.19	500000	
Ti	47	45	1	He	104.255	104.255	1.76	19453	0.54	2500	
V	51	45	1	He	1091.843	1091.843	2.65	5204416	0.02	10000	
Cr	52	45	1	He	1046.493	1046.493	2.25	6121778	0.02	10000	
Mn	55	45	1	He	4149.684	4149.684	0.72	17167477	0.02	10000	
Fe	56	45	1	He	156777.887	156777.887	0.73	839605478	0.02	200000	
Co	59	103	1	He	1072.130	1072.130	1.31	8676508	0.01	10000	
Ni	60	103	1	He	1085.125	1085.125	1.43	2233229	0.05	10000	
Cu	63	103	1	He	1030.067	1030.067	1.78	5655254	0.02	10000	
Zn	66	103	1	He	1008.640	1008.640	1.64	1126325	0.09	10000	
As	75	103	1	He	1075.091	1075.091	1.11	759666	0.14	10000	
Se	78	103	1	He	1074.410	1074.410	1.18	62860	1.71	10000	
Sr	88	103	1	He	2793.700	2793.700	1.22	11745200	0.02	10000	
Mo	95	103	1	He	124.482	124.482	1.06	282516	0.04	2000	
Ag	107	103	1	He	105.567	105.567	1.05	828038	0.01	300	
Cd	111	103	1	He	1039.219	1039.219	1.16	1362059	0.08	4000	
Sn	118	115	1	He	1190.443	1190.443	1.07	3523180	0.03	2000	
Sb	123	115	1	He	112.696	112.696	1.05	354246	0.03	300	
Ba	137	115	1	He	1172.307	1172.307	0.69	1454204	0.08	10000	
W	182	165	1	He	103.784	103.784	1.74	1058473	0.01	2500	
Tl	205	209	1	He	273.802	273.802	0.23	5283524	0.01	5000	
Pb	208	209	1	He	1131.416	1131.416	0.26	28728374	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1375604	24.26	1803797	76.26	30	120	
Sc	45	1	He	493551	0.62	574766	85.87	30	120	
Sc	45	2	NoGas	3799131	27.11	4296857	88.42	30	120	
Rh	103	1	He	1268381	1.17	1652712	76.75	30	120	
In	115	1	He	675914	0.08	852389	79.30	30	120	
Tb	159	1	He	2206064	1.68	2425956	90.94	30	120	
Ho	165	1	He	2286624	1.14	2452680	93.23	30	120	
Bi	209	1	He	1401757	0.49	1810473	77.42	30	120	

Sample Report

Sample Table

Sample Name	240-49304-k-1-e msd
Data File Name	092SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:21:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1075.869	1075.869	1.22	4908918	0.02	10000	
B	11	45	2	NoGas	380.785	380.785	1.21	1216277	0.03	300	>LDR
Na	23	45	1	He	633116.685	633116.685	1.53	835362189	0.08	500000	>LDR
Mg	24	45	1	He	221534.127	221534.127	0.42	165759497	0.13	500000	
Al	27	45	1	He	9844.535	9844.535	0.93	3830947	0.26	200000	
K	39	45	1	He	53086.337	53086.337	1.64	31233084	0.17	500000	
Ca	44	45	1	He	198591.652	198591.652	1.54	6218488	3.19	500000	
Ti	47	45	1	He	104.037	104.037	2.58	19399	0.54	2500	
V	51	45	1	He	1087.355	1087.355	1.78	5179448	0.02	10000	
Cr	52	45	1	He	1034.235	1034.235	0.62	6046144	0.02	10000	
Mn	55	45	1	He	4112.044	4112.044	0.43	17000388	0.02	10000	
Fe	56	45	1	He	156436.691	156436.691	0.60	837192322	0.02	200000	
Co	59	103	1	He	1052.164	1052.164	0.89	8706862	0.01	10000	
Ni	60	103	1	He	1067.103	1067.103	0.29	2245698	0.05	10000	
Cu	63	103	1	He	1006.760	1006.760	0.99	5652531	0.02	10000	
Zn	66	103	1	He	988.586	988.586	0.45	1128932	0.09	10000	
As	75	103	1	He	1049.158	1049.158	0.65	758094	0.14	10000	
Se	78	103	1	He	1055.290	1055.290	0.85	63135	1.67	10000	
Sr	88	103	1	He	2737.543	2737.543	0.60	11769325	0.02	10000	
Mo	95	103	1	He	121.140	121.140	0.41	281159	0.04	2000	
Ag	107	103	1	He	103.009	103.009	0.18	826219	0.01	300	
Cd	111	103	1	He	1017.413	1017.413	0.36	1363603	0.07	4000	
Sn	118	115	1	He	1166.376	1166.376	1.09	3509589	0.03	2000	
Sb	123	115	1	He	110.829	110.829	0.85	354205	0.03	300	
Ba	137	115	1	He	1176.356	1176.356	3.76	1483525	0.08	10000	
W	182	165	1	He	101.301	101.301	1.98	1052169	0.01	2500	
Tl	205	209	1	He	272.985	272.985	0.46	5323433	0.01	5000	
Pb	208	209	1	He	1111.601	1111.601	0.63	28522916	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1457769	2.03	1803797	80.82	30	120	
Sc	45	1	He	493226	1.48	574766	85.81	30	120	
Sc	45	2	NoGas	3911575	0.74	4296857	91.03	30	120	
Rh	103	1	He	1296923	0.64	1652712	78.47	30	120	
In	115	1	He	687224	0.68	852389	80.62	30	120	
Tb	159	1	He	2258071	0.39	2425956	93.08	30	120	
Ho	165	1	He	2328520	0.66	2452680	94.94	30	120	
Bi	209	1	He	1416549	0.45	1810473	78.24	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	093_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:25:25-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.530	3.533	245286	3.36	50	91.1	89.5	110.5	
B	11	45	2	NoGas	56.469	2.413	211302	1.65	50	112.9	89.5	110.5	CCV Failed
Na	23	45	1	He	26029.536	2.208	39796436	0.51	25000	104.1	89.5	110.5	
Mg	24	45	1	He	25864.384	1.421	22405567	0.51	25000	103.5	89.5	110.5	
Al	27	45	1	He	245.948	1.497	111541	0.53	250	98.4	89.5	110.5	
K	39	45	1	He	26503.099	2.409	18085664	0.53	25000	106.0	89.5	110.5	
Ca	44	45	1	He	24989.882	2.203	906412	0.31	25000	100.0	89.5	110.5	
Ti	47	45	1	He	50.933	1.726	10996	1.12	50	101.9	89.5	110.5	
V	51	45	1	He	51.374	0.383	283643	1.75	50	102.7	89.5	110.5	
Cr	52	45	1	He	51.700	1.937	352755	0.25	50	103.4	89.5	110.5	
Mn	55	45	1	He	254.987	2.091	1220580	0.40	250	102.0	89.5	110.5	
Fe	56	45	1	He	13140.785	2.264	81419681	0.38	12500	105.1	89.5	110.5	
Co	59	103	1	He	47.247	1.300	499461	0.36	50	94.5	89.5	110.5	
Ni	60	103	1	He	47.427	1.405	127581	0.96	50	94.9	89.5	110.5	
Cu	63	103	1	He	47.545	1.041	343345	0.69	50	95.1	89.5	110.5	
Zn	66	103	1	He	47.826	1.167	70570	0.21	50	95.7	89.5	110.5	
As	75	103	1	He	47.739	1.170	44249	0.22	50	95.5	89.5	110.5	
Se	78	103	1	He	47.273	3.055	3641	2.11	50	94.5	89.5	110.5	
Sr	88	103	1	He	48.460	2.280	266234	1.32	50	96.9	89.5	110.5	
Mo	95	103	1	He	50.470	0.888	150045	1.77	50	100.9	89.5	110.5	
Ag	107	103	1	He	49.046	1.456	502497	0.67	50	98.1	89.5	110.5	
Cd	111	103	1	He	49.413	1.549	85401	0.59	50	98.8	89.5	110.5	
Sn	118	115	1	He	51.757	0.719	192138	0.82	50	103.5	89.5	110.5	
Sb	123	115	1	He	53.001	0.967	208552	0.63	50	106.0	89.5	110.5	
Ba	137	115	1	He	52.384	0.410	81173	0.47	50	104.8	89.5	110.5	
W	182	165	1	He	48.176	1.455	564832	1.53	50	96.4	89.5	110.5	
Tl	205	209	1	He	47.207	0.538	1220525	0.75	50	94.4	89.5	110.5	
Pb	208	209	1	He	48.563	0.196	1652558	0.41	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1721021	0.27	1803797	95.41	30	120	
Sc	45	1	He	571138	1.94	574766	99.37	30	120	
Sc	45	2	NoGas	4470459	1.18	4296857	104.04	30	120	
Rh	103	1	He	1656699	0.95	1652712	100.24	30	120	
In	115	1	He	844207	0.33	852389	99.04	30	120	
Tb	159	1	He	2536496	1.25	2425956	104.56	30	120	
Ho	165	1	He	2621254	0.83	2452680	106.87	30	120	
Bi	209	1	He	1877586	0.49	1810473	103.71	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	094_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:29:15-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.181	7.7	1007	7.2	1	
B	11	45	2	NoGas	7.616	2.2	34244	2.6	20	
Na	23	45	1	He	98.434	3.5	181680	2.1	400	
Mg	24	45	1	He	8.303	5.6	8024	4.8	1000	
Al	27	45	1	He	7.965	3.9	4285	2.4	50	
K	39	45	1	He	11.219	10.6	71218	1.3	1000	
Ca	44	45	1	He	11.430	17.9	975	8.3	1000	
Ti	47	45	1	He	0.395	33.9	86	34.0	20	
V	51	45	1	He	0.106	46.1	839	32.6	2	
Cr	52	45	1	He	0.059	19.6	3350	1.7	2	
Mn	55	45	1	He	0.266	11.3	1425	10.0	2	
Fe	56	45	1	He	21.531	19.0	137835	17.3	50	
Co	59	103	1	He	0.037	16.1	471	12.5	1	
Ni	60	103	1	He	0.012	71.2	136	15.8	2	
Cu	63	103	1	He	0.125	16.0	3625	4.6	2	
Zn	66	103	1	He	0.527	11.0	1728	3.3	20	
As	75	103	1	He	0.148	10.4	357	2.6	2	
Se	78	103	1	He	0.316	30.4	58	11.7	2	
Sr	88	103	1	He	0.144	26.1	993	21.1	10	
Mo	95	103	1	He	0.708	26.4	2979	18.4	2	
Ag	107	103	1	He	0.009	11.6	129	10.5	0.2	
Cd	111	103	1	He	0.154	12.8	1193	2.7	0.2	
Sn	118	115	1	He	0.548	8.9	3030	6.5	10	
Sb	123	115	1	He	0.271	12.6	2052	7.2	1	
Ba	137	115	1	He	0.094	25.0	167	22.5	5	
W	182	165	1	He	1.158	12.5	16461	10.9	10	
Tl	205	209	1	He	0.111	9.2	3377	6.5	0.5	
Pb	208	209	1	He	0.070	4.9	3408	5.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1768760	0.82	1803797	98.06	30	120	
Sc	45	1	He	564925	0.80	574766	98.29	30	120	
Sc	45	2	NoGas	4533584	0.80	4296857	105.51	30	120	
Rh	103	1	He	1770958	1.95	1652712	107.15	30	120	
In	115	1	He	887359	0.44	852389	104.10	30	120	
Tb	159	1	He	2558878	0.95	2425956	105.48	30	120	
Ho	165	1	He	2633307	0.63	2452680	107.36	30	120	
Bi	209	1	He	1940025	1.73	1810473	107.16	30	120	

Sample Report

Sample Table

Sample Name	240-49304-m-1-a
Data File Name	095SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:33:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.273	0.273	13.82	1289	0.02	10000	
B	11	45	2	NoGas	241.104	241.104	0.94	794309	0.03	300	
Na	23	45	1	He	474436.326	474436.326	2.17	650409396	0.07	500000	
Mg	24	45	1	He	174793.854	174793.854	2.07	135862717	0.13	500000	
Al	27	45	1	He	25.243	25.243	2.26	10876	0.23	200000	
K	39	45	1	He	34340.539	34340.539	1.72	21013595	0.16	500000	
Ca	44	45	1	He	180992.788	180992.788	0.93	5888822	3.07	500000	
Ti	47	45	1	He	1.118	1.118	8.21	218	0.51	2500	
V	51	45	1	He	1.644	1.644	6.34	8374	0.02	10000	
Cr	52	45	1	He	2.862	2.862	2.84	20058	0.01	10000	
Mn	55	45	1	He	3265.258	3265.258	2.22	14024079	0.02	10000	
Fe	56	45	1	He	158781.083	158781.083	1.74	882885618	0.02	200000	
Co	59	103	1	He	71.668	71.668	0.62	612041	0.01	10000	
Ni	60	103	1	He	51.564	51.564	1.10	112051	0.05	10000	
Cu	63	103	1	He	1.906	1.906	3.99	13056	0.01	10000	
Zn	66	103	1	He	79.177	79.177	0.07	93932	0.08	10000	
As	75	103	1	He	2.328	2.328	1.25	1895	0.12	10000	
Se	78	103	1	He	1.411	1.411	7.02	111	1.27	10000	
Sr	88	103	1	He	1388.025	1388.025	1.32	6157650	0.02	10000	
Mo	95	103	1	He	0.471	0.471	10.10	1688	0.03	2000	
Ag	107	103	1	He	0.007	0.007	38.24	83	0.01	300	
Cd	111	103	1	He	6.985	6.985	0.20	10344	0.07	4000	
Sn	118	115	1	He	1.753	1.753	14.91	6372	0.03	2000	
Sb	123	115	1	He	0.447	0.447	3.65	2295	0.02	300	
Ba	137	115	1	He	53.123	53.123	0.41	71482	0.07	10000	
W	182	165	1	He	0.434	0.434	8.91	7057	0.01	2500	
Tl	205	209	1	He	0.095	0.095	7.76	2285	0.00	5000	
Pb	208	209	1	He	0.121	0.121	3.41	4002	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1506893	1.43	1803797	83.54	30	120	
Sc	45	1	He	512513	1.82	574766	89.17	30	120	
Sc	45	2	NoGas	4024032	0.42	4296857	93.65	30	120	
Rh	103	1	He	1338293	0.16	1652712	80.98	30	120	
In	115	1	He	733083	0.40	852389	86.00	30	120	
Tb	159	1	He	2288538	0.50	2425956	94.34	30	120	
Ho	165	1	He	2333205	1.97	2452680	95.13	30	120	
Bi	209	1	He	1495730	0.08	1810473	82.62	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176683/1-a
Data File Name	096_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:36:58-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.126	24.6	641	24.0	1	
B	11	45	2	NoGas	11.698	4.3	45404	2.7	20	
Na	23	45	1	He	174.351	3.7	287023	4.1	400	
Mg	24	45	1	He	81.095	1.9	68160	2.5	1000	
Al	27	45	1	He	3.773	3.3	2340	2.1	50	
K	39	45	1	He	20.482	10.5	74977	2.3	1000	
Ca	44	45	1	He	315.555	0.3	11502	1.0	1000	
Ti	47	45	1	He	0.399	29.1	83	28.0	20	
V	51	45	1	He	0.210	27.5	1360	23.3	2	
Cr	52	45	1	He	1.041	1.7	9607	1.5	2	
Mn	55	45	1	He	0.546	10.6	2664	10.7	2	
Fe	56	45	1	He	40.872	20.5	248589	20.8	50	
Co	59	103	1	He	0.022	13.3	284	10.6	1	
Ni	60	103	1	He	0.129	24.9	441	19.7	2	
Cu	63	103	1	He	0.827	1.8	8408	1.2	2	
Zn	66	103	1	He	4.111	3.7	6830	3.6	20	
As	75	103	1	He	0.204	3.2	385	1.9	2	
Se	78	103	1	He	0.204	63.9	45	22.1	2	
Sr	88	103	1	He	0.640	4.6	3650	4.3	10	
Mo	95	103	1	He	-0.088	-28.3	437	17.1	2	
Ag	107	103	1	He	0.004	35.5	76	20.4	0.2	
Cd	111	103	1	He	0.125	5.9	1064	1.1	0.2	
Sn	118	115	1	He	0.673	11.0	3282	7.8	10	
Sb	123	115	1	He	0.233	9.6	1766	4.5	1	
Ba	137	115	1	He	1.530	5.9	2338	5.7	5	
W	182	165	1	He	0.192	10.7	4879	5.4	10	
Tl	205	209	1	He	0.041	11.0	1468	7.7	0.5	
Pb	208	209	1	He	0.147	3.6	5958	3.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1612673	2.19	1803797	89.40	30	120	
Sc	45	1	He	546870	0.79	574766	95.15	30	120	
Sc	45	2	NoGas	4177769	1.10	4296857	97.23	30	120	
Rh	103	1	He	1653576	0.37	1652712	100.05	30	120	
In	115	1	He	828037	0.36	852389	97.14	30	120	
Tb	159	1	He	2463933	0.70	2425956	101.57	30	120	
Ho	165	1	He	2504941	0.91	2452680	102.13	30	120	
Bi	209	1	He	1884418	0.76	1810473	104.08	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176683/3-a
Data File Name	097_LCS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:40:49-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	977.280	977.280	1.971	5057626	0.78	1000	97.7	79.5	120.5	
B	11	2	NoGas	114.073	114.073	0.455	393531	0.60	100	114.1	79.5	120.5	
Na	23	1	He	10047.843	10047.843	2.180	14734098	1.15	10000	100.5	79.5	120.5	
Mg	24	1	He	9912.448	9912.448	2.261	8224776	1.47	10000	99.1	79.5	120.5	
Al	27	1	He	9101.438	9101.438	3.571	3927483	2.84	10000	91.0	79.5	120.5	
K	39	1	He	9856.293	9856.293	3.787	6479745	1.91	10000	98.6	79.5	120.5	
Ca	44	1	He	9268.547	9268.547	0.891	322394	1.01	10000	92.7	79.5	120.5	
Ti	47	1	He	95.580	95.580	4.194	19756	2.60	100	95.6	79.5	120.5	
V	51	1	He	1002.075	1002.075	2.759	5293114	1.65	1000	100.2	79.5	120.5	
Cr	52	1	He	994.390	994.390	2.112	6446203	0.31	1000	99.4	79.5	120.5	
Mn	55	1	He	971.339	971.339	1.863	4453101	0.06	1000	97.1	79.5	120.5	
Fe	56	1	He	10011.131	10011.131	0.978	59422624	1.01	10000	100.1	79.5	120.5	
Co	59	1	He	911.375	911.375	1.082	9172009	0.72	1000	91.1	79.5	120.5	
Ni	60	1	He	956.370	956.370	1.956	2447429	0.47	1000	95.6	79.5	120.5	
Cu	63	1	He	932.614	932.614	2.206	6366952	0.64	1000	93.3	79.5	120.5	
Zn	66	1	He	907.237	907.237	1.416	1259944	0.24	1000	90.7	79.5	120.5	
As	75	1	He	884.465	884.465	1.742	777189	0.75	1000	88.4	79.5	120.5	
Se	78	1	He	886.757	886.757	0.711	64526	0.88	1000	88.7	79.5	120.5	
Sr	88	1	He	941.012	941.012	1.763	4919551	0.18	1000	94.1	79.5	120.5	
Mo	95	1	He	99.553	99.553	2.064	281094	1.44	100	99.6	79.5	120.5	
Ag	107	1	He	96.776	96.776	1.652	943922	0.33	100	96.8	79.5	120.5	
Cd	111	1	He	989.290	989.290	5.987	1611697	4.54	1000	98.9	79.5	120.5	
Sn	118	1	He	1082.917	1082.917	0.662	3689077	0.68	1000	108.3	79.5	120.5	
Sb	123	1	He	102.333	102.333	0.628	370337	0.97	100	102.3	79.5	120.5	
Ba	137	1	He	1000.571	1000.571	1.019	1428590	0.36	1000	100.1	79.5	120.5	
W	182	1	He	93.440	93.440	0.855	1040031	1.01	100	93.4	79.5	120.5	
Tl	205	1	He	231.013	231.013	1.034	5723723	0.92	250	92.4	79.5	120.5	
Pb	208	1	He	949.984	949.984	2.313	30966338	0.68	1000	95.0	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1653514	1.57	1803797	91.67	30	120	
Sc	45	1	He	547033	1.86	574766	95.17	30	120	
Sc	45	2	NoGas	4181677	0.42	4296857	97.32	30	120	
Rh	103	1	He	1577376	1.60	1652712	95.44	30	120	
In	115	1	He	778017	0.89	852389	91.27	30	120	
Tb	159	1	He	2437946	1.34	2425956	100.49	30	120	
Ho	165	1	He	2494559	0.44	2452680	101.71	30	120	
Bi	209	1	He	1800010	1.89	1810473	99.42	30	120	

Sample Report

Sample Table

Sample Name	240-49299-b-1-a
Data File Name	098SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:44:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.310	0.310	1.75	1685	0.02	10000	
B	11	45	2	NoGas	49.965	49.965	2.25	186669	0.03	300	
Na	23	45	1	He	34726.855	34726.855	2.16	52041916	0.07	500000	
Mg	24	45	1	He	161056.298	161056.298	1.91	136767209	0.12	500000	
Al	27	45	1	He	19.745	19.745	1.51	9450	0.21	200000	
K	39	45	1	He	1885.742	1885.742	3.35	1320153	0.14	500000	
Ca	44	45	1	He	243929.547	243929.547	0.79	8670041	2.81	500000	
Ti	47	45	1	He	0.940	0.940	12.27	200	0.47	2500	
V	51	45	1	He	-0.010	-0.010	-1064.43	198	-0.01	10000	
Cr	52	45	1	He	1.396	1.396	2.72	12186	0.01	10000	
Mn	55	45	1	He	6.440	6.440	0.81	30386	0.02	10000	
Fe	56	45	1	He	38.870	38.870	1.52	242086	0.02	200000	
Co	59	103	1	He	0.291	0.291	5.76	2806	0.01	10000	
Ni	60	103	1	He	3.385	3.385	1.68	8256	0.04	10000	
Cu	63	103	1	He	6.057	6.057	1.64	41237	0.01	10000	
Zn	66	103	1	He	11.707	11.707	3.49	16088	0.07	10000	
As	75	103	1	He	2.983	2.983	0.86	2649	0.11	10000	
Se	78	103	1	He	4.032	4.032	8.50	303	1.33	10000	
Sr	88	103	1	He	2046.287	2046.287	1.62	10091505	0.02	10000	
Mo	95	103	1	He	6.657	6.657	3.64	18314	0.04	2000	
Ag	107	103	1	He	0.013	0.013	24.03	148	0.01	300	
Cd	111	103	1	He	0.381	0.381	13.93	1350	0.03	4000	
Sn	118	115	1	He	2.621	2.621	22.34	9807	0.03	2000	
Sb	123	115	1	He	0.567	0.567	1.53	2895	0.02	300	
Ba	137	115	1	He	17.791	17.791	0.89	25673	0.07	10000	
W	182	165	1	He	1.197	1.197	12.67	15927	0.01	2500	
Tl	205	209	1	He	0.299	0.299	19.44	7287	0.00	5000	
Pb	208	209	1	He	0.280	0.280	6.20	9346	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1735434	1.90	1803797	96.21	30	120	
Sc	45	1	He	559855	0.93	574766	97.41	30	120	
Sc	45	2	NoGas	4446201	0.53	4296857	103.48	30	120	
Rh	103	1	He	1487865	1.39	1652712	90.03	30	120	
In	115	1	He	785940	0.74	852389	92.20	30	120	
Tb	159	1	He	2415730	1.01	2425956	99.58	30	120	
Ho	165	1	He	2483085	1.78	2452680	101.24	30	120	
Bi	209	1	He	1680070	1.34	1810473	92.80	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49299-b-1-a@5
Data File Name	099SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:48:13-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.129	0.129	18.93	763	0.02	10000	
B	11	45	2	NoGas	13.142	13.142	1.00	58381	0.02	300	
Na	23	45	1	He	7015.007	7015.007	2.45	11659568	0.06	500000	
Mg	24	45	1	He	32098.434	32098.434	2.29	30157373	0.11	500000	
Al	27	45	1	He	5.032	5.032	4.50	3266	0.15	200000	
K	39	45	1	He	363.234	363.234	4.15	337676	0.11	500000	
Ca	44	45	1	He	50852.549	50852.549	3.47	1999770	2.54	500000	
Ti	47	45	1	He	0.337	0.337	46.06	80	0.42	2500	
V	51	45	1	He	0.018	0.018	299.17	395	0.00	10000	
Cr	52	45	1	He	0.309	0.309	8.06	5509	0.01	10000	
Mn	55	45	1	He	1.424	1.424	3.65	7578	0.02	10000	
Fe	56	45	1	He	9.062	9.062	7.12	67501	0.01	200000	
Co	59	103	1	He	0.062	0.062	2.87	750	0.01	10000	
Ni	60	103	1	He	0.642	0.642	0.91	1916	0.03	10000	
Cu	63	103	1	He	1.053	1.053	2.86	10569	0.01	10000	
Zn	66	103	1	He	2.295	2.295	1.68	4414	0.05	10000	
As	75	103	1	He	0.454	0.454	8.17	648	0.07	10000	
Se	78	103	1	He	0.830	0.830	6.18	98	0.85	10000	
Sr	88	103	1	He	407.687	407.687	0.78	2355348	0.02	10000	
Mo	95	103	1	He	1.041	1.041	3.61	3974	0.03	2000	
Ag	107	103	1	He	0.003	0.003	109.87	64	0.00	300	
Cd	111	103	1	He	0.138	0.138	3.74	1145	0.01	4000	
Sn	118	115	1	He	0.249	0.249	29.11	1874	0.01	2000	
Sb	123	115	1	He	0.063	0.063	17.41	1198	0.01	300	
Ba	137	115	1	He	3.388	3.388	2.65	5542	0.06	10000	
W	182	165	1	He	0.170	0.170	6.91	5020	0.00	2500	
Tl	205	209	1	He	0.058	0.058	10.67	1953	0.00	5000	
Pb	208	209	1	He	0.072	0.072	3.77	3459	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1879999	0.60	1803797	104.22	30	120	
Sc	45	1	He	619489	1.74	574766	107.78	30	120	
Sc	45	2	NoGas	4846778	0.90	4296857	112.80	30	120	
Rh	103	1	He	1742824	1.10	1652712	105.45	30	120	
In	115	1	He	889185	0.62	852389	104.32	30	120	
Tb	159	1	He	2617283	1.44	2425956	107.89	30	120	
Ho	165	1	He	2708624	0.53	2452680	110.44	30	120	
Bi	209	1	He	1922467	1.45	1810473	106.19	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49299-b-1-a
Data File Name	100SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:52:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2079.618	2079.618	3.20	10544984	0.02	10000	
B	11	45	2	NoGas	283.806	283.806	0.52	969997	0.03	300	
Na	23	45	1	He	53677.200	53677.200	3.02	76902714	0.07	500000	
Mg	24	45	1	He	170889.408	170889.408	1.60	138789217	0.12	500000	
Al	27	45	1	He	19424.280	19424.280	2.56	8204269	0.24	200000	
K	39	45	1	He	22663.478	22663.478	2.32	14509355	0.16	500000	
Ca	44	45	1	He	253714.114	253714.114	3.21	8622127	2.94	500000	
Ti	47	45	1	He	207.775	207.775	3.06	42043	0.49	2500	
V	51	45	1	He	2111.670	2111.670	1.61	10919380	0.02	10000	
Cr	52	45	1	He	2108.845	2108.845	2.18	13378906	0.02	10000	
Mn	55	45	1	He	2075.353	2075.353	1.79	9313480	0.02	10000	
Fe	56	45	1	He	20795.684	20795.684	1.29	120817662	0.02	200000	
Co	59	103	1	He	2072.625	2072.625	0.45	18658985	0.01	10000	
Ni	60	103	1	He	2082.135	2082.135	1.53	4766801	0.04	10000	
Cu	63	103	1	He	2075.182	2075.182	1.18	12672186	0.02	10000	
Zn	66	103	1	He	2071.385	2071.385	0.67	2572511	0.08	10000	
As	75	103	1	He	2230.462	2230.462	1.03	1753108	0.13	10000	
Se	78	103	1	He	2075.620	2075.620	0.38	135069	1.54	10000	
Sr	88	103	1	He	4136.158	4136.158	0.64	19344324	0.02	10000	
Mo	95	103	1	He	244.152	244.152	0.30	615848	0.04	2000	
Ag	107	103	1	He	221.681	221.681	0.63	1934273	0.01	300	
Cd	111	103	1	He	2195.107	2195.107	1.11	3199720	0.07	4000	
Sn	118	115	1	He	2351.487	2351.487	0.14	7454191	0.03	2000	>LDR
Sb	123	115	1	He	227.662	227.662	0.38	765807	0.03	300	
Ba	137	115	1	He	2397.114	2397.114	0.95	3185269	0.08	10000	
W	182	165	1	He	218.381	218.381	0.85	2376888	0.01	2500	
Tl	205	209	1	He	542.637	542.637	0.90	11502659	0.00	5000	
Pb	208	209	1	He	2223.929	2223.929	0.47	62030009	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1620460	2.06	1803797	89.84	30	120	
Sc	45	1	He	535484	1.91	574766	93.17	30	120	
Sc	45	2	NoGas	4179097	0.89	4296857	97.26	30	120	
Rh	103	1	He	1410884	0.11	1652712	85.37	30	120	
In	115	1	He	724041	0.11	852389	84.94	30	120	
Tb	159	1	He	2384973	0.39	2425956	98.31	30	120	
Ho	165	1	He	2443225	1.48	2452680	99.61	30	120	
Bi	209	1	He	1539817	0.91	1810473	85.05	30	120	

Sample Report

Sample Table

Sample Name	240-49299-b-1-d ms
Data File Name	101SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:55:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1096.396	1096.396	2.13	5681633	0.02	10000	
B	11	45	2	NoGas	168.859	168.859	0.74	591610	0.03	300	
Na	23	45	1	He	44947.255	44947.255	1.47	64909955	0.07	500000	
Mg	24	45	1	He	168153.216	168153.216	1.09	137625406	0.12	500000	
Al	27	45	1	He	10290.431	10290.431	2.94	4380060	0.23	200000	
K	39	45	1	He	12879.944	12879.944	1.26	8336430	0.15	500000	
Ca	44	45	1	He	251991.135	251991.135	0.63	8631910	2.92	500000	
Ti	47	45	1	He	108.391	108.391	1.39	22107	0.49	2500	
V	51	45	1	He	1130.310	1130.310	0.91	5890256	0.02	10000	
Cr	52	45	1	He	1097.510	1097.510	2.16	7018067	0.02	10000	
Mn	55	45	1	He	1081.160	1081.160	2.54	4889333	0.02	10000	
Fe	56	45	1	He	10979.896	10979.896	1.31	64283995	0.02	200000	
Co	59	103	1	He	1069.546	1069.546	0.38	9779412	0.01	10000	
Ni	60	103	1	He	1081.521	1081.521	0.91	2514814	0.04	10000	
Cu	63	103	1	He	1054.476	1054.476	0.82	6541055	0.02	10000	
Zn	66	103	1	He	1014.478	1014.478	0.22	1280000	0.08	10000	
As	75	103	1	He	1086.777	1086.777	0.17	867641	0.13	10000	
Se	78	103	1	He	1081.847	1081.847	0.71	71514	1.51	10000	
Sr	88	103	1	He	3170.790	3170.790	0.71	15061534	0.02	10000	
Mo	95	103	1	He	130.539	130.539	0.87	334702	0.04	2000	
Ag	107	103	1	He	108.606	108.606	1.05	962470	0.01	300	
Cd	111	103	1	He	1129.433	1129.433	1.38	1672422	0.07	4000	
Sn	118	115	1	He	1206.158	1206.158	0.41	3929646	0.03	2000	
Sb	123	115	1	He	115.811	115.811	1.23	400718	0.03	300	
Ba	137	115	1	He	1244.474	1244.474	1.71	1699397	0.07	10000	
W	182	165	1	He	108.035	108.035	0.78	1174028	0.01	2500	
Tl	205	209	1	He	269.010	269.010	3.22	6001421	0.00	5000	
Pb	208	209	1	He	1097.682	1097.682	3.83	32216871	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1655761	1.87	1803797	91.79	30	120	
Sc	45	1	He	539565	1.11	574766	93.88	30	120	
Sc	45	2	NoGas	4266978	0.70	4296857	99.30	30	120	
Rh	103	1	He	1432971	0.35	1652712	86.70	30	120	
In	115	1	He	744072	0.45	852389	87.29	30	120	
Tb	159	1	He	2370115	1.24	2425956	97.70	30	120	
Ho	165	1	He	2436391	0.60	2452680	99.34	30	120	
Bi	209	1	He	1621902	3.98	1810473	89.58	30	120	

Sample Report

Sample Table

Sample Name	240-49299-b-1-e msd
Data File Name	102SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T16:59:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1066.218	1066.218	1.52	5596908	0.02	10000	
B	11	45	2	NoGas	161.770	161.770	1.78	587899	0.03	300	
Na	23	45	1	He	43666.438	43666.438	0.58	63888007	0.07	500000	
Mg	24	45	1	He	162913.892	162913.892	1.62	135074691	0.12	500000	
Al	27	45	1	He	10102.469	10102.469	1.02	4356883	0.23	200000	
K	39	45	1	He	12551.035	12551.035	1.39	8231171	0.15	500000	
Ca	44	45	1	He	247679.675	247679.675	0.39	8595380	2.88	500000	
Ti	47	45	1	He	106.033	106.033	1.18	21910	0.48	2500	
V	51	45	1	He	1111.116	1111.116	0.40	5865968	0.02	10000	
Cr	52	45	1	He	1058.224	1058.224	0.31	6856169	0.02	10000	
Mn	55	45	1	He	1056.409	1056.409	0.97	4840311	0.02	10000	
Fe	56	45	1	He	10576.379	10576.379	0.70	62732475	0.02	200000	
Co	59	103	1	He	1013.490	1013.490	3.87	9534070	0.01	10000	
Ni	60	103	1	He	1033.056	1033.056	4.38	2471028	0.04	10000	
Cu	63	103	1	He	1008.090	1008.090	2.72	6435031	0.02	10000	
Zn	66	103	1	He	966.444	966.444	3.47	1254635	0.08	10000	
As	75	103	1	He	1041.167	1041.167	2.99	855323	0.12	10000	
Se	78	103	1	He	1037.704	1037.704	3.61	70575	1.47	10000	
Sr	88	103	1	He	3067.206	3067.206	3.83	14989001	0.02	10000	
Mo	95	103	1	He	123.539	123.539	2.65	325995	0.04	2000	
Ag	107	103	1	He	103.386	103.386	3.00	942793	0.01	300	
Cd	111	103	1	He	1069.211	1069.211	4.24	1628779	0.07	4000	
Sn	118	115	1	He	1178.907	1178.907	1.00	3901274	0.03	2000	
Sb	123	115	1	He	112.596	112.596	1.68	395760	0.03	300	
Ba	137	115	1	He	1204.943	1204.943	1.33	1671353	0.07	10000	
W	182	165	1	He	102.816	102.816	1.02	1124901	0.01	2500	
Tl	205	209	1	He	271.134	271.134	0.87	5813507	0.00	5000	
Pb	208	209	1	He	1117.270	1117.270	0.75	31521802	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1677050	1.44	1803797	92.97	30	120	
Sc	45	1	He	546600	0.84	574766	95.10	30	120	
Sc	45	2	NoGas	4424644	1.61	4296857	102.97	30	120	
Rh	103	1	He	1475431	3.23	1652712	89.27	30	120	
In	115	1	He	755785	0.32	852389	88.67	30	120	
Tb	159	1	He	2378442	1.17	2425956	98.04	30	120	
Ho	165	1	He	2452813	0.90	2452680	100.01	30	120	
Bi	209	1	He	1557511	0.26	1810473	86.03	30	120	

Sample Report

Sample Table

Sample Name	190-7047-d-1-a
Data File Name	103SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:02:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.474	0.474	8.50	2452	0.02	10000	
B	11	45	2	NoGas	57391.495	57391.495	0.25	209281866	0.03	300	>LDR
Na	23	45	1	He	545121.262	545121.262	1.90	809792086	0.07	500000	>LDR
Mg	24	45	1	He	40397.433	40397.433	1.60	34026821	0.12	500000	
Al	27	45	1	He	980.820	980.820	1.30	430375	0.23	200000	
K	39	45	1	He	30888.457	30888.457	0.51	20491838	0.15	500000	
Ca	44	45	1	He	104133.073	104133.073	1.71	3671272	2.84	500000	
Ti	47	45	1	He	1.185	1.185	4.73	250	0.47	2500	
V	51	45	1	He	2.895	2.895	3.07	15776	0.02	10000	
Cr	52	45	1	He	1.946	1.946	0.75	15709	0.01	10000	
Mn	55	45	1	He	453.439	453.439	0.17	2110862	0.02	10000	
Fe	56	45	1	He	628.025	628.025	0.46	3790076	0.02	200000	
Co	59	103	1	He	3.114	3.114	2.86	28544	0.01	10000	
Ni	60	103	1	He	12.643	12.643	1.34	29505	0.04	10000	
Cu	63	103	1	He	9.561	9.561	2.38	61506	0.02	10000	
Zn	66	103	1	He	230.600	230.600	0.68	291783	0.08	10000	
As	75	103	1	He	3.986	3.986	2.68	3356	0.12	10000	
Se	78	103	1	He	1.937	1.937	7.09	154	1.26	10000	
Sr	88	103	1	He	474.241	474.241	0.93	2254910	0.02	10000	
Mo	95	103	1	He	210.104	210.104	0.85	538814	0.04	2000	
Ag	107	103	1	He	0.013	0.013	18.89	141	0.01	300	
Cd	111	103	1	He	0.512	0.512	6.15	1496	0.03	4000	
Sn	118	115	1	He	4.755	4.755	14.03	17098	0.03	2000	
Sb	123	115	1	He	17.230	17.230	1.79	63462	0.03	300	
Ba	137	115	1	He	26.848	26.848	2.22	38604	0.07	10000	
W	182	165	1	He	11.208	11.208	1.15	125668	0.01	2500	
Tl	205	209	1	He	0.357	0.357	23.36	8003	0.00	5000	
Pb	208	209	1	He	8.757	8.757	0.66	248253	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1649483	1.37	1803797	91.45	30	120	
Sc	45	1	He	555331	1.52	574766	96.62	30	120	
Sc	45	2	NoGas	4484840	0.31	4296857	104.37	30	120	
Rh	103	1	He	1434259	0.53	1652712	86.78	30	120	
In	115	1	He	783249	0.22	852389	91.89	30	120	
Tb	159	1	He	2386941	1.37	2425956	98.39	30	120	
Ho	165	1	He	2465536	1.14	2452680	100.52	30	120	
Bi	209	1	He	1560191	0.63	1810473	86.18	30	120	

Sample Report

Sample Table

Sample Name	190-7048-d-1-a
Data File Name	104SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:06:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.266	0.266	4.77	1311	0.02	10000	
B	11	45	2	NoGas	836.118	836.118	2.01	2923019	0.03	300	>LDR
Na	23	45	1	He	232235.327	232235.327	0.88	337807313	0.07	500000	
Mg	24	45	1	He	8277.821	8277.821	0.64	6827469	0.12	500000	
Al	27	45	1	He	26.504	26.504	3.50	12073	0.22	200000	
K	39	45	1	He	145499.014	145499.014	2.42	94241700	0.15	500000	
Ca	44	45	1	He	14720.538	14720.538	1.73	508526	2.89	500000	
Ti	47	45	1	He	1.132	1.132	10.46	233	0.48	2500	
V	51	45	1	He	1.585	1.585	4.73	8566	0.02	10000	
Cr	52	45	1	He	1.581	1.581	8.25	13021	0.01	10000	
Mn	55	45	1	He	45.644	45.644	1.48	208139	0.02	10000	
Fe	56	45	1	He	144.632	144.632	1.68	858825	0.02	200000	
Co	59	103	1	He	0.235	0.235	6.29	2238	0.01	10000	
Ni	60	103	1	He	310.390	310.390	2.73	736919	0.04	10000	
Cu	63	103	1	He	2.871	2.871	2.19	20385	0.01	10000	
Zn	66	103	1	He	64.139	64.139	2.52	83329	0.08	10000	
As	75	103	1	He	1.904	1.904	4.03	1726	0.11	10000	
Se	78	103	1	He	0.601	0.601	10.75	67	0.90	10000	
Sr	88	103	1	He	72.316	72.316	2.74	350824	0.02	10000	
Mo	95	103	1	He	10.120	10.120	5.13	27051	0.04	2000	
Ag	107	103	1	He	0.006	0.006	33.94	84	0.01	300	
Cd	111	103	1	He	0.288	0.288	11.80	1187	0.02	4000	
Sn	118	115	1	He	2.474	2.474	11.52	9292	0.03	2000	
Sb	123	115	1	He	2.953	2.953	0.53	11577	0.03	300	
Ba	137	115	1	He	2.510	2.510	2.94	3625	0.07	10000	
W	182	165	1	He	0.874	0.874	4.86	12153	0.01	2500	
Tl	205	209	1	He	0.186	0.186	7.13	4512	0.00	5000	
Pb	208	209	1	He	0.880	0.880	3.28	26718	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1570825	0.89	1803797	87.08	30	120	
Sc	45	1	He	543686	1.88	574766	94.59	30	120	
Sc	45	2	NoGas	4291845	1.33	4296857	99.88	30	120	
Rh	103	1	He	1463727	2.81	1652712	88.57	30	120	
In	115	1	He	784450	1.08	852389	92.03	30	120	
Tb	159	1	He	2368945	0.98	2425956	97.65	30	120	
Ho	165	1	He	2439121	0.53	2452680	99.45	30	120	
Bi	209	1	He	1627596	1.87	1810473	89.90	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	105_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:10:23-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.977	1.740	246859	1.85	50	92.0	89.5	110.5	
B	11	45	2	NoGas	449.267	0.872	1696560	0.63	50	898.5	89.5	110.5	CCV Failed
Na	23	45	1	He	25168.663	1.804	40213285	1.36	25000	100.7	89.5	110.5	
Mg	24	45	1	He	25071.008	1.951	22692948	1.23	25000	100.3	89.5	110.5	
Al	27	45	1	He	246.819	2.214	116951	1.00	250	98.7	89.5	110.5	
K	39	45	1	He	26259.996	2.731	18723864	0.50	25000	105.0	89.5	110.5	
Ca	44	45	1	He	24916.251	2.409	944299	0.69	25000	99.7	89.5	110.5	
Ti	47	45	1	He	50.942	1.594	11494	2.75	50	101.9	89.5	110.5	
V	51	45	1	He	50.838	0.647	293318	2.59	50	101.7	89.5	110.5	
Cr	52	45	1	He	50.277	1.967	358545	1.15	50	100.6	89.5	110.5	
Mn	55	45	1	He	249.890	2.141	1249936	1.26	250	100.0	89.5	110.5	
Fe	56	45	1	He	12761.879	2.220	82625477	1.07	12500	102.1	89.5	110.5	
Co	59	103	1	He	47.503	0.265	506392	0.63	50	95.0	89.5	110.5	
Ni	60	103	1	He	47.253	0.839	128185	1.33	50	94.5	89.5	110.5	
Cu	63	103	1	He	47.614	0.991	346727	1.49	50	95.2	89.5	110.5	
Zn	66	103	1	He	47.726	1.420	71016	1.74	50	95.5	89.5	110.5	
As	75	103	1	He	49.219	0.874	45996	0.31	50	98.4	89.5	110.5	
Se	78	103	1	He	49.151	2.175	3816	1.60	50	98.3	89.5	110.5	
Sr	88	103	1	He	50.127	0.344	277721	0.87	50	100.3	89.5	110.5	
Mo	95	103	1	He	49.355	1.222	147955	0.73	50	98.7	89.5	110.5	
Ag	107	103	1	He	49.377	0.740	510137	0.68	50	98.8	89.5	110.5	
Cd	111	103	1	He	49.900	0.216	86961	0.58	50	99.8	89.5	110.5	
Sn	118	115	1	He	50.580	1.330	194091	0.57	50	101.2	89.5	110.5	
Sb	123	115	1	He	52.674	1.421	214231	0.73	50	105.3	89.5	110.5	
Ba	137	115	1	He	52.250	2.152	83680	1.43	50	104.5	89.5	110.5	
W	182	165	1	He	47.280	1.017	559504	1.28	50	94.6	89.5	110.5	
Tl	205	209	1	He	47.079	1.012	1221793	0.77	50	94.2	89.5	110.5	
Pb	208	209	1	He	48.574	0.503	1659224	1.10	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1715286	1.63	1803797	95.09	30	120	
Sc	45	1	He	596895	3.11	574766	103.85	30	120	
Sc	45	2	NoGas	4627468	0.87	4296857	107.69	30	120	
Rh	103	1	He	1670495	0.56	1652712	101.08	30	120	
In	115	1	He	872608	0.77	852389	102.37	30	120	
Tb	159	1	He	2551361	1.25	2425956	105.17	30	120	
Ho	165	1	He	2645392	0.49	2452680	107.86	30	120	
Bi	209	1	He	1884809	1.48	1810473	104.11	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	106_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:14:13-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.144	9.6	796	10.5	1	
B	11	45	2	NoGas	301.880	1.4	1171581	1.7	20	CCB Failed
Na	23	45	1	He	58.995	8.3	123023	5.4	400	
Mg	24	45	1	He	8.043	21.3	7861	18.6	1000	
Al	27	45	1	He	8.330	1.9	4483	0.3	50	
K	39	45	1	He	22.373	21.2	79317	3.0	1000	
Ca	44	45	1	He	11.350	10.4	980	4.8	1000	
Ti	47	45	1	He	0.470	69.7	102	68.7	20	
V	51	45	1	He	0.075	108.9	673	66.7	2	
Cr	52	45	1	He	0.040	35.1	3254	4.2	2	
Mn	55	45	1	He	0.242	22.6	1323	19.9	2	
Fe	56	45	1	He	16.569	33.2	108287	31.0	50	
Co	59	103	1	He	0.041	21.6	518	18.8	1	
Ni	60	103	1	He	0.022	18.5	163	7.1	2	
Cu	63	103	1	He	-0.054	-33.1	2219	6.1	2	
Zn	66	103	1	He	0.474	11.7	1622	5.3	20	
As	75	103	1	He	0.131	22.2	336	8.0	2	
Se	78	103	1	He	0.280	25.7	54	10.3	2	
Sr	88	103	1	He	0.158	29.9	1063	25.3	10	
Mo	95	103	1	He	0.675	21.8	2835	15.7	2	
Ag	107	103	1	He	0.008	35.3	126	26.2	0.2	
Cd	111	103	1	He	0.166	4.0	1196	0.6	0.2	
Sn	118	115	1	He	0.302	19.0	2100	10.6	10	
Sb	123	115	1	He	0.178	23.8	1686	10.3	1	
Ba	137	115	1	He	0.069	35.3	128	31.1	5	
W	182	165	1	He	1.124	14.1	15823	12.0	10	
Tl	205	209	1	He	0.082	12.4	2617	10.6	0.5	
Pb	208	209	1	He	0.058	9.8	2978	7.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1751754	1.64	1803797	97.11	30	120	
Sc	45	1	He	569378	1.30	574766	99.06	30	120	
Sc	45	2	NoGas	4747127	1.43	4296857	110.48	30	120	
Rh	103	1	He	1744534	0.47	1652712	105.56	30	120	
In	115	1	He	898155	0.34	852389	105.37	30	120	
Tb	159	1	He	2570920	1.27	2425956	105.98	30	120	
Ho	165	1	He	2594199	0.44	2452680	105.77	30	120	
Bi	209	1	He	1942969	0.57	1810473	107.32	30	120	

Sample Report

Sample Table

Sample Name	240-49336-d-1-a
Data File Name	107SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:18:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.169	0.169	7.32	878	0.02	10000	
B	11	45	2	NoGas	513.857	513.857	0.08	1840043	0.03	300	>LDR
Na	23	45	1	He	45657.033	45657.033	3.32	67760499	0.07	500000	
Mg	24	45	1	He	21905.416	21905.416	2.71	18428058	0.12	500000	
Al	27	45	1	He	165.230	165.230	2.23	73014	0.23	200000	
K	39	45	1	He	7750.139	7750.139	3.71	5179671	0.15	500000	
Ca	44	45	1	He	64097.077	64097.077	2.62	2257220	2.84	500000	
Ti	47	45	1	He	3.806	3.806	9.02	798	0.48	2500	
V	51	45	1	He	0.713	0.713	45.07	4047	0.02	10000	
Cr	52	45	1	He	1.457	1.457	7.01	12469	0.01	10000	
Mn	55	45	1	He	46.021	46.021	3.75	214030	0.02	10000	
Fe	56	45	1	He	579.542	579.542	2.85	3492911	0.02	200000	
Co	59	103	1	He	0.240	0.240	4.01	2358	0.01	10000	
Ni	60	103	1	He	1.344	1.344	6.58	3373	0.04	10000	
Cu	63	103	1	He	1.806	1.806	2.60	14041	0.01	10000	
Zn	66	103	1	He	10.509	10.509	1.90	14707	0.07	10000	
As	75	103	1	He	2.695	2.695	3.93	2440	0.11	10000	
Se	78	103	1	He	0.535	0.535	24.60	64	0.83	10000	
Sr	88	103	1	He	382.057	382.057	4.32	1907252	0.02	10000	
Mo	95	103	1	He	1.167	1.167	4.23	3774	0.03	2000	
Ag	107	103	1	He	0.008	0.008	29.17	108	0.01	300	
Cd	111	103	1	He	0.230	0.230	7.74	1132	0.02	4000	
Sn	118	115	1	He	1.022	1.022	7.90	4404	0.02	2000	
Sb	123	115	1	He	0.336	0.336	8.63	2097	0.02	300	
Ba	137	115	1	He	95.609	95.609	0.31	140717	0.07	10000	
W	182	165	1	He	0.406	0.406	15.29	7146	0.01	2500	
Tl	205	209	1	He	0.079	0.079	4.14	2271	0.00	5000	
Pb	208	209	1	He	0.401	0.401	4.45	13528	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1649480	1.63	1803797	91.44	30	120	
Sc	45	1	He	554851	3.23	574766	96.54	30	120	
Sc	45	2	NoGas	4389861	1.47	4296857	102.16	30	120	
Rh	103	1	He	1507029	3.08	1652712	91.19	30	120	
In	115	1	He	801904	0.47	852389	94.08	30	120	
Tb	159	1	He	2409153	1.49	2425956	99.31	30	120	
Ho	165	1	He	2465198	1.64	2452680	100.51	30	120	
Bi	209	1	He	1744869	1.90	1810473	96.38	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	108SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:21:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2220.142	2220.142	1.76	11078639	0.02	10000	
B	11	45	2	NoGas	417.929	417.929	1.72	1477963	0.03	300	>LDR
Na	23	45	1	He	20593.751	20593.751	2.34	30802055	0.07	500000	
Mg	24	45	1	He	20642.304	20642.304	3.64	17482778	0.12	500000	
Al	27	45	1	He	19827.816	19827.816	3.39	8734202	0.23	200000	
K	39	45	1	He	21146.186	21146.186	3.91	14121533	0.15	500000	
Ca	44	45	1	He	19056.439	19056.439	3.51	675987	2.82	500000	
Ti	47	45	1	He	202.463	202.463	3.38	42737	0.47	2500	
V	51	45	1	He	2071.583	2071.583	2.25	11174091	0.02	10000	
Cr	52	45	1	He	2053.917	2053.917	2.83	13591618	0.02	10000	
Mn	55	45	1	He	2078.128	2078.128	3.32	9725868	0.02	10000	
Fe	56	45	1	He	20990.355	20990.355	2.53	127194133	0.02	200000	
Co	59	103	1	He	1971.095	1971.095	1.34	19476386	0.01	10000	
Ni	60	103	1	He	1973.336	1973.336	0.85	4958742	0.04	10000	
Cu	63	103	1	He	1956.187	1956.187	1.99	13110661	0.01	10000	
Zn	66	103	1	He	2039.397	2039.397	2.08	2779717	0.07	10000	
As	75	103	1	He	2111.886	2111.886	1.72	1821909	0.12	10000	
Se	78	103	1	He	1974.979	1974.979	1.30	141060	1.40	10000	
Sr	88	103	1	He	2130.844	2130.844	1.38	10938296	0.02	10000	
Mo	95	103	1	He	203.221	203.221	3.32	562674	0.04	2000	
Ag	107	103	1	He	213.211	213.211	1.00	2042004	0.01	300	
Cd	111	103	1	He	2163.403	2163.403	1.24	3461301	0.06	4000	
Sn	118	115	1	He	2329.288	2329.288	0.49	7940822	0.03	2000	>LDR
Sb	123	115	1	He	232.771	232.771	0.25	842038	0.03	300	
Ba	137	115	1	He	2416.867	2416.867	0.64	3453752	0.07	10000	
W	182	165	1	He	209.629	209.629	0.90	2369712	0.01	2500	
Tl	205	209	1	He	495.457	495.457	0.97	12397051	0.00	5000	
Pb	208	209	1	He	2050.697	2050.697	1.08	67517706	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1594450	2.16	1803797	88.39	30	120	
Sc	45	1	He	558755	3.49	574766	97.21	30	120	
Sc	45	2	NoGas	4332447	0.71	4296857	100.83	30	120	
Rh	103	1	He	1548718	1.39	1652712	93.71	30	120	
In	115	1	He	778660	0.29	852389	91.35	30	120	
Tb	159	1	He	2469878	1.03	2425956	101.81	30	120	
Ho	165	1	He	2537241	0.51	2452680	103.45	30	120	
Bi	209	1	He	1817701	0.68	1810473	100.40	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176157/1-a
Data File Name	109_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:25:20-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.405	8.6	2130	7.8	1	
B	11	45	2	NoGas	192.068	1.4	687355	0.5	20	Blank Failed
Na	23	45	1	He	51.376	1.3	106349	1.4	400	
Mg	24	45	1	He	4.225	3.8	4356	2.4	1000	
Al	27	45	1	He	4.209	4.4	2511	2.1	50	
K	39	45	1	He	32.429	7.1	82204	0.3	1000	
Ca	44	45	1	He	14.339	28.6	1038	13.9	1000	
Ti	47	45	1	He	0.476	40.4	99	40.5	20	
V	51	45	1	He	0.519	26.4	2970	24.1	2	
Cr	52	45	1	He	1.270	4.6	11017	2.1	2	
Mn	55	45	1	He	0.377	1.5	1873	1.4	2	
Fe	56	45	1	He	16.628	29.1	103843	27.9	50	
Co	59	103	1	He	0.388	6.2	4056	5.9	1	
Ni	60	103	1	He	0.309	0.7	902	1.1	2	
Cu	63	103	1	He	1.090	23.4	10044	17.2	2	
Zn	66	103	1	He	2.852	5.0	4882	3.8	20	
As	75	103	1	He	1.841	4.7	1849	3.7	2	
Se	78	103	1	He	1.614	17.4	149	13.7	2	
Sr	88	103	1	He	0.498	7.1	2807	6.3	10	
Mo	95	103	1	He	3.575	32.3	10984	29.8	2	Blank Failed
Ag	107	103	1	He	0.016	28.2	196	23.2	0.2	
Cd	111	103	1	He	0.605	20.1	1840	10.5	0.2	Blank Failed
Sn	118	115	1	He	17.082	27.3	62536	26.3	10	Blank Failed
Sb	123	115	1	He	0.616	5.6	3230	3.6	1	
Ba	137	115	1	He	0.577	28.8	887	27.8	5	
W	182	165	1	He	3.786	30.0	44484	26.9	10	
Tl	205	209	1	He	0.471	27.2	12652	25.9	0.5	
Pb	208	209	1	He	0.408	25.8	14876	23.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1678893	0.94	1803797	93.08	30	120	
Sc	45	1	He	543321	1.45	574766	94.53	30	120	
Sc	45	2	NoGas	4363868	0.92	4296857	101.56	30	120	
Rh	103	1	He	1615230	0.51	1652712	97.73	30	120	
In	115	1	He	825817	0.53	852389	96.88	30	120	
Tb	159	1	He	2406986	1.63	2425956	99.22	30	120	
Ho	165	1	He	2485252	1.57	2452680	101.33	30	120	
Bi	209	1	He	1888304	1.51	1810473	104.30	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176157/2-a
Data File Name	110_LCS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:29:12-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1098.732	1098.732	0.998	5461126	0.41	1000	109.9	79.5	120.5	
B	11	2	NoGas	288.796	288.796	1.898	1004893	0.74	100	288.8	79.5	120.5	LCS Failed
Na	23	1	He	10742.126	10742.126	1.488	15503534	1.22	10000	107.4	79.5	120.5	
Mg	24	1	He	10635.175	10635.175	2.019	8685308	0.62	10000	106.4	79.5	120.5	
Al	27	1	He	9930.616	9930.616	0.796	4218934	2.06	10000	99.3	79.5	120.5	
K	39	1	He	10862.340	10862.340	2.816	7023356	0.80	10000	108.6	79.5	120.5	
Ca	44	1	He	9679.676	9679.676	2.400	331307	0.22	10000	96.8	79.5	120.5	
Ti	47	1	He	103.144	103.144	2.415	20991	2.12	100	103.1	79.5	120.5	
V	51	1	He	1081.739	1081.739	3.007	5623273	0.61	1000	108.2	79.5	120.5	
Cr	52	1	He	1062.800	1062.800	2.960	6780105	0.35	1000	106.3	79.5	120.5	
Mn	55	1	He	1074.059	1074.059	1.531	4846904	1.09	1000	107.4	79.5	120.5	
Fe	56	1	He	10719.137	10719.137	2.144	62615155	0.81	10000	107.2	79.5	120.5	
Co	59	1	He	992.937	992.937	1.491	9747571	0.72	1000	99.3	79.5	120.5	
Ni	60	1	He	1017.755	1017.755	2.119	2540696	1.04	1000	101.8	79.5	120.5	
Cu	63	1	He	998.314	998.314	1.240	6648956	0.36	1000	99.8	79.5	120.5	
Zn	66	1	He	976.988	976.988	1.171	1323534	0.53	1000	97.7	79.5	120.5	
As	75	1	He	979.827	979.827	1.159	839896	0.32	1000	98.0	79.5	120.5	
Se	78	1	He	990.580	990.580	0.575	70310	0.66	1000	99.1	79.5	120.5	
Sr	88	1	He	1046.088	1046.088	0.959	5335231	0.36	1000	104.6	79.5	120.5	
Mo	95	1	He	110.528	110.528	1.314	304366	0.29	100	110.5	79.5	120.5	
Ag	107	1	He	104.360	104.360	1.094	993007	0.67	100	104.4	79.5	120.5	
Cd	111	1	He	1087.866	1087.866	2.228	1729524	1.53	1000	108.8	79.5	120.5	
Sn	118	1	He	1168.905	1168.905	0.275	3956441	0.46	1000	116.9	79.5	120.5	
Sb	123	1	He	111.634	111.634	0.342	401326	0.03	100	111.6	79.5	120.5	
Ba	137	1	He	1177.022	1177.022	0.250	1669809	0.43	1000	117.7	79.5	120.5	
W	182	1	He	100.875	100.875	2.268	1113342	1.44	100	100.9	79.5	120.5	
Tl	205	1	He	249.659	249.659	1.393	6136518	1.50	250	99.9	79.5	120.5	
Pb	208	1	He	1020.055	1020.055	1.408	32989638	0.86	1000	102.0	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1587831	0.59	1803797	88.03	30	120	
Sc	45	1	He	538488	2.64	574766	93.69	30	120	
Sc	45	2	NoGas	4255606	1.21	4296857	99.04	30	120	
Rh	103	1	He	1538661	1.23	1652712	93.10	30	120	
In	115	1	He	773014	0.32	852389	90.69	30	120	
Tb	159	1	He	2397388	0.60	2425956	98.82	30	120	
Ho	165	1	He	2474380	0.84	2452680	100.88	30	120	
Bi	209	1	He	1785487	0.61	1810473	98.62	30	120	

Sample Report

Sample Table

Sample Name	240-49236-d-3-a
Data File Name	111SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:32:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.272	0.272	7.01	1430	0.02	10000	
B	11	45	2	NoGas	284.911	284.911	0.79	1016825	0.03	300	
Na	23	45	1	He	46635.736	46635.736	2.32	67960712	0.07	500000	
Mg	24	45	1	He	32088.529	32088.529	1.68	26503938	0.12	500000	
Al	27	45	1	He	7.754	7.754	3.46	4042	0.19	200000	
K	39	45	1	He	3089.103	3089.103	2.59	2064211	0.15	500000	
Ca	44	45	1	He	19977.796	19977.796	1.30	691107	2.89	500000	
Ti	47	45	1	He	0.420	0.420	30.23	88	0.48	2500	
V	51	45	1	He	0.222	0.222	87.26	1424	0.02	10000	
Cr	52	45	1	He	1.338	1.338	5.20	11480	0.01	10000	
Mn	55	45	1	He	0.504	0.504	3.14	2461	0.02	10000	
Fe	56	45	1	He	29.907	29.907	1.73	182507	0.02	200000	
Co	59	103	1	He	0.295	0.295	20.36	2871	0.01	10000	
Ni	60	103	1	He	0.208	0.208	6.66	594	0.03	10000	
Cu	63	103	1	He	1.475	1.475	8.50	11879	0.01	10000	
Zn	66	103	1	He	3.871	3.871	3.11	5906	0.07	10000	
As	75	103	1	He	2.036	2.036	6.22	1887	0.11	10000	
Se	78	103	1	He	1.171	1.171	24.90	108	1.08	10000	
Sr	88	103	1	He	392.819	392.819	4.85	1960216	0.02	10000	
Mo	95	103	1	He	0.862	0.862	17.43	2948	0.03	2000	
Ag	107	103	1	He	0.010	0.010	70.22	124	0.01	300	
Cd	111	103	1	He	0.394	0.394	12.20	1388	0.03	4000	
Sn	118	115	1	He	3.161	3.161	16.75	11823	0.03	2000	
Sb	123	115	1	He	0.514	0.514	3.48	2739	0.02	300	
Ba	137	115	1	He	20.513	20.513	2.50	29989	0.07	10000	
W	182	165	1	He	1.306	1.306	16.49	17069	0.01	2500	
Tl	205	209	1	He	0.251	0.251	25.61	6514	0.00	5000	
Pb	208	209	1	He	0.197	0.197	16.20	7177	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1673645	0.48	1803797	92.78	30	120	
Sc	45	1	He	544552	1.47	574766	94.74	30	120	
Sc	45	2	NoGas	4364121	1.71	4296857	101.57	30	120	
Rh	103	1	He	1506919	3.36	1652712	91.18	30	120	
In	115	1	He	796326	0.66	852389	93.42	30	120	
Tb	159	1	He	2421015	1.30	2425956	99.80	30	120	
Ho	165	1	He	2472647	0.72	2452680	100.81	30	120	
Bi	209	1	He	1769341	0.46	1810473	97.73	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49236-d-3-a@5
Data File Name	112SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:36:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.175	0.175	6.39	963	0.02	10000	
B	11	45	2	NoGas	127.538	127.538	1.27	477310	0.03	300	
Na	23	45	1	He	9370.894	9370.894	2.40	14568840	0.06	500000	
Mg	24	45	1	He	6574.639	6574.639	3.43	5782118	0.11	500000	
Al	27	45	1	He	25.009	25.009	2.83	12194	0.21	200000	
K	39	45	1	He	601.695	601.695	3.46	480729	0.13	500000	
Ca	44	45	1	He	4051.648	4051.648	1.33	149729	2.71	500000	
Ti	47	45	1	He	0.197	0.197	28.74	44	0.44	2500	
V	51	45	1	He	0.131	0.131	67.38	1006	0.01	10000	
Cr	52	45	1	He	0.313	0.313	7.71	5184	0.01	10000	
Mn	55	45	1	He	0.397	0.397	3.92	2101	0.02	10000	
Fe	56	45	1	He	6.462	6.462	2.98	46789	0.01	200000	
Co	59	103	1	He	0.059	0.059	3.13	678	0.01	10000	
Ni	60	103	1	He	0.057	0.057	16.88	251	0.02	10000	
Cu	63	103	1	He	0.228	0.228	11.20	4138	0.01	10000	
Zn	66	103	1	He	1.551	1.551	11.09	3118	0.05	10000	
As	75	103	1	He	0.421	0.421	6.18	587	0.07	10000	
Se	78	103	1	He	0.350	0.350	21.67	57	0.62	10000	
Sr	88	103	1	He	72.266	72.266	0.52	398083	0.02	10000	
Mo	95	103	1	He	-0.009	-0.009	-478.63	673	0.00	2000	
Ag	107	103	1	He	0.002	0.002	72.51	54	0.00	300	
Cd	111	103	1	He	0.177	0.177	21.24	1157	0.02	4000	
Sn	118	115	1	He	0.515	0.515	6.90	2849	0.02	2000	
Sb	123	115	1	He	0.084	0.084	24.07	1257	0.01	300	
Ba	137	115	1	He	3.929	3.929	5.17	6296	0.06	10000	
W	182	165	1	He	0.318	0.318	9.26	6416	0.00	2500	
Tl	205	209	1	He	0.075	0.075	6.67	2389	0.00	5000	
Pb	208	209	1	He	0.067	0.067	5.65	3231	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1747707	0.38	1803797	96.89	30	120	
Sc	45	1	He	579969	2.38	574766	100.91	30	120	
Sc	45	2	NoGas	4543396	0.45	4296857	105.74	30	120	
Rh	103	1	He	1661241	0.87	1652712	100.52	30	120	
In	115	1	He	871276	0.46	852389	102.22	30	120	
Tb	159	1	He	2519071	0.61	2425956	103.84	30	120	
Ho	165	1	He	2558703	0.39	2452680	104.32	30	120	
Bi	209	1	He	1906119	0.76	1810473	105.28	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49236-d-3-a
Data File Name	113SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:40:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1117.225	1117.225	1.45	5445363	0.02	10000	
B	11	45	2	NoGas	367.964	367.964	0.49	1222712	0.03	300	>LDR
Na	23	45	1	He	57358.757	57358.757	2.03	79472414	0.07	500000	
Mg	24	45	1	He	42952.258	42952.258	1.52	33732221	0.13	500000	
Al	27	45	1	He	10454.709	10454.709	0.98	4270884	0.24	200000	
K	39	45	1	He	14156.988	14156.988	1.25	8786875	0.16	500000	
Ca	44	45	1	He	29811.020	29811.020	1.33	980301	3.04	500000	
Ti	47	45	1	He	105.874	105.874	1.41	20722	0.51	2500	
V	51	45	1	He	1120.888	1120.888	0.81	5605541	0.02	10000	
Cr	52	45	1	He	1102.820	1102.820	1.83	6767007	0.02	10000	
Mn	55	45	1	He	1097.287	1097.287	3.03	4761195	0.02	10000	
Fe	56	45	1	He	11030.197	11030.197	2.44	61961335	0.02	200000	
Co	59	103	1	He	1070.361	1070.361	0.43	9481711	0.01	10000	
Ni	60	103	1	He	1085.956	1085.956	0.61	2446380	0.04	10000	
Cu	63	103	1	He	1074.079	1074.079	2.80	6454048	0.02	10000	
Zn	66	103	1	He	1050.116	1050.116	1.49	1283522	0.08	10000	
As	75	103	1	He	1085.522	1085.522	0.98	839577	0.13	10000	
Se	78	103	1	He	1078.894	1078.894	1.27	69091	1.56	10000	
Sr	88	103	1	He	1540.170	1540.170	0.62	7088013	0.02	10000	
Mo	95	103	1	He	122.322	122.322	0.93	303881	0.04	2000	
Ag	107	103	1	He	111.938	111.938	1.33	961014	0.01	300	
Cd	111	103	1	He	1179.348	1179.348	2.54	1691813	0.07	4000	
Sn	118	115	1	He	1216.722	1216.722	0.89	3906951	0.03	2000	
Sb	123	115	1	He	115.816	115.816	0.28	394974	0.03	300	
Ba	137	115	1	He	1262.653	1262.653	0.99	1699374	0.07	10000	
W	182	165	1	He	105.588	105.588	1.84	1129440	0.01	2500	
Tl	205	209	1	He	270.590	270.590	4.45	6063143	0.00	5000	
Pb	208	209	1	He	1112.893	1112.893	4.38	32813595	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1557148	1.34	1803797	86.33	30	120	
Sc	45	1	He	517782	1.68	574766	90.09	30	120	
Sc	45	2	NoGas	4068413	1.19	4296857	94.68	30	120	
Rh	103	1	He	1388310	1.03	1652712	84.00	30	120	
In	115	1	He	733359	0.21	852389	86.04	30	120	
Tb	159	1	He	2333422	0.55	2425956	96.19	30	120	
Ho	165	1	He	2398377	1.03	2452680	97.79	30	120	
Bi	209	1	He	1629611	4.00	1810473	90.01	30	120	

Sample Report

Sample Table

Sample Name	240-49236-d-3-b du
Data File Name	114SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:44:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.303	0.303	18.98	1593	0.02	10000	
B	11	45	2	NoGas	211.289	211.289	1.81	744039	0.03	300	
Na	23	45	1	He	42934.049	42934.049	1.37	60947912	0.07	500000	
Mg	24	45	1	He	29538.562	29538.562	2.38	23761462	0.12	500000	
Al	27	45	1	He	5.609	5.609	7.86	3037	0.18	200000	
K	39	45	1	He	2787.543	2787.543	0.63	1820502	0.15	500000	
Ca	44	45	1	He	18151.201	18151.201	1.92	611605	2.97	500000	
Ti	47	45	1	He	0.383	0.383	9.79	78	0.49	2500	
V	51	45	1	He	0.301	0.301	21.30	1786	0.02	10000	
Cr	52	45	1	He	1.311	1.311	5.05	11010	0.01	10000	
Mn	55	45	1	He	0.579	0.579	8.65	2729	0.02	10000	
Fe	56	45	1	He	27.578	27.578	4.90	164353	0.02	200000	
Co	59	103	1	He	0.236	0.236	17.14	2244	0.01	10000	
Ni	60	103	1	He	0.207	0.207	15.01	574	0.04	10000	
Cu	63	103	1	He	1.217	1.217	8.90	9895	0.01	10000	
Zn	66	103	1	He	8.314	8.314	4.07	11444	0.07	10000	
As	75	103	1	He	1.638	1.638	5.87	1507	0.11	10000	
Se	78	103	1	He	0.982	0.982	17.29	92	1.06	10000	
Sr	88	103	1	He	365.406	365.406	2.40	1770495	0.02	10000	
Mo	95	103	1	He	0.628	0.628	23.67	2252	0.03	2000	
Ag	107	103	1	He	0.008	0.008	56.02	103	0.01	300	
Cd	111	103	1	He	0.347	0.347	24.05	1275	0.03	4000	
Sn	118	115	1	He	2.335	2.335	16.96	8847	0.03	2000	
Sb	123	115	1	He	0.405	0.405	14.16	2310	0.02	300	
Ba	137	115	1	He	18.288	18.288	1.88	26436	0.07	10000	
W	182	165	1	He	1.141	1.141	18.13	15052	0.01	2500	
Tl	205	209	1	He	0.227	0.227	24.41	5809	0.00	5000	
Pb	208	209	1	He	0.185	0.185	15.88	6686	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1679284	1.07	1803797	93.10	30	120	
Sc	45	1	He	530406	1.70	574766	92.28	30	120	
Sc	45	2	NoGas	4297488	1.59	4296857	100.01	30	120	
Rh	103	1	He	1462001	1.81	1652712	88.46	30	120	
In	115	1	He	787340	1.10	852389	92.37	30	120	
Tb	159	1	He	2362658	0.58	2425956	97.39	30	120	
Ho	165	1	He	2442586	2.08	2452680	99.59	30	120	
Bi	209	1	He	1738307	1.03	1810473	96.01	30	120	

Sample Report

Sample Table

Sample Name	240-49236-d-3-c ms
Data File Name	115SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:47:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	106.109	106.109	1.95	525835	0.02	10000	
B	11	45	2	NoGas	334.863	334.863	1.14	1126415	0.03	300	>LDR
Na	23	45	1	He	54834.012	54834.012	1.81	76987223	0.07	500000	
Mg	24	45	1	He	41077.815	41077.815	2.00	32687499	0.13	500000	
Al	27	45	1	He	9949.764	9949.764	1.35	4118498	0.24	200000	
K	39	45	1	He	13664.869	13664.869	1.82	8595967	0.16	500000	
Ca	44	45	1	He	28774.415	28774.415	1.80	958789	3.00	500000	
Ti	47	45	1	He	101.438	101.438	3.53	20111	0.50	2500	
V	51	45	1	He	104.324	104.324	1.67	528795	0.02	10000	
Cr	52	45	1	He	104.692	104.692	1.60	653447	0.02	10000	
Mn	55	45	1	He	102.953	102.953	1.59	452860	0.02	10000	
Fe	56	45	1	He	10664.153	10664.153	2.01	60706378	0.02	200000	
Co	59	103	1	He	102.412	102.412	1.01	919400	0.01	10000	
Ni	60	103	1	He	101.393	101.393	0.31	231552	0.04	10000	
Cu	63	103	1	He	102.726	102.726	0.25	627549	0.02	10000	
Zn	66	103	1	He	106.576	106.576	0.90	132668	0.08	10000	
As	75	103	1	He	108.521	108.521	0.83	85214	0.13	10000	
Se	78	103	1	He	106.750	106.750	0.94	6951	1.54	10000	
Sr	88	103	1	He	495.572	495.572	1.43	2311250	0.02	10000	
Mo	95	103	1	He	115.600	115.600	0.45	291076	0.04	2000	
Ag	107	103	1	He	109.609	109.609	0.56	953703	0.01	300	
Cd	111	103	1	He	109.439	109.439	1.71	159759	0.07	4000	
Sn	118	115	1	He	105.996	105.996	0.26	352915	0.03	2000	
Sb	123	115	1	He	108.895	108.895	0.70	384344	0.03	300	
Ba	137	115	1	He	129.515	129.515	1.09	180386	0.07	10000	
W	182	165	1	He	100.530	100.530	0.63	1081136	0.01	2500	
Tl	205	209	1	He	107.991	107.991	3.31	2442167	0.00	5000	
Pb	208	209	1	He	108.312	108.312	2.88	3223726	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1583166	1.07	1803797	87.77	30	120	
Sc	45	1	He	524691	2.00	574766	91.29	30	120	
Sc	45	2	NoGas	4116560	0.41	4296857	95.80	30	120	
Rh	103	1	He	1406916	0.42	1652712	85.13	30	120	
In	115	1	He	758895	0.64	852389	89.03	30	120	
Tb	159	1	He	2337521	0.16	2425956	96.35	30	120	
Ho	165	1	He	2410876	1.39	2452680	98.30	30	120	
Bi	209	1	He	1643649	2.97	1810473	90.79	30	120	

Sample Report

Sample Table

Sample Name	240-49236-a-4-a
Data File Name	116SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:51:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.163	0.163	18.05	841	0.02	10000	
B	11	45	2	NoGas	75.630	75.630	1.04	269107	0.03	300	
Na	23	45	1	He	905.906	905.906	1.47	1344804	0.07	500000	
Mg	24	45	1	He	28.348	28.348	4.39	24180	0.12	500000	
Al	27	45	1	He	52.968	52.968	2.09	23347	0.23	200000	
K	39	45	1	He	47.548	47.548	5.27	91742	0.05	500000	
Ca	44	45	1	He	175.734	175.734	3.66	6587	2.67	500000	
Ti	47	45	1	He	0.407	0.407	6.41	84	0.48	2500	
V	51	45	1	He	0.101	0.101	219.83	777	0.01	10000	
Cr	52	45	1	He	2.001	2.001	3.05	15684	0.01	10000	
Mn	55	45	1	He	5.911	5.911	0.66	27004	0.02	10000	
Fe	56	45	1	He	57.791	57.791	1.54	345543	0.02	200000	
Co	59	103	1	He	0.139	0.139	3.71	1506	0.01	10000	
Ni	60	103	1	He	2.502	2.502	1.18	6748	0.04	10000	
Cu	63	103	1	He	0.426	0.426	7.81	5489	0.01	10000	
Zn	66	103	1	He	3.466	3.466	2.46	5837	0.06	10000	
As	75	103	1	He	0.615	0.615	3.10	757	0.08	10000	
Se	78	103	1	He	0.446	0.446	17.42	63	0.71	10000	
Sr	88	103	1	He	0.707	0.707	2.17	3979	0.02	10000	
Mo	95	103	1	He	0.866	0.866	24.49	3225	0.03	2000	
Ag	107	103	1	He	0.007	0.007	25.24	102	0.01	300	
Cd	111	103	1	He	0.121	0.121	30.79	1047	0.01	4000	
Sn	118	115	1	He	0.850	0.850	21.17	3901	0.02	2000	
Sb	123	115	1	He	0.695	0.695	4.90	3523	0.02	300	
Ba	137	115	1	He	0.713	0.713	7.39	1090	0.07	10000	
W	182	165	1	He	1.472	1.472	14.38	19005	0.01	2500	
Tl	205	209	1	He	0.139	0.139	18.42	4003	0.00	5000	
Pb	208	209	1	He	0.118	0.118	5.44	4916	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1643436	2.47	1803797	91.11	30	120	
Sc	45	1	He	541834	0.95	574766	94.27	30	120	
Sc	45	2	NoGas	4281634	0.11	4296857	99.65	30	120	
Rh	103	1	He	1638439	0.59	1652712	99.14	30	120	
In	115	1	He	823286	0.27	852389	96.59	30	120	
Tb	159	1	He	2433599	1.67	2425956	100.32	30	120	
Ho	165	1	He	2488125	1.17	2452680	101.45	30	120	
Bi	209	1	He	1869843	0.94	1810473	103.28	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	117_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:55:34-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.286	1.916	240641	2.19	50	92.6	89.5	110.5	
B	11	45	2	NoGas	101.835	1.236	365100	1.41	50	203.7	89.5	110.5	CCV Failed
Na	23	45	1	He	25038.435	3.087	38307111	0.45	25000	100.2	89.5	110.5	
Mg	24	45	1	He	25070.174	1.973	21735258	1.57	25000	100.3	89.5	110.5	
Al	27	45	1	He	245.209	2.134	111298	1.67	250	98.1	89.5	110.5	
K	39	45	1	He	25771.782	3.474	17598920	0.72	25000	103.1	89.5	110.5	
Ca	44	45	1	He	24886.976	2.421	903403	1.00	25000	99.5	89.5	110.5	
Ti	47	45	1	He	50.092	4.890	10819	3.41	50	100.2	89.5	110.5	
V	51	45	1	He	50.881	3.396	281020	1.00	50	101.8	89.5	110.5	
Cr	52	45	1	He	49.901	2.398	340849	1.08	50	99.8	89.5	110.5	
Mn	55	45	1	He	249.101	2.925	1193213	0.77	250	99.6	89.5	110.5	
Fe	56	45	1	He	12691.732	3.162	78689837	0.97	12500	101.5	89.5	110.5	
Co	59	103	1	He	47.784	1.525	482107	0.86	50	95.6	89.5	110.5	
Ni	60	103	1	He	47.083	1.884	120875	1.01	50	94.2	89.5	110.5	
Cu	63	103	1	He	47.212	2.123	325396	1.58	50	94.4	89.5	110.5	
Zn	66	103	1	He	48.496	2.691	68282	2.23	50	97.0	89.5	110.5	
As	75	103	1	He	49.258	1.042	43572	1.17	50	98.5	89.5	110.5	
Se	78	103	1	He	49.771	1.646	3657	1.55	50	99.5	89.5	110.5	
Sr	88	103	1	He	50.136	0.860	262915	1.23	50	100.3	89.5	110.5	
Mo	95	103	1	He	49.828	1.721	141375	1.36	50	99.7	89.5	110.5	
Ag	107	103	1	He	49.611	0.943	485120	0.39	50	99.2	89.5	110.5	
Cd	111	103	1	He	50.158	0.950	82729	0.72	50	100.3	89.5	110.5	
Sn	118	115	1	He	50.218	1.066	183693	1.64	50	100.4	89.5	110.5	
Sb	123	115	1	He	53.380	0.460	206927	0.89	50	106.8	89.5	110.5	
Ba	137	115	1	He	52.965	1.444	80852	0.86	50	105.9	89.5	110.5	
W	182	165	1	He	47.587	0.864	540410	0.71	50	95.2	89.5	110.5	
Tl	205	209	1	He	47.224	1.152	1190823	0.85	50	94.4	89.5	110.5	
Pb	208	209	1	He	48.786	1.025	1619185	0.80	50	97.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1660732	0.30	1803797	92.07	30	120	
Sc	45	1	He	571748	3.44	574766	99.47	30	120	
Sc	45	2	NoGas	4338189	0.25	4296857	100.96	30	120	
Rh	103	1	He	1581149	0.87	1652712	95.67	30	120	
In	115	1	He	831692	0.58	852389	97.57	30	120	
Tb	159	1	He	2494625	1.37	2425956	102.83	30	120	
Ho	165	1	He	2538792	0.16	2452680	103.51	30	120	
Bi	209	1	He	1831339	0.83	1810473	101.15	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	118_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T17:59:24-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.107	23.0	559	21.9	1	
B	11	45	2	NoGas	48.854	2.0	181480	1.7	20	CCB Failed
Na	23	45	1	He	25.669	6.0	69413	0.9	400	
Mg	24	45	1	He	2.905	20.9	3286	13.8	1000	
Al	27	45	1	He	7.635	6.3	4004	2.7	50	
K	39	45	1	He	13.638	28.6	70489	1.1	1000	
Ca	44	45	1	He	4.859	33.3	715	5.6	1000	
Ti	47	45	1	He	0.230	37.7	49	38.8	20	
V	51	45	1	He	0.051	115.8	514	57.9	2	
Cr	52	45	1	He	0.049	30.4	3179	2.0	2	
Mn	55	45	1	He	0.125	11.0	732	7.9	2	
Fe	56	45	1	He	12.286	33.1	78324	28.0	50	
Co	59	103	1	He	0.026	9.5	328	7.2	1	
Ni	60	103	1	He	0.022	24.2	156	8.7	2	
Cu	63	103	1	He	-0.115	-12.9	1665	7.4	2	
Zn	66	103	1	He	0.465	17.9	1518	7.2	20	
As	75	103	1	He	0.088	7.1	277	1.1	2	
Se	78	103	1	He	0.252	19.8	49	8.9	2	
Sr	88	103	1	He	0.079	26.0	573	20.0	10	
Mo	95	103	1	He	0.670	21.0	2667	16.8	2	
Ag	107	103	1	He	0.005	50.4	82	30.7	0.2	
Cd	111	103	1	He	0.138	22.9	1082	5.3	0.2	
Sn	118	115	1	He	0.297	8.3	2004	5.0	10	
Sb	123	115	1	He	0.168	31.6	1585	13.7	1	
Ba	137	115	1	He	0.101	6.5	173	5.8	5	
W	182	165	1	He	1.028	12.2	14496	9.0	10	
Tl	205	209	1	He	0.065	6.9	2122	4.9	0.5	
Pb	208	209	1	He	0.037	10.3	2203	7.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1669206	1.03	1803797	92.54	30	120	
Sc	45	1	He	546969	2.43	574766	95.16	30	120	
Sc	45	2	NoGas	4417705	0.36	4296857	102.81	30	120	
Rh	103	1	He	1646928	1.17	1652712	99.65	30	120	
In	115	1	He	864099	0.35	852389	101.37	30	120	
Tb	159	1	He	2495588	1.26	2425956	102.87	30	120	
Ho	165	1	He	2559122	0.81	2452680	104.34	30	120	
Bi	209	1	He	1897239	2.04	1810473	104.79	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	119_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:03:16-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.862	1.858	241359	2.08	50	93.7	89.5	110.5	
B	11	45	2	NoGas	89.686	1.094	332876	2.05	50	179.4	89.5	110.5	CCV Failed
Na	23	45	1	He	24817.600	3.023	38068348	1.23	25000	99.3	89.5	110.5	
Mg	24	45	1	He	25166.565	5.146	21856723	1.14	25000	100.7	89.5	110.5	
Al	27	45	1	He	246.838	2.993	112297	1.27	250	98.7	89.5	110.5	
K	39	45	1	He	25875.077	4.612	17709033	1.10	25000	103.5	89.5	110.5	
Ca	44	45	1	He	24968.136	3.178	908523	0.99	25000	99.9	89.5	110.5	
Ti	47	45	1	He	49.747	0.799	10780	3.34	50	99.5	89.5	110.5	
V	51	45	1	He	50.611	3.764	280245	1.86	50	101.2	89.5	110.5	
Cr	52	45	1	He	49.894	3.803	341562	0.67	50	99.8	89.5	110.5	
Mn	55	45	1	He	249.702	4.128	1198767	0.11	250	99.9	89.5	110.5	
Fe	56	45	1	He	12657.151	4.396	78648641	0.63	12500	101.3	89.5	110.5	
Co	59	103	1	He	47.716	1.835	479266	0.38	50	95.4	89.5	110.5	
Ni	60	103	1	He	47.703	1.439	121930	1.05	50	95.4	89.5	110.5	
Cu	63	103	1	He	47.222	1.683	324018	0.55	50	94.4	89.5	110.5	
Zn	66	103	1	He	48.950	3.026	68598	1.50	50	97.9	89.5	110.5	
As	75	103	1	He	49.558	1.742	43637	0.48	50	99.1	89.5	110.5	
Se	78	103	1	He	49.383	1.305	3613	0.71	50	98.8	89.5	110.5	
Sr	88	103	1	He	51.298	1.778	267776	0.38	50	102.6	89.5	110.5	
Mo	95	103	1	He	49.926	2.267	141058	3.32	50	99.9	89.5	110.5	
Ag	107	103	1	He	49.611	1.563	482944	0.15	50	99.2	89.5	110.5	
Cd	111	103	1	He	50.559	1.749	83009	0.92	50	101.1	89.5	110.5	
Sn	118	115	1	He	50.293	1.581	186431	1.03	50	100.6	89.5	110.5	
Sb	123	115	1	He	52.889	1.431	207790	0.83	50	105.8	89.5	110.5	
Ba	137	115	1	He	52.737	2.596	81588	2.08	50	105.5	89.5	110.5	
W	182	165	1	He	47.748	1.468	541947	2.01	50	95.5	89.5	110.5	
Tl	205	209	1	He	46.717	0.145	1185453	0.50	50	93.4	89.5	110.5	
Pb	208	209	1	He	48.295	0.065	1612958	0.34	50	96.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1645271	1.19	1803797	91.21	30	120	
Sc	45	1	He	573298	4.11	574766	99.74	30	120	
Sc	45	2	NoGas	4481057	1.01	4296857	104.29	30	120	
Rh	103	1	He	1574234	1.57	1652712	95.25	30	120	
In	115	1	He	842922	0.61	852389	98.89	30	120	
Tb	159	1	He	2478723	1.59	2425956	102.18	30	120	
Ho	165	1	He	2537291	0.56	2452680	103.45	30	120	
Bi	209	1	He	1842752	0.36	1810473	101.78	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	120_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:07:08-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.100	19.8	522	18.9	1	
B	11	45	2	NoGas	39.350	2.1	148336	1.3	20	CCB Failed
Na	23	45	1	He	23.215	9.3	66595	3.1	400	
Mg	24	45	1	He	2.529	30.8	3008	20.0	1000	
Al	27	45	1	He	7.841	2.6	4145	3.6	50	
K	39	45	1	He	16.257	25.3	73054	1.9	1000	
Ca	44	45	1	He	6.081	15.9	767	4.5	1000	
Ti	47	45	1	He	0.128	47.6	28	45.4	20	
V	51	45	1	He	0.071	52.2	632	30.7	2	
Cr	52	45	1	He	0.000	14032.2	2898	5.2	2	
Mn	55	45	1	He	0.092	21.6	588	14.5	2	
Fe	56	45	1	He	11.936	32.3	77248	28.0	50	
Co	59	103	1	He	0.017	15.3	233	12.4	1	
Ni	60	103	1	He	0.007	21.7	118	4.3	2	
Cu	63	103	1	He	-0.109	-21.4	1733	9.4	2	
Zn	66	103	1	He	0.428	7.1	1493	2.4	20	
As	75	103	1	He	0.096	40.2	289	12.0	2	
Se	78	103	1	He	0.321	31.3	55	14.0	2	
Sr	88	103	1	He	0.038	11.3	357	6.5	10	
Mo	95	103	1	He	0.623	24.3	2577	18.2	2	
Ag	107	103	1	He	0.005	29.2	80	16.7	0.2	
Cd	111	103	1	He	0.103	45.8	1041	7.4	0.2	
Sn	118	115	1	He	0.370	16.5	2293	9.8	10	
Sb	123	115	1	He	0.166	28.3	1585	11.9	1	
Ba	137	115	1	He	0.059	21.3	108	18.1	5	
W	182	165	1	He	0.978	14.8	14129	12.1	10	
Tl	205	209	1	He	0.061	20.8	2015	16.2	0.5	
Pb	208	209	1	He	0.035	8.8	2143	4.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1655035	0.94	1803797	91.75	30	120	
Sc	45	1	He	553418	1.97	574766	96.29	30	120	
Sc	45	2	NoGas	4447790	0.94	4296857	103.51	30	120	
Rh	103	1	He	1678863	0.65	1652712	101.58	30	120	
In	115	1	He	869433	0.54	852389	102.00	30	120	
Tb	159	1	He	2481605	0.83	2425956	102.29	30	120	
Ho	165	1	He	2594555	0.40	2452680	105.78	30	120	
Bi	209	1	He	1900457	0.24	1810473	104.97	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	121CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:11:01-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.994	0.994	8.030	5182	6.93	1	99.4	69.5	130.5	
B	11	2	NoGas	53.832	53.832	0.677	201680	1.46	20	269.2	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1085.782	1085.782	1.207	1693350	0.77	1000	108.6	69.5	130.5	
Mg	24	1	He	1038.751	1038.751	1.505	901462	2.00	1000	103.9	69.5	130.5	
Al	27	1	He	50.135	50.135	1.056	23349	1.96	50	100.3	69.5	130.5	
K	39	1	He	1071.265	1071.265	0.963	793468	0.51	1000	107.1	69.5	130.5	
Ca	44	1	He	1036.926	1036.926	2.272	38188	1.68	1000	103.7	69.5	130.5	
Ti	47	1	He	9.727	9.727	6.517	2103	7.58	10	97.3	69.5	130.5	
V	51	1	He	5.229	5.229	3.481	29112	2.22	5	104.6	69.5	130.5	
Cr	52	1	He	3.726	3.726	1.490	28224	2.48	2	186.3	69.5	130.5	6020A CR1 Failed
Mn	55	1	He	5.469	5.469	2.676	26361	1.86	5	109.4	69.5	130.5	
Fe	56	1	He	111.843	111.843	1.068	699554	0.21	100	111.8	69.5	130.5	
Co	59	1	He	0.974	0.974	1.666	10333	1.80	1	97.4	69.5	130.5	
Ni	60	1	He	2.649	2.649	2.308	7209	2.38	2	132.5	69.5	130.5	6020A CR1 Failed
Cu	63	1	He	1.820	1.820	0.732	15525	0.76	2	91.0	69.5	130.5	
Zn	66	1	He	19.517	19.517	1.586	29267	1.69	20	97.6	69.5	130.5	
As	75	1	He	4.937	4.937	2.097	4748	2.08	5	98.7	69.5	130.5	
Se	78	1	He	4.889	4.889	1.269	403	1.32	5	97.8	69.5	130.5	
Sr	88	1	He	9.959	9.959	0.992	54768	1.13	10	99.6	69.5	130.5	
Mo	95	1	He	10.091	10.091	1.433	30517	1.39	10	100.9	69.5	130.5	
Ag	107	1	He	1.001	1.001	3.643	10278	3.58	1	100.1	69.5	130.5	
Cd	111	1	He	1.079	1.079	2.477	2695	1.79	1	107.9	69.5	130.5	
Sn	118	1	He	9.929	9.929	1.107	38964	0.78	10	99.3	69.5	130.5	
Sb	123	1	He	1.913	1.913	1.071	8699	1.00	2	95.6	69.5	130.5	
Ba	137	1	He	5.239	5.239	1.497	8436	1.42	5	104.8	69.5	130.5	
W	182	1	He	9.545	9.545	2.887	112547	2.18	10	95.4	69.5	130.5	
Tl	205	1	He	1.912	1.912	1.290	50996	1.10	2	95.6	69.5	130.5	
Pb	208	1	He	1.066	1.066	0.623	38046	0.60	1	106.6	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1665038	1.06	1803797	92.31	30	120	
Sc	45	1	He	571497	1.22	574766	99.43	30	120	
Sc	45	2	NoGas	4468930	1.13	4296857	104.00	30	120	
Rh	103	1	He	1654602	0.15	1652712	100.11	30	120	
In	115	1	He	875951	0.31	852389	102.76	30	120	
Tb	159	1	He	2540368	1.29	2425956	104.72	30	120	
Ho	165	1	He	2583572	1.61	2452680	105.34	30	120	
Bi	209	1	He	1922056	0.28	1810473	106.16	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176562/1-a@2
Data File Name	122_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:14:54-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.106	10.8	544	10.8	1	
B	11	45	2	NoGas	41.570	0.1	148499	0.3	20	Blank Failed
Na	23	45	1	He	57.383	1.0	114977	1.8	400	
Mg	24	45	1	He	30.969	1.5	26376	2.3	1000	
Al	27	45	1	He	6.330	3.0	3417	1.4	50	
K	39	45	1	He	42.305	6.1	88530	2.8	1000	
Ca	44	45	1	He	99.269	5.3	3962	3.8	1000	
Ti	47	45	1	He	0.581	97.5	120	96.6	20	
V	51	45	1	He	0.291	10.9	1774	9.7	2	
Cr	52	45	1	He	1.174	5.5	10386	3.3	2	
Mn	55	45	1	He	0.555	6.8	2685	5.5	2	
Fe	56	45	1	He	14.559	2.0	91505	2.7	50	
Co	59	103	1	He	0.047	15.5	534	14.0	1	
Ni	60	103	1	He	0.206	8.9	627	7.5	2	
Cu	63	103	1	He	0.334	9.5	4720	3.6	2	
Zn	66	103	1	He	2.418	4.6	4227	4.9	20	
As	75	103	1	He	0.346	12.8	500	9.1	2	
Se	78	103	1	He	0.325	16.1	53	6.5	2	
Sr	88	103	1	He	0.606	3.6	3354	3.6	10	
Mo	95	103	1	He	0.234	25.1	1340	11.6	2	
Ag	107	103	1	He	0.006	22.0	88	13.3	0.2	
Cd	111	103	1	He	0.116	39.3	1015	8.2	0.2	
Sn	118	115	1	He	17.586	2.5	64259	2.6	10	Blank Failed
Sb	123	115	1	He	0.102	21.1	1257	6.3	1	
Ba	137	115	1	He	1.144	7.0	1741	6.3	5	
W	182	165	1	He	0.570	19.7	9021	12.7	10	
Tl	205	209	1	He	0.087	14.4	2698	13.2	0.5	
Pb	208	209	1	He	0.237	7.2	9122	5.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1633978	0.54	1803797	90.59	30	120	
Sc	45	1	He	542783	1.07	574766	94.44	30	120	
Sc	45	2	NoGas	4223623	0.24	4296857	98.30	30	120	
Rh	103	1	He	1600315	1.18	1652712	96.83	30	120	
In	115	1	He	823806	0.72	852389	96.65	30	120	
Tb	159	1	He	2420800	0.63	2425956	99.79	30	120	
Ho	165	1	He	2486334	1.08	2452680	101.37	30	120	
Bi	209	1	He	1908848	1.14	1810473	105.43	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176562/2-a@2
Data File Name	123LCSS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:18:45-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	516.347	516.347	0.859	2559295	0.76	500	103.3	78.6	110.5	
B	11	2	NoGas	92.160	92.160	1.001	315678	1.77	50	184.3	79.5	120.5	LCSS Failed
Na	23	1	He	5217.730	5217.730	1.660	7414099	0.31	5000	104.4	79.5	120.5	
Mg	24	1	He	5162.824	5162.824	0.588	4143484	0.78	5000	103.3	79.5	120.5	
Al	27	1	He	4988.215	4988.215	0.881	2082183	0.53	5000	99.8	79.5	120.5	
K	39	1	He	5346.061	5346.061	1.334	3427097	0.48	5000	106.9	79.5	120.5	
Ca	44	1	He	4819.061	4819.061	1.177	162352	1.13	5000	96.4	79.5	120.5	
Ti	47	1	He	50.934	50.934	3.193	10183	1.85	50	101.9	79.5	120.5	
V	51	1	He	530.696	530.696	1.988	2711106	0.85	500	106.1	71.5	110.5	
Cr	52	1	He	522.413	522.413	1.428	3276698	1.16	500	104.5	69.5	110.5	
Mn	55	1	He	522.104	522.104	1.008	2315019	0.83	500	104.4	79.5	120.5	
Fe	56	1	He	5232.765	5232.765	2.103	30035104	0.80	5000	104.7	79.5	120.5	
Co	59	1	He	472.206	472.206	2.918	4634869	1.32	500	94.4	73.9	110.5	
Ni	60	1	He	457.963	457.963	2.614	1143198	0.90	500	91.6	74.9	110.5	
Cu	63	1	He	480.194	480.194	1.931	3199190	0.68	500	96.0	72.6	110.5	
Zn	66	1	He	450.887	450.887	2.402	611161	0.70	500	90.2	71.5	113.4	
As	75	1	He	452.289	452.289	2.019	387760	0.28	500	90.5	73.4	110.5	
Se	78	1	He	444.767	444.767	1.928	31581	0.59	500	89.0	64.6	110.5	
Sr	88	1	He	509.195	509.195	1.445	2597024	0.95	500	101.8	79.5	120.5	
Mo	95	1	He	52.584	52.584	1.683	145137	0.27	50	105.2	29.5	140.5	
Ag	107	1	He	49.779	49.779	2.224	473609	0.41	50	99.6	59.5	114.5	
Cd	111	1	He	477.150	477.150	1.853	759014	0.09	500	95.4	73.5	110.5	
Sn	118	1	He	576.661	576.661	0.382	1977986	0.71	500	115.3	79.5	120.5	
Sb	123	1	He	51.944	51.944	0.149	189643	0.33	50	103.9	67.5	113.4	
Ba	137	1	He	523.849	523.849	0.658	752957	0.23	500	104.8	69.5	110.5	
W	182	1	He	48.016	48.016	1.196	533197	1.17	50	96.0	74.6	125.4	
Tl	205	1	He	119.087	119.087	0.939	2995799	1.03	125	95.3	70.6	110.5	
Pb	208	1	He	483.840	483.840	0.783	16015057	0.72	500	96.8	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1583484	1.59	1803797	87.79	30	120	
Sc	45	1	He	528977	1.36	574766	92.03	30	120	
Sc	45	2	NoGas	4137546	0.83	4296857	96.29	30	120	
Rh	103	1	He	1538755	1.81	1652712	93.10	30	120	
In	115	1	He	783201	0.43	852389	91.88	30	120	
Tb	159	1	He	2392760	0.61	2425956	98.63	30	120	
Ho	165	1	He	2482621	0.53	2452680	101.22	30	120	
Bi	209	1	He	1827238	0.09	1810473	100.93	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-2-j@2
Data File Name	124SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:22:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.086	2.086	1.81	10529	0.02	10000	
B	11	45	2	NoGas	40.212	40.212	0.85	147627	0.03	300	
Na	23	45	1	He	144.209	144.209	1.67	244431	0.06	500000	
Mg	24	45	1	He	7238.128	7238.128	0.51	6043868	0.12	500000	
Al	27	45	1	He	48705.616	48705.616	1.01	21146937	0.23	200000	
K	39	45	1	He	2435.041	2435.041	1.56	1658136	0.15	500000	
Ca	44	45	1	He	10696.980	10696.980	0.74	374293	2.86	500000	
Ti	47	45	1	He	351.954	351.954	1.10	73222	0.48	2500	
V	51	45	1	He	101.943	101.943	0.95	542118	0.02	10000	
Cr	52	45	1	He	73.538	73.538	0.39	482400	0.02	10000	
Mn	55	45	1	He	1986.143	1986.143	0.69	9162585	0.02	10000	
Fe	56	45	1	He	90959.767	90959.767	0.50	543192458	0.02	200000	
Co	59	103	1	He	29.692	29.692	1.85	287694	0.01	10000	
Ni	60	103	1	He	188.498	188.498	1.94	464465	0.04	10000	
Cu	63	103	1	He	48.884	48.884	2.34	323454	0.02	10000	
Zn	66	103	1	He	285.908	285.908	1.75	382774	0.07	10000	
As	75	103	1	He	42.147	42.147	2.22	35824	0.12	10000	
Se	78	103	1	He	4.366	4.366	7.12	333	1.31	10000	
Sr	88	103	1	He	36.181	36.181	1.75	182227	0.02	10000	
Mo	95	103	1	He	7.197	7.197	1.22	20160	0.04	2000	
Ag	107	103	1	He	0.222	0.222	6.78	2118	0.01	300	
Cd	111	103	1	He	0.953	0.953	7.90	2276	0.04	4000	
Sn	118	115	1	He	20.320	20.320	1.56	72388	0.03	2000	
Sb	123	115	1	He	0.712	0.712	3.22	3507	0.02	300	
Ba	137	115	1	He	262.761	262.761	0.59	387974	0.07	10000	
W	182	165	1	He	0.899	0.899	11.47	13043	0.01	2500	
Tl	205	209	1	He	0.811	0.811	4.68	21303	0.00	5000	
Pb	208	209	1	He	78.710	78.710	0.86	2669772	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1612005	1.23	1803797	89.37	30	120	
Sc	45	1	He	550359	0.67	574766	95.75	30	120	
Sc	45	2	NoGas	4335213	1.20	4296857	100.89	30	120	
Rh	103	1	He	1518486	1.24	1652712	91.88	30	120	
In	115	1	He	804528	0.55	852389	94.39	30	120	
Tb	159	1	He	2492632	1.03	2425956	102.75	30	120	
Ho	165	1	He	2559650	0.94	2452680	104.36	30	120	
Bi	209	1	He	1871968	0.54	1810473	103.40	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49071-a-2-j@10
Data File Name	125SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:26:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.476	0.476	9.16	2478	0.02	10000	
B	11	45	2	NoGas	27.767	27.767	1.88	105951	0.03	300	
Na	23	45	1	He	42.461	42.461	0.27	98461	0.04	500000	
Mg	24	45	1	He	1502.358	1502.358	1.57	1306064	0.12	500000	
Al	27	45	1	He	10100.842	10100.842	2.02	4563868	0.22	200000	
K	39	45	1	He	478.721	478.721	2.29	391005	0.12	500000	
Ca	44	45	1	He	2181.674	2181.674	2.25	79880	2.73	500000	
Ti	47	45	1	He	72.918	72.918	0.68	15789	0.46	2500	
V	51	45	1	He	20.438	20.438	1.69	113303	0.02	10000	
Cr	52	45	1	He	14.931	14.931	0.93	104318	0.01	10000	
Mn	55	45	1	He	419.953	419.953	2.39	2015767	0.02	10000	
Fe	56	45	1	He	18609.963	18609.963	1.92	115638315	0.02	200000	
Co	59	103	1	He	5.884	5.884	1.69	62660	0.01	10000	
Ni	60	103	1	He	36.738	36.738	2.49	99501	0.04	10000	
Cu	63	103	1	He	9.551	9.551	1.70	71439	0.01	10000	
Zn	66	103	1	He	57.865	57.865	2.91	85766	0.07	10000	
As	75	103	1	He	8.341	8.341	2.70	7946	0.10	10000	
Se	78	103	1	He	1.052	1.052	15.67	111	0.95	10000	
Sr	88	103	1	He	7.169	7.169	0.69	39779	0.02	10000	
Mo	95	103	1	He	1.223	1.223	3.45	4344	0.03	2000	
Ag	107	103	1	He	0.042	0.042	9.06	462	0.01	300	
Cd	111	103	1	He	0.180	0.180	19.36	1167	0.02	4000	
Sn	118	115	1	He	3.795	3.795	3.94	15259	0.02	2000	
Sb	123	115	1	He	0.045	0.045	33.84	1091	0.00	300	
Ba	137	115	1	He	52.205	52.205	0.71	82940	0.06	10000	
W	182	165	1	He	0.190	0.190	11.22	5157	0.00	2500	
Tl	205	209	1	He	0.172	0.172	3.08	5071	0.00	5000	
Pb	208	209	1	He	16.090	16.090	0.46	571543	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1659497	0.68	1803797	92.00	30	120	
Sc	45	1	He	572793	2.28	574766	99.66	30	120	
Sc	45	2	NoGas	4426783	1.22	4296857	103.02	30	120	
Rh	103	1	He	1667816	1.21	1652712	100.91	30	120	
In	115	1	He	865547	0.23	852389	101.54	30	120	
Tb	159	1	He	2580498	0.78	2425956	106.37	30	120	
Ho	165	1	He	2659740	1.70	2452680	108.44	30	120	
Bi	209	1	He	1957705	0.34	1810473	108.13	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49071-a-2-j@2
Data File Name	126SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:30:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1089.759	1089.759	1.07	5282455	0.02	10000	
B	11	45	2	NoGas	141.655	141.655	0.65	494548	0.03	300	
Na	23	45	1	He	10410.586	10410.586	0.75	15339449	0.07	500000	
Mg	24	45	1	He	17029.083	17029.083	1.34	14196926	0.12	500000	
Al	27	45	1	He	56498.854	56498.854	1.42	24495098	0.23	200000	
K	39	45	1	He	12808.907	12808.907	2.26	8444310	0.15	500000	
Ca	44	45	1	He	19743.551	19743.551	1.38	689403	2.86	500000	
Ti	47	45	1	He	443.533	443.533	1.25	92142	0.48	2500	
V	51	45	1	He	1151.361	1151.361	1.55	6111120	0.02	10000	
Cr	52	45	1	He	1109.198	1109.198	0.88	7225981	0.02	10000	
Mn	55	45	1	He	2963.396	2963.396	1.74	13650115	0.02	10000	
Fe	56	45	1	He	97519.255	97519.255	1.71	581485470	0.02	200000	
Co	59	103	1	He	1052.184	1052.184	1.27	9942371	0.01	10000	
Ni	60	103	1	He	1228.029	1228.029	1.65	2950790	0.04	10000	
Cu	63	103	1	He	1062.625	1062.625	1.76	6811624	0.02	10000	
Zn	66	103	1	He	1317.487	1317.487	2.03	1717525	0.08	10000	
As	75	103	1	He	1039.844	1039.844	0.82	857947	0.12	10000	
Se	78	103	1	He	995.610	995.610	0.92	68017	1.46	10000	
Sr	88	103	1	He	1134.538	1134.538	1.35	5569574	0.02	10000	
Mo	95	103	1	He	122.895	122.895	1.52	325664	0.04	2000	
Ag	107	103	1	He	106.500	106.500	1.28	975371	0.01	300	
Cd	111	103	1	He	1099.641	1099.641	0.99	1682836	0.07	4000	
Sn	118	115	1	He	1205.385	1205.385	1.25	4076586	0.03	2000	
Sb	123	115	1	He	112.774	112.774	0.52	405094	0.03	300	
Ba	137	115	1	He	1491.513	1491.513	1.34	2114289	0.07	10000	
W	182	165	1	He	101.861	101.861	0.79	1143237	0.01	2500	
Tl	205	209	1	He	252.906	252.906	0.87	6277613	0.00	5000	
Pb	208	209	1	He	1108.993	1108.993	0.14	36221982	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1548432	0.33	1803797	85.84	30	120	
Sc	45	1	He	549628	1.80	574766	95.63	30	120	
Sc	45	2	NoGas	4243862	0.55	4296857	98.77	30	120	
Rh	103	1	He	1480982	1.14	1652712	89.61	30	120	
In	115	1	He	772408	0.32	852389	90.62	30	120	
Tb	159	1	He	2456849	0.54	2425956	101.27	30	120	
Ho	165	1	He	2515978	0.06	2452680	102.58	30	120	
Bi	209	1	He	1803121	0.34	1810473	99.59	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-2-k du@2
Data File Name	127SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:33:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.163	2.163	1.50	10926	0.02	10000	
B	11	45	2	NoGas	35.147	35.147	0.47	130354	0.03	300	
Na	23	45	1	He	136.094	136.094	1.99	231309	0.06	500000	
Mg	24	45	1	He	7255.861	7255.861	1.31	6028418	0.12	500000	
Al	27	45	1	He	48732.536	48732.536	1.30	21053596	0.23	200000	
K	39	45	1	He	2500.649	2500.649	1.33	1692595	0.15	500000	
Ca	44	45	1	He	4960.156	4960.156	1.69	172984	2.87	500000	
Ti	47	45	1	He	363.752	363.752	1.53	75297	0.48	2500	
V	51	45	1	He	105.622	105.622	0.74	558895	0.02	10000	
Cr	52	45	1	He	76.472	76.472	1.08	499038	0.02	10000	
Mn	55	45	1	He	1736.328	1736.328	2.05	7969608	0.02	10000	
Fe	56	45	1	He	95214.256	95214.256	2.09	565720991	0.02	200000	
Co	59	103	1	He	27.832	27.832	1.52	270612	0.01	10000	
Ni	60	103	1	He	137.234	137.234	0.81	339380	0.04	10000	
Cu	63	103	1	He	48.909	48.909	2.03	324726	0.02	10000	
Zn	66	103	1	He	282.797	282.797	2.55	379873	0.07	10000	
As	75	103	1	He	43.570	43.570	2.15	37154	0.12	10000	
Se	78	103	1	He	4.582	4.582	9.94	349	1.31	10000	
Sr	88	103	1	He	21.355	21.355	2.36	107964	0.02	10000	
Mo	95	103	1	He	8.206	8.206	3.67	22966	0.04	2000	
Ag	107	103	1	He	0.225	0.225	6.18	2150	0.01	300	
Cd	111	103	1	He	1.026	1.026	2.86	2399	0.04	4000	
Sn	118	115	1	He	23.015	23.015	1.83	81483	0.03	2000	
Sb	123	115	1	He	0.883	0.883	8.31	4123	0.02	300	
Ba	137	115	1	He	251.270	251.270	0.15	369239	0.07	10000	
W	182	165	1	He	1.366	1.366	16.48	18445	0.01	2500	
Tl	205	209	1	He	0.953	0.953	8.12	24427	0.00	5000	
Pb	208	209	1	He	81.552	81.552	1.60	2707805	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1613038	0.90	1803797	89.42	30	120	
Sc	45	1	He	547646	1.21	574766	95.28	30	120	
Sc	45	2	NoGas	4354249	0.25	4296857	101.34	30	120	
Rh	103	1	He	1523837	2.18	1652712	92.20	30	120	
In	115	1	He	800681	0.47	852389	93.93	30	120	
Tb	159	1	He	2474587	1.19	2425956	102.00	30	120	
Ho	165	1	He	2569674	1.61	2452680	104.77	30	120	
Bi	209	1	He	1832758	1.66	1810473	101.23	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-2-I ms@2
Data File Name	128SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:37:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	50.079	50.079	2.50	248821	0.02	10000	
B	11	45	2	NoGas	69.678	69.678	0.72	247642	0.03	300	
Na	23	45	1	He	4854.949	4854.949	0.90	7217822	0.07	500000	
Mg	24	45	1	He	12540.664	12540.664	0.44	10524837	0.12	500000	
Al	27	45	1	He	58146.294	58146.294	0.59	25377165	0.23	200000	
K	39	45	1	He	7126.149	7126.149	1.63	4757187	0.15	500000	
Ca	44	45	1	He	9925.244	9925.244	1.25	349131	2.84	500000	
Ti	47	45	1	He	436.432	436.432	0.53	91268	0.48	2500	
V	51	45	1	He	159.909	159.909	0.22	854645	0.02	10000	
Cr	52	45	1	He	122.541	122.541	0.39	806089	0.02	10000	
Mn	55	45	1	He	2103.593	2103.593	0.78	9754809	0.02	10000	
Fe	56	45	1	He	101343.029	101343.029	0.50	608334180	0.02	200000	
Co	59	103	1	He	77.167	77.167	2.01	738552	0.01	10000	
Ni	60	103	1	He	205.448	205.448	2.07	500085	0.04	10000	
Cu	63	103	1	He	96.759	96.759	1.65	630305	0.02	10000	
Zn	66	103	1	He	357.279	357.279	1.58	472352	0.08	10000	
As	75	103	1	He	90.746	90.746	2.10	75992	0.12	10000	
Se	78	103	1	He	45.863	45.863	2.21	3200	1.43	10000	
Sr	88	103	1	He	72.976	72.976	2.44	362927	0.02	10000	
Mo	95	103	1	He	56.957	56.957	1.87	153215	0.04	2000	
Ag	107	103	1	He	47.494	47.494	1.79	440576	0.01	300	
Cd	111	103	1	He	48.087	48.087	1.88	75271	0.06	4000	
Sn	118	115	1	He	56.204	56.204	0.92	196316	0.03	2000	
Sb	123	115	1	He	13.890	13.890	0.35	52065	0.03	300	
Ba	137	115	1	He	326.148	326.148	1.77	475624	0.07	10000	
W	182	165	1	He	35.307	35.307	1.27	403360	0.01	2500	
Tl	205	209	1	He	43.484	43.484	1.35	1091260	0.00	5000	
Pb	208	209	1	He	134.115	134.115	0.13	4428217	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1587718	2.67	1803797	88.02	30	120	
Sc	45	1	He	553202	0.13	574766	96.25	30	120	
Sc	45	2	NoGas	4268910	0.98	4296857	99.35	30	120	
Rh	103	1	He	1500216	1.87	1652712	90.77	30	120	
In	115	1	He	794631	0.60	852389	93.22	30	120	
Tb	159	1	He	2493470	0.69	2425956	102.78	30	120	
Ho	165	1	He	2549533	0.62	2452680	103.95	30	120	
Bi	209	1	He	1822449	0.43	1810473	100.66	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-3-b@2
Data File Name	129SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:41:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.660	2.660	6.19	13383	0.02	10000	
B	11	45	2	NoGas	35.959	35.959	0.34	132489	0.03	300	
Na	23	45	1	He	174.972	174.972	1.23	287615	0.06	500000	
Mg	24	45	1	He	14055.169	14055.169	0.81	11650132	0.12	500000	
Al	27	45	1	He	45099.527	45099.527	1.53	19439627	0.23	200000	
K	39	45	1	He	3564.486	3564.486	1.68	2380871	0.15	500000	
Ca	44	45	1	He	26378.766	26378.766	0.65	915513	2.88	500000	
Ti	47	45	1	He	376.389	376.389	0.44	77739	0.48	2500	
V	51	45	1	He	94.513	94.513	0.87	498988	0.02	10000	
Cr	52	45	1	He	86.613	86.613	1.00	563546	0.02	10000	
Mn	55	45	1	He	3514.509	3514.509	1.36	16095846	0.02	10000	
Fe	56	45	1	He	106876.772	106876.772	0.28	633618855	0.02	200000	
Co	59	103	1	He	41.541	41.541	3.71	405243	0.01	10000	
Ni	60	103	1	He	98.597	98.597	3.93	244643	0.04	10000	
Cu	63	103	1	He	61.276	61.276	3.88	407638	0.02	10000	
Zn	66	103	1	He	289.760	289.760	3.91	390551	0.07	10000	
As	75	103	1	He	52.943	52.943	3.92	45261	0.12	10000	
Se	78	103	1	He	4.170	4.170	3.75	322	1.30	10000	
Sr	88	103	1	He	55.449	55.449	4.15	281070	0.02	10000	
Mo	95	103	1	He	7.095	7.095	3.79	20024	0.04	2000	
Ag	107	103	1	He	0.168	0.168	10.72	1616	0.01	300	
Cd	111	103	1	He	0.868	0.868	7.82	2155	0.04	4000	
Sn	118	115	1	He	17.085	17.085	0.96	60549	0.03	2000	
Sb	123	115	1	He	0.591	0.591	1.44	3033	0.02	300	
Ba	137	115	1	He	290.298	290.298	0.80	425528	0.07	10000	
W	182	165	1	He	0.739	0.739	11.65	11268	0.01	2500	
Tl	205	209	1	He	0.816	0.816	2.95	20731	0.00	5000	
Pb	208	209	1	He	90.961	90.961	0.92	2983051	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1607789	1.22	1803797	89.13	30	120	
Sc	45	1	He	546363	0.29	574766	95.06	30	120	
Sc	45	2	NoGas	4330184	1.03	4296857	100.78	30	120	
Rh	103	1	He	1530182	4.08	1652712	92.59	30	120	
In	115	1	He	798671	0.63	852389	93.70	30	120	
Tb	159	1	He	2485280	0.57	2425956	102.45	30	120	
Ho	165	1	He	2571701	1.23	2452680	104.85	30	120	
Bi	209	1	He	1810020	0.68	1810473	99.97	30	120	

Sample Report

Sample Table

Sample Name	240-49071-a-4-b@2
Data File Name	130SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:45:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.626	2.626	0.87	13265	0.02	10000	
B	11	45	2	NoGas	34.590	34.590	2.39	129072	0.03	300	
Na	23	45	1	He	169.366	169.366	1.68	283335	0.06	500000	
Mg	24	45	1	He	13330.450	13330.450	0.81	11204402	0.12	500000	
Al	27	45	1	He	46166.447	46166.447	1.14	20178982	0.23	200000	
K	39	45	1	He	3948.787	3948.787	0.60	2667940	0.15	500000	
Ca	44	45	1	He	32257.121	32257.121	1.13	1135194	2.84	500000	
Ti	47	45	1	He	355.796	355.796	0.56	74520	0.48	2500	
V	51	45	1	He	93.288	93.288	1.42	499439	0.02	10000	
Cr	52	45	1	He	88.434	88.434	0.21	583427	0.02	10000	
Mn	55	45	1	He	2310.727	2310.727	0.89	10731489	0.02	10000	
Fe	56	45	1	He	109326.927	109326.927	0.17	657268881	0.02	200000	
Co	59	103	1	He	36.743	36.743	2.98	352913	0.01	10000	
Ni	60	103	1	He	101.450	101.450	2.92	247850	0.04	10000	
Cu	63	103	1	He	76.833	76.833	3.35	502661	0.02	10000	
Zn	66	103	1	He	310.567	310.567	2.98	412106	0.08	10000	
As	75	103	1	He	58.634	58.634	2.53	49343	0.12	10000	
Se	78	103	1	He	4.398	4.398	9.94	332	1.32	10000	
Sr	88	103	1	He	73.145	73.145	3.67	364998	0.02	10000	
Mo	95	103	1	He	6.795	6.795	3.86	18902	0.04	2000	
Ag	107	103	1	He	0.177	0.177	6.59	1681	0.01	300	
Cd	111	103	1	He	0.905	0.905	1.48	2182	0.04	4000	
Sn	118	115	1	He	18.797	18.797	1.19	66044	0.03	2000	
Sb	123	115	1	He	0.625	0.625	3.31	3135	0.02	300	
Ba	137	115	1	He	301.016	301.016	1.07	437909	0.07	10000	
W	182	165	1	He	0.433	0.433	3.11	7591	0.01	2500	
Tl	205	209	1	He	0.800	0.800	1.56	20246	0.00	5000	
Pb	208	209	1	He	100.024	100.024	0.14	3267824	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1612968	2.41	1803797	89.42	30	120	
Sc	45	1	He	554048	0.62	574766	96.40	30	120	
Sc	45	2	NoGas	4378193	0.93	4296857	101.89	30	120	
Rh	103	1	He	1506091	3.42	1652712	91.13	30	120	
In	115	1	He	792737	1.24	852389	93.00	30	120	
Tb	159	1	He	2472482	0.23	2425956	101.92	30	120	
Ho	165	1	He	2512012	0.48	2452680	102.42	30	120	
Bi	209	1	He	1803136	0.36	1810473	99.59	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	131_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:48:53-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.404	2.860	236833	2.46	50	92.8	89.5	110.5	
B	11	45	2	NoGas	61.180	0.997	224311	0.76	50	122.4	89.5	110.5	CCV Failed
Na	23	45	1	He	25188.343	3.269	38025132	0.87	25000	100.8	89.5	110.5	
Mg	24	45	1	He	25062.730	2.267	21438500	0.39	25000	100.3	89.5	110.5	
Al	27	45	1	He	248.870	1.522	111454	0.95	250	99.5	89.5	110.5	
K	39	45	1	He	25994.556	3.034	17517078	0.68	25000	104.0	89.5	110.5	
Ca	44	45	1	He	24797.395	2.089	888254	0.47	25000	99.2	89.5	110.5	
Ti	47	45	1	He	50.154	2.571	10697	4.03	50	100.3	89.5	110.5	
V	51	45	1	He	51.056	1.712	278358	1.91	50	102.1	89.5	110.5	
Cr	52	45	1	He	50.285	1.529	338934	0.99	50	100.6	89.5	110.5	
Mn	55	45	1	He	251.786	1.873	1190326	1.09	250	100.7	89.5	110.5	
Fe	56	45	1	He	12734.251	2.135	77921379	0.78	12500	101.9	89.5	110.5	
Co	59	103	1	He	46.571	1.557	482503	1.46	50	93.1	89.5	110.5	
Ni	60	103	1	He	46.464	2.089	122495	1.85	50	92.9	89.5	110.5	
Cu	63	103	1	He	46.367	0.782	328209	0.60	50	92.7	89.5	110.5	
Zn	66	103	1	He	47.286	1.625	68389	1.33	50	94.6	89.5	110.5	
As	75	103	1	He	47.806	0.462	43428	0.33	50	95.6	89.5	110.5	
Se	78	103	1	He	47.908	1.450	3616	1.44	50	95.8	89.5	110.5	
Sr	88	103	1	He	49.094	0.415	264356	0.41	50	98.2	89.5	110.5	
Mo	95	103	1	He	49.054	2.476	142931	2.50	50	98.1	89.5	110.5	
Ag	107	103	1	He	48.948	0.798	491491	0.66	50	97.9	89.5	110.5	
Cd	111	103	1	He	49.251	0.686	83428	0.41	50	98.5	89.5	110.5	
Sn	118	115	1	He	49.828	0.818	185330	1.28	50	99.7	89.5	110.5	
Sb	123	115	1	He	52.714	0.800	207780	0.39	50	105.4	89.5	110.5	
Ba	137	115	1	He	52.718	1.690	81826	1.33	50	105.4	89.5	110.5	
W	182	165	1	He	47.081	0.269	545141	1.33	50	94.2	89.5	110.5	
Tl	205	209	1	He	47.134	1.635	1207231	1.06	50	94.3	89.5	110.5	
Pb	208	209	1	He	48.396	0.994	1631499	0.45	50	96.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1630467	0.75	1803797	90.39	30	120	
Sc	45	1	He	564070	2.47	574766	98.14	30	120	
Sc	45	2	NoGas	4389487	0.66	4296857	102.16	30	120	
Rh	103	1	He	1623545	0.29	1652712	98.24	30	120	
In	115	1	He	845652	0.68	852389	99.21	30	120	
Tb	159	1	He	2531013	1.35	2425956	104.33	30	120	
Ho	165	1	He	2588366	1.23	2452680	105.53	30	120	
Bi	209	1	He	1860133	0.57	1810473	102.74	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	132_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:52:45-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.072	21.0	382	22.1	1	
B	11	45	2	NoGas	15.957	2.4	64163	1.6	20	
Na	23	45	1	He	16.112	10.5	56075	3.2	400	
Mg	24	45	1	He	2.148	28.2	2689	17.7	1000	
Al	27	45	1	He	9.840	0.4	5015	1.0	50	
K	39	45	1	He	7.201	12.4	67091	0.7	1000	
Ca	44	45	1	He	4.533	9.2	712	3.0	1000	
Ti	47	45	1	He	0.165	15.9	36	14.3	20	
V	51	45	1	He	0.060	200.0	568	111.6	2	
Cr	52	45	1	He	-0.054	-28.7	2541	4.2	2	
Mn	55	45	1	He	0.202	13.4	1098	10.3	2	
Fe	56	45	1	He	18.127	22.2	114493	20.0	50	
Co	59	103	1	He	0.015	24.4	223	18.3	1	
Ni	60	103	1	He	0.016	38.8	142	12.0	2	
Cu	63	103	1	He	-0.157	-7.9	1408	6.3	2	
Zn	66	103	1	He	0.504	16.3	1626	8.1	20	
As	75	103	1	He	0.025	19.4	226	1.5	2	
Se	78	103	1	He	0.240	31.5	49	12.6	2	
Sr	88	103	1	He	0.025	94.3	284	45.2	10	
Mo	95	103	1	He	0.567	36.1	2437	25.5	2	
Ag	107	103	1	He	0.002	102.3	52	37.4	0.2	
Cd	111	103	1	He	0.045	27.3	953	2.9	0.2	
Sn	118	115	1	He	0.245	12.5	1837	6.2	10	
Sb	123	115	1	He	0.101	43.7	1339	13.3	1	
Ba	137	115	1	He	0.038	60.7	74	49.3	5	
W	182	165	1	He	0.875	17.9	13136	14.2	10	
Tl	205	209	1	He	0.043	21.3	1572	15.3	0.5	
Pb	208	209	1	He	0.037	4.9	2246	2.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1663877	1.21	1803797	92.24	30	120	
Sc	45	1	He	553222	1.28	574766	96.25	30	120	
Sc	45	2	NoGas	4477033	2.02	4296857	104.19	30	120	
Rh	103	1	He	1699587	0.66	1652712	102.84	30	120	
In	115	1	He	879114	0.22	852389	103.14	30	120	
Tb	159	1	He	2567816	1.41	2425956	105.85	30	120	
Ho	165	1	He	2632850	0.48	2452680	107.35	30	120	
Bi	209	1	He	1946129	0.26	1810473	107.49	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-8-d@2
Data File Name	133SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T18:56:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.450	1.450	2.83	7346	0.02	10000	
B	11	45	2	NoGas	31.456	31.456	0.84	119289	0.03	300	
Na	23	45	1	He	322.490	322.490	2.07	520460	0.06	500000	
Mg	24	45	1	He	17840.962	17840.962	1.30	15295830	0.12	500000	
Al	27	45	1	He	23681.301	23681.301	2.07	10557134	0.22	200000	
K	39	45	1	He	4230.697	4230.697	1.21	2910882	0.15	500000	
Ca	44	45	1	He	21749.058	21749.058	1.07	780822	2.79	500000	
Ti	47	45	1	He	220.968	220.968	1.31	47204	0.47	2500	
V	51	45	1	He	45.215	45.215	2.56	246995	0.02	10000	
Cr	52	45	1	He	41.717	41.717	1.36	282266	0.01	10000	
Mn	55	45	1	He	1777.706	1777.706	0.98	8420999	0.02	10000	
Fe	56	45	1	He	103105.501	103105.501	1.52	632195513	0.02	200000	
Co	59	103	1	He	33.701	33.701	2.30	334124	0.01	10000	
Ni	60	103	1	He	73.481	73.481	1.23	185345	0.04	10000	
Cu	63	103	1	He	83.640	83.640	1.85	564666	0.01	10000	
Zn	66	103	1	He	226.106	226.106	1.29	309945	0.07	10000	
As	75	103	1	He	95.321	95.321	2.23	82673	0.12	10000	
Se	78	103	1	He	2.794	2.794	6.91	228	1.23	10000	
Sr	88	103	1	He	45.242	45.242	2.16	233124	0.02	10000	
Mo	95	103	1	He	5.199	5.199	1.88	15080	0.03	2000	
Ag	107	103	1	He	0.085	0.085	6.83	848	0.01	300	
Cd	111	103	1	He	0.552	0.552	3.34	1684	0.03	4000	
Sn	118	115	1	He	16.844	16.844	3.63	61025	0.03	2000	
Sb	123	115	1	He	0.440	0.440	8.12	2528	0.02	300	
Ba	137	115	1	He	134.136	134.136	0.53	200952	0.07	10000	
W	182	165	1	He	0.432	0.432	15.09	7787	0.01	2500	
Tl	205	209	1	He	0.520	0.520	0.52	13740	0.00	5000	
Pb	208	209	1	He	48.585	48.585	1.13	1641146	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1617333	1.25	1803797	89.66	30	120	
Sc	45	1	He	565171	1.74	574766	98.33	30	120	
Sc	45	2	NoGas	4428912	1.60	4296857	103.07	30	120	
Rh	103	1	He	1553946	1.79	1652712	94.02	30	120	
In	115	1	He	816276	0.61	852389	95.76	30	120	
Tb	159	1	He	2515756	1.19	2425956	103.70	30	120	
Ho	165	1	He	2584166	1.79	2452680	105.36	30	120	
Bi	209	1	He	1863955	1.26	1810473	102.95	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-15-f@2
Data File Name	134SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:00:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.163	2.163	6.36	11252	0.02	10000	
B	11	45	2	NoGas	37.263	37.263	0.31	141684	0.03	300	
Na	23	45	1	He	346.941	346.941	0.68	562829	0.06	500000	
Mg	24	45	1	He	26250.821	26250.821	0.88	22719845	0.12	500000	
Al	27	45	1	He	38189.763	38189.763	0.20	17189991	0.22	200000	
K	39	45	1	He	6290.078	6290.078	0.83	4338115	0.14	500000	
Ca	44	45	1	He	32941.619	32941.619	1.24	1193678	2.76	500000	
Ti	47	45	1	He	294.058	294.058	0.72	63422	0.46	2500	
V	51	45	1	He	64.265	64.265	1.06	354397	0.02	10000	
Cr	52	45	1	He	62.855	62.855	0.71	427870	0.01	10000	
Mn	55	45	1	He	1053.316	1053.316	1.97	5037163	0.02	10000	
Fe	56	45	1	He	125536.520	125536.520	1.38	777133622	0.02	200000	
Co	59	103	1	He	46.976	46.976	0.99	472352	0.01	10000	
Ni	60	103	1	He	107.315	107.315	0.88	274472	0.04	10000	
Cu	63	103	1	He	99.548	99.548	1.15	681158	0.01	10000	
Zn	66	103	1	He	288.395	288.395	1.78	400675	0.07	10000	
As	75	103	1	He	70.189	70.189	1.90	61789	0.11	10000	
Se	78	103	1	He	3.797	3.797	5.47	304	1.25	10000	
Sr	88	103	1	He	83.702	83.702	1.13	437332	0.02	10000	
Mo	95	103	1	He	5.332	5.332	2.51	15669	0.03	2000	
Ag	107	103	1	He	0.097	0.097	8.65	971	0.01	300	
Cd	111	103	1	He	0.596	0.596	4.56	1781	0.03	4000	
Sn	118	115	1	He	16.733	16.733	2.88	61044	0.03	2000	
Sb	123	115	1	He	0.305	0.305	10.38	2028	0.02	300	
Ba	137	115	1	He	169.246	169.246	0.90	255317	0.07	10000	
W	182	165	1	He	0.229	0.229	13.22	5560	0.00	2500	
Tl	205	209	1	He	0.553	0.553	1.98	14385	0.00	5000	
Pb	208	209	1	He	54.332	54.332	0.65	1808411	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1661686	1.44	1803797	92.12	30	120	
Sc	45	1	He	570539	0.63	574766	99.26	30	120	
Sc	45	2	NoGas	4475522	0.53	4296857	104.16	30	120	
Rh	103	1	He	1575789	1.01	1652712	95.35	30	120	
In	115	1	He	821967	0.39	852389	96.43	30	120	
Tb	159	1	He	2551547	0.59	2425956	105.18	30	120	
Ho	165	1	He	2631023	1.02	2452680	107.27	30	120	
Bi	209	1	He	1836634	0.22	1810473	101.45	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-22-d@2
Data File Name	135SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:04:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.909	2.909	4.07	15014	0.02	10000	
B	11	45	2	NoGas	44.096	44.096	1.48	167550	0.03	300	
Na	23	45	1	He	340.549	340.549	0.92	560946	0.06	500000	
Mg	24	45	1	He	27770.576	27770.576	0.95	24378031	0.11	500000	
Al	27	45	1	He	44707.682	44707.682	1.24	20409595	0.22	200000	
K	39	45	1	He	7971.479	7971.479	1.01	5558522	0.14	500000	
Ca	44	45	1	He	27344.818	27344.818	0.34	1005128	2.72	500000	
Ti	47	45	1	He	305.773	305.773	0.56	66887	0.46	2500	
V	51	45	1	He	74.075	74.075	1.38	414237	0.02	10000	
Cr	52	45	1	He	71.897	71.897	0.25	495969	0.01	10000	
Mn	55	45	1	He	1679.229	1679.229	0.84	8145104	0.02	10000	
Fe	56	45	1	He	138871.775	138871.775	0.29	871976339	0.02	200000	
Co	59	103	1	He	55.390	55.390	1.13	556542	0.01	10000	
Ni	60	103	1	He	134.692	134.692	1.25	344213	0.04	10000	
Cu	63	103	1	He	92.706	92.706	1.01	634046	0.01	10000	
Zn	66	103	1	He	302.906	302.906	1.13	420509	0.07	10000	
As	75	103	1	He	83.556	83.556	0.68	73474	0.11	10000	
Se	78	103	1	He	4.106	4.106	4.76	326	1.26	10000	
Sr	88	103	1	He	86.782	86.782	0.54	453094	0.02	10000	
Mo	95	103	1	He	5.282	5.282	1.33	15519	0.03	2000	
Ag	107	103	1	He	0.117	0.117	0.52	1171	0.01	300	
Cd	111	103	1	He	0.629	0.629	8.27	1833	0.03	4000	
Sn	118	115	1	He	16.895	16.895	2.15	61378	0.03	2000	
Sb	123	115	1	He	0.341	0.341	8.08	2159	0.02	300	
Ba	137	115	1	He	218.343	218.343	0.27	328019	0.07	10000	
W	182	165	1	He	0.192	0.192	20.56	5160	0.00	2500	
Tl	205	209	1	He	0.675	0.675	1.97	17358	0.00	5000	
Pb	208	209	1	He	59.969	59.969	1.00	1982774	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1647773	1.35	1803797	91.35	30	120	
Sc	45	1	He	578671	0.78	574766	100.68	30	120	
Sc	45	2	NoGas	4502588	1.18	4296857	104.79	30	120	
Rh	103	1	He	1574630	0.89	1652712	95.28	30	120	
In	115	1	He	818567	0.36	852389	96.03	30	120	
Tb	159	1	He	2573351	0.65	2425956	106.08	30	120	
Ho	165	1	He	2647566	0.78	2452680	107.95	30	120	
Bi	209	1	He	1824660	1.35	1810473	100.78	30	120	

Sample Report

Sample Table

Sample Name	240-49085-f-34-d@2
Data File Name	136SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:08:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.220	2.220	2.75	11523	0.02	10000	
B	11	45	2	NoGas	33.688	33.688	1.76	130218	0.03	300	
Na	23	45	1	He	289.655	289.655	1.30	475459	0.06	500000	
Mg	24	45	1	He	26103.968	26103.968	1.23	22596583	0.12	500000	
Al	27	45	1	He	38204.831	38204.831	1.96	17198001	0.22	200000	
K	39	45	1	He	6005.610	6005.610	0.64	4145599	0.14	500000	
Ca	44	45	1	He	49250.666	49250.666	2.04	1785027	2.76	500000	
Ti	47	45	1	He	327.079	327.079	1.19	70554	0.46	2500	
V	51	45	1	He	63.942	63.942	2.38	352637	0.02	10000	
Cr	52	45	1	He	62.292	62.292	1.27	424125	0.01	10000	
Mn	55	45	1	He	1569.814	1569.814	1.55	7508762	0.02	10000	
Fe	56	45	1	He	121171.414	121171.414	0.48	750287810	0.02	200000	
Co	59	103	1	He	45.624	45.624	2.82	462307	0.01	10000	
Ni	60	103	1	He	107.866	107.866	3.13	277997	0.04	10000	
Cu	63	103	1	He	83.243	83.243	2.72	574404	0.01	10000	
Zn	66	103	1	He	265.976	265.976	2.88	372467	0.07	10000	
As	75	103	1	He	72.278	72.278	2.67	64121	0.11	10000	
Se	78	103	1	He	3.616	3.616	2.23	293	1.23	10000	
Sr	88	103	1	He	84.978	84.978	2.56	447445	0.02	10000	
Mo	95	103	1	He	4.360	4.360	1.44	13036	0.03	2000	
Ag	107	103	1	He	0.087	0.087	4.77	881	0.01	300	
Cd	111	103	1	He	0.502	0.502	5.13	1641	0.03	4000	
Sn	118	115	1	He	16.945	16.945	1.28	62063	0.03	2000	
Sb	123	115	1	He	0.267	0.267	15.38	1890	0.01	300	
Ba	137	115	1	He	197.830	197.830	1.57	299618	0.07	10000	
W	182	165	1	He	0.176	0.176	14.21	4945	0.00	2500	
Tl	205	209	1	He	0.654	0.654	1.44	17150	0.00	5000	
Pb	208	209	1	He	45.566	45.566	0.62	1535580	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1657471	1.12	1803797	91.89	30	120	
Sc	45	1	He	570659	1.10	574766	99.29	30	120	
Sc	45	2	NoGas	4529560	0.85	4296857	105.42	30	120	
Rh	103	1	He	1588661	2.66	1652712	96.12	30	120	
In	115	1	He	825268	0.77	852389	96.82	30	120	
Tb	159	1	He	2572580	1.08	2425956	106.04	30	120	
Ho	165	1	He	2636397	1.00	2452680	107.49	30	120	
Bi	209	1	He	1859376	0.30	1810473	102.70	30	120	

Sample Report

Sample Table

Sample Name	240-49171-b-19-a@2
Data File Name	137SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:11:51-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.465	0.465	14.25	2345	0.02	10000	
B	11	45	2	NoGas	17.344	17.344	2.16	67174	0.03	300	
Na	23	45	1	He	90.631	90.631	1.46	165331	0.05	500000	
Mg	24	45	1	He	882.472	882.472	0.79	736703	0.12	500000	
Al	27	45	1	He	5253.318	5253.318	0.93	2278649	0.23	200000	
K	39	45	1	He	943.895	943.895	1.00	679803	0.14	500000	
Ca	44	45	1	He	361.121	361.121	2.63	13151	2.75	500000	
Ti	47	45	1	He	83.466	83.466	4.09	17342	0.48	2500	
V	51	45	1	He	14.258	14.258	2.94	75935	0.02	10000	
Cr	52	45	1	He	12.334	12.334	0.26	83200	0.01	10000	
Mn	55	45	1	He	132.324	132.324	0.39	609841	0.02	10000	
Fe	56	45	1	He	15703.982	15703.982	0.71	93666950	0.02	200000	
Co	59	103	1	He	5.416	5.416	1.42	57063	0.01	10000	
Ni	60	103	1	He	15.065	15.065	1.54	40424	0.04	10000	
Cu	63	103	1	He	7.527	7.527	2.91	56214	0.01	10000	
Zn	66	103	1	He	133.058	133.058	1.95	194000	0.07	10000	
As	75	103	1	He	19.409	19.409	1.91	18030	0.11	10000	
Se	78	103	1	He	0.837	0.837	21.34	93	0.90	10000	
Sr	88	103	1	He	6.102	6.102	1.30	33513	0.02	10000	
Mo	95	103	1	He	2.994	2.994	3.40	9516	0.03	2000	
Ag	107	103	1	He	0.011	0.011	9.03	149	0.01	300	
Cd	111	103	1	He	0.117	0.117	29.67	1048	0.01	4000	
Sn	118	115	1	He	17.978	17.978	2.25	66750	0.03	2000	
Sb	123	115	1	He	0.172	0.172	9.77	1549	0.01	300	
Ba	137	115	1	He	27.736	27.736	0.77	42634	0.07	10000	
W	182	165	1	He	0.143	0.143	18.56	4497	0.00	2500	
Tl	205	209	1	He	0.148	0.148	1.31	4273	0.00	5000	
Pb	208	209	1	He	8.833	8.833	0.66	303606	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1611819	2.78	1803797	89.36	30	120	
Sc	45	1	He	549665	0.69	574766	95.63	30	120	
Sc	45	2	NoGas	4344376	1.54	4296857	101.11	30	120	
Rh	103	1	He	1649935	1.84	1652712	99.83	30	120	
In	115	1	He	837321	0.12	852389	98.23	30	120	
Tb	159	1	He	2538010	0.46	2425956	104.62	30	120	
Ho	165	1	He	2599745	1.00	2452680	106.00	30	120	
Bi	209	1	He	1891716	0.41	1810473	104.49	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-6-h@2
Data File Name	138SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:15:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.020	4.020	2.74	20382	0.02	10000	
B	11	45	2	NoGas	21.004	21.004	0.32	83093	0.03	300	
Na	23	45	1	He	169.299	169.299	0.82	302233	0.06	500000	
Mg	24	45	1	He	10592.111	10592.111	0.53	9499575	0.11	500000	
Al	27	45	1	He	61338.254	61338.254	0.83	28606862	0.21	200000	
K	39	45	1	He	3807.753	3807.753	1.15	2747310	0.14	500000	
Ca	44	45	1	He	859.367	859.367	0.98	32843	2.62	500000	
Ti	47	45	1	He	525.817	525.817	1.03	117506	0.45	2500	
V	51	45	1	He	130.305	130.305	0.74	744273	0.02	10000	
Cr	52	45	1	He	100.147	100.147	0.36	704553	0.01	10000	
Mn	55	45	1	He	4279.221	4279.221	1.33	21205339	0.02	10000	
Fe	56	45	1	He	127276.121	127276.121	0.87	816421870	0.02	200000	
Co	59	103	1	He	59.050	59.050	1.48	607452	0.01	10000	
Ni	60	103	1	He	86.153	86.153	2.53	225434	0.04	10000	
Cu	63	103	1	He	72.162	72.162	1.43	505842	0.01	10000	
Zn	66	103	1	He	279.149	279.149	0.92	396845	0.07	10000	
As	75	103	1	He	61.550	61.550	1.52	55462	0.11	10000	
Se	78	103	1	He	5.932	5.932	5.49	470	1.26	10000	
Sr	88	103	1	He	17.804	17.804	1.58	95276	0.02	10000	
Mo	95	103	1	He	8.198	8.198	2.61	24279	0.03	2000	
Ag	107	103	1	He	0.178	0.178	1.76	1810	0.01	300	
Cd	111	103	1	He	0.725	0.725	2.86	2036	0.04	4000	
Sn	118	115	1	He	20.419	20.419	1.56	74564	0.03	2000	
Sb	123	115	1	He	0.501	0.501	10.67	2787	0.02	300	
Ba	137	115	1	He	468.205	468.205	0.56	708706	0.07	10000	
W	182	165	1	He	0.306	0.306	11.01	6435	0.00	2500	
Tl	205	209	1	He	0.843	0.843	0.86	22157	0.00	5000	
Pb	208	209	1	He	90.386	90.386	2.81	3067850	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1619480	1.17	1803797	89.78	30	120	
Sc	45	1	He	591161	0.45	574766	102.85	30	120	
Sc	45	2	NoGas	4506475	0.92	4296857	104.88	30	120	
Rh	103	1	He	1612241	1.26	1652712	97.55	30	120	
In	115	1	He	824777	0.67	852389	96.76	30	120	
Tb	159	1	He	2544432	0.72	2425956	104.88	30	120	
Ho	165	1	He	2618299	1.36	2452680	106.75	30	120	
Bi	209	1	He	1873904	1.88	1810473	103.50	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-8-f@2
Data File Name	139SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:19:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.908	3.908	2.53	18907	0.02	10000	
B	11	45	2	NoGas	22.320	22.320	0.50	83331	0.03	300	
Na	23	45	1	He	151.440	151.440	0.76	256549	0.06	500000	
Mg	24	45	1	He	11062.525	11062.525	1.20	9290142	0.12	500000	
Al	27	45	1	He	63111.826	63111.826	1.47	27562142	0.23	200000	
K	39	45	1	He	4053.661	4053.661	0.54	2734697	0.15	500000	
Ca	44	45	1	He	1296.503	1296.503	1.27	46114	2.81	500000	
Ti	47	45	1	He	567.558	567.558	0.21	118764	0.48	2500	
V	51	45	1	He	128.398	128.398	0.52	686712	0.02	10000	
Cr	52	45	1	He	89.418	89.418	0.28	589356	0.02	10000	
Mn	55	45	1	He	3154.505	3154.505	0.12	14637105	0.02	10000	
Fe	56	45	1	He	129056.212	129056.212	0.37	775172627	0.02	200000	
Co	59	103	1	He	52.604	52.604	1.86	495907	0.01	10000	
Ni	60	103	1	He	104.488	104.488	2.94	250523	0.04	10000	
Cu	63	103	1	He	83.764	83.764	2.59	537680	0.02	10000	
Zn	66	103	1	He	294.505	294.505	1.68	383627	0.08	10000	
As	75	103	1	He	59.071	59.071	1.81	48786	0.12	10000	
Se	78	103	1	He	5.981	5.981	7.00	434	1.38	10000	
Sr	88	103	1	He	25.244	25.244	2.48	123739	0.02	10000	
Mo	95	103	1	He	8.706	8.706	0.98	23596	0.04	2000	
Ag	107	103	1	He	0.121	0.121	8.71	1136	0.01	300	
Cd	111	103	1	He	0.966	0.966	8.80	2236	0.04	4000	
Sn	118	115	1	He	17.631	17.631	2.73	60873	0.03	2000	
Sb	123	115	1	He	0.626	0.626	7.46	3079	0.02	300	
Ba	137	115	1	He	449.679	449.679	0.86	642391	0.07	10000	
W	182	165	1	He	0.300	0.300	17.43	6224	0.00	2500	
Tl	205	209	1	He	0.892	0.892	0.15	22744	0.00	5000	
Pb	208	209	1	He	67.012	67.012	0.50	2209785	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1545131	0.87	1803797	85.66	30	120	
Sc	45	1	He	553548	0.28	574766	96.31	30	120	
Sc	45	2	NoGas	4271688	2.12	4296857	99.41	30	120	
Rh	103	1	He	1477601	1.70	1652712	89.40	30	120	
In	115	1	He	778419	0.70	852389	91.32	30	120	
Tb	159	1	He	2489118	1.54	2425956	102.60	30	120	
Ho	165	1	He	2561616	1.50	2452680	104.44	30	120	
Bi	209	1	He	1819757	0.28	1810473	100.51	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-10-h@2
Data File Name	140SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:23:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.876	1.876	8.11	8658	0.02	10000	
B	11	45	2	NoGas	17.910	17.910	3.67	62197	0.03	300	
Na	23	45	1	He	118.821	118.821	1.89	191046	0.06	500000	
Mg	24	45	1	He	6223.547	6223.547	1.75	4795372	0.13	500000	
Al	27	45	1	He	30542.849	30542.849	0.83	12237621	0.25	200000	
K	39	45	1	He	2762.665	2762.665	3.40	1728233	0.16	500000	
Ca	44	45	1	He	690.098	690.098	1.90	22759	3.03	500000	
Ti	47	45	1	He	430.993	430.993	0.88	82746	0.52	2500	
V	51	45	1	He	80.181	80.181	0.53	393516	0.02	10000	
Cr	52	45	1	He	92.557	92.557	0.18	559593	0.02	10000	
Mn	55	45	1	He	1528.935	1528.935	0.70	6508825	0.02	10000	
Fe	56	45	1	He	79971.608	79971.608	0.40	440711894	0.02	200000	
Co	59	103	1	He	32.009	32.009	0.31	288337	0.01	10000	
Ni	60	103	1	He	66.644	66.644	0.34	152720	0.04	10000	
Cu	63	103	1	He	28.478	28.478	0.18	176075	0.02	10000	
Zn	66	103	1	He	164.046	164.046	0.11	204487	0.08	10000	
As	75	103	1	He	59.589	59.589	0.62	47020	0.13	10000	
Se	78	103	1	He	2.894	2.894	3.76	214	1.35	10000	
Sr	88	103	1	He	11.679	11.679	1.61	54767	0.02	10000	
Mo	95	103	1	He	5.856	5.856	2.23	15356	0.04	2000	
Ag	107	103	1	He	0.103	0.103	2.78	930	0.01	300	
Cd	111	103	1	He	0.434	0.434	12.78	1359	0.03	4000	
Sn	118	115	1	He	17.568	17.568	1.15	59278	0.03	2000	
Sb	123	115	1	He	0.249	0.249	18.20	1681	0.01	300	
Ba	137	115	1	He	184.264	184.264	0.33	257262	0.07	10000	
W	182	165	1	He	0.231	0.231	7.37	5223	0.00	2500	
Tl	205	209	1	He	0.439	0.439	1.93	11052	0.00	5000	
Pb	208	209	1	He	38.395	38.395	0.39	1227105	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1474507	0.77	1803797	81.74	30	120	
Sc	45	1	He	507861	0.67	574766	88.36	30	120	
Sc	45	2	NoGas	3906392	0.33	4296857	90.91	30	120	
Rh	103	1	He	1411483	0.15	1652712	85.40	30	120	
In	115	1	He	760712	0.38	852389	89.24	30	120	
Tb	159	1	He	2366204	0.79	2425956	97.54	30	120	
Ho	165	1	He	2457831	1.24	2452680	100.21	30	120	
Bi	209	1	He	1763199	0.49	1810473	97.39	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	141_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:27:07-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.563	2.440	218793	2.32	50	95.1	89.5	110.5	
B	11	45	2	NoGas	54.852	0.407	185136	1.62	50	109.7	89.5	110.5	
Na	23	45	1	He	25341.469	0.985	34638207	0.26	25000	101.4	89.5	110.5	
Mg	24	45	1	He	25150.968	1.411	19475654	0.56	25000	100.6	89.5	110.5	
Al	27	45	1	He	248.630	2.912	100778	2.07	250	99.5	89.5	110.5	
K	39	45	1	He	25710.268	2.375	15686033	1.67	25000	102.8	89.5	110.5	
Ca	44	45	1	He	24938.475	1.753	808632	0.91	25000	99.8	89.5	110.5	
Ti	47	45	1	He	50.278	2.499	9702	1.52	50	100.6	89.5	110.5	
V	51	45	1	He	51.840	1.891	255815	1.80	50	103.7	89.5	110.5	
Cr	52	45	1	He	50.700	1.675	309298	1.07	50	101.4	89.5	110.5	
Mn	55	45	1	He	252.603	1.397	1080945	0.36	250	101.0	89.5	110.5	
Fe	56	45	1	He	12886.016	1.527	71377699	1.00	12500	103.1	89.5	110.5	
Co	59	103	1	He	48.379	0.499	440483	0.99	50	96.8	89.5	110.5	
Ni	60	103	1	He	48.123	0.878	111488	0.27	50	96.2	89.5	110.5	
Cu	63	103	1	He	47.945	0.554	298170	0.90	50	95.9	89.5	110.5	
Zn	66	103	1	He	48.998	0.233	62250	0.84	50	98.0	89.5	110.5	
As	75	103	1	He	49.704	0.473	39671	0.85	50	99.4	89.5	110.5	
Se	78	103	1	He	48.890	2.175	3242	1.41	50	97.8	89.5	110.5	
Sr	88	103	1	He	51.182	0.696	242178	0.74	50	102.4	89.5	110.5	
Mo	95	103	1	He	51.802	2.025	132610	2.41	50	103.6	89.5	110.5	
Ag	107	103	1	He	52.306	0.648	461541	0.81	50	104.6	89.5	110.5	
Cd	111	103	1	He	51.888	0.922	77198	0.45	50	103.8	89.5	110.5	
Sn	118	115	1	He	50.954	1.162	176486	0.93	50	101.9	89.5	110.5	
Sb	123	115	1	He	53.045	1.634	194716	0.17	50	106.1	89.5	110.5	
Ba	137	115	1	He	53.000	0.846	76620	0.83	50	106.0	89.5	110.5	
W	182	165	1	He	47.275	0.826	528246	1.99	50	94.5	89.5	110.5	
Tl	205	209	1	He	46.726	0.432	1162876	0.20	50	93.5	89.5	110.5	
Pb	208	209	1	He	48.474	0.199	1587810	0.24	50	96.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1469499	0.77	1803797	81.47	30	120	
Sc	45	1	He	510487	1.06	574766	88.82	30	120	
Sc	45	2	NoGas	4028305	1.36	4296857	93.75	30	120	
Rh	103	1	He	1426736	0.75	1652712	86.33	30	120	
In	115	1	He	787665	1.51	852389	92.41	30	120	
Tb	159	1	He	2430305	1.78	2425956	100.18	30	120	
Ho	165	1	He	2497875	1.62	2452680	101.84	30	120	
Bi	209	1	He	1807345	0.44	1810473	99.83	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	142_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:30:59-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.056	16.9	267	15.0	1	
B	11	45	2	NoGas	9.279	3.0	36047	1.8	20	
Na	23	45	1	He	14.810	11.3	49806	4.0	400	
Mg	24	45	1	He	2.121	13.6	2456	8.5	1000	
Al	27	45	1	He	9.571	2.3	4504	1.6	50	
K	39	45	1	He	12.625	28.0	64980	2.9	1000	
Ca	44	45	1	He	2.300	42.8	583	4.9	1000	
Ti	47	45	1	He	0.151	52.9	30	50.9	20	
V	51	45	1	He	0.047	214.7	460	106.9	2	
Cr	52	45	1	He	-0.046	-19.6	2388	1.7	2	
Mn	55	45	1	He	0.278	5.6	1335	4.4	2	
Fe	56	45	1	He	17.359	20.6	101148	19.0	50	
Co	59	103	1	He	0.008	42.4	129	24.0	1	
Ni	60	103	1	He	0.008	67.6	112	12.0	2	
Cu	63	103	1	He	-0.180	-6.7	1149	8.2	2	
Zn	66	103	1	He	0.456	5.3	1446	1.9	20	
As	75	103	1	He	-0.010	-326.6	180	15.6	2	
Se	78	103	1	He	0.052	152.6	32	17.0	2	
Sr	88	103	1	He	0.009	15.4	184	2.8	10	
Mo	95	103	1	He	0.678	29.4	2584	22.5	2	
Ag	107	103	1	He	0.001	192.9	39	40.5	0.2	
Cd	111	103	1	He	0.012	189.4	833	3.4	0.2	
Sn	118	115	1	He	0.189	13.5	1522	5.5	10	
Sb	123	115	1	He	0.089	45.7	1208	12.3	1	
Ba	137	115	1	He	0.024	51.1	49	37.6	5	
W	182	165	1	He	0.886	20.7	12743	16.1	10	
Tl	205	209	1	He	0.036	28.1	1330	20.5	0.5	
Pb	208	209	1	He	0.028	3.6	1878	2.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1502860	1.99	1803797	83.32	30	120	
Sc	45	1	He	508736	0.61	574766	88.51	30	120	
Sc	45	2	NoGas	4048664	0.75	4296857	94.22	30	120	
Rh	103	1	He	1581362	1.25	1652712	95.68	30	120	
In	115	1	He	824787	0.56	852389	96.76	30	120	
Tb	159	1	He	2456737	0.48	2425956	101.27	30	120	
Ho	165	1	He	2530352	0.50	2452680	103.17	30	120	
Bi	209	1	He	1869272	1.34	1810473	103.25	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	143CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:34:50-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.916	0.916	7.960	4475	6.43	1	91.6	69.5	130.5	
B	11	2	NoGas	25.682	25.682	1.150	92164	1.82	20	128.4	69.5	130.5	
Na	23	1	He	1075.838	1075.838	2.302	1546021	0.75	1000	107.6	69.5	130.5	
Mg	24	1	He	1040.414	1040.414	1.186	831839	0.55	1000	104.0	69.5	130.5	
Al	27	1	He	50.777	50.777	1.348	21777	0.51	50	101.6	69.5	130.5	
K	39	1	He	1051.449	1051.449	2.032	718599	0.63	1000	105.1	69.5	130.5	
Ca	44	1	He	1018.792	1018.792	1.540	34579	0.34	1000	101.9	69.5	130.5	
Ti	47	1	He	10.709	10.709	1.839	2132	1.15	10	107.1	69.5	130.5	
V	51	1	He	5.407	5.407	1.312	27737	1.16	5	108.1	69.5	130.5	
Cr	52	1	He	3.941	3.941	1.119	27341	0.69	2	197.0	69.5	130.5	6020A CR1 Failed
Mn	55	1	He	5.629	5.629	0.604	25000	1.64	5	112.6	69.5	130.5	
Fe	56	1	He	116.909	116.909	1.185	673498	0.54	100	116.9	69.5	130.5	
Co	59	1	He	0.938	0.938	3.271	9543	2.84	1	93.8	69.5	130.5	
Ni	60	1	He	2.685	2.685	2.295	6997	1.27	2	134.3	69.5	130.5	6020A CR1 Failed
Cu	63	1	He	1.676	1.676	4.068	13880	3.01	2	83.8	69.5	130.5	
Zn	66	1	He	18.670	18.670	2.184	26851	1.07	20	93.4	69.5	130.5	
As	75	1	He	4.710	4.710	1.835	4348	1.05	5	94.2	69.5	130.5	
Se	78	1	He	4.866	4.866	1.757	384	2.56	5	97.3	69.5	130.5	
Sr	88	1	He	9.693	9.693	1.646	51062	1.38	10	96.9	69.5	130.5	
Mo	95	1	He	9.789	9.789	3.002	28376	1.99	10	97.9	69.5	130.5	
Ag	107	1	He	0.990	0.990	5.954	9735	4.90	1	99.0	69.5	130.5	
Cd	111	1	He	1.068	1.068	1.798	2564	0.96	1	106.8	69.5	130.5	
Sn	118	1	He	10.055	10.055	1.981	37524	2.09	10	100.5	69.5	130.5	
Sb	123	1	He	1.857	1.857	0.696	8059	0.29	2	92.9	69.5	130.5	
Ba	137	1	He	5.390	5.390	3.069	8255	3.39	5	107.8	69.5	130.5	
W	182	1	He	9.698	9.698	1.349	110292	0.59	10	97.0	69.5	130.5	
Tl	205	1	He	1.897	1.897	2.272	49093	1.02	2	94.8	69.5	130.5	
Pb	208	1	He	1.057	1.057	2.489	36602	0.49	1	105.7	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1560031	2.32	1803797	86.49	30	120	
Sc	45	1	He	526590	1.69	574766	91.62	30	120	
Sc	45	2	NoGas	4143717	1.12	4296857	96.44	30	120	
Rh	103	1	He	1585090	1.03	1652712	95.91	30	120	
In	115	1	He	833194	0.34	852389	97.75	30	120	
Tb	159	1	He	2440507	0.82	2425956	100.60	30	120	
Ho	165	1	He	2492603	1.18	2452680	101.63	30	120	
Bi	209	1	He	1865108	2.56	1810473	103.02	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176698/1-a@2
Data File Name	144_Blk.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:38:41-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.081	36.1	382	33.8	1	
B	11	45	2	NoGas	12.008	3.0	43957	1.9	20	
Na	23	45	1	He	47.714	3.2	95204	0.9	400	
Mg	24	45	1	He	38.006	2.7	30341	0.7	1000	
Al	27	45	1	He	27.423	1.2	11746	1.8	50	
K	39	45	1	He	41.625	4.6	83097	1.5	1000	
Ca	44	45	1	He	130.372	5.3	4752	5.9	1000	
Ti	47	45	1	He	0.461	27.3	90	25.9	20	
V	51	45	1	He	0.278	17.4	1604	13.1	2	
Cr	52	45	1	He	0.998	2.5	8734	1.4	2	
Mn	55	45	1	He	0.568	3.7	2586	3.4	2	
Fe	56	45	1	He	17.787	3.9	104318	5.6	50	
Co	59	103	1	He	0.098	2.6	986	4.2	1	
Ni	60	103	1	He	0.284	15.1	778	15.2	2	
Cu	63	103	1	He	0.311	13.4	4262	5.3	2	
Zn	66	103	1	He	3.366	3.9	5198	3.0	20	
As	75	103	1	He	0.504	7.5	598	6.5	2	
Se	78	103	1	He	0.480	10.2	60	6.3	2	
Sr	88	103	1	He	0.388	5.7	2052	7.1	10	
Mo	95	103	1	He	0.406	21.8	1711	12.1	2	
Ag	107	103	1	He	0.009	22.2	108	14.6	0.2	
Cd	111	103	1	He	0.043	20.5	836	1.5	0.2	
Sn	118	115	1	He	17.180	1.3	60691	1.5	10	Blank Failed
Sb	123	115	1	He	0.080	19.3	1135	5.3	1	
Ba	137	115	1	He	0.966	6.0	1423	5.7	5	
W	182	165	1	He	0.494	12.1	8228	7.7	10	
Tl	205	209	1	He	0.328	3.9	8717	4.5	0.5	
Pb	208	209	1	He	0.253	2.5	9342	2.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1501941	2.48	1803797	83.27	30	120	
Sc	45	1	He	512125	1.92	574766	89.10	30	120	
Sc	45	2	NoGas	3952267	1.01	4296857	91.98	30	120	
Rh	103	1	He	1495999	1.90	1652712	90.52	30	120	
In	115	1	He	796188	0.24	852389	93.41	30	120	
Tb	159	1	He	2409514	1.17	2425956	99.32	30	120	
Ho	165	1	He	2499075	0.44	2452680	101.89	30	120	
Bi	209	1	He	1839140	0.74	1810473	101.58	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176698/2-a@2
Data File Name	145LCSS.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:42:33-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	507.000	507.000	1.603	2363052	0.92	500	101.4	78.6	110.5	
B	11	2	NoGas	62.481	62.481	1.107	203655	0.49	50	125.0	79.5	120.5	LCSS Failed
Na	23	1	He	5041.215	5041.215	2.014	6825828	1.41	5000	100.8	79.5	120.5	
Mg	24	1	He	5022.529	5022.529	1.214	3840168	0.22	5000	100.5	79.5	120.5	
Al	27	1	He	4750.560	4750.560	1.852	1889127	0.66	5000	95.0	79.5	120.5	
K	39	1	He	5087.953	5087.953	1.256	3110208	0.11	5000	101.8	79.5	120.5	
Ca	44	1	He	4549.425	4549.425	0.913	146053	0.91	5000	91.0	79.5	120.5	
Ti	47	1	He	49.039	49.039	2.704	9341	1.56	50	98.1	79.5	120.5	
V	51	1	He	515.100	515.100	0.504	2507395	1.00	500	103.0	71.5	110.5	
Cr	52	1	He	508.692	508.692	1.044	3039902	0.73	500	101.7	69.5	110.5	
Mn	55	1	He	518.128	518.128	2.236	2188538	1.06	500	103.6	79.5	120.5	
Fe	56	1	He	5069.998	5069.998	1.787	27726301	0.49	5000	101.4	79.5	120.5	
Co	59	1	He	460.465	460.465	3.367	4325926	0.86	500	92.1	73.9	110.5	
Ni	60	1	He	450.424	450.424	3.533	1076111	0.56	500	90.1	74.9	110.5	
Cu	63	1	He	471.608	471.608	4.026	3006587	1.03	500	94.3	72.6	110.5	
Zn	66	1	He	444.310	444.310	2.076	576564	1.13	500	88.9	71.5	113.4	
As	75	1	He	439.435	439.435	2.662	360614	0.66	500	87.9	73.4	110.5	
Se	78	1	He	436.920	436.920	2.528	29696	0.48	500	87.4	64.6	110.5	
Sr	88	1	He	501.508	501.508	3.102	2448107	1.89	500	100.3	79.5	120.5	
Mo	95	1	He	51.639	51.639	2.836	136426	0.22	50	103.3	29.5	140.5	
Ag	107	1	He	49.212	49.212	2.801	448173	0.91	50	98.4	59.5	114.5	
Cd	111	1	He	475.790	475.790	2.006	724517	0.96	500	95.2	73.5	110.5	
Sn	118	1	He	558.568	558.568	2.642	1867209	2.02	500	111.7	79.5	120.5	
Sb	123	1	He	50.703	50.703	0.872	180435	0.26	50	101.4	67.5	113.4	
Ba	137	1	He	512.752	512.752	1.392	718306	0.53	500	102.6	69.5	110.5	
W	182	1	He	47.113	47.113	1.695	522524	0.98	50	94.2	74.6	125.4	
Tl	205	1	He	117.905	117.905	1.031	2924891	0.06	125	94.3	70.6	110.5	
Pb	208	1	He	479.461	479.461	0.991	15650206	0.60	500	95.9	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1489093	1.57	1803797	82.55	30	120	
Sc	45	1	He	503973	1.34	574766	87.68	30	120	
Sc	45	2	NoGas	3904705	1.44	4296857	90.87	30	120	
Rh	103	1	He	1473260	2.93	1652712	89.14	30	120	
In	115	1	He	763377	0.90	852389	89.56	30	120	
Tb	159	1	He	2407021	0.69	2425956	99.22	30	120	
Ho	165	1	He	2479712	1.71	2452680	101.10	30	120	
Bi	209	1	He	1802017	1.07	1810473	99.53	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-d@2
Data File Name	146SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:46:13-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.060	3.060	2.17	14343	0.02	10000	
B	11	45	2	NoGas	18.400	18.400	0.56	67330	0.03	300	
Na	23	45	1	He	121.408	121.408	1.14	206555	0.06	500000	
Mg	24	45	1	He	7393.597	7393.597	0.95	6048255	0.12	500000	
Al	27	45	1	He	39097.121	39097.121	0.77	16630609	0.24	200000	
K	39	45	1	He	3254.573	3254.573	1.41	2150402	0.15	500000	
Ca	44	45	1	He	619.993	619.993	2.48	21757	2.85	500000	
Ti	47	45	1	He	322.651	322.651	1.36	65758	0.49	2500	
V	51	45	1	He	109.797	109.797	0.73	572003	0.02	10000	
Cr	52	45	1	He	93.403	93.403	0.42	599519	0.02	10000	
Mn	55	45	1	He	7886.754	7886.754	0.80	35644560	0.02	10000	
Fe	56	45	1	He	193623.303	193623.303	0.87	1132755191	0.02	200000	
Co	59	103	1	He	58.043	58.043	0.57	524675	0.01	10000	
Ni	60	103	1	He	87.116	87.116	0.37	200317	0.04	10000	
Cu	63	103	1	He	56.993	56.993	0.88	351492	0.02	10000	
Zn	66	103	1	He	198.387	198.387	0.63	248026	0.08	10000	
As	75	103	1	He	73.410	73.410	0.70	58093	0.13	10000	
Se	78	103	1	He	5.192	5.192	4.42	365	1.42	10000	
Sr	88	103	1	He	22.704	22.704	1.05	106733	0.02	10000	
Mo	95	103	1	He	7.767	7.767	0.07	20246	0.04	2000	
Ag	107	103	1	He	0.095	0.095	3.12	857	0.01	300	
Cd	111	103	1	He	0.602	0.602	8.19	1609	0.04	4000	
Sn	118	115	1	He	18.076	18.076	1.90	61609	0.03	2000	
Sb	123	115	1	He	0.748	0.748	1.78	3478	0.02	300	
Ba	137	115	1	He	314.440	314.440	0.38	443587	0.07	10000	
W	182	165	1	He	0.714	0.714	14.42	10656	0.01	2500	
Tl	205	209	1	He	0.837	0.837	2.95	21004	0.00	5000	
Pb	208	209	1	He	68.699	68.699	0.36	2226032	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1497607	2.15	1803797	83.03	30	120	
Sc	45	1	He	539209	1.76	574766	93.81	30	120	
Sc	45	2	NoGas	4125599	1.33	4296857	96.01	30	120	
Rh	103	1	He	1416499	0.69	1652712	85.71	30	120	
In	115	1	He	768669	0.29	852389	90.18	30	120	
Tb	159	1	He	2438038	2.56	2425956	100.50	30	120	
Ho	165	1	He	2494561	0.84	2452680	101.71	30	120	
Bi	209	1	He	1788168	0.70	1810473	98.77	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-1-d@10
Data File Name	147SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:50:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.623	0.623	2.96	2826	0.02	10000	
B	11	45	2	NoGas	9.176	9.176	2.74	34447	0.03	300	
Na	23	45	1	He	31.918	31.918	4.84	72479	0.04	500000	
Mg	24	45	1	He	1555.011	1555.011	4.29	1190492	0.13	500000	
Al	27	45	1	He	8281.975	8281.975	3.91	3295998	0.25	200000	
K	39	45	1	He	660.173	660.173	2.82	453474	0.15	500000	
Ca	44	45	1	He	123.468	123.468	4.50	4457	2.77	500000	
Ti	47	45	1	He	67.930	67.930	4.49	12954	0.52	2500	
V	51	45	1	He	23.012	23.012	3.30	112329	0.02	10000	
Cr	52	45	1	He	19.676	19.676	2.91	120238	0.02	10000	
Mn	55	45	1	He	1666.115	1666.115	3.20	7044336	0.02	10000	
Fe	56	45	1	He	41676.731	41676.731	3.08	228120009	0.02	200000	
Co	59	103	1	He	11.482	11.482	1.02	104003	0.01	10000	
Ni	60	103	1	He	17.303	17.303	1.10	39919	0.04	10000	
Cu	63	103	1	He	11.469	11.469	0.66	72555	0.02	10000	
Zn	66	103	1	He	41.101	41.101	0.73	52046	0.08	10000	
As	75	103	1	He	14.723	14.723	1.15	11805	0.12	10000	
Se	78	103	1	He	1.123	1.123	2.84	99	1.13	10000	
Sr	88	103	1	He	4.465	4.465	1.58	21123	0.02	10000	
Mo	95	103	1	He	1.316	1.316	1.02	3933	0.03	2000	
Ag	107	103	1	He	0.015	0.015	36.06	156	0.01	300	
Cd	111	103	1	He	0.141	0.141	28.09	937	0.02	4000	
Sn	118	115	1	He	3.314	3.314	5.24	12072	0.03	2000	
Sb	123	115	1	He	0.029	0.029	85.08	924	0.00	300	
Ba	137	115	1	He	62.978	62.978	1.10	89880	0.07	10000	
W	182	165	1	He	0.112	0.112	17.04	3908	0.00	2500	
Tl	205	209	1	He	0.166	0.166	3.73	4607	0.00	5000	
Pb	208	209	1	He	13.520	13.520	0.84	450542	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1447831	0.45	1803797	80.27	30	120	
Sc	45	1	He	504705	2.96	574766	87.81	30	120	
Sc	45	2	NoGas	3904967	0.50	4296857	90.88	30	120	
Rh	103	1	He	1418832	0.55	1652712	85.85	30	120	
In	115	1	He	777547	0.16	852389	91.22	30	120	
Tb	159	1	He	2405165	0.59	2425956	99.14	30	120	
Ho	165	1	He	2454504	1.18	2452680	100.07	30	120	
Bi	209	1	He	1836129	1.06	1810473	101.42	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-1-d@2
Data File Name	148SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:53:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1110.767	1110.767	1.79	4939763	0.02	10000	
B	11	45	2	NoGas	119.174	119.174	1.35	396476	0.03	300	
Na	23	45	1	He	9868.949	9868.949	1.67	13448211	0.07	500000	
Mg	24	45	1	He	16999.070	16999.070	1.52	13106090	0.13	500000	
Al	27	45	1	He	46700.653	46700.653	2.79	18722535	0.25	200000	
K	39	45	1	He	13123.286	13123.286	2.52	7999242	0.16	500000	
Ca	44	45	1	He	9646.112	9646.112	1.97	311722	3.09	500000	
Ti	47	45	1	He	410.821	410.821	1.11	78932	0.52	2500	
V	51	45	1	He	1138.722	1138.722	2.67	5589216	0.02	10000	
Cr	52	45	1	He	1109.367	1109.367	3.31	6681566	0.02	10000	
Mn	55	45	1	He	8654.903	8654.903	1.40	36870552	0.02	10000	
Fe	56	45	1	He	199915.534	199915.534	2.07	1102401343	0.02	200000	
Co	59	103	1	He	1080.915	1080.915	0.83	9194584	0.01	10000	
Ni	60	103	1	He	1131.710	1131.710	0.83	2448123	0.05	10000	
Cu	63	103	1	He	1091.632	1091.632	1.70	6299017	0.02	10000	
Zn	66	103	1	He	1187.218	1187.218	1.96	1393359	0.09	10000	
As	75	103	1	He	1070.692	1070.692	1.00	795198	0.13	10000	
Se	78	103	1	He	986.079	986.079	0.70	60642	1.63	10000	
Sr	88	103	1	He	1137.063	1137.063	0.97	5024760	0.02	10000	
Mo	95	103	1	He	125.776	125.776	0.68	300040	0.04	2000	
Ag	107	103	1	He	109.237	109.237	0.60	900575	0.01	300	
Cd	111	103	1	He	1097.754	1097.754	2.64	1512078	0.07	4000	
Sn	118	115	1	He	1212.764	1212.764	0.55	3761767	0.03	2000	
Sb	123	115	1	He	113.455	113.455	1.02	373782	0.03	300	
Ba	137	115	1	He	1558.586	1558.586	1.54	2026333	0.08	10000	
W	182	165	1	He	99.960	99.960	1.20	1081641	0.01	2500	
Tl	205	209	1	He	272.197	272.197	1.83	5914638	0.00	5000	
Pb	208	209	1	He	1198.967	1198.967	1.44	34282838	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1420627	0.28	1803797	78.76	30	120	
Sc	45	1	He	508308	1.85	574766	88.44	30	120	
Sc	45	2	NoGas	4035111	0.11	4296857	93.91	30	120	
Rh	103	1	He	1333082	0.73	1652712	80.66	30	120	
In	115	1	He	708415	0.46	852389	83.11	30	120	
Tb	159	1	He	2352986	0.08	2425956	96.99	30	120	
Ho	165	1	He	2425697	1.31	2452680	98.90	30	120	
Bi	209	1	He	1578808	1.93	1810473	87.20	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-e du@2
Data File Name	149SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T19:57:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.338	3.338	1.49	15251	0.02	10000	
B	11	45	2	NoGas	19.038	19.038	0.84	70478	0.03	300	
Na	23	45	1	He	127.362	127.362	2.72	210064	0.06	500000	
Mg	24	45	1	He	7797.777	7797.777	2.33	6227798	0.13	500000	
Al	27	45	1	He	43650.943	43650.943	1.43	18131508	0.24	200000	
K	39	45	1	He	3788.002	3788.002	2.25	2434348	0.16	500000	
Ca	44	45	1	He	667.941	667.941	1.30	22852	2.92	500000	
Ti	47	45	1	He	304.584	304.584	1.65	60616	0.50	2500	
V	51	45	1	He	115.724	115.724	1.77	588653	0.02	10000	
Cr	52	45	1	He	101.627	101.627	1.91	636657	0.02	10000	
Mn	55	45	1	He	6413.884	6413.884	1.48	28304731	0.02	10000	
Fe	56	45	1	He	191143.318	191143.318	2.10	1091862001	0.02	200000	
Co	59	103	1	He	50.903	50.903	1.10	445079	0.01	10000	
Ni	60	103	1	He	87.821	87.821	0.87	195338	0.04	10000	
Cu	63	103	1	He	57.737	57.737	0.44	344411	0.02	10000	
Zn	66	103	1	He	204.667	204.667	1.23	247467	0.08	10000	
As	75	103	1	He	71.574	71.574	0.56	54790	0.13	10000	
Se	78	103	1	He	5.873	5.873	8.18	396	1.48	10000	
Sr	88	103	1	He	25.274	25.274	0.52	114917	0.02	10000	
Mo	95	103	1	He	8.451	8.451	4.64	21253	0.04	2000	
Ag	107	103	1	He	0.100	0.100	8.90	870	0.01	300	
Cd	111	103	1	He	0.708	0.708	5.85	1707	0.04	4000	
Sn	118	115	1	He	18.452	18.452	2.71	61270	0.03	2000	
Sb	123	115	1	He	0.974	0.974	3.47	4176	0.02	300	
Ba	137	115	1	He	313.060	313.060	0.26	430404	0.07	10000	
W	182	165	1	He	1.555	1.555	22.00	19709	0.01	2500	
Tl	205	209	1	He	1.135	1.135	9.97	27010	0.00	5000	
Pb	208	209	1	He	71.333	71.333	1.94	2206227	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1459037	1.36	1803797	80.89	30	120	
Sc	45	1	He	526534	1.47	574766	91.61	30	120	
Sc	45	2	NoGas	4185602	1.15	4296857	97.41	30	120	
Rh	103	1	He	1370222	1.03	1652712	82.91	30	120	
In	115	1	He	749111	0.40	852389	87.88	30	120	
Tb	159	1	He	2407056	0.84	2425956	99.22	30	120	
Ho	165	1	He	2463407	1.24	2452680	100.44	30	120	
Bi	209	1	He	1707271	2.11	1810473	94.30	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-f ms@2
Data File Name	150SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:01:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	51.285	51.285	1.53	222658	0.02	10000	
B	11	45	2	NoGas	53.938	53.938	1.14	181053	0.03	300	
Na	23	45	1	He	4563.767	4563.767	1.53	6297244	0.07	500000	
Mg	24	45	1	He	12261.050	12261.050	2.14	9547637	0.13	500000	
Al	27	45	1	He	48951.408	48951.408	0.85	19824263	0.25	200000	
K	39	45	1	He	7333.256	7333.256	1.38	4541351	0.16	500000	
Ca	44	45	1	He	4985.415	4985.415	0.89	162979	3.06	500000	
Ti	47	45	1	He	409.332	409.332	0.86	79431	0.52	2500	
V	51	45	1	He	167.737	167.737	1.54	831789	0.02	10000	
Cr	52	45	1	He	141.865	141.865	1.27	865469	0.02	10000	
Mn	55	45	1	He	7666.386	7666.386	0.11	32988613	0.02	10000	
Fe	56	45	1	He	204035.068	204035.068	0.87	1136469075	0.02	200000	>LDR
Co	59	103	1	He	105.135	105.135	0.23	919739	0.01	10000	
Ni	60	103	1	He	130.042	130.042	1.04	289366	0.04	10000	
Cu	63	103	1	He	101.404	101.404	0.56	603662	0.02	10000	
Zn	66	103	1	He	249.323	249.323	0.59	301498	0.08	10000	
As	75	103	1	He	120.511	120.511	0.25	92193	0.13	10000	
Se	78	103	1	He	47.132	47.132	1.22	3004	1.57	10000	
Sr	88	103	1	He	72.062	72.062	0.27	327605	0.02	10000	
Mo	95	103	1	He	58.155	58.155	0.27	142978	0.04	2000	
Ag	107	103	1	He	47.562	47.562	0.53	403273	0.01	300	
Cd	111	103	1	He	47.641	47.641	1.11	68171	0.07	4000	
Sn	118	115	1	He	57.476	57.476	1.00	187789	0.03	2000	
Sb	123	115	1	He	16.383	16.383	1.20	57304	0.03	300	
Ba	137	115	1	He	363.683	363.683	1.20	496144	0.07	10000	
W	182	165	1	He	32.760	32.760	2.02	361592	0.01	2500	
Tl	205	209	1	He	41.972	41.972	1.14	1008183	0.00	5000	
Pb	208	209	1	He	121.500	121.500	1.94	3839589	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1387034	2.00	1803797	76.90	30	120	
Sc	45	1	He	513341	0.97	574766	89.31	30	120	
Sc	45	2	NoGas	4004541	1.99	4296857	93.20	30	120	
Rh	103	1	He	1370951	0.35	1652712	82.95	30	120	
In	115	1	He	743328	0.28	852389	87.21	30	120	
Tb	159	1	He	2401698	1.35	2425956	99.00	30	120	
Ho	165	1	He	2461879	0.44	2452680	100.38	30	120	
Bi	209	1	He	1744499	1.49	1810473	96.36	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-2-b@2
Data File Name	151SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:05:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.425	3.425	1.30	15136	0.02	10000	
B	11	45	2	NoGas	20.684	20.684	1.61	74940	0.03	300	
Na	23	45	1	He	166.010	166.010	1.49	262935	0.06	500000	
Mg	24	45	1	He	11633.430	11633.430	0.25	9236410	0.13	500000	
Al	27	45	1	He	59081.083	59081.083	0.81	24392191	0.24	200000	
K	39	45	1	He	5204.087	5204.087	2.04	3302052	0.16	500000	
Ca	44	45	1	He	906.704	906.704	2.24	30643	2.96	500000	
Ti	47	45	1	He	344.747	344.747	1.62	68196	0.51	2500	
V	51	45	1	He	119.352	119.352	0.79	603482	0.02	10000	
Cr	52	45	1	He	104.174	104.174	1.44	648625	0.02	10000	
Mn	55	45	1	He	3181.564	3181.564	1.89	13955437	0.02	10000	
Fe	56	45	1	He	176164.622	176164.622	1.33	1000299054	0.02	200000	
Co	59	103	1	He	48.291	48.291	0.52	426745	0.01	10000	
Ni	60	103	1	He	101.890	101.890	0.54	229025	0.04	10000	
Cu	63	103	1	He	87.957	87.957	0.17	529178	0.02	10000	
Zn	66	103	1	He	255.635	255.635	0.15	312228	0.08	10000	
As	75	103	1	He	78.379	78.379	0.26	60624	0.13	10000	
Se	78	103	1	He	6.442	6.442	5.87	436	1.48	10000	
Sr	88	103	1	He	36.576	36.576	0.86	168012	0.02	10000	
Mo	95	103	1	He	8.793	8.793	0.32	22331	0.04	2000	
Ag	107	103	1	He	0.087	0.087	4.13	774	0.01	300	
Cd	111	103	1	He	0.753	0.753	3.18	1790	0.04	4000	
Sn	118	115	1	He	17.497	17.497	2.62	58304	0.03	2000	
Sb	123	115	1	He	0.915	0.915	2.90	3981	0.02	300	
Ba	137	115	1	He	387.123	387.123	0.30	533691	0.07	10000	
W	182	165	1	He	0.688	0.688	12.96	10471	0.01	2500	
Tl	205	209	1	He	1.039	1.039	0.31	25567	0.00	5000	
Pb	208	209	1	He	89.585	89.585	1.67	2857317	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1411718	1.81	1803797	78.26	30	120	
Sc	45	1	He	523339	0.99	574766	91.05	30	120	
Sc	45	2	NoGas	4122314	0.74	4296857	95.94	30	120	
Rh	103	1	He	1384783	0.29	1652712	83.79	30	120	
In	115	1	He	751176	0.30	852389	88.13	30	120	
Tb	159	1	He	2458106	1.23	2425956	101.33	30	120	
Ho	165	1	He	2519458	0.61	2452680	102.72	30	120	
Bi	209	1	He	1760655	1.89	1810473	97.25	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-4-b@2
Data File Name	152SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:08:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.885	2.885	3.40	12653	0.02	10000	
B	11	45	2	NoGas	62.968	62.968	1.16	207552	0.03	300	
Na	23	45	1	He	1804.266	1804.266	2.15	2462404	0.07	500000	
Mg	24	45	1	He	12413.228	12413.228	0.88	9492095	0.13	500000	
Al	27	45	1	He	44862.271	44862.271	0.60	17839933	0.25	200000	
K	39	45	1	He	16499.826	16499.826	1.19	9961888	0.17	500000	
Ca	44	45	1	He	133.747	133.747	25.27	4779	2.80	500000	
Ti	47	45	1	He	397.708	397.708	0.18	75782	0.52	2500	
V	51	45	1	He	79.346	79.346	1.94	386482	0.02	10000	
Cr	52	45	1	He	81.609	81.609	0.35	490012	0.02	10000	
Mn	55	45	1	He	6276.349	6276.349	0.99	26517594	0.02	10000	
Fe	56	45	1	He	112422.379	112422.379	0.96	614903069	0.02	200000	
Co	59	103	1	He	42.601	42.601	0.69	371283	0.01	10000	
Ni	60	103	1	He	106.250	106.250	0.37	235531	0.05	10000	
Cu	63	103	1	He	95.820	95.820	0.20	568344	0.02	10000	
Zn	66	103	1	He	241.121	241.121	0.82	290474	0.08	10000	
As	75	103	1	He	200.770	200.770	0.22	152894	0.13	10000	
Se	78	103	1	He	3.755	3.755	3.57	261	1.44	10000	
Sr	88	103	1	He	2336.345	2336.345	0.63	10576956	0.02	10000	
Mo	95	103	1	He	672.381	672.381	0.43	1640651	0.04	2000	
Ag	107	103	1	He	0.082	0.082	11.67	716	0.01	300	
Cd	111	103	1	He	0.546	0.546	9.90	1472	0.04	4000	
Sn	118	115	1	He	17.020	17.020	3.09	55818	0.03	2000	
Sb	123	115	1	He	0.410	0.410	4.46	2186	0.02	300	
Ba	137	115	1	He	339.309	339.309	0.45	460267	0.07	10000	
W	182	165	1	He	11.235	11.235	1.95	124575	0.01	2500	
Tl	205	209	1	He	0.575	0.575	1.82	14103	0.00	5000	
Pb	208	209	1	He	403.796	403.796	2.49	12670338	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1400460	0.97	1803797	77.64	30	120	
Sc	45	1	He	504055	0.70	574766	87.70	30	120	
Sc	45	2	NoGas	3949519	1.59	4296857	91.92	30	120	
Rh	103	1	He	1365683	0.34	1652712	82.63	30	120	
In	115	1	He	739114	0.43	852389	86.71	30	120	
Tb	159	1	He	2366157	0.47	2425956	97.54	30	120	
Ho	165	1	He	2438442	1.07	2452680	99.42	30	120	
Bi	209	1	He	1732691	1.91	1810473	95.70	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	153_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:12:39-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.286	0.842	209416	0.53	50	94.6	89.5	110.5	
B	11	45	2	NoGas	50.892	1.149	164509	0.89	50	101.8	89.5	110.5	
Na	23	45	1	He	25530.690	2.179	33417129	0.81	25000	102.1	89.5	110.5	
Mg	24	45	1	He	25411.837	0.818	18847152	1.34	25000	101.6	89.5	110.5	
Al	27	45	1	He	251.070	1.353	97466	0.89	250	100.4	89.5	110.5	
K	39	45	1	He	26173.217	2.630	15290331	0.80	25000	104.7	89.5	110.5	
Ca	44	45	1	He	25412.811	2.323	789077	0.60	25000	101.7	89.5	110.5	
Ti	47	45	1	He	52.106	3.527	9627	1.47	50	104.2	89.5	110.5	
V	51	45	1	He	52.296	1.233	247148	1.22	50	104.6	89.5	110.5	
Cr	52	45	1	He	52.019	1.472	303855	0.72	50	104.0	89.5	110.5	
Mn	55	45	1	He	261.140	1.257	1070246	0.90	250	104.5	89.5	110.5	
Fe	56	45	1	He	13253.887	1.672	70307191	0.46	12500	106.0	89.5	110.5	
Co	59	103	1	He	47.367	0.849	426282	0.95	50	94.7	89.5	110.5	
Ni	60	103	1	He	47.384	0.817	108513	0.89	50	94.8	89.5	110.5	
Cu	63	103	1	He	47.449	0.653	291694	0.54	50	94.9	89.5	110.5	
Zn	66	103	1	He	49.169	0.537	61743	0.66	50	98.3	89.5	110.5	
As	75	103	1	He	49.429	0.606	38997	0.46	50	98.9	89.5	110.5	
Se	78	103	1	He	48.683	0.258	3191	0.20	50	97.4	89.5	110.5	
Sr	88	103	1	He	51.753	0.481	242055	0.31	50	103.5	89.5	110.5	
Mo	95	103	1	He	59.063	1.621	149364	1.59	50	118.1	89.5	110.5	CCV Failed
Ag	107	103	1	He	51.806	1.150	451846	1.08	50	103.6	89.5	110.5	
Cd	111	103	1	He	52.944	0.981	77847	0.80	50	105.9	89.5	110.5	
Sn	118	115	1	He	50.499	0.239	173524	0.08	50	101.0	89.5	110.5	
Sb	123	115	1	He	53.108	0.981	193406	0.81	50	106.2	89.5	110.5	
Ba	137	115	1	He	52.677	0.571	75546	0.34	50	105.4	89.5	110.5	
W	182	165	1	He	47.627	2.696	526952	2.23	50	95.3	89.5	110.5	
Tl	205	209	1	He	47.096	0.906	1162368	0.43	50	94.2	89.5	110.5	
Pb	208	209	1	He	48.315	0.881	1569511	0.80	50	96.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1414837	1.36	1803797	78.44	30	120	
Sc	45	1	He	488953	2.15	574766	85.07	30	120	
Sc	45	2	NoGas	3849288	0.63	4296857	89.58	30	120	
Rh	103	1	He	1410251	0.17	1652712	85.33	30	120	
In	115	1	He	781330	0.32	852389	91.66	30	120	
Tb	159	1	He	2406374	0.09	2425956	99.19	30	120	
Ho	165	1	He	2473678	0.50	2452680	100.86	30	120	
Bi	209	1	He	1792403	0.58	1810473	99.00	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	154_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:16:29-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.112	22.8	504	22.6	1	
B	11	45	2	NoGas	6.124	2.0	24825	2.3	20	
Na	23	45	1	He	11.034	12.2	43256	2.7	400	
Mg	24	45	1	He	2.147	33.4	2393	20.7	1000	
Al	27	45	1	He	9.205	6.3	4218	3.7	50	
K	39	45	1	He	10.887	14.1	61921	0.3	1000	
Ca	44	45	1	He	1.652	81.4	545	9.5	1000	
Ti	47	45	1	He	0.073	39.0	14	35.3	20	
V	51	45	1	He	0.036	139.9	393	59.2	2	
Cr	52	45	1	He	-0.048	-47.7	2300	4.4	2	
Mn	55	45	1	He	1.413	3.9	5978	2.5	2	
Fe	56	45	1	He	24.518	15.4	136110	13.2	50	
Co	59	103	1	He	0.024	25.6	279	21.7	1	
Ni	60	103	1	He	0.016	76.8	123	24.0	2	
Cu	63	103	1	He	-0.150	-9.4	1265	6.6	2	
Zn	66	103	1	He	0.436	13.8	1325	6.6	20	
As	75	103	1	He	0.028	71.8	200	9.2	2	
Se	78	103	1	He	0.173	69.5	38	20.9	2	
Sr	88	103	1	He	0.044	19.0	341	12.8	10	
Mo	95	103	1	He	1.496	15.1	4568	13.1	2	
Ag	107	103	1	He	0.005	32.4	71	19.0	0.2	
Cd	111	103	1	He	0.042	20.7	823	0.8	0.2	
Sn	118	115	1	He	0.200	31.0	1522	13.7	10	
Sb	123	115	1	He	0.062	50.6	1078	10.2	1	
Ba	137	115	1	He	0.040	42.7	72	35.9	5	
W	182	165	1	He	0.919	13.8	12761	9.9	10	
Tl	205	209	1	He	0.054	16.1	1797	11.9	0.5	
Pb	208	209	1	He	0.053	7.2	2682	5.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1425765	0.59	1803797	79.04	30	120	
Sc	45	1	He	492810	1.71	574766	85.74	30	120	
Sc	45	2	NoGas	3915603	0.87	4296857	91.13	30	120	
Rh	103	1	He	1476997	0.84	1652712	89.37	30	120	
In	115	1	He	804165	0.78	852389	94.34	30	120	
Tb	159	1	He	2382992	1.17	2425956	98.23	30	120	
Ho	165	1	He	2464316	0.99	2452680	100.47	30	120	
Bi	209	1	He	1856986	0.93	1810473	102.57	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-11-b@2
Data File Name	155SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:20:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.487	2.487	6.45	10800	0.02	10000	
B	11	45	2	NoGas	18.078	18.078	2.73	63435	0.03	300	
Na	23	45	1	He	312.853	312.853	1.94	458972	0.07	500000	
Mg	24	45	1	He	8600.712	8600.712	1.70	6689326	0.13	500000	
Al	27	45	1	He	55390.135	55390.135	3.27	22397015	0.25	200000	
K	39	45	1	He	3590.297	3590.297	2.22	2249582	0.16	500000	
Ca	44	45	1	He	5080.485	5080.485	1.85	165856	3.06	500000	
Ti	47	45	1	He	602.527	602.527	2.29	116756	0.52	2500	
V	51	45	1	He	106.100	106.100	3.05	525466	0.02	10000	
Cr	52	45	1	He	82.952	82.952	2.53	506475	0.02	10000	
Mn	55	45	1	He	4407.583	4407.583	2.99	18936670	0.02	10000	
Fe	56	45	1	He	84230.347	84230.347	2.46	468505741	0.02	200000	
Co	59	103	1	He	39.237	39.237	0.72	344693	0.01	10000	
Ni	60	103	1	He	104.275	104.275	0.54	233001	0.04	10000	
Cu	63	103	1	He	47.889	47.889	0.60	287352	0.02	10000	
Zn	66	103	1	He	243.420	243.420	0.70	295579	0.08	10000	
As	75	103	1	He	77.284	77.284	0.31	59426	0.13	10000	
Se	78	103	1	He	5.136	5.136	3.72	351	1.46	10000	
Sr	88	103	1	He	78.935	78.935	1.81	360305	0.02	10000	
Mo	95	103	1	He	8.879	8.879	0.79	22411	0.04	2000	
Ag	107	103	1	He	0.147	0.147	3.15	1278	0.01	300	
Cd	111	103	1	He	0.676	0.676	10.54	1668	0.04	4000	
Sn	118	115	1	He	16.812	16.812	0.40	56268	0.03	2000	
Sb	123	115	1	He	0.573	0.573	7.58	2799	0.02	300	
Ba	137	115	1	He	395.576	395.576	0.30	547477	0.07	10000	
W	182	165	1	He	0.571	0.571	4.02	8947	0.01	2500	
Tl	205	209	1	He	0.912	0.912	0.89	22499	0.00	5000	
Pb	208	209	1	He	48.339	48.339	1.35	1543359	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1387539	2.84	1803797	76.92	30	120	
Sc	45	1	He	512778	2.24	574766	89.21	30	120	
Sc	45	2	NoGas	3950202	0.30	4296857	91.93	30	120	
Rh	103	1	He	1376598	0.54	1652712	83.29	30	120	
In	115	1	He	754109	0.18	852389	88.47	30	120	
Tb	159	1	He	2389935	1.26	2425956	98.52	30	120	
Ho	165	1	He	2460509	1.41	2452680	100.32	30	120	
Bi	209	1	He	1761828	1.18	1810473	97.31	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-13-b@2
Data File Name	156SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:24:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.047	2.047	4.87	8936	0.02	10000	
B	11	45	2	NoGas	13.639	13.639	1.31	48761	0.03	300	
Na	23	45	1	He	86.286	86.286	1.25	143548	0.06	500000	
Mg	24	45	1	He	5045.036	5045.036	1.21	3800046	0.13	500000	
Al	27	45	1	He	32635.648	32635.648	0.88	12782406	0.26	200000	
K	39	45	1	He	2556.891	2556.891	0.29	1567674	0.16	500000	
Ca	44	45	1	He	875.000	875.000	1.25	28073	3.12	500000	
Ti	47	45	1	He	355.348	355.348	1.83	66688	0.53	2500	
V	51	45	1	He	66.597	66.597	0.70	319562	0.02	10000	
Cr	52	45	1	He	61.400	61.400	0.55	363752	0.02	10000	
Mn	55	45	1	He	1778.231	1778.231	1.02	7399852	0.02	10000	
Fe	56	45	1	He	83373.230	83373.230	0.99	449121982	0.02	200000	
Co	59	103	1	He	36.484	36.484	0.22	321629	0.01	10000	
Ni	60	103	1	He	74.577	74.577	0.68	167242	0.04	10000	
Cu	63	103	1	He	40.526	40.526	0.48	244341	0.02	10000	
Zn	66	103	1	He	250.410	250.410	0.71	305109	0.08	10000	
As	75	103	1	He	98.629	98.629	0.74	76056	0.13	10000	
Se	78	103	1	He	3.409	3.409	5.40	242	1.41	10000	
Sr	88	103	1	He	16.387	16.387	0.84	75154	0.02	10000	
Mo	95	103	1	He	7.891	7.891	1.07	20052	0.04	2000	
Ag	107	103	1	He	0.094	0.094	3.74	827	0.01	300	
Cd	111	103	1	He	0.654	0.654	11.85	1643	0.04	4000	
Sn	118	115	1	He	14.589	14.589	1.42	48541	0.03	2000	
Sb	123	115	1	He	0.376	0.376	6.07	2093	0.02	300	
Ba	137	115	1	He	223.322	223.322	1.00	306618	0.07	10000	
W	182	165	1	He	0.339	0.339	7.82	6346	0.01	2500	
Tl	205	209	1	He	0.607	0.607	2.42	15064	0.00	5000	
Pb	208	209	1	He	46.188	46.188	0.80	1471121	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1393754	1.71	1803797	77.27	30	120	
Sc	45	1	He	496458	0.73	574766	86.38	30	120	
Sc	45	2	NoGas	3916784	0.22	4296857	91.15	30	120	
Rh	103	1	He	1381395	0.34	1652712	83.58	30	120	
In	115	1	He	748107	0.22	852389	87.77	30	120	
Tb	159	1	He	2365877	0.27	2425956	97.52	30	120	
Ho	165	1	He	2435760	0.98	2452680	99.31	30	120	
Bi	209	1	He	1757398	0.71	1810473	97.07	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-14-b@2
Data File Name	157SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:27:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.408	2.408	3.59	10474	0.02	10000	
B	11	45	2	NoGas	18.935	18.935	1.84	65868	0.03	300	
Na	23	45	1	He	158.411	158.411	3.47	243599	0.07	500000	
Mg	24	45	1	He	8381.278	8381.278	2.68	6425368	0.13	500000	
Al	27	45	1	He	41445.460	41445.460	0.30	16525274	0.25	200000	
K	39	45	1	He	4097.537	4097.537	0.54	2523149	0.16	500000	
Ca	44	45	1	He	1116.676	1116.676	1.61	36336	3.07	500000	
Ti	47	45	1	He	499.482	499.482	0.50	95421	0.52	2500	
V	51	45	1	He	92.653	92.653	0.72	452477	0.02	10000	
Cr	52	45	1	He	80.343	80.343	0.49	483722	0.02	10000	
Mn	55	45	1	He	3055.772	3055.772	1.57	12943751	0.02	10000	
Fe	56	45	1	He	108295.817	108295.817	0.48	593899870	0.02	200000	
Co	59	103	1	He	116.726	116.726	0.38	1017910	0.01	10000	
Ni	60	103	1	He	135.371	135.371	0.29	300270	0.05	10000	
Cu	63	103	1	He	61.251	61.251	0.47	364296	0.02	10000	
Zn	66	103	1	He	613.970	613.970	0.55	739086	0.08	10000	
As	75	103	1	He	499.570	499.570	0.15	380463	0.13	10000	
Se	78	103	1	He	4.354	4.354	5.15	299	1.46	10000	
Sr	88	103	1	He	54.178	54.178	0.56	245554	0.02	10000	
Mo	95	103	1	He	9.940	9.940	0.81	24838	0.04	2000	
Ag	107	103	1	He	0.291	0.291	3.59	2488	0.01	300	
Cd	111	103	1	He	1.311	1.311	5.51	2554	0.05	4000	
Sn	118	115	1	He	16.646	16.646	1.66	55030	0.03	2000	
Sb	123	115	1	He	0.887	0.887	7.08	3850	0.02	300	
Ba	137	115	1	He	308.007	308.007	2.08	420992	0.07	10000	
W	182	165	1	He	0.340	0.340	5.65	6409	0.01	2500	
Tl	205	209	1	He	1.200	1.200	2.03	29183	0.00	5000	
Pb	208	209	1	He	75.112	75.112	2.33	2373756	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1389527	1.77	1803797	77.03	30	120	
Sc	45	1	He	505384	1.12	574766	87.93	30	120	
Sc	45	2	NoGas	3931376	1.06	4296857	91.49	30	120	
Rh	103	1	He	1366629	0.26	1652712	82.69	30	120	
In	115	1	He	744866	1.20	852389	87.39	30	120	
Tb	159	1	He	2398971	1.17	2425956	98.89	30	120	
Ho	165	1	He	2458853	0.52	2452680	100.25	30	120	
Bi	209	1	He	1744766	2.62	1810473	96.37	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-15-b@2
Data File Name	158SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:31:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.721	3.721	4.02	16178	0.02	10000	
B	11	45	2	NoGas	18.190	18.190	2.28	65564	0.03	300	
Na	23	45	1	He	179.768	179.768	1.16	277774	0.06	500000	
Mg	24	45	1	He	15200.870	15200.870	1.31	11878510	0.13	500000	
Al	27	45	1	He	67676.624	67676.624	1.55	27502185	0.25	200000	
K	39	45	1	He	4911.555	4911.555	2.29	3070728	0.16	500000	
Ca	44	45	1	He	1865.256	1865.256	2.11	61507	3.03	500000	
Ti	47	45	1	He	699.757	699.757	1.27	136255	0.51	2500	
V	51	45	1	He	136.041	136.041	1.24	677056	0.02	10000	
Cr	52	45	1	He	121.859	121.859	0.70	746448	0.02	10000	
Mn	55	45	1	He	2310.856	2310.856	0.86	9978121	0.02	10000	
Fe	56	45	1	He	163533.524	163533.524	0.88	914071928	0.02	200000	
Co	59	103	1	He	57.061	57.061	0.13	493919	0.01	10000	
Ni	60	103	1	He	129.237	129.237	0.54	284528	0.05	10000	
Cu	63	103	1	He	135.028	135.028	0.27	794651	0.02	10000	
Zn	66	103	1	He	415.272	415.272	0.10	496388	0.08	10000	
As	75	103	1	He	97.694	97.694	0.63	73977	0.13	10000	
Se	78	103	1	He	6.427	6.427	3.55	426	1.51	10000	
Sr	88	103	1	He	26.798	26.798	0.70	120614	0.02	10000	
Mo	95	103	1	He	10.895	10.895	0.60	26968	0.04	2000	
Ag	107	103	1	He	0.133	0.133	5.04	1143	0.01	300	
Cd	111	103	1	He	1.104	1.104	4.01	2244	0.05	4000	
Sn	118	115	1	He	16.396	16.396	3.27	53834	0.03	2000	
Sb	123	115	1	He	0.949	0.949	2.76	4037	0.02	300	
Ba	137	115	1	He	370.487	370.487	0.66	502938	0.07	10000	
W	182	165	1	He	0.296	0.296	4.35	5961	0.00	2500	
Tl	205	209	1	He	1.231	1.231	2.09	29433	0.00	5000	
Pb	208	209	1	He	111.203	111.203	1.96	3454186	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1389087	2.02	1803797	77.01	30	120	
Sc	45	1	He	515157	1.40	574766	89.63	30	120	
Sc	45	2	NoGas	4059769	0.60	4296857	94.48	30	120	
Rh	103	1	He	1356434	0.33	1652712	82.07	30	120	
In	115	1	He	739697	0.93	852389	86.78	30	120	
Tb	159	1	He	2385858	0.96	2425956	98.35	30	120	
Ho	165	1	He	2469305	0.90	2452680	100.68	30	120	
Bi	209	1	He	1714841	1.96	1810473	94.72	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-16-b@2
Data File Name	159SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:35:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.974	2.974	5.02	12634	0.02	10000	
B	11	45	2	NoGas	18.615	18.615	1.89	64029	0.03	300	
Na	23	45	1	He	207.807	207.807	1.11	308853	0.07	500000	
Mg	24	45	1	He	13254.839	13254.839	1.37	10108976	0.13	500000	
Al	27	45	1	He	46157.819	46157.819	1.86	18305893	0.25	200000	
K	39	45	1	He	4922.202	4922.202	0.86	3003864	0.16	500000	
Ca	44	45	1	He	3344.483	3344.483	1.31	107241	3.12	500000	
Ti	47	45	1	He	427.974	427.974	1.37	81331	0.53	2500	
V	51	45	1	He	92.013	92.013	1.37	446984	0.02	10000	
Cr	52	45	1	He	80.669	80.669	1.13	483125	0.02	10000	
Mn	55	45	1	He	2830.060	2830.060	0.93	11926017	0.02	10000	
Fe	56	45	1	He	121515.946	121515.946	0.77	662904205	0.02	200000	
Co	59	103	1	He	47.495	47.495	0.52	411820	0.01	10000	
Ni	60	103	1	He	104.662	104.662	1.04	230829	0.05	10000	
Cu	63	103	1	He	85.914	85.914	0.27	507225	0.02	10000	
Zn	66	103	1	He	285.432	285.432	0.85	341990	0.08	10000	
As	75	103	1	He	61.117	61.117	0.34	46420	0.13	10000	
Se	78	103	1	He	4.413	4.413	6.57	301	1.47	10000	
Sr	88	103	1	He	31.942	31.942	1.00	143986	0.02	10000	
Mo	95	103	1	He	6.296	6.296	3.37	15851	0.04	2000	
Ag	107	103	1	He	0.102	0.102	2.34	883	0.01	300	
Cd	111	103	1	He	0.651	0.651	8.64	1612	0.04	4000	
Sn	118	115	1	He	16.558	16.558	2.09	54495	0.03	2000	
Sb	123	115	1	He	0.506	0.506	4.46	2521	0.02	300	
Ba	137	115	1	He	327.114	327.114	0.53	445075	0.07	10000	
W	182	165	1	He	0.251	0.251	10.51	5423	0.00	2500	
Tl	205	209	1	He	0.780	0.780	0.81	19100	0.00	5000	
Pb	208	209	1	He	77.044	77.044	0.51	2434023	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1356506	1.77	1803797	75.20	30	120	
Sc	45	1	He	502760	1.11	574766	87.47	30	120	
Sc	45	2	NoGas	3882319	1.36	4296857	90.35	30	120	
Rh	103	1	He	1358767	0.42	1652712	82.21	30	120	
In	115	1	He	741371	0.47	852389	86.98	30	120	
Tb	159	1	He	2410100	0.62	2425956	99.35	30	120	
Ho	165	1	He	2452679	1.16	2452680	100.00	30	120	
Bi	209	1	He	1743536	0.51	1810473	96.30	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-17-b@2
Data File Name	160SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:39:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.917	3.917	0.69	16875	0.02	10000	
B	11	45	2	NoGas	19.158	19.158	2.13	67690	0.03	300	
Na	23	45	1	He	192.233	192.233	0.88	290601	0.07	500000	
Mg	24	45	1	He	13403.669	13403.669	0.57	10320355	0.13	500000	
Al	27	45	1	He	61441.034	61441.034	1.16	24599865	0.25	200000	
K	39	45	1	He	5197.381	5197.381	0.93	3198516	0.16	500000	
Ca	44	45	1	He	4992.634	4992.634	0.68	161370	3.09	500000	
Ti	47	45	1	He	419.259	419.259	1.08	80434	0.52	2500	
V	51	45	1	He	121.488	121.488	1.95	595665	0.02	10000	
Cr	52	45	1	He	92.700	92.700	1.40	560051	0.02	10000	
Mn	55	45	1	He	4285.749	4285.749	2.45	18230390	0.02	10000	
Fe	56	45	1	He	174147.746	174147.746	0.82	959032602	0.02	200000	
Co	59	103	1	He	56.015	56.015	0.40	485344	0.01	10000	
Ni	60	103	1	He	107.166	107.166	1.37	236184	0.05	10000	
Cu	63	103	1	He	96.692	96.692	0.18	570190	0.02	10000	
Zn	66	103	1	He	317.928	317.928	0.39	380573	0.08	10000	
As	75	103	1	He	75.920	75.920	0.15	57583	0.13	10000	
Se	78	103	1	He	6.311	6.311	4.20	420	1.50	10000	
Sr	88	103	1	He	43.300	43.300	0.22	195008	0.02	10000	
Mo	95	103	1	He	8.797	8.797	3.71	21905	0.04	2000	
Ag	107	103	1	He	0.194	0.194	4.11	1658	0.01	300	
Cd	111	103	1	He	1.048	1.048	9.72	2168	0.05	4000	
Sn	118	115	1	He	17.744	17.744	1.09	58204	0.03	2000	
Sb	123	115	1	He	0.539	0.539	9.01	2629	0.02	300	
Ba	137	115	1	He	522.051	522.051	1.00	708632	0.07	10000	
W	182	165	1	He	0.257	0.257	9.78	5460	0.00	2500	
Tl	205	209	1	He	0.920	0.920	1.31	22539	0.00	5000	
Pb	208	209	1	He	82.433	82.433	1.17	2611157	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1375901	1.73	1803797	76.28	30	120	
Sc	45	1	He	507543	1.25	574766	88.30	30	120	
Sc	45	2	NoGas	3996541	0.30	4296857	93.01	30	120	
Rh	103	1	He	1357798	0.43	1652712	82.16	30	120	
In	115	1	He	739630	0.24	852389	86.77	30	120	
Tb	159	1	He	2387688	0.13	2425956	98.42	30	120	
Ho	165	1	He	2439760	0.18	2452680	99.47	30	120	
Bi	209	1	He	1748363	1.56	1810473	96.57	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-18-b@2
Data File Name	161SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:43:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.409	3.409	7.22	14666	0.02	10000	
B	11	45	2	NoGas	16.206	16.206	2.86	56672	0.03	300	
Na	23	45	1	He	195.530	195.530	1.07	290984	0.07	500000	
Mg	24	45	1	He	14468.590	14468.590	1.39	10984688	0.13	500000	
Al	27	45	1	He	58587.212	58587.212	1.29	23130974	0.25	200000	
K	39	45	1	He	4426.885	4426.885	0.71	2694876	0.16	500000	
Ca	44	45	1	He	4085.583	4085.583	0.61	130310	3.14	500000	
Ti	47	45	1	He	453.566	453.566	1.75	85803	0.53	2500	
V	51	45	1	He	109.256	109.256	0.58	528323	0.02	10000	
Cr	52	45	1	He	92.387	92.387	0.78	550430	0.02	10000	
Mn	55	45	1	He	2705.723	2705.723	0.80	11350503	0.02	10000	
Fe	56	45	1	He	140669.109	140669.109	0.26	763910387	0.02	200000	
Co	59	103	1	He	51.336	51.336	0.52	446261	0.01	10000	
Ni	60	103	1	He	112.686	112.686	0.92	249155	0.05	10000	
Cu	63	103	1	He	96.378	96.378	0.41	570202	0.02	10000	
Zn	66	103	1	He	414.502	414.502	0.20	497593	0.08	10000	
As	75	103	1	He	68.972	68.972	0.89	52500	0.13	10000	
Se	78	103	1	He	4.747	4.747	4.42	323	1.47	10000	
Sr	88	103	1	He	29.571	29.571	0.28	133650	0.02	10000	
Mo	95	103	1	He	7.393	7.393	2.54	18559	0.04	2000	
Ag	107	103	1	He	0.149	0.149	5.75	1285	0.01	300	
Cd	111	103	1	He	0.880	0.880	3.07	1938	0.05	4000	
Sn	118	115	1	He	16.254	16.254	1.67	53415	0.03	2000	
Sb	123	115	1	He	0.414	0.414	5.48	2202	0.02	300	
Ba	137	115	1	He	365.707	365.707	0.78	496759	0.07	10000	
W	182	165	1	He	0.259	0.259	4.25	5572	0.00	2500	
Tl	205	209	1	He	0.937	0.937	0.82	22823	0.00	5000	
Pb	208	209	1	He	73.743	73.743	2.43	2323630	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1374355	1.58	1803797	76.19	30	120	
Sc	45	1	He	500473	0.77	574766	87.07	30	120	
Sc	45	2	NoGas	3898311	0.34	4296857	90.72	30	120	
Rh	103	1	He	1362258	0.80	1652712	82.43	30	120	
In	115	1	He	740118	0.44	852389	86.83	30	120	
Tb	159	1	He	2423316	0.54	2425956	99.89	30	120	
Ho	165	1	He	2480377	0.96	2452680	101.13	30	120	
Bi	209	1	He	1739499	2.12	1810473	96.08	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-20-b@2
Data File Name	162SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:47:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.667	3.667	3.79	15366	0.02	10000	
B	11	45	2	NoGas	22.863	22.863	1.53	78722	0.03	300	
Na	23	45	1	He	280.990	280.990	1.97	406818	0.07	500000	
Mg	24	45	1	He	18053.817	18053.817	1.44	13755089	0.13	500000	
Al	27	45	1	He	60907.186	60907.186	1.76	24131828	0.25	200000	
K	39	45	1	He	6796.864	6796.864	1.16	4122126	0.16	500000	
Ca	44	45	1	He	7590.547	7590.547	0.68	242528	3.13	500000	
Ti	47	45	1	He	430.615	430.615	1.46	81760	0.53	2500	
V	51	45	1	He	109.211	109.211	0.91	530004	0.02	10000	
Cr	52	45	1	He	100.981	100.981	0.81	603534	0.02	10000	
Mn	55	45	1	He	2727.788	2727.788	1.39	11483582	0.02	10000	
Fe	56	45	1	He	147497.968	147497.968	0.18	803868697	0.02	200000	
Co	59	103	1	He	65.425	65.425	1.00	564806	0.01	10000	
Ni	60	103	1	He	145.118	145.118	1.19	318636	0.05	10000	
Cu	63	103	1	He	105.715	105.715	1.95	620918	0.02	10000	
Zn	66	103	1	He	331.847	331.847	0.65	395762	0.08	10000	
As	75	103	1	He	68.659	68.659	1.13	51900	0.13	10000	
Se	78	103	1	He	4.930	4.930	2.51	332	1.49	10000	
Sr	88	103	1	He	43.313	43.313	0.35	194356	0.02	10000	
Mo	95	103	1	He	6.638	6.638	2.32	16609	0.04	2000	
Ag	107	103	1	He	0.108	0.108	10.46	933	0.01	300	
Cd	111	103	1	He	0.733	0.733	6.56	1720	0.04	4000	
Sn	118	115	1	He	17.569	17.569	1.02	57610	0.03	2000	
Sb	123	115	1	He	0.480	0.480	2.41	2427	0.02	300	
Ba	137	115	1	He	422.113	422.113	0.67	572706	0.07	10000	
W	182	165	1	He	0.176	0.176	18.88	4649	0.00	2500	
Tl	205	209	1	He	0.988	0.988	0.33	23645	0.00	5000	
Pb	208	209	1	He	67.098	67.098	1.56	2079648	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1338294	0.71	1803797	74.19	30	120	
Sc	45	1	He	502272	1.11	574766	87.39	30	120	
Sc	45	2	NoGas	3945985	0.31	4296857	91.83	30	120	
Rh	103	1	He	1352871	0.41	1652712	81.86	30	120	
In	115	1	He	739281	0.57	852389	86.73	30	120	
Tb	159	1	He	2413295	1.23	2425956	99.48	30	120	
Ho	165	1	He	2475295	0.70	2452680	100.92	30	120	
Bi	209	1	He	1710746	1.95	1810473	94.49	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-21-b@2
Data File Name	163SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:50:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.723	3.723	1.73	15885	0.02	10000	
B	11	45	2	NoGas	28.405	28.405	2.81	95596	0.03	300	
Na	23	45	1	He	319.778	319.778	0.78	456703	0.07	500000	
Mg	24	45	1	He	18946.028	18946.028	1.14	14363800	0.13	500000	
Al	27	45	1	He	68941.452	68941.452	0.38	27183096	0.25	200000	
K	39	45	1	He	7838.773	7838.773	0.39	4721960	0.17	500000	
Ca	44	45	1	He	10159.266	10159.266	0.10	322839	3.15	500000	
Ti	47	45	1	He	455.934	455.934	0.27	86139	0.53	2500	
V	51	45	1	He	122.939	122.939	0.72	593659	0.02	10000	
Cr	52	45	1	He	123.244	123.244	0.25	732400	0.02	10000	
Mn	55	45	1	He	2933.271	2933.271	2.23	12287465	0.02	10000	
Fe	56	45	1	He	165001.202	165001.202	1.25	894765813	0.02	200000	
Co	59	103	1	He	78.903	78.903	0.44	663129	0.01	10000	
Ni	60	103	1	He	160.438	160.438	0.86	342937	0.05	10000	
Cu	63	103	1	He	130.354	130.354	0.60	744924	0.02	10000	
Zn	66	103	1	He	390.505	390.505	0.63	453271	0.09	10000	
As	75	103	1	He	89.514	89.514	0.21	65827	0.14	10000	
Se	78	103	1	He	7.542	7.542	1.29	482	1.57	10000	
Sr	88	103	1	He	52.245	52.245	1.22	228210	0.02	10000	
Mo	95	103	1	He	8.623	8.623	1.91	20837	0.04	2000	
Ag	107	103	1	He	0.132	0.132	6.66	1100	0.01	300	
Cd	111	103	1	He	0.942	0.942	7.08	1959	0.05	4000	
Sn	118	115	1	He	18.400	18.400	1.83	59063	0.03	2000	
Sb	123	115	1	He	0.653	0.653	6.28	2959	0.02	300	
Ba	137	115	1	He	417.422	417.422	0.52	554677	0.08	10000	
W	182	165	1	He	0.208	0.208	2.91	4986	0.00	2500	
Tl	205	209	1	He	1.059	1.059	1.72	25626	0.00	5000	
Pb	208	209	1	He	78.938	78.938	1.10	2477060	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1362488	0.92	1803797	75.53	30	120	
Sc	45	1	He	499779	1.04	574766	86.95	30	120	
Sc	45	2	NoGas	3910184	1.81	4296857	91.00	30	120	
Rh	103	1	He	1317026	0.54	1652712	79.69	30	120	
In	115	1	He	724059	0.63	852389	84.94	30	120	
Tb	159	1	He	2463940	0.46	2425956	101.57	30	120	
Ho	165	1	He	2468613	0.27	2452680	100.65	30	120	
Bi	209	1	He	1731930	1.53	1810473	95.66	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-1-b@2
Data File Name	164SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:54:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.802	3.802	2.70	15759	0.02	10000	
B	11	45	2	NoGas	23.072	23.072	1.15	74327	0.03	300	
Na	23	45	1	He	282.778	282.778	2.07	379577	0.07	500000	
Mg	24	45	1	He	19137.935	19137.935	1.01	13525213	0.14	500000	
Al	27	45	1	He	70981.379	70981.379	1.42	26085855	0.27	200000	
K	39	45	1	He	6227.329	6227.329	0.55	3507394	0.18	500000	
Ca	44	45	1	He	31519.139	31519.139	0.58	932642	3.38	500000	
Ti	47	45	1	He	391.656	391.656	0.61	68972	0.57	2500	
V	51	45	1	He	138.714	138.714	0.70	624327	0.02	10000	
Cr	52	45	1	He	109.947	109.947	0.54	609302	0.02	10000	
Mn	55	45	1	He	4471.797	4471.797	0.64	17461873	0.03	10000	
Fe	56	45	1	He	156699.212	156699.212	1.64	792075240	0.02	200000	
Co	59	103	1	He	58.565	58.565	0.80	475184	0.01	10000	
Ni	60	103	1	He	123.341	123.341	1.00	254534	0.05	10000	
Cu	63	103	1	He	74.313	74.313	0.69	410800	0.02	10000	
Zn	66	103	1	He	344.415	344.415	0.12	386025	0.09	10000	
As	75	103	1	He	72.249	72.249	0.57	51322	0.14	10000	
Se	78	103	1	He	5.373	5.373	10.09	338	1.59	10000	
Sr	88	103	1	He	89.548	89.548	1.36	377539	0.02	10000	
Mo	95	103	1	He	8.108	8.108	1.57	18947	0.04	2000	
Ag	107	103	1	He	0.335	0.335	3.97	2659	0.01	300	
Cd	111	103	1	He	1.135	1.135	5.29	2144	0.05	4000	
Sn	118	115	1	He	17.371	17.371	1.21	53448	0.03	2000	
Sb	123	115	1	He	14.053	14.053	0.50	45969	0.03	300	
Ba	137	115	1	He	473.422	473.422	0.65	602614	0.08	10000	
W	182	165	1	He	0.249	0.249	10.03	5086	0.00	2500	
Tl	205	209	1	He	1.032	1.032	1.03	22516	0.00	5000	
Pb	208	209	1	He	98.363	98.363	0.33	2780526	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1323810	1.38	1803797	73.39	30	120	
Sc	45	1	He	465860	0.78	574766	81.05	30	120	
Sc	45	2	NoGas	3694430	0.46	4296857	85.98	30	120	
Rh	103	1	He	1271498	0.95	1652712	76.93	30	120	
In	115	1	He	693593	0.69	852389	81.37	30	120	
Tb	159	1	He	2239287	0.66	2425956	92.31	30	120	
Ho	165	1	He	2311554	1.03	2452680	94.25	30	120	
Bi	209	1	He	1560160	0.29	1810473	86.17	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	165_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T20:58:30-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.046	2.975	192199	2.75	50	92.1	89.5	110.5	
B	11	45	2	NoGas	47.676	1.270	147313	1.08	50	95.4	89.5	110.5	
Na	23	45	1	He	25475.839	1.678	31512394	2.04	25000	101.9	89.5	110.5	
Mg	24	45	1	He	25473.088	0.804	17850494	1.10	25000	101.9	89.5	110.5	
Al	27	45	1	He	252.874	1.143	92752	1.05	250	101.1	89.5	110.5	
K	39	45	1	He	26330.803	0.429	14536977	0.54	25000	105.3	89.5	110.5	
Ca	44	45	1	He	25413.402	0.402	745719	0.74	25000	101.7	89.5	110.5	
Ti	47	45	1	He	52.313	0.628	9136	0.97	50	104.6	89.5	110.5	
V	51	45	1	He	51.563	0.416	230251	0.15	50	103.1	89.5	110.5	
Cr	52	45	1	He	51.634	0.807	285013	0.96	50	103.3	89.5	110.5	
Mn	55	45	1	He	260.489	0.748	1008723	0.38	250	104.2	89.5	110.5	
Fe	56	45	1	He	13170.637	0.065	66019142	0.35	12500	105.4	89.5	110.5	
Co	59	103	1	He	47.228	0.847	405369	0.44	50	94.5	89.5	110.5	
Ni	60	103	1	He	47.151	0.682	102983	0.35	50	94.3	89.5	110.5	
Cu	63	103	1	He	47.038	0.316	275815	0.74	50	94.1	89.5	110.5	
Zn	66	103	1	He	48.495	0.644	58090	0.90	50	97.0	89.5	110.5	
As	75	103	1	He	49.178	0.897	37005	0.52	50	98.4	89.5	110.5	
Se	78	103	1	He	49.339	0.984	3085	1.23	50	98.7	89.5	110.5	
Sr	88	103	1	He	51.163	0.401	228234	0.84	50	102.3	89.5	110.5	
Mo	95	103	1	He	51.935	1.475	125330	1.41	50	103.9	89.5	110.5	
Ag	107	103	1	He	51.472	0.528	428181	0.65	50	102.9	89.5	110.5	
Cd	111	103	1	He	52.217	0.991	73236	0.57	50	104.4	89.5	110.5	
Sn	118	115	1	He	50.029	0.285	162659	0.35	50	100.1	89.5	110.5	
Sb	123	115	1	He	53.541	0.371	184478	0.50	50	107.1	89.5	110.5	
Ba	137	115	1	He	53.357	0.953	72402	1.30	50	106.7	89.5	110.5	
W	182	165	1	He	46.220	1.129	494790	1.46	50	92.4	89.5	110.5	
Tl	205	209	1	He	47.032	1.531	1105123	0.40	50	94.1	89.5	110.5	
Pb	208	209	1	He	48.830	1.713	1510120	0.58	50	97.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1333599	1.99	1803797	73.93	30	120	
Sc	45	1	He	461923	0.37	574766	80.37	30	120	
Sc	45	2	NoGas	3671477	0.21	4296857	85.45	30	120	
Rh	103	1	He	1345038	0.44	1652712	81.38	30	120	
In	115	1	He	739252	0.56	852389	86.73	30	120	
Tb	159	1	He	2313565	0.98	2425956	95.37	30	120	
Ho	165	1	He	2392744	0.36	2452680	97.56	30	120	
Bi	209	1	He	1706601	1.27	1810473	94.26	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	166_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:02:23-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.048	16.0	196	16.3	1	
B	11	45	2	NoGas	4.230	5.7	17298	3.6	20	
Na	23	45	1	He	9.744	8.2	37398	1.6	400	
Mg	24	45	1	He	2.840	13.6	2623	8.8	1000	
Al	27	45	1	He	10.077	4.9	4103	4.5	50	
K	39	45	1	He	13.984	8.8	57351	0.2	1000	
Ca	44	45	1	He	2.900	54.2	525	9.3	1000	
Ti	47	45	1	He	0.221	61.2	38	58.7	20	
V	51	45	1	He	0.092	90.5	593	58.7	2	
Cr	52	45	1	He	-0.045	-24.2	2082	2.2	2	
Mn	55	45	1	He	1.432	3.7	5451	3.1	2	
Fe	56	45	1	He	35.854	9.0	177094	7.7	50	
Co	59	103	1	He	0.028	21.4	287	17.6	1	
Ni	60	103	1	He	0.049	29.4	186	16.7	2	
Cu	63	103	1	He	-0.184	-12.3	953	13.9	2	
Zn	66	103	1	He	0.506	5.1	1290	2.5	20	
As	75	103	1	He	-0.010	-135.9	153	6.9	2	
Se	78	103	1	He	0.152	75.0	34	21.3	2	
Sr	88	103	1	He	0.013	19.7	172	5.9	10	
Mo	95	103	1	He	0.760	22.0	2394	16.3	2	
Ag	107	103	1	He	0.000	-453.4	24	34.3	0.2	
Cd	111	103	1	He	0.015	40.4	713	0.9	0.2	
Sn	118	115	1	He	0.248	18.5	1545	8.7	10	
Sb	123	115	1	He	0.061	99.1	983	20.2	1	
Ba	137	115	1	He	0.042	18.7	68	14.2	5	
W	182	165	1	He	0.824	10.7	10934	9.0	10	
Tl	205	209	1	He	0.035	32.0	1171	22.2	0.5	
Pb	208	209	1	He	0.034	10.2	1840	7.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1298093	1.06	1803797	71.96	30	120	
Sc	45	1	He	443378	0.98	574766	77.14	30	120	
Sc	45	2	NoGas	3604638	0.55	4296857	83.89	30	120	
Rh	103	1	He	1346889	0.58	1652712	81.50	30	120	
In	115	1	He	735660	1.50	852389	86.31	30	120	
Tb	159	1	He	2231203	0.19	2425956	91.97	30	120	
Ho	165	1	He	2294535	0.89	2452680	93.55	30	120	
Bi	209	1	He	1661870	2.94	1810473	91.79	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-2-b@2
Data File Name	167SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:06:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.579	3.579	0.60	14847	0.02	10000	
B	11	45	2	NoGas	13.514	13.514	3.24	47120	0.03	300	
Na	23	45	1	He	147.719	147.719	1.55	223292	0.07	500000	
Mg	24	45	1	He	10355.212	10355.212	1.58	7735005	0.13	500000	
Al	27	45	1	He	63224.773	63224.773	1.11	24559510	0.26	200000	
K	39	45	1	He	3960.994	3960.994	0.46	2378243	0.17	500000	
Ca	44	45	1	He	2245.321	2245.321	1.91	70673	3.18	500000	
Ti	47	45	1	He	364.667	364.667	2.43	67871	0.54	2500	
V	51	45	1	He	134.067	134.067	0.78	637812	0.02	10000	
Cr	52	45	1	He	95.420	95.420	0.51	559259	0.02	10000	
Mn	55	45	1	He	5016.494	5016.494	0.44	20705928	0.02	10000	
Fe	56	45	1	He	131210.953	131210.953	0.60	701044523	0.02	200000	
Co	59	103	1	He	52.826	52.826	0.42	445962	0.01	10000	
Ni	60	103	1	He	100.539	100.539	0.55	215899	0.05	10000	
Cu	63	103	1	He	64.839	64.839	1.32	373196	0.02	10000	
Zn	66	103	1	He	291.375	291.375	0.46	339885	0.09	10000	
As	75	103	1	He	60.699	60.699	0.82	44887	0.14	10000	
Se	78	103	1	He	5.265	5.265	4.19	345	1.53	10000	
Sr	88	103	1	He	24.773	24.773	0.60	108749	0.02	10000	
Mo	95	103	1	He	7.906	7.906	0.69	19236	0.04	2000	
Ag	107	103	1	He	0.268	0.268	2.59	2222	0.01	300	
Cd	111	103	1	He	0.946	0.946	7.99	1973	0.05	4000	
Sn	118	115	1	He	18.345	18.345	1.37	58851	0.03	2000	
Sb	123	115	1	He	3.884	3.884	2.26	13808	0.03	300	
Ba	137	115	1	He	438.917	438.917	0.21	582902	0.08	10000	
W	182	165	1	He	0.546	0.546	4.86	8325	0.01	2500	
Tl	205	209	1	He	0.941	0.941	1.25	22351	0.00	5000	
Pb	208	209	1	He	97.273	97.273	1.28	2989640	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1324770	1.65	1803797	73.44	30	120	
Sc	45	1	He	492412	1.07	574766	85.67	30	120	
Sc	45	2	NoGas	3817322	1.75	4296857	88.84	30	120	
Rh	103	1	He	1322918	0.35	1652712	80.05	30	120	
In	115	1	He	723623	0.28	852389	84.89	30	120	
Tb	159	1	He	2287066	1.44	2425956	94.27	30	120	
Ho	165	1	He	2362232	1.04	2452680	96.31	30	120	
Bi	209	1	He	1696276	0.53	1810473	93.69	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-3-b@2
Data File Name	168SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:10:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.727	4.727	4.79	19541	0.02	10000	
B	11	45	2	NoGas	14.909	14.909	2.76	50979	0.03	300	
Na	23	45	1	He	168.721	168.721	0.49	248211	0.07	500000	
Mg	24	45	1	He	13318.593	13318.593	0.44	9839626	0.14	500000	
Al	27	45	1	He	68672.422	68672.422	0.33	26383485	0.26	200000	
K	39	45	1	He	4662.002	4662.002	0.95	2758595	0.17	500000	
Ca	44	45	1	He	2029.101	2029.101	0.57	63218	3.21	500000	
Ti	47	45	1	He	456.738	456.738	0.54	84080	0.54	2500	
V	51	45	1	He	160.077	160.077	0.41	753120	0.02	10000	
Cr	52	45	1	He	115.603	115.603	0.39	669562	0.02	10000	
Mn	55	45	1	He	6920.000	6920.000	0.42	28247447	0.02	10000	
Fe	56	45	1	He	169332.268	169332.268	0.36	894773084	0.02	200000	
Co	59	103	1	He	73.891	73.891	0.75	615803	0.01	10000	
Ni	60	103	1	He	138.875	138.875	0.25	294384	0.05	10000	
Cu	63	103	1	He	78.885	78.885	0.44	447811	0.02	10000	
Zn	66	103	1	He	357.091	357.091	0.40	411071	0.09	10000	
As	75	103	1	He	74.867	74.867	0.76	54620	0.14	10000	
Se	78	103	1	He	6.242	6.242	7.56	400	1.56	10000	
Sr	88	103	1	He	31.168	31.168	0.48	135047	0.02	10000	
Mo	95	103	1	He	9.619	9.619	1.91	22988	0.04	2000	
Ag	107	103	1	He	0.270	0.270	3.88	2206	0.01	300	
Cd	111	103	1	He	1.120	1.120	9.02	2183	0.05	4000	
Sn	118	115	1	He	17.881	17.881	3.02	56821	0.03	2000	
Sb	123	115	1	He	0.972	0.972	0.23	3986	0.02	300	
Ba	137	115	1	He	609.896	609.896	0.93	802000	0.08	10000	
W	182	165	1	He	0.298	0.298	13.89	5790	0.01	2500	
Tl	205	209	1	He	1.039	1.039	0.97	24549	0.00	5000	
Pb	208	209	1	He	103.053	103.053	2.29	3157453	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1321506	2.82	1803797	73.26	30	120	
Sc	45	1	He	486979	0.21	574766	84.73	30	120	
Sc	45	2	NoGas	3780997	0.47	4296857	87.99	30	120	
Rh	103	1	He	1306035	0.57	1652712	79.02	30	120	
In	115	1	He	716526	0.40	852389	84.06	30	120	
Tb	159	1	He	2312364	0.40	2425956	95.32	30	120	
Ho	165	1	He	2392961	1.14	2452680	97.57	30	120	
Bi	209	1	He	1691320	1.16	1810473	93.42	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-4-b@2
Data File Name	169SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:13:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.358	3.358	5.93	13895	0.02	10000	
B	11	45	2	NoGas	10.486	10.486	2.32	37788	0.03	300	
Na	23	45	1	He	153.698	153.698	2.90	227981	0.07	500000	
Mg	24	45	1	He	11512.465	11512.465	1.59	8481549	0.14	500000	
Al	27	45	1	He	72345.877	72345.877	2.48	27713863	0.26	200000	
K	39	45	1	He	3560.711	3560.711	1.19	2114136	0.17	500000	
Ca	44	45	1	He	2431.127	2431.127	0.52	75453	3.22	500000	
Ti	47	45	1	He	402.007	402.007	1.57	73799	0.54	2500	
V	51	45	1	He	155.629	155.629	1.55	730155	0.02	10000	
Cr	52	45	1	He	101.451	101.451	1.96	586234	0.02	10000	
Mn	55	45	1	He	4322.049	4322.049	2.59	17591924	0.02	10000	
Fe	56	45	1	He	141730.918	141730.918	1.89	746807739	0.02	200000	
Co	59	103	1	He	54.674	54.674	0.60	461911	0.01	10000	
Ni	60	103	1	He	95.885	95.885	0.62	206064	0.05	10000	
Cu	63	103	1	He	54.642	54.642	0.86	315053	0.02	10000	
Zn	66	103	1	He	377.215	377.215	1.22	440141	0.09	10000	
As	75	103	1	He	62.523	62.523	0.85	46265	0.14	10000	
Se	78	103	1	He	5.600	5.600	1.33	366	1.53	10000	
Sr	88	103	1	He	23.501	23.501	0.31	103252	0.02	10000	
Mo	95	103	1	He	9.236	9.236	0.20	22398	0.04	2000	
Ag	107	103	1	He	0.251	0.251	4.75	2081	0.01	300	
Cd	111	103	1	He	1.089	1.089	2.22	2170	0.05	4000	
Sn	118	115	1	He	18.215	18.215	2.66	58743	0.03	2000	
Sb	123	115	1	He	0.712	0.712	2.28	3168	0.02	300	
Ba	137	115	1	He	400.066	400.066	0.78	534044	0.07	10000	
W	182	165	1	He	0.317	0.317	15.81	5979	0.01	2500	
Tl	205	209	1	He	1.020	1.020	0.57	24638	0.00	5000	
Pb	208	209	1	He	111.225	111.225	1.07	3480793	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1321466	1.45	1803797	73.26	30	120	
Sc	45	1	He	485712	1.90	574766	84.51	30	120	
Sc	45	2	NoGas	3822367	0.47	4296857	88.96	30	120	
Rh	103	1	He	1323926	0.34	1652712	80.11	30	120	
In	115	1	He	727352	0.20	852389	85.33	30	120	
Tb	159	1	He	2323854	0.91	2425956	95.79	30	120	
Ho	165	1	He	2387542	1.12	2452680	97.34	30	120	
Bi	209	1	He	1727326	0.47	1810473	95.41	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-5-b@2
Data File Name	170SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:17:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.299	3.299	1.31	13131	0.03	10000	
B	11	45	2	NoGas	14.420	14.420	2.24	48200	0.03	300	
Na	23	45	1	He	152.375	152.375	0.64	220017	0.07	500000	
Mg	24	45	1	He	10116.816	10116.816	1.01	7247108	0.14	500000	
Al	27	45	1	He	62995.138	62995.138	0.51	23466591	0.27	200000	
K	39	45	1	He	3794.556	3794.556	2.16	2186879	0.17	500000	
Ca	44	45	1	He	5261.809	5261.809	0.66	158199	3.33	500000	
Ti	47	45	1	He	491.857	491.857	0.99	87793	0.56	2500	
V	51	45	1	He	136.222	136.222	1.03	621432	0.02	10000	
Cr	52	45	1	He	94.538	94.538	1.06	531350	0.02	10000	
Mn	55	45	1	He	7250.436	7250.436	0.91	28696296	0.03	10000	
Fe	56	45	1	He	119421.988	119421.988	0.43	611860545	0.02	200000	
Co	59	103	1	He	53.202	53.202	0.55	446842	0.01	10000	
Ni	60	103	1	He	94.402	94.402	0.17	201690	0.05	10000	
Cu	63	103	1	He	50.922	50.922	0.66	292008	0.02	10000	
Zn	66	103	1	He	306.290	306.290	1.15	355404	0.09	10000	
As	75	103	1	He	52.711	52.711	0.54	38802	0.14	10000	
Se	78	103	1	He	5.382	5.382	5.76	350	1.54	10000	
Sr	88	103	1	He	34.156	34.156	0.64	149135	0.02	10000	
Mo	95	103	1	He	8.427	8.427	0.71	20364	0.04	2000	
Ag	107	103	1	He	0.276	0.276	7.83	2271	0.01	300	
Cd	111	103	1	He	1.249	1.249	5.27	2376	0.05	4000	
Sn	118	115	1	He	18.535	18.535	3.06	59370	0.03	2000	
Sb	123	115	1	He	1.050	1.050	3.79	4282	0.02	300	
Ba	137	115	1	He	520.529	520.529	0.72	690334	0.08	10000	
W	182	165	1	He	0.360	0.360	4.71	6413	0.01	2500	
Tl	205	209	1	He	0.978	0.978	0.32	23730	0.00	5000	
Pb	208	209	1	He	103.746	103.746	1.48	3260028	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1271373	1.16	1803797	70.48	30	120	
Sc	45	1	He	472180	0.43	574766	82.15	30	120	
Sc	45	2	NoGas	3683767	0.84	4296857	85.73	30	120	
Rh	103	1	He	1316175	0.97	1652712	79.64	30	120	
In	115	1	He	722641	0.37	852389	84.78	30	120	
Tb	159	1	He	2287517	0.25	2425956	94.29	30	120	
Ho	165	1	He	2378723	0.77	2452680	96.98	30	120	
Bi	209	1	He	1734465	0.99	1810473	95.80	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-6-b@2
Data File Name	171SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:21:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.975	2.975	2.83	12097	0.02	10000	
B	11	45	2	NoGas	14.427	14.427	0.33	48111	0.03	300	
Na	23	45	1	He	169.569	169.569	3.26	240115	0.07	500000	
Mg	24	45	1	He	10530.657	10530.657	0.87	7494159	0.14	500000	
Al	27	45	1	He	57820.990	57820.990	1.70	21398125	0.27	200000	
K	39	45	1	He	3670.110	3670.110	1.05	2103298	0.17	500000	
Ca	44	45	1	He	10716.845	10716.845	0.60	319622	3.35	500000	
Ti	47	45	1	He	414.830	414.830	1.38	73556	0.56	2500	
V	51	45	1	He	124.368	124.368	1.01	563659	0.02	10000	
Cr	52	45	1	He	92.969	92.969	0.83	519171	0.02	10000	
Mn	55	45	1	He	3410.503	3410.503	1.50	13409488	0.03	10000	
Fe	56	45	1	He	108976.940	108976.940	0.91	554685845	0.02	200000	
Co	59	103	1	He	42.212	42.212	0.68	352128	0.01	10000	
Ni	60	103	1	He	97.632	97.632	0.23	207165	0.05	10000	
Cu	63	103	1	He	66.325	66.325	1.23	377154	0.02	10000	
Zn	66	103	1	He	350.033	350.033	0.61	403323	0.09	10000	
As	75	103	1	He	50.329	50.329	0.32	36804	0.14	10000	
Se	78	103	1	He	4.740	4.740	8.45	309	1.53	10000	
Sr	88	103	1	He	69.941	69.941	0.78	303176	0.02	10000	
Mo	95	103	1	He	7.633	7.633	2.62	18371	0.04	2000	
Ag	107	103	1	He	0.240	0.240	4.90	1966	0.01	300	
Cd	111	103	1	He	1.123	1.123	6.06	2188	0.05	4000	
Sn	118	115	1	He	26.173	26.173	2.36	83241	0.03	2000	
Sb	123	115	1	He	1.569	1.569	2.34	6002	0.03	300	
Ba	137	115	1	He	595.383	595.383	0.73	786792	0.08	10000	
W	182	165	1	He	0.303	0.303	4.63	5772	0.01	2500	
Tl	205	209	1	He	0.860	0.860	0.49	20351	0.00	5000	
Pb	208	209	1	He	120.278	120.278	1.23	3676742	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1298633	1.07	1803797	71.99	30	120	
Sc	45	1	He	469112	1.17	574766	81.62	30	120	
Sc	45	2	NoGas	3675269	1.29	4296857	85.53	30	120	
Rh	103	1	He	1307209	0.45	1652712	79.09	30	120	
In	115	1	He	720072	0.77	852389	84.48	30	120	
Tb	159	1	He	2301234	0.47	2425956	94.86	30	120	
Ho	165	1	He	2360709	0.35	2452680	96.25	30	120	
Bi	209	1	He	1687296	1.00	1810473	93.20	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-7-b@2
Data File Name	172SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:25:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.403	3.403	5.86	13646	0.02	10000	
B	11	45	2	NoGas	16.469	16.469	1.67	56256	0.03	300	
Na	23	45	1	He	204.671	204.671	2.37	293054	0.07	500000	
Mg	24	45	1	He	10952.409	10952.409	0.90	8037442	0.14	500000	
Al	27	45	1	He	45267.250	45267.250	1.13	17274445	0.26	200000	
K	39	45	1	He	6065.549	6065.549	1.53	3548474	0.17	500000	
Ca	44	45	1	He	2076.771	2076.771	0.89	64258	3.23	500000	
Ti	47	45	1	He	339.899	339.899	1.03	62151	0.55	2500	
V	51	45	1	He	85.011	85.011	0.29	397379	0.02	10000	
Cr	52	45	1	He	133.592	133.592	0.28	768172	0.02	10000	
Mn	55	45	1	He	1608.248	1608.248	1.89	6520538	0.02	10000	
Fe	56	45	1	He	122640.860	122640.860	1.24	643684703	0.02	200000	
Co	59	103	1	He	44.149	44.149	0.67	368255	0.01	10000	
Ni	60	103	1	He	133.312	133.312	1.10	282802	0.05	10000	
Cu	63	103	1	He	82.023	82.023	0.97	465892	0.02	10000	
Zn	66	103	1	He	213.719	213.719	0.95	246484	0.09	10000	
As	75	103	1	He	53.091	53.091	1.15	38808	0.14	10000	
Se	78	103	1	He	4.797	4.797	2.53	313	1.53	10000	
Sr	88	103	1	He	24.653	24.653	0.53	106925	0.02	10000	
Mo	95	103	1	He	4.251	4.251	2.74	10477	0.04	2000	
Ag	107	103	1	He	0.161	0.161	3.28	1323	0.01	300	
Cd	111	103	1	He	0.618	0.618	8.84	1507	0.04	4000	
Sn	118	115	1	He	17.094	17.094	0.50	54210	0.03	2000	
Sb	123	115	1	He	0.361	0.361	13.89	1951	0.02	300	
Ba	137	115	1	He	272.189	272.189	0.48	357018	0.08	10000	
W	182	165	1	He	0.145	0.145	28.82	4164	0.00	2500	
Tl	205	209	1	He	0.716	0.716	1.26	16823	0.00	5000	
Pb	208	209	1	He	77.370	77.370	0.93	2339599	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1281548	1.69	1803797	71.05	30	120	
Sc	45	1	He	483721	0.70	574766	84.16	30	120	
Sc	45	2	NoGas	3813521	1.11	4296857	88.75	30	120	
Rh	103	1	He	1307080	0.83	1652712	79.09	30	120	
In	115	1	He	714690	0.62	852389	83.85	30	120	
Tb	159	1	He	2327964	0.68	2425956	95.96	30	120	
Ho	165	1	He	2394413	1.30	2452680	97.62	30	120	
Bi	209	1	He	1668906	0.87	1810473	92.18	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-8-b@2
Data File Name	173SMPL.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:29:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.558	3.558	3.75	14262	0.02	10000	
B	11	45	2	NoGas	18.928	18.928	0.85	64446	0.03	300	
Na	23	45	1	He	184.224	184.224	1.49	270993	0.07	500000	
Mg	24	45	1	He	12623.840	12623.840	2.02	9415455	0.13	500000	
Al	27	45	1	He	73834.871	73834.871	2.25	28638152	0.26	200000	
K	39	45	1	He	6297.212	6297.212	2.55	3742135	0.17	500000	
Ca	44	45	1	He	1318.867	1318.867	1.22	41660	3.17	500000	
Ti	47	45	1	He	388.970	388.970	2.57	72285	0.54	2500	
V	51	45	1	He	131.159	131.159	2.37	622975	0.02	10000	
Cr	52	45	1	He	106.231	106.231	1.51	621398	0.02	10000	
Mn	55	45	1	He	790.292	790.292	2.17	3256844	0.02	10000	
Fe	56	45	1	He	146871.366	146871.366	2.00	783507293	0.02	200000	
Co	59	103	1	He	39.156	39.156	0.78	326502	0.01	10000	
Ni	60	103	1	He	92.766	92.766	0.69	196762	0.05	10000	
Cu	63	103	1	He	92.994	92.994	0.82	527796	0.02	10000	
Zn	66	103	1	He	256.430	256.430	1.15	295520	0.09	10000	
As	75	103	1	He	70.655	70.655	0.74	51582	0.14	10000	
Se	78	103	1	He	5.994	5.994	3.44	385	1.56	10000	
Sr	88	103	1	He	22.482	22.482	0.94	97491	0.02	10000	
Mo	95	103	1	He	5.767	5.767	2.62	14008	0.04	2000	
Ag	107	103	1	He	0.199	0.199	0.35	1633	0.01	300	
Cd	111	103	1	He	0.647	0.647	8.19	1545	0.04	4000	
Sn	118	115	1	He	17.294	17.294	0.90	54756	0.03	2000	
Sb	123	115	1	He	0.688	0.688	7.51	3030	0.02	300	
Ba	137	115	1	He	342.913	342.913	0.61	449110	0.08	10000	
W	182	165	1	He	0.190	0.190	17.26	4668	0.00	2500	
Tl	205	209	1	He	1.007	1.007	5.02	23369	0.00	5000	
Pb	208	209	1	He	70.385	70.385	2.81	2116525	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1280505	0.93	1803797	70.99	30	120	
Sc	45	1	He	491737	1.69	574766	85.55	30	120	
Sc	45	2	NoGas	3847437	0.86	4296857	89.54	30	120	
Rh	103	1	He	1306689	0.68	1652712	79.06	30	120	
In	115	1	He	713625	0.30	852389	83.72	30	120	
Tb	159	1	He	2333982	0.88	2425956	96.21	30	120	
Ho	165	1	He	2406314	0.79	2452680	98.11	30	120	
Bi	209	1	He	1660275	2.59	1810473	91.70	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	174_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:32:54-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.915	2.210	187100	1.42	50	93.8	89.5	110.5	
B	11	45	2	NoGas	44.488	1.130	137537	1.47	50	89.0	89.5	110.5	CCV Failed
Na	23	45	1	He	25059.587	1.208	31044540	1.02	25000	100.2	89.5	110.5	
Mg	24	45	1	He	24991.094	1.973	17537764	0.68	25000	100.0	89.5	110.5	
Al	27	45	1	He	250.300	1.553	91952	0.69	250	100.1	89.5	110.5	
K	39	45	1	He	26137.765	2.377	14450898	0.81	25000	104.6	89.5	110.5	
Ca	44	45	1	He	25258.170	1.807	742247	0.74	25000	101.0	89.5	110.5	
Ti	47	45	1	He	52.010	3.619	9095	2.41	50	104.0	89.5	110.5	
V	51	45	1	He	51.498	0.338	230351	2.01	50	103.0	89.5	110.5	
Cr	52	45	1	He	51.240	1.570	283274	0.78	50	102.5	89.5	110.5	
Mn	55	45	1	He	260.516	1.725	1010341	0.84	250	104.2	89.5	110.5	
Fe	56	45	1	He	13265.508	1.930	66591617	0.88	12500	106.1	89.5	110.5	
Co	59	103	1	He	46.867	0.852	403474	0.36	50	93.7	89.5	110.5	
Ni	60	103	1	He	46.342	0.768	101526	1.12	50	92.7	89.5	110.5	
Cu	63	103	1	He	46.780	1.173	275131	0.64	50	93.6	89.5	110.5	
Zn	66	103	1	He	48.329	0.110	58068	0.75	50	96.7	89.5	110.5	
As	75	103	1	He	48.206	0.981	36385	0.15	50	96.4	89.5	110.5	
Se	78	103	1	He	47.975	4.327	3008	3.48	50	95.9	89.5	110.5	
Sr	88	103	1	He	51.302	0.650	229534	0.24	50	102.6	89.5	110.5	
Mo	95	103	1	He	51.474	2.633	124582	1.83	50	102.9	89.5	110.5	
Ag	107	103	1	He	51.220	0.775	427358	0.34	50	102.4	89.5	110.5	
Cd	111	103	1	He	52.590	1.984	73972	1.30	50	105.2	89.5	110.5	
Sn	118	115	1	He	51.216	0.912	168455	0.82	50	102.4	89.5	110.5	
Sb	123	115	1	He	53.252	0.639	185641	0.61	50	106.5	89.5	110.5	
Ba	137	115	1	He	52.955	0.573	72698	0.50	50	105.9	89.5	110.5	
W	182	165	1	He	46.719	1.525	506865	0.67	50	93.4	89.5	110.5	
Tl	205	209	1	He	46.593	0.668	1127597	0.32	50	93.2	89.5	110.5	
Pb	208	209	1	He	48.113	0.877	1532540	0.68	50	96.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1274108	0.94	1803797	70.63	30	120	
Sc	45	1	He	462718	2.22	574766	80.51	30	120	
Sc	45	2	NoGas	3664641	1.32	4296857	85.29	30	120	
Rh	103	1	He	1349104	0.84	1652712	81.63	30	120	
In	115	1	He	747931	0.36	852389	87.75	30	120	
Tb	159	1	He	2323275	0.75	2425956	95.77	30	120	
Ho	165	1	He	2425399	1.00	2452680	98.89	30	120	
Bi	209	1	He	1757560	0.94	1810473	97.08	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	175_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:36:44-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.041	25.5	163	25.8	1	
B	11	45	2	NoGas	3.020	2.8	13424	2.1	20	
Na	23	45	1	He	7.071	15.6	33992	2.6	400	
Mg	24	45	1	He	2.876	26.6	2626	18.0	1000	
Al	27	45	1	He	10.556	8.9	4238	6.4	50	
K	39	45	1	He	10.130	52.3	54925	3.9	1000	
Ca	44	45	1	He	4.079	34.2	555	8.0	1000	
Ti	47	45	1	He	0.222	22.0	38	22.2	20	
V	51	45	1	He	0.104	39.6	642	26.2	2	
Cr	52	45	1	He	-0.040	-37.1	2096	4.6	2	
Mn	55	45	1	He	1.630	4.7	6147	5.1	2	
Fe	56	45	1	He	42.457	11.1	207349	9.5	50	
Co	59	103	1	He	0.021	18.8	222	14.8	1	
Ni	60	103	1	He	0.038	2.2	162	1.2	2	
Cu	63	103	1	He	-0.198	-1.4	880	1.9	2	
Zn	66	103	1	He	0.470	14.7	1257	6.8	20	
As	75	103	1	He	-0.012	-73.6	153	4.7	2	
Se	78	103	1	He	0.162	77.8	34	22.6	2	
Sr	88	103	1	He	0.005	148.2	141	25.3	10	
Mo	95	103	1	He	0.681	25.2	2220	18.6	2	
Ag	107	103	1	He	0.001	299.5	36	76.4	0.2	
Cd	111	103	1	He	0.019	114.3	724	4.3	0.2	
Sn	118	115	1	He	0.217	22.5	1459	10.4	10	
Sb	123	115	1	He	0.021	126.1	854	11.0	1	
Ba	137	115	1	He	0.066	12.9	101	11.6	5	
W	182	165	1	He	0.815	15.8	10986	11.5	10	
Tl	205	209	1	He	0.036	37.4	1222	23.9	0.5	
Pb	208	209	1	He	0.032	6.0	1848	1.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1239406	0.65	1803797	68.71	30	120	
Sc	45	1	He	440384	1.32	574766	76.62	30	120	
Sc	45	2	NoGas	3518380	1.00	4296857	81.88	30	120	
Rh	103	1	He	1356792	0.26	1652712	82.09	30	120	
In	115	1	He	741406	0.49	852389	86.98	30	120	
Tb	159	1	He	2259452	0.45	2425956	93.14	30	120	
Ho	165	1	He	2327815	0.83	2452680	94.91	30	120	
Bi	209	1	He	1719357	2.57	1810473	94.97	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	176CRIA.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:40:37-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.919	0.919	1.471	3719	1.94	1	91.9	69.5	130.5	
B	11	2	NoGas	19.039	19.039	2.988	60350	2.41	20	95.2	69.5	130.5	
Na	23	1	He	1059.350	1059.350	2.871	1327698	3.10	1000	105.9	69.5	130.5	
Mg	24	1	He	1013.643	1013.643	0.603	706509	0.85	1000	101.4	69.5	130.5	
Al	27	1	He	49.764	49.764	1.970	18618	2.36	50	99.5	69.5	130.5	
K	39	1	He	1039.115	1039.115	1.087	619711	0.58	1000	103.9	69.5	130.5	
Ca	44	1	He	1030.015	1030.015	0.510	30472	0.55	1000	103.0	69.5	130.5	
Ti	47	1	He	10.384	10.384	9.112	1802	8.88	10	103.8	69.5	130.5	
V	51	1	He	5.196	5.196	3.761	23242	3.74	5	103.9	69.5	130.5	
Cr	52	1	He	3.938	3.938	0.669	23821	1.11	2	196.9	69.5	130.5	6020A CR1 Failed
Mn	55	1	He	6.946	6.946	0.786	26859	1.21	5	138.9	69.5	130.5	6020A CR1 Failed
Fe	56	1	He	141.348	141.348	0.317	708825	0.21	100	141.3	69.5	130.5	6020A CR1 Failed
Co	59	1	He	0.967	0.967	0.507	8504	0.45	1	96.7	69.5	130.5	
Ni	60	1	He	2.711	2.711	0.749	6111	0.66	2	135.5	69.5	130.5	6020A CR1 Failed
Cu	63	1	He	1.740	1.740	0.542	12390	0.53	2	87.0	69.5	130.5	
Zn	66	1	He	19.415	19.415	1.334	24133	1.21	20	97.1	69.5	130.5	
As	75	1	He	4.834	4.834	2.628	3856	2.49	5	96.7	69.5	130.5	
Se	78	1	He	4.850	4.850	0.973	331	0.84	5	97.0	69.5	130.5	
Sr	88	1	He	10.127	10.127	1.218	46153	1.18	10	101.3	69.5	130.5	
Mo	95	1	He	10.304	10.304	1.339	25815	1.23	10	103.0	69.5	130.5	
Ag	107	1	He	1.053	1.053	2.461	8955	2.52	1	105.3	69.5	130.5	
Cd	111	1	He	1.036	1.036	2.829	2172	1.85	1	103.6	69.5	130.5	
Sn	118	1	He	9.960	9.960	1.415	33913	1.76	10	99.6	69.5	130.5	
Sb	123	1	He	1.868	1.868	1.205	7392	1.26	2	93.4	69.5	130.5	
Ba	137	1	He	5.372	5.372	2.860	7505	2.76	5	107.4	69.5	130.5	
W	182	1	He	9.125	9.125	2.826	100492	2.50	10	91.3	69.5	130.5	
Tl	205	1	He	1.874	1.874	1.319	46262	1.31	2	93.7	69.5	130.5	
Pb	208	1	He	1.029	1.029	1.391	34013	1.40	1	102.9	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1291839	1.03	1803797	71.62	30	120	
Sc	45	1	He	458988	0.51	574766	79.86	30	120	
Sc	45	2	NoGas	3584060	1.00	4296857	83.41	30	120	
Rh	103	1	He	1371334	0.08	1652712	82.97	30	120	
In	115	1	He	760046	0.40	852389	89.17	30	120	
Tb	159	1	He	2295040	1.43	2425956	94.60	30	120	
Ho	165	1	He	2409961	1.63	2452680	98.26	30	120	
Bi	209	1	He	1778455	0.21	1810473	98.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	177_CCV.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:44:29-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.990	1.158	191710	0.48	50	96.0	89.5	110.5	
B	11	45	2	NoGas	44.576	1.906	139789	0.97	50	89.2	89.5	110.5	CCV Failed
Na	23	45	1	He	24325.585	2.590	31186375	1.09	25000	97.3	89.5	110.5	
Mg	24	45	1	He	24343.227	3.402	17676828	0.52	25000	97.4	89.5	110.5	
Al	27	45	1	He	239.470	2.681	91069	1.00	250	95.8	89.5	110.5	
K	39	45	1	He	25558.928	4.222	14621541	1.33	25000	102.2	89.5	110.5	
Ca	44	45	1	He	24687.458	3.155	750726	0.66	25000	98.7	89.5	110.5	
Ti	47	45	1	He	49.721	4.575	8997	2.58	50	99.4	89.5	110.5	
V	51	45	1	He	50.868	3.100	235399	0.38	50	101.7	89.5	110.5	
Cr	52	45	1	He	50.027	3.156	286240	0.22	50	100.1	89.5	110.5	
Mn	55	45	1	He	252.019	2.675	1011466	0.35	250	100.8	89.5	110.5	
Fe	56	45	1	He	12797.300	2.065	66491017	1.01	12500	102.4	89.5	110.5	
Co	59	103	1	He	46.945	1.062	404687	0.96	50	93.9	89.5	110.5	
Ni	60	103	1	He	46.566	0.404	102148	0.46	50	93.1	89.5	110.5	
Cu	63	103	1	He	46.655	0.634	274765	0.60	50	93.3	89.5	110.5	
Zn	66	103	1	He	48.142	0.372	57921	0.29	50	96.3	89.5	110.5	
As	75	103	1	He	49.028	0.609	37053	0.70	50	98.1	89.5	110.5	
Se	78	103	1	He	48.987	1.949	3076	2.08	50	98.0	89.5	110.5	
Sr	88	103	1	He	51.979	0.185	232871	0.21	50	104.0	89.5	110.5	
Mo	95	103	1	He	51.372	1.149	124514	1.05	50	102.7	89.5	110.5	
Ag	107	103	1	He	51.204	0.656	427792	0.69	50	102.4	89.5	110.5	
Cd	111	103	1	He	52.682	0.655	74203	0.63	50	105.4	89.5	110.5	
Sn	118	115	1	He	50.251	0.512	166546	0.26	50	100.5	89.5	110.5	
Sb	123	115	1	He	53.039	0.636	186305	0.75	50	106.1	89.5	110.5	
Ba	137	115	1	He	53.227	0.876	73624	0.63	50	106.5	89.5	110.5	
W	182	165	1	He	46.163	1.328	498353	1.86	50	92.3	89.5	110.5	
Tl	205	209	1	He	46.406	1.576	1117624	0.74	50	92.8	89.5	110.5	
Pb	208	209	1	He	48.034	1.575	1522589	0.52	50	96.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1276176	0.80	1803797	70.75	30	120	
Sc	45	1	He	478993	3.04	574766	83.34	30	120	
Sc	45	2	NoGas	3717911	0.89	4296857	86.53	30	120	
Rh	103	1	He	1350846	0.16	1652712	81.74	30	120	
In	115	1	He	753599	0.42	852389	88.41	30	120	
Tb	159	1	He	2325124	1.48	2425956	95.84	30	120	
Ho	165	1	He	2412946	1.05	2452680	98.38	30	120	
Bi	209	1	He	1749142	1.06	1810473	96.61	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	178_CCB.d
Data Path Name	D:\Analytical Runs\I10042015B.b
Acq Date Time	2015-04-20T21:48:20-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.047	15.6	189	15.6	1	
B	11	45	2	NoGas	3.671	5.8	15592	3.4	20	
Na	23	45	1	He	6.744	26.4	34099	4.3	400	
Mg	24	45	1	He	2.188	23.4	2200	14.2	1000	
Al	27	45	1	He	8.269	1.7	3499	3.2	50	
K	39	45	1	He	12.698	34.4	57117	2.3	1000	
Ca	44	45	1	He	2.941	49.0	530	6.9	1000	
Ti	47	45	1	He	0.153	23.2	27	21.7	20	
V	51	45	1	He	0.043	38.7	389	16.5	2	
Cr	52	45	1	He	-0.055	-18.7	2047	4.5	2	
Mn	55	45	1	He	1.302	6.5	5007	4.6	2	
Fe	56	45	1	He	26.098	12.3	131143	10.0	50	
Co	59	103	1	He	0.025	9.7	258	8.6	1	
Ni	60	103	1	He	0.039	25.3	164	12.9	2	
Cu	63	103	1	He	-0.202	-5.5	857	6.9	2	
Zn	66	103	1	He	0.479	13.8	1269	6.8	20	
As	75	103	1	He	-0.013	-249.6	152	16.2	2	
Se	78	103	1	He	0.198	41.6	37	14.6	2	
Sr	88	103	1	He	0.005	92.4	138	14.2	10	
Mo	95	103	1	He	0.615	24.7	2061	17.1	2	
Ag	107	103	1	He	0.005	73.8	64	43.1	0.2	
Cd	111	103	1	He	0.020	180.3	726	6.4	0.2	
Sn	118	115	1	He	0.282	44.2	1678	24.3	10	
Sb	123	115	1	He	0.084	39.1	1073	10.6	1	
Ba	137	115	1	He	0.032	35.9	56	28.4	5	
W	182	165	1	He	0.812	10.6	11001	8.6	10	
Tl	205	209	1	He	0.036	13.0	1248	8.2	0.5	
Pb	208	209	1	He	0.026	2.0	1683	1.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1269006	1.86	1803797	70.35	30	120	
Sc	45	1	He	447049	1.88	574766	77.78	30	120	
Sc	45	2	NoGas	3588925	0.94	4296857	83.52	30	120	
Rh	103	1	He	1357847	0.70	1652712	82.16	30	120	
In	115	1	He	744739	0.24	852389	87.37	30	120	
Tb	159	1	He	2293378	1.16	2425956	94.54	30	120	
Ho	165	1	He	2335119	0.51	2452680	95.21	30	120	
Bi	209	1	He	1740382	0.94	1810473	96.13	30	120	

MTMSCCBDILH20-193 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/22/15 **Analyst:** AS **Instrument:** I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* =90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

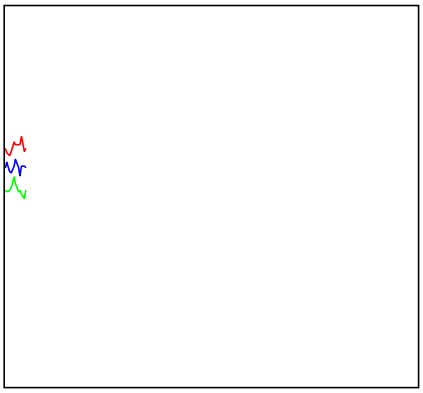
Level I Analyst: [signature] Date: 4/23/15 Time: 14:52-20:28
Level I Analyst: Date: Time:

Level II Reviewer: Karen L Conte Date: 4-24-15 Time: 14:52-20:28
Level II Reviewer: Date: Time:

Comments:

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	3133	3148.4	2.31
89	10000	5148	5177.6	2.81
205	10000	5748	5759.3	2.16
156/140	2	0.675 %	0.753 %	20.88
70/140	2	0.987 %	1.108 %	15.13
115	500	351	399.6	5.59
63	500	434	418.8	6.86
60	100	39	44.6	15.27
121	20	5	10.7	35.40
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	14.99	L/min
MU./Dil. Gas	0.65	L/min	Ar Gas Tank Press	5.85E+2	kPa			

Current Signal

[He]

Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1259	1310.0	4.41
51	50	41	42.5	10.50
52	200	99	110.3	13.83
51/59	5	3.255 %	3.247 %	10.45
52/59	20	7.861 %	8.420 %	12.92
7	50	24	15.2	36.45
89	2000	1536	1462.9	3.95
205	5000	3586	3519.0	2.47
6	20	3	1.3	90.83
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	14.99	L/min
MU./Dil. Gas	0.65	L/min	Ar Gas Tank Press	5.85E+2	kPa			

US EPA Tune Check Sample Report

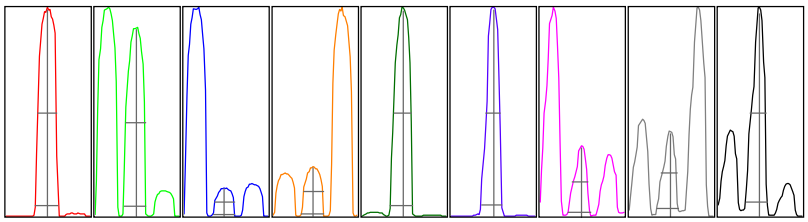
Batch Folder D:\Analytical Runs\I10042215A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	39308	0.80	5.00	
24	137578	1.54	5.00	
25	18200	1.48	5.00	
26	21091	1.71	5.00	
59	154157	0.30	5.00	
115	248898	0.25	5.00	
206	92385	0.68	5.00	
207	82690	0.56	5.00	
208	195008	0.23	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	39781	39353	39317	39159	38929
24	134097	137230	138076	139170	139316
25	17796	18170	18164	18345	18524
26	20671	20996	20860	21419	21509
59	154715	154282	153644	154432	153713
115	249921	248852	248582	248245	248888
206	92516	92915	91350	92845	92298
207	83511	82553	82523	82390	82475
208	195450	195157	194254	195191	194988

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6093	9.00	8.9 - 9.1		0.790	0.850	
24	21820	24.00	23.9 - 24.1		0.788	0.850	
25	2926	24.95	24.9 - 25.1		0.775	0.850	
26	3372	25.95	25.9 - 26.1		0.790	0.850	
59	25273	59.00	58.9 - 59.1		0.792	0.850	
115	47876	115.05	114.9 - 115.1		0.740	0.850	
206	18111	206.00	205.9 - 206.1		0.760	0.850	
207	15928	207.00	206.9 - 207.1		0.756	0.850	
208	38719	208.00	207.9 - 208.1		0.774	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

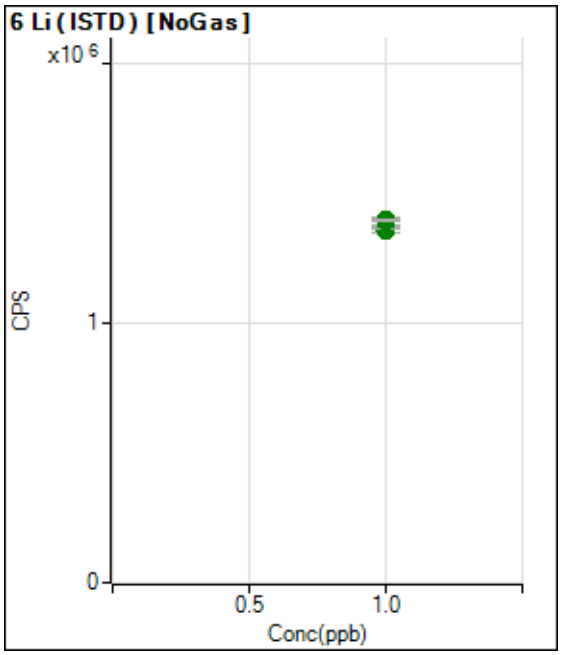
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

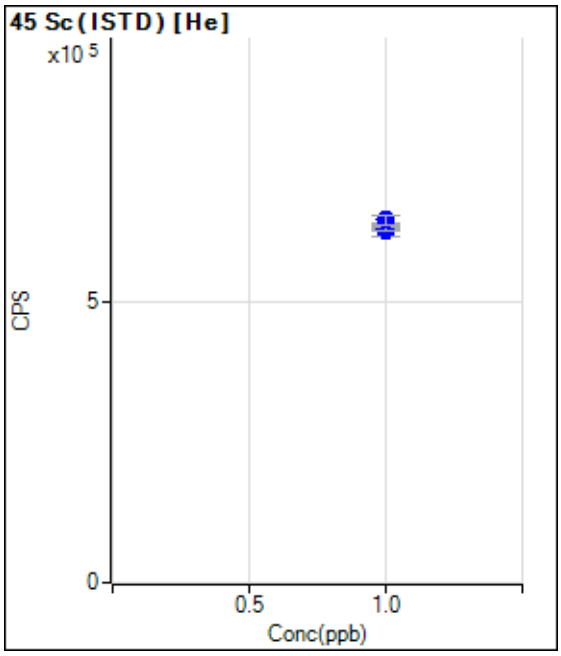
Calibration for 014SMPL.d

Batch Folder: D:\Analytical Runs\I10042215C.b\
Analysis File: I10042215C.batch.bin
DA Date-Time: 4/22/2015 3:44:27 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

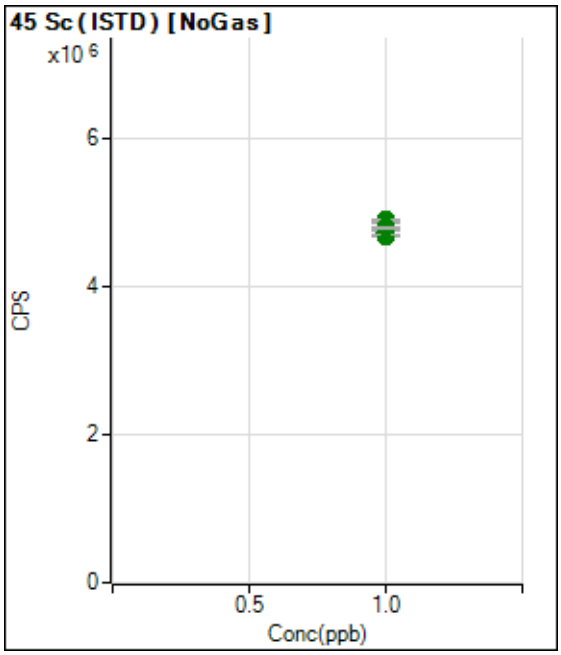
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/22/2015 2:56:39 PM
2	003CALS.d	STD1-1906323	4/22/2015 3:00:27 PM
3	004CALS.d	STD2-1904110	4/22/2015 3:04:15 PM
4	005CALS.d	STD3-1906333	4/22/2015 3:08:05 PM
5	006CALS.d	STD4-1906536	4/22/2015 3:11:51 PM



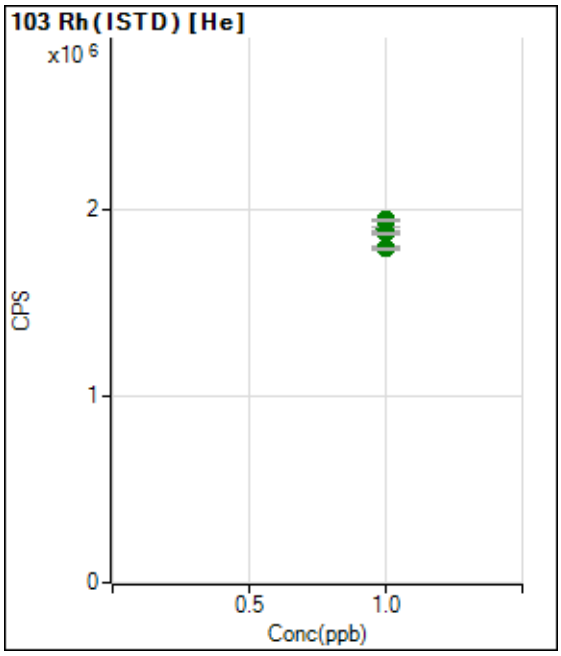
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1389655.32		A	1.3
2	☐	1.000		1357111.87		A	1.5
3	☐	1.000		1365209.99		A	0.2
4	☐	1.000		1398132.17		A	1.2
5	☐	1.000		1395034.51		A	0.3



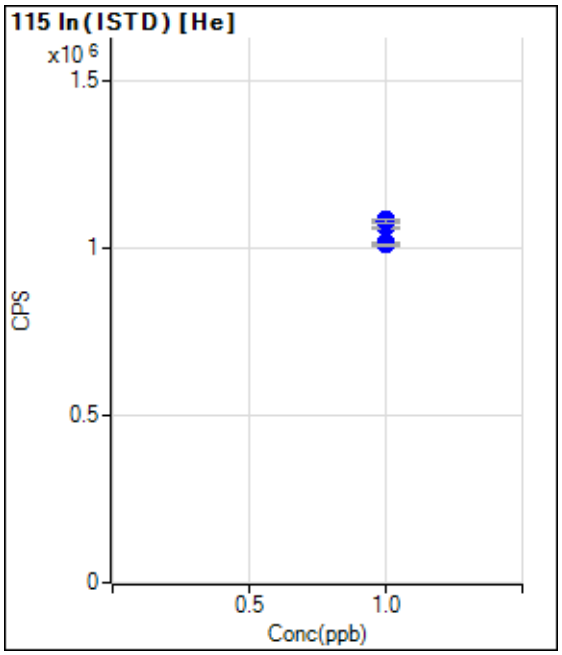
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		628608.62		P	0.5
2	☐	1.000		634725.63		P	1.2
3	☐	1.000		630420.30		P	4.2
4	☐	1.000		632141.21		P	1.1
5	☐	1.000		647896.50		P	2.6



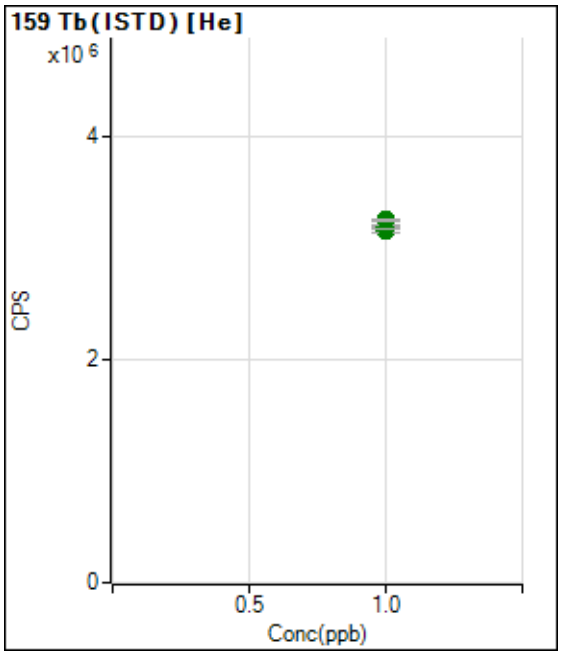
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4813296.20		A	1.5
2	☐	1.000		4676619.95		A	0.4
3	☐	1.000		4719343.15		A	1.2
4	☐	1.000		4898034.11		A	0.4
5	☐	1.000		4794715.23		A	0.6



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1894468.74		A	1.0
2	☐	1.000		1871729.72		A	0.5
3	☐	1.000		1794555.21		A	0.7
4	☐	1.000		1789010.00		A	0.8
5	☐	1.000		1944156.87		A	0.7



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1086371.43		P	0.2
2	☐	1.000		1062585.06		P	0.7
3	☐	1.000		1017533.21		P	0.4
4	☐	1.000		1011939.51		P	0.6
5	☐	1.000		1080936.13		P	1.0



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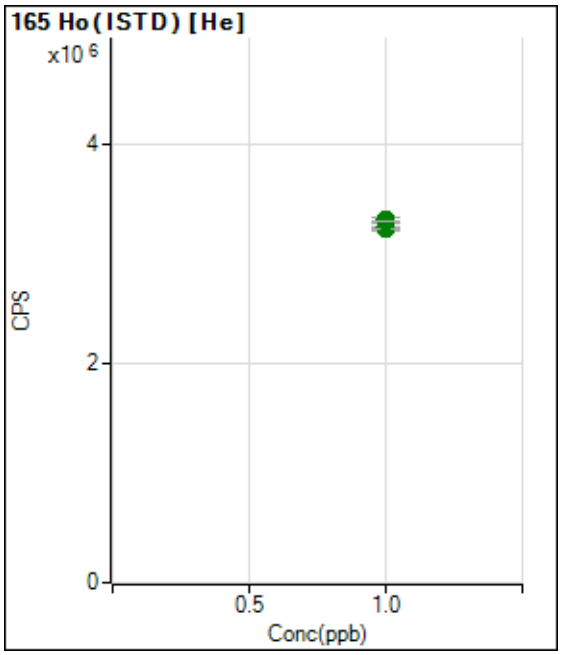
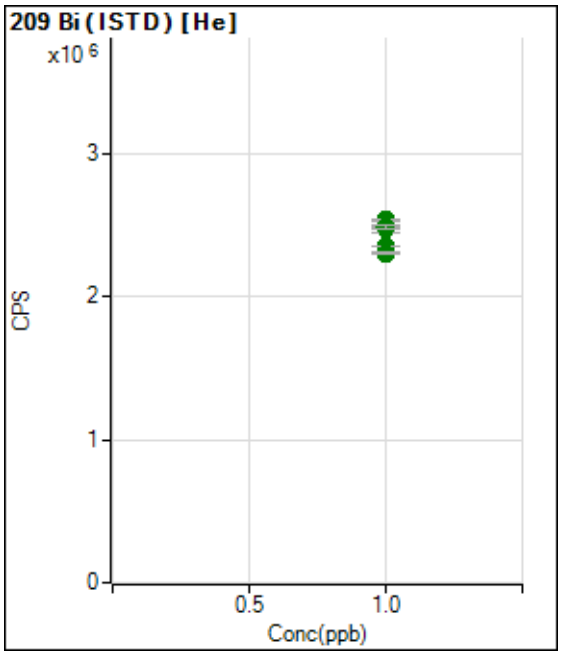
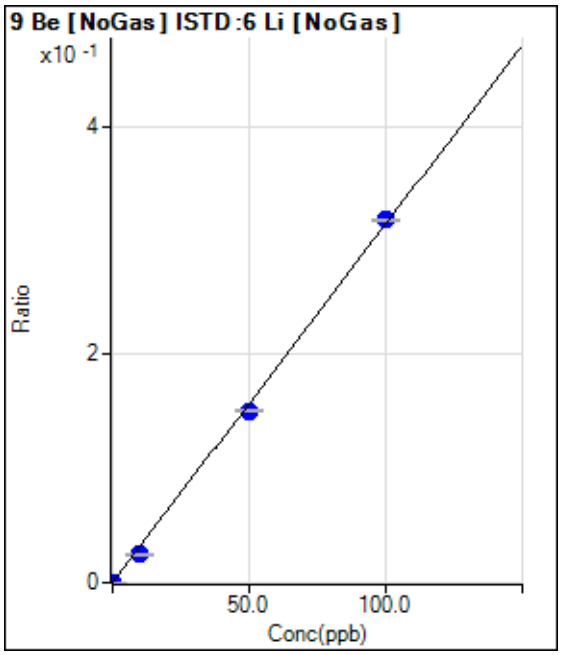
1	☐	1.000		3251379.18		A	0.2
2	☐	1.000		3202308.69		A	0.7
3	☐	1.000		3158032.44		A	1.7
4	☐	1.000		3182665.71		A	0.9
5	☐	1.000		3250918.20		A	0.9



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3312124.03		A	1.1
2	☐	1.000		3286570.49		A	0.6
3	☐	1.000		3231264.94		A	0.8
4	☐	1.000		3254943.62		A	1.7
5	☐	1.000		3301825.70		A	0.3



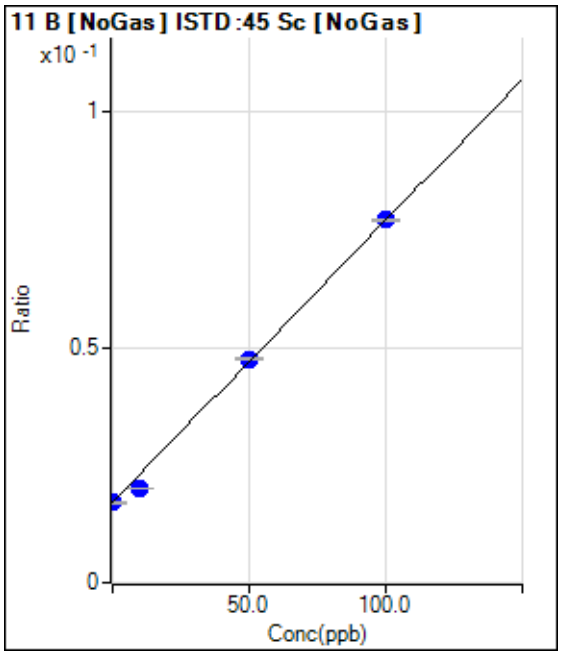
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2533294.07		A	0.5
2	☐	1.000		2466651.78		A	1.7
3	☐	1.000		2353558.31		A	0.2
4	☐	1.000		2300605.60		A	0.8
5	☐	1.000		2485448.79		A	1.4



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	211.12	0.0002	P	1.3
2	☐	10.000	7.844	33657.44	0.0248	P	3.7
3	☐	50.000	47.947	205937.56	0.1508	P	1.2
4	☐	100.000	101.242	445087.57	0.3184	P	0.5
5	☐			174.09	0.0001	P	32.3

y = 0.0031 * x + 1.5194E-004
R = 0.9995
DL = 0.001838
BEC = 0.04834

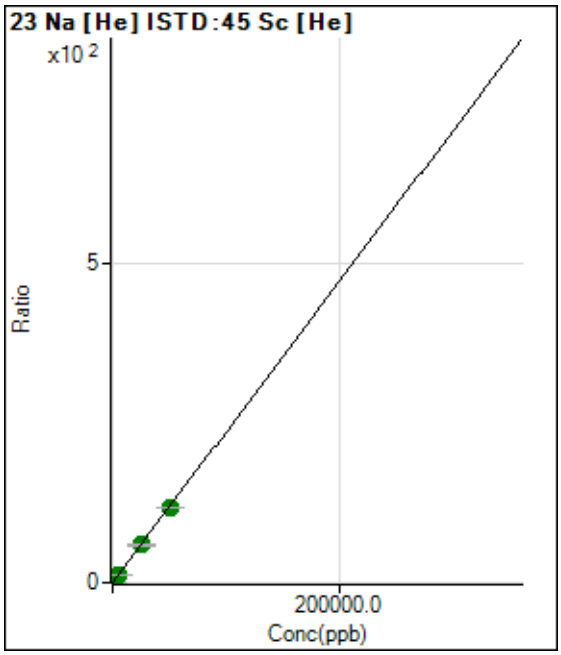
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	82180.37	0.0171	P	3.2
2	☐	10.000	5.074	94096.07	0.0201	P	0.1
3	☐	50.000	50.727	224126.71	0.0475	P	0.9
4	☐			59755.56	0.0122	P	0.8
5	☐	100.000	100.129	369729.10	0.0771	P	0.7

y = 5.9958E-004 * x + 0.0171
R = 0.9987
DL = 2.718
BEC = 28.48

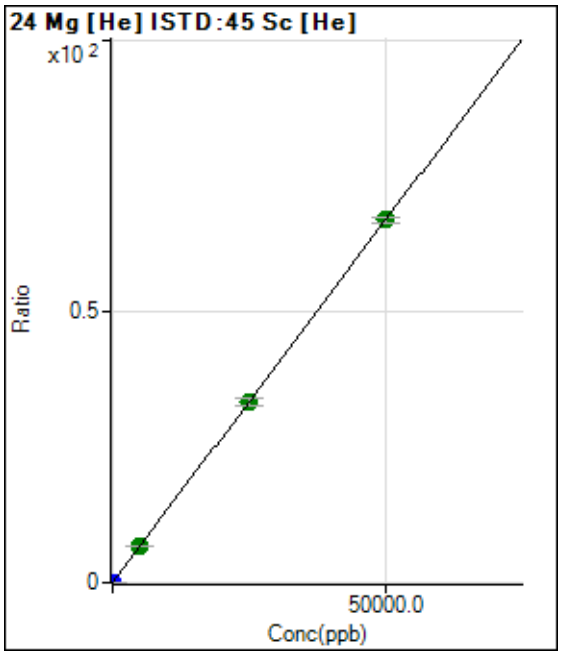
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	76365.42	0.1215	P	1.9
2	☐	5000.000	5142.659	7762385.80	12.2295	A	0.2
3	☐	25000.00	24879.74	36961197.60	58.6992	A	4.2
4	☐	50000.00	50045.86	74558561.85	117.951	A	0.6
5	☐			89260.25	0.1378	P	1.1

y = 0.0024 * x + 0.1215
R = 1.0000
DL = 2.986
BEC = 51.6

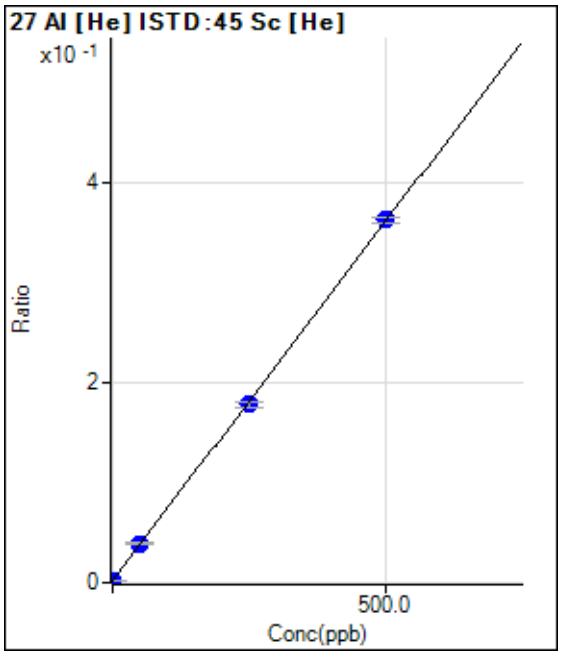
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1363.20	0.0022	P	3.8
2	☐	5000.000	5122.178	4346989.29	6.8492	A	1.0
3	☐	25000.00	24892.82	20958164.45	33.2774	A	3.6
4	☐	50000.00	50041.36	42282946.47	66.8944	A	1.4
5	☐			4541.55	0.0070	P	27.8

y = 0.0013 * x + 0.0022
R = 1.0000
DL = 0.1837
BEC = 1.622

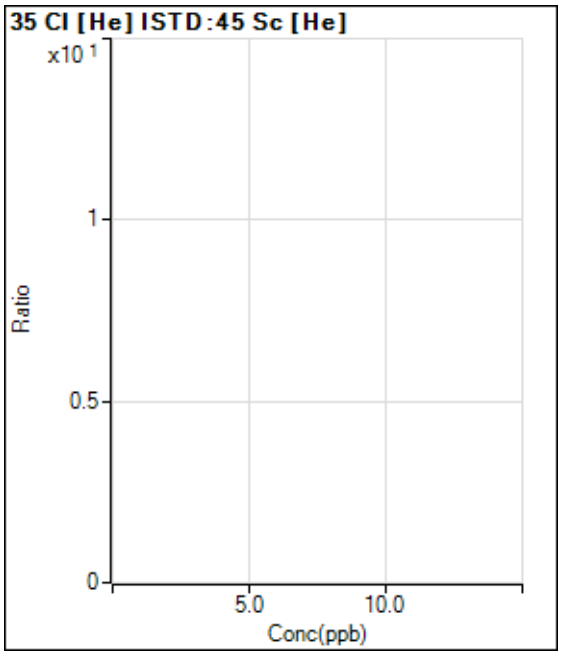
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1337.85	0.0021	P	5.6
2	☐	50.000	51.723	24970.28	0.0393	P	1.8
3	☐	250.000	245.254	112467.59	0.1786	P	3.6
4	☐	500.000	502.201	229730.35	0.3634	P	1.3
5	☐			2101.27	0.0032	P	4.8

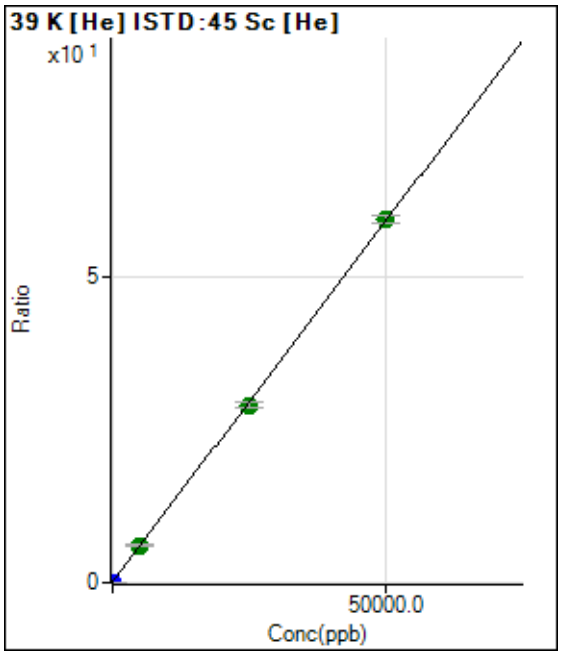
y = 7.1947E-004 * x + 0.0021
R = 0.9999
DL = 0.4956
BEC = 2.958

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			9396604.95	14.9485	A	0.5
2	☐			9934279.24	15.6522	A	0.9
3	☐			9987416.73	15.8627	A	4.6
4	☐			10092224.83	15.9673	A	2.0
5	☐			10756793.55	16.6083	A	2.1

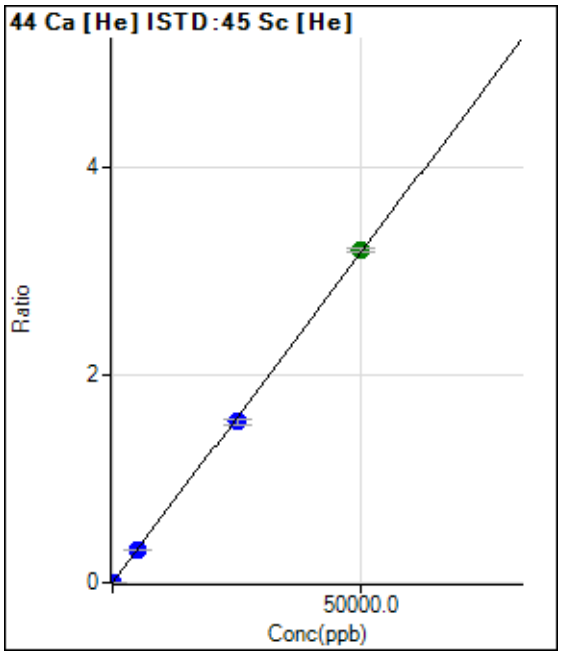
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33323.87	0.0530	P	2.2
2	☐	5000.000	5144.696	3882301.70	6.1167	A	1.4
3	☐	25000.00	24529.45	18243429.37	28.9640	A	3.1
4	☐	50000.00	50220.80	37444350.36	59.2443	A	2.3
5	☐			41570.89	0.0642	P	0.7

y = 0.0012 * x + 0.0530
R = 0.9999
DL = 2.942
BEC = 44.98

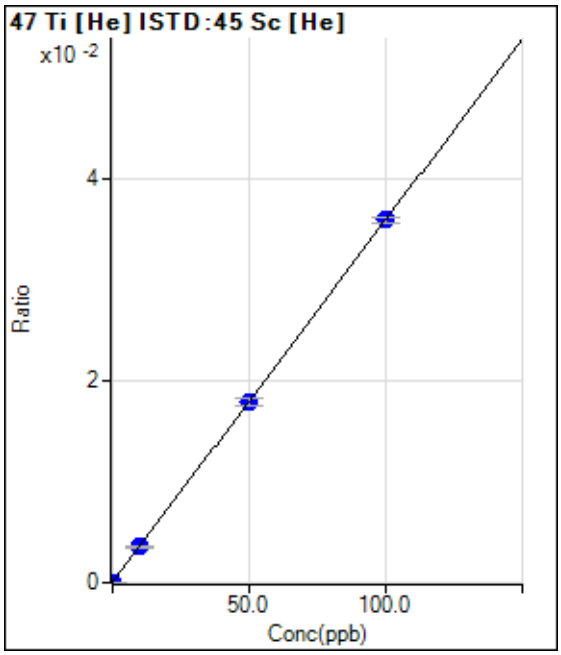
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	409.63	0.0007	P	9.4
2	☐	5000.000	5047.203	204244.95	0.3218	P	0.8
3	☐	25000.00	24347.64	976159.70	1.5499	P	3.3
4	☐	50000.00	50321.45	2024322.87	3.2026	A	1.1
5	☐			930.90	0.0014	P	0.9

y = 6.3630E-005 * x + 6.5170E-004
R = 0.9998
DL = 2.889
BEC = 10.24

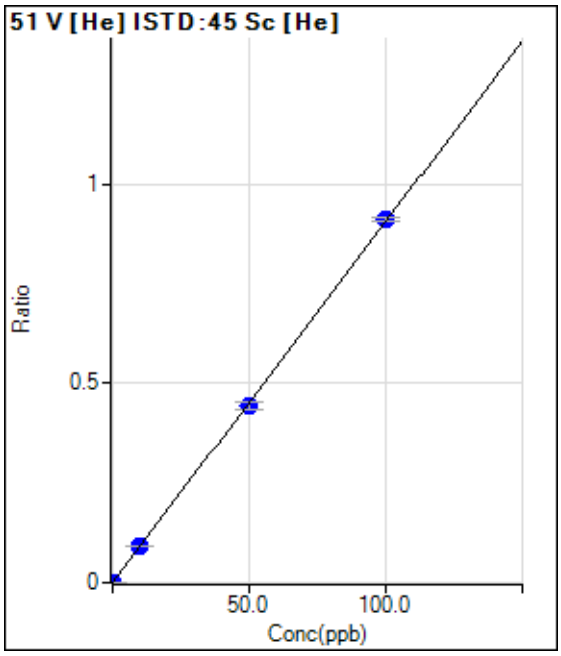
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24.44	0.0000	P	41.4
2	☐	10.000	9.833	2261.28	0.0036	P	3.8
3	☐	50.000	49.885	11281.39	0.0179	P	4.5
4	☐			40.00	0.0001	P	36.3
5	☐	100.000	100.074	23251.63	0.0359	P	1.7

y = 3.5833E-004 * x + 3.8860E-005
R = 1.0000
DL = 0.1347
BEC = 0.1084

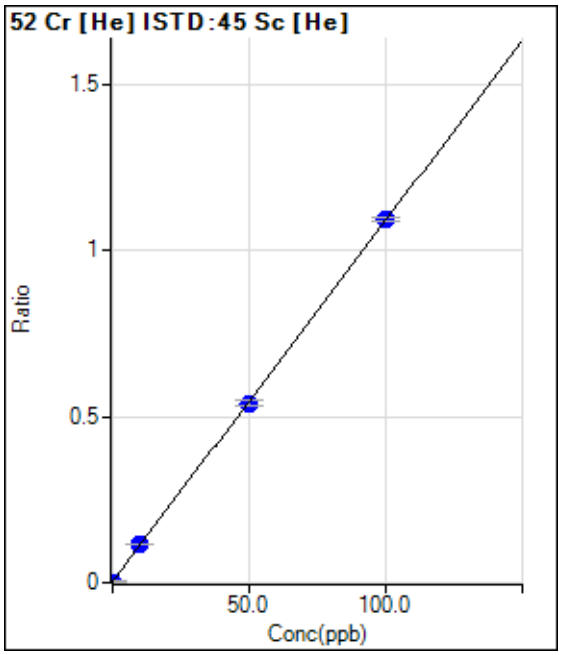
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-124.28	-0.0002	P	-214.
2	☐	10.000	10.030	57505.94	0.0906	P	1.7
3	☐	50.000	48.922	278770.28	0.4427	P	4.1
4	☐	100.000	100.536	575177.05	0.9100	P	1.2
5	☐			253.20	0.0004	P	189.2

y = 0.0091 * x - 1.9709E-004
R = 0.9999
DL = 0.1399
BEC = -0.02177

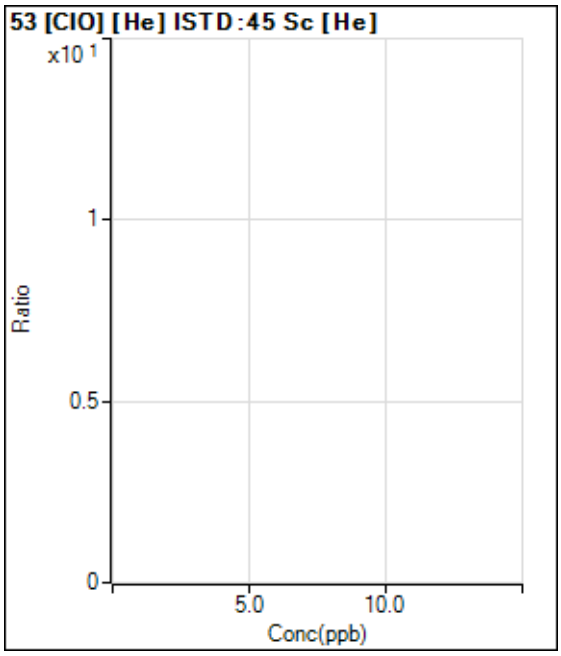
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1785.67	0.0028	P	4.1
2	☐	10.000	10.251	72560.63	0.1143	P	1.1
3	☐	50.000	49.488	340819.98	0.5411	P	2.9
4	☐	100.000	100.231	690834.02	1.0929	P	1.0
5	☐			3019.17	0.0047	P	3.0

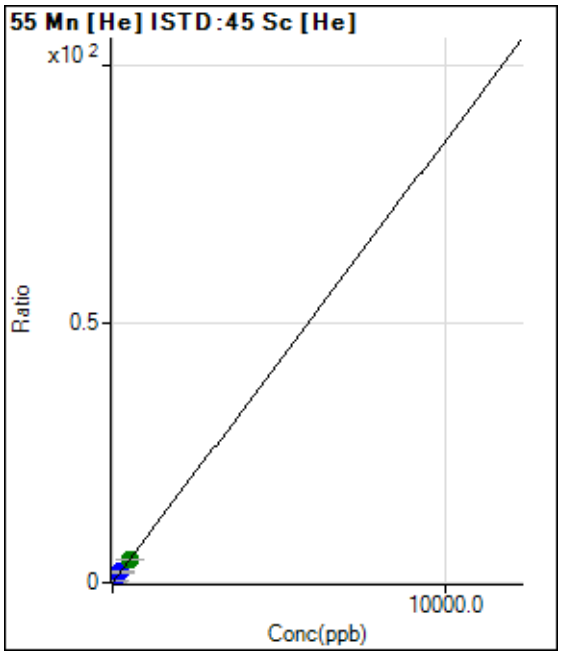
y = 0.0109 * x + 0.0028
R = 1.0000
DL = 0.03175
BEC = 0.2612

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			648.20	0.0010	P	13.6
2	☐			9113.81	0.0144	P	1.0
3	☐			41923.78	0.0665	P	1.1
4	☐			84639.70	0.1339	P	1.2
5	☐			640.78	0.0010	P	27.3

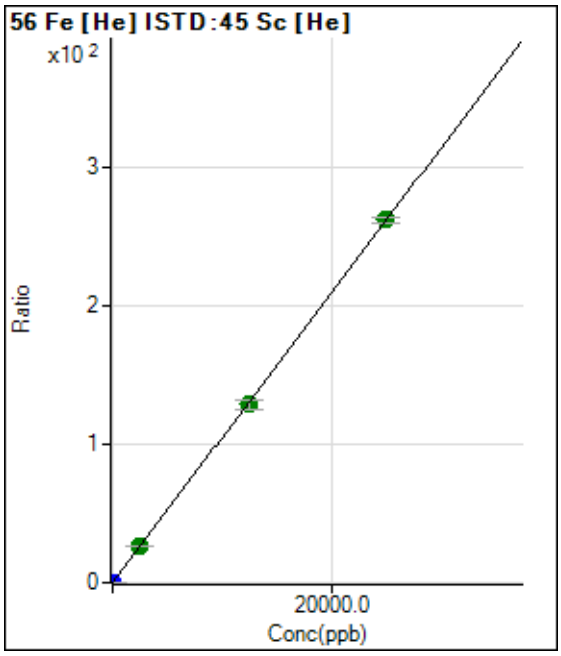
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	472.24	0.0008	P	3.9
2	☐	50.000	50.325	274057.60	0.4318	P	1.4
3	☐	250.000	240.166	1295962.24	2.0578	P	3.6
4	☐	500.000	504.884	2734298.08	4.3252	A	1.3
5	☐			1312.29	0.0020	P	4.8

y = 0.0086 * x + 7.5133E-004
R = 0.9997
DL = 0.01028
BEC = 0.08772

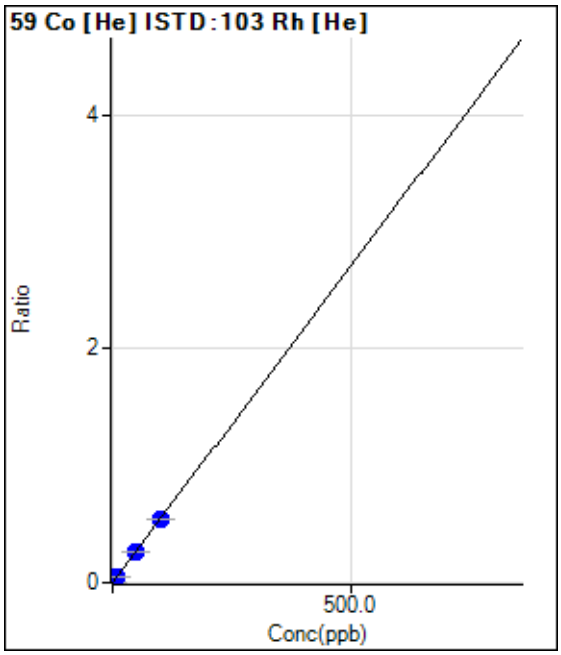
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5007.42	0.0080	P	3.2
2	☐	2500.000	2550.010	16911295.44	26.6454	A	1.2
3	☐	12500.00	12315.30	81000530.12	128.653	A	4.7
4	☐	25000.00	25087.34	165654397.8	262.070	A	1.5
5	☐			193090.48	0.2966	P	28.1

y = 0.0104 * x + 0.0080
R = 0.9999
DL = 0.07323
BEC = 0.7625

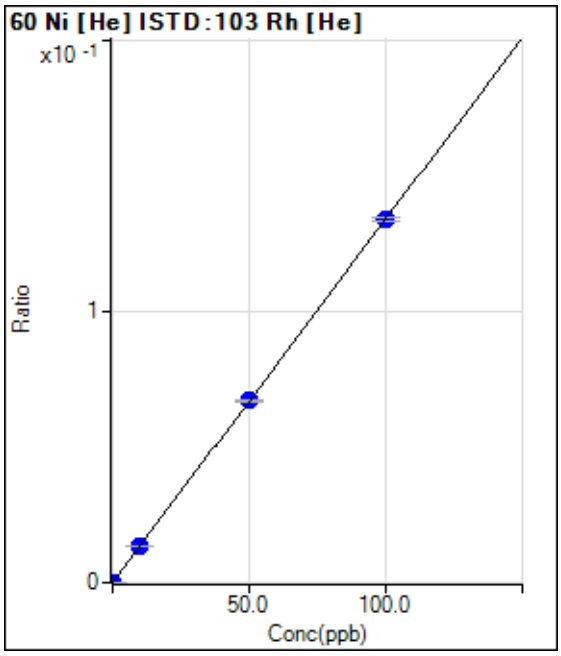
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.89	0.0000	P	62.2
2	☐	10.000	10.107	102346.26	0.0547	P	2.2
3	☐	50.000	49.466	480201.06	0.2676	P	1.0
4	☐	100.000	100.256	970195.83	0.5423	P	1.3
5	☐			140.00	0.0001	P	17.8

y = 0.0054 * x + 1.0003E-005
R = 1.0000
DL = 0.003452
BEC = 0.001849

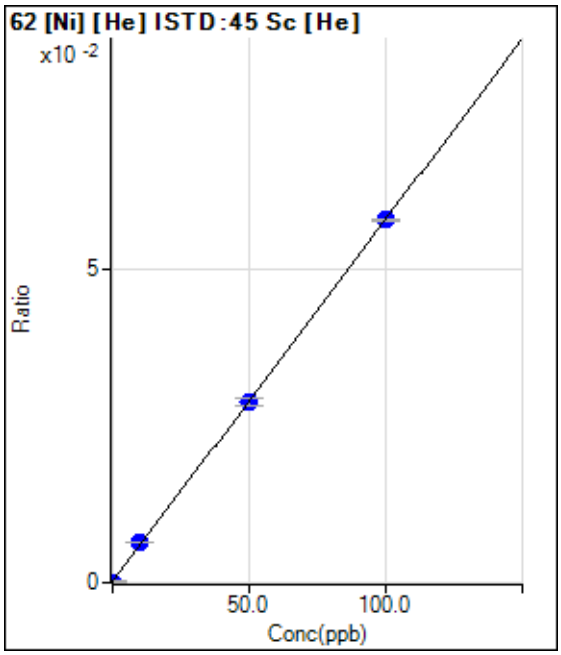
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	89.9
2	☐	10.000	9.994	25074.31	0.0134	P	1.7
3	☐	50.000	50.257	120793.33	0.0673	P	1.0
4	☐	100.000	99.872	239271.52	0.1338	P	1.1
5	☐			184.45	0.0001	P	4.3

y = 0.0013 * x + 1.4582E-005
R = 1.0000
DL = 0.02937
BEC = 0.01089

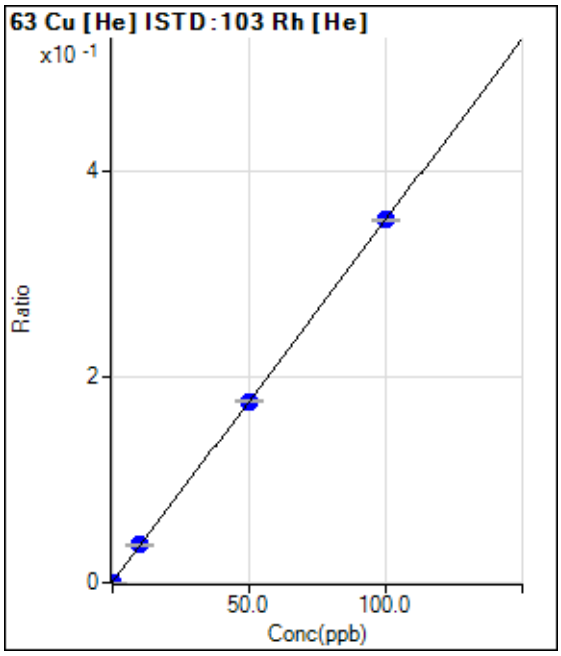
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.44	0.0002	P	19.8
2	☐	10.000	10.921	4106.08	0.0065	P	1.7
3	☐	50.000	49.900	18272.79	0.0290	P	4.1
4	☐	100.000	99.958	36650.61	0.0580	P	0.5
5	☐			156.67	0.0002	P	3.7

y = 5.7851E-004 * x + 1.5033E-004
R = 1.0000
DL = 0.1544
BEC = 0.2599

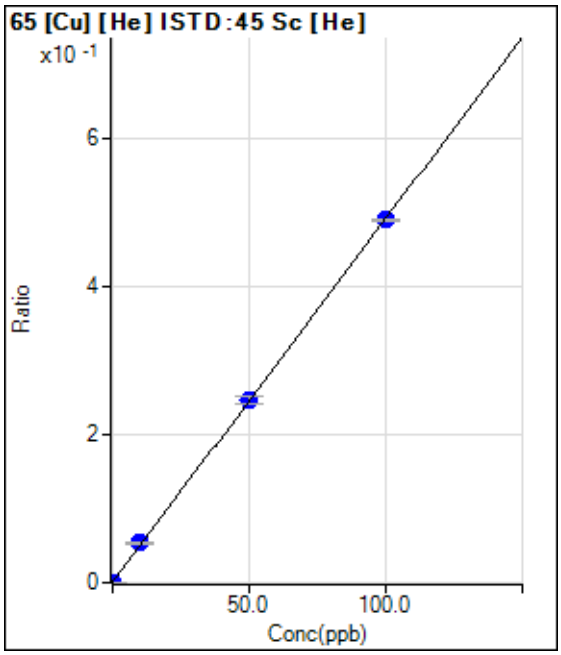
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	620.02	0.0003	P	3.1
2	☐	10.000	10.329	68593.22	0.0366	P	2.5
3	☐	50.000	49.908	315530.55	0.1758	P	0.9
4	☐	100.000	100.013	629755.93	0.3520	P	0.7
5	☐			1044.49	0.0005	P	6.6

y = 0.0035 * x + 3.2733E-004
R = 1.0000
DL = 0.008645
BEC = 0.09308

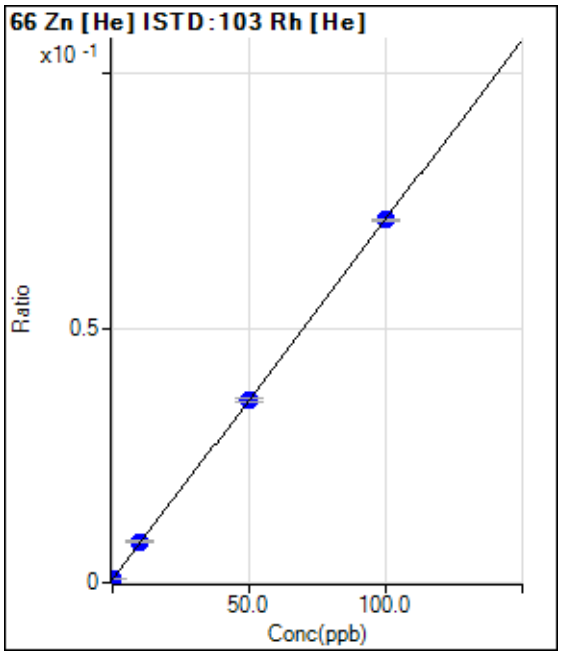
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	273.34	0.0004	P	10.1
2	☐	10.000	10.812	33886.52	0.0534	P	1.2
3	☐	50.000	50.311	155457.28	0.2469	P	3.8
4	☐	100.000	99.763	309152.29	0.4891	P	0.6
5	☐			532.24	0.0008	P	4.2

y = 0.0049 * x + 4.3470E-004
R = 1.0000
DL = 0.02701
BEC = 0.08875

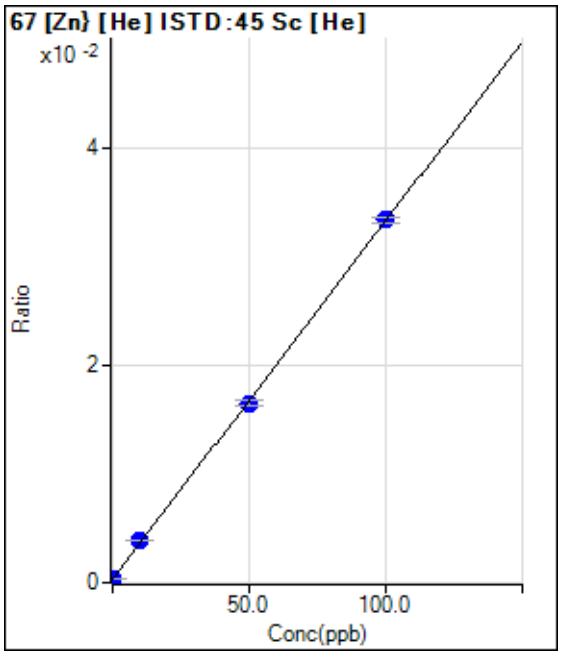
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1127.83	0.0006	P	3.5
2	☐	10.000	10.613	15154.32	0.0081	P	2.1
3	☐	50.000	50.024	64511.94	0.0360	P	2.6
4	☐	100.000	99.927	127417.34	0.0712	P	0.8
5	☐			1871.24	0.0010	P	5.6

y = 7.0679E-004 * x + 5.9526E-004
R = 1.0000
DL = 0.08938
BEC = 0.8422

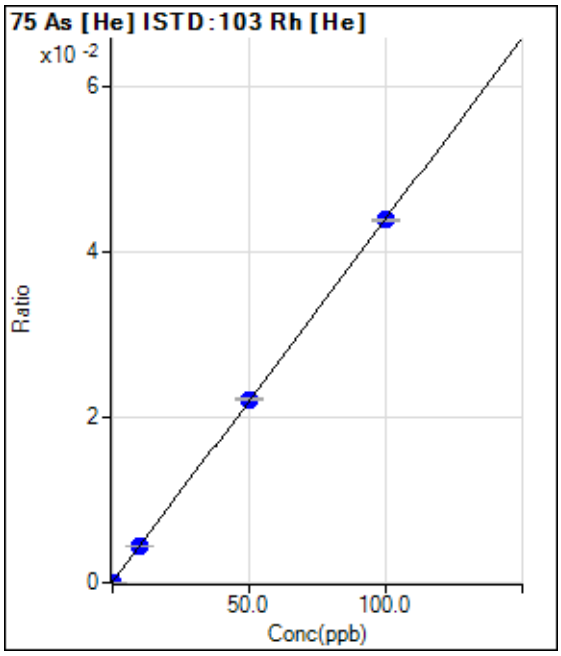
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	191.11	0.0003	P	16.0
2	☐	10.000	10.752	2439.09	0.0038	P	1.9
3	☐	50.000	49.138	10377.54	0.0165	P	2.8
4	☐	100.000	100.356	21070.32	0.0333	P	1.7
5	☐			264.45	0.0004	P	10.3

y = 3.2907E-004 * x + 3.0390E-004
R = 0.9999
DL = 0.4445
BEC = 0.9235

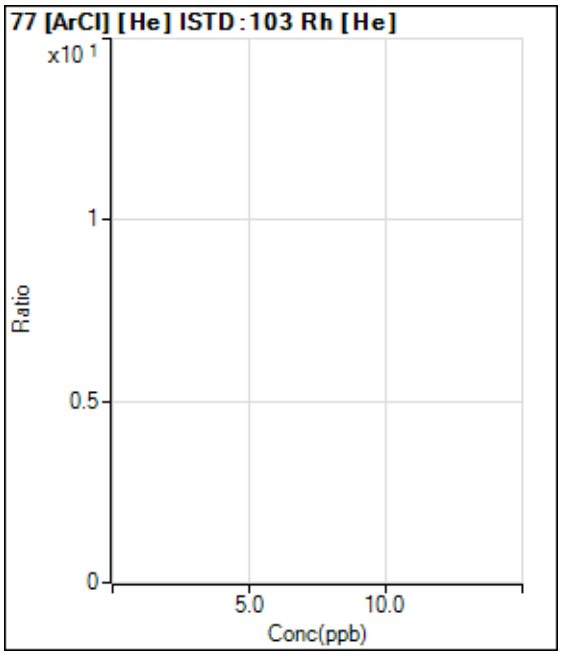
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	96.14	0.0001	P	10.8
2	☐	10.000	10.009	8327.69	0.0044	P	2.6
3	☐	50.000	50.393	39831.06	0.0222	P	0.7
4	☐	100.000	99.802	78552.40	0.0439	P	0.4
5	☐			1029.39	0.0005	P	11.4

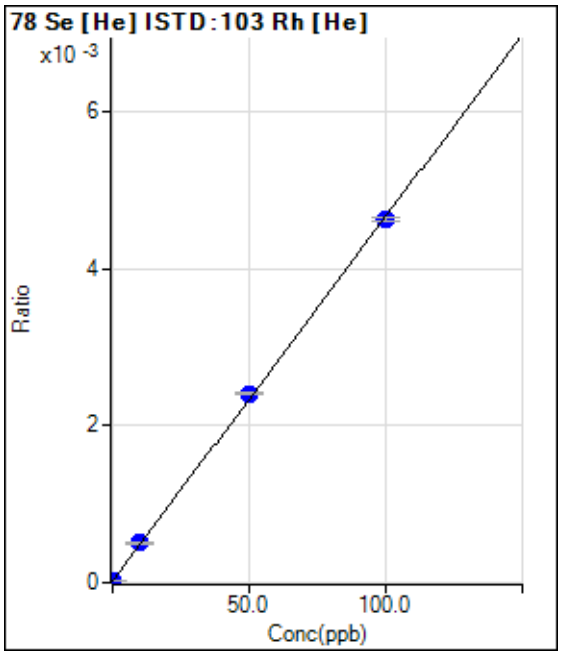
y = 4.3945E-004 * x + 5.0786E-005
R = 1.0000
DL = 0.03754
BEC = 0.1156

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			14.81	0.0000	P	86.6
2	☐			274.09	0.0001	P	32.4
3	☐			1155.65	0.0006	P	9.0
4	☐			2529.92	0.0014	P	3.7
5	☐			25.92	0.0000	P	25.4

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	34.33	0.0000	P	7.3
2	☐	10.000	10.438	940.33	0.0005	P	1.2
3	☐	50.000	51.547	4324.24	0.0024	P	1.0
4	☐	100.000	99.183	8265.43	0.0046	P	1.0
5	☐			121.06	0.0001	P	14.6

y = 4.6397E-005 * x + 1.8128E-005

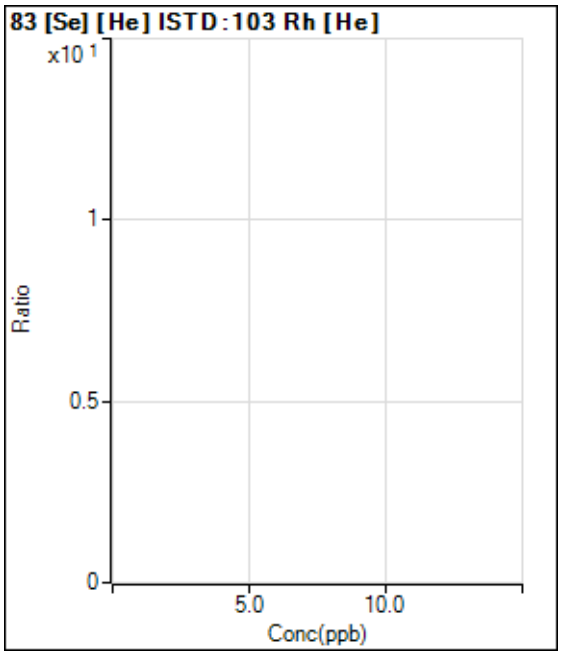
R = 0.9998

DL = 0.08536

BEC = 0.3907

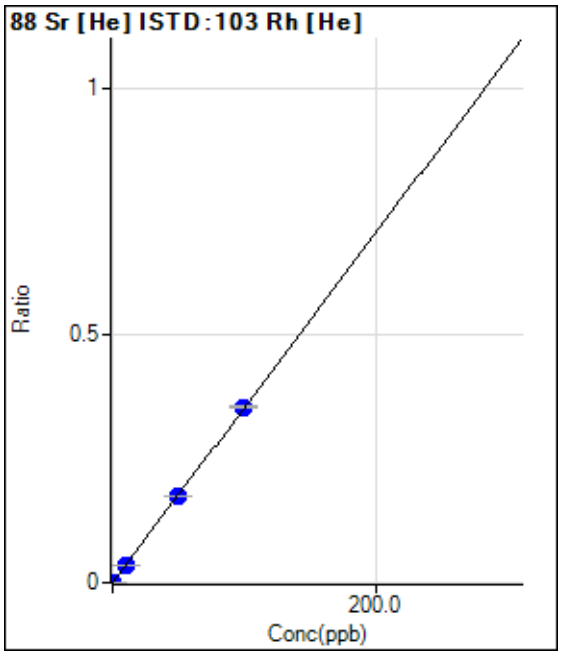
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			76.10	0.0000	P	5.7
2	☐			92.26	0.0000	P	11.6
3	☐			75.09	0.0000	P	10.2
4	☐			79.46	0.0000	P	5.0
5	☐			88.89	0.0000	P	13.2

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	173.34	0.0001	P	16.6
2	☐	10.000	9.922	65687.41	0.0351	P	2.7
3	☐	50.000	49.217	311758.09	0.1737	P	0.4
4	☐	100.000	100.399	633830.93	0.3543	P	0.7
5	☐			238.89	0.0001	P	12.4

y = 0.0035 * x + 9.1430E-005

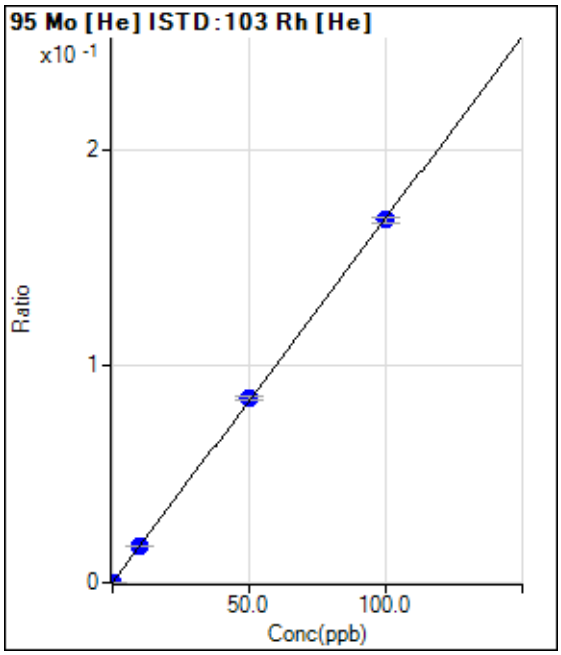
R = 0.9999

DL = 0.01288

BEC = 0.02592

Weight: <None>

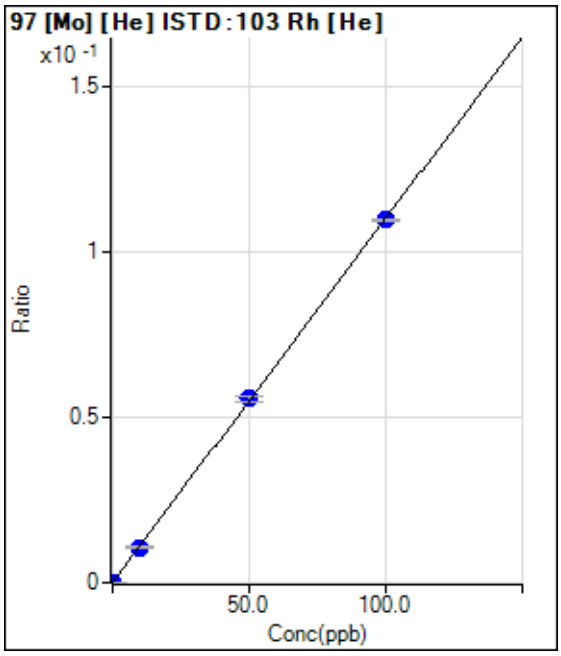
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.67	0.0000	P	5.7
2	☐	10.000	10.025	31607.51	0.0169	P	3.0
3	☐	50.000	50.690	152884.30	0.0852	P	2.3
4	☐			3011.42	0.0017	P	16.3
5	☐	100.000	99.652	325523.54	0.1674	P	1.6

y = 0.0017 * x + 4.5731E-005
R = 1.0000
DL = 0.004627
BEC = 0.02722

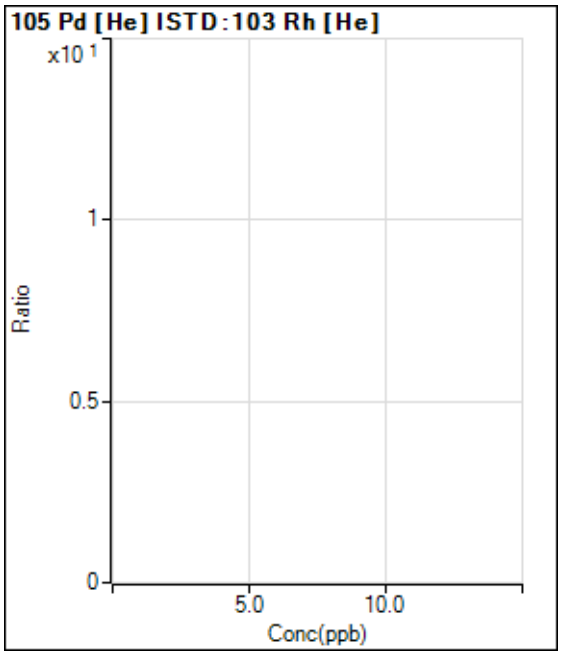
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88.90	0.0000	P	33.2
2	☐	10.000	9.717	20071.57	0.0107	P	2.6
3	☐	50.000	50.633	99938.43	0.0557	P	2.8
4	☐			2155.80	0.0012	P	23.0
5	☐	100.000	99.712	213113.87	0.1096	P	0.8

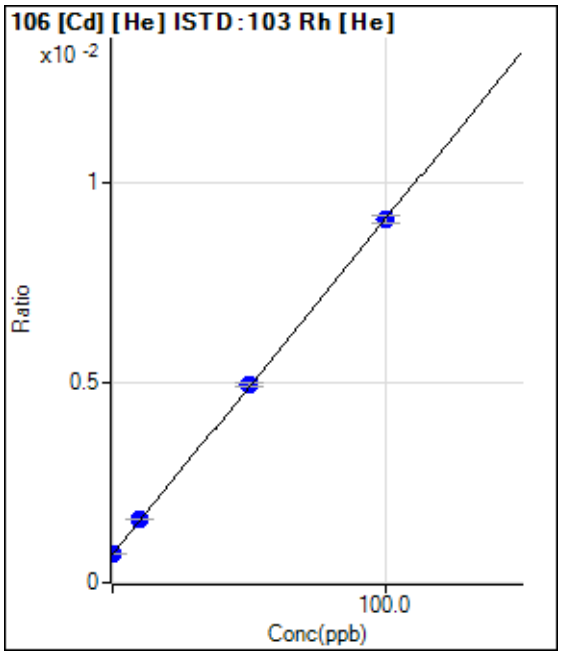
y = 0.0011 * x + 4.6922E-005
R = 1.0000
DL = 0.04247
BEC = 0.0427

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1292.70	0.0007	P	3.3
2	☐			1366.79	0.0007	P	4.8
3	☐			1511.25	0.0008	P	11.0
4	☐			1774.24	0.0010	P	12.0
5	☐			1507.55	0.0008	P	2.9

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1347.87	0.0007	P	3.8
2	☐	10.000	10.352	2953.46	0.0016	P	2.1
3	☐	50.000	50.539	8866.93	0.0049	P	1.5
4	☐	100.000	99.695	16199.46	0.0091	P	2.1
5	☐			1495.69	0.0008	P	4.6

y = 8.3698E-005 * x + 7.1136E-004

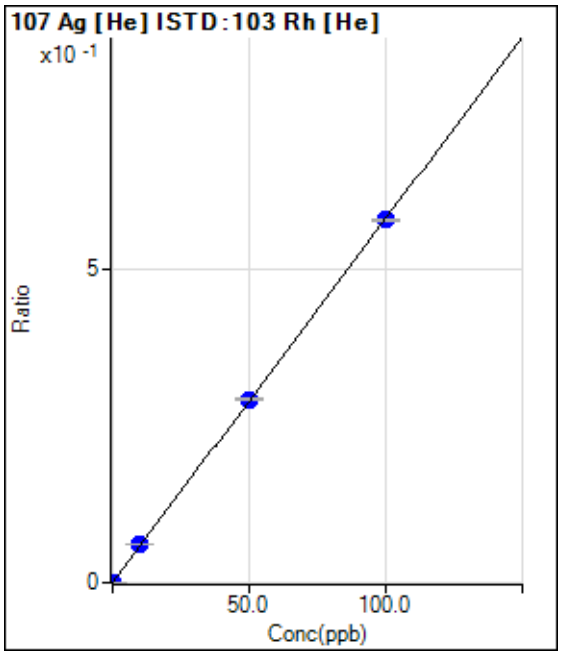
R = 1.0000

DL = 0.9692

BEC = 8.499

Weight: <None>

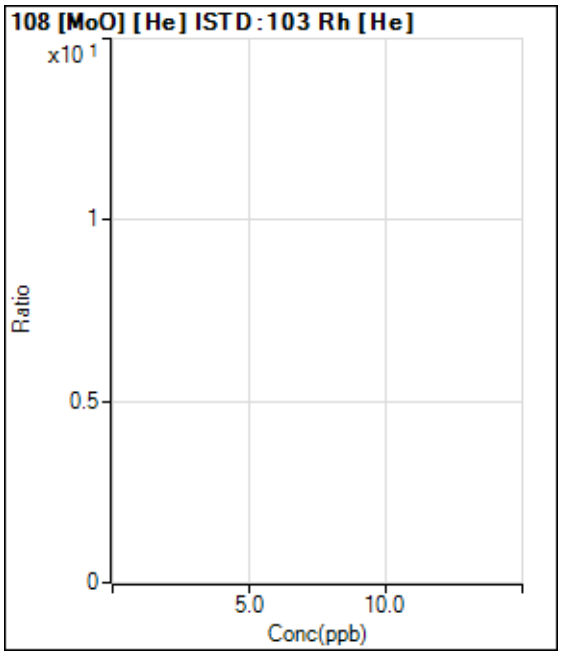
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	58.5
2	☐	10.000	10.508	114086.73	0.0610	P	1.3
3	☐	50.000	50.377	524216.35	0.2921	P	1.3
4	☐	100.000	99.761	1034892.11	0.5785	P	0.5
5	☐			281.12	0.0001	P	13.7

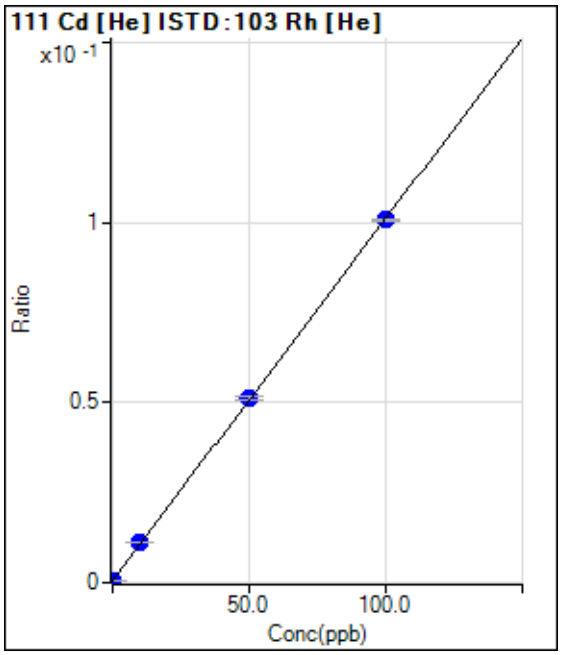
y = 0.0058 * x + 2.3462E-005
R = 1.0000
DL = 0.0071
BEC = 0.004046

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			0.00	0.0000	P	
2	☐			1251.96	0.0007	P	25.5
3	☐			6290.35	0.0035	P	4.7
4	☐			11370.95	0.0064	P	4.2
5	☐			107.41	0.0001	P	61.8

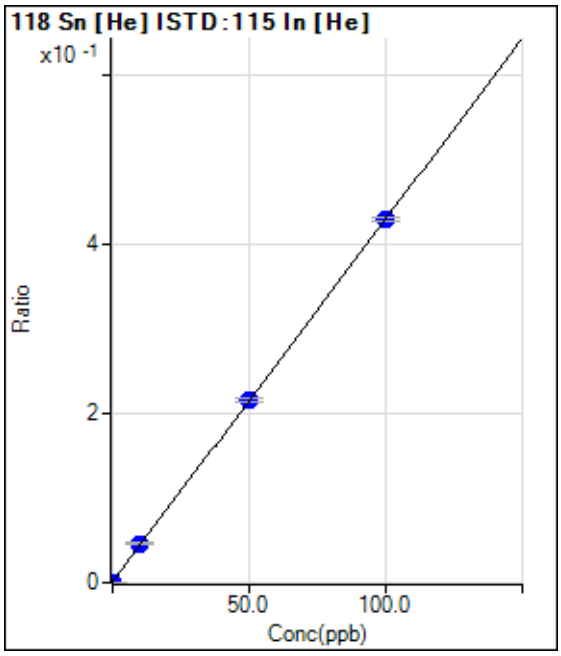
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1032.47	0.0005	P	3.8
2	☐	10.000	10.423	20626.30	0.0110	P	0.5
3	☐	50.000	50.391	91855.96	0.0512	P	2.0
4	☐	100.000	99.762	180348.86	0.1008	P	0.5
5	☐			1154.06	0.0006	P	9.6

y = 0.0010 * x + 5.4490E-004
R = 1.0000
DL = 0.06256
BEC = 0.5422

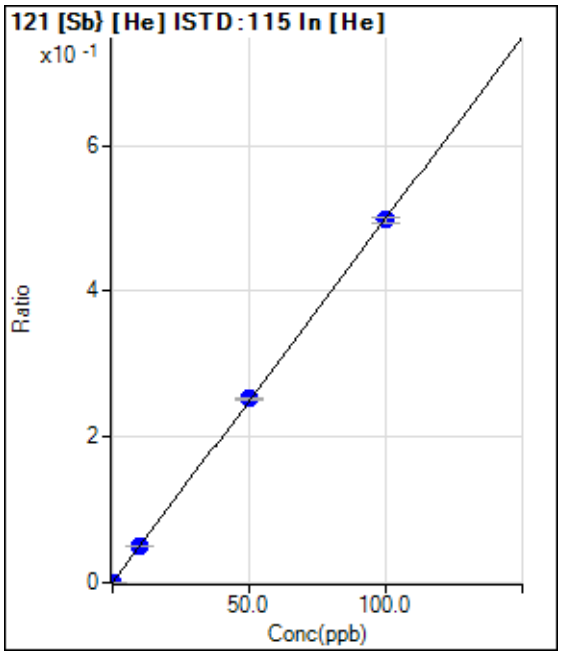
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1129.73	0.0010	P	13.3
2	☐	10.000	10.522	49049.70	0.0462	P	2.3
3	☐	50.000	50.190	220018.11	0.2162	P	1.8
4	☐			3237.52	0.0032	P	0.8
5	☐	100.000	99.853	463889.30	0.4292	P	1.1

y = 0.0043 * x + 0.0010
R = 1.0000
DL = 0.097
BEC = 0.2425

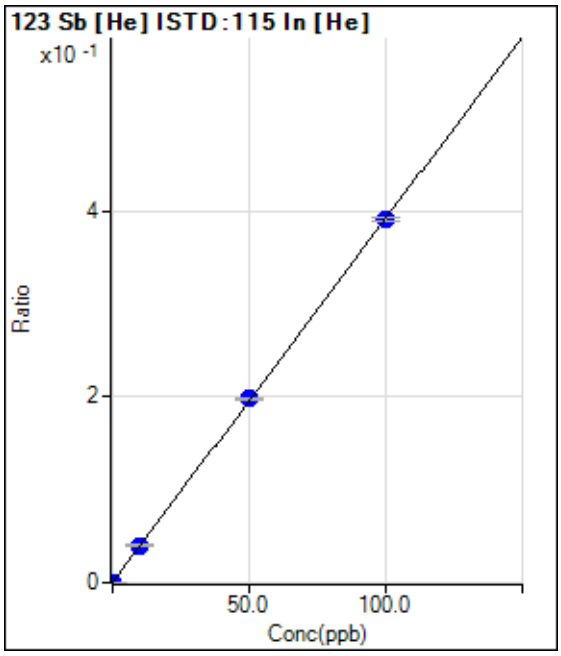
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	257.78	0.0002	P	8.4
2	☐	10.000	10.160	54137.19	0.0509	P	1.9
3	☐	50.000	50.488	256629.52	0.2522	P	1.6
4	☐			3942.74	0.0039	P	12.7
5	☐	100.000	99.740	538299.91	0.4980	P	1.3

y = 0.0050 * x + 2.3726E-004
R = 1.0000
DL = 0.01199
BEC = 0.04754

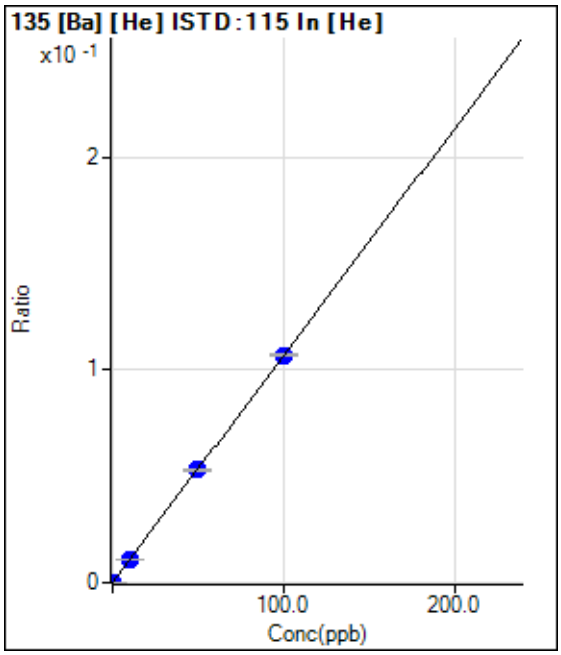
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	208.90	0.0002	P	14.8
2	☐	10.000	10.244	42806.70	0.0403	P	0.9
3	☐	50.000	50.525	201421.82	0.1980	P	0.9
4	☐			3187.02	0.0031	P	13.6
5	☐	100.000	99.713	422058.78	0.3905	P	1.0

y = 0.0039 * x + 1.9229E-004
R = 1.0000
DL = 0.02186
BEC = 0.04913

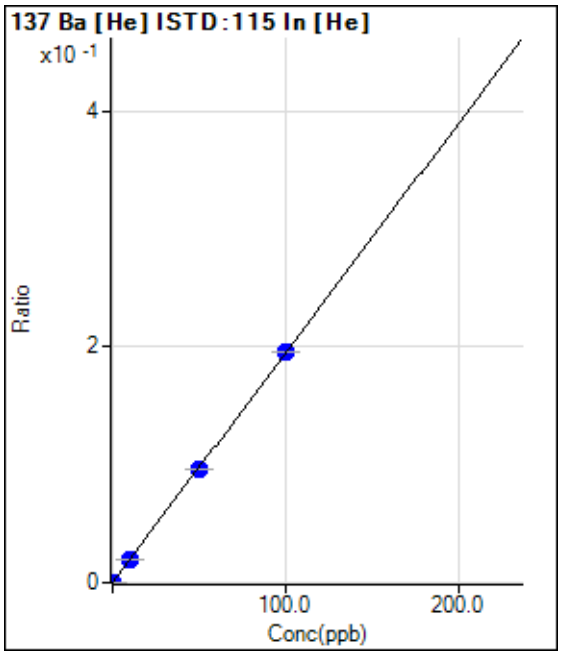
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24.44	0.0000	P	31.3
2	☐	10.000	9.758	11081.51	0.0104	P	0.4
3	☐	50.000	49.553	53797.23	0.0529	P	1.1
4	☐	100.000	100.248	108212.50	0.1069	P	0.5
5	☐			65.56	0.0001	P	29.8

y = 0.0011 * x + 2.2491E-005
R = 1.0000
DL = 0.01978
BEC = 0.02109

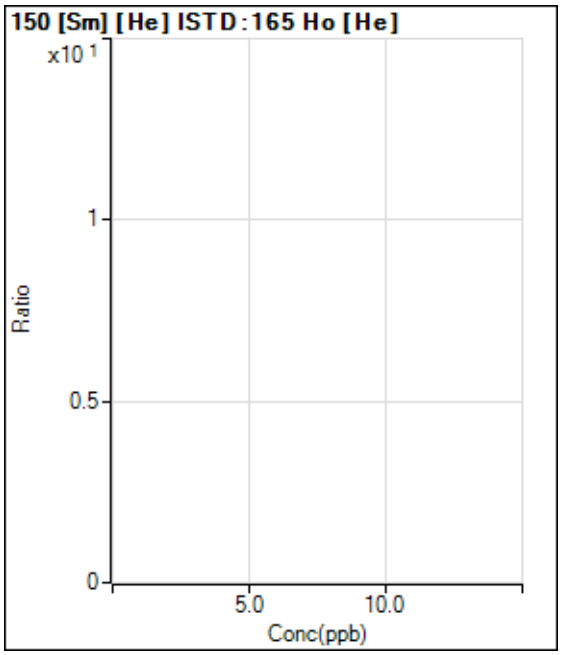
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	71.11	0.0001	P	16.7
2	☐	10.000	9.983	20766.21	0.0195	P	2.5
3	☐	50.000	49.333	98023.32	0.0963	P	0.3
4	☐	100.000	100.335	198194.61	0.1959	P	0.3
5	☐			152.23	0.0001	P	6.5

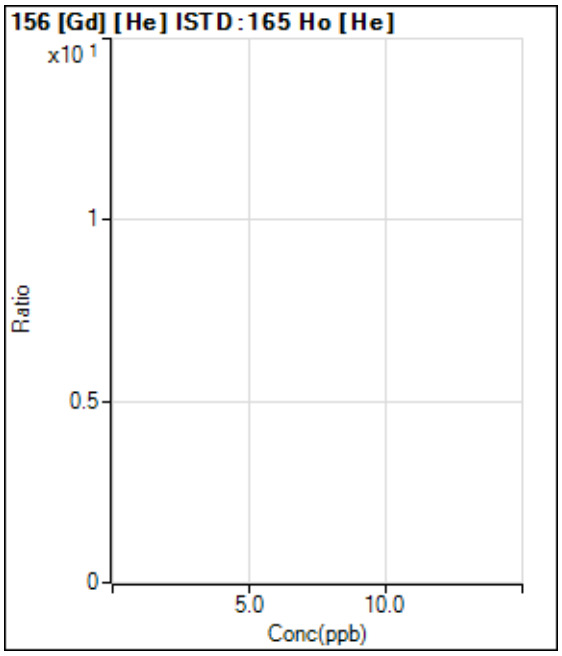
y = 0.0020 * x + 6.5472E-005
R = 1.0000
DL = 0.01678
BEC = 0.03355

Weight: <None>
Min Conc: <None>



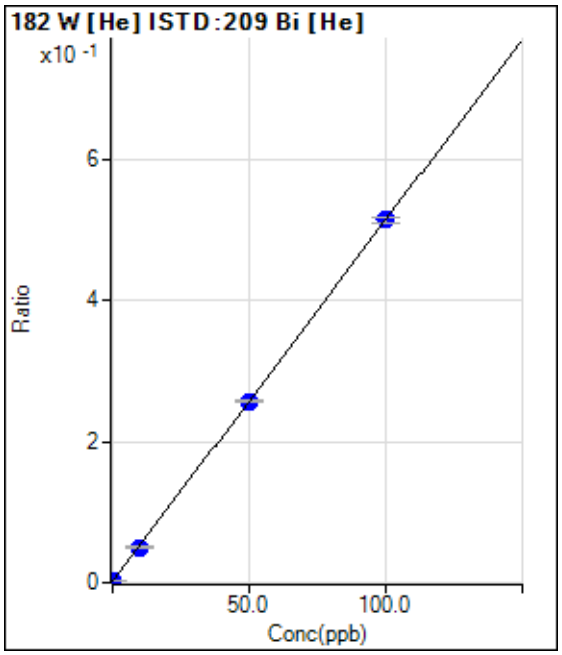
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4.67	0.0000	P	108.6
2	☐			2.67	0.0000	P	173.2
3	☐			7.33	0.0000	P	102.6
4	☐			14.00	0.0000	P	63.8
5	☐			4.67	0.0000	P	65.6

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			24.00	0.0000	P	7.3
2	☐			11.33	0.0000	P	36.6
3	☐			14.00	0.0000	P	51.7
4	☐			24.00	0.0000	P	37.9
5	☐			11.33	0.0000	P	20.5

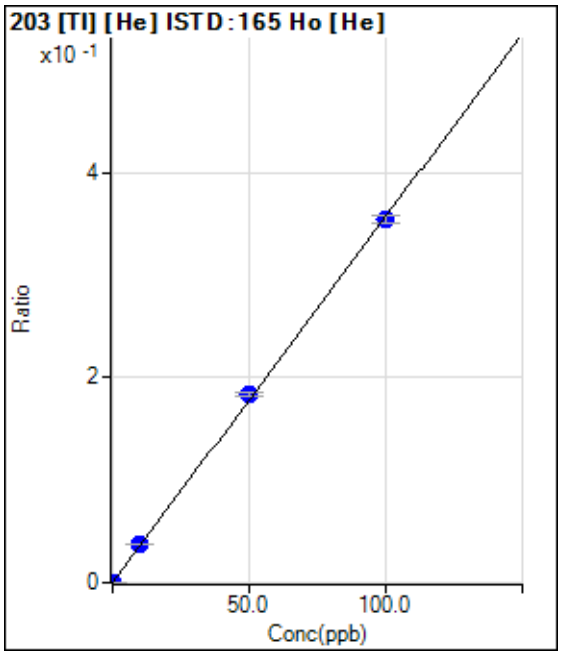
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3719.14	0.0015	P	8.4
2	☐	10.000	9.390	122298.10	0.0496	P	4.6
3	☐	50.000	49.894	605435.87	0.2572	P	0.7
4	☐			15419.27	0.0067	P	17.2
5	☐	100.000	100.114	1279074.95	0.5147	P	1.4

y = 0.0051 * x + 0.0015
R = 1.0000
DL = 0.07255
BEC = 0.2863

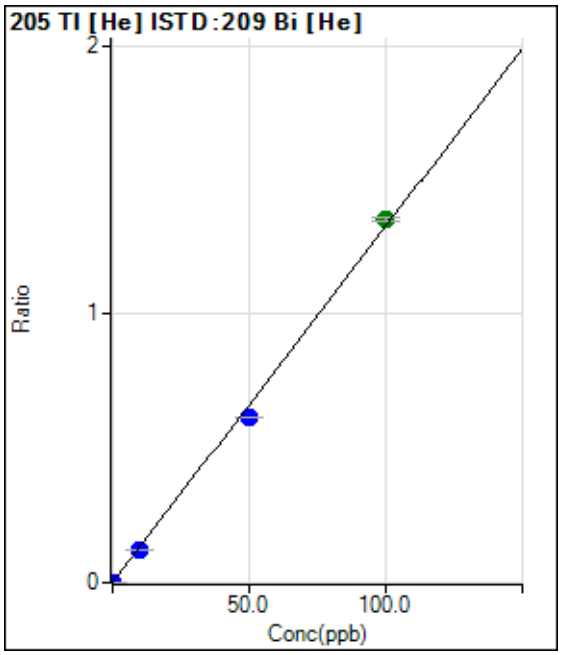
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.93	0.0000	P	64.5
2	☐	10.000	10.483	122851.61	0.0374	P	1.7
3	☐	50.000	51.533	593648.25	0.1837	P	1.7
4	☐	100.000	99.185	1150783.17	0.3536	P	2.1
5	☐			1792.78	0.0005	P	24.7

y = 0.0036 * x + 7.7927E-006
R = 0.9998
DL = 0.004229
BEC = 0.002186

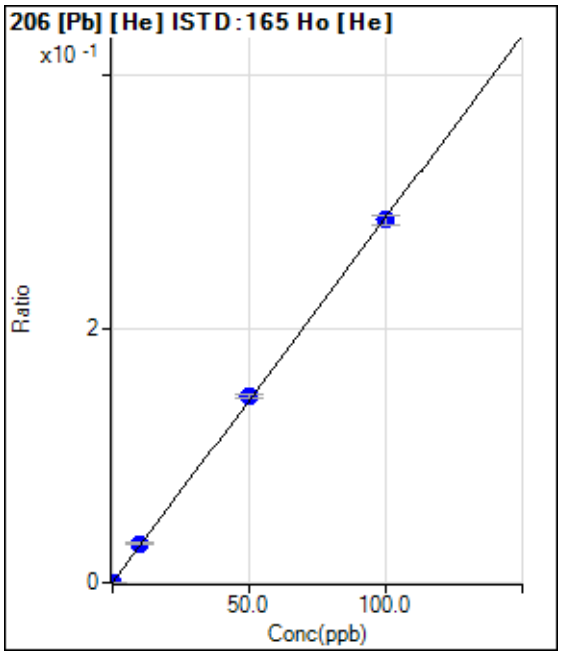
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.89	0.0000	P	21.6
2	☐	10.000	9.269	303167.15	0.1229	P	1.1
3	☐	50.000	46.351	1446391.61	0.6146	P	0.7
4	☐	100.000	101.898	3108044.39	1.3510	A	0.9
5	☐			3504.89	0.0014	P	23.6

y = 0.0133 * x + 2.3251E-005
R = 0.9989
DL = 0.001136
BEC = 0.001754

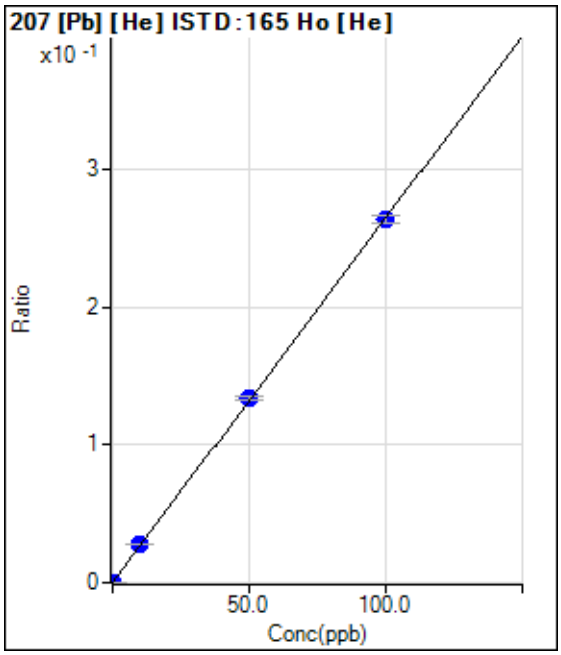
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	227.78	0.0001	P	5.1
2	☐	10.000	10.692	101109.49	0.0308	P	2.1
3	☐	50.000	50.964	472996.89	0.1464	P	1.8
4	☐	100.000	99.449	929341.49	0.2856	P	2.6
5	☐			925.60	0.0003	P	7.5

y = 0.0029 * x + 6.8773E-005
R = 0.9999
DL = 0.003634
BEC = 0.02395

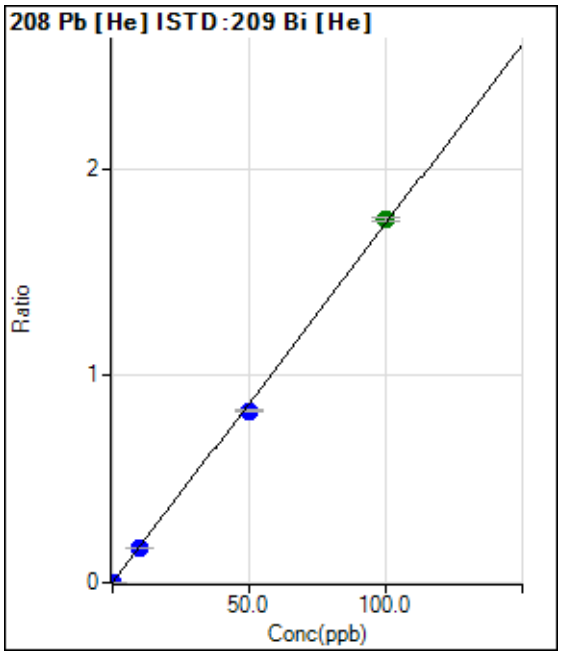
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	222.23	0.0001	P	12.7
2	☐	10.000	10.626	92510.78	0.0281	P	1.2
3	☐	50.000	50.722	433321.08	0.1341	P	1.9
4	☐	100.000	99.576	856593.16	0.2632	P	2.0
5	☐			805.59	0.0002	P	6.8

y = 0.0026 * x + 6.7069E-005
R = 0.9999
DL = 0.009671
BEC = 0.02538

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	948.92	0.0004	P	2.7
2	☐	10.000	9.736	416805.13	0.1690	P	1.2
3	☐	50.000	47.792	1948998.94	0.8281	P	1.1
4	☐	100.000	101.130	4030260.74	1.7519	A	1.1
5	☐			3758.00	0.0015	P	5.1

y = 0.0173 * x + 3.7457E-004
R = 0.9996
DL = 0.00178
BEC = 0.02163

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T14:52:49-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	196	9.27
B	11	45	2	NoGas	103828	0.00
Na	23	45	1	He	80743	0.00
Mg	24	45	1	He	1571	0.55
Al	27	45	1	He	1276	0.36
K	39	45	1	He	34088	0.01
Ca	44	45	1	He	444	0.99
Ti	47	45	1	He	18	121.86
V	51	45	1	He	518	14.37
Cr	52	45	1	He	1841	0.39
Mn	55	45	1	He	473	1.97
Fe	56	45	1	He	6223	0.11
Co	59	103	1	He	36	84.77
Ni	60	103	1	He	32	148.32
Cu	63	103	1	He	690	1.27
Zn	66	103	1	He	1080	0.48
As	75	103	1	He	102	1.46
Se	78	103	1	He	36	11.40
Sr	88	103	1	He	243	9.40
Mo	95	103	1	He	88	27.48
Ag	107	103	1	He	46	66.87
Cd	111	103	1	He	987	0.39
Sn	118	115	1	He	1219	0.92
Sb	123	115	1	He	200	8.82
Ba	137	115	1	He	66	27.25
W	182	209	1	He	3589	0.20
Tl	205	209	1	He	63	68.02
Pb	208	209	1	He	917	0.87

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1396251	0.54
Sc	45	1	He	637553	0.51
Sc	45	2	NoGas	4884031	1.32
Rh	103	1	He	1906680	1.18
In	115	1	He	1084697	0.42
Tb	159	1	He	3239190	0.43
Ho	165	1	He	3291602	0.50
Bi	209	1	He	2496837	1.01

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T14:56:39-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	211	0.00
B	11	45	2	NoGas	82180	0.00
Na	23	45	1	He	76365	0.00
Mg	24	45	1	He	1363	0.30
Al	27	45	1	He	1338	0.44
K	39	45	1	He	33324	0.01
Ca	44	45	1	He	410	2.27
Ti	47	45	1	He	24	170.45
Cr	52	45	1	He	1786	0.24
Mn	55	45	1	He	472	0.74
Fe	56	45	1	He	5007	0.07
Co	59	103	1	He	19	328.01
Ni	60	103	1	He	28	327.07
Cu	63	103	1	He	620	0.38
Zn	66	103	1	He	1128	0.37
As	75	103	1	He	96	10.31
Se	78	103	1	He	34	18.40
Sr	88	103	1	He	173	9.98
Mo	95	103	1	He	87	7.69
Ag	107	103	1	He	44	131.09
Cd	111	103	1	He	1032	0.44
Sn	118	115	1	He	1130	1.19
Sb	123	115	1	He	209	7.10
Ba	137	115	1	He	71	23.15
W	182	209	1	He	3719	0.24
Tl	205	209	1	He	59	36.40
Pb	208	209	1	He	949	0.30

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1389655	1.27
Sc	45	1	He	628609	0.48
Sc	45	2	NoGas	4813296	1.50
Rh	103	1	He	1894469	1.02
In	115	1	He	1086371	0.22
Tb	159	1	He	3251379	0.20
Ho	165	1	He	3312124	1.05
Bi	209	1	He	2533294	0.49

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:00:27-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	33657	0.01
B	11	2	NoGas	94096	0.00
Na	23	1	He	7762386	0.00
Mg	24	1	He	4346989	0.00
Al	27	1	He	24970	0.01
K	39	1	He	3882302	0.00
Ca	44	1	He	204245	0.00
Ti	47	1	He	2261	0.20
V	51	1	He	57506	0.00
Cr	52	1	He	72561	0.00
Mn	55	1	He	274058	0.00
Fe	56	1	He	16911295	0.00
Co	59	1	He	102346	0.00
Ni	60	1	He	25074	0.00
Cu	63	1	He	68593	0.00
Zn	66	1	He	15154	0.01
As	75	1	He	8328	0.03
Se	78	1	He	940	0.09
Sr	88	1	He	65687	0.00
Mo	95	1	He	31608	0.01
Ag	107	1	He	114087	0.00
Cd	111	1	He	20626	0.00
Sn	118	1	He	49050	0.01
Sb	123	1	He	42807	0.00
Ba	137	1	He	20766	0.01
W	182	1	He	122298	0.00
Tl	205	1	He	303167	0.00
Pb	208	1	He	416805	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1357112	1.51	1389655	97.66	30	120	
Sc	45	1	He	634726	1.24	628609	100.97	30	120	
Sc	45	2	NoGas	4676620	0.39	4813296	97.16	30	120	
Rh	103	1	He	1871730	0.53	1894469	98.80	30	120	
In	115	1	He	1062585	0.74	1086371	97.81	30	120	
Tb	159	1	He	3202309	0.67	3251379	98.49	30	120	
Ho	165	1	He	3286570	0.59	3312124	99.23	30	120	
Bi	209	1	He	2466652	1.72	2533294	97.37	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:04:15-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	205938	0.00
B	11	2	NoGas	224127	0.00
Na	23	1	He	36961198	0.00
Mg	24	1	He	20958164	0.00
Al	27	1	He	112468	0.00
K	39	1	He	18243429	0.00
Ca	44	1	He	976160	0.00
Ti	47	1	He	11281	0.02
V	51	1	He	278770	0.00
Cr	52	1	He	340820	0.00
Mn	55	1	He	1295962	0.00
Fe	56	1	He	81000530	0.00
Co	59	1	He	480201	0.00
Ni	60	1	He	120793	0.00
Cu	63	1	He	315531	0.00
Zn	66	1	He	64512	0.00
As	75	1	He	39831	0.00
Se	78	1	He	4324	0.01
Sr	88	1	He	311758	0.00
Mo	95	1	He	152884	0.00
Ag	107	1	He	524216	0.00
Cd	111	1	He	91856	0.00
Sn	118	1	He	220018	0.00
Sb	123	1	He	201422	0.00
Ba	137	1	He	98023	0.00
W	182	1	He	605436	0.00
Tl	205	1	He	1446392	0.00
Pb	208	1	He	1948999	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1365210	0.16	1389655	98.24	30	120	
Sc	45	1	He	630420	4.23	628609	100.29	30	120	
Sc	45	2	NoGas	4719343	1.22	4813296	98.05	30	120	
Rh	103	1	He	1794555	0.69	1894469	94.73	30	120	
In	115	1	He	1017533	0.41	1086371	93.66	30	120	
Tb	159	1	He	3158032	1.67	3251379	97.13	30	120	
Ho	165	1	He	3231265	0.80	3312124	97.56	30	120	
Bi	209	1	He	2353558	0.20	2533294	92.91	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:08:05-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	445088	0.00
B	11	2	NoGas	59756	0.00
Na	23	1	He	74558562	0.00
Mg	24	1	He	42282946	0.00
Al	27	1	He	229730	0.00
K	39	1	He	37444350	0.00
Ca	44	1	He	2024323	0.00
Ti	47	1	He	40	90.83
V	51	1	He	575177	0.00
Cr	52	1	He	690834	0.00
Mn	55	1	He	2734298	0.00
Fe	56	1	He	165654398	0.00
Co	59	1	He	970196	0.00
Ni	60	1	He	239272	0.00
Cu	63	1	He	629756	0.00
Zn	66	1	He	127417	0.00
As	75	1	He	78552	0.00
Se	78	1	He	8265	0.02
Sr	88	1	He	633831	0.00
Mo	95	1	He	3011	0.54
Ag	107	1	He	1034892	0.00
Cd	111	1	He	180349	0.00
Sn	118	1	He	3238	0.01
Sb	123	1	He	3187	0.44
Ba	137	1	He	198195	0.00
W	182	1	He	15419	0.11
Tl	205	1	He	3108044	0.00
Pb	208	1	He	4030261	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1398132	1.23	1389655	100.61	30	120	
Sc	45	1	He	632141	1.14	628609	100.56	30	120	
Sc	45	2	NoGas	4898034	0.44	4813296	101.76	30	120	
Rh	103	1	He	1789010	0.75	1894469	94.43	30	120	
In	115	1	He	1011940	0.63	1086371	93.15	30	120	
Tb	159	1	He	3182666	0.91	3251379	97.89	30	120	
Ho	165	1	He	3254944	1.74	3312124	98.27	30	120	
Bi	209	1	He	2300606	0.83	2533294	90.81	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:11:51-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	174	18.45
B	11	2	NoGas	369729	0.00
Na	23	1	He	89260	0.00
Mg	24	1	He	4542	0.66
Al	27	1	He	2101	0.20
K	39	1	He	41571	0.01
Ca	44	1	He	931	0.38
Ti	47	1	He	23252	0.00
V	51	1	He	253	72.73
Cr	52	1	He	3019	0.13
Mn	55	1	He	1312	0.56
Fe	56	1	He	193090	0.02
Co	59	1	He	140	12.84
Ni	60	1	He	184	2.26
Cu	63	1	He	1044	0.57
Zn	66	1	He	1871	0.34
As	75	1	He	1029	1.10
Se	78	1	He	121	11.97
Sr	88	1	He	239	5.40
Mo	95	1	He	325524	0.00
Ag	107	1	He	281	4.80
Cd	111	1	He	1154	0.77
Sn	118	1	He	463889	0.00
Sb	123	1	He	422059	0.00
Ba	137	1	He	152	3.62
W	182	1	He	1279075	0.00
Tl	205	1	He	3505	0.66
Pb	208	1	He	3758	0.14

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1395035	0.33	1389655	100.39	30	120	
Sc	45	1	He	647897	2.63	628609	103.07	30	120	
Sc	45	2	NoGas	4794715	0.65	4813296	99.61	30	120	
Rh	103	1	He	1944157	0.69	1894469	102.62	30	120	
In	115	1	He	1080936	1.02	1086371	99.50	30	120	
Tb	159	1	He	3250918	0.91	3251379	99.99	30	120	
Ho	165	1	He	3301826	0.31	3312124	99.69	30	120	
Bi	209	1	He	2485449	1.39	2533294	98.11	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:15:41-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	39.013	0.625	174997	0.88	40	97.5	89.5	110.5	
B	11	45	NoGas	35.957	3.286	188437	1.92	40	89.9	89.5	110.5	
Na	23	45	He	20850.463	1.793	31382448	0.52	20000	104.3	89.5	110.5	
Mg	24	45	He	20778.236	1.424	17714003	0.46	20000	103.9	89.5	110.5	
Al	27	45	He	205.431	1.580	95612	0.54	200	102.7	89.5	110.5	
K	39	45	He	20712.455	2.113	15600550	0.45	20000	103.6	89.5	110.5	
Ca	44	45	He	20050.722	1.512	814016	0.34	20000	100.3	89.5	110.5	
Ti	47	45	He	41.108	1.767	9418	0.39	40	102.8	89.5	110.5	
V	51	45	He	41.056	1.640	236905	1.02	40	102.6	89.5	110.5	
Cr	52	45	He	41.043	1.029	286484	0.87	40	102.6	89.5	110.5	
Mn	55	45	He	200.640	1.108	1096449	0.75	200	100.3	89.5	110.5	
Fe	56	45	He	10264.799	1.894	68381942	0.66	10000	102.6	89.5	110.5	
Co	59	103	He	40.117	0.826	404863	0.38	40	100.3	89.5	110.5	
Ni	60	103	He	40.704	1.513	101709	1.06	40	101.8	89.5	110.5	
Cu	63	103	He	41.478	1.133	272715	0.68	40	103.7	89.5	110.5	
Zn	66	103	He	41.990	0.773	56476	0.78	40	105.0	89.5	110.5	
As	75	103	He	39.654	1.136	32604	0.78	40	99.1	89.5	110.5	
Se	78	103	He	41.488	0.958	3625	1.19	40	103.7	89.5	110.5	
Sr	88	103	He	40.362	0.785	265817	0.45	40	100.9	89.5	110.5	
Mo	95	103	He	42.846	1.655	134352	1.89	40	107.1	89.5	110.5	
Ag	107	103	He	41.226	0.927	445989	0.62	40	103.1	89.5	110.5	
Cd	111	103	He	40.861	0.349	77629	0.13	40	102.2	89.5	110.5	
Sn	118	115	He	41.458	0.777	186793	0.98	40	103.6	89.5	110.5	
Sb	123	115	He	41.637	0.607	170459	0.26	40	104.1	89.5	110.5	
Ba	137	115	He	40.800	1.825	83241	1.33	40	102.0	89.5	110.5	
W	182	209	He	39.465	1.083	489869	1.18	40	98.7	89.5	110.5	
Tl	205	209	He	37.243	0.648	1187062	0.65	40	93.1	89.5	110.5	
Pb	208	209	He	39.074	0.985	1627735	0.99	40	97.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1425458	1.25	1389655	102.58	30	120	
Sc	45	He	637826	1.84	628609	101.47	30	120	
Sc	45	NoGas	4877061	0.64	4813296	101.32	30	120	
Rh	103	He	1865575	0.46	1894469	98.47	30	120	
In	115	He	1044746	0.84	1086371	96.17	30	120	
Tb	159	He	3212157	0.30	3251379	98.79	30	120	
Ho	165	He	3285176	1.19	3312124	99.19	30	120	
Bi	209	He	2403917	0.11	2533294	94.89	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:19:28-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.075	41.6	41	16.9	20	
W	182	1	He	1.243	13.5	19620	11.2	10	
Ca	44	1	He	-0.943	-224.7	370	22.0	1000	
Na	23	1	He	3.536	47.2	81331	2.1	400	
Mg	24	1	He	1.703	42.3	2782	20.8	1000	
K	39	1	He	7.184	25.5	38516	2.9	1000	
V	51	1	He	0.088	16.2	377	20.6	2	
Cr	52	1	He	0.013	54.7	1871	2.2	2	
Mn	55	1	He	-0.015	-79.9	390	15.7	2	
Fe	56	1	He	15.417	28.2	105739	26.1	50	
Co	59	1	He	0.007	12.5	89	10.8	1	
Ni	60	1	He	0.002	351.7	33	55.7	2	
Cu	63	1	He	0.026	13.2	806	3.8	2	
Zn	66	1	He	-0.268	-13.8	781	5.5	20	
As	75	1	He	0.166	14.4	238	7.6	2	
Se	78	1	He	0.331	19.1	65	8.5	2	
Sr	88	1	He	0.016	38.9	282	13.8	10	
Mo	95	1	He	1.007	20.1	3344	19.2	2	
Ag	107	1	He	0.006	19.2	111	10.5	0.2	
Cd	111	1	He	-0.003	-456.7	1044	1.8	0.2	
Ba	137	1	He	0.000	33717.4	71	16.5	5	
Sn	118	1	He	0.267	28.7	2371	14.6	10	
Tl	205	1	He	0.050	16.7	1726	16.4	0.5	
Pb	208	1	He	0.017	16.8	1660	7.6	1	
Al	27	1	He	-0.107	-222.7	1286	9.2	50	
Sb	123	1	He	1.062	19.0	4720	17.8	1	ICB Failed
B	11	2	NoGas	-9.766	-0.9	54332	0.1	20	
Be	9	2	NoGas	0.012	132.1	270	28.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1415813	1.32	1389655	101.88	30	120	
Sc	45	1	He	626628	0.95	628609	99.68	30	120	
Sc	45	2	NoGas	4841273	0.51	4813296	100.58	30	120	
Rh	103	1	He	1926152	0.98	1894469	101.67	30	120	
In	115	1	He	1085097	0.58	1086371	99.88	30	120	

Tb	159	1	He	3252878	0.75	3251379	100.05	30	120	
Ho	165	1	He	3319976	0.59	3312124	100.24	30	120	
Bi	209	1	He	2501369	0.34	2533294	98.74	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1912660
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:23:18-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.901	0.901	2.895	4204	3.70	1	90.1	69.5	130.5	
B	11	2	NoGas	11.625	11.625	1.378	117072	0.35	20	58.1	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1066.852	1066.852	0.480	1693946	0.46	1000	106.7	69.5	130.5	
Mg	24	1	He	1056.797	1056.797	1.155	910084	0.25	1000	105.7	69.5	130.5	
Al	27	1	He	51.239	51.239	3.397	25082	2.88	50	102.5	69.5	130.5	
K	39	1	He	1051.781	1051.781	0.711	831528	0.51	1000	105.2	69.5	130.5	
Ca	44	1	He	1019.304	1019.304	1.389	42138	0.48	1000	101.9	69.5	130.5	
Ti	47	1	He	10.926	10.926	3.978	2544	4.04	10	109.3	69.5	130.5	
V	51	1	He	5.427	5.427	4.224	31476	3.90	5	108.5	69.5	130.5	
Cr	52	1	He	2.144	2.144	2.580	16825	2.05	2	107.2	69.5	130.5	
Mn	55	1	He	5.108	5.108	1.841	28623	1.12	5	102.2	69.5	130.5	
Fe	56	1	He	105.993	105.993	1.041	717351	0.95	100	106.0	69.5	130.5	
Co	59	1	He	1.029	1.029	1.589	10738	0.56	1	102.9	69.5	130.5	
Ni	60	1	He	2.121	2.121	3.212	5500	2.34	2	106.1	69.5	130.5	
Cu	63	1	He	2.126	2.126	0.662	15036	0.76	2	106.3	69.5	130.5	
Zn	66	1	He	20.673	20.673	2.774	29292	1.41	20	103.4	69.5	130.5	
As	75	1	He	5.068	5.068	1.483	4388	1.08	5	101.4	69.5	130.5	
Se	78	1	He	5.355	5.355	3.022	514	2.49	5	107.1	69.5	130.5	
Sr	88	1	He	9.822	9.822	1.881	66927	0.56	10	98.2	69.5	130.5	
Mo	95	1	He	10.639	10.639	2.754	34510	1.36	10	106.4	69.5	130.5	
Ag	107	1	He	1.071	1.071	2.202	12004	0.95	1	107.1	69.5	130.5	
Cd	111	1	He	1.027	1.027	5.507	3037	3.13	1	102.7	69.5	130.5	
Sn	118	1	He	10.376	10.376	1.929	49313	1.70	10	103.8	69.5	130.5	
Sb	123	1	He	2.341	2.341	1.329	10131	1.17	2	117.0	69.5	130.5	
Ba	137	1	He	5.016	5.016	3.081	10672	3.22	5	100.3	69.5	130.5	
W	182	1	He	9.869	9.869	0.302	129930	0.89	10	98.7	69.5	130.5	
Tl	205	1	He	1.884	1.884	1.530	62398	1.72	2	94.2	69.5	130.5	
Pb	208	1	He	1.022	1.022	2.024	45112	1.52	1	102.2	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1409353	1.38	1389655	101.42	30	120	
Sc	45	1	He	643291	0.90	628609	102.34	30	120	
Sc	45	2	NoGas	4868159	0.51	4813296	101.14	30	120	
Rh	103	1	He	1926702	1.37	1894469	101.70	30	120	
In	115	1	He	1083111	0.26	1086371	99.70	30	120	
Tb	159	1	He	3241245	0.66	3251379	99.69	30	120	
Ho	165	1	He	3306863	0.76	3312124	99.84	30	120	
Bi	209	1	He	2495794	0.90	2533294	98.52	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:27:08-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.010	266.9	219	44.4	1	
B	11	45	2	NoGas	-11.462	-4.9	43793	1.9	20	
Na	23	45	1	He	47575.009	2.5	66868077	2.3	75200	
Mg	24	45	1	He	47895.599	2.8	38176725	2.1	75200	
Al	27	45	1	He	45805.099	2.6	19652441	2.1	75200	
K	39	45	1	He	47596.057	3.3	33476537	1.9	75200	
Ca	44	45	1	He	48823.937	3.9	1852443	2.4	75200	
Ti	47	45	1	He	962.784	4.2	205641	0.8	1505	
V	51	45	1	He	0.063	24.4	228	41.5	4	
Cr	52	45	1	He	0.639	7.0	5834	3.1	4	
Mn	55	45	1	He	0.417	1.6	2578	3.4	4	
Fe	56	45	1	He	47489.697	3.3	295749428	1.4	75200	
Co	59	103	1	He	0.034	13.4	319	11.5	2	
Ni	60	103	1	He	0.100	21.0	244	17.5	4	
Cu	63	103	1	He	0.340	10.5	2501	8.2	4	
Zn	66	103	1	He	0.088	55.0	1079	3.6	10	
As	75	103	1	He	0.314	4.0	310	2.1	4	
Se	78	103	1	He	0.485	16.9	67	8.1	4	
Sr	88	103	1	He	0.342	2.6	2133	3.3	20	
Mo	95	103	1	He	1062.348	3.0	2930149	2.0	1505	
Ag	107	103	1	He	0.010	4.3	133	4.3	1	
Cd	111	103	1	He	0.048	101.3	975	9.8	1	
Sn	118	115	1	He	0.434	21.5	2787	14.2	20	
Sb	123	115	1	He	0.296	8.1	1296	7.4	1	
Ba	137	115	1	He	0.052	27.6	160	16.3	2	
W	182	209	1	He	0.551	7.4	9651	6.5	20	
Tl	205	209	1	He	0.012	6.4	403	4.1	1	
Pb	208	209	1	He	0.577	0.8	23298	2.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1200114	1.62	1389655	86.36	30	120	
Sc	45	1	He	596769	4.66	628609	94.93	30	120	
Sc	45	2	NoGas	4292056	1.40	4813296	89.17	30	120	
Rh	103	1	He	1642409	1.61	1894469	86.69	30	120	
In	115	1	He	960143	0.55	1086371	88.38	30	120	
Tb	159	1	He	3042108	0.43	3251379	93.56	30	120	
Ho	165	1	He	3085400	0.54	3312124	93.15	30	120	
Bi	209	1	He	2248168	1.93	2533294	88.74	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:30:54-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	101.078	1.254	375994	0.59	100	101.1	79.5	120.5	
B	11	45	2	NoGas	100.636	2.074	331020	0.61	100	100.6	79.5	120.5	
Na	23	45	1	He	49210.061	2.176	66163234	0.64	50000	98.4	79.5	120.5	
Mg	24	45	1	He	49321.803	2.132	37612155	0.84	50000	98.6	79.5	120.5	
Al	27	45	1	He	47366.501	1.843	19443121	1.11	50000	94.7	79.5	120.5	
K	39	45	1	He	49182.483	2.399	33096737	0.45	50000	98.4	79.5	120.5	
Ca	44	45	1	He	49368.800	1.999	1792415	0.88	50000	98.7	79.5	120.5	
Ti	47	45	1	He	1081.600	2.499	221102	0.54	1100	98.3	79.5	120.5	
V	51	45	1	He	99.198	2.481	512172	0.90	100	99.2	79.5	120.5	
Cr	52	45	1	He	100.375	1.954	624388	0.93	100	100.4	79.5	120.5	
Mn	55	45	1	He	97.325	2.281	475957	0.74	100	97.3	79.5	120.5	
Fe	56	45	1	He	49442.188	2.289	294623046	0.54	50000	98.9	79.5	120.5	
Co	59	103	1	He	99.132	2.036	883239	0.17	100	99.1	79.5	120.5	
Ni	60	103	1	He	97.767	2.455	215640	0.59	100	97.8	79.5	120.5	
Cu	63	103	1	He	98.190	3.224	569149	1.10	100	98.2	79.5	120.5	
Zn	66	103	1	He	98.793	2.453	115979	0.32	100	98.8	79.5	120.5	
As	75	103	1	He	100.913	3.262	73111	1.13	100	100.9	79.5	120.5	
Se	78	103	1	He	101.519	2.907	7787	0.87	100	101.5	79.5	120.5	
Sr	88	103	1	He	99.219	2.058	576690	0.57	100	99.2	79.5	120.5	
Mo	95	103	1	He	1195.051	1.893	3307768	3.60	1100	108.6	79.5	120.5	
Ag	107	103	1	He	99.666	2.394	951830	0.43	100	99.7	79.5	120.5	
Cd	111	103	1	He	100.953	3.027	167986	0.90	100	101.0	79.5	120.5	
Sn	118	115	1	He	98.689	0.951	404297	0.48	100	98.7	79.5	120.5	
Sb	123	115	1	He	104.420	0.753	389740	0.44	100	104.4	79.5	120.5	
Ba	137	115	1	He	99.895	0.367	185862	0.21	100	99.9	79.5	120.5	
W	182	209	1	He	102.004	0.070	1189392	0.59	100	102.0	79.5	120.5	
Tl	205	209	1	He	100.627	0.922	3026093	0.47	100	100.6	79.5	120.5	
Pb	208	209	1	He	100.460	0.605	3947295	0.45	100	100.5	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1183046	0.73	1389655	85.13	30	120	
Sc	45	1	He	570687	2.81	628609	90.79	30	120	
Sc	45	2	NoGas	4276262	1.22	4813296	88.84	30	120	
Rh	103	1	He	1647507	2.10	1894469	86.96	30	120	
In	115	1	He	953149	0.47	1086371	87.74	30	120	
Tb	159	1	He	3071043	0.70	3251379	94.45	30	120	
Ho	165	1	He	3098145	0.08	3312124	93.54	30	120	
Bi	209	1	He	2268215	0.62	2533294	89.54	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:34:39-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.586	0.035	195860	0.51	50	97.2	89.5	110.5	
B	11	45	2	NoGas	49.122	3.699	210760	1.04	50	98.2	89.5	110.5	
Na	23	45	1	He	24998.945	2.053	35143825	1.01	25000	100.0	89.5	110.5	
Mg	24	45	1	He	24999.810	2.101	19913266	0.51	25000	100.0	89.5	110.5	
Al	27	45	1	He	249.822	1.085	108386	1.65	250	99.9	89.5	110.5	
K	39	45	1	He	25040.777	2.717	17615323	0.60	25000	100.2	89.5	110.5	
Ca	44	45	1	He	24649.039	1.708	934958	0.52	25000	98.6	89.5	110.5	
Ti	47	45	1	He	51.942	4.038	11111	2.62	50	103.9	89.5	110.5	
V	51	45	1	He	49.828	1.657	268705	1.63	50	99.7	89.5	110.5	
Cr	52	45	1	He	50.550	2.100	329268	0.51	50	101.1	89.5	110.5	
Mn	55	45	1	He	245.259	2.139	1252110	0.12	250	98.1	89.5	110.5	
Fe	56	45	1	He	12628.638	2.669	78600455	0.56	12500	101.0	89.5	110.5	
Co	59	103	1	He	49.275	1.366	467542	0.30	50	98.5	89.5	110.5	
Ni	60	103	1	He	48.844	0.329	114761	1.34	50	97.7	89.5	110.5	
Cu	63	103	1	He	49.517	1.650	305985	0.18	50	99.0	89.5	110.5	
Zn	66	103	1	He	49.488	1.292	62394	0.35	50	99.0	89.5	110.5	
As	75	103	1	He	49.749	1.051	38437	0.91	50	99.5	89.5	110.5	
Se	78	103	1	He	50.528	0.775	4144	1.68	50	101.1	89.5	110.5	
Sr	88	103	1	He	49.182	1.669	304498	0.70	50	98.4	89.5	110.5	
Mo	95	103	1	He	76.388	6.926	225001	5.28	50	152.8	89.5	110.5	CCV Failed
Ag	107	103	1	He	51.105	1.873	519776	0.26	50	102.2	89.5	110.5	
Cd	111	103	1	He	51.328	2.267	91429	0.64	50	102.7	89.5	110.5	
Sn	118	115	1	He	49.592	1.144	214721	1.18	50	99.2	89.5	110.5	
Sb	123	115	1	He	51.596	0.991	203134	0.70	50	103.2	89.5	110.5	
Ba	137	115	1	He	49.657	1.288	97438	0.92	50	99.3	89.5	110.5	
W	182	209	1	He	51.806	1.332	627968	0.67	50	103.6	89.5	110.5	
Tl	205	209	1	He	46.712	0.288	1456487	0.39	50	93.4	89.5	110.5	
Pb	208	209	1	He	48.090	0.543	1959580	0.37	50	96.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1281336	0.53	1389655	92.21	30	120	
Sc	45	1	He	596021	2.21	628609	94.82	30	120	
Sc	45	2	NoGas	4530389	1.40	4813296	94.12	30	120	
Rh	103	1	He	1754244	1.61	1894469	92.60	30	120	
In	115	1	He	1004908	0.37	1086371	92.50	30	120	
Tb	159	1	He	3215738	1.34	3251379	98.90	30	120	
Ho	165	1	He	3251002	1.30	3312124	98.15	30	120	
Bi	209	1	He	2351695	0.66	2533294	92.83	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:38:32-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.009	193.4	233	33.3	1	
B	11	45	2	NoGas	-12.896	-1.5	41788	1.6	20	
Na	23	45	1	He	5.011	54.0	76205	2.8	400	
Mg	24	45	1	He	2.827	20.0	3397	10.6	1000	
Al	27	45	1	He	1.574	16.6	1867	7.7	50	
K	39	45	1	He	11.301	12.8	37933	0.9	1000	
Ca	44	45	1	He	7.724	26.8	654	11.8	1000	
Ti	47	45	1	He	0.232	22.5	70	17.2	20	
V	51	45	1	He	0.027	183.2	24	1066.9	2	
Cr	52	45	1	He	0.015	136.0	1716	5.5	2	
Mn	55	45	1	He	0.256	17.3	1680	10.9	2	
Fe	56	45	1	He	17.478	26.3	108661	23.1	50	
Co	59	103	1	He	0.006	93.1	76	69.8	1	
Ni	60	103	1	He	0.005	125.3	39	39.6	2	
Cu	63	103	1	He	0.041	21.1	867	6.0	2	
Zn	66	103	1	He	0.191	25.3	1338	4.1	20	
As	75	103	1	He	0.128	17.3	196	8.3	2	
Se	78	103	1	He	0.142	33.8	45	8.3	2	
Sr	88	103	1	He	0.002	378.2	180	25.9	10	
Mo	95	103	1	He	3.587	11.9	11123	11.0	2	CCB Failed
Ag	107	103	1	He	0.010	27.1	146	18.5	0.2	
Cd	111	103	1	He	-0.036	-73.9	932	6.1	0.2	
Sn	118	115	1	He	0.316	10.9	2467	5.5	10	
Sb	123	115	1	He	0.673	13.6	2915	12.4	1	
Ba	137	115	1	He	-0.004	-265.4	59	38.5	5	
W	182	209	1	He	1.078	15.6	17065	13.6	10	
Tl	205	209	1	He	0.049	12.8	1648	13.6	0.5	
Pb	208	209	1	He	0.024	6.2	1920	4.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1280643	1.61	1389655	92.16	30	120	
Sc	45	1	He	572093	2.01	628609	91.01	30	120	
Sc	45	2	NoGas	4471198	1.39	4813296	92.89	30	120	
Rh	103	1	He	1833027	0.80	1894469	96.76	30	120	
In	115	1	He	1031302	0.83	1086371	94.93	30	120	
Tb	159	1	He	3199331	1.45	3251379	98.40	30	120	
Ho	165	1	He	3257406	0.21	3312124	98.35	30	120	
Bi	209	1	He	2437844	1.48	2533294	96.23	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-b
Data File Name	014SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:42:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.015	0.015	82.64	226	0.01	10000	
B	11	45	2	NoGas	36.880	36.880	1.22	160960	0.02	300	
Na	23	45	1	He	240625.405	240625.405	3.55	311644054	0.08	500000	
Mg	24	45	1	He	20904.377	20904.377	4.50	15365623	0.14	500000	
Al	27	45	1	He	18.348	18.348	5.47	8430	0.22	200000	
K	39	45	1	He	6637.978	6637.978	5.32	4329871	0.15	500000	
Ca	44	45	1	He	54849.300	54849.300	2.91	1920130	2.86	500000	
Ti	47	45	1	He	0.416	0.416	12.52	103	0.40	2500	
V	51	45	1	He	0.201	0.201	136.46	872	0.02	10000	
Cr	52	45	1	He	0.738	0.738	9.95	5971	0.01	10000	
Mn	55	45	1	He	8186.954	8186.954	3.63	38565246	0.02	10000	
Fe	56	45	1	He	15046.094	15046.094	4.35	86425245	0.02	200000	
Co	59	103	1	He	573.755	573.755	0.54	4842874	0.01	10000	
Ni	60	103	1	He	31.674	31.674	2.89	66193	0.05	10000	
Cu	63	103	1	He	3.491	3.491	2.62	19662	0.02	10000	
Zn	66	103	1	He	22.649	22.649	2.32	25904	0.09	10000	
As	75	103	1	He	0.856	0.856	4.12	666	0.13	10000	
Se	78	103	1	He	0.372	0.372	9.45	55	0.67	10000	
Sr	88	103	1	He	207.762	207.762	1.17	1143805	0.02	10000	
Mo	95	103	1	He	3.281	3.281	0.89	8670	0.04	2000	
Ag	107	103	1	He	0.014	0.014	35.02	160	0.01	300	
Cd	111	103	1	He	0.030	0.030	105.97	896	0.00	4000	
Sn	118	115	1	He	0.889	0.889	29.37	4316	0.02	2000	
Sb	123	115	1	He	0.668	0.668	3.72	2495	0.03	300	
Ba	137	115	1	He	157.766	157.766	0.49	273646	0.06	10000	
W	182	209	1	He	0.453	0.453	7.54	8065	0.01	2500	
Tl	205	209	1	He	0.523	0.523	3.82	14794	0.00	5000	
Pb	208	209	1	He	0.203	0.203	0.78	8264	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1136425	1.92	1389655	81.78	30	120	
Sc	45	1	He	550511	4.17	628609	87.58	30	120	
Sc	45	2	NoGas	4107134	1.20	4813296	85.33	30	120	
Rh	103	1	He	1560396	0.95	1894469	82.37	30	120	
In	115	1	He	888650	0.87	1086371	81.80	30	120	
Tb	159	1	He	2963282	0.99	3251379	91.14	30	120	
Ho	165	1	He	3043737	1.69	3312124	91.90	30	120	
Bi	209	1	He	2126730	0.85	2533294	83.95	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49409-g-6-b@5
Data File Name	015SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:46:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.012	0.012	143.39	230	0.01	10000	
B	11	45	2	NoGas	-4.570	-4.570	-8.71	62238	-0.01	300	
Na	23	45	1	He	51151.217	51151.217	0.91	68702536	0.07	500000	
Mg	24	45	1	He	4485.943	4485.943	0.60	3418666	0.13	500000	
Al	27	45	1	He	4.146	4.146	3.18	2912	0.14	200000	
K	39	45	1	He	1417.090	1417.090	0.48	982064	0.14	500000	
Ca	44	45	1	He	11495.790	11495.790	0.87	417227	2.76	500000	
Ti	47	45	1	He	0.066	0.066	62.82	36	0.18	2500	
V	51	45	1	He	0.070	0.070	175.42	250	0.03	10000	
Cr	52	45	1	He	0.159	0.159	8.01	2604	0.01	10000	
Mn	55	45	1	He	1781.144	1781.144	0.57	8694618	0.02	10000	
Fe	56	45	1	He	3258.045	3258.045	0.74	19399908	0.02	200000	
Co	59	103	1	He	115.801	115.801	1.31	1081651	0.01	10000	
Ni	60	103	1	He	6.552	6.552	2.27	15174	0.04	10000	
Cu	63	103	1	He	0.754	0.754	0.65	5143	0.01	10000	
Zn	66	103	1	He	4.703	4.703	1.68	6767	0.07	10000	
As	75	103	1	He	0.164	0.164	2.08	212	0.08	10000	
Se	78	103	1	He	0.104	0.104	106.95	40	0.26	10000	
Sr	88	103	1	He	41.417	41.417	1.29	252461	0.02	10000	
Mo	95	103	1	He	0.960	0.960	3.62	2864	0.03	2000	
Ag	107	103	1	He	0.005	0.005	43.32	92	0.01	300	
Cd	111	103	1	He	-0.006	-0.006	-551.92	929	0.00	4000	
Sn	118	115	1	He	-0.025	-0.025	-151.69	922	0.00	2000	
Sb	123	115	1	He	0.106	0.106	16.58	602	0.02	300	
Ba	137	115	1	He	31.091	31.091	1.15	60041	0.05	10000	
W	182	209	1	He	0.154	0.154	15.49	5305	0.00	2500	
Tl	205	209	1	He	0.108	0.108	1.71	3402	0.00	5000	
Pb	208	209	1	He	0.041	0.041	4.41	2537	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1218206	0.70	1389655	87.66	30	120	
Sc	45	1	He	569904	0.53	628609	90.66	30	120	
Sc	45	2	NoGas	4340533	0.22	4813296	90.18	30	120	
Rh	103	1	He	1726808	0.84	1894469	91.15	30	120	
In	115	1	He	988601	0.42	1086371	91.00	30	120	
Tb	159	1	He	3130184	0.81	3251379	96.27	30	120	
Ho	165	1	He	3203500	0.94	3312124	96.72	30	120	
Bi	209	1	He	2348175	0.26	2533294	92.69	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49409-g-6-b
Data File Name	016SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:49:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	986.862	986.862	0.90	3680941	0.03	10000	
B	11	45	2	NoGas	157.753	157.753	1.70	480867	0.03	300	
Na	23	45	1	He	249242.755	249242.755	1.71	326983780	0.08	500000	
Mg	24	45	1	He	30797.471	30797.471	1.56	22935932	0.13	500000	
Al	27	45	1	He	9897.013	9897.013	1.43	3968216	0.25	200000	
K	39	45	1	He	16628.555	16628.555	2.80	10946576	0.15	500000	
Ca	44	45	1	He	63453.046	63453.046	2.21	2249645	2.82	500000	
Ti	47	45	1	He	102.691	102.691	0.87	20526	0.50	2500	
V	51	45	1	He	1023.882	1023.882	2.38	5163400	0.02	10000	
Cr	52	45	1	He	1013.382	1013.382	1.78	6141387	0.02	10000	
Mn	55	45	1	He	9097.961	9097.961	1.35	43415814	0.02	10000	
Fe	56	45	1	He	25015.684	25015.684	1.86	145578274	0.02	200000	
Co	59	103	1	He	1568.075	1568.075	1.32	13438514	0.01	10000	
Ni	60	103	1	He	1065.034	1065.034	1.38	2259499	0.05	10000	
Cu	63	103	1	He	1035.638	1035.638	1.96	5769891	0.02	10000	
Zn	66	103	1	He	965.278	965.278	1.56	1081777	0.09	10000	
As	75	103	1	He	999.548	999.548	1.16	695986	0.14	10000	
Se	78	103	1	He	966.048	966.048	1.36	71038	1.36	10000	
Sr	88	103	1	He	1260.284	1260.284	2.56	7043760	0.02	10000	
Mo	95	103	1	He	118.119	118.119	0.54	314423	0.04	2000	
Ag	107	103	1	He	103.032	103.032	1.05	946545	0.01	300	
Cd	111	103	1	He	1082.334	1082.334	1.28	1724207	0.06	4000	
Sn	118	115	1	He	1155.086	1155.086	1.00	4327261	0.03	2000	
Sb	123	115	1	He	113.155	113.155	0.52	387070	0.03	300	
Ba	137	115	1	He	1326.152	1326.152	0.43	2260691	0.06	10000	
W	182	209	1	He	112.051	112.051	1.01	1229998	0.01	2500	
Tl	205	209	1	He	244.575	244.575	0.52	6926042	0.00	5000	
Pb	208	209	1	He	1051.534	1051.534	1.01	38898633	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1186816	1.86	1389655	85.40	30	120	
Sc	45	1	He	557180	1.48	628609	88.64	30	120	
Sc	45	2	NoGas	4306836	1.21	4813296	89.48	30	120	
Rh	103	1	He	1584434	1.25	1894469	83.63	30	120	
In	115	1	He	873561	0.08	1086371	80.41	30	120	
Tb	159	1	He	3019260	0.70	3251379	92.86	30	120	
Ho	165	1	He	3064942	0.19	3312124	92.54	30	120	
Bi	209	1	He	2135970	1.02	2533294	84.32	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-c ms
Data File Name	017SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:53:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1013.846	1013.846	1.90	3644245	0.03	10000	
B	11	45	2	NoGas	171.843	171.843	1.33	505333	0.03	300	
Na	23	45	1	He	289377.436	289377.436	0.93	367658667	0.08	500000	
Mg	24	45	1	He	34223.811	34223.811	0.85	24683817	0.14	500000	
Al	27	45	1	He	10042.517	10042.517	1.50	3899193	0.26	200000	
K	39	45	1	He	17989.975	17989.975	0.34	11469252	0.16	500000	
Ca	44	45	1	He	73314.311	73314.311	1.03	2517677	2.91	500000	
Ti	47	45	1	He	105.276	105.276	0.17	20376	0.52	2500	
V	51	45	1	He	1062.184	1062.184	2.10	5187487	0.02	10000	
Cr	52	45	1	He	1051.066	1051.066	1.69	6168699	0.02	10000	
Mn	55	45	1	He	10467.474	10467.474	1.24	48370638	0.02	10000	>LDR
Fe	56	45	1	He	27846.310	27846.310	0.84	156944705	0.02	200000	
Co	59	103	1	He	1688.274	1688.274	1.31	14255607	0.01	10000	
Ni	60	103	1	He	1094.521	1094.521	0.22	2287959	0.05	10000	
Cu	63	103	1	He	1035.153	1035.153	1.20	5682620	0.02	10000	
Zn	66	103	1	He	961.793	961.793	0.60	1062090	0.09	10000	
As	75	103	1	He	1001.520	1001.520	0.36	687118	0.15	10000	
Se	78	103	1	He	965.943	965.943	0.46	69988	1.38	10000	
Sr	88	103	1	He	1298.880	1298.880	1.57	7153137	0.02	10000	
Mo	95	103	1	He	123.259	123.259	1.44	323251	0.04	2000	
Ag	107	103	1	He	105.130	105.130	0.85	951598	0.01	300	
Cd	111	103	1	He	1096.298	1096.298	0.78	1720769	0.06	4000	
Sn	118	115	1	He	1193.254	1193.254	0.98	4360614	0.03	2000	
Sb	123	115	1	He	114.802	114.802	0.62	383076	0.03	300	
Ba	137	115	1	He	1390.671	1390.671	1.52	2312513	0.06	10000	
W	182	209	1	He	119.879	119.879	0.39	1268711	0.01	2500	
Tl	205	209	1	He	258.145	258.145	1.10	7048353	0.00	5000	
Pb	208	209	1	He	1092.406	1092.406	1.14	38963498	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1143588	0.09	1389655	82.29	30	120	
Sc	45	1	He	539572	1.42	628609	85.84	30	120	
Sc	45	2	NoGas	4207237	0.35	4813296	87.41	30	120	
Rh	103	1	He	1561040	0.71	1894469	82.40	30	120	
In	115	1	He	852163	0.43	1086371	78.44	30	120	
Tb	159	1	He	3011838	0.72	3251379	92.63	30	120	
Ho	165	1	He	3057165	0.89	3312124	92.30	30	120	
Bi	209	1	He	2059526	1.20	2533294	81.30	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-d msd
Data File Name	018SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:57:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	920.216	920.216	1.69	3409666	0.03	10000	
B	11	45	2	NoGas	159.334	159.334	2.00	473821	0.03	300	
Na	23	45	1	He	266822.863	266822.863	4.25	337934342	0.08	500000	
Mg	24	45	1	He	31635.959	31635.959	3.17	22749000	0.14	500000	
Al	27	45	1	He	9129.562	9129.562	2.31	3534899	0.26	200000	
K	39	45	1	He	16546.457	16546.457	3.55	10518298	0.16	500000	
Ca	44	45	1	He	66727.768	66727.768	1.68	2284829	2.92	500000	
Ti	47	45	1	He	96.667	96.667	1.85	18657	0.52	2500	
V	51	45	1	He	958.252	958.252	2.49	4667226	0.02	10000	
Cr	52	45	1	He	964.508	964.508	1.80	5645293	0.02	10000	
Mn	55	45	1	He	9687.903	9687.903	2.70	44640218	0.02	10000	
Fe	56	45	1	He	25449.042	25449.042	2.50	143019519	0.02	200000	
Co	59	103	1	He	1550.774	1550.774	2.47	13031736	0.01	10000	
Ni	60	103	1	He	1010.464	1010.464	2.07	2102088	0.05	10000	
Cu	63	103	1	He	964.500	964.500	2.36	5269495	0.02	10000	
Zn	66	103	1	He	894.352	894.352	1.63	982986	0.09	10000	
As	75	103	1	He	922.886	922.886	1.62	630167	0.15	10000	
Se	78	103	1	He	900.677	900.677	2.57	64943	1.39	10000	
Sr	88	103	1	He	1186.578	1186.578	0.94	6504853	0.02	10000	
Mo	95	103	1	He	112.712	112.712	1.26	294224	0.04	2000	
Ag	107	103	1	He	97.499	97.499	1.67	878353	0.01	300	
Cd	111	103	1	He	929.874	929.874	1.94	1452721	0.06	4000	
Sn	118	115	1	He	1075.364	1075.364	0.44	3987359	0.03	2000	
Sb	123	115	1	He	103.204	103.204	0.52	349423	0.03	300	
Ba	137	115	1	He	1244.879	1244.879	1.03	2100361	0.06	10000	
W	182	209	1	He	109.258	109.258	0.45	1168577	0.01	2500	
Tl	205	209	1	He	234.430	234.430	1.80	6467115	0.00	5000	
Pb	208	209	1	He	990.232	990.232	1.38	35686691	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1178927	0.77	1389655	84.84	30	120	
Sc	45	1	He	538177	2.33	628609	85.61	30	120	
Sc	45	2	NoGas	4208293	1.82	4813296	87.43	30	120	
Rh	103	1	He	1553948	2.04	1894469	82.03	30	120	
In	115	1	He	864615	0.51	1086371	79.59	30	120	
Tb	159	1	He	2991750	1.51	3251379	92.01	30	120	
Ho	165	1	He	3105741	0.09	3312124	93.77	30	120	
Bi	209	1	He	2081013	1.35	2533294	82.15	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177242/1-a
Data File Name	019_Blk.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:00:40-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.254	3.6	1189	1.9	1	
B	11	45	2	NoGas	-10.308	-8.8	47841	4.6	20	
Na	23	45	1	He	150.845	7.3	278994	7.3	400	
Mg	24	45	1	He	63.827	2.6	51161	1.1	1000	
Al	27	45	1	He	15.430	2.4	7741	3.9	50	
K	39	45	1	He	28.231	0.9	50471	2.1	1000	
Ca	44	45	1	He	190.586	1.4	7474	2.0	1000	
Ti	47	45	1	He	0.210	21.6	67	13.2	20	
V	51	45	1	He	0.346	58.7	1728	64.4	2	
Cr	52	45	1	He	1.087	3.4	8579	3.9	2	
Mn	55	45	1	He	1.757	14.4	9257	15.6	2	
Fe	56	45	1	He	26.908	9.6	169272	11.3	50	
Co	59	103	1	He	0.213	16.3	2163	14.7	1	
Ni	60	103	1	He	0.309	12.7	799	10.7	2	
Cu	63	103	1	He	0.727	12.2	5384	9.3	2	
Zn	66	103	1	He	4.440	3.2	6975	3.4	20	
As	75	103	1	He	1.273	7.3	1139	5.2	2	
Se	78	103	1	He	1.106	16.1	130	11.1	2	
Sr	88	103	1	He	0.554	6.0	3819	4.2	10	
Mo	95	103	1	He	1.089	12.6	3498	11.1	2	
Ag	107	103	1	He	0.022	18.2	280	13.7	0.2	
Cd	111	103	1	He	0.040	26.6	1092	0.7	0.2	
Sn	118	115	1	He	2.083	22.3	9985	19.5	10	
Sb	123	115	1	He	0.420	7.2	1839	6.0	1	
Ba	137	115	1	He	1.214	5.6	2438	5.1	5	
W	182	209	1	He	1.400	17.6	21263	13.0	10	
Tl	205	209	1	He	0.220	31.7	7210	29.9	0.5	
Pb	208	209	1	He	0.386	15.3	17356	12.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1252814	1.32	1389655	90.15	30	120	
Sc	45	1	He	584942	1.90	628609	93.05	30	120	
Sc	45	2	NoGas	4390531	0.93	4813296	91.22	30	120	
Rh	103	1	He	1868251	1.76	1894469	98.62	30	120	
In	115	1	He	1001966	0.48	1086371	92.23	30	120	
Tb	159	1	He	3189404	0.64	3251379	98.09	30	120	
Ho	165	1	He	3255841	0.21	3312124	98.30	30	120	
Bi	209	1	He	2463993	1.82	2533294	97.26	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177242/2-a
Data File Name	020_LCS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:04:32-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1051.213	1051.213	0.976	4040870	1.05	1000	105.1	79.5	120.5	
B	11	2	NoGas	123.483	123.483	1.427	388923	0.64	100	123.5	79.5	120.5	LCS Failed
Na	23	1	He	10856.350	10856.350	3.245	14327084	0.84	10000	108.6	79.5	120.5	
Mg	24	1	He	10689.057	10689.057	2.901	7972614	0.47	10000	106.9	79.5	120.5	
Al	27	1	He	9954.341	9954.341	1.473	3998357	2.45	10000	99.5	79.5	120.5	
K	39	1	He	10518.986	10518.986	2.640	6946589	0.46	10000	105.2	79.5	120.5	
Ca	44	1	He	9644.927	9644.927	2.018	342797	0.82	10000	96.4	79.5	120.5	
Ti	47	1	He	107.033	107.033	1.977	21424	1.72	100	107.0	79.5	120.5	
V	51	1	He	1081.906	1081.906	2.489	5464852	1.15	1000	108.2	79.5	120.5	
Cr	52	1	He	1101.677	1101.677	2.908	6686173	1.09	1000	110.2	79.5	120.5	
Mn	55	1	He	1071.052	1071.052	2.997	5118275	0.42	1000	107.1	79.5	120.5	
Fe	56	1	He	10806.171	10806.171	2.144	62988464	0.70	10000	108.1	79.5	120.5	
Co	59	1	He	1038.584	1038.584	1.273	9658862	0.55	1000	103.9	79.5	120.5	
Ni	60	1	He	1094.364	1094.364	2.888	2518947	1.15	1000	109.4	79.5	120.5	
Cu	63	1	He	1085.899	1085.899	3.356	6564548	2.34	1000	108.6	79.5	120.5	
Zn	66	1	He	1030.441	1030.441	2.123	1252999	0.36	1000	103.0	79.5	120.5	
As	75	1	He	1013.798	1013.798	1.978	765959	0.24	1000	101.4	79.5	120.5	
Se	78	1	He	1051.754	1051.754	2.408	83914	0.66	1000	105.2	79.5	120.5	
Sr	88	1	He	1028.260	1028.260	1.878	6236481	0.08	1000	102.8	79.5	120.5	
Mo	95	1	He	113.031	113.031	2.261	326455	0.72	100	113.0	79.5	120.5	
Ag	107	1	He	106.787	106.787	1.819	1064501	0.21	100	106.8	79.5	120.5	
Cd	111	1	He	1159.008	1159.008	4.637	2002754	2.92	1000	115.9	79.5	120.5	
Sn	118	1	He	1203.097	1203.097	1.202	4728303	1.98	1000	120.3	79.5	120.5	
Sb	123	1	He	115.747	115.747	0.291	415337	0.74	100	115.7	79.5	120.5	
Ba	137	1	He	1175.772	1175.772	2.560	2102288	1.71	1000	117.6	79.5	120.5	
W	182	1	He	110.470	110.470	0.951	1310735	0.87	100	110.5	79.5	120.5	
Tl	205	1	He	262.492	262.492	1.624	8034426	1.75	250	105.0	79.5	120.5	
Pb	208	1	He	1094.486	1094.486	1.099	43761000	0.77	1000	109.4	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1222988	0.14	1389655	88.01	30	120	
Sc	45	1	He	558171	2.62	628609	88.79	30	120	
Sc	45	2	NoGas	4268640	0.88	4813296	88.68	30	120	
Rh	103	1	He	1719475	1.81	1894469	90.76	30	120	
In	115	1	He	916381	0.87	1086371	84.35	30	120	
Tb	159	1	He	3141096	1.80	3251379	96.61	30	120	
Ho	165	1	He	3177866	0.75	3312124	95.95	30	120	
Bi	209	1	He	2308590	0.63	2533294	91.13	30	120	

Sample Report

Sample Table

Sample Name	190-7091-a-1-b
Data File Name	021SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:08:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.265	0.265	24.70	1174	0.02	10000	
B	11	45	2	NoGas	51.692	51.692	0.52	206595	0.03	300	
Na	23	45	1	He	209959.581	209959.581	2.27	273178248	0.08	500000	
Mg	24	45	1	He	3149.004	3149.004	1.62	2326950	0.14	500000	
Al	27	45	1	He	360.889	360.889	1.88	144632	0.25	200000	
K	39	45	1	He	8336.000	8336.000	2.40	5457393	0.15	500000	
Ca	44	45	1	He	43921.052	43921.052	2.37	1544351	2.84	500000	
Ti	47	45	1	He	2.177	2.177	10.80	452	0.48	2500	
V	51	45	1	He	4.543	4.543	2.75	22618	0.02	10000	
Cr	52	45	1	He	2.152	2.152	4.00	14499	0.01	10000	
Mn	55	45	1	He	11.261	11.261	2.33	53703	0.02	10000	
Fe	56	45	1	He	492.024	492.024	1.90	2844150	0.02	200000	
Co	59	103	1	He	0.490	0.490	6.64	4452	0.01	10000	
Ni	60	103	1	He	2.417	2.417	4.33	5439	0.04	10000	
Cu	63	103	1	He	25.408	25.408	1.64	149978	0.02	10000	
Zn	66	103	1	He	91.423	91.423	1.04	109070	0.08	10000	
As	75	103	1	He	2.930	2.930	7.33	2237	0.13	10000	
Se	78	103	1	He	2.779	2.779	13.21	246	1.13	10000	
Sr	88	103	1	He	574.809	574.809	2.21	3391618	0.02	10000	
Mo	95	103	1	He	44.143	44.143	0.82	124100	0.04	2000	
Ag	107	103	1	He	0.032	0.032	8.55	346	0.01	300	
Cd	111	103	1	He	0.201	0.201	24.43	1249	0.02	4000	
Sn	118	115	1	He	4.089	4.089	10.60	17239	0.02	2000	
Sb	123	115	1	He	0.999	0.999	5.27	3809	0.03	300	
Ba	137	115	1	He	18.553	18.553	1.36	33679	0.06	10000	
W	182	209	1	He	1.353	1.353	16.54	25135	0.01	2500	
Tl	205	209	1	He	0.189	0.189	32.48	7555	0.00	5000	
Pb	208	209	1	He	0.663	0.663	5.55	35467	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1192695	1.41	1389655	85.83	30	120	
Sc	45	1	He	552585	1.26	628609	87.91	30	120	
Sc	45	2	NoGas	4297604	1.12	4813296	89.29	30	120	
Rh	103	1	He	1672709	1.36	1894469	88.29	30	120	
In	115	1	He	928605	0.72	1086371	85.48	30	120	
Tb	159	1	He	3087423	0.63	3251379	94.96	30	120	
Ho	165	1	He	3141662	0.78	3312124	94.85	30	120	
Bi	209	1	He	2994034	1.21	2533294	118.19	30	120	

Sample Report

Sample Table

Sample Name	SD 190-7091-a-1-b@5
Data File Name	022SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:11:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.136	0.136	25.87	756	0.02	10000	
B	11	45	2	NoGas	1.847	1.847	17.87	83509	0.00	300	
Na	23	45	1	He	43967.295	43967.295	0.83	61564005	0.07	500000	
Mg	24	45	1	He	648.564	648.564	2.05	516240	0.13	500000	
Al	27	45	1	He	77.086	77.086	3.47	34203	0.23	200000	
K	39	45	1	He	1804.927	1804.927	2.20	1295017	0.14	500000	
Ca	44	45	1	He	9079.419	9079.419	3.08	343498	2.64	500000	
Ti	47	45	1	He	1.114	1.114	98.78	260	0.43	2500	
V	51	45	1	He	0.967	0.967	8.40	5085	0.02	10000	
Cr	52	45	1	He	0.500	0.500	7.21	4916	0.01	10000	
Mn	55	45	1	He	2.603	2.603	6.04	13683	0.02	10000	
Fe	56	45	1	He	100.005	100.005	2.48	625188	0.02	200000	
Co	59	103	1	He	0.136	0.136	2.92	1393	0.01	10000	
Ni	60	103	1	He	0.531	0.531	8.11	1356	0.04	10000	
Cu	63	103	1	He	5.296	5.296	2.38	35434	0.01	10000	
Zn	66	103	1	He	19.752	19.752	3.96	27209	0.07	10000	
As	75	103	1	He	0.527	0.527	11.84	528	0.10	10000	
Se	78	103	1	He	0.437	0.437	12.23	72	0.61	10000	
Sr	88	103	1	He	108.467	108.467	2.73	715541	0.02	10000	
Mo	95	103	1	He	8.851	8.851	1.75	27882	0.03	2000	
Ag	107	103	1	He	0.013	0.013	12.04	181	0.01	300	
Cd	111	103	1	He	0.001	0.001	815.62	1020	0.00	4000	
Sn	118	115	1	He	0.587	0.587	7.22	3727	0.02	2000	
Sb	123	115	1	He	0.260	0.260	5.11	1268	0.02	300	
Ba	137	115	1	He	3.699	3.699	5.85	7626	0.05	10000	
W	182	209	1	He	0.348	0.348	13.69	8599	0.00	2500	
Tl	205	209	1	He	0.043	0.043	5.79	1581	0.00	5000	
Pb	208	209	1	He	0.227	0.227	7.56	11366	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1302580	0.61	1389655	93.73	30	120	
Sc	45	1	He	594056	1.24	628609	94.50	30	120	
Sc	45	2	NoGas	4592088	0.70	4813296	95.40	30	120	
Rh	103	1	He	1869899	1.45	1894469	98.70	30	120	
In	115	1	He	1047656	1.43	1086371	96.44	30	120	
Tb	159	1	He	3289468	0.46	3251379	101.17	30	120	
Ho	165	1	He	3362173	0.69	3312124	101.51	30	120	
Bi	209	1	He	2646095	1.96	2533294	104.45	30	120	

Sample Report

Sample Table

Sample Name	PDS 190-7091-a-1-b
Data File Name	023SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:15:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1000.340	1000.340	1.28	3666403	0.03	10000	
B	11	45	2	NoGas	172.692	172.692	1.34	510344	0.03	300	
Na	23	45	1	He	206841.673	206841.673	4.15	272140893	0.08	500000	
Mg	24	45	1	He	13073.577	13073.577	2.37	9768983	0.13	500000	
Al	27	45	1	He	10124.039	10124.039	3.00	4071611	0.25	200000	
K	39	45	1	He	17714.261	17714.261	2.70	11697659	0.15	500000	
Ca	44	45	1	He	51270.485	51270.485	3.42	1823331	2.81	500000	
Ti	47	45	1	He	105.978	105.978	2.46	21264	0.50	2500	
V	51	45	1	He	1016.715	1016.715	1.65	5145066	0.02	10000	
Cr	52	45	1	He	1017.889	1017.889	2.63	6188651	0.02	10000	
Mn	55	45	1	He	986.202	986.202	2.62	4721192	0.02	10000	
Fe	56	45	1	He	10602.008	10602.008	2.54	61899509	0.02	200000	
Co	59	103	1	He	1003.311	1003.311	1.26	8680188	0.01	10000	
Ni	60	103	1	He	1031.421	1031.421	1.26	2209011	0.05	10000	
Cu	63	103	1	He	1048.345	1048.345	1.95	5896301	0.02	10000	
Zn	66	103	1	He	1027.107	1027.107	1.43	1161963	0.09	10000	
As	75	103	1	He	985.612	985.612	1.27	692798	0.14	10000	
Se	78	103	1	He	966.710	966.710	1.28	71763	1.35	10000	
Sr	88	103	1	He	1599.019	1599.019	1.95	9022127	0.02	10000	
Mo	95	103	1	He	158.953	158.953	0.62	427125	0.04	2000	
Ag	107	103	1	He	104.371	104.371	1.25	967940	0.01	300	
Cd	111	103	1	He	1078.640	1078.640	2.63	1734570	0.06	4000	
Sn	118	115	1	He	1186.492	1186.492	1.01	4436388	0.03	2000	
Sb	123	115	1	He	113.133	113.133	1.01	386253	0.03	300	
Ba	137	115	1	He	1188.666	1188.666	1.07	2022469	0.06	10000	
W	182	209	1	He	85.089	85.089	0.91	1263125	0.01	2500	
Tl	205	209	1	He	191.719	191.719	0.90	7335852	0.00	5000	
Pb	208	209	1	He	793.174	793.174	1.27	39646871	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1166200	1.27	1389655	83.92	30	120	
Sc	45	1	He	559180	3.26	628609	88.96	30	120	
Sc	45	2	NoGas	4231104	0.58	4813296	87.90	30	120	
Rh	103	1	He	1599471	1.04	1894469	84.43	30	120	
In	115	1	He	871936	0.90	1086371	80.26	30	120	
Tb	159	1	He	3043422	0.65	3251379	93.60	30	120	
Ho	165	1	He	3133634	0.62	3312124	94.61	30	120	
Bi	209	1	He	2886166	1.07	2533294	113.93	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	024_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:19:19-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.264	1.672	193287	1.78	50	94.5	89.5	110.5	
B	11	45	2	NoGas	40.579	1.639	195654	1.47	50	81.2	89.5	110.5	CCV Failed
Na	23	45	1	He	25050.504	2.360	37476388	2.57	25000	100.2	89.5	110.5	
Mg	24	45	1	He	24694.540	4.639	20917388	0.25	25000	98.8	89.5	110.5	
Al	27	45	1	He	241.169	4.030	111316	0.91	250	96.5	89.5	110.5	
K	39	45	1	He	24491.645	4.519	18324756	0.18	25000	98.0	89.5	110.5	
Ca	44	45	1	He	24023.426	3.255	969407	1.57	25000	96.1	89.5	110.5	
Ti	47	45	1	He	49.229	6.103	11197	1.49	50	98.5	89.5	110.5	
V	51	45	1	He	49.375	3.475	283213	1.32	50	98.8	89.5	110.5	
Cr	52	45	1	He	49.721	3.383	344575	1.37	50	99.4	89.5	110.5	
Mn	55	45	1	He	238.977	3.791	1297776	0.88	250	95.6	89.5	110.5	
Fe	56	45	1	He	12342.095	3.884	81714806	0.78	12500	98.7	89.5	110.5	
Co	59	103	1	He	49.084	0.991	492547	1.42	50	98.2	89.5	110.5	
Ni	60	103	1	He	49.498	0.971	122973	0.81	50	99.0	89.5	110.5	
Cu	63	103	1	He	49.587	1.175	324062	1.31	50	99.2	89.5	110.5	
Zn	66	103	1	He	48.732	1.057	64993	0.89	50	97.5	89.5	110.5	
As	75	103	1	He	49.633	0.422	40553	1.04	50	99.3	89.5	110.5	
Se	78	103	1	He	49.762	1.402	4316	1.81	50	99.5	89.5	110.5	
Sr	88	103	1	He	47.917	0.547	313756	1.07	50	95.8	89.5	110.5	
Mo	95	103	1	He	51.610	1.330	160880	0.63	50	103.2	89.5	110.5	
Ag	107	103	1	He	50.286	0.842	540925	1.32	50	100.6	89.5	110.5	
Cd	111	103	1	He	50.384	1.079	94943	1.50	50	100.8	89.5	110.5	
Sn	118	115	1	He	50.703	1.567	224624	1.57	50	101.4	89.5	110.5	
Sb	123	115	1	He	50.621	1.184	203939	0.63	50	101.2	89.5	110.5	
Ba	137	115	1	He	49.563	0.635	99525	0.87	50	99.1	89.5	110.5	
W	182	209	1	He	51.140	1.360	646399	1.01	50	102.3	89.5	110.5	
Tl	205	209	1	He	47.715	5.224	1551494	5.71	50	95.4	89.5	110.5	
Pb	208	209	1	He	47.607	0.891	2022744	1.47	50	95.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1299831	0.32	1389655	93.54	30	120	
Sc	45	1	He	634553	4.74	628609	100.95	30	120	
Sc	45	2	NoGas	4724780	0.60	4813296	98.16	30	120	
Rh	103	1	He	1854959	0.78	1894469	97.91	30	120	
In	115	1	He	1028341	0.63	1086371	94.66	30	120	
Tb	159	1	He	3291741	1.07	3251379	101.24	30	120	
Ho	165	1	He	3355855	0.76	3312124	101.32	30	120	
Bi	209	1	He	2452253	1.78	2533294	96.80	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:23:09-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.120	17.7	707	8.7	1	
B	11	45	2	NoGas	-16.293	-2.5	34036	2.3	20	
Na	23	45	1	He	118.174	8.1	237423	4.6	400	
Mg	24	45	1	He	1.913	36.7	2804	18.8	1000	
Al	27	45	1	He	0.918	12.2	1657	2.7	50	
K	39	45	1	He	23.503	11.8	47949	3.4	1000	
Ca	44	45	1	He	12.780	14.2	871	8.4	1000	
Ti	47	45	1	He	-0.020	-84.6	19	20.4	20	
V	51	45	1	He	0.125	8.4	554	9.9	2	
Cr	52	45	1	He	0.049	26.3	2005	2.9	2	
Mn	55	45	1	He	0.403	3.1	2500	3.5	2	
Fe	56	45	1	He	21.598	26.3	138547	24.4	50	
Co	59	103	1	He	0.050	8.0	540	8.6	1	
Ni	60	103	1	He	0.028	18.8	100	12.0	2	
Cu	63	103	1	He	0.139	13.0	1573	8.6	2	
Zn	66	103	1	He	0.359	7.4	1639	2.7	20	
As	75	103	1	He	0.195	5.4	263	4.0	2	
Se	78	103	1	He	0.264	46.6	59	19.9	2	
Sr	88	103	1	He	0.044	15.4	476	11.3	10	
Mo	95	103	1	He	1.080	20.6	3596	21.2	2	
Ag	107	103	1	He	0.015	21.0	214	16.6	0.2	
Cd	111	103	1	He	-0.017	-78.9	1020	3.8	0.2	
Sn	118	115	1	He	0.535	8.9	3534	5.8	10	
Sb	123	115	1	He	0.674	13.3	3000	12.1	1	
Ba	137	115	1	He	0.022	42.9	116	17.4	5	
W	182	209	1	He	1.171	14.8	18678	12.2	10	
Tl	205	209	1	He	0.068	15.4	2300	15.2	0.5	
Pb	208	209	1	He	0.125	9.7	6338	8.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1340998	4.03	1389655	96.50	30	120	
Sc	45	1	He	594219	1.28	628609	94.53	30	120	
Sc	45	2	NoGas	4657820	1.45	4813296	96.77	30	120	
Rh	103	1	He	1930421	1.58	1894469	101.90	30	120	
In	115	1	He	1060180	0.36	1086371	97.59	30	120	
Tb	159	1	He	3277030	0.32	3251379	100.79	30	120	
Ho	165	1	He	3345465	1.21	3312124	101.01	30	120	
Bi	209	1	He	2499180	0.85	2533294	98.65	30	120	

Sample Report

Sample Table

Sample Name	190-7091-a-1-c ms
Data File Name	026SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:26:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1077.587	1077.587	0.80	3930789	0.03	10000	
B	11	45	2	NoGas	178.956	178.956	0.99	523520	0.03	300	
Na	23	45	1	He	210458.854	210458.854	3.26	276820122	0.08	500000	
Mg	24	45	1	He	13503.564	13503.564	4.36	10079131	0.13	500000	
Al	27	45	1	He	10384.959	10384.959	3.92	4173198	0.25	200000	
K	39	45	1	He	18345.620	18345.620	4.70	12100931	0.15	500000	
Ca	44	45	1	He	53413.436	53413.436	3.93	1898087	2.81	500000	
Ti	47	45	1	He	113.414	113.414	5.54	22710	0.50	2500	
V	51	45	1	He	1098.362	1098.362	2.56	5553976	0.02	10000	
Cr	52	45	1	He	1079.722	1079.722	2.68	6560381	0.02	10000	
Mn	55	45	1	He	1060.726	1060.726	3.66	5073712	0.02	10000	
Fe	56	45	1	He	11072.960	11072.960	3.14	64602700	0.02	200000	
Co	59	103	1	He	1094.786	1094.786	0.79	9504593	0.01	10000	
Ni	60	103	1	He	1120.986	1120.986	2.03	2408892	0.05	10000	
Cu	63	103	1	He	1131.304	1131.304	1.00	6384914	0.02	10000	
Zn	66	103	1	He	1103.586	1103.586	0.78	1252725	0.09	10000	
As	75	103	1	He	1061.549	1061.549	0.65	748743	0.14	10000	
Se	78	103	1	He	1029.804	1029.804	1.01	76706	1.34	10000	
Sr	88	103	1	He	1658.579	1658.579	0.44	9390980	0.02	10000	
Mo	95	103	1	He	165.754	165.754	1.15	446899	0.04	2000	
Ag	107	103	1	He	106.430	106.430	1.61	990418	0.01	300	
Cd	111	103	1	He	1158.630	1158.630	1.49	1869563	0.06	4000	
Sn	118	115	1	He	1242.675	1242.675	0.83	4669340	0.03	2000	
Sb	123	115	1	He	119.634	119.634	0.30	410460	0.03	300	
Ba	137	115	1	He	1252.238	1252.238	0.11	2141143	0.06	10000	
W	182	209	1	He	85.848	85.848	1.36	1332697	0.01	2500	
Tl	205	209	1	He	184.203	184.203	0.44	7371578	0.00	5000	
Pb	208	209	1	He	813.899	813.899	0.46	42548886	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1160549	0.43	1389655	83.51	30	120	
Sc	45	1	He	558902	3.64	628609	88.91	30	120	
Sc	45	2	NoGas	4209195	1.14	4813296	87.45	30	120	
Rh	103	1	He	1604909	0.91	1894469	84.72	30	120	
In	115	1	He	876201	0.27	1086371	80.65	30	120	
Tb	159	1	He	3046123	0.87	3251379	93.69	30	120	
Ho	165	1	He	3120723	0.88	3312124	94.22	30	120	
Bi	209	1	He	3018426	0.82	2533294	119.15	30	120	

Sample Report

Sample Table

Sample Name	190-7091-a-1-d msd
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:30:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1078.825	1078.825	1.65	4015432	0.03	10000	
B	11	45	2	NoGas	182.533	182.533	1.17	537983	0.03	300	
Na	23	45	1	He	215374.469	215374.469	2.19	279925574	0.08	500000	
Mg	24	45	1	He	13691.109	13691.109	2.70	10101413	0.14	500000	
Al	27	45	1	He	10487.824	10487.824	2.54	4165444	0.25	200000	
K	39	45	1	He	18524.009	18524.009	3.09	12077127	0.15	500000	
Ca	44	45	1	He	54684.712	54684.712	2.15	1920898	2.85	500000	
Ti	47	45	1	He	111.802	111.802	3.09	22129	0.51	2500	
V	51	45	1	He	1125.344	1125.344	2.39	5622544	0.02	10000	
Cr	52	45	1	He	1112.695	1112.695	2.54	6679970	0.02	10000	
Mn	55	45	1	He	1095.298	1095.298	2.16	5178020	0.02	10000	
Fe	56	45	1	He	11422.348	11422.348	2.68	65850895	0.02	200000	
Co	59	103	1	He	1107.907	1107.907	1.07	9607267	0.01	10000	
Ni	60	103	1	He	1134.214	1134.214	1.03	2434687	0.05	10000	
Cu	63	103	1	He	1151.622	1151.622	2.53	6491381	0.02	10000	
Zn	66	103	1	He	1110.295	1110.295	1.71	1258818	0.09	10000	
As	75	103	1	He	1071.986	1071.986	1.43	755210	0.14	10000	
Se	78	103	1	He	1045.572	1045.572	1.12	77792	1.34	10000	
Sr	88	103	1	He	1686.443	1686.443	1.41	9537384	0.02	10000	
Mo	95	103	1	He	170.309	170.309	1.26	458650	0.04	2000	
Ag	107	103	1	He	106.840	106.840	0.68	993150	0.01	300	
Cd	111	103	1	He	1179.690	1179.690	1.05	1901461	0.06	4000	
Sn	118	115	1	He	1245.137	1245.137	1.18	4692034	0.03	2000	
Sb	123	115	1	He	119.790	119.790	0.28	412193	0.03	300	
Ba	137	115	1	He	1269.522	1269.522	0.63	2176952	0.06	10000	
W	182	209	1	He	82.019	82.019	0.83	1349822	0.01	2500	
Tl	205	209	1	He	175.344	175.344	1.32	7437285	0.00	5000	
Pb	208	209	1	He	770.428	770.428	0.47	42689619	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1184286	0.96	1389655	85.22	30	120	
Sc	45	1	He	552075	2.21	628609	87.82	30	120	
Sc	45	2	NoGas	4252386	1.08	4813296	88.35	30	120	
Rh	103	1	He	1603171	1.46	1894469	84.62	30	120	
In	115	1	He	878747	0.60	1086371	80.89	30	120	
Tb	159	1	He	3079662	1.89	3251379	94.72	30	120	
Ho	165	1	He	3138607	1.93	3312124	94.76	30	120	
Bi	209	1	He	3199260	0.56	2533294	126.29	30	120	ISTD Failed

Sample Report

Sample Table

Sample Name	190-7092-a-1-b
Data File Name	028SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:34:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.340	0.340	9.53	1508	0.02	10000	
B	11	45	2	NoGas	138.821	138.821	1.91	415221	0.03	300	
Na	23	45	1	He	149310.476	149310.476	0.08	190813504	0.08	500000	
Mg	24	45	1	He	8183.882	8183.882	0.87	5936831	0.14	500000	
Al	27	45	1	He	509.690	509.690	1.19	200123	0.25	200000	
K	39	45	1	He	27241.427	27241.427	1.81	17448331	0.16	500000	
Ca	44	45	1	He	57931.847	57931.847	1.89	2000305	2.90	500000	
Ti	47	45	1	He	6.461	6.461	6.88	1278	0.51	2500	
V	51	45	1	He	1.438	1.438	6.01	6953	0.02	10000	
Cr	52	45	1	He	2.639	2.639	1.54	17115	0.02	10000	
Mn	55	45	1	He	38.274	38.274	0.61	178280	0.02	10000	
Fe	56	45	1	He	866.272	866.272	1.19	4914030	0.02	200000	
Co	59	103	1	He	0.443	0.443	6.90	4121	0.01	10000	
Ni	60	103	1	He	2.724	2.724	4.70	6262	0.04	10000	
Cu	63	103	1	He	14.686	14.686	1.59	88910	0.02	10000	
Zn	66	103	1	He	269.005	269.005	2.47	326230	0.08	10000	
As	75	103	1	He	1.490	1.490	10.97	1206	0.12	10000	
Se	78	103	1	He	2.313	2.313	10.64	215	1.08	10000	
Sr	88	103	1	He	1211.788	1211.788	1.56	7313461	0.02	10000	
Mo	95	103	1	He	6.145	6.145	6.39	17731	0.03	2000	
Ag	107	103	1	He	0.057	0.057	16.16	601	0.01	300	
Cd	111	103	1	He	0.384	0.384	11.99	1592	0.02	4000	
Sn	118	115	1	He	4.547	4.547	10.05	19397	0.02	2000	
Sb	123	115	1	He	1.199	1.199	3.59	4612	0.03	300	
Ba	137	115	1	He	34.680	34.680	1.44	63979	0.05	10000	
W	182	209	1	He	1.423	1.423	12.00	21118	0.01	2500	
Tl	205	209	1	He	0.220	0.220	29.89	7105	0.00	5000	
Pb	208	209	1	He	1.486	1.486	3.01	62883	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1236104	2.18	1389655	88.95	30	120	
Sc	45	1	He	542603	0.97	628609	86.32	30	120	
Sc	45	2	NoGas	4139770	1.30	4813296	86.01	30	120	
Rh	103	1	He	1710937	1.69	1894469	90.31	30	120	
In	115	1	He	944645	1.96	1086371	86.95	30	120	
Tb	159	1	He	3119589	2.45	3251379	95.95	30	120	
Ho	165	1	He	3190456	1.32	3312124	96.33	30	120	
Bi	209	1	He	2408669	0.97	2533294	95.08	30	120	

Sample Report

Sample Table

Sample Name	190-7093-a-1-b
Data File Name	029SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:37:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.218	0.218	18.62	1056	0.02	10000	
B	11	45	2	NoGas	102.274	102.274	2.73	324574	0.03	300	
Na	23	45	1	He	862685.937	862685.937	4.28	1093837853	0.08	500000	>LDR
Mg	24	45	1	He	34874.889	34874.889	2.80	25113944	0.14	500000	
Al	27	45	1	He	443.043	443.043	3.19	172843	0.26	200000	
K	39	45	1	He	29464.620	29464.620	2.96	18735265	0.16	500000	
Ca	44	45	1	He	135884.329	135884.329	2.19	4658912	2.92	500000	
Ti	47	45	1	He	4.091	4.091	24.19	808	0.51	2500	
V	51	45	1	He	1.312	1.312	9.14	6311	0.02	10000	
Cr	52	45	1	He	4.475	4.475	1.86	27758	0.02	10000	
Mn	55	45	1	He	57.946	57.946	3.01	267753	0.02	10000	
Fe	56	45	1	He	2116.917	2116.917	3.32	11915329	0.02	200000	
Co	59	103	1	He	0.382	0.382	6.28	3311	0.01	10000	
Ni	60	103	1	He	15.192	15.192	1.74	32444	0.05	10000	
Cu	63	103	1	He	36.756	36.756	1.54	206506	0.02	10000	
Zn	66	103	1	He	570.653	570.653	1.88	643671	0.09	10000	
As	75	103	1	He	1.358	1.358	1.37	1032	0.13	10000	
Se	78	103	1	He	1.649	1.649	7.16	151	1.09	10000	
Sr	88	103	1	He	12871.953	12871.953	2.06	72366124	0.02	10000	>LDR
Mo	95	103	1	He	10.241	10.241	2.83	27484	0.04	2000	
Ag	107	103	1	He	0.091	0.091	3.91	882	0.01	300	
Cd	111	103	1	He	0.209	0.209	10.93	1203	0.02	4000	
Sn	118	115	1	He	4.775	4.775	3.39	19367	0.02	2000	
Sb	123	115	1	He	1.411	1.411	5.44	5145	0.03	300	
Ba	137	115	1	He	142.260	142.260	0.90	249984	0.06	10000	
W	182	209	1	He	0.352	0.352	12.13	8962	0.00	2500	
Tl	205	209	1	He	0.098	0.098	5.58	3612	0.00	5000	
Pb	208	209	1	He	0.510	0.510	1.27	25227	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1262202	0.35	1389655	90.83	30	120	
Sc	45	1	He	539028	3.42	628609	85.75	30	120	
Sc	45	2	NoGas	4140792	1.44	4813296	86.03	30	120	
Rh	103	1	He	1593847	1.61	1894469	84.13	30	120	
In	115	1	He	900316	0.46	1086371	82.87	30	120	
Tb	159	1	He	3061068	0.86	3251379	94.15	30	120	
Ho	165	1	He	3168065	0.36	3312124	95.65	30	120	
Bi	209	1	He	2739193	0.47	2533294	108.13	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:41:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1912.761	1912.761	2.15	7432105	0.03	10000	
B	11	45	2	NoGas	211.135	211.135	0.89	650623	0.03	300	
Na	23	45	1	He	19878.348	19878.348	3.96	29227458	0.07	500000	
Mg	24	45	1	He	19474.378	19474.378	3.51	16218148	0.12	500000	
Al	27	45	1	He	18253.985	18253.985	4.34	8180686	0.22	200000	
K	39	45	1	He	19151.263	19151.263	3.56	14094180	0.14	500000	
Ca	44	45	1	He	17414.072	17414.072	4.23	690518	2.52	500000	
Ti	47	45	1	He	190.265	190.265	3.42	42500	0.45	2500	
V	51	45	1	He	1913.076	1913.076	3.49	10789515	0.02	10000	
Cr	52	45	1	He	1941.053	1941.053	3.69	13152658	0.01	10000	
Mn	55	45	1	He	1898.395	1898.395	4.16	10127612	0.02	10000	
Fe	56	45	1	He	19530.003	19530.003	3.33	127102524	0.02	200000	
Co	59	103	1	He	1974.605	1974.605	0.38	19005029	0.01	10000	
Ni	60	103	1	He	2016.767	2016.767	0.91	4804711	0.04	10000	
Cu	63	103	1	He	2026.070	2026.070	1.50	12675452	0.02	10000	
Zn	66	103	1	He	2052.679	2052.679	0.69	2582534	0.08	10000	
As	75	103	1	He	1919.765	1919.765	1.11	1500981	0.13	10000	
Se	78	103	1	He	1909.238	1909.238	0.47	157634	1.21	10000	
Sr	88	103	1	He	2009.644	2009.644	0.82	12614041	0.02	10000	
Mo	95	103	1	He	202.465	202.465	3.32	605004	0.03	2000	
Ag	107	103	1	He	217.716	217.716	0.75	2246306	0.01	300	
Cd	111	103	1	He	2139.201	2139.201	1.20	3826001	0.06	4000	
Sn	118	115	1	He	2337.284	2337.284	1.39	9425919	0.02	2000	>LDR
Sb	123	115	1	He	229.394	229.394	0.93	844632	0.03	300	
Ba	137	115	1	He	2272.375	2272.375	1.46	4170426	0.05	10000	
W	182	209	1	He	226.503	226.503	4.06	2761544	0.01	2500	
Tl	205	209	1	He	502.584	502.584	2.53	15831773	0.00	5000	
Pb	208	209	1	He	2089.833	2089.833	1.95	86007189	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1236492	1.60	1389655	88.98	30	120	
Sc	45	1	He	623649	4.79	628609	99.21	30	120	
Sc	45	2	NoGas	4528418	1.08	4813296	94.08	30	120	
Rh	103	1	He	1779236	1.41	1894469	93.92	30	120	
In	115	1	He	940526	0.49	1086371	86.57	30	120	
Tb	159	1	He	3179922	0.30	3251379	97.80	30	120	
Ho	165	1	He	3286394	0.88	3312124	99.22	30	120	
Bi	209	1	He	2377008	2.74	2533294	93.83	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD Fe
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:45:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.423	0.423	13.00	1896	0.02	10000	
B	11	45	2	NoGas	-14.339	-14.339	-3.23	38919	-0.04	300	
Na	23	45	1	He	88.422	88.422	17.28	217840	0.04	500000	
Mg	24	45	1	He	3.085	3.085	52.84	4178	0.07	500000	
Al	27	45	1	He	2.652	2.652	40.41	2671	0.10	200000	
K	39	45	1	He	9.996	9.996	25.53	42751	0.02	500000	
Ca	44	45	1	He	8.451	8.451	22.53	783	1.08	500000	
Ti	47	45	1	He	0.228	0.228	78.64	79	0.29	2500	
V	51	45	1	He	0.326	0.326	43.73	1832	0.02	10000	
Cr	52	45	1	He	0.631	0.631	11.42	6411	0.01	10000	
Mn	55	45	1	He	2.210	2.210	4.09	12971	0.02	10000	
Fe	56	45	1	He	146818.289	146818.289	3.09	1010225027	0.01	200000	
Co	59	103	1	He	0.700	0.700	15.57	7314	0.01	10000	
Ni	60	103	1	He	1.136	1.136	8.97	2963	0.04	10000	
Cu	63	103	1	He	0.926	0.926	16.65	6899	0.01	10000	
Zn	66	103	1	He	0.609	0.609	25.11	1977	0.03	10000	
As	75	103	1	He	1.407	1.407	9.56	1289	0.11	10000	
Se	78	103	1	He	1.417	1.417	2.56	162	0.88	10000	
Sr	88	103	1	He	0.506	0.506	24.68	3610	0.01	10000	
Mo	95	103	1	He	3.729	3.729	12.62	12152	0.03	2000	
Ag	107	103	1	He	0.041	0.041	5.39	503	0.01	300	
Cd	111	103	1	He	0.188	0.188	64.03	1412	0.01	4000	
Sn	118	115	1	He	11.541	11.541	11.88	53586	0.02	2000	
Sb	123	115	1	He	0.972	0.972	4.71	4242	0.02	300	
Ba	137	115	1	He	0.230	0.230	58.98	543	0.04	10000	
W	182	209	1	He	3.304	3.304	12.24	47063	0.01	2500	
Tl	205	209	1	He	0.373	0.373	33.59	12718	0.00	5000	
Pb	208	209	1	He	0.606	0.606	17.55	27818	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1277741	1.92	1389655	91.95	30	120	
Sc	45	1	He	659156	3.48	628609	104.86	30	120	
Sc	45	2	NoGas	4589516	0.50	4813296	95.35	30	120	
Rh	103	1	He	1929599	2.23	1894469	101.85	30	120	
In	115	1	He	1061508	1.28	1086371	97.71	30	120	
Tb	159	1	He	3311336	0.68	3251379	101.84	30	120	
Ho	165	1	He	3403271	0.86	3312124	102.75	30	120	
Bi	209	1	He	2555214	1.19	2533294	100.87	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD Al
Data File Name	032SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:48:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.233	0.233	13.78	1204	0.02	10000	
B	11	45	2	NoGas	-13.541	-13.541	-0.79	42516	-0.03	300	
Na	23	45	1	He	45.237	45.237	3.39	131373	0.03	500000	
Mg	24	45	1	He	1.307	1.307	18.16	2259	0.06	500000	
Al	27	45	1	He	163155.172	163155.172	1.69	67638028	0.24	200000	
K	39	45	1	He	6.771	6.771	20.19	35139	0.02	500000	
Ca	44	45	1	He	19.075	19.075	20.20	1073	1.78	500000	
Ti	47	45	1	He	0.091	0.091	44.52	41	0.22	2500	
V	51	45	1	He	0.203	0.203	18.96	950	0.02	10000	
Cr	52	45	1	He	0.087	0.087	24.77	2185	0.00	10000	
Mn	55	45	1	He	1.060	1.060	2.05	5664	0.02	10000	
Fe	56	45	1	He	102.249	102.249	33.50	616866	0.02	200000	
Co	59	103	1	He	0.063	0.063	5.53	661	0.01	10000	
Ni	60	103	1	He	0.120	0.120	12.73	328	0.04	10000	
Cu	63	103	1	He	0.311	0.311	7.46	2664	0.01	10000	
Zn	66	103	1	He	12.233	12.233	2.74	17312	0.07	10000	
As	75	103	1	He	0.489	0.489	6.88	498	0.10	10000	
Se	78	103	1	He	0.457	0.457	25.97	74	0.62	10000	
Sr	88	103	1	He	0.203	0.203	4.49	1516	0.01	10000	
Mo	95	103	1	He	1.037	1.037	9.04	3350	0.03	2000	
Ag	107	103	1	He	0.021	0.021	15.15	270	0.01	300	
Cd	111	103	1	He	-0.001	-0.001	-3943.27	1019	0.00	4000	
Sn	118	115	1	He	3.691	3.691	3.87	17918	0.02	2000	
Sb	123	115	1	He	0.160	0.160	9.94	869	0.02	300	
Ba	137	115	1	He	0.052	0.052	38.78	178	0.03	10000	
W	182	209	1	He	1.122	1.122	11.00	17299	0.01	2500	
Tl	205	209	1	He	0.067	0.067	5.73	2195	0.00	5000	
Pb	208	209	1	He	0.227	0.227	7.15	10313	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1362440	1.50	1389655	98.04	30	120	
Sc	45	1	He	576351	2.46	628609	91.69	30	120	
Sc	45	2	NoGas	4745714	1.25	4813296	98.60	30	120	
Rh	103	1	He	1873508	0.67	1894469	98.89	30	120	
In	115	1	He	1062676	1.16	1086371	97.82	30	120	
Tb	159	1	He	3216013	0.62	3251379	98.91	30	120	
Ho	165	1	He	3269531	1.39	3312124	98.71	30	120	
Bi	209	1	He	2397404	1.12	2533294	94.64	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176698/1-a@2
Data File Name	033_Blk.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:52:45-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.220	4.9	1019	2.7	1	
B	11	45	2	NoGas	-13.798	-5.8	38021	3.8	20	
Na	23	45	1	He	51.699	7.9	142618	0.6	400	
Mg	24	45	1	He	37.327	1.2	30552	2.7	1000	
Al	27	45	1	He	23.619	34.1	11309	34.1	50	
K	39	45	1	He	24.798	15.2	48213	2.9	1000	
Ca	44	45	1	He	120.169	3.4	4869	3.9	1000	
Ti	47	45	1	He	0.511	33.4	131	31.4	20	
V	51	45	1	He	0.171	36.1	799	45.2	2	
Cr	52	45	1	He	0.820	1.9	6898	2.4	2	
Mn	55	45	1	He	1.353	0.4	7242	3.5	2	
Fe	56	45	1	He	36.368	13.4	228398	16.9	50	
Co	59	103	1	He	0.154	12.8	1508	11.5	1	
Ni	60	103	1	He	0.279	13.4	696	11.0	2	
Cu	63	103	1	He	0.691	2.3	4953	3.7	2	
Zn	66	103	1	He	2.293	10.6	3983	9.6	20	
As	75	103	1	He	0.887	3.7	792	4.8	2	
Se	78	103	1	He	0.684	21.9	89	12.8	2	
Sr	88	103	1	He	0.529	9.8	3509	7.6	10	
Mo	95	103	1	He	0.752	10.9	2352	12.3	2	
Ag	107	103	1	He	0.029	0.6	348	2.4	0.2	
Cd	111	103	1	He	0.028	18.9	1029	2.3	0.2	
Sn	118	115	1	He	21.913	5.4	94838	6.3	10	Blank Failed
Sb	123	115	1	He	0.199	7.0	968	5.7	1	
Ba	137	115	1	He	0.933	12.8	1883	12.6	5	
W	182	209	1	He	0.680	6.1	11920	5.0	10	
Tl	205	209	1	He	0.359	2.8	11518	3.5	0.5	
Pb	208	209	1	He	0.463	12.6	20216	12.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1208894	1.29	1389655	86.99	30	120	
Sc	45	1	He	586974	3.79	628609	93.38	30	120	
Sc	45	2	NoGas	4320745	2.12	4813296	89.77	30	120	
Rh	103	1	He	1795626	1.87	1894469	94.78	30	120	
In	115	1	He	998003	0.98	1086371	91.87	30	120	
Tb	159	1	He	3199014	1.62	3251379	98.39	30	120	
Ho	165	1	He	3243267	0.70	3312124	97.92	30	120	
Bi	209	1	He	2404825	0.78	2533294	94.93	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176698/2-a@2
Data File Name	034LCSS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:56:34-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	468.645	468.645	1.376	1677036	0.95	500	93.7	78.6	110.5	
B	11	2	NoGas	42.772	42.772	3.061	174636	1.58	50	85.5	79.5	120.5	
Na	23	1	He	4811.696	4811.696	2.036	6280139	1.12	5000	96.2	79.5	120.5	
Mg	24	1	He	4885.388	4885.388	3.548	3581880	0.90	5000	97.7	79.5	120.5	
Al	27	1	He	4564.349	4564.349	2.665	1802062	0.56	5000	91.3	79.5	120.5	
K	39	1	He	4725.112	4725.112	4.388	3082069	1.34	5000	94.5	79.5	120.5	
Ca	44	1	He	4391.734	4391.734	2.178	153619	1.01	5000	87.8	79.5	120.5	
Ti	47	1	He	46.645	46.645	2.983	9187	0.08	50	93.3	79.5	120.5	
V	51	1	He	490.970	490.970	4.338	2436777	2.01	500	98.2	71.5	110.5	
Cr	52	1	He	493.050	493.050	4.249	2941607	2.23	500	98.6	69.5	110.5	
Mn	55	1	He	481.322	481.322	2.328	2261395	0.87	500	96.3	79.5	120.5	
Fe	56	1	He	4858.917	4858.917	2.327	27840698	0.74	5000	97.2	79.5	120.5	
Co	59	1	He	460.527	460.527	0.837	4198209	0.80	500	92.1	73.9	110.5	
Ni	60	1	He	446.195	446.195	0.520	1006960	1.19	500	89.2	74.9	110.5	
Cu	63	1	He	478.586	478.586	1.052	2836625	0.59	500	95.7	72.6	110.5	
Zn	66	1	He	418.210	418.210	0.311	499132	0.73	500	83.6	71.5	113.4	
As	75	1	He	405.330	405.330	0.254	300266	0.78	500	81.1	73.4	110.5	
Se	78	1	He	392.402	392.402	0.382	30712	0.94	500	78.5	64.6	110.5	
Sr	88	1	He	468.126	468.126	0.727	2783409	1.07	500	93.6	79.5	120.5	
Mo	95	1	He	50.674	50.674	0.850	143522	1.13	50	101.3	29.5	140.5	
Ag	107	1	He	48.780	48.780	0.584	476697	0.45	50	97.6	59.5	114.5	
Cd	111	1	He	453.227	453.227	0.736	768534	0.35	500	90.6	73.5	110.5	
Sn	118	1	He	561.489	561.489	0.352	2186073	0.44	500	112.3	79.5	120.5	
Sb	123	1	He	49.077	49.077	0.525	174527	0.65	50	98.2	67.5	113.4	
Ba	137	1	He	472.019	472.019	0.380	836092	0.45	500	94.4	69.5	110.5	
W	182	1	He	49.232	49.232	2.046	582713	1.73	50	98.5	74.6	125.4	
Tl	205	1	He	118.069	118.069	0.830	3593561	0.72	125	94.5	70.6	110.5	
Pb	208	1	He	487.953	487.953	0.869	19400859	0.21	500	97.6	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1138561	1.40	1389655	81.93	30	120	
Sc	45	1	He	548696	3.11	628609	87.29	30	120	
Sc	45	2	NoGas	4087733	0.81	4813296	84.93	30	120	
Rh	103	1	He	1685267	1.04	1894469	88.96	30	120	
In	115	1	He	907651	0.13	1086371	83.55	30	120	
Tb	159	1	He	3058085	0.52	3251379	94.06	30	120	
Ho	165	1	He	3124511	1.08	3312124	94.34	30	120	
Bi	209	1	He	2295648	0.73	2533294	90.62	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-d@2
Data File Name	035SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:00:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.026	3.026	2.71	11597	0.03	10000	
B	11	45	2	NoGas	-7.947	-7.947	-3.47	56093	-0.01	300	
Na	23	45	1	He	115.148	115.148	3.81	240365	0.05	500000	
Mg	24	45	1	He	7023.141	7023.141	3.54	5748525	0.12	500000	
Al	27	45	1	He	36882.555	36882.555	3.97	16244889	0.23	200000	
K	39	45	1	He	3020.026	3020.026	3.14	2211595	0.14	500000	
Ca	44	45	1	He	579.507	579.507	1.26	22981	2.52	500000	
Ti	47	45	1	He	311.697	311.697	1.93	68412	0.46	2500	
V	51	45	1	He	103.131	103.131	2.34	571526	0.02	10000	
Cr	52	45	1	He	89.598	89.598	2.83	598324	0.01	10000	
Mn	55	45	1	He	7350.115	7350.115	2.44	38545440	0.02	10000	
Fe	56	45	1	He	187305.170	187305.170	2.23	1197966708	0.02	200000	
Co	59	103	1	He	55.793	55.793	0.86	527300	0.01	10000	
Ni	60	103	1	He	84.232	84.232	1.04	197098	0.04	10000	
Cu	63	103	1	He	55.919	55.919	1.15	344121	0.02	10000	
Zn	66	103	1	He	180.992	180.992	1.31	224521	0.08	10000	
As	75	103	1	He	65.173	65.173	0.99	50125	0.13	10000	
Se	78	103	1	He	4.972	4.972	2.24	435	1.14	10000	
Sr	88	103	1	He	20.228	20.228	0.78	124839	0.02	10000	
Mo	95	103	1	He	7.581	7.581	0.26	22328	0.03	2000	
Ag	107	103	1	He	0.097	0.097	2.58	1027	0.01	300	
Cd	111	103	1	He	0.483	0.483	10.13	1801	0.03	4000	
Sn	118	115	1	He	17.901	17.901	0.34	74200	0.02	2000	
Sb	123	115	1	He	0.878	0.878	0.35	3462	0.03	300	
Ba	137	115	1	He	290.313	290.313	0.62	540402	0.05	10000	
W	182	209	1	He	0.871	0.871	12.24	13769	0.01	2500	
Tl	205	209	1	He	0.852	0.852	4.56	26259	0.00	5000	
Pb	208	209	1	He	67.294	67.294	0.72	2706537	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1200505	1.02	1389655	86.39	30	120	
Sc	45	1	He	612440	1.90	628609	97.43	30	120	
Sc	45	2	NoGas	4555192	0.21	4813296	94.64	30	120	
Rh	103	1	He	1747188	1.22	1894469	92.23	30	120	
In	115	1	He	953797	0.33	1086371	87.80	30	120	
Tb	159	1	He	3192540	0.35	3251379	98.19	30	120	
Ho	165	1	He	3266107	0.23	3312124	98.61	30	120	
Bi	209	1	He	2321490	0.41	2533294	91.64	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	036_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:03:58-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.713	1.986	171304	1.75	50	91.4	89.5	110.5	
B	11	45	2	NoGas	38.611	2.705	167600	1.84	50	77.2	89.5	110.5	CCV Failed
Na	23	45	1	He	25159.466	1.669	33412403	0.69	25000	100.6	89.5	110.5	
Mg	24	45	1	He	25012.213	1.334	18824427	1.99	25000	100.0	89.5	110.5	
Al	27	45	1	He	246.222	0.787	100932	1.76	250	98.5	89.5	110.5	
K	39	45	1	He	24585.865	3.149	16337433	0.85	25000	98.3	89.5	110.5	
Ca	44	45	1	He	24160.182	2.296	865625	0.07	25000	96.6	89.5	110.5	
Ti	47	45	1	He	49.333	1.793	9973	1.26	50	98.7	89.5	110.5	
V	51	45	1	He	49.613	1.481	252734	1.38	50	99.2	89.5	110.5	
Cr	52	45	1	He	50.467	1.552	310564	1.10	50	100.9	89.5	110.5	
Mn	55	45	1	He	242.953	1.567	1171796	0.76	250	97.2	89.5	110.5	
Fe	56	45	1	He	12602.571	1.852	74106937	0.82	12500	100.8	89.5	110.5	
Co	59	103	1	He	47.422	0.699	442113	0.77	50	94.8	89.5	110.5	
Ni	60	103	1	He	47.482	0.510	109601	0.25	50	95.0	89.5	110.5	
Cu	63	103	1	He	48.363	0.834	293654	0.68	50	96.7	89.5	110.5	
Zn	66	103	1	He	47.060	0.851	58351	1.51	50	94.1	89.5	110.5	
As	75	103	1	He	47.540	0.888	36091	0.74	50	95.1	89.5	110.5	
Se	78	103	1	He	46.359	0.668	3738	1.32	50	92.7	89.5	110.5	
Sr	88	103	1	He	46.408	0.863	282312	0.23	50	92.8	89.5	110.5	
Mo	95	103	1	He	49.498	3.288	143347	2.63	50	99.0	89.5	110.5	
Ag	107	103	1	He	49.660	1.043	496272	0.48	50	99.3	89.5	110.5	
Cd	111	103	1	He	49.156	1.606	86077	1.35	50	98.3	89.5	110.5	
Sn	118	115	1	He	50.477	1.343	206166	0.94	50	101.0	89.5	110.5	
Sb	123	115	1	He	50.942	0.611	189217	0.38	50	101.9	89.5	110.5	
Ba	137	115	1	He	49.437	1.204	91518	0.71	50	98.9	89.5	110.5	
W	182	209	1	He	49.451	2.237	591300	0.78	50	98.9	89.5	110.5	
Tl	205	209	1	He	46.043	0.851	1415924	0.60	50	92.1	89.5	110.5	
Pb	208	209	1	He	47.692	0.653	1916728	0.83	50	95.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1191096	0.42	1389655	85.71	30	120	
Sc	45	1	He	563043	2.33	628609	89.57	30	120	
Sc	45	2	NoGas	4166386	1.61	4813296	86.56	30	120	
Rh	103	1	He	1723396	0.68	1894469	90.97	30	120	
In	115	1	He	948066	0.50	1086371	87.27	30	120	
Tb	159	1	He	3131651	1.95	3251379	96.32	30	120	
Ho	165	1	He	3195990	0.93	3312124	96.49	30	120	
Bi	209	1	He	2319563	1.45	2533294	91.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	037_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:07:48-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.140	39.4	719	28.6	1	
B	11	45	2	NoGas	-16.903	-1.8	29788	2.6	20	
Na	23	45	1	He	38.490	7.9	114999	2.0	400	
Mg	24	45	1	He	2.603	41.4	3056	24.0	1000	
Al	27	45	1	He	2.511	14.8	2132	5.1	50	
K	39	45	1	He	12.375	15.1	36646	1.7	1000	
Ca	44	45	1	He	13.047	18.0	803	8.6	1000	
Ti	47	45	1	He	0.091	112.8	39	52.4	20	
V	51	45	1	He	0.081	106.0	287	145.1	2	
Cr	52	45	1	He	0.013	206.4	1616	8.4	2	
Mn	55	45	1	He	0.484	7.6	2652	4.9	2	
Fe	56	45	1	He	31.461	20.1	182161	17.9	50	
Co	59	103	1	He	0.037	11.9	374	11.5	1	
Ni	60	103	1	He	0.032	45.4	103	34.0	2	
Cu	63	103	1	He	0.105	15.3	1256	8.3	2	
Zn	66	103	1	He	0.440	26.4	1636	9.0	20	
As	75	103	1	He	0.133	1.7	197	1.1	2	
Se	78	103	1	He	0.126	42.5	43	10.2	2	
Sr	88	103	1	He	0.060	42.0	549	29.5	10	
Mo	95	103	1	He	0.940	21.6	2933	21.1	2	
Ag	107	103	1	He	0.012	27.7	164	20.7	0.2	
Cd	111	103	1	He	-0.042	-24.4	907	2.1	0.2	
Sn	118	115	1	He	0.471	9.0	3045	5.6	10	
Sb	123	115	1	He	0.648	19.6	2714	17.7	1	
Ba	137	115	1	He	0.026	17.5	116	7.3	5	
W	182	209	1	He	1.036	22.4	16283	16.7	10	
Tl	205	209	1	He	0.054	12.7	1763	11.5	0.5	
Pb	208	209	1	He	0.075	9.1	4027	6.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1214949	0.65	1389655	87.43	30	120	
Sc	45	1	He	542343	1.72	628609	86.28	30	120	
Sc	45	2	NoGas	4289977	0.14	4813296	89.13	30	120	
Rh	103	1	He	1804385	0.18	1894469	95.24	30	120	
In	115	1	He	995596	0.45	1086371	91.64	30	120	
Tb	159	1	He	3134835	0.41	3251379	96.42	30	120	
Ho	165	1	He	3190883	1.12	3312124	96.34	30	120	
Bi	209	1	He	2404305	1.00	2533294	94.91	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-1-d@10
Data File Name	038SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:11:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.651	0.651	1.95	2674	0.02	10000	
B	11	45	2	NoGas	-16.291	-16.291	-2.05	31914	-0.05	300	
Na	23	45	1	He	29.301	29.301	4.67	115440	0.03	500000	
Mg	24	45	1	He	1486.315	1486.315	4.54	1204218	0.12	500000	
Al	27	45	1	He	7835.967	7835.967	4.79	3414250	0.23	200000	
K	39	45	1	He	617.306	617.306	5.40	472499	0.13	500000	
Ca	44	45	1	He	124.157	124.157	4.89	5177	2.40	500000	
Ti	47	45	1	He	64.546	64.546	5.59	14021	0.46	2500	
V	51	45	1	He	21.376	21.376	2.32	117173	0.02	10000	
Cr	52	45	1	He	18.371	18.371	3.57	122729	0.01	10000	
Mn	55	45	1	He	1537.430	1537.430	5.14	7971591	0.02	10000	
Fe	56	45	1	He	39082.020	39082.020	4.67	247163164	0.02	200000	
Co	59	103	1	He	11.292	11.292	0.71	109606	0.01	10000	
Ni	60	103	1	He	16.979	16.979	1.94	40815	0.04	10000	
Cu	63	103	1	He	11.424	11.424	1.34	72664	0.02	10000	
Zn	66	103	1	He	40.371	40.371	1.12	52260	0.08	10000	
As	75	103	1	He	13.831	13.831	1.48	10995	0.13	10000	
Se	78	103	1	He	1.034	1.034	12.14	119	0.87	10000	
Sr	88	103	1	He	4.094	4.094	1.66	26081	0.02	10000	
Mo	95	103	1	He	1.456	1.456	1.59	4470	0.03	2000	
Ag	107	103	1	He	0.024	0.024	11.37	290	0.01	300	
Cd	111	103	1	He	0.074	0.074	35.05	1111	0.01	4000	
Sn	118	115	1	He	3.502	3.502	2.59	16034	0.02	2000	
Sb	123	115	1	He	0.358	0.358	7.02	1590	0.02	300	
Ba	137	115	1	He	57.352	57.352	1.34	111824	0.05	10000	
W	182	209	1	He	0.258	0.258	9.87	6698	0.00	2500	
Tl	205	209	1	He	0.161	0.161	1.75	5176	0.00	5000	
Pb	208	209	1	He	13.365	13.365	0.56	556754	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1216154	1.52	1389655	87.51	30	120	
Sc	45	1	He	606422	5.43	628609	96.47	30	120	
Sc	45	2	NoGas	4365727	1.90	4813296	90.70	30	120	
Rh	103	1	He	1794240	1.62	1894469	94.71	30	120	
In	115	1	He	998537	0.73	1086371	91.91	30	120	
Tb	159	1	He	3178565	1.31	3251379	97.76	30	120	
Ho	165	1	He	3251632	0.38	3312124	98.17	30	120	
Bi	209	1	He	2401414	1.32	2533294	94.79	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-1-d@2
Data File Name	039SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:15:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	948.960	948.960	0.96	3375916	0.03	10000	
B	11	45	2	NoGas	103.243	103.243	1.63	339726	0.03	300	
Na	23	45	1	He	9902.100	9902.100	2.95	13788141	0.07	500000	
Mg	24	45	1	He	16469.716	16469.716	2.27	12955648	0.13	500000	
Al	27	45	1	He	44959.621	44959.621	3.10	19032146	0.24	200000	
K	39	45	1	He	12192.577	12192.577	2.20	8486802	0.14	500000	
Ca	44	45	1	He	9227.041	9227.041	1.48	345885	2.67	500000	
Ti	47	45	1	He	394.287	394.287	1.80	83162	0.47	2500	
V	51	45	1	He	1050.844	1050.844	1.30	5598692	0.02	10000	
Cr	52	45	1	He	1042.992	1042.992	2.22	6676606	0.02	10000	
Mn	55	45	1	He	8018.640	8018.640	1.69	40416286	0.02	10000	
Fe	56	45	1	He	190226.774	190226.774	1.33	1169417731	0.02	200000	
Co	59	103	1	He	1039.755	1039.755	1.10	9290677	0.01	10000	
Ni	60	103	1	He	1109.014	1109.014	2.33	2453037	0.05	10000	
Cu	63	103	1	He	1053.225	1053.225	0.83	6118352	0.02	10000	
Zn	66	103	1	He	1068.227	1068.227	0.77	1248116	0.09	10000	
As	75	103	1	He	949.574	949.574	1.21	689373	0.14	10000	
Se	78	103	1	He	845.817	845.817	1.85	64851	1.30	10000	
Sr	88	103	1	He	1017.951	1017.951	1.92	5932144	0.02	10000	
Mo	95	103	1	He	117.470	117.470	1.07	326005	0.04	2000	
Ag	107	103	1	He	102.070	102.070	1.25	977646	0.01	300	
Cd	111	103	1	He	1046.527	1046.527	0.46	1738305	0.06	4000	
Sn	118	115	1	He	1164.143	1164.143	0.63	4460870	0.03	2000	
Sb	123	115	1	He	108.448	108.448	1.15	379449	0.03	300	
Ba	137	115	1	He	1445.067	1445.067	0.28	2519774	0.06	10000	
W	182	209	1	He	106.543	106.543	1.74	1214959	0.01	2500	
Tl	205	209	1	He	253.850	253.850	0.53	7467316	0.00	5000	
Pb	208	209	1	He	1113.299	1113.299	0.99	42779606	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1131837	0.49	1389655	81.45	30	120	
Sc	45	1	He	588628	2.63	628609	93.64	30	120	
Sc	45	2	NoGas	4301421	0.48	4813296	89.37	30	120	
Rh	103	1	He	1651851	0.48	1894469	87.19	30	120	
In	115	1	He	893546	0.54	1086371	82.25	30	120	
Tb	159	1	He	3174147	0.70	3251379	97.62	30	120	
Ho	165	1	He	3190365	1.05	3312124	96.32	30	120	
Bi	209	1	He	2218747	0.98	2533294	87.58	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-e du@2
Data File Name	040SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:18:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.208	3.208	2.17	11949	0.03	10000	
B	11	45	2	NoGas	-7.630	-7.630	-3.79	55487	-0.01	300	
Na	23	45	1	He	117.366	117.366	1.90	230376	0.05	500000	
Mg	24	45	1	He	7657.393	7657.393	2.40	5928164	0.13	500000	
Al	27	45	1	He	43148.551	43148.551	1.43	17978619	0.24	200000	
K	39	45	1	He	3524.288	3524.288	3.05	2435756	0.14	500000	
Ca	44	45	1	He	652.504	652.504	3.71	24414	2.67	500000	
Ti	47	45	1	He	300.315	300.315	2.16	62336	0.48	2500	
V	51	45	1	He	111.948	111.948	1.87	586780	0.02	10000	
Cr	52	45	1	He	101.122	101.122	1.69	638496	0.02	10000	
Mn	55	45	1	He	6082.558	6082.558	2.49	30167471	0.02	10000	
Fe	56	45	1	He	185569.550	185569.550	2.80	1122369627	0.02	200000	
Co	59	103	1	He	49.558	49.558	1.44	442305	0.01	10000	
Ni	60	103	1	He	86.493	86.493	0.74	191110	0.05	10000	
Cu	63	103	1	He	57.501	57.501	0.62	334142	0.02	10000	
Zn	66	103	1	He	196.663	196.663	1.37	230299	0.09	10000	
As	75	103	1	He	66.343	66.343	0.94	48183	0.14	10000	
Se	78	103	1	He	5.880	5.880	7.85	480	1.22	10000	
Sr	88	103	1	He	22.826	22.826	1.08	133012	0.02	10000	
Mo	95	103	1	He	8.268	8.268	3.99	22989	0.04	2000	
Ag	107	103	1	He	0.093	0.093	3.71	930	0.01	300	
Cd	111	103	1	He	0.504	0.504	12.76	1735	0.03	4000	
Sn	118	115	1	He	18.123	18.123	1.54	71959	0.03	2000	
Sb	123	115	1	He	0.996	0.996	3.80	3738	0.03	300	
Ba	137	115	1	He	288.043	288.043	0.73	513730	0.06	10000	
W	182	209	1	He	1.751	1.751	19.96	23607	0.01	2500	
Tl	205	209	1	He	1.037	1.037	7.10	31138	0.00	5000	
Pb	208	209	1	He	67.976	67.976	0.46	2663317	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1167577	2.59	1389655	84.02	30	120	
Sc	45	1	He	579179	1.69	628609	92.14	30	120	
Sc	45	2	NoGas	4437630	0.65	4813296	92.20	30	120	
Rh	103	1	He	1649849	0.49	1894469	87.09	30	120	
In	115	1	He	913915	1.08	1086371	84.13	30	120	
Tb	159	1	He	3087264	0.41	3251379	94.95	30	120	
Ho	165	1	He	3177749	1.07	3312124	95.94	30	120	
Bi	209	1	He	2261525	0.72	2533294	89.27	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-f ms@2
Data File Name	041SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:22:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	46.970	46.970	1.01	163072	0.03	10000	
B	11	45	2	NoGas	31.444	31.444	3.69	152129	0.02	300	
Na	23	45	1	He	4449.308	4449.308	1.17	5839726	0.08	500000	
Mg	24	45	1	He	12015.600	12015.600	0.91	8852407	0.14	500000	
Al	27	45	1	He	47428.766	47428.766	1.22	18806083	0.25	200000	
K	39	45	1	He	6898.298	6898.298	2.34	4509587	0.15	500000	
Ca	44	45	1	He	4788.653	4788.653	1.74	168265	2.85	500000	
Ti	47	45	1	He	394.132	394.132	1.09	77856	0.51	2500	
V	51	45	1	He	162.453	162.453	1.08	810370	0.02	10000	
Cr	52	45	1	He	140.342	140.342	0.73	842697	0.02	10000	
Mn	55	45	1	He	7258.031	7258.031	0.46	34260089	0.02	10000	
Fe	56	45	1	He	197377.744	197377.744	0.53	1136256595	0.02	200000	
Co	59	103	1	He	102.192	102.192	0.47	880869	0.01	10000	
Ni	60	103	1	He	127.291	127.291	0.53	271626	0.05	10000	
Cu	63	103	1	He	103.583	103.583	0.63	580942	0.02	10000	
Zn	66	103	1	He	233.058	233.058	0.74	263425	0.09	10000	
As	75	103	1	He	109.759	109.759	0.64	76939	0.14	10000	
Se	78	103	1	He	41.938	41.938	1.29	3129	1.34	10000	
Sr	88	103	1	He	66.540	66.540	0.38	374211	0.02	10000	
Mo	95	103	1	He	56.683	56.683	0.53	151790	0.04	2000	
Ag	107	103	1	He	46.305	46.305	0.59	427873	0.01	300	
Cd	111	103	1	He	44.481	44.481	1.27	72102	0.06	4000	
Sn	118	115	1	He	56.861	56.861	1.24	214702	0.03	2000	
Sb	123	115	1	He	16.255	16.255	0.63	55962	0.03	300	
Ba	137	115	1	He	341.541	341.541	0.52	584516	0.06	10000	
W	182	209	1	He	35.621	35.621	0.92	400947	0.01	2500	
Tl	205	209	1	He	41.236	41.236	1.52	1190800	0.00	5000	
Pb	208	209	1	He	122.843	122.843	1.73	4634599	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1103492	0.16	1389655	79.41	30	120	
Sc	45	1	He	551114	1.16	628609	87.67	30	120	
Sc	45	2	NoGas	4234565	1.30	4813296	87.98	30	120	
Rh	103	1	He	1593439	0.34	1894469	84.11	30	120	
In	115	1	He	876939	0.30	1086371	80.72	30	120	
Tb	159	1	He	3022878	0.26	3251379	92.97	30	120	
Ho	165	1	He	3085122	0.45	3312124	93.15	30	120	
Bi	209	1	He	2178369	1.66	2533294	85.99	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-2-b@2
Data File Name	042SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:26:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.245	3.245	5.08	11682	0.03	10000	
B	11	45	2	NoGas	-3.409	-3.409	-4.73	66609	-0.01	300	
Na	23	45	1	He	151.129	151.129	1.72	270562	0.06	500000	
Mg	24	45	1	He	11368.282	11368.282	1.84	8615641	0.13	500000	
Al	27	45	1	He	57874.179	57874.179	1.41	23604364	0.25	200000	
K	39	45	1	He	4919.655	4919.655	0.88	3316911	0.15	500000	
Ca	44	45	1	He	896.201	896.201	0.82	32694	2.74	500000	
Ti	47	45	1	He	341.034	341.034	1.64	69291	0.49	2500	
V	51	45	1	He	116.342	116.342	0.93	596932	0.02	10000	
Cr	52	45	1	He	103.734	103.734	1.26	641105	0.02	10000	
Mn	55	45	1	He	3069.960	3069.960	1.56	14905034	0.02	10000	
Fe	56	45	1	He	172472.466	172472.466	0.75	1021267657	0.02	200000	
Co	59	103	1	He	47.568	47.568	0.50	420751	0.01	10000	
Ni	60	103	1	He	100.322	100.322	0.73	219679	0.05	10000	
Cu	63	103	1	He	87.575	87.575	0.45	504075	0.02	10000	
Zn	66	103	1	He	244.621	244.621	0.43	283670	0.09	10000	
As	75	103	1	He	72.540	72.540	0.15	52207	0.14	10000	
Se	78	103	1	He	6.874	6.874	4.48	551	1.25	10000	
Sr	88	103	1	He	33.282	33.282	1.37	192138	0.02	10000	
Mo	95	103	1	He	8.728	8.728	1.24	24047	0.04	2000	
Ag	107	103	1	He	0.088	0.088	10.25	876	0.01	300	
Cd	111	103	1	He	0.526	0.526	16.93	1756	0.03	4000	
Sn	118	115	1	He	17.163	17.163	2.16	67794	0.03	2000	
Sb	123	115	1	He	1.045	1.045	0.92	3891	0.03	300	
Ba	137	115	1	He	358.056	358.056	1.02	634824	0.06	10000	
W	182	209	1	He	0.868	0.868	18.51	13332	0.01	2500	
Tl	205	209	1	He	0.994	0.994	1.90	29770	0.00	5000	
Pb	208	209	1	He	92.702	92.702	1.61	3620227	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1128247	0.69	1389655	81.19	30	120	
Sc	45	1	He	566862	0.59	628609	90.18	30	120	
Sc	45	2	NoGas	4430321	0.64	4813296	92.04	30	120	
Rh	103	1	He	1635106	0.58	1894469	86.31	30	120	
In	115	1	He	908550	1.25	1086371	83.63	30	120	
Tb	159	1	He	3101567	1.08	3251379	95.39	30	120	
Ho	165	1	He	3170356	1.46	3312124	95.72	30	120	
Bi	209	1	He	2254613	1.33	2533294	89.00	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-4-b@2
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:30:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.652	2.652	4.85	9288	0.03	10000	
B	11	45	2	NoGas	43.764	43.764	0.31	178069	0.02	300	
Na	23	45	1	He	1795.833	1795.833	3.34	2301714	0.08	500000	
Mg	24	45	1	He	12368.483	12368.483	4.81	8746632	0.14	500000	
Al	27	45	1	He	44563.783	44563.783	4.49	16962257	0.26	200000	
K	39	45	1	He	15915.686	15915.686	3.33	9954388	0.16	500000	
Ca	44	45	1	He	164.252	164.252	5.92	5888	2.79	500000	
Ti	47	45	1	He	395.533	395.533	3.84	75008	0.53	2500	
V	51	45	1	He	76.955	76.955	3.72	368508	0.02	10000	
Cr	52	45	1	He	81.546	81.546	3.86	470728	0.02	10000	
Mn	55	45	1	He	6071.848	6071.848	4.05	27514979	0.02	10000	
Fe	56	45	1	He	111615.923	111615.923	4.89	616718820	0.02	200000	
Co	59	103	1	He	41.812	41.812	4.43	358713	0.01	10000	
Ni	60	103	1	He	104.618	104.618	5.01	222143	0.05	10000	
Cu	63	103	1	He	96.123	96.123	4.47	536542	0.02	10000	
Zn	66	103	1	He	226.325	226.325	4.57	254599	0.09	10000	
As	75	103	1	He	180.845	180.845	4.56	126101	0.14	10000	
Se	78	103	1	He	3.555	3.555	4.00	291	1.22	10000	
Sr	88	103	1	He	2135.363	2135.363	5.20	11943933	0.02	10000	
Mo	95	103	1	He	646.769	646.769	6.01	1722048	0.04	2000	
Ag	107	103	1	He	0.082	0.082	14.93	786	0.01	300	
Cd	111	103	1	He	0.394	0.394	15.45	1491	0.03	4000	
Sn	118	115	1	He	17.671	17.671	3.43	66895	0.03	2000	
Sb	123	115	1	He	0.583	0.583	11.01	2149	0.03	300	
Ba	137	115	1	He	319.343	319.343	5.40	542425	0.06	10000	
W	182	209	1	He	12.430	12.430	4.19	141214	0.01	2500	
Tl	205	209	1	He	0.552	0.552	4.22	15904	0.00	5000	
Pb	208	209	1	He	410.219	410.219	4.71	15388416	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1094573	0.57	1389655	78.77	30	120	
Sc	45	1	He	529592	3.81	628609	84.25	30	120	
Sc	45	2	NoGas	4110707	1.09	4813296	85.40	30	120	
Rh	103	1	He	1587806	4.36	1894469	83.81	30	120	
In	115	1	He	871881	4.91	1086371	80.26	30	120	
Tb	159	1	He	2993016	4.88	3251379	92.05	30	120	
Ho	165	1	He	3030714	5.10	3312124	91.50	30	120	
Bi	209	1	He	2168797	4.41	2533294	85.61	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-11-b@2
Data File Name	044SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:34:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.233	2.233	4.22	7776	0.03	10000	
B	11	45	2	NoGas	-7.700	-7.700	-3.39	50912	-0.02	300	
Na	23	45	1	He	306.725	306.725	0.77	450893	0.07	500000	
Mg	24	45	1	He	8633.916	8633.916	2.43	6168786	0.14	500000	
Al	27	45	1	He	54845.942	54845.942	1.11	21090190	0.26	200000	
K	39	45	1	He	3438.289	3438.289	1.19	2194230	0.16	500000	
Ca	44	45	1	He	4961.816	4961.816	1.31	169079	2.93	500000	
Ti	47	45	1	He	606.683	606.683	0.98	116214	0.52	2500	
V	51	45	1	He	106.026	106.026	0.28	512919	0.02	10000	
Cr	52	45	1	He	84.411	84.411	0.58	492168	0.02	10000	
Mn	55	45	1	He	4285.510	4285.510	0.25	19618966	0.02	10000	
Fe	56	45	1	He	83933.084	83933.084	0.38	468614399	0.02	200000	
Co	59	103	1	He	38.963	38.963	0.72	334997	0.01	10000	
Ni	60	103	1	He	103.683	103.683	0.21	220694	0.05	10000	
Cu	63	103	1	He	48.122	48.122	0.93	269470	0.02	10000	
Zn	66	103	1	He	241.112	241.112	1.19	271788	0.09	10000	
As	75	103	1	He	70.837	70.837	1.01	49556	0.14	10000	
Se	78	103	1	He	4.674	4.674	3.87	373	1.25	10000	
Sr	88	103	1	He	71.995	71.995	0.53	403840	0.02	10000	
Mo	95	103	1	He	13.862	13.862	10.57	37071	0.04	2000	
Ag	107	103	1	He	0.146	0.146	3.48	1382	0.01	300	
Cd	111	103	1	He	0.536	0.536	8.40	1723	0.03	4000	
Sn	118	115	1	He	16.243	16.243	2.36	62813	0.03	2000	
Sb	123	115	1	He	0.617	0.617	4.73	2317	0.03	300	
Ba	137	115	1	He	368.764	368.764	0.79	639508	0.06	10000	
W	182	209	1	He	0.535	0.535	2.99	9281	0.01	2500	
Tl	205	209	1	He	0.874	0.874	1.95	25572	0.00	5000	
Pb	208	209	1	He	47.926	47.926	1.19	1829638	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1084781	1.17	1389655	78.06	30	120	
Sc	45	1	He	534473	0.96	628609	85.02	30	120	
Sc	45	2	NoGas	4085495	0.33	4813296	84.88	30	120	
Rh	103	1	He	1589395	0.65	1894469	83.90	30	120	
In	115	1	He	888621	0.31	1086371	81.80	30	120	
Tb	159	1	He	3010350	0.57	3251379	92.59	30	120	
Ho	165	1	He	3034576	1.28	3312124	91.62	30	120	
Bi	209	1	He	2203423	1.17	2533294	86.98	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-13-b@2
Data File Name	045SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:37:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.201	2.201	4.23	7632	0.03	10000	
B	11	45	2	NoGas	-11.717	-11.717	-2.22	41147	-0.03	300	
Na	23	45	1	He	82.893	82.893	3.60	167457	0.05	500000	
Mg	24	45	1	He	5875.248	5875.248	1.66	4154296	0.14	500000	
Al	27	45	1	He	37743.283	37743.283	1.37	14361530	0.26	200000	
K	39	45	1	He	2807.042	2807.042	1.66	1777638	0.16	500000	
Ca	44	45	1	He	1011.895	1011.895	1.22	34394	2.94	500000	
Ti	47	45	1	He	414.082	414.082	0.39	78490	0.53	2500	
V	51	45	1	He	76.316	76.316	0.89	365291	0.02	10000	
Cr	52	45	1	He	72.307	72.307	0.89	417371	0.02	10000	
Mn	55	45	1	He	1989.659	1989.659	0.88	9012658	0.02	10000	
Fe	56	45	1	He	97319.030	97319.030	0.58	537619908	0.02	200000	
Co	59	103	1	He	42.033	42.033	1.92	370465	0.01	10000	
Ni	60	103	1	He	87.173	87.173	2.39	190195	0.05	10000	
Cu	63	103	1	He	47.203	47.203	2.29	270965	0.02	10000	
Zn	66	103	1	He	265.869	265.869	2.56	307096	0.09	10000	
As	75	103	1	He	102.092	102.092	1.95	73178	0.14	10000	
Se	78	103	1	He	3.895	3.895	6.01	324	1.20	10000	
Sr	88	103	1	He	17.558	17.558	1.95	101069	0.02	10000	
Mo	95	103	1	He	9.840	9.840	3.48	26998	0.04	2000	
Ag	107	103	1	He	0.092	0.092	4.65	904	0.01	300	
Cd	111	103	1	He	0.547	0.547	10.73	1784	0.03	4000	
Sn	118	115	1	He	16.696	16.696	2.87	64738	0.03	2000	
Sb	123	115	1	He	0.614	0.614	4.58	2316	0.03	300	
Ba	137	115	1	He	245.520	245.520	1.37	427142	0.06	10000	
W	182	209	1	He	0.326	0.326	15.39	6891	0.00	2500	
Tl	205	209	1	He	0.652	0.652	2.60	19027	0.00	5000	
Pb	208	209	1	He	52.053	52.053	0.61	1980389	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1079941	1.84	1389655	77.71	30	120	
Sc	45	1	He	528853	0.67	628609	84.13	30	120	
Sc	45	2	NoGas	4093302	1.20	4813296	85.04	30	120	
Rh	103	1	He	1629645	2.04	1894469	86.02	30	120	
In	115	1	He	891477	0.76	1086371	82.06	30	120	
Tb	159	1	He	3006377	0.75	3251379	92.46	30	120	
Ho	165	1	He	3052155	1.44	3312124	92.15	30	120	
Bi	209	1	He	2195880	1.01	2533294	86.68	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-14-b@2
Data File Name	046SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:41:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.218	2.218	3.79	7935	0.03	10000	
B	11	45	2	NoGas	-5.164	-5.164	-1.11	59481	-0.01	300	
Na	23	45	1	He	141.520	141.520	2.63	250188	0.06	500000	
Mg	24	45	1	He	8229.137	8229.137	1.74	6053722	0.14	500000	
Al	27	45	1	He	40183.202	40183.202	1.23	15909277	0.25	200000	
K	39	45	1	He	3934.032	3934.032	0.80	2580568	0.15	500000	
Ca	44	45	1	He	1084.914	1084.914	0.70	38344	2.83	500000	
Ti	47	45	1	He	493.718	493.718	0.94	97369	0.51	2500	
V	51	45	1	He	91.800	91.800	1.00	457189	0.02	10000	
Cr	52	45	1	He	80.395	80.395	0.98	482671	0.02	10000	
Mn	55	45	1	He	2934.214	2934.214	1.30	13829084	0.02	10000	
Fe	56	45	1	He	106910.619	106910.619	1.50	614489753	0.02	200000	
Co	59	103	1	He	113.353	113.353	1.82	1013006	0.01	10000	
Ni	60	103	1	He	132.960	132.960	0.97	294187	0.05	10000	
Cu	63	103	1	He	60.785	60.785	1.67	353670	0.02	10000	
Zn	66	103	1	He	574.947	574.947	1.75	672314	0.09	10000	
As	75	103	1	He	451.471	451.471	1.32	327863	0.14	10000	
Se	78	103	1	He	4.113	4.113	7.23	345	1.19	10000	
Sr	88	103	1	He	49.407	49.407	0.96	288141	0.02	10000	
Mo	95	103	1	He	10.113	10.113	2.26	28149	0.04	2000	
Ag	107	103	1	He	0.278	0.278	3.70	2704	0.01	300	
Cd	111	103	1	He	1.124	1.124	3.71	2766	0.04	4000	
Sn	118	115	1	He	16.770	16.770	1.33	66530	0.03	2000	
Sb	123	115	1	He	1.032	1.032	0.54	3859	0.03	300	
Ba	137	115	1	He	288.693	288.693	1.01	513805	0.06	10000	
W	182	209	1	He	0.345	0.345	15.60	7265	0.00	2500	
Tl	205	209	1	He	1.151	1.151	1.87	34272	0.00	5000	
Pb	208	209	1	He	76.020	76.020	4.15	2953270	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1114459	0.77	1389655	80.20	30	120	
Sc	45	1	He	550284	1.07	628609	87.54	30	120	
Sc	45	2	NoGas	4254194	1.59	4813296	88.38	30	120	
Rh	103	1	He	1652372	1.79	1894469	87.22	30	120	
In	115	1	He	912004	1.02	1086371	83.95	30	120	
Tb	159	1	He	3075037	1.00	3251379	94.58	30	120	
Ho	165	1	He	3121247	0.08	3312124	94.24	30	120	
Bi	209	1	He	2242851	0.98	2533294	88.53	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-15-b@2
Data File Name	047SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:45:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.791	3.791	4.15	13691	0.03	10000	
B	11	45	2	NoGas	-4.436	-4.436	-7.58	65025	-0.01	300	
Na	23	45	1	He	186.408	186.408	1.28	320720	0.06	500000	
Mg	24	45	1	He	17068.603	17068.603	1.13	13059742	0.13	500000	
Al	27	45	1	He	75963.178	75963.178	1.29	31280962	0.24	200000	
K	39	45	1	He	5398.143	5398.143	1.39	3671651	0.15	500000	
Ca	44	45	1	He	2077.070	2077.070	2.26	76015	2.73	500000	
Ti	47	45	1	He	796.423	796.423	1.06	163357	0.49	2500	
V	51	45	1	He	152.629	152.629	1.17	790713	0.02	10000	
Cr	52	45	1	He	140.148	140.148	0.98	873980	0.02	10000	
Mn	55	45	1	He	2495.824	2495.824	0.99	12235317	0.02	10000	
Fe	56	45	1	He	182713.597	182713.597	1.05	1092367992	0.02	200000	
Co	59	103	1	He	64.334	64.334	0.71	573899	0.01	10000	
Ni	60	103	1	He	145.781	145.781	1.00	321934	0.05	10000	
Cu	63	103	1	He	153.179	153.179	1.43	888785	0.02	10000	
Zn	66	103	1	He	435.089	435.089	1.12	508074	0.09	10000	
As	75	103	1	He	99.803	99.803	1.11	72407	0.14	10000	
Se	78	103	1	He	7.246	7.246	8.23	584	1.24	10000	
Sr	88	103	1	He	27.769	27.769	0.72	161713	0.02	10000	
Mo	95	103	1	He	12.250	12.250	0.69	34008	0.04	2000	
Ag	107	103	1	He	0.138	0.138	7.76	1359	0.01	300	
Cd	111	103	1	He	1.062	1.062	6.47	2658	0.04	4000	
Sn	118	115	1	He	18.347	18.347	2.26	72495	0.03	2000	
Sb	123	115	1	He	1.256	1.256	1.11	4646	0.03	300	
Ba	137	115	1	He	398.660	398.660	0.57	707655	0.06	10000	
W	182	209	1	He	0.444	0.444	5.02	8362	0.01	2500	
Tl	205	209	1	He	1.305	1.305	1.80	38693	0.00	5000	
Pb	208	209	1	He	123.174	123.174	0.99	4765874	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1134636	1.26	1389655	81.65	30	120	
Sc	45	1	He	572357	0.70	628609	91.05	30	120	
Sc	45	2	NoGas	4509566	1.18	4813296	93.69	30	120	
Rh	103	1	He	1649088	0.73	1894469	87.05	30	120	
In	115	1	He	909576	0.36	1086371	83.73	30	120	
Tb	159	1	He	3116755	1.42	3251379	95.86	30	120	
Ho	165	1	He	3174560	1.24	3312124	95.85	30	120	
Bi	209	1	He	2233776	0.95	2533294	88.18	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	048_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:49:14-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.527	2.352	156795	1.16	50	93.1	89.5	110.5	
B	11	45	2	NoGas	31.323	0.404	141711	0.71	50	62.6	89.5	110.5	CCV Failed
Na	23	45	1	He	25396.972	0.932	31345727	0.70	25000	101.6	89.5	110.5	
Mg	24	45	1	He	25411.426	1.029	17772072	1.05	25000	101.6	89.5	110.5	
Al	27	45	1	He	250.786	1.370	95522	2.37	250	100.3	89.5	110.5	
K	39	45	1	He	25063.183	1.113	15481830	1.08	25000	100.3	89.5	110.5	
Ca	44	45	1	He	24707.579	0.603	822835	1.03	25000	98.8	89.5	110.5	
Ti	47	45	1	He	51.020	0.900	9585	0.86	50	102.0	89.5	110.5	
V	51	45	1	He	50.888	1.935	240924	2.15	50	101.8	89.5	110.5	
Cr	52	45	1	He	51.580	1.188	294959	0.91	50	103.2	89.5	110.5	
Mn	55	45	1	He	248.858	0.946	1115498	0.67	250	99.5	89.5	110.5	
Fe	56	45	1	He	13082.692	0.561	71502039	1.06	12500	104.7	89.5	110.5	
Co	59	103	1	He	46.789	2.063	417571	1.24	50	93.6	89.5	110.5	
Ni	60	103	1	He	47.083	1.783	104039	1.20	50	94.2	89.5	110.5	
Cu	63	103	1	He	47.613	2.389	276750	1.47	50	95.2	89.5	110.5	
Zn	66	103	1	He	47.533	1.777	56407	1.02	50	95.1	89.5	110.5	
As	75	103	1	He	47.479	2.231	34504	1.21	50	95.0	89.5	110.5	
Se	78	103	1	He	46.944	1.858	3623	0.93	50	93.9	89.5	110.5	
Sr	88	103	1	He	47.108	1.718	274333	0.69	50	94.2	89.5	110.5	
Mo	95	103	1	He	49.856	1.718	138247	1.96	50	99.7	89.5	110.5	
Ag	107	103	1	He	50.168	1.958	479940	1.10	50	100.3	89.5	110.5	
Cd	111	103	1	He	50.054	3.271	83882	2.29	50	100.1	89.5	110.5	
Sn	118	115	1	He	49.854	1.082	196003	1.48	50	99.7	89.5	110.5	
Sb	123	115	1	He	51.233	0.612	183159	0.54	50	102.5	89.5	110.5	
Ba	137	115	1	He	50.643	0.772	90237	1.09	50	101.3	89.5	110.5	
W	182	209	1	He	50.587	2.383	576663	0.87	50	101.2	89.5	110.5	
Tl	205	209	1	He	46.861	0.624	1374114	1.20	50	93.7	89.5	110.5	
Pb	208	209	1	He	48.608	0.621	1862715	1.26	50	97.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1071323	1.34	1389655	77.09	30	120	
Sc	45	1	He	523205	1.62	628609	83.23	30	120	
Sc	45	2	NoGas	3951937	0.92	4813296	82.10	30	120	
Rh	103	1	He	1649931	1.05	1894469	87.09	30	120	
In	115	1	He	912498	0.44	1086371	84.00	30	120	
Tb	159	1	He	3025119	0.53	3251379	93.04	30	120	
Ho	165	1	He	3083045	0.98	3312124	93.08	30	120	
Bi	209	1	He	2211715	1.55	2533294	87.31	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	049_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:53:05-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.034	104.0	289	43.7	1	
B	11	45	2	NoGas	-21.882	-0.7	15852	2.1	20	
Na	23	45	1	He	-0.483	-473.8	62224	3.6	400	
Mg	24	45	1	He	2.785	17.0	3045	10.1	1000	
Al	27	45	1	He	3.923	3.4	2560	2.4	50	
K	39	45	1	He	7.619	20.8	32055	2.8	1000	
Ca	44	45	1	He	12.402	23.2	745	12.3	1000	
Ti	47	45	1	He	0.060	94.6	31	32.7	20	
V	51	45	1	He	0.061	148.3	185	231.4	2	
Cr	52	45	1	He	0.033	36.0	1657	4.2	2	
Mn	55	45	1	He	0.745	8.9	3687	7.6	2	
Fe	56	45	1	He	33.458	15.1	184660	13.6	50	
Co	59	103	1	He	0.019	20.2	192	18.2	1	
Ni	60	103	1	He	0.022	55.6	76	37.0	2	
Cu	63	103	1	He	0.047	21.4	856	7.5	2	
Zn	66	103	1	He	0.433	26.0	1566	9.2	20	
As	75	103	1	He	0.095	8.9	161	4.2	2	
Se	78	103	1	He	-0.045	-75.7	28	9.5	2	
Sr	88	103	1	He	0.031	29.8	350	15.9	10	
Mo	95	103	1	He	0.998	24.1	2991	23.7	2	
Ag	107	103	1	He	0.007	61.4	107	38.0	0.2	
Cd	111	103	1	He	-0.059	-23.6	843	3.2	0.2	
Sn	118	115	1	He	0.257	10.2	2045	5.6	10	
Sb	123	115	1	He	0.538	18.8	2194	17.4	1	
Ba	137	115	1	He	0.021	38.0	102	15.1	5	
W	182	209	1	He	0.937	17.2	14570	14.2	10	
Tl	205	209	1	He	0.054	8.5	1715	9.2	0.5	
Pb	208	209	1	He	0.065	8.9	3466	7.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1112008	1.74	1389655	80.02	30	120	
Sc	45	1	He	517163	1.25	628609	82.27	30	120	
Sc	45	2	NoGas	4004786	0.83	4813296	83.20	30	120	
Rh	103	1	He	1736644	0.39	1894469	91.67	30	120	
In	115	1	He	954954	0.42	1086371	87.90	30	120	
Tb	159	1	He	3008639	1.03	3251379	92.53	30	120	
Ho	165	1	He	3107947	0.38	3312124	93.84	30	120	
Bi	209	1	He	2321989	1.01	2533294	91.66	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-16-b@2
Data File Name	050SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:56:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.671	2.671	7.32	9092	0.03	10000	
B	11	45	2	NoGas	-6.593	-6.593	-7.93	53879	-0.01	300	
Na	23	45	1	He	190.830	190.830	2.77	309997	0.06	500000	
Mg	24	45	1	He	12577.328	12577.328	3.30	9131382	0.14	500000	
Al	27	45	1	He	44141.973	44141.973	3.02	17250521	0.26	200000	
K	39	45	1	He	4584.623	4584.623	2.52	2963320	0.15	500000	
Ca	44	45	1	He	3139.249	3139.249	2.73	108830	2.88	500000	
Ti	47	45	1	He	416.990	416.990	1.90	81177	0.51	2500	
V	51	45	1	He	87.096	87.096	2.90	428076	0.02	10000	
Cr	52	45	1	He	77.284	77.284	2.30	458029	0.02	10000	
Mn	55	45	1	He	2622.330	2622.330	2.35	12198609	0.02	10000	
Fe	56	45	1	He	116439.900	116439.900	1.03	660734552	0.02	200000	
Co	59	103	1	He	45.713	45.713	1.48	391933	0.01	10000	
Ni	60	103	1	He	101.149	101.149	0.83	214707	0.05	10000	
Cu	63	103	1	He	84.203	84.203	0.82	469834	0.02	10000	
Zn	66	103	1	He	264.356	264.356	1.10	297091	0.09	10000	
As	75	103	1	He	55.215	55.215	1.28	38539	0.14	10000	
Se	78	103	1	He	4.427	4.427	3.72	354	1.25	10000	
Sr	88	103	1	He	29.000	29.000	0.93	162304	0.02	10000	
Mo	95	103	1	He	6.570	6.570	2.54	17563	0.04	2000	
Ag	107	103	1	He	0.086	0.086	6.22	824	0.01	300	
Cd	111	103	1	He	0.514	0.514	6.96	1681	0.03	4000	
Sn	118	115	1	He	16.050	16.050	0.55	61958	0.03	2000	
Sb	123	115	1	He	0.952	0.952	2.15	3474	0.03	300	
Ba	137	115	1	He	299.342	299.342	1.04	518125	0.06	10000	
W	182	209	1	He	0.614	0.614	3.04	10085	0.01	2500	
Tl	205	209	1	He	0.768	0.768	1.07	22321	0.00	5000	
Pb	208	209	1	He	76.624	76.624	1.82	2901756	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1063744	0.33	1389655	76.55	30	120	
Sc	45	1	He	543312	2.62	628609	86.43	30	120	
Sc	45	2	NoGas	4105266	0.89	4813296	85.29	30	120	
Rh	103	1	He	1585050	1.07	1894469	83.67	30	120	
In	115	1	He	886929	0.61	1086371	81.64	30	120	
Tb	159	1	He	2985563	1.08	3251379	91.82	30	120	
Ho	165	1	He	3043983	0.60	3312124	91.90	30	120	
Bi	209	1	He	2185928	0.71	2533294	86.29	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-17-b@2
Data File Name	051SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:00:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.486	3.486	3.06	11945	0.03	10000	
B	11	45	2	NoGas	-6.419	-6.419	-2.39	55851	-0.01	300	
Na	23	45	1	He	178.284	178.284	0.99	291180	0.06	500000	
Mg	24	45	1	He	13238.574	13238.574	1.64	9521587	0.14	500000	
Al	27	45	1	He	60898.097	60898.097	1.55	23571865	0.26	200000	
K	39	45	1	He	4923.248	4923.248	2.57	3150017	0.16	500000	
Ca	44	45	1	He	4915.931	4915.931	0.95	168628	2.92	500000	
Ti	47	45	1	He	415.843	415.843	0.64	80185	0.52	2500	
V	51	45	1	He	116.658	116.658	1.35	568074	0.02	10000	
Cr	52	45	1	He	91.612	91.612	0.83	537546	0.02	10000	
Mn	55	45	1	He	4114.464	4114.464	1.24	18959291	0.02	10000	
Fe	56	45	1	He	169675.180	169675.180	0.38	953539198	0.02	200000	
Co	59	103	1	He	54.549	54.549	0.73	468770	0.01	10000	
Ni	60	103	1	He	104.171	104.171	0.90	221614	0.05	10000	
Cu	63	103	1	He	95.536	95.536	0.34	534199	0.02	10000	
Zn	66	103	1	He	298.373	298.373	1.13	335931	0.09	10000	
As	75	103	1	He	68.999	68.999	0.43	48247	0.14	10000	
Se	78	103	1	He	6.085	6.085	1.15	477	1.27	10000	
Sr	88	103	1	He	38.991	38.991	0.64	218673	0.02	10000	
Mo	95	103	1	He	8.772	8.772	2.15	23479	0.04	2000	
Ag	107	103	1	He	0.206	0.206	3.31	1935	0.01	300	
Cd	111	103	1	He	0.923	0.923	0.16	2340	0.04	4000	
Sn	118	115	1	He	17.327	17.327	0.50	66549	0.03	2000	
Sb	123	115	1	He	0.712	0.712	3.74	2632	0.03	300	
Ba	137	115	1	He	484.662	484.662	0.60	835550	0.06	10000	
W	182	209	1	He	0.375	0.375	19.69	7439	0.01	2500	
Tl	205	209	1	He	0.916	0.916	1.71	26726	0.00	5000	
Pb	208	209	1	He	84.431	84.431	1.27	3212154	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1075346	0.43	1389655	77.38	30	120	
Sc	45	1	He	537988	0.51	628609	85.58	30	120	
Sc	45	2	NoGas	4221759	0.31	4813296	87.71	30	120	
Rh	103	1	He	1588551	0.83	1894469	83.85	30	120	
In	115	1	He	883418	0.48	1086371	81.32	30	120	
Tb	159	1	He	3030634	0.85	3251379	93.21	30	120	
Ho	165	1	He	3078157	0.69	3312124	92.94	30	120	
Bi	209	1	He	2196364	1.57	2533294	86.70	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-18-b@2
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:04:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.105	3.105	2.56	10255	0.03	10000	
B	11	45	2	NoGas	-10.100	-10.100	-4.66	45256	-0.02	300	
Na	23	45	1	He	179.629	179.629	1.31	285159	0.06	500000	
Mg	24	45	1	He	14130.387	14130.387	1.34	9894479	0.14	500000	
Al	27	45	1	He	57402.799	57402.799	1.14	21633154	0.27	200000	
K	39	45	1	He	4207.218	4207.218	1.54	2624979	0.16	500000	
Ca	44	45	1	He	3944.755	3944.755	0.90	131813	2.99	500000	
Ti	47	45	1	He	443.362	443.362	1.02	83234	0.53	2500	
V	51	45	1	He	107.141	107.141	1.32	507943	0.02	10000	
Cr	52	45	1	He	91.157	91.157	1.48	520754	0.02	10000	
Mn	55	45	1	He	2563.426	2563.426	1.18	11500544	0.02	10000	
Fe	56	45	1	He	135851.278	135851.278	1.35	743292842	0.02	200000	
Co	59	103	1	He	49.585	49.585	2.13	420540	0.01	10000	
Ni	60	103	1	He	109.988	109.988	2.74	230911	0.05	10000	
Cu	63	103	1	He	94.779	94.779	2.29	523027	0.02	10000	
Zn	66	103	1	He	384.763	384.763	2.60	427255	0.09	10000	
As	75	103	1	He	61.943	61.943	2.22	42755	0.14	10000	
Se	78	103	1	He	4.647	4.647	5.20	366	1.27	10000	
Sr	88	103	1	He	26.631	26.631	2.09	147442	0.02	10000	
Mo	95	103	1	He	7.309	7.309	4.78	19314	0.04	2000	
Ag	107	103	1	He	0.132	0.132	13.27	1236	0.01	300	
Cd	111	103	1	He	0.700	0.700	4.68	1958	0.04	4000	
Sn	118	115	1	He	15.656	15.656	1.06	59415	0.03	2000	
Sb	123	115	1	He	0.562	0.562	4.40	2086	0.03	300	
Ba	137	115	1	He	335.708	335.708	0.99	571069	0.06	10000	
W	182	209	1	He	0.337	0.337	11.14	6928	0.00	2500	
Tl	205	209	1	He	0.885	0.885	1.41	25473	0.00	5000	
Pb	208	209	1	He	70.986	70.986	1.50	2665501	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1034845	1.57	1389655	74.47	30	120	
Sc	45	1	He	523809	0.81	628609	83.33	30	120	
Sc	45	2	NoGas	4106447	1.02	4813296	85.31	30	120	
Rh	103	1	He	1568159	1.79	1894469	82.78	30	120	
In	115	1	He	871696	0.90	1086371	80.24	30	120	
Tb	159	1	He	2964553	2.68	3251379	91.18	30	120	
Ho	165	1	He	3031056	1.60	3312124	91.51	30	120	
Bi	209	1	He	2167672	1.33	2533294	85.57	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-20-b@2
Data File Name	053SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:08:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.070	3.070	5.76	10151	0.03	10000	
B	11	45	2	NoGas	-2.433	-2.433	-16.15	63011	0.00	300	
Na	23	45	1	He	268.464	268.464	0.54	393147	0.07	500000	
Mg	24	45	1	He	17603.751	17603.751	0.21	12277751	0.14	500000	
Al	27	45	1	He	59358.678	59358.678	0.16	22281749	0.27	200000	
K	39	45	1	He	6484.297	6484.297	2.09	4014629	0.16	500000	
Ca	44	45	1	He	7359.390	7359.390	1.29	244635	3.01	500000	
Ti	47	45	1	He	433.516	433.516	0.95	81066	0.53	2500	
V	51	45	1	He	106.298	106.298	0.81	501944	0.02	10000	
Cr	52	45	1	He	100.812	100.812	0.21	573484	0.02	10000	
Mn	55	45	1	He	2623.745	2623.745	1.03	11724383	0.02	10000	
Fe	56	45	1	He	144548.123	144548.123	0.25	787761444	0.02	200000	
Co	59	103	1	He	66.599	66.599	4.40	534397	0.01	10000	
Ni	60	103	1	He	149.123	149.123	4.30	296225	0.05	10000	
Cu	63	103	1	He	108.563	108.563	3.87	566831	0.02	10000	
Zn	66	103	1	He	321.911	321.911	3.90	338407	0.10	10000	
As	75	103	1	He	65.149	65.149	3.79	42548	0.15	10000	
Se	78	103	1	He	5.008	5.008	2.52	372	1.35	10000	
Sr	88	103	1	He	41.415	41.415	4.24	216871	0.02	10000	
Mo	95	103	1	He	6.678	6.678	5.31	16701	0.04	2000	
Ag	107	103	1	He	0.105	0.105	5.52	940	0.01	300	
Cd	111	103	1	He	0.580	0.580	13.39	1675	0.03	4000	
Sn	118	115	1	He	17.032	17.032	3.59	63917	0.03	2000	
Sb	123	115	1	He	0.591	0.591	6.14	2165	0.03	300	
Ba	137	115	1	He	389.568	389.568	0.97	656198	0.06	10000	
W	182	209	1	He	0.230	0.230	6.75	5657	0.00	2500	
Tl	205	209	1	He	0.966	0.966	0.70	27434	0.00	5000	
Pb	208	209	1	He	64.207	64.207	1.08	2378686	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1036629	2.17	1389655	74.60	30	120	
Sc	45	1	He	521707	0.35	628609	82.99	30	120	
Sc	45	2	NoGas	4034222	0.70	4813296	83.81	30	120	
Rh	103	1	He	1484929	3.77	1894469	78.38	30	120	
In	115	1	He	863170	1.04	1086371	79.45	30	120	
Tb	159	1	He	2960437	1.23	3251379	91.05	30	120	
Ho	165	1	He	3008456	0.53	3312124	90.83	30	120	
Bi	209	1	He	2138385	0.49	2533294	84.41	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-21-b@2
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:12:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.617	3.617	2.47	11864	0.03	10000	
B	11	45	2	NoGas	3.596	3.596	17.68	78640	0.00	300	
Na	23	45	1	He	311.290	311.290	1.78	450100	0.07	500000	
Mg	24	45	1	He	18694.106	18694.106	0.36	13165899	0.14	500000	
Al	27	45	1	He	67761.499	67761.499	0.53	25684890	0.26	200000	
K	39	45	1	He	7567.283	7567.283	0.51	4726686	0.16	500000	
Ca	44	45	1	He	9959.241	9959.241	0.56	334188	2.98	500000	
Ti	47	45	1	He	454.862	454.862	0.99	85886	0.53	2500	
V	51	45	1	He	119.242	119.242	0.57	568615	0.02	10000	
Cr	52	45	1	He	123.150	123.150	0.52	707086	0.02	10000	
Mn	55	45	1	He	2786.516	2786.516	1.33	12573660	0.02	10000	
Fe	56	45	1	He	160568.222	160568.222	0.93	883626098	0.02	200000	
Co	59	103	1	He	79.932	79.932	3.34	638657	0.01	10000	
Ni	60	103	1	He	162.201	162.201	3.28	320831	0.05	10000	
Cu	63	103	1	He	133.775	133.775	3.54	695273	0.02	10000	
Zn	66	103	1	He	383.006	383.006	3.05	400731	0.10	10000	
As	75	103	1	He	85.409	85.409	2.87	55517	0.15	10000	
Se	78	103	1	He	8.440	8.440	3.83	605	1.39	10000	
Sr	88	103	1	He	49.826	49.826	2.53	259815	0.02	10000	
Mo	95	103	1	He	8.778	8.778	3.98	21843	0.04	2000	
Ag	107	103	1	He	0.125	0.125	7.73	1104	0.01	300	
Cd	111	103	1	He	0.863	0.863	4.88	2087	0.04	4000	
Sn	118	115	1	He	17.425	17.425	0.47	65128	0.03	2000	
Sb	123	115	1	He	0.799	0.799	5.18	2855	0.03	300	
Ba	137	115	1	He	389.194	389.194	0.91	652986	0.06	10000	
W	182	209	1	He	0.268	0.268	9.67	6116	0.00	2500	
Tl	205	209	1	He	1.024	1.024	3.43	29278	0.00	5000	
Pb	208	209	1	He	81.154	81.154	2.55	3026287	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1029981	0.57	1389655	74.12	30	120	
Sc	45	1	He	526825	0.44	628609	83.81	30	120	
Sc	45	2	NoGas	4088342	0.48	4813296	84.94	30	120	
Rh	103	1	He	1477994	3.03	1894469	78.02	30	120	
In	115	1	He	859745	0.62	1086371	79.14	30	120	
Tb	159	1	He	2998944	0.90	3251379	92.24	30	120	
Ho	165	1	He	3031216	1.56	3312124	91.52	30	120	
Bi	209	1	He	2153140	1.69	2533294	84.99	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-1-b@2
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:15:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.827	3.827	4.04	12364	0.03	10000	
B	11	45	2	NoGas	-1.931	-1.931	-22.81	62182	0.00	300	
Na	23	45	1	He	263.878	263.878	1.59	381006	0.07	500000	
Mg	24	45	1	He	18623.579	18623.579	0.26	12772299	0.15	500000	
Al	27	45	1	He	68816.391	68816.391	1.65	25397475	0.27	200000	
K	39	45	1	He	5982.058	5982.058	2.24	3643499	0.16	500000	
Ca	44	45	1	He	30398.604	30398.604	1.83	992467	3.06	500000	
Ti	47	45	1	He	386.147	386.147	1.87	70993	0.54	2500	
V	51	45	1	He	134.700	134.700	0.88	625470	0.02	10000	
Cr	52	45	1	He	108.323	108.323	1.34	605776	0.02	10000	
Mn	55	45	1	He	4203.884	4203.884	1.15	18470596	0.02	10000	
Fe	56	45	1	He	153444.540	153444.540	1.27	822220838	0.02	200000	
Co	59	103	1	He	59.017	59.017	4.48	474751	0.01	10000	
Ni	60	103	1	He	124.760	124.760	4.20	248468	0.05	10000	
Cu	63	103	1	He	75.585	75.585	4.45	395736	0.02	10000	
Zn	66	103	1	He	333.119	333.119	4.42	351005	0.09	10000	
As	75	103	1	He	68.703	68.703	4.26	44974	0.15	10000	
Se	78	103	1	He	5.731	5.731	4.90	423	1.36	10000	
Sr	88	103	1	He	84.457	84.457	4.22	443254	0.02	10000	
Mo	95	103	1	He	8.306	8.306	5.23	20813	0.04	2000	
Ag	107	103	1	He	0.334	0.334	3.26	2917	0.01	300	
Cd	111	103	1	He	1.099	1.099	5.79	2453	0.04	4000	
Sn	118	115	1	He	16.460	16.460	2.21	61679	0.03	2000	
Sb	123	115	1	He	13.844	13.844	1.32	46839	0.03	300	
Ba	137	115	1	He	432.963	432.963	0.19	727753	0.06	10000	
W	182	209	1	He	0.275	0.275	9.53	6135	0.00	2500	
Tl	205	209	1	He	0.954	0.954	2.33	27021	0.00	5000	
Pb	208	209	1	He	95.263	95.263	1.88	3520178	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1015432	1.09	1389655	73.07	30	120	
Sc	45	1	He	513013	1.38	628609	81.61	30	120	
Sc	45	2	NoGas	3905941	0.68	4813296	81.15	30	120	
Rh	103	1	He	1488699	3.77	1894469	78.58	30	120	
In	115	1	He	861309	0.47	1086371	79.28	30	120	
Tb	159	1	He	2914646	0.88	3251379	89.64	30	120	
Ho	165	1	He	2967600	0.82	3312124	89.60	30	120	
Bi	209	1	He	2133565	1.80	2533294	84.22	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-2-b@2
Data File Name	056SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:19:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.308	3.308	1.72	10744	0.03	10000	
B	11	45	2	NoGas	-12.918	-12.918	-2.88	36685	-0.04	300	
Na	23	45	1	He	130.152	130.152	2.06	219224	0.06	500000	
Mg	24	45	1	He	10267.488	10267.488	0.52	7032822	0.15	500000	
Al	27	45	1	He	61611.046	61611.046	2.15	22707191	0.27	200000	
K	39	45	1	He	3831.182	3831.182	2.68	2340102	0.16	500000	
Ca	44	45	1	He	2193.695	2193.695	1.41	71840	3.05	500000	
Ti	47	45	1	He	366.002	366.002	1.07	67209	0.54	2500	
V	51	45	1	He	131.795	131.795	2.44	611067	0.02	10000	
Cr	52	45	1	He	95.777	95.777	0.99	535098	0.02	10000	
Mn	55	45	1	He	4823.057	4823.057	1.87	21162355	0.02	10000	
Fe	56	45	1	He	128080.028	128080.028	2.27	685336275	0.02	200000	
Co	59	103	1	He	52.953	52.953	5.54	425244	0.01	10000	
Ni	60	103	1	He	102.215	102.215	5.33	203229	0.05	10000	
Cu	63	103	1	He	66.571	66.571	5.19	348051	0.02	10000	
Zn	66	103	1	He	285.506	285.506	5.32	300468	0.10	10000	
As	75	103	1	He	57.536	57.536	5.40	37612	0.15	10000	
Se	78	103	1	He	5.327	5.327	7.11	394	1.35	10000	
Sr	88	103	1	He	23.011	23.011	5.40	120658	0.02	10000	
Mo	95	103	1	He	7.851	7.851	5.93	19643	0.04	2000	
Ag	107	103	1	He	0.253	0.253	3.41	2218	0.01	300	
Cd	111	103	1	He	0.862	0.862	4.48	2097	0.04	4000	
Sn	118	115	1	He	17.526	17.526	1.98	65652	0.03	2000	
Sb	123	115	1	He	3.897	3.897	2.78	13312	0.03	300	
Ba	137	115	1	He	404.337	404.337	0.63	680013	0.06	10000	
W	182	209	1	He	0.270	0.270	11.88	6094	0.00	2500	
Tl	205	209	1	He	0.893	0.893	3.08	25374	0.00	5000	
Pb	208	209	1	He	98.102	98.102	2.06	3634410	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1018360	2.56	1389655	73.28	30	120	
Sc	45	1	He	512352	1.61	628609	81.51	30	120	
Sc	45	2	NoGas	3930556	0.64	4813296	81.66	30	120	
Rh	103	1	He	1487149	4.81	1894469	78.50	30	120	
In	115	1	He	861785	0.90	1086371	79.33	30	120	
Tb	159	1	He	2909634	0.65	3251379	89.49	30	120	
Ho	165	1	He	2977609	0.51	3312124	89.90	30	120	
Bi	209	1	He	2139005	1.55	2533294	84.44	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-3-b@2
Data File Name	057SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:23:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.306	4.306	1.15	13316	0.03	10000	
B	11	45	2	NoGas	-10.551	-10.551	-0.97	41986	-0.03	300	
Na	23	45	1	He	146.648	146.648	0.17	236019	0.06	500000	
Mg	24	45	1	He	12979.442	12979.442	0.37	8774172	0.15	500000	
Al	27	45	1	He	66441.546	66441.546	0.19	24172620	0.27	200000	
K	39	45	1	He	4462.838	4462.838	1.06	2686559	0.17	500000	
Ca	44	45	1	He	1961.135	1961.135	2.61	63425	3.09	500000	
Ti	47	45	1	He	454.074	454.074	0.92	82292	0.55	2500	
V	51	45	1	He	156.285	156.285	0.31	715331	0.02	10000	
Cr	52	45	1	He	114.671	114.671	0.71	632039	0.02	10000	
Mn	55	45	1	He	6637.378	6637.378	0.38	28746578	0.02	10000	
Fe	56	45	1	He	164618.099	164618.099	0.73	869530792	0.02	200000	
Co	59	103	1	He	74.774	74.774	4.04	585944	0.01	10000	
Ni	60	103	1	He	141.304	141.304	4.19	274099	0.05	10000	
Cu	63	103	1	He	81.255	81.255	3.88	414397	0.02	10000	
Zn	66	103	1	He	345.689	345.689	5.10	354675	0.10	10000	
As	75	103	1	He	71.103	71.103	4.51	45329	0.16	10000	
Se	78	103	1	He	6.337	6.337	6.62	452	1.40	10000	
Sr	88	103	1	He	29.502	29.502	4.27	150896	0.02	10000	
Mo	95	103	1	He	9.874	9.874	3.64	24095	0.04	2000	
Ag	107	103	1	He	0.268	0.268	4.01	2292	0.01	300	
Cd	111	103	1	He	1.049	1.049	18.24	2310	0.05	4000	
Sn	118	115	1	He	17.369	17.369	1.30	63824	0.03	2000	
Sb	123	115	1	He	1.033	1.033	4.52	3582	0.03	300	
Ba	137	115	1	He	566.262	566.262	0.41	934009	0.06	10000	
W	182	209	1	He	0.273	0.273	1.62	6109	0.00	2500	
Tl	205	209	1	He	0.988	0.988	2.66	27956	0.00	5000	
Pb	208	209	1	He	101.513	101.513	2.46	3744852	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	973024	1.33	1389655	70.02	30	120	
Sc	45	1	He	505651	0.33	628609	80.44	30	120	
Sc	45	2	NoGas	3904928	0.77	4813296	81.13	30	120	
Rh	103	1	He	1450312	4.52	1894469	76.56	30	120	
In	115	1	He	845211	0.32	1086371	77.80	30	120	
Tb	159	1	He	2907351	0.37	3251379	89.42	30	120	
Ho	165	1	He	2939418	1.00	3312124	88.75	30	120	
Bi	209	1	He	2130249	2.10	2533294	84.09	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-4-b@2
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:27:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.094	3.094	4.42	9614	0.03	10000	
B	11	45	2	NoGas	-14.857	-14.857	-1.50	31739	-0.05	300	
Na	23	45	1	He	138.664	138.664	1.80	223548	0.06	500000	
Mg	24	45	1	He	11262.698	11262.698	2.11	7513423	0.15	500000	
Al	27	45	1	He	71230.499	71230.499	1.49	25575543	0.28	200000	
K	39	45	1	He	3428.024	3428.024	1.46	2043022	0.17	500000	
Ca	44	45	1	He	2381.571	2381.571	3.25	75929	3.14	500000	
Ti	47	45	1	He	404.755	404.755	0.83	72402	0.56	2500	
V	51	45	1	He	153.330	153.330	0.80	692662	0.02	10000	
Cr	52	45	1	He	101.791	101.791	1.55	553851	0.02	10000	
Mn	55	45	1	He	4185.070	4185.070	1.90	17887292	0.02	10000	
Fe	56	45	1	He	140024.261	140024.261	1.66	729902887	0.02	200000	
Co	59	103	1	He	55.819	55.819	3.73	437431	0.01	10000	
Ni	60	103	1	He	97.393	97.393	3.31	188969	0.05	10000	
Cu	63	103	1	He	56.637	56.637	2.86	289053	0.02	10000	
Zn	66	103	1	He	374.899	374.899	3.47	384736	0.10	10000	
As	75	103	1	He	59.969	59.969	3.70	38251	0.16	10000	
Se	78	103	1	He	5.485	5.485	5.15	395	1.39	10000	
Sr	88	103	1	He	22.150	22.150	3.80	113337	0.02	10000	
Mo	95	103	1	He	9.502	9.502	4.15	23184	0.04	2000	
Ag	107	103	1	He	0.255	0.255	4.71	2179	0.01	300	
Cd	111	103	1	He	1.029	1.029	12.14	2286	0.05	4000	
Sn	118	115	1	He	17.712	17.712	2.82	65504	0.03	2000	
Sb	123	115	1	He	0.809	0.809	2.66	2858	0.03	300	
Ba	137	115	1	He	373.837	373.837	0.33	620807	0.06	10000	
W	182	209	1	He	0.261	0.261	18.28	5931	0.00	2500	
Tl	205	209	1	He	1.012	1.012	2.37	28405	0.00	5000	
Pb	208	209	1	He	111.061	111.061	1.68	4066842	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	973756	1.76	1389655	70.07	30	120	
Sc	45	1	He	499109	1.85	628609	79.40	30	120	
Sc	45	2	NoGas	3884758	0.85	4813296	80.71	30	120	
Rh	103	1	He	1449921	3.57	1894469	76.53	30	120	
In	115	1	He	850938	0.98	1086371	78.33	30	120	
Tb	159	1	He	2874093	1.03	3251379	88.40	30	120	
Ho	165	1	He	2947350	0.44	3312124	88.99	30	120	
Bi	209	1	He	2114343	2.18	2533294	83.46	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-5-b@2
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:30:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.213	3.213	1.07	9903	0.03	10000	
B	11	45	2	NoGas	-10.149	-10.149	-5.49	41258	-0.02	300	
Na	23	45	1	He	140.117	140.117	2.94	219750	0.06	500000	
Mg	24	45	1	He	10234.580	10234.580	1.11	6661715	0.15	500000	
Al	27	45	1	He	62779.145	62779.145	1.02	21991102	0.29	200000	
K	39	45	1	He	3700.021	3700.021	1.07	2148922	0.17	500000	
Ca	44	45	1	He	5246.958	5246.958	1.01	162858	3.22	500000	
Ti	47	45	1	He	501.382	501.382	0.49	87492	0.57	2500	
V	51	45	1	He	135.099	135.099	0.41	595386	0.02	10000	
Cr	52	45	1	He	96.382	96.382	0.59	511734	0.02	10000	
Mn	55	45	1	He	7068.615	7068.615	1.17	29476969	0.02	10000	
Fe	56	45	1	He	118757.529	118757.529	0.64	603986109	0.02	200000	
Co	59	103	1	He	56.335	56.335	0.23	429011	0.01	10000	
Ni	60	103	1	He	100.887	100.887	0.66	190202	0.05	10000	
Cu	63	103	1	He	55.231	55.231	0.76	273877	0.02	10000	
Zn	66	103	1	He	310.207	310.207	0.34	309484	0.10	10000	
As	75	103	1	He	52.567	52.567	0.91	32592	0.16	10000	
Se	78	103	1	He	5.807	5.807	6.54	405	1.43	10000	
Sr	88	103	1	He	34.027	34.027	0.51	169125	0.02	10000	
Mo	95	103	1	He	9.198	9.198	1.70	21813	0.04	2000	
Ag	107	103	1	He	0.293	0.293	4.61	2427	0.01	300	
Cd	111	103	1	He	1.276	1.276	4.68	2572	0.05	4000	
Sn	118	115	1	He	18.212	18.212	1.52	66456	0.03	2000	
Sb	123	115	1	He	1.157	1.157	2.32	3965	0.03	300	
Ba	137	115	1	He	494.827	494.827	0.90	811079	0.06	10000	
W	182	209	1	He	0.391	0.391	8.76	7361	0.01	2500	
Tl	205	209	1	He	0.969	0.969	2.44	27273	0.00	5000	
Pb	208	209	1	He	106.122	106.122	0.70	3895669	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	965943	0.58	1389655	69.51	30	120	
Sc	45	1	He	486870	0.63	628609	77.45	30	120	
Sc	45	2	NoGas	3752621	0.94	4813296	77.96	30	120	
Rh	103	1	He	1407738	0.17	1894469	74.31	30	120	
In	115	1	He	839955	0.75	1086371	77.32	30	120	
Tb	159	1	He	2848263	1.01	3251379	87.60	30	120	
Ho	165	1	He	2897974	1.70	3312124	87.50	30	120	
Bi	209	1	He	2119254	1.68	2533294	83.66	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	060_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:34:40-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.849	0.066	147789	1.37	50	93.7	89.5	110.5	
B	11	45	2	NoGas	29.166	3.598	129497	1.13	50	58.3	89.5	110.5	CCV Failed
Na	23	45	1	He	25038.347	0.673	29263534	1.17	25000	100.2	89.5	110.5	
Mg	24	45	1	He	24921.089	1.766	16501660	0.49	25000	99.7	89.5	110.5	
Al	27	45	1	He	250.327	0.559	90273	0.92	250	100.1	89.5	110.5	
K	39	45	1	He	25161.178	2.365	14714455	1.07	25000	100.6	89.5	110.5	
Ca	44	45	1	He	24642.087	1.159	777009	0.35	25000	98.6	89.5	110.5	
Ti	47	45	1	He	52.556	4.981	9349	5.23	50	105.1	89.5	110.5	
V	51	45	1	He	51.185	1.551	229433	0.35	50	102.4	89.5	110.5	
Cr	52	45	1	He	50.992	0.937	276123	0.58	50	102.0	89.5	110.5	
Mn	55	45	1	He	248.396	0.412	1054322	0.97	250	99.4	89.5	110.5	
Fe	56	45	1	He	12930.465	1.583	66908755	0.36	12500	103.4	89.5	110.5	
Co	59	103	1	He	47.202	1.659	397042	0.56	50	94.4	89.5	110.5	
Ni	60	103	1	He	46.805	1.188	97481	0.46	50	93.6	89.5	110.5	
Cu	63	103	1	He	47.418	2.403	259765	1.06	50	94.8	89.5	110.5	
Zn	66	103	1	He	47.721	1.066	53372	0.54	50	95.4	89.5	110.5	
As	75	103	1	He	47.793	1.410	32737	0.56	50	95.6	89.5	110.5	
Se	78	103	1	He	47.273	0.894	3439	1.74	50	94.5	89.5	110.5	
Sr	88	103	1	He	47.584	1.706	261169	0.51	50	95.2	89.5	110.5	
Mo	95	103	1	He	50.244	0.556	131323	1.78	50	100.5	89.5	110.5	
Ag	107	103	1	He	50.389	1.555	454343	0.41	50	100.8	89.5	110.5	
Cd	111	103	1	He	50.268	1.072	79406	0.38	50	100.5	89.5	110.5	
Sn	118	115	1	He	49.843	1.007	188705	0.33	50	99.7	89.5	110.5	
Sb	123	115	1	He	51.661	0.751	177861	0.68	50	103.3	89.5	110.5	
Ba	137	115	1	He	50.388	2.971	86450	2.04	50	100.8	89.5	110.5	
W	182	209	1	He	48.761	1.138	551860	0.25	50	97.5	89.5	110.5	
Tl	205	209	1	He	45.659	1.477	1328720	0.53	50	91.3	89.5	110.5	
Pb	208	209	1	He	47.138	2.388	1792558	1.25	50	94.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1002646	1.31	1389655	72.15	30	120	
Sc	45	1	He	495397	1.35	628609	78.81	30	120	
Sc	45	2	NoGas	3746703	0.84	4813296	77.84	30	120	
Rh	103	1	He	1555122	1.37	1894469	82.09	30	120	
In	115	1	He	878784	0.94	1086371	80.89	30	120	
Tb	159	1	He	2906138	0.57	3251379	89.38	30	120	
Ho	165	1	He	2981530	0.75	3312124	90.02	30	120	
Bi	209	1	He	2195087	1.37	2533294	86.65	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	061_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:38:29-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.033	42.9	252	17.8	1	
B	11	45	2	NoGas	-23.701	-1.3	10737	5.8	20	
Na	23	45	1	He	-5.293	-18.8	52178	1.4	400	
Mg	24	45	1	He	2.512	34.0	2641	19.6	1000	
Al	27	45	1	He	4.909	0.7	2709	1.4	50	
K	39	45	1	He	4.925	54.8	28137	4.1	1000	
Ca	44	45	1	He	11.993	23.0	677	11.3	1000	
Ti	47	45	1	He	0.106	65.8	37	31.5	20	
V	51	45	1	He	0.107	50.6	369	63.1	2	
Cr	52	45	1	He	0.040	61.8	1568	8.9	2	
Mn	55	45	1	He	1.100	5.4	4870	4.4	2	
Fe	56	45	1	He	36.710	14.3	187165	12.9	50	
Co	59	103	1	He	0.014	9.3	142	9.5	1	
Ni	60	103	1	He	0.031	32.3	93	23.4	2	
Cu	63	103	1	He	0.034	24.7	737	5.2	2	
Zn	66	103	1	He	0.310	8.4	1347	3.5	20	
As	75	103	1	He	0.076	19.9	140	8.6	2	
Se	78	103	1	He	0.089	50.3	37	8.9	2	
Sr	88	103	1	He	0.013	63.3	229	20.7	10	
Mo	95	103	1	He	0.912	23.3	2615	24.1	2	
Ag	107	103	1	He	0.002	126.8	60	45.5	0.2	
Cd	111	103	1	He	-0.060	-70.4	800	7.8	0.2	
Sn	118	115	1	He	0.233	17.9	1845	8.5	10	
Sb	123	115	1	He	0.582	20.2	2234	18.3	1	
Ba	137	115	1	He	0.024	44.5	102	18.8	5	
W	182	209	1	He	0.936	14.8	13881	11.2	10	
Tl	205	209	1	He	0.045	12.5	1387	12.1	0.5	
Pb	208	209	1	He	0.047	1.9	2627	1.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	981820	1.19	1389655	70.65	30	120	
Sc	45	1	He	478655	1.40	628609	76.15	30	120	
Sc	45	2	NoGas	3744986	0.91	4813296	77.81	30	120	
Rh	103	1	He	1653917	1.38	1894469	87.30	30	120	
In	115	1	He	904599	0.31	1086371	83.27	30	120	
Tb	159	1	He	2898817	0.70	3251379	89.16	30	120	
Ho	165	1	He	2983822	0.73	3312124	90.09	30	120	
Bi	209	1	He	2215619	0.97	2533294	87.46	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-6-b@2
Data File Name	062SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:42:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.955	2.955	3.53	8884	0.03	10000	
B	11	45	2	NoGas	-9.943	-9.943	-3.92	41299	-0.02	300	
Na	23	45	1	He	150.515	150.515	4.82	237596	0.06	500000	
Mg	24	45	1	He	10083.077	10083.077	4.92	6727343	0.15	500000	
Al	27	45	1	He	55513.616	55513.616	4.74	19933516	0.28	200000	
K	39	45	1	He	3428.824	3428.824	4.76	2043296	0.17	500000	
Ca	44	45	1	He	10237.977	10237.977	3.63	325548	3.14	500000	
Ti	47	45	1	He	403.207	403.207	3.45	72154	0.56	2500	
V	51	45	1	He	118.420	118.420	4.34	535010	0.02	10000	
Cr	52	45	1	He	89.749	89.749	4.34	488602	0.02	10000	
Mn	55	45	1	He	3172.880	3172.880	4.84	13563369	0.02	10000	
Fe	56	45	1	He	102858.705	102858.705	4.79	536213739	0.02	200000	
Co	59	103	1	He	43.826	43.826	0.34	330956	0.01	10000	
Ni	60	103	1	He	102.843	102.843	0.78	192259	0.05	10000	
Cu	63	103	1	He	69.333	69.333	0.58	340794	0.02	10000	
Zn	66	103	1	He	350.995	350.995	0.48	347125	0.10	10000	
As	75	103	1	He	49.090	49.090	0.92	30185	0.16	10000	
Se	78	103	1	He	4.630	4.630	2.47	325	1.42	10000	
Sr	88	103	1	He	67.907	67.907	0.69	334551	0.02	10000	
Mo	95	103	1	He	8.117	8.117	2.47	19095	0.04	2000	
Ag	107	103	1	He	0.247	0.247	3.22	2030	0.01	300	
Cd	111	103	1	He	1.101	1.101	0.97	2305	0.05	4000	
Sn	118	115	1	He	25.056	25.056	1.39	91501	0.03	2000	
Sb	123	115	1	He	2.001	2.001	2.09	6768	0.03	300	
Ba	137	115	1	He	551.294	551.294	0.50	907471	0.06	10000	
W	182	209	1	He	0.662	0.662	4.53	10244	0.01	2500	
Tl	205	209	1	He	0.846	0.846	2.07	23686	0.00	5000	
Pb	208	209	1	He	117.063	117.063	1.05	4272433	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	941270	0.94	1389655	67.73	30	120	
Sc	45	1	He	499834	4.95	628609	79.51	30	120	
Sc	45	2	NoGas	3715626	1.31	4813296	77.20	30	120	
Rh	103	1	He	1395923	0.39	1894469	73.68	30	120	
In	115	1	He	843496	0.73	1086371	77.64	30	120	
Tb	159	1	He	2806143	0.42	3251379	86.31	30	120	
Ho	165	1	He	2844404	2.03	3312124	85.88	30	120	
Bi	209	1	He	2107075	1.38	2533294	83.18	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-7-b@2
Data File Name	063SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:46:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.192	3.192	7.91	9599	0.03	10000	
B	11	45	2	NoGas	-8.787	-8.787	-2.14	45538	-0.02	300	
Na	23	45	1	He	188.313	188.313	1.46	281756	0.07	500000	
Mg	24	45	1	He	10860.366	10860.366	0.54	7242969	0.15	500000	
Al	27	45	1	He	44725.909	44725.909	1.39	16052414	0.28	200000	
K	39	45	1	He	5847.764	5847.764	0.68	3464557	0.17	500000	
Ca	44	45	1	He	2007.012	2007.012	0.58	64027	3.13	500000	
Ti	47	45	1	He	340.002	340.002	1.45	60790	0.56	2500	
V	51	45	1	He	82.750	82.750	1.07	373587	0.02	10000	
Cr	52	45	1	He	133.389	133.389	1.03	725051	0.02	10000	
Mn	55	45	1	He	1532.871	1532.871	0.51	6549525	0.02	10000	
Fe	56	45	1	He	120516.951	120516.951	0.76	627998091	0.02	200000	
Co	59	103	1	He	46.601	46.601	1.33	346367	0.01	10000	
Ni	60	103	1	He	141.885	141.885	1.02	261061	0.05	10000	
Cu	63	103	1	He	87.851	87.851	0.51	424917	0.02	10000	
Zn	66	103	1	He	216.482	216.482	0.44	211042	0.10	10000	
As	75	103	1	He	52.927	52.927	1.10	32026	0.17	10000	
Se	78	103	1	He	5.487	5.487	5.06	375	1.46	10000	
Sr	88	103	1	He	24.421	24.421	0.39	118507	0.02	10000	
Mo	95	103	1	He	4.631	4.631	2.69	10753	0.04	2000	
Ag	107	103	1	He	0.161	0.161	8.79	1315	0.01	300	
Cd	111	103	1	He	0.585	0.585	10.14	1556	0.04	4000	
Sn	118	115	1	He	16.803	16.803	0.21	60092	0.03	2000	
Sb	123	115	1	He	0.582	0.582	7.08	2032	0.03	300	
Ba	137	115	1	He	254.079	254.079	0.53	407725	0.06	10000	
W	182	209	1	He	0.293	0.293	19.09	6135	0.00	2500	
Tl	205	209	1	He	0.702	0.702	2.04	19255	0.00	5000	
Pb	208	209	1	He	74.261	74.261	1.25	2656282	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	943069	1.06	1389655	67.86	30	120	
Sc	45	1	He	498828	0.65	628609	79.35	30	120	
Sc	45	2	NoGas	3855832	0.54	4813296	80.11	30	120	
Rh	103	1	He	1373987	0.82	1894469	72.53	30	120	
In	115	1	He	822242	0.25	1086371	75.69	30	120	
Tb	159	1	He	2835787	0.09	3251379	87.22	30	120	
Ho	165	1	He	2877671	0.77	3312124	86.88	30	120	
Bi	209	1	He	2064868	1.11	2533294	81.51	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-8-b@2
Data File Name	064SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:49:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.331	3.331	4.70	10155	0.03	10000	
B	11	45	2	NoGas	-5.812	-5.812	-7.69	51888	-0.01	300	
Na	23	45	1	He	172.622	172.622	1.28	258980	0.07	500000	
Mg	24	45	1	He	12683.024	12683.024	0.82	8318202	0.15	500000	
Al	27	45	1	He	74466.028	74466.028	1.09	26284836	0.28	200000	
K	39	45	1	He	6215.257	6215.257	1.73	3619536	0.17	500000	
Ca	44	45	1	He	1309.341	1309.341	0.93	41190	3.18	500000	
Ti	47	45	1	He	391.931	391.931	0.80	68916	0.57	2500	
V	51	45	1	He	130.205	130.205	0.55	578195	0.02	10000	
Cr	52	45	1	He	107.806	107.806	0.50	576588	0.02	10000	
Mn	55	45	1	He	764.223	764.223	1.39	3211427	0.02	10000	
Fe	56	45	1	He	146660.908	146660.908	0.56	751593943	0.02	200000	
Co	59	103	1	He	40.878	40.878	0.48	301193	0.01	10000	
Ni	60	103	1	He	96.817	96.817	0.50	176601	0.05	10000	
Cu	63	103	1	He	98.760	98.760	0.22	473468	0.02	10000	
Zn	66	103	1	He	256.023	256.023	0.93	247273	0.10	10000	
As	75	103	1	He	69.068	69.068	0.62	41410	0.17	10000	
Se	78	103	1	He	6.380	6.380	5.14	428	1.49	10000	
Sr	88	103	1	He	21.948	21.948	0.73	105591	0.02	10000	
Mo	95	103	1	He	6.161	6.161	3.54	14157	0.04	2000	
Ag	107	103	1	He	0.216	0.216	4.33	1736	0.01	300	
Cd	111	103	1	He	0.732	0.732	4.31	1744	0.04	4000	
Sn	118	115	1	He	16.800	16.800	1.69	59701	0.03	2000	
Sb	123	115	1	He	0.832	0.832	3.29	2819	0.03	300	
Ba	137	115	1	He	316.674	316.674	0.88	504939	0.06	10000	
W	182	209	1	He	0.219	0.219	3.51	5334	0.00	2500	
Tl	205	209	1	He	0.952	0.952	0.86	26040	0.00	5000	
Pb	208	209	1	He	66.204	66.204	1.04	2363007	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	956259	0.79	1389655	68.81	30	120	
Sc	45	1	He	490595	0.82	628609	78.04	30	120	
Sc	45	2	NoGas	3817661	1.56	4813296	79.31	30	120	
Rh	103	1	He	1362022	0.13	1894469	71.89	30	120	
In	115	1	He	817042	0.51	1086371	75.21	30	120	
Tb	159	1	He	2803415	0.90	3251379	86.22	30	120	
Ho	165	1	He	2851044	0.66	3312124	86.08	30	120	
Bi	209	1	He	2060257	0.60	2533294	81.33	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV -1945747
Data File Name	065_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:53:47-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.427	2.108	143257	1.47	50	94.9	89.5	110.5	
B	11	45	2	NoGas	27.693	1.273	123357	1.85	50	55.4	89.5	110.5	CCV Failed
Na	23	45	1	He	25056.436	2.743	28327286	1.47	25000	100.2	89.5	110.5	
Mg	24	45	1	He	24950.694	1.210	15985325	0.31	25000	99.8	89.5	110.5	
Al	27	45	1	He	252.406	0.437	88064	1.70	250	101.0	89.5	110.5	
K	39	45	1	He	25164.505	0.610	14241545	1.67	25000	100.7	89.5	110.5	
Ca	44	45	1	He	24756.544	0.818	755288	0.82	25000	99.0	89.5	110.5	
Ti	47	45	1	He	52.772	2.178	9083	3.27	50	105.5	89.5	110.5	
V	51	45	1	He	50.894	2.366	220699	1.09	50	101.8	89.5	110.5	
Cr	52	45	1	He	51.355	0.975	269039	0.34	50	102.7	89.5	110.5	
Mn	55	45	1	He	248.516	1.052	1020503	0.37	250	99.4	89.5	110.5	
Fe	56	45	1	He	12999.790	0.848	65086500	0.61	12500	104.0	89.5	110.5	
Co	59	103	1	He	49.913	0.875	383169	0.57	50	99.8	89.5	110.5	
Ni	60	103	1	He	49.796	0.824	94646	0.50	50	99.6	89.5	110.5	
Cu	63	103	1	He	50.299	0.200	251475	0.52	50	100.6	89.5	110.5	
Zn	66	103	1	He	50.595	1.882	51589	1.48	50	101.2	89.5	110.5	
As	75	103	1	He	51.051	0.988	31909	0.81	50	102.1	89.5	110.5	
Se	78	103	1	He	51.499	1.159	3416	0.77	50	103.0	89.5	110.5	
Sr	88	103	1	He	50.845	1.069	254685	0.62	50	101.7	89.5	110.5	
Mo	95	103	1	He	53.783	2.276	128265	2.06	50	107.6	89.5	110.5	
Ag	107	103	1	He	53.586	1.072	440969	0.88	50	107.2	89.5	110.5	
Cd	111	103	1	He	53.741	0.426	77421	0.58	50	107.5	89.5	110.5	
Sn	118	115	1	He	49.601	0.838	183580	0.78	50	99.2	89.5	110.5	
Sb	123	115	1	He	51.340	0.442	172787	0.49	50	102.7	89.5	110.5	
Ba	137	115	1	He	50.480	0.644	84674	0.62	50	101.0	89.5	110.5	
W	182	209	1	He	49.236	1.586	535764	1.30	50	98.5	89.5	110.5	
Tl	205	209	1	He	46.056	0.986	1288750	0.74	50	92.1	89.5	110.5	
Pb	208	209	1	He	47.700	0.992	1744349	0.97	50	95.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	960192	1.06	1389655	69.10	30	120	
Sc	45	1	He	479301	1.30	628609	76.25	30	120	
Sc	45	2	NoGas	3662172	1.42	4813296	76.08	30	120	
Rh	103	1	He	1419117	0.45	1894469	74.91	30	120	
In	115	1	He	859020	0.10	1086371	79.07	30	120	
Tb	159	1	He	2832842	1.47	3251379	87.13	30	120	
Ho	165	1	He	2865572	1.16	3312124	86.52	30	120	
Bi	209	1	He	2110495	0.60	2533294	83.31	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	066_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:57:39-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.016	76.5	200	20.0	1	
B	11	45	2	NoGas	-22.439	-0.3	13572	2.1	20	
Na	23	45	1	He	-8.930	-19.1	47622	3.0	400	
Mg	24	45	1	He	3.194	27.9	3049	17.5	1000	
Al	27	45	1	He	5.499	6.2	2886	5.0	50	
K	39	45	1	He	6.166	19.0	28575	1.4	1000	
Ca	44	45	1	He	12.415	20.4	684	11.5	1000	
Ti	47	45	1	He	0.068	125.9	30	48.4	20	
V	51	45	1	He	0.094	18.8	310	24.2	2	
Cr	52	45	1	He	0.036	42.2	1533	4.6	2	
Mn	55	45	1	He	0.746	6.1	3385	4.5	2	
Fe	56	45	1	He	38.353	10.7	193600	9.5	50	
Co	59	103	1	He	0.013	26.4	132	23.4	1	
Ni	60	103	1	He	0.010	82.6	44	38.5	2	
Cu	63	103	1	He	0.024	61.8	667	12.7	2	
Zn	66	103	1	He	0.357	31.2	1368	8.9	20	
As	75	103	1	He	0.053	24.2	120	7.2	2	
Se	78	103	1	He	0.085	94.6	36	16.6	2	
Sr	88	103	1	He	0.009	23.7	201	6.3	10	
Mo	95	103	1	He	1.018	11.8	2836	11.7	2	
Ag	107	103	1	He	0.004	26.5	77	13.0	0.2	
Cd	111	103	1	He	-0.041	-14.0	814	0.8	0.2	
Sn	118	115	1	He	0.261	32.9	1948	17.0	10	
Sb	123	115	1	He	0.579	19.1	2218	17.6	1	
Ba	137	115	1	He	0.029	28.3	110	13.2	5	
W	182	209	1	He	0.975	15.8	14233	11.1	10	
Tl	205	209	1	He	0.046	15.5	1389	13.9	0.5	
Pb	208	209	1	He	0.045	9.8	2528	5.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	986111	1.11	1389655	70.96	30	120	
Sc	45	1	He	474143	1.02	628609	75.43	30	120	
Sc	45	2	NoGas	3744230	1.16	4813296	77.79	30	120	
Rh	103	1	He	1614439	0.37	1894469	85.22	30	120	
In	115	1	He	902126	0.09	1086371	83.04	30	120	
Tb	159	1	He	2878459	0.58	3251379	88.53	30	120	
Ho	165	1	He	2912652	0.83	3312124	87.94	30	120	
Bi	209	1	He	2203329	1.18	2533294	86.97	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	067CRIA.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:01:29-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.998	0.998	4.925	3304	5.09	1	99.8	69.5	130.5	
B	11	2	NoGas	-2.801	-2.801	-4.472	58188	0.65	20	-14.0	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1073.753	1073.753	1.643	1310869	0.73	1000	107.4	69.5	130.5	
Mg	24	1	He	1066.454	1066.454	0.479	706464	1.51	1000	106.6	69.5	130.5	
Al	27	1	He	51.674	51.674	1.917	19450	2.63	50	103.3	69.5	130.5	
K	39	1	He	1056.929	1056.929	1.628	642536	0.45	1000	105.7	69.5	130.5	
Ca	44	1	He	1045.241	1045.241	2.457	33232	2.87	1000	104.5	69.5	130.5	
Ti	47	1	He	11.265	11.265	4.414	2016	2.72	10	112.7	69.5	130.5	
V	51	1	He	5.341	5.341	2.065	23832	3.31	5	106.8	69.5	130.5	
Cr	52	1	He	2.206	2.206	1.188	13277	1.43	2	110.3	69.5	130.5	
Mn	55	1	He	5.705	5.705	2.774	24546	1.95	5	114.1	69.5	130.5	
Fe	56	1	He	120.911	120.911	1.264	628848	0.90	100	120.9	69.5	130.5	
Co	59	1	He	0.982	0.982	3.463	8660	1.97	1	98.2	69.5	130.5	
Ni	60	1	He	1.944	1.944	2.116	4261	0.92	2	97.2	69.5	130.5	
Cu	63	1	He	1.991	1.991	3.769	11931	2.13	2	99.6	69.5	130.5	
Zn	66	1	He	19.884	19.884	2.521	23847	1.22	20	99.4	69.5	130.5	
As	75	1	He	4.903	4.903	3.139	3590	1.57	5	98.1	69.5	130.5	
Se	78	1	He	5.049	5.049	6.132	411	5.77	5	101.0	69.5	130.5	
Sr	88	1	He	9.581	9.581	2.007	55176	0.51	10	95.8	69.5	130.5	
Mo	95	1	He	10.474	10.474	0.668	28721	1.63	10	104.7	69.5	130.5	
Ag	107	1	He	1.038	1.038	2.381	9843	3.60	1	103.8	69.5	130.5	
Cd	111	1	He	1.026	1.026	5.865	2565	2.42	1	102.6	69.5	130.5	
Sn	118	1	He	10.183	10.183	3.567	40597	3.18	10	101.8	69.5	130.5	
Sb	123	1	He	2.181	2.181	5.558	7929	5.29	2	109.1	69.5	130.5	
Ba	137	1	He	5.087	5.087	0.077	9076	0.39	5	101.7	69.5	130.5	
W	182	1	He	9.692	9.692	1.202	114219	0.38	10	96.9	69.5	130.5	
Tl	205	1	He	1.894	1.894	1.667	56131	1.11	2	94.7	69.5	130.5	
Pb	208	1	He	1.058	1.058	1.413	41750	0.96	1	105.8	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1004346	0.41	1389655	72.27	30	120	
Sc	45	1	He	494843	1.96	628609	78.72	30	120	
Sc	45	2	NoGas	3778648	0.18	4813296	78.50	30	120	
Rh	103	1	He	1628249	1.51	1894469	85.95	30	120	
In	115	1	He	908231	0.34	1086371	83.60	30	120	
Tb	159	1	He	2891676	1.09	3251379	88.94	30	120	
Ho	165	1	He	2969822	0.20	3312124	89.67	30	120	
Bi	209	1	He	2232967	0.80	2533294	88.14	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177128/1-a@2
Data File Name	068_Blk.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:05:18-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.023	150.0	215	49.7	1	
B	11	45	2	NoGas	-22.714	-0.5	12123	0.9	20	
Na	23	45	1	He	19.124	4.2	78631	0.9	400	
Mg	24	45	1	He	30.627	1.5	20360	2.7	1000	
Al	27	45	1	He	2.665	7.5	1910	3.1	50	
K	39	45	1	He	21.083	11.6	36757	2.5	1000	
Ca	44	45	1	He	98.493	5.3	3266	3.2	1000	
Ti	47	45	1	He	0.240	25.6	59	17.3	20	
V	51	45	1	He	0.236	31.3	917	34.1	2	
Cr	52	45	1	He	0.817	4.8	5536	1.8	2	
Mn	55	45	1	He	0.789	7.5	3543	5.0	2	
Fe	56	45	1	He	29.667	4.7	150201	6.4	50	
Co	59	103	1	He	0.016	19.7	139	18.0	1	
Ni	60	103	1	He	0.157	7.4	322	6.9	2	
Cu	63	103	1	He	1.540	25.7	8254	24.4	2	
Zn	66	103	1	He	3.060	1.9	3963	1.8	20	
As	75	103	1	He	0.158	13.7	173	7.5	2	
Se	78	103	1	He	0.139	20.6	35	5.1	2	
Sr	88	103	1	He	0.238	6.6	1340	6.3	10	
Mo	95	103	1	He	0.429	25.0	1100	23.6	2	
Ag	107	103	1	He	0.003	118.7	57	48.2	0.2	
Cd	111	103	1	He	0.005	152.1	791	1.5	0.2	
Sn	118	115	1	He	18.578	1.3	68683	1.2	10	Blank Failed
Sb	123	115	1	He	0.237	6.6	953	5.9	1	
Ba	137	115	1	He	0.835	5.1	1442	4.8	5	
W	182	209	1	He	0.483	21.5	8510	12.4	10	
Tl	205	209	1	He	0.032	7.8	954	7.4	0.5	
Pb	208	209	1	He	0.183	2.3	7672	2.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	948619	1.62	1389655	68.26	30	120	
Sc	45	1	He	472279	1.92	628609	75.13	30	120	
Sc	45	2	NoGas	3504707	1.24	4813296	72.81	30	120	
Rh	103	1	He	1436788	0.37	1894469	75.84	30	120	
In	115	1	He	851142	0.44	1086371	78.35	30	120	
Tb	159	1	He	2779597	0.57	3251379	85.49	30	120	
Ho	165	1	He	2823069	0.35	3312124	85.23	30	120	
Bi	209	1	He	2160068	1.32	2533294	85.27	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177128/2-a@2
Data File Name	069LCSS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:09:10-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	484.078	484.078	1.788	1383267	0.51	500	96.8	78.6	110.5	
B	11	2	NoGas	31.261	31.261	2.235	125385	0.91	50	62.5	79.5	120.5	LCSS Failed
Na	23	1	He	4828.166	4828.166	1.591	5312775	0.80	5000	96.6	79.5	120.5	
Mg	24	1	He	4928.950	4928.950	1.463	3047812	0.93	5000	98.6	79.5	120.5	
Al	27	1	He	4750.099	4750.099	2.086	1581230	0.69	5000	95.0	79.5	120.5	
K	39	1	He	4966.359	4966.359	1.643	2731196	0.27	5000	99.3	79.5	120.5	
Ca	44	1	He	4547.686	4547.686	2.274	134104	1.36	5000	91.0	79.5	120.5	
Ti	47	1	He	48.238	48.238	1.590	8011	0.32	50	96.5	79.5	120.5	
V	51	1	He	499.524	499.524	3.285	2090716	1.88	500	99.9	71.5	110.5	
Cr	52	1	He	507.296	507.296	1.827	2552462	0.30	500	101.5	69.5	110.5	
Mn	55	1	He	496.594	496.594	2.239	1967011	0.43	500	99.3	79.5	120.5	
Fe	56	1	He	5079.638	5079.638	1.770	24539655	0.47	5000	101.6	79.5	120.5	
Co	59	1	He	494.185	494.185	0.677	3698618	0.71	500	98.8	73.9	110.5	
Ni	60	1	He	474.292	474.292	0.316	878737	0.53	500	94.9	74.9	110.5	
Cu	63	1	He	503.429	503.429	0.825	2449731	0.30	500	100.7	72.6	110.5	
Zn	66	1	He	456.883	456.883	0.669	447594	0.61	500	91.4	71.5	113.4	
As	75	1	He	440.912	440.912	0.423	268148	0.58	500	88.2	73.4	110.5	
Se	78	1	He	420.952	420.952	0.656	27047	0.68	500	84.2	64.6	110.5	
Sr	88	1	He	514.982	514.982	0.502	2513812	0.22	500	103.0	79.5	120.5	
Mo	95	1	He	54.447	54.447	0.521	126598	0.83	50	108.9	29.5	140.5	
Ag	107	1	He	52.261	52.261	0.519	419290	0.56	50	104.5	59.5	114.5	
Cd	111	1	He	494.543	494.543	0.698	688423	0.76	500	98.9	73.5	110.5	
Sn	118	1	He	562.352	562.352	1.399	1964945	1.10	500	112.5	79.5	120.5	
Sb	123	1	He	49.173	49.173	0.535	156942	0.48	50	98.3	67.5	113.4	
Ba	137	1	He	484.297	484.297	0.568	769905	0.66	500	96.9	69.5	110.5	
W	182	1	He	47.880	47.880	1.333	510685	0.17	50	95.8	74.6	125.4	
Tl	205	1	He	121.550	121.550	0.535	3333360	0.84	125	97.2	70.6	110.5	
Pb	208	1	He	494.075	494.075	1.346	17699137	0.56	500	98.8	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	909339	2.29	1389655	65.44	30	120	
Sc	45	1	He	462504	1.91	628609	73.58	30	120	
Sc	45	2	NoGas	3500262	0.26	4813296	72.72	30	120	
Rh	103	1	He	1383559	0.54	1894469	73.03	30	120	
In	115	1	He	814614	0.33	1086371	74.98	30	120	
Tb	159	1	He	2745227	0.90	3251379	84.43	30	120	
Ho	165	1	He	2817665	0.71	3312124	85.07	30	120	
Bi	209	1	He	2068480	1.33	2533294	81.65	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-d@2
Data File Name	070SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:12:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.579	2.579	1.80	7828	0.03	10000	
B	11	45	2	NoGas	45.279	45.279	3.86	166967	0.03	300	
Na	23	45	1	He	1899.836	1899.836	3.03	2290992	0.08	500000	
Mg	24	45	1	He	11067.031	11067.031	2.45	7378310	0.15	500000	
Al	27	45	1	He	42633.516	42633.516	2.68	15296589	0.28	200000	
K	39	45	1	He	15372.977	15372.977	1.97	9062564	0.17	500000	
Ca	44	45	1	He	104.045	104.045	58.63	3638	2.86	500000	
Ti	47	45	1	He	323.123	323.123	1.56	57767	0.56	2500	
V	51	45	1	He	75.350	75.350	0.84	340169	0.02	10000	
Cr	52	45	1	He	77.411	77.411	2.31	421280	0.02	10000	
Mn	55	45	1	He	10781.740	10781.740	2.24	46054697	0.02	10000	>LDR
Fe	56	45	1	He	100096.597	100096.597	1.61	521490806	0.02	200000	
Co	59	103	1	He	37.995	37.995	0.92	281455	0.01	10000	
Ni	60	103	1	He	97.761	97.761	0.34	179273	0.05	10000	
Cu	63	103	1	He	99.825	99.825	1.00	481133	0.02	10000	
Zn	66	103	1	He	229.625	229.625	1.12	223053	0.10	10000	
As	75	103	1	He	217.730	217.730	0.26	131087	0.17	10000	
Se	78	103	1	He	4.138	4.138	3.10	288	1.44	10000	
Sr	88	103	1	He	1899.420	1899.420	0.93	9176197	0.02	10000	
Mo	95	103	1	He	685.153	685.153	1.45	1575894	0.04	2000	
Ag	107	103	1	He	0.087	0.087	15.34	726	0.01	300	
Cd	111	103	1	He	0.551	0.551	8.03	1504	0.04	4000	
Sn	118	115	1	He	17.310	17.310	1.21	62504	0.03	2000	
Sb	123	115	1	He	0.700	0.700	7.38	2435	0.03	300	
Ba	137	115	1	He	306.709	306.709	0.06	497128	0.06	10000	
W	182	209	1	He	17.599	17.599	0.54	190544	0.01	2500	
Tl	205	209	1	He	0.561	0.561	4.85	15493	0.00	5000	
Pb	208	209	1	He	393.167	393.167	0.16	14151943	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	947844	0.94	1389655	68.21	30	120	
Sc	45	1	He	498870	2.44	628609	79.36	30	120	
Sc	45	2	NoGas	3775956	1.47	4813296	78.45	30	120	
Rh	103	1	He	1369301	0.39	1894469	72.28	30	120	
In	115	1	He	830522	0.45	1086371	76.45	30	120	
Tb	159	1	He	2816256	0.23	3251379	86.62	30	120	
Ho	165	1	He	2886292	0.53	3312124	87.14	30	120	
Bi	209	1	He	2078159	0.06	2533294	82.03	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-3-d@10
Data File Name	071SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:16:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.482	0.482	12.28	1608	0.03	10000	
B	11	45	2	NoGas	-9.306	-9.306	-8.44	42260	-0.02	300	
Na	23	45	1	He	380.468	380.468	1.31	484181	0.08	500000	
Mg	24	45	1	He	2427.171	2427.171	0.83	1545230	0.16	500000	
Al	27	45	1	He	9507.214	9507.214	0.84	3256570	0.29	200000	
K	39	45	1	He	3416.736	3416.736	1.80	1941645	0.18	500000	
Ca	44	45	1	He	-52.487	-52.487	-53.97	-1291	4.07	500000	
Ti	47	45	1	He	70.058	70.058	1.49	11966	0.59	2500	
V	51	45	1	He	16.428	16.428	1.93	70695	0.02	10000	
Cr	52	45	1	He	16.758	16.758	0.95	88096	0.02	10000	
Mn	55	45	1	He	2334.115	2334.115	2.14	9513957	0.02	10000	
Fe	56	45	1	He	21788.426	21788.426	2.22	108312611	0.02	200000	
Co	59	103	1	He	7.609	7.609	0.54	58716	0.01	10000	
Ni	60	103	1	He	19.641	19.641	0.82	37535	0.05	10000	
Cu	63	103	1	He	20.175	20.175	0.55	101654	0.02	10000	
Zn	66	103	1	He	48.427	48.427	1.02	49667	0.10	10000	
As	75	103	1	He	45.126	45.126	0.52	28357	0.16	10000	
Se	78	103	1	He	0.782	0.782	21.04	78	1.01	10000	
Sr	88	103	1	He	389.645	389.645	0.68	1960759	0.02	10000	
Mo	95	103	1	He	124.223	124.223	0.40	297674	0.04	2000	
Ag	107	103	1	He	0.014	0.014	31.43	146	0.01	300	
Cd	111	103	1	He	0.155	0.155	6.97	1000	0.02	4000	
Sn	118	115	1	He	3.340	3.340	3.15	13113	0.03	2000	
Sb	123	115	1	He	0.134	0.134	12.00	611	0.02	300	
Ba	137	115	1	He	61.453	61.453	1.10	102429	0.06	10000	
W	182	209	1	He	3.538	3.538	5.53	42167	0.01	2500	
Tl	205	209	1	He	0.117	0.117	4.02	3384	0.00	5000	
Pb	208	209	1	He	71.915	71.915	1.90	2680837	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	964189	0.43	1389655	69.38	30	120	
Sc	45	1	He	475994	1.96	628609	75.72	30	120	
Sc	45	2	NoGas	3676918	1.88	4813296	76.39	30	120	
Rh	103	1	He	1426264	0.46	1894469	75.29	30	120	
In	115	1	He	853683	0.49	1086371	78.58	30	120	
Tb	159	1	He	2839697	0.37	3251379	87.34	30	120	
Ho	165	1	He	2869723	1.76	3312124	86.64	30	120	
Bi	209	1	He	2152102	1.59	2533294	84.95	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-3-d@2
Data File Name	072SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:20:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	975.122	975.122	1.07	2872670	0.03	10000	
B	11	45	2	NoGas	155.583	155.583	0.58	394951	0.04	300	
Na	23	45	1	He	11640.561	11640.561	1.86	13084623	0.09	500000	
Mg	24	45	1	He	20799.919	20799.919	1.15	13217718	0.16	500000	
Al	27	45	1	He	51935.474	51935.474	0.84	17763462	0.29	200000	
K	39	45	1	He	24973.108	24973.108	2.03	14015193	0.18	500000	
Ca	44	45	1	He	8797.770	8797.770	1.96	266387	3.30	500000	
Ti	47	45	1	He	414.421	414.421	1.92	70604	0.59	2500	
V	51	45	1	He	1066.737	1066.737	1.21	4590459	0.02	10000	
Cr	52	45	1	He	1070.777	1070.777	1.51	5536840	0.02	10000	
Mn	55	45	1	He	11577.302	11577.302	1.14	47136520	0.02	10000	>LDR
Fe	56	45	1	He	109256.558	109256.558	1.68	542488530	0.02	200000	
Co	59	103	1	He	1090.629	1090.629	1.21	7669994	0.01	10000	
Ni	60	103	1	He	1192.502	1192.502	1.33	2075981	0.06	10000	
Cu	63	103	1	He	1180.192	1180.192	1.61	5395921	0.02	10000	
Zn	66	103	1	He	1192.997	1192.997	0.99	1096974	0.11	10000	
As	75	103	1	He	1183.696	1183.696	1.08	676323	0.18	10000	
Se	78	103	1	He	942.801	942.801	1.08	56892	1.66	10000	
Sr	88	103	1	He	2997.837	2997.837	1.01	13750038	0.02	10000	
Mo	95	103	1	He	815.103	815.103	0.73	1780084	0.05	2000	
Ag	107	103	1	He	111.273	111.273	1.16	838830	0.01	300	
Cd	111	103	1	He	1072.133	1072.133	0.80	1401565	0.08	4000	
Sn	118	115	1	He	1201.583	1201.583	1.20	3972367	0.03	2000	
Sb	123	115	1	He	110.647	110.647	1.32	334010	0.03	300	
Ba	137	115	1	He	1516.163	1516.163	2.46	2280594	0.07	10000	
W	182	209	1	He	119.845	119.845	1.46	1231618	0.01	2500	
Tl	205	209	1	He	254.525	254.525	0.63	6749068	0.00	5000	
Pb	208	209	1	He	1429.862	1429.862	0.47	49530034	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	937267	0.98	1389655	67.45	30	120	
Sc	45	1	He	475401	1.52	628609	75.63	30	120	
Sc	45	2	NoGas	3578585	0.61	4813296	74.35	30	120	
Rh	103	1	He	1300103	0.63	1894469	68.63	30	120	
In	115	1	He	770962	1.18	1086371	70.97	30	120	
Tb	159	1	He	2760177	1.07	3251379	84.89	30	120	
Ho	165	1	He	2785899	1.15	3312124	84.11	30	120	
Bi	209	1	He	2000023	0.84	2533294	78.95	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-e du@2
Data File Name	073SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:23:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.403	2.403	7.11	6991	0.03	10000	
B	11	45	2	NoGas	43.928	43.928	1.69	153690	0.03	300	
Na	23	45	1	He	1793.993	1793.993	1.88	1968167	0.09	500000	
Mg	24	45	1	He	10301.995	10301.995	0.72	6239059	0.17	500000	
Al	27	45	1	He	38574.848	38574.848	1.00	12572449	0.31	200000	
K	39	45	1	He	14271.628	14271.628	1.83	7642877	0.19	500000	
Ca	44	45	1	He	294.062	294.062	13.29	8769	3.35	500000	
Ti	47	45	1	He	352.261	352.261	0.79	57196	0.62	2500	
V	51	45	1	He	69.537	69.537	1.03	285061	0.02	10000	
Cr	52	45	1	He	74.123	74.123	1.22	366430	0.02	10000	
Mn	55	45	1	He	5159.864	5159.864	1.46	20018368	0.03	10000	
Fe	56	45	1	He	97297.954	97297.954	1.00	460387519	0.02	200000	
Co	59	103	1	He	35.875	35.875	0.62	252079	0.01	10000	
Ni	60	103	1	He	90.839	90.839	0.17	158014	0.06	10000	
Cu	63	103	1	He	80.242	80.242	0.95	366928	0.02	10000	
Zn	66	103	1	He	195.095	195.095	0.47	179872	0.11	10000	
As	75	103	1	He	202.616	202.616	0.87	115716	0.18	10000	
Se	78	103	1	He	4.189	4.189	14.74	276	1.52	10000	
Sr	88	103	1	He	1389.372	1389.372	0.84	6366673	0.02	10000	
Mo	95	103	1	He	617.231	617.231	0.53	1346686	0.05	2000	
Ag	107	103	1	He	0.082	0.082	10.54	647	0.01	300	
Cd	111	103	1	He	0.614	0.614	9.82	1509	0.04	4000	
Sn	118	115	1	He	20.190	20.190	3.89	68275	0.03	2000	
Sb	123	115	1	He	0.996	0.996	6.73	3187	0.03	300	
Ba	137	115	1	He	274.831	274.831	0.53	418005	0.07	10000	
W	182	209	1	He	20.400	20.400	1.82	209341	0.01	2500	
Tl	205	209	1	He	0.809	0.809	12.71	21237	0.00	5000	
Pb	208	209	1	He	256.224	256.224	0.33	8760531	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	907423	2.40	1389655	65.30	30	120	
Sc	45	1	He	452993	1.08	628609	72.06	30	120	
Sc	45	2	NoGas	3539829	0.18	4813296	73.54	30	120	
Rh	103	1	He	1298868	0.38	1894469	68.56	30	120	
In	115	1	He	779334	0.30	1086371	71.74	30	120	
Tb	159	1	He	2690155	0.76	3251379	82.74	30	120	
Ho	165	1	He	2754614	1.03	3312124	83.17	30	120	
Bi	209	1	He	1973919	0.83	2533294	77.92	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-f ms@2
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:27:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	48.135	48.135	0.40	135800	0.04	10000	
B	11	45	2	NoGas	91.342	91.342	1.53	251636	0.04	300	
Na	23	45	1	He	6233.776	6233.776	1.56	6624175	0.09	500000	
Mg	24	45	1	He	14852.197	14852.197	0.41	8888705	0.17	500000	
Al	27	45	1	He	44219.578	44219.578	1.07	14242643	0.31	200000	
K	39	45	1	He	18190.790	18190.790	0.79	9621203	0.19	500000	
Ca	44	45	1	He	4361.198	4361.198	0.43	124515	3.50	500000	
Ti	47	45	1	He	439.210	439.210	1.40	70467	0.62	2500	
V	51	45	1	He	115.093	115.093	1.01	466334	0.02	10000	
Cr	52	45	1	He	117.111	117.111	1.13	571411	0.02	10000	
Mn	55	45	1	He	9604.956	9604.956	1.51	36825879	0.03	10000	
Fe	56	45	1	He	97684.410	97684.410	1.23	456772746	0.02	200000	
Co	59	103	1	He	80.535	80.535	0.07	554800	0.01	10000	
Ni	60	103	1	He	133.486	133.486	0.95	227644	0.06	10000	
Cu	63	103	1	He	133.933	133.933	0.54	600187	0.02	10000	
Zn	66	103	1	He	240.851	240.851	0.41	217544	0.11	10000	
As	75	103	1	He	235.065	235.065	0.31	131613	0.18	10000	
Se	78	103	1	He	42.970	42.970	1.74	2562	1.68	10000	
Sr	88	103	1	He	2055.593	2055.593	0.21	9235458	0.02	10000	
Mo	95	103	1	He	713.031	713.031	0.48	1525306	0.05	2000	
Ag	107	103	1	He	50.228	50.228	0.24	370918	0.01	300	
Cd	111	103	1	He	49.042	49.042	1.28	63459	0.08	4000	
Sn	118	115	1	He	61.705	61.705	1.97	203351	0.03	2000	
Sb	123	115	1	He	17.061	17.061	1.44	51281	0.03	300	
Ba	137	115	1	He	324.750	324.750	1.03	485241	0.07	10000	
W	182	209	1	He	54.912	54.912	0.85	553228	0.01	2500	
Tl	205	209	1	He	41.695	41.695	0.79	1080815	0.00	5000	
Pb	208	209	1	He	434.146	434.146	0.82	14701284	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	896750	0.89	1389655	64.53	30	120	
Sc	45	1	He	447663	0.88	628609	71.21	30	120	
Sc	45	2	NoGas	3502779	1.26	4813296	72.77	30	120	
Rh	103	1	He	1273474	0.45	1894469	67.22	30	120	
In	115	1	He	765657	0.67	1086371	70.48	30	120	
Tb	159	1	He	2669950	0.93	3251379	82.12	30	120	
Ho	165	1	He	2722368	1.30	3312124	82.19	30	120	
Bi	209	1	He	1955125	0.57	2533294	77.18	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-9-b@2
Data File Name	075SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:31:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.695	3.695	2.66	10789	0.03	10000	
B	11	45	2	NoGas	-7.734	-7.734	-4.61	46106	-0.02	300	
Na	23	45	1	He	186.716	186.716	1.82	266837	0.07	500000	
Mg	24	45	1	He	15244.654	15244.654	2.40	9690807	0.16	500000	
Al	27	45	1	He	65400.635	65400.635	1.70	22377068	0.29	200000	
K	39	45	1	He	5596.714	5596.714	1.47	3162119	0.18	500000	
Ca	44	45	1	He	1839.056	1839.056	0.42	55964	3.29	500000	
Ti	47	45	1	He	407.960	407.960	1.64	69535	0.59	2500	
V	51	45	1	He	117.965	117.965	1.26	507783	0.02	10000	
Cr	52	45	1	He	103.221	103.221	1.48	535200	0.02	10000	
Mn	55	45	1	He	1238.026	1238.026	1.85	5042963	0.02	10000	
Fe	56	45	1	He	144657.630	144657.630	1.19	718620149	0.02	200000	
Co	59	103	1	He	53.862	53.862	0.32	381867	0.01	10000	
Ni	60	103	1	He	125.570	125.570	1.17	220392	0.06	10000	
Cu	63	103	1	He	105.005	105.005	0.59	484354	0.02	10000	
Zn	66	103	1	He	288.001	288.001	0.33	267551	0.11	10000	
As	75	103	1	He	71.830	71.830	0.23	41435	0.17	10000	
Se	78	103	1	He	6.158	6.158	6.79	398	1.55	10000	
Sr	88	103	1	He	27.930	27.930	1.27	129256	0.02	10000	
Mo	95	103	1	He	13.584	13.584	11.76	29959	0.05	2000	
Ag	107	103	1	He	0.151	0.151	8.69	1176	0.01	300	
Cd	111	103	1	He	0.826	0.826	8.21	1801	0.05	4000	
Sn	118	115	1	He	17.009	17.009	2.37	58676	0.03	2000	
Sb	123	115	1	He	0.858	0.858	4.00	2816	0.03	300	
Ba	137	115	1	He	379.917	379.917	0.71	588097	0.06	10000	
W	182	209	1	He	1.085	1.085	10.60	14192	0.01	2500	
Tl	205	209	1	He	1.010	1.010	1.43	27065	0.00	5000	
Pb	208	209	1	He	64.206	64.206	1.11	2245204	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	916964	0.89	1389655	65.99	30	120	
Sc	45	1	He	475620	1.60	628609	75.66	30	120	
Sc	45	2	NoGas	3705745	0.37	4813296	76.99	30	120	
Rh	103	1	He	1310564	0.34	1894469	69.18	30	120	
In	115	1	He	793204	0.33	1086371	73.01	30	120	
Tb	159	1	He	2737535	0.82	3251379	84.20	30	120	
Ho	165	1	He	2803446	1.51	3312124	84.64	30	120	
Bi	209	1	He	2018538	1.24	2533294	79.68	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-10-b@2
Data File Name	076SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:35:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.254	3.254	3.15	9418	0.03	10000	
B	11	45	2	NoGas	-13.347	-13.347	-3.02	32296	-0.04	300	
Na	23	45	1	He	158.513	158.513	0.44	227563	0.07	500000	
Mg	24	45	1	He	10635.735	10635.735	0.97	6540640	0.16	500000	
Al	27	45	1	He	59204.014	59204.014	1.39	19593823	0.30	200000	
K	39	45	1	He	3773.752	3773.752	1.37	2070347	0.18	500000	
Ca	44	45	1	He	1790.015	1790.015	0.15	52694	3.40	500000	
Ti	47	45	1	He	511.805	511.805	1.00	84380	0.61	2500	
V	51	45	1	He	129.318	129.318	1.59	538415	0.02	10000	
Cr	52	45	1	He	89.584	89.584	1.43	449449	0.02	10000	
Mn	55	45	1	He	4082.591	4082.591	0.51	16085615	0.03	10000	
Fe	56	45	1	He	129017.310	129017.310	1.34	619958642	0.02	200000	
Co	59	103	1	He	61.393	61.393	1.41	427766	0.01	10000	
Ni	60	103	1	He	89.269	89.269	0.45	153990	0.06	10000	
Cu	63	103	1	He	68.413	68.413	0.87	310296	0.02	10000	
Zn	66	103	1	He	259.930	259.930	1.21	237397	0.11	10000	
As	75	103	1	He	58.130	58.130	0.93	32969	0.18	10000	
Se	78	103	1	He	5.118	5.118	1.38	329	1.55	10000	
Sr	88	103	1	He	21.776	21.776	1.39	99070	0.02	10000	
Mo	95	103	1	He	9.807	9.807	1.20	21277	0.05	2000	
Ag	107	103	1	He	0.163	0.163	8.26	1250	0.01	300	
Cd	111	103	1	He	0.716	0.716	2.19	1628	0.04	4000	
Sn	118	115	1	He	16.422	16.422	0.62	55707	0.03	2000	
Sb	123	115	1	He	0.755	0.755	3.97	2452	0.03	300	
Ba	137	115	1	He	380.086	380.086	0.50	578305	0.07	10000	
W	182	209	1	He	0.506	0.506	6.52	8025	0.01	2500	
Tl	205	209	1	He	0.919	0.919	1.03	24138	0.00	5000	
Pb	208	209	1	He	74.238	74.238	0.85	2541879	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	907314	1.11	1389655	65.29	30	120	
Sc	45	1	He	460011	1.03	628609	73.18	30	120	
Sc	45	2	NoGas	3557942	1.21	4813296	73.92	30	120	
Rh	103	1	He	1288060	0.38	1894469	67.99	30	120	
In	115	1	He	779644	0.46	1086371	71.77	30	120	
Tb	159	1	He	2656871	0.11	3251379	81.72	30	120	
Ho	165	1	He	2713597	0.25	3312124	81.93	30	120	
Bi	209	1	He	1976385	0.13	2533294	78.02	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	077_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:39:05-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.678	0.951	142687	0.61	50	97.4	89.5	110.5	
B	11	45	2	NoGas	28.222	2.592	119945	1.73	50	56.4	89.5	110.5	CCV Failed
Na	23	45	1	He	25463.427	0.878	27514040	0.80	25000	101.9	89.5	110.5	
Mg	24	45	1	He	25239.581	1.890	15451855	0.39	25000	101.0	89.5	110.5	
Al	27	45	1	He	253.183	0.698	84409	1.42	250	101.3	89.5	110.5	
K	39	45	1	He	25322.624	1.437	13692988	0.23	25000	101.3	89.5	110.5	
Ca	44	45	1	He	24846.583	1.145	724384	0.82	25000	99.4	89.5	110.5	
Ti	47	45	1	He	52.668	0.175	8662	1.44	50	105.3	89.5	110.5	
V	51	45	1	He	51.435	1.168	213198	1.94	50	102.9	89.5	110.5	
Cr	52	45	1	He	51.935	0.996	259992	0.57	50	103.9	89.5	110.5	
Mn	55	45	1	He	251.405	0.991	986565	0.57	250	100.6	89.5	110.5	
Fe	56	45	1	He	13131.255	2.562	62817178	1.14	12500	105.1	89.5	110.5	
Co	59	103	1	He	49.989	1.080	367573	0.54	50	100.0	89.5	110.5	
Ni	60	103	1	He	49.721	0.555	90520	0.24	50	99.4	89.5	110.5	
Cu	63	103	1	He	50.828	0.953	243396	0.42	50	101.7	89.5	110.5	
Zn	66	103	1	He	50.260	2.443	49090	1.75	50	100.5	89.5	110.5	
As	75	103	1	He	51.277	0.720	30699	0.10	50	102.6	89.5	110.5	
Se	78	103	1	He	51.085	1.862	3247	2.52	50	102.2	89.5	110.5	
Sr	88	103	1	He	51.634	1.031	247741	1.18	50	103.3	89.5	110.5	
Mo	95	103	1	He	54.459	1.479	124410	1.79	50	108.9	89.5	110.5	
Ag	107	103	1	He	53.924	1.143	425039	0.83	50	107.8	89.5	110.5	
Cd	111	103	1	He	54.105	1.281	74652	0.54	50	108.2	89.5	110.5	
Sn	118	115	1	He	49.529	1.159	176073	1.15	50	99.1	89.5	110.5	
Sb	123	115	1	He	51.696	0.505	167109	0.55	50	103.4	89.5	110.5	
Ba	137	115	1	He	51.000	0.899	82167	1.01	50	102.0	89.5	110.5	
W	182	209	1	He	49.124	0.239	518940	1.13	50	98.2	89.5	110.5	
Tl	205	209	1	He	46.269	1.649	1256729	0.76	50	92.5	89.5	110.5	
Pb	208	209	1	He	47.863	2.030	1698915	1.16	50	95.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	931731	0.40	1389655	67.05	30	120	
Sc	45	1	He	458045	1.56	628609	72.87	30	120	
Sc	45	2	NoGas	3527715	0.78	4813296	73.29	30	120	
Rh	103	1	He	1359312	0.73	1894469	71.75	30	120	
In	115	1	He	825082	0.15	1086371	75.95	30	120	
Tb	159	1	He	2767101	0.76	3251379	85.11	30	120	
Ho	165	1	He	2853533	1.26	3312124	86.15	30	120	
Bi	209	1	He	2048750	0.90	2533294	80.87	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	078_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:42:56-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.059	7.6	326	5.2	1	
B	11	45	2	NoGas	-23.114	-1.2	11708	5.8	20	
Na	23	45	1	He	-10.141	-20.5	44529	3.9	400	
Mg	24	45	1	He	2.916	45.2	2763	28.0	1000	
Al	27	45	1	He	4.240	19.6	2361	10.4	50	
K	39	45	1	He	6.545	41.6	27700	4.2	1000	
Ca	44	45	1	He	12.689	46.2	665	24.9	1000	
Ti	47	45	1	He	0.143	80.5	41	46.1	20	
V	51	45	1	He	0.079	39.8	238	55.5	2	
Cr	52	45	1	He	0.037	58.2	1478	6.1	2	
Mn	55	45	1	He	1.209	6.8	5066	5.5	2	
Fe	56	45	1	He	31.789	16.5	154990	14.9	50	
Co	59	103	1	He	0.026	16.5	223	13.3	1	
Ni	60	103	1	He	0.026	48.4	72	37.6	2	
Cu	63	103	1	He	0.047	32.6	721	9.7	2	
Zn	66	103	1	He	0.433	19.7	1316	3.6	20	
As	75	103	1	He	0.113	20.9	147	8.1	2	
Se	78	103	1	He	0.168	42.9	38	15.2	2	
Sr	88	103	1	He	0.040	34.4	341	18.4	10	
Mo	95	103	1	He	1.246	16.8	3117	14.1	2	
Ag	107	103	1	He	0.004	39.1	67	17.3	0.2	
Cd	111	103	1	He	0.000	-9568.5	796	2.1	0.2	
Sn	118	115	1	He	0.257	33.5	1837	17.0	10	
Sb	123	115	1	He	0.559	14.3	2040	12.9	1	
Ba	137	115	1	He	0.021	53.7	91	20.1	5	
W	182	209	1	He	0.973	15.6	13821	12.1	10	
Tl	205	209	1	He	0.059	6.4	1737	6.0	0.5	
Pb	208	209	1	He	0.088	7.0	4078	5.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	962293	1.02	1389655	69.25	30	120	
Sc	45	1	He	456348	1.13	628609	72.60	30	120	
Sc	45	2	NoGas	3635633	1.72	4813296	75.53	30	120	
Rh	103	1	He	1461720	3.28	1894469	77.16	30	120	
In	115	1	He	857646	0.58	1086371	78.95	30	120	
Tb	159	1	He	2781769	0.64	3251379	85.56	30	120	
Ho	165	1	He	2840462	0.40	3312124	85.76	30	120	
Bi	209	1	He	2141094	0.26	2533294	84.52	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-1-b@2
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:46:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.928	2.928	8.46	8528	0.03	10000	
B	11	45	2	NoGas	-7.516	-7.516	-8.56	44406	-0.02	300	
Na	23	45	1	He	211.725	211.725	3.54	284826	0.07	500000	
Mg	24	45	1	He	13494.934	13494.934	2.28	8289927	0.16	500000	
Al	27	45	1	He	45682.984	45682.984	2.85	15100701	0.30	200000	
K	39	45	1	He	3837.786	3837.786	1.78	2102833	0.18	500000	
Ca	44	45	1	He	24374.762	24374.762	1.71	712978	3.42	500000	
Ti	47	45	1	He	441.222	441.222	2.26	72660	0.61	2500	
V	51	45	1	He	88.624	88.624	2.43	368543	0.02	10000	
Cr	52	45	1	He	84.780	84.780	1.78	424993	0.02	10000	
Mn	55	45	1	He	2693.128	2693.128	1.47	10600433	0.03	10000	
Fe	56	45	1	He	114886.435	114886.435	2.29	551407836	0.02	200000	
Co	59	103	1	He	40.908	40.908	1.39	285439	0.01	10000	
Ni	60	103	1	He	101.157	101.157	1.48	174736	0.06	10000	
Cu	63	103	1	He	64.403	64.403	1.46	292536	0.02	10000	
Zn	66	103	1	He	233.318	233.318	1.41	213468	0.11	10000	
As	75	103	1	He	67.608	67.608	1.17	38387	0.18	10000	
Se	78	103	1	He	4.541	4.541	2.33	295	1.54	10000	
Sr	88	103	1	He	68.493	68.493	1.55	311796	0.02	10000	
Mo	95	103	1	He	7.208	7.208	1.58	15677	0.05	2000	
Ag	107	103	1	He	0.193	0.193	4.99	1471	0.01	300	
Cd	111	103	1	He	0.855	0.855	12.27	1810	0.05	4000	
Sn	118	115	1	He	17.127	17.127	1.51	58241	0.03	2000	
Sb	123	115	1	He	1.758	1.758	4.61	5531	0.03	300	
Ba	137	115	1	He	291.598	291.598	1.03	445066	0.07	10000	
W	182	209	1	He	0.671	0.671	6.58	9800	0.01	2500	
Tl	205	209	1	He	0.692	0.692	1.35	18368	0.00	5000	
Pb	208	209	1	He	74.434	74.434	0.55	2575019	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	912234	1.25	1389655	65.64	30	120	
Sc	45	1	He	459658	2.86	628609	73.12	30	120	
Sc	45	2	NoGas	3533010	1.31	4813296	73.40	30	120	
Rh	103	1	He	1289939	0.92	1894469	68.09	30	120	
In	115	1	He	782115	0.82	1086371	71.99	30	120	
Tb	159	1	He	2714979	0.33	3251379	83.50	30	120	
Ho	165	1	He	2747900	0.37	3312124	82.96	30	120	
Bi	209	1	He	1996909	0.79	2533294	78.83	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-2-b@2
Data File Name	080SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:50:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.093	3.093	1.66	8877	0.03	10000	
B	11	45	2	NoGas	-13.040	-13.040	-5.65	32693	-0.04	300	
Na	23	45	1	He	142.963	142.963	2.34	210615	0.07	500000	
Mg	24	45	1	He	9692.066	9692.066	0.90	5958465	0.16	500000	
Al	27	45	1	He	66740.951	66740.951	2.24	22076511	0.30	200000	
K	39	45	1	He	3500.535	3500.535	1.68	1921436	0.18	500000	
Ca	44	45	1	He	3914.095	3914.095	1.34	114813	3.41	500000	
Ti	47	45	1	He	334.742	334.742	2.55	55159	0.61	2500	
V	51	45	1	He	136.832	136.832	1.81	569455	0.02	10000	
Cr	52	45	1	He	95.895	95.895	1.97	480790	0.02	10000	
Mn	55	45	1	He	3285.761	3285.761	2.15	12938750	0.03	10000	
Fe	56	45	1	He	127666.610	127666.610	1.87	613136207	0.02	200000	
Co	59	103	1	He	51.161	51.161	0.49	361941	0.01	10000	
Ni	60	103	1	He	92.902	92.902	0.26	162709	0.06	10000	
Cu	63	103	1	He	61.557	61.557	0.59	283516	0.02	10000	
Zn	66	103	1	He	308.349	308.349	0.96	285781	0.11	10000	
As	75	103	1	He	77.340	77.340	0.38	44514	0.17	10000	
Se	78	103	1	He	5.926	5.926	3.40	383	1.55	10000	
Sr	88	103	1	He	26.718	26.718	1.48	123389	0.02	10000	
Mo	95	103	1	He	8.989	8.989	0.68	19805	0.05	2000	
Ag	107	103	1	He	0.440	0.440	2.00	3366	0.01	300	
Cd	111	103	1	He	0.966	0.966	3.13	1983	0.05	4000	
Sn	118	115	1	He	17.129	17.129	2.17	59062	0.03	2000	
Sb	123	115	1	He	1.508	1.508	1.41	4833	0.03	300	
Ba	137	115	1	He	363.020	363.020	0.55	561790	0.06	10000	
W	182	209	1	He	0.420	0.420	6.87	7306	0.01	2500	
Tl	205	209	1	He	1.021	1.021	1.46	27385	0.00	5000	
Pb	208	209	1	He	118.287	118.287	0.57	4136062	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	898826	1.51	1389655	64.68	30	120	
Sc	45	1	He	459901	2.54	628609	73.16	30	120	
Sc	45	2	NoGas	3530717	0.37	4813296	73.35	30	120	
Rh	103	1	He	1307750	0.40	1894469	69.03	30	120	
In	115	1	He	792973	0.38	1086371	72.99	30	120	
Tb	159	1	He	2663604	1.00	3251379	81.92	30	120	
Ho	165	1	He	2724857	1.20	3312124	82.27	30	120	
Bi	209	1	He	2018572	0.65	2533294	79.68	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-3-b@2
Data File Name	081SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:54:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.036	3.036	2.38	8436	0.04	10000	
B	11	45	2	NoGas	-10.858	-10.858	-7.34	36868	-0.03	300	
Na	23	45	1	He	162.982	162.982	1.68	225477	0.07	500000	
Mg	24	45	1	He	9603.294	9603.294	2.74	5729017	0.17	500000	
Al	27	45	1	He	66154.156	66154.156	2.98	21238026	0.31	200000	
K	39	45	1	He	3712.475	3712.475	2.06	1976347	0.19	500000	
Ca	44	45	1	He	6881.549	6881.549	1.69	195702	3.52	500000	
Ti	47	45	1	He	399.620	399.620	1.78	63923	0.63	2500	
V	51	45	1	He	136.505	136.505	1.68	551453	0.02	10000	
Cr	52	45	1	He	105.884	105.884	1.77	515170	0.02	10000	
Mn	55	45	1	He	3968.711	3968.711	2.60	15168776	0.03	10000	
Fe	56	45	1	He	127922.998	127922.998	2.15	596308385	0.02	200000	
Co	59	103	1	He	62.117	62.117	0.23	428148	0.01	10000	
Ni	60	103	1	He	94.735	94.735	0.74	161653	0.06	10000	
Cu	63	103	1	He	61.744	61.744	0.40	277061	0.02	10000	
Zn	66	103	1	He	303.538	303.538	0.13	274104	0.11	10000	
As	75	103	1	He	77.348	77.348	0.45	43373	0.18	10000	
Se	78	103	1	He	5.781	5.781	3.28	365	1.58	10000	
Sr	88	103	1	He	37.300	37.300	1.55	167789	0.02	10000	
Mo	95	103	1	He	8.918	8.918	3.25	19143	0.05	2000	
Ag	107	103	1	He	0.414	0.414	1.12	3088	0.01	300	
Cd	111	103	1	He	0.987	0.987	1.58	1958	0.05	4000	
Sn	118	115	1	He	17.983	17.983	1.67	60486	0.03	2000	
Sb	123	115	1	He	1.927	1.927	3.98	5986	0.03	300	
Ba	137	115	1	He	349.764	349.764	1.12	528375	0.07	10000	
W	182	209	1	He	0.458	0.458	2.59	7498	0.01	2500	
Tl	205	209	1	He	1.010	1.010	2.54	26364	0.00	5000	
Pb	208	209	1	He	124.901	124.901	2.13	4251500	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	870419	1.85	1389655	62.64	30	120	
Sc	45	1	He	446366	1.97	628609	71.01	30	120	
Sc	45	2	NoGas	3487895	1.18	4813296	72.46	30	120	
Rh	103	1	He	1274127	0.21	1894469	67.26	30	120	
In	115	1	He	774090	0.78	1086371	71.25	30	120	
Tb	159	1	He	2643770	0.26	3251379	81.31	30	120	
Ho	165	1	He	2714324	0.10	3312124	81.95	30	120	
Bi	209	1	He	1965488	1.77	2533294	77.59	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-4-b@2
Data File Name	082SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:58:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.066	3.066	4.16	8673	0.04	10000	
B	11	45	2	NoGas	-5.622	-5.622	-4.68	47989	-0.01	300	
Na	23	45	1	He	227.963	227.963	3.10	294069	0.08	500000	
Mg	24	45	1	He	8101.291	8101.291	2.52	4839146	0.17	500000	
Al	27	45	1	He	33852.228	33852.228	3.21	10881363	0.31	200000	
K	39	45	1	He	2285.723	2285.723	2.92	1227226	0.19	500000	
Ca	44	45	1	He	26667.537	26667.537	1.92	758444	3.52	500000	
Ti	47	45	1	He	405.041	405.041	2.62	64864	0.62	2500	
V	51	45	1	He	80.031	80.031	2.41	323626	0.02	10000	
Cr	52	45	1	He	96.039	96.039	2.17	467939	0.02	10000	
Mn	55	45	1	He	3963.404	3963.404	1.57	15169125	0.03	10000	
Fe	56	45	1	He	107990.159	107990.159	3.12	503946060	0.02	200000	
Co	59	103	1	He	48.492	48.492	1.00	337112	0.01	10000	
Ni	60	103	1	He	104.115	104.115	0.34	179181	0.06	10000	
Cu	63	103	1	He	61.835	61.835	0.70	279851	0.02	10000	
Zn	66	103	1	He	215.488	215.488	0.87	196486	0.11	10000	
As	75	103	1	He	127.347	127.347	0.28	71981	0.18	10000	
Se	78	103	1	He	4.783	4.783	2.45	308	1.55	10000	
Sr	88	103	1	He	87.713	87.713	0.68	397780	0.02	10000	
Mo	95	103	1	He	7.442	7.442	1.07	16123	0.05	2000	
Ag	107	103	1	He	0.621	0.621	2.97	4656	0.01	300	
Cd	111	103	1	He	0.932	0.932	9.89	1904	0.05	4000	
Sn	118	115	1	He	18.471	18.471	1.90	62084	0.03	2000	
Sb	123	115	1	He	2.633	2.633	2.96	8124	0.03	300	
Ba	137	115	1	He	422.524	422.524	0.80	637980	0.07	10000	
W	182	209	1	He	1.067	1.067	10.44	13982	0.01	2500	
Tl	205	209	1	He	0.718	0.718	1.55	19234	0.00	5000	
Pb	208	209	1	He	136.836	136.836	0.38	4779432	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	885856	1.47	1389655	63.75	30	120	
Sc	45	1	He	446915	1.98	628609	71.10	30	120	
Sc	45	2	NoGas	3501280	1.28	4813296	72.74	30	120	
Rh	103	1	He	1285065	0.20	1894469	67.83	30	120	
In	115	1	He	773732	0.60	1086371	71.22	30	120	
Tb	159	1	He	2663487	2.19	3251379	81.92	30	120	
Ho	165	1	He	2737997	0.79	3312124	82.67	30	120	
Bi	209	1	He	2016417	0.94	2533294	79.60	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-4-b@2
Data File Name	083SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:01:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.967	2.967	7.53	8310	0.04	10000	
B	11	45	2	NoGas	-16.295	-16.295	-1.95	25285	-0.06	300	
Na	23	45	1	He	143.808	143.808	2.48	203901	0.07	500000	
Mg	24	45	1	He	9412.672	9412.672	2.49	5577338	0.17	500000	
Al	27	45	1	He	55495.881	55495.881	1.98	17696079	0.31	200000	
K	39	45	1	He	2847.595	2847.595	0.54	1511158	0.19	500000	
Ca	44	45	1	He	2391.146	2391.146	1.05	67724	3.53	500000	
Ti	47	45	1	He	466.643	466.643	0.30	74138	0.63	2500	
V	51	45	1	He	129.895	129.895	0.75	521149	0.02	10000	
Cr	52	45	1	He	78.407	78.407	1.57	379189	0.02	10000	
Mn	55	45	1	He	16263.248	16263.248	0.12	61746844	0.03	10000	>LDR
Fe	56	45	1	He	123493.628	123493.628	2.63	571704937	0.02	200000	
Co	59	103	1	He	59.106	59.106	1.21	405727	0.01	10000	
Ni	60	103	1	He	71.518	71.518	1.74	121545	0.06	10000	
Cu	63	103	1	He	48.860	48.860	0.13	218441	0.02	10000	
Zn	66	103	1	He	499.456	499.456	0.66	448711	0.11	10000	
As	75	103	1	He	62.190	62.190	0.76	34744	0.18	10000	
Se	78	103	1	He	5.161	5.161	4.26	327	1.58	10000	
Sr	88	103	1	He	31.670	31.670	0.25	141895	0.02	10000	
Mo	95	103	1	He	9.792	9.792	1.31	20928	0.05	2000	
Ag	107	103	1	He	1.754	1.754	1.01	12937	0.01	300	
Cd	111	103	1	He	1.526	1.526	6.79	2638	0.06	4000	
Sn	118	115	1	He	16.630	16.630	1.45	55406	0.03	2000	
Sb	123	115	1	He	0.898	0.898	0.89	2840	0.03	300	
Ba	137	115	1	He	478.836	478.836	0.61	715684	0.07	10000	
W	182	209	1	He	3.475	3.475	1.75	37608	0.01	2500	
Tl	205	209	1	He	1.137	1.137	0.27	29446	0.00	5000	
Pb	208	209	1	He	222.371	222.371	0.23	7511837	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	877347	1.56	1389655	63.13	30	120	
Sc	45	1	He	443274	1.65	628609	70.52	30	120	
Sc	45	2	NoGas	3460120	1.26	4813296	71.89	30	120	
Rh	103	1	He	1268947	0.50	1894469	66.98	30	120	
In	115	1	He	765873	0.23	1086371	70.50	30	120	
Tb	159	1	He	2619884	0.94	3251379	80.58	30	120	
Ho	165	1	He	2664295	0.67	3312124	80.44	30	120	
Bi	209	1	He	1950236	0.45	2533294	76.98	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-6-b@2
Data File Name	084SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:05:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.577	2.577	3.24	7246	0.04	10000	
B	11	45	2	NoGas	-14.404	-14.404	-4.31	29220	-0.05	300	
Na	23	45	1	He	134.655	134.655	0.42	194890	0.07	500000	
Mg	24	45	1	He	8590.553	8590.553	1.57	5103905	0.17	500000	
Al	27	45	1	He	56639.330	56639.330	1.20	18110352	0.31	200000	
K	39	45	1	He	3392.943	3392.943	1.36	1800630	0.19	500000	
Ca	44	45	1	He	938.917	938.917	1.96	26840	3.50	500000	
Ti	47	45	1	He	407.940	407.940	1.38	64975	0.63	2500	
V	51	45	1	He	129.864	129.864	0.98	522372	0.02	10000	
Cr	52	45	1	He	80.386	80.386	1.15	389765	0.02	10000	
Mn	55	45	1	He	7440.999	7440.999	1.50	28321598	0.03	10000	
Fe	56	45	1	He	115945.296	115945.296	0.54	538248939	0.02	200000	
Co	59	103	1	He	48.987	48.987	0.28	339702	0.01	10000	
Ni	60	103	1	He	73.218	73.218	0.71	125697	0.06	10000	
Cu	63	103	1	He	42.361	42.361	1.53	191366	0.02	10000	
Zn	66	103	1	He	261.808	261.808	1.63	237958	0.11	10000	
As	75	103	1	He	52.647	52.647	0.42	29722	0.18	10000	
Se	78	103	1	He	4.739	4.739	3.57	305	1.55	10000	
Sr	88	103	1	He	17.622	17.622	0.78	79809	0.02	10000	
Mo	95	103	1	He	8.136	8.136	2.07	17578	0.05	2000	
Ag	107	103	1	He	0.421	0.421	0.65	3157	0.01	300	
Cd	111	103	1	He	0.876	0.876	5.08	1827	0.05	4000	
Sn	118	115	1	He	17.333	17.333	1.26	58319	0.03	2000	
Sb	123	115	1	He	0.881	0.881	7.43	2817	0.03	300	
Ba	137	115	1	He	447.870	447.870	0.41	676457	0.07	10000	
W	182	209	1	He	0.593	0.593	5.51	8970	0.01	2500	
Tl	205	209	1	He	0.904	0.904	1.15	23907	0.00	5000	
Pb	208	209	1	He	105.174	105.174	2.06	3625000	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	878487	1.36	1389655	63.22	30	120	
Sc	45	1	He	444416	1.05	628609	70.70	30	120	
Sc	45	2	NoGas	3462259	1.04	4813296	71.93	30	120	
Rh	103	1	He	1281872	0.61	1894469	67.66	30	120	
In	115	1	He	773941	0.45	1086371	71.24	30	120	
Tb	159	1	He	2644182	0.65	3251379	81.32	30	120	
Ho	165	1	He	2680831	1.02	3312124	80.94	30	120	
Bi	209	1	He	1990117	1.72	2533294	78.56	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-8-b@2
Data File Name	085SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:09:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.164	3.164	8.20	8943	0.04	10000	
B	11	45	2	NoGas	-11.974	-11.974	-6.19	34151	-0.04	300	
Na	23	45	1	He	130.066	130.066	1.22	190536	0.07	500000	
Mg	24	45	1	He	8408.604	8408.604	2.34	5007532	0.17	500000	
Al	27	45	1	He	66177.505	66177.505	2.65	21208509	0.31	200000	
K	39	45	1	He	3512.638	3512.638	1.99	1867731	0.19	500000	
Ca	44	45	1	He	1392.436	1392.436	0.87	39763	3.50	500000	
Ti	47	45	1	He	406.861	406.861	1.28	64961	0.63	2500	
V	51	45	1	He	142.056	142.056	1.11	572797	0.02	10000	
Cr	52	45	1	He	92.052	92.052	1.00	447233	0.02	10000	
Mn	55	45	1	He	7073.335	7073.335	1.85	26986789	0.03	10000	
Fe	56	45	1	He	124176.733	124176.733	1.23	577828813	0.02	200000	
Co	59	103	1	He	63.029	63.029	0.09	432641	0.01	10000	
Ni	60	103	1	He	96.344	96.344	0.65	163718	0.06	10000	
Cu	63	103	1	He	59.348	59.348	0.47	265234	0.02	10000	
Zn	66	103	1	He	288.759	288.759	0.21	259722	0.11	10000	
As	75	103	1	He	63.142	63.142	0.54	35274	0.18	10000	
Se	78	103	1	He	5.953	5.953	2.37	373	1.59	10000	
Sr	88	103	1	He	18.599	18.599	0.40	83376	0.02	10000	
Mo	95	103	1	He	9.243	9.243	1.95	19759	0.05	2000	
Ag	107	103	1	He	0.346	0.346	1.55	2572	0.01	300	
Cd	111	103	1	He	0.877	0.877	4.11	1810	0.05	4000	
Sn	118	115	1	He	18.122	18.122	1.10	60798	0.03	2000	
Sb	123	115	1	He	1.176	1.176	9.75	3704	0.03	300	
Ba	137	115	1	He	498.501	498.501	0.72	751194	0.07	10000	
W	182	209	1	He	0.403	0.403	8.99	6954	0.01	2500	
Tl	205	209	1	He	1.025	1.025	1.15	26759	0.00	5000	
Pb	208	209	1	He	117.701	117.701	1.07	4008319	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	886241	2.61	1389655	63.77	30	120	
Sc	45	1	He	445493	1.05	628609	70.87	30	120	
Sc	45	2	NoGas	3449947	0.99	4813296	71.68	30	120	
Rh	103	1	He	1268888	0.38	1894469	66.98	30	120	
In	115	1	He	772160	0.35	1086371	71.08	30	120	
Tb	159	1	He	2662809	0.44	3251379	81.90	30	120	
Ho	165	1	He	2694528	0.78	3312124	81.35	30	120	
Bi	209	1	He	1966040	0.93	2533294	77.61	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV -1945747
Data File Name	086_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:13:15-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.950	1.171	145027	2.48	50	99.9	89.5	110.5	
B	11	45	2	NoGas	26.993	3.367	119284	2.10	50	54.0	89.5	110.5	CCV Failed
Na	23	45	1	He	24823.210	2.813	26687577	0.91	25000	99.3	89.5	110.5	
Mg	24	45	1	He	24857.260	2.028	15143782	0.23	25000	99.4	89.5	110.5	
Al	27	45	1	He	253.590	1.355	84127	0.93	250	101.4	89.5	110.5	
K	39	45	1	He	25351.812	2.759	13640124	0.85	25000	101.4	89.5	110.5	
Ca	44	45	1	He	24831.714	1.398	720419	0.53	25000	99.3	89.5	110.5	
Ti	47	45	1	He	50.440	3.621	8253	1.80	50	100.9	89.5	110.5	
V	51	45	1	He	50.589	2.155	208631	0.84	50	101.2	89.5	110.5	
Cr	52	45	1	He	50.793	1.805	253054	0.28	50	101.6	89.5	110.5	
Mn	55	45	1	He	248.436	2.022	970085	0.10	250	99.4	89.5	110.5	
Fe	56	45	1	He	12978.967	1.951	61791106	0.06	12500	103.8	89.5	110.5	
Co	59	103	1	He	50.143	0.741	361287	0.47	50	100.3	89.5	110.5	
Ni	60	103	1	He	49.943	1.231	89091	0.52	50	99.9	89.5	110.5	
Cu	63	103	1	He	50.273	0.435	235903	0.79	50	100.5	89.5	110.5	
Zn	66	103	1	He	50.893	1.243	48700	0.50	50	101.8	89.5	110.5	
As	75	103	1	He	51.483	0.674	30201	0.37	50	103.0	89.5	110.5	
Se	78	103	1	He	50.733	1.853	3159	2.33	50	101.5	89.5	110.5	
Sr	88	103	1	He	51.735	0.872	243218	0.25	50	103.5	89.5	110.5	
Mo	95	103	1	He	54.556	3.060	122116	3.05	50	109.1	89.5	110.5	
Ag	107	103	1	He	53.724	0.627	414934	0.18	50	107.4	89.5	110.5	
Cd	111	103	1	He	54.010	1.936	73019	1.21	50	108.0	89.5	110.5	
Sn	118	115	1	He	49.915	1.435	174459	0.86	50	99.8	89.5	110.5	
Sb	123	115	1	He	51.726	1.295	164414	1.77	50	103.5	89.5	110.5	
Ba	137	115	1	He	51.416	0.450	81449	0.18	50	102.8	89.5	110.5	
W	182	209	1	He	48.605	1.672	508964	1.82	50	97.2	89.5	110.5	
Tl	205	209	1	He	45.752	1.346	1231763	0.59	50	91.5	89.5	110.5	
Pb	208	209	1	He	47.429	0.780	1668802	0.07	50	94.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	922813	1.38	1389655	66.41	30	120	
Sc	45	1	He	455847	1.93	628609	72.52	30	120	
Sc	45	2	NoGas	3586061	1.24	4813296	74.50	30	120	
Rh	103	1	He	1331934	0.72	1894469	70.31	30	120	
In	115	1	He	811272	0.62	1086371	74.68	30	120	
Tb	159	1	He	2758704	0.59	3251379	84.85	30	120	
Ho	165	1	He	2795215	0.13	3312124	84.39	30	120	
Bi	209	1	He	2030692	0.82	2533294	80.16	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	087_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:17:04-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.010	311.9	174	54.3	1	
B	11	45	2	NoGas	-23.129	-0.3	11374	0.5	20	
Na	23	45	1	He	-13.516	-12.1	40234	4.2	400	
Mg	24	45	1	He	1.631	54.4	1948	26.4	1000	
Al	27	45	1	He	3.383	13.7	2047	7.2	50	
K	39	45	1	He	3.887	73.7	25834	5.1	1000	
Ca	44	45	1	He	9.862	7.6	574	4.4	1000	
Ti	47	45	1	He	0.202	9.3	50	6.7	20	
V	51	45	1	He	0.045	43.8	95	84.9	2	
Cr	52	45	1	He	0.018	116.0	1365	8.0	2	
Mn	55	45	1	He	1.430	1.4	5832	1.6	2	
Fe	56	45	1	He	33.689	16.7	161360	15.5	50	
Co	59	103	1	He	0.013	38.6	120	34.1	1	
Ni	60	103	1	He	0.021	21.2	64	16.6	2	
Cu	63	103	1	He	0.018	28.4	581	1.8	2	
Zn	66	103	1	He	0.428	13.4	1332	5.6	20	
As	75	103	1	He	0.092	18.5	135	5.1	2	
Se	78	103	1	He	0.099	151.7	34	27.6	2	
Sr	88	103	1	He	0.007	54.2	173	8.8	10	
Mo	95	103	1	He	0.919	22.4	2356	21.7	2	
Ag	107	103	1	He	0.006	70.9	83	41.8	0.2	
Cd	111	103	1	He	-0.026	-76.0	770	0.8	0.2	
Sn	118	115	1	He	0.271	26.3	1878	13.9	10	
Sb	123	115	1	He	0.549	21.3	1995	19.5	1	
Ba	137	115	1	He	0.027	7.8	100	3.3	5	
W	182	209	1	He	0.900	22.2	12998	15.5	10	
Tl	205	209	1	He	0.044	9.7	1306	8.0	0.5	
Pb	208	209	1	He	0.068	6.3	3315	3.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	945940	1.26	1389655	68.07	30	120	
Sc	45	1	He	448720	0.78	628609	71.38	30	120	
Sc	45	2	NoGas	3543089	0.85	4813296	73.61	30	120	
Rh	103	1	He	1483569	2.99	1894469	78.31	30	120	
In	115	1	He	852387	0.13	1086371	78.46	30	120	
Tb	159	1	He	2767487	0.77	3251379	85.12	30	120	
Ho	165	1	He	2848485	0.36	3312124	86.00	30	120	
Bi	209	1	He	2140678	1.43	2533294	84.50	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	088CRIA.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:20:53-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.934	0.934	12.750	2897	13.30	1	93.4	69.5	130.5	
B	11	2	NoGas	-3.089	-3.089	-20.284	52987	2.40	20	-15.4	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1070.160	1070.160	2.129	1211177	0.26	1000	107.0	69.5	130.5	
Mg	24	1	He	1059.961	1059.961	1.608	650824	1.18	1000	106.0	69.5	130.5	
Al	27	1	He	52.044	52.044	1.126	18150	1.35	50	104.1	69.5	130.5	
K	39	1	He	1048.548	1048.548	1.718	591134	1.73	1000	104.9	69.5	130.5	
Ca	44	1	He	1027.063	1027.063	1.767	30271	1.25	1000	102.7	69.5	130.5	
Ti	47	1	He	10.564	10.564	3.425	1753	1.62	10	105.6	69.5	130.5	
V	51	1	He	5.471	5.471	1.376	22629	2.39	5	109.4	69.5	130.5	
Cr	52	1	He	2.181	2.181	2.905	12179	0.97	2	109.0	69.5	130.5	
Mn	55	1	He	6.158	6.158	2.106	24538	2.25	5	123.2	69.5	130.5	
Fe	56	1	He	118.143	118.143	1.797	569622	0.33	100	118.1	69.5	130.5	
Co	59	1	He	1.065	1.065	1.826	8056	1.19	1	106.5	69.5	130.5	
Ni	60	1	He	2.115	2.115	7.202	3974	7.07	2	105.8	69.5	130.5	
Cu	63	1	He	2.185	2.185	3.292	11179	2.36	2	109.2	69.5	130.5	
Zn	66	1	He	21.103	21.103	2.345	21652	2.83	20	105.5	69.5	130.5	
As	75	1	He	5.222	5.222	1.536	3274	1.85	5	104.4	69.5	130.5	
Se	78	1	He	5.301	5.301	4.681	369	4.79	5	106.0	69.5	130.5	
Sr	88	1	He	10.310	10.310	0.336	50901	0.73	10	103.1	69.5	130.5	
Mo	95	1	He	11.293	11.293	0.562	26541	0.52	10	112.9	69.5	130.5	
Ag	107	1	He	1.157	1.157	2.254	9396	1.89	1	115.7	69.5	130.5	
Cd	111	1	He	1.109	1.109	2.130	2316	0.64	1	110.9	69.5	130.5	
Sn	118	1	He	10.294	10.294	0.235	38155	0.64	10	102.9	69.5	130.5	
Sb	123	1	He	2.097	2.097	3.362	7095	3.15	2	104.9	69.5	130.5	
Ba	137	1	He	5.115	5.115	1.442	8484	1.72	5	102.3	69.5	130.5	
W	182	1	He	9.812	9.812	2.619	108352	1.52	10	98.1	69.5	130.5	
Tl	205	1	He	1.899	1.899	1.937	52761	0.90	2	95.0	69.5	130.5	
Pb	208	1	He	1.082	1.082	0.947	40011	0.46	1	108.2	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	937638	1.80	1389655	67.47	30	120	
Sc	45	1	He	458696	1.78	628609	72.97	30	120	
Sc	45	2	NoGas	3480084	0.63	4813296	72.30	30	120	
Rh	103	1	He	1395849	0.87	1894469	73.68	30	120	
In	115	1	He	844537	0.41	1086371	77.74	30	120	
Tb	159	1	He	2753624	1.30	3251379	84.69	30	120	
Ho	165	1	He	2794387	0.35	3312124	84.37	30	120	
Bi	209	1	He	2093433	1.06	2533294	82.64	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	089_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:24:46-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.326	2.140	141836	1.33	50	96.7	89.5	110.5	
B	11	45	2	NoGas	27.954	2.874	117575	1.85	50	55.9	89.5	110.5	CCV Failed
Na	23	45	1	He	24377.420	4.789	27073599	1.04	25000	97.5	89.5	110.5	
Mg	24	45	1	He	24552.522	5.065	15448530	1.15	25000	98.2	89.5	110.5	
Al	27	45	1	He	238.763	4.634	81865	0.52	250	95.5	89.5	110.5	
K	39	45	1	He	24404.040	4.113	13566680	0.97	25000	97.6	89.5	110.5	
Ca	44	45	1	He	23995.144	4.262	719088	0.80	25000	96.0	89.5	110.5	
Ti	47	45	1	He	48.116	3.929	8137	2.49	50	96.2	89.5	110.5	
V	51	45	1	He	48.941	5.462	208406	0.47	50	97.9	89.5	110.5	
Cr	52	45	1	He	49.578	4.997	255120	0.76	50	99.2	89.5	110.5	
Mn	55	45	1	He	241.346	4.798	973351	0.24	250	96.5	89.5	110.5	
Fe	56	45	1	He	12545.736	4.760	61690002	0.51	12500	100.4	89.5	110.5	
Co	59	103	1	He	50.992	0.261	362889	0.63	50	102.0	89.5	110.5	
Ni	60	103	1	He	50.591	0.894	89142	1.26	50	101.2	89.5	110.5	
Cu	63	103	1	He	51.259	1.308	237554	1.04	50	102.5	89.5	110.5	
Zn	66	103	1	He	51.560	0.684	48723	0.36	50	103.1	89.5	110.5	
As	75	103	1	He	52.318	0.487	30313	0.70	50	104.6	89.5	110.5	
Se	78	103	1	He	53.180	0.655	3270	0.96	50	106.4	89.5	110.5	
Sr	88	103	1	He	52.276	0.465	242743	0.51	50	104.6	89.5	110.5	
Mo	95	103	1	He	55.081	1.595	121773	1.54	50	110.2	89.5	110.5	
Ag	107	103	1	He	54.119	0.786	412845	0.64	50	108.2	89.5	110.5	
Cd	111	103	1	He	54.543	0.376	72832	0.76	50	109.1	89.5	110.5	
Sn	118	115	1	He	49.904	0.867	173804	0.79	50	99.8	89.5	110.5	
Sb	123	115	1	He	51.761	0.772	163925	0.44	50	103.5	89.5	110.5	
Ba	137	115	1	He	50.645	0.575	79943	0.94	50	101.3	89.5	110.5	
W	182	209	1	He	49.267	1.175	510940	1.15	50	98.5	89.5	110.5	
Tl	205	209	1	He	45.533	1.991	1214163	0.74	50	91.1	89.5	110.5	
Pb	208	209	1	He	47.297	1.829	1648244	0.67	50	94.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	933004	0.93	1389655	67.14	30	120	
Sc	45	1	He	471469	5.18	628609	75.00	30	120	
Sc	45	2	NoGas	3474433	0.88	4813296	72.18	30	120	
Rh	103	1	He	1315536	0.46	1894469	69.44	30	120	
In	115	1	He	808356	0.37	1086371	74.41	30	120	
Tb	159	1	He	2700930	1.56	3251379	83.07	30	120	
Ho	165	1	He	2741282	0.83	3312124	82.77	30	120	
Bi	209	1	He	2011476	1.26	2533294	79.40	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	090_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:28:37-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	-0.015	-135.1	96	63.6	1	
B	11	45	2	NoGas	-24.339	-0.7	8536	3.2	20	
Na	23	45	1	He	-11.180	-23.3	41964	4.8	400	
Mg	24	45	1	He	2.240	31.4	2274	17.1	1000	
Al	27	45	1	He	1.339	5.3	1365	3.3	50	
K	39	45	1	He	5.516	61.7	26257	6.7	1000	
Ca	44	45	1	He	12.312	15.1	633	6.5	1000	
Ti	47	45	1	He	0.096	70.2	32	31.6	20	
V	51	45	1	He	0.087	77.7	258	104.1	2	
Cr	52	45	1	He	0.032	67.9	1407	5.8	2	
Mn	55	45	1	He	1.134	4.0	4617	2.8	2	
Fe	56	45	1	He	24.997	21.0	118612	19.7	50	
Co	59	103	1	He	0.011	22.7	96	22.4	1	
Ni	60	103	1	He	0.008	68.1	37	32.8	2	
Cu	63	103	1	He	0.028	17.0	600	5.5	2	
Zn	66	103	1	He	0.401	16.4	1239	8.3	20	
As	75	103	1	He	0.067	28.2	113	12.8	2	
Se	78	103	1	He	0.195	14.8	38	7.9	2	
Sr	88	103	1	He	-0.001	-713.0	121	38.6	10	
Mo	95	103	1	He	0.989	14.9	2411	17.6	2	
Ag	107	103	1	He	0.009	40.3	107	30.8	0.2	
Cd	111	103	1	He	-0.007	-161.6	758	4.0	0.2	
Sn	118	115	1	He	0.220	4.9	1652	2.1	10	
Sb	123	115	1	He	0.517	27.4	1847	25.3	1	
Ba	137	115	1	He	0.022	67.5	90	26.7	5	
W	182	209	1	He	1.027	20.9	13814	14.9	10	
Tl	205	209	1	He	0.048	20.5	1363	18.6	0.5	
Pb	208	209	1	He	0.051	12.7	2579	8.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	924508	1.11	1389655	66.53	30	120	
Sc	45	1	He	441272	1.83	628609	70.20	30	120	
Sc	45	2	NoGas	3435390	1.08	4813296	71.37	30	120	
Rh	103	1	He	1408218	2.91	1894469	74.33	30	120	
In	115	1	He	833465	0.46	1086371	76.72	30	120	
Tb	159	1	He	2647059	1.80	3251379	81.41	30	120	
Ho	165	1	He	2769191	2.08	3312124	83.61	30	120	
Bi	209	1	He	2055526	2.35	2533294	81.14	30	120	

MTMSCCBDILH20-193 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/24/15 Analyst: AS Instrument: I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* = 90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

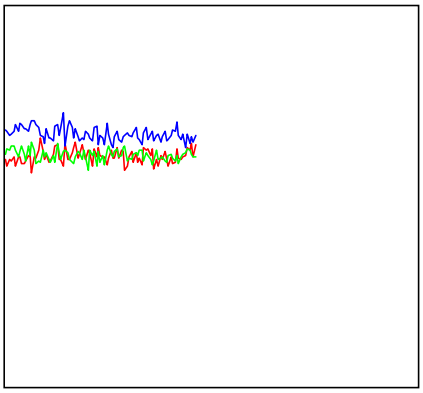
Level I Analyst: Anjali Sharma Date: 4/24/15 Time: 8:59 - 10:44 - 12:11
Level I Analyst: Anjali Sharma Date: 4/27/15 Time: 8:59 - 23:33

Level II Reviewer: ~~Karen L. Conte~~ Date: ~~4/24/15~~ Time: ~~8:59 - 10:44~~ 4/24/15 KLC
Level II Reviewer: Karen L. Conte Date: 4-24-15 Time: 8:59 - 12:11
Sam Mantle 4/27/15 12:17 - 23:33

Comments:

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	3176	3029.5	2.99
89	10000	6043	6084.1	2.43
205	10000	6596	6646.6	2.76
156/140	2	0.776 %	0.753 %	19.66
70/140	2	0.959 %	1.169 %	14.50
115	50	9	10.2	40.41
63	500	298	291.4	8.07
60	200	34	50.9	34.47
121	50	26	30.5	24.36
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

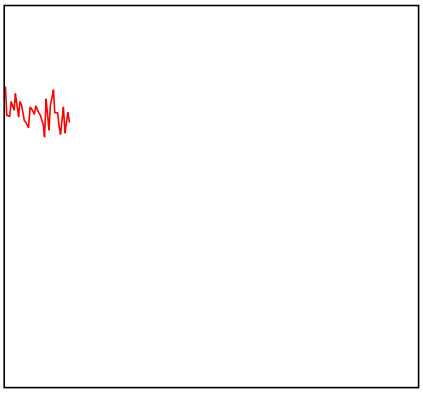
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	15.02	L/min
MU./Dil. Gas	0.65	L/min	Ar Gas Tank Press	6.61E+2	kPa			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1396	1437.7	4.55
51	200	99	90.4	14.99
52	200	122	117.1	13.55
51/59	10	7.094 %	6.301 %	15.82
52/59	20	8.742 %	8.162 %	14.36
7	50	18	15.7	33.15
89	2000	1748	1659.3	3.49
205	5000	3840	3790.8	3.13
6	20	1	0.9	129.76
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	14.98	L/min
MU./Dil. Gas	0.65	L/min	Ar Gas Tank Press	6.61E+2	kPa			

US EPA Tune Check Sample Report

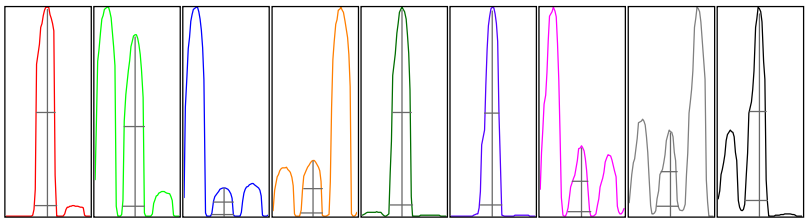
Batch Folder D:\Analytical Runs\I10042415A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	38712	0.48	5.00	
24	148944	0.35	5.00	
25	20171	0.23	5.00	
26	23195	0.63	5.00	
59	189400	0.43	5.00	
115	326901	0.41	5.00	
206	117611	0.63	5.00	
207	105343	0.61	5.00	
208	247680	0.65	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	39009	38733	38540	38573	38705
24	149714	148356	148787	148706	149155
25	20193	20232	20107	20174	20148
26	23410	23151	23018	23249	23146
59	190676	189028	189047	189659	188593
115	329064	327310	326319	325796	326014
206	118591	117774	117733	117415	116542
207	106339	105027	105531	105161	104659
208	249910	247925	245606	248140	246819

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6178	9.00	8.9 - 9.1		0.778	0.850	
24	24262	23.95	23.9 - 24.1		0.769	0.850	
25	3274	24.95	24.9 - 25.1		0.775	0.850	
26	3754	25.95	25.9 - 26.1		0.774	0.850	
59	31063	58.95	58.9 - 59.1		0.809	0.850	
115	60121	115.00	114.9 - 115.1		0.781	0.850	
206	21853	206.00	205.9 - 206.1		0.794	0.850	
207	19226	207.00	206.9 - 207.1		0.777	0.850	
208	46898	208.00	207.9 - 208.1		0.790	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

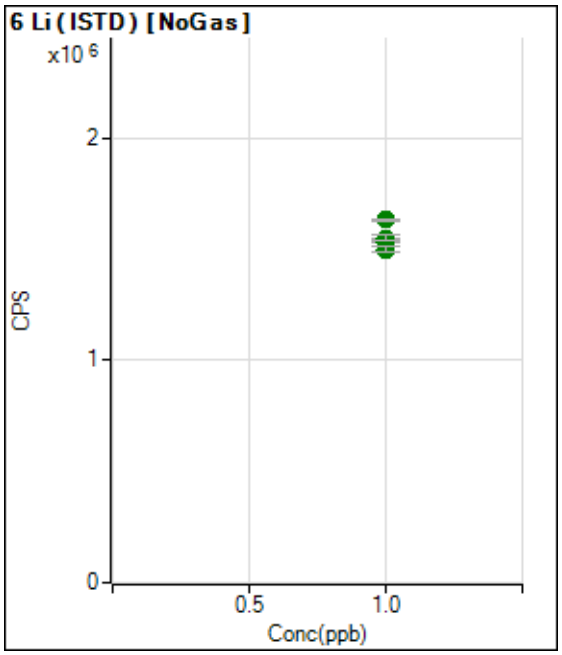
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

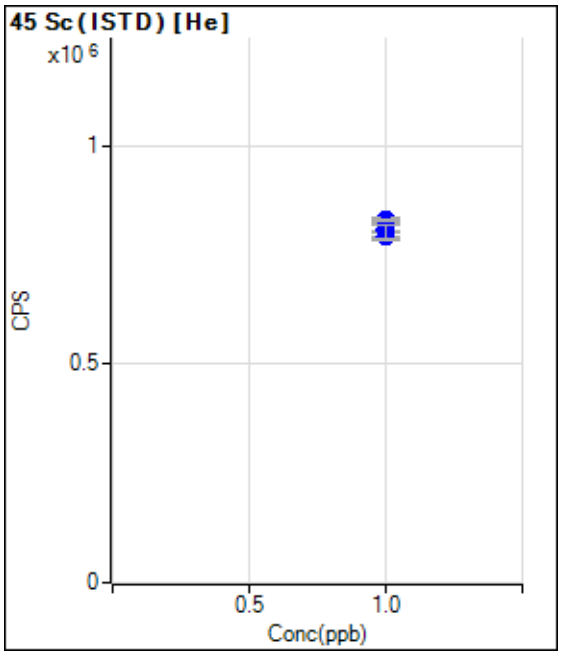
Calibration for 020SMPL.d

Batch Folder: D:\Analytical Runs\I10042415A.b\
Analysis File: I10042415A.batch.bin
DA Date-Time: 4/24/2015 10:47:10 AM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

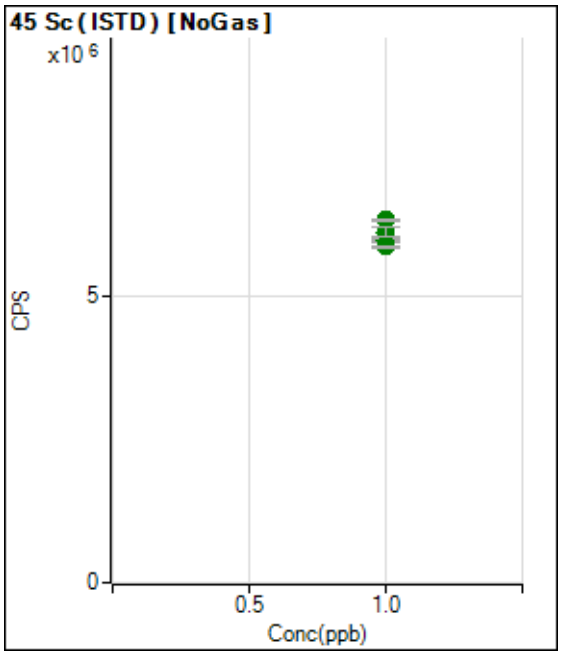
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/24/2015 9:03:11 AM
2	003CALS.d	STD1-1906323	4/24/2015 9:07:04 AM
3	004CALS.d	STD2-1904110	4/24/2015 9:10:52 AM
4	005CALS.d	STD3-1906333	4/24/2015 9:14:41 AM
5	006CALS.d	STD4-1906536	4/24/2015 9:18:28 AM



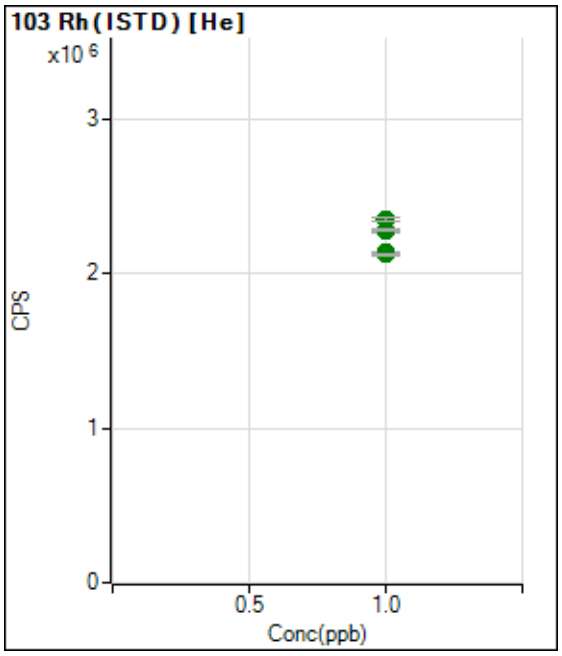
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1631380.70		A	0.7
2	☐	1.000		1540307.15		A	0.8
3	☐	1.000		1526248.41		A	1.7
4	☐	1.000		1551780.36		A	1.6
5	☐	1.000		1498103.13		A	2.0



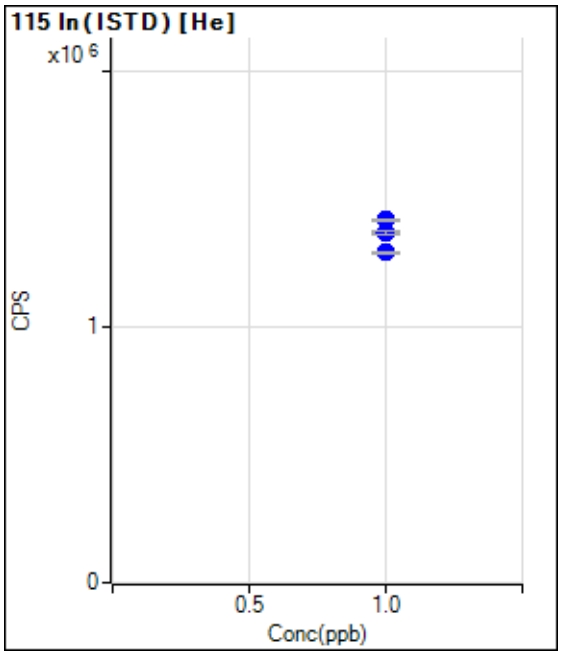
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		829695.59		P	1.4
2	☐	1.000		817537.88		P	3.3
3	☐	1.000		807513.79		P	4.4
4	☐	1.000		790122.88		P	2.1
5	☐	1.000		803039.60		P	4.2



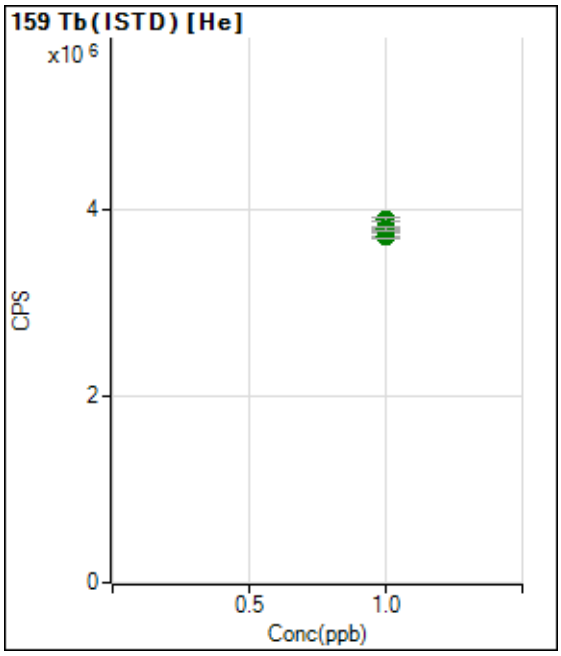
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6325637.53		A	0.2
2	☐	1.000		5950417.40		A	0.6
3	☐	1.000		5970501.43		A	1.1
4	☐	1.000		6107044.76		A	2.8
5	☐	1.000		5852964.49		A	0.7



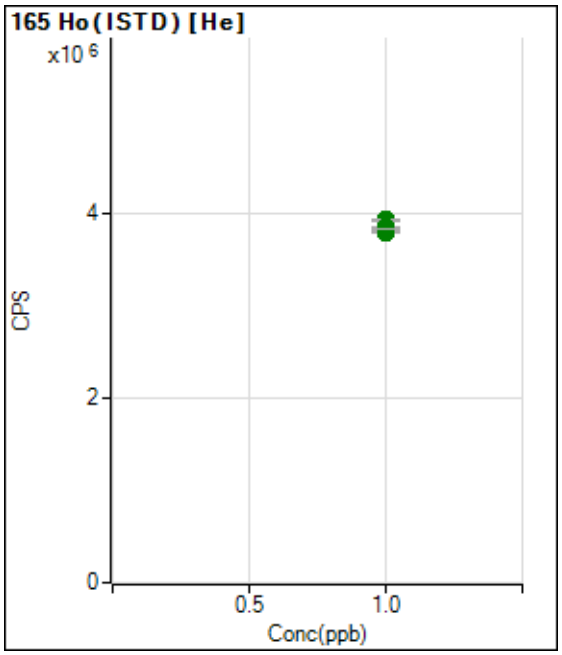
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2345542.75		A	1.1
2	☐	1.000		2270622.48		A	0.4
3	☐	1.000		2138680.75		A	0.2
4	☐	1.000		2121899.08		A	0.8
5	☐	1.000		2278765.60		A	0.7



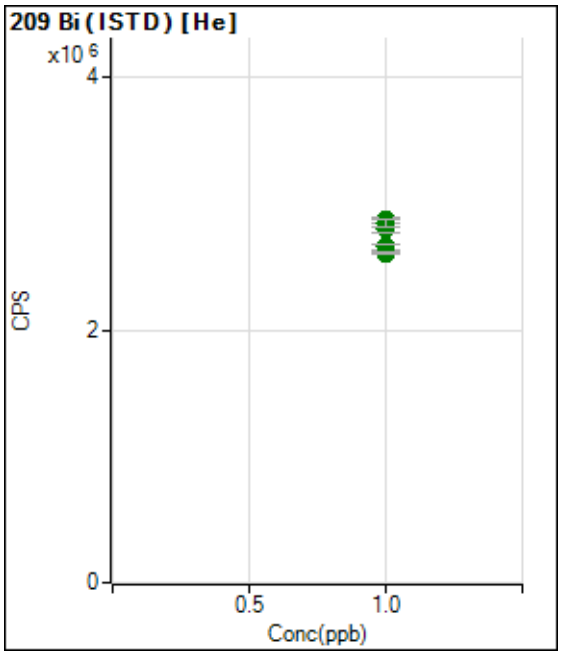
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1419467.00		P	0.5
2	☐	1.000		1368321.56		P	0.6
3	☐	1.000		1291611.85		P	0.6
4	☐	1.000		1290416.56		P	0.6
5	☐	1.000		1367724.92		P	1.0



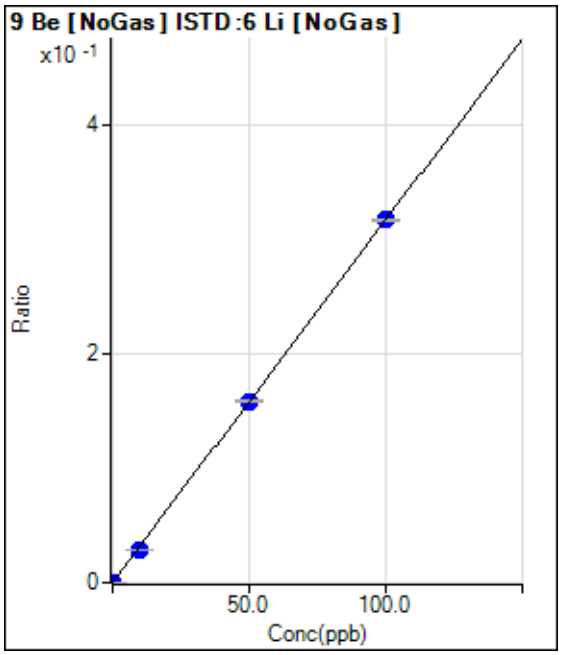
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3888261.79		A	1.0
2	☐	1.000		3779425.55		A	0.9
3	☐	1.000		3744716.52		A	1.9
4	☐	1.000		3712947.49		A	1.7
5	☐	1.000		3796091.10		A	1.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3932561.79		A	0.4
2	☐	1.000		3846649.57		A	0.7
3	☐	1.000		3795686.66		A	0.5
4	☐	1.000		3791295.96		A	0.3
5	☐	1.000		3835106.79		A	0.5



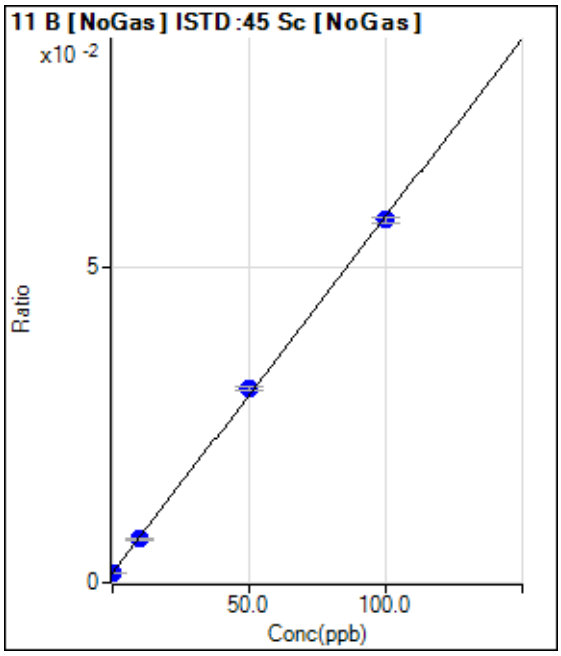
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2874804.82		A	1.3
2	☐	1.000		2797035.03		A	1.2
3	☐	1.000		2659575.52		A	1.4
4	☐	1.000		2611397.26		A	1.0
5	☐	1.000		2853757.74		A	2.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	74.5
2	☐	10.000	9.067	44179.23	0.0287	P	2.9
3	☐	50.000	49.944	240950.08	0.1579	P	1.3
4	☐	100.000	100.121	491107.69	0.3165	P	0.6
5	☐			151.86	0.0001	P	15.0

y = 0.0032 * x + 2.7200E-005
R = 1.0000
DL = 0.01924
BEC = 0.008605

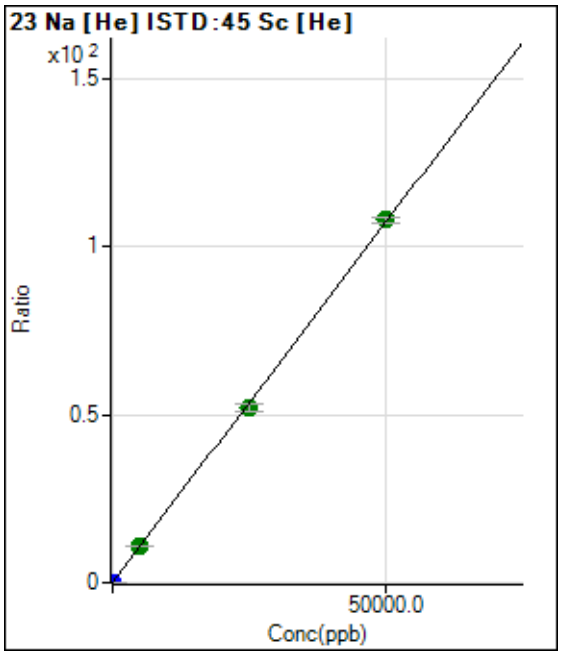
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9869.75	0.0016	P	4.4
2	☐	10.000	9.616	41488.21	0.0070	P	4.6
3	☐	50.000	51.866	183611.44	0.0308	P	1.9
4	☐			12245.17	0.0020	P	2.3
5	☐	100.000	99.105	335668.74	0.0573	P	1.6

y = 5.6290E-004 * x + 0.0016
R = 0.9997
DL = 0.3637
BEC = 2.772

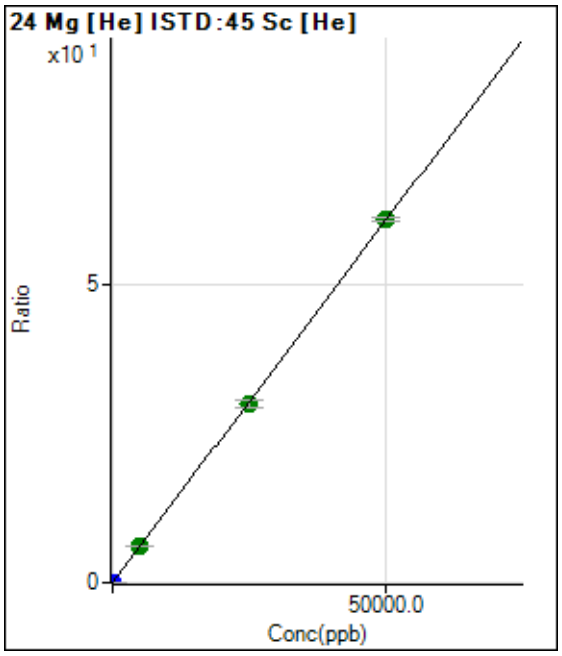
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23119.03	0.0279	P	2.1
2	☐	5000.000	5068.973	8886942.47	10.8742	A	2.0
3	☐	25000.000	24210.598	41801990.93	51.8327	A	4.4
4	☐	50000.000	50387.804	85188646.61	107.8457	A	1.9
5	☐			39064.96	0.0486	P	4.7

y = 0.0021 * x + 0.0279
R = 0.9998
DL = 0.8254
BEC = 13.02

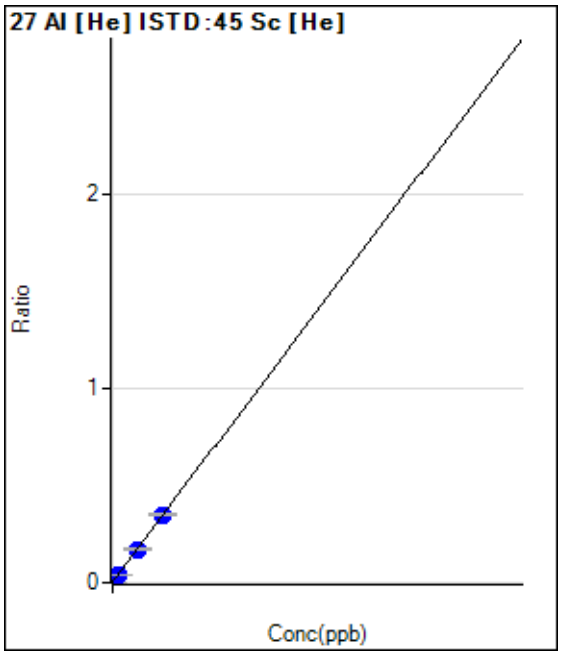
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	988.97	0.0012	P	15.1
2	☐	5000.000	5140.359	5111829.19	6.2540	A	1.6
3	☐	25000.000	24674.041	24209588.85	30.0151	A	4.0
4	☐	50000.000	50148.944	48191972.16	61.0031	A	1.2
5	☐			5475.15	0.0068	P	13.1

y = 0.0012 * x + 0.0012
R = 1.0000
DL = 0.4453
BEC = 0.981

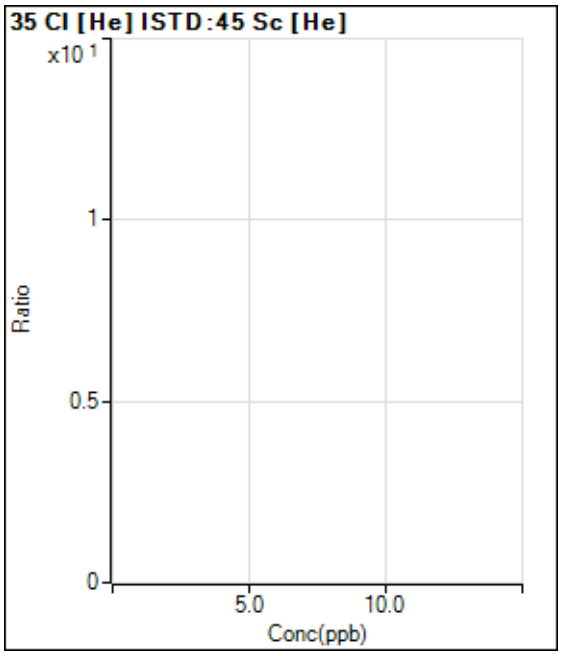
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2648.00	0.0032	P	7.6
2	☐	50.000	49.865	30708.98	0.0376	P	1.3
3	☐	250.000	245.708	139162.76	0.1726	P	5.5
4	☐	500.000	502.160	276019.85	0.3494	P	2.0
5	☐			2865.82	0.0036	P	5.3

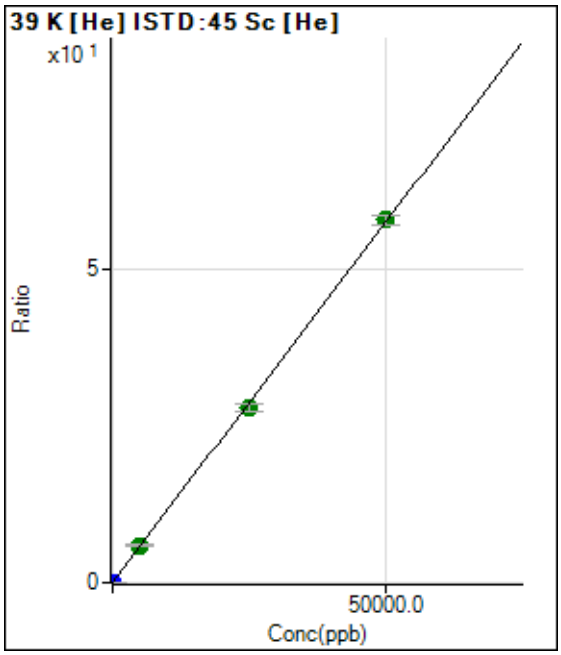
y = 6.8952E-004 * x + 0.0032
R = 0.9999
DL = 1.048
BEC = 4.626

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			13349840.67	16.0920	A	1.5
2	☐			12632885.61	15.4604	A	2.4
3	☐			12470725.43	15.4634	A	4.5
4	☐			12109121.74	15.3298	A	2.0
5	☐			12941196.25	16.1304	A	3.5

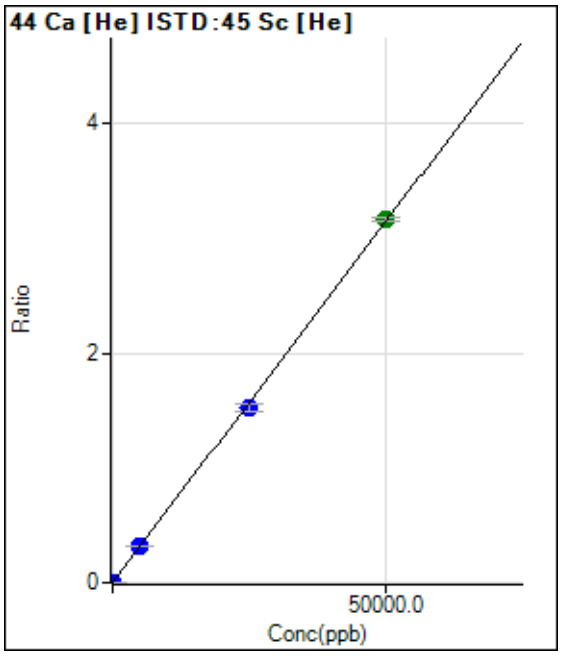
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38274.64	0.0461	P	1.7
2	☐	5000.000	5141.355	4849697.38	5.9343	A	2.0
3	☐	25000.000	24265.021	22452697.25	27.8360	A	4.0
4	☐	50000.000	50353.354	45584978.74	57.7140	A	2.5
5	☐			42461.49	0.0529	P	0.8

y = 0.0011 * x + 0.0461
R = 0.9998
DL = 2.058
BEC = 40.28

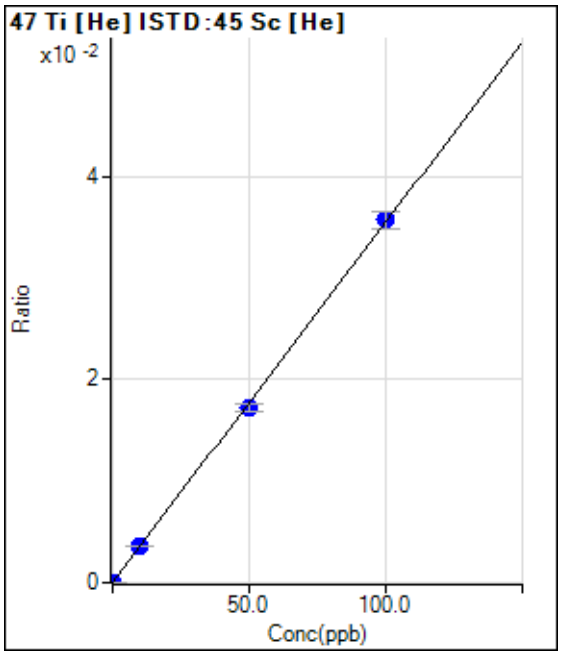
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1003.83	0.0012	P	15.0
2	☐	5000.000	5000.793	257825.02	0.3155	P	1.5
3	☐	25000.000	24363.660	1235832.22	1.5323	P	4.2
4	☐	50000.000	50318.091	2499004.66	3.1633	A	1.2
5	☐			1139.06	0.0014	P	7.6

y = 6.2841E-005 * x + 0.0012
R = 0.9999
DL = 8.639
BEC = 19.23

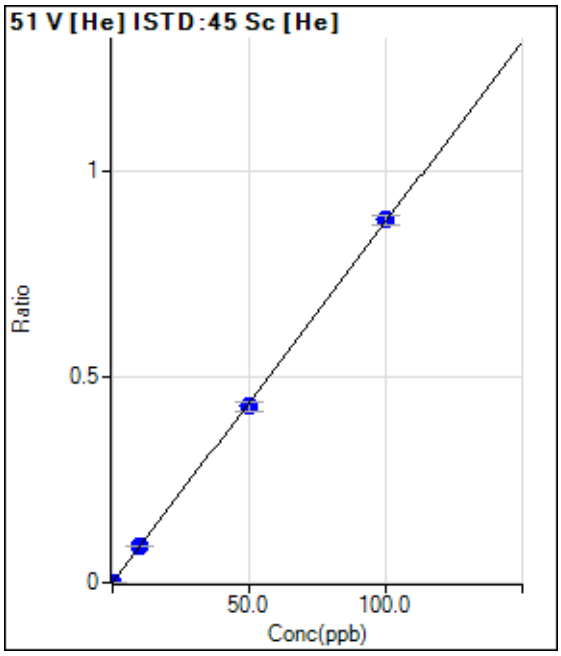
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	26.0
2	☐	10.000	9.980	2902.49	0.0036	P	1.2
3	☐	50.000	48.605	13902.14	0.0172	P	3.9
4	☐			17.78	0.0000	P	29.8
5	☐	100.000	100.700	28623.77	0.0357	P	4.5

y = 3.5421E-004 * x + 1.6103E-005
R = 0.9998
DL = 0.03548
BEC = 0.04546

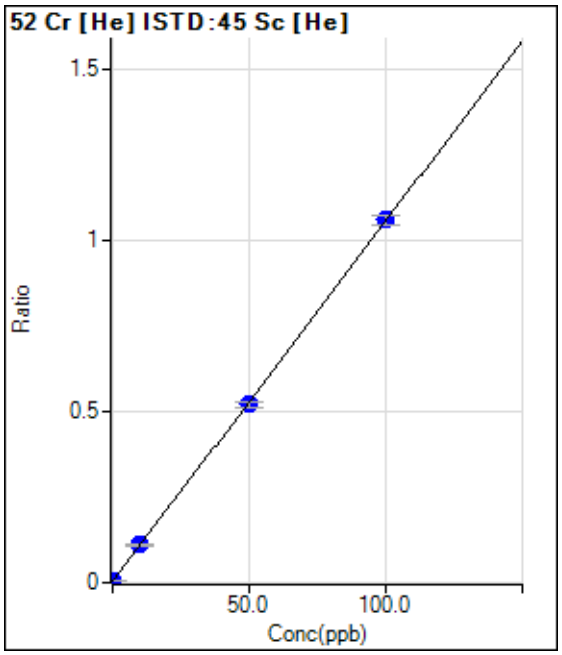
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.14	0.0001	P	728.1
2	☐	10.000	10.044	71999.45	0.0881	P	2.3
3	☐	50.000	48.849	345100.92	0.4280	P	5.0
4	☐	100.000	100.571	695861.57	0.8810	P	2.3
5	☐			541.49	0.0007	P	57.6

y = 0.0088 * x + 1.2709E-004
R = 0.9999
DL = 0.3169
BEC = 0.01451

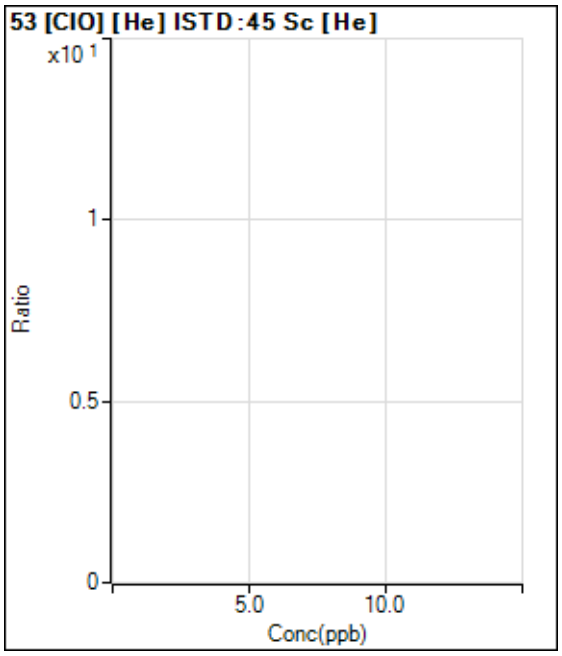
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2573.55	0.0031	P	5.3
2	☐	10.000	10.125	89657.22	0.1097	P	0.8
3	☐	50.000	49.138	419721.65	0.5204	P	4.0
4	☐	100.000	100.419	837413.89	1.0602	P	2.3
5	☐			3677.10	0.0046	P	3.6

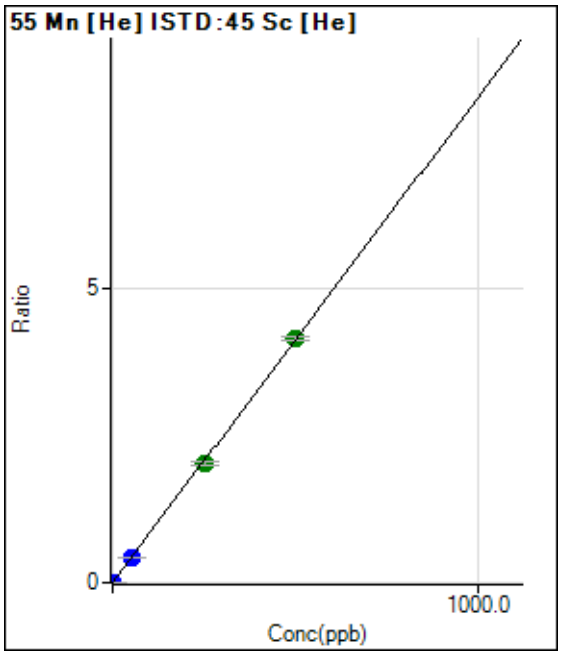
y = 0.0105 * x + 0.0031
R = 0.9999
DL = 0.04688
BEC = 0.2948

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1966.88	0.0024	P	15.0
2	☐			11400.40	0.0139	P	6.2
3	☐			51794.52	0.0642	P	3.2
4	☐			102393.77	0.1296	P	2.5
5	☐			733.38	0.0009	P	15.6

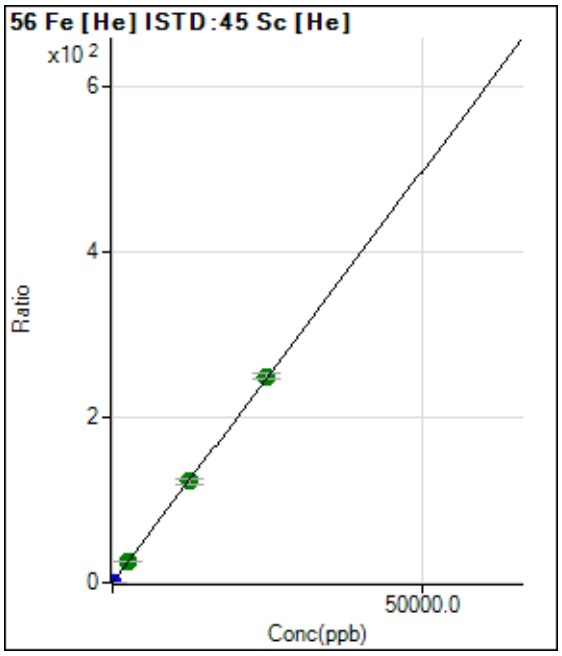
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1230.06	0.0015	P	2.4
2	☐	50.000	50.534	342909.72	0.4195	P	1.1
3	☐	250.000	245.959	1642241.12	2.0362	A	4.3
4	☐	500.000	501.967	3281596.40	4.1541	A	1.3
5	☐			1567.87	0.0020	P	14.0

y = 0.0083 * x + 0.0015
R = 0.9999
DL = 0.01307
BEC = 0.1792

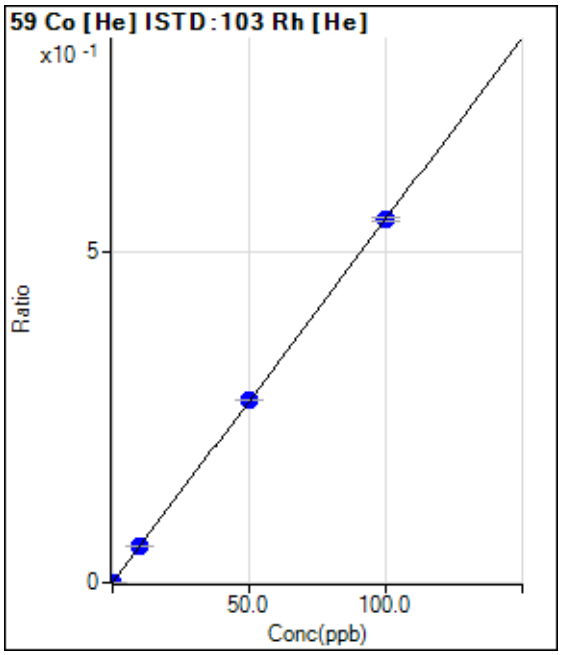
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4585.09	0.0055	P	5.7
2	☐	2500.000	2535.095	20566579.74	25.1686	A	2.3
3	☐	12500.000	12329.704	98690627.19	122.3886	A	4.9
4	☐	25000.000	25081.639	196640618.85	248.9628	A	2.6
5	☐			275375.27	0.3410	P	21.9

y = 0.0099 * x + 0.0055
R = 1.0000
DL = 0.0957
BEC = 0.557

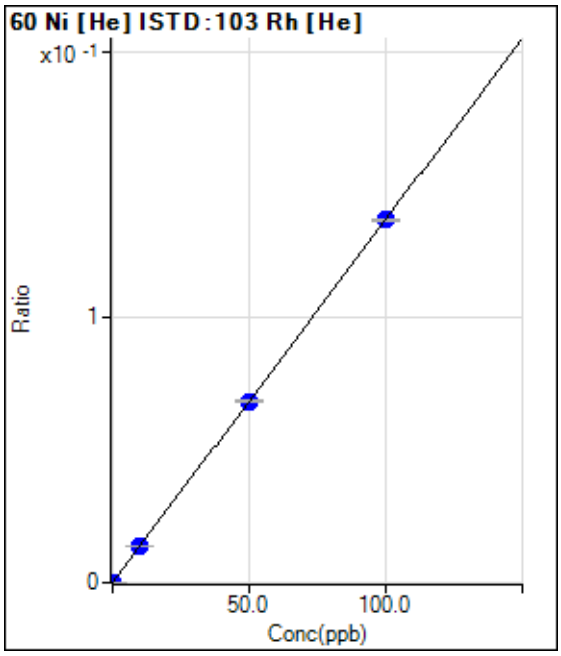
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.78	0.0000	P	54.1
2	☐	10.000	10.103	126406.59	0.0557	P	1.7
3	☐	50.000	50.282	592350.12	0.2770	P	0.3
4	☐	100.000	99.848	1166939.02	0.5500	P	0.9
5	☐			220.01	0.0001	P	31.5

y = 0.0055 * x + 2.0382E-005
R = 1.0000
DL = 0.006004
BEC = 0.0037

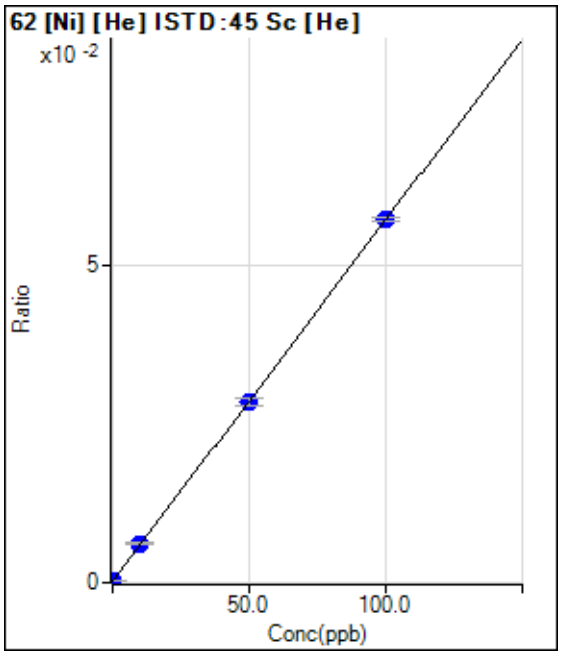
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	128.89	0.0001	P	21.0
2	☐	10.000	9.919	30883.23	0.0136	P	2.0
3	☐	50.000	50.028	146236.59	0.0684	P	0.8
4	☐	100.000	99.994	289874.62	0.1366	P	0.5
5	☐			330.01	0.0001	P	14.4

y = 0.0014 * x + 5.4954E-005
R = 1.0000
DL = 0.02537
BEC = 0.04024

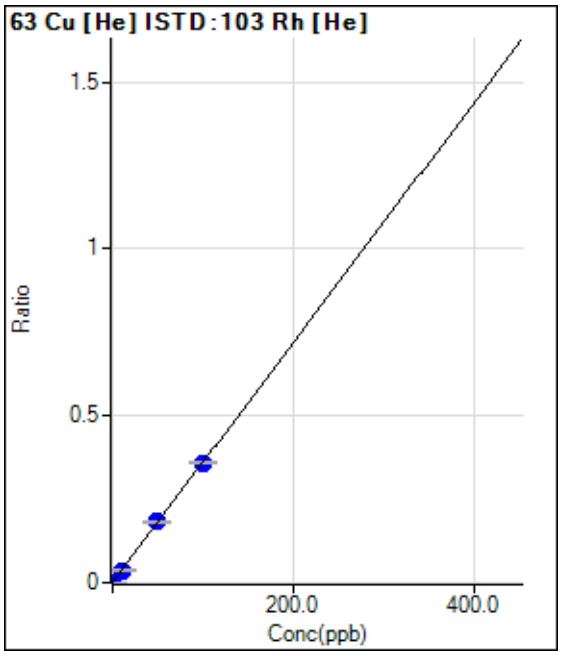
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	147.78	0.0002	P	25.0
2	☐	10.000	10.511	5028.54	0.0062	P	2.7
3	☐	50.000	49.679	22927.00	0.0284	P	4.2
4	☐	100.000	100.110	45107.56	0.0571	P	1.1
5	☐			208.89	0.0003	P	14.4

y = 5.6855E-004 * x + 1.7849E-004
R = 1.0000
DL = 0.2351
BEC = 0.3139

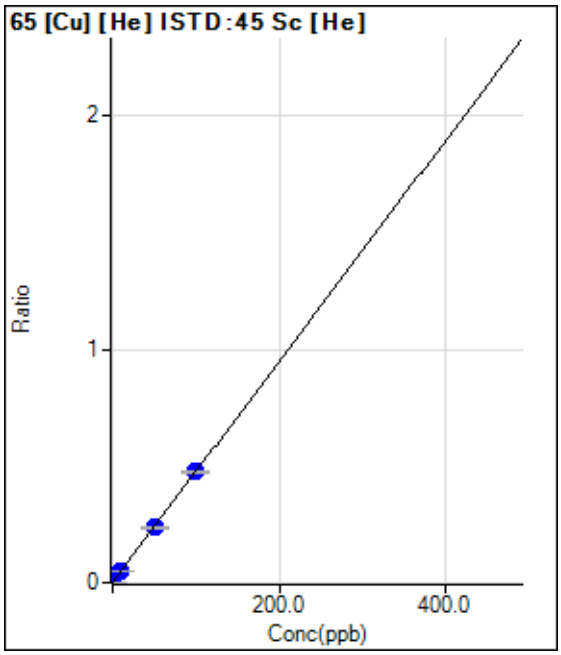
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1714.55	0.0007	P	4.5
2	☐	10.000	10.195	84808.34	0.0373	P	2.5
3	☐	50.000	50.307	387992.67	0.1814	P	0.5
4	☐	100.000	99.827	762296.27	0.3593	P	1.5
5	☐			1535.65	0.0007	P	8.4

y = 0.0036 * x + 7.3091E-004
R = 1.0000
DL = 0.02761
BEC = 0.2035

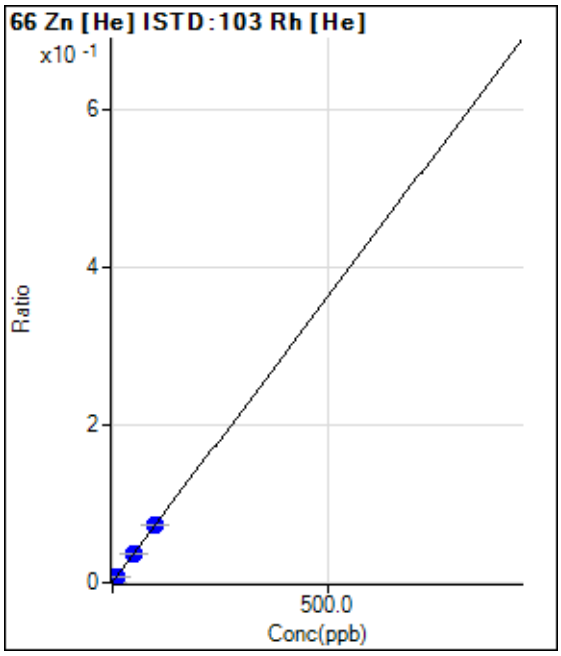
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	778.92	0.0009	P	11.3
2	☐	10.000	10.605	41834.23	0.0512	P	0.9
3	☐	50.000	49.647	190470.21	0.2362	P	4.3
4	☐	100.000	100.116	375449.34	0.4753	P	1.5
5	☐			832.26	0.0010	P	6.7

y = 0.0047 * x + 9.3938E-004
R = 1.0000
DL = 0.06726
BEC = 0.1983

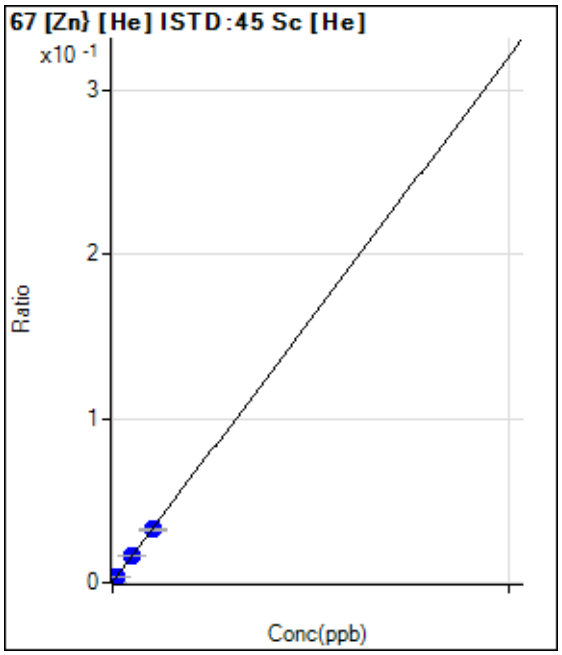
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1973.47	0.0008	P	2.0
2	☐	10.000	10.041	18451.86	0.0081	P	3.1
3	☐	50.000	49.532	78647.36	0.0368	P	0.5
4	☐	100.000	100.230	156069.00	0.0736	P	0.1
5	☐			2237.95	0.0010	P	0.7

y = 7.2544E-004 * x + 8.4125E-004
R = 1.0000
DL = 0.071
BEC = 1.16

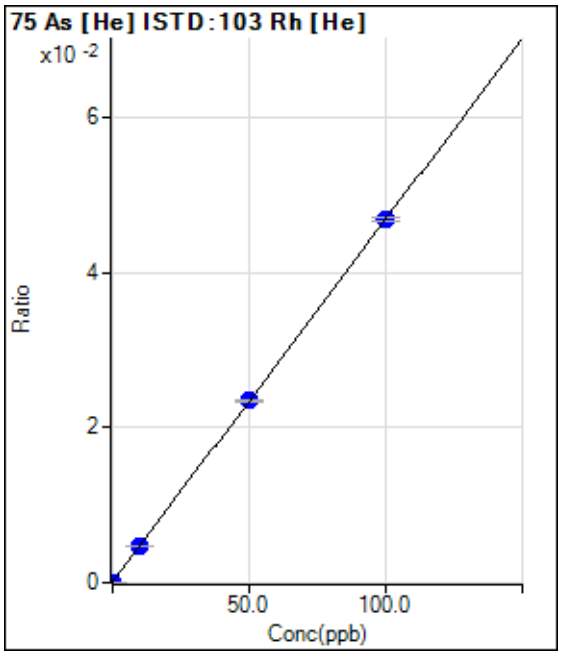
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	296.67	0.0004	P	17.7
2	☐	10.000	10.592	3066.97	0.0037	P	7.5
3	☐	50.000	49.169	12980.42	0.0161	P	2.8
4	☐	100.000	100.356	25641.79	0.0325	P	2.7
5	☐			368.90	0.0005	P	7.8

y = 3.1990E-004 * x + 3.5812E-004
R = 0.9999
DL = 0.5949
BEC = 1.119

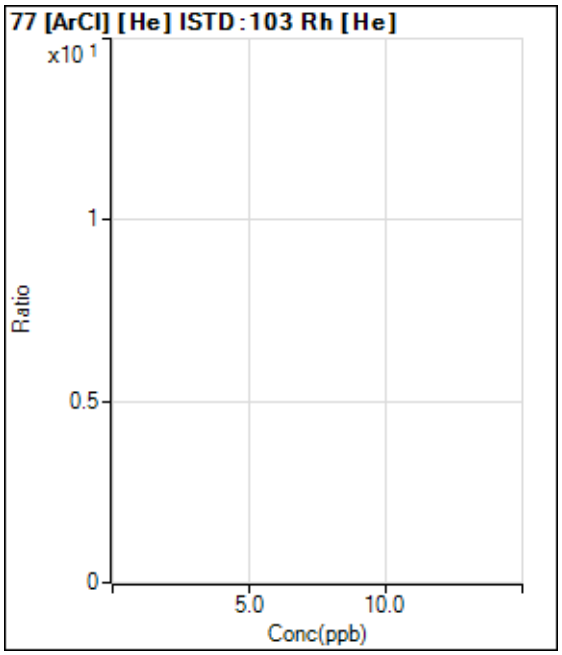
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	163.13	0.0001	P	11.3
2	☐	10.000	10.045	10819.04	0.0048	P	1.9
3	☐	50.000	50.119	50248.45	0.0235	P	0.7
4	☐	100.000	99.936	99257.85	0.0468	P	1.1
5	☐			460.83	0.0002	P	10.5

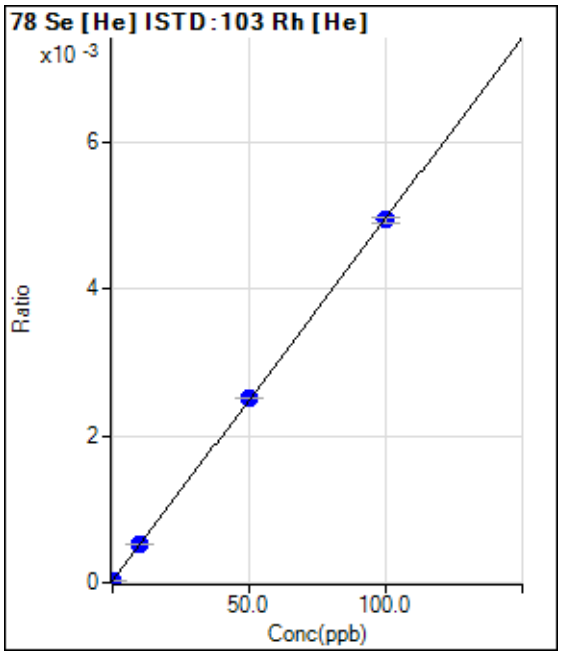
y = 4.6741E-004 * x + 6.9592E-005
R = 1.0000
DL = 0.0504
BEC = 0.1489

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			22.22	0.0000	P	100.5
2	☐			348.17	0.0002	P	12.8
3	☐			1600.15	0.0007	P	10.3
4	☐			3222.67	0.0015	P	11.0
5	☐			14.81	0.0000	P	43.0

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51.90	0.0000	P	8.0
2	☐	10.000	10.188	1192.91	0.0005	P	2.6
3	☐	50.000	50.627	5395.52	0.0025	P	0.5
4	☐	100.000	99.668	10492.30	0.0049	P	1.7
5	☐			90.88	0.0000	P	21.8

y = 4.9395E-005 * x + 2.2119E-005

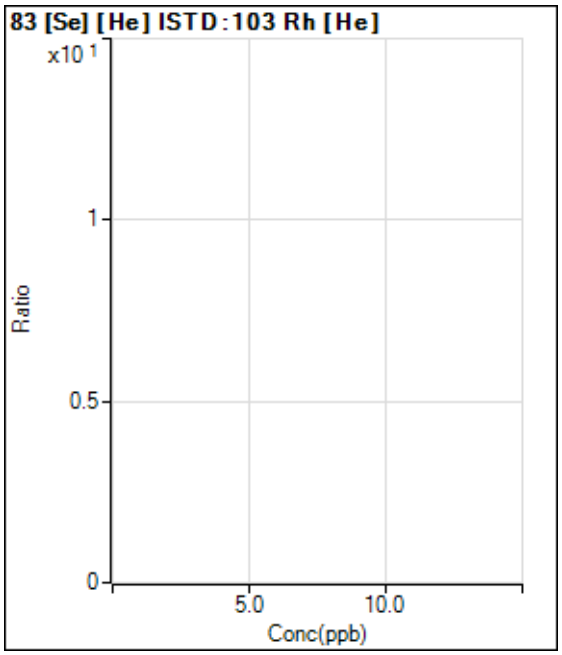
R = 1.0000

DL = 0.107

BEC = 0.4478

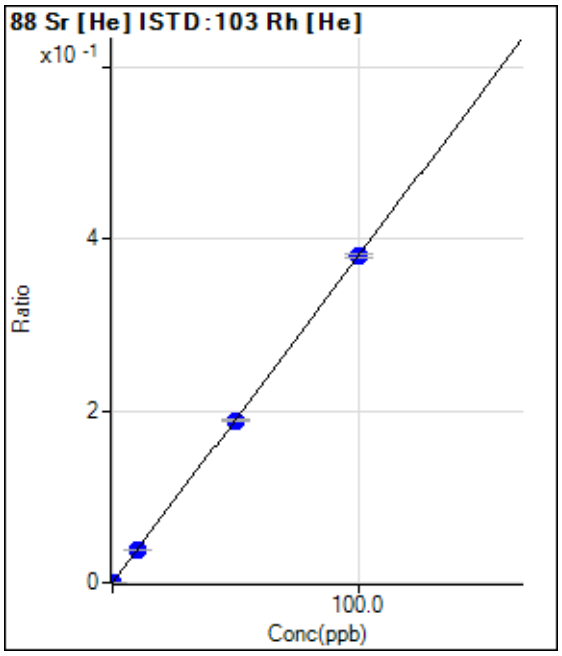
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			95.29	0.0000	P	19.8
2	☐			105.05	0.0000	P	19.3
3	☐			102.69	0.0000	P	12.4
4	☐			106.06	0.0000	P	8.6
5	☐			102.36	0.0000	P	9.1

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	117.78	0.0001	P	30.1
2	☐	10.000	9.848	85029.26	0.0374	P	2.7
3	☐	50.000	49.625	403131.16	0.1885	P	1.0
4	☐	100.000	100.203	807469.52	0.3806	P	0.9
5	☐			288.90	0.0001	P	13.9

y = 0.0038 * x + 5.0104E-005

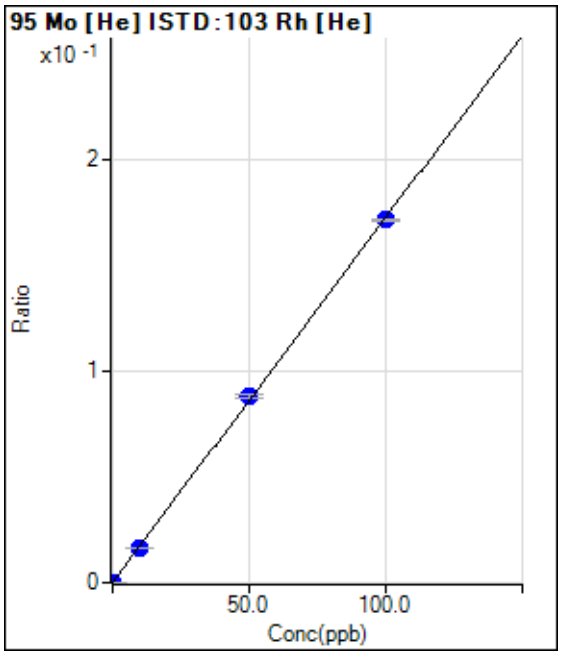
R = 1.0000

DL = 0.01193

BEC = 0.01319

Weight: <None>

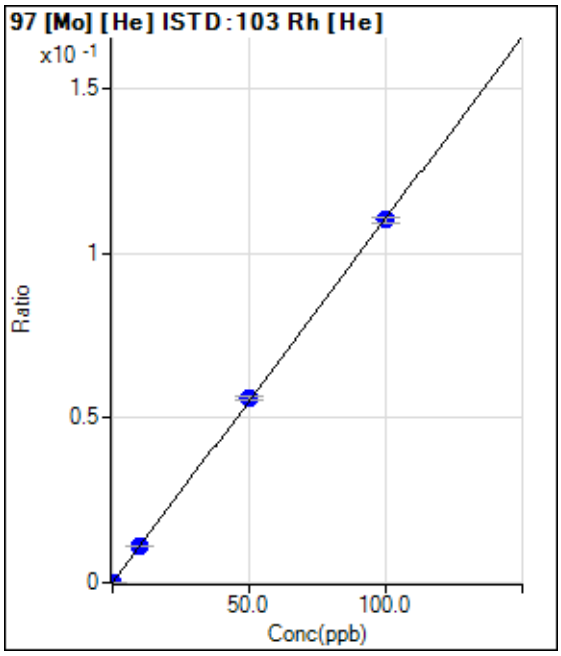
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0000	P	37.2
2	☐	10.000	9.672	37953.38	0.0167	P	1.1
3	☐	50.000	51.117	188697.31	0.0882	P	1.6
4	☐			3195.90	0.0015	P	17.1
5	☐	100.000	99.474	391196.37	0.1717	P	0.3

y = 0.0017 * x + 2.6123E-005
R = 0.9999
DL = 0.0169
BEC = 0.01514

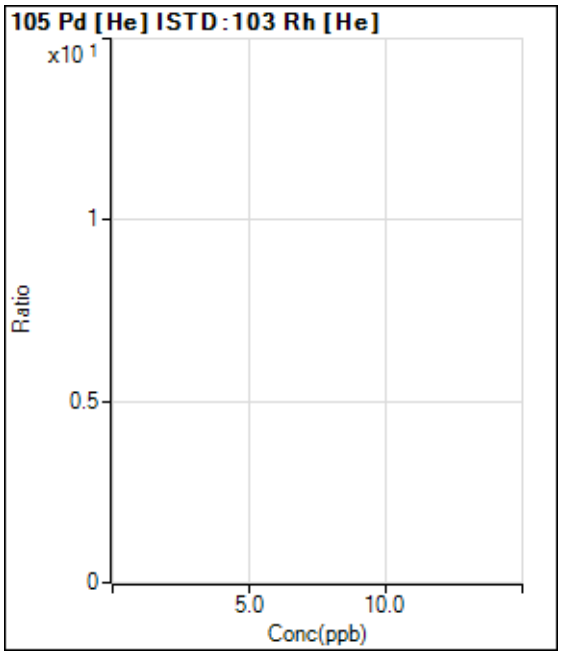
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.81	0.0000	P	86.6
2	☐	10.000	10.027	25145.08	0.0111	P	3.4
3	☐	50.000	50.627	119533.62	0.0559	P	2.0
4	☐			1800.19	0.0008	P	15.3
5	☐	100.000	99.684	250745.61	0.1100	P	1.5

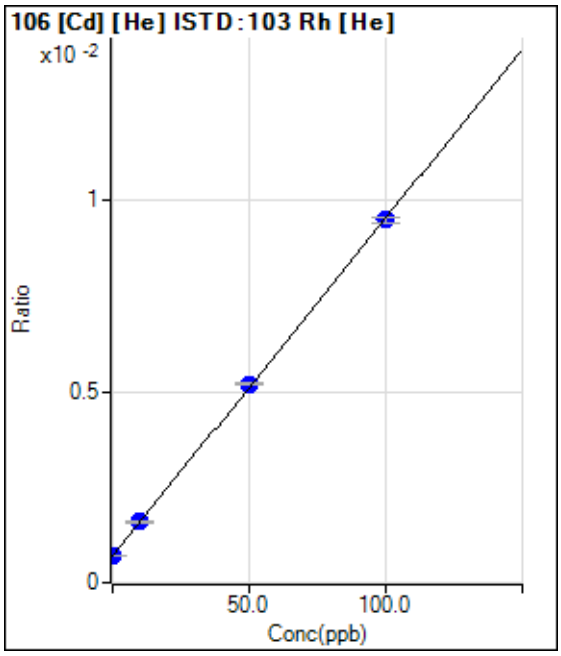
y = 0.0011 * x + 6.3218E-006
R = 1.0000
DL = 0.01488
BEC = 0.005727

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1670.56	0.0007	P	11.0
2	☐			1807.60	0.0008	P	24.7
3	☐			2055.78	0.0010	P	6.3
4	☐			2441.05	0.0011	P	9.7
5	☐			1748.34	0.0008	P	13.5

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1626.35	0.0007	P	2.2
2	☐	10.000	10.112	3602.41	0.0016	P	2.2
3	☐	50.000	50.938	11105.24	0.0052	P	0.5
4	☐	100.000	99.520	20122.04	0.0095	P	1.6
5	☐			1730.06	0.0008	P	2.5

y = 8.8330E-005 * x + 6.9328E-004

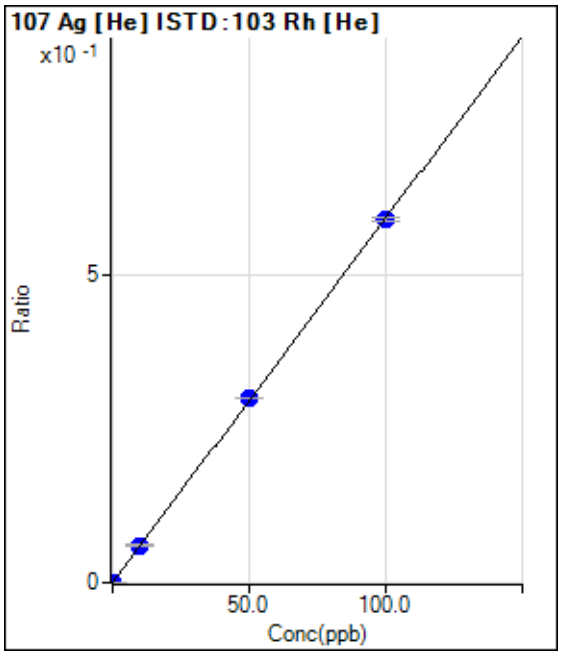
R = 0.9999

DL = 0.5141

BEC = 7.849

Weight: <None>

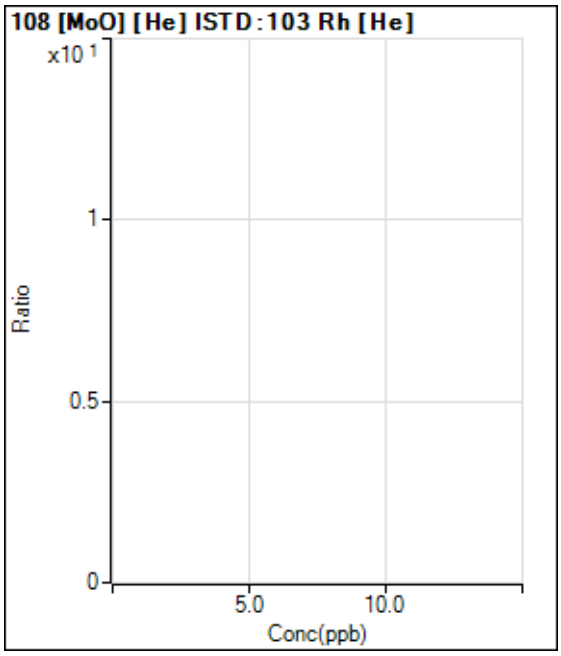
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.56	0.0000	P	91.3
2	☐	10.000	10.272	138266.67	0.0609	P	1.7
3	☐	50.000	50.678	642464.04	0.3004	P	0.1
4	☐	100.000	99.634	1253098.01	0.5906	P	1.1
5	☐			250.01	0.0001	P	17.1

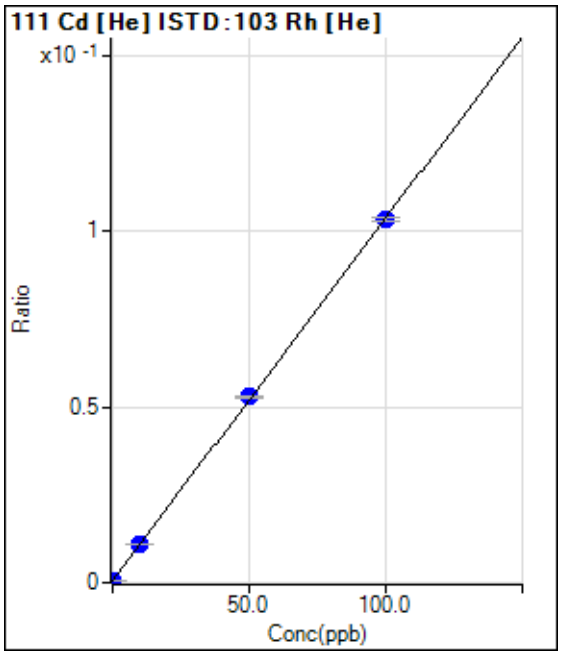
y = 0.0059 * x + 2.3780E-006
R = 1.0000
DL = 0.001099
BEC = 0.0004012

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			14.81	0.0000	P	86.6
2	☐			1500.15	0.0007	P	14.0
3	☐			7049.98	0.0033	P	3.9
4	☐			13806.18	0.0065	P	4.9
5	☐			100.01	0.0000	P	50.5

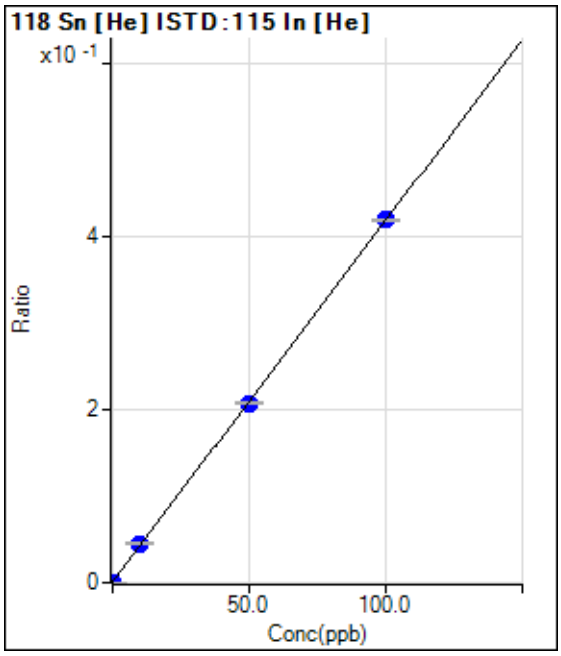
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1232.01	0.0005	P	1.8
2	☐	10.000	10.146	24958.20	0.0110	P	3.1
3	☐	50.000	50.737	113053.77	0.0529	P	0.5
4	☐	100.000	99.617	219141.23	0.1033	P	1.0
5	☐			1362.94	0.0006	P	6.3

y = 0.0010 * x + 5.2519E-004
R = 1.0000
DL = 0.0269
BEC = 0.5091

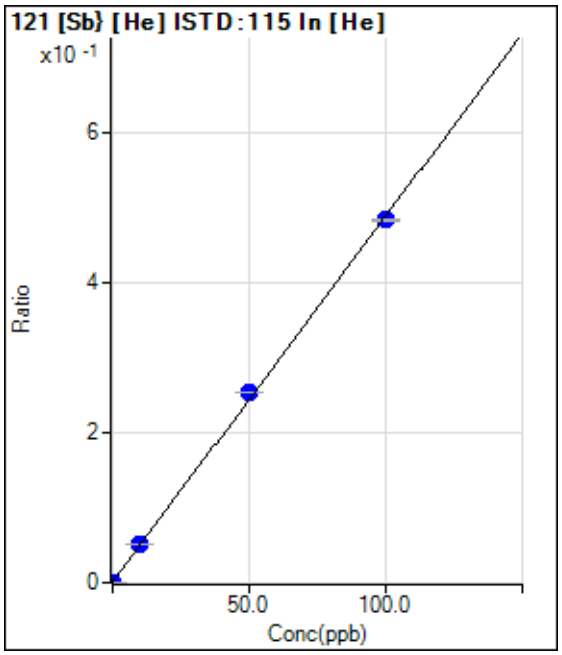
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1114.93	0.0008	P	11.0
2	☐	10.000	10.627	61713.30	0.0451	P	2.3
3	☐	50.000	49.477	267481.25	0.2071	P	1.6
4	☐			4634.35	0.0036	P	9.1
5	☐	100.000	100.199	572523.27	0.4186	P	0.2

y = 0.0042 * x + 7.8560E-004
R = 0.9999
DL = 0.06215
BEC = 0.1884

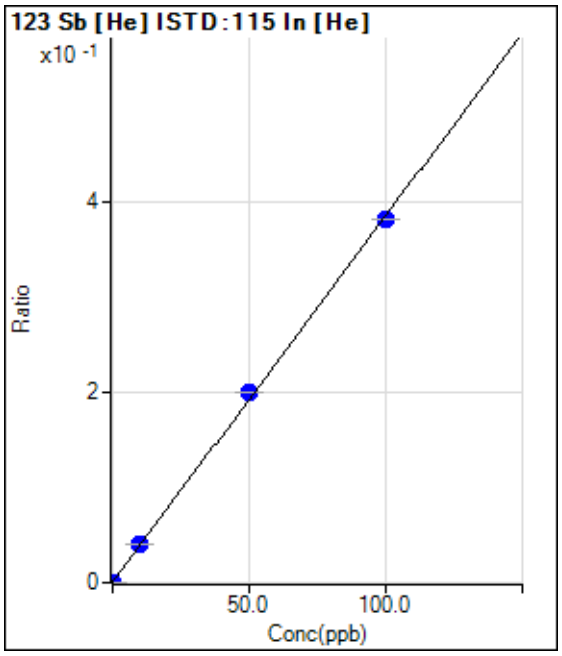
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	823.37	0.0006	P	3.4
2	☐	10.000	10.307	69477.45	0.0508	P	1.5
3	☐	50.000	51.821	326682.70	0.2529	P	0.4
4	☐			4210.58	0.0033	P	9.1
5	☐	100.000	99.059	660543.62	0.4830	P	0.6

y = 0.0049 * x + 5.7999E-004
R = 0.9997
DL = 0.01213
BEC = 0.1191

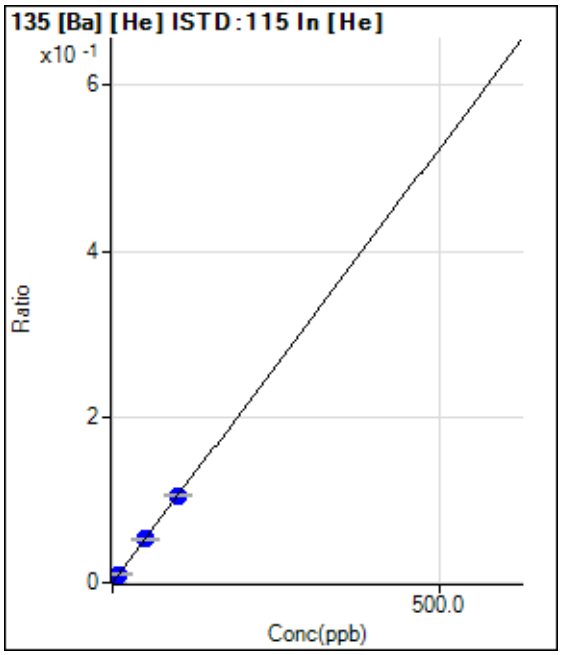
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	638.91	0.0004	P	9.4
2	☐	10.000	10.266	54718.16	0.0400	P	1.4
3	☐	50.000	51.957	259021.83	0.2005	P	0.3
4	☐			3329.26	0.0026	P	9.9
5	☐	100.000	98.995	522052.36	0.3817	P	0.1

y = 0.0039 * x + 4.4999E-004
R = 0.9997
DL = 0.03288
BEC = 0.1168

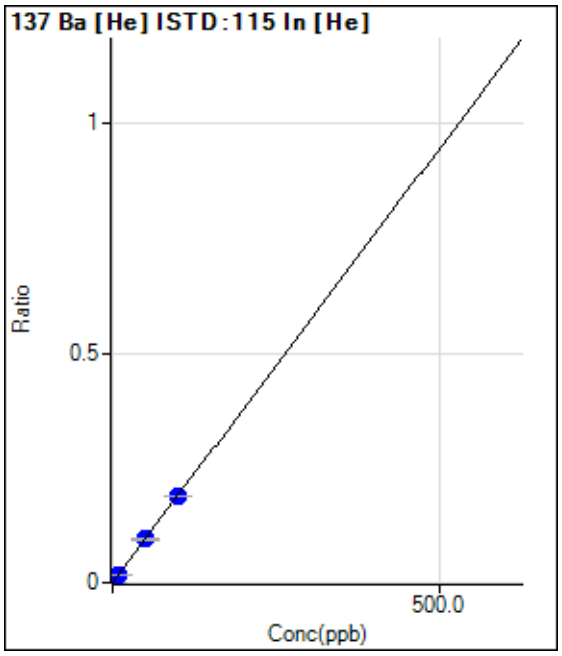
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46.67	0.0000	P	18.8
2	☐	10.000	9.807	14098.25	0.0103	P	2.7
3	☐	50.000	49.994	67659.62	0.0524	P	1.5
4	☐	100.000	100.023	135205.73	0.1048	P	1.8
5	☐			81.11	0.0001	P	28.2

y = 0.0010 * x + 3.2873E-005
R = 1.0000
DL = 0.01769
BEC = 0.03139

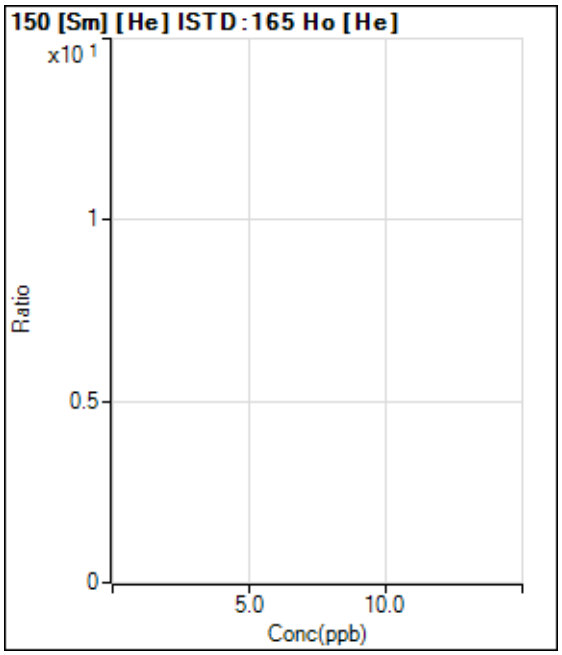
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.00	0.0001	P	14.9
2	☐	10.000	9.749	25346.97	0.0185	P	2.3
3	☐	50.000	49.960	122218.87	0.0946	P	1.9
4	☐	100.000	100.045	244440.15	0.1894	P	1.0
5	☐			183.34	0.0001	P	22.1

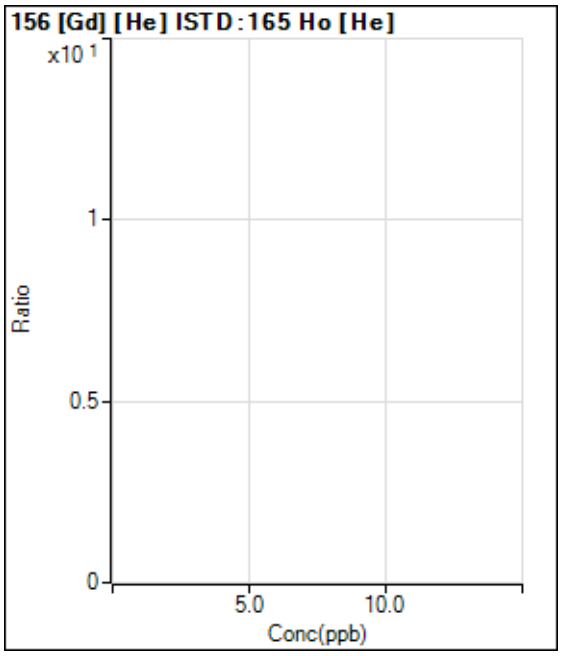
y = 0.0019 * x + 7.0421E-005
R = 1.0000
DL = 0.01662
BEC = 0.03721

Weight: <None>
Min Conc: <None>



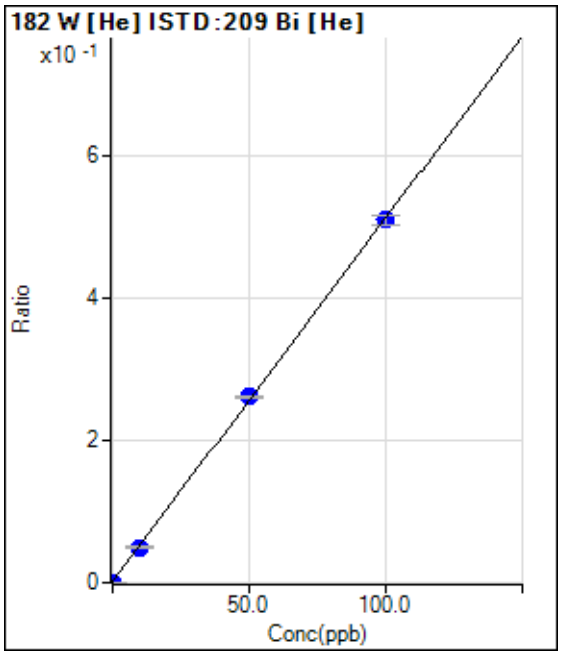
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2.00	0.0000	P	100.0
2	☐			3.33	0.0000	P	91.4
3	☐			19.33	0.0000	P	86.5
4	☐			20.00	0.0000	P	86.7
5	☐			3.33	0.0000	P	34.3

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			10.00	0.0000	P	72.2
2	☐			14.00	0.0000	P	51.6
3	☐			14.67	0.0000	P	20.5
4	☐			24.67	0.0000	P	38.2
5	☐			8.67	0.0000	P	35.0

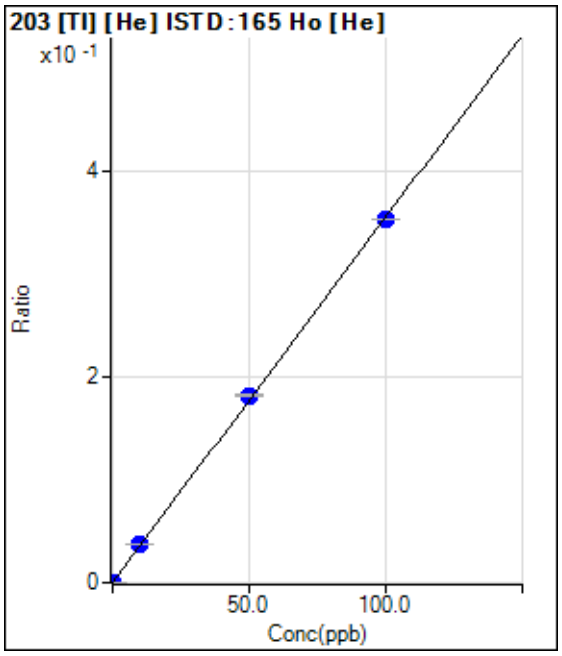
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3730.24	0.0013	P	3.8
2	☐	10.000	9.501	139239.39	0.0498	P	0.9
3	☐	50.000	50.947	694844.75	0.2613	P	1.2
4	☐			17232.09	0.0066	P	13.9
5	☐	100.000	99.576	1453299.54	0.5094	P	2.7

y = 0.0051 * x + 0.0013
R = 0.9999
DL = 0.0287
BEC = 0.2543

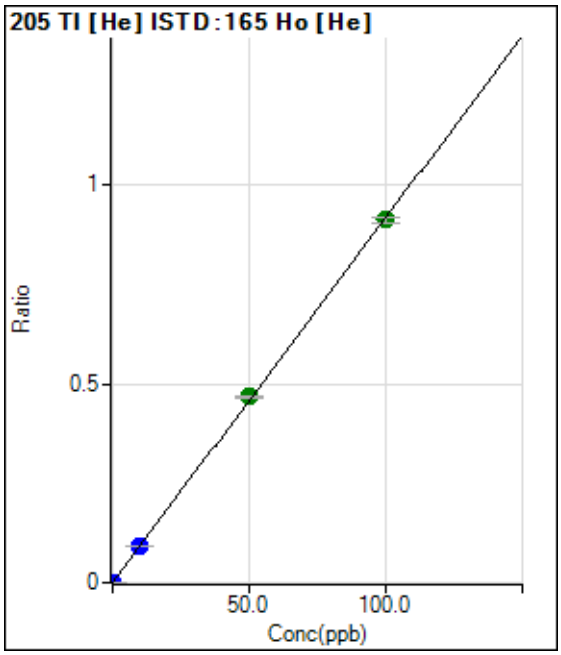
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	66.8
2	☐	10.000	10.361	141504.54	0.0368	P	1.1
3	☐	50.000	51.189	689715.22	0.1817	P	1.0
4	☐	100.000	99.369	1337353.48	0.3527	P	0.1
5	☐			1744.63	0.0005	P	15.1

y = 0.0035 * x + 8.4870E-006
R = 0.9999
DL = 0.004791
BEC = 0.002391

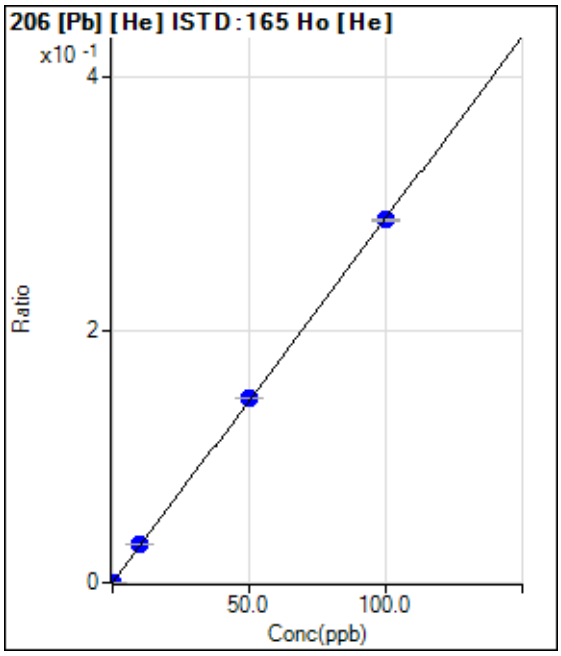
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	71.11	0.0000	P	54.3
2	☐	10.000	9.889	349176.26	0.0908	P	1.5
3	☐	50.000	50.982	1775994.23	0.4679	A	1.6
4	☐	100.000	99.520	3462823.20	0.9133	A	1.3
5	☐			3024.79	0.0008	P	31.5

y = 0.0092 * x + 1.8106E-005
R = 0.9999
DL = 0.003214
BEC = 0.001973

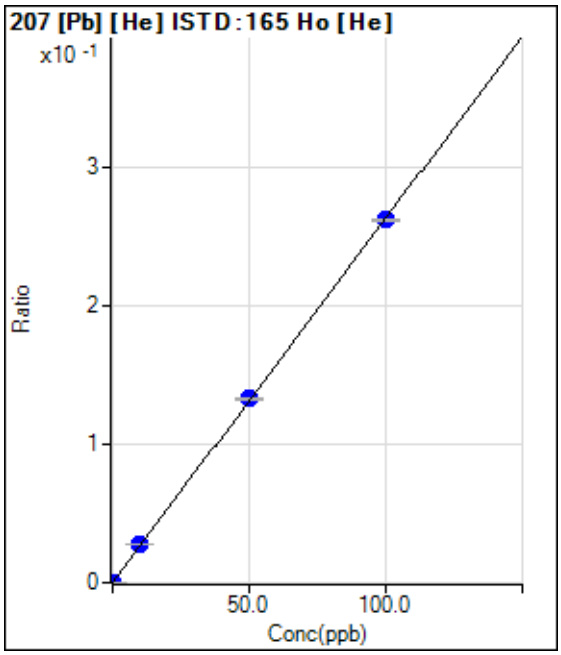
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	193.34	0.0000	P	9.3
2	☐	10.000	10.588	117572.20	0.0306	P	2.2
3	☐	50.000	50.599	553648.48	0.1459	P	0.7
4	☐	100.000	99.642	1088833.67	0.2872	P	0.4
5	☐			744.48	0.0002	P	4.1

y = 0.0029 * x + 4.9175E-005
R = 1.0000
DL = 0.004754
BEC = 0.01706

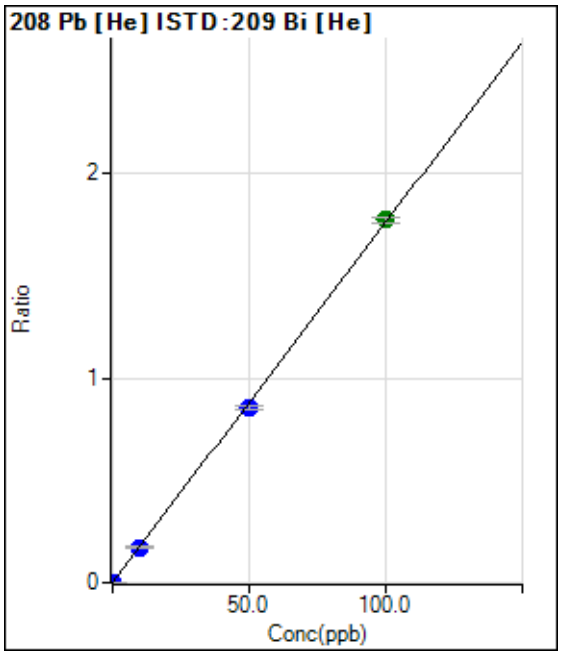
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	170.00	0.0000	P	17.3
2	☐	10.000	10.537	106826.61	0.0278	P	1.8
3	☐	50.000	50.567	505183.85	0.1331	P	0.7
4	☐	100.000	99.663	994368.78	0.2623	P	0.4
5	☐			720.03	0.0002	P	11.9

y = 0.0026 * x + 4.3223E-005
R = 1.0000
DL = 0.008541
BEC = 0.01643

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	807.80	0.0003	P	7.4
2	☐	10.000	9.757	481158.37	0.1720	P	2.3
3	☐	50.000	48.647	2277930.97	0.8566	P	1.7
4	☐	100.000	100.701	4629581.73	1.7730	A	1.3
5	☐			3266.86	0.0011	P	11.7

y = 0.0176 * x + 2.8103E-004
R = 0.9998
DL = 0.003544
BEC = 0.01596

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T08:59:18-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	70	131.47
B	11	45	2	NoGas	10785	0.06
Na	23	45	1	He	22681	0.01
Mg	24	45	1	He	1100	1.75
Al	27	45	1	He	2700	0.07
K	39	45	1	He	37829	0.01
Ca	44	45	1	He	1147	0.60
Ti	47	45	1	He	52	117.45
Cr	52	45	1	He	2584	0.18
Mn	55	45	1	He	1275	0.25
Fe	56	45	1	He	9614	0.28
Co	59	103	1	He	61	53.80
Ni	60	103	1	He	149	8.55
Cu	63	103	1	He	1688	0.66
Zn	66	103	1	He	1962	0.04
As	75	103	1	He	209	8.65
Se	78	103	1	He	57	13.78
Sr	88	103	1	He	129	13.36
Mo	95	103	1	He	596	6.75
Ag	107	103	1	He	12	1054.29
Cd	111	103	1	He	1301	0.34
Sn	118	115	1	He	1896	1.58
Sb	123	115	1	He	1092	2.27
Ba	137	115	1	He	100	23.34
W	182	209	1	He	5824	0.21
Tl	205	165	1	He	230	5.38
Pb	208	209	1	He	834	0.56

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1705161	0.85
Sc	45	1	He	844110	0.55
Sc	45	2	NoGas	6525731	1.04
Rh	103	1	He	2402308	0.48
In	115	1	He	1433973	0.24
Tb	159	1	He	3915650	1.00
Ho	165	1	He	4002193	0.94
Bi	209	1	He	2891682	0.51

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:03:11-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	44	168.74
B	11	45	2	NoGas	9870	0.05
Na	23	45	1	He	23119	0.02
Mg	24	45	1	He	989	1.42
Al	27	45	1	He	2648	0.33
K	39	45	1	He	38275	0.00
Ca	44	45	1	He	1004	1.62
Ti	47	45	1	He	13	187.59
V	51	45	1	He	111	624.55
Cr	52	45	1	He	2574	0.17
Mn	55	45	1	He	1230	0.26
Fe	56	45	1	He	4585	0.11
Co	59	103	1	He	48	113.42
Ni	60	103	1	He	129	16.34
Cu	63	103	1	He	1715	0.29
Zn	66	103	1	He	1973	0.16
As	75	103	1	He	163	6.39
Se	78	103	1	He	52	17.06
Sr	88	103	1	He	118	26.36
Mo	95	103	1	He	61	59.42
Ag	107	103	1	He	6	1649.19
Cd	111	103	1	He	1232	0.23
Sn	118	115	1	He	1115	0.96
Sb	123	115	1	He	639	1.53
Ba	137	115	1	He	100	15.28
W	182	209	1	He	3730	0.10
Tl	205	165	1	He	71	76.11
Pb	208	209	1	He	808	0.90

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1631381	0.72
Sc	45	1	He	829696	1.36
Sc	45	2	NoGas	6325638	0.21
Rh	103	1	He	2345543	1.11
In	115	1	He	1419467	0.49
Tb	159	1	He	3888262	0.98
Ho	165	1	He	3932562	0.35
Bi	209	1	He	2874805	1.34

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:07:04-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	44179	0.00
B	11	2	NoGas	41488	0.01
Na	23	1	He	8886942	0.00
Mg	24	1	He	5111829	0.00
Al	27	1	He	30709	0.01
K	39	1	He	4849697	0.00
Ca	44	1	He	257825	0.00
Ti	47	1	He	2902	0.07
V	51	1	He	71999	0.00
Cr	52	1	He	89657	0.00
Mn	55	1	He	342910	0.00
Fe	56	1	He	20566580	0.00
Co	59	1	He	126407	0.00
Ni	60	1	He	30883	0.01
Cu	63	1	He	84808	0.00
Zn	66	1	He	18452	0.02
As	75	1	He	10819	0.02
Se	78	1	He	1193	0.24
Sr	88	1	He	85029	0.00
Mo	95	1	He	37953	0.00
Ag	107	1	He	138267	0.00
Cd	111	1	He	24958	0.01
Sn	118	1	He	61713	0.00
Sb	123	1	He	54718	0.00
Ba	137	1	He	25347	0.01
W	182	1	He	139239	0.00
Tl	205	1	He	349176	0.00
Pb	208	1	He	481158	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1540307	0.83	1631381	94.42	30	120	
Sc	45	1	He	817538	3.25	829696	98.53	30	120	
Sc	45	2	NoGas	5950417	0.56	6325638	94.07	30	120	
Rh	103	1	He	2270622	0.38	2345543	96.81	30	120	
In	115	1	He	1368322	0.64	1419467	96.40	30	120	
Tb	159	1	He	3779426	0.90	3888262	97.20	30	120	
Ho	165	1	He	3846650	0.70	3932562	97.82	30	120	
Bi	209	1	He	2797035	1.23	2874805	97.29	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:10:52-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	240950	0.00
B	11	2	NoGas	183611	0.00
Na	23	1	He	41801991	0.00
Mg	24	1	He	24209589	0.00
Al	27	1	He	139163	0.00
K	39	1	He	22452697	0.00
Ca	44	1	He	1235832	0.00
Ti	47	1	He	13902	0.02
V	51	1	He	345101	0.00
Cr	52	1	He	419722	0.00
Mn	55	1	He	1642241	0.00
Fe	56	1	He	98690627	0.00
Co	59	1	He	592350	0.00
Ni	60	1	He	146237	0.00
Cu	63	1	He	387993	0.00
Zn	66	1	He	78647	0.00
As	75	1	He	50248	0.00
Se	78	1	He	5396	0.01
Sr	88	1	He	403131	0.00
Mo	95	1	He	188697	0.00
Ag	107	1	He	642464	0.00
Cd	111	1	He	113054	0.00
Sn	118	1	He	267481	0.00
Sb	123	1	He	259022	0.00
Ba	137	1	He	122219	0.00
W	182	1	He	694845	0.00
Tl	205	1	He	1775994	0.00
Pb	208	1	He	2277931	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1526248	1.73	1631381	93.56	30	120	
Sc	45	1	He	807514	4.37	829696	97.33	30	120	
Sc	45	2	NoGas	5970501	1.09	6325638	94.39	30	120	
Rh	103	1	He	2138681	0.22	2345543	91.18	30	120	
In	115	1	He	1291612	0.62	1419467	90.99	30	120	
Tb	159	1	He	3744717	1.88	3888262	96.31	30	120	
Ho	165	1	He	3795687	0.46	3932562	96.52	30	120	
Bi	209	1	He	2659576	1.42	2874805	92.51	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:14:41-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	491108	0.00
B	11	2	NoGas	12245	0.04
Na	23	1	He	85188647	0.00
Mg	24	1	He	48191972	0.00
Al	27	1	He	276020	0.00
K	39	1	He	45584979	0.00
Ca	44	1	He	2499005	0.00
Ti	47	1	He	18	161.10
V	51	1	He	695862	0.00
Cr	52	1	He	837414	0.00
Mn	55	1	He	3281596	0.00
Fe	56	1	He	196640619	0.00
Co	59	1	He	1166939	0.00
Ni	60	1	He	289875	0.00
Cu	63	1	He	762296	0.00
Zn	66	1	He	156069	0.00
As	75	1	He	99258	0.00
Se	78	1	He	10492	0.01
Sr	88	1	He	807470	0.00
Mo	95	1	He	3196	0.51
Ag	107	1	He	1253098	0.00
Cd	111	1	He	219141	0.00
Sn	118	1	He	4634	0.20
Sb	123	1	He	3329	0.31
Ba	137	1	He	244440	0.00
W	182	1	He	17232	0.08
Tl	205	1	He	3462823	0.00
Pb	208	1	He	4629582	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1551780	1.55	1631381	95.12	30	120	
Sc	45	1	He	790123	2.12	829696	95.23	30	120	
Sc	45	2	NoGas	6107045	2.81	6325638	96.54	30	120	
Rh	103	1	He	2121899	0.80	2345543	90.47	30	120	
In	115	1	He	1290417	0.61	1419467	90.91	30	120	
Tb	159	1	He	3712947	1.73	3888262	95.49	30	120	
Ho	165	1	He	3791296	0.31	3932562	96.41	30	120	
Bi	209	1	He	2611397	0.96	2874805	90.84	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:18:28-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	152	10.03
B	11	2	NoGas	335669	0.00
Na	23	1	He	39065	0.02
Mg	24	1	He	5475	0.32
Al	27	1	He	2866	0.19
K	39	1	He	42461	0.01
Ca	44	1	He	1139	0.73
Ti	47	1	He	28624	0.01
V	51	1	He	541	11.48
Cr	52	1	He	3677	0.21
Mn	55	1	He	1568	0.99
Fe	56	1	He	275375	0.01
Co	59	1	He	220	14.51
Ni	60	1	He	330	4.32
Cu	63	1	He	1536	0.54
Zn	66	1	He	2238	0.06
As	75	1	He	461	2.39
Se	78	1	He	91	24.27
Sr	88	1	He	289	4.59
Mo	95	1	He	391196	0.00
Ag	107	1	He	250	6.97
Cd	111	1	He	1363	0.41
Sn	118	1	He	572523	0.00
Sb	123	1	He	522052	0.00
Ba	137	1	He	183	12.19
W	182	1	He	1453300	0.00
Tl	205	1	He	3025	1.03
Pb	208	1	He	3267	0.31

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1498103	1.99	1631381	91.83	30	120	
Sc	45	1	He	803040	4.17	829696	96.79	30	120	
Sc	45	2	NoGas	5852964	0.67	6325638	92.53	30	120	
Rh	103	1	He	2278766	0.70	2345543	97.15	30	120	
In	115	1	He	1367725	0.97	1419467	96.35	30	120	
Tb	159	1	He	3796091	0.97	3888262	97.63	30	120	
Ho	165	1	He	3835107	0.48	3932562	97.52	30	120	
Bi	209	1	He	2853758	2.05	2874805	99.27	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:22:19-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	39.719	2.977	199844	1.68	40	99.3	89.5	110.5	
B	11	45	NoGas	42.614	1.107	160744	0.12	40	106.5	89.5	110.5	
Na	23	45	He	20347.473	2.253	35423057	0.91	20000	101.7	89.5	110.5	
Mg	24	45	He	20572.318	1.718	20349026	0.69	20000	102.9	89.5	110.5	
Al	27	45	He	202.762	1.205	116282	0.87	200	101.4	89.5	110.5	
K	39	45	He	20635.545	2.407	19252292	0.57	20000	103.2	89.5	110.5	
Ca	44	45	He	20094.657	1.450	1027800	0.55	20000	100.5	89.5	110.5	
Ti	47	45	He	40.693	4.295	11732	3.36	40	101.7	89.5	110.5	
V	51	45	He	40.709	2.273	290021	1.52	40	101.8	89.5	110.5	
Cr	52	45	He	41.092	1.340	354283	1.10	40	102.7	89.5	110.5	
Mn	55	45	He	207.587	0.717	1397977	2.61	200	103.8	89.5	110.5	
Fe	56	45	He	10216.638	2.075	82465319	1.66	10000	102.2	89.5	110.5	
Co	59	103	He	40.223	0.218	494721	0.36	40	100.6	89.5	110.5	
Ni	60	103	He	40.791	0.971	124511	1.27	40	102.0	89.5	110.5	
Cu	63	103	He	40.594	1.245	327179	0.95	40	101.5	89.5	110.5	
Zn	66	103	He	41.119	0.557	68483	0.07	40	102.8	89.5	110.5	
As	75	103	He	39.716	0.668	41605	0.24	40	99.3	89.5	110.5	
Se	78	103	He	42.068	1.056	4689	0.72	40	105.2	89.5	110.5	
Sr	88	103	He	40.385	1.039	342529	0.55	40	101.0	89.5	110.5	
Mo	95	103	He	42.603	1.507	164192	1.02	40	106.5	89.5	110.5	
Ag	107	103	He	41.029	0.289	543038	0.26	40	102.6	89.5	110.5	
Cd	111	103	He	40.453	1.072	94346	1.20	40	101.1	89.5	110.5	
Sn	118	115	He	40.657	1.079	228942	1.44	40	101.6	89.5	110.5	
Sb	123	115	He	43.806	1.643	227377	1.99	40	109.5	89.5	110.5	
Ba	137	115	He	40.105	0.393	102127	0.38	40	100.3	89.5	110.5	
W	182	209	He	40.649	0.952	568386	1.13	40	101.6	89.5	110.5	
Tl	205	165	He	39.187	1.277	1386061	1.22	40	98.0	89.5	110.5	
Pb	208	209	He	39.641	1.401	1900915	1.28	40	99.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1591870	1.37	1631381	97.58	30	120	
Sc	45	He	813295	1.95	829696	98.02	30	120	
Sc	45	NoGas	6292310	1.09	6325638	99.47	30	120	
Rh	103	He	2232877	0.55	2345543	95.20	30	120	
In	115	He	1344152	0.38	1419467	94.69	30	120	
Tb	159	He	3806803	1.92	3888262	97.91	30	120	
Ho	165	He	3853877	0.16	3932562	98.00	30	120	
Bi	209	He	2723051	0.66	2874805	94.72	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:26:10-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.029	20.7	21	9.1	20	
W	182	1	He	1.241	13.8	21845	10.8	10	
Ca	44	1	He	-9.642	-20.9	480	21.1	1000	
Na	23	1	He	3.422	19.7	28015	2.8	400	
Mg	24	1	He	2.011	34.1	2893	21.6	1000	
K	39	1	He	4.594	28.0	40936	2.4	1000	
V	51	1	He	0.039	94.2	376	69.2	2	
Cr	52	1	He	-0.004	-280.4	2440	2.3	2	
Mn	55	1	He	-0.122	-7.9	378	16.3	2	
Fe	56	1	He	19.417	24.3	157605	22.3	50	
Co	59	1	He	0.003	103.4	82	43.4	1	
Ni	60	1	He	-0.001	-647.6	126	22.1	2	
Cu	63	1	He	-0.072	-7.4	1113	4.0	2	
Zn	66	1	He	-0.315	-15.3	1443	4.5	20	
As	75	1	He	0.022	87.8	188	10.0	2	
Se	78	1	He	0.089	8.1	63	2.6	2	
Sr	88	1	He	0.013	22.7	236	11.5	10	
Mo	95	1	He	0.911	16.4	3769	16.7	2	
Ag	107	1	He	0.010	14.6	147	14.9	0.2	
Cd	111	1	He	0.044	53.3	1345	2.8	0.2	
Ba	137	1	He	-0.007	-36.3	81	8.6	5	
Sn	118	1	He	0.360	14.4	3226	9.7	10	
Tl	205	1	He	0.044	30.2	1647	28.8	0.5	
Pb	208	1	He	0.010	22.6	1331	8.2	1	
Al	27	1	He	1.396	26.9	3306	4.9	50	
Sb	123	1	He	0.522	7.3	3474	6.3	1	
B	11	2	NoGas	0.981	9.6	13376	2.7	20	
Be	9	2	NoGas	0.007	176.7	78	75.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1631422	0.57	1631381	100.00	30	120	
Sc	45	1	He	796577	1.31	829696	96.01	30	120	
Sc	45	2	NoGas	6332474	0.34	6325638	100.11	30	120	
Rh	103	1	He	2358192	1.43	2345543	100.54	30	120	
In	115	1	He	1411905	0.37	1419467	99.47	30	120	

Tb	159	1	He	3887187	0.02	3888262	99.97	30	120	
Ho	165	1	He	3914967	0.86	3932562	99.55	30	120	
Bi	209	1	He	2863182	0.75	2874805	99.60	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1912660
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:30:04-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.044	1.044	4.154	5012	5.57	1	104.4	69.5	130.5	
B	11	2	NoGas	23.577	23.577	5.104	85976	2.56	20	117.9	69.5	130.5	
Na	23	1	He	1060.776	1060.776	2.000	1948698	1.12	1000	106.1	69.5	130.5	
Mg	24	1	He	1077.817	1077.817	0.945	1113136	1.71	1000	107.8	69.5	130.5	
Al	27	1	He	48.108	48.108	1.960	30838	0.13	50	96.2	69.5	130.5	
K	39	1	He	1075.149	1075.149	0.905	1083552	1.05	1000	107.5	69.5	130.5	
Ca	44	1	He	1018.635	1018.635	1.033	55324	1.77	1000	101.9	69.5	130.5	
Ti	47	1	He	10.758	10.758	4.676	3245	3.49	10	107.6	69.5	130.5	
V	51	1	He	5.329	5.329	1.886	39693	1.08	5	106.6	69.5	130.5	
Cr	52	1	He	2.125	2.125	2.771	21599	1.26	2	106.2	69.5	130.5	
Mn	55	1	He	5.209	5.209	1.204	37808	1.32	5	104.2	69.5	130.5	
Fe	56	1	He	108.979	108.979	0.564	922254	1.52	100	109.0	69.5	130.5	
Co	59	1	He	1.006	1.006	2.830	13385	2.63	1	100.6	69.5	130.5	
Ni	60	1	He	2.057	2.057	3.238	6891	3.22	2	102.9	69.5	130.5	
Cu	63	1	He	2.013	2.013	1.822	19151	1.52	2	100.6	69.5	130.5	
Zn	66	1	He	20.587	20.587	1.916	37955	2.01	20	102.9	69.5	130.5	
As	75	1	He	5.113	5.113	0.636	5917	0.83	5	102.3	69.5	130.5	
Se	78	1	He	5.261	5.261	2.021	678	1.96	5	105.2	69.5	130.5	
Sr	88	1	He	9.637	9.637	0.665	88162	0.55	10	96.4	69.5	130.5	
Mo	95	1	He	10.468	10.468	1.161	43518	1.07	10	104.7	69.5	130.5	
Ag	107	1	He	1.033	1.033	0.742	14738	0.91	1	103.3	69.5	130.5	
Cd	111	1	He	1.042	1.042	0.157	3850	0.28	1	104.2	69.5	130.5	
Sn	118	1	He	10.088	10.088	0.541	61370	0.85	10	100.9	69.5	130.5	
Sb	123	1	He	2.203	2.203	1.821	12797	1.19	2	110.2	69.5	130.5	
Ba	137	1	He	4.941	4.941	1.793	13493	1.38	5	98.8	69.5	130.5	
W	182	1	He	10.180	10.180	2.063	152706	2.18	10	101.8	69.5	130.5	
Tl	205	1	He	2.046	2.046	1.873	74530	1.26	2	102.3	69.5	130.5	
Pb	208	1	He	1.044	1.044	3.177	53518	1.96	1	104.4	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1506387	2.35	1631381	92.34	30	120	
Sc	45	1	He	848301	1.92	829696	102.24	30	120	
Sc	45	2	NoGas	5800348	2.08	6325638	91.70	30	120	
Rh	103	1	He	2405851	0.22	2345543	102.57	30	120	
In	115	1	He	1432276	1.12	1419467	100.90	30	120	
Tb	159	1	He	3907047	1.39	3888262	100.48	30	120	
Ho	165	1	He	3966512	0.80	3932562	100.86	30	120	
Bi	209	1	He	2868080	1.15	2874805	99.77	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	ZZZZ
Data File Name	014_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:21:13-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	-0.007	-19.2	15	86.6	1	
B	11	45	2	NoGas	-1.703	-1.1	7083	1.1	20	
Na	23	45	1	He	-5.719	-48.6	16130	5.3	400	
Mg	24	45	1	He	0.504	74.6	1926	13.0	1000	
Al	27	45	1	He	8.258	64.7	9096	13.1	50	
K	39	45	1	He	-23.759	-24.6	19703	14.3	1000	
Ca	44	45	1	He	-15.961	-9.0	213	36.2	1000	
Ti	47	45	1	He	16.237	140.5	4501	120.8	20	
V	51	45	1	He	0.065	91.7	704	61.9	2	
Cr	52	45	1	He	-0.171	-48.5	1249	27.1	2	
Mn	55	45	1	He	-0.151	-7.2	243	6.3	2	
Fe	56	45	1	He	2.215	44.8	28785	23.1	50	
Co	59	103	1	He	-0.002	-74.8	58	54.8	1	
Ni	60	103	1	He	-0.031	-5.7	72	2.7	2	
Cu	63	103	1	He	-0.157	-7.7	963	8.2	2	
Zn	66	103	1	He	-1.090	-2.1	290	18.9	20	
As	75	103	1	He	-0.099	-15.8	134	18.3	2	
Se	78	103	1	He	-0.232	-10.8	63	11.9	2	
Sr	88	103	1	He	-0.001	-775.1	257	50.9	10	
Mo	95	103	1	He	0.033	39.6	506	38.1	2	
Ag	107	103	1	He	0.001	47.9	33	36.1	0.2	
Cd	111	103	1	He	0.053	8.0	3436	15.6	0.2	
Sn	118	115	1	He	-0.044	-109.0	2208	12.8	10	
Sb	123	115	1	He	-0.054	-16.9	914	13.8	1	
Ba	137	115	1	He	-0.002	-669.1	239	28.6	5	
W	182	209	1	He	1.124	47.9	36712	5.4	10	
Tl	205	165	1	He	-0.001	-13.4	58	8.8	0.5	
Pb	208	209	1	He	-0.003	-138.1	1203	6.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3126201	7.17	1631381	191.63	30	120	ISTD Failed
Sc	45	1	He	1132578	34.83	829696	136.51	30	120	ISTD Failed
Sc	45	2	NoGas	11780520	2.46	6325638	186.23	30	120	ISTD Failed
Rh	103	1	He	5927199	16.20	2345543	252.70	30	120	ISTD Failed
In	115	1	He	3796197	17.17	1419467	267.44	30	120	ISTD Failed
Tb	159	1	He	10072430	17.72	3888262	259.05	30	120	ISTD Failed
Ho	165	1	He	10325492	17.55	3932562	262.56	30	120	ISTD Failed
Bi	209	1	He	5693580	32.63	2874805	198.05	30	120	ISTD Failed

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:33:55-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.037	43.9	189	35.8	1	
B	11	45	2	NoGas	0.854	9.8	11130	2.3	20	
Na	23	45	1	He	46893.482	5.5	77934886	1.5	75200	
Mg	24	45	1	He	46829.550	4.5	44252768	2.5	75200	
Al	27	45	1	He	44548.464	4.6	23863820	2.4	75200	
K	39	45	1	He	47217.109	6.1	42012656	0.9	75200	
Ca	44	45	1	He	48546.792	5.1	2370274	2.0	75200	
Ti	47	45	1	He	953.546	5.4	262293	1.9	1505	
V	51	45	1	He	0.010	753.6	184	302.8	4	
Cr	52	45	1	He	0.640	7.1	7645	2.7	4	
Mn	55	45	1	He	0.324	12.6	3231	1.2	4	
Fe	56	45	1	He	47084.230	5.6	362884439	1.6	75200	
Co	59	103	1	He	0.032	8.2	400	6.8	2	
Ni	60	103	1	He	0.111	13.0	419	7.7	4	
Cu	63	103	1	He	0.233	9.9	3196	5.7	4	
Zn	66	103	1	He	-0.074	-104.6	1603	6.7	10	
As	75	103	1	He	0.096	15.6	233	6.3	4	
Se	78	103	1	He	0.186	31.5	64	7.8	4	
Sr	88	103	1	He	0.338	1.3	2712	1.6	20	
Mo	95	103	1	He	1024.383	3.9	3598715	2.2	1505	
Ag	107	103	1	He	0.015	11.6	190	9.3	1	
Cd	111	103	1	He	-0.009	-294.0	1050	6.3	1	
Sn	118	115	1	He	0.376	7.5	2934	5.6	20	
Sb	123	115	1	He	0.275	3.4	1882	2.2	1	
Ba	137	115	1	He	0.033	16.9	166	8.4	2	
W	182	209	1	He	0.557	6.7	10704	5.8	20	
Tl	205	165	1	He	0.007	9.5	289	7.7	1	
Pb	208	209	1	He	0.588	1.0	27487	1.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1323780	1.30	1631381	81.14	30	120	
Sc	45	1	He	778498	7.08	829696	93.83	30	120	
Sc	45	2	NoGas	5452568	0.27	6325638	86.20	30	120	
Rh	103	1	He	2036887	1.94	2345543	86.84	30	120	
In	115	1	He	1246815	0.70	1419467	87.84	30	120	
Tb	159	1	He	3610330	0.91	3888262	92.85	30	120	
Ho	165	1	He	3689701	0.43	3932562	93.82	30	120	
Bi	209	1	He	2584461	1.52	2874805	89.90	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:37:43-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	103.161	1.732	422098	0.63	100	103.2	79.5	120.5	
B	11	45	2	NoGas	101.808	0.539	317813	0.31	100	101.8	79.5	120.5	
Na	23	45	1	He	48905.835	3.174	76203843	1.25	50000	97.8	79.5	120.5	
Mg	24	45	1	He	49498.614	2.387	43844959	2.01	50000	99.0	79.5	120.5	
Al	27	45	1	He	46451.633	2.726	23322202	1.43	50000	92.9	79.5	120.5	
K	39	45	1	He	49332.806	4.159	41155260	1.17	50000	98.7	79.5	120.5	
Ca	44	45	1	He	49399.110	3.186	2260798	1.04	50000	98.8	79.5	120.5	
Ti	47	45	1	He	1090.099	3.420	281091	0.71	1100	99.1	79.5	120.5	
V	51	45	1	He	99.787	2.751	636425	1.34	100	99.8	79.5	120.5	
Cr	52	45	1	He	101.461	3.280	779782	0.83	100	101.5	79.5	120.5	
Mn	55	45	1	He	99.986	3.161	603232	0.95	100	100.0	79.5	120.5	
Fe	56	45	1	He	49769.280	3.090	359642635	1.02	50000	99.5	79.5	120.5	
Co	59	103	1	He	99.532	0.565	1097986	0.97	100	99.5	79.5	120.5	
Ni	60	103	1	He	98.338	0.839	269079	1.14	100	98.3	79.5	120.5	
Cu	63	103	1	He	98.361	0.856	709028	1.48	100	98.4	79.5	120.5	
Zn	66	103	1	He	98.303	0.399	144510	0.98	100	98.3	79.5	120.5	
As	75	103	1	He	100.199	0.927	93936	1.13	100	100.2	79.5	120.5	
Se	78	103	1	He	101.968	1.030	10132	1.24	100	102.0	79.5	120.5	
Sr	88	103	1	He	99.168	0.926	754330	1.54	100	99.2	79.5	120.5	
Mo	95	103	1	He	1150.327	2.590	3974943	1.95	1100	104.6	79.5	120.5	
Ag	107	103	1	He	99.725	0.349	1183901	0.84	100	99.7	79.5	120.5	
Cd	111	103	1	He	99.777	0.637	207181	0.95	100	99.8	79.5	120.5	
Sn	118	115	1	He	100.220	0.655	515295	0.25	100	100.2	79.5	120.5	
Sb	123	115	1	He	107.017	0.458	507806	0.96	100	107.0	79.5	120.5	
Ba	137	115	1	He	101.398	1.341	236308	1.85	100	101.4	79.5	120.5	
W	182	209	1	He	104.183	1.103	1371723	1.66	100	104.2	79.5	120.5	
Tl	205	165	1	He	100.889	0.814	3374765	0.68	100	100.9	79.5	120.5	
Pb	208	209	1	He	100.721	1.389	4563854	0.96	100	100.7	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1294518	1.11	1631381	79.35	30	120	
Sc	45	1	He	728623	4.12	829696	87.82	30	120	
Sc	45	2	NoGas	5398752	0.32	6325638	85.35	30	120	
Rh	103	1	He	2002767	0.64	2345543	85.39	30	120	
In	115	1	He	1230771	0.52	1419467	86.71	30	120	
Tb	159	1	He	3577698	1.08	3888262	92.01	30	120	
Ho	165	1	He	3644844	0.26	3932562	92.68	30	120	
Bi	209	1	He	2573850	1.36	2874805	89.53	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:41:28-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.358	1.596	216344	1.21	50	96.7	89.5	110.5	
B	11	45	2	NoGas	50.520	2.049	173149	1.02	50	101.0	89.5	110.5	
Na	23	45	1	He	24518.014	1.488	40303200	0.51	25000	98.1	89.5	110.5	
Mg	24	45	1	He	24629.636	1.834	23003582	0.16	25000	98.5	89.5	110.5	
Al	27	45	1	He	248.890	2.562	134199	0.56	250	99.6	89.5	110.5	
K	39	45	1	He	24742.369	2.831	21789028	1.00	25000	99.0	89.5	110.5	
Ca	44	45	1	He	24690.607	2.296	1192142	0.41	25000	98.8	89.5	110.5	
Ti	47	45	1	He	52.536	1.766	14300	0.55	50	105.1	89.5	110.5	
V	51	45	1	He	49.902	1.809	335673	0.18	50	99.8	89.5	110.5	
Cr	52	45	1	He	50.186	1.313	408038	0.94	50	100.4	89.5	110.5	
Mn	55	45	1	He	255.723	1.482	1625502	1.07	250	102.3	89.5	110.5	
Fe	56	45	1	He	12527.034	2.229	95466696	0.27	12500	100.2	89.5	110.5	
Co	59	103	1	He	47.839	1.598	577362	0.56	50	95.7	89.5	110.5	
Ni	60	103	1	He	47.427	1.091	142037	0.25	50	94.9	89.5	110.5	
Cu	63	103	1	He	47.975	1.729	379140	0.99	50	95.9	89.5	110.5	
Zn	66	103	1	He	48.175	0.783	78420	0.69	50	96.3	89.5	110.5	
As	75	103	1	He	47.961	1.698	49269	0.56	50	95.9	89.5	110.5	
Se	78	103	1	He	49.101	0.920	5363	0.38	50	98.2	89.5	110.5	
Sr	88	103	1	He	47.867	1.854	398367	0.84	50	95.7	89.5	110.5	
Mo	95	103	1	He	75.599	8.576	285717	7.42	50	151.2	89.5	110.5	CCV Failed
Ag	107	103	1	He	49.325	2.369	640565	1.22	50	98.6	89.5	110.5	
Cd	111	103	1	He	49.108	1.709	112137	0.55	50	98.2	89.5	110.5	
Sn	118	115	1	He	50.441	0.828	273517	0.57	50	100.9	89.5	110.5	
Sb	123	115	1	He	52.224	0.532	261149	0.35	50	104.4	89.5	110.5	
Ba	137	115	1	He	50.111	1.482	122973	1.26	50	100.2	89.5	110.5	
W	182	209	1	He	52.203	2.192	725299	0.40	50	104.4	89.5	110.5	
Tl	205	165	1	He	51.105	1.941	1794388	1.71	50	102.2	89.5	110.5	
Pb	208	209	1	He	48.229	2.137	2301107	0.87	50	96.5	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1415190	0.55	1631381	86.75	30	120	
Sc	45	1	He	767969	1.98	829696	92.56	30	120	
Sc	45	2	NoGas	5772792	1.15	6325638	91.26	30	120	
Rh	103	1	He	2191270	1.14	2345543	93.42	30	120	
In	115	1	He	1295591	0.26	1419467	91.27	30	120	
Tb	159	1	He	3757351	0.82	3888262	96.63	30	120	
Ho	165	1	He	3825930	0.84	3932562	97.29	30	120	
Bi	209	1	He	2710286	2.25	2874805	94.28	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:45:18-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.027	6.4	167	6.7	1	
B	11	45	2	NoGas	1.505	6.0	14395	2.5	20	
Na	23	45	1	He	8.168	29.2	33728	9.4	400	
Mg	24	45	1	He	3.010	25.2	3608	17.2	1000	
Al	27	45	1	He	1.215	17.0	2999	1.6	50	
K	39	45	1	He	7.613	19.0	40854	1.2	1000	
Ca	44	45	1	He	2.138	73.0	1001	9.4	1000	
Ti	47	45	1	He	0.348	35.4	103	29.6	20	
V	51	45	1	He	0.007	1018.6	138	346.8	2	
Cr	52	45	1	He	0.007	171.6	2362	2.9	2	
Mn	55	45	1	He	0.036	17.2	1329	3.3	2	
Fe	56	45	1	He	28.563	18.9	214873	16.8	50	
Co	59	103	1	He	0.004	32.7	94	16.3	1	
Ni	60	103	1	He	0.063	149.5	322	91.8	2	
Cu	63	103	1	He	0.024	33.5	1863	3.5	2	
Zn	66	103	1	He	-0.094	-82.7	1761	8.0	20	
As	75	103	1	He	0.005	206.3	163	5.5	2	
Se	78	103	1	He	0.061	41.0	57	5.4	2	
Sr	88	103	1	He	0.002	187.8	131	24.4	10	
Mo	95	103	1	He	5.418	4.8	21343	4.8	2	CCB Failed
Ag	107	103	1	He	0.025	28.0	341	27.0	0.2	
Cd	111	103	1	He	0.048	13.0	1309	1.6	0.2	
Sn	118	115	1	He	0.480	6.3	3797	3.8	10	
Sb	123	115	1	He	0.495	2.3	3207	1.1	1	
Ba	137	115	1	He	0.008	79.3	116	13.0	5	
W	182	209	1	He	1.387	12.3	23559	11.2	10	
Tl	205	165	1	He	0.048	14.0	1786	14.7	0.5	
Pb	208	209	1	He	0.036	9.3	2585	7.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1481255	1.83	1631381	90.80	30	120	
Sc	45	1	He	745079	2.01	829696	89.80	30	120	
Sc	45	2	NoGas	5979116	0.65	6325638	94.52	30	120	
Rh	103	1	He	2276868	0.78	2345543	97.07	30	120	
In	115	1	He	1361849	0.76	1419467	95.94	30	120	
Tb	159	1	He	3830821	1.31	3888262	98.52	30	120	
Ho	165	1	He	3892891	1.66	3932562	98.99	30	120	
Bi	209	1	He	2811174	0.82	2874805	97.79	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-175943/1-a
Data File Name	015_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:26:21-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.016	95.0	111	62.5	1	
B	11	45	2	NoGas	3.067	2.3	18032	1.7	20	
Na	23	45	1	He	88.554	5.7	167976	1.2	400	
Mg	24	45	1	He	54.100	4.5	51796	2.2	1000	
Al	27	45	1	He	3.203	12.9	4172	1.8	50	
K	39	45	1	He	23.669	14.4	56596	0.5	1000	
Ca	44	45	1	He	209.525	6.1	11107	0.2	1000	
Ti	47	45	1	He	0.141	54.4	51	39.9	20	
V	51	45	1	He	0.183	31.4	1343	31.7	2	
Cr	52	45	1	He	0.660	10.8	7762	2.9	2	
Mn	55	45	1	He	0.197	6.2	2405	3.8	2	
Fe	56	45	1	He	11.753	4.6	94453	1.5	50	
Co	59	103	1	He	0.005	17.8	109	11.6	1	
Ni	60	103	1	He	0.133	22.4	514	18.2	2	
Cu	63	103	1	He	0.904	4.4	8660	3.0	2	
Zn	66	103	1	He	11.708	3.1	20316	1.7	20	
As	75	103	1	He	0.103	14.3	256	4.9	2	
Se	78	103	1	He	0.072	108.6	56	15.0	2	
Sr	88	103	1	He	0.408	2.3	3484	3.0	10	
Mo	95	103	1	He	0.192	2.0	778	2.9	2	
Ag	107	103	1	He	0.013	22.8	169	21.7	0.2	
Cd	111	103	1	He	0.053	21.6	1262	2.1	0.2	
Sn	118	115	1	He	0.773	11.8	5212	9.0	10	
Sb	123	115	1	He	1.316	11.7	7178	11.2	1	Blank Failed
Ba	137	115	1	He	0.749	2.9	1935	3.2	5	
W	182	209	1	He	0.029	61.2	4434	2.3	10	
Tl	205	165	1	He	0.001	102.8	91	25.7	0.5	
Pb	208	209	1	He	0.130	2.8	7886	3.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1406462	0.40	1631381	86.21	30	120	
Sc	45	1	He	774342	5.91	829696	93.33	30	120	
Sc	45	2	NoGas	5485822	0.90	6325638	86.72	30	120	
Rh	103	1	He	2176808	1.15	2345543	92.81	30	120	
In	115	1	He	1300688	0.47	1419467	91.63	30	120	
Tb	159	1	He	3648202	0.34	3888262	93.83	30	120	
Ho	165	1	He	3744596	0.88	3932562	95.22	30	120	
Bi	209	1	He	3068742	4.50	2874805	106.75	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-175943/3-a
Data File Name	016_LCS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:30:11-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1013.639	1013.639	2.624	4452594	2.11	1000	101.4	79.5	120.5	
B	11	2	NoGas	119.383	119.383	1.504	381188	0.23	100	119.4	79.5	120.5	
Na	23	1	He	10345.742	10345.742	2.390	16357652	0.77	10000	103.5	79.5	120.5	
Mg	24	1	He	10346.264	10346.264	2.836	9287772	0.02	10000	103.5	79.5	120.5	
Al	27	1	He	9552.988	9552.988	3.327	4862619	1.01	10000	95.5	79.5	120.5	
K	39	1	He	10098.744	10098.744	2.945	8568512	0.65	10000	101.0	79.5	120.5	
Ca	44	1	He	9522.837	9522.837	2.550	442515	0.90	10000	95.2	79.5	120.5	
Ti	47	1	He	100.258	100.258	4.079	26216	2.62	100	100.3	79.5	120.5	
V	51	1	He	985.194	985.194	2.932	6367348	0.23	1000	98.5	79.5	120.5	
Cr	52	1	He	1012.845	1012.845	3.248	7869424	0.63	1000	101.3	79.5	120.5	
Mn	55	1	He	1007.883	1007.883	2.438	6154727	1.73	1000	100.8	79.5	120.5	
Fe	56	1	He	10473.443	10473.443	2.174	76730479	1.50	10000	104.7	79.5	120.5	
Co	59	1	He	975.095	975.095	1.638	11418348	0.86	1000	97.5	79.5	120.5	
Ni	60	1	He	995.251	995.251	1.611	2889844	1.10	1000	99.5	79.5	120.5	
Cu	63	1	He	1000.862	1000.862	0.273	7644715	0.56	1000	100.1	79.5	120.5	
Zn	66	1	He	1014.516	1014.516	0.419	1566622	0.94	1000	101.5	79.5	120.5	
As	75	1	He	947.964	947.964	0.923	942194	0.39	1000	94.8	79.5	120.5	
Se	78	1	He	980.210	980.210	0.841	102989	0.52	1000	98.0	79.5	120.5	
Sr	88	1	He	959.702	959.702	1.198	7748331	0.53	1000	96.0	79.5	120.5	
Mo	95	1	He	107.642	107.642	0.536	394974	0.88	100	107.6	79.5	120.5	
Ag	107	1	He	103.649	103.649	1.570	1306210	0.75	100	103.6	79.5	120.5	
Cd	111	1	He	1042.679	1042.679	2.068	2287698	1.30	1000	104.3	79.5	120.5	
Sn	118	1	He	1109.838	1109.838	0.787	5623604	0.84	1000	111.0	79.5	120.5	
Sb	123	1	He	109.180	109.180	0.435	511396	0.40	100	109.2	79.5	120.5	
Ba	137	1	He	1084.923	1084.923	0.361	2494981	0.30	1000	108.5	79.5	120.5	
W	182	1	He	104.024	104.024	1.377	1459848	1.25	100	104.0	79.5	120.5	
Tl	205	1	He	252.177	252.177	1.028	8629754	1.10	250	100.9	79.5	120.5	
Pb	208	1	He	975.992	975.992	0.650	47133830	0.24	1000	97.6	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1389816	0.53	1631381	85.19	30	120	
Sc	45	1	He	738317	2.90	829696	88.99	30	120	
Sc	45	2	NoGas	5544472	1.57	6325638	87.65	30	120	
Rh	103	1	He	2126213	0.83	2345543	90.65	30	120	
In	115	1	He	1214958	0.06	1419467	85.59	30	120	
Tb	159	1	He	3676347	1.35	3888262	94.55	30	120	
Ho	165	1	He	3728817	0.34	3932562	94.82	30	120	
Bi	209	1	He	2743402	0.54	2874805	95.43	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	Xmb 240-177133/1-a@2
Data File Name	017_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:33:41-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.162	13.0	752	11.9	1	
B	11	45	2	NoGas	1.573	8.6	13598	1.9	20	
Na	23	45	1	He	38.258	2.9	81383	2.6	400	
Mg	24	45	1	He	30.352	4.3	28267	4.1	1000	
Al	27	45	1	He	3.956	16.1	4392	8.9	50	
K	39	45	1	He	22.089	6.8	52970	1.2	1000	
Ca	44	45	1	He	86.001	6.1	4903	4.2	1000	
Ti	47	45	1	He	0.178	30.8	59	26.1	20	
V	51	45	1	He	0.316	53.8	2158	53.0	2	
Cr	52	45	1	He	0.928	1.6	9546	2.2	2	
Mn	55	45	1	He	0.263	21.4	2717	14.2	2	
Fe	56	45	1	He	21.119	10.3	159733	11.5	50	
Co	59	103	1	He	0.096	26.4	1223	25.1	1	
Ni	60	103	1	He	0.244	26.9	863	22.5	2	
Cu	63	103	1	He	1.629	8.2	14641	7.1	2	
Zn	66	103	1	He	2.831	4.7	6439	3.0	20	
As	75	103	1	He	0.780	15.5	966	12.5	2	
Se	78	103	1	He	0.784	22.8	135	14.0	2	
Sr	88	103	1	He	0.291	13.2	2571	12.1	10	
Mo	95	103	1	He	1.087	15.0	4227	14.3	2	
Ag	107	103	1	He	0.025	22.0	338	21.1	0.2	
Cd	111	103	1	He	0.106	62.6	1411	10.3	0.2	
Sn	118	115	1	He	18.814	4.0	101761	4.0	10	Blank Failed
Sb	123	115	1	He	0.625	6.7	3669	5.7	1	
Ba	137	115	1	He	1.042	5.2	2624	5.1	5	
W	182	209	1	He	1.399	21.1	23711	17.7	10	
Tl	205	165	1	He	0.186	43.3	6616	43.9	0.5	
Pb	208	209	1	He	0.423	7.5	21722	7.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1393807	3.33	1631381	85.44	30	120	
Sc	45	1	He	741712	1.48	829696	89.40	30	120	
Sc	45	2	NoGas	5560954	1.24	6325638	87.91	30	120	
Rh	103	1	He	2224484	0.53	2345543	94.84	30	120	
In	115	1	He	1284255	0.30	1419467	90.47	30	120	
Tb	159	1	He	3759152	0.92	3888262	96.68	30	120	
Ho	165	1	He	3821187	1.62	3932562	97.17	30	120	
Bi	209	1	He	2811009	0.49	2874805	97.78	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	Xlcs 240-177133/2-a@2
Data File Name	018LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:37:31-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	456.764	456.764	2.750	2034483	0.92	500	91.4	78.6	110.5	
B	11	2	NoGas	56.335	56.335	1.221	186710	0.65	50	112.7	79.5	120.5	
Na	23	1	He	5063.063	5063.063	3.448	8158114	1.55	5000	101.3	79.5	120.5	
Mg	24	1	He	4976.818	4976.818	1.594	4549038	0.45	5000	99.5	79.5	120.5	
Al	27	1	He	4638.868	4638.868	1.286	2405536	0.92	5000	92.8	79.5	120.5	
K	39	1	He	4976.132	4976.132	0.700	4316667	1.24	5000	99.5	79.5	120.5	
Ca	44	1	He	4715.233	4715.233	1.691	223521	0.79	5000	94.3	79.5	120.5	
Ti	47	1	He	48.104	48.104	3.501	12811	2.36	50	96.2	79.5	120.5	
V	51	1	He	467.736	467.736	2.787	3077555	1.60	500	93.5	71.5	110.5	
Cr	52	1	He	479.955	479.955	1.623	3798150	0.78	500	96.0	69.5	110.5	
Mn	55	1	He	482.743	482.743	1.491	3001490	1.05	500	96.5	79.5	120.5	
Fe	56	1	He	5006.376	5006.376	2.407	37333256	0.61	5000	100.1	79.5	120.5	
Co	59	1	He	445.210	445.210	1.361	5400212	0.92	500	89.0	73.9	110.5	
Ni	60	1	He	445.863	445.863	0.487	1341088	0.34	500	89.2	74.9	110.5	
Cu	63	1	He	461.430	461.430	1.015	3651350	0.34	500	92.3	72.6	110.5	
Zn	66	1	He	420.210	420.210	0.775	673176	0.33	500	84.0	71.5	113.4	
As	75	1	He	402.838	402.838	1.257	414799	0.58	500	80.6	73.4	110.5	
Se	78	1	He	393.234	393.234	0.721	42825	0.08	500	78.6	64.6	110.5	
Sr	88	1	He	448.344	448.344	0.600	3749718	1.25	500	89.7	79.5	120.5	
Mo	95	1	He	51.247	51.247	1.475	194797	1.35	50	102.5	29.5	140.5	
Ag	107	1	He	48.717	48.717	0.893	635945	0.22	50	97.4	59.5	114.5	
Cd	111	1	He	439.099	439.099	0.604	998640	0.17	500	87.8	73.5	110.5	
Sn	118	1	He	542.177	542.177	1.365	2861779	1.37	500	108.4	79.5	120.5	
Sb	123	1	He	49.208	49.208	0.991	240365	0.79	50	98.4	67.5	113.4	
Ba	137	1	He	462.985	462.985	0.041	1108972	0.25	500	92.6	69.5	110.5	
W	182	1	He	50.492	50.492	1.682	707162	0.36	50	101.0	74.6	125.4	
Tl	205	1	He	116.886	116.886	2.531	4150205	1.58	125	93.5	70.6	110.5	
Pb	208	1	He	465.853	465.853	1.444	22395183	0.28	500	93.2	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1409591	1.84	1631381	86.40	30	120	
Sc	45	1	He	751430	1.94	829696	90.57	30	120	
Sc	45	2	NoGas	5612046	0.95	6325638	88.72	30	120	
Rh	103	1	He	2202307	0.68	2345543	93.89	30	120	
In	115	1	He	1265394	0.21	1419467	89.15	30	120	
Tb	159	1	He	3748886	0.94	3888262	96.42	30	120	
Ho	165	1	He	3869457	0.94	3932562	98.40	30	120	
Bi	209	1	He	2731256	1.70	2874805	95.01	30	120	

Sample Report

Sample Table

Sample Name	190-7094-a-1-a@2
Data File Name	019SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:41:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.268	0.268	7.98	1282	0.02	10000	
B	11	45	2	NoGas	49.432	49.432	1.16	168250	0.03	300	
Na	23	45	1	He	1925.432	1925.432	2.31	3185150	0.06	500000	
Mg	24	45	1	He	6708.117	6708.117	0.88	6268331	0.11	500000	
Al	27	45	1	He	5360.238	5360.238	1.14	2841175	0.19	200000	
K	39	45	1	He	1324.613	1324.613	1.77	1200481	0.11	500000	
Ca	44	45	1	He	45807.079	45807.079	1.89	2211668	2.07	500000	
Ti	47	45	1	He	89.982	89.982	0.28	24497	0.37	2500	
V	51	45	1	He	11.018	11.018	7.70	74231	0.01	10000	
Cr	52	45	1	He	109.857	109.857	2.02	890462	0.01	10000	
Mn	55	45	1	He	1823.433	1823.433	2.84	11583633	0.02	10000	
Fe	56	45	1	He	98429.289	98429.289	2.64	750203970	0.01	200000	
Co	59	103	1	He	10.999	10.999	3.47	135161	0.01	10000	
Ni	60	103	1	He	46.265	46.265	1.66	141080	0.03	10000	
Cu	63	103	1	He	594.940	594.940	1.55	4768701	0.01	10000	
Zn	66	103	1	He	1288.447	1288.447	1.30	2087170	0.06	10000	
As	75	103	1	He	11.477	11.477	2.20	12123	0.09	10000	
Se	78	103	1	He	8.300	8.300	5.77	964	0.86	10000	
Sr	88	103	1	He	205.227	205.227	2.71	1738486	0.01	10000	
Mo	95	103	1	He	23.447	23.447	2.04	90311	0.03	2000	
Ag	107	103	1	He	10.554	10.554	2.45	139560	0.01	300	
Cd	111	103	1	He	2.154	2.154	4.30	6127	0.04	4000	
Sn	118	115	1	He	58.297	58.297	0.11	323368	0.02	2000	
Sb	123	115	1	He	4.309	4.309	1.19	22599	0.02	300	
Ba	137	115	1	He	756.101	756.101	0.72	1897706	0.04	10000	
W	182	209	1	He	15.268	15.268	1.40	340200	0.00	2500	
Tl	205	165	1	He	0.265	0.265	11.40	9596	0.00	5000	
Pb	208	209	1	He	36.777	36.777	1.32	2781815	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1465488	0.66	1631381	89.83	30	120	
Sc	45	1	He	768175	2.31	829696	92.59	30	120	
Sc	45	2	NoGas	5725723	0.67	6325638	90.52	30	120	
Rh	103	1	He	2231290	1.75	2345543	95.13	30	120	
In	115	1	He	1325967	0.16	1419467	93.41	30	120	
Tb	159	1	He	3807544	1.13	3888262	97.92	30	120	
Ho	165	1	He	3920832	0.88	3932562	99.70	30	120	
Bi	209	1	He	4295330	0.97	2874805	149.41	30	120	ISTD Failed

Sample Report

Sample Table

Sample Name	190-7094-a-2-a@2
Data File Name	020SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:44:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.158	0.158	21.15	748	0.02	10000	
B	11	45	2	NoGas	36.247	36.247	2.10	121228	0.03	300	
Na	23	45	1	He	1009.218	1009.218	2.20	1635103	0.06	500000	
Mg	24	45	1	He	3431.297	3431.297	2.55	3120725	0.11	500000	
Al	27	45	1	He	2698.646	2698.646	1.93	1393467	0.19	200000	
K	39	45	1	He	1392.571	1392.571	1.71	1226759	0.11	500000	
Ca	44	45	1	He	24634.463	24634.463	1.98	1158125	2.13	500000	
Ti	47	45	1	He	64.768	64.768	13.11	17146	0.38	2500	
V	51	45	1	He	5.791	5.791	7.73	38024	0.02	10000	
Cr	52	45	1	He	48.091	48.091	1.38	380787	0.01	10000	
Mn	55	45	1	He	747.144	747.144	2.59	4621032	0.02	10000	
Fe	56	45	1	He	44137.183	44137.183	2.18	327486814	0.01	200000	
Co	59	103	1	He	4.953	4.953	1.00	60656	0.01	10000	
Ni	60	103	1	He	23.004	23.004	1.08	69926	0.03	10000	
Cu	63	103	1	He	302.307	302.307	1.51	2414067	0.01	10000	
Zn	66	103	1	He	632.846	632.846	1.42	1021908	0.06	10000	
As	75	103	1	He	5.191	5.191	0.34	5546	0.09	10000	
Se	78	103	1	He	4.107	4.107	5.51	500	0.82	10000	
Sr	88	103	1	He	111.161	111.161	2.29	937941	0.01	10000	
Mo	95	103	1	He	11.919	11.919	1.53	45753	0.03	2000	
Ag	107	103	1	He	5.655	5.655	1.54	74478	0.01	300	
Cd	111	103	1	He	1.142	1.142	5.42	3784	0.03	4000	
Sn	118	115	1	He	33.643	33.643	1.24	183470	0.02	2000	
Sb	123	115	1	He	3.706	3.706	0.31	19149	0.02	300	
Ba	137	115	1	He	417.261	417.261	1.46	1027183	0.04	10000	
W	182	209	1	He	7.162	7.162	2.08	138022	0.01	2500	
Tl	205	165	1	He	0.109	0.109	3.72	3925	0.00	5000	
Pb	208	209	1	He	18.365	18.365	1.40	1180049	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1421156	0.47	1631381	87.11	30	120	
Sc	45	1	He	747740	2.17	829696	90.12	30	120	
Sc	45	2	NoGas	5519575	0.52	6325638	87.26	30	120	
Rh	103	1	He	2222081	1.19	2345543	94.74	30	120	
In	115	1	He	1300569	0.64	1419467	91.62	30	120	
Tb	159	1	He	3803185	0.41	3888262	97.81	30	120	
Ho	165	1	He	3849085	1.57	3932562	97.88	30	120	
Bi	209	1	He	3647159	0.80	2874805	126.87	30	120	ISTD Failed

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177401/1-a@2
Data File Name	022_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:24:57-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.013	50.5	111	30.0	1	
B	11	45	2	NoGas	0.230	56.2	10852	3.0	20	
Na	23	45	1	He	30.639	6.8	82577	0.8	400	
Mg	24	45	1	He	13.077	8.2	15103	3.7	1000	
Al	27	45	1	He	1.726	14.4	3876	5.4	50	
K	39	45	1	He	20.867	10.9	61929	1.8	1000	
Ca	44	45	1	He	41.718	3.0	3388	2.2	1000	
Ti	47	45	1	He	0.130	38.1	54	24.7	20	
V	51	45	1	He	0.123	34.1	1060	27.1	2	
Cr	52	45	1	He	0.834	8.0	10501	1.9	2	
Mn	55	45	1	He	0.153	7.5	2432	6.0	2	
Fe	56	45	1	He	10.398	3.6	96153	1.2	50	
Co	59	103	1	He	0.011	20.6	194	15.4	1	
Ni	60	103	1	He	0.171	7.6	696	6.1	2	
Cu	63	103	1	He	0.458	3.4	5740	2.4	2	
Zn	66	103	1	He	2.356	3.3	6158	2.4	20	
As	75	103	1	He	0.052	28.5	226	7.3	2	
Se	78	103	1	He	-0.046	-170.0	48	19.4	2	
Sr	88	103	1	He	0.157	7.6	1559	7.0	10	
Mo	95	103	1	He	0.077	25.3	386	20.9	2	
Ag	107	103	1	He	0.008	7.3	122	6.9	0.2	
Cd	111	103	1	He	0.047	55.1	1385	4.9	0.2	
Sn	118	115	1	He	16.231	1.5	98539	1.2	10	Blank Failed
Sb	123	115	1	He	0.093	15.5	1161	6.7	1	
Ba	137	115	1	He	1.517	2.9	4234	2.7	5	
W	182	209	1	He	0.086	17.2	5475	2.1	10	
Tl	205	165	1	He	0.003	26.2	164	15.7	0.5	
Pb	208	209	1	He	0.242	13.7	14351	15.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1629858	0.89	1631381	99.91	30	120	
Sc	45	1	He	885100	4.14	829696	106.68	30	120	
Sc	45	2	NoGas	6424383	1.33	6325638	101.56	30	120	
Rh	103	1	He	2414051	0.25	2345543	102.92	30	120	
In	115	1	He	1439274	0.25	1419467	101.40	30	120	
Tb	159	1	He	3940151	1.33	3888262	101.33	30	120	
Ho	165	1	He	3994213	1.04	3932562	101.57	30	120	
Bi	209	1	He	3150976	2.32	2874805	109.61	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177401/2-a@2
Data File Name	023LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:28:52-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	463.516	463.516	1.596	2322592	1.25	500	92.7	78.6	110.5	
B	11	2	NoGas	55.460	55.460	0.336	207191	1.00	50	110.9	79.5	120.5	
Na	23	1	He	4989.253	4989.253	2.413	8937747	0.73	5000	99.8	79.5	120.5	
Mg	24	1	He	4982.178	4982.178	2.063	5061737	0.42	5000	99.6	79.5	120.5	
Al	27	1	He	4687.675	4687.675	1.280	2701975	0.44	5000	93.8	79.5	120.5	
K	39	1	He	4941.028	4941.028	3.240	4763274	1.54	5000	98.8	79.5	120.5	
Ca	44	1	He	4673.358	4673.358	1.475	246263	0.21	5000	93.5	79.5	120.5	
Ti	47	1	He	47.662	47.662	2.053	14111	0.43	50	95.3	79.5	120.5	
V	51	1	He	472.124	472.124	1.701	3453380	0.89	500	94.4	71.5	110.5	
Cr	52	1	He	480.895	480.895	1.788	4230057	0.52	500	96.2	69.5	110.5	
Mn	55	1	He	485.540	485.540	1.572	3355569	0.46	500	97.1	79.5	120.5	
Fe	56	1	He	4913.927	4913.927	2.763	40731026	1.10	5000	98.3	79.5	120.5	
Co	59	1	He	467.543	467.543	1.004	5995689	1.13	500	93.5	73.9	110.5	
Ni	60	1	He	490.494	490.494	0.527	1559773	1.30	500	98.1	74.9	110.5	
Cu	63	1	He	487.569	487.569	1.308	4078704	0.71	500	97.5	72.6	110.5	
Zn	66	1	He	441.108	441.108	0.655	746998	0.99	500	88.2	71.5	113.4	
As	75	1	He	424.369	424.369	0.886	461961	0.44	500	84.9	73.4	110.5	
Se	78	1	He	415.230	415.230	1.305	47801	0.18	500	83.0	64.6	110.5	
Sr	88	1	He	463.180	463.180	0.885	4095453	1.68	500	92.6	79.5	120.5	
Mo	95	1	He	52.127	52.127	1.119	209467	0.26	50	104.3	29.5	140.5	
Ag	107	1	He	49.565	49.565	0.749	684043	0.98	50	99.1	59.5	114.5	
Cd	111	1	He	453.332	453.332	0.835	1089930	0.56	500	90.7	73.5	110.5	
Sn	118	1	He	539.487	539.487	0.626	3044403	1.14	500	107.9	79.5	120.5	
Sb	123	1	He	48.247	48.247	1.111	251967	0.92	50	96.5	67.5	113.4	
Ba	137	1	He	470.664	470.664	0.209	1205258	0.60	500	94.1	69.5	110.5	
W	182	1	He	49.703	49.703	0.743	731038	0.71	50	99.4	74.6	125.4	
Tl	205	1	He	120.251	120.251	0.507	4403117	1.15	125	96.2	70.6	110.5	
Pb	208	1	He	469.246	469.246	0.668	23687299	0.40	500	93.8	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1585354	1.16	1631381	97.18	30	120	
Sc	45	1	He	835243	1.68	829696	100.67	30	120	
Sc	45	2	NoGas	6321094	1.31	6325638	99.93	30	120	
Rh	103	1	He	2328356	1.31	2345543	99.27	30	120	
In	115	1	He	1352831	0.67	1419467	95.31	30	120	
Tb	159	1	He	3917170	1.17	3888262	100.74	30	120	
Ho	165	1	He	3989811	1.17	3932562	101.46	30	120	
Bi	209	1	He	2867534	0.50	2874805	99.75	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-f@2
Data File Name	024SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:32:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.526	0.526	9.48	2222	0.02	10000	
B	11	45	2	NoGas	11.445	11.445	4.59	73156	0.02	300	
Na	23	45	1	He	1293.587	1293.587	4.33	3844720	0.03	500000	
Mg	24	45	1	He	2039.979	2039.979	3.14	3416308	0.06	500000	
Al	27	45	1	He	12801.110	12801.110	2.00	12155610	0.11	200000	
K	39	45	1	He	163.404	163.404	3.13	321076	0.05	500000	
Ca	44	45	1	He	623507.521	623507.521	2.17	53938464	1.16	500000	>LDR
Ti	47	45	1	He	35258.350	35258.350	2.11	17192240	0.21	2500	>LDR
V	51	45	1	He	3898.312	3898.312	1.57	47021371	0.01	10000	
Cr	52	45	1	He	1461.633	1461.633	3.23	21175120	0.01	10000	
Mn	55	45	1	He	203.798	203.798	1.13	2324048	0.01	10000	
Fe	56	45	1	He	11486.654	11486.654	2.76	156951016	0.01	200000	
Co	59	103	1	He	3.082	3.082	4.76	31399	0.01	10000	
Ni	60	103	1	He	11.260	11.260	1.90	28502	0.04	10000	
Cu	63	103	1	He	15.723	15.723	2.74	105659	0.01	10000	
Zn	66	103	1	He	263.614	263.614	1.69	354734	0.07	10000	
As	75	103	1	He	5.779	5.779	2.00	5117	0.11	10000	
Se	78	103	1	He	2.401	2.401	9.61	260	0.92	10000	
Sr	88	103	1	He	21524.942	21524.942	1.50	150952465	0.01	10000	>LDR
Mo	95	103	1	He	8.038	8.038	2.11	25658	0.03	2000	
Ag	107	103	1	He	2.222	2.222	6.59	24295	0.01	300	
Cd	111	103	1	He	10.320	10.320	5.79	20611	0.05	4000	
Sn	118	115	1	He	72.947	72.947	0.99	351600	0.02	2000	
Sb	123	115	1	He	7.182	7.182	2.38	32415	0.02	300	
Ba	137	115	1	He	41.685	41.685	0.88	91046	0.05	10000	
W	182	209	1	He	13.594	13.594	0.63	162686	0.01	2500	
Tl	205	165	1	He	0.175	0.175	16.61	5793	0.00	5000	
Pb	208	209	1	He	56.537	56.537	0.41	2291705	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1315358	0.94	1631381	80.63	30	120	
Sc	45	1	He	1377973	7.18	829696	166.08	30	120	ISTD Failed
Sc	45	2	NoGas	9142317	0.91	6325638	144.53	30	120	ISTD Failed
Rh	103	1	He	1846320	2.56	2345543	78.72	30	120	
In	115	1	He	1152784	2.21	1419467	81.21	30	120	
Tb	159	1	He	3469100	1.08	3888262	89.22	30	120	
Ho	165	1	He	3554253	1.47	3932562	90.38	30	120	
Bi	209	1	He	2302074	1.42	2874805	80.08	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111548-a-3-f@10
Data File Name	025SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:36:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.202	0.202	5.75	852	0.02	10000	
B	11	45	2	NoGas	3.155	3.155	4.10	19615	0.02	300	
Na	23	45	1	He	446.214	446.214	2.35	757035	0.06	500000	
Mg	24	45	1	He	704.527	704.527	2.16	661161	0.11	500000	
Al	27	45	1	He	4496.947	4496.947	2.00	2391351	0.19	200000	
K	39	45	1	He	57.830	57.830	5.47	86561	0.07	500000	
Ca	44	45	1	He	211368.603	211368.603	1.82	10234351	2.07	500000	
Ti	47	45	1	He	11999.786	11999.786	2.24	3274622	0.37	2500	>LDR
V	51	45	1	He	1324.466	1324.466	3.08	8936500	0.01	10000	
Cr	52	45	1	He	511.811	511.811	3.77	4152623	0.01	10000	
Mn	55	45	1	He	69.131	69.131	2.17	441738	0.02	10000	
Fe	56	45	1	He	4070.193	4070.193	2.46	31128153	0.01	200000	
Co	59	103	1	He	0.601	0.601	1.43	6386	0.01	10000	
Ni	60	103	1	He	2.236	2.236	0.80	5962	0.04	10000	
Cu	63	103	1	He	3.217	3.217	3.60	23552	0.01	10000	
Zn	66	103	1	He	56.797	56.797	2.56	80610	0.07	10000	
As	75	103	1	He	0.853	0.853	0.88	898	0.09	10000	
Se	78	103	1	He	0.412	0.412	14.90	81	0.51	10000	
Sr	88	103	1	He	4054.123	4054.123	3.92	29511123	0.01	10000	
Mo	95	103	1	He	1.620	1.620	2.43	5410	0.03	2000	
Ag	107	103	1	He	0.439	0.439	4.61	4995	0.01	300	
Cd	111	103	1	He	2.073	2.073	10.62	5109	0.04	4000	
Sn	118	115	1	He	14.874	14.874	5.44	72864	0.02	2000	
Sb	123	115	1	He	1.497	1.497	5.03	7213	0.02	300	
Ba	137	115	1	He	8.518	8.518	5.76	18785	0.05	10000	
W	182	209	1	He	2.590	2.590	1.29	36903	0.01	2500	
Tl	205	165	1	He	0.030	0.030	11.33	1058	0.00	5000	
Pb	208	209	1	He	11.462	11.462	3.44	513512	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1279863	1.89	1631381	78.45	30	120	
Sc	45	1	He	770560	1.36	829696	92.87	30	120	
Sc	45	2	NoGas	5878627	0.39	6325638	92.93	30	120	
Rh	103	1	He	1917919	2.03	2345543	81.77	30	120	
In	115	1	He	1161106	2.44	1419467	81.80	30	120	
Tb	159	1	He	3511623	2.53	3888262	90.31	30	120	
Ho	165	1	He	3608591	3.50	3932562	91.76	30	120	
Bi	209	1	He	2542471	1.71	2874805	88.44	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111548-a-3-f@2
Data File Name	026SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:39:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	901.808	901.808	1.74	3398087	0.03	10000	
B	11	45	2	NoGas	73.172	73.172	0.76	360256	0.02	300	
Na	23	45	1	He	6999.026	6999.026	1.75	16904600	0.04	500000	
Mg	24	45	1	He	7562.398	7562.398	0.18	10365587	0.07	500000	
Al	27	45	1	He	18160.827	18160.827	1.60	14112165	0.13	200000	
K	39	45	1	He	5727.040	5727.040	1.49	7441245	0.08	500000	
Ca	44	45	1	He	645966.894	645966.894	0.70	45734908	1.41	500000	>LDR
Ti	47	45	1	He	36207.679	36207.679	1.22	14448846	0.25	2500	>LDR
V	51	45	1	He	4514.152	4514.152	0.70	44543952	0.01	10000	
Cr	52	45	1	He	2055.387	2055.387	1.63	24379056	0.01	10000	
Mn	55	45	1	He	746.372	746.372	1.07	6957761	0.01	10000	
Fe	56	45	1	He	17327.243	17327.243	0.86	193774748	0.01	200000	
Co	59	103	1	He	964.091	964.091	0.22	8854437	0.01	10000	
Ni	60	103	1	He	969.352	969.352	1.86	2207379	0.04	10000	
Cu	63	103	1	He	939.476	939.476	0.47	5627723	0.02	10000	
Zn	66	103	1	He	1095.742	1095.742	0.86	1326842	0.08	10000	
As	75	103	1	He	1015.956	1015.956	1.05	791920	0.13	10000	
Se	78	103	1	He	1045.228	1045.228	0.76	86127	1.21	10000	
Sr	88	103	1	He	21867.143	21867.143	0.34	138465634	0.02	10000	>LDR
Mo	95	103	1	He	124.062	124.062	0.83	356995	0.03	2000	
Ag	107	103	1	He	98.572	98.572	0.87	974270	0.01	300	
Cd	111	103	1	He	991.396	991.396	1.75	1706065	0.06	4000	
Sn	118	115	1	He	1165.143	1165.143	1.25	5005594	0.02	2000	
Sb	123	115	1	He	110.270	110.270	1.19	437924	0.03	300	
Ba	137	115	1	He	1137.122	1137.122	0.61	2217282	0.05	10000	
W	182	209	1	He	126.116	126.116	0.19	1429131	0.01	2500	
Tl	205	165	1	He	244.321	244.321	1.05	7522677	0.00	5000	
Pb	208	209	1	He	1061.007	1061.007	1.35	41387795	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1192240	2.67	1631381	73.08	30	120	
Sc	45	1	He	1126668	0.94	829696	135.79	30	120	ISTD Failed
Sc	45	2	NoGas	8427012	0.99	6325638	133.22	30	120	ISTD Failed
Rh	103	1	He	1667473	0.54	2345543	71.09	30	120	
In	115	1	He	1030157	0.52	1419467	72.57	30	120	
Tb	159	1	He	3256364	1.42	3888262	83.75	30	120	
Ho	165	1	He	3355091	0.61	3932562	85.32	30	120	
Bi	209	1	He	2216154	1.33	2874805	77.09	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-g ms@2
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:43:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	437.883	437.883	2.04	1524410	0.03	10000	
B	11	45	2	NoGas	38.973	38.973	1.57	179440	0.02	300	
Na	23	45	1	He	4152.147	4152.147	1.56	9344389	0.04	500000	
Mg	24	45	1	He	4751.935	4751.935	0.65	6062244	0.08	500000	
Al	27	45	1	He	15412.477	15412.477	0.99	11145905	0.14	200000	
K	39	45	1	He	2861.789	2861.789	1.68	3484861	0.08	500000	
Ca	44	45	1	He	758935.521	758935.521	1.11	50009006	1.52	500000	>LDR
Ti	47	45	1	He	36022.321	36022.321	0.91	13379106	0.27	2500	>LDR
V	51	45	1	He	4208.231	4208.231	1.40	38645168	0.01	10000	
Cr	52	45	1	He	1772.763	1772.763	0.62	19570394	0.01	10000	
Mn	55	45	1	He	479.244	479.244	1.04	4158396	0.01	10000	
Fe	56	45	1	He	14562.113	14562.113	1.64	151552678	0.01	200000	
Co	59	103	1	He	458.370	458.370	2.34	4095540	0.01	10000	
Ni	60	103	1	He	447.001	447.001	0.76	990432	0.05	10000	
Cu	63	103	1	He	459.386	459.386	1.82	2677800	0.02	10000	
Zn	66	103	1	He	631.134	631.134	0.71	744145	0.08	10000	
As	75	103	1	He	439.911	439.911	0.95	333677	0.13	10000	
Se	78	103	1	He	481.216	481.216	0.85	38598	1.25	10000	
Sr	88	103	1	He	25532.098	25532.098	0.86	157294136	0.02	10000	>LDR
Mo	95	103	1	He	58.759	58.759	0.78	164526	0.04	2000	
Ag	107	103	1	He	47.565	47.565	1.06	457380	0.01	300	
Cd	111	103	1	He	450.664	450.664	0.78	754998	0.06	4000	
Sn	118	115	1	He	595.796	595.796	0.82	2493485	0.02	2000	
Sb	123	115	1	He	46.287	46.287	0.72	179311	0.03	300	
Ba	137	115	1	He	517.180	517.180	1.00	982225	0.05	10000	
W	182	209	1	He	32.088	32.088	0.78	357978	0.01	2500	
Tl	205	165	1	He	118.318	118.318	0.71	3582177	0.00	5000	
Pb	208	209	1	He	538.938	538.938	0.45	20578155	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1101638	1.92	1631381	67.53	30	120	
Sc	45	1	He	1048539	0.80	829696	126.38	30	120	ISTD Failed
Sc	45	2	NoGas	7636331	0.72	6325638	120.72	30	120	ISTD Failed
Rh	103	1	He	1622361	1.13	2345543	69.17	30	120	
In	115	1	He	1003416	1.24	1419467	70.69	30	120	
Tb	159	1	He	3219276	0.31	3888262	82.79	30	120	
Ho	165	1	He	3299027	0.78	3932562	83.89	30	120	
Bi	209	1	He	2169026	0.75	2874805	75.45	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	028_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:52:44-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.691	2.049	185029	3.26	50	93.4	89.5	110.5	
B	11	45	2	NoGas	50.054	0.623	151163	0.54	50	100.1	89.5	110.5	
Na	23	45	1	He	26276.468	0.916	36833223	1.49	25000	105.1	89.5	110.5	
Mg	24	45	1	He	25994.056	1.567	20702442	0.92	25000	104.0	89.5	110.5	
Al	27	45	1	He	251.642	0.754	115694	0.65	250	100.7	89.5	110.5	
K	39	45	1	He	25880.193	1.858	19434986	0.94	25000	103.5	89.5	110.5	
Ca	44	45	1	He	25667.856	1.524	1056872	1.27	25000	102.7	89.5	110.5	
Ti	47	45	1	He	71.273	0.881	16541	1.47	50	142.5	89.5	110.5	CCV Failed
V	51	45	1	He	52.951	1.493	303720	0.62	50	105.9	89.5	110.5	
Cr	52	45	1	He	52.623	1.956	364708	1.40	50	105.2	89.5	110.5	
Mn	55	45	1	He	261.986	2.051	1419872	1.22	250	104.8	89.5	110.5	
Fe	56	45	1	He	13120.721	1.158	85270952	0.46	12500	105.0	89.5	110.5	
Co	59	103	1	He	47.676	1.519	511472	0.72	50	95.4	89.5	110.5	
Ni	60	103	1	He	47.455	1.910	126328	1.38	50	94.9	89.5	110.5	
Cu	63	103	1	He	48.125	1.654	338058	0.74	50	96.2	89.5	110.5	
Zn	66	103	1	He	48.183	1.962	69712	0.89	50	96.4	89.5	110.5	
As	75	103	1	He	47.859	2.274	43700	1.22	50	95.7	89.5	110.5	
Se	78	103	1	He	48.963	1.967	4753	0.90	50	97.9	89.5	110.5	
Sr	88	103	1	He	48.718	1.858	360393	0.96	50	97.4	89.5	110.5	
Mo	95	103	1	He	51.113	1.522	171830	1.44	50	102.2	89.5	110.5	
Ag	107	103	1	He	50.783	2.454	586226	1.51	50	101.6	89.5	110.5	
Cd	111	103	1	He	51.864	1.602	105221	1.39	50	103.7	89.5	110.5	
Sn	118	115	1	He	50.261	1.445	249374	1.66	50	100.5	89.5	110.5	
Sb	123	115	1	He	51.735	0.778	236707	0.38	50	103.5	89.5	110.5	
Ba	137	115	1	He	49.900	0.525	112041	0.39	50	99.8	89.5	110.5	
W	182	209	1	He	52.072	1.588	683100	1.36	50	104.1	89.5	110.5	
Tl	205	165	1	He	51.695	2.366	1722937	2.89	50	103.4	89.5	110.5	
Pb	208	209	1	He	49.317	1.655	2221506	0.96	50	98.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1253401	2.11	1631381	76.83	30	120	
Sc	45	1	He	654768	1.02	829696	78.92	30	120	
Sc	45	2	NoGas	5083669	0.96	6325638	80.37	30	120	
Rh	103	1	He	1947782	1.06	2345543	83.04	30	120	
In	115	1	He	1185405	0.41	1419467	83.51	30	120	
Tb	159	1	He	3495343	1.24	3888262	89.89	30	120	
Ho	165	1	He	3631250	0.81	3932562	92.34	30	120	
Bi	209	1	He	2558267	0.70	2874805	88.99	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	029_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:56:31-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.082	3.3	367	3.0	1	
B	11	45	2	NoGas	-0.091	-145.3	7809	4.7	20	
Na	23	45	1	He	7.778	12.0	29135	3.6	400	
Mg	24	45	1	He	1.940	41.8	2322	26.8	1000	
Al	27	45	1	He	0.460	32.5	2297	4.2	50	
K	39	45	1	He	6.233	58.1	34872	7.0	1000	
Ca	44	45	1	He	8.811	17.5	1154	5.7	1000	
Ti	47	45	1	He	2.887	12.2	680	11.6	20	
V	51	45	1	He	0.100	34.6	655	29.2	2	
Cr	52	45	1	He	0.011	284.4	2106	9.0	2	
Mn	55	45	1	He	0.045	51.8	1216	9.3	2	
Fe	56	45	1	He	14.673	20.5	98860	18.8	50	
Co	59	103	1	He	0.007	29.7	119	20.3	1	
Ni	60	103	1	He	-0.005	-208.3	99	30.6	2	
Cu	63	103	1	He	0.096	11.7	2225	4.8	2	
Zn	66	103	1	He	-0.038	-248.6	1680	7.7	20	
As	75	103	1	He	0.084	5.9	225	2.1	2	
Se	78	103	1	He	0.109	64.7	57	13.3	2	
Sr	88	103	1	He	0.151	8.9	1292	9.3	10	
Mo	95	103	1	He	0.940	13.5	3405	13.5	2	
Ag	107	103	1	He	0.016	15.2	202	13.7	0.2	
Cd	111	103	1	He	0.023	139.6	1133	5.0	0.2	
Sn	118	115	1	He	0.369	7.3	2860	4.4	10	
Sb	123	115	1	He	0.533	9.7	3077	7.1	1	
Ba	137	115	1	He	0.014	52.0	120	13.9	5	
W	182	209	1	He	1.070	16.8	18282	12.1	10	
Tl	205	165	1	He	0.039	19.4	1380	18.2	0.5	
Pb	208	209	1	He	0.093	13.7	5186	10.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1284934	0.93	1631381	78.76	30	120	
Sc	45	1	He	654884	1.37	829696	78.93	30	120	
Sc	45	2	NoGas	5176097	0.22	6325638	81.83	30	120	
Rh	103	1	He	2066171	1.16	2345543	88.09	30	120	
In	115	1	He	1230524	0.94	1419467	86.69	30	120	
Tb	159	1	He	3591874	0.85	3888262	92.38	30	120	
Ho	165	1	He	3671995	1.14	3932562	93.37	30	120	
Bi	209	1	He	2707559	1.44	2874805	94.18	30	120	

Sample Report

Sample Table

Sample Name	190-7094-a-1-a@2
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:00:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.246	0.246	13.14	1022	0.02	10000	
B	11	45	2	NoGas	48.062	48.062	1.16	146723	0.03	300	
Na	23	45	1	He	1997.089	1997.089	2.55	2805567	0.07	500000	
Mg	24	45	1	He	6777.663	6777.663	1.92	5378419	0.13	500000	
Al	27	45	1	He	5393.824	5393.824	2.29	2427949	0.22	200000	
K	39	45	1	He	1326.245	1326.245	3.07	1020812	0.13	500000	
Ca	44	45	1	He	46538.997	46538.997	2.10	1908418	2.44	500000	
Ti	47	45	1	He	103.273	103.273	2.34	23874	0.43	2500	
V	51	45	1	He	10.697	10.697	1.37	61206	0.02	10000	
Cr	52	45	1	He	110.517	110.517	1.59	760893	0.01	10000	
Mn	55	45	1	He	1831.703	1831.703	2.26	9884558	0.02	10000	
Fe	56	45	1	He	99904.367	99904.367	3.18	646774374	0.02	200000	
Co	59	103	1	He	10.307	10.307	1.41	114044	0.01	10000	
Ni	60	103	1	He	43.555	43.555	1.91	119560	0.04	10000	
Cu	63	103	1	He	566.132	566.132	2.50	4084693	0.01	10000	
Zn	66	103	1	He	1243.589	1243.589	1.81	1813391	0.07	10000	
As	75	103	1	He	10.788	10.788	3.10	10265	0.11	10000	
Se	78	103	1	He	7.757	7.757	1.79	814	0.95	10000	
Sr	88	103	1	He	195.347	195.347	3.09	1489702	0.01	10000	
Mo	95	103	1	He	23.040	23.040	1.28	79886	0.03	2000	
Ag	107	103	1	He	10.497	10.497	1.62	124961	0.01	300	
Cd	111	103	1	He	2.613	2.613	3.08	6469	0.04	4000	
Sn	118	115	1	He	57.513	57.513	0.79	288713	0.02	2000	
Sb	123	115	1	He	4.382	4.382	1.37	20794	0.02	300	
Ba	137	115	1	He	760.243	760.243	0.69	1726711	0.04	10000	
W	182	209	1	He	14.737	14.737	0.93	317495	0.00	2500	
Tl	205	165	1	He	0.204	0.204	2.02	6962	0.00	5000	
Pb	208	209	1	He	36.191	36.191	0.31	2645212	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1268369	0.29	1631381	77.75	30	120	
Sc	45	1	He	652343	0.99	829696	78.62	30	120	
Sc	45	2	NoGas	5127599	0.67	6325638	81.06	30	120	
Rh	103	1	He	2008164	0.53	2345543	85.62	30	120	
In	115	1	He	1199962	1.03	1419467	84.54	30	120	
Tb	159	1	He	3614038	0.81	3888262	92.95	30	120	
Ho	165	1	He	3690706	1.66	3932562	93.85	30	120	
Bi	209	1	He	4150211	0.61	2874805	144.36	30	120	ISTD Failed

Sample Report

Sample Table

Sample Name	190-7094-a-2-a@2
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:04:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.129	0.129	8.06	596	0.02	10000	
B	11	45	2	NoGas	34.537	34.537	1.31	114316	0.03	300	
Na	23	45	1	He	1042.257	1042.257	2.17	1566447	0.07	500000	
Mg	24	45	1	He	3487.173	3487.173	0.85	2943523	0.12	500000	
Al	27	45	1	He	2686.282	2686.282	1.86	1287140	0.21	200000	
K	39	45	1	He	1408.932	1408.932	0.36	1151453	0.12	500000	
Ca	44	45	1	He	25129.832	25129.832	0.57	1096383	2.29	500000	
Ti	47	45	1	He	64.920	64.920	6.98	15967	0.41	2500	
V	51	45	1	He	5.938	5.938	3.31	36171	0.02	10000	
Cr	52	45	1	He	48.625	48.625	0.54	357271	0.01	10000	
Mn	55	45	1	He	765.705	765.705	0.71	4395660	0.02	10000	
Fe	56	45	1	He	45141.924	45141.924	1.06	310842494	0.01	200000	
Co	59	103	1	He	4.868	4.868	0.87	57350	0.01	10000	
Ni	60	103	1	He	22.413	22.413	0.59	65543	0.03	10000	
Cu	63	103	1	He	295.374	295.374	0.26	2269236	0.01	10000	
Zn	66	103	1	He	622.613	622.613	0.34	967214	0.06	10000	
As	75	103	1	He	5.121	5.121	1.19	5265	0.10	10000	
Se	78	103	1	He	4.024	4.024	6.09	472	0.85	10000	
Sr	88	103	1	He	111.502	111.502	0.47	905137	0.01	10000	
Mo	95	103	1	He	11.934	11.934	1.51	44075	0.03	2000	
Ag	107	103	1	He	5.688	5.688	0.83	72063	0.01	300	
Cd	111	103	1	He	1.300	1.300	9.11	3988	0.03	4000	
Sn	118	115	1	He	33.851	33.851	0.88	178075	0.02	2000	
Sb	123	115	1	He	3.750	3.750	0.96	18685	0.02	300	
Ba	137	115	1	He	424.890	424.890	0.90	1009034	0.04	10000	
W	182	209	1	He	7.124	7.124	2.44	138926	0.01	2500	
Tl	205	165	1	He	0.099	0.099	6.24	3618	0.00	5000	
Pb	208	209	1	He	18.069	18.069	1.21	1174681	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1372156	1.37	1631381	84.11	30	120	
Sc	45	1	He	693755	0.73	829696	83.62	30	120	
Sc	45	2	NoGas	5443189	0.36	6325638	86.05	30	120	
Rh	103	1	He	2137494	1.08	2345543	91.13	30	120	
In	115	1	He	1254645	1.01	1419467	88.39	30	120	
Tb	159	1	He	3789824	0.38	3888262	97.47	30	120	
Ho	165	1	He	3897954	1.33	3932562	99.12	30	120	
Bi	209	1	He	3690104	1.15	2874805	128.36	30	120	ISTD Failed

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	032_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:07:50-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.781	2.541	228211	1.32	50	95.6	89.5	110.5	
B	11	45	2	NoGas	49.484	2.737	183521	2.71	50	99.0	89.5	110.5	
Na	23	45	1	He	25053.728	2.691	44151866	0.35	25000	100.2	89.5	110.5	
Mg	24	45	1	He	25007.922	2.896	25040582	0.26	25000	100.0	89.5	110.5	
Al	27	45	1	He	242.751	2.506	140415	0.75	250	97.1	89.5	110.5	
K	39	45	1	He	24987.506	2.947	23594532	1.21	25000	100.0	89.5	110.5	
Ca	44	45	1	He	24786.721	2.246	1283300	0.87	25000	99.1	89.5	110.5	
Ti	47	45	1	He	52.002	5.853	15169	3.72	50	104.0	89.5	110.5	
V	51	45	1	He	50.894	2.061	367082	0.97	50	101.8	89.5	110.5	
Cr	52	45	1	He	51.156	2.728	445837	0.29	50	102.3	89.5	110.5	
Mn	55	45	1	He	256.058	3.064	1744765	0.22	250	102.4	89.5	110.5	
Fe	56	45	1	He	12730.668	2.748	104020783	0.32	12500	101.8	89.5	110.5	
Co	59	103	1	He	48.670	0.218	626692	1.32	50	97.3	89.5	110.5	
Ni	60	103	1	He	48.010	0.705	153389	0.75	50	96.0	89.5	110.5	
Cu	63	103	1	He	49.115	1.367	414041	0.87	50	98.2	89.5	110.5	
Zn	66	103	1	He	48.232	1.953	83745	0.83	50	96.5	89.5	110.5	
As	75	103	1	He	48.639	0.358	53305	1.09	50	97.3	89.5	110.5	
Se	78	103	1	He	47.855	0.778	5577	0.45	50	95.7	89.5	110.5	
Sr	88	103	1	He	48.239	0.484	428325	1.23	50	96.5	89.5	110.5	
Mo	95	103	1	He	51.133	2.964	206265	1.87	50	102.3	89.5	110.5	
Ag	107	103	1	He	50.328	1.118	697312	0.69	50	100.7	89.5	110.5	
Cd	111	103	1	He	50.261	1.221	122410	0.26	50	100.5	89.5	110.5	
Sn	118	115	1	He	50.056	1.040	291843	0.74	50	100.1	89.5	110.5	
Sb	123	115	1	He	51.579	1.245	277317	0.85	50	103.2	89.5	110.5	
Ba	137	115	1	He	50.742	0.969	133885	1.17	50	101.5	89.5	110.5	
W	182	209	1	He	51.578	0.749	774404	1.94	50	103.2	89.5	110.5	
Tl	205	165	1	He	51.837	1.313	1983145	0.96	50	103.7	89.5	110.5	
Pb	208	209	1	He	48.783	1.736	2514565	0.43	50	97.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1511095	1.32	1631381	92.63	30	120	
Sc	45	1	He	823607	3.01	829696	99.27	30	120	
Sc	45	2	NoGas	6238980	0.67	6325638	98.63	30	120	
Rh	103	1	He	2337601	1.22	2345543	99.66	30	120	
In	115	1	He	1392996	0.48	1419467	98.14	30	120	
Tb	159	1	He	4060112	0.85	3888262	104.42	30	120	
Ho	165	1	He	4168644	0.40	3932562	106.00	30	120	
Bi	209	1	He	2927642	1.39	2874805	101.84	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	033_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:11:40-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.061	19.3	330	16.6	1	
B	11	45	2	NoGas	0.213	40.4	10296	2.7	20	
Na	23	45	1	He	7.698	16.9	34864	5.6	400	
Mg	24	45	1	He	2.682	39.3	3501	28.1	1000	
Al	27	45	1	He	0.349	117.3	2698	7.9	50	
K	39	45	1	He	7.066	37.5	42647	5.0	1000	
Ca	44	45	1	He	5.548	42.3	1225	9.2	1000	
Ti	47	45	1	He	0.904	5.6	264	5.7	20	
V	51	45	1	He	0.013	329.0	190	156.4	2	
Cr	52	45	1	He	0.008	111.8	2505	2.3	2	
Mn	55	45	1	He	0.057	22.4	1536	5.0	2	
Fe	56	45	1	He	27.916	22.4	222106	21.3	50	
Co	59	103	1	He	0.004	54.8	107	28.6	1	
Ni	60	103	1	He	-0.011	-57.8	98	20.8	2	
Cu	63	103	1	He	0.070	26.0	2397	7.0	2	
Zn	66	103	1	He	0.021	171.7	2090	3.5	20	
As	75	103	1	He	0.017	21.5	190	2.8	2	
Se	78	103	1	He	0.035	150.2	58	10.7	2	
Sr	88	103	1	He	0.034	9.1	441	6.2	10	
Mo	95	103	1	He	0.943	18.2	4034	17.3	2	
Ag	107	103	1	He	0.016	20.7	241	19.9	0.2	
Cd	111	103	1	He	0.039	38.9	1380	2.2	0.2	
Sn	118	115	1	He	0.349	22.6	3238	15.0	10	
Sb	123	115	1	He	0.548	19.9	3697	16.7	1	
Ba	137	115	1	He	0.022	42.1	162	15.6	5	
W	182	209	1	He	1.128	22.4	21122	18.0	10	
Tl	205	165	1	He	0.032	25.9	1305	24.5	0.5	
Pb	208	209	1	He	0.056	9.0	3774	6.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1491301	1.01	1631381	91.41	30	120	
Sc	45	1	He	786652	0.67	829696	94.81	30	120	
Sc	45	2	NoGas	6128606	1.37	6325638	96.89	30	120	
Rh	103	1	He	2441025	0.61	2345543	104.07	30	120	
In	115	1	He	1443065	0.60	1419467	101.66	30	120	
Tb	159	1	He	4018686	0.44	3888262	103.35	30	120	
Ho	165	1	He	4149414	0.08	3932562	105.51	30	120	
Bi	209	1	He	2994424	0.85	2874805	104.16	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	034_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:17:59-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.117	1.269	226910	1.11	50	94.2	89.5	110.5	
B	11	45	2	NoGas	48.861	2.100	185189	0.67	50	97.7	89.5	110.5	
Na	23	45	1	He	24008.049	4.317	44358568	0.24	25000	96.0	89.5	110.5	
Mg	24	45	1	He	23905.092	2.344	25111684	2.24	25000	95.6	89.5	110.5	
Al	27	45	1	He	235.924	3.833	143166	0.61	250	94.4	89.5	110.5	
K	39	45	1	He	24339.665	3.353	24103699	1.06	25000	97.4	89.5	110.5	
Ca	44	45	1	He	24132.538	2.601	1310583	2.28	25000	96.5	89.5	110.5	
Ti	47	45	1	He	50.083	2.519	15332	1.95	50	100.2	89.5	110.5	
V	51	45	1	He	48.720	3.840	368424	0.59	50	97.4	89.5	110.5	
Cr	52	45	1	He	48.951	4.214	447409	0.33	50	97.9	89.5	110.5	
Mn	55	45	1	He	245.747	4.711	1755654	1.23	250	98.3	89.5	110.5	
Fe	56	45	1	He	12132.847	3.927	103949178	0.43	12500	97.1	89.5	110.5	
Co	59	103	1	He	48.828	0.884	626958	0.36	50	97.7	89.5	110.5	
Ni	60	103	1	He	48.431	0.811	154307	0.28	50	96.9	89.5	110.5	
Cu	63	103	1	He	49.495	1.180	416091	0.78	50	99.0	89.5	110.5	
Zn	66	103	1	He	48.756	0.304	84413	0.70	50	97.5	89.5	110.5	
As	75	103	1	He	49.678	1.030	54289	0.61	50	99.4	89.5	110.5	
Se	78	103	1	He	49.343	2.211	5733	2.34	50	98.7	89.5	110.5	
Sr	88	103	1	He	48.903	1.145	432996	0.73	50	97.8	89.5	110.5	
Mo	95	103	1	He	50.327	1.498	202505	2.01	50	100.7	89.5	110.5	
Ag	107	103	1	He	50.462	1.147	697252	0.62	50	100.9	89.5	110.5	
Cd	111	103	1	He	50.075	0.919	121632	0.56	50	100.2	89.5	110.5	
Sn	118	115	1	He	50.100	0.942	293168	0.72	50	100.2	89.5	110.5	
Sb	123	115	1	He	51.851	0.346	279808	0.46	50	103.7	89.5	110.5	
Ba	137	115	1	He	50.362	0.961	133367	0.88	50	100.7	89.5	110.5	
W	182	209	1	He	50.808	0.792	761041	1.24	50	101.6	89.5	110.5	
Tl	205	165	1	He	51.546	0.771	1956396	0.21	50	103.1	89.5	110.5	
Pb	208	209	1	He	48.219	1.388	2479691	0.67	50	96.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1523478	1.65	1631381	93.39	30	120	
Sc	45	1	He	864118	4.43	829696	104.15	30	120	
Sc	45	2	NoGas	6373033	1.66	6325638	100.75	30	120	
Rh	103	1	He	2331119	0.53	2345543	99.39	30	120	
In	115	1	He	1398092	0.26	1419467	98.49	30	120	
Tb	159	1	He	4024439	1.12	3888262	103.50	30	120	
Ho	165	1	He	4135633	0.57	3932562	105.16	30	120	
Bi	209	1	He	2920573	0.77	2874805	101.59	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	035_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:21:44-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.040	32.5	237	27.5	1	
B	11	45	2	NoGas	0.724	23.5	12590	4.2	20	
Na	23	45	1	He	6.795	14.6	34337	3.8	400	
Mg	24	45	1	He	2.448	56.0	3371	38.9	1000	
Al	27	45	1	He	0.152	121.4	2668	2.7	50	
K	39	45	1	He	7.538	26.8	44355	3.0	1000	
Ca	44	45	1	He	3.545	46.1	1160	8.3	1000	
Ti	47	45	1	He	0.655	7.7	201	8.2	20	
V	51	45	1	He	0.009	302.1	167	116.1	2	
Cr	52	45	1	He	0.006	104.2	2567	2.4	2	
Mn	55	45	1	He	0.071	6.2	1680	1.9	2	
Fe	56	45	1	He	24.917	22.4	204550	20.8	50	
Co	59	103	1	He	0.005	42.4	118	24.4	1	
Ni	60	103	1	He	-0.003	-408.2	128	33.0	2	
Cu	63	103	1	He	0.057	23.7	2348	5.8	2	
Zn	66	103	1	He	-0.029	-120.2	2056	2.8	20	
As	75	103	1	He	0.025	15.2	204	2.2	2	
Se	78	103	1	He	0.095	129.3	67	23.4	2	
Sr	88	103	1	He	0.018	30.2	299	17.3	10	
Mo	95	103	1	He	0.936	24.8	4118	25.0	2	
Ag	107	103	1	He	0.021	12.4	312	12.8	0.2	
Cd	111	103	1	He	0.029	59.2	1391	2.7	0.2	
Sn	118	115	1	He	0.358	13.3	3352	8.2	10	
Sb	123	115	1	He	0.590	19.8	4006	16.0	1	
Ba	137	115	1	He	0.013	103.9	139	25.9	5	
W	182	209	1	He	1.093	11.7	21118	9.1	10	
Tl	205	165	1	He	0.035	30.7	1393	28.3	0.5	
Pb	208	209	1	He	0.042	6.2	3110	4.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1552882	0.78	1631381	95.19	30	120	
Sc	45	1	He	810154	1.23	829696	97.64	30	120	
Sc	45	2	NoGas	6398729	0.70	6325638	101.16	30	120	
Rh	103	1	He	2507027	0.65	2345543	106.88	30	120	
In	115	1	He	1471504	0.54	1419467	103.67	30	120	
Tb	159	1	He	4104515	0.91	3888262	105.56	30	120	
Ho	165	1	He	4155840	0.79	3932562	105.68	30	120	
Bi	209	1	He	3071982	0.42	2874805	106.86	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-175943/1-a
Data File Name	036_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:25:36-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.055	25.3	296	21.3	1	
B	11	45	2	NoGas	2.393	2.9	17301	0.6	20	
Na	23	45	1	He	95.317	1.7	184330	1.5	400	
Mg	24	45	1	He	56.572	0.8	55677	2.3	1000	
Al	27	45	1	He	3.285	8.5	4337	3.2	50	
K	39	45	1	He	29.320	6.7	63370	0.7	1000	
Ca	44	45	1	He	214.087	1.0	11661	2.6	1000	
Ti	47	45	1	He	0.871	37.1	257	33.1	20	
V	51	45	1	He	0.089	20.4	719	15.2	2	
Cr	52	45	1	He	0.651	3.8	7916	1.5	2	
Mn	55	45	1	He	0.248	3.0	2811	2.9	2	
Fe	56	45	1	He	21.703	7.3	175892	9.3	50	
Co	59	103	1	He	0.006	34.1	121	22.1	1	
Ni	60	103	1	He	0.099	28.6	446	21.7	2	
Cu	63	103	1	He	0.736	4.3	7909	1.6	2	
Zn	66	103	1	He	11.819	3.8	22056	1.9	20	
As	75	103	1	He	0.083	34.0	254	10.3	2	
Se	78	103	1	He	0.076	130.7	61	17.1	2	
Sr	88	103	1	He	0.417	4.4	3829	2.9	10	
Mo	95	103	1	He	0.224	9.3	964	7.6	2	
Ag	107	103	1	He	0.021	29.0	292	27.2	0.2	
Cd	111	103	1	He	0.031	20.8	1305	0.9	0.2	
Sn	118	115	1	He	0.979	7.2	6746	6.3	10	
Sb	123	115	1	He	1.194	9.7	6987	7.5	1	Blank Failed
Ba	137	115	1	He	0.773	7.7	2126	7.2	5	
W	182	209	1	He	0.277	6.7	8347	3.7	10	
Tl	205	165	1	He	0.010	17.4	419	12.9	0.5	
Pb	208	209	1	He	0.168	3.7	9954	3.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1481735	1.49	1631381	90.83	30	120	
Sc	45	1	He	795371	2.77	829696	95.86	30	120	
Sc	45	2	NoGas	5951014	0.75	6325638	94.08	30	120	
Rh	103	1	He	2343473	1.82	2345543	99.91	30	120	
In	115	1	He	1385640	1.36	1419467	97.62	30	120	
Tb	159	1	He	3892844	1.91	3888262	100.12	30	120	
Ho	165	1	He	3979716	2.70	3932562	101.20	30	120	
Bi	209	1	He	3080165	0.39	2874805	107.14	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-175943/3-a
Data File Name	037_LCS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:29:28-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	971.750	971.750	1.886	4358624	0.86	1000	97.2	79.5	120.5	
B	11	2	NoGas	116.130	116.130	1.212	379795	0.42	100	116.1	79.5	120.5	
Na	23	1	He	10303.213	10303.213	2.092	16367517	0.18	10000	103.0	79.5	120.5	
Mg	24	1	He	10299.638	10299.638	3.315	9288893	1.12	10000	103.0	79.5	120.5	
Al	27	1	He	9354.165	9354.165	2.531	4784835	1.56	10000	93.5	79.5	120.5	
K	39	1	He	10198.061	10198.061	2.942	8693165	0.72	10000	102.0	79.5	120.5	
Ca	44	1	He	9301.064	9301.064	2.789	434236	0.56	10000	93.0	79.5	120.5	
Ti	47	1	He	99.100	99.100	2.310	26040	1.08	100	99.1	79.5	120.5	
V	51	1	He	995.940	995.940	3.220	6466903	1.00	1000	99.6	79.5	120.5	
Cr	52	1	He	1018.541	1018.541	1.521	7953187	0.87	1000	101.9	79.5	120.5	
Mn	55	1	He	1015.058	1015.058	0.781	6228750	1.70	1000	101.5	79.5	120.5	
Fe	56	1	He	10375.553	10375.553	1.793	76369544	0.53	10000	103.8	79.5	120.5	
Co	59	1	He	958.081	958.081	2.974	11388225	1.34	1000	95.8	79.5	120.5	
Ni	60	1	He	983.492	983.492	2.121	2898992	0.77	1000	98.3	79.5	120.5	
Cu	63	1	He	983.526	983.526	1.117	7626758	1.09	1000	98.4	79.5	120.5	
Zn	66	1	He	1007.219	1007.219	1.030	1579053	1.16	1000	100.7	79.5	120.5	
As	75	1	He	936.694	936.694	1.217	945166	0.41	1000	93.7	79.5	120.5	
Se	78	1	He	959.837	959.837	0.942	102387	0.68	1000	96.0	79.5	120.5	
Sr	88	1	He	948.877	948.877	2.292	7776827	0.81	1000	94.9	79.5	120.5	
Mo	95	1	He	107.776	107.776	0.566	401509	1.39	100	107.8	79.5	120.5	
Ag	107	1	He	103.625	103.625	1.661	1325783	0.23	100	103.6	79.5	120.5	
Cd	111	1	He	1046.935	1046.935	1.928	2331967	0.32	1000	104.7	79.5	120.5	
Sn	118	1	He	1125.628	1125.628	0.616	5741229	0.40	1000	112.6	79.5	120.5	
Sb	123	1	He	111.044	111.044	0.808	523549	0.70	100	111.0	79.5	120.5	
Ba	137	1	He	1103.207	1103.207	0.914	2553773	0.77	1000	110.3	79.5	120.5	
W	182	1	He	109.633	109.633	5.713	1566994	4.88	100	109.6	79.5	120.5	
Tl	205	1	He	252.717	252.717	0.477	8965815	0.97	250	101.1	79.5	120.5	
Pb	208	1	He	994.280	994.280	0.833	48923363	0.10	1000	99.4	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1419417	2.43	1631381	87.01	30	120	
Sc	45	1	He	741709	2.27	829696	89.40	30	120	
Sc	45	2	NoGas	5674892	0.93	6325638	89.71	30	120	
Rh	103	1	He	2158763	1.61	2345543	92.04	30	120	
In	115	1	He	1222989	0.32	1419467	86.16	30	120	
Tb	159	1	He	3762548	1.17	3888262	96.77	30	120	
Ho	165	1	He	3865772	0.92	3932562	98.30	30	120	
Bi	209	1	He	2795259	0.87	2874805	97.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	038_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:33:01-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.589	2.792	244003	1.68	50	97.2	89.5	110.5	
B	11	45	2	NoGas	51.577	2.487	197992	2.22	50	103.2	89.5	110.5	
Na	23	45	1	He	24936.666	2.854	45750276	0.32	25000	99.7	89.5	110.5	
Mg	24	45	1	He	25166.021	2.943	26234511	0.63	25000	100.7	89.5	110.5	
Al	27	45	1	He	242.671	3.400	146112	0.48	250	97.1	89.5	110.5	
K	39	45	1	He	25195.122	2.812	24767696	0.56	25000	100.8	89.5	110.5	
Ca	44	45	1	He	25006.574	4.436	1347324	1.76	25000	100.0	89.5	110.5	
Ti	47	45	1	He	50.800	0.938	15440	2.04	50	101.6	89.5	110.5	
V	51	45	1	He	50.686	3.282	380513	0.39	50	101.4	89.5	110.5	
Cr	52	45	1	He	50.856	2.973	461428	0.04	50	101.7	89.5	110.5	
Mn	55	45	1	He	255.228	3.689	1810399	1.00	250	102.1	89.5	110.5	
Fe	56	45	1	He	12732.305	3.516	108293416	0.61	12500	101.9	89.5	110.5	
Co	59	103	1	He	49.032	1.206	649280	0.27	50	98.1	89.5	110.5	
Ni	60	103	1	He	48.878	1.206	160603	0.28	50	97.8	89.5	110.5	
Cu	63	103	1	He	49.454	1.269	428762	0.41	50	98.9	89.5	110.5	
Zn	66	103	1	He	48.930	2.367	87347	1.35	50	97.9	89.5	110.5	
As	75	103	1	He	49.775	1.077	56097	0.13	50	99.6	89.5	110.5	
Se	78	103	1	He	48.877	2.167	5857	1.45	50	97.8	89.5	110.5	
Sr	88	103	1	He	48.206	1.703	440178	0.90	50	96.4	89.5	110.5	
Mo	95	103	1	He	51.425	2.009	213397	2.25	50	102.8	89.5	110.5	
Ag	107	103	1	He	49.928	1.515	711459	0.66	50	99.9	89.5	110.5	
Cd	111	103	1	He	49.938	1.369	125094	0.39	50	99.9	89.5	110.5	
Sn	118	115	1	He	51.525	0.250	305659	0.88	50	103.1	89.5	110.5	
Sb	123	115	1	He	52.043	1.435	284707	0.39	50	104.1	89.5	110.5	
Ba	137	115	1	He	50.554	2.099	135714	1.17	50	101.1	89.5	110.5	
W	182	209	1	He	53.351	0.716	802797	0.46	50	106.7	89.5	110.5	
Tl	205	165	1	He	51.430	0.585	1992819	0.71	50	102.9	89.5	110.5	
Pb	208	209	1	He	49.019	0.570	2533261	0.60	50	98.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1588916	1.94	1631381	97.40	30	120	
Sc	45	1	He	857436	2.90	829696	103.34	30	120	
Sc	45	2	NoGas	6471963	0.51	6325638	102.31	30	120	
Rh	103	1	He	2404170	0.97	2345543	102.50	30	120	
In	115	1	He	1417487	1.08	1419467	99.86	30	120	
Tb	159	1	He	4118013	1.07	3888262	105.91	30	120	
Ho	165	1	He	4221973	0.21	3932562	107.36	30	120	
Bi	209	1	He	2934762	0.26	2874805	102.09	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	039_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:36:50-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.126	33.9	674	31.5	1	
B	11	45	2	NoGas	0.761	15.0	12801	3.8	20	
Na	23	45	1	He	7.745	17.0	36333	3.9	400	
Mg	24	45	1	He	2.829	69.2	3764	49.2	1000	
Al	27	45	1	He	0.589	24.8	2943	1.8	50	
K	39	45	1	He	7.407	51.9	44660	6.0	1000	
Ca	44	45	1	He	2.050	114.6	1093	9.3	1000	
Ti	47	45	1	He	0.340	22.6	112	22.3	20	
V	51	45	1	He	0.027	117.5	297	76.7	2	
Cr	52	45	1	He	0.013	115.9	2647	3.6	2	
Mn	55	45	1	He	0.067	35.5	1662	7.4	2	
Fe	56	45	1	He	26.044	26.3	215263	23.4	50	
Co	59	103	1	He	0.021	33.7	348	28.8	1	
Ni	60	103	1	He	0.017	44.9	199	13.4	2	
Cu	63	103	1	He	0.092	22.5	2699	7.2	2	
Zn	66	103	1	He	-0.006	-784.4	2126	3.4	20	
As	75	103	1	He	0.154	7.6	359	3.7	2	
Se	78	103	1	He	0.215	31.1	83	10.2	2	
Sr	88	103	1	He	0.020	37.6	321	22.7	10	
Mo	95	103	1	He	1.083	20.2	4816	19.8	2	
Ag	107	103	1	He	0.020	27.0	301	26.8	0.2	
Cd	111	103	1	He	0.043	69.5	1447	5.3	0.2	
Sn	118	115	1	He	0.616	10.1	4931	7.2	10	
Sb	123	115	1	He	0.643	16.8	4302	13.9	1	
Ba	137	115	1	He	0.011	111.5	134	26.0	5	
W	182	209	1	He	1.374	13.6	25169	10.4	10	
Tl	205	165	1	He	0.063	22.6	2519	22.8	0.5	
Pb	208	209	1	He	0.135	13.4	8044	11.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1584656	1.66	1631381	97.14	30	120	
Sc	45	1	He	818596	2.51	829696	98.66	30	120	
Sc	45	2	NoGas	6436098	0.60	6325638	101.75	30	120	
Rh	103	1	He	2541409	0.99	2345543	108.35	30	120	
In	115	1	He	1470450	0.55	1419467	103.59	30	120	
Tb	159	1	He	4111614	0.59	3888262	105.74	30	120	
Ho	165	1	He	4241790	1.11	3932562	107.86	30	120	
Bi	209	1	He	3031213	1.04	2874805	105.44	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177401/1-a@2
Data File Name	040_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:40:43-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.095	24.4	489	21.7	1	
B	11	45	2	NoGas	0.939	17.4	12809	3.8	20	
Na	23	45	1	He	34.575	3.6	83269	1.7	400	
Mg	24	45	1	He	14.448	8.0	15333	5.3	1000	
Al	27	45	1	He	1.213	11.7	3291	1.0	50	
K	39	45	1	He	22.417	4.1	58721	1.5	1000	
Ca	44	45	1	He	44.694	3.3	3284	1.0	1000	
Ti	47	45	1	He	0.772	33.7	236	29.5	20	
V	51	45	1	He	0.179	37.5	1392	36.3	2	
Cr	52	45	1	He	0.834	8.3	9714	4.4	2	
Mn	55	45	1	He	0.183	6.0	2451	1.1	2	
Fe	56	45	1	He	21.140	9.1	176403	11.4	50	
Co	59	103	1	He	0.019	18.8	298	16.5	1	
Ni	60	103	1	He	0.151	20.7	628	17.6	2	
Cu	63	103	1	He	0.425	4.4	5424	3.5	2	
Zn	66	103	1	He	2.220	5.8	5887	2.6	20	
As	75	103	1	He	0.208	11.8	401	5.9	2	
Se	78	103	1	He	0.145	83.3	70	18.6	2	
Sr	88	103	1	He	0.184	1.0	1802	2.5	10	
Mo	95	103	1	He	0.466	15.6	1992	14.2	2	
Ag	107	103	1	He	0.017	10.9	248	9.4	0.2	
Cd	111	103	1	He	0.050	20.8	1384	2.5	0.2	
Sn	118	115	1	He	17.459	2.0	102823	2.0	10	Blank Failed
Sb	123	115	1	He	0.431	5.2	2947	4.0	1	
Ba	137	115	1	He	1.541	2.8	4175	2.9	5	
W	182	209	1	He	0.576	5.1	12921	3.2	10	
Tl	205	165	1	He	0.031	21.3	1239	19.5	0.5	
Pb	208	209	1	He	0.277	13.3	15734	13.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1499469	1.90	1631381	91.91	30	120	
Sc	45	1	He	817932	2.59	829696	98.58	30	120	
Sc	45	2	NoGas	6132866	0.70	6325638	96.95	30	120	
Rh	103	1	He	2401990	1.59	2345543	102.41	30	120	
In	115	1	He	1397303	0.17	1419467	98.44	30	120	
Tb	159	1	He	4034218	0.14	3888262	103.75	30	120	
Ho	165	1	He	4111677	1.07	3932562	104.55	30	120	
Bi	209	1	He	3050016	0.68	2874805	106.09	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177401/2-a@2
Data File Name	041LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:44:35-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	453.144	453.144	1.337	2014594	0.37	500	90.6	78.6	110.5	
B	11	2	NoGas	54.649	54.649	1.092	184147	1.44	50	109.3	79.5	120.5	
Na	23	1	He	4907.618	4907.618	1.153	7890802	0.46	5000	98.2	79.5	120.5	
Mg	24	1	He	4962.514	4962.514	1.249	4525113	1.48	5000	99.3	79.5	120.5	
Al	27	1	He	4573.718	4573.718	1.453	2365899	1.26	5000	91.5	79.5	120.5	
K	39	1	He	4858.995	4858.995	0.967	4205354	1.38	5000	97.2	79.5	120.5	
Ca	44	1	He	4520.885	4520.885	1.651	213817	1.12	5000	90.4	79.5	120.5	
Ti	47	1	He	48.176	48.176	5.423	12799	4.83	50	96.4	79.5	120.5	
V	51	1	He	481.105	481.105	1.808	3157920	0.89	500	96.2	71.5	110.5	
Cr	52	1	He	484.358	484.358	0.192	3823921	1.38	500	96.9	69.5	110.5	
Mn	55	1	He	488.898	488.898	0.483	3032408	1.22	500	97.8	79.5	120.5	
Fe	56	1	He	4986.277	4986.277	1.510	37094690	0.18	5000	99.7	79.5	120.5	
Co	59	1	He	453.805	453.805	0.904	5523715	0.69	500	90.8	73.9	110.5	
Ni	60	1	He	452.810	452.810	1.324	1366663	0.71	500	90.6	74.9	110.5	
Cu	63	1	He	464.711	464.711	1.429	3690007	0.75	500	92.9	72.6	110.5	
Zn	66	1	He	424.258	424.258	1.460	681981	0.78	500	84.9	71.5	113.4	
As	75	1	He	411.091	411.091	0.961	424773	0.52	500	82.2	73.4	110.5	
Se	78	1	He	394.947	394.947	1.518	43159	0.90	500	79.0	64.6	110.5	
Sr	88	1	He	451.961	451.961	0.976	3792964	1.04	500	90.4	79.5	120.5	
Mo	95	1	He	51.350	51.350	1.091	195866	0.63	50	102.7	29.5	140.5	
Ag	107	1	He	49.060	49.060	0.804	642660	0.56	50	98.1	59.5	114.5	
Cd	111	1	He	453.196	453.196	1.021	1034231	0.59	500	90.6	73.5	110.5	
Sn	118	1	He	545.338	545.338	0.198	2895987	0.28	500	109.1	79.5	120.5	
Sb	123	1	He	49.515	49.515	0.552	243336	0.36	50	99.0	67.5	113.4	
Ba	137	1	He	481.104	481.104	0.167	1159386	0.40	500	96.2	69.5	110.5	
W	182	1	He	50.561	50.561	0.086	729846	0.42	50	101.1	74.6	125.4	
Tl	205	1	He	121.075	121.075	1.922	4392743	0.80	125	96.9	70.6	110.5	
Pb	208	1	He	472.585	472.585	0.964	23415078	0.94	500	94.5	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1406617	1.06	1631381	86.22	30	120	
Sc	45	1	He	749524	1.55	829696	90.34	30	120	
Sc	45	2	NoGas	5697295	1.27	6325638	90.07	30	120	
Rh	103	1	He	2209962	0.71	2345543	94.22	30	120	
In	115	1	He	1273098	0.24	1419467	89.69	30	120	
Tb	159	1	He	3827680	1.10	3888262	98.44	30	120	
Ho	165	1	He	3953933	1.40	3932562	100.54	30	120	
Bi	209	1	He	2814525	0.43	2874805	97.90	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-f@2
Data File Name	042SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:48:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.666	0.666	1.70	2567	0.03	10000	
B	11	45	2	NoGas	11.367	11.367	3.37	69349	0.02	300	
Na	23	45	1	He	1288.731	1288.731	3.33	3475211	0.04	500000	
Mg	24	45	1	He	2041.489	2041.489	2.67	3100673	0.07	500000	
Al	27	45	1	He	12805.600	12805.600	2.60	11022721	0.12	200000	
K	39	45	1	He	163.193	163.193	3.05	290808	0.06	500000	
Ca	44	45	1	He	627265.669	627265.669	1.78	49208187	1.27	500000	>LDR
Ti	47	45	1	He	35827.838	35827.838	3.22	15832631	0.23	2500	>LDR
V	51	45	1	He	3917.408	3917.408	2.24	42823107	0.01	10000	
Cr	52	45	1	He	1491.578	1491.578	2.53	19597835	0.01	10000	
Mn	55	45	1	He	207.440	207.440	2.24	2143547	0.01	10000	
Fe	56	45	1	He	11695.335	11695.335	3.05	144847079	0.01	200000	
Co	59	103	1	He	2.952	2.952	3.78	29017	0.01	10000	
Ni	60	103	1	He	10.700	10.700	2.18	26140	0.04	10000	
Cu	63	103	1	He	15.099	15.099	3.15	97958	0.02	10000	
Zn	66	103	1	He	254.505	254.505	2.90	330561	0.08	10000	
As	75	103	1	He	5.831	5.831	0.37	4980	0.12	10000	
Se	78	103	1	He	2.344	2.344	9.58	246	0.95	10000	
Sr	88	103	1	He	20871.717	20871.717	1.97	141250043	0.01	10000	>LDR
Mo	95	103	1	He	8.106	8.106	2.15	24968	0.03	2000	
Ag	107	103	1	He	2.255	2.255	4.53	23815	0.01	300	
Cd	111	103	1	He	10.695	10.695	6.48	20582	0.05	4000	
Sn	118	115	1	He	73.720	73.720	0.16	342220	0.02	2000	
Sb	123	115	1	He	7.296	7.296	1.89	31688	0.02	300	
Ba	137	115	1	He	42.099	42.099	1.03	88543	0.05	10000	
W	182	209	1	He	13.468	13.468	0.62	161629	0.01	2500	
Tl	205	165	1	He	0.203	0.203	15.04	6682	0.00	5000	
Pb	208	209	1	He	56.684	56.684	0.43	2303839	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1204775	1.08	1631381	73.85	30	120	
Sc	45	1	He	1249166	6.11	829696	150.56	30	120	ISTD Failed
Sc	45	2	NoGas	8714720	0.87	6325638	137.77	30	120	ISTD Failed
Rh	103	1	He	1781910	1.80	2345543	75.97	30	120	
In	115	1	He	1110403	3.04	1419467	78.23	30	120	
Tb	159	1	He	3432372	1.66	3888262	88.28	30	120	
Ho	165	1	He	3544857	1.77	3932562	90.14	30	120	
Bi	209	1	He	2308090	1.60	2874805	80.29	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-f@10
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:51:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.180	0.180	19.19	682	0.03	10000	
B	11	45	2	NoGas	3.406	3.406	3.01	18970	0.02	300	
Na	23	45	1	He	438.085	438.085	1.24	697485	0.06	500000	
Mg	24	45	1	He	692.214	692.214	0.65	609309	0.11	500000	
Al	27	45	1	He	4420.003	4420.003	0.40	2204429	0.20	200000	
K	39	45	1	He	54.181	54.181	6.47	78209	0.07	500000	
Ca	44	45	1	He	208784.786	208784.786	1.91	9482950	2.20	500000	
Ti	47	45	1	He	11759.639	11759.639	1.54	3009666	0.39	2500	>LDR
V	51	45	1	He	1316.686	1316.686	1.55	8333684	0.02	10000	
Cr	52	45	1	He	510.004	510.004	1.06	3881150	0.01	10000	
Mn	55	45	1	He	69.033	69.033	1.02	413724	0.02	10000	
Fe	56	45	1	He	4026.677	4026.677	1.54	28886869	0.01	200000	
Co	59	103	1	He	0.573	0.573	0.97	5902	0.01	10000	
Ni	60	103	1	He	2.078	2.078	7.63	5375	0.04	10000	
Cu	63	103	1	He	3.074	3.074	1.78	21872	0.01	10000	
Zn	66	103	1	He	54.511	54.511	2.62	75040	0.07	10000	
As	75	103	1	He	0.827	0.827	4.52	847	0.10	10000	
Se	78	103	1	He	0.422	0.422	20.91	80	0.53	10000	
Sr	88	103	1	He	4011.709	4011.709	2.65	28304573	0.01	10000	
Mo	95	103	1	He	1.575	1.575	3.19	5101	0.03	2000	
Ag	107	103	1	He	0.432	0.432	2.76	4765	0.01	300	
Cd	111	103	1	He	1.914	1.914	9.51	4644	0.04	4000	
Sn	118	115	1	He	14.866	14.866	1.67	71271	0.02	2000	
Sb	123	115	1	He	1.507	1.507	0.50	7102	0.02	300	
Ba	137	115	1	He	8.389	8.389	1.95	18110	0.05	10000	
W	182	209	1	He	2.498	2.498	2.84	36002	0.01	2500	
Tl	205	165	1	He	0.031	0.031	2.90	1083	0.00	5000	
Pb	208	209	1	He	11.176	11.176	0.97	505044	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1146923	1.09	1631381	70.30	30	120	
Sc	45	1	He	722584	1.89	829696	87.09	30	120	
Sc	45	2	NoGas	5454702	0.60	6325638	86.23	30	120	
Rh	103	1	He	1858185	1.01	2345543	79.22	30	120	
In	115	1	He	1135417	0.99	1419467	79.99	30	120	
Tb	159	1	He	3504211	0.75	3888262	90.12	30	120	
Ho	165	1	He	3572451	0.74	3932562	90.84	30	120	
Bi	209	1	He	2563411	0.65	2874805	89.17	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111548-a-3-f@10
Data File Name	044SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:55:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.203	0.203	13.36	752	0.03	10000	
B	11	45	2	NoGas	3.472	3.472	6.43	19051	0.02	300	
Na	23	45	1	He	428.245	428.245	0.45	674104	0.06	500000	
Mg	24	45	1	He	685.657	685.657	0.54	596350	0.11	500000	
Al	27	45	1	He	4332.684	4332.684	0.36	2135163	0.20	200000	
K	39	45	1	He	55.802	55.802	2.58	78566	0.07	500000	
Ca	44	45	1	He	206908.499	206908.499	1.38	9283216	2.23	500000	
Ti	47	45	1	He	11736.590	11736.590	0.76	2968225	0.40	2500	>LDR
V	51	45	1	He	1317.782	1317.782	0.48	8240415	0.02	10000	
Cr	52	45	1	He	507.289	507.289	0.81	3814775	0.01	10000	
Mn	55	45	1	He	67.990	67.990	0.60	402621	0.02	10000	
Fe	56	45	1	He	3979.695	3979.695	1.20	28204631	0.01	200000	
Co	59	103	1	He	0.545	0.545	1.43	5495	0.01	10000	
Ni	60	103	1	He	2.080	2.080	3.54	5259	0.04	10000	
Cu	63	103	1	He	3.075	3.075	2.96	21391	0.01	10000	
Zn	66	103	1	He	55.408	55.408	1.15	74552	0.07	10000	
As	75	103	1	He	0.748	0.748	0.12	762	0.10	10000	
Se	78	103	1	He	0.367	0.367	4.60	73	0.50	10000	
Sr	88	103	1	He	4000.519	4000.519	1.80	27597874	0.01	10000	
Mo	95	103	1	He	1.502	1.502	0.76	4757	0.03	2000	
Ag	107	103	1	He	0.481	0.481	4.74	5184	0.01	300	
Cd	111	103	1	He	2.334	2.334	3.08	5327	0.04	4000	
Sn	118	115	1	He	14.546	14.546	0.35	69037	0.02	2000	
Sb	123	115	1	He	1.489	1.489	2.34	6950	0.02	300	
Ba	137	115	1	He	8.485	8.485	3.12	18124	0.05	10000	
W	182	209	1	He	2.438	2.438	1.53	34920	0.01	2500	
Tl	205	165	1	He	0.029	0.029	9.72	992	0.00	5000	
Pb	208	209	1	He	11.098	11.098	1.30	497148	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1121344	1.59	1631381	68.74	30	120	
Sc	45	1	He	713962	1.03	829696	86.05	30	120	
Sc	45	2	NoGas	5419189	1.03	6325638	85.67	30	120	
Rh	103	1	He	1816859	0.96	2345543	77.46	30	120	
In	115	1	He	1123650	0.30	1419467	79.16	30	120	
Tb	159	1	He	3472601	0.90	3888262	89.31	30	120	
Ho	165	1	He	3538501	0.63	3932562	89.98	30	120	
Bi	209	1	He	2541337	1.23	2874805	88.40	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111548-a-3-f@50
Data File Name	045SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:59:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.100	0.100	3.93	407	0.02	10000	
B	11	45	2	NoGas	0.561	0.561	21.65	9484	0.01	300	
Na	23	45	1	He	102.825	102.825	2.75	163172	0.06	500000	
Mg	24	45	1	He	159.628	159.628	1.44	128623	0.12	500000	
Al	27	45	1	He	1025.745	1025.745	1.07	467716	0.22	200000	
K	39	45	1	He	15.751	15.751	9.01	42250	0.04	500000	
Ca	44	45	1	He	49445.845	49445.845	0.67	2046499	2.42	500000	
Ti	47	45	1	He	2704.285	2704.285	1.39	630640	0.43	2500	>LDR
V	51	45	1	He	314.254	314.254	2.12	1812167	0.02	10000	
Cr	52	45	1	He	119.258	119.258	1.80	828523	0.01	10000	
Mn	55	45	1	He	16.095	16.095	1.63	88631	0.02	10000	
Fe	56	45	1	He	946.644	946.644	0.89	6189826	0.02	200000	
Co	59	103	1	He	0.108	0.108	5.07	1225	0.01	10000	
Ni	60	103	1	He	0.409	0.409	13.14	1221	0.03	10000	
Cu	63	103	1	He	0.594	0.594	6.92	5711	0.01	10000	
Zn	66	103	1	He	11.191	11.191	4.55	17851	0.06	10000	
As	75	103	1	He	0.131	0.131	14.56	261	0.05	10000	
Se	78	103	1	He	0.068	0.068	89.51	51	0.13	10000	
Sr	88	103	1	He	792.054	792.054	1.12	5993459	0.01	10000	
Mo	95	103	1	He	0.317	0.317	8.91	1141	0.03	2000	
Ag	107	103	1	He	0.088	0.088	6.56	1040	0.01	300	
Cd	111	103	1	He	0.445	0.445	23.18	1960	0.02	4000	
Sn	118	115	1	He	2.891	2.891	6.35	15345	0.02	2000	
Sb	123	115	1	He	0.294	0.294	9.19	1889	0.02	300	
Ba	137	115	1	He	1.717	1.717	3.37	3969	0.04	10000	
W	182	209	1	He	0.470	0.470	7.82	10115	0.00	2500	
Tl	205	165	1	He	0.008	0.008	18.93	323	0.00	5000	
Pb	208	209	1	He	2.219	2.219	1.69	107652	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1188793	0.72	1631381	72.87	30	120	
Sc	45	1	He	658377	0.99	829696	79.35	30	120	
Sc	45	2	NoGas	5055722	1.21	6325638	79.92	30	120	
Rh	103	1	He	1992622	0.75	2345543	84.95	30	120	
In	115	1	He	1195320	0.32	1419467	84.21	30	120	
Tb	159	1	He	3525348	0.74	3888262	90.67	30	120	
Ho	165	1	He	3666834	0.76	3932562	93.24	30	120	
Bi	209	1	He	2736470	0.56	2874805	95.19	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111548-a-3-f@2
Data File Name	046SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:03:13-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	885.722	885.722	1.33	2962162	0.03	10000	
B	11	45	2	NoGas	69.015	69.015	0.90	314445	0.02	300	
Na	23	45	1	He	6952.876	6952.876	1.13	15153396	0.05	500000	
Mg	24	45	1	He	7568.957	7568.957	0.75	9361395	0.08	500000	
Al	27	45	1	He	18172.773	18172.773	0.44	12742383	0.14	200000	
K	39	45	1	He	5788.973	5788.973	0.18	6787228	0.09	500000	
Ca	44	45	1	He	645090.975	645090.975	1.32	41214669	1.57	500000	>LDR
Ti	47	45	1	He	36017.411	36017.411	0.72	12970562	0.28	2500	>LDR
V	51	45	1	He	4561.240	4561.240	0.50	40615610	0.01	10000	
Cr	52	45	1	He	2067.685	2067.685	0.99	22132272	0.01	10000	
Mn	55	45	1	He	758.062	758.062	0.87	6377200	0.01	10000	
Fe	56	45	1	He	17651.345	17651.345	1.08	178131811	0.01	200000	
Co	59	103	1	He	927.409	927.409	0.76	8106045	0.01	10000	
Ni	60	103	1	He	930.592	930.592	0.87	2016873	0.05	10000	
Cu	63	103	1	He	898.380	898.380	1.05	5121518	0.02	10000	
Zn	66	103	1	He	1050.484	1050.484	0.70	1210654	0.09	10000	
As	75	103	1	He	983.440	983.440	1.04	729544	0.13	10000	
Se	78	103	1	He	1003.230	1003.230	0.76	78673	1.28	10000	
Sr	88	103	1	He	21312.814	21312.814	1.00	128430502	0.02	10000	>LDR
Mo	95	103	1	He	121.144	121.144	0.70	331757	0.04	2000	
Ag	107	103	1	He	97.413	97.413	0.88	916303	0.01	300	
Cd	111	103	1	He	960.480	960.480	0.23	1573077	0.06	4000	
Sn	118	115	1	He	1160.185	1160.185	0.50	4733738	0.02	2000	
Sb	123	115	1	He	111.073	111.073	1.08	418921	0.03	300	
Ba	137	115	1	He	1154.521	1154.521	1.33	2137855	0.05	10000	
W	182	209	1	He	121.488	121.488	1.60	1370819	0.01	2500	
Tl	205	165	1	He	240.722	240.722	0.59	7258805	0.00	5000	
Pb	208	209	1	He	1042.633	1042.633	1.46	40498355	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058146	1.23	1631381	64.86	30	120	
Sc	45	1	He	1016651	0.35	829696	122.53	30	120	ISTD Failed
Sc	45	2	NoGas	7781518	1.37	6325638	123.02	30	120	ISTD Failed
Rh	103	1	He	1586918	0.78	2345543	67.66	30	120	
In	115	1	He	978343	0.57	1419467	68.92	30	120	
Tb	159	1	He	3180107	0.80	3888262	81.79	30	120	
Ho	165	1	He	3285769	0.69	3932562	83.55	30	120	
Bi	209	1	He	2206758	1.30	2874805	76.76	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111548-a-3-f@10
Data File Name	047SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:06:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	951.980	951.980	1.24	3355818	0.03	10000	
B	11	45	2	NoGas	97.444	97.444	0.87	304710	0.03	300	
Na	23	45	1	He	9370.901	9370.901	1.26	13817617	0.07	500000	
Mg	24	45	1	He	9630.059	9630.059	0.56	8062326	0.12	500000	
Al	27	45	1	He	12497.130	12497.130	1.35	5931842	0.21	200000	
K	39	45	1	He	8939.639	8939.639	0.18	7077482	0.13	500000	
Ca	44	45	1	He	215273.892	215273.892	1.10	9310339	2.31	500000	
Ti	47	45	1	He	11903.511	11903.511	0.80	2901633	0.41	2500	>LDR
V	51	45	1	He	2213.193	2213.193	1.37	13339157	0.02	10000	
Cr	52	45	1	He	1397.691	1397.691	1.75	10126749	0.01	10000	
Mn	55	45	1	He	962.364	962.364	1.33	5479516	0.02	10000	
Fe	56	45	1	He	13100.949	13100.949	0.50	89491139	0.01	200000	
Co	59	103	1	He	915.088	915.088	1.17	9098566	0.01	10000	
Ni	60	103	1	He	923.263	923.263	1.19	2276315	0.04	10000	
Cu	63	103	1	He	911.174	911.174	1.45	5909071	0.02	10000	
Zn	66	103	1	He	930.270	930.270	0.93	1219766	0.08	10000	
As	75	103	1	He	937.493	937.493	0.86	791144	0.12	10000	
Se	78	103	1	He	927.322	927.322	0.68	82728	1.12	10000	
Sr	88	103	1	He	4873.892	4873.892	0.16	33411421	0.01	10000	
Mo	95	103	1	He	108.893	108.893	0.88	339245	0.03	2000	
Ag	107	103	1	He	98.838	98.838	0.58	1057615	0.01	300	
Cd	111	103	1	He	1026.436	1026.436	0.61	1912319	0.05	4000	
Sn	118	115	1	He	1137.929	1137.929	1.30	5082754	0.02	2000	
Sb	123	115	1	He	109.274	109.274	0.10	451214	0.02	300	
Ba	137	115	1	He	1126.268	1126.268	0.99	2283242	0.05	10000	
W	182	209	1	He	109.400	109.400	2.51	1397598	0.01	2500	
Tl	205	165	1	He	252.634	252.634	1.71	8327219	0.00	5000	
Pb	208	209	1	He	1011.672	1011.672	0.70	44483087	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1115299	0.99	1631381	68.37	30	120	
Sc	45	1	He	688176	0.68	829696	82.94	30	120	
Sc	45	2	NoGas	5401492	0.15	6325638	85.39	30	120	
Rh	103	1	He	1805234	0.34	2345543	76.96	30	120	
In	115	1	He	1071059	0.69	1419467	75.46	30	120	
Tb	159	1	He	3476813	1.00	3888262	89.42	30	120	
Ho	165	1	He	3591755	0.46	3932562	91.33	30	120	
Bi	209	1	He	2497770	0.41	2874805	86.88	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-g ms@2
Data File Name	048SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:10:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	433.651	433.651	3.71	1424826	0.03	10000	
B	11	45	2	NoGas	38.211	38.211	1.14	175321	0.02	300	
Na	23	45	1	He	4029.731	4029.731	0.19	8532320	0.05	500000	
Mg	24	45	1	He	4704.157	4704.157	0.64	5645178	0.08	500000	
Al	27	45	1	He	15045.638	15045.638	0.55	10235512	0.15	200000	
K	39	45	1	He	2813.435	2813.435	0.75	3223397	0.09	500000	
Ca	44	45	1	He	751017.261	751017.261	1.20	46554511	1.61	500000	>LDR
Ti	47	45	1	He	35464.393	35464.393	0.85	12390698	0.29	2500	>LDR
V	51	45	1	He	4169.737	4169.737	1.17	36024658	0.01	10000	
Cr	52	45	1	He	1764.151	1764.151	0.16	18320285	0.01	10000	
Mn	55	45	1	He	470.093	470.093	0.99	3837414	0.01	10000	
Fe	56	45	1	He	14410.874	14410.874	0.69	141096786	0.01	200000	
Co	59	103	1	He	460.151	460.151	2.52	3866191	0.01	10000	
Ni	60	103	1	He	445.795	445.795	1.74	928916	0.05	10000	
Cu	63	103	1	He	453.702	453.702	0.72	2487652	0.02	10000	
Zn	66	103	1	He	629.667	629.667	2.14	698108	0.09	10000	
As	75	103	1	He	443.534	443.534	2.45	316348	0.14	10000	
Se	78	103	1	He	481.256	481.256	1.81	36301	1.33	10000	
Sr	88	103	1	He	25531.644	25531.644	1.87	147908674	0.02	10000	>LDR
Mo	95	103	1	He	60.487	60.487	3.18	159228	0.04	2000	
Ag	107	103	1	He	48.402	48.402	2.60	437630	0.01	300	
Cd	111	103	1	He	458.243	458.243	2.43	721840	0.06	4000	
Sn	118	115	1	He	602.545	602.545	2.01	2425054	0.02	2000	
Sb	123	115	1	He	47.124	47.124	1.45	175537	0.03	300	
Ba	137	115	1	He	521.558	521.558	0.55	952560	0.05	10000	
W	182	209	1	He	32.713	32.713	1.78	357500	0.01	2500	
Tl	205	165	1	He	115.455	115.455	1.67	3453302	0.00	5000	
Pb	208	209	1	He	536.378	536.378	0.78	20064800	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1039733	1.09	1631381	63.73	30	120	
Sc	45	1	He	986322	1.14	829696	118.88	30	120	
Sc	45	2	NoGas	7599650	0.28	6325638	120.14	30	120	ISTD Failed
Rh	103	1	He	1526114	2.94	2345543	65.06	30	120	
In	115	1	He	964856	0.38	1419467	67.97	30	120	
Tb	159	1	He	3097678	1.47	3888262	79.67	30	120	
Ho	165	1	He	3259425	0.88	3932562	82.88	30	120	
Bi	209	1	He	2125018	0.50	2874805	73.92	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-g ms@10
Data File Name	049SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:13:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	91.817	91.817	0.12	305130	0.03	10000	
B	11	45	2	NoGas	11.872	11.872	1.80	41700	0.03	300	
Na	23	45	1	He	1311.034	1311.034	1.12	1845225	0.07	500000	
Mg	24	45	1	He	1516.321	1516.321	0.79	1202077	0.13	500000	
Al	27	45	1	He	4867.719	4867.719	1.34	2188078	0.22	200000	
K	39	45	1	He	884.418	884.418	0.73	689737	0.13	500000	
Ca	44	45	1	He	236027.661	236027.661	0.79	9660960	2.44	500000	
Ti	47	45	1	He	11326.901	11326.901	0.84	2613114	0.43	2500	>LDR
V	51	45	1	He	1344.177	1344.177	0.18	7667807	0.02	10000	
Cr	52	45	1	He	578.697	578.697	1.72	3969602	0.01	10000	
Mn	55	45	1	He	149.851	149.851	0.60	808347	0.02	10000	
Fe	56	45	1	He	4680.847	4680.847	1.85	30263953	0.02	200000	
Co	59	103	1	He	87.498	87.498	0.88	844856	0.01	10000	
Ni	60	103	1	He	87.247	87.247	0.64	208980	0.04	10000	
Cu	63	103	1	He	88.378	88.378	0.82	557732	0.02	10000	
Zn	66	103	1	He	132.823	132.823	2.23	170381	0.08	10000	
As	75	103	1	He	81.341	81.341	0.95	66769	0.12	10000	
Se	78	103	1	He	84.652	84.652	0.87	7369	1.15	10000	
Sr	88	103	1	He	4777.933	4777.933	1.08	31806961	0.02	10000	
Mo	95	103	1	He	10.896	10.896	1.98	33003	0.03	2000	
Ag	107	103	1	He	9.834	9.834	1.02	102204	0.01	300	
Cd	111	103	1	He	94.776	94.776	1.34	172291	0.06	4000	
Sn	118	115	1	He	113.216	113.216	1.22	501300	0.02	2000	
Sb	123	115	1	He	9.578	9.578	1.30	39579	0.02	300	
Ba	137	115	1	He	103.079	103.079	1.33	206910	0.05	10000	
W	182	209	1	He	5.921	5.921	4.30	77328	0.01	2500	
Tl	205	165	1	He	23.377	23.377	1.93	732365	0.00	5000	
Pb	208	209	1	He	105.290	105.290	0.71	4548365	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1051272	0.46	1631381	64.44	30	120	
Sc	45	1	He	651294	0.10	829696	78.50	30	120	
Sc	45	2	NoGas	5059076	0.36	6325638	79.98	30	120	
Rh	103	1	He	1753075	1.02	2345543	74.74	30	120	
In	115	1	He	1060148	0.55	1419467	74.69	30	120	
Tb	159	1	He	3355930	2.04	3888262	86.31	30	120	
Ho	165	1	He	3413809	0.88	3932562	86.81	30	120	
Bi	209	1	He	2453706	1.08	2874805	85.35	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	050_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:17:37-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.316	2.766	166051	1.71	50	92.6	89.5	110.5	
B	11	45	2	NoGas	48.314	0.363	136198	1.27	50	96.6	89.5	110.5	
Na	23	45	1	He	26464.165	2.965	33522336	1.74	25000	105.9	89.5	110.5	
Mg	24	45	1	He	26185.797	1.906	18849422	0.69	25000	104.7	89.5	110.5	
Al	27	45	1	He	251.419	2.266	104469	1.13	250	100.6	89.5	110.5	
K	39	45	1	He	26218.004	1.304	17796272	0.39	25000	104.9	89.5	110.5	
Ca	44	45	1	He	26006.449	1.507	967827	0.47	25000	104.0	89.5	110.5	
Ti	47	45	1	He	86.819	5.768	18201	4.53	50	173.6	89.5	110.5	CCV Failed
V	51	45	1	He	53.156	1.547	275596	1.23	50	106.3	89.5	110.5	
Cr	52	45	1	He	53.730	1.788	336543	0.93	50	107.5	89.5	110.5	
Mn	55	45	1	He	264.086	2.324	1293605	1.11	250	105.6	89.5	110.5	
Fe	56	45	1	He	13428.787	1.955	78878939	0.96	12500	107.4	89.5	110.5	
Co	59	103	1	He	45.907	0.611	473799	0.72	50	91.8	89.5	110.5	
Ni	60	103	1	He	45.477	1.376	116471	1.47	50	91.0	89.5	110.5	
Cu	63	103	1	He	46.707	1.016	315687	1.12	50	93.4	89.5	110.5	
Zn	66	103	1	He	46.508	1.213	64791	1.09	50	93.0	89.5	110.5	
As	75	103	1	He	46.260	0.451	40643	0.50	50	92.5	89.5	110.5	
Se	78	103	1	He	46.403	1.204	4336	1.12	50	92.8	89.5	110.5	
Sr	88	103	1	He	47.273	0.541	336446	0.63	50	94.5	89.5	110.5	
Mo	95	103	1	He	50.502	0.971	163322	0.90	50	101.0	89.5	110.5	
Ag	107	103	1	He	50.289	0.889	558532	0.99	50	100.6	89.5	110.5	
Cd	111	103	1	He	51.409	1.218	100344	1.31	50	102.8	89.5	110.5	
Sn	118	115	1	He	51.639	1.072	241909	0.74	50	103.3	89.5	110.5	
Sb	123	115	1	He	52.449	0.317	226608	0.30	50	104.9	89.5	110.5	
Ba	137	115	1	He	51.584	0.365	109372	0.61	50	103.2	89.5	110.5	
W	182	209	1	He	51.261	1.268	668471	0.63	50	102.5	89.5	110.5	
Tl	205	165	1	He	50.414	2.136	1654230	2.43	50	100.8	89.5	110.5	
Pb	208	209	1	He	48.659	1.858	2178741	1.25	50	97.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1134300	1.51	1631381	69.53	30	120	
Sc	45	1	He	591835	1.20	829696	71.33	30	120	
Sc	45	2	NoGas	4736464	1.61	6325638	74.88	30	120	
Rh	103	1	He	1873655	0.11	2345543	79.88	30	120	
In	115	1	He	1119411	0.61	1419467	78.86	30	120	
Tb	159	1	He	3469285	0.45	3888262	89.22	30	120	
Ho	165	1	He	3575100	0.32	3932562	90.91	30	120	
Bi	209	1	He	2543000	1.13	2874805	88.46	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	051_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:21:28-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.150	11.2	567	11.9	1	
B	11	45	2	NoGas	0.457	40.1	8551	5.7	20	
Na	23	45	1	He	11.287	20.8	32430	9.2	400	
Mg	24	45	1	He	2.240	61.8	2441	42.5	1000	
Al	27	45	1	He	1.180	18.0	2497	3.6	50	
K	39	45	1	He	8.322	17.7	34716	2.6	1000	
Ca	44	45	1	He	19.311	11.1	1510	5.0	1000	
Ti	47	45	1	He	4.179	6.5	933	6.6	20	
V	51	45	1	He	0.139	39.8	837	36.0	2	
Cr	52	45	1	He	0.027	93.5	2112	8.3	2	
Mn	55	45	1	He	0.092	47.1	1398	15.7	2	
Fe	56	45	1	He	15.093	20.2	96845	19.2	50	
Co	59	103	1	He	0.014	33.6	197	26.9	1	
Ni	60	103	1	He	0.000	-2075.8	111	4.6	2	
Cu	63	103	1	He	0.135	13.2	2466	6.5	2	
Zn	66	103	1	He	-0.007	-1062.6	1696	6.2	20	
As	75	103	1	He	0.214	5.5	344	2.3	2	
Se	78	103	1	He	0.126	53.6	57	10.5	2	
Sr	88	103	1	He	0.265	6.8	2140	6.6	10	
Mo	95	103	1	He	0.925	16.0	3291	16.4	2	
Ag	107	103	1	He	0.015	9.9	190	10.7	0.2	
Cd	111	103	1	He	0.010	238.8	1085	3.6	0.2	
Sn	118	115	1	He	0.535	17.3	3560	13.1	10	
Sb	123	115	1	He	0.539	17.0	2981	13.9	1	
Ba	137	115	1	He	0.009	14.4	103	3.2	5	
W	182	209	1	He	1.156	7.9	19331	7.2	10	
Tl	205	165	1	He	0.047	24.7	1621	24.2	0.5	
Pb	208	209	1	He	0.129	5.9	6835	6.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1130581	1.69	1631381	69.30	30	120	
Sc	45	1	He	623699	0.59	829696	75.17	30	120	
Sc	45	2	NoGas	4705370	1.81	6325638	74.39	30	120	
Rh	103	1	He	2027114	1.30	2345543	86.42	30	120	
In	115	1	He	1179723	0.42	1419467	83.11	30	120	
Tb	159	1	He	3521407	0.64	3888262	90.57	30	120	
Ho	165	1	He	3604970	0.48	3932562	91.67	30	120	
Bi	209	1	He	2684585	1.09	2874805	93.38	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-h msd@2
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:25:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	416.847	416.847	2.27	1273261	0.03	10000	
B	11	45	2	NoGas	37.734	37.734	0.82	156073	0.02	300	
Na	23	45	1	He	4019.982	4019.982	0.97	7987329	0.05	500000	
Mg	24	45	1	He	4578.684	4578.684	0.97	5155948	0.09	500000	
Al	27	45	1	He	14589.844	14589.844	1.35	9312747	0.16	200000	
K	39	45	1	He	2875.467	2875.467	1.04	3090683	0.09	500000	
Ca	44	45	1	He	731043.754	731043.754	0.66	42524349	1.72	500000	>LDR
Ti	47	45	1	He	33614.900	33614.900	0.87	11020605	0.31	2500	>LDR
V	51	45	1	He	4019.866	4019.866	1.38	32584473	0.01	10000	
Cr	52	45	1	He	1698.176	1698.176	1.40	16546288	0.01	10000	
Mn	55	45	1	He	462.137	462.137	1.02	3539938	0.01	10000	
Fe	56	45	1	He	14157.359	14157.359	1.24	130055404	0.01	200000	
Co	59	103	1	He	436.348	436.348	2.14	3572227	0.01	10000	
Ni	60	103	1	He	423.719	423.719	1.76	860096	0.05	10000	
Cu	63	103	1	He	440.609	440.609	0.50	2353765	0.02	10000	
Zn	66	103	1	He	604.455	604.455	1.49	653000	0.09	10000	
As	75	103	1	He	431.530	431.530	2.04	299876	0.14	10000	
Se	78	103	1	He	471.754	471.754	1.97	34677	1.36	10000	
Sr	88	103	1	He	24823.933	24823.933	2.15	140104048	0.02	10000	>LDR
Mo	95	103	1	He	55.723	55.723	2.21	142921	0.04	2000	
Ag	107	103	1	He	48.281	48.281	3.10	425174	0.01	300	
Cd	111	103	1	He	454.215	454.215	2.24	696979	0.07	4000	
Sn	118	115	1	He	582.421	582.421	2.56	2297895	0.03	2000	
Sb	123	115	1	He	43.680	43.680	1.35	159533	0.03	300	
Ba	137	115	1	He	509.142	509.142	0.83	911441	0.06	10000	
W	182	209	1	He	25.032	25.032	3.59	281282	0.01	2500	
Tl	205	165	1	He	113.889	113.889	1.86	3351303	0.00	5000	
Pb	208	209	1	He	506.280	506.280	0.95	19437383	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	966716	2.65	1631381	59.26	30	120	
Sc	45	1	He	925762	4.03	829696	111.58	30	120	
Sc	45	2	NoGas	6844933	0.59	6325638	108.21	30	120	
Rh	103	1	He	1486870	4.40	2345543	63.39	30	120	
In	115	1	He	945721	1.47	1419467	66.63	30	120	
Tb	159	1	He	3083958	0.92	3888262	79.31	30	120	
Ho	165	1	He	3206363	2.25	3932562	81.53	30	120	
Bi	209	1	He	2181117	2.51	2874805	75.87	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-h msd@10
Data File Name	053SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:28:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	88.695	88.695	2.98	267076	0.03	10000	
B	11	45	2	NoGas	11.246	11.246	3.18	36392	0.03	300	
Na	23	45	1	He	1268.724	1268.724	0.95	1666460	0.08	500000	
Mg	24	45	1	He	1449.000	1449.000	0.84	1071670	0.14	500000	
Al	27	45	1	He	4540.172	4540.172	0.56	1904097	0.24	200000	
K	39	45	1	He	867.372	867.372	0.96	631593	0.14	500000	
Ca	44	45	1	He	223425.072	223425.072	0.88	8531957	2.62	500000	
Ti	47	45	1	He	10493.271	10493.271	1.10	2258508	0.46	2500	>LDR
V	51	45	1	He	1255.190	1255.190	0.31	6679902	0.02	10000	
Cr	52	45	1	He	536.892	536.892	1.01	3435906	0.02	10000	
Mn	55	45	1	He	142.915	142.915	0.30	719262	0.02	10000	
Fe	56	45	1	He	4480.036	4480.036	0.20	27022395	0.02	200000	
Co	59	103	1	He	82.834	82.834	1.91	761268	0.01	10000	
Ni	60	103	1	He	82.657	82.657	1.30	188448	0.04	10000	
Cu	63	103	1	He	83.856	83.856	1.85	503747	0.02	10000	
Zn	66	103	1	He	125.948	125.948	0.97	153859	0.08	10000	
As	75	103	1	He	77.918	77.918	1.74	60882	0.13	10000	
Se	78	103	1	He	81.291	81.291	1.42	6737	1.21	10000	
Sr	88	103	1	He	4541.335	4541.335	2.34	28772100	0.02	10000	
Mo	95	103	1	He	10.182	10.182	1.41	29359	0.03	2000	
Ag	107	103	1	He	9.654	9.654	2.74	95469	0.01	300	
Cd	111	103	1	He	92.506	92.506	0.58	160100	0.06	4000	
Sn	118	115	1	He	108.764	108.764	1.45	459475	0.02	2000	
Sb	123	115	1	He	9.035	9.035	1.15	35647	0.03	300	
Ba	137	115	1	He	100.295	100.295	0.06	192062	0.05	10000	
W	182	209	1	He	4.772	4.772	4.41	61868	0.01	2500	
Tl	205	165	1	He	22.812	22.812	0.86	698792	0.00	5000	
Pb	208	209	1	He	101.853	101.853	0.78	4326021	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	953022	2.50	1631381	58.42	30	120	
Sc	45	1	He	607607	0.62	829696	73.23	30	120	
Sc	45	2	NoGas	4612348	0.43	6325638	72.92	30	120	
Rh	103	1	He	1668709	1.25	2345543	71.14	30	120	
In	115	1	He	1011366	0.28	1419467	71.25	30	120	
Tb	159	1	He	3200709	0.38	3888262	82.32	30	120	
Ho	165	1	He	3337453	0.65	3932562	84.87	30	120	
Bi	209	1	He	2412362	0.64	2874805	83.91	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-2-m@2
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:32:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.796	0.796	6.24	2393	0.03	10000	
B	11	45	2	NoGas	9.840	9.840	1.03	51353	0.02	300	
Na	23	45	1	He	1126.450	1126.450	2.11	2347899	0.05	500000	
Mg	24	45	1	He	2156.655	2156.655	0.62	2527392	0.09	500000	
Al	27	45	1	He	13397.916	13397.916	0.33	8898909	0.15	200000	
K	39	45	1	He	119.730	119.730	1.83	176472	0.07	500000	
Ca	44	45	1	He	597025.936	597025.936	0.77	36127337	1.65	500000	>LDR
Ti	47	45	1	He	36222.513	36222.513	0.45	12354940	0.29	2500	>LDR
V	51	45	1	He	4227.223	4227.223	0.94	35654166	0.01	10000	
Cr	52	45	1	He	1644.138	1644.138	0.51	16669693	0.01	10000	
Mn	55	45	1	He	249.901	249.901	1.57	1992141	0.01	10000	
Fe	56	45	1	He	12689.603	12689.603	0.29	121292066	0.01	200000	
Co	59	103	1	He	3.364	3.364	1.95	26711	0.01	10000	
Ni	60	103	1	He	11.666	11.666	2.62	23020	0.05	10000	
Cu	63	103	1	He	15.798	15.798	1.25	82761	0.02	10000	
Zn	66	103	1	He	233.855	233.855	1.56	245507	0.10	10000	
As	75	103	1	He	5.108	5.108	1.84	3539	0.14	10000	
Se	78	103	1	He	1.902	1.902	9.47	167	1.14	10000	
Sr	88	103	1	He	19552.016	19552.016	0.57	106917665	0.02	10000	>LDR
Mo	95	103	1	He	10.103	10.103	1.41	25141	0.04	2000	
Ag	107	103	1	He	2.944	2.944	1.27	25135	0.01	300	
Cd	111	103	1	He	13.981	13.981	1.14	21525	0.06	4000	
Sn	118	115	1	He	69.758	69.758	0.63	272983	0.03	2000	
Sb	123	115	1	He	3.945	3.945	2.82	14640	0.03	300	
Ba	137	115	1	He	40.314	40.314	1.07	71484	0.06	10000	
W	182	209	1	He	13.940	13.940	1.69	152046	0.01	2500	
Tl	205	165	1	He	0.168	0.168	13.86	4894	0.00	5000	
Pb	208	209	1	He	63.705	63.705	1.53	2354621	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	941255	2.02	1631381	57.70	30	120	
Sc	45	1	He	962941	0.79	829696	116.06	30	120	
Sc	45	2	NoGas	7233774	0.32	6325638	114.36	30	120	
Rh	103	1	He	1440059	0.63	2345543	61.40	30	120	
In	115	1	He	935957	0.33	1419467	65.94	30	120	
Tb	159	1	He	3023583	1.00	3888262	77.76	30	120	
Ho	165	1	He	3136470	0.55	3932562	79.76	30	120	
Bi	209	1	He	2099492	1.62	2874805	73.03	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-2-m@10
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:36:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.231	0.231	12.67	733	0.03	10000	
B	11	45	2	NoGas	3.181	3.181	5.78	16137	0.02	300	
Na	23	45	1	He	371.997	371.997	1.06	516018	0.07	500000	
Mg	24	45	1	He	719.202	719.202	0.86	548726	0.13	500000	
Al	27	45	1	He	4601.563	4601.563	0.90	1989493	0.23	200000	
K	39	45	1	He	41.116	41.116	1.54	58394	0.07	500000	
Ca	44	45	1	He	196124.997	196124.997	2.03	7720196	2.54	500000	
Ti	47	45	1	He	12112.861	12112.861	0.58	2687487	0.45	2500	>LDR
V	51	45	1	He	1415.118	1415.118	1.44	7763212	0.02	10000	
Cr	52	45	1	He	554.291	554.291	1.28	3656661	0.02	10000	
Mn	55	45	1	He	80.500	80.500	1.51	418048	0.02	10000	
Fe	56	45	1	He	4282.885	4282.885	1.50	26630751	0.02	200000	
Co	59	103	1	He	0.634	0.634	0.85	5881	0.01	10000	
Ni	60	103	1	He	2.230	2.230	0.33	5193	0.04	10000	
Cu	63	103	1	He	3.123	3.123	1.42	20010	0.02	10000	
Zn	66	103	1	He	48.789	48.789	0.52	60698	0.08	10000	
As	75	103	1	He	0.784	0.784	4.93	731	0.11	10000	
Se	78	103	1	He	0.197	0.197	23.02	53	0.37	10000	
Sr	88	103	1	He	3631.053	3631.053	0.35	23097638	0.02	10000	
Mo	95	103	1	He	1.852	1.852	3.23	5398	0.03	2000	
Ag	107	103	1	He	0.517	0.517	1.55	5135	0.01	300	
Cd	111	103	1	He	2.293	2.293	3.89	4843	0.05	4000	
Sn	118	115	1	He	14.092	14.092	3.60	61088	0.02	2000	
Sb	123	115	1	He	0.787	0.787	7.76	3569	0.02	300	
Ba	137	115	1	He	7.974	7.974	0.78	15556	0.05	10000	
W	182	209	1	He	2.591	2.591	1.16	34924	0.01	2500	
Tl	205	165	1	He	0.030	0.030	3.64	993	0.00	5000	
Pb	208	209	1	He	12.666	12.666	1.75	536949	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	968366	1.47	1631381	59.36	30	120	
Sc	45	1	He	626393	0.93	829696	75.50	30	120	
Sc	45	2	NoGas	4816530	0.84	6325638	76.14	30	120	
Rh	103	1	He	1675155	0.80	2345543	71.42	30	120	
In	115	1	He	1025878	0.46	1419467	72.27	30	120	
Tb	159	1	He	3257259	0.84	3888262	83.77	30	120	
Ho	165	1	He	3362131	0.47	3932562	85.49	30	120	
Bi	209	1	He	2405484	0.83	2874805	83.67	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-4-e@2
Data File Name	056SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:40:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.585	0.585	4.91	1674	0.03	10000	
B	11	45	2	NoGas	9.821	9.821	3.53	44866	0.02	300	
Na	23	45	1	He	1250.320	1250.320	0.17	2275806	0.05	500000	
Mg	24	45	1	He	1740.707	1740.707	0.93	1783505	0.10	500000	
Al	27	45	1	He	12192.726	12192.726	0.91	7079965	0.17	200000	
K	39	45	1	He	127.481	127.481	1.05	161761	0.08	500000	
Ca	44	45	1	He	659958.412	659958.412	0.91	34916626	1.89	500000	>LDR
Ti	47	45	1	He	30302.037	30302.037	0.72	9036406	0.34	2500	>LDR
V	51	45	1	He	3675.640	3675.640	0.91	27103217	0.01	10000	
Cr	52	45	1	He	1396.259	1396.259	0.40	12376696	0.01	10000	
Mn	55	45	1	He	149.666	149.666	0.43	1043580	0.01	10000	
Fe	56	45	1	He	9521.752	9521.752	0.30	79571064	0.01	200000	
Co	59	103	1	He	2.143	2.143	1.05	16543	0.01	10000	
Ni	60	103	1	He	7.938	7.938	2.51	15240	0.05	10000	
Cu	63	103	1	He	8.819	8.819	1.30	45332	0.02	10000	
Zn	66	103	1	He	175.877	175.877	0.96	179662	0.10	10000	
As	75	103	1	He	4.663	4.663	1.59	3147	0.15	10000	
Se	78	103	1	He	1.671	1.671	3.58	146	1.14	10000	
Sr	88	103	1	He	21486.444	21486.444	0.97	114136755	0.02	10000	>LDR
Mo	95	103	1	He	8.084	8.084	1.54	19551	0.04	2000	
Ag	107	103	1	He	2.555	2.555	1.23	21187	0.01	300	
Cd	111	103	1	He	11.971	11.971	4.04	18009	0.07	4000	
Sn	118	115	1	He	69.877	69.877	1.22	267014	0.03	2000	
Sb	123	115	1	He	1.946	1.946	4.30	7259	0.03	300	
Ba	137	115	1	He	33.013	33.013	0.98	57172	0.06	10000	
W	182	209	1	He	16.786	16.786	0.76	179448	0.01	2500	
Tl	205	165	1	He	0.093	0.093	5.72	2684	0.00	5000	
Pb	208	209	1	He	52.824	52.824	0.34	1919593	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	891440	0.73	1631381	54.64	30	120	
Sc	45	1	He	841873	0.97	829696	101.47	30	120	
Sc	45	2	NoGas	6329863	0.37	6325638	100.07	30	120	
Rh	103	1	He	1398886	0.49	2345543	59.64	30	120	
In	115	1	He	913931	0.14	1419467	64.39	30	120	
Tb	159	1	He	2996703	0.39	3888262	77.07	30	120	
Ho	165	1	He	3092974	0.44	3932562	78.65	30	120	
Bi	209	1	He	2063699	0.41	2874805	71.79	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-4-e@10
Data File Name	057SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:43:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.235	0.235	6.40	726	0.03	10000	
B	11	45	2	NoGas	2.591	2.591	4.68	13817	0.02	300	
Na	23	45	1	He	387.324	387.324	1.34	507484	0.08	500000	
Mg	24	45	1	He	538.448	538.448	0.72	388722	0.14	500000	
Al	27	45	1	He	3880.489	3880.489	1.27	1586969	0.24	200000	
K	39	45	1	He	40.029	40.029	6.35	54490	0.07	500000	
Ca	44	45	1	He	201267.917	201267.917	0.35	7493523	2.69	500000	
Ti	47	45	1	He	9472.309	9472.309	1.32	1987677	0.48	2500	>LDR
V	51	45	1	He	1152.777	1152.777	0.57	5981462	0.02	10000	
Cr	52	45	1	He	440.772	440.772	0.94	2750593	0.02	10000	
Mn	55	45	1	He	46.899	46.899	1.21	230717	0.02	10000	
Fe	56	45	1	He	3023.889	3023.889	0.46	17784375	0.02	200000	
Co	59	103	1	He	0.391	0.391	2.49	3639	0.01	10000	
Ni	60	103	1	He	1.399	1.399	5.90	3286	0.04	10000	
Cu	63	103	1	He	1.678	1.678	2.79	11301	0.01	10000	
Zn	66	103	1	He	35.747	35.747	0.73	44771	0.08	10000	
As	75	103	1	He	0.708	0.708	1.73	670	0.11	10000	
Se	78	103	1	He	0.285	0.285	30.54	61	0.47	10000	
Sr	88	103	1	He	3913.212	3913.212	1.49	24846935	0.02	10000	
Mo	95	103	1	He	1.528	1.528	4.50	4451	0.03	2000	
Ag	107	103	1	He	0.409	0.409	4.59	4059	0.01	300	
Cd	111	103	1	He	1.982	1.982	4.62	4297	0.05	4000	
Sn	118	115	1	He	14.137	14.137	0.72	60642	0.02	2000	
Sb	123	115	1	He	0.353	0.353	7.21	1838	0.02	300	
Ba	137	115	1	He	6.623	6.623	1.87	12798	0.05	10000	
W	182	209	1	He	3.189	3.189	2.00	42336	0.01	2500	
Tl	205	165	1	He	0.020	0.020	8.70	669	0.00	5000	
Pb	208	209	1	He	10.434	10.434	1.17	443212	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	943009	0.43	1631381	57.80	30	120	
Sc	45	1	He	592415	0.16	829696	71.40	30	120	
Sc	45	2	NoGas	4577806	1.21	6325638	72.37	30	120	
Rh	103	1	He	1672193	1.12	2345543	71.29	30	120	
In	115	1	He	1015195	0.09	1419467	71.52	30	120	
Tb	159	1	He	3243502	0.36	3888262	83.42	30	120	
Ho	165	1	He	3331583	0.25	3932562	84.72	30	120	
Bi	209	1	He	2409276	0.18	2874805	83.81	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-5-e@2
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:47:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	8.603	8.603	1.50	28297	0.03	10000	
B	11	45	2	NoGas	51.550	51.550	1.17	165544	0.03	300	
Na	23	45	1	He	12423.802	12423.802	1.79	17266459	0.07	500000	
Mg	24	45	1	He	23094.933	23094.933	0.28	18236129	0.13	500000	
Al	27	45	1	He	86331.135	86331.135	0.31	38641127	0.22	200000	
K	39	45	1	He	9994.328	9994.328	0.34	7459346	0.13	500000	
Ca	44	45	1	He	28492.381	28492.381	0.73	1162835	2.45	500000	
Ti	47	45	1	He	1745.179	1745.179	2.58	401005	0.44	2500	
V	51	45	1	He	421.746	421.746	2.12	2396536	0.02	10000	
Cr	52	45	1	He	261.792	261.792	1.47	1790689	0.01	10000	
Mn	55	45	1	He	1828.743	1828.743	1.55	9818000	0.02	10000	
Fe	56	45	1	He	155738.752	155738.752	1.73	1003000813	0.02	200000	
Co	59	103	1	He	54.422	54.422	0.59	509390	0.01	10000	
Ni	60	103	1	He	67.885	67.885	0.84	157635	0.04	10000	
Cu	63	103	1	He	63.399	63.399	0.47	388228	0.02	10000	
Zn	66	103	1	He	242.948	242.948	0.89	300875	0.08	10000	
As	75	103	1	He	63.057	63.057	0.58	50199	0.13	10000	
Se	78	103	1	He	10.891	10.891	2.41	951	1.14	10000	
Sr	88	103	1	He	683.272	683.272	0.87	4408498	0.02	10000	
Mo	95	103	1	He	8.494	8.494	1.85	24944	0.03	2000	
Ag	107	103	1	He	0.811	0.811	7.92	8158	0.01	300	
Cd	111	103	1	He	3.644	3.644	5.24	7276	0.05	4000	
Sn	118	115	1	He	23.765	23.765	1.80	101742	0.02	2000	
Sb	123	115	1	He	0.493	0.493	7.74	2394	0.02	300	
Ba	137	115	1	He	251.826	251.826	1.16	485693	0.05	10000	
W	182	209	1	He	1.339	1.339	6.26	19598	0.01	2500	
Tl	205	165	1	He	1.067	1.067	1.79	35190	0.00	5000	
Pb	208	209	1	He	114.598	114.598	0.80	4864374	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1039734	2.43	1631381	63.73	30	120	
Sc	45	1	He	649133	4.04	829696	78.24	30	120	
Sc	45	2	NoGas	5414130	0.77	6325638	85.59	30	120	
Rh	103	1	He	1699316	2.88	2345543	72.45	30	120	
In	115	1	He	1019024	3.12	1419467	71.79	30	120	
Tb	159	1	He	3444143	2.70	3888262	88.58	30	120	
Ho	165	1	He	3586296	2.04	3932562	91.19	30	120	
Bi	209	1	He	2410951	1.10	2874805	83.86	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-5-e@10
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:51:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.677	1.677	1.66	5886	0.03	10000	
B	11	45	2	NoGas	11.075	11.075	5.12	39335	0.03	300	
Na	23	45	1	He	2823.478	2823.478	0.62	3904059	0.07	500000	
Mg	24	45	1	He	5200.306	5200.306	0.63	4069475	0.13	500000	
Al	27	45	1	He	19455.746	19455.746	0.99	8630492	0.23	200000	
K	39	45	1	He	2333.254	2333.254	2.25	1748315	0.13	500000	
Ca	44	45	1	He	6486.751	6486.751	0.59	262972	2.47	500000	
Ti	47	45	1	He	393.039	393.039	1.34	89555	0.44	2500	
V	51	45	1	He	91.436	91.436	1.77	515168	0.02	10000	
Cr	52	45	1	He	57.869	57.869	0.84	393819	0.01	10000	
Mn	55	45	1	He	419.679	419.679	0.75	2234087	0.02	10000	
Fe	56	45	1	He	35001.956	35001.956	0.22	223471200	0.02	200000	
Co	59	103	1	He	10.771	10.771	0.79	116350	0.01	10000	
Ni	60	103	1	He	13.550	13.550	1.57	36387	0.04	10000	
Cu	63	103	1	He	12.946	12.946	1.38	92594	0.01	10000	
Zn	66	103	1	He	51.651	51.651	0.62	75113	0.07	10000	
As	75	103	1	He	12.925	12.925	0.59	11981	0.11	10000	
Se	78	103	1	He	2.104	2.104	6.25	247	0.85	10000	
Sr	88	103	1	He	126.467	126.467	0.25	941676	0.01	10000	
Mo	95	103	1	He	1.636	1.636	2.24	5588	0.03	2000	
Ag	107	103	1	He	0.119	0.119	14.20	1387	0.01	300	
Cd	111	103	1	He	0.526	0.526	9.62	2093	0.03	4000	
Sn	118	115	1	He	4.514	4.514	0.92	22972	0.02	2000	
Sb	123	115	1	He	0.049	0.049	24.71	749	0.01	300	
Ba	137	115	1	He	48.022	48.022	0.84	106557	0.05	10000	
W	182	209	1	He	0.286	0.286	1.36	7398	0.00	2500	
Tl	205	165	1	He	0.224	0.224	3.09	7750	0.00	5000	
Pb	208	209	1	He	21.755	21.755	0.66	1028662	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1104792	0.92	1631381	67.72	30	120	
Sc	45	1	He	643217	0.65	829696	77.52	30	120	
Sc	45	2	NoGas	5048336	1.26	6325638	79.81	30	120	
Rh	103	1	He	1960625	0.42	2345543	83.59	30	120	
In	115	1	He	1171427	0.25	1419467	82.53	30	120	
Tb	159	1	He	3623637	0.74	3888262	93.19	30	120	
Ho	165	1	He	3744029	0.33	3932562	95.21	30	120	
Bi	209	1	He	2684154	0.57	2874805	93.37	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	060_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:55:17-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.947	0.983	162744	1.77	50	95.9	89.5	110.5	
B	11	45	2	NoGas	46.236	0.271	129163	1.19	50	92.5	89.5	110.5	
Na	23	45	1	He	25624.860	1.395	33007146	0.76	25000	102.5	89.5	110.5	
Mg	24	45	1	He	25445.606	2.116	18622830	1.11	25000	101.8	89.5	110.5	
Al	27	45	1	He	251.638	1.294	106317	1.01	250	100.7	89.5	110.5	
K	39	45	1	He	25877.183	1.888	17857946	0.54	25000	103.5	89.5	110.5	
Ca	44	45	1	He	25528.306	1.013	966031	1.46	25000	102.1	89.5	110.5	
Ti	47	45	1	He	63.012	2.747	13441	3.14	50	126.0	89.5	110.5	CCV Failed
V	51	45	1	He	52.432	1.252	276390	1.00	50	104.9	89.5	110.5	
Cr	52	45	1	He	52.449	0.819	334093	1.34	50	104.9	89.5	110.5	
Mn	55	45	1	He	258.382	1.710	1286941	1.04	250	103.4	89.5	110.5	
Fe	56	45	1	He	13048.345	1.733	77926515	0.60	12500	104.4	89.5	110.5	
Co	59	103	1	He	45.311	1.427	472410	1.04	50	90.6	89.5	110.5	
Ni	60	103	1	He	44.481	1.384	115086	1.22	50	89.0	89.5	110.5	CCV Failed
Cu	63	103	1	He	45.764	1.704	312483	0.81	50	91.5	89.5	110.5	
Zn	66	103	1	He	45.807	0.804	64491	0.58	50	91.6	89.5	110.5	
As	75	103	1	He	45.977	1.733	40806	1.25	50	92.0	89.5	110.5	
Se	78	103	1	He	45.685	1.257	4313	1.40	50	91.4	89.5	110.5	
Sr	88	103	1	He	47.481	1.368	341377	1.35	50	95.0	89.5	110.5	
Mo	95	103	1	He	50.067	2.098	163556	1.15	50	100.1	89.5	110.5	
Ag	107	103	1	He	49.619	1.772	556727	1.79	50	99.2	89.5	110.5	
Cd	111	103	1	He	49.853	1.722	98328	1.24	50	99.7	89.5	110.5	
Sn	118	115	1	He	50.636	1.440	241323	1.23	50	101.3	89.5	110.5	
Sb	123	115	1	He	52.002	1.179	228556	0.93	50	104.0	89.5	110.5	
Ba	137	115	1	He	51.731	1.127	111575	1.09	50	103.5	89.5	110.5	
W	182	209	1	He	50.266	0.303	652542	0.62	50	100.5	89.5	110.5	
Tl	205	165	1	He	51.109	4.129	1660246	3.44	50	102.2	89.5	110.5	
Pb	208	209	1	He	48.823	1.152	2176010	0.66	50	97.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1073592	0.90	1631381	65.81	30	120	
Sc	45	1	He	601792	2.14	829696	72.53	30	120	
Sc	45	2	NoGas	4682044	1.04	6325638	74.02	30	120	
Rh	103	1	He	1892885	0.96	2345543	80.70	30	120	
In	115	1	He	1138725	0.52	1419467	80.22	30	120	
Tb	159	1	He	3479244	1.48	3888262	89.48	30	120	
Ho	165	1	He	3540151	0.70	3932562	90.02	30	120	
Bi	209	1	He	2531140	0.81	2874805	88.05	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	061_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:59:06-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.066	7.0	263	4.9	1	
B	11	45	2	NoGas	0.340	49.5	8298	5.4	20	
Na	23	45	1	He	9.181	13.9	28697	5.5	400	
Mg	24	45	1	He	2.594	36.9	2626	26.5	1000	
Al	27	45	1	He	1.862	12.4	2702	3.3	50	
K	39	45	1	He	11.548	5.7	35862	1.1	1000	
Ca	44	45	1	He	10.671	17.8	1135	6.1	1000	
Ti	47	45	1	He	2.021	4.1	442	4.2	20	
V	51	45	1	He	0.095	67.1	577	57.9	2	
Cr	52	45	1	He	-0.006	-84.7	1833	1.6	2	
Mn	55	45	1	He	0.061	31.8	1202	7.8	2	
Fe	56	45	1	He	19.632	16.3	121036	15.6	50	
Co	59	103	1	He	0.004	72.0	84	38.3	1	
Ni	60	103	1	He	-0.004	-203.8	97	26.0	2	
Cu	63	103	1	He	0.028	67.4	1631	7.7	2	
Zn	66	103	1	He	0.005	1538.5	1659	3.0	20	
As	75	103	1	He	0.140	12.8	265	4.0	2	
Se	78	103	1	He	0.142	42.6	57	7.7	2	
Sr	88	103	1	He	0.101	10.1	849	5.7	10	
Mo	95	103	1	He	0.852	12.0	2940	11.3	2	
Ag	107	103	1	He	0.013	17.6	154	18.1	0.2	
Cd	111	103	1	He	0.007	278.1	1046	3.5	0.2	
Sn	118	115	1	He	0.323	19.7	2519	12.4	10	
Sb	123	115	1	He	0.500	20.3	2806	16.4	1	
Ba	137	115	1	He	0.015	49.5	117	14.3	5	
W	182	209	1	He	1.043	14.5	17540	11.2	10	
Tl	205	165	1	He	0.037	20.2	1285	17.4	0.5	
Pb	208	209	1	He	0.063	10.8	3675	8.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1121210	1.44	1631381	68.73	30	120	
Sc	45	1	He	604159	0.27	829696	72.82	30	120	
Sc	45	2	NoGas	4738285	0.37	6325638	74.91	30	120	
Rh	103	1	He	1966726	4.03	2345543	83.85	30	120	
In	115	1	He	1181373	0.08	1419467	83.23	30	120	
Tb	159	1	He	3469979	2.03	3888262	89.24	30	120	
Ho	165	1	He	3630176	1.69	3932562	92.31	30	120	
Bi	209	1	He	2649694	0.65	2874805	92.17	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	062CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:03:00-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.908	0.908	12.474	3234	11.70	1	90.8	69.5	130.5	
B	11	2	NoGas	18.168	18.168	0.656	57003	0.37	20	90.8	69.5	130.5	
Na	23	1	He	1047.573	1047.573	0.440	1417644	0.52	1000	104.8	69.5	130.5	
Mg	24	1	He	1061.516	1061.516	0.901	807366	1.18	1000	106.2	69.5	130.5	
Al	27	1	He	46.344	46.344	1.571	21953	1.19	50	92.7	69.5	130.5	
K	39	1	He	1069.882	1069.882	1.425	794236	1.48	1000	107.0	69.5	130.5	
Ca	44	1	He	1038.200	1038.200	0.094	41510	0.68	1000	103.8	69.5	130.5	
Ti	47	1	He	11.613	11.613	7.749	2579	7.35	10	116.1	69.5	130.5	
V	51	1	He	5.323	5.323	2.324	29204	2.82	5	106.5	69.5	130.5	
Cr	52	1	He	2.160	2.160	0.218	16143	0.93	2	108.0	69.5	130.5	
Mn	55	1	He	5.309	5.309	2.070	28361	1.27	5	106.2	69.5	130.5	
Fe	56	1	He	114.021	114.021	0.904	710417	0.38	100	114.0	69.5	130.5	
Co	59	1	He	0.940	0.940	4.638	10355	2.46	1	94.0	69.5	130.5	
Ni	60	1	He	1.855	1.855	4.446	5154	2.23	2	92.7	69.5	130.5	
Cu	63	1	He	1.865	1.865	0.892	14802	2.27	2	93.2	69.5	130.5	
Zn	66	1	He	18.512	18.512	3.590	28426	1.55	20	92.6	69.5	130.5	
As	75	1	He	4.505	4.505	3.176	4333	1.14	5	90.1	69.5	130.5	
Se	78	1	He	4.732	4.732	2.458	510	1.72	5	94.6	69.5	130.5	
Sr	88	1	He	9.383	9.383	3.458	71066	1.18	10	93.8	69.5	130.5	
Mo	95	1	He	10.099	10.099	0.640	34780	2.67	10	101.0	69.5	130.5	
Ag	107	1	He	1.018	1.018	2.262	12027	1.37	1	101.8	69.5	130.5	
Cd	111	1	He	1.043	1.043	4.534	3189	1.63	1	104.3	69.5	130.5	
Sn	118	1	He	10.137	10.137	2.500	51564	2.75	10	101.4	69.5	130.5	
Sb	123	1	He	2.137	2.137	1.654	10397	1.56	2	106.9	69.5	130.5	
Ba	137	1	He	5.069	5.069	2.831	11573	2.87	5	101.4	69.5	130.5	
W	182	1	He	9.531	9.531	2.016	133705	1.98	10	95.3	69.5	130.5	
Tl	205	1	He	2.045	2.045	0.798	67699	0.94	2	102.2	69.5	130.5	
Pb	208	1	He	1.066	1.066	0.220	50981	0.60	1	106.6	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1117252	0.74	1631381	68.49	30	120	
Sc	45	1	He	624684	0.74	829696	75.29	30	120	
Sc	45	2	NoGas	4836219	0.26	6325638	76.45	30	120	
Rh	103	1	He	1992857	2.31	2345543	84.96	30	120	
In	115	1	He	1197533	0.35	1419467	84.36	30	120	
Tb	159	1	He	3567034	0.40	3888262	91.74	30	120	
Ho	165	1	He	3604014	0.64	3932562	91.65	30	120	
Bi	209	1	He	2677441	0.39	2874805	93.13	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	063_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:06:53-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.914	1.550	166381	1.02	50	93.8	89.5	110.5	
B	11	45	2	NoGas	46.175	1.803	133482	0.91	50	92.4	89.5	110.5	
Na	23	45	1	He	25004.929	8.081	33233466	0.13	25000	100.0	89.5	110.5	
Mg	24	45	1	He	24869.154	8.061	18781175	0.14	25000	99.5	89.5	110.5	
Al	27	45	1	He	243.758	8.057	106332	0.20	250	97.5	89.5	110.5	
K	39	45	1	He	25440.391	8.415	18113514	0.51	25000	101.8	89.5	110.5	
Ca	44	45	1	He	25228.241	7.990	985020	0.60	25000	100.9	89.5	110.5	
Ti	47	45	1	He	54.874	7.991	12081	3.20	50	109.7	89.5	110.5	
V	51	45	1	He	51.168	8.493	278241	0.60	50	102.3	89.5	110.5	
Cr	52	45	1	He	51.504	7.609	338610	0.82	50	103.0	89.5	110.5	
Mn	55	45	1	He	256.238	7.766	1317136	1.17	250	102.5	89.5	110.5	
Fe	56	45	1	He	12864.815	7.354	79307744	0.97	12500	102.9	89.5	110.5	
Co	59	103	1	He	46.749	9.772	477790	0.93	50	93.5	89.5	110.5	
Ni	60	103	1	He	46.142	8.392	117122	1.46	50	92.3	89.5	110.5	
Cu	63	103	1	He	46.743	9.489	312916	0.92	50	93.5	89.5	110.5	
Zn	66	103	1	He	47.170	9.295	65080	0.75	50	94.3	89.5	110.5	
As	75	103	1	He	47.894	9.435	41674	0.57	50	95.8	89.5	110.5	
Se	78	103	1	He	48.406	8.763	4480	0.51	50	96.8	89.5	110.5	
Sr	88	103	1	He	48.831	9.670	344173	1.38	50	97.7	89.5	110.5	
Mo	95	103	1	He	51.991	9.879	166496	0.81	50	104.0	89.5	110.5	
Ag	107	103	1	He	50.587	9.018	556620	0.56	50	101.2	89.5	110.5	
Cd	111	103	1	He	51.235	9.356	99063	0.33	50	102.5	89.5	110.5	
Sn	118	115	1	He	50.734	8.281	241238	0.66	50	101.5	89.5	110.5	
Sb	123	115	1	He	53.091	7.692	232862	0.33	50	106.2	89.5	110.5	
Ba	137	115	1	He	52.154	7.579	112268	1.17	50	104.3	89.5	110.5	
W	182	209	1	He	51.415	7.083	656769	0.31	50	102.8	89.5	110.5	
Tl	205	165	1	He	50.988	7.722	1644516	2.28	50	102.0	89.5	110.5	
Pb	208	209	1	He	49.367	6.873	2165495	0.52	50	98.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1121903	1.25	1631381	68.77	30	120	
Sc	45	1	He	623372	7.64	829696	75.13	30	120	
Sc	45	2	NoGas	4845095	0.84	6325638	76.59	30	120	
Rh	103	1	He	1866468	9.09	2345543	79.58	30	120	
In	115	1	He	1140959	7.80	1419467	80.38	30	120	
Tb	159	1	He	3427156	7.83	3888262	88.14	30	120	
Ho	165	1	He	3526970	7.40	3932562	89.69	30	120	
Bi	209	1	He	2498679	6.67	2874805	86.92	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	064_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:10:40-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.066	20.9	267	19.1	1	
B	11	45	2	NoGas	0.401	37.0	8669	3.7	20	
Na	23	45	1	He	9.907	19.9	29577	8.2	400	
Mg	24	45	1	He	2.541	41.1	2582	29.4	1000	
Al	27	45	1	He	1.077	5.7	2371	1.4	50	
K	39	45	1	He	11.309	14.8	35629	3.0	1000	
Ca	44	45	1	He	7.397	44.8	1009	12.2	1000	
Ti	47	45	1	He	1.156	6.2	257	5.7	20	
V	51	45	1	He	0.092	99.1	564	85.9	2	
Cr	52	45	1	He	0.000	-16557.6	1870	8.4	2	
Mn	55	45	1	He	0.060	42.2	1192	10.2	2	
Fe	56	45	1	He	17.691	21.6	109170	20.6	50	
Co	59	103	1	He	0.003	36.6	77	17.4	1	
Ni	60	103	1	He	-0.004	-68.1	99	7.0	2	
Cu	63	103	1	He	0.024	45.8	1613	4.0	2	
Zn	66	103	1	He	0.079	83.6	1778	4.6	20	
As	75	103	1	He	0.093	7.6	224	3.3	2	
Se	78	103	1	He	0.073	84.5	51	12.4	2	
Sr	88	103	1	He	0.037	19.0	380	14.5	10	
Mo	95	103	1	He	0.946	20.6	3284	20.4	2	
Ag	107	103	1	He	0.015	42.4	187	41.8	0.2	
Cd	111	103	1	He	0.029	82.2	1098	5.0	0.2	
Sn	118	115	1	He	0.394	21.1	2860	15.1	10	
Sb	123	115	1	He	0.552	15.8	3036	13.8	1	
Ba	137	115	1	He	0.002	665.0	88	36.9	5	
W	182	209	1	He	1.154	18.6	18819	15.5	10	
Tl	205	165	1	He	0.038	22.4	1308	21.4	0.5	
Pb	208	209	1	He	0.047	15.7	2880	11.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1125804	0.87	1631381	69.01	30	120	
Sc	45	1	He	603020	0.38	829696	72.68	30	120	
Sc	45	2	NoGas	4856037	0.99	6325638	76.77	30	120	
Rh	103	1	He	1979085	0.78	2345543	84.38	30	120	
In	115	1	He	1177373	0.72	1419467	82.94	30	120	
Tb	159	1	He	3453965	0.76	3888262	88.83	30	120	
Ho	165	1	He	3534366	0.48	3932562	89.87	30	120	
Bi	209	1	He	2617231	0.43	2874805	91.04	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	065SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:14:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1969.949	1969.949	0.72	6287912	0.03	10000	
B	11	45	2	NoGas	199.351	199.351	0.39	502556	0.04	300	
Na	23	45	1	He	19747.869	19747.869	2.79	25461485	0.08	500000	
Mg	24	45	1	He	19765.140	19765.140	2.36	14480729	0.14	500000	
Al	27	45	1	He	18520.438	18520.438	2.78	7692308	0.24	200000	
K	39	45	1	He	19995.125	19995.125	3.68	13813914	0.14	500000	
Ca	44	45	1	He	17863.033	17863.033	3.66	676500	2.64	500000	
Ti	47	45	1	He	200.192	200.192	2.70	42716	0.47	2500	
V	51	45	1	He	1950.802	1950.802	2.73	10288726	0.02	10000	
Cr	52	45	1	He	2008.130	2008.130	3.15	12730124	0.02	10000	
Mn	55	45	1	He	2028.481	2028.481	2.39	10107521	0.02	10000	
Fe	56	45	1	He	20594.400	20594.400	2.66	123101475	0.02	200000	
Co	59	103	1	He	1816.725	1816.725	1.14	18157257	0.01	10000	
Ni	60	103	1	He	1819.912	1819.912	2.61	4509921	0.04	10000	
Cu	63	103	1	He	1823.828	1823.828	0.46	11888481	0.02	10000	
Zn	66	103	1	He	1921.708	1921.708	1.00	2531292	0.08	10000	
As	75	103	1	He	1818.910	1818.910	1.25	1542835	0.12	10000	
Se	78	103	1	He	1831.691	1831.691	1.29	164216	1.12	10000	
Sr	88	103	1	He	1945.669	1945.669	1.29	13407306	0.01	10000	
Mo	95	103	1	He	200.924	200.924	1.35	629168	0.03	2000	
Ag	107	103	1	He	208.997	208.997	1.31	2247993	0.01	300	
Cd	111	103	1	He	2086.056	2086.056	2.38	3905231	0.05	4000	
Sn	118	115	1	He	2263.803	2263.803	1.92	9876208	0.02	2000	>LDR
Sb	123	115	1	He	221.438	221.438	0.58	892602	0.02	300	
Ba	137	115	1	He	2295.425	2295.425	0.48	4545196	0.05	10000	
W	182	209	1	He	215.291	215.291	2.11	2738983	0.01	2500	
Tl	205	165	1	He	516.761	516.761	0.97	16344275	0.00	5000	
Pb	208	209	1	He	2008.738	2008.738	0.74	88055843	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1009830	0.97	1631381	61.90	30	120	
Sc	45	1	He	602576	3.91	829696	72.63	30	120	
Sc	45	2	NoGas	4417018	0.50	6325638	69.83	30	120	
Rh	103	1	He	1814701	1.03	2345543	77.37	30	120	
In	115	1	He	1046146	0.35	1419467	73.70	30	120	
Tb	159	1	He	3376304	1.01	3888262	86.83	30	120	
Ho	165	1	He	3446537	0.95	3932562	87.64	30	120	
Bi	209	1	He	2490267	0.67	2874805	86.62	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177128/1-a@2
Data File Name	066_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:18:02-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.427	18.0	1441	18.3	1	
B	11	45	2	NoGas	2.055	10.1	12208	3.9	20	
Na	23	45	1	He	51.030	0.5	79226	0.6	400	
Mg	24	45	1	He	33.299	2.8	24102	2.0	1000	
Al	27	45	1	He	5.149	20.6	3894	10.0	50	
K	39	45	1	He	37.864	3.3	51734	0.8	1000	
Ca	44	45	1	He	105.324	6.9	4523	4.8	1000	
Ti	47	45	1	He	2.101	19.4	440	19.7	20	
V	51	45	1	He	0.574	42.6	2972	41.1	2	
Cr	52	45	1	He	1.071	4.0	8310	2.7	2	
Mn	55	45	1	He	0.555	14.1	3507	9.7	2	
Fe	56	45	1	He	42.119	19.1	244810	18.7	50	
Co	59	103	1	He	0.222	23.7	2292	22.7	1	
Ni	60	103	1	He	0.379	30.1	1053	26.6	2	
Cu	63	103	1	He	1.403	22.5	10623	19.1	2	
Zn	66	103	1	He	2.990	8.6	5544	5.6	20	
As	75	103	1	He	2.923	12.8	2644	11.6	2	Blank Failed
Se	78	103	1	He	2.086	5.3	231	3.8	2	Blank Failed
Sr	88	103	1	He	0.546	5.4	3913	4.7	10	
Mo	95	103	1	He	4.301	28.1	13707	27.5	2	Blank Failed
Ag	107	103	1	He	0.049	12.1	541	11.5	0.2	
Cd	111	103	1	He	0.261	22.4	1463	7.0	0.2	Blank Failed
Sn	118	115	1	He	37.408	17.0	172618	15.5	10	Blank Failed
Sb	123	115	1	He	2.116	18.8	9466	16.5	1	Blank Failed
Ba	137	115	1	He	1.146	11.3	2467	9.7	5	
W	182	209	1	He	4.564	24.3	65443	23.1	10	
Tl	205	165	1	He	0.297	56.3	9491	54.9	0.5	
Pb	208	209	1	He	0.864	19.4	41216	19.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1045564	1.05	1631381	64.09	30	120	
Sc	45	1	He	578089	1.00	829696	69.67	30	120	
Sc	45	2	NoGas	4493425	0.48	6325638	71.04	30	120	
Rh	103	1	He	1842276	0.61	2345543	78.54	30	120	
In	115	1	He	1102668	1.28	1419467	77.68	30	120	
Tb	159	1	He	3369762	0.94	3888262	86.66	30	120	
Ho	165	1	He	3473591	1.02	3932562	88.33	30	120	
Bi	209	1	He	2661404	0.13	2874805	92.58	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177128/2-a@2
Data File Name	067LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:21:53-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	465.285	465.285	2.520	1507852	0.61	500	93.1	78.6	110.5	
B	11	2	NoGas	51.599	51.599	0.880	136215	1.02	50	103.2	79.5	120.5	
Na	23	1	He	4903.245	4903.245	1.329	6096230	0.18	5000	98.1	79.5	120.5	
Mg	24	1	He	4987.094	4987.094	0.827	3516679	1.70	5000	99.7	79.5	120.5	
Al	27	1	He	4522.939	4522.939	0.862	1809290	1.28	5000	90.5	79.5	120.5	
K	39	1	He	4933.237	4933.237	0.944	3301036	0.72	5000	98.7	79.5	120.5	
Ca	44	1	He	4534.917	4534.917	2.028	165838	0.53	5000	90.7	79.5	120.5	
Ti	47	1	He	50.873	50.873	1.166	10453	1.70	50	101.7	79.5	120.5	
V	51	1	He	490.662	490.662	1.262	2490529	0.25	500	98.1	71.5	110.5	
Cr	52	1	He	496.983	496.983	0.608	3033898	1.22	500	99.4	69.5	110.5	
Mn	55	1	He	500.060	500.060	0.459	2398378	1.05	500	100.0	79.5	120.5	
Fe	56	1	He	5066.026	5066.026	1.283	29144050	0.51	5000	101.3	79.5	120.5	
Co	59	1	He	435.949	435.949	0.100	4366783	0.30	500	87.2	73.9	110.5	
Ni	60	1	He	428.932	428.932	0.892	1065406	1.04	500	85.8	74.9	110.5	
Cu	63	1	He	449.082	449.082	1.375	2934600	1.19	500	89.8	72.6	110.5	
Zn	66	1	He	415.345	415.345	0.704	549491	0.90	500	83.1	71.5	113.4	
As	75	1	He	400.522	400.522	0.198	340579	0.36	500	80.1	73.4	110.5	
Se	78	1	He	390.231	390.231	0.696	35095	0.78	500	78.0	64.6	110.5	
Sr	88	1	He	462.944	462.944	0.578	3197128	0.46	500	92.6	79.5	120.5	
Mo	95	1	He	51.000	51.000	1.242	160088	1.44	50	102.0	29.5	140.5	
Ag	107	1	He	48.298	48.298	0.491	520644	0.31	50	96.6	59.5	114.5	
Cd	111	1	He	461.083	461.083	0.187	865903	0.06	500	92.2	73.5	110.5	
Sn	118	1	He	554.456	554.456	0.629	2458361	0.72	500	110.9	79.5	120.5	
Sb	123	1	He	50.451	50.451	0.600	206997	0.22	50	100.9	67.5	113.4	
Ba	137	1	He	495.465	495.465	0.350	996891	0.19	500	99.1	69.5	110.5	
W	182	1	He	48.119	48.119	1.293	631586	1.31	50	96.2	74.6	125.4	
Tl	205	1	He	121.711	121.711	0.434	3883309	0.62	125	97.4	70.6	110.5	
Pb	208	1	He	469.953	469.953	0.174	21166898	0.20	500	94.0	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1025720	2.85	1631381	62.87	30	120	
Sc	45	1	He	579587	1.51	829696	69.86	30	120	
Sc	45	2	NoGas	4450628	0.48	6325638	70.36	30	120	
Rh	103	1	He	1818594	0.21	2345543	77.53	30	120	
In	115	1	He	1062949	0.40	1419467	74.88	30	120	
Tb	159	1	He	3361556	1.29	3888262	86.45	30	120	
Ho	165	1	He	3476641	1.05	3932562	88.41	30	120	
Bi	209	1	He	2558519	0.11	2874805	89.00	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-d@20
Data File Name	068SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:25:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.508	0.508	12.81	1859	0.03	10000	
B	11	45	2	NoGas	7.558	7.558	1.98	28541	0.03	300	
Na	23	45	1	He	216.958	216.958	1.47	309313	0.07	500000	
Mg	24	45	1	He	1284.435	1284.435	0.99	982819	0.13	500000	
Al	27	45	1	He	4947.942	4947.942	1.95	2146325	0.23	200000	
K	39	45	1	He	1827.240	1827.240	2.40	1344446	0.14	500000	
Ca	44	45	1	He	3.894	3.894	154.40	913	0.43	500000	
Ti	47	45	1	He	36.444	36.444	1.78	8124	0.45	2500	
V	51	45	1	He	8.621	8.621	4.67	47543	0.02	10000	
Cr	52	45	1	He	8.797	8.797	1.16	60160	0.01	10000	
Mn	55	45	1	He	1249.096	1249.096	2.70	6495308	0.02	10000	
Fe	56	45	1	He	11591.762	11591.762	0.92	72325993	0.02	200000	
Co	59	103	1	He	3.746	3.746	0.39	40904	0.01	10000	
Ni	60	103	1	He	9.380	9.380	3.54	25471	0.04	10000	
Cu	63	103	1	He	9.683	9.683	1.51	70315	0.01	10000	
Zn	66	103	1	He	23.302	23.302	1.55	35140	0.07	10000	
As	75	103	1	He	21.959	21.959	2.68	20460	0.11	10000	
Se	78	103	1	He	1.011	1.011	6.88	143	0.71	10000	
Sr	88	103	1	He	173.193	173.193	1.65	1302452	0.01	10000	
Mo	95	103	1	He	56.721	56.721	3.46	193824	0.03	2000	
Ag	107	103	1	He	0.023	0.023	4.36	276	0.01	300	
Cd	111	103	1	He	0.136	0.136	13.87	1318	0.01	4000	
Sn	118	115	1	He	2.649	2.649	4.95	13958	0.02	2000	
Sb	123	115	1	He	0.261	0.261	4.74	1715	0.02	300	
Ba	137	115	1	He	33.063	33.063	0.58	73908	0.04	10000	
W	182	209	1	He	2.385	2.385	4.48	36353	0.01	2500	
Tl	205	165	1	He	0.145	0.145	23.22	4941	0.00	5000	
Pb	208	209	1	He	38.508	38.508	0.77	1830280	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1138119	1.40	1631381	69.76	30	120	
Sc	45	1	He	628620	1.39	829696	75.77	30	120	
Sc	45	2	NoGas	4908383	0.61	6325638	77.60	30	120	
Rh	103	1	He	1980553	1.63	2345543	84.44	30	120	
In	115	1	He	1179686	0.30	1419467	83.11	30	120	
Tb	159	1	He	3528951	1.13	3888262	90.76	30	120	
Ho	165	1	He	3666957	1.54	3932562	93.25	30	120	
Bi	209	1	He	2698943	0.79	2874805	93.88	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-3-d@100
Data File Name	069SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:29:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.207	0.207	11.36	785	0.03	10000	
B	11	45	2	NoGas	1.318	1.318	6.36	11574	0.01	300	
Na	23	45	1	He	46.061	46.061	0.95	78254	0.06	500000	
Mg	24	45	1	He	252.722	252.722	1.95	190995	0.13	500000	
Al	27	45	1	He	980.108	980.108	3.29	420154	0.23	200000	
K	39	45	1	He	357.230	357.230	3.15	281725	0.13	500000	
Ca	44	45	1	He	-0.315	-0.315	-2896.78	732	-0.04	500000	
Ti	47	45	1	He	7.503	7.503	3.19	1655	0.45	2500	
V	51	45	1	He	1.756	1.756	7.79	9590	0.02	10000	
Cr	52	45	1	He	1.756	1.756	2.63	13362	0.01	10000	
Mn	55	45	1	He	247.026	247.026	2.31	1265589	0.02	10000	
Fe	56	45	1	He	2307.397	2307.397	2.19	14177389	0.02	200000	
Co	59	103	1	He	0.739	0.739	4.91	8060	0.01	10000	
Ni	60	103	1	He	1.878	1.878	4.09	5162	0.04	10000	
Cu	63	103	1	He	1.923	1.923	4.20	15048	0.01	10000	
Zn	66	103	1	He	4.319	4.319	5.35	7831	0.06	10000	
As	75	103	1	He	4.463	4.463	2.50	4249	0.11	10000	
Se	78	103	1	He	0.272	0.272	20.06	70	0.39	10000	
Sr	88	103	1	He	33.518	33.518	3.86	250879	0.01	10000	
Mo	95	103	1	He	12.096	12.096	4.30	41172	0.03	2000	
Ag	107	103	1	He	0.014	0.014	7.08	168	0.01	300	
Cd	111	103	1	He	0.063	0.063	36.84	1165	0.01	4000	
Sn	118	115	1	He	0.583	0.583	5.49	3852	0.02	2000	
Sb	123	115	1	He	0.081	0.081	7.00	912	0.01	300	
Ba	137	115	1	He	6.291	6.291	5.82	14335	0.04	10000	
W	182	209	1	He	0.605	0.605	8.56	11760	0.01	2500	
Tl	205	165	1	He	0.029	0.029	3.85	1012	0.00	5000	
Pb	208	209	1	He	7.410	7.410	5.63	350757	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1151567	1.04	1631381	70.59	30	120	
Sc	45	1	He	619028	1.74	829696	74.61	30	120	
Sc	45	2	NoGas	5027689	0.43	6325638	79.48	30	120	
Rh	103	1	He	1971722	2.81	2345543	84.06	30	120	
In	115	1	He	1198238	2.92	1419467	84.41	30	120	
Tb	159	1	He	3480680	5.26	3888262	89.52	30	120	
Ho	165	1	He	3607539	2.21	3932562	91.74	30	120	
Bi	209	1	He	2688243	4.87	2874805	93.51	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-3-d@20
Data File Name	070SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:33:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1022.166	1022.166	1.37	3458033	0.03	10000	
B	11	45	2	NoGas	109.541	109.541	1.41	296380	0.04	300	
Na	23	45	1	He	9924.295	9924.295	3.56	13455056	0.07	500000	
Mg	24	45	1	He	11079.556	11079.556	3.08	8529972	0.13	500000	
Al	27	45	1	He	13783.110	13783.110	3.17	6016733	0.23	200000	
K	39	45	1	He	11698.866	11698.866	4.99	8503239	0.14	500000	
Ca	44	45	1	He	8878.395	8878.395	3.13	353854	2.51	500000	
Ti	47	45	1	He	131.138	131.138	2.93	29408	0.45	2500	
V	51	45	1	He	994.197	994.197	3.29	5510692	0.02	10000	
Cr	52	45	1	He	1001.072	1001.072	3.92	6669454	0.02	10000	
Mn	55	45	1	He	2119.568	2119.568	3.36	11097016	0.02	10000	
Fe	56	45	1	He	20704.884	20704.884	3.05	130073822	0.02	200000	
Co	59	103	1	He	923.933	923.933	1.80	9548327	0.01	10000	
Ni	60	103	1	He	951.448	951.448	0.92	2438081	0.04	10000	
Cu	63	103	1	He	948.993	948.993	1.34	6396682	0.01	10000	
Zn	66	103	1	He	968.213	968.213	1.28	1319440	0.07	10000	
As	75	103	1	He	950.091	950.091	1.42	833341	0.11	10000	
Se	78	103	1	He	948.245	948.245	1.27	87924	1.08	10000	
Sr	88	103	1	He	1167.865	1167.865	1.64	8320985	0.01	10000	
Mo	95	103	1	He	155.704	155.704	1.09	504170	0.03	2000	
Ag	107	103	1	He	101.084	101.084	1.62	1124236	0.01	300	
Cd	111	103	1	He	1069.293	1069.293	0.91	2070557	0.05	4000	
Sn	118	115	1	He	1129.843	1129.843	1.21	5214222	0.02	2000	
Sb	123	115	1	He	109.298	109.298	0.51	466289	0.02	300	
Ba	137	115	1	He	1183.287	1183.287	1.16	2478595	0.05	10000	
W	182	209	1	He	98.391	98.391	3.22	1303478	0.01	2500	
Tl	205	165	1	He	259.172	259.172	0.79	8448145	0.00	5000	
Pb	208	209	1	He	1035.549	1035.549	1.51	47215874	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1070345	1.47	1631381	65.61	30	120	
Sc	45	1	He	633492	4.89	829696	76.35	30	120	
Sc	45	2	NoGas	4688296	0.85	6325638	74.12	30	120	
Rh	103	1	He	1876317	0.34	2345543	80.00	30	120	
In	115	1	He	1106608	0.67	1419467	77.96	30	120	
Tb	159	1	He	3476649	1.44	3888262	89.41	30	120	
Ho	165	1	He	3551950	0.78	3932562	90.32	30	120	
Bi	209	1	He	2590579	2.18	2874805	90.11	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-e du@20
Data File Name	071SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:36:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.544	0.544	9.63	1959	0.03	10000	
B	11	45	2	NoGas	6.222	6.222	4.47	24517	0.03	300	
Na	23	45	1	He	196.492	196.492	0.68	272426	0.07	500000	
Mg	24	45	1	He	1123.804	1123.804	1.25	831392	0.14	500000	
Al	27	45	1	He	4204.951	4204.951	1.76	1763741	0.24	200000	
K	39	45	1	He	1576.873	1576.873	0.51	1125451	0.14	500000	
Ca	44	45	1	He	13.580	13.580	105.86	1252	1.09	500000	
Ti	47	45	1	He	38.133	38.133	1.21	8218	0.46	2500	
V	51	45	1	He	7.777	7.777	2.78	41465	0.02	10000	
Cr	52	45	1	He	8.034	8.034	1.62	53275	0.02	10000	
Mn	55	45	1	He	577.326	577.326	0.51	2903205	0.02	10000	
Fe	56	45	1	He	10624.498	10624.498	1.03	64087269	0.02	200000	
Co	59	103	1	He	3.440	3.440	1.90	36224	0.01	10000	
Ni	60	103	1	He	8.697	8.697	1.49	22786	0.04	10000	
Cu	63	103	1	He	7.827	7.827	0.68	55073	0.01	10000	
Zn	66	103	1	He	20.575	20.575	1.58	30106	0.07	10000	
As	75	103	1	He	21.359	21.359	1.13	19196	0.11	10000	
Se	78	103	1	He	1.515	1.515	8.00	185	0.82	10000	
Sr	88	103	1	He	126.230	126.230	0.31	915425	0.01	10000	
Mo	95	103	1	He	56.290	56.290	0.09	185524	0.03	2000	
Ag	107	103	1	He	0.030	0.030	16.36	348	0.01	300	
Cd	111	103	1	He	0.214	0.214	18.14	1425	0.02	4000	
Sn	118	115	1	He	8.216	8.216	12.55	40658	0.02	2000	
Sb	123	115	1	He	1.012	1.012	20.62	5043	0.02	300	
Ba	137	115	1	He	28.552	28.552	1.17	62797	0.05	10000	
W	182	209	1	He	3.981	3.981	9.15	57407	0.01	2500	
Tl	205	165	1	He	0.193	0.193	18.14	6368	0.00	5000	
Pb	208	209	1	He	23.892	23.892	0.62	1117783	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1123503	1.72	1631381	68.87	30	120	
Sc	45	1	He	607678	0.58	829696	73.24	30	120	
Sc	45	2	NoGas	4842265	0.27	6325638	76.55	30	120	
Rh	103	1	He	1909563	0.67	2345543	81.41	30	120	
In	115	1	He	1160525	0.48	1419467	81.76	30	120	
Tb	159	1	He	3496085	0.88	3888262	89.91	30	120	
Ho	165	1	He	3567499	0.34	3932562	90.72	30	120	
Bi	209	1	He	2655980	0.22	2874805	92.39	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-f ms@20
Data File Name	072SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:40:32-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.018	5.018	1.52	18261	0.03	10000	
B	11	45	2	NoGas	10.445	10.445	1.15	37776	0.03	300	
Na	23	45	1	He	655.836	655.836	2.51	930081	0.07	500000	
Mg	24	45	1	He	1554.467	1554.467	2.24	1229573	0.13	500000	
Al	27	45	1	He	4648.071	4648.071	0.61	2085073	0.22	200000	
K	39	45	1	He	1983.329	1983.329	2.78	1505998	0.13	500000	
Ca	44	45	1	He	451.838	451.838	5.12	19233	2.35	500000	
Ti	47	45	1	He	46.084	46.084	1.29	10620	0.43	2500	
V	51	45	1	He	12.299	12.299	1.57	70093	0.02	10000	
Cr	52	45	1	He	12.333	12.333	0.65	86394	0.01	10000	
Mn	55	45	1	He	1025.882	1025.882	1.36	5516481	0.02	10000	
Fe	56	45	1	He	10423.756	10423.756	1.68	67243144	0.02	200000	
Co	59	103	1	He	7.460	7.460	0.43	83230	0.01	10000	
Ni	60	103	1	He	12.238	12.238	1.50	33948	0.04	10000	
Cu	63	103	1	He	12.565	12.565	1.07	92851	0.01	10000	
Zn	66	103	1	He	24.262	24.262	1.13	37342	0.06	10000	
As	75	103	1	He	23.288	23.288	0.35	22180	0.10	10000	
Se	78	103	1	He	5.148	5.148	5.26	560	0.92	10000	
Sr	88	103	1	He	180.388	180.388	1.14	1386968	0.01	10000	
Mo	95	103	1	He	56.604	56.604	0.47	197807	0.03	2000	
Ag	107	103	1	He	4.611	4.611	0.59	55341	0.01	300	
Cd	111	103	1	He	4.824	4.824	0.81	11138	0.04	4000	
Sn	118	115	1	He	7.767	7.767	2.08	39982	0.02	2000	
Sb	123	115	1	He	1.926	1.926	1.84	9484	0.02	300	
Ba	137	115	1	He	32.805	32.805	0.41	74922	0.04	10000	
W	182	209	1	He	5.419	5.419	1.68	78427	0.01	2500	
Tl	205	165	1	He	4.541	4.541	1.15	152206	0.00	5000	
Pb	208	209	1	He	40.440	40.440	0.87	1929072	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1149472	0.69	1631381	70.46	30	120	
Sc	45	1	He	649967	1.28	829696	78.34	30	120	
Sc	45	2	NoGas	5077635	0.22	6325638	80.27	30	120	
Rh	103	1	He	2024739	0.98	2345543	86.32	30	120	
In	115	1	He	1205291	0.66	1419467	84.91	30	120	
Tb	159	1	He	3582116	1.47	3888262	92.13	30	120	
Ho	165	1	He	3650351	0.13	3932562	92.82	30	120	
Bi	209	1	He	2708770	0.30	2874805	94.22	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-9-b@20
Data File Name	073SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:44:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.556	0.556	10.55	2197	0.03	10000	
B	11	45	2	NoGas	1.350	1.350	8.93	12508	0.01	300	
Na	23	45	1	He	25.038	25.038	3.31	56401	0.04	500000	
Mg	24	45	1	He	1749.250	1749.250	2.35	1474532	0.12	500000	
Al	27	45	1	He	7414.876	7414.876	0.68	3543862	0.21	200000	
K	39	45	1	He	636.718	636.718	2.43	536991	0.12	500000	
Ca	44	45	1	He	210.949	210.949	1.60	10023	2.10	500000	
Ti	47	45	1	He	46.394	46.394	0.82	11395	0.41	2500	
V	51	45	1	He	13.406	13.406	2.56	81405	0.02	10000	
Cr	52	45	1	He	11.846	11.846	2.79	88508	0.01	10000	
Mn	55	45	1	He	139.952	139.952	2.06	802896	0.02	10000	
Fe	56	45	1	He	16647.830	16647.830	2.25	114450911	0.01	200000	
Co	59	103	1	He	5.304	5.304	0.91	61780	0.01	10000	
Ni	60	103	1	He	12.405	12.405	1.13	35917	0.03	10000	
Cu	63	103	1	He	10.486	10.486	0.24	81138	0.01	10000	
Zn	66	103	1	He	30.929	30.929	1.53	49193	0.06	10000	
As	75	103	1	He	7.692	7.692	0.90	7745	0.10	10000	
Se	78	103	1	He	0.853	0.853	14.41	136	0.63	10000	
Sr	88	103	1	He	2.778	2.778	1.82	22403	0.01	10000	
Mo	95	103	1	He	1.933	1.933	6.70	7103	0.03	2000	
Ag	107	103	1	He	0.020	0.020	18.55	254	0.01	300	
Cd	111	103	1	He	0.115	0.115	13.11	1360	0.01	4000	
Sn	118	115	1	He	2.526	2.526	0.68	14195	0.02	2000	
Sb	123	115	1	He	0.164	0.164	12.26	1359	0.01	300	
Ba	137	115	1	He	40.903	40.903	0.17	97193	0.04	10000	
W	182	209	1	He	0.406	0.406	8.86	9385	0.00	2500	
Tl	205	165	1	He	0.124	0.124	2.06	4322	0.00	5000	
Pb	208	209	1	He	6.929	6.929	0.99	340369	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1232885	2.19	1631381	75.57	30	120	
Sc	45	1	He	692778	1.85	829696	83.50	30	120	
Sc	45	2	NoGas	5391701	0.98	6325638	85.24	30	120	
Rh	103	1	He	2113358	0.64	2345543	90.10	30	120	
In	115	1	He	1254278	0.48	1419467	88.36	30	120	
Tb	159	1	He	3681703	0.65	3888262	94.69	30	120	
Ho	165	1	He	3749595	0.58	3932562	95.35	30	120	
Bi	209	1	He	2784149	0.82	2874805	96.85	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-10-b@20
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:48:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.484	0.484	6.98	1911	0.03	10000	
B	11	45	2	NoGas	0.604	0.604	23.60	10296	0.01	300	
Na	23	45	1	He	19.949	19.949	4.60	49103	0.04	500000	
Mg	24	45	1	He	1157.619	1157.619	0.42	981035	0.12	500000	
Al	27	45	1	He	6428.759	6428.759	1.47	3087729	0.21	200000	
K	39	45	1	He	405.553	405.553	1.14	355426	0.11	500000	
Ca	44	45	1	He	192.256	192.256	2.51	9251	2.08	500000	
Ti	47	45	1	He	54.834	54.834	3.88	13532	0.41	2500	
V	51	45	1	He	13.675	13.675	0.26	83461	0.02	10000	
Cr	52	45	1	He	9.641	9.641	1.41	72806	0.01	10000	
Mn	55	45	1	He	455.449	455.449	0.32	2623750	0.02	10000	
Fe	56	45	1	He	13884.717	13884.717	0.70	95937376	0.01	200000	
Co	59	103	1	He	5.652	5.652	0.57	66765	0.01	10000	
Ni	60	103	1	He	8.485	8.485	1.78	24951	0.03	10000	
Cu	63	103	1	He	6.501	6.501	0.48	51609	0.01	10000	
Zn	66	103	1	He	26.328	26.328	2.34	42731	0.06	10000	
As	75	103	1	He	5.874	5.874	1.71	6033	0.10	10000	
Se	78	103	1	He	0.566	0.566	10.00	107	0.53	10000	
Sr	88	103	1	He	2.104	2.104	1.91	17233	0.01	10000	
Mo	95	103	1	He	1.078	1.078	2.48	4044	0.03	2000	
Ag	107	103	1	He	0.020	0.020	14.87	256	0.01	300	
Cd	111	103	1	He	0.126	0.126	12.77	1405	0.01	4000	
Sn	118	115	1	He	1.998	1.998	3.77	11712	0.02	2000	
Sb	123	115	1	He	0.089	0.089	8.84	1017	0.01	300	
Ba	137	115	1	He	38.990	38.990	1.61	94906	0.04	10000	
W	182	209	1	He	0.209	0.209	8.29	6639	0.00	2500	
Tl	205	165	1	He	0.100	0.100	1.12	3569	0.00	5000	
Pb	208	209	1	He	7.639	7.639	2.52	378349	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1226390	0.55	1631381	75.17	30	120	
Sc	45	1	He	696099	0.54	829696	83.90	30	120	
Sc	45	2	NoGas	5415955	1.28	6325638	85.62	30	120	
Rh	103	1	He	2143216	1.04	2345543	91.37	30	120	
In	115	1	He	1284818	0.31	1419467	90.51	30	120	
Tb	159	1	He	3739917	0.80	3888262	96.18	30	120	
Ho	165	1	He	3825374	0.68	3932562	97.27	30	120	
Bi	209	1	He	2808842	2.37	2874805	97.71	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	075_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:51:57-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.113	1.315	176212	1.36	50	96.2	89.5	110.5	
B	11	45	2	NoGas	45.782	3.014	137846	2.54	50	91.6	89.5	110.5	
Na	23	45	1	He	24366.199	2.082	34721495	1.12	25000	97.5	89.5	110.5	
Mg	24	45	1	He	24393.161	2.001	19750728	1.06	25000	97.6	89.5	110.5	
Al	27	45	1	He	242.154	1.688	113264	1.20	250	96.9	89.5	110.5	
K	39	45	1	He	25080.816	1.446	19151372	1.40	25000	100.3	89.5	110.5	
Ca	44	45	1	He	24762.688	1.391	1036696	1.68	25000	99.1	89.5	110.5	
Ti	47	45	1	He	50.571	2.324	11940	4.18	50	101.1	89.5	110.5	
V	51	45	1	He	50.478	2.012	294355	0.96	50	101.0	89.5	110.5	
Cr	52	45	1	He	50.481	0.964	355846	2.07	50	101.0	89.5	110.5	
Mn	55	45	1	He	254.887	1.448	1404830	2.64	250	102.0	89.5	110.5	
Fe	56	45	1	He	12689.435	1.548	83845652	1.37	12500	101.5	89.5	110.5	
Co	59	103	1	He	45.856	1.224	499056	1.47	50	91.7	89.5	110.5	
Ni	60	103	1	He	45.729	2.136	123496	2.23	50	91.5	89.5	110.5	
Cu	63	103	1	He	46.088	1.580	328496	1.72	50	92.2	89.5	110.5	
Zn	66	103	1	He	46.664	2.031	68546	2.20	50	93.3	89.5	110.5	
As	75	103	1	He	47.663	0.782	44153	0.92	50	95.3	89.5	110.5	
Se	78	103	1	He	48.234	2.849	4751	2.55	50	96.5	89.5	110.5	
Sr	88	103	1	He	48.405	1.405	363269	1.62	50	96.8	89.5	110.5	
Mo	95	103	1	He	50.342	2.313	171664	1.88	50	100.7	89.5	110.5	
Ag	107	103	1	He	49.500	0.911	579708	0.65	50	99.0	89.5	110.5	
Cd	111	103	1	He	50.197	0.558	103339	0.54	50	100.4	89.5	110.5	
Sn	118	115	1	He	50.151	0.526	251607	0.81	50	100.3	89.5	110.5	
Sb	123	115	1	He	52.068	0.534	240894	0.37	50	104.1	89.5	110.5	
Ba	137	115	1	He	51.263	1.049	116391	1.37	50	102.5	89.5	110.5	
W	182	209	1	He	49.553	1.582	666272	1.18	50	99.1	89.5	110.5	
Tl	205	165	1	He	51.442	2.792	1746427	1.51	50	102.9	89.5	110.5	
Pb	208	209	1	He	47.700	0.475	2201949	0.98	50	95.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1158617	1.89	1631381	71.02	30	120	
Sc	45	1	He	665848	2.86	829696	80.25	30	120	
Sc	45	2	NoGas	5043861	0.30	6325638	79.74	30	120	
Rh	103	1	He	1975738	0.47	2345543	84.23	30	120	
In	115	1	He	1198670	0.61	1419467	84.45	30	120	
Tb	159	1	He	3583975	0.74	3888262	92.17	30	120	
Ho	165	1	He	3700053	1.48	3932562	94.09	30	120	
Bi	209	1	He	2621466	0.71	2874805	91.19	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	076_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:55:45-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.103	11.6	422	9.5	1	
B	11	45	2	NoGas	0.442	20.6	9069	2.9	20	
Na	23	45	1	He	7.680	15.1	28056	5.3	400	
Mg	24	45	1	He	1.625	19.1	2008	11.3	1000	
Al	27	45	1	He	1.177	15.3	2535	3.4	50	
K	39	45	1	He	10.322	8.9	36712	1.2	1000	
Ca	44	45	1	He	5.780	52.6	996	12.4	1000	
Ti	47	45	1	He	0.306	7.5	79	6.5	20	
V	51	45	1	He	0.039	187.7	294	136.9	2	
Cr	52	45	1	He	-0.004	-457.1	1940	5.2	2	
Mn	55	45	1	He	0.080	27.9	1358	8.4	2	
Fe	56	45	1	He	22.360	21.9	143970	20.7	50	
Co	59	103	1	He	0.006	12.4	111	7.5	1	
Ni	60	103	1	He	-0.001	-1531.4	111	21.3	2	
Cu	63	103	1	He	0.005	51.5	1538	0.5	2	
Zn	66	103	1	He	0.042	229.7	1789	7.4	20	
As	75	103	1	He	0.160	10.3	296	4.7	2	
Se	78	103	1	He	0.244	34.0	70	11.3	2	
Sr	88	103	1	He	0.014	30.9	211	15.8	10	
Mo	95	103	1	He	1.034	22.7	3712	21.8	2	
Ag	107	103	1	He	0.015	18.6	186	18.1	0.2	
Cd	111	103	1	He	0.050	42.9	1183	3.2	0.2	
Sn	118	115	1	He	0.557	7.7	3867	5.8	10	
Sb	123	115	1	He	0.523	20.0	3065	16.2	1	
Ba	137	115	1	He	0.005	239.3	100	29.6	5	
W	182	209	1	He	1.208	16.9	20366	14.1	10	
Tl	205	165	1	He	0.043	20.6	1516	19.9	0.5	
Pb	208	209	1	He	0.074	7.5	4304	5.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1195526	2.28	1631381	73.28	30	120	
Sc	45	1	He	633493	0.66	829696	76.35	30	120	
Sc	45	2	NoGas	5012784	0.33	6325638	79.25	30	120	
Rh	103	1	He	2052793	0.82	2345543	87.52	30	120	
In	115	1	He	1243549	0.17	1419467	87.61	30	120	
Tb	159	1	He	3606082	0.58	3888262	92.74	30	120	
Ho	165	1	He	3668309	0.32	3932562	93.28	30	120	
Bi	209	1	He	2729394	1.26	2874805	94.94	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-1-b@20
Data File Name	077SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:59:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.406	0.406	6.91	1489	0.03	10000	
B	11	45	2	NoGas	1.779	1.779	12.01	12723	0.01	300	
Na	23	45	1	He	28.886	28.886	3.93	57918	0.05	500000	
Mg	24	45	1	He	1477.016	1477.016	1.41	1161488	0.13	500000	
Al	27	45	1	He	4858.170	4858.170	1.81	2166022	0.22	200000	
K	39	45	1	He	412.341	412.341	1.75	334882	0.12	500000	
Ca	44	45	1	He	2661.496	2661.496	1.76	108826	2.45	500000	
Ti	47	45	1	He	46.579	46.579	2.64	10670	0.44	2500	
V	51	45	1	He	9.494	9.494	4.63	53780	0.02	10000	
Cr	52	45	1	He	9.016	9.016	2.27	63313	0.01	10000	
Mn	55	45	1	He	302.576	302.576	1.16	1618129	0.02	10000	
Fe	56	45	1	He	12331.837	12331.837	1.52	79080544	0.02	200000	
Co	59	103	1	He	3.831	3.831	1.46	41738	0.01	10000	
Ni	60	103	1	He	9.598	9.598	1.15	26013	0.04	10000	
Cu	63	103	1	He	5.945	5.945	2.38	43643	0.01	10000	
Zn	66	103	1	He	24.514	24.514	1.73	36807	0.07	10000	
As	75	103	1	He	6.805	6.805	1.00	6423	0.11	10000	
Se	78	103	1	He	0.488	0.488	17.84	91	0.53	10000	
Sr	88	103	1	He	6.519	6.519	2.54	49018	0.01	10000	
Mo	95	103	1	He	0.809	0.809	3.85	2811	0.03	2000	
Ag	107	103	1	He	0.025	0.025	10.43	296	0.01	300	
Cd	111	103	1	He	0.123	0.123	22.27	1288	0.01	4000	
Sn	118	115	1	He	2.047	2.047	4.45	11082	0.02	2000	
Sb	123	115	1	He	0.329	0.329	4.30	2040	0.02	300	
Ba	137	115	1	He	30.571	30.571	1.75	68890	0.04	10000	
W	182	209	1	He	0.320	0.320	6.24	7921	0.00	2500	
Tl	205	165	1	He	0.085	0.085	3.17	2887	0.00	5000	
Pb	208	209	1	He	7.814	7.814	0.44	372663	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1135861	1.54	1631381	69.63	30	120	
Sc	45	1	He	646188	2.45	829696	77.88	30	120	
Sc	45	2	NoGas	4969060	1.39	6325638	78.55	30	120	
Rh	103	1	He	1976187	0.50	2345543	84.25	30	120	
In	115	1	He	1189090	0.31	1419467	83.77	30	120	
Tb	159	1	He	3494289	0.49	3888262	89.87	30	120	
Ho	165	1	He	3621315	0.53	3932562	92.09	30	120	
Bi	209	1	He	2703796	0.81	2874805	94.05	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-2-b@20
Data File Name	078SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:03:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.409	0.409	8.30	1608	0.03	10000	
B	11	45	2	NoGas	0.971	0.971	18.09	11222	0.01	300	
Na	23	45	1	He	18.986	18.986	2.40	46738	0.04	500000	
Mg	24	45	1	He	1029.882	1029.882	1.83	855736	0.12	500000	
Al	27	45	1	He	6864.071	6864.071	2.24	3231756	0.21	200000	
K	39	45	1	He	370.820	370.820	2.63	321266	0.12	500000	
Ca	44	45	1	He	420.661	420.661	3.66	18864	2.23	500000	
Ti	47	45	1	He	34.756	34.756	5.80	8409	0.41	2500	
V	51	45	1	He	14.603	14.603	1.23	87373	0.02	10000	
Cr	52	45	1	He	10.005	10.005	2.54	73987	0.01	10000	
Mn	55	45	1	He	358.713	358.713	3.14	2025736	0.02	10000	
Fe	56	45	1	He	13339.352	13339.352	2.26	90352425	0.01	200000	
Co	59	103	1	He	4.725	4.725	2.55	54513	0.01	10000	
Ni	60	103	1	He	8.656	8.656	2.60	24856	0.03	10000	
Cu	63	103	1	He	5.811	5.811	3.81	45207	0.01	10000	
Zn	66	103	1	He	31.001	31.001	0.91	48839	0.06	10000	
As	75	103	1	He	7.497	7.497	2.12	7480	0.10	10000	
Se	78	103	1	He	0.591	0.591	23.75	107	0.55	10000	
Sr	88	103	1	He	2.534	2.534	2.28	20245	0.01	10000	
Mo	95	103	1	He	0.865	0.865	2.52	3178	0.03	2000	
Ag	107	103	1	He	0.043	0.043	12.04	543	0.01	300	
Cd	111	103	1	He	0.132	0.132	23.38	1384	0.01	4000	
Sn	118	115	1	He	1.842	1.842	1.27	10637	0.02	2000	
Sb	123	115	1	He	0.208	0.208	9.33	1570	0.01	300	
Ba	137	115	1	He	36.875	36.875	0.95	87762	0.04	10000	
W	182	209	1	He	0.181	0.181	7.73	6227	0.00	2500	
Tl	205	165	1	He	0.114	0.114	3.31	4003	0.00	5000	
Pb	208	209	1	He	11.348	11.348	1.70	560577	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1216083	1.74	1631381	74.54	30	120	
Sc	45	1	He	682566	1.98	829696	82.27	30	120	
Sc	45	2	NoGas	5326580	0.13	6325638	84.21	30	120	
Rh	103	1	He	2093535	1.68	2345543	89.26	30	120	
In	115	1	He	1256198	0.67	1419467	88.50	30	120	
Tb	159	1	He	3664529	0.99	3888262	94.25	30	120	
Ho	165	1	He	3745472	0.68	3932562	95.24	30	120	
Bi	209	1	He	2802473	1.08	2874805	97.48	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-3-b@20
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:07:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.432	0.432	6.99	1689	0.03	10000	
B	11	45	2	NoGas	0.790	0.790	12.88	10729	0.01	300	
Na	23	45	1	He	21.349	21.349	8.49	51807	0.04	500000	
Mg	24	45	1	He	1079.212	1079.212	0.47	925825	0.12	500000	
Al	27	45	1	He	7165.974	7165.974	1.21	3483701	0.21	200000	
K	39	45	1	He	411.730	411.730	1.89	364724	0.11	500000	
Ca	44	45	1	He	779.509	779.509	0.89	35366	2.20	500000	
Ti	47	45	1	He	44.759	44.759	3.90	11184	0.40	2500	
V	51	45	1	He	15.364	15.364	1.19	94900	0.02	10000	
Cr	52	45	1	He	11.636	11.636	0.65	88493	0.01	10000	
Mn	55	45	1	He	446.901	446.901	0.11	2606027	0.02	10000	
Fe	56	45	1	He	14101.694	14101.694	1.32	98623165	0.01	200000	
Co	59	103	1	He	6.135	6.135	1.75	72557	0.01	10000	
Ni	60	103	1	He	9.298	9.298	0.55	27367	0.03	10000	
Cu	63	103	1	He	6.189	6.189	0.57	49271	0.01	10000	
Zn	66	103	1	He	32.352	32.352	0.95	52169	0.06	10000	
As	75	103	1	He	8.056	8.056	1.16	8229	0.10	10000	
Se	78	103	1	He	0.684	0.684	6.72	120	0.57	10000	
Sr	88	103	1	He	3.664	3.664	1.99	29968	0.01	10000	
Mo	95	103	1	He	0.875	0.875	2.86	3297	0.03	2000	
Ag	107	103	1	He	0.045	0.045	8.63	580	0.01	300	
Cd	111	103	1	He	0.126	0.126	2.45	1407	0.01	4000	
Sn	118	115	1	He	1.971	1.971	3.48	11556	0.02	2000	
Sb	123	115	1	He	0.234	0.234	7.35	1732	0.01	300	
Ba	137	115	1	He	37.704	37.704	2.28	91675	0.04	10000	
W	182	209	1	He	0.124	0.124	11.59	5446	0.00	2500	
Tl	205	165	1	He	0.116	0.116	2.26	4112	0.00	5000	
Pb	208	209	1	He	12.663	12.663	1.75	629740	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1212063	1.57	1631381	74.30	30	120	
Sc	45	1	He	704619	0.94	829696	84.92	30	120	
Sc	45	2	NoGas	5351460	0.73	6325638	84.60	30	120	
Rh	103	1	He	2145971	0.52	2345543	91.49	30	120	
In	115	1	He	1283551	1.08	1419467	90.42	30	120	
Tb	159	1	He	3707740	1.63	3888262	95.36	30	120	
Ho	165	1	He	3790847	0.78	3932562	96.40	30	120	
Bi	209	1	He	2821995	1.30	2874805	98.16	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-4-b@20
Data File Name	080SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:11:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.412	0.412	12.11	1633	0.03	10000	
B	11	45	2	NoGas	1.625	1.625	11.06	13720	0.01	300	
Na	23	45	1	He	29.928	29.928	1.47	64446	0.05	500000	
Mg	24	45	1	He	909.397	909.397	2.04	776509	0.12	500000	
Al	27	45	1	He	3781.261	3781.261	2.07	1830344	0.21	200000	
K	39	45	1	He	269.743	269.743	2.97	248938	0.11	500000	
Ca	44	45	1	He	3039.215	3039.215	2.65	134751	2.26	500000	
Ti	47	45	1	He	45.070	45.070	2.38	11206	0.40	2500	
V	51	45	1	He	8.848	8.848	3.41	54460	0.02	10000	
Cr	52	45	1	He	10.664	10.664	0.74	80907	0.01	10000	
Mn	55	45	1	He	453.499	453.499	2.00	2631619	0.02	10000	
Fe	56	45	1	He	12007.790	12007.790	3.09	83561294	0.01	200000	
Co	59	103	1	He	4.823	4.823	1.76	56800	0.01	10000	
Ni	60	103	1	He	10.429	10.429	0.78	30549	0.03	10000	
Cu	63	103	1	He	6.182	6.182	1.75	48995	0.01	10000	
Zn	66	103	1	He	23.318	23.318	2.25	37934	0.06	10000	
As	75	103	1	He	13.416	13.416	1.49	13545	0.10	10000	
Se	78	103	1	He	0.684	0.684	13.92	119	0.57	10000	
Sr	88	103	1	He	8.937	8.937	1.41	72616	0.01	10000	
Mo	95	103	1	He	0.726	0.726	4.16	2735	0.03	2000	
Ag	107	103	1	He	0.073	0.073	7.33	923	0.01	300	
Cd	111	103	1	He	0.110	0.110	31.56	1365	0.01	4000	
Sn	118	115	1	He	2.001	2.001	1.87	11701	0.02	2000	
Sb	123	115	1	He	0.303	0.303	7.03	2073	0.01	300	
Ba	137	115	1	He	45.856	45.856	0.77	111332	0.04	10000	
W	182	209	1	He	0.132	0.132	11.01	5553	0.00	2500	
Tl	205	165	1	He	0.085	0.085	2.49	2986	0.00	5000	
Pb	208	209	1	He	14.107	14.107	0.47	701109	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1230100	0.14	1631381	75.40	30	120	
Sc	45	1	He	701381	2.27	829696	84.53	30	120	
Sc	45	2	NoGas	5543287	0.45	6325638	87.63	30	120	
Rh	103	1	He	2136636	1.32	2345543	91.09	30	120	
In	115	1	He	1281686	0.58	1419467	90.29	30	120	
Tb	159	1	He	3705187	0.39	3888262	95.29	30	120	
Ho	165	1	He	3761004	0.74	3932562	95.64	30	120	
Bi	209	1	He	2820192	0.30	2874805	98.10	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-4-b@20
Data File Name	081SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:14:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.370	0.370	11.45	1530	0.02	10000	
B	11	45	2	NoGas	0.641	0.641	27.18	10863	0.01	300	
Na	23	45	1	He	18.344	18.344	3.65	48406	0.04	500000	
Mg	24	45	1	He	997.206	997.206	2.68	875681	0.11	500000	
Al	27	45	1	He	5798.553	5798.553	3.02	2885786	0.20	200000	
K	39	45	1	He	300.221	300.221	4.01	281217	0.11	500000	
Ca	44	45	1	He	247.475	247.475	0.90	12092	2.05	500000	
Ti	47	45	1	He	49.024	49.024	2.52	12536	0.39	2500	
V	51	45	1	He	13.848	13.848	3.61	87560	0.02	10000	
Cr	52	45	1	He	8.273	8.273	1.61	65058	0.01	10000	
Mn	55	45	1	He	1747.803	1747.803	1.38	10430360	0.02	10000	
Fe	56	45	1	He	13058.869	13058.869	1.95	93493594	0.01	200000	
Co	59	103	1	He	5.616	5.616	0.59	68156	0.01	10000	
Ni	60	103	1	He	6.713	6.713	0.53	20310	0.03	10000	
Cu	63	103	1	He	4.610	4.610	1.65	38076	0.01	10000	
Zn	66	103	1	He	51.168	51.168	1.04	83591	0.06	10000	
As	75	103	1	He	6.299	6.299	0.62	6637	0.09	10000	
Se	78	103	1	He	0.577	0.577	21.11	111	0.52	10000	
Sr	88	103	1	He	3.040	3.040	2.32	25526	0.01	10000	
Mo	95	103	1	He	0.911	0.911	1.81	3518	0.03	2000	
Ag	107	103	1	He	0.163	0.163	4.69	2133	0.01	300	
Cd	111	103	1	He	0.190	0.190	5.62	1587	0.01	4000	
Sn	118	115	1	He	1.725	1.725	4.18	10507	0.02	2000	
Sb	123	115	1	He	0.096	0.096	11.41	1079	0.01	300	
Ba	137	115	1	He	48.545	48.545	0.35	121106	0.04	10000	
W	182	209	1	He	0.389	0.389	2.64	9459	0.00	2500	
Tl	205	165	1	He	0.121	0.121	2.24	4353	0.00	5000	
Pb	208	209	1	He	20.840	20.840	0.86	1058576	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1281007	1.78	1631381	78.52	30	120	
Sc	45	1	He	721423	1.79	829696	86.95	30	120	
Sc	45	2	NoGas	5655989	1.12	6325638	89.41	30	120	
Rh	103	1	He	2202161	0.78	2345543	93.89	30	120	
In	115	1	He	1317052	1.06	1419467	92.78	30	120	
Tb	159	1	He	3779939	1.11	3888262	97.21	30	120	
Ho	165	1	He	3856707	0.68	3932562	98.07	30	120	
Bi	209	1	He	2883411	0.58	2874805	100.30	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-6-b@20
Data File Name	082SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:18:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.340	0.340	3.51	1404	0.02	10000	
B	11	45	2	NoGas	0.685	0.685	22.47	10981	0.01	300	
Na	23	45	1	He	16.769	16.769	2.15	46745	0.04	500000	
Mg	24	45	1	He	901.118	901.118	0.41	804811	0.11	500000	
Al	27	45	1	He	5906.172	5906.172	0.88	2989568	0.20	200000	
K	39	45	1	He	352.585	352.585	1.60	329958	0.11	500000	
Ca	44	45	1	He	94.639	94.639	4.37	5247	1.80	500000	
Ti	47	45	1	He	42.902	42.902	2.61	11156	0.38	2500	
V	51	45	1	He	13.472	13.472	1.49	86631	0.02	10000	
Cr	52	45	1	He	8.303	8.303	2.09	66367	0.01	10000	
Mn	55	45	1	He	782.097	782.097	1.98	4746178	0.02	10000	
Fe	56	45	1	He	12058.229	12058.229	1.85	87774577	0.01	200000	
Co	59	103	1	He	4.630	4.630	0.57	57427	0.01	10000	
Ni	60	103	1	He	6.951	6.951	0.77	21483	0.03	10000	
Cu	63	103	1	He	3.976	3.976	0.70	33776	0.01	10000	
Zn	66	103	1	He	26.262	26.262	1.55	44757	0.06	10000	
As	75	103	1	He	5.206	5.206	0.65	5632	0.09	10000	
Se	78	103	1	He	0.537	0.537	17.68	109	0.49	10000	
Sr	88	103	1	He	1.674	1.674	1.64	14418	0.01	10000	
Mo	95	103	1	He	0.744	0.744	4.80	2948	0.03	2000	
Ag	107	103	1	He	0.042	0.042	9.76	570	0.01	300	
Cd	111	103	1	He	0.125	0.125	19.13	1472	0.01	4000	
Sn	118	115	1	He	1.748	1.748	3.37	10756	0.02	2000	
Sb	123	115	1	He	0.069	0.069	10.92	954	0.01	300	
Ba	137	115	1	He	44.950	44.950	1.01	113433	0.04	10000	
W	182	209	1	He	0.128	0.128	11.24	5635	0.00	2500	
Tl	205	165	1	He	0.100	0.100	0.75	3630	0.00	5000	
Pb	208	209	1	He	10.139	10.139	1.10	517065	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1275668	0.46	1631381	78.20	30	120	
Sc	45	1	He	733458	1.72	829696	88.40	30	120	
Sc	45	2	NoGas	5645193	1.07	6325638	89.24	30	120	
Rh	103	1	He	2250062	0.90	2345543	95.93	30	120	
In	115	1	He	1332174	0.30	1419467	93.85	30	120	
Tb	159	1	He	3818595	0.35	3888262	98.21	30	120	
Ho	165	1	He	3875926	0.79	3932562	98.56	30	120	
Bi	209	1	He	2892618	0.79	2874805	100.62	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-8-b@20
Data File Name	083SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:22:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.418	0.418	5.46	1785	0.02	10000	
B	11	45	2	NoGas	0.427	0.427	39.01	10641	0.00	300	
Na	23	45	1	He	17.231	17.231	2.58	49597	0.03	500000	
Mg	24	45	1	He	897.225	897.225	0.98	837153	0.11	500000	
Al	27	45	1	He	6903.003	6903.003	1.17	3649352	0.19	200000	
K	39	45	1	He	374.269	374.269	1.54	363770	0.10	500000	
Ca	44	45	1	He	151.892	151.892	3.94	8240	1.84	500000	
Ti	47	45	1	He	42.644	42.644	3.00	11586	0.37	2500	
V	51	45	1	He	14.951	14.951	1.04	100441	0.01	10000	
Cr	52	45	1	He	9.725	9.725	1.42	80814	0.01	10000	
Mn	55	45	1	He	759.866	759.866	1.32	4817439	0.02	10000	
Fe	56	45	1	He	13064.034	13064.034	0.59	99363743	0.01	200000	
Co	59	103	1	He	6.105	6.105	2.42	76494	0.01	10000	
Ni	60	103	1	He	9.285	9.285	1.59	28955	0.03	10000	
Cu	63	103	1	He	5.717	5.717	1.21	48355	0.01	10000	
Zn	66	103	1	He	30.168	30.168	0.68	51674	0.06	10000	
As	75	103	1	He	6.401	6.401	2.65	6959	0.09	10000	
Se	78	103	1	He	0.664	0.664	2.55	125	0.53	10000	
Sr	88	103	1	He	1.837	1.837	2.50	15970	0.01	10000	
Mo	95	103	1	He	0.880	0.880	3.81	3513	0.03	2000	
Ag	107	103	1	He	0.035	0.035	9.56	483	0.01	300	
Cd	111	103	1	He	0.112	0.112	10.43	1457	0.01	4000	
Sn	118	115	1	He	1.793	1.793	4.98	11301	0.02	2000	
Sb	123	115	1	He	0.073	0.073	23.84	1000	0.01	300	
Ba	137	115	1	He	50.700	50.700	0.95	131347	0.04	10000	
W	182	209	1	He	0.090	0.090	20.22	5083	0.00	2500	
Tl	205	165	1	He	0.107	0.107	5.47	3966	0.00	5000	
Pb	208	209	1	He	11.359	11.359	0.76	579984	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1324905	0.88	1631381	81.21	30	120	
Sc	45	1	He	766256	1.02	829696	92.35	30	120	
Sc	45	2	NoGas	5907458	1.55	6325638	93.39	30	120	
Rh	103	1	He	2273882	1.52	2345543	96.94	30	120	
In	115	1	He	1367734	0.35	1419467	96.36	30	120	
Tb	159	1	He	3857192	1.03	3888262	99.20	30	120	
Ho	165	1	He	3976714	0.99	3932562	101.12	30	120	
Bi	209	1	He	2896559	0.76	2874805	100.76	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	084_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:26:08-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.972	1.570	193830	1.05	50	99.9	89.5	110.5	
B	11	45	2	NoGas	46.674	1.727	147706	1.96	50	93.3	89.5	110.5	
Na	23	45	1	He	24069.364	2.232	36532812	1.14	25000	96.3	89.5	110.5	
Mg	24	45	1	He	24041.143	2.392	20732680	0.91	25000	96.2	89.5	110.5	
Al	27	45	1	He	236.384	2.249	117814	1.03	250	94.6	89.5	110.5	
K	39	45	1	He	25069.714	2.922	20385336	1.14	25000	100.3	89.5	110.5	
Ca	44	45	1	He	24583.415	2.262	1096076	1.04	25000	98.3	89.5	110.5	
Ti	47	45	1	He	51.450	2.438	12934	2.61	50	102.9	89.5	110.5	
V	51	45	1	He	50.656	3.259	314563	0.72	50	101.3	89.5	110.5	
Cr	52	45	1	He	50.116	2.452	376201	0.80	50	100.2	89.5	110.5	
Mn	55	45	1	He	255.226	2.711	1497749	0.48	250	102.1	89.5	110.5	
Fe	56	45	1	He	12572.521	2.055	88479399	1.21	12500	100.6	89.5	110.5	
Co	59	103	1	He	47.386	1.913	528463	1.77	50	94.8	89.5	110.5	
Ni	60	103	1	He	46.679	2.277	129160	0.46	50	93.4	89.5	110.5	
Cu	63	103	1	He	47.319	2.591	345529	1.42	50	94.6	89.5	110.5	
Zn	66	103	1	He	47.868	2.005	72006	1.38	50	95.7	89.5	110.5	
As	75	103	1	He	49.066	2.290	46567	0.98	50	98.1	89.5	110.5	
Se	78	103	1	He	49.100	3.123	4954	1.73	50	98.2	89.5	110.5	
Sr	88	103	1	He	49.544	1.999	380984	1.14	50	99.1	89.5	110.5	
Mo	95	103	1	He	50.631	2.779	176907	1.57	50	101.3	89.5	110.5	
Ag	107	103	1	He	49.922	2.965	599016	1.64	50	99.8	89.5	110.5	
Cd	111	103	1	He	50.198	2.352	105884	0.58	50	100.4	89.5	110.5	
Sn	118	115	1	He	50.035	1.853	258496	0.82	50	100.1	89.5	110.5	
Sb	123	115	1	He	52.148	0.663	248463	0.39	50	104.3	89.5	110.5	
Ba	137	115	1	He	51.491	1.906	120390	1.58	50	103.0	89.5	110.5	
W	182	209	1	He	50.159	1.707	680402	1.61	50	100.3	89.5	110.5	
Tl	205	165	1	He	51.034	0.610	1759115	1.61	50	102.1	89.5	110.5	
Pb	208	209	1	He	47.888	1.241	2230266	1.19	50	95.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1227045	1.38	1631381	75.22	30	120	
Sc	45	1	He	709282	3.20	829696	85.49	30	120	
Sc	45	2	NoGas	5306633	0.35	6325638	83.89	30	120	
Rh	103	1	He	2024969	2.07	2345543	86.33	30	120	
In	115	1	He	1234490	1.03	1419467	86.97	30	120	
Tb	159	1	He	3681433	0.96	3888262	94.68	30	120	
Ho	165	1	He	3755620	1.04	3932562	95.50	30	120	
Bi	209	1	He	2644816	0.62	2874805	92.00	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	085_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:29:56-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.078	11.8	337	9.5	1	
B	11	45	2	NoGas	0.260	65.7	9099	5.9	20	
Na	23	45	1	He	7.025	21.6	28634	5.6	400	
Mg	24	45	1	He	1.839	71.2	2278	44.5	1000	
Al	27	45	1	He	1.290	16.9	2725	2.5	50	
K	39	45	1	He	10.265	12.3	38683	2.6	1000	
Ca	44	45	1	He	5.186	38.3	1025	7.1	1000	
Ti	47	45	1	He	0.312	13.2	84	9.9	20	
V	51	45	1	He	0.026	353.5	233	232.4	2	
Cr	52	45	1	He	-0.007	-74.3	2027	2.6	2	
Mn	55	45	1	He	0.076	40.9	1411	10.4	2	
Fe	56	45	1	He	23.662	21.3	160208	18.7	50	
Co	59	103	1	He	0.004	47.6	87	23.1	1	
Ni	60	103	1	He	-0.021	-28.3	56	30.8	2	
Cu	63	103	1	He	0.004	157.5	1585	1.9	2	
Zn	66	103	1	He	-0.037	-169.2	1736	5.1	20	
As	75	103	1	He	0.079	7.3	227	3.2	2	
Se	78	103	1	He	0.171	15.8	65	4.0	2	
Sr	88	103	1	He	0.013	30.4	216	15.9	10	
Mo	95	103	1	He	0.894	20.2	3346	20.3	2	
Ag	107	103	1	He	0.013	36.2	167	35.6	0.2	
Cd	111	103	1	He	0.039	21.9	1205	1.0	0.2	
Sn	118	115	1	He	0.405	11.7	3149	6.4	10	
Sb	123	115	1	He	0.497	14.0	3009	9.8	1	
Ba	137	115	1	He	0.006	132.4	104	17.6	5	
W	182	209	1	He	1.072	16.0	18723	12.9	10	
Tl	205	165	1	He	0.041	25.4	1481	24.4	0.5	
Pb	208	209	1	He	0.042	12.2	2831	9.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1232465	1.35	1631381	75.55	30	120	
Sc	45	1	He	668278	2.00	829696	80.55	30	120	
Sc	45	2	NoGas	5332089	0.52	6325638	84.29	30	120	
Rh	103	1	He	2130954	0.75	2345543	90.85	30	120	
In	115	1	He	1273716	1.73	1419467	89.73	30	120	
Tb	159	1	He	3636833	0.72	3888262	93.53	30	120	
Ho	165	1	He	3729127	0.56	3932562	94.83	30	120	
Bi	209	1	He	2766107	0.33	2874805	96.22	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	086CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:33:46-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.987	0.987	4.067	3949	3.16	1	98.7	69.5	130.5	
B	11	2	NoGas	18.141	18.141	4.614	63305	2.63	20	90.7	69.5	130.5	
Na	23	1	He	1060.712	1060.712	2.082	1600027	2.03	1000	106.1	69.5	130.5	
Mg	24	1	He	1057.138	1057.138	0.261	896364	0.12	1000	105.7	69.5	130.5	
Al	27	1	He	46.811	46.811	1.441	24699	1.15	50	93.6	69.5	130.5	
K	39	1	He	1071.984	1071.984	0.775	887112	0.47	1000	107.2	69.5	130.5	
Ca	44	1	He	1027.605	1027.605	0.770	45814	0.99	1000	102.8	69.5	130.5	
Ti	47	1	He	10.230	10.230	4.596	2535	4.32	10	102.3	69.5	130.5	
V	51	1	He	5.296	5.296	2.881	32393	2.62	5	105.9	69.5	130.5	
Cr	52	1	He	2.142	2.142	1.155	17861	0.96	2	107.1	69.5	130.5	
Mn	55	1	He	5.223	5.223	0.742	31125	0.91	5	104.5	69.5	130.5	
Fe	56	1	He	111.584	111.584	0.387	775184	0.59	100	111.6	69.5	130.5	
Co	59	1	He	0.957	0.957	0.376	11254	0.85	1	95.7	69.5	130.5	
Ni	60	1	He	1.940	1.940	3.731	5749	3.18	2	97.0	69.5	130.5	
Cu	63	1	He	1.852	1.852	4.074	15695	3.24	2	92.6	69.5	130.5	
Zn	66	1	He	19.367	19.367	1.295	31657	0.77	20	96.8	69.5	130.5	
As	75	1	He	4.896	4.896	1.404	5013	1.59	5	97.9	69.5	130.5	
Se	78	1	He	5.136	5.136	1.404	586	1.60	5	102.7	69.5	130.5	
Sr	88	1	He	9.599	9.599	2.338	77603	2.38	10	96.0	69.5	130.5	
Mo	95	1	He	10.339	10.339	0.315	37985	0.74	10	103.4	69.5	130.5	
Ag	107	1	He	1.057	1.057	1.857	13329	1.97	1	105.7	69.5	130.5	
Cd	111	1	He	1.093	1.093	8.269	3514	5.40	1	109.3	69.5	130.5	
Sn	118	1	He	10.212	10.212	2.203	55469	2.31	10	102.1	69.5	130.5	
Sb	123	1	He	2.061	2.061	0.378	10728	0.81	2	103.1	69.5	130.5	
Ba	137	1	He	5.155	5.155	2.173	12569	1.72	5	103.1	69.5	130.5	
W	182	1	He	9.639	9.639	1.119	140950	1.35	10	96.4	69.5	130.5	
Tl	205	1	He	2.059	2.059	3.092	71031	2.09	2	103.0	69.5	130.5	
Pb	208	1	He	1.038	1.038	2.448	51786	2.16	1	103.8	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1254792	1.41	1631381	76.92	30	120	
Sc	45	1	He	696417	0.28	829696	83.94	30	120	
Sc	45	2	NoGas	5379970	1.88	6325638	85.05	30	120	
Rh	103	1	He	2126052	0.48	2345543	90.64	30	120	
In	115	1	He	1279074	0.72	1419467	90.11	30	120	
Tb	159	1	He	3679669	1.11	3888262	94.64	30	120	
Ho	165	1	He	3756192	1.11	3932562	95.52	30	120	
Bi	209	1	He	2791841	0.37	2874805	97.11	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176698/1-a@2
Data File Name	087_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:37:37-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.082	30.2	333	27.3	1	
B	11	45	2	NoGas	0.269	107.4	8495	7.9	20	
Na	23	45	1	He	41.922	4.9	77187	2.2	400	
Mg	24	45	1	He	38.035	1.8	31187	4.4	1000	
Al	27	45	1	He	2.071	25.3	3038	10.5	50	
K	39	45	1	He	34.647	3.5	56366	2.4	1000	
Ca	44	45	1	He	114.094	0.3	5505	3.7	1000	
Ti	47	45	1	He	0.738	28.6	181	23.3	20	
V	51	45	1	He	0.091	27.4	609	26.1	2	
Cr	52	45	1	He	0.833	10.5	7786	3.9	2	
Mn	55	45	1	He	0.299	7.8	2598	1.7	2	
Fe	56	45	1	He	21.706	4.6	145380	8.5	50	
Co	59	103	1	He	0.087	12.1	990	12.8	1	
Ni	60	103	1	He	0.228	12.8	728	10.3	2	
Cu	63	103	1	He	0.281	5.4	3465	3.4	2	
Zn	66	103	1	He	1.659	1.8	4069	1.7	20	
As	75	103	1	He	0.414	3.4	523	2.9	2	
Se	78	103	1	He	0.438	19.8	87	10.0	2	
Sr	88	103	1	He	0.372	5.1	2907	3.9	10	
Mo	95	103	1	He	0.592	17.3	2086	16.8	2	
Ag	107	103	1	He	0.025	18.1	296	18.1	0.2	
Cd	111	103	1	He	0.051	52.5	1150	3.8	0.2	
Sn	118	115	1	He	17.642	1.5	88682	1.7	10	Blank Failed
Sb	123	115	1	He	0.395	6.5	2350	6.1	1	
Ba	137	115	1	He	0.853	10.2	2009	8.6	5	
W	182	209	1	He	0.435	22.0	9781	14.5	10	
Tl	205	165	1	He	0.326	3.0	10780	2.5	0.5	
Pb	208	209	1	He	0.190	2.2	10071	1.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1159817	1.72	1631381	71.09	30	120	
Sc	45	1	He	657114	3.97	829696	79.20	30	120	
Sc	45	2	NoGas	4967497	1.59	6325638	78.53	30	120	
Rh	103	1	He	1990053	1.12	2345543	84.84	30	120	
In	115	1	He	1192775	1.11	1419467	84.03	30	120	
Tb	159	1	He	3477857	1.29	3888262	89.45	30	120	
Ho	165	1	He	3587273	0.99	3932562	91.22	30	120	
Bi	209	1	He	2778059	1.37	2874805	96.63	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176698/2-a@2
Data File Name	088LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:41:27-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	453.088	453.088	1.445	1552860	2.09	500	90.6	78.6	110.5	
B	11	2	NoGas	49.636	49.636	0.474	134443	0.57	50	99.3	79.5	120.5	
Na	23	1	He	4765.751	4765.751	1.623	6100939	1.27	5000	95.3	79.5	120.5	
Mg	24	1	He	4854.251	4854.251	1.507	3523839	1.37	5000	97.1	79.5	120.5	
Al	27	1	He	4558.474	4558.474	1.863	1877293	1.81	5000	91.2	79.5	120.5	
K	39	1	He	4869.542	4869.542	1.930	3354754	0.93	5000	97.4	79.5	120.5	
Ca	44	1	He	4380.194	4380.194	1.243	164961	1.48	5000	87.6	79.5	120.5	
Ti	47	1	He	48.383	48.383	1.376	10235	1.37	50	96.8	79.5	120.5	
V	51	1	He	480.535	480.535	2.035	2511040	0.93	500	96.1	71.5	110.5	
Cr	52	1	He	487.340	487.340	2.172	3062426	0.82	500	97.5	69.5	110.5	
Mn	55	1	He	495.065	495.065	2.837	2443864	0.52	500	99.0	79.5	120.5	
Fe	56	1	He	4934.431	4934.431	1.865	29224330	0.84	5000	98.7	79.5	120.5	
Co	59	1	He	425.871	425.871	0.124	4349044	0.26	500	85.2	73.9	110.5	
Ni	60	1	He	420.496	420.496	0.318	1064825	0.54	500	84.1	74.9	110.5	
Cu	63	1	He	439.315	439.315	0.451	2926878	0.68	500	87.9	72.6	110.5	
Zn	66	1	He	404.843	404.843	0.606	546084	0.79	500	81.0	71.5	113.4	
As	75	1	He	396.051	396.051	1.164	343353	1.39	500	79.2	73.4	110.5	
Se	78	1	He	387.080	387.080	1.061	35491	1.22	500	77.4	64.6	110.5	
Sr	88	1	He	457.277	457.277	0.903	3219657	1.13	500	91.5	79.5	120.5	
Mo	95	1	He	49.440	49.440	0.155	158220	0.33	50	98.9	29.5	140.5	
Ag	107	1	He	47.520	47.520	1.041	522268	1.26	50	95.0	59.5	114.5	
Cd	111	1	He	447.506	447.506	0.427	856836	0.65	500	89.5	73.5	110.5	
Sn	118	1	He	544.221	544.221	1.309	2463172	1.45	500	108.8	79.5	120.5	
Sb	123	1	He	49.256	49.256	0.222	206315	0.86	50	98.5	67.5	113.4	
Ba	137	1	He	483.477	483.477	0.724	993032	1.30	500	96.7	69.5	110.5	
W	182	1	He	46.262	46.262	2.220	611239	0.32	50	92.5	74.6	125.4	
Tl	205	1	He	120.081	120.081	1.953	3821197	0.86	125	96.1	70.6	110.5	
Pb	208	1	He	456.060	456.060	0.846	20677425	1.35	500	91.2	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1084208	0.89	1631381	66.46	30	120	
Sc	45	1	He	596812	2.73	829696	71.93	30	120	
Sc	45	2	NoGas	4557301	0.13	6325638	72.04	30	120	
Rh	103	1	He	1854069	0.23	2345543	79.05	30	120	
In	115	1	He	1085051	0.65	1419467	76.44	30	120	
Tb	159	1	He	3405101	0.79	3888262	87.57	30	120	
Ho	165	1	He	3467870	1.15	3932562	88.18	30	120	
Bi	209	1	He	2575718	1.94	2874805	89.60	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-d@20
Data File Name	089SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:45:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.429	0.429	1.41	1682	0.03	10000	
B	11	45	2	NoGas	0.902	0.902	9.82	10748	0.01	300	
Na	23	45	1	He	12.661	12.661	2.52	36745	0.03	500000	
Mg	24	45	1	He	760.198	760.198	1.21	619148	0.12	500000	
Al	27	45	1	He	4009.435	4009.435	1.89	1850663	0.22	200000	
K	39	45	1	He	331.075	331.075	2.09	284379	0.12	500000	
Ca	44	45	1	He	64.743	64.743	3.22	3528	1.83	500000	
Ti	47	45	1	He	33.655	33.655	4.13	7981	0.42	2500	
V	51	45	1	He	11.037	11.037	3.49	64717	0.02	10000	
Cr	52	45	1	He	9.831	9.831	0.88	71282	0.01	10000	
Mn	55	45	1	He	815.405	815.405	1.02	4511709	0.02	10000	
Fe	56	45	1	He	20372.567	20372.567	1.25	135221492	0.02	200000	
Co	59	103	1	He	5.451	5.451	0.34	61020	0.01	10000	
Ni	60	103	1	He	8.125	8.125	1.74	22648	0.04	10000	
Cu	63	103	1	He	5.550	5.550	0.19	41975	0.01	10000	
Zn	66	103	1	He	19.198	19.198	1.36	29996	0.06	10000	
As	75	103	1	He	7.144	7.144	1.37	6924	0.10	10000	
Se	78	103	1	He	1.004	1.004	3.18	146	0.69	10000	
Sr	88	103	1	He	2.079	2.079	3.07	16134	0.01	10000	
Mo	95	103	1	He	0.992	0.992	8.39	3532	0.03	2000	
Ag	107	103	1	He	0.023	0.023	8.43	277	0.01	300	
Cd	111	103	1	He	0.156	0.156	12.87	1394	0.01	4000	
Sn	118	115	1	He	2.204	2.204	6.09	12112	0.02	2000	
Sb	123	115	1	He	0.262	0.262	16.22	1771	0.01	300	
Ba	137	115	1	He	30.115	30.115	2.13	69312	0.04	10000	
W	182	209	1	He	0.613	0.613	14.94	12124	0.01	2500	
Tl	205	165	1	He	0.160	0.160	12.22	5474	0.00	5000	
Pb	208	209	1	He	6.744	6.744	0.07	325559	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1215406	2.28	1631381	74.50	30	120	
Sc	45	1	He	668727	0.94	829696	80.60	30	120	
Sc	45	2	NoGas	5196121	1.54	6325638	82.14	30	120	
Rh	103	1	He	2031059	0.47	2345543	86.59	30	120	
In	115	1	He	1214562	0.44	1419467	85.56	30	120	
Tb	159	1	He	3569566	0.82	3888262	91.80	30	120	
Ho	165	1	He	3680434	0.94	3932562	93.59	30	120	
Bi	209	1	He	2735887	1.10	2874805	95.17	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-1-d@100
Data File Name	090SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:48:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.125	0.125	2.36	507	0.02	10000	
B	11	45	2	NoGas	-0.191	-0.191	-53.14	7472	0.00	300	
Na	23	45	1	He	3.854	3.854	1.11	23924	0.02	500000	
Mg	24	45	1	He	158.051	158.051	0.13	128186	0.12	500000	
Al	27	45	1	He	845.935	845.935	0.86	388592	0.22	200000	
K	39	45	1	He	71.279	71.279	3.79	84664	0.08	500000	
Ca	44	45	1	He	12.241	12.241	5.36	1310	0.93	500000	
Ti	47	45	1	He	6.795	6.795	9.77	1605	0.42	2500	
V	51	45	1	He	2.413	2.413	4.94	14096	0.02	10000	
Cr	52	45	1	He	2.003	2.003	1.22	16028	0.01	10000	
Mn	55	45	1	He	170.526	170.526	0.45	935716	0.02	10000	
Fe	56	45	1	He	4281.929	4281.929	1.42	28164314	0.02	200000	
Co	59	103	1	He	1.110	1.110	1.50	12645	0.01	10000	
Ni	60	103	1	He	1.627	1.627	5.75	4694	0.03	10000	
Cu	63	103	1	He	1.082	1.082	4.15	9514	0.01	10000	
Zn	66	103	1	He	3.834	3.834	3.65	7469	0.05	10000	
As	75	103	1	He	1.465	1.465	3.69	1555	0.09	10000	
Se	78	103	1	He	0.224	0.224	30.82	68	0.33	10000	
Sr	88	103	1	He	0.419	0.419	2.36	3381	0.01	10000	
Mo	95	103	1	He	0.229	0.229	9.23	869	0.03	2000	
Ag	107	103	1	He	0.006	0.006	24.63	76	0.01	300	
Cd	111	103	1	He	0.080	0.080	51.38	1253	0.01	4000	
Sn	118	115	1	He	0.413	0.413	10.02	3123	0.01	2000	
Sb	123	115	1	He	0.029	0.029	33.80	699	0.00	300	
Ba	137	115	1	He	5.975	5.975	0.66	14178	0.04	10000	
W	182	209	1	He	0.165	0.165	23.07	5898	0.00	2500	
Tl	205	165	1	He	0.030	0.030	8.96	1082	0.00	5000	
Pb	208	209	1	He	1.389	1.389	0.72	68240	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1199620	1.04	1631381	73.53	30	120	
Sc	45	1	He	662630	1.23	829696	79.86	30	120	
Sc	45	2	NoGas	5144449	2.60	6325638	81.33	30	120	
Rh	103	1	He	2061403	0.86	2345543	87.89	30	120	
In	115	1	He	1245896	0.22	1419467	87.77	30	120	
Tb	159	1	He	3632495	0.73	3888262	93.42	30	120	
Ho	165	1	He	3724335	1.65	3932562	94.71	30	120	
Bi	209	1	He	2758092	0.84	2874805	95.94	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-1-d@20
Data File Name	091SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:52:45-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	992.707	992.707	1.10	3465841	0.03	10000	
B	11	45	2	NoGas	100.229	100.229	1.46	282310	0.04	300	
Na	23	45	1	He	9614.176	9614.176	4.53	13653520	0.07	500000	
Mg	24	45	1	He	10421.737	10421.737	5.66	8399155	0.12	500000	
Al	27	45	1	He	12829.584	12829.584	3.51	5867836	0.22	200000	
K	39	45	1	He	10248.698	10248.698	4.73	7809784	0.13	500000	
Ca	44	45	1	He	8821.553	8821.553	3.68	368351	2.39	500000	
Ti	47	45	1	He	126.391	126.391	5.22	29675	0.43	2500	
V	51	45	1	He	969.040	969.040	3.20	5628384	0.02	10000	
Cr	52	45	1	He	969.836	969.836	3.77	6770832	0.01	10000	
Mn	55	45	1	He	1756.092	1756.092	4.26	9631484	0.02	10000	
Fe	56	45	1	He	29531.031	29531.031	4.03	194325086	0.02	200000	
Co	59	103	1	He	919.939	919.939	0.89	9746717	0.01	10000	
Ni	60	103	1	He	947.352	947.352	0.69	2488539	0.04	10000	
Cu	63	103	1	He	941.043	941.043	0.67	6502333	0.01	10000	
Zn	66	103	1	He	951.089	951.089	0.60	1328706	0.07	10000	
As	75	103	1	He	922.709	922.709	0.78	829640	0.11	10000	
Se	78	103	1	He	934.493	934.493	0.90	88822	1.05	10000	
Sr	88	103	1	He	979.202	979.202	1.13	7152011	0.01	10000	
Mo	95	103	1	He	99.214	99.214	2.82	329230	0.03	2000	
Ag	107	103	1	He	99.288	99.288	0.96	1131951	0.01	300	
Cd	111	103	1	He	1043.018	1043.018	0.43	2070481	0.05	4000	
Sn	118	115	1	He	1100.448	1100.448	1.34	5223078	0.02	2000	
Sb	123	115	1	He	105.784	105.784	0.77	464131	0.02	300	
Ba	137	115	1	He	1152.614	1152.614	1.27	2482836	0.05	10000	
W	182	209	1	He	94.385	94.385	1.05	1250426	0.01	2500	
Tl	205	165	1	He	254.353	254.353	1.58	8339423	0.00	5000	
Pb	208	209	1	He	991.858	991.858	0.80	45210965	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1104639	1.53	1631381	67.71	30	120	
Sc	45	1	He	663990	6.03	829696	80.03	30	120	
Sc	45	2	NoGas	4869439	0.71	6325638	76.98	30	120	
Rh	103	1	He	1923572	2.11	2345543	82.01	30	120	
In	115	1	He	1137997	0.59	1419467	80.17	30	120	
Tb	159	1	He	3459432	1.39	3888262	88.97	30	120	
Ho	165	1	He	3572857	1.07	3932562	90.85	30	120	
Bi	209	1	He	2589269	0.80	2874805	90.07	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-e du@20
Data File Name	092SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:56:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.577	0.577	12.08	2156	0.03	10000	
B	11	45	2	NoGas	1.062	1.062	10.48	11044	0.01	300	
Na	23	45	1	He	16.126	16.126	2.10	40364	0.04	500000	
Mg	24	45	1	He	850.408	850.408	0.80	670284	0.13	500000	
Al	27	45	1	He	4722.972	4722.972	1.37	2109702	0.22	200000	
K	39	45	1	He	400.822	400.822	1.18	326988	0.12	500000	
Ca	44	45	1	He	69.559	69.559	5.03	3612	1.93	500000	
Ti	47	45	1	He	32.551	32.551	1.89	7474	0.44	2500	
V	51	45	1	He	12.460	12.460	2.19	70722	0.02	10000	
Cr	52	45	1	He	11.112	11.112	0.73	77716	0.01	10000	
Mn	55	45	1	He	693.326	693.326	0.86	3713176	0.02	10000	
Fe	56	45	1	He	20858.480	20858.480	1.12	133998261	0.02	200000	
Co	59	103	1	He	4.921	4.921	1.89	54074	0.01	10000	
Ni	60	103	1	He	8.508	8.508	1.89	23275	0.04	10000	
Cu	63	103	1	He	5.763	5.763	2.84	42723	0.01	10000	
Zn	66	103	1	He	20.602	20.602	1.50	31477	0.07	10000	
As	75	103	1	He	7.799	7.799	3.40	7405	0.11	10000	
Se	78	103	1	He	1.625	1.625	3.89	204	0.80	10000	
Sr	88	103	1	He	2.413	2.413	5.01	18362	0.01	10000	
Mo	95	103	1	He	2.532	2.532	14.89	8752	0.03	2000	
Ag	107	103	1	He	0.027	0.027	32.39	322	0.01	300	
Cd	111	103	1	He	0.188	0.188	15.08	1434	0.01	4000	
Sn	118	115	1	He	7.525	7.525	9.60	38322	0.02	2000	
Sb	123	115	1	He	0.896	0.896	13.95	4646	0.02	300	
Ba	137	115	1	He	29.949	29.949	1.71	67659	0.04	10000	
W	182	209	1	He	2.183	2.183	12.46	33354	0.01	2500	
Tl	205	165	1	He	0.233	0.233	15.47	7806	0.00	5000	
Pb	208	209	1	He	7.086	7.086	1.06	335294	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1165247	0.88	1631381	71.43	30	120	
Sc	45	1	He	647233	0.77	829696	78.01	30	120	
Sc	45	2	NoGas	5117030	0.59	6325638	80.89	30	120	
Rh	103	1	He	1994121	1.62	2345543	85.02	30	120	
In	115	1	He	1192217	1.04	1419467	83.99	30	120	
Tb	159	1	He	3520877	1.90	3888262	90.55	30	120	
Ho	165	1	He	3626811	0.42	3932562	92.23	30	120	
Bi	209	1	He	2682163	0.43	2874805	93.30	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-f ms@20
Data File Name	093SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:00:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.166	5.166	3.77	20245	0.03	10000	
B	11	45	2	NoGas	4.331	4.331	0.76	21661	0.02	300	
Na	23	45	1	He	476.243	476.243	0.56	730995	0.07	500000	
Mg	24	45	1	He	1302.356	1302.356	1.06	1106965	0.12	500000	
Al	27	45	1	He	5171.155	5171.155	0.90	2491909	0.21	200000	
K	39	45	1	He	763.129	763.129	1.74	642430	0.12	500000	
Ca	44	45	1	He	540.689	540.689	1.37	24568	2.20	500000	
Ti	47	45	1	He	42.444	42.444	0.07	10509	0.40	2500	
V	51	45	1	He	17.592	17.592	1.71	107674	0.02	10000	
Cr	52	45	1	He	15.066	15.066	1.19	112910	0.01	10000	
Mn	55	45	1	He	805.138	805.138	0.58	4651656	0.02	10000	
Fe	56	45	1	He	21674.817	21674.817	1.86	150217087	0.01	200000	
Co	59	103	1	He	10.378	10.378	0.44	118081	0.01	10000	
Ni	60	103	1	He	12.898	12.898	2.04	36484	0.04	10000	
Cu	63	103	1	He	10.263	10.263	1.34	77625	0.01	10000	
Zn	66	103	1	He	25.475	25.475	0.59	39900	0.06	10000	
As	75	103	1	He	12.260	12.260	2.46	11975	0.10	10000	
Se	78	103	1	He	5.153	5.153	4.67	571	0.90	10000	
Sr	88	103	1	He	6.881	6.881	1.21	54055	0.01	10000	
Mo	95	103	1	He	5.483	5.483	0.79	19591	0.03	2000	
Ag	107	103	1	He	4.717	4.717	0.93	57745	0.01	300	
Cd	111	103	1	He	4.767	4.767	1.02	11239	0.04	4000	
Sn	118	115	1	He	7.253	7.253	2.69	38682	0.02	2000	
Sb	123	115	1	He	1.859	1.859	0.39	9486	0.02	300	
Ba	137	115	1	He	34.923	34.923	1.28	82484	0.04	10000	
W	182	209	1	He	3.559	3.559	1.35	53266	0.01	2500	
Tl	205	165	1	He	4.468	4.468	1.05	151627	0.00	5000	
Pb	208	209	1	He	11.849	11.849	1.48	571700	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1238432	1.90	1631381	75.91	30	120	
Sc	45	1	He	698242	0.49	829696	84.16	30	120	
Sc	45	2	NoGas	5417956	1.27	6325638	85.65	30	120	
Rh	103	1	He	2064968	1.05	2345543	88.04	30	120	
In	115	1	He	1246579	0.62	1419467	87.82	30	120	
Tb	159	1	He	3589538	1.31	3888262	92.32	30	120	
Ho	165	1	He	3696058	0.98	3932562	93.99	30	120	
Bi	209	1	He	2737596	1.43	2874805	95.23	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-2-b@20
Data File Name	094SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:03:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.467	0.467	13.87	1893	0.02	10000	
B	11	45	2	NoGas	0.891	0.891	11.13	11478	0.01	300	
Na	23	45	1	He	17.001	17.001	5.08	46356	0.04	500000	
Mg	24	45	1	He	1201.776	1201.776	2.07	1055856	0.11	500000	
Al	27	45	1	He	6065.473	6065.473	1.34	3020675	0.20	200000	
K	39	45	1	He	538.160	538.160	1.20	478104	0.11	500000	
Ca	44	45	1	He	97.548	97.548	3.92	5297	1.84	500000	
Ti	47	45	1	He	35.332	35.332	1.95	9043	0.39	2500	
V	51	45	1	He	12.309	12.309	1.14	77903	0.02	10000	
Cr	52	45	1	He	10.877	10.877	1.99	84869	0.01	10000	
Mn	55	45	1	He	338.146	338.146	0.58	2019972	0.02	10000	
Fe	56	45	1	He	18569.541	18569.541	2.56	133018844	0.01	200000	
Co	59	103	1	He	4.647	4.647	2.29	55409	0.01	10000	
Ni	60	103	1	He	9.780	9.780	2.26	29013	0.03	10000	
Cu	63	103	1	He	8.571	8.571	1.19	68183	0.01	10000	
Zn	66	103	1	He	25.270	25.270	3.19	41472	0.06	10000	
As	75	103	1	He	7.458	7.458	1.67	7692	0.10	10000	
Se	78	103	1	He	0.855	0.855	16.73	139	0.61	10000	
Sr	88	103	1	He	3.344	3.344	2.40	27582	0.01	10000	
Mo	95	103	1	He	0.915	0.915	6.19	3472	0.03	2000	
Ag	107	103	1	He	0.014	0.014	8.48	186	0.01	300	
Cd	111	103	1	He	0.124	0.124	11.97	1414	0.01	4000	
Sn	118	115	1	He	2.248	2.248	2.61	13150	0.02	2000	
Sb	123	115	1	He	0.176	0.176	4.23	1460	0.01	300	
Ba	137	115	1	He	36.163	36.163	1.47	88698	0.04	10000	
W	182	209	1	He	0.298	0.298	2.24	7962	0.00	2500	
Tl	205	165	1	He	0.115	0.115	5.18	4107	0.00	5000	
Pb	208	209	1	He	8.609	8.609	1.52	429061	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1257849	0.40	1631381	77.10	30	120	
Sc	45	1	He	721740	0.76	829696	86.99	30	120	
Sc	45	2	NoGas	5566403	0.86	6325638	88.00	30	120	
Rh	103	1	He	2163899	2.04	2345543	92.26	30	120	
In	115	1	He	1294608	0.82	1419467	91.20	30	120	
Tb	159	1	He	3737830	1.40	3888262	96.13	30	120	
Ho	165	1	He	3841436	1.59	3932562	97.68	30	120	
Bi	209	1	He	2826382	1.21	2874805	98.32	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-4-b@20
Data File Name	095SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:07:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.415	0.415	13.86	1689	0.02	10000	
B	11	45	2	NoGas	5.003	5.003	4.47	24521	0.02	300	
Na	23	45	1	He	188.462	188.462	1.63	311570	0.06	500000	
Mg	24	45	1	He	1345.872	1345.872	2.64	1183829	0.11	500000	
Al	27	45	1	He	4815.102	4815.102	2.63	2401439	0.20	200000	
K	39	45	1	He	1850.909	1850.909	4.24	1564762	0.12	500000	
Ca	44	45	1	He	-31.607	-31.607	-38.04	-568	5.56	500000	
Ti	47	45	1	He	43.488	43.488	2.72	11142	0.39	2500	
V	51	45	1	He	8.606	8.606	3.69	54548	0.02	10000	
Cr	52	45	1	He	8.793	8.793	2.53	69126	0.01	10000	
Mn	55	45	1	He	676.560	676.560	2.53	4045357	0.02	10000	
Fe	56	45	1	He	12296.296	12296.296	3.24	88189008	0.01	200000	
Co	59	103	1	He	4.329	4.329	2.07	51757	0.01	10000	
Ni	60	103	1	He	10.642	10.642	1.16	31643	0.03	10000	
Cu	63	103	1	He	9.818	9.818	2.01	78066	0.01	10000	
Zn	66	103	1	He	25.404	25.404	2.55	41794	0.06	10000	
As	75	103	1	He	20.187	20.187	1.98	20616	0.10	10000	
Se	78	103	1	He	0.458	0.458	7.02	97	0.47	10000	
Sr	88	103	1	He	229.505	229.505	0.80	1890490	0.01	10000	
Mo	95	103	1	He	58.203	58.203	2.78	217863	0.03	2000	
Ag	107	103	1	He	0.015	0.015	9.73	203	0.01	300	
Cd	111	103	1	He	0.136	0.136	26.80	1442	0.01	4000	
Sn	118	115	1	He	2.126	2.126	0.37	12516	0.02	2000	
Sb	123	115	1	He	0.068	0.068	2.22	923	0.01	300	
Ba	137	115	1	He	33.687	33.687	1.38	82796	0.04	10000	
W	182	209	1	He	1.270	1.270	6.30	21834	0.01	2500	
Tl	205	165	1	He	0.063	0.063	2.35	2289	0.00	5000	
Pb	208	209	1	He	38.823	38.823	1.33	1919125	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1262952	2.29	1631381	77.42	30	120	
Sc	45	1	He	722845	2.11	829696	87.12	30	120	
Sc	45	2	NoGas	5602676	0.58	6325638	88.57	30	120	
Rh	103	1	He	2169173	1.08	2345543	92.48	30	120	
In	115	1	He	1297211	0.99	1419467	91.39	30	120	
Tb	159	1	He	3720269	0.72	3888262	95.68	30	120	
Ho	165	1	He	3843567	0.81	3932562	97.74	30	120	
Bi	209	1	He	2807378	1.55	2874805	97.65	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	096_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:11:29-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.142	2.538	178372	3.17	50	96.3	89.5	110.5	
B	11	45	2	NoGas	45.329	1.085	137145	2.36	50	90.7	89.5	110.5	
Na	23	45	1	He	24413.908	2.817	35068214	0.97	25000	97.7	89.5	110.5	
Mg	24	45	1	He	24597.227	3.001	20075914	1.64	25000	98.4	89.5	110.5	
Al	27	45	1	He	240.832	1.682	113586	2.05	250	96.3	89.5	110.5	
K	39	45	1	He	25306.817	3.269	19474373	0.53	25000	101.2	89.5	110.5	
Ca	44	45	1	He	24753.276	2.103	1044608	1.21	25000	99.0	89.5	110.5	
Ti	47	45	1	He	50.608	2.733	12044	3.92	50	101.2	89.5	110.5	
V	51	45	1	He	50.152	1.889	294874	1.98	50	100.3	89.5	110.5	
Cr	52	45	1	He	50.461	1.569	358571	1.76	50	100.9	89.5	110.5	
Mn	55	45	1	He	256.426	2.297	1424461	1.63	250	102.6	89.5	110.5	
Fe	56	45	1	He	12682.992	2.209	84477223	1.17	12500	101.5	89.5	110.5	
Co	59	103	1	He	46.325	0.383	502053	2.04	50	92.7	89.5	110.5	
Ni	60	103	1	He	45.999	0.905	123703	2.04	50	92.0	89.5	110.5	
Cu	63	103	1	He	46.710	1.108	331467	0.63	50	93.4	89.5	110.5	
Zn	66	103	1	He	47.045	0.729	68802	2.11	50	94.1	89.5	110.5	
As	75	103	1	He	48.029	0.464	44304	1.94	50	96.1	89.5	110.5	
Se	78	103	1	He	47.998	0.301	4708	1.49	50	96.0	89.5	110.5	
Sr	88	103	1	He	48.211	1.083	360248	1.03	50	96.4	89.5	110.5	
Mo	95	103	1	He	50.820	2.463	172534	1.39	50	101.6	89.5	110.5	
Ag	107	103	1	He	49.320	0.795	575129	0.96	50	98.6	89.5	110.5	
Cd	111	103	1	He	49.673	0.421	101840	1.74	50	99.3	89.5	110.5	
Sn	118	115	1	He	50.481	0.962	251084	0.17	50	101.0	89.5	110.5	
Sb	123	115	1	He	51.709	0.161	237199	0.91	50	103.4	89.5	110.5	
Ba	137	115	1	He	51.233	0.362	115330	1.01	50	102.5	89.5	110.5	
W	182	209	1	He	48.907	2.330	650772	1.45	50	97.8	89.5	110.5	
Tl	205	165	1	He	50.124	5.143	1671040	4.33	50	100.2	89.5	110.5	
Pb	208	209	1	He	47.350	0.722	2163204	1.03	50	94.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1171880	1.12	1631381	71.83	30	120	
Sc	45	1	He	671339	3.35	829696	80.91	30	120	
Sc	45	2	NoGas	5064740	1.41	6325638	80.07	30	120	
Rh	103	1	He	1967420	1.73	2345543	83.88	30	120	
In	115	1	He	1188437	0.79	1419467	83.72	30	120	
Tb	159	1	He	3513397	0.68	3888262	90.36	30	120	
Ho	165	1	He	3633573	0.84	3932562	92.40	30	120	
Bi	209	1	He	2594468	1.35	2874805	90.25	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	097_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:15:16-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.073	46.6	307	41.9	1	
B	11	45	2	NoGas	0.480	110.3	9180	16.4	20	
Na	23	45	1	He	5.899	21.0	25615	5.3	400	
Mg	24	45	1	He	1.413	62.8	1837	35.7	1000	
Al	27	45	1	He	0.176	101.1	2096	3.0	50	
K	39	45	1	He	9.600	23.2	36156	3.1	1000	
Ca	44	45	1	He	1.999	78.7	844	5.9	1000	
Ti	47	45	1	He	0.286	16.6	74	15.7	20	
V	51	45	1	He	0.095	71.9	605	61.0	2	
Cr	52	45	1	He	0.011	134.7	2036	3.5	2	
Mn	55	45	1	He	0.047	23.6	1183	3.9	2	
Fe	56	45	1	He	24.205	22.4	155263	20.3	50	
Co	59	103	1	He	0.005	71.5	92	39.7	1	
Ni	60	103	1	He	-0.005	-205.0	98	29.0	2	
Cu	63	103	1	He	-0.003	-627.2	1468	8.5	2	
Zn	66	103	1	He	-0.084	-39.2	1588	2.2	20	
As	75	103	1	He	0.103	14.1	240	6.6	2	
Se	78	103	1	He	0.123	37.0	57	8.6	2	
Sr	88	103	1	He	0.010	69.5	181	29.8	10	
Mo	95	103	1	He	1.096	17.8	3906	18.5	2	
Ag	107	103	1	He	0.012	18.7	153	17.3	0.2	
Cd	111	103	1	He	0.059	52.4	1191	4.5	0.2	
Sn	118	115	1	He	0.485	6.1	3430	4.0	10	
Sb	123	115	1	He	0.545	20.2	3113	15.9	1	
Ba	137	115	1	He	0.000	-1213.5	86	6.0	5	
W	182	209	1	He	1.130	12.7	18849	10.2	10	
Tl	205	165	1	He	0.042	22.0	1448	21.0	0.5	
Pb	208	209	1	He	0.062	5.8	3685	4.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1191214	1.03	1631381	73.02	30	120	
Sc	45	1	He	633128	1.53	829696	76.31	30	120	
Sc	45	2	NoGas	5014953	0.15	6325638	79.28	30	120	
Rh	103	1	He	2034734	0.93	2345543	86.75	30	120	
In	115	1	He	1221412	0.73	1419467	86.05	30	120	
Tb	159	1	He	3538460	2.29	3888262	91.00	30	120	
Ho	165	1	He	3615402	0.07	3932562	91.94	30	120	
Bi	209	1	He	2668069	0.15	2874805	92.81	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-11-b@20
Data File Name	098SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:19:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.283	0.283	9.26	1141	0.02	10000	
B	11	45	2	NoGas	0.619	0.619	34.55	10029	0.01	300	
Na	23	45	1	He	35.280	35.280	1.83	69227	0.05	500000	
Mg	24	45	1	He	893.550	893.550	1.18	728582	0.12	500000	
Al	27	45	1	He	5726.538	5726.538	2.80	2645118	0.22	200000	
K	39	45	1	He	364.692	364.692	2.56	310477	0.12	500000	
Ca	44	45	1	He	532.910	532.910	1.95	23229	2.29	500000	
Ti	47	45	1	He	62.182	62.182	2.47	14755	0.42	2500	
V	51	45	1	He	10.880	10.880	4.59	63865	0.02	10000	
Cr	52	45	1	He	8.698	8.698	1.54	63379	0.01	10000	
Mn	55	45	1	He	463.906	463.906	1.99	2570144	0.02	10000	
Fe	56	45	1	He	8837.164	8837.164	3.11	58716182	0.02	200000	
Co	59	103	1	He	3.744	3.744	1.79	42112	0.01	10000	
Ni	60	103	1	He	10.018	10.018	2.74	28023	0.04	10000	
Cu	63	103	1	He	4.652	4.652	2.21	35583	0.01	10000	
Zn	66	103	1	He	23.609	23.609	2.91	36656	0.06	10000	
As	75	103	1	He	7.181	7.181	2.09	6991	0.10	10000	
Se	78	103	1	He	0.525	0.525	26.73	98	0.54	10000	
Sr	88	103	1	He	7.278	7.278	1.00	56503	0.01	10000	
Mo	95	103	1	He	0.925	0.925	4.45	3309	0.03	2000	
Ag	107	103	1	He	0.022	0.022	3.59	271	0.01	300	
Cd	111	103	1	He	0.105	0.105	43.33	1293	0.01	4000	
Sn	118	115	1	He	1.800	1.800	3.24	10022	0.02	2000	
Sb	123	115	1	He	0.195	0.195	6.15	1450	0.01	300	
Ba	137	115	1	He	37.886	37.886	1.44	86776	0.04	10000	
W	182	209	1	He	0.290	0.290	5.71	7487	0.00	2500	
Tl	205	165	1	He	0.096	0.096	7.47	3295	0.00	5000	
Pb	208	209	1	He	4.781	4.781	0.92	227785	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1236865	0.82	1631381	75.82	30	120	
Sc	45	1	He	669697	2.79	829696	80.72	30	120	
Sc	45	2	NoGas	5257615	1.12	6325638	83.12	30	120	
Rh	103	1	He	2040782	1.79	2345543	87.01	30	120	
In	115	1	He	1208953	0.19	1419467	85.17	30	120	
Tb	159	1	He	3553843	1.06	3888262	91.40	30	120	
Ho	165	1	He	3663154	0.37	3932562	93.15	30	120	
Bi	209	1	He	2697422	0.36	2874805	93.83	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-13-b@20
Data File Name	099SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:22:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.304	0.304	12.45	1248	0.02	10000	
B	11	45	2	NoGas	0.125	0.125	64.19	8999	0.00	300	
Na	23	45	1	He	10.950	10.950	1.53	36129	0.03	500000	
Mg	24	45	1	He	613.830	613.830	0.96	526812	0.12	500000	
Al	27	45	1	He	3990.504	3990.504	1.32	1940377	0.21	200000	
K	39	45	1	He	296.836	296.836	2.24	271945	0.11	500000	
Ca	44	45	1	He	107.479	107.479	3.55	5608	1.92	500000	
Ti	47	45	1	He	42.599	42.599	1.37	10641	0.40	2500	
V	51	45	1	He	7.897	7.897	0.64	48813	0.02	10000	
Cr	52	45	1	He	7.505	7.505	1.11	57839	0.01	10000	
Mn	55	45	1	He	210.647	210.647	0.89	1228535	0.02	10000	
Fe	56	45	1	He	10188.155	10188.155	0.76	71238393	0.01	200000	
Co	59	103	1	He	4.225	4.225	1.62	49567	0.01	10000	
Ni	60	103	1	He	8.725	8.725	0.43	25471	0.03	10000	
Cu	63	103	1	He	4.777	4.777	0.58	38067	0.01	10000	
Zn	66	103	1	He	29.524	29.524	2.73	47362	0.06	10000	
As	75	103	1	He	10.929	10.929	0.20	11018	0.10	10000	
Se	78	103	1	He	0.472	0.472	19.91	97	0.49	10000	
Sr	88	103	1	He	1.844	1.844	2.57	15009	0.01	10000	
Mo	95	103	1	He	0.845	0.845	7.02	3158	0.03	2000	
Ag	107	103	1	He	0.014	0.014	20.19	181	0.01	300	
Cd	111	103	1	He	0.139	0.139	10.03	1423	0.01	4000	
Sn	118	115	1	He	1.697	1.697	2.68	10000	0.02	2000	
Sb	123	115	1	He	0.090	0.090	10.20	1011	0.01	300	
Ba	137	115	1	He	24.867	24.867	0.70	59988	0.04	10000	
W	182	209	1	He	0.136	0.136	24.64	5564	0.00	2500	
Tl	205	165	1	He	0.070	0.070	2.44	2480	0.00	5000	
Pb	208	209	1	He	5.182	5.182	0.50	255917	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1264330	1.35	1631381	77.50	30	120	
Sc	45	1	He	704445	0.97	829696	84.90	30	120	
Sc	45	2	NoGas	5518604	1.14	6325638	87.24	30	120	
Rh	103	1	He	2127860	0.31	2345543	90.72	30	120	
In	115	1	He	1272540	1.48	1419467	89.65	30	120	
Tb	159	1	He	3681597	0.66	3888262	94.68	30	120	
Ho	165	1	He	3769797	0.91	3932562	95.86	30	120	
Bi	209	1	He	2796734	1.07	2874805	97.28	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-14-b@20
Data File Name	100SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:26:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.307	0.307	2.97	1300	0.02	10000	
B	11	45	2	NoGas	0.842	0.842	3.51	11534	0.01	300	
Na	23	45	1	He	16.855	16.855	3.41	46456	0.04	500000	
Mg	24	45	1	He	875.475	875.475	1.60	774607	0.11	500000	
Al	27	45	1	He	4245.382	4245.382	1.89	2129231	0.20	200000	
K	39	45	1	He	423.380	423.380	2.71	385779	0.11	500000	
Ca	44	45	1	He	120.276	120.276	1.33	6371	1.89	500000	
Ti	47	45	1	He	51.701	51.701	3.17	13316	0.39	2500	
V	51	45	1	He	9.655	9.655	0.26	61544	0.02	10000	
Cr	52	45	1	He	8.530	8.530	2.07	67488	0.01	10000	
Mn	55	45	1	He	317.555	317.555	2.56	1909584	0.02	10000	
Fe	56	45	1	He	11300.374	11300.374	1.65	81498223	0.01	200000	
Co	59	103	1	He	11.276	11.276	2.74	135272	0.01	10000	
Ni	60	103	1	He	13.417	13.417	2.43	40019	0.03	10000	
Cu	63	103	1	He	6.088	6.088	1.81	49210	0.01	10000	
Zn	66	103	1	He	63.113	63.113	2.69	101524	0.06	10000	
As	75	103	1	He	48.011	48.011	1.41	49021	0.10	10000	
Se	78	103	1	He	0.442	0.442	32.88	96	0.46	10000	
Sr	88	103	1	He	5.045	5.045	1.63	41829	0.01	10000	
Mo	95	103	1	He	0.986	0.986	4.15	3760	0.03	2000	
Ag	107	103	1	He	0.030	0.030	14.81	397	0.01	300	
Cd	111	103	1	He	0.172	0.172	4.54	1532	0.01	4000	
Sn	118	115	1	He	1.700	1.700	5.30	10329	0.02	2000	
Sb	123	115	1	He	0.116	0.116	12.76	1178	0.01	300	
Ba	137	115	1	He	29.214	29.214	0.72	72626	0.04	10000	
W	182	209	1	He	0.118	0.118	34.63	5412	0.00	2500	
Tl	205	165	1	He	0.122	0.122	2.12	4384	0.00	5000	
Pb	208	209	1	He	7.265	7.265	0.74	365399	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1303349	0.36	1631381	79.89	30	120	
Sc	45	1	He	726662	1.49	829696	87.58	30	120	
Sc	45	2	NoGas	5669713	1.03	6325638	89.63	30	120	
Rh	103	1	He	2178048	1.65	2345543	92.86	30	120	
In	115	1	He	1311744	0.48	1419467	92.41	30	120	
Tb	159	1	He	3732204	0.21	3888262	95.99	30	120	
Ho	165	1	He	3858171	1.19	3932562	98.11	30	120	
Bi	209	1	He	2850874	0.91	2874805	99.17	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-15-b@20
Data File Name	101SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:30:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.397	0.397	16.79	1711	0.02	10000	
B	11	45	2	NoGas	0.894	0.894	10.28	12064	0.01	300	
Na	23	45	1	He	23.729	23.729	3.18	56108	0.04	500000	
Mg	24	45	1	He	1912.131	1912.131	2.38	1660414	0.12	500000	
Al	27	45	1	He	8371.495	8371.495	2.81	4120539	0.20	200000	
K	39	45	1	He	611.174	611.174	1.82	532388	0.11	500000	
Ca	44	45	1	He	234.667	234.667	2.79	11385	2.06	500000	
Ti	47	45	1	He	87.675	87.675	3.28	22167	0.40	2500	
V	51	45	1	He	16.837	16.837	3.37	105296	0.02	10000	
Cr	52	45	1	He	15.488	15.488	2.53	118543	0.01	10000	
Mn	55	45	1	He	290.036	290.036	2.23	1713048	0.02	10000	
Fe	56	45	1	He	20534.344	20534.344	2.22	145434643	0.01	200000	
Co	59	103	1	He	6.834	6.834	14.78	76637	0.01	10000	
Ni	60	103	1	He	15.491	15.491	14.92	43154	0.04	10000	
Cu	63	103	1	He	16.293	16.293	15.04	120548	0.01	10000	
Zn	66	103	1	He	51.624	51.624	15.08	77916	0.07	10000	
As	75	103	1	He	11.469	11.469	14.72	11052	0.10	10000	
Se	78	103	1	He	1.061	1.061	29.75	151	0.70	10000	
Sr	88	103	1	He	3.049	3.049	15.62	23648	0.01	10000	
Mo	95	103	1	He	1.300	1.300	14.95	4618	0.03	2000	
Ag	107	103	1	He	0.017	0.017	15.35	213	0.01	300	
Cd	111	103	1	He	0.185	0.185	29.13	1467	0.01	4000	
Sn	118	115	1	He	1.987	1.987	6.16	11412	0.02	2000	
Sb	123	115	1	He	0.132	0.132	11.72	1207	0.01	300	
Ba	137	115	1	He	41.732	41.732	8.52	99297	0.04	10000	
W	182	209	1	He	0.133	0.133	10.09	5249	0.00	2500	
Tl	205	165	1	He	0.150	0.150	10.23	4923	0.00	5000	
Pb	208	209	1	He	12.386	12.386	11.01	576382	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1331834	1.69	1631381	81.64	30	120	
Sc	45	1	He	713749	2.20	829696	86.03	30	120	
Sc	45	2	NoGas	5847554	0.71	6325638	92.44	30	120	
Rh	103	1	He	2061656	13.25	2345543	87.90	30	120	
In	115	1	He	1261327	7.45	1419467	88.86	30	120	
Tb	159	1	He	3542268	10.59	3888262	91.10	30	120	
Ho	165	1	He	3560353	10.11	3932562	90.54	30	120	
Bi	209	1	He	2658922	9.63	2874805	92.49	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-16-b@20
Data File Name	102SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:34:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.335	0.335	18.78	1422	0.02	10000	
B	11	45	2	NoGas	0.492	0.492	23.26	10448	0.00	300	
Na	23	45	1	He	21.767	21.767	1.48	55314	0.04	500000	
Mg	24	45	1	He	1371.614	1371.614	0.06	1240824	0.11	500000	
Al	27	45	1	He	4802.742	4802.742	2.11	2463040	0.19	200000	
K	39	45	1	He	513.805	513.805	1.10	471557	0.11	500000	
Ca	44	45	1	He	345.990	345.990	0.22	17056	2.03	500000	
Ti	47	45	1	He	44.467	44.467	2.91	11715	0.38	2500	
V	51	45	1	He	9.447	9.447	2.98	61570	0.02	10000	
Cr	52	45	1	He	8.438	8.438	0.26	68315	0.01	10000	
Mn	55	45	1	He	294.038	294.038	0.53	1808823	0.02	10000	
Fe	56	45	1	He	12691.068	12691.068	0.61	93616694	0.01	200000	
Co	59	103	1	He	4.593	4.593	0.53	56442	0.01	10000	
Ni	60	103	1	He	10.208	10.208	0.49	31204	0.03	10000	
Cu	63	103	1	He	8.522	8.522	1.16	69876	0.01	10000	
Zn	66	103	1	He	28.986	28.986	1.60	48753	0.06	10000	
As	75	103	1	He	5.898	5.898	0.87	6302	0.09	10000	
Se	78	103	1	He	0.507	0.507	27.09	105	0.48	10000	
Sr	88	103	1	He	2.911	2.911	0.85	24756	0.01	10000	
Mo	95	103	1	He	0.633	0.633	6.02	2494	0.03	2000	
Ag	107	103	1	He	0.012	0.012	3.81	170	0.01	300	
Cd	111	103	1	He	0.095	0.095	14.80	1390	0.01	4000	
Sn	118	115	1	He	1.600	1.600	1.53	9926	0.02	2000	
Sb	123	115	1	He	0.038	0.038	43.38	792	0.00	300	
Ba	137	115	1	He	30.902	30.902	1.71	77955	0.04	10000	
W	182	209	1	He	0.082	0.082	17.51	4894	0.00	2500	
Tl	205	165	1	He	0.080	0.080	0.97	2938	0.00	5000	
Pb	208	209	1	He	7.495	7.495	1.77	376783	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1312378	0.93	1631381	80.45	30	120	
Sc	45	1	He	743167	1.26	829696	89.57	30	120	
Sc	45	2	NoGas	5686182	0.42	6325638	89.89	30	120	
Rh	103	1	He	2229609	1.15	2345543	95.06	30	120	
In	115	1	He	1331199	0.26	1419467	93.78	30	120	
Tb	159	1	He	3765700	1.57	3888262	96.85	30	120	
Ho	165	1	He	3892095	0.88	3932562	98.97	30	120	
Bi	209	1	He	2850195	1.07	2874805	99.14	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-17-b@20
Data File Name	103SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:38:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.381	0.381	6.92	1559	0.02	10000	
B	11	45	2	NoGas	0.435	0.435	41.44	9825	0.00	300	
Na	23	45	1	He	20.041	20.041	7.68	51521	0.04	500000	
Mg	24	45	1	He	1387.067	1387.067	3.53	1229953	0.11	500000	
Al	27	45	1	He	6404.423	6404.423	1.91	3220493	0.20	200000	
K	39	45	1	He	531.467	531.467	2.67	477098	0.11	500000	
Ca	44	45	1	He	523.326	523.326	0.79	24857	2.11	500000	
Ti	47	45	1	He	42.495	42.495	1.25	10982	0.39	2500	
V	51	45	1	He	12.116	12.116	3.54	77405	0.02	10000	
Cr	52	45	1	He	9.445	9.445	1.29	74731	0.01	10000	
Mn	55	45	1	He	447.742	447.742	3.39	2699613	0.02	10000	
Fe	56	45	1	He	17868.988	17868.988	2.27	129245648	0.01	200000	
Co	59	103	1	He	5.477	5.477	0.85	64865	0.01	10000	
Ni	60	103	1	He	10.594	10.594	3.65	31196	0.03	10000	
Cu	63	103	1	He	9.604	9.604	2.06	75674	0.01	10000	
Zn	66	103	1	He	32.015	32.015	0.59	51714	0.06	10000	
As	75	103	1	He	7.243	7.243	1.95	7422	0.10	10000	
Se	78	103	1	He	0.637	0.637	20.10	115	0.55	10000	
Sr	88	103	1	He	4.022	4.022	2.27	32920	0.01	10000	
Mo	95	103	1	He	0.866	0.866	8.80	3266	0.03	2000	
Ag	107	103	1	He	0.020	0.020	19.10	257	0.01	300	
Cd	111	103	1	He	0.166	0.166	12.48	1496	0.01	4000	
Sn	118	115	1	He	1.765	1.765	6.54	10541	0.02	2000	
Sb	123	115	1	He	0.048	0.048	26.88	821	0.01	300	
Ba	137	115	1	He	48.570	48.570	0.74	119086	0.04	10000	
W	182	209	1	He	0.063	0.063	47.84	4538	0.00	2500	
Tl	205	165	1	He	0.097	0.097	2.13	3455	0.00	5000	
Pb	208	209	1	He	7.936	7.936	1.08	392095	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1266955	0.27	1631381	77.66	30	120	
Sc	45	1	He	728981	3.09	829696	87.86	30	120	
Sc	45	2	NoGas	5442592	1.38	6325638	86.04	30	120	
Rh	103	1	He	2148706	1.78	2345543	91.61	30	120	
In	115	1	He	1294341	0.79	1419467	91.19	30	120	
Tb	159	1	He	3719214	0.35	3888262	95.65	30	120	
Ho	165	1	He	3796814	0.77	3932562	96.55	30	120	
Bi	209	1	He	2801115	0.48	2874805	97.44	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-18-b@20
Data File Name	104SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:41:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.062	0.062	36.31	256	0.02	10000	
B	11	45	2	NoGas	-0.665	-0.665	-23.47	5875	-0.01	300	
Na	23	45	1	He	1.411	1.411	39.47	19393	0.01	500000	
Mg	24	45	1	He	-0.417	-0.417	-27.95	430	-0.10	500000	
Al	27	45	1	He	2.549	2.549	18.35	3105	0.08	200000	
K	39	45	1	He	5.818	5.818	36.89	33146	0.02	500000	
Ca	44	45	1	He	-0.777	-0.777	-151.58	728	-0.11	500000	
Ti	47	45	1	He	0.103	0.103	86.23	33	0.31	2500	
V	51	45	1	He	0.017	0.017	517.24	166	0.01	10000	
Cr	52	45	1	He	0.009	0.009	183.09	2010	0.00	10000	
Mn	55	45	1	He	0.028	0.028	84.33	1073	0.00	10000	
Fe	56	45	1	He	25.576	25.576	20.27	162450	0.02	200000	
Co	59	103	1	He	0.002	0.002	25.58	58	0.00	10000	
Ni	60	103	1	He	-0.012	-0.012	-51.58	76	-0.02	10000	
Cu	63	103	1	He	-0.003	-0.003	-417.35	1421	0.00	10000	
Zn	66	103	1	He	-0.253	-0.253	-18.24	1302	-0.02	10000	
As	75	103	1	He	-0.001	-0.001	-2018.62	137	0.00	10000	
Se	78	103	1	He	0.030	0.030	193.60	47	0.06	10000	
Sr	88	103	1	He	0.005	0.005	47.00	141	0.00	10000	
Mo	95	103	1	He	0.039	0.039	8.24	187	0.02	2000	
Ag	107	103	1	He	0.004	0.004	11.53	49	0.01	300	
Cd	111	103	1	He	0.051	0.051	59.59	1144	0.00	4000	
Sn	118	115	1	He	0.010	0.010	314.82	982	0.00	2000	
Sb	123	115	1	He	-0.024	-0.024	-17.42	426	-0.01	300	
Ba	137	115	1	He	0.003	0.003	131.04	91	0.00	10000	
W	182	209	1	He	0.063	0.063	6.57	4219	0.00	2500	
Tl	205	165	1	He	0.001	0.001	72.77	83	0.00	5000	
Pb	208	209	1	He	0.018	0.018	15.41	1577	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1154172	1.53	1631381	70.75	30	120	
Sc	45	1	He	628270	2.52	829696	75.72	30	120	
Sc	45	2	NoGas	4956869	0.88	6325638	78.36	30	120	
Rh	103	1	He	1980527	4.52	2345543	84.44	30	120	
In	115	1	He	1191448	4.08	1419467	83.94	30	120	
Tb	159	1	He	3445817	4.81	3888262	88.62	30	120	
Ho	165	1	He	3502002	4.60	3932562	89.05	30	120	
Bi	209	1	He	2608659	3.32	2874805	90.74	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-20-b@20
Data File Name	105SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:45:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.386	0.386	8.83	1471	0.03	10000	
B	11	45	2	NoGas	0.265	0.265	21.28	8647	0.00	300	
Na	23	45	1	He	20.161	20.161	5.40	48019	0.04	500000	
Mg	24	45	1	He	1497.472	1497.472	2.92	1232598	0.12	500000	
Al	27	45	1	He	5984.845	5984.845	3.97	2792164	0.21	200000	
K	39	45	1	He	444.632	444.632	3.89	375488	0.12	500000	
Ca	44	45	1	He	415.005	415.005	4.99	18448	2.25	500000	
Ti	47	45	1	He	45.380	45.380	0.95	10888	0.42	2500	
V	51	45	1	He	10.774	10.774	4.36	63880	0.02	10000	
Cr	52	45	1	He	9.383	9.383	3.53	68882	0.01	10000	
Mn	55	45	1	He	276.119	276.119	2.64	1545739	0.02	10000	
Fe	56	45	1	He	14200.830	14200.830	3.25	95313212	0.01	200000	
Co	59	103	1	He	5.000	5.000	2.63	54823	0.01	10000	
Ni	60	103	1	He	10.942	10.942	1.67	29840	0.04	10000	
Cu	63	103	1	He	9.520	9.520	2.10	69483	0.01	10000	
Zn	66	103	1	He	42.222	42.222	1.51	62616	0.07	10000	
As	75	103	1	He	6.418	6.418	1.43	6107	0.11	10000	
Se	78	103	1	He	0.498	0.498	14.54	93	0.54	10000	
Sr	88	103	1	He	2.769	2.769	3.62	21017	0.01	10000	
Mo	95	103	1	He	0.714	0.714	6.42	2506	0.03	2000	
Ag	107	103	1	He	0.017	0.017	13.45	202	0.01	300	
Cd	111	103	1	He	0.168	0.168	5.64	1389	0.01	4000	
Sn	118	115	1	He	1.693	1.693	3.93	9451	0.02	2000	
Sb	123	115	1	He	0.067	0.067	27.49	854	0.01	300	
Ba	137	115	1	He	34.057	34.057	1.78	77740	0.04	10000	
W	182	209	1	He	0.079	0.079	11.23	4553	0.00	2500	
Tl	205	165	1	He	0.094	0.094	2.70	3197	0.00	5000	
Pb	208	209	1	He	7.176	7.176	0.53	338687	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1180871	1.69	1631381	72.38	30	120	
Sc	45	1	He	676619	3.10	829696	81.55	30	120	
Sc	45	2	NoGas	5059381	0.68	6325638	79.98	30	120	
Rh	103	1	He	1990014	1.90	2345543	84.84	30	120	
In	115	1	He	1204759	0.51	1419467	84.87	30	120	
Tb	159	1	He	3567484	0.83	3888262	91.75	30	120	
Ho	165	1	He	3644411	0.83	3932562	92.67	30	120	
Bi	209	1	He	2675257	0.55	2874805	93.06	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-21-b@20
Data File Name	106SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:49:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.355	0.355	14.69	1330	0.03	10000	
B	11	45	2	NoGas	0.675	0.675	27.14	9625	0.01	300	
Na	23	45	1	He	29.994	29.994	1.57	60288	0.05	500000	
Mg	24	45	1	He	1896.549	1896.549	1.65	1511702	0.13	500000	
Al	27	45	1	He	6280.878	6280.878	2.56	2838417	0.22	200000	
K	39	45	1	He	697.120	697.120	2.25	553051	0.13	500000	
Ca	44	45	1	He	794.836	794.836	2.27	33501	2.37	500000	
Ti	47	45	1	He	43.906	43.906	2.49	10195	0.43	2500	
V	51	45	1	He	11.204	11.204	4.88	64325	0.02	10000	
Cr	52	45	1	He	10.567	10.567	1.75	74882	0.01	10000	
Mn	55	45	1	He	289.664	289.664	1.46	1570368	0.02	10000	
Fe	56	45	1	He	15354.836	15354.836	1.17	99825343	0.02	200000	
Co	59	103	1	He	6.228	6.228	0.32	67717	0.01	10000	
Ni	60	103	1	He	14.162	14.162	1.03	38264	0.04	10000	
Cu	63	103	1	He	10.334	10.334	1.07	74664	0.01	10000	
Zn	66	103	1	He	33.330	33.330	1.36	49361	0.07	10000	
As	75	103	1	He	6.397	6.397	0.29	6036	0.11	10000	
Se	78	103	1	He	0.440	0.440	1.06	87	0.51	10000	
Sr	88	103	1	He	3.988	3.988	0.45	29977	0.01	10000	
Mo	95	103	1	He	0.642	0.642	3.28	2238	0.03	2000	
Ag	107	103	1	He	0.013	0.013	21.14	159	0.01	300	
Cd	111	103	1	He	0.137	0.137	6.31	1316	0.01	4000	
Sn	118	115	1	He	1.654	1.654	1.21	9173	0.02	2000	
Sb	123	115	1	He	0.019	0.019	71.63	626	0.00	300	
Ba	137	115	1	He	39.793	39.793	1.42	90027	0.04	10000	
W	182	209	1	He	0.078	0.078	20.01	4519	0.00	2500	
Tl	205	165	1	He	0.104	0.104	6.90	3476	0.00	5000	
Pb	208	209	1	He	6.400	6.400	0.62	300993	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1157485	0.26	1631381	70.95	30	120	
Sc	45	1	He	655057	2.02	829696	78.95	30	120	
Sc	45	2	NoGas	4963057	1.13	6325638	78.46	30	120	
Rh	103	1	He	1972889	1.04	2345543	84.11	30	120	
In	115	1	He	1194163	0.60	1419467	84.13	30	120	
Tb	159	1	He	3513832	0.62	3888262	90.37	30	120	
Ho	165	1	He	3559156	1.23	3932562	90.50	30	120	
Bi	209	1	He	2664806	0.32	2874805	92.70	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-1-b@20
Data File Name	107SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:53:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.402	0.402	13.17	1522	0.03	10000	
B	11	45	2	NoGas	1.262	1.262	9.58	11274	0.01	300	
Na	23	45	1	He	34.509	34.509	3.18	66751	0.05	500000	
Mg	24	45	1	He	2045.865	2045.865	0.96	1634139	0.13	500000	
Al	27	45	1	He	7268.429	7268.429	0.76	3291502	0.22	200000	
K	39	45	1	He	826.504	826.504	0.73	651542	0.13	500000	
Ca	44	45	1	He	1075.653	1075.653	0.99	45159	2.38	500000	
Ti	47	45	1	He	47.470	47.470	1.77	11047	0.43	2500	
V	51	45	1	He	12.358	12.358	4.35	71131	0.02	10000	
Cr	52	45	1	He	12.927	12.927	0.35	91352	0.01	10000	
Mn	55	45	1	He	308.369	308.369	1.89	1675356	0.02	10000	
Fe	56	45	1	He	17315.132	17315.132	2.02	112810393	0.02	200000	
Co	59	103	1	He	7.435	7.435	0.32	81296	0.01	10000	
Ni	60	103	1	He	15.227	15.227	0.77	41368	0.04	10000	
Cu	63	103	1	He	12.715	12.715	1.77	92059	0.01	10000	
Zn	66	103	1	He	39.097	39.097	0.87	57943	0.07	10000	
As	75	103	1	He	8.471	8.471	1.44	7994	0.11	10000	
Se	78	103	1	He	0.865	0.865	13.44	129	0.67	10000	
Sr	88	103	1	He	4.793	4.793	1.62	36208	0.01	10000	
Mo	95	103	1	He	0.807	0.807	4.31	2816	0.03	2000	
Ag	107	103	1	He	0.012	0.012	12.34	142	0.01	300	
Cd	111	103	1	He	0.140	0.140	16.32	1329	0.01	4000	
Sn	118	115	1	He	1.743	1.743	3.45	9533	0.02	2000	
Sb	123	115	1	He	0.034	0.034	24.05	686	0.00	300	
Ba	137	115	1	He	39.330	39.330	1.19	88209	0.04	10000	
W	182	209	1	He	0.079	0.079	6.71	4456	0.00	2500	
Tl	205	165	1	He	0.110	0.110	4.84	3677	0.00	5000	
Pb	208	209	1	He	7.758	7.758	0.88	358917	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1171324	1.16	1631381	71.80	30	120	
Sc	45	1	He	656340	0.25	829696	79.11	30	120	
Sc	45	2	NoGas	4965045	0.76	6325638	78.49	30	120	
Rh	103	1	He	1984166	0.51	2345543	84.59	30	120	
In	115	1	He	1183848	0.33	1419467	83.40	30	120	
Tb	159	1	He	3476903	0.33	3888262	89.42	30	120	
Ho	165	1	He	3589383	0.84	3932562	91.27	30	120	
Bi	209	1	He	2622664	0.61	2874805	91.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	108_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:57:03-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.765	1.181	163830	0.68	50	95.5	89.5	110.5	
B	11	45	2	NoGas	45.721	1.606	125565	1.13	50	91.4	89.5	110.5	
Na	23	45	1	He	24631.854	2.658	32541193	1.06	25000	98.5	89.5	110.5	
Mg	24	45	1	He	24767.413	1.880	18598295	2.81	25000	99.1	89.5	110.5	
Al	27	45	1	He	241.404	1.098	104716	2.19	250	96.6	89.5	110.5	
K	39	45	1	He	25242.453	2.546	17868053	0.96	25000	101.0	89.5	110.5	
Ca	44	45	1	He	24919.313	1.964	967193	1.29	25000	99.7	89.5	110.5	
Ti	47	45	1	He	50.089	1.959	10961	2.33	50	100.2	89.5	110.5	
V	51	45	1	He	51.033	2.205	275935	1.68	50	102.1	89.5	110.5	
Cr	52	45	1	He	50.319	0.915	328902	2.37	50	100.6	89.5	110.5	
Mn	55	45	1	He	252.233	1.660	1288804	1.78	250	100.9	89.5	110.5	
Fe	56	45	1	He	12843.178	1.924	78680368	1.48	12500	102.7	89.5	110.5	
Co	59	103	1	He	46.309	1.615	463411	1.99	50	92.6	89.5	110.5	
Ni	60	103	1	He	45.807	1.116	113744	1.26	50	91.6	89.5	110.5	
Cu	63	103	1	He	46.168	1.684	302568	2.03	50	92.3	89.5	110.5	
Zn	66	103	1	He	47.494	1.464	64121	1.84	50	95.0	89.5	110.5	
As	75	103	1	He	47.824	1.371	40735	1.72	50	95.6	89.5	110.5	
Se	78	103	1	He	48.128	0.499	4359	0.73	50	96.3	89.5	110.5	
Sr	88	103	1	He	48.599	0.602	335350	0.83	50	97.2	89.5	110.5	
Mo	95	103	1	He	50.059	2.021	156952	1.59	50	100.1	89.5	110.5	
Ag	107	103	1	He	49.890	2.031	537234	2.27	50	99.8	89.5	110.5	
Cd	111	103	1	He	50.474	1.240	95538	1.59	50	100.9	89.5	110.5	
Sn	118	115	1	He	49.858	0.830	230976	0.31	50	99.7	89.5	110.5	
Sb	123	115	1	He	52.102	0.739	222587	0.93	50	104.2	89.5	110.5	
Ba	137	115	1	He	51.125	1.797	107198	2.74	50	102.3	89.5	110.5	
W	182	209	1	He	49.560	1.097	623279	0.82	50	99.1	89.5	110.5	
Tl	205	165	1	He	48.107	1.816	1532741	1.57	50	96.2	89.5	110.5	
Pb	208	209	1	He	47.842	1.380	2065874	2.22	50	95.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1085016	1.34	1631381	66.51	30	120	
Sc	45	1	He	617423	3.28	829696	74.42	30	120	
Sc	45	2	NoGas	4600612	1.81	6325638	72.73	30	120	
Rh	103	1	He	1816605	0.44	2345543	77.45	30	120	
In	115	1	He	1106883	1.14	1419467	77.98	30	120	
Tb	159	1	He	3325549	0.93	3888262	85.53	30	120	
Ho	165	1	He	3471673	0.35	3932562	88.28	30	120	
Bi	209	1	He	2451989	1.01	2874805	85.29	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	109_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:00:54-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.060	42.0	244	38.8	1	
B	11	45	2	NoGas	-0.359	-55.1	6294	9.3	20	
Na	23	45	1	He	5.759	19.9	23571	5.1	400	
Mg	24	45	1	He	1.374	50.6	1678	28.5	1000	
Al	27	45	1	He	0.204	101.9	1955	4.8	50	
K	39	45	1	He	10.069	18.1	33840	3.6	1000	
Ca	44	45	1	He	0.246	422.2	718	4.9	1000	
Ti	47	45	1	He	0.275	19.6	67	18.0	20	
V	51	45	1	He	0.076	31.7	467	27.8	2	
Cr	52	45	1	He	0.000	5511.9	1822	4.1	2	
Mn	55	45	1	He	0.012	149.2	926	8.0	2	
Fe	56	45	1	He	23.029	20.4	137190	18.8	50	
Co	59	103	1	He	0.004	5.8	80	4.2	1	
Ni	60	103	1	He	-0.012	-52.7	72	23.2	2	
Cu	63	103	1	He	-0.028	-67.8	1197	10.3	2	
Zn	66	103	1	He	-0.101	-19.6	1461	1.7	20	
As	75	103	1	He	0.038	32.5	166	5.5	2	
Se	78	103	1	He	0.071	79.7	49	11.6	2	
Sr	88	103	1	He	0.005	48.9	131	12.5	10	
Mo	95	103	1	He	0.820	22.9	2740	21.8	2	
Ag	107	103	1	He	0.008	9.2	97	9.1	0.2	
Cd	111	103	1	He	0.067	42.7	1131	3.8	0.2	
Sn	118	115	1	He	0.306	9.2	2360	6.1	10	
Sb	123	115	1	He	0.518	24.3	2797	19.2	1	
Ba	137	115	1	He	0.011	54.5	104	12.1	5	
W	182	209	1	He	1.011	15.7	16461	13.1	10	
Tl	205	165	1	He	0.035	27.1	1159	24.3	0.5	
Pb	208	209	1	He	0.036	13.8	2320	10.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1116010	3.09	1631381	68.41	30	120	
Sc	45	1	He	586847	1.14	829696	70.73	30	120	
Sc	45	2	NoGas	4631612	1.23	6325638	73.22	30	120	
Rh	103	1	He	1902751	1.41	2345543	81.12	30	120	
In	115	1	He	1145517	0.57	1419467	80.70	30	120	
Tb	159	1	He	3350240	0.81	3888262	86.16	30	120	
Ho	165	1	He	3426303	1.45	3932562	87.13	30	120	
Bi	209	1	He	2548339	1.16	2874805	88.64	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-2-b@20
Data File Name	110SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:04:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.367	0.367	2.68	1422	0.03	10000	
B	11	45	2	NoGas	-0.082	-0.082	-387.10	7561	0.00	300	
Na	23	45	1	He	17.610	17.610	3.80	43047	0.04	500000	
Mg	24	45	1	He	1076.965	1076.965	0.94	861268	0.13	500000	
Al	27	45	1	He	6439.100	6439.100	1.99	2918249	0.22	200000	
K	39	45	1	He	395.052	395.052	1.89	327474	0.12	500000	
Ca	44	45	1	He	231.886	231.886	2.74	10365	2.24	500000	
Ti	47	45	1	He	37.041	37.041	3.78	8628	0.43	2500	
V	51	45	1	He	13.286	13.286	4.17	76509	0.02	10000	
Cr	52	45	1	He	9.574	9.574	1.24	68240	0.01	10000	
Mn	55	45	1	He	516.737	516.737	1.28	2808761	0.02	10000	
Fe	56	45	1	He	13056.211	13056.211	1.29	85125768	0.02	200000	
Co	59	103	1	He	5.009	5.009	0.30	54082	0.01	10000	
Ni	60	103	1	He	9.615	9.615	0.45	25829	0.04	10000	
Cu	63	103	1	He	6.244	6.244	1.74	45354	0.01	10000	
Zn	66	103	1	He	28.976	28.976	0.06	42823	0.07	10000	
As	75	103	1	He	5.565	5.565	2.39	5231	0.11	10000	
Se	78	103	1	He	0.528	0.528	13.90	94	0.56	10000	
Sr	88	103	1	He	2.210	2.210	1.14	16537	0.01	10000	
Mo	95	103	1	He	0.814	0.814	2.13	2801	0.03	2000	
Ag	107	103	1	He	0.031	0.031	34.02	370	0.01	300	
Cd	111	103	1	He	0.170	0.170	13.48	1373	0.01	4000	
Sn	118	115	1	He	1.772	1.772	3.12	9633	0.02	2000	
Sb	123	115	1	He	0.476	0.476	4.14	2692	0.02	300	
Ba	137	115	1	He	40.895	40.895	0.66	91306	0.04	10000	
W	182	209	1	He	0.239	0.239	10.43	6691	0.00	2500	
Tl	205	165	1	He	0.104	0.104	3.84	3459	0.00	5000	
Pb	208	209	1	He	9.097	9.097	0.50	426020	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1197979	0.89	1631381	73.43	30	120	
Sc	45	1	He	656861	0.57	829696	79.17	30	120	
Sc	45	2	NoGas	4994839	1.31	6325638	78.96	30	120	
Rh	103	1	He	1958854	0.99	2345543	83.51	30	120	
In	115	1	He	1178515	0.74	1419467	83.03	30	120	
Tb	159	1	He	3470228	1.36	3888262	89.25	30	120	
Ho	165	1	He	3562355	1.48	3932562	90.59	30	120	
Bi	209	1	He	2655686	0.12	2874805	92.38	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-3-b@20
Data File Name	111SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:08:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.452	0.452	10.73	1745	0.03	10000	
B	11	45	2	NoGas	0.001	0.001	13458.61	8098	0.00	300	
Na	23	45	1	He	18.396	18.396	0.26	45294	0.04	500000	
Mg	24	45	1	He	1396.908	1396.908	1.84	1145472	0.12	500000	
Al	27	45	1	He	7020.556	7020.556	1.04	3263501	0.22	200000	
K	39	45	1	He	475.415	475.415	1.82	397872	0.12	500000	
Ca	44	45	1	He	201.199	201.199	0.54	9333	2.16	500000	
Ti	47	45	1	He	47.725	47.725	3.55	11398	0.42	2500	
V	51	45	1	He	15.926	15.926	1.46	94062	0.02	10000	
Cr	52	45	1	He	11.715	11.715	1.85	85165	0.01	10000	
Mn	55	45	1	He	710.315	710.315	0.92	3960006	0.02	10000	
Fe	56	45	1	He	17234.604	17234.604	1.22	115253658	0.01	200000	
Co	59	103	1	He	6.945	6.945	1.89	77193	0.01	10000	
Ni	60	103	1	He	13.228	13.228	1.64	36547	0.04	10000	
Cu	63	103	1	He	7.557	7.557	1.62	56225	0.01	10000	
Zn	66	103	1	He	35.282	35.282	0.15	53324	0.07	10000	
As	75	103	1	He	7.010	7.010	2.22	6748	0.10	10000	
Se	78	103	1	He	0.681	0.681	10.13	112	0.61	10000	
Sr	88	103	1	He	2.847	2.847	1.84	21909	0.01	10000	
Mo	95	103	1	He	0.933	0.933	4.82	3300	0.03	2000	
Ag	107	103	1	He	0.031	0.031	5.02	377	0.01	300	
Cd	111	103	1	He	0.183	0.183	12.73	1440	0.01	4000	
Sn	118	115	1	He	1.763	1.763	3.17	9866	0.02	2000	
Sb	123	115	1	He	0.157	0.157	7.34	1277	0.01	300	
Ba	137	115	1	He	56.700	56.700	1.29	130205	0.04	10000	
W	182	209	1	He	0.136	0.136	26.96	5286	0.00	2500	
Tl	205	165	1	He	0.106	0.106	10.16	3562	0.00	5000	
Pb	208	209	1	He	9.613	9.613	0.87	450105	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1199918	0.98	1631381	73.55	30	120	
Sc	45	1	He	673799	1.90	829696	81.21	30	120	
Sc	45	2	NoGas	5188362	0.45	6325638	82.02	30	120	
Rh	103	1	He	2017134	1.40	2345543	86.00	30	120	
In	115	1	He	1212505	0.36	1419467	85.42	30	120	
Tb	159	1	He	3526662	0.48	3888262	90.70	30	120	
Ho	165	1	He	3607891	1.16	3932562	91.74	30	120	
Bi	209	1	He	2655473	0.82	2874805	92.37	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-4-b@20
Data File Name	112SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:12:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.321	0.321	10.63	1267	0.03	10000	
B	11	45	2	NoGas	-0.113	-0.113	-146.73	7772	0.00	300	
Na	23	45	1	He	16.408	16.408	7.21	42824	0.04	500000	
Mg	24	45	1	He	1188.406	1188.406	1.23	984213	0.12	500000	
Al	27	45	1	He	7386.876	7386.876	2.16	3466842	0.21	200000	
K	39	45	1	He	364.741	364.741	1.62	315545	0.12	500000	
Ca	44	45	1	He	246.240	246.240	2.69	11347	2.17	500000	
Ti	47	45	1	He	41.740	41.740	4.15	10067	0.41	2500	
V	51	45	1	He	15.793	15.793	0.53	94193	0.02	10000	
Cr	52	45	1	He	10.444	10.444	1.23	76906	0.01	10000	
Mn	55	45	1	He	445.548	445.548	2.63	2507995	0.02	10000	
Fe	56	45	1	He	14540.990	14540.990	1.59	98185938	0.01	200000	
Co	59	103	1	He	5.212	5.212	1.76	59121	0.01	10000	
Ni	60	103	1	He	9.146	9.146	1.71	25818	0.04	10000	
Cu	63	103	1	He	5.314	5.314	0.66	40783	0.01	10000	
Zn	66	103	1	He	37.557	37.557	1.25	57803	0.06	10000	
As	75	103	1	He	5.745	5.745	0.29	5670	0.10	10000	
Se	78	103	1	He	0.549	0.549	18.76	101	0.54	10000	
Sr	88	103	1	He	2.187	2.187	1.48	17194	0.01	10000	
Mo	95	103	1	He	0.873	0.873	5.11	3155	0.03	2000	
Ag	107	103	1	He	0.024	0.024	8.19	296	0.01	300	
Cd	111	103	1	He	0.175	0.175	0.98	1451	0.01	4000	
Sn	118	115	1	He	1.801	1.801	6.36	10178	0.02	2000	
Sb	123	115	1	He	0.093	0.093	14.60	990	0.01	300	
Ba	137	115	1	He	37.622	37.622	1.57	87474	0.04	10000	
W	182	209	1	He	0.109	0.109	9.66	5020	0.00	2500	
Tl	205	165	1	He	0.107	0.107	4.52	3637	0.00	5000	
Pb	208	209	1	He	10.383	10.383	0.31	496293	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1215305	0.65	1631381	74.50	30	120	
Sc	45	1	He	680364	1.65	829696	82.00	30	120	
Sc	45	2	NoGas	5194189	1.09	6325638	82.11	30	120	
Rh	103	1	He	2058096	0.56	2345543	87.74	30	120	
In	115	1	He	1227296	0.82	1419467	86.46	30	120	
Tb	159	1	He	3567643	0.95	3888262	91.75	30	120	
Ho	165	1	He	3635838	0.73	3932562	92.45	30	120	
Bi	209	1	He	2711188	0.43	2874805	94.31	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-5-b@20
Data File Name	113SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:16:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.396	0.396	10.17	1567	0.03	10000	
B	11	45	2	NoGas	0.265	0.265	24.47	8836	0.00	300	
Na	23	45	1	He	18.427	18.427	5.00	43909	0.04	500000	
Mg	24	45	1	He	1076.692	1076.692	3.96	855260	0.13	500000	
Al	27	45	1	He	6575.975	6575.975	4.21	2960178	0.22	200000	
K	39	45	1	He	394.792	394.792	3.30	325144	0.12	500000	
Ca	44	45	1	He	568.037	568.037	5.40	24072	2.36	500000	
Ti	47	45	1	He	52.086	52.086	3.12	12050	0.43	2500	
V	51	45	1	He	13.949	13.949	5.70	79767	0.02	10000	
Cr	52	45	1	He	9.919	9.919	3.51	70155	0.01	10000	
Mn	55	45	1	He	754.836	754.836	4.30	4074715	0.02	10000	
Fe	56	45	1	He	12296.211	12296.211	2.99	79647166	0.02	200000	
Co	59	103	1	He	5.276	5.276	6.51	57608	0.01	10000	
Ni	60	103	1	He	9.490	9.490	5.83	25789	0.04	10000	
Cu	63	103	1	He	5.125	5.125	6.33	37919	0.01	10000	
Zn	66	103	1	He	32.519	32.519	7.18	48388	0.07	10000	
As	75	103	1	He	5.180	5.180	7.75	4932	0.11	10000	
Se	78	103	1	He	0.626	0.626	6.92	105	0.59	10000	
Sr	88	103	1	He	3.300	3.300	8.34	24904	0.01	10000	
Mo	95	103	1	He	0.832	0.832	12.25	2890	0.03	2000	
Ag	107	103	1	He	0.034	0.034	27.86	404	0.01	300	
Cd	111	103	1	He	0.165	0.165	16.54	1379	0.01	4000	
Sn	118	115	1	He	1.858	1.858	5.72	10129	0.02	2000	
Sb	123	115	1	He	0.129	0.129	20.62	1121	0.01	300	
Ba	137	115	1	He	50.126	50.126	6.85	112554	0.04	10000	
W	182	209	1	He	0.104	0.104	22.05	4779	0.00	2500	
Tl	205	165	1	He	0.106	0.106	4.13	3469	0.00	5000	
Pb	208	209	1	He	10.150	10.150	5.63	466855	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1224331	0.90	1631381	75.05	30	120	
Sc	45	1	He	652897	2.76	829696	78.69	30	120	
Sc	45	2	NoGas	5168883	0.66	6325638	81.71	30	120	
Rh	103	1	He	1986082	6.10	2345543	84.67	30	120	
In	115	1	He	1188179	5.04	1419467	83.71	30	120	
Tb	159	1	He	3462573	5.50	3888262	89.05	30	120	
Ho	165	1	He	3518070	5.46	3932562	89.46	30	120	
Bi	209	1	He	2613779	5.16	2874805	90.92	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-6-b@20
Data File Name	114SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:19:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.335	0.335	12.06	1304	0.03	10000	
B	11	45	2	NoGas	-0.056	-0.056	-114.36	7850	0.00	300	
Na	23	45	1	He	18.830	18.830	8.05	45647	0.04	500000	
Mg	24	45	1	He	1089.386	1089.386	1.88	888788	0.12	500000	
Al	27	45	1	He	5934.168	5934.168	3.21	2743471	0.22	200000	
K	39	45	1	He	366.086	366.086	2.79	311839	0.12	500000	
Ca	44	45	1	He	1113.326	1113.326	2.80	47686	2.33	500000	
Ti	47	45	1	He	42.099	42.099	3.51	10003	0.42	2500	
V	51	45	1	He	12.468	12.468	1.41	73288	0.02	10000	
Cr	52	45	1	He	9.467	9.467	1.45	68870	0.01	10000	
Mn	55	45	1	He	351.520	351.520	2.38	1949418	0.02	10000	
Fe	56	45	1	He	10938.834	10938.834	1.09	72769739	0.02	200000	
Co	59	103	1	He	4.096	4.096	1.44	45512	0.01	10000	
Ni	60	103	1	He	9.498	9.498	1.85	26253	0.04	10000	
Cu	63	103	1	He	6.552	6.552	2.61	48898	0.01	10000	
Zn	66	103	1	He	35.285	35.285	1.09	53285	0.07	10000	
As	75	103	1	He	4.699	4.699	0.51	4567	0.10	10000	
Se	78	103	1	He	0.542	0.542	2.02	99	0.55	10000	
Sr	88	103	1	He	6.394	6.394	0.39	49037	0.01	10000	
Mo	95	103	1	He	0.701	0.701	2.38	2489	0.03	2000	
Ag	107	103	1	He	0.025	0.025	1.35	307	0.01	300	
Cd	111	103	1	He	0.174	0.174	17.57	1419	0.01	4000	
Sn	118	115	1	He	2.387	2.387	3.45	13043	0.02	2000	
Sb	123	115	1	He	0.145	0.145	2.58	1226	0.01	300	
Ba	137	115	1	He	55.539	55.539	0.73	127739	0.04	10000	
W	182	209	1	He	0.061	0.061	33.73	4327	0.00	2500	
Tl	205	165	1	He	0.088	0.088	2.62	2983	0.00	5000	
Pb	208	209	1	He	11.059	11.059	1.16	524171	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1200764	0.69	1631381	73.60	30	120	
Sc	45	1	He	670291	2.49	829696	80.79	30	120	
Sc	45	2	NoGas	5135934	0.34	6325638	81.19	30	120	
Rh	103	1	He	2015535	0.62	2345543	85.93	30	120	
In	115	1	He	1214370	0.23	1419467	85.55	30	120	
Tb	159	1	He	3518854	0.91	3888262	90.50	30	120	
Ho	165	1	He	3609590	0.98	3932562	91.79	30	120	
Bi	209	1	He	2688939	1.10	2874805	93.53	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-7-b@20
Data File Name	115SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:23:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.391	0.391	14.28	1530	0.03	10000	
B	11	45	2	NoGas	0.111	0.111	183.22	8447	0.00	300	
Na	23	45	1	He	21.244	21.244	2.69	49375	0.04	500000	
Mg	24	45	1	He	1238.388	1238.388	0.50	1015304	0.12	500000	
Al	27	45	1	He	5038.233	5038.233	1.90	2341774	0.22	200000	
K	39	45	1	He	673.654	673.654	0.35	550662	0.12	500000	
Ca	44	45	1	He	214.082	214.082	0.27	9874	2.17	500000	
Ti	47	45	1	He	37.663	37.663	4.26	8995	0.42	2500	
V	51	45	1	He	9.178	9.178	2.31	54222	0.02	10000	
Cr	52	45	1	He	14.956	14.956	1.31	108118	0.01	10000	
Mn	55	45	1	He	173.555	173.555	0.43	967936	0.02	10000	
Fe	56	45	1	He	13471.089	13471.089	1.30	90051836	0.01	200000	
Co	59	103	1	He	4.548	4.548	0.59	50562	0.01	10000	
Ni	60	103	1	He	13.765	13.765	1.37	38022	0.04	10000	
Cu	63	103	1	He	8.522	8.522	1.20	63203	0.01	10000	
Zn	66	103	1	He	22.622	22.622	0.75	34794	0.07	10000	
As	75	103	1	He	5.340	5.340	1.02	5174	0.10	10000	
Se	78	103	1	He	0.624	0.624	14.58	107	0.58	10000	
Sr	88	103	1	He	2.393	2.393	1.23	18430	0.01	10000	
Mo	95	103	1	He	0.416	0.416	6.41	1500	0.03	2000	
Ag	107	103	1	He	0.017	0.017	6.96	212	0.01	300	
Cd	111	103	1	He	0.143	0.143	13.46	1356	0.01	4000	
Sn	118	115	1	He	1.664	1.664	1.05	9399	0.02	2000	
Sb	123	115	1	He	0.006	0.006	161.50	578	0.00	300	
Ba	137	115	1	He	26.479	26.479	1.13	61062	0.04	10000	
W	182	209	1	He	0.074	0.074	14.92	4471	0.00	2500	
Tl	205	165	1	He	0.076	0.076	3.38	2582	0.00	5000	
Pb	208	209	1	He	7.671	7.671	1.05	361136	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1213114	0.71	1631381	74.36	30	120	
Sc	45	1	He	673473	0.49	829696	81.17	30	120	
Sc	45	2	NoGas	5205749	0.40	6325638	82.30	30	120	
Rh	103	1	He	2016791	0.34	2345543	85.98	30	120	
In	115	1	He	1216691	0.40	1419467	85.71	30	120	
Tb	159	1	He	3529528	0.06	3888262	90.77	30	120	
Ho	165	1	He	3608292	0.68	3932562	91.75	30	120	
Bi	209	1	He	2669052	1.20	2874805	92.84	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-8-b@20
Data File Name	116SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:27:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.385	0.385	7.74	1489	0.03	10000	
B	11	45	2	NoGas	0.559	0.559	28.38	9755	0.01	300	
Na	23	45	1	He	18.555	18.555	8.47	46248	0.04	500000	
Mg	24	45	1	He	1343.240	1343.240	2.12	1119720	0.12	500000	
Al	27	45	1	He	7774.605	7774.605	2.20	3673137	0.21	200000	
K	39	45	1	He	656.086	656.086	3.19	546066	0.12	500000	
Ca	44	45	1	He	130.357	130.357	4.21	6436	2.03	500000	
Ti	47	45	1	He	41.033	41.033	0.93	9968	0.41	2500	
V	51	45	1	He	13.662	13.662	3.24	82016	0.02	10000	
Cr	52	45	1	He	11.130	11.130	1.97	82366	0.01	10000	
Mn	55	45	1	He	79.220	79.220	1.53	449836	0.02	10000	
Fe	56	45	1	He	15210.828	15210.828	1.68	103400243	0.01	200000	
Co	59	103	1	He	3.763	3.763	1.86	42383	0.01	10000	
Ni	60	103	1	He	8.759	8.759	1.70	24549	0.04	10000	
Cu	63	103	1	He	8.998	8.998	1.22	67515	0.01	10000	
Zn	66	103	1	He	25.014	25.014	1.70	38789	0.06	10000	
As	75	103	1	He	6.722	6.722	1.33	6560	0.10	10000	
Se	78	103	1	He	0.689	0.689	15.31	115	0.60	10000	
Sr	88	103	1	He	2.069	2.069	3.58	16150	0.01	10000	
Mo	95	103	1	He	0.510	0.510	5.85	1850	0.03	2000	
Ag	107	103	1	He	0.019	0.019	13.21	239	0.01	300	
Cd	111	103	1	He	0.142	0.142	14.43	1372	0.01	4000	
Sn	118	115	1	He	1.628	1.628	5.48	9296	0.02	2000	
Sb	123	115	1	He	0.055	0.055	10.74	810	0.01	300	
Ba	137	115	1	He	31.439	31.439	1.12	73097	0.04	10000	
W	182	209	1	He	0.078	0.078	17.29	4597	0.00	2500	
Tl	205	165	1	He	0.097	0.097	3.26	3299	0.00	5000	
Pb	208	209	1	He	6.491	6.491	1.11	310374	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1197426	1.22	1631381	73.40	30	120	
Sc	45	1	He	685001	2.22	829696	82.56	30	120	
Sc	45	2	NoGas	5201047	1.82	6325638	82.22	30	120	
Rh	103	1	He	2042901	0.64	2345543	87.10	30	120	
In	115	1	He	1226931	0.21	1419467	86.44	30	120	
Tb	159	1	He	3560815	1.24	3888262	91.58	30	120	
Ho	165	1	He	3622319	0.26	3932562	92.11	30	120	
Bi	209	1	He	2709529	0.38	2874805	94.25	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	117_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:31:27-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.012	2.842	166532	2.85	50	96.0	89.5	110.5	
B	11	45	2	NoGas	45.620	0.714	126796	1.67	50	91.2	89.5	110.5	
Na	23	45	1	He	24449.161	3.767	32865856	0.32	25000	97.8	89.5	110.5	
Mg	24	45	1	He	24478.029	3.032	18700296	1.07	25000	97.9	89.5	110.5	
Al	27	45	1	He	239.523	2.697	105735	1.46	250	95.8	89.5	110.5	
K	39	45	1	He	25225.347	2.794	18173882	1.55	25000	100.9	89.5	110.5	
Ca	44	45	1	He	24764.276	2.159	978333	1.96	25000	99.1	89.5	110.5	
Ti	47	45	1	He	50.044	5.840	11135	2.22	50	100.1	89.5	110.5	
V	51	45	1	He	49.402	2.261	271885	2.05	50	98.8	89.5	110.5	
Cr	52	45	1	He	49.810	3.290	331230	0.95	50	99.6	89.5	110.5	
Mn	55	45	1	He	251.060	2.314	1305531	1.76	250	100.4	89.5	110.5	
Fe	56	45	1	He	12681.808	2.702	79065170	1.48	12500	101.5	89.5	110.5	
Co	59	103	1	He	47.240	2.309	468605	2.48	50	94.5	89.5	110.5	
Ni	60	103	1	He	47.176	1.271	116116	0.81	50	94.4	89.5	110.5	
Cu	63	103	1	He	47.180	1.826	306469	1.68	50	94.4	89.5	110.5	
Zn	66	103	1	He	47.786	1.929	63945	2.35	50	95.6	89.5	110.5	
As	75	103	1	He	48.358	2.051	40828	1.95	50	96.7	89.5	110.5	
Se	78	103	1	He	49.060	2.286	4404	2.68	50	98.1	89.5	110.5	
Sr	88	103	1	He	49.412	1.591	337983	1.58	50	98.8	89.5	110.5	
Mo	95	103	1	He	50.978	1.815	158438	0.84	50	102.0	89.5	110.5	
Ag	107	103	1	He	50.655	1.001	540712	1.11	50	101.3	89.5	110.5	
Cd	111	103	1	He	51.101	1.857	95869	1.81	50	102.2	89.5	110.5	
Sn	118	115	1	He	50.047	1.985	231974	2.34	50	100.1	89.5	110.5	
Sb	123	115	1	He	52.217	0.377	223182	0.10	50	104.4	89.5	110.5	
Ba	137	115	1	He	51.360	0.366	107728	0.81	50	102.7	89.5	110.5	
W	182	209	1	He	49.461	1.024	622194	0.83	50	98.9	89.5	110.5	
Tl	205	165	1	He	48.302	1.036	1533123	0.69	50	96.6	89.5	110.5	
Pb	208	209	1	He	48.091	1.046	2076862	1.08	50	96.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1097153	0.59	1631381	67.25	30	120	
Sc	45	1	He	628541	4.12	829696	75.76	30	120	
Sc	45	2	NoGas	4654556	1.01	6325638	73.58	30	120	
Rh	103	1	He	1800855	1.00	2345543	76.78	30	120	
In	115	1	He	1107365	0.45	1419467	78.01	30	120	
Tb	159	1	He	3343253	0.71	3888262	85.98	30	120	
Ho	165	1	He	3458587	0.94	3932562	87.95	30	120	
Bi	209	1	He	2452474	0.23	2874805	85.31	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	118_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:35:16-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.028	31.1	130	21.6	1	
B	11	45	2	NoGas	-0.771	-8.1	5212	1.9	20	
Na	23	45	1	He	5.638	27.7	23460	7.5	400	
Mg	24	45	1	He	2.005	59.8	2130	39.1	1000	
Al	27	45	1	He	0.335	99.7	2010	5.8	50	
K	39	45	1	He	11.230	11.6	34678	1.6	1000	
Ca	44	45	1	He	1.016	76.8	748	4.7	1000	
Ti	47	45	1	He	0.152	26.3	41	20.4	20	
V	51	45	1	He	0.012	218.2	138	100.4	2	
Cr	52	45	1	He	-0.002	-402.9	1813	1.8	2	
Mn	55	45	1	He	0.021	39.4	972	4.2	2	
Fe	56	45	1	He	24.302	21.9	144871	20.4	50	
Co	59	103	1	He	0.002	143.6	56	44.2	1	
Ni	60	103	1	He	-0.018	-67.5	58	52.4	2	
Cu	63	103	1	He	-0.027	-80.1	1192	11.3	2	
Zn	66	103	1	He	-0.059	-104.5	1499	6.3	20	
As	75	103	1	He	0.032	79.3	159	13.5	2	
Se	78	103	1	He	0.060	92.6	47	10.4	2	
Sr	88	103	1	He	0.005	28.5	129	8.3	10	
Mo	95	103	1	He	0.865	20.1	2849	19.1	2	
Ag	107	103	1	He	0.011	3.5	123	2.7	0.2	
Cd	111	103	1	He	0.068	15.1	1117	1.6	0.2	
Sn	118	115	1	He	0.313	32.7	2389	20.1	10	
Sb	123	115	1	He	0.496	21.9	2696	17.5	1	
Ba	137	115	1	He	-0.002	-679.8	76	43.3	5	
W	182	209	1	He	1.042	17.5	16617	14.0	10	
Tl	205	165	1	He	0.036	28.1	1216	26.8	0.5	
Pb	208	209	1	He	0.033	14.0	2183	9.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1113044	3.27	1631381	68.23	30	120	
Sc	45	1	He	587895	0.95	829696	70.86	30	120	
Sc	45	2	NoGas	4629998	1.46	6325638	73.19	30	120	
Rh	103	1	He	1877361	0.71	2345543	80.04	30	120	
In	115	1	He	1142580	0.25	1419467	80.49	30	120	
Tb	159	1	He	3369454	0.75	3888262	86.66	30	120	
Ho	165	1	He	3452663	0.47	3932562	87.80	30	120	
Bi	209	1	He	2511449	0.28	2874805	87.36	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	119CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:39:06-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.940	0.940	4.160	3371	3.20	1	94.0	69.5	130.5	
B	11	2	NoGas	17.664	17.664	3.969	53381	3.46	20	88.3	69.5	130.5	
Na	23	1	He	1079.314	1079.314	1.191	1429545	0.30	1000	107.9	69.5	130.5	
Mg	24	1	He	1061.798	1061.798	0.582	790713	0.43	1000	106.2	69.5	130.5	
Al	27	1	He	46.861	46.861	0.993	21714	1.10	50	93.7	69.5	130.5	
K	39	1	He	1080.493	1080.493	1.439	785081	1.23	1000	108.0	69.5	130.5	
Ca	44	1	He	1047.307	1047.307	1.204	40992	0.60	1000	104.7	69.5	130.5	
Ti	47	1	He	10.685	10.685	2.112	2325	1.15	10	106.9	69.5	130.5	
V	51	1	He	5.152	5.152	2.669	27676	1.81	5	103.0	69.5	130.5	
Cr	52	1	He	2.140	2.140	1.481	15679	0.90	2	107.0	69.5	130.5	
Mn	55	1	He	5.228	5.228	1.907	27357	1.24	5	104.6	69.5	130.5	
Fe	56	1	He	112.570	112.570	1.172	686773	0.38	100	112.6	69.5	130.5	
Co	59	1	He	0.911	0.911	5.792	9642	5.07	1	91.1	69.5	130.5	
Ni	60	1	He	1.851	1.851	2.443	4946	2.24	2	92.6	69.5	130.5	
Cu	63	1	He	1.787	1.787	2.068	13688	0.88	2	89.3	69.5	130.5	
Zn	66	1	He	19.010	19.010	0.496	28019	1.47	20	95.1	69.5	130.5	
As	75	1	He	4.659	4.659	0.256	4303	1.20	5	93.2	69.5	130.5	
Se	78	1	He	4.773	4.773	1.878	494	2.70	5	95.5	69.5	130.5	
Sr	88	1	He	9.425	9.425	1.023	68624	1.15	10	94.2	69.5	130.5	
Mo	95	1	He	10.161	10.161	1.968	33626	2.96	10	101.6	69.5	130.5	
Ag	107	1	He	1.029	1.029	2.202	11679	1.95	1	102.9	69.5	130.5	
Cd	111	1	He	1.075	1.075	3.451	3128	1.35	1	107.5	69.5	130.5	
Sn	118	1	He	10.207	10.207	2.464	49870	2.60	10	102.1	69.5	130.5	
Sb	123	1	He	2.097	2.097	2.374	9806	1.53	2	104.8	69.5	130.5	
Ba	137	1	He	4.966	4.966	2.656	10893	1.92	5	99.3	69.5	130.5	
W	182	1	He	9.473	9.473	1.944	126598	1.45	10	94.7	69.5	130.5	
Tl	205	1	He	2.017	2.017	0.757	64011	1.00	2	100.9	69.5	130.5	
Pb	208	1	He	1.014	1.014	2.504	46236	1.82	1	101.4	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1124956	0.91	1631381	68.96	30	120	
Sc	45	1	He	611661	0.99	829696	73.72	30	120	
Sc	45	2	NoGas	4640446	0.28	6325638	73.36	30	120	
Rh	103	1	He	1914826	1.00	2345543	81.64	30	120	
In	115	1	He	1150496	0.73	1419467	81.05	30	120	
Tb	159	1	He	3358277	1.63	3888262	86.37	30	120	
Ho	165	1	He	3453951	0.47	3932562	87.83	30	120	
Bi	209	1	He	2550554	1.06	2874805	88.72	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176764/1-a
Data File Name	120_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:42:57-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.043	81.7	178	69.6	1	
B	11	45	2	NoGas	1.085	2.7	9814	1.4	20	
Na	23	45	1	He	61.121	3.8	95344	1.0	400	
Mg	24	45	1	He	70.485	3.5	52245	1.5	1000	
Al	27	45	1	He	0.225	82.0	2012	6.4	50	
K	39	45	1	He	12.868	18.6	36571	1.0	1000	
Ca	44	45	1	He	404.255	3.8	15992	0.2	1000	
Ti	47	45	1	He	0.226	18.0	58	13.3	20	
V	51	45	1	He	0.198	106.5	1092	100.2	2	
Cr	52	45	1	He	0.711	10.4	6361	4.9	2	
Mn	55	45	1	He	0.090	17.5	1339	7.7	2	
Fe	56	45	1	He	21.674	1.6	132767	5.2	50	
Co	59	103	1	He	0.010	19.6	137	14.8	1	
Ni	60	103	1	He	0.066	15.9	269	9.1	2	
Cu	63	103	1	He	0.382	4.3	3892	1.8	2	
Zn	66	103	1	He	5.642	2.8	9131	3.5	20	
As	75	103	1	He	0.103	32.4	218	12.3	2	
Se	78	103	1	He	0.187	80.3	58	22.7	2	
Sr	88	103	1	He	0.493	1.0	3557	1.9	10	
Mo	95	103	1	He	0.310	8.2	1038	8.3	2	
Ag	107	103	1	He	0.011	24.3	129	23.2	0.2	
Cd	111	103	1	He	0.070	33.8	1105	4.0	0.2	
Sn	118	115	1	He	1.002	11.8	5434	10.2	10	
Sb	123	115	1	He	0.839	7.0	4027	5.8	1	
Ba	137	115	1	He	1.274	6.0	2718	6.2	5	
W	182	209	1	He	0.380	19.4	8673	13.2	10	
Tl	205	165	1	He	0.010	22.5	378	18.4	0.5	
Pb	208	209	1	He	0.132	2.3	6956	0.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1071570	1.65	1631381	65.68	30	120	
Sc	45	1	He	601444	3.63	829696	72.49	30	120	
Sc	45	2	NoGas	4520538	1.16	6325638	71.46	30	120	
Rh	103	1	He	1850403	1.13	2345543	78.89	30	120	
In	115	1	He	1094665	0.42	1419467	77.12	30	120	
Tb	159	1	He	3251130	0.25	3888262	83.61	30	120	
Ho	165	1	He	3341080	0.64	3932562	84.96	30	120	
Bi	209	1	He	2677348	1.71	2874805	93.13	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176764/2-a
Data File Name	121_LCS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:46:49-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	997.039	997.039	2.741	3199585	0.63	1000	99.7	79.5	120.5	
B	11	2	NoGas	104.908	104.908	1.140	259451	1.22	100	104.9	79.5	120.5	
Na	23	1	He	9945.683	9945.683	2.867	12310821	0.69	10000	99.5	79.5	120.5	
Mg	24	1	He	10013.300	10013.300	2.480	7038293	1.27	10000	100.1	79.5	120.5	
Al	27	1	He	9250.759	9250.759	3.290	3686491	0.25	10000	92.5	79.5	120.5	
K	39	1	He	10116.448	10116.448	3.670	6718876	0.31	10000	101.2	79.5	120.5	
Ca	44	1	He	9251.133	9251.133	3.371	336519	0.28	10000	92.5	79.5	120.5	
Ti	47	1	He	95.967	95.967	0.884	19660	3.33	100	96.0	79.5	120.5	
V	51	1	He	954.115	954.115	2.693	4828121	0.91	1000	95.4	79.5	120.5	
Cr	52	1	He	969.191	969.191	1.994	5897529	1.93	1000	96.9	79.5	120.5	
Mn	55	1	He	976.921	976.921	2.558	4670302	1.37	1000	97.7	79.5	120.5	
Fe	56	1	He	10268.503	10268.503	3.263	58881842	0.61	10000	102.7	79.5	120.5	
Co	59	1	He	883.484	883.484	0.695	8478250	0.98	1000	88.3	79.5	120.5	
Ni	60	1	He	907.085	907.085	1.226	2158479	1.70	1000	90.7	79.5	120.5	
Cu	63	1	He	907.174	907.174	0.748	5678692	2.00	1000	90.7	79.5	120.5	
Zn	66	1	He	895.699	895.699	0.316	1133611	1.36	1000	89.6	79.5	120.5	
As	75	1	He	886.986	886.986	1.003	722415	0.61	1000	88.7	79.5	120.5	
Se	78	1	He	924.951	924.951	1.017	79636	0.29	1000	92.5	79.5	120.5	
Sr	88	1	He	934.383	934.383	0.701	6182141	1.07	1000	93.4	79.5	120.5	
Mo	95	1	He	101.470	101.470	2.608	305043	1.32	100	101.5	79.5	120.5	
Ag	107	1	He	98.686	98.686	1.088	1019131	0.21	100	98.7	79.5	120.5	
Cd	111	1	He	1024.183	1024.183	0.535	1841603	1.10	1000	102.4	79.5	120.5	
Sn	118	1	He	1088.662	1088.662	0.682	4616392	0.57	1000	108.9	79.5	120.5	
Sb	123	1	He	106.794	106.794	1.206	418610	0.64	100	106.8	79.5	120.5	
Ba	137	1	He	1091.078	1091.078	1.455	2099743	1.05	1000	109.1	79.5	120.5	
W	182	1	He	94.709	94.709	1.354	1186641	0.86	100	94.7	79.5	120.5	
Tl	205	1	He	244.014	244.014	0.600	7377185	0.86	250	97.6	79.5	120.5	
Pb	208	1	He	935.221	935.221	0.909	40314761	0.81	1000	93.5	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1015757	2.84	1631381	62.26	30	120	
Sc	45	1	He	578118	3.59	829696	69.68	30	120	
Sc	45	2	NoGas	4280479	0.73	6325638	67.67	30	120	
Rh	103	1	He	1742358	1.31	2345543	74.28	30	120	
In	115	1	He	1016769	0.60	1419467	71.63	30	120	
Tb	159	1	He	3195862	0.84	3888262	82.19	30	120	
Ho	165	1	He	3294300	0.98	3932562	83.77	30	120	
Bi	209	1	He	2448841	1.02	2874805	85.18	30	120	

Sample Report

Sample Table

Sample Name	240-49393-s-1-a
Data File Name	122SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:50:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.231	0.231	6.77	867	0.03	10000	
B	11	45	2	NoGas	212.092	212.092	1.00	584466	0.04	300	
Na	23	45	1	He	143533.269	143533.269	2.64	182054915	0.08	500000	
Mg	24	45	1	He	82653.355	82653.355	1.19	59589935	0.14	500000	
Al	27	45	1	He	1.288	1.288	12.10	2417	0.05	200000	
K	39	45	1	He	2445.093	2445.093	1.31	1687004	0.14	500000	
Ca	44	45	1	He	103204.890	103204.890	1.29	3844609	2.68	500000	
Ti	47	45	1	He	0.548	0.548	24.30	124	0.44	2500	
V	51	45	1	He	0.418	0.418	46.50	2241	0.02	10000	
Cr	52	45	1	He	1.464	1.464	0.46	10973	0.01	10000	
Mn	55	45	1	He	95.552	95.552	0.76	469380	0.02	10000	
Fe	56	45	1	He	3176.050	3176.050	1.52	18688438	0.02	200000	
Co	59	103	1	He	0.433	0.433	9.36	4086	0.01	10000	
Ni	60	103	1	He	1.487	1.487	6.54	3546	0.04	10000	
Cu	63	103	1	He	0.227	0.227	30.94	2622	0.01	10000	
Zn	66	103	1	He	2.629	2.629	3.37	4674	0.06	10000	
As	75	103	1	He	1.572	1.572	7.63	1367	0.11	10000	
Se	78	103	1	He	1.217	1.217	17.86	140	0.87	10000	
Sr	88	103	1	He	184.819	184.819	1.29	1193723	0.02	10000	
Mo	95	103	1	He	1.781	1.781	11.70	5263	0.03	2000	
Ag	107	103	1	He	0.024	0.024	6.40	249	0.01	300	
Cd	111	103	1	He	0.194	0.194	29.70	1232	0.02	4000	
Sn	118	115	1	He	2.840	2.840	19.42	13032	0.02	2000	
Sb	123	115	1	He	1.032	1.032	1.13	4576	0.02	300	
Ba	137	115	1	He	103.152	103.152	1.81	202020	0.05	10000	
W	182	209	1	He	1.542	1.542	15.80	21148	0.01	2500	
Tl	205	165	1	He	0.180	0.180	36.84	5625	0.00	5000	
Pb	208	209	1	He	0.296	0.296	24.61	12678	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1146547	1.26	1631381	70.28	30	120	
Sc	45	1	He	592710	0.98	829696	71.44	30	120	
Sc	45	2	NoGas	4832414	0.77	6325638	76.39	30	120	
Rh	103	1	He	1701015	2.02	2345543	72.52	30	120	
In	115	1	He	1034616	2.16	1419467	72.89	30	120	
Tb	159	1	He	3242193	1.66	3888262	83.38	30	120	
Ho	165	1	He	3374817	2.22	3932562	85.82	30	120	
Bi	209	1	He	2307098	0.28	2874805	80.25	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49393-s-1-a@5
Data File Name	123SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:54:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.125	0.125	4.27	519	0.02	10000	
B	11	45	2	NoGas	39.537	39.537	0.93	123655	0.03	300	
Na	23	45	1	He	28958.657	28958.657	1.68	41259292	0.07	500000	
Mg	24	45	1	He	16839.493	16839.493	0.15	13635761	0.12	500000	
Al	27	45	1	He	2.730	2.730	7.12	3377	0.08	200000	
K	39	45	1	He	493.568	493.568	1.56	406924	0.12	500000	
Ca	44	45	1	He	21135.311	21135.311	0.93	884855	2.39	500000	
Ti	47	45	1	He	0.129	0.129	22.89	41	0.31	2500	
V	51	45	1	He	-0.064	-0.064	-188.77	-289	0.02	10000	
Cr	52	45	1	He	0.317	0.317	5.48	4283	0.01	10000	
Mn	55	45	1	He	15.830	15.830	0.57	88153	0.02	10000	
Fe	56	45	1	He	653.661	653.661	1.05	4322487	0.02	200000	
Co	59	103	1	He	0.070	0.070	11.40	812	0.01	10000	
Ni	60	103	1	He	0.268	0.268	8.15	841	0.03	10000	
Cu	63	103	1	He	-0.040	-0.040	-42.78	1170	0.00	10000	
Zn	66	103	1	He	0.090	0.090	55.24	1810	0.00	10000	
As	75	103	1	He	0.267	0.267	10.61	388	0.07	10000	
Se	78	103	1	He	0.168	0.168	44.44	61	0.28	10000	
Sr	88	103	1	He	36.086	36.086	0.13	273809	0.01	10000	
Mo	95	103	1	He	0.299	0.299	10.01	1083	0.03	2000	
Ag	107	103	1	He	0.012	0.012	23.21	144	0.01	300	
Cd	111	103	1	He	0.092	0.092	27.77	1238	0.01	4000	
Sn	118	115	1	He	0.124	0.124	15.27	1559	0.01	2000	
Sb	123	115	1	He	0.134	0.134	15.66	1157	0.01	300	
Ba	137	115	1	He	20.193	20.193	1.57	45897	0.04	10000	
W	182	209	1	He	0.289	0.289	11.62	7187	0.00	2500	
Tl	205	165	1	He	0.023	0.023	7.43	840	0.00	5000	
Pb	208	209	1	He	0.082	0.082	4.88	4473	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1227667	1.06	1631381	75.25	30	120	
Sc	45	1	He	665656	1.69	829696	80.23	30	120	
Sc	45	2	NoGas	5192020	0.26	6325638	82.08	30	120	
Rh	103	1	He	1997347	1.52	2345543	85.15	30	120	
In	115	1	He	1198644	0.52	1419467	84.44	30	120	
Tb	159	1	He	3523537	1.21	3888262	90.62	30	120	
Ho	165	1	He	3636602	0.69	3932562	92.47	30	120	
Bi	209	1	He	2593395	1.14	2874805	90.21	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49393-s-1-a
Data File Name	124SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:57:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1008.390	1008.390	1.69	3472331	0.03	10000	
B	11	45	2	NoGas	313.529	313.529	1.93	833885	0.04	300	>LDR
Na	23	45	1	He	145658.232	145658.232	2.26	185119604	0.08	500000	
Mg	24	45	1	He	88044.949	88044.949	1.77	63612170	0.14	500000	
Al	27	45	1	He	9472.798	9472.798	2.76	3880667	0.24	200000	
K	39	45	1	He	12320.590	12320.590	2.73	8406833	0.15	500000	
Ca	44	45	1	He	108850.908	108850.908	1.59	4063658	2.68	500000	
Ti	47	45	1	He	101.554	101.554	1.49	21376	0.48	2500	
V	51	45	1	He	1012.179	1012.179	3.01	5264444	0.02	10000	
Cr	52	45	1	He	1000.309	1000.309	2.94	6254899	0.02	10000	
Mn	55	45	1	He	1082.966	1082.966	3.22	5320670	0.02	10000	
Fe	56	45	1	He	13046.948	13046.948	1.85	76920101	0.02	200000	
Co	59	103	1	He	927.193	927.193	1.48	8696606	0.01	10000	
Ni	60	103	1	He	944.572	944.572	1.70	2196752	0.04	10000	
Cu	63	103	1	He	926.251	926.251	2.69	5666022	0.02	10000	
Zn	66	103	1	He	890.115	890.115	1.41	1101037	0.08	10000	
As	75	103	1	He	937.345	937.345	1.21	746200	0.13	10000	
Se	78	103	1	He	932.991	932.991	0.71	78519	1.19	10000	
Sr	88	103	1	He	1193.699	1193.699	1.36	7719241	0.02	10000	
Mo	95	103	1	He	112.412	112.412	1.92	330346	0.03	2000	
Ag	107	103	1	He	98.671	98.671	0.67	996049	0.01	300	
Cd	111	103	1	He	1039.725	1039.725	1.07	1827290	0.06	4000	
Sn	118	115	1	He	1152.842	1152.842	0.27	4766348	0.02	2000	
Sb	123	115	1	He	111.863	111.863	0.23	427518	0.03	300	
Ba	137	115	1	He	1265.441	1265.441	1.59	2374390	0.05	10000	
W	182	209	1	He	107.522	107.522	1.91	1257479	0.01	2500	
Tl	205	165	1	He	244.005	244.005	2.86	7429600	0.00	5000	
Pb	208	209	1	He	1000.960	1000.960	1.63	40288000	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1089605	1.92	1631381	66.79	30	120	
Sc	45	1	He	594129	2.61	829696	71.61	30	120	
Sc	45	2	NoGas	4684023	0.97	6325638	74.05	30	120	
Rh	103	1	He	1703048	0.96	2345543	72.61	30	120	
In	115	1	He	991359	0.64	1419467	69.84	30	120	
Tb	159	1	He	3229215	0.73	3888262	83.05	30	120	
Ho	165	1	He	3318977	1.95	3932562	84.40	30	120	
Bi	209	1	He	2286595	0.86	2874805	79.54	30	120	

Sample Report

Sample Table

Sample Name	240-49393-s-1-b ms
Data File Name	125SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:01:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1083.256	1083.256	1.10	3692679	0.03	10000	
B	11	45	2	NoGas	332.106	332.106	0.90	883832	0.04	300	>LDR
Na	23	45	1	He	156620.915	156620.915	1.68	196667955	0.08	500000	
Mg	24	45	1	He	93929.994	93929.994	1.98	67043562	0.14	500000	
Al	27	45	1	He	10194.612	10194.612	1.69	4126756	0.25	200000	
K	39	45	1	He	13287.535	13287.535	1.67	8956743	0.15	500000	
Ca	44	45	1	He	115798.176	115798.176	2.63	4270355	2.71	500000	
Ti	47	45	1	He	105.953	105.953	3.58	22031	0.48	2500	
V	51	45	1	He	1070.170	1070.170	1.70	5500453	0.02	10000	
Cr	52	45	1	He	1056.849	1056.849	1.44	6530333	0.02	10000	
Mn	55	45	1	He	1140.503	1140.503	2.58	5536572	0.02	10000	
Fe	56	45	1	He	14545.965	14545.965	1.91	84722208	0.02	200000	
Co	59	103	1	He	977.125	977.125	0.76	9193253	0.01	10000	
Ni	60	103	1	He	981.701	981.701	0.85	2290208	0.04	10000	
Cu	63	103	1	He	972.748	972.748	0.83	5969284	0.02	10000	
Zn	66	103	1	He	917.053	917.053	1.04	1137819	0.08	10000	
As	75	103	1	He	975.320	975.320	0.38	778823	0.13	10000	
Se	78	103	1	He	961.654	961.654	0.72	81177	1.18	10000	
Sr	88	103	1	He	1243.146	1243.146	1.16	8064048	0.02	10000	
Mo	95	103	1	He	118.628	118.628	2.18	349698	0.03	2000	
Ag	107	103	1	He	104.234	104.234	0.61	1055401	0.01	300	
Cd	111	103	1	He	1074.114	1074.114	0.46	1893494	0.06	4000	
Sn	118	115	1	He	1190.936	1190.936	0.35	4986642	0.02	2000	
Sb	123	115	1	He	115.628	115.628	0.15	447532	0.03	300	
Ba	137	115	1	He	1318.385	1318.385	0.28	2505432	0.05	10000	
W	182	209	1	He	115.123	115.123	1.88	1353707	0.01	2500	
Tl	205	165	1	He	254.317	254.317	0.43	7798094	0.00	5000	
Pb	208	209	1	He	1047.794	1047.794	1.53	42409905	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1078550	1.46	1631381	66.11	30	120	
Sc	45	1	He	586909	1.87	829696	70.74	30	120	
Sc	45	2	NoGas	4688708	0.93	6325638	74.12	30	120	
Rh	103	1	He	1708190	0.39	2345543	72.83	30	120	
In	115	1	He	1004000	0.20	1419467	70.73	30	120	
Tb	159	1	He	3222439	0.89	3888262	82.88	30	120	
Ho	165	1	He	3341085	0.80	3932562	84.96	30	120	
Bi	209	1	He	2299512	1.19	2874805	79.99	30	120	

Sample Report

Sample Table

Sample Name	240-49393-s-1-c msd
Data File Name	126SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:04:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1166.859	1166.859	22.57	3604414	0.03	10000	
B	11	45	2	NoGas	350.436	350.436	22.36	882526	0.04	300	>LDR
Na	23	45	1	He	155433.373	155433.373	0.94	199177496	0.08	500000	
Mg	24	45	1	He	93272.742	93272.742	1.40	67939273	0.14	500000	
Al	27	45	1	He	9942.815	9942.815	2.55	4106677	0.24	200000	
K	39	45	1	He	13136.774	13136.774	1.94	9036049	0.15	500000	
Ca	44	45	1	He	114203.771	114203.771	2.60	4297605	2.66	500000	
Ti	47	45	1	He	105.000	105.000	1.89	22279	0.47	2500	
V	51	45	1	He	1062.837	1062.837	1.25	5574283	0.02	10000	
Cr	52	45	1	He	1047.593	1047.593	0.64	6606153	0.02	10000	
Mn	55	45	1	He	1103.622	1103.622	1.06	5467926	0.02	10000	
Fe	56	45	1	He	13804.132	13804.132	0.40	82056870	0.02	200000	
Co	59	103	1	He	958.498	958.498	2.42	9216248	0.01	10000	
Ni	60	103	1	He	964.352	964.352	1.84	2299442	0.04	10000	
Cu	63	103	1	He	955.363	955.363	0.92	5992240	0.02	10000	
Zn	66	103	1	He	907.151	907.151	1.36	1150388	0.08	10000	
As	75	103	1	He	957.034	957.034	0.76	781111	0.12	10000	
Se	78	103	1	He	949.895	949.895	1.01	81956	1.16	10000	
Sr	88	103	1	He	1207.191	1207.191	1.31	8004077	0.02	10000	
Mo	95	103	1	He	117.143	117.143	1.36	352939	0.03	2000	
Ag	107	103	1	He	101.963	101.963	1.16	1055186	0.01	300	
Cd	111	103	1	He	1052.178	1052.178	1.50	1895733	0.06	4000	
Sn	118	115	1	He	1188.937	1188.937	0.46	5003817	0.02	2000	
Sb	123	115	1	He	115.246	115.246	0.45	448327	0.03	300	
Ba	137	115	1	He	1306.318	1306.318	1.41	2495018	0.05	10000	
W	182	209	1	He	113.880	113.880	1.89	1350996	0.01	2500	
Tl	205	165	1	He	250.476	250.476	0.63	7770389	0.00	5000	
Pb	208	209	1	He	1039.980	1039.980	1.50	42466042	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1011589	22.60	1631381	62.01	30	120	
Sc	45	1	He	598871	1.43	829696	72.18	30	120	
Sc	45	2	NoGas	4598186	23.44	6325638	72.69	30	120	
Rh	103	1	He	1746011	1.14	2345543	74.44	30	120	
In	115	1	He	1009138	0.83	1419467	71.09	30	120	
Tb	159	1	He	3294564	0.24	3888262	84.73	30	120	
Ho	165	1	He	3380265	0.28	3932562	85.96	30	120	
Bi	209	1	He	2319730	0.67	2874805	80.69	30	120	

Sample Report

Sample Table

Sample Name	240-49393-v-1-a
Data File Name	127SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:08:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.506	0.506	7.30	1963	0.03	10000	
B	11	45	2	NoGas	212.530	212.530	1.33	628969	0.03	300	
Na	23	45	1	He	141731.725	141731.725	2.05	192970881	0.07	500000	
Mg	24	45	1	He	81723.256	81723.256	2.22	63247805	0.13	500000	
Al	27	45	1	He	3.533	3.533	13.35	3580	0.10	200000	
K	39	45	1	He	2417.181	2417.181	1.70	1790738	0.13	500000	
Ca	44	45	1	He	104358.326	104358.326	2.39	4173105	2.50	500000	
Ti	47	45	1	He	0.552	0.552	12.55	134	0.41	2500	
V	51	45	1	He	0.521	0.521	70.20	3003	0.02	10000	
Cr	52	45	1	He	1.115	1.115	3.39	9445	0.01	10000	
Mn	55	45	1	He	77.031	77.031	1.41	406407	0.02	10000	
Fe	56	45	1	He	3058.103	3058.103	1.17	19317748	0.02	200000	
Co	59	103	1	He	0.467	0.467	7.24	4710	0.01	10000	
Ni	60	103	1	He	1.468	1.468	1.55	3746	0.04	10000	
Cu	63	103	1	He	0.430	0.430	11.13	4135	0.01	10000	
Zn	66	103	1	He	1.869	1.869	9.16	3995	0.05	10000	
As	75	103	1	He	1.788	1.788	4.29	1646	0.11	10000	
Se	78	103	1	He	1.495	1.495	3.28	174	0.86	10000	
Sr	88	103	1	He	186.009	186.009	0.55	1284332	0.01	10000	
Mo	95	103	1	He	1.929	1.929	11.90	6100	0.03	2000	
Ag	107	103	1	He	0.043	0.043	7.86	471	0.01	300	
Cd	111	103	1	He	0.228	0.228	26.73	1383	0.02	4000	
Sn	118	115	1	He	2.651	2.651	19.95	12958	0.02	2000	
Sb	123	115	1	He	0.970	0.970	2.39	4583	0.02	300	
Ba	137	115	1	He	103.495	103.495	1.17	214572	0.05	10000	
W	182	209	1	He	1.937	1.937	21.11	26486	0.01	2500	
Tl	205	165	1	He	0.276	0.276	29.83	8892	0.00	5000	
Pb	208	209	1	He	0.554	0.554	21.17	23744	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1206836	0.48	1631381	73.98	30	120	
Sc	45	1	He	636356	1.36	829696	76.70	30	120	
Sc	45	2	NoGas	5189826	0.33	6325638	82.04	30	120	
Rh	103	1	He	1818157	0.25	2345543	77.52	30	120	
In	115	1	He	1095030	0.64	1419467	77.14	30	120	
Tb	159	1	He	3398135	1.35	3888262	87.39	30	120	
Ho	165	1	He	3478746	0.98	3932562	88.46	30	120	
Bi	209	1	He	2370557	0.90	2874805	82.46	30	120	

Sample Report

Sample Table

Sample Name	240-49393-v-1-b ms
Data File Name	128SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:12:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1039.748	1039.748	1.87	3636244	0.03	10000	
B	11	45	2	NoGas	319.718	319.718	2.18	871211	0.04	300	>LDR
Na	23	45	1	He	149228.696	149228.696	2.68	192982392	0.08	500000	
Mg	24	45	1	He	90044.415	90044.415	2.87	66189407	0.14	500000	
Al	27	45	1	He	9392.978	9392.978	2.40	3916216	0.24	200000	
K	39	45	1	He	12514.976	12514.976	2.44	8690183	0.14	500000	
Ca	44	45	1	He	110925.285	110925.285	3.30	4212738	2.63	500000	
Ti	47	45	1	He	102.651	102.651	0.49	21992	0.47	2500	
V	51	45	1	He	1054.267	1054.267	2.20	5580909	0.02	10000	
Cr	52	45	1	He	1039.116	1039.116	2.75	6612130	0.02	10000	
Mn	55	45	1	He	1115.966	1115.966	3.15	5579369	0.02	10000	
Fe	56	45	1	He	13248.034	13248.034	2.64	79469930	0.02	200000	
Co	59	103	1	He	943.742	943.742	1.15	9275660	0.01	10000	
Ni	60	103	1	He	952.453	952.453	0.71	2321232	0.04	10000	
Cu	63	103	1	He	945.045	945.045	0.89	6058437	0.02	10000	
Zn	66	103	1	He	890.077	890.077	1.02	1153742	0.08	10000	
As	75	103	1	He	943.964	943.964	1.01	787450	0.12	10000	
Se	78	103	1	He	932.498	932.498	1.19	82233	1.13	10000	
Sr	88	103	1	He	1188.029	1188.029	1.72	8050168	0.01	10000	
Mo	95	103	1	He	113.430	113.430	1.96	349294	0.03	2000	
Ag	107	103	1	He	100.028	100.028	0.97	1058057	0.01	300	
Cd	111	103	1	He	1032.433	1032.433	2.16	1901250	0.05	4000	
Sn	118	115	1	He	1183.589	1183.589	0.95	5018615	0.02	2000	
Sb	123	115	1	He	114.889	114.889	0.75	450298	0.03	300	
Ba	137	115	1	He	1305.492	1305.492	1.24	2512244	0.05	10000	
W	182	209	1	He	112.051	112.051	0.36	1327985	0.01	2500	
Tl	205	165	1	He	248.851	248.851	1.07	7781960	0.00	5000	
Pb	208	209	1	He	1032.269	1032.269	1.25	42106836	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1106279	0.91	1631381	67.81	30	120	
Sc	45	1	He	604632	2.97	829696	72.87	30	120	
Sc	45	2	NoGas	4799654	1.62	6325638	75.88	30	120	
Rh	103	1	He	1784533	0.77	2345543	76.08	30	120	
In	115	1	He	1016727	0.61	1419467	71.63	30	120	
Tb	159	1	He	3321984	0.51	3888262	85.44	30	120	
Ho	165	1	He	3407661	1.25	3932562	86.65	30	120	
Bi	209	1	He	2317190	0.25	2874805	80.60	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	129_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:15:51-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.353	0.170	197226	1.00	50	98.7	89.5	110.5	
B	11	45	2	NoGas	52.583	0.557	168427	0.49	50	105.2	89.5	110.5	
Na	23	45	1	He	24722.276	2.130	36878125	1.12	25000	98.9	89.5	110.5	
Mg	24	45	1	He	24722.596	2.278	20954736	1.44	25000	98.9	89.5	110.5	
Al	27	45	1	He	240.422	1.484	117744	1.67	250	96.2	89.5	110.5	
K	39	45	1	He	25185.143	2.527	20127496	0.53	25000	100.7	89.5	110.5	
Ca	44	45	1	He	24784.744	2.226	1086032	0.97	25000	99.1	89.5	110.5	
Ti	47	45	1	He	50.116	2.161	12380	0.83	50	100.2	89.5	110.5	
V	51	45	1	He	49.904	1.560	304672	1.60	50	99.8	89.5	110.5	
Cr	52	45	1	He	50.233	1.351	370659	1.67	50	100.5	89.5	110.5	
Mn	55	45	1	He	259.785	3.601	1498075	1.55	250	103.9	89.5	110.5	
Fe	56	45	1	He	12692.940	1.979	87790357	1.16	12500	101.5	89.5	110.5	
Co	59	103	1	He	47.185	0.937	521782	0.95	50	94.4	89.5	110.5	
Ni	60	103	1	He	47.162	1.700	129407	1.40	50	94.3	89.5	110.5	
Cu	63	103	1	He	47.653	1.316	345070	1.34	50	95.3	89.5	110.5	
Zn	66	103	1	He	47.360	1.554	70664	1.79	50	94.7	89.5	110.5	
As	75	103	1	He	49.107	0.577	46218	0.52	50	98.2	89.5	110.5	
Se	78	103	1	He	49.290	1.307	4932	0.96	50	98.6	89.5	110.5	
Sr	88	103	1	He	48.740	0.822	371676	1.10	50	97.5	89.5	110.5	
Mo	95	103	1	He	50.757	1.139	175878	1.16	50	101.5	89.5	110.5	
Ag	107	103	1	He	49.514	1.261	589211	1.09	50	99.0	89.5	110.5	
Cd	111	103	1	He	50.032	1.282	104662	1.31	50	100.1	89.5	110.5	
Sn	118	115	1	He	51.465	0.679	259658	0.23	50	102.9	89.5	110.5	
Sb	123	115	1	He	52.644	0.633	244953	0.30	50	105.3	89.5	110.5	
Ba	137	115	1	He	51.645	0.846	117927	0.35	50	103.3	89.5	110.5	
W	182	209	1	He	50.721	1.616	674415	0.14	50	101.4	89.5	110.5	
Tl	205	165	1	He	51.498	1.355	1744408	0.93	50	103.0	89.5	110.5	
Pb	208	209	1	He	48.421	1.296	2210740	1.02	50	96.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1264044	0.94	1631381	77.48	30	120	
Sc	45	1	He	697051	3.01	829696	84.01	30	120	
Sc	45	2	NoGas	5405379	0.12	6325638	85.45	30	120	
Rh	103	1	He	2007561	0.48	2345543	85.59	30	120	
In	115	1	He	1205569	0.53	1419467	84.93	30	120	
Tb	159	1	He	3600837	0.32	3888262	92.61	30	120	
Ho	165	1	He	3691015	0.79	3932562	93.86	30	120	
Bi	209	1	He	2592993	1.50	2874805	90.20	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	130_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:19:41-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.266	12.7	1115	13.0	1	
B	11	45	2	NoGas	4.407	3.4	21728	1.3	20	
Na	23	45	1	He	45.880	6.5	82938	3.7	400	
Mg	24	45	1	He	4.488	27.3	4371	20.9	1000	
Al	27	45	1	He	0.362	47.7	2264	2.0	50	
K	39	45	1	He	11.680	16.1	39180	3.8	1000	
Ca	44	45	1	He	5.025	28.8	1003	5.2	1000	
Ti	47	45	1	He	0.141	27.6	43	20.4	20	
V	51	45	1	He	0.077	160.8	529	136.6	2	
Cr	52	45	1	He	0.037	54.8	2299	5.1	2	
Mn	55	45	1	He	0.042	39.4	1206	6.1	2	
Fe	56	45	1	He	22.339	23.2	149316	21.2	50	
Co	59	103	1	He	0.022	2.3	300	2.9	1	
Ni	60	103	1	He	0.013	155.9	152	37.7	2	
Cu	63	103	1	He	0.205	13.9	3090	6.5	2	
Zn	66	103	1	He	0.012	458.2	1790	5.6	20	
As	75	103	1	He	0.249	6.8	392	3.3	2	
Se	78	103	1	He	0.280	39.5	76	14.2	2	
Sr	88	103	1	He	0.036	15.3	390	12.1	10	
Mo	95	103	1	He	0.957	19.7	3527	18.4	2	
Ag	107	103	1	He	0.024	13.1	308	11.9	0.2	
Cd	111	103	1	He	0.117	20.2	1360	2.8	0.2	
Sn	118	115	1	He	0.522	1.7	3719	1.5	10	
Sb	123	115	1	He	0.530	21.1	3125	16.9	1	
Ba	137	115	1	He	0.015	91.3	123	25.8	5	
W	182	209	1	He	1.306	12.7	21690	10.9	10	
Tl	205	165	1	He	0.089	14.4	3070	13.2	0.5	
Pb	208	209	1	He	0.184	3.3	9599	3.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1281837	0.86	1631381	78.57	30	120	
Sc	45	1	He	658383	1.40	829696	79.35	30	120	
Sc	45	2	NoGas	5378840	2.79	6325638	85.03	30	120	
Rh	103	1	He	2105025	0.99	2345543	89.75	30	120	
In	115	1	He	1255019	0.29	1419467	88.41	30	120	
Tb	159	1	He	3557435	1.58	3888262	91.49	30	120	
Ho	165	1	He	3665451	1.03	3932562	93.21	30	120	
Bi	209	1	He	2722672	0.39	2874805	94.71	30	120	

Sample Report

Sample Table

Sample Name	240-49393-v-1-c msd
Data File Name	131SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:23:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1045.637	1045.637	0.46	3669044	0.03	10000	
B	11	45	2	NoGas	325.422	325.422	1.04	884007	0.04	300	>LDR
Na	23	45	1	He	153441.527	153441.527	4.91	197681466	0.08	500000	
Mg	24	45	1	He	91913.169	91913.169	2.66	67349301	0.14	500000	
Al	27	45	1	He	9999.012	9999.012	4.15	4153413	0.24	200000	
K	39	45	1	He	13081.447	13081.447	5.90	9046020	0.14	500000	
Ca	44	45	1	He	113227.746	113227.746	3.45	4285962	2.64	500000	
Ti	47	45	1	He	106.334	106.334	4.50	22690	0.47	2500	
V	51	45	1	He	1048.671	1048.671	4.21	5530669	0.02	10000	
Cr	52	45	1	He	1044.082	1044.082	3.53	6621019	0.02	10000	
Mn	55	45	1	He	1115.470	1115.470	4.56	5556865	0.02	10000	
Fe	56	45	1	He	13808.240	13808.240	3.80	82540054	0.02	200000	
Co	59	103	1	He	977.774	977.774	0.60	9171179	0.01	10000	
Ni	60	103	1	He	987.986	987.986	0.22	2297852	0.04	10000	
Cu	63	103	1	He	983.250	983.250	1.29	6014842	0.02	10000	
Zn	66	103	1	He	932.554	932.554	0.54	1153466	0.08	10000	
As	75	103	1	He	988.200	988.200	0.72	786664	0.13	10000	
Se	78	103	1	He	983.064	983.064	1.07	82726	1.19	10000	
Sr	88	103	1	He	1249.165	1249.165	1.45	8077681	0.02	10000	
Mo	95	103	1	He	118.580	118.580	0.41	348496	0.03	2000	
Ag	107	103	1	He	103.822	103.822	1.02	1047958	0.01	300	
Cd	111	103	1	He	1081.130	1081.130	0.23	1900006	0.06	4000	
Sn	118	115	1	He	1199.466	1199.466	1.09	5009637	0.02	2000	
Sb	123	115	1	He	116.074	116.074	0.69	448123	0.03	300	
Ba	137	115	1	He	1329.243	1329.243	0.15	2519758	0.05	10000	
W	182	209	1	He	113.132	113.132	1.38	1320298	0.01	2500	
Tl	205	165	1	He	252.502	252.502	0.29	7773269	0.00	5000	
Pb	208	209	1	He	1051.247	1051.247	0.49	42227589	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1110102	0.23	1631381	68.05	30	120	
Sc	45	1	He	602761	3.69	829696	72.65	30	120	
Sc	45	2	NoGas	4785281	0.74	6325638	75.65	30	120	
Rh	103	1	He	1702948	0.81	2345543	72.60	30	120	
In	115	1	He	1001502	0.71	1419467	70.55	30	120	
Tb	159	1	He	3239571	1.37	3888262	83.32	30	120	
Ho	165	1	He	3354407	0.22	3932562	85.30	30	120	
Bi	209	1	He	2281866	0.51	2874805	79.37	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-2-a
Data File Name	132SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:27:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.472	0.472	5.09	1704	0.03	10000	
B	11	45	2	NoGas	1385.873	1385.873	0.65	3794390	0.04	300	>LDR
Na	23	45	1	He	109526.890	109526.890	2.07	144987791	0.08	500000	
Mg	24	45	1	He	26656.875	26656.875	2.73	20056332	0.13	500000	
Al	27	45	1	He	111.799	111.799	2.94	49651	0.23	200000	
K	39	45	1	He	17586.558	17586.558	3.49	12484450	0.14	500000	
Ca	44	45	1	He	44187.026	44187.026	3.02	1718115	2.57	500000	
Ti	47	45	1	He	1.899	1.899	26.86	428	0.44	2500	
V	51	45	1	He	0.638	0.638	15.48	3544	0.02	10000	
Cr	52	45	1	He	1.477	1.477	3.69	11537	0.01	10000	
Mn	55	45	1	He	163.472	163.472	2.24	837415	0.02	10000	
Fe	56	45	1	He	3813.042	3813.042	2.11	23415118	0.02	200000	
Co	59	103	1	He	0.465	0.465	10.28	4627	0.01	10000	
Ni	60	103	1	He	1.303	1.303	4.48	3289	0.04	10000	
Cu	63	103	1	He	1.253	1.253	5.52	9379	0.01	10000	
Zn	66	103	1	He	8.930	8.930	1.18	13123	0.07	10000	
As	75	103	1	He	3.732	3.732	1.34	3252	0.11	10000	
Se	78	103	1	He	1.346	1.346	8.65	159	0.85	10000	
Sr	88	103	1	He	1321.588	1321.588	0.70	8997281	0.01	10000	
Mo	95	103	1	He	1.532	1.532	9.25	4787	0.03	2000	
Ag	107	103	1	He	0.040	0.040	18.79	427	0.01	300	
Cd	111	103	1	He	0.246	0.246	2.83	1396	0.02	4000	
Sn	118	115	1	He	2.443	2.443	15.64	11953	0.02	2000	
Sb	123	115	1	He	0.870	0.870	1.17	4139	0.02	300	
Ba	137	115	1	He	152.882	152.882	0.56	315177	0.05	10000	
W	182	209	1	He	2.802	2.802	8.20	36947	0.01	2500	
Tl	205	165	1	He	0.266	0.266	29.85	8578	0.00	5000	
Pb	208	209	1	He	0.815	0.815	11.36	34664	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1120610	1.12	1631381	68.69	30	120	
Sc	45	1	He	618795	2.57	829696	74.58	30	120	
Sc	45	2	NoGas	4854173	0.42	6325638	76.74	30	120	
Rh	103	1	He	1792753	0.35	2345543	76.43	30	120	
In	115	1	He	1088948	0.71	1419467	76.72	30	120	
Tb	159	1	He	3402246	1.22	3888262	87.50	30	120	
Ho	165	1	He	3484974	1.13	3932562	88.62	30	120	
Bi	209	1	He	2368881	0.53	2874805	82.40	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-2-a
Data File Name	133SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:30:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.267	0.267	6.99	985	0.03	10000	
B	11	45	2	NoGas	1495.368	1495.368	1.22	4118672	0.04	300	>LDR
Na	23	45	1	He	115800.209	115800.209	3.62	153825872	0.08	500000	
Mg	24	45	1	He	28121.632	28121.632	2.33	21239880	0.13	500000	
Al	27	45	1	He	1.121	1.121	25.02	2460	0.05	200000	
K	39	45	1	He	18529.085	18529.085	2.50	13203921	0.14	500000	
Ca	44	45	1	He	46275.394	46275.394	1.71	1806536	2.56	500000	
Ti	47	45	1	He	0.393	0.393	53.42	96	0.41	2500	
V	51	45	1	He	0.443	0.443	27.78	2482	0.02	10000	
Cr	52	45	1	He	1.227	1.227	10.54	9931	0.01	10000	
Mn	55	45	1	He	172.267	172.267	2.59	885703	0.02	10000	
Fe	56	45	1	He	3868.686	3868.686	3.12	23841813	0.02	200000	
Co	59	103	1	He	0.390	0.390	5.42	3924	0.01	10000	
Ni	60	103	1	He	1.601	1.601	4.85	4055	0.04	10000	
Cu	63	103	1	He	0.647	0.647	2.16	5526	0.01	10000	
Zn	66	103	1	He	8.444	8.444	1.96	12599	0.07	10000	
As	75	103	1	He	3.057	3.057	1.26	2710	0.11	10000	
Se	78	103	1	He	0.618	0.618	16.23	95	0.65	10000	
Sr	88	103	1	He	1400.938	1400.938	1.38	9620715	0.01	10000	
Mo	95	103	1	He	0.750	0.750	7.24	2388	0.03	2000	
Ag	107	103	1	He	0.030	0.030	19.75	329	0.01	300	
Cd	111	103	1	He	0.116	0.116	7.44	1166	0.01	4000	
Sn	118	115	1	He	0.671	0.671	15.49	3878	0.02	2000	
Sb	123	115	1	He	0.693	0.693	6.03	3378	0.02	300	
Ba	137	115	1	He	157.035	157.035	1.48	321869	0.05	10000	
W	182	209	1	He	1.766	1.766	2.70	24252	0.01	2500	
Tl	205	165	1	He	0.048	0.048	13.75	1575	0.00	5000	
Pb	208	209	1	He	0.253	0.253	8.71	11151	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1130580	1.82	1631381	69.30	30	120	
Sc	45	1	He	621188	3.10	829696	74.87	30	120	
Sc	45	2	NoGas	4884701	1.93	6325638	77.22	30	120	
Rh	103	1	He	1808623	1.30	2345543	77.11	30	120	
In	115	1	He	1082690	0.40	1419467	76.27	30	120	
Tb	159	1	He	3379022	0.69	3888262	86.90	30	120	
Ho	165	1	He	3451851	1.14	3932562	87.78	30	120	
Bi	209	1	He	2352011	0.35	2874805	81.81	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-3-a
Data File Name	134SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:34:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.255	0.255	4.06	1022	0.02	10000	
B	11	45	2	NoGas	285.108	285.108	0.71	851231	0.03	300	
Na	23	45	1	He	78268.139	78268.139	2.31	107917044	0.07	500000	
Mg	24	45	1	He	77507.779	77507.779	2.29	60744862	0.13	500000	
Al	27	45	1	He	-0.386	-0.386	-36.21	1883	-0.02	200000	
K	39	45	1	He	2485.873	2485.873	2.20	1864091	0.13	500000	
Ca	44	45	1	He	85615.954	85615.954	3.40	3466946	2.47	500000	
Ti	47	45	1	He	0.270	0.270	24.13	72	0.37	2500	
V	51	45	1	He	0.011	0.011	1723.96	152	0.01	10000	
Cr	52	45	1	He	1.092	1.092	7.00	9401	0.01	10000	
Mn	55	45	1	He	284.156	284.156	1.66	1515622	0.02	10000	
Fe	56	45	1	He	580.817	580.817	2.16	3717828	0.02	200000	
Co	59	103	1	He	0.221	0.221	4.04	2280	0.01	10000	
Ni	60	103	1	He	1.134	1.134	2.98	2951	0.04	10000	
Cu	63	103	1	He	0.549	0.549	8.88	4972	0.01	10000	
Zn	66	103	1	He	4.054	4.054	2.57	6959	0.06	10000	
As	75	103	1	He	0.884	0.884	4.56	889	0.10	10000	
Se	78	103	1	He	0.759	0.759	17.43	110	0.69	10000	
Sr	88	103	1	He	351.719	351.719	1.32	2457832	0.01	10000	
Mo	95	103	1	He	3.152	3.152	1.71	10056	0.03	2000	
Ag	107	103	1	He	0.033	0.033	9.18	368	0.01	300	
Cd	111	103	1	He	0.118	0.118	14.73	1191	0.01	4000	
Sn	118	115	1	He	0.395	0.395	12.78	2693	0.01	2000	
Sb	123	115	1	He	0.545	0.545	3.52	2827	0.02	300	
Ba	137	115	1	He	193.413	193.413	0.99	405780	0.05	10000	
W	182	209	1	He	0.379	0.379	1.45	7695	0.00	2500	
Tl	205	165	1	He	0.024	0.024	3.45	850	0.00	5000	
Pb	208	209	1	He	0.228	0.228	7.45	10198	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1226131	1.78	1631381	75.16	30	120	
Sc	45	1	He	644378	1.22	829696	77.66	30	120	
Sc	45	2	NoGas	5253114	1.31	6325638	83.04	30	120	
Rh	103	1	He	1840196	1.42	2345543	78.46	30	120	
In	115	1	He	1108316	1.22	1419467	78.08	30	120	
Tb	159	1	He	3397727	0.98	3888262	87.38	30	120	
Ho	165	1	He	3522807	0.22	3932562	89.58	30	120	
Bi	209	1	He	2381016	1.67	2874805	82.82	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-3-a
Data File Name	135SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:38:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.204	0.204	19.74	837	0.02	10000	
B	11	45	2	NoGas	271.476	271.476	0.56	809846	0.03	300	
Na	23	45	1	He	82969.948	82969.948	3.16	118259880	0.07	500000	
Mg	24	45	1	He	75175.221	75175.221	3.30	60901951	0.12	500000	
Al	27	45	1	He	-1.289	-1.289	-13.46	1533	-0.08	200000	
K	39	45	1	He	2432.411	2432.411	3.36	1886027	0.13	500000	
Ca	44	45	1	He	84610.163	84610.163	2.89	3542518	2.39	500000	
Ti	47	45	1	He	0.288	0.288	59.75	78	0.37	2500	
V	51	45	1	He	-0.221	-0.221	-152.84	-1220	0.02	10000	
Cr	52	45	1	He	1.041	1.041	2.11	9370	0.01	10000	
Mn	55	45	1	He	229.334	229.334	2.43	1264786	0.02	10000	
Fe	56	45	1	He	380.978	380.978	2.99	2522487	0.02	200000	
Co	59	103	1	He	0.236	0.236	1.23	2499	0.01	10000	
Ni	60	103	1	He	1.207	1.207	1.44	3224	0.04	10000	
Cu	63	103	1	He	0.363	0.363	6.75	3853	0.01	10000	
Zn	66	103	1	He	1.546	1.546	2.36	3714	0.04	10000	
As	75	103	1	He	0.820	0.820	2.88	856	0.10	10000	
Se	78	103	1	He	0.365	0.365	19.20	76	0.48	10000	
Sr	88	103	1	He	328.109	328.109	1.64	2357465	0.01	10000	
Mo	95	103	1	He	3.007	3.007	3.37	9866	0.03	2000	
Ag	107	103	1	He	0.032	0.032	4.43	369	0.01	300	
Cd	111	103	1	He	0.105	0.105	17.37	1199	0.01	4000	
Sn	118	115	1	He	0.333	0.333	9.32	2482	0.01	2000	
Sb	123	115	1	He	0.424	0.424	2.72	2378	0.02	300	
Ba	137	115	1	He	178.620	178.620	1.25	385931	0.05	10000	
W	182	209	1	He	0.253	0.253	19.93	6227	0.00	2500	
Tl	205	165	1	He	0.012	0.012	11.07	469	0.00	5000	
Pb	208	209	1	He	0.164	0.164	7.24	7642	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1247504	0.79	1631381	76.47	30	120	
Sc	45	1	He	666572	3.98	829696	80.34	30	120	
Sc	45	2	NoGas	5246003	1.59	6325638	82.93	30	120	
Rh	103	1	He	1892070	0.83	2345543	80.67	30	120	
In	115	1	He	1141308	0.31	1419467	80.40	30	120	
Tb	159	1	He	3511225	1.07	3888262	90.30	30	120	
Ho	165	1	He	3562462	0.36	3932562	90.59	30	120	
Bi	209	1	He	2406871	1.24	2874805	83.72	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-4-a
Data File Name	136SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:42:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.204	0.204	10.08	822	0.02	10000	
B	11	45	2	NoGas	265.586	265.586	0.61	799046	0.03	300	
Na	23	45	1	He	83857.904	83857.904	2.51	120357069	0.07	500000	
Mg	24	45	1	He	67175.490	67175.490	2.66	54800385	0.12	500000	
Al	27	45	1	He	3.852	3.852	13.63	3920	0.10	200000	
K	39	45	1	He	2621.569	2621.569	1.58	2044906	0.13	500000	
Ca	44	45	1	He	86376.492	86376.492	3.20	3640698	2.37	500000	
Ti	47	45	1	He	0.487	0.487	24.28	127	0.38	2500	
V	51	45	1	He	-0.052	-0.052	-53.90	-221	0.02	10000	
Cr	52	45	1	He	1.082	1.082	8.47	9715	0.01	10000	
Mn	55	45	1	He	138.035	138.035	1.78	766882	0.02	10000	
Fe	56	45	1	He	1056.047	1056.047	2.52	7033477	0.02	200000	
Co	59	103	1	He	0.399	0.399	2.18	4168	0.01	10000	
Ni	60	103	1	He	1.281	1.281	5.26	3394	0.04	10000	
Cu	63	103	1	He	0.699	0.699	1.74	6094	0.01	10000	
Zn	66	103	1	He	2.569	2.569	2.12	5087	0.05	10000	
As	75	103	1	He	0.828	0.828	0.53	859	0.10	10000	
Se	78	103	1	He	0.370	0.370	26.00	76	0.49	10000	
Sr	88	103	1	He	287.304	287.304	1.08	2052266	0.01	10000	
Mo	95	103	1	He	3.113	3.113	2.13	10152	0.03	2000	
Ag	107	103	1	He	0.024	0.024	3.65	274	0.01	300	
Cd	111	103	1	He	0.122	0.122	28.70	1223	0.01	4000	
Sn	118	115	1	He	0.299	0.299	22.31	2289	0.01	2000	
Sb	123	115	1	He	0.458	0.458	6.08	2495	0.02	300	
Ba	137	115	1	He	130.031	130.031	1.17	277580	0.05	10000	
W	182	209	1	He	0.318	0.318	6.89	7050	0.00	2500	
Tl	205	165	1	He	0.011	0.011	7.13	427	0.00	5000	
Pb	208	209	1	He	0.153	0.153	5.49	7191	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1223943	1.09	1631381	75.02	30	120	
Sc	45	1	He	670883	2.19	829696	80.86	30	120	
Sc	45	2	NoGas	5289490	0.67	6325638	83.62	30	120	
Rh	103	1	He	1880905	0.65	2345543	80.19	30	120	
In	115	1	He	1127575	0.59	1419467	79.44	30	120	
Tb	159	1	He	3458627	0.61	3888262	88.95	30	120	
Ho	165	1	He	3531941	0.63	3932562	89.81	30	120	
Bi	209	1	He	2412968	1.60	2874805	83.94	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-4-a
Data File Name	137SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:46:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.145	0.145	12.19	593	0.02	10000	
B	11	45	2	NoGas	271.329	271.329	0.48	811466	0.03	300	
Na	23	45	1	He	88620.095	88620.095	2.89	126147402	0.07	500000	
Mg	24	45	1	He	68446.413	68446.413	2.55	55382955	0.12	500000	
Al	27	45	1	He	0.897	0.897	37.62	2532	0.04	200000	
K	39	45	1	He	2713.117	2713.117	2.82	2097453	0.13	500000	
Ca	44	45	1	He	87158.422	87158.422	2.11	3644335	2.39	500000	
Ti	47	45	1	He	0.304	0.304	19.88	82	0.37	2500	
V	51	45	1	He	-0.171	-0.171	-191.82	-882	0.02	10000	
Cr	52	45	1	He	1.000	1.000	6.85	9066	0.01	10000	
Mn	55	45	1	He	123.347	123.347	2.37	679749	0.02	10000	
Fe	56	45	1	He	812.154	812.154	1.89	5366509	0.02	200000	
Co	59	103	1	He	0.366	0.366	5.92	3833	0.01	10000	
Ni	60	103	1	He	2.252	2.252	1.40	5888	0.04	10000	
Cu	63	103	1	He	0.874	0.874	2.31	7282	0.01	10000	
Zn	66	103	1	He	2.398	2.398	7.52	4853	0.05	10000	
As	75	103	1	He	0.843	0.843	10.02	872	0.10	10000	
Se	78	103	1	He	0.347	0.347	6.34	74	0.47	10000	
Sr	88	103	1	He	287.719	287.719	1.94	2054966	0.01	10000	
Mo	95	103	1	He	3.047	3.047	1.10	9938	0.03	2000	
Ag	107	103	1	He	0.021	0.021	1.03	242	0.01	300	
Cd	111	103	1	He	0.093	0.093	1.84	1169	0.01	4000	
Sn	118	115	1	He	0.264	0.264	17.28	2137	0.01	2000	
Sb	123	115	1	He	0.504	0.504	11.37	2709	0.02	300	
Ba	137	115	1	He	128.619	128.619	1.17	276015	0.05	10000	
W	182	209	1	He	0.333	0.333	9.09	7276	0.00	2500	
Tl	205	165	1	He	0.009	0.009	12.26	339	0.00	5000	
Pb	208	209	1	He	0.090	0.090	2.50	4539	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1223138	0.30	1631381	74.98	30	120	
Sc	45	1	He	665460	2.57	829696	80.21	30	120	
Sc	45	2	NoGas	5259315	0.90	6325638	83.14	30	120	
Rh	103	1	He	1880929	1.10	2345543	80.19	30	120	
In	115	1	He	1133495	0.31	1419467	79.85	30	120	
Tb	159	1	He	3460571	0.52	3888262	89.00	30	120	
Ho	165	1	He	3508519	0.76	3932562	89.22	30	120	
Bi	209	1	He	2428996	1.20	2874805	84.49	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-5-a
Data File Name	138SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:49:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.118	0.118	7.37	489	0.02	10000	
B	11	45	2	NoGas	108.169	108.169	0.15	318838	0.03	300	
Na	23	45	1	He	9468.726	9468.726	1.05	13189268	0.07	500000	
Mg	24	45	1	He	54291.429	54291.429	1.83	42928357	0.13	500000	
Al	27	45	1	He	4.158	4.158	11.03	3942	0.11	200000	
K	39	45	1	He	1408.911	1408.911	1.94	1078780	0.13	500000	
Ca	44	45	1	He	117379.211	117379.211	2.58	4794591	2.45	500000	
Ti	47	45	1	He	0.243	0.243	22.27	67	0.36	2500	
V	51	45	1	He	0.043	0.043	511.68	322	0.01	10000	
Cr	52	45	1	He	1.107	1.107	6.88	9586	0.01	10000	
Mn	55	45	1	He	156.723	156.723	2.35	843592	0.02	10000	
Fe	56	45	1	He	69.942	69.942	2.72	454766	0.02	200000	
Co	59	103	1	He	0.557	0.557	1.60	5761	0.01	10000	
Ni	60	103	1	He	1.297	1.297	2.99	3409	0.04	10000	
Cu	63	103	1	He	1.286	1.286	2.72	9987	0.01	10000	
Zn	66	103	1	He	2.022	2.022	8.11	4308	0.05	10000	
As	75	103	1	He	0.993	0.993	6.78	996	0.10	10000	
Se	78	103	1	He	0.847	0.847	7.13	119	0.71	10000	
Sr	88	103	1	He	228.188	228.188	1.86	1617417	0.01	10000	
Mo	95	103	1	He	1.140	1.140	1.55	3722	0.03	2000	
Ag	107	103	1	He	0.022	0.022	10.13	250	0.01	300	
Cd	111	103	1	He	0.128	0.128	15.83	1226	0.01	4000	
Sn	118	115	1	He	0.232	0.232	33.09	1974	0.01	2000	
Sb	123	115	1	He	0.481	0.481	11.85	2591	0.02	300	
Ba	137	115	1	He	54.814	54.814	1.24	116963	0.05	10000	
W	182	209	1	He	0.194	0.194	9.46	5560	0.00	2500	
Tl	205	165	1	He	0.012	0.012	15.28	450	0.00	5000	
Pb	208	209	1	He	0.119	0.119	6.53	5779	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1217814	1.24	1631381	74.65	30	120	
Sc	45	1	He	650209	2.83	829696	78.37	30	120	
Sc	45	2	NoGas	5105552	0.95	6325638	80.71	30	120	
Rh	103	1	He	1866606	0.66	2345543	79.58	30	120	
In	115	1	He	1126580	0.25	1419467	79.37	30	120	
Tb	159	1	He	3434179	1.18	3888262	88.32	30	120	
Ho	165	1	He	3575832	1.72	3932562	90.93	30	120	
Bi	209	1	He	2432042	0.55	2874805	84.60	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-5-a
Data File Name	139SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:53:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.121	0.121	25.82	496	0.02	10000	
B	11	45	2	NoGas	105.253	105.253	0.65	308311	0.03	300	
Na	23	45	1	He	9451.577	9451.577	2.13	13153278	0.07	500000	
Mg	24	45	1	He	53403.789	53403.789	2.10	42190278	0.13	500000	
Al	27	45	1	He	11.962	11.962	2.57	7430	0.16	200000	
K	39	45	1	He	1404.544	1404.544	2.89	1074577	0.13	500000	
Ca	44	45	1	He	115296.746	115296.746	2.10	4706382	2.45	500000	
Ti	47	45	1	He	0.307	0.307	5.25	81	0.38	2500	
V	51	45	1	He	-0.092	-0.092	-264.93	-442	0.02	10000	
Cr	52	45	1	He	1.488	1.488	5.76	12188	0.01	10000	
Mn	55	45	1	He	142.770	142.770	0.90	768126	0.02	10000	
Fe	56	45	1	He	29.048	29.048	1.15	190869	0.02	200000	
Co	59	103	1	He	0.503	0.503	4.73	5166	0.01	10000	
Ni	60	103	1	He	1.529	1.529	2.45	3968	0.04	10000	
Cu	63	103	1	He	1.322	1.322	1.62	10146	0.01	10000	
Zn	66	103	1	He	2.075	2.075	8.67	4345	0.05	10000	
As	75	103	1	He	1.006	1.006	1.92	999	0.10	10000	
Se	78	103	1	He	0.857	0.857	11.47	119	0.72	10000	
Sr	88	103	1	He	225.894	225.894	1.60	1588872	0.01	10000	
Mo	95	103	1	He	1.184	1.184	3.03	3832	0.03	2000	
Ag	107	103	1	He	0.020	0.020	5.11	227	0.01	300	
Cd	111	103	1	He	0.110	0.110	18.85	1182	0.01	4000	
Sn	118	115	1	He	0.227	0.227	27.86	1934	0.01	2000	
Sb	123	115	1	He	0.426	0.426	4.69	2334	0.02	300	
Ba	137	115	1	He	53.533	53.533	0.48	113108	0.05	10000	
W	182	209	1	He	0.177	0.177	9.98	5412	0.00	2500	
Tl	205	165	1	He	0.011	0.011	25.72	429	0.00	5000	
Pb	208	209	1	He	0.075	0.075	2.27	3928	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1210750	1.51	1631381	74.22	30	120	
Sc	45	1	He	649610	1.69	829696	78.29	30	120	
Sc	45	2	NoGas	5070279	0.08	6325638	80.15	30	120	
Rh	103	1	He	1852045	0.55	2345543	78.96	30	120	
In	115	1	He	1115531	0.36	1419467	78.59	30	120	
Tb	159	1	He	3369958	1.01	3888262	86.67	30	120	
Ho	165	1	He	3512803	0.64	3932562	89.33	30	120	
Bi	209	1	He	2458847	1.22	2874805	85.53	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-6-a
Data File Name	140SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:57:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.126	0.126	12.59	522	0.02	10000	
B	11	45	2	NoGas	277.545	277.545	1.17	808181	0.03	300	
Na	23	45	1	He	40959.045	40959.045	2.27	56966490	0.07	500000	
Mg	24	45	1	He	63334.729	63334.729	2.49	50059609	0.13	500000	
Al	27	45	1	He	0.307	0.307	64.82	2211	0.01	200000	
K	39	45	1	He	4933.478	4933.478	1.80	3701846	0.13	500000	
Ca	44	45	1	He	99746.939	99746.939	1.35	4074568	2.45	500000	
Ti	47	45	1	He	0.241	0.241	41.80	66	0.37	2500	
V	51	45	1	He	-0.013	-0.013	-1723.21	27	-0.05	10000	
Cr	52	45	1	He	0.977	0.977	8.81	8690	0.01	10000	
Mn	55	45	1	He	3.580	3.580	0.96	20214	0.02	10000	
Fe	56	45	1	He	10.131	10.131	2.73	68935	0.01	200000	
Co	59	103	1	He	0.378	0.378	0.48	3872	0.01	10000	
Ni	60	103	1	He	2.790	2.790	3.10	7125	0.04	10000	
Cu	63	103	1	He	0.308	0.308	2.99	3389	0.01	10000	
Zn	66	103	1	He	4.918	4.918	2.94	8125	0.06	10000	
As	75	103	1	He	0.922	0.922	5.60	923	0.10	10000	
Se	78	103	1	He	0.266	0.266	2.71	65	0.41	10000	
Sr	88	103	1	He	519.376	519.376	1.20	3635228	0.01	10000	
Mo	95	103	1	He	3.637	3.637	0.14	11614	0.03	2000	
Ag	107	103	1	He	0.017	0.017	17.30	193	0.01	300	
Cd	111	103	1	He	0.098	0.098	22.79	1154	0.01	4000	
Sn	118	115	1	He	0.160	0.160	31.57	1615	0.01	2000	
Sb	123	115	1	He	0.466	0.466	8.56	2492	0.02	300	
Ba	137	115	1	He	48.444	48.444	0.61	101861	0.05	10000	
W	182	209	1	He	0.164	0.164	18.74	5097	0.00	2500	
Tl	205	165	1	He	0.034	0.034	4.88	1158	0.00	5000	
Pb	208	209	1	He	0.076	0.076	5.88	3849	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1225515	2.02	1631381	75.12	30	120	
Sc	45	1	He	650025	2.48	829696	78.34	30	120	
Sc	45	2	NoGas	5122209	1.21	6325638	80.98	30	120	
Rh	103	1	He	1843117	0.32	2345543	78.58	30	120	
In	115	1	He	1110057	0.33	1419467	78.20	30	120	
Tb	159	1	He	3404746	0.38	3888262	87.56	30	120	
Ho	165	1	He	3501767	0.77	3932562	89.05	30	120	
Bi	209	1	He	2391506	1.58	2874805	83.19	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	141_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:01:27-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.869	1.467	191750	0.32	50	99.7	89.5	110.5	
B	11	45	2	NoGas	62.579	2.150	190634	1.05	50	125.2	89.5	110.5	CCV Failed
Na	23	45	1	He	24347.335	2.301	35353336	1.84	25000	97.4	89.5	110.5	
Mg	24	45	1	He	24352.714	3.533	20085860	1.06	25000	97.4	89.5	110.5	
Al	27	45	1	He	236.666	3.253	112820	1.58	250	94.7	89.5	110.5	
K	39	45	1	He	25052.715	3.208	19486335	0.92	25000	100.2	89.5	110.5	
Ca	44	45	1	He	24567.589	3.364	1047612	0.75	25000	98.3	89.5	110.5	
Ti	47	45	1	He	48.877	6.511	11739	2.50	50	97.8	89.5	110.5	
V	51	45	1	He	49.223	1.526	292554	2.62	50	98.4	89.5	110.5	
Cr	52	45	1	He	49.693	3.298	356801	0.83	50	99.4	89.5	110.5	
Mn	55	45	1	He	253.734	3.674	1424118	0.64	250	101.5	89.5	110.5	
Fe	56	45	1	He	12404.585	3.375	83489108	1.05	12500	99.2	89.5	110.5	
Co	59	103	1	He	47.108	0.730	498976	0.89	50	94.2	89.5	110.5	
Ni	60	103	1	He	46.843	1.437	123116	1.21	50	93.7	89.5	110.5	
Cu	63	103	1	He	47.137	0.440	326977	1.29	50	94.3	89.5	110.5	
Zn	66	103	1	He	47.378	1.386	67706	0.93	50	94.8	89.5	110.5	
As	75	103	1	He	48.500	0.556	43726	1.24	50	97.0	89.5	110.5	
Se	78	103	1	He	48.909	0.810	4688	0.63	50	97.8	89.5	110.5	
Sr	88	103	1	He	49.154	0.589	359036	1.29	50	98.3	89.5	110.5	
Mo	95	103	1	He	49.956	2.766	165785	2.02	50	99.9	89.5	110.5	
Ag	107	103	1	He	49.527	0.636	564559	1.45	50	99.1	89.5	110.5	
Cd	111	103	1	He	49.970	0.638	100129	0.94	50	99.9	89.5	110.5	
Sn	118	115	1	He	50.475	0.254	243918	0.44	50	100.9	89.5	110.5	
Sb	123	115	1	He	52.646	0.752	234607	0.38	50	105.3	89.5	110.5	
Ba	137	115	1	He	52.063	0.690	113862	1.20	50	104.1	89.5	110.5	
W	182	209	1	He	49.701	1.692	632800	0.66	50	99.4	89.5	110.5	
Tl	205	165	1	He	49.560	5.601	1616865	5.63	50	99.1	89.5	110.5	
Pb	208	209	1	He	48.622	1.077	2125472	0.66	50	97.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1216394	1.22	1631381	74.56	30	120	
Sc	45	1	He	678672	4.18	829696	81.80	30	120	
Sc	45	2	NoGas	5182912	1.06	6325638	81.94	30	120	
Rh	103	1	He	1922965	0.85	2345543	81.98	30	120	
In	115	1	He	1154612	0.53	1419467	81.34	30	120	
Tb	159	1	He	3442051	1.52	3888262	88.52	30	120	
Ho	165	1	He	3554675	0.15	3932562	90.39	30	120	
Bi	209	1	He	2482641	1.36	2874805	86.36	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	142_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:05:18-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.108	20.0	452	18.1	1	
B	11	45	2	NoGas	12.620	2.9	43916	1.1	20	
Na	23	45	1	He	37.516	8.3	68996	4.6	400	
Mg	24	45	1	He	4.176	24.6	3997	18.4	1000	
Al	27	45	1	He	-0.023	-407.0	2027	3.5	50	
K	39	45	1	He	9.366	24.2	36289	3.3	1000	
Ca	44	45	1	He	5.381	51.1	987	10.8	1000	
Ti	47	45	1	He	0.078	73.1	28	45.4	20	
V	51	45	1	He	-0.004	-3389.4	55	1538.0	2	
Cr	52	45	1	He	0.033	56.0	2204	4.4	2	
Mn	55	45	1	He	0.038	28.5	1148	3.5	2	
Fe	56	45	1	He	20.883	26.0	135523	23.7	50	
Co	59	103	1	He	0.006	47.6	104	29.7	1	
Ni	60	103	1	He	-0.009	-34.2	88	8.8	2	
Cu	63	103	1	He	0.217	3.1	3073	1.9	2	
Zn	66	103	1	He	-0.076	-81.3	1598	6.7	20	
As	75	103	1	He	0.081	17.2	219	6.9	2	
Se	78	103	1	He	0.115	68.0	57	14.8	2	
Sr	88	103	1	He	0.023	45.4	281	28.4	10	
Mo	95	103	1	He	0.805	20.2	2876	19.6	2	
Ag	107	103	1	He	0.015	17.2	184	16.8	0.2	
Cd	111	103	1	He	0.090	36.3	1257	4.7	0.2	
Sn	118	115	1	He	0.335	10.5	2641	6.7	10	
Sb	123	115	1	He	0.433	23.5	2562	18.4	1	
Ba	137	115	1	He	0.005	178.0	97	21.0	5	
W	182	209	1	He	1.091	14.7	18052	11.1	10	
Tl	205	165	1	He	0.040	26.4	1395	24.8	0.5	
Pb	208	209	1	He	0.038	12.3	2485	7.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1221612	2.11	1631381	74.88	30	120	
Sc	45	1	He	638459	1.54	829696	76.95	30	120	
Sc	45	2	NoGas	5069803	1.54	6325638	80.15	30	120	
Rh	103	1	He	2032744	0.89	2345543	86.66	30	120	
In	115	1	He	1210660	0.06	1419467	85.29	30	120	
Tb	159	1	He	3505091	0.45	3888262	90.15	30	120	
Ho	165	1	He	3595334	0.54	3932562	91.42	30	120	
Bi	209	1	He	2631894	1.09	2874805	91.55	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-6-a
Data File Name	143SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:09:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.130	0.130	13.54	515	0.03	10000	
B	11	45	2	NoGas	260.414	260.414	2.16	750457	0.03	300	
Na	23	45	1	He	40360.978	40360.978	2.12	55425748	0.07	500000	
Mg	24	45	1	He	62466.248	62466.248	3.34	48742930	0.13	500000	
Al	27	45	1	He	-0.426	-0.426	-45.30	1858	-0.02	200000	
K	39	45	1	He	4776.596	4776.596	2.21	3539269	0.13	500000	
Ca	44	45	1	He	100097.571	100097.571	2.74	4036084	2.48	500000	
Ti	47	45	1	He	0.253	0.253	5.40	68	0.37	2500	
V	51	45	1	He	-0.023	-0.023	-856.37	-43	0.05	10000	
Cr	52	45	1	He	0.909	0.909	6.53	8129	0.01	10000	
Mn	55	45	1	He	4.185	4.185	1.67	23166	0.02	10000	
Fe	56	45	1	He	13.366	13.366	9.05	88761	0.02	200000	
Co	59	103	1	He	0.432	0.432	2.82	4319	0.01	10000	
Ni	60	103	1	He	2.871	2.871	5.33	7147	0.04	10000	
Cu	63	103	1	He	0.377	0.377	12.10	3745	0.01	10000	
Zn	66	103	1	He	5.308	5.308	4.01	8437	0.06	10000	
As	75	103	1	He	0.709	0.709	9.74	721	0.10	10000	
Se	78	103	1	He	0.203	0.203	45.61	58	0.35	10000	
Sr	88	103	1	He	501.055	501.055	3.23	3421458	0.01	10000	
Mo	95	103	1	He	3.997	3.997	3.04	12451	0.03	2000	
Ag	107	103	1	He	0.020	0.020	2.66	217	0.01	300	
Cd	111	103	1	He	0.120	0.120	34.81	1166	0.01	4000	
Sn	118	115	1	He	0.476	0.476	17.24	3037	0.02	2000	
Sb	123	115	1	He	0.586	0.586	3.47	2970	0.02	300	
Ba	137	115	1	He	47.621	47.621	0.34	99040	0.05	10000	
W	182	209	1	He	0.409	0.409	7.90	8162	0.01	2500	
Tl	205	165	1	He	0.045	0.045	5.96	1472	0.00	5000	
Pb	208	209	1	He	0.080	0.080	6.38	4089	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1179006	0.94	1631381	72.27	30	120	
Sc	45	1	He	641734	1.86	829696	77.35	30	120	
Sc	45	2	NoGas	5067252	2.32	6325638	80.11	30	120	
Rh	103	1	He	1799174	2.85	2345543	76.71	30	120	
In	115	1	He	1097922	1.20	1419467	77.35	30	120	
Tb	159	1	He	3351247	0.65	3888262	86.19	30	120	
Ho	165	1	He	3397871	1.51	3932562	86.40	30	120	
Bi	209	1	He	2410448	0.69	2874805	83.85	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	144_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:13:08-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.179	1.217	185699	0.46	50	96.4	89.5	110.5	
B	11	45	2	NoGas	58.900	1.426	180210	1.81	50	117.8	89.5	110.5	CCV Failed
Na	23	45	1	He	24905.042	8.617	34784033	0.18	25000	99.6	89.5	110.5	
Mg	24	45	1	He	25071.542	8.393	19901311	1.45	25000	100.3	89.5	110.5	
Al	27	45	1	He	244.743	8.356	112203	0.77	250	97.9	89.5	110.5	
K	39	45	1	He	26161.966	8.814	19575127	1.22	25000	104.6	89.5	110.5	
Ca	44	45	1	He	25253.200	7.980	1036512	1.10	25000	101.0	89.5	110.5	
Ti	47	45	1	He	50.401	7.385	11669	3.07	50	100.8	89.5	110.5	
V	51	45	1	He	51.531	10.268	294236	1.55	50	103.1	89.5	110.5	
Cr	52	45	1	He	50.790	8.613	350857	0.92	50	101.6	89.5	110.5	
Mn	55	45	1	He	252.614	8.744	1364223	0.54	250	101.0	89.5	110.5	
Fe	56	45	1	He	12762.112	9.493	82602992	0.96	12500	102.1	89.5	110.5	
Co	59	103	1	He	47.724	3.403	488083	1.04	50	95.4	89.5	110.5	
Ni	60	103	1	He	47.401	2.341	120320	1.44	50	94.8	89.5	110.5	
Cu	63	103	1	He	48.020	2.652	321620	0.18	50	96.0	89.5	110.5	
Zn	66	103	1	He	47.998	3.108	66215	0.40	50	96.0	89.5	110.5	
As	75	103	1	He	49.182	2.711	42815	0.34	50	98.4	89.5	110.5	
Se	78	103	1	He	50.368	2.258	4661	0.69	50	100.7	89.5	110.5	
Sr	88	103	1	He	50.277	2.731	354622	0.95	50	100.6	89.5	110.5	
Mo	95	103	1	He	50.536	4.402	161938	2.44	50	101.1	89.5	110.5	
Ag	107	103	1	He	50.661	2.204	557665	0.62	50	101.3	89.5	110.5	
Cd	111	103	1	He	51.186	2.639	99022	1.22	50	102.4	89.5	110.5	
Sn	118	115	1	He	51.469	2.065	241678	2.32	50	102.9	89.5	110.5	
Sb	123	115	1	He	53.618	3.476	232083	0.37	50	107.2	89.5	110.5	
Ba	137	115	1	He	52.748	3.002	112066	1.26	50	105.5	89.5	110.5	
W	182	209	1	He	49.686	4.461	621442	1.29	50	99.4	89.5	110.5	
Tl	205	165	1	He	50.353	6.877	1585778	3.90	50	100.7	89.5	110.5	
Pb	208	209	1	He	48.532	2.749	2084856	1.67	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1219264	0.93	1631381	74.74	30	120	
Sc	45	1	He	655776	9.03	829696	79.04	30	120	
Sc	45	2	NoGas	5191071	1.03	6325638	82.06	30	120	
Rh	103	1	He	1857743	2.59	2345543	79.20	30	120	
In	115	1	He	1122346	3.24	1419467	79.07	30	120	
Tb	159	1	He	3331128	3.05	3888262	85.67	30	120	
Ho	165	1	He	3436388	3.22	3932562	87.38	30	120	
Bi	209	1	He	2440754	3.19	2874805	84.90	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	145_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:16:56-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.066	15.2	293	14.4	1	
B	11	45	2	NoGas	12.416	1.2	44591	1.4	20	
Na	23	45	1	He	31.657	8.1	61016	3.9	400	
Mg	24	45	1	He	3.856	23.6	3749	16.9	1000	
Al	27	45	1	He	0.065	479.0	2066	6.8	50	
K	39	45	1	He	11.215	22.8	37647	3.0	1000	
Ca	44	45	1	He	3.207	112.2	899	14.2	1000	
Ti	47	45	1	He	0.107	50.3	34	34.0	20	
V	51	45	1	He	0.065	67.5	444	54.3	2	
Cr	52	45	1	He	0.001	284.8	1990	0.8	2	
Mn	55	45	1	He	0.022	86.9	1063	8.1	2	
Fe	56	45	1	He	22.154	25.9	143534	23.4	50	
Co	59	103	1	He	0.005	85.8	94	47.9	1	
Ni	60	103	1	He	-0.012	-32.0	78	13.1	2	
Cu	63	103	1	He	0.122	14.7	2361	5.5	2	
Zn	66	103	1	He	-0.090	-51.4	1569	4.9	20	
As	75	103	1	He	0.082	28.3	218	10.6	2	
Se	78	103	1	He	0.174	45.4	62	12.0	2	
Sr	88	103	1	He	0.016	4.5	223	3.0	10	
Mo	95	103	1	He	0.853	21.0	3029	20.6	2	
Ag	107	103	1	He	0.016	26.4	199	26.5	0.2	
Cd	111	103	1	He	0.095	12.1	1259	2.6	0.2	
Sn	118	115	1	He	0.296	30.4	2445	18.1	10	
Sb	123	115	1	He	0.431	11.4	2556	8.3	1	
Ba	137	115	1	He	0.004	147.7	93	12.4	5	
W	182	209	1	He	1.156	13.0	18782	10.6	10	
Tl	205	165	1	He	0.044	20.0	1486	19.7	0.5	
Pb	208	209	1	He	0.039	18.1	2522	12.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1238949	1.16	1631381	75.94	30	120	
Sc	45	1	He	638734	1.94	829696	76.98	30	120	
Sc	45	2	NoGas	5215755	0.67	6325638	82.45	30	120	
Rh	103	1	He	2021216	0.72	2345543	86.17	30	120	
In	115	1	He	1211056	0.67	1419467	85.32	30	120	
Tb	159	1	He	3475600	1.30	3888262	89.39	30	120	
Ho	165	1	He	3540066	0.55	3932562	90.02	30	120	
Bi	209	1	He	2609350	1.03	2874805	90.77	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	146CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:20:48-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.039	1.039	6.625	4064	6.01	1	103.9	69.5	130.5	
B	11	2	NoGas	28.471	28.471	2.150	91561	0.58	20	142.4	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1080.635	1080.635	0.869	1560450	1.61	1000	108.1	69.5	130.5	
Mg	24	1	He	1064.644	1064.644	2.399	864176	1.20	1000	106.5	69.5	130.5	
Al	27	1	He	48.098	48.098	1.086	24240	1.38	50	96.2	69.5	130.5	
K	39	1	He	1090.392	1090.392	1.616	863381	1.06	1000	109.0	69.5	130.5	
Ca	44	1	He	1051.874	1051.874	1.312	44879	1.02	1000	105.2	69.5	130.5	
Ti	47	1	He	10.693	10.693	8.564	2537	8.98	10	106.9	69.5	130.5	
V	51	1	He	5.319	5.319	4.172	31134	2.03	5	106.4	69.5	130.5	
Cr	52	1	He	2.150	2.150	2.001	17166	3.32	2	107.5	69.5	130.5	
Mn	55	1	He	5.160	5.160	0.753	29454	2.13	5	103.2	69.5	130.5	
Fe	56	1	He	109.306	109.306	0.963	727125	1.33	100	109.3	69.5	130.5	
Co	59	1	He	0.970	0.970	0.854	10707	2.22	1	97.0	69.5	130.5	
Ni	60	1	He	1.885	1.885	3.412	5244	1.62	2	94.2	69.5	130.5	
Cu	63	1	He	2.051	2.051	3.621	16162	3.71	2	102.6	69.5	130.5	
Zn	66	1	He	19.477	19.477	2.700	29870	1.29	20	97.4	69.5	130.5	
As	75	1	He	4.876	4.876	1.746	4686	0.71	5	97.5	69.5	130.5	
Se	78	1	He	5.026	5.026	0.492	540	2.19	5	100.5	69.5	130.5	
Sr	88	1	He	9.789	9.789	2.419	74272	1.68	10	97.9	69.5	130.5	
Mo	95	1	He	10.452	10.452	1.926	36038	0.22	10	104.5	69.5	130.5	
Ag	107	1	He	1.038	1.038	1.511	12278	1.36	1	103.8	69.5	130.5	
Cd	111	1	He	1.147	1.147	8.213	3408	4.36	1	114.7	69.5	130.5	
Sn	118	1	He	10.126	10.126	1.693	52782	1.55	10	101.3	69.5	130.5	
Sb	123	1	He	2.095	2.095	2.099	10454	1.75	2	104.8	69.5	130.5	
Ba	137	1	He	5.131	5.131	0.998	12007	1.27	5	102.6	69.5	130.5	
W	182	1	He	9.733	9.733	1.285	133491	1.68	10	97.3	69.5	130.5	
Tl	205	1	He	2.048	2.048	2.140	66483	1.33	2	102.4	69.5	130.5	
Pb	208	1	He	1.031	1.031	3.149	48248	2.66	1	103.1	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1227370	0.63	1631381	75.24	30	120	
Sc	45	1	He	666879	2.19	829696	80.38	30	120	
Sc	45	2	NoGas	5207299	1.43	6325638	82.32	30	120	
Rh	103	1	He	1995728	1.75	2345543	85.09	30	120	
In	115	1	He	1227273	0.35	1419467	86.46	30	120	
Tb	159	1	He	3495476	0.61	3888262	89.90	30	120	
Ho	165	1	He	3534623	1.49	3932562	89.88	30	120	
Bi	209	1	He	2619221	0.43	2874805	91.11	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177036/1-a
Data File Name	147_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:24:40-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.104	26.6	400	24.7	1	
B	11	45	2	NoGas	12.862	0.9	41915	0.3	20	
Na	23	45	1	He	104.576	4.8	158701	1.9	400	
Mg	24	45	1	He	74.622	3.4	58011	1.2	1000	
Al	27	45	1	He	9.289	4.2	6053	1.9	50	
K	39	45	1	He	26.872	11.3	48499	0.9	1000	
Ca	44	45	1	He	242.004	8.2	10351	5.9	1000	
Ti	47	45	1	He	0.152	51.8	44	41.3	20	
V	51	45	1	He	0.145	88.6	872	77.5	2	
Cr	52	45	1	He	0.795	9.2	7232	3.2	2	
Mn	55	45	1	He	0.473	10.0	3401	5.5	2	
Fe	56	45	1	He	20.026	1.1	128958	3.3	50	
Co	59	103	1	He	0.013	39.4	177	30.0	1	
Ni	60	103	1	He	0.172	12.2	553	9.7	2	
Cu	63	103	1	He	1.086	6.9	8842	5.8	2	
Zn	66	103	1	He	8.336	3.6	13144	1.8	20	
As	75	103	1	He	0.156	17.2	272	9.2	2	
Se	78	103	1	He	0.120	15.3	54	3.5	2	
Sr	88	103	1	He	0.550	4.5	4082	3.0	10	
Mo	95	103	1	He	0.269	17.9	937	17.9	2	
Ag	107	103	1	He	0.011	20.8	127	21.1	0.2	
Cd	111	103	1	He	0.057	35.8	1114	3.3	0.2	
Sn	118	115	1	He	1.601	4.9	8417	3.9	10	
Sb	123	115	1	He	0.446	5.1	2445	3.6	1	
Ba	137	115	1	He	1.353	2.8	2969	2.3	5	
W	182	209	1	He	0.455	11.9	9411	7.5	10	
Tl	205	165	1	He	0.013	13.8	483	12.7	0.5	
Pb	208	209	1	He	0.178	4.2	8887	4.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1128511	1.21	1631381	69.18	30	120	
Sc	45	1	He	631352	4.07	829696	76.09	30	120	
Sc	45	2	NoGas	4763131	0.90	6325638	75.30	30	120	
Rh	103	1	He	1908604	1.33	2345543	81.37	30	120	
In	115	1	He	1128448	0.50	1419467	79.50	30	120	
Tb	159	1	He	3361932	0.91	3888262	86.46	30	120	
Ho	165	1	He	3409686	0.63	3932562	86.70	30	120	
Bi	209	1	He	2600722	0.62	2874805	90.47	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177036/3-a
Data File Name	148_LCS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:28:29-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1060.781	1060.781	2.220	3503078	1.24	1000	106.1	79.5	120.5	
B	11	2	NoGas	123.052	123.052	1.475	321787	1.25	100	123.1	79.5	120.5	LCS Failed
Na	23	1	He	10331.860	10331.860	3.300	12863643	0.23	10000	103.3	79.5	120.5	
Mg	24	1	He	10382.257	10382.257	4.259	7338363	1.17	10000	103.8	79.5	120.5	
Al	27	1	He	9682.678	9682.678	3.756	3881285	0.42	10000	96.8	79.5	120.5	
K	39	1	He	10453.238	10453.238	3.854	6983475	1.44	10000	104.5	79.5	120.5	
Ca	44	1	He	9291.013	9291.013	2.306	340088	1.46	10000	92.9	79.5	120.5	
Ti	47	1	He	102.129	102.129	5.339	21022	2.02	100	102.1	79.5	120.5	
V	51	1	He	1021.926	1021.926	4.094	5200846	1.34	1000	102.2	79.5	120.5	
Cr	52	1	He	1025.938	1025.938	4.114	6276818	0.79	1000	102.6	79.5	120.5	
Mn	55	1	He	1045.248	1045.248	3.101	5026079	0.48	1000	104.5	79.5	120.5	
Fe	56	1	He	10708.021	10708.021	3.939	61760515	0.65	10000	107.1	79.5	120.5	
Co	59	1	He	938.375	938.375	0.613	9071623	0.19	1000	93.8	79.5	120.5	
Ni	60	1	He	963.194	963.194	0.458	2308888	0.24	1000	96.3	79.5	120.5	
Cu	63	1	He	956.646	956.646	0.575	6032037	0.24	1000	95.7	79.5	120.5	
Zn	66	1	He	937.135	937.135	0.572	1194716	0.40	1000	93.7	79.5	120.5	
As	75	1	He	931.362	931.362	0.376	764199	0.29	1000	93.1	79.5	120.5	
Se	78	1	He	967.439	967.439	0.819	83913	0.60	1000	96.7	79.5	120.5	
Sr	88	1	He	997.809	997.809	1.558	6650437	1.18	1000	99.8	79.5	120.5	
Mo	95	1	He	108.472	108.472	2.174	328559	1.99	100	108.5	79.5	120.5	
Ag	107	1	He	102.829	102.829	0.785	1069828	0.59	100	102.8	79.5	120.5	
Cd	111	1	He	1080.496	1080.496	0.907	1957142	0.53	1000	108.0	79.5	120.5	
Sn	118	1	He	1165.383	1165.383	1.907	4904632	1.94	1000	116.5	79.5	120.5	
Sb	123	1	He	113.203	113.203	0.963	440389	0.84	100	113.2	79.5	120.5	
Ba	137	1	He	1152.096	1152.096	1.394	2200631	1.52	1000	115.2	79.5	120.5	
W	182	1	He	103.420	103.420	2.454	1269559	2.20	100	103.4	79.5	120.5	
Tl	205	1	He	256.644	256.644	1.499	7857491	0.61	250	102.7	79.5	120.5	
Pb	208	1	He	1011.016	1011.016	0.564	42709888	0.37	1000	101.1	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1044906	1.02	1631381	64.05	30	120	
Sc	45	1	He	581564	3.40	829696	70.09	30	120	
Sc	45	2	NoGas	4543422	0.45	6325638	71.83	30	120	
Rh	103	1	He	1755208	0.43	2345543	74.83	30	120	
In	115	1	He	1009129	0.16	1419467	71.09	30	120	
Tb	159	1	He	3211595	0.92	3888262	82.60	30	120	
Ho	165	1	He	3336337	0.89	3932562	84.84	30	120	
Bi	209	1	He	2399762	0.27	2874805	83.48	30	120	

Sample Report

Sample Table

Sample Name	240-49480-f-3-a
Data File Name	149SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:32:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.341	1.341	5.76	4227	0.03	10000	
B	11	45	2	NoGas	150.012	150.012	1.66	378018	0.04	300	
Na	23	45	1	He	115283.065	115283.065	1.18	136177502	0.08	500000	
Mg	24	45	1	He	40820.211	40820.211	2.41	27405208	0.15	500000	
Al	27	45	1	He	635.525	635.525	1.65	243630	0.26	200000	
K	39	45	1	He	5602.031	5602.031	2.53	3566345	0.16	500000	
Ca	44	45	1	He	55368.280	55368.280	1.06	1921270	2.88	500000	
Ti	47	45	1	He	0.960	0.960	5.90	197	0.49	2500	
V	51	45	1	He	0.579	0.579	43.70	2886	0.02	10000	
Cr	52	45	1	He	1.564	1.564	1.98	10804	0.01	10000	
Mn	55	45	1	He	1350.743	1350.743	1.44	6168579	0.02	10000	
Fe	56	45	1	He	25317.822	25317.822	1.61	138711501	0.02	200000	
Co	59	103	1	He	105.382	105.382	0.75	944638	0.01	10000	
Ni	60	103	1	He	168.619	168.619	0.75	374847	0.04	10000	
Cu	63	103	1	He	1.123	1.123	13.55	7752	0.01	10000	
Zn	66	103	1	He	895.983	895.983	1.49	1059107	0.08	10000	
As	75	103	1	He	2.733	2.733	7.88	2192	0.12	10000	
Se	78	103	1	He	1.845	1.845	13.29	184	1.00	10000	
Sr	88	103	1	He	274.271	274.271	1.58	1695011	0.02	10000	
Mo	95	103	1	He	1.073	1.073	19.97	3053	0.04	2000	
Ag	107	103	1	He	0.030	0.030	35.66	293	0.01	300	
Cd	111	103	1	He	3.851	3.851	3.77	7318	0.05	4000	
Sn	118	115	1	He	2.662	2.662	21.49	11668	0.02	2000	
Sb	123	115	1	He	0.986	0.986	3.56	4173	0.02	300	
Ba	137	115	1	He	12.323	12.323	0.92	22979	0.05	10000	
W	182	209	1	He	1.691	1.691	14.73	22347	0.01	2500	
Tl	205	165	1	He	2.969	2.969	3.56	88370	0.00	5000	
Pb	208	209	1	He	1.798	1.798	5.17	71911	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	991396	0.87	1631381	60.77	30	120	
Sc	45	1	He	552057	1.71	829696	66.54	30	120	
Sc	45	2	NoGas	4396062	1.69	6325638	69.50	30	120	
Rh	103	1	He	1627480	0.91	2345543	69.39	30	120	
In	115	1	He	982208	0.34	1419467	69.20	30	120	
Tb	159	1	He	3136604	0.61	3888262	80.67	30	120	
Ho	165	1	He	3242119	1.14	3932562	82.44	30	120	
Bi	209	1	He	2252976	0.84	2874805	78.37	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49480-f-3-a@5
Data File Name	150SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:35:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.404	0.404	4.94	1411	0.03	10000	
B	11	45	2	NoGas	35.817	35.817	3.67	102098	0.04	300	
Na	23	45	1	He	24122.857	24122.857	1.36	31102782	0.08	500000	
Mg	24	45	1	He	8527.482	8527.482	1.10	6248129	0.14	500000	
Al	27	45	1	He	130.527	130.527	1.52	56122	0.23	200000	
K	39	45	1	He	1176.715	1176.715	0.59	839466	0.14	500000	
Ca	44	45	1	He	11313.719	11313.719	1.42	428899	2.64	500000	
Ti	47	45	1	He	0.175	0.175	97.31	47	0.37	2500	
V	51	45	1	He	0.026	0.026	259.40	208	0.01	10000	
Cr	52	45	1	He	0.335	0.335	5.91	3996	0.01	10000	
Mn	55	45	1	He	291.704	291.704	1.03	1454244	0.02	10000	
Fe	56	45	1	He	5353.574	5353.574	1.36	32008105	0.02	200000	
Co	59	103	1	He	21.662	21.662	2.14	217591	0.01	10000	
Ni	60	103	1	He	35.827	35.827	1.61	89321	0.04	10000	
Cu	63	103	1	He	0.151	0.151	9.97	2325	0.01	10000	
Zn	66	103	1	He	199.290	199.290	1.42	265156	0.08	10000	
As	75	103	1	He	0.420	0.420	7.50	485	0.09	10000	
Se	78	103	1	He	0.340	0.340	9.64	71	0.48	10000	
Sr	88	103	1	He	52.798	52.798	2.12	365672	0.01	10000	
Mo	95	103	1	He	0.169	0.169	13.49	579	0.03	2000	
Ag	107	103	1	He	0.009	0.009	11.19	102	0.01	300	
Cd	111	103	1	He	0.859	0.859	1.01	2574	0.03	4000	
Sn	118	115	1	He	0.140	0.140	26.06	1526	0.01	2000	
Sb	123	115	1	He	0.173	0.173	19.68	1241	0.01	300	
Ba	137	115	1	He	2.425	2.425	3.17	5189	0.05	10000	
W	182	209	1	He	0.323	0.323	9.36	7421	0.00	2500	
Tl	205	165	1	He	0.619	0.619	3.72	19739	0.00	5000	
Pb	208	209	1	He	0.370	0.370	1.22	17142	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1082820	0.05	1631381	66.37	30	120	
Sc	45	1	He	602330	1.65	829696	72.60	30	120	
Sc	45	2	NoGas	4700899	0.65	6325638	74.32	30	120	
Rh	103	1	He	1823561	0.76	2345543	77.75	30	120	
In	115	1	He	1113186	0.38	1419467	78.42	30	120	
Tb	159	1	He	3337362	0.70	3888262	85.83	30	120	
Ho	165	1	He	3462678	1.25	3932562	88.05	30	120	
Bi	209	1	He	2519521	1.43	2874805	87.64	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49480-f-3-a
Data File Name	151SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:39:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1913.618	1913.618	1.46	6143885	0.03	10000	
B	11	45	2	NoGas	345.543	345.543	1.27	862670	0.04	300	>LDR
Na	23	45	1	He	128120.394	128120.394	1.96	152825683	0.08	500000	
Mg	24	45	1	He	57834.630	57834.630	2.65	39209574	0.15	500000	
Al	27	45	1	He	18734.263	18734.263	2.82	7200682	0.26	200000	
K	39	45	1	He	25018.084	25018.084	3.53	15991482	0.16	500000	
Ca	44	45	1	He	70203.209	70203.209	2.35	2459645	2.85	500000	
Ti	47	45	1	He	189.369	189.369	3.54	37385	0.51	2500	
V	51	45	1	He	1900.193	1900.193	2.88	9275062	0.02	10000	
Cr	52	45	1	He	1928.327	1928.327	3.08	11314020	0.02	10000	
Mn	55	45	1	He	3189.007	3189.007	3.19	14702047	0.02	10000	
Fe	56	45	1	He	43777.670	43777.670	3.30	242139777	0.02	200000	
Co	59	103	1	He	1884.938	1884.938	1.23	16968674	0.01	10000	
Ni	60	103	1	He	1946.156	1946.156	2.12	4344028	0.04	10000	
Cu	63	103	1	He	1774.346	1774.346	0.95	10417288	0.02	10000	
Zn	66	103	1	He	2626.049	2626.049	0.93	3115188	0.08	10000	
As	75	103	1	He	1792.726	1792.726	0.68	1369677	0.13	10000	
Se	78	103	1	He	1812.500	1812.500	0.88	146367	1.24	10000	
Sr	88	103	1	He	2199.569	2199.569	1.08	13652151	0.02	10000	
Mo	95	103	1	He	214.137	214.137	0.70	603974	0.04	2000	
Ag	107	103	1	He	203.744	203.744	0.57	1973969	0.01	300	
Cd	111	103	1	He	1983.536	1983.536	0.20	3345124	0.06	4000	
Sn	118	115	1	He	2294.038	2294.038	1.04	8908349	0.03	2000	>LDR
Sb	123	115	1	He	221.502	221.502	0.56	794766	0.03	300	
Ba	137	115	1	He	2290.971	2290.971	1.16	4037937	0.06	10000	
W	182	209	1	He	229.809	229.809	2.24	2592987	0.01	2500	
Tl	205	165	1	He	473.185	473.185	0.20	14031961	0.00	5000	
Pb	208	209	1	He	1967.059	1967.059	0.23	76489046	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1015795	1.09	1631381	62.27	30	120	
Sc	45	1	He	557645	3.33	829696	67.21	30	120	
Sc	45	2	NoGas	4399952	1.43	6325638	69.56	30	120	
Rh	103	1	He	1634508	0.70	2345543	69.69	30	120	
In	115	1	He	931217	0.36	1419467	65.60	30	120	
Tb	159	1	He	3141965	0.83	3888262	80.81	30	120	
Ho	165	1	He	3231233	0.20	3932562	82.17	30	120	
Bi	209	1	He	2208937	1.01	2874805	76.84	30	120	

Sample Report

Sample Table

Sample Name	240-49480-f-3-d ms
Data File Name	152SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:43:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1006.520	1006.520	1.46	3142270	0.03	10000	
B	11	45	2	NoGas	243.134	243.134	0.42	615765	0.04	300	
Na	23	45	1	He	123791.665	123791.665	2.54	148228642	0.08	500000	
Mg	24	45	1	He	49788.130	49788.130	2.58	33887477	0.15	500000	
Al	27	45	1	He	10049.705	10049.705	3.35	3878535	0.26	200000	
K	39	45	1	He	15539.166	15539.166	2.75	9983434	0.16	500000	
Ca	44	45	1	He	63279.825	63279.825	2.05	2225869	2.84	500000	
Ti	47	45	1	He	101.158	101.158	3.38	20056	0.50	2500	
V	51	45	1	He	1011.811	1011.811	2.53	4958714	0.02	10000	
Cr	52	45	1	He	998.484	998.484	2.18	5883265	0.02	10000	
Mn	55	45	1	He	2308.536	2308.536	2.72	10686481	0.02	10000	
Fe	56	45	1	He	35352.253	35352.253	2.08	196362121	0.02	200000	
Co	59	103	1	He	1012.602	1012.602	0.46	9259794	0.01	10000	
Ni	60	103	1	He	1082.109	1082.109	0.24	2453600	0.04	10000	
Cu	63	103	1	He	915.023	915.023	1.56	5456881	0.02	10000	
Zn	66	103	1	He	1849.752	1849.752	1.01	2229080	0.08	10000	
As	75	103	1	He	923.807	923.807	0.98	716944	0.13	10000	
Se	78	103	1	He	935.628	935.628	1.41	76757	1.22	10000	
Sr	88	103	1	He	1244.436	1244.436	1.47	7844879	0.02	10000	
Mo	95	103	1	He	111.108	111.108	1.51	318309	0.03	2000	
Ag	107	103	1	He	99.170	99.170	1.67	975827	0.01	300	
Cd	111	103	1	He	1032.075	1032.075	1.73	1768230	0.06	4000	
Sn	118	115	1	He	1144.092	1144.092	0.59	4636635	0.02	2000	
Sb	123	115	1	He	111.152	111.152	0.59	416406	0.03	300	
Ba	137	115	1	He	1157.151	1157.151	0.87	2128406	0.05	10000	
W	182	209	1	He	109.171	109.171	0.02	1248743	0.01	2500	
Tl	205	165	1	He	241.926	241.926	0.39	7279298	0.00	5000	
Pb	208	209	1	He	1010.840	1010.840	1.08	39792402	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	987748	0.86	1631381	60.55	30	120	
Sc	45	1	He	559751	2.32	829696	67.46	30	120	
Sc	45	2	NoGas	4448558	0.90	6325638	70.33	30	120	
Rh	103	1	He	1660263	1.32	2345543	70.78	30	120	
In	115	1	He	971749	0.22	1419467	68.46	30	120	
Tb	159	1	He	3200878	0.49	3888262	82.32	30	120	
Ho	165	1	He	3278596	0.33	3932562	83.37	30	120	
Bi	209	1	He	2236258	0.40	2874805	77.79	30	120	

Sample Report

Sample Table

Sample Name	240-49480-f-3-e msd
Data File Name	153SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:46:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	981.744	981.744	4.16	3089950	0.03	10000	
B	11	45	2	NoGas	240.736	240.736	1.61	620115	0.04	300	
Na	23	45	1	He	121019.492	121019.492	1.09	146589820	0.08	500000	
Mg	24	45	1	He	48481.685	48481.685	1.29	33380501	0.15	500000	
Al	27	45	1	He	9591.772	9591.772	1.21	3745279	0.26	200000	
K	39	45	1	He	15312.809	15312.809	2.29	9951049	0.15	500000	
Ca	44	45	1	He	61862.177	61862.177	2.75	2200718	2.81	500000	
Ti	47	45	1	He	95.581	95.581	3.03	19168	0.50	2500	
V	51	45	1	He	977.599	977.599	1.77	4846131	0.02	10000	
Cr	52	45	1	He	970.911	970.911	1.58	5786525	0.02	10000	
Mn	55	45	1	He	2274.019	2274.019	2.00	10647983	0.02	10000	
Fe	56	45	1	He	34320.017	34320.017	3.09	192770721	0.02	200000	
Co	59	103	1	He	990.522	990.522	1.17	9074420	0.01	10000	
Ni	60	103	1	He	1075.114	1075.114	0.30	2442373	0.04	10000	
Cu	63	103	1	He	898.367	898.367	0.70	5368181	0.02	10000	
Zn	66	103	1	He	1789.185	1789.185	0.33	2160356	0.08	10000	
As	75	103	1	He	910.238	910.238	0.79	707772	0.13	10000	
Se	78	103	1	He	918.013	918.013	0.31	75462	1.22	10000	
Sr	88	103	1	He	1222.901	1222.901	1.34	7724132	0.02	10000	
Mo	95	103	1	He	109.133	109.133	0.69	313267	0.03	2000	
Ag	107	103	1	He	98.893	98.893	0.21	975053	0.01	300	
Cd	111	103	1	He	1011.175	1011.175	1.71	1735817	0.06	4000	
Sn	118	115	1	He	1131.569	1131.569	0.19	4610625	0.02	2000	
Sb	123	115	1	He	109.613	109.613	0.37	412849	0.03	300	
Ba	137	115	1	He	1134.696	1134.696	2.15	2098252	0.05	10000	
W	182	209	1	He	105.986	105.986	1.51	1229044	0.01	2500	
Tl	205	165	1	He	240.160	240.160	0.73	7223244	0.00	5000	
Pb	208	209	1	He	988.802	988.802	1.58	39460664	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	996312	2.17	1631381	61.07	30	120	
Sc	45	1	He	566111	2.09	829696	68.23	30	120	
Sc	45	2	NoGas	4524283	0.54	6325638	71.52	30	120	
Rh	103	1	He	1663373	0.69	2345543	70.92	30	120	
In	115	1	He	976980	0.46	1419467	68.83	30	120	
Tb	159	1	He	3209222	1.75	3888262	82.54	30	120	
Ho	165	1	He	3277308	0.88	3932562	83.34	30	120	
Bi	209	1	He	2267185	0.96	2874805	78.86	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-1-a
Data File Name	154SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:50:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.530	0.530	5.98	1804	0.03	10000	
B	11	45	2	NoGas	32.213	32.213	1.66	90009	0.04	300	
Na	23	45	1	He	15764.292	15764.292	1.43	19855376	0.08	500000	
Mg	24	45	1	He	14116.515	14116.515	1.85	10099483	0.14	500000	
Al	27	45	1	He	16.203	16.203	2.04	8449	0.19	200000	
K	39	45	1	He	136.764	136.764	4.77	119228	0.11	500000	
Ca	44	45	1	He	21800.474	21800.474	2.38	806359	2.70	500000	
Ti	47	45	1	He	0.484	0.484	29.95	110	0.44	2500	
V	51	45	1	He	0.312	0.312	21.49	1689	0.02	10000	
Cr	52	45	1	He	0.954	0.954	2.27	7735	0.01	10000	
Mn	55	45	1	He	178.857	178.857	1.78	871052	0.02	10000	
Fe	56	45	1	He	3641.655	3641.655	1.52	21262992	0.02	200000	
Co	59	103	1	He	4.184	4.184	1.49	42036	0.01	10000	
Ni	60	103	1	He	21.274	21.274	2.07	53048	0.04	10000	
Cu	63	103	1	He	0.931	0.931	5.83	7422	0.01	10000	
Zn	66	103	1	He	110.478	110.478	1.84	147590	0.07	10000	
As	75	103	1	He	1.271	1.271	8.82	1209	0.11	10000	
Se	78	103	1	He	1.372	1.372	16.16	164	0.84	10000	
Sr	88	103	1	He	113.317	113.317	1.35	784322	0.01	10000	
Mo	95	103	1	He	1.112	1.112	13.77	3542	0.03	2000	
Ag	107	103	1	He	0.030	0.030	24.44	326	0.01	300	
Cd	111	103	1	He	0.168	0.168	18.72	1274	0.01	4000	
Sn	118	115	1	He	2.200	2.200	21.38	10711	0.02	2000	
Sb	123	115	1	He	0.838	0.838	5.46	3957	0.02	300	
Ba	137	115	1	He	22.465	22.465	1.74	45813	0.05	10000	
W	182	209	1	He	1.765	1.765	16.12	25039	0.01	2500	
Tl	205	165	1	He	0.292	0.292	30.51	9122	0.00	5000	
Pb	208	209	1	He	0.616	0.616	15.88	27024	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058520	2.16	1631381	64.88	30	120	
Sc	45	1	He	588239	1.78	829696	70.90	30	120	
Sc	45	2	NoGas	4570226	0.95	6325638	72.25	30	120	
Rh	103	1	He	1822708	1.37	2345543	77.71	30	120	
In	115	1	He	1075705	0.27	1419467	75.78	30	120	
Tb	159	1	He	3323795	1.29	3888262	85.48	30	120	
Ho	165	1	He	3381622	0.26	3932562	85.99	30	120	
Bi	209	1	He	2430615	1.09	2874805	84.55	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-2-a
Data File Name	155SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:54:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.323	0.323	6.84	1126	0.03	10000	
B	11	45	2	NoGas	12.798	12.798	3.97	40126	0.03	300	
Na	23	45	1	He	958.012	958.012	3.76	1246878	0.08	500000	
Mg	24	45	1	He	58.742	58.742	3.14	43605	0.13	500000	
Al	27	45	1	He	16.112	16.112	6.25	8580	0.19	200000	
K	39	45	1	He	18.233	18.233	9.46	40227	0.05	500000	
Ca	44	45	1	He	151.996	151.996	6.90	6455	2.35	500000	
Ti	47	45	1	He	0.190	0.190	34.24	50	0.38	2500	
V	51	45	1	He	0.091	0.091	168.54	561	0.02	10000	
Cr	52	45	1	He	4.230	4.230	2.00	28600	0.01	10000	
Mn	55	45	1	He	1.278	1.278	2.91	7237	0.02	10000	
Fe	56	45	1	He	65.262	65.262	1.59	392246	0.02	200000	
Co	59	103	1	He	0.097	0.097	6.22	1052	0.01	10000	
Ni	60	103	1	He	0.807	0.807	2.15	2196	0.04	10000	
Cu	63	103	1	He	0.453	0.453	2.10	4475	0.01	10000	
Zn	66	103	1	He	7.379	7.379	1.55	11758	0.06	10000	
As	75	103	1	He	0.377	0.377	3.19	467	0.08	10000	
Se	78	103	1	He	0.307	0.307	21.01	71	0.43	10000	
Sr	88	103	1	He	0.253	0.253	8.15	1920	0.01	10000	
Mo	95	103	1	He	0.248	0.248	7.15	861	0.03	2000	
Ag	107	103	1	He	0.018	0.018	21.99	202	0.01	300	
Cd	111	103	1	He	0.085	0.085	22.86	1162	0.01	4000	
Sn	118	115	1	He	0.616	0.616	0.47	3708	0.02	2000	
Sb	123	115	1	He	0.527	0.527	5.07	2744	0.02	300	
Ba	137	115	1	He	0.363	0.363	7.10	838	0.04	10000	
W	182	209	1	He	0.452	0.452	1.42	9136	0.00	2500	
Tl	205	165	1	He	0.068	0.068	14.17	2188	0.00	5000	
Pb	208	209	1	He	0.326	0.326	5.65	15249	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1072919	2.31	1631381	65.77	30	120	
Sc	45	1	He	600515	2.78	829696	72.38	30	120	
Sc	45	2	NoGas	4579468	1.78	6325638	72.40	30	120	
Rh	103	1	He	1898215	0.59	2345543	80.93	30	120	
In	115	1	He	1105814	0.42	1419467	77.90	30	120	
Tb	159	1	He	3323594	0.85	3888262	85.48	30	120	
Ho	165	1	He	3403906	0.81	3932562	86.56	30	120	
Bi	209	1	He	2536529	0.13	2874805	88.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	156_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:57:57-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.108	2.141	186417	1.22	50	100.2	89.5	110.5	
B	11	45	2	NoGas	53.500	2.483	160838	1.50	50	107.0	89.5	110.5	
Na	23	45	1	He	24290.226	5.497	33985020	0.77	25000	97.2	89.5	110.5	
Mg	24	45	1	He	24332.697	4.862	19347922	0.02	25000	97.3	89.5	110.5	
Al	27	45	1	He	236.203	5.809	108512	0.88	250	94.5	89.5	110.5	
K	39	45	1	He	25358.385	6.137	19006546	1.70	25000	101.4	89.5	110.5	
Ca	44	45	1	He	24664.347	4.493	1014050	0.75	25000	98.7	89.5	110.5	
Ti	47	45	1	He	50.144	6.647	11616	3.19	50	100.3	89.5	110.5	
V	51	45	1	He	50.276	4.955	287909	0.44	50	100.6	89.5	110.5	
Cr	52	45	1	He	49.767	4.596	344509	0.72	50	99.5	89.5	110.5	
Mn	55	45	1	He	246.610	4.543	1334638	0.54	250	98.6	89.5	110.5	
Fe	56	45	1	He	12617.876	5.807	81851572	2.05	12500	100.9	89.5	110.5	
Co	59	103	1	He	46.187	1.185	484336	0.74	50	92.4	89.5	110.5	
Ni	60	103	1	He	45.883	1.142	119393	0.54	50	91.8	89.5	110.5	
Cu	63	103	1	He	46.210	1.255	317348	0.53	50	92.4	89.5	110.5	
Zn	66	103	1	He	46.406	0.497	65695	1.28	50	92.8	89.5	110.5	
As	75	103	1	He	47.411	1.198	42319	0.26	50	94.8	89.5	110.5	
Se	78	103	1	He	48.511	1.345	4604	0.83	50	97.0	89.5	110.5	
Sr	88	103	1	He	48.801	1.764	352867	0.84	50	97.6	89.5	110.5	
Mo	95	103	1	He	49.135	3.830	161426	2.88	50	98.3	89.5	110.5	
Ag	107	103	1	He	49.135	1.365	554459	0.73	50	98.3	89.5	110.5	
Cd	111	103	1	He	49.542	0.901	98287	0.50	50	99.1	89.5	110.5	
Sn	118	115	1	He	49.841	0.392	238876	0.50	50	99.7	89.5	110.5	
Sb	123	115	1	He	52.441	0.416	231766	0.29	50	104.9	89.5	110.5	
Ba	137	115	1	He	51.901	1.253	112565	1.10	50	103.8	89.5	110.5	
W	182	209	1	He	49.418	1.822	630410	1.84	50	98.8	89.5	110.5	
Tl	205	165	1	He	49.979	3.989	1608500	3.47	50	100.0	89.5	110.5	
Pb	208	209	1	He	47.897	1.762	2097410	0.44	50	95.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1176941	1.03	1631381	72.14	30	120	
Sc	45	1	He	654699	4.95	829696	78.91	30	120	
Sc	45	2	NoGas	5078679	1.56	6325638	80.29	30	120	
Rh	103	1	He	1903860	1.17	2345543	81.17	30	120	
In	115	1	He	1145054	0.18	1419467	80.67	30	120	
Tb	159	1	He	3420856	0.39	3888262	87.98	30	120	
Ho	165	1	He	3507285	0.89	3932562	89.19	30	120	
Bi	209	1	He	2487164	1.40	2874805	86.52	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	157_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:01:45-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.226	15.2	900	14.2	1	
B	11	45	2	NoGas	9.130	1.9	34340	1.4	20	
Na	23	45	1	He	33.745	1.9	61763	3.1	400	
Mg	24	45	1	He	2.484	30.4	2604	23.0	1000	
Al	27	45	1	He	0.400	66.7	2137	2.3	50	
K	39	45	1	He	12.560	21.5	37325	3.1	1000	
Ca	44	45	1	He	2.525	80.9	844	9.5	1000	
Ti	47	45	1	He	0.098	74.9	31	48.3	20	
V	51	45	1	He	0.103	44.3	636	38.4	2	
Cr	52	45	1	He	0.081	32.9	2438	3.9	2	
Mn	55	45	1	He	0.079	19.2	1318	5.3	2	
Fe	56	45	1	He	25.251	27.0	158410	28.0	50	
Co	59	103	1	He	0.024	44.6	296	37.5	1	
Ni	60	103	1	He	0.003	566.3	117	42.9	2	
Cu	63	103	1	He	0.067	16.1	1906	4.0	2	
Zn	66	103	1	He	-0.004	-2076.5	1642	5.7	20	
As	75	103	1	He	0.146	5.1	270	0.9	2	
Se	78	103	1	He	0.263	26.6	69	8.9	2	
Sr	88	103	1	He	0.035	40.5	358	28.8	10	
Mo	95	103	1	He	0.987	26.3	3384	25.0	2	
Ag	107	103	1	He	0.020	22.3	236	21.2	0.2	
Cd	111	103	1	He	0.127	15.1	1287	2.9	0.2	
Sn	118	115	1	He	0.376	9.6	2797	8.0	10	
Sb	123	115	1	He	0.462	22.4	2647	18.6	1	
Ba	137	115	1	He	0.029	50.0	149	23.9	5	
W	182	209	1	He	1.280	16.3	20099	14.2	10	
Tl	205	165	1	He	0.069	18.6	2268	18.3	0.5	
Pb	208	209	1	He	0.127	6.6	6467	5.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1211841	0.40	1631381	74.28	30	120	
Sc	45	1	He	617274	3.11	829696	74.40	30	120	
Sc	45	2	NoGas	5125709	0.27	6325638	81.03	30	120	
Rh	103	1	He	1960314	1.70	2345543	83.58	30	120	
In	115	1	He	1187598	2.64	1419467	83.67	30	120	
Tb	159	1	He	3411495	3.59	3888262	87.74	30	120	
Ho	165	1	He	3498974	1.50	3932562	88.97	30	120	
Bi	209	1	He	2566627	3.69	2874805	89.28	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-4-a
Data File Name	158SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:05:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.276	0.276	10.05	967	0.03	10000	
B	11	45	2	NoGas	152.047	152.047	0.50	407015	0.04	300	
Na	23	45	1	He	67835.352	67835.352	3.88	87393363	0.08	500000	
Mg	24	45	1	He	34329.060	34329.060	4.17	25136829	0.14	500000	
Al	27	45	1	He	7.173	7.173	9.31	4896	0.15	200000	
K	39	45	1	He	2355.331	2355.331	3.87	1651596	0.14	500000	
Ca	44	45	1	He	70528.197	70528.197	4.08	2668596	2.64	500000	
Ti	47	45	1	He	0.476	0.476	44.98	112	0.42	2500	
V	51	45	1	He	0.260	0.260	60.19	1431	0.02	10000	
Cr	52	45	1	He	1.032	1.032	6.16	8403	0.01	10000	
Mn	55	45	1	He	943.395	943.395	4.33	4698362	0.02	10000	
Fe	56	45	1	He	2529.715	2529.715	4.42	15116816	0.02	200000	
Co	59	103	1	He	12.775	12.775	0.13	121887	0.01	10000	
Ni	60	103	1	He	17.162	17.162	0.44	40684	0.04	10000	
Cu	63	103	1	He	1.255	1.255	1.41	9069	0.01	10000	
Zn	66	103	1	He	13.647	13.647	2.05	18600	0.07	10000	
As	75	103	1	He	0.545	0.545	3.03	562	0.10	10000	
Se	78	103	1	He	0.450	0.450	12.66	77	0.59	10000	
Sr	88	103	1	He	352.405	352.405	0.80	2317589	0.02	10000	
Mo	95	103	1	He	3.133	3.133	2.21	9406	0.03	2000	
Ag	107	103	1	He	0.022	0.022	9.82	232	0.01	300	
Cd	111	103	1	He	0.224	0.224	7.02	1310	0.02	4000	
Sn	118	115	1	He	0.795	0.795	15.18	4345	0.02	2000	
Sb	123	115	1	He	0.625	0.625	5.12	3029	0.02	300	
Ba	137	115	1	He	67.042	67.042	0.53	134649	0.05	10000	
W	182	209	1	He	0.522	0.522	3.64	9325	0.01	2500	
Tl	205	165	1	He	0.351	0.351	3.62	10837	0.00	5000	
Pb	208	209	1	He	0.228	0.228	6.79	10107	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1077086	3.01	1631381	66.02	30	120	
Sc	45	1	He	602497	3.40	829696	72.62	30	120	
Sc	45	2	NoGas	4670402	0.33	6325638	73.83	30	120	
Rh	103	1	He	1731727	0.71	2345543	73.83	30	120	
In	115	1	He	1060528	0.72	1419467	74.71	30	120	
Tb	159	1	He	3255591	1.17	3888262	83.73	30	120	
Ho	165	1	He	3342720	1.13	3932562	85.00	30	120	
Bi	209	1	He	2354007	0.43	2874805	81.88	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-5-a
Data File Name	159SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:09:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.239	0.239	12.70	830	0.03	10000	
B	11	45	2	NoGas	63.172	63.172	1.16	173195	0.04	300	
Na	23	45	1	He	53502.414	53502.414	2.25	68493979	0.08	500000	
Mg	24	45	1	He	23283.236	23283.236	3.03	16939002	0.14	500000	
Al	27	45	1	He	11.268	11.268	2.62	6556	0.17	200000	
K	39	45	1	He	1072.267	1072.267	2.85	762065	0.14	500000	
Ca	44	45	1	He	39217.407	39217.407	3.50	1474488	2.66	500000	
Ti	47	45	1	He	0.501	0.501	18.91	116	0.43	2500	
V	51	45	1	He	0.224	0.224	37.63	1248	0.02	10000	
Cr	52	45	1	He	0.838	0.838	8.24	7130	0.01	10000	
Mn	55	45	1	He	642.183	642.183	2.92	3178146	0.02	10000	
Fe	56	45	1	He	1011.760	1011.760	3.64	6008621	0.02	200000	
Co	59	103	1	He	7.518	7.518	1.94	72780	0.01	10000	
Ni	60	103	1	He	22.753	22.753	0.74	54684	0.04	10000	
Cu	63	103	1	He	0.807	0.807	5.27	6372	0.01	10000	
Zn	66	103	1	He	11.749	11.749	0.93	16451	0.07	10000	
As	75	103	1	He	0.362	0.362	12.63	419	0.09	10000	
Se	78	103	1	He	0.271	0.271	22.48	62	0.43	10000	
Sr	88	103	1	He	166.476	166.476	1.03	1110621	0.01	10000	
Mo	95	103	1	He	0.713	0.713	2.63	2207	0.03	2000	
Ag	107	103	1	He	0.033	0.033	18.17	343	0.01	300	
Cd	111	103	1	He	0.148	0.148	11.93	1191	0.01	4000	
Sn	118	115	1	He	0.397	0.397	28.25	2626	0.02	2000	
Sb	123	115	1	He	0.391	0.391	3.98	2108	0.02	300	
Ba	137	115	1	He	13.407	13.407	1.07	27411	0.05	10000	
W	182	209	1	He	0.258	0.258	8.99	6290	0.00	2500	
Tl	205	165	1	He	0.156	0.156	1.21	4934	0.00	5000	
Pb	208	209	1	He	0.173	0.173	3.34	8005	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058707	1.01	1631381	64.90	30	120	
Sc	45	1	He	598411	2.95	829696	72.12	30	120	
Sc	45	2	NoGas	4666563	2.20	6325638	73.77	30	120	
Rh	103	1	He	1756712	0.25	2345543	74.90	30	120	
In	115	1	He	1077160	0.51	1419467	75.88	30	120	
Tb	159	1	He	3293865	0.46	3888262	84.71	30	120	
Ho	165	1	He	3398869	0.89	3932562	86.43	30	120	
Bi	209	1	He	2404846	0.41	2874805	83.65	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-6-a
Data File Name	160SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:13:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.297	0.297	8.20	1037	0.03	10000	
B	11	45	2	NoGas	98.290	98.290	0.68	266596	0.04	300	
Na	23	45	1	He	412229.116	412229.116	4.21	515737135	0.08	500000	
Mg	24	45	1	He	98102.318	98102.318	3.39	69784019	0.14	500000	
Al	27	45	1	He	33.364	33.364	4.45	15321	0.22	200000	
K	39	45	1	He	4435.511	4435.511	4.65	2996752	0.15	500000	
Ca	44	45	1	He	111688.481	111688.481	4.30	4104244	2.72	500000	
Ti	47	45	1	He	0.475	0.475	7.80	108	0.44	2500	
V	51	45	1	He	-0.008	-0.008	-2412.74	43	-0.02	10000	
Cr	52	45	1	He	1.170	1.170	11.46	9005	0.01	10000	
Mn	55	45	1	He	5031.283	5031.283	2.98	24341941	0.02	10000	
Fe	56	45	1	He	317.386	317.386	2.34	1845915	0.02	200000	
Co	59	103	1	He	29.181	29.181	1.75	264603	0.01	10000	
Ni	60	103	1	He	183.894	183.894	1.33	413514	0.04	10000	
Cu	63	103	1	He	3.221	3.221	1.86	20257	0.02	10000	
Zn	66	103	1	He	178.949	178.949	1.38	215090	0.08	10000	
As	75	103	1	He	0.743	0.743	16.15	688	0.11	10000	
Se	78	103	1	He	0.543	0.543	6.25	81	0.67	10000	
Sr	88	103	1	He	814.023	814.023	1.32	5088816	0.02	10000	
Mo	95	103	1	He	0.500	0.500	7.38	1463	0.03	2000	
Ag	107	103	1	He	0.026	0.026	8.63	256	0.01	300	
Cd	111	103	1	He	1.023	1.023	3.75	2601	0.04	4000	
Sn	118	115	1	He	0.387	0.387	23.37	2463	0.02	2000	
Sb	123	115	1	He	0.361	0.361	1.37	1889	0.02	300	
Ba	137	115	1	He	21.575	21.575	1.09	41999	0.05	10000	
W	182	209	1	He	0.230	0.230	16.68	5427	0.00	2500	
Tl	205	165	1	He	0.175	0.175	5.16	5411	0.00	5000	
Pb	208	209	1	He	0.217	0.217	4.16	9013	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1072646	0.95	1631381	65.75	30	120	
Sc	45	1	He	585175	3.08	829696	70.53	30	120	
Sc	45	2	NoGas	4686355	0.11	6325638	74.09	30	120	
Rh	103	1	He	1646458	1.84	2345543	70.20	30	120	
In	115	1	He	1026681	0.36	1419467	72.33	30	120	
Tb	159	1	He	3223366	0.51	3888262	82.90	30	120	
Ho	165	1	He	3328362	0.80	3932562	84.64	30	120	
Bi	209	1	He	2196888	1.73	2874805	76.42	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-7-a
Data File Name	161SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:16:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.611	1.611	5.29	5305	0.03	10000	
B	11	45	2	NoGas	32.338	32.338	1.71	92075	0.04	300	
Na	23	45	1	He	116831.018	116831.018	2.15	146270205	0.08	500000	
Mg	24	45	1	He	27341.196	27341.196	1.55	19458682	0.14	500000	
Al	27	45	1	He	779.901	779.901	1.48	316483	0.25	200000	
K	39	45	1	He	1654.762	1654.762	2.22	1135706	0.15	500000	
Ca	44	45	1	He	29243.217	29243.217	1.78	1075834	2.72	500000	
Ti	47	45	1	He	0.577	0.577	26.80	129	0.45	2500	
V	51	45	1	He	-0.133	-0.133	-95.77	-604	0.02	10000	
Cr	52	45	1	He	2.870	2.870	4.12	19489	0.01	10000	
Mn	55	45	1	He	507.363	507.363	1.42	2456490	0.02	10000	
Fe	56	45	1	He	1858.302	1858.302	2.31	10794179	0.02	200000	
Co	59	103	1	He	45.493	45.493	1.49	432023	0.01	10000	
Ni	60	103	1	He	99.235	99.235	2.00	233727	0.04	10000	
Cu	63	103	1	He	20.309	20.309	1.58	127016	0.02	10000	
Zn	66	103	1	He	375.611	375.611	1.90	471190	0.08	10000	
As	75	103	1	He	0.432	0.432	8.84	469	0.09	10000	
Se	78	103	1	He	0.501	0.501	19.66	81	0.62	10000	
Sr	88	103	1	He	241.215	241.215	1.65	1579571	0.02	10000	
Mo	95	103	1	He	0.534	0.534	2.72	1633	0.03	2000	
Ag	107	103	1	He	0.066	0.066	6.70	676	0.01	300	
Cd	111	103	1	He	1.995	1.995	1.96	4453	0.04	4000	
Sn	118	115	1	He	0.409	0.409	6.47	2630	0.02	2000	
Sb	123	115	1	He	0.377	0.377	6.37	2010	0.02	300	
Ba	137	115	1	He	18.606	18.606	0.82	37279	0.05	10000	
W	182	209	1	He	0.211	0.211	7.59	5579	0.00	2500	
Tl	205	165	1	He	0.400	0.400	2.02	12484	0.00	5000	
Pb	208	209	1	He	1.684	1.684	1.39	70237	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1035941	0.81	1631381	63.50	30	120	
Sc	45	1	He	585113	0.99	829696	70.52	30	120	
Sc	45	2	NoGas	4658855	0.16	6325638	73.65	30	120	
Rh	103	1	He	1724288	1.72	2345543	73.51	30	120	
In	115	1	He	1056419	0.75	1419467	74.42	30	120	
Tb	159	1	He	3278094	1.48	3888262	84.31	30	120	
Ho	165	1	He	3380548	1.66	3932562	85.96	30	120	
Bi	209	1	He	2347285	0.34	2874805	81.65	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-8-a
Data File Name	162SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:20:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.462	1.462	11.05	4482	0.03	10000	
B	11	45	2	NoGas	126.860	126.860	1.27	318451	0.04	300	
Na	23	45	1	He	265259.427	265259.427	3.01	314598773	0.08	500000	
Mg	24	45	1	He	79807.504	79807.504	3.39	53799942	0.15	500000	
Al	27	45	1	He	1279.595	1279.595	3.73	490691	0.26	200000	
K	39	45	1	He	6461.668	6461.668	3.32	4126822	0.16	500000	
Ca	44	45	1	He	107452.236	107452.236	2.65	3743510	2.87	500000	
Ti	47	45	1	He	0.722	0.722	26.78	150	0.48	2500	
V	51	45	1	He	0.223	0.223	56.58	1169	0.02	10000	
Cr	52	45	1	He	1.026	1.026	6.69	7703	0.01	10000	
Mn	55	45	1	He	3603.917	3603.917	3.52	16522505	0.02	10000	
Fe	56	45	1	He	23317.575	23317.575	3.51	128264079	0.02	200000	
Co	59	103	1	He	203.901	203.901	0.55	1750257	0.01	10000	
Ni	60	103	1	He	342.045	342.045	0.59	728062	0.05	10000	
Cu	63	103	1	He	11.501	11.501	1.83	65509	0.02	10000	
Zn	66	103	1	He	1741.535	1741.535	1.74	1970059	0.09	10000	
As	75	103	1	He	0.786	0.786	1.40	681	0.12	10000	
Se	78	103	1	He	0.732	0.732	33.61	91	0.81	10000	
Sr	88	103	1	He	691.697	691.697	0.82	4093576	0.02	10000	
Mo	95	103	1	He	0.500	0.500	5.55	1385	0.04	2000	
Ag	107	103	1	He	0.023	0.023	26.86	213	0.01	300	
Cd	111	103	1	He	8.496	8.496	2.01	14476	0.06	4000	
Sn	118	115	1	He	0.292	0.292	24.15	1959	0.01	2000	
Sb	123	115	1	He	0.372	0.372	11.13	1842	0.02	300	
Ba	137	115	1	He	15.578	15.578	1.65	28933	0.05	10000	
W	182	209	1	He	0.244	0.244	9.17	5546	0.00	2500	
Tl	205	165	1	He	1.012	1.012	1.32	30282	0.00	5000	
Pb	208	209	1	He	0.203	0.203	6.37	8423	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	963774	1.43	1631381	59.08	30	120	
Sc	45	1	He	554653	3.78	829696	66.85	30	120	
Sc	45	2	NoGas	4364375	0.75	6325638	69.00	30	120	
Rh	103	1	He	1558483	0.94	2345543	66.44	30	120	
In	115	1	He	979028	0.88	1419467	68.97	30	120	
Tb	159	1	He	3168813	1.09	3888262	81.50	30	120	
Ho	165	1	He	3253811	1.13	3932562	82.74	30	120	
Bi	209	1	He	2181400	0.07	2874805	75.88	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-9-a
Data File Name	163SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:24:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.689	2.689	5.29	8317	0.03	10000	
B	11	45	2	NoGas	80.797	80.797	1.40	207829	0.04	300	
Na	23	45	1	He	145764.065	145764.065	3.26	172515660	0.08	500000	
Mg	24	45	1	He	38622.900	38622.900	2.99	25985510	0.15	500000	
Al	27	45	1	He	1497.912	1497.912	3.04	573008	0.26	200000	
K	39	45	1	He	6116.950	6116.950	3.13	3900130	0.16	500000	
Ca	44	45	1	He	53725.852	53725.852	3.26	1867909	2.88	500000	
Ti	47	45	1	He	0.785	0.785	28.92	163	0.48	2500	
V	51	45	1	He	0.290	0.290	44.87	1465	0.02	10000	
Cr	52	45	1	He	1.030	1.030	7.40	7710	0.01	10000	
Mn	55	45	1	He	828.934	828.934	3.09	3793503	0.02	10000	
Fe	56	45	1	He	34526.700	34526.700	2.52	189570988	0.02	200000	
Co	59	103	1	He	182.440	182.440	1.97	1633227	0.01	10000	
Ni	60	103	1	He	247.864	247.864	1.24	550248	0.05	10000	
Cu	63	103	1	He	10.127	10.127	0.85	60307	0.02	10000	
Zn	66	103	1	He	709.310	709.310	0.74	837674	0.08	10000	
As	75	103	1	He	0.439	0.439	4.12	447	0.10	10000	
Se	78	103	1	He	0.424	0.424	13.56	70	0.61	10000	
Sr	88	103	1	He	330.746	330.746	0.44	2041395	0.02	10000	
Mo	95	103	1	He	0.242	0.242	12.01	722	0.03	2000	
Ag	107	103	1	He	0.042	0.042	15.07	407	0.01	300	
Cd	111	103	1	He	2.757	2.757	3.44	5475	0.05	4000	
Sn	118	115	1	He	0.291	0.291	7.27	1974	0.01	2000	
Sb	123	115	1	He	0.347	0.347	12.07	1763	0.02	300	
Ba	137	115	1	He	19.406	19.406	0.71	36337	0.05	10000	
W	182	209	1	He	0.177	0.177	13.10	4945	0.00	2500	
Tl	205	165	1	He	3.625	3.625	0.51	109055	0.00	5000	
Pb	208	209	1	He	4.076	4.076	0.17	161994	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	975988	1.94	1631381	59.83	30	120	
Sc	45	1	He	553409	2.92	829696	66.70	30	120	
Sc	45	2	NoGas	4417842	0.77	6325638	69.84	30	120	
Rh	103	1	He	1625296	0.24	2345543	69.29	30	120	
In	115	1	He	987394	0.34	1419467	69.56	30	120	
Tb	159	1	He	3223483	0.85	3888262	82.90	30	120	
Ho	165	1	He	3276160	1.15	3932562	83.31	30	120	
Bi	209	1	He	2249061	0.33	2874805	78.23	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-10-a
Data File Name	164SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:28:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.788	2.788	5.40	8699	0.03	10000	
B	11	45	2	NoGas	82.234	82.234	1.34	212562	0.04	300	
Na	23	45	1	He	149324.688	149324.688	3.59	177958493	0.08	500000	
Mg	24	45	1	He	39752.877	39752.877	3.39	26931417	0.15	500000	
Al	27	45	1	He	1525.781	1525.781	3.29	587719	0.26	200000	
K	39	45	1	He	6236.093	6236.093	3.27	4003322	0.16	500000	
Ca	44	45	1	He	54100.915	54100.915	3.48	1894057	2.86	500000	
Ti	47	45	1	He	0.873	0.873	7.46	181	0.48	2500	
V	51	45	1	He	0.272	0.272	73.31	1387	0.02	10000	
Cr	52	45	1	He	1.074	1.074	8.54	8021	0.01	10000	
Mn	55	45	1	He	851.120	851.120	3.59	3921958	0.02	10000	
Fe	56	45	1	He	35149.528	35149.528	2.28	194346299	0.02	200000	
Co	59	103	1	He	185.026	185.026	0.61	1674267	0.01	10000	
Ni	60	103	1	He	249.678	249.678	0.30	560272	0.04	10000	
Cu	63	103	1	He	10.146	10.146	1.39	61065	0.02	10000	
Zn	66	103	1	He	721.541	721.541	0.72	861308	0.08	10000	
As	75	103	1	He	0.454	0.454	8.97	463	0.10	10000	
Se	78	103	1	He	0.486	0.486	12.12	76	0.64	10000	
Sr	88	103	1	He	336.368	336.368	0.50	2098563	0.02	10000	
Mo	95	103	1	He	0.246	0.246	9.00	740	0.03	2000	
Ag	107	103	1	He	0.037	0.037	18.62	364	0.01	300	
Cd	111	103	1	He	2.891	2.891	0.91	5762	0.05	4000	
Sn	118	115	1	He	0.249	0.249	12.72	1826	0.01	2000	
Sb	123	115	1	He	0.325	0.325	3.71	1706	0.02	300	
Ba	137	115	1	He	19.502	19.502	2.05	37054	0.05	10000	
W	182	209	1	He	0.158	0.158	13.92	4794	0.00	2500	
Tl	205	165	1	He	3.698	3.698	1.27	112002	0.00	5000	
Pb	208	209	1	He	4.029	4.029	0.91	162189	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	984136	0.46	1631381	60.33	30	120	
Sc	45	1	He	557261	2.69	829696	67.16	30	120	
Sc	45	2	NoGas	4442800	1.79	6325638	70.23	30	120	
Rh	103	1	He	1642879	0.42	2345543	70.04	30	120	
In	115	1	He	1002011	0.57	1419467	70.59	30	120	
Tb	159	1	He	3173575	0.19	3888262	81.62	30	120	
Ho	165	1	He	3298300	0.33	3932562	83.87	30	120	
Bi	209	1	He	2277503	0.42	2874805	79.22	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-1-a
Data File Name	165SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:32:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.143	0.143	24.71	541	0.03	10000	
B	11	45	2	NoGas	1219.827	1219.827	4.54	3317411	0.04	300	>LDR
Na	23	45	1	He	31295.177	31295.177	2.44	40808585	0.08	500000	
Mg	24	45	1	He	43368.653	43368.653	3.78	32130434	0.13	500000	
Al	27	45	1	He	24.296	24.296	2.74	12149	0.20	200000	
K	39	45	1	He	13796.256	13796.256	2.83	9652657	0.14	500000	
Ca	44	45	1	He	69244.092	69244.092	2.52	2651476	2.61	500000	
Ti	47	45	1	He	0.418	0.418	9.34	100	0.42	2500	
V	51	45	1	He	0.024	0.024	440.67	209	0.01	10000	
Cr	52	45	1	He	1.030	1.030	9.64	8490	0.01	10000	
Mn	55	45	1	He	11.270	11.270	1.61	57705	0.02	10000	
Fe	56	45	1	He	157.889	157.889	1.12	958406	0.02	200000	
Co	59	103	1	He	0.088	0.088	8.07	914	0.01	10000	
Ni	60	103	1	He	0.308	0.308	11.54	860	0.04	10000	
Cu	63	103	1	He	0.448	0.448	8.68	4236	0.01	10000	
Zn	66	103	1	He	13.081	13.081	1.20	18703	0.07	10000	
As	75	103	1	He	0.447	0.447	13.10	504	0.09	10000	
Se	78	103	1	He	0.189	0.189	46.51	57	0.33	10000	
Sr	88	103	1	He	1130.718	1130.718	1.31	7773710	0.01	10000	
Mo	95	103	1	He	0.072	0.072	18.60	273	0.03	2000	
Ag	107	103	1	He	0.019	0.019	24.90	204	0.01	300	
Cd	111	103	1	He	0.086	0.086	7.51	1112	0.01	4000	
Sn	118	115	1	He	0.321	0.321	5.06	2341	0.01	2000	
Sb	123	115	1	He	0.321	0.321	4.30	1856	0.02	300	
Ba	137	115	1	He	20.255	20.255	1.93	42297	0.05	10000	
W	182	209	1	He	0.524	0.524	3.30	9581	0.01	2500	
Tl	205	165	1	He	0.008	0.008	16.13	327	0.00	5000	
Pb	208	209	1	He	0.226	0.226	0.31	10290	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1128224	1.59	1631381	69.16	30	120	
Sc	45	1	He	609361	2.08	829696	73.44	30	120	
Sc	45	2	NoGas	4824002	2.49	6325638	76.26	30	120	
Rh	103	1	He	1810653	1.54	2345543	77.20	30	120	
In	115	1	He	1101447	1.37	1419467	77.60	30	120	
Tb	159	1	He	3392292	1.14	3888262	87.24	30	120	
Ho	165	1	He	3480263	0.97	3932562	88.50	30	120	
Bi	209	1	He	2412871	0.67	2874805	83.93	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-1-a
Data File Name	166SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:35:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.115	0.115	30.55	456	0.03	10000	
B	11	45	2	NoGas	1215.848	1215.848	2.33	3490350	0.03	300	>LDR
Na	23	45	1	He	32510.763	32510.763	3.04	44227067	0.07	500000	
Mg	24	45	1	He	44533.063	44533.063	2.16	34430300	0.13	500000	
Al	27	45	1	He	13.097	13.097	5.88	7767	0.17	200000	
K	39	45	1	He	14248.054	14248.054	2.43	10400468	0.14	500000	
Ca	44	45	1	He	71122.659	71122.659	2.14	2841453	2.50	500000	
Ti	47	45	1	He	0.212	0.212	31.15	58	0.37	2500	
V	51	45	1	He	0.118	0.118	111.73	747	0.02	10000	
Cr	52	45	1	He	0.969	0.969	5.59	8453	0.01	10000	
Mn	55	45	1	He	11.187	11.187	3.86	59749	0.02	10000	
Fe	56	45	1	He	119.420	119.420	1.85	756926	0.02	200000	
Co	59	103	1	He	0.075	0.075	5.22	802	0.01	10000	
Ni	60	103	1	He	0.431	0.431	10.81	1191	0.04	10000	
Cu	63	103	1	He	0.239	0.239	4.56	2946	0.01	10000	
Zn	66	103	1	He	9.562	9.562	5.23	14409	0.07	10000	
As	75	103	1	He	0.502	0.502	5.81	564	0.09	10000	
Se	78	103	1	He	0.144	0.144	11.61	54	0.27	10000	
Sr	88	103	1	He	1167.918	1167.918	2.13	8219353	0.01	10000	
Mo	95	103	1	He	0.073	0.073	6.11	282	0.03	2000	
Ag	107	103	1	He	0.015	0.015	6.70	167	0.01	300	
Cd	111	103	1	He	0.090	0.090	28.31	1145	0.01	4000	
Sn	118	115	1	He	0.415	0.415	15.17	2837	0.01	2000	
Sb	123	115	1	He	0.293	0.293	12.95	1780	0.02	300	
Ba	137	115	1	He	20.475	20.475	1.75	43762	0.05	10000	
W	182	209	1	He	0.505	0.505	9.29	9537	0.01	2500	
Tl	205	165	1	He	0.003	0.003	20.95	153	0.00	5000	
Pb	208	209	1	He	0.096	0.096	4.08	4860	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1166586	1.56	1631381	71.51	30	120	
Sc	45	1	He	635739	1.79	829696	76.62	30	120	
Sc	45	2	NoGas	5089148	1.17	6325638	80.45	30	120	
Rh	103	1	He	1853917	2.55	2345543	79.04	30	120	
In	115	1	He	1127244	0.69	1419467	79.41	30	120	
Tb	159	1	He	3441887	0.82	3888262	88.52	30	120	
Ho	165	1	He	3534772	0.97	3932562	89.88	30	120	
Bi	209	1	He	2462209	0.98	2874805	85.65	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-2-a
Data File Name	167SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:39:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.142	0.142	21.63	504	0.03	10000	
B	11	45	2	NoGas	102.376	102.376	1.60	278051	0.04	300	
Na	23	45	1	He	43838.812	43838.812	2.75	57356876	0.08	500000	
Mg	24	45	1	He	109968.060	109968.060	3.42	81753134	0.13	500000	
Al	27	45	1	He	32.762	32.762	2.65	15765	0.21	200000	
K	39	45	1	He	4647.914	4647.914	2.10	3282735	0.14	500000	
Ca	44	45	1	He	140720.068	140720.068	2.64	5406437	2.60	500000	
Ti	47	45	1	He	0.506	0.506	21.46	119	0.43	2500	
V	51	45	1	He	0.355	0.355	45.53	1971	0.02	10000	
Cr	52	45	1	He	1.303	1.303	3.92	10283	0.01	10000	
Mn	55	45	1	He	137.540	137.540	2.44	696474	0.02	10000	
Fe	56	45	1	He	9194.214	9194.214	3.57	55775411	0.02	200000	
Co	59	103	1	He	0.838	0.838	0.53	8190	0.01	10000	
Ni	60	103	1	He	0.740	0.740	2.61	1882	0.04	10000	
Cu	63	103	1	He	0.350	0.350	7.80	3510	0.01	10000	
Zn	66	103	1	He	4.058	4.058	2.55	6682	0.06	10000	
As	75	103	1	He	0.895	0.895	5.43	862	0.10	10000	
Se	78	103	1	He	0.227	0.227	55.79	59	0.39	10000	
Sr	88	103	1	He	270.281	270.281	1.00	1812300	0.01	10000	
Mo	95	103	1	He	0.590	0.590	5.93	1842	0.03	2000	
Ag	107	103	1	He	0.014	0.014	13.10	154	0.01	300	
Cd	111	103	1	He	0.102	0.102	30.15	1115	0.01	4000	
Sn	118	115	1	He	0.164	0.164	16.76	1567	0.01	2000	
Sb	123	115	1	He	0.236	0.236	11.22	1452	0.02	300	
Ba	137	115	1	He	233.365	233.365	0.42	471753	0.05	10000	
W	182	209	1	He	0.258	0.258	13.57	6127	0.00	2500	
Tl	205	165	1	He	0.001	0.001	50.77	101	0.00	5000	
Pb	208	209	1	He	0.105	0.105	3.35	4989	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058483	0.38	1631381	64.88	30	120	
Sc	45	1	He	611722	4.08	829696	73.73	30	120	
Sc	45	2	NoGas	4698009	0.53	6325638	74.27	30	120	
Rh	103	1	He	1765905	2.10	2345543	75.29	30	120	
In	115	1	He	1067845	0.80	1419467	75.23	30	120	
Tb	159	1	He	3324240	2.10	3888262	85.49	30	120	
Ho	165	1	He	3412186	0.70	3932562	86.77	30	120	
Bi	209	1	He	2341925	1.21	2874805	81.46	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	168_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:43:30-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	51.261	1.220	188912	0.55	50	102.5	89.5	110.5	
B	11	45	2	NoGas	62.351	0.668	189026	0.44	50	124.7	89.5	110.5	CCV Failed
Na	23	45	1	He	24673.674	3.372	34555152	0.25	25000	98.7	89.5	110.5	
Mg	24	45	1	He	24718.014	3.793	19667683	0.32	25000	98.9	89.5	110.5	
Al	27	45	1	He	239.105	3.105	109945	0.68	250	95.6	89.5	110.5	
K	39	45	1	He	25741.733	2.979	19317339	0.53	25000	103.0	89.5	110.5	
Ca	44	45	1	He	24990.156	3.448	1028075	0.14	25000	100.0	89.5	110.5	
Ti	47	45	1	He	49.500	3.263	11482	1.51	50	99.0	89.5	110.5	
V	51	45	1	He	50.512	1.925	289593	1.64	50	101.0	89.5	110.5	
Cr	52	45	1	He	50.054	3.209	346729	0.32	50	100.1	89.5	110.5	
Mn	55	45	1	He	255.445	3.460	1383308	0.16	250	102.2	89.5	110.5	
Fe	56	45	1	He	12719.591	2.780	82605223	0.79	12500	101.8	89.5	110.5	
Co	59	103	1	He	47.141	1.553	492502	0.86	50	94.3	89.5	110.5	
Ni	60	103	1	He	46.612	0.893	120843	0.46	50	93.2	89.5	110.5	
Cu	63	103	1	He	47.256	1.434	323301	0.52	50	94.5	89.5	110.5	
Zn	66	103	1	He	47.198	1.391	66536	0.47	50	94.4	89.5	110.5	
As	75	103	1	He	48.563	0.653	43186	0.65	50	97.1	89.5	110.5	
Se	78	103	1	He	49.426	2.032	4672	1.07	50	98.9	89.5	110.5	
Sr	88	103	1	He	49.359	1.245	355601	0.79	50	98.7	89.5	110.5	
Mo	95	103	1	He	49.930	1.821	163482	2.57	50	99.9	89.5	110.5	
Ag	107	103	1	He	49.651	1.042	558213	0.13	50	99.3	89.5	110.5	
Cd	111	103	1	He	50.352	1.563	99504	0.63	50	100.7	89.5	110.5	
Sn	118	115	1	He	50.847	0.944	244818	1.00	50	101.7	89.5	110.5	
Sb	123	115	1	He	52.633	1.495	233690	0.98	50	105.3	89.5	110.5	
Ba	137	115	1	He	51.960	0.683	113221	0.99	50	103.9	89.5	110.5	
W	182	209	1	He	48.408	1.274	628720	0.43	50	96.8	89.5	110.5	
Tl	205	165	1	He	49.481	4.116	1594389	3.61	50	99.0	89.5	110.5	
Pb	208	209	1	He	47.380	0.671	2112510	0.93	50	94.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1165870	1.74	1631381	71.47	30	120	
Sc	45	1	He	654684	3.56	829696	78.91	30	120	
Sc	45	2	NoGas	5156640	0.88	6325638	81.52	30	120	
Rh	103	1	He	1896806	0.96	2345543	80.87	30	120	
In	115	1	He	1150426	0.81	1419467	81.05	30	120	
Tb	159	1	He	3443810	0.69	3888262	88.57	30	120	
Ho	165	1	He	3511441	0.63	3932562	89.29	30	120	
Bi	209	1	He	2531986	0.93	2874805	88.08	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	169_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:47:17-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.099	6.4	407	6.9	1	
B	11	45	2	NoGas	16.158	0.7	54406	0.5	20	
Na	23	45	1	He	49.957	6.4	85245	3.6	400	
Mg	24	45	1	He	4.962	11.1	4575	9.1	1000	
Al	27	45	1	He	-0.136	-47.5	1959	0.9	50	
K	39	45	1	He	10.400	22.0	36723	3.2	1000	
Ca	44	45	1	He	3.487	30.0	904	6.0	1000	
Ti	47	45	1	He	0.132	57.1	40	44.1	20	
V	51	45	1	He	0.023	381.6	204	238.8	2	
Cr	52	45	1	He	0.048	53.9	2287	8.4	2	
Mn	55	45	1	He	0.073	12.1	1320	4.7	2	
Fe	56	45	1	He	24.028	26.3	154101	24.4	50	
Co	59	103	1	He	0.008	28.7	126	18.6	1	
Ni	60	103	1	He	0.004	236.1	120	19.4	2	
Cu	63	103	1	He	0.063	12.2	1915	3.7	2	
Zn	66	103	1	He	-0.033	-95.2	1635	2.6	20	
As	75	103	1	He	0.082	16.7	216	7.3	2	
Se	78	103	1	He	0.175	36.1	62	10.0	2	
Sr	88	103	1	He	0.031	19.5	338	12.9	10	
Mo	95	103	1	He	0.911	21.7	3198	21.3	2	
Ag	107	103	1	He	0.016	19.4	191	17.9	0.2	
Cd	111	103	1	He	0.096	10.7	1249	2.1	0.2	
Sn	118	115	1	He	0.298	5.3	2467	3.2	10	
Sb	123	115	1	He	0.393	15.6	2387	12.3	1	
Ba	137	115	1	He	0.008	49.8	104	9.8	5	
W	182	209	1	He	1.149	16.9	19109	14.0	10	
Tl	205	165	1	He	0.041	20.6	1423	19.9	0.5	
Pb	208	209	1	He	0.036	9.3	2462	6.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1196359	1.06	1631381	73.33	30	120	
Sc	45	1	He	632919	1.55	829696	76.28	30	120	
Sc	45	2	NoGas	5106029	1.08	6325638	80.72	30	120	
Rh	103	1	He	2000430	1.30	2345543	85.29	30	120	
In	115	1	He	1215339	0.89	1419467	85.62	30	120	
Tb	159	1	He	3505960	1.14	3888262	90.17	30	120	
Ho	165	1	He	3583759	0.62	3932562	91.13	30	120	
Bi	209	1	He	2668542	0.17	2874805	92.83	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-2-a
Data File Name	170SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:51:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.100	0.100	34.94	363	0.03	10000	
B	11	45	2	NoGas	96.116	96.116	0.56	263002	0.04	300	
Na	23	45	1	He	44261.231	44261.231	2.95	57202853	0.08	500000	
Mg	24	45	1	He	110997.298	110997.298	3.45	81518458	0.14	500000	
Al	27	45	1	He	28.769	28.769	3.87	13905	0.21	200000	
K	39	45	1	He	4725.548	4725.548	3.86	3295097	0.14	500000	
Ca	44	45	1	He	143617.161	143617.161	3.55	5449711	2.64	500000	
Ti	47	45	1	He	0.480	0.480	14.19	112	0.43	2500	
V	51	45	1	He	0.202	0.202	35.86	1153	0.02	10000	
Cr	52	45	1	He	0.901	0.901	6.54	7599	0.01	10000	
Mn	55	45	1	He	139.228	139.228	2.50	696404	0.02	10000	
Fe	56	45	1	He	8120.083	8120.083	2.27	48675733	0.02	200000	
Co	59	103	1	He	0.877	0.877	2.74	8319	0.01	10000	
Ni	60	103	1	He	0.700	0.700	5.66	1733	0.04	10000	
Cu	63	103	1	He	0.165	0.165	8.32	2268	0.01	10000	
Zn	66	103	1	He	7.727	7.727	0.97	11057	0.07	10000	
As	75	103	1	He	0.811	0.811	5.46	770	0.11	10000	
Se	78	103	1	He	0.192	0.192	14.75	54	0.35	10000	
Sr	88	103	1	He	281.469	281.469	1.15	1833221	0.02	10000	
Mo	95	103	1	He	0.946	0.946	10.66	2842	0.03	2000	
Ag	107	103	1	He	0.014	0.014	4.97	148	0.01	300	
Cd	111	103	1	He	0.129	0.129	14.44	1129	0.01	4000	
Sn	118	115	1	He	0.475	0.475	12.48	2908	0.02	2000	
Sb	123	115	1	He	0.481	0.481	6.41	2420	0.02	300	
Ba	137	115	1	He	235.998	235.998	1.59	469685	0.05	10000	
W	182	209	1	He	0.589	0.589	4.32	10059	0.01	2500	
Tl	205	165	1	He	0.011	0.011	22.57	412	0.00	5000	
Pb	208	209	1	He	0.092	0.092	5.84	4461	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1063302	1.51	1631381	65.18	30	120	
Sc	45	1	He	604142	2.85	829696	72.81	30	120	
Sc	45	2	NoGas	4724857	0.42	6325638	74.69	30	120	
Rh	103	1	He	1715150	0.74	2345543	73.12	30	120	
In	115	1	He	1051403	0.69	1419467	74.07	30	120	
Tb	159	1	He	3254139	0.71	3888262	83.69	30	120	
Ho	165	1	He	3353365	0.75	3932562	85.27	30	120	
Bi	209	1	He	2338294	0.72	2874805	81.34	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-3-a
Data File Name	171SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:54:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.096	0.096	11.70	382	0.03	10000	
B	11	45	2	NoGas	166.368	166.368	1.35	474339	0.04	300	
Na	23	45	1	He	24242.195	24242.195	2.47	33544858	0.07	500000	
Mg	24	45	1	He	87173.727	87173.727	2.22	68540118	0.13	500000	
Al	27	45	1	He	13.498	13.498	6.38	8075	0.17	200000	
K	39	45	1	He	5232.257	5232.257	2.92	3902631	0.13	500000	
Ca	44	45	1	He	127615.955	127615.955	3.21	5183582	2.46	500000	
Ti	47	45	1	He	0.446	0.446	13.21	112	0.40	2500	
V	51	45	1	He	0.090	0.090	209.24	611	0.01	10000	
Cr	52	45	1	He	0.909	0.909	2.94	8193	0.01	10000	
Mn	55	45	1	He	10.373	10.373	3.51	56412	0.02	10000	
Fe	56	45	1	He	36.223	36.223	6.73	235868	0.02	200000	
Co	59	103	1	He	0.128	0.128	2.48	1338	0.01	10000	
Ni	60	103	1	He	1.012	1.012	4.83	2644	0.04	10000	
Cu	63	103	1	He	0.300	0.300	5.81	3327	0.01	10000	
Zn	66	103	1	He	5.157	5.157	6.78	8425	0.06	10000	
As	75	103	1	He	0.829	0.829	3.59	842	0.10	10000	
Se	78	103	1	He	0.194	0.194	11.53	58	0.33	10000	
Sr	88	103	1	He	293.164	293.164	3.65	2047598	0.01	10000	
Mo	95	103	1	He	0.125	0.125	17.96	444	0.03	2000	
Ag	107	103	1	He	0.013	0.013	8.30	147	0.01	300	
Cd	111	103	1	He	0.124	0.124	19.41	1203	0.01	4000	
Sn	118	115	1	He	0.157	0.157	17.19	1611	0.01	2000	
Sb	123	115	1	He	0.260	0.260	16.50	1622	0.02	300	
Ba	137	115	1	He	16.888	16.888	4.54	35907	0.05	10000	
W	182	209	1	He	0.360	0.360	10.14	7606	0.00	2500	
Tl	205	165	1	He	0.004	0.004	44.99	178	0.00	5000	
Pb	208	209	1	He	0.095	0.095	8.05	4715	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1156824	0.44	1631381	70.91	30	120	
Sc	45	1	He	646609	2.65	829696	77.93	30	120	
Sc	45	2	NoGas	4982570	1.15	6325638	78.77	30	120	
Rh	103	1	He	1840364	2.60	2345543	78.46	30	120	
In	115	1	He	1122138	3.75	1419467	79.05	30	120	
Tb	159	1	He	3437898	4.12	3888262	88.42	30	120	
Ho	165	1	He	3500144	2.07	3932562	89.00	30	120	
Bi	209	1	He	2424565	2.54	2874805	84.34	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-3-a
Data File Name	172SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:58:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.086	0.086	38.22	344	0.02	10000	
B	11	45	2	NoGas	163.050	163.050	0.48	469841	0.03	300	
Na	23	45	1	He	23833.938	23833.938	3.23	32728238	0.07	500000	
Mg	24	45	1	He	85090.782	85090.782	3.51	66384527	0.13	500000	
Al	27	45	1	He	6.796	6.796	10.38	5051	0.13	200000	
K	39	45	1	He	5168.372	5168.372	2.90	3826482	0.14	500000	
Ca	44	45	1	He	125895.357	125895.357	2.80	5075672	2.48	500000	
Ti	47	45	1	He	0.274	0.274	36.55	72	0.38	2500	
V	51	45	1	He	0.048	0.048	684.36	311	0.02	10000	
Cr	52	45	1	He	0.959	0.959	7.18	8462	0.01	10000	
Mn	55	45	1	He	9.885	9.885	4.47	53387	0.02	10000	
Fe	56	45	1	He	15.030	15.030	3.70	99223	0.02	200000	
Co	59	103	1	He	0.123	0.123	4.38	1266	0.01	10000	
Ni	60	103	1	He	0.977	0.977	1.81	2526	0.04	10000	
Cu	63	103	1	He	0.128	0.128	9.83	2165	0.01	10000	
Zn	66	103	1	He	3.714	3.714	4.59	6425	0.06	10000	
As	75	103	1	He	0.859	0.859	3.10	856	0.10	10000	
Se	78	103	1	He	0.186	0.186	11.35	57	0.33	10000	
Sr	88	103	1	He	290.222	290.222	0.69	2002849	0.01	10000	
Mo	95	103	1	He	0.101	0.101	7.03	363	0.03	2000	
Ag	107	103	1	He	0.011	0.011	8.95	128	0.01	300	
Cd	111	103	1	He	0.115	0.115	21.37	1169	0.01	4000	
Sn	118	115	1	He	0.174	0.174	6.50	1678	0.01	2000	
Sb	123	115	1	He	0.276	0.276	2.07	1682	0.02	300	
Ba	137	115	1	He	16.519	16.519	0.41	34810	0.05	10000	
W	182	209	1	He	0.347	0.347	16.38	7280	0.00	2500	
Tl	205	165	1	He	0.001	0.001	61.38	103	0.00	5000	
Pb	208	209	1	He	0.081	0.081	3.53	4067	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1152621	1.17	1631381	70.65	30	120	
Sc	45	1	He	641884	3.56	829696	77.36	30	120	
Sc	45	2	NoGas	5033684	0.92	6325638	79.58	30	120	
Rh	103	1	He	1817255	0.29	2345543	77.48	30	120	
In	115	1	He	1110810	0.40	1419467	78.26	30	120	
Tb	159	1	He	3330439	0.22	3888262	85.65	30	120	
Ho	165	1	He	3478842	0.78	3932562	88.46	30	120	
Bi	209	1	He	2372950	0.20	2874805	82.54	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-4-a
Data File Name	173SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:02:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.071	0.071	39.98	282	0.03	10000	
B	11	45	2	NoGas	1579.863	1579.863	1.87	4294332	0.04	300	>LDR
Na	23	45	1	He	58506.750	58506.750	3.03	75806523	0.08	500000	
Mg	24	45	1	He	44678.905	44678.905	3.25	32902963	0.14	500000	
Al	27	45	1	He	20.946	20.946	3.36	10678	0.20	200000	
K	39	45	1	He	15642.645	15642.645	3.15	10873468	0.14	500000	
Ca	44	45	1	He	62919.010	62919.010	3.75	2394100	2.63	500000	
Ti	47	45	1	He	0.637	0.637	33.13	146	0.44	2500	
V	51	45	1	He	0.193	0.193	47.05	1095	0.02	10000	
Cr	52	45	1	He	1.712	1.712	6.57	12784	0.01	10000	
Mn	55	45	1	He	95.762	95.762	3.47	480461	0.02	10000	
Fe	56	45	1	He	1909.633	1909.633	2.31	11480060	0.02	200000	
Co	59	103	1	He	0.227	0.227	3.59	2239	0.01	10000	
Ni	60	103	1	He	0.571	0.571	3.82	1473	0.04	10000	
Cu	63	103	1	He	0.795	0.795	4.50	6327	0.01	10000	
Zn	66	103	1	He	7.266	7.266	2.46	10786	0.07	10000	
As	75	103	1	He	2.218	2.218	0.78	1952	0.11	10000	
Se	78	103	1	He	0.077	0.077	45.46	46	0.17	10000	
Sr	88	103	1	He	1124.672	1124.672	0.99	7536457	0.01	10000	
Mo	95	103	1	He	1.324	1.324	7.42	4077	0.03	2000	
Ag	107	103	1	He	0.012	0.012	21.83	130	0.01	300	
Cd	111	103	1	He	0.097	0.097	15.39	1103	0.01	4000	
Sn	118	115	1	He	0.237	0.237	14.47	1882	0.01	2000	
Sb	123	115	1	He	0.365	0.365	4.88	1972	0.02	300	
Ba	137	115	1	He	56.090	56.090	1.57	112850	0.05	10000	
W	182	209	1	He	0.220	0.220	12.59	5664	0.00	2500	
Tl	205	165	1	He	0.001	0.001	54.25	84	0.00	5000	
Pb	208	209	1	He	0.205	0.205	1.93	9120	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1112450	0.87	1631381	68.19	30	120	
Sc	45	1	He	605729	2.75	829696	73.01	30	120	
Sc	45	2	NoGas	4820867	1.14	6325638	76.21	30	120	
Rh	103	1	He	1764565	0.82	2345543	75.23	30	120	
In	115	1	He	1062358	1.20	1419467	74.84	30	120	
Tb	159	1	He	3293107	1.58	3888262	84.69	30	120	
Ho	165	1	He	3377658	1.41	3932562	85.89	30	120	
Bi	209	1	He	2341389	0.59	2874805	81.45	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-4-a
Data File Name	174SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:06:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.089	0.089	8.52	344	0.03	10000	
B	11	45	2	NoGas	1578.355	1578.355	1.36	4343048	0.04	300	>LDR
Na	23	45	1	He	57395.514	57395.514	2.96	75765101	0.08	500000	
Mg	24	45	1	He	43666.679	43666.679	2.63	32764408	0.13	500000	
Al	27	45	1	He	11.675	11.675	5.04	6931	0.17	200000	
K	39	45	1	He	15330.472	15330.472	4.60	10854142	0.14	500000	
Ca	44	45	1	He	61680.086	61680.086	3.74	2391083	2.58	500000	
Ti	47	45	1	He	0.240	0.240	26.54	62	0.39	2500	
V	51	45	1	He	0.057	0.057	97.57	393	0.01	10000	
Cr	52	45	1	He	1.138	1.138	9.49	9295	0.01	10000	
Mn	55	45	1	He	92.510	92.510	4.05	472819	0.02	10000	
Fe	56	45	1	He	1445.785	1445.785	4.40	8852102	0.02	200000	
Co	59	103	1	He	0.217	0.217	8.89	2166	0.01	10000	
Ni	60	103	1	He	0.630	0.630	6.49	1633	0.04	10000	
Cu	63	103	1	He	0.242	0.242	11.77	2858	0.01	10000	
Zn	66	103	1	He	6.663	6.663	2.01	10126	0.07	10000	
As	75	103	1	He	1.925	1.925	0.61	1730	0.11	10000	
Se	78	103	1	He	0.130	0.130	25.56	51	0.26	10000	
Sr	88	103	1	He	1100.646	1100.646	0.23	7458294	0.01	10000	
Mo	95	103	1	He	1.273	1.273	2.91	3965	0.03	2000	
Ag	107	103	1	He	0.011	0.011	14.49	116	0.01	300	
Cd	111	103	1	He	0.100	0.100	42.86	1122	0.01	4000	
Sn	118	115	1	He	0.956	0.956	15.29	5138	0.02	2000	
Sb	123	115	1	He	0.270	0.270	10.65	1605	0.02	300	
Ba	137	115	1	He	53.859	53.859	0.55	109878	0.05	10000	
W	182	209	1	He	0.188	0.188	17.51	5349	0.00	2500	
Tl	205	165	1	He	0.002	0.002	12.40	120	0.00	5000	
Pb	208	209	1	He	0.064	0.064	5.26	3350	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1113397	1.86	1631381	68.25	30	120	
Sc	45	1	He	617171	3.24	829696	74.39	30	120	
Sc	45	2	NoGas	4879925	0.78	6325638	77.15	30	120	
Rh	103	1	He	1784425	0.76	2345543	76.08	30	120	
In	115	1	He	1077112	0.32	1419467	75.88	30	120	
Tb	159	1	He	3345049	1.46	3888262	86.03	30	120	
Ho	165	1	He	3440917	0.70	3932562	87.50	30	120	
Bi	209	1	He	2369879	0.76	2874805	82.44	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-5-a
Data File Name	175SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:10:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.055	0.055	13.89	219	0.03	10000	
B	11	45	2	NoGas	140.150	140.150	1.56	389378	0.04	300	
Na	23	45	1	He	82128.863	82128.863	3.15	108176748	0.08	500000	
Mg	24	45	1	He	123606.123	123606.123	3.00	92543496	0.13	500000	
Al	27	45	1	He	7.793	7.793	11.12	5267	0.15	200000	
K	39	45	1	He	2987.071	2987.071	3.09	2133956	0.14	500000	
Ca	44	45	1	He	216834.846	216834.846	2.66	8388385	2.58	500000	
Ti	47	45	1	He	0.431	0.431	46.14	103	0.42	2500	
V	51	45	1	He	0.183	0.183	68.84	1050	0.02	10000	
Cr	52	45	1	He	0.685	0.685	9.40	6347	0.01	10000	
Mn	55	45	1	He	346.170	346.170	1.64	1764193	0.02	10000	
Fe	56	45	1	He	6812.919	6812.919	2.31	41633784	0.02	200000	
Co	59	103	1	He	35.965	35.965	0.98	335833	0.01	10000	
Ni	60	103	1	He	17.175	17.175	1.77	39853	0.04	10000	
Cu	63	103	1	He	1.163	1.163	4.45	8320	0.01	10000	
Zn	66	103	1	He	5.368	5.368	3.25	8029	0.07	10000	
As	75	103	1	He	1.649	1.649	2.41	1425	0.12	10000	
Se	78	103	1	He	0.319	0.319	25.87	64	0.50	10000	
Sr	88	103	1	He	533.894	533.894	0.93	3436717	0.02	10000	
Mo	95	103	1	He	1.368	1.368	3.35	4045	0.03	2000	
Ag	107	103	1	He	0.021	0.021	16.88	214	0.01	300	
Cd	111	103	1	He	0.130	0.130	24.77	1117	0.01	4000	
Sn	118	115	1	He	0.144	0.144	6.58	1471	0.01	2000	
Sb	123	115	1	He	0.178	0.178	15.21	1205	0.01	300	
Ba	137	115	1	He	77.590	77.590	1.46	155738	0.05	10000	
W	182	209	1	He	0.155	0.155	13.76	4742	0.00	2500	
Tl	205	165	1	He	0.007	0.007	3.30	286	0.00	5000	
Pb	208	209	1	He	0.135	0.135	3.79	6045	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1082813	1.29	1631381	66.37	30	120	
Sc	45	1	He	615969	3.89	829696	74.24	30	120	
Sc	45	2	NoGas	4840685	1.60	6325638	76.52	30	120	
Rh	103	1	He	1695172	1.02	2345543	72.27	30	120	
In	115	1	He	1059961	0.58	1419467	74.67	30	120	
Tb	159	1	He	3296492	1.45	3888262	84.78	30	120	
Ho	165	1	He	3378679	0.49	3932562	85.92	30	120	
Bi	209	1	He	2270030	1.41	2874805	78.96	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-5-a
Data File Name	176SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:13:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.085	0.085	13.08	319	0.03	10000	
B	11	45	2	NoGas	145.365	145.365	1.22	392847	0.04	300	
Na	23	45	1	He	82914.669	82914.669	2.50	105271814	0.08	500000	
Mg	24	45	1	He	123635.046	123635.046	2.36	89223993	0.14	500000	
Al	27	45	1	He	5.889	5.889	8.15	4299	0.14	200000	
K	39	45	1	He	3028.623	3028.623	3.49	2084834	0.15	500000	
Ca	44	45	1	He	216924.265	216924.265	2.62	8087699	2.68	500000	
Ti	47	45	1	He	0.366	0.366	14.62	87	0.42	2500	
V	51	45	1	He	0.054	0.054	97.34	358	0.01	10000	
Cr	52	45	1	He	0.980	0.980	4.40	7961	0.01	10000	
Mn	55	45	1	He	339.467	339.467	3.54	1666596	0.02	10000	
Fe	56	45	1	He	5691.547	5691.547	1.83	33522439	0.02	200000	
Co	59	103	1	He	34.865	34.865	0.76	320874	0.01	10000	
Ni	60	103	1	He	16.962	16.962	1.88	38797	0.04	10000	
Cu	63	103	1	He	0.439	0.439	6.02	3856	0.01	10000	
Zn	66	103	1	He	5.462	5.462	0.81	8025	0.07	10000	
As	75	103	1	He	1.614	1.614	3.18	1377	0.12	10000	
Se	78	103	1	He	0.338	0.338	17.96	65	0.52	10000	
Sr	88	103	1	He	517.882	517.882	1.13	3285773	0.02	10000	
Mo	95	103	1	He	1.375	1.375	6.82	4007	0.03	2000	
Ag	107	103	1	He	0.014	0.014	2.75	147	0.01	300	
Cd	111	103	1	He	0.112	0.112	14.11	1070	0.01	4000	
Sn	118	115	1	He	0.180	0.180	13.18	1578	0.01	2000	
Sb	123	115	1	He	0.320	0.320	19.66	1726	0.02	300	
Ba	137	115	1	He	76.322	76.322	0.68	148315	0.05	10000	
W	182	209	1	He	0.264	0.264	15.95	5842	0.00	2500	
Tl	205	165	1	He	0.007	0.007	34.68	278	0.00	5000	
Pb	208	209	1	He	0.069	0.069	10.50	3289	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1078303	0.73	1631381	66.10	30	120	
Sc	45	1	He	593521	2.68	829696	71.53	30	120	
Sc	45	2	NoGas	4711682	1.53	6325638	74.49	30	120	
Rh	103	1	He	1670808	0.80	2345543	71.23	30	120	
In	115	1	He	1026186	0.41	1419467	72.29	30	120	
Tb	159	1	He	3227037	0.39	3888262	82.99	30	120	
Ho	165	1	He	3315457	0.60	3932562	84.31	30	120	
Bi	209	1	He	2206935	1.15	2874805	76.77	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	177_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:17:40-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.766	1.551	182284	2.05	50	101.5	89.5	110.5	
B	11	45	2	NoGas	68.623	0.716	197593	0.87	50	137.2	89.5	110.5	CCV Failed
Na	23	45	1	He	24701.289	3.098	33310765	1.16	25000	98.8	89.5	110.5	
Mg	24	45	1	He	24847.748	3.218	19038622	0.80	25000	99.4	89.5	110.5	
Al	27	45	1	He	243.991	2.484	107998	1.55	250	97.6	89.5	110.5	
K	39	45	1	He	25581.753	4.388	18477226	0.69	25000	102.3	89.5	110.5	
Ca	44	45	1	He	25097.023	3.866	993982	0.63	25000	100.4	89.5	110.5	
Ti	47	45	1	He	49.122	1.505	10975	2.34	50	98.2	89.5	110.5	
V	51	45	1	He	50.012	2.674	276018	1.14	50	100.0	89.5	110.5	
Cr	52	45	1	He	50.250	2.946	335169	1.19	50	100.5	89.5	110.5	
Mn	55	45	1	He	251.493	3.441	1311284	0.36	250	100.6	89.5	110.5	
Fe	56	45	1	He	12892.494	3.607	80599470	0.68	12500	103.1	89.5	110.5	
Co	59	103	1	He	46.673	0.552	470696	0.45	50	93.3	89.5	110.5	
Ni	60	103	1	He	46.135	1.168	115459	1.60	50	92.3	89.5	110.5	
Cu	63	103	1	He	46.630	0.599	307986	1.51	50	93.3	89.5	110.5	
Zn	66	103	1	He	47.084	2.442	64069	1.67	50	94.2	89.5	110.5	
As	75	103	1	He	48.082	0.709	41274	0.95	50	96.2	89.5	110.5	
Se	78	103	1	He	49.844	0.974	4548	0.30	50	99.7	89.5	110.5	
Sr	88	103	1	He	49.624	0.919	345093	0.37	50	99.2	89.5	110.5	
Mo	95	103	1	He	50.212	2.838	158654	1.94	50	100.4	89.5	110.5	
Ag	107	103	1	He	49.715	0.529	539537	0.46	50	99.4	89.5	110.5	
Cd	111	103	1	He	50.328	0.639	96007	0.48	50	100.7	89.5	110.5	
Sn	118	115	1	He	50.397	1.604	235338	1.44	50	100.8	89.5	110.5	
Sb	123	115	1	He	52.806	0.066	227400	0.38	50	105.6	89.5	110.5	
Ba	137	115	1	He	52.192	0.782	110294	0.51	50	104.4	89.5	110.5	
W	182	209	1	He	49.004	3.438	615555	1.89	50	98.0	89.5	110.5	
Tl	205	165	1	He	48.138	0.821	1520269	0.25	50	96.3	89.5	110.5	
Pb	208	209	1	He	48.099	1.424	2074620	0.90	50	96.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1135782	1.37	1631381	69.62	30	120	
Sc	45	1	He	630379	3.83	829696	75.98	30	120	
Sc	45	2	NoGas	4916830	1.21	6325638	77.73	30	120	
Rh	103	1	He	1830896	0.92	2345543	78.06	30	120	
In	115	1	He	1115727	0.34	1419467	78.60	30	120	
Tb	159	1	He	3329750	0.26	3888262	85.64	30	120	
Ho	165	1	He	3441179	0.59	3932562	87.50	30	120	
Bi	209	1	He	2449722	1.75	2874805	85.21	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	178_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:21:30-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.089	5.8	359	7.1	1	
B	11	45	2	NoGas	16.941	1.9	54860	1.0	20	
Na	23	45	1	He	52.628	9.3	84999	6.2	400	
Mg	24	45	1	He	8.281	25.7	6809	21.8	1000	
Al	27	45	1	He	0.201	113.5	2015	3.8	50	
K	39	45	1	He	10.896	16.0	35480	2.2	1000	
Ca	44	45	1	He	12.046	36.6	1189	12.9	1000	
Ti	47	45	1	He	0.105	83.3	32	57.0	20	
V	51	45	1	He	0.057	87.4	377	68.5	2	
Cr	52	45	1	He	0.039	56.9	2125	5.9	2	
Mn	55	45	1	He	0.074	11.1	1269	2.2	2	
Fe	56	45	1	He	24.214	26.5	148554	24.6	50	
Co	59	103	1	He	0.010	72.1	141	52.4	1	
Ni	60	103	1	He	-0.010	-19.3	79	6.5	2	
Cu	63	103	1	He	0.059	10.2	1816	3.1	2	
Zn	66	103	1	He	0.009	930.9	1631	7.5	20	
As	75	103	1	He	0.061	35.9	188	9.8	2	
Se	78	103	1	He	0.111	25.2	53	4.2	2	
Sr	88	103	1	He	0.070	53.1	611	45.1	10	
Mo	95	103	1	He	0.894	28.1	3021	28.1	2	
Ag	107	103	1	He	0.014	18.3	168	18.5	0.2	
Cd	111	103	1	He	0.097	8.8	1203	2.2	0.2	
Sn	118	115	1	He	0.262	13.7	2204	7.9	10	
Sb	123	115	1	He	0.381	22.5	2247	17.1	1	
Ba	137	115	1	He	0.006	173.1	96	23.7	5	
W	182	209	1	He	1.159	13.8	18501	12.3	10	
Tl	205	165	1	He	0.041	25.2	1367	24.5	0.5	
Pb	208	209	1	He	0.026	19.9	1911	13.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1164687	1.84	1631381	71.39	30	120	
Sc	45	1	He	605489	1.29	829696	72.98	30	120	
Sc	45	2	NoGas	4944394	1.19	6325638	78.16	30	120	
Rh	103	1	He	1923636	0.84	2345543	82.01	30	120	
In	115	1	He	1173200	0.48	1419467	82.65	30	120	
Tb	159	1	He	3369179	0.57	3888262	86.65	30	120	
Ho	165	1	He	3438135	0.61	3932562	87.43	30	120	
Bi	209	1	He	2562681	1.19	2874805	89.14	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	179CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:25:23-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.033	1.033	5.803	3982	4.33	1	103.3	69.5	130.5	
B	11	2	NoGas	36.614	36.614	0.809	110853	1.47	20	183.1	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1093.029	1093.029	2.184	1505718	0.58	1000	109.3	69.5	130.5	
Mg	24	1	He	1061.237	1061.237	2.305	822052	1.00	1000	106.1	69.5	130.5	
Al	27	1	He	47.804	47.804	2.506	23000	1.07	50	95.6	69.5	130.5	
K	39	1	He	1083.854	1083.854	1.615	819145	0.56	1000	108.4	69.5	130.5	
Ca	44	1	He	1040.705	1040.705	1.910	42382	1.63	1000	104.1	69.5	130.5	
Ti	47	1	He	10.374	10.374	8.267	2347	6.91	10	103.7	69.5	130.5	
V	51	1	He	5.083	5.083	4.815	28397	3.51	5	101.7	69.5	130.5	
Cr	52	1	He	2.141	2.141	2.276	16314	1.22	2	107.0	69.5	130.5	
Mn	55	1	He	5.263	5.263	2.826	28644	1.17	5	105.3	69.5	130.5	
Fe	56	1	He	109.812	109.812	1.453	697033	0.29	100	109.8	69.5	130.5	
Co	59	1	He	0.927	0.927	1.276	9909	0.63	1	92.7	69.5	130.5	
Ni	60	1	He	1.867	1.867	5.684	5035	4.87	2	93.4	69.5	130.5	
Cu	63	1	He	1.859	1.859	5.340	14315	3.72	2	92.9	69.5	130.5	
Zn	66	1	He	19.080	19.080	1.818	28381	1.16	20	95.4	69.5	130.5	
As	75	1	He	4.766	4.766	1.801	4440	0.93	5	95.3	69.5	130.5	
Se	78	1	He	5.424	5.424	8.118	561	6.97	5	108.5	69.5	130.5	
Sr	88	1	He	9.836	9.836	2.366	72288	1.26	10	98.4	69.5	130.5	
Mo	95	1	He	10.277	10.277	2.848	34325	2.04	10	102.8	69.5	130.5	
Ag	107	1	He	1.027	1.027	0.328	11770	1.44	1	102.7	69.5	130.5	
Cd	111	1	He	1.135	1.135	4.467	3279	3.49	1	113.5	69.5	130.5	
Sn	118	1	He	10.170	10.170	1.782	50680	1.47	10	101.7	69.5	130.5	
Sb	123	1	He	2.071	2.071	2.341	9885	2.16	2	103.5	69.5	130.5	
Ba	137	1	He	5.130	5.130	3.383	11475	3.50	5	102.6	69.5	130.5	
W	182	1	He	9.457	9.457	1.786	127520	2.09	10	94.6	69.5	130.5	
Tl	205	1	He	2.027	2.027	1.661	64261	1.74	2	101.4	69.5	130.5	
Pb	208	1	He	1.004	1.004	1.228	46182	0.73	1	100.4	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1209607	1.49	1631381	74.15	30	120	
Sc	45	1	He	636361	1.60	829696	76.70	30	120	
Sc	45	2	NoGas	4999983	1.11	6325638	79.04	30	120	
Rh	103	1	He	1933186	1.12	2345543	82.42	30	120	
In	115	1	He	1173375	0.28	1419467	82.66	30	120	
Tb	159	1	He	3354976	0.32	3888262	86.28	30	120	
Ho	165	1	He	3450628	0.50	3932562	87.75	30	120	
Bi	209	1	He	2573069	0.80	2874805	89.50	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177625/1-a@2
Data File Name	180_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:29:14-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.055	31.0	219	28.0	1	
B	11	45	2	NoGas	22.075	1.7	64784	2.1	20	Blank Failed
Na	23	45	1	He	60.250	3.2	93465	0.2	400	
Mg	24	45	1	He	19.290	1.7	14703	1.1	1000	
Al	27	45	1	He	-1.470	-7.5	1297	2.3	50	
K	39	45	1	He	25.458	5.6	44897	2.4	1000	
Ca	44	45	1	He	59.690	6.3	2956	3.6	1000	
Ti	47	45	1	He	0.176	11.8	47	7.1	20	
V	51	45	1	He	0.195	80.7	1081	74.0	2	
Cr	52	45	1	He	0.928	6.8	7672	3.1	2	
Mn	55	45	1	He	0.198	1.3	1861	2.7	2	
Fe	56	45	1	He	17.272	5.1	105632	7.4	50	
Co	59	103	1	He	0.008	44.1	121	29.4	1	
Ni	60	103	1	He	0.089	19.3	326	12.1	2	
Cu	63	103	1	He	0.207	6.9	2717	2.9	2	
Zn	66	103	1	He	1.120	3.7	3047	2.7	20	
As	75	103	1	He	0.197	22.4	298	14.1	2	
Se	78	103	1	He	0.157	41.2	55	12.0	2	
Sr	88	103	1	He	0.162	7.6	1225	8.0	10	
Mo	95	103	1	He	0.324	21.0	1076	19.4	2	
Ag	107	103	1	He	0.014	46.6	162	44.7	0.2	
Cd	111	103	1	He	0.062	15.4	1085	0.7	0.2	
Sn	118	115	1	He	17.488	1.9	81075	2.1	10	Blank Failed
Sb	123	115	1	He	0.191	17.8	1303	11.2	1	
Ba	137	115	1	He	0.392	6.7	893	6.2	5	
W	182	209	1	He	0.765	6.7	12958	6.2	10	
Tl	205	165	1	He	0.014	13.0	507	11.9	0.5	
Pb	208	209	1	He	0.169	24.5	8126	24.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1083598	1.80	1631381	66.42	30	120	
Sc	45	1	He	596419	2.50	829696	71.88	30	120	
Sc	45	2	NoGas	4631771	0.86	6325638	73.22	30	120	
Rh	103	1	He	1842199	1.32	2345543	78.54	30	120	
In	115	1	He	1099924	0.48	1419467	77.49	30	120	
Tb	159	1	He	3274953	0.55	3888262	84.23	30	120	
Ho	165	1	He	3354706	0.48	3932562	85.31	30	120	
Bi	209	1	He	2489647	1.59	2874805	86.60	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177625/3-a@2
Data File Name	181LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:33:04-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	488.624	488.624	2.018	1516515	1.15	500	97.7	78.6	110.5	
B	11	2	NoGas	69.771	69.771	1.238	174470	0.83	50	139.5	79.5	120.5	LCSS Failed
Na	23	1	He	4911.757	4911.757	1.925	5823652	0.55	5000	98.2	79.5	120.5	
Mg	24	1	He	5014.577	5014.577	2.275	3371504	0.58	5000	100.3	79.5	120.5	
Al	27	1	He	4674.219	4674.219	2.807	1782695	1.04	5000	93.5	79.5	120.5	
K	39	1	He	5057.794	5057.794	2.106	3226575	0.17	5000	101.2	79.5	120.5	
Ca	44	1	He	4422.833	4422.833	1.788	154269	0.38	5000	88.5	79.5	120.5	
Ti	47	1	He	47.212	47.212	2.437	9251	2.06	50	94.4	79.5	120.5	
V	51	1	He	494.178	494.178	1.949	2392177	1.35	500	98.8	71.5	110.5	
Cr	52	1	He	500.384	500.384	2.321	2912568	0.43	500	100.1	69.5	110.5	
Mn	55	1	He	505.393	505.393	1.548	2311458	0.49	500	101.1	79.5	120.5	
Fe	56	1	He	5069.878	5069.878	2.112	27812824	0.45	5000	101.4	79.5	120.5	
Co	59	1	He	444.163	444.163	1.112	4130910	1.36	500	88.8	73.9	110.5	
Ni	60	1	He	429.273	429.273	0.305	989979	0.24	500	85.9	74.9	110.5	
Cu	63	1	He	458.515	458.515	0.265	2781958	0.39	500	91.7	72.6	110.5	
Zn	66	1	He	413.306	413.306	0.465	507691	0.71	500	82.7	71.5	113.4	
As	75	1	He	403.860	403.860	0.159	318852	0.15	500	80.8	73.4	110.5	
Se	78	1	He	403.293	403.293	0.260	33674	0.40	500	80.7	64.6	110.5	
Sr	88	1	He	482.488	482.488	0.371	3093762	0.07	500	96.5	79.5	120.5	
Mo	95	1	He	50.970	50.970	0.451	148549	0.69	50	101.9	29.5	140.5	
Ag	107	1	He	48.826	48.826	0.219	488688	0.09	50	97.7	59.5	114.5	
Cd	111	1	He	464.533	464.533	0.320	809985	0.60	500	92.9	73.5	110.5	
Sn	118	1	He	564.610	564.610	1.742	2378856	1.60	500	112.9	79.5	120.5	
Sb	123	1	He	49.583	49.583	0.833	193333	0.82	50	99.2	67.5	113.4	
Ba	137	1	He	500.415	500.415	0.781	956786	0.61	500	100.1	69.5	110.5	
W	182	1	He	47.656	47.656	0.826	579124	0.46	50	95.3	74.6	125.4	
Tl	205	1	He	125.377	125.377	3.247	3732067	0.95	125	100.3	70.6	110.5	
Pb	208	1	He	477.284	477.284	0.670	19902034	0.31	500	95.5	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	981994	0.92	1631381	60.19	30	120	
Sc	45	1	He	552775	1.96	829696	66.62	30	120	
Sc	45	2	NoGas	4272801	0.90	6325638	67.55	30	120	
Rh	103	1	He	1688518	0.30	2345543	71.99	30	120	
In	115	1	He	1010097	0.20	1419467	71.16	30	120	
Tb	159	1	He	3206287	0.94	3888262	82.46	30	120	
Ho	165	1	He	3245249	2.64	3932562	82.52	30	120	
Bi	209	1	He	2368775	0.90	2874805	82.40	30	120	

Sample Report

Sample Table

Sample Name	240-49628-c-13-d@2
Data File Name	182SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:36:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.340	1.340	14.21	4412	0.03	10000	
B	11	45	2	NoGas	53.562	53.562	0.41	143528	0.04	300	
Na	23	45	1	He	1002.147	1002.147	2.06	1212769	0.08	500000	
Mg	24	45	1	He	9988.026	9988.026	1.95	6782877	0.15	500000	
Al	27	45	1	He	23649.185	23649.185	2.01	9104403	0.26	200000	
K	39	45	1	He	4403.844	4403.844	0.95	2841666	0.15	500000	
Ca	44	45	1	He	1483455.104	1483455.104	1.40	52044179	2.85	500000	>LDR
Ti	47	45	1	He	1005.696	1005.696	2.08	198863	0.51	2500	
V	51	45	1	He	105.409	105.409	2.30	515412	0.02	10000	
Cr	52	45	1	He	46.180	46.180	2.06	273101	0.02	10000	
Mn	55	45	1	He	1184.968	1184.968	1.96	5472973	0.02	10000	
Fe	56	45	1	He	35838.345	35838.345	2.35	198569054	0.02	200000	
Co	59	103	1	He	9.810	9.810	1.15	75980	0.01	10000	
Ni	60	103	1	He	31.283	31.283	0.75	60130	0.05	10000	
Cu	63	103	1	He	17.479	17.479	0.64	89273	0.02	10000	
Zn	66	103	1	He	78.777	78.777	1.28	81512	0.10	10000	
As	75	103	1	He	28.635	28.635	0.46	18911	0.15	10000	
Se	78	103	1	He	2.968	2.968	8.74	237	1.25	10000	
Sr	88	103	1	He	1205.909	1205.909	0.41	6436943	0.02	10000	
Mo	95	103	1	He	3.775	3.775	2.20	9194	0.04	2000	
Ag	107	103	1	He	0.082	0.082	8.83	690	0.01	300	
Cd	111	103	1	He	1.085	1.085	8.21	2311	0.05	4000	
Sn	118	115	1	He	17.657	17.657	0.90	70342	0.03	2000	
Sb	123	115	1	He	0.905	0.905	0.75	3722	0.02	300	
Ba	137	115	1	He	237.340	237.340	0.16	424696	0.06	10000	
W	182	209	1	He	3.355	3.355	0.97	36669	0.01	2500	
Tl	205	165	1	He	0.280	0.280	15.15	7843	0.00	5000	
Pb	208	209	1	He	22.146	22.146	1.24	776608	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1035726	1.93	1631381	63.49	30	120	
Sc	45	1	He	558398	2.41	829696	67.30	30	120	
Sc	45	2	NoGas	4526275	1.04	6325638	71.55	30	120	
Rh	103	1	He	1405642	0.07	2345543	59.93	30	120	
In	115	1	He	945256	0.61	1419467	66.59	30	120	
Tb	159	1	He	2957995	0.63	3888262	76.07	30	120	
Ho	165	1	He	3030891	0.76	3932562	77.07	30	120	
Bi	209	1	He	1990891	1.50	2874805	69.25	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49628-c-13-d@10
Data File Name	183SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:40:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.339	0.339	13.95	1241	0.03	10000	
B	11	45	2	NoGas	22.886	22.886	1.92	71913	0.03	300	
Na	23	45	1	He	221.266	221.266	2.22	309010	0.07	500000	
Mg	24	45	1	He	2140.628	2140.628	1.76	1605828	0.13	500000	
Al	27	45	1	He	5031.654	5031.654	1.20	2140696	0.24	200000	
K	39	45	1	He	879.425	879.425	2.37	649248	0.14	500000	
Ca	44	45	1	He	304837.274	304837.274	2.46	11808331	2.58	500000	
Ti	47	45	1	He	204.191	204.191	2.12	44592	0.46	2500	
V	51	45	1	He	21.688	21.688	1.22	117180	0.02	10000	
Cr	52	45	1	He	9.438	9.438	0.80	63164	0.01	10000	
Mn	55	45	1	He	243.895	243.895	1.64	1244633	0.02	10000	
Fe	56	45	1	He	7534.177	7534.177	1.42	46102516	0.02	200000	
Co	59	103	1	He	1.847	1.847	3.58	17959	0.01	10000	
Ni	60	103	1	He	5.959	5.959	0.91	14433	0.04	10000	
Cu	63	103	1	He	3.368	3.368	3.08	22599	0.01	10000	
Zn	66	103	1	He	16.110	16.110	2.20	22072	0.07	10000	
As	75	103	1	He	5.068	5.068	1.32	4296	0.12	10000	
Se	78	103	1	He	0.467	0.467	13.95	80	0.59	10000	
Sr	88	103	1	He	211.327	211.327	0.66	1413809	0.01	10000	
Mo	95	103	1	He	0.672	0.672	5.95	2089	0.03	2000	
Ag	107	103	1	He	0.020	0.020	2.01	217	0.01	300	
Cd	111	103	1	He	0.310	0.310	5.84	1488	0.02	4000	
Sn	118	115	1	He	3.293	3.293	2.07	15971	0.02	2000	
Sb	123	115	1	He	0.136	0.136	7.60	1072	0.01	300	
Ba	137	115	1	He	46.532	46.532	1.42	96978	0.05	10000	
W	182	209	1	He	0.698	0.698	4.63	11594	0.01	2500	
Tl	205	165	1	He	0.051	0.051	2.68	1671	0.00	5000	
Pb	208	209	1	He	4.309	4.309	0.45	181575	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1128914	0.73	1631381	69.20	30	120	
Sc	45	1	He	616508	1.28	829696	74.31	30	120	
Sc	45	2	NoGas	4979062	1.65	6325638	78.71	30	120	
Rh	103	1	He	1761692	0.48	2345543	75.11	30	120	
In	115	1	He	1100238	0.53	1419467	77.51	30	120	
Tb	159	1	He	3333018	0.58	3888262	85.72	30	120	
Ho	165	1	He	3418499	1.36	3932562	86.93	30	120	
Bi	209	1	He	2385052	0.55	2874805	82.96	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49628-c-13-d@2
Data File Name	184SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:44:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	960.213	960.213	1.14	3249027	0.03	10000	
B	11	45	2	NoGas	150.819	150.819	1.26	404631	0.04	300	
Na	23	45	1	He	10967.334	10967.334	2.38	13388785	0.08	500000	
Mg	24	45	1	He	19621.826	19621.826	2.90	13600849	0.14	500000	
Al	27	45	1	He	32800.708	32800.708	2.03	12890679	0.25	200000	
K	39	45	1	He	14687.819	14687.819	1.75	9613167	0.15	500000	
Ca	44	45	1	He	1483195.767	1483195.767	2.83	53110322	2.79	500000	>LDR
Ti	47	45	1	He	1090.037	1090.037	2.45	220037	0.50	2500	
V	51	45	1	He	1118.271	1118.271	2.01	5581766	0.02	10000	
Cr	52	45	1	He	1017.621	1017.621	1.82	6107053	0.02	10000	
Mn	55	45	1	He	2122.853	2122.853	2.91	10007420	0.02	10000	
Fe	56	45	1	He	45129.869	45129.869	2.53	255263563	0.02	200000	
Co	59	103	1	He	979.026	979.026	4.70	8013666	0.01	10000	
Ni	60	103	1	He	989.638	989.638	3.76	2009138	0.05	10000	
Cu	63	103	1	He	929.900	929.900	4.01	4965471	0.02	10000	
Zn	66	103	1	He	890.892	890.892	4.11	961859	0.09	10000	
As	75	103	1	He	993.899	993.899	3.97	690616	0.14	10000	
Se	78	103	1	He	890.788	890.788	4.14	65432	1.36	10000	
Sr	88	103	1	He	2265.178	2265.178	3.61	12787083	0.02	10000	
Mo	95	103	1	He	123.343	123.343	4.40	316354	0.04	2000	
Ag	107	103	1	He	96.253	96.253	3.72	848121	0.01	300	
Cd	111	103	1	He	945.256	945.256	3.97	1450093	0.07	4000	
Sn	118	115	1	He	1149.266	1149.266	0.80	4539506	0.03	2000	
Sb	123	115	1	He	104.536	104.536	0.58	381714	0.03	300	
Ba	137	115	1	He	1405.787	1405.787	0.25	2520089	0.06	10000	
W	182	209	1	He	114.272	114.272	1.47	1182419	0.01	2500	
Tl	205	165	1	He	245.162	245.162	1.73	6861539	0.00	5000	
Pb	208	209	1	He	1039.024	1039.024	1.02	37005740	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1070513	0.61	1631381	65.62	30	120	
Sc	45	1	He	570064	2.39	829696	68.71	30	120	
Sc	45	2	NoGas	4680485	0.94	6325638	73.99	30	120	
Rh	103	1	He	1488085	4.28	2345543	63.44	30	120	
In	115	1	He	947098	0.52	1419467	66.72	30	120	
Tb	159	1	He	3009624	0.71	3888262	77.40	30	120	
Ho	165	1	He	3049799	0.54	3932562	77.55	30	120	
Bi	209	1	He	2023372	1.29	2874805	70.38	30	120	

Sample Report

Sample Table

Sample Name	240-49628-c-13-e ms@2
Data File Name	185SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:47:51-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	436.002	436.002	2.00	1416438	0.03	10000	
B	11	45	2	NoGas	105.826	105.826	0.63	277738	0.04	300	
Na	23	45	1	He	5743.937	5743.937	1.29	6736457	0.09	500000	
Mg	24	45	1	He	16847.085	16847.085	2.22	11206166	0.15	500000	
Al	27	45	1	He	34871.751	34871.751	2.14	13149878	0.27	200000	
K	39	45	1	He	10123.573	10123.573	2.70	6364472	0.16	500000	
Ca	44	45	1	He	1806936.287	1806936.287	1.33	62096050	2.91	500000	>LDR
Ti	47	45	1	He	1314.268	1314.268	1.62	254580	0.52	2500	
V	51	45	1	He	597.580	597.580	1.35	2862280	0.02	10000	
Cr	52	45	1	He	498.014	498.014	1.77	2868496	0.02	10000	
Mn	55	45	1	He	1872.312	1872.312	2.02	8470398	0.02	10000	
Fe	56	45	1	He	46504.231	46504.231	1.88	252412319	0.02	200000	
Co	59	103	1	He	471.665	471.665	0.36	3564462	0.01	10000	
Ni	60	103	1	He	460.769	460.769	0.67	863453	0.05	10000	
Cu	63	103	1	He	457.833	457.833	1.76	2257170	0.02	10000	
Zn	66	103	1	He	455.481	455.481	0.33	454515	0.10	10000	
As	75	103	1	He	486.574	486.574	0.30	312139	0.16	10000	
Se	78	103	1	He	412.664	412.664	0.92	27998	1.47	10000	
Sr	88	103	1	He	1987.248	1987.248	0.45	10354123	0.02	10000	
Mo	95	103	1	He	60.988	60.988	0.56	144427	0.04	2000	
Ag	107	103	1	He	45.214	45.214	0.44	367732	0.01	300	
Cd	111	103	1	He	441.501	441.501	0.42	625578	0.07	4000	
Sn	118	115	1	He	515.572	515.572	0.82	1982333	0.03	2000	
Sb	123	115	1	He	22.969	22.969	1.12	81953	0.03	300	
Ba	137	115	1	He	724.287	724.287	1.07	1263652	0.06	10000	
W	182	209	1	He	45.422	45.422	0.87	452053	0.01	2500	
Tl	205	165	1	He	114.039	114.039	0.74	3074298	0.00	5000	
Pb	208	209	1	He	487.307	487.307	0.80	16637143	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1027946	1.42	1631381	63.01	30	120	
Sc	45	1	He	546943	1.85	829696	65.92	30	120	
Sc	45	2	NoGas	4543478	0.39	6325638	71.83	30	120	
Rh	103	1	He	1372059	0.15	2345543	58.50	30	120	
In	115	1	He	921773	0.73	1419467	64.94	30	120	
Tb	159	1	He	2897667	0.67	3888262	74.52	30	120	
Ho	165	1	He	2937479	0.65	3932562	74.70	30	120	
Bi	209	1	He	1939436	0.64	2874805	67.46	30	120	

Sample Report

Sample Table

Sample Name	240-49628-c-13-f msd@2
Data File Name	186SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:51:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	432.990	432.990	3.64	1377704	0.03	10000	
B	11	45	2	NoGas	102.838	102.838	1.28	268825	0.04	300	
Na	23	45	1	He	5644.077	5644.077	0.90	6527655	0.09	500000	
Mg	24	45	1	He	16428.576	16428.576	0.68	10777367	0.15	500000	
Al	27	45	1	He	33579.836	33579.836	1.24	12487743	0.27	200000	
K	39	45	1	He	10168.890	10168.890	0.60	6305789	0.16	500000	
Ca	44	45	1	He	1812547.234	1812547.234	1.34	61420693	2.95	500000	>LDR
Ti	47	45	1	He	1264.642	1264.642	1.94	241549	0.52	2500	
V	51	45	1	He	595.399	595.399	2.04	2811905	0.02	10000	
Cr	52	45	1	He	494.594	494.594	2.03	2809137	0.02	10000	
Mn	55	45	1	He	1854.102	1854.102	0.58	8272302	0.02	10000	
Fe	56	45	1	He	48612.349	48612.349	1.21	260197199	0.02	200000	
Co	59	103	1	He	467.678	467.678	0.96	3505692	0.01	10000	
Ni	60	103	1	He	459.098	459.098	0.39	853339	0.05	10000	
Cu	63	103	1	He	454.604	454.604	0.92	2223056	0.02	10000	
Zn	66	103	1	He	450.166	450.166	0.47	445582	0.10	10000	
As	75	103	1	He	485.716	485.716	0.43	309059	0.16	10000	
Se	78	103	1	He	409.785	409.785	1.21	27577	1.49	10000	
Sr	88	103	1	He	1953.478	1953.478	0.35	10095565	0.02	10000	
Mo	95	103	1	He	59.661	59.661	0.45	140136	0.04	2000	
Ag	107	103	1	He	45.319	45.319	0.63	365588	0.01	300	
Cd	111	103	1	He	442.551	442.551	0.11	621973	0.07	4000	
Sn	118	115	1	He	512.921	512.921	1.15	1952305	0.03	2000	
Sb	123	115	1	He	22.267	22.267	0.66	78658	0.03	300	
Ba	137	115	1	He	720.811	720.811	0.80	1244954	0.06	10000	
W	182	209	1	He	43.778	43.778	2.77	431940	0.01	2500	
Tl	205	165	1	He	115.206	115.206	0.86	3087276	0.00	5000	
Pb	208	209	1	He	487.090	487.090	2.11	16484327	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1007097	2.25	1631381	61.73	30	120	
Sc	45	1	He	539307	1.66	829696	65.00	30	120	
Sc	45	2	NoGas	4522226	0.88	6325638	71.49	30	120	
Rh	103	1	He	1360921	0.31	2345543	58.02	30	120	
In	115	1	He	912471	0.14	1419467	64.28	30	120	
Tb	159	1	He	2870364	1.18	3888262	73.82	30	120	
Ho	165	1	He	2920141	1.14	3932562	74.26	30	120	
Bi	209	1	He	1922868	1.67	2874805	66.89	30	120	

Sample Report

Sample Table

Sample Name	310-53259-c-1-a@2
Data File Name	187SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:55:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	14.262	14.262	2.37	45374	0.03	10000	
B	11	45	2	NoGas	534.865	534.865	0.97	1797022	0.03	300	>LDR
Na	23	45	1	He	143469.755	143469.755	2.21	220230199	0.07	500000	
Mg	24	45	1	He	82626.610	82626.610	2.14	72094414	0.11	500000	
Al	27	45	1	He	302812.004	302812.004	1.40	149787354	0.20	200000	>LDR
K	39	45	1	He	16569.434	16569.434	1.80	13645429	0.12	500000	
Ca	44	45	1	He	344995.580	344995.580	1.32	15553869	2.22	500000	
Ti	47	45	1	He	16192.228	16192.228	2.89	4113635	0.39	2500	>LDR
V	51	45	1	He	603.803	603.803	1.48	3793790	0.02	10000	
Cr	52	45	1	He	198.569	198.569	2.08	1501608	0.01	10000	
Mn	55	45	1	He	1594.636	1594.636	1.25	9464614	0.02	10000	
Fe	56	45	1	He	182976.072	182976.072	2.59	1302680517	0.01	200000	
Co	59	103	1	He	237.673	237.673	0.46	1836701	0.01	10000	
Ni	60	103	1	He	138.967	138.967	0.29	266344	0.05	10000	
Cu	63	103	1	He	531.416	531.416	0.48	2678911	0.02	10000	
Zn	66	103	1	He	2698.591	2698.591	0.25	2747815	0.10	10000	
As	75	103	1	He	7.930	7.930	1.40	5298	0.15	10000	
Se	78	103	1	He	8.920	8.920	4.37	649	1.37	10000	
Sr	88	103	1	He	28447.878	28447.878	0.78	151566714	0.02	10000	>LDR
Mo	95	103	1	He	29.171	29.171	1.11	70660	0.04	2000	
Ag	107	103	1	He	0.293	0.293	9.32	2444	0.01	300	
Cd	111	103	1	He	2.715	2.715	1.85	4665	0.06	4000	
Sn	118	115	1	He	17.168	17.168	2.00	67638	0.03	2000	
Sb	123	115	1	He	1.360	1.360	2.79	5318	0.03	300	
Ba	137	115	1	He	60342.274	60342.274	0.49	106745114	0.06	10000	>LDR
W	182	209	1	He	3.514	3.514	1.98	38369	0.01	2500	
Tl	205	165	1	He	0.148	0.148	16.68	4214	0.00	5000	
Pb	208	209	1	He	5.317	5.317	1.85	187296	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1006120	1.21	1631381	61.67	30	120	
Sc	45	1	He	717506	2.12	829696	86.48	30	120	
Sc	45	2	NoGas	5938085	0.62	6325638	93.87	30	120	
Rh	103	1	He	1403008	0.40	2345543	59.82	30	120	
In	115	1	He	934607	0.42	1419467	65.84	30	120	
Tb	159	1	He	2970158	0.66	3888262	76.39	30	120	
Ho	165	1	He	3057155	0.36	3932562	77.74	30	120	
Bi	209	1	He	1995166	0.91	2874805	69.40	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177246/1-a@2
Data File Name	188_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:58:51-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.254	8.6	759	8.6	1	
B	11	45	2	NoGas	17.768	1.7	47807	1.8	20	
Na	23	45	1	He	88.434	7.9	109121	5.2	400	
Mg	24	45	1	He	41.830	7.8	26175	6.0	1000	
Al	27	45	1	He	33.526	38.0	13181	31.7	50	
K	39	45	1	He	27.686	13.8	39132	3.7	1000	
Ca	44	45	1	He	189.949	17.3	6600	13.9	1000	
Ti	47	45	1	He	18.279	28.8	3254	27.0	20	
V	51	45	1	He	0.410	11.8	1873	13.4	2	
Cr	52	45	1	He	1.023	5.2	6979	4.7	2	
Mn	55	45	1	He	0.593	7.7	3209	4.0	2	
Fe	56	45	1	He	74.104	28.6	371629	26.7	50	Blank Failed
Co	59	103	1	He	0.041	10.8	403	12.2	1	
Ni	60	103	1	He	0.140	9.0	404	5.0	2	
Cu	63	103	1	He	0.460	5.3	3922	1.5	2	
Zn	66	103	1	He	8.002	3.4	10937	2.6	20	
As	75	103	1	He	0.241	5.8	300	1.6	2	
Se	78	103	1	He	0.238	10.8	56	1.5	2	
Sr	88	103	1	He	2.080	32.5	13034	30.9	10	
Mo	95	103	1	He	0.747	21.8	2160	19.9	2	
Ag	107	103	1	He	0.046	8.6	450	8.1	0.2	
Cd	111	103	1	He	0.254	17.4	1295	3.7	0.2	Blank Failed
Sn	118	115	1	He	17.650	0.2	73470	1.3	10	Blank Failed
Sb	123	115	1	He	0.109	8.2	860	2.8	1	
Ba	137	115	1	He	5.733	30.5	10765	29.3	5	Blank Failed
W	182	209	1	He	0.527	3.6	9444	2.1	10	
Tl	205	165	1	He	0.051	12.8	1535	10.9	0.5	
Pb	208	209	1	He	0.334	20.3	14594	20.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	915040	1.32	1631381	56.09	30	120	
Sc	45	1	He	503073	1.95	829696	60.63	30	120	
Sc	45	2	NoGas	4134785	0.59	6325638	65.37	30	120	
Rh	103	1	He	1645943	2.24	2345543	70.17	30	120	
In	115	1	He	987693	1.19	1419467	69.58	30	120	
Tb	159	1	He	3111658	0.90	3888262	80.03	30	120	
Ho	165	1	He	3169138	2.02	3932562	80.59	30	120	
Bi	209	1	He	2368781	0.91	2874805	82.40	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	189_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:02:42-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	51.133	2.814	165433	2.58	50	102.3	89.5	110.5	
B	11	45	2	NoGas	56.047	1.925	153098	0.75	50	112.1	89.5	110.5	CCV Failed
Na	23	45	1	He	25622.349	0.518	30858544	2.33	25000	102.5	89.5	110.5	
Mg	24	45	1	He	25544.591	0.778	17479163	1.58	25000	102.2	89.5	110.5	
Al	27	45	1	He	260.687	1.223	102925	3.14	250	104.3	89.5	110.5	
K	39	45	1	He	26986.507	1.149	17410024	1.26	25000	107.9	89.5	110.5	
Ca	44	45	1	He	26138.408	0.191	924725	2.25	25000	104.6	89.5	110.5	
Ti	47	45	1	He	56.726	3.008	11316	4.77	50	113.5	89.5	110.5	CCV Failed
V	51	45	1	He	51.799	0.436	255295	2.27	50	103.6	89.5	110.5	
Cr	52	45	1	He	51.782	0.162	308399	2.28	50	103.6	89.5	110.5	
Mn	55	45	1	He	262.706	0.546	1223308	1.61	250	105.1	89.5	110.5	
Fe	56	45	1	He	13171.801	1.139	73542153	1.37	12500	105.4	89.5	110.5	
Co	59	103	1	He	45.869	0.911	438660	2.58	50	91.7	89.5	110.5	
Ni	60	103	1	He	44.825	0.886	106364	1.86	50	89.6	89.5	110.5	
Cu	63	103	1	He	45.813	0.157	286923	1.92	50	91.6	89.5	110.5	
Zn	66	103	1	He	46.070	0.211	59478	1.59	50	92.1	89.5	110.5	
As	75	103	1	He	47.673	0.842	38802	1.80	50	95.3	89.5	110.5	
Se	78	103	1	He	47.754	1.089	4134	2.82	50	95.5	89.5	110.5	
Sr	88	103	1	He	49.936	0.404	329285	1.96	50	99.9	89.5	110.5	
Mo	95	103	1	He	50.295	1.255	150690	1.37	50	100.6	89.5	110.5	
Ag	107	103	1	He	50.129	0.260	515855	2.00	50	100.3	89.5	110.5	
Cd	111	103	1	He	51.424	0.554	92992	1.35	50	102.8	89.5	110.5	
Sn	118	115	1	He	50.706	0.425	227055	0.62	50	101.4	89.5	110.5	
Sb	123	115	1	He	52.832	0.899	218184	1.88	50	105.7	89.5	110.5	
Ba	137	115	1	He	53.541	1.907	108514	2.88	50	107.1	89.5	110.5	
W	182	209	1	He	48.424	1.228	589770	1.15	50	96.8	89.5	110.5	
Tl	205	165	1	He	47.654	0.551	1467732	1.56	50	95.3	89.5	110.5	
Pb	208	209	1	He	47.915	1.077	2003423	2.02	50	95.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1023466	0.99	1631381	62.74	30	120	
Sc	45	1	He	562551	2.13	829696	67.80	30	120	
Sc	45	2	NoGas	4624866	1.59	6325638	73.11	30	120	
Rh	103	1	He	1735989	1.78	2345543	74.01	30	120	
In	115	1	He	1069925	1.00	1419467	75.38	30	120	
Tb	159	1	He	3254483	1.08	3888262	83.70	30	120	
Ho	165	1	He	3355769	1.06	3932562	85.33	30	120	
Bi	209	1	He	2374268	1.00	2874805	82.59	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	190_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:06:32-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.152	18.5	533	17.8	1	
B	11	45	2	NoGas	12.553	1.1	40003	1.2	20	
Na	23	45	1	He	51.981	6.1	79300	4.1	400	
Mg	24	45	1	He	3.601	58.1	3171	44.8	1000	
Al	27	45	1	He	3.076	24.7	3027	9.0	50	
K	39	45	1	He	11.143	12.7	33584	2.0	1000	
Ca	44	45	1	He	23.064	34.4	1514	17.8	1000	
Ti	47	45	1	He	0.555	33.3	121	30.2	20	
V	51	45	1	He	0.069	38.3	419	32.0	2	
Cr	52	45	1	He	0.044	84.7	2035	10.6	2	
Mn	55	45	1	He	0.060	60.4	1129	14.8	2	
Fe	56	45	1	He	21.047	21.3	122153	19.9	50	
Co	59	103	1	He	0.014	53.6	173	42.3	1	
Ni	60	103	1	He	-0.001	-1665.6	98	35.5	2	
Cu	63	103	1	He	0.100	40.6	1981	12.9	2	
Zn	66	103	1	He	-0.038	-90.4	1479	3.1	20	
As	75	103	1	He	0.079	15.4	194	5.3	2	
Se	78	103	1	He	0.198	8.0	58	2.6	2	
Sr	88	103	1	He	0.205	34.1	1510	32.1	10	
Mo	95	103	1	He	1.094	14.0	3480	13.7	2	
Ag	107	103	1	He	0.012	22.5	131	21.6	0.2	
Cd	111	103	1	He	0.108	25.3	1158	5.1	0.2	
Sn	118	115	1	He	0.308	10.8	2308	6.5	10	
Sb	123	115	1	He	0.375	17.7	2111	13.4	1	
Ba	137	115	1	He	0.389	12.5	898	11.5	5	
W	182	209	1	He	1.160	10.8	18014	8.1	10	
Tl	205	165	1	He	0.059	24.2	1863	22.7	0.5	
Pb	208	209	1	He	0.097	10.9	4947	8.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1050978	0.35	1631381	64.42	30	120	
Sc	45	1	He	570298	0.85	829696	68.74	30	120	
Sc	45	2	NoGas	4637405	0.90	6325638	73.31	30	120	
Rh	103	1	He	1818297	0.91	2345543	77.52	30	120	
In	115	1	He	1113969	0.20	1419467	78.48	30	120	
Tb	159	1	He	3272521	2.23	3888262	84.16	30	120	
Ho	165	1	He	3332090	1.00	3932562	84.73	30	120	
Bi	209	1	He	2496617	0.97	2874805	86.84	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177246/2-a@2
Data File Name	191LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:10:21-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	507.823	507.823	0.794	1441000	1.31	500	101.6	78.6	110.5	
B	11	2	NoGas	65.947	65.947	1.536	160256	0.78	50	131.9	79.5	120.5	LCSS Failed
Na	23	1	He	5069.575	5069.575	1.831	5665784	0.65	5000	101.4	79.5	120.5	
Mg	24	1	He	5187.100	5187.100	3.687	3286811	1.45	5000	103.7	79.5	120.5	
Al	27	1	He	4849.604	4849.604	2.503	1743521	0.30	5000	97.0	79.5	120.5	
K	39	1	He	5302.715	5302.715	1.002	3188808	2.65	5000	106.1	79.5	120.5	
Ca	44	1	He	4668.673	4668.673	1.183	153487	1.05	5000	93.4	79.5	120.5	
Ti	47	1	He	52.716	52.716	2.810	9743	4.99	50	105.4	79.5	120.5	
V	51	1	He	511.972	511.972	1.690	2336371	1.68	500	102.4	71.5	110.5	
Cr	52	1	He	524.976	524.976	1.160	2880974	1.30	500	105.0	69.5	110.5	
Mn	55	1	He	531.780	531.780	1.393	2293052	2.23	500	106.4	79.5	120.5	
Fe	56	1	He	5277.366	5277.366	1.863	27292653	0.93	5000	105.5	79.5	120.5	
Co	59	1	He	443.280	443.280	0.302	4042280	0.75	500	88.7	73.9	110.5	
Ni	60	1	He	429.006	429.006	0.802	970067	0.71	500	85.8	74.9	110.5	
Cu	63	1	He	455.602	455.602	1.929	2710190	1.26	500	91.1	72.6	110.5	
Zn	66	1	He	418.764	418.764	0.475	504362	1.22	500	83.8	71.5	113.4	
As	75	1	He	411.265	411.265	0.291	318370	0.74	500	82.3	73.4	110.5	
Se	78	1	He	406.386	406.386	0.584	33271	1.00	500	81.3	64.6	110.5	
Sr	88	1	He	492.396	492.396	1.201	3095778	1.36	500	98.5	79.5	120.5	
Mo	95	1	He	53.216	53.216	0.334	152073	1.17	50	106.4	29.5	140.5	
Ag	107	1	He	50.091	50.091	0.185	491587	0.93	50	100.2	59.5	114.5	
Cd	111	1	He	472.349	472.349	0.178	807556	0.97	500	94.5	73.5	110.5	
Sn	118	1	He	596.181	596.181	0.900	2439351	0.55	500	119.2	79.5	120.5	
Sb	123	1	He	53.026	53.026	0.745	200761	0.61	50	106.1	67.5	113.4	
Ba	137	1	He	520.087	520.087	0.843	965704	0.69	500	104.0	69.5	110.5	
W	182	1	He	49.874	49.874	0.991	590035	1.32	50	99.7	74.6	125.4	
Tl	205	1	He	124.799	124.799	0.803	3677475	1.21	125	99.8	70.6	110.5	
Pb	208	1	He	487.937	487.937	0.330	19812011	0.24	500	97.6	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	897734	1.34	1631381	55.03	30	120	
Sc	45	1	He	521102	2.22	829696	62.81	30	120	
Sc	45	2	NoGas	4143158	0.70	6325638	65.50	30	120	
Rh	103	1	He	1655646	1.03	2345543	70.59	30	120	
In	115	1	He	980979	0.92	1419467	69.11	30	120	
Tb	159	1	He	3104539	0.38	3888262	79.84	30	120	
Ho	165	1	He	3210759	0.68	3932562	81.65	30	120	
Bi	209	1	He	2306515	0.56	2874805	80.23	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-d@2
Data File Name	192SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:14:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.092	4.092	1.41	13053	0.03	10000	
B	11	45	2	NoGas	21.171	21.171	2.45	65728	0.03	300	
Na	23	45	1	He	306.221	306.221	2.80	403530	0.08	500000	
Mg	24	45	1	He	10009.255	10009.255	2.22	7194234	0.14	500000	
Al	27	45	1	He	63859.069	63859.069	2.52	26014036	0.25	200000	
K	39	45	1	He	3413.069	3413.069	3.05	2336622	0.15	500000	
Ca	44	45	1	He	2030.283	2030.283	2.25	76095	2.67	500000	
Ti	47	45	1	He	607.370	607.370	2.38	127111	0.48	2500	
V	51	45	1	He	145.457	145.457	1.64	752703	0.02	10000	
Cr	52	45	1	He	89.617	89.617	1.97	559133	0.02	10000	
Mn	55	45	1	He	16749.149	16749.149	1.52	81855923	0.02	10000	>LDR
Fe	56	45	1	He	124557.780	124557.780	1.32	730386584	0.02	200000	
Co	59	103	1	He	72.615	72.615	0.55	692540	0.01	10000	
Ni	60	103	1	He	91.717	91.717	1.44	216948	0.04	10000	
Cu	63	103	1	He	62.463	62.463	1.74	389638	0.02	10000	
Zn	66	103	1	He	282.130	282.130	1.75	355759	0.08	10000	
As	75	103	1	He	57.828	57.828	1.55	46915	0.12	10000	
Se	78	103	1	He	6.787	6.787	1.95	619	1.10	10000	
Sr	88	103	1	He	106.066	106.066	0.97	697411	0.02	10000	
Mo	95	103	1	He	13.317	13.317	2.15	39820	0.03	2000	
Ag	107	103	1	He	0.341	0.341	0.28	3502	0.01	300	
Cd	111	103	1	He	1.222	1.222	7.37	3092	0.04	4000	
Sn	118	115	1	He	19.038	19.038	3.36	83813	0.02	2000	
Sb	123	115	1	He	1.151	1.151	5.10	5102	0.02	300	
Ba	137	115	1	He	610.060	610.060	0.47	1207607	0.05	10000	
W	182	209	1	He	1.534	1.534	8.48	21675	0.01	2500	
Tl	205	165	1	He	1.282	1.282	1.67	39639	0.00	5000	
Pb	208	209	1	He	122.313	122.313	0.95	5117474	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1007062	0.90	1631381	61.73	30	120	
Sc	45	1	He	590793	1.12	829696	71.21	30	120	
Sc	45	2	NoGas	4877173	0.51	6325638	77.10	30	120	
Rh	103	1	He	1731548	2.53	2345543	73.82	30	120	
In	115	1	He	1045782	1.64	1419467	73.67	30	120	
Tb	159	1	He	3301949	2.41	3888262	84.92	30	120	
Ho	165	1	He	3363082	1.02	3932562	85.52	30	120	
Bi	209	1	He	2376442	1.16	2874805	82.66	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49233-a-1-d@10
Data File Name	193SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:17:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.969	0.969	6.38	3056	0.03	10000	
B	11	45	2	NoGas	10.833	10.833	0.32	34492	0.03	300	
Na	23	45	1	He	81.750	81.750	0.71	117512	0.07	500000	
Mg	24	45	1	He	2116.285	2116.285	1.83	1492355	0.14	500000	
Al	27	45	1	He	13505.362	13505.362	2.09	5397321	0.25	200000	
K	39	45	1	He	695.733	695.733	1.19	488463	0.14	500000	
Ca	44	45	1	He	416.986	416.986	0.57	15885	2.63	500000	
Ti	47	45	1	He	124.601	124.601	1.77	25581	0.49	2500	
V	51	45	1	He	30.103	30.103	0.60	152863	0.02	10000	
Cr	52	45	1	He	18.183	18.183	1.74	112703	0.02	10000	
Mn	55	45	1	He	3493.861	3493.861	1.34	16748289	0.02	10000	
Fe	56	45	1	He	25655.212	25655.212	1.25	147556047	0.02	200000	
Co	59	103	1	He	14.600	14.600	1.54	142844	0.01	10000	
Ni	60	103	1	He	18.315	18.315	1.93	44517	0.04	10000	
Cu	63	103	1	He	12.619	12.619	0.95	81800	0.02	10000	
Zn	66	103	1	He	61.361	61.361	1.08	80554	0.08	10000	
As	75	103	1	He	12.117	12.117	2.03	10181	0.12	10000	
Se	78	103	1	He	1.505	1.505	14.02	171	0.88	10000	
Sr	88	103	1	He	21.270	21.270	1.03	143543	0.01	10000	
Mo	95	103	1	He	2.553	2.553	2.83	7867	0.03	2000	
Ag	107	103	1	He	0.066	0.066	5.18	701	0.01	300	
Cd	111	103	1	He	0.305	0.305	14.09	1493	0.02	4000	
Sn	118	115	1	He	3.683	3.683	2.22	17513	0.02	2000	
Sb	123	115	1	He	0.167	0.167	6.70	1187	0.01	300	
Ba	137	115	1	He	120.036	120.036	1.78	246505	0.05	10000	
W	182	209	1	He	0.320	0.320	4.00	7176	0.00	2500	
Tl	205	165	1	He	0.260	0.260	2.62	8027	0.00	5000	
Pb	208	209	1	He	23.357	23.357	1.86	1007969	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	989089	1.86	1631381	60.63	30	120	
Sc	45	1	He	579511	1.61	829696	69.85	30	120	
Sc	45	2	NoGas	4503941	0.44	6325638	71.20	30	120	
Rh	103	1	He	1776163	1.37	2345543	75.73	30	120	
In	115	1	He	1084737	0.82	1419467	76.42	30	120	
Tb	159	1	He	3264580	0.52	3888262	83.96	30	120	
Ho	165	1	He	3344787	0.50	3932562	85.05	30	120	
Bi	209	1	He	2450129	1.27	2874805	85.23	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49233-a-1-d@2
Data File Name	194SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:21:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1021.402	1021.402	1.90	3059558	0.03	10000	
B	11	45	2	NoGas	113.994	113.994	1.23	298357	0.04	300	
Na	23	45	1	He	9965.074	9965.074	0.79	11932383	0.08	500000	
Mg	24	45	1	He	19330.092	19330.092	0.48	13141579	0.15	500000	
Al	27	45	1	He	71417.507	71417.507	1.09	27523586	0.26	200000	
K	39	45	1	He	13155.871	13155.871	1.31	8446560	0.16	500000	
Ca	44	45	1	He	10806.176	10806.176	0.83	380196	2.84	500000	
Ti	47	45	1	He	672.015	672.015	2.09	133053	0.51	2500	
V	51	45	1	He	1130.158	1130.158	1.08	5532250	0.02	10000	
Cr	52	45	1	He	1066.158	1066.158	1.42	6274363	0.02	10000	
Mn	55	45	1	He	17155.072	17155.072	0.84	79315846	0.02	10000	>LDR
Fe	56	45	1	He	129573.377	129573.377	0.57	718771545	0.02	200000	
Co	59	103	1	He	987.138	987.138	2.08	8906446	0.01	10000	
Ni	60	103	1	He	1017.079	1017.079	0.89	2275945	0.04	10000	
Cu	63	103	1	He	974.219	974.219	1.42	5733897	0.02	10000	
Zn	66	103	1	He	1123.183	1123.183	1.53	1336234	0.08	10000	
As	75	103	1	He	924.483	924.483	1.15	708066	0.13	10000	
Se	78	103	1	He	853.467	853.467	1.14	69105	1.24	10000	
Sr	88	103	1	He	1116.034	1116.034	0.67	6944208	0.02	10000	
Mo	95	103	1	He	121.730	121.730	0.81	344213	0.04	2000	
Ag	107	103	1	He	100.588	100.588	1.76	976744	0.01	300	
Cd	111	103	1	He	1030.133	1030.133	3.11	1741100	0.06	4000	
Sn	118	115	1	He	1180.382	1180.382	1.37	4761271	0.02	2000	
Sb	123	115	1	He	110.449	110.449	0.61	411806	0.03	300	
Ba	137	115	1	He	1837.959	1837.959	0.73	3364873	0.05	10000	
W	182	209	1	He	101.764	101.764	2.04	1195405	0.01	2500	
Tl	205	165	1	He	249.556	249.556	1.57	7420772	0.00	5000	
Pb	208	209	1	He	1109.207	1109.207	0.50	44831288	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	947867	1.85	1631381	58.10	30	120	
Sc	45	1	He	558856	0.87	829696	67.36	30	120	
Sc	45	2	NoGas	4539063	0.91	6325638	71.76	30	120	
Rh	103	1	He	1638751	3.05	2345543	69.87	30	120	
In	115	1	He	967184	1.73	1419467	68.14	30	120	
Tb	159	1	He	3139412	1.52	3888262	80.74	30	120	
Ho	165	1	He	3240671	2.02	3932562	82.41	30	120	
Bi	209	1	He	2295931	0.81	2874805	79.86	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-e du@2
Data File Name	195SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:25:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.164	4.164	0.78	13272	0.03	10000	
B	11	45	2	NoGas	21.708	21.708	0.68	66423	0.03	300	
Na	23	45	1	He	347.076	347.076	0.69	457928	0.08	500000	
Mg	24	45	1	He	10040.724	10040.724	0.62	7259543	0.14	500000	
Al	27	45	1	He	64078.074	64078.074	0.67	26260563	0.24	200000	
K	39	45	1	He	3750.897	3750.897	2.17	2580360	0.15	500000	
Ca	44	45	1	He	1947.409	1947.409	1.18	73451	2.65	500000	
Ti	47	45	1	He	500.811	500.811	0.54	105440	0.47	2500	
V	51	45	1	He	141.426	141.426	0.35	736251	0.02	10000	
Cr	52	45	1	He	86.947	86.947	0.24	545819	0.02	10000	
Mn	55	45	1	He	16974.387	16974.387	0.34	83456028	0.02	10000	>LDR
Fe	56	45	1	He	117088.009	117088.009	1.01	690737039	0.02	200000	
Co	59	103	1	He	79.449	79.449	1.83	768302	0.01	10000	
Ni	60	103	1	He	92.079	92.079	1.74	220872	0.04	10000	
Cu	63	103	1	He	64.427	64.427	1.80	407552	0.02	10000	
Zn	66	103	1	He	295.658	295.658	1.83	378040	0.08	10000	
As	75	103	1	He	55.637	55.637	2.01	45777	0.12	10000	
Se	78	103	1	He	6.647	6.647	3.67	615	1.08	10000	
Sr	88	103	1	He	99.272	99.272	1.63	661945	0.01	10000	
Mo	95	103	1	He	13.308	13.308	3.31	40353	0.03	2000	
Ag	107	103	1	He	0.352	0.352	4.78	3666	0.01	300	
Cd	111	103	1	He	1.221	1.221	1.94	3134	0.04	4000	
Sn	118	115	1	He	19.006	19.006	2.38	84830	0.02	2000	
Sb	123	115	1	He	1.129	1.129	1.09	5084	0.02	300	
Ba	137	115	1	He	609.535	609.535	0.40	1222809	0.05	10000	
W	182	209	1	He	1.873	1.873	10.00	25669	0.01	2500	
Tl	205	165	1	He	1.401	1.401	4.94	43570	0.00	5000	
Pb	208	209	1	He	122.327	122.327	1.22	5091805	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1006449	0.95	1631381	61.69	30	120	
Sc	45	1	He	594319	0.36	829696	71.63	30	120	
Sc	45	2	NoGas	4820287	1.10	6325638	76.20	30	120	
Rh	103	1	He	1756057	1.89	2345543	74.87	30	120	
In	115	1	He	1059845	0.17	1419467	74.67	30	120	
Tb	159	1	He	3311977	0.77	3888262	85.18	30	120	
Ho	165	1	He	3386130	1.69	3932562	86.10	30	120	
Bi	209	1	He	2364445	1.08	2874805	82.25	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-f ms@2
Data File Name	196SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:28:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	50.412	50.412	2.04	154524	0.03	10000	
B	11	45	2	NoGas	49.449	49.449	2.17	135275	0.04	300	
Na	23	45	1	He	4935.512	4935.512	2.03	5842059	0.08	500000	
Mg	24	45	1	He	15555.351	15555.351	0.23	10440276	0.15	500000	
Al	27	45	1	He	77904.449	77904.449	0.42	29638432	0.26	200000	
K	39	45	1	He	8453.436	8453.436	2.08	5366788	0.16	500000	
Ca	44	45	1	He	6713.534	6713.534	1.01	233434	2.88	500000	
Ti	47	45	1	He	583.374	583.374	1.33	114019	0.51	2500	
V	51	45	1	He	199.813	199.813	1.54	965659	0.02	10000	
Cr	52	45	1	He	141.724	141.724	1.99	824854	0.02	10000	
Mn	55	45	1	He	13955.936	13955.936	2.06	63701353	0.02	10000	>LDR
Fe	56	45	1	He	125523.844	125523.844	2.02	687435119	0.02	200000	
Co	59	103	1	He	110.473	110.473	1.88	986554	0.01	10000	
Ni	60	103	1	He	141.092	141.092	2.00	312482	0.05	10000	
Cu	63	103	1	He	107.105	107.105	1.86	624886	0.02	10000	
Zn	66	103	1	He	366.304	366.304	2.02	432183	0.08	10000	
As	75	103	1	He	97.894	97.894	1.74	74302	0.13	10000	
Se	78	103	1	He	44.275	44.275	2.45	3581	1.24	10000	
Sr	88	103	1	He	135.558	135.558	1.83	834679	0.02	10000	
Mo	95	103	1	He	59.555	59.555	0.78	166699	0.04	2000	
Ag	107	103	1	He	46.798	46.798	2.76	449668	0.01	300	
Cd	111	103	1	He	47.070	47.070	2.40	79562	0.06	4000	
Sn	118	115	1	He	59.047	59.047	0.87	243721	0.02	2000	
Sb	123	115	1	He	15.188	15.188	0.18	58158	0.03	300	
Ba	137	115	1	He	654.652	654.652	0.73	1222618	0.05	10000	
W	182	209	1	He	32.838	32.838	1.69	382809	0.01	2500	
Tl	205	165	1	He	43.484	43.484	0.49	1295118	0.00	5000	
Pb	208	209	1	He	167.522	167.522	1.42	6685244	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	969636	0.87	1631381	59.44	30	120	
Sc	45	1	He	551728	0.39	829696	66.50	30	120	
Sc	45	2	NoGas	4602360	1.39	6325638	72.76	30	120	
Rh	103	1	He	1621972	3.34	2345543	69.15	30	120	
In	115	1	He	986700	1.53	1419467	69.51	30	120	
Tb	159	1	He	3157656	0.70	3888262	81.21	30	120	
Ho	165	1	He	3245318	0.87	3932562	82.52	30	120	
Bi	209	1	He	2267135	1.82	2874805	78.86	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-2-b@2
Data File Name	197SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:32:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.594	3.594	4.96	10314	0.03	10000	
B	11	45	2	NoGas	19.634	19.634	1.22	54391	0.04	300	
Na	23	45	1	He	204.243	204.243	2.07	242451	0.08	500000	
Mg	24	45	1	He	10646.640	10646.640	1.97	6754781	0.16	500000	
Al	27	45	1	He	58237.105	58237.105	1.63	20944498	0.28	200000	
K	39	45	1	He	3777.822	3777.822	2.08	2280640	0.17	500000	
Ca	44	45	1	He	7733.072	7733.072	1.08	254081	3.04	500000	
Ti	47	45	1	He	476.905	476.905	1.75	88108	0.54	2500	
V	51	45	1	He	125.706	125.706	1.86	574266	0.02	10000	
Cr	52	45	1	He	89.345	89.345	2.84	492114	0.02	10000	
Mn	55	45	1	He	10070.230	10070.230	1.82	43448203	0.02	10000	>LDR
Fe	56	45	1	He	113681.266	113681.266	1.61	588489452	0.02	200000	
Co	59	103	1	He	51.137	51.137	2.29	424521	0.01	10000	
Ni	60	103	1	He	91.724	91.724	2.74	188850	0.05	10000	
Cu	63	103	1	He	53.629	53.629	3.94	291276	0.02	10000	
Zn	66	103	1	He	333.242	333.242	3.02	365540	0.09	10000	
As	75	103	1	He	48.633	48.633	2.97	34358	0.14	10000	
Se	78	103	1	He	5.276	5.276	4.49	426	1.24	10000	
Sr	88	103	1	He	44.952	44.952	2.66	257317	0.02	10000	
Mo	95	103	1	He	9.150	9.150	2.70	23833	0.04	2000	
Ag	107	103	1	He	0.616	0.616	1.87	5509	0.01	300	
Cd	111	103	1	He	1.418	1.418	5.91	2994	0.05	4000	
Sn	118	115	1	He	18.544	18.544	0.96	74348	0.02	2000	
Sb	123	115	1	He	0.944	0.944	0.89	3888	0.02	300	
Ba	137	115	1	He	512.058	512.058	1.06	922547	0.06	10000	
W	182	209	1	He	1.624	1.624	8.79	21345	0.01	2500	
Tl	205	165	1	He	1.117	1.117	1.69	32090	0.00	5000	
Pb	208	209	1	He	120.737	120.737	0.27	4733953	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	905793	1.30	1631381	55.52	30	120	
Sc	45	1	He	521587	1.02	829696	62.86	30	120	
Sc	45	2	NoGas	4312427	1.40	6325638	68.17	30	120	
Rh	103	1	He	1507966	3.76	2345543	64.29	30	120	
In	115	1	He	951868	1.14	1419467	67.06	30	120	
Tb	159	1	He	3039131	0.92	3888262	78.16	30	120	
Ho	165	1	He	3124046	1.84	3932562	79.44	30	120	
Bi	209	1	He	2227026	0.26	2874805	77.47	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-9-b@2
Data File Name	198SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:36:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.791	2.791	2.51	8050	0.03	10000	
B	11	45	2	NoGas	18.046	18.046	1.21	50373	0.04	300	
Na	23	45	1	He	140.874	140.874	3.62	165851	0.08	500000	
Mg	24	45	1	He	9712.533	9712.533	3.71	5950387	0.16	500000	
Al	27	45	1	He	58037.207	58037.207	2.29	20159738	0.29	200000	
K	39	45	1	He	2822.682	2822.682	3.28	1651322	0.17	500000	
Ca	44	45	1	He	939.552	939.552	2.80	30348	3.10	500000	
Ti	47	45	1	He	403.878	403.878	2.21	72075	0.56	2500	
V	51	45	1	He	109.278	109.278	2.23	482221	0.02	10000	
Cr	52	45	1	He	80.685	80.685	2.18	429434	0.02	10000	
Mn	55	45	1	He	2286.156	2286.156	3.69	9525203	0.02	10000	
Fe	56	45	1	He	111044.473	111044.473	3.21	555133009	0.02	200000	
Co	59	103	1	He	53.020	53.020	4.87	432166	0.01	10000	
Ni	60	103	1	He	76.831	76.831	4.89	155348	0.05	10000	
Cu	63	103	1	He	52.790	52.790	4.49	281723	0.02	10000	
Zn	66	103	1	He	246.772	246.772	5.13	266132	0.09	10000	
As	75	103	1	He	44.507	44.507	5.11	30884	0.14	10000	
Se	78	103	1	He	4.598	4.598	5.32	370	1.24	10000	
Sr	88	103	1	He	14.259	14.259	4.69	80208	0.02	10000	
Mo	95	103	1	He	7.323	7.323	5.41	18736	0.04	2000	
Ag	107	103	1	He	0.216	0.216	14.06	1893	0.01	300	
Cd	111	103	1	He	0.723	0.723	6.18	1885	0.04	4000	
Sn	118	115	1	He	17.774	17.774	6.25	69815	0.03	2000	
Sb	123	115	1	He	0.657	0.657	3.05	2782	0.02	300	
Ba	137	115	1	He	298.891	298.891	3.70	527687	0.06	10000	
W	182	209	1	He	0.638	0.638	4.35	10148	0.01	2500	
Tl	205	165	1	He	0.789	0.789	3.77	22265	0.00	5000	
Pb	208	209	1	He	82.225	82.225	3.15	3226059	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	909767	1.50	1631381	55.77	30	120	
Sc	45	1	He	503984	3.28	829696	60.74	30	120	
Sc	45	2	NoGas	4298433	0.55	6325638	67.95	30	120	
Rh	103	1	He	1482590	5.84	2345543	63.21	30	120	
In	115	1	He	933743	4.77	1419467	65.78	30	120	
Tb	159	1	He	2990955	4.39	3888262	76.92	30	120	
Ho	165	1	He	3069556	4.81	3932562	78.05	30	120	
Bi	209	1	He	2229840	3.25	2874805	77.56	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-10-b@2
Data File Name	199SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:40:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.521	3.521	1.04	10559	0.03	10000	
B	11	45	2	NoGas	17.469	17.469	0.61	51212	0.03	300	
Na	23	45	1	He	173.712	173.712	1.41	217662	0.08	500000	
Mg	24	45	1	He	10078.988	10078.988	1.00	6679505	0.15	500000	
Al	27	45	1	He	62600.269	62600.269	1.72	23516192	0.27	200000	
K	39	45	1	He	3923.805	3923.805	0.96	2473390	0.16	500000	
Ca	44	45	1	He	787.208	787.208	2.68	27609	2.85	500000	
Ti	47	45	1	He	396.276	396.276	1.44	76480	0.52	2500	
V	51	45	1	He	139.294	139.294	1.96	664685	0.02	10000	
Cr	52	45	1	He	86.630	86.630	1.21	498511	0.02	10000	
Mn	55	45	1	He	7316.733	7316.733	1.88	32976642	0.02	10000	
Fe	56	45	1	He	125944.687	125944.687	1.55	681051884	0.02	200000	
Co	59	103	1	He	59.851	59.851	1.10	540074	0.01	10000	
Ni	60	103	1	He	75.187	75.187	1.05	168297	0.04	10000	
Cu	63	103	1	He	43.223	43.223	0.89	255498	0.02	10000	
Zn	66	103	1	He	250.680	250.680	0.60	299276	0.08	10000	
As	75	103	1	He	51.554	51.554	0.27	39590	0.13	10000	
Se	78	103	1	He	4.752	4.752	5.53	421	1.13	10000	
Sr	88	103	1	He	40.217	40.217	0.29	250264	0.02	10000	
Mo	95	103	1	He	7.663	7.663	2.80	21707	0.04	2000	
Ag	107	103	1	He	0.261	0.261	4.00	2534	0.01	300	
Cd	111	103	1	He	0.860	0.860	12.91	2312	0.04	4000	
Sn	118	115	1	He	17.398	17.398	2.38	72585	0.02	2000	
Sb	123	115	1	He	0.721	0.721	2.70	3195	0.02	300	
Ba	137	115	1	He	418.964	418.964	0.34	784787	0.05	10000	
W	182	209	1	He	0.462	0.462	9.50	8388	0.01	2500	
Tl	205	165	1	He	0.944	0.944	2.50	27723	0.00	5000	
Pb	208	209	1	He	101.402	101.402	0.77	4098383	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	946485	1.79	1631381	58.02	30	120	
Sc	45	1	He	544795	1.14	829696	65.66	30	120	
Sc	45	2	NoGas	4494962	0.65	6325638	71.06	30	120	
Rh	103	1	He	1638191	1.24	2345543	69.84	30	120	
In	115	1	He	989580	1.27	1419467	69.71	30	120	
Tb	159	1	He	3127842	1.27	3888262	80.44	30	120	
Ho	165	1	He	3194729	2.29	3932562	81.24	30	120	
Bi	209	1	He	2295687	0.65	2874805	79.86	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-11-b@2
Data File Name	200SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:44:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.282	4.282	4.49	12523	0.03	10000	
B	11	45	2	NoGas	15.252	15.252	1.02	44525	0.03	300	
Na	23	45	1	He	158.236	158.236	2.06	197316	0.08	500000	
Mg	24	45	1	He	10308.687	10308.687	1.59	6752817	0.15	500000	
Al	27	45	1	He	67316.574	67316.574	2.07	24995516	0.27	200000	
K	39	45	1	He	3490.980	3490.980	0.93	2177784	0.16	500000	
Ca	44	45	1	He	901.450	901.450	0.89	31156	2.89	500000	
Ti	47	45	1	He	479.366	479.366	2.80	91442	0.52	2500	
V	51	45	1	He	149.178	149.178	2.21	703652	0.02	10000	
Cr	52	45	1	He	93.196	93.196	1.69	529957	0.02	10000	
Mn	55	45	1	He	6565.910	6565.910	1.34	29249223	0.02	10000	
Fe	56	45	1	He	129641.119	129641.119	0.96	692924524	0.02	200000	
Co	59	103	1	He	64.565	64.565	1.61	570771	0.01	10000	
Ni	60	103	1	He	87.291	87.291	2.00	191396	0.05	10000	
Cu	63	103	1	He	54.068	54.068	1.81	312838	0.02	10000	
Zn	66	103	1	He	267.231	267.231	1.84	312459	0.09	10000	
As	75	103	1	He	52.747	52.747	1.49	39682	0.13	10000	
Se	78	103	1	He	5.534	5.534	5.24	474	1.17	10000	
Sr	88	103	1	He	20.498	20.498	2.73	124977	0.02	10000	
Mo	95	103	1	He	9.112	9.112	1.80	25274	0.04	2000	
Ag	107	103	1	He	0.238	0.238	2.37	2264	0.01	300	
Cd	111	103	1	He	0.867	0.867	12.55	2275	0.04	4000	
Sn	118	115	1	He	17.702	17.702	1.49	72781	0.02	2000	
Sb	123	115	1	He	0.762	0.762	5.17	3301	0.02	300	
Ba	137	115	1	He	502.128	502.128	0.36	927361	0.05	10000	
W	182	209	1	He	0.489	0.489	6.46	8595	0.01	2500	
Tl	205	165	1	He	0.991	0.991	1.85	29132	0.00	5000	
Pb	208	209	1	He	108.956	108.956	1.06	4348457	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	923798	1.63	1631381	56.63	30	120	
Sc	45	1	He	538496	0.72	829696	64.90	30	120	
Sc	45	2	NoGas	4388757	0.59	6325638	69.38	30	120	
Rh	103	1	He	1605252	2.35	2345543	68.44	30	120	
In	115	1	He	975664	0.91	1419467	68.73	30	120	
Tb	159	1	He	3099093	0.60	3888262	79.70	30	120	
Ho	165	1	He	3195990	0.49	3932562	81.27	30	120	
Bi	209	1	He	2267006	1.61	2874805	78.86	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	201_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:47:51-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.261	1.739	137564	1.63	50	100.5	89.5	110.5	
B	11	45	2	NoGas	52.506	1.226	122083	0.76	50	105.0	89.5	110.5	
Na	23	45	1	He	25032.346	1.978	26535604	0.62	25000	100.1	89.5	110.5	
Mg	24	45	1	He	25160.069	1.895	15154873	0.66	25000	100.6	89.5	110.5	
Al	27	45	1	He	249.774	2.335	86855	1.24	250	99.9	89.5	110.5	
K	39	45	1	He	25868.069	1.448	14692739	0.04	25000	103.5	89.5	110.5	
Ca	44	45	1	He	25459.898	1.474	792855	0.71	25000	101.8	89.5	110.5	
Ti	47	45	1	He	51.368	4.359	9016	3.15	50	102.7	89.5	110.5	
V	51	45	1	He	50.749	1.438	220162	0.54	50	101.5	89.5	110.5	
Cr	52	45	1	He	51.353	1.366	269224	0.44	50	102.7	89.5	110.5	
Mn	55	45	1	He	259.050	1.366	1061910	0.33	250	103.6	89.5	110.5	
Fe	56	45	1	He	13215.505	1.347	64957997	0.14	12500	105.7	89.5	110.5	
Co	59	103	1	He	47.065	0.836	376744	0.29	50	94.1	89.5	110.5	
Ni	60	103	1	He	46.464	0.852	92293	0.45	50	92.9	89.5	110.5	
Cu	63	103	1	He	46.806	1.259	245361	0.60	50	93.6	89.5	110.5	
Zn	66	103	1	He	47.401	0.619	51194	0.32	50	94.8	89.5	110.5	
As	75	103	1	He	49.104	0.456	33455	0.33	50	98.2	89.5	110.5	
Se	78	103	1	He	49.092	0.608	3556	0.27	50	98.2	89.5	110.5	
Sr	88	103	1	He	51.591	0.664	284774	0.44	50	103.2	89.5	110.5	
Mo	95	103	1	He	52.802	1.511	132450	1.99	50	105.6	89.5	110.5	
Ag	107	103	1	He	52.304	1.108	450544	0.41	50	104.6	89.5	110.5	
Cd	111	103	1	He	53.552	0.866	81037	0.42	50	107.1	89.5	110.5	
Sn	118	115	1	He	50.616	0.310	201264	0.61	50	101.2	89.5	110.5	
Sb	123	115	1	He	53.388	0.492	195764	0.81	50	106.8	89.5	110.5	
Ba	137	115	1	He	53.091	0.587	95536	0.91	50	106.2	89.5	110.5	
W	182	209	1	He	48.506	2.000	546279	1.36	50	97.0	89.5	110.5	
Tl	205	165	1	He	48.378	1.908	1353517	0.40	50	96.8	89.5	110.5	
Pb	208	209	1	He	47.888	1.934	1851250	0.33	50	95.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	865762	0.20	1631381	53.07	30	120	
Sc	45	1	He	495242	1.44	829696	59.69	30	120	
Sc	45	2	NoGas	3923689	0.84	6325638	62.03	30	120	
Rh	103	1	He	1453258	0.70	2345543	61.96	30	120	
In	115	1	He	950044	0.37	1419467	66.93	30	120	
Tb	159	1	He	3016728	2.20	3888262	77.59	30	120	
Ho	165	1	He	3049089	1.55	3932562	77.53	30	120	
Bi	209	1	He	2195818	1.85	2874805	76.38	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	202_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:51:43-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.088	25.7	267	26.0	1	
B	11	45	2	NoGas	7.683	1.6	23404	1.7	20	
Na	23	45	1	He	26.036	9.2	40943	4.2	400	
Mg	24	45	1	He	2.435	40.5	2030	27.2	1000	
Al	27	45	1	He	2.927	28.2	2550	9.2	50	
K	39	45	1	He	11.899	26.4	29280	4.2	1000	
Ca	44	45	1	He	3.137	36.2	689	5.4	1000	
Ti	47	45	1	He	0.147	27.7	33	20.0	20	
V	51	45	1	He	0.137	53.3	651	48.1	2	
Cr	52	45	1	He	0.001	1171.2	1526	3.8	2	
Mn	55	45	1	He	0.494	7.8	2729	3.9	2	
Fe	56	45	1	He	33.546	18.6	165589	16.3	50	
Co	59	103	1	He	0.008	66.6	102	46.3	1	
Ni	60	103	1	He	-0.009	-115.2	69	34.3	2	
Cu	63	103	1	He	-0.020	-39.4	1081	4.6	2	
Zn	66	103	1	He	-0.043	-163.4	1332	6.7	20	
As	75	103	1	He	0.050	59.0	153	15.3	2	
Se	78	103	1	He	0.159	35.4	49	8.8	2	
Sr	88	103	1	He	0.008	38.3	134	16.1	10	
Mo	95	103	1	He	0.873	17.8	2525	19.2	2	
Ag	107	103	1	He	0.007	15.6	73	15.7	0.2	
Cd	111	103	1	He	0.066	36.3	975	4.8	0.2	
Sn	118	115	1	He	0.328	22.9	2156	14.4	10	
Sb	123	115	1	He	0.375	20.6	1898	15.4	1	
Ba	137	115	1	He	0.032	55.9	131	25.6	5	
W	182	209	1	He	1.124	15.8	16090	13.2	10	
Tl	205	165	1	He	0.061	16.9	1779	15.7	0.5	
Pb	208	209	1	He	0.076	5.3	3714	4.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	865944	2.64	1631381	53.08	30	120	
Sc	45	1	He	490312	1.96	829696	59.10	30	120	
Sc	45	2	NoGas	3976787	0.55	6325638	62.87	30	120	
Rh	103	1	He	1643809	1.73	2345543	70.08	30	120	
In	115	1	He	1001445	0.33	1419467	70.55	30	120	
Tb	159	1	He	2984429	1.34	3888262	76.75	30	120	
Ho	165	1	He	3093888	1.07	3932562	78.67	30	120	
Bi	209	1	He	2286541	0.88	2874805	79.54	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-12-b@2
Data File Name	203SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:55:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.926	3.926	5.70	10959	0.04	10000	
B	11	45	2	NoGas	14.540	14.540	0.61	41581	0.03	300	
Na	23	45	1	He	145.399	145.399	3.75	185017	0.08	500000	
Mg	24	45	1	He	9770.990	9770.990	3.73	6487659	0.15	500000	
Al	27	45	1	He	55919.580	55919.580	3.18	21047567	0.27	200000	
K	39	45	1	He	3438.654	3438.654	2.99	2174836	0.16	500000	
Ca	44	45	1	He	1439.874	1439.874	1.86	50058	2.88	500000	
Ti	47	45	1	He	479.717	479.717	3.52	92753	0.52	2500	
V	51	45	1	He	113.699	113.699	2.60	543675	0.02	10000	
Cr	52	45	1	He	79.148	79.148	2.68	456503	0.02	10000	
Mn	55	45	1	He	5269.344	5269.344	2.07	23798202	0.02	10000	
Fe	56	45	1	He	105905.316	105905.316	3.06	573787906	0.02	200000	
Co	59	103	1	He	57.631	57.631	0.33	507741	0.01	10000	
Ni	60	103	1	He	90.533	90.533	1.64	197835	0.05	10000	
Cu	63	103	1	He	53.407	53.407	1.61	307953	0.02	10000	
Zn	66	103	1	He	232.732	232.732	0.74	271376	0.09	10000	
As	75	103	1	He	44.162	44.162	1.11	33125	0.13	10000	
Se	78	103	1	He	5.135	5.135	4.80	441	1.16	10000	
Sr	88	103	1	He	19.482	19.482	0.62	118405	0.02	10000	
Mo	95	103	1	He	7.745	7.745	0.49	21418	0.04	2000	
Ag	107	103	1	He	0.200	0.200	5.20	1900	0.01	300	
Cd	111	103	1	He	1.060	1.060	5.90	2589	0.04	4000	
Sn	118	115	1	He	17.188	17.188	0.97	70308	0.02	2000	
Sb	123	115	1	He	0.881	0.881	1.43	3730	0.02	300	
Ba	137	115	1	He	469.180	469.180	0.39	861784	0.05	10000	
W	182	209	1	He	0.816	0.816	6.60	12513	0.01	2500	
Tl	205	165	1	He	0.924	0.924	1.93	26982	0.00	5000	
Pb	208	209	1	He	93.272	93.272	1.48	3760745	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	881233	0.83	1631381	54.02	30	120	
Sc	45	1	He	546090	2.28	829696	65.82	30	120	
Sc	45	2	NoGas	4267111	0.52	6325638	67.46	30	120	
Rh	103	1	He	1599444	0.66	2345543	68.19	30	120	
In	115	1	He	970366	0.33	1419467	68.36	30	120	
Tb	159	1	He	3100195	0.64	3888262	79.73	30	120	
Ho	165	1	He	3175869	0.95	3932562	80.76	30	120	
Bi	209	1	He	2290358	1.36	2874805	79.67	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-13-b@2
Data File Name	204SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:59:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.666	3.666	1.11	10566	0.03	10000	
B	11	45	2	NoGas	13.812	13.812	3.53	40653	0.03	300	
Na	23	45	1	He	132.402	132.402	1.94	169848	0.08	500000	
Mg	24	45	1	He	8201.977	8201.977	1.11	5446347	0.15	500000	
Al	27	45	1	He	54896.378	54896.378	1.35	20662509	0.27	200000	
K	39	45	1	He	3012.360	3012.360	2.66	1908038	0.16	500000	
Ca	44	45	1	He	862.327	862.327	4.47	30230	2.85	500000	
Ti	47	45	1	He	442.061	442.061	1.90	85471	0.52	2500	
V	51	45	1	He	121.982	121.982	1.85	583192	0.02	10000	
Cr	52	45	1	He	84.373	84.373	0.91	486494	0.02	10000	
Mn	55	45	1	He	6358.044	6358.044	2.06	28707628	0.02	10000	
Fe	56	45	1	He	105857.576	105857.576	1.02	573522608	0.02	200000	
Co	59	103	1	He	61.683	61.683	1.41	554638	0.01	10000	
Ni	60	103	1	He	72.922	72.922	2.16	162646	0.04	10000	
Cu	63	103	1	He	43.892	43.892	0.82	258555	0.02	10000	
Zn	66	103	1	He	214.391	214.391	1.36	255261	0.08	10000	
As	75	103	1	He	43.039	43.039	0.71	32955	0.13	10000	
Se	78	103	1	He	4.783	4.783	3.76	422	1.13	10000	
Sr	88	103	1	He	17.214	17.214	0.68	106801	0.02	10000	
Mo	95	103	1	He	7.662	7.662	1.89	21631	0.04	2000	
Ag	107	103	1	He	0.186	0.186	6.60	1809	0.01	300	
Cd	111	103	1	He	0.854	0.854	12.89	2294	0.04	4000	
Sn	118	115	1	He	18.723	18.723	1.35	77953	0.02	2000	
Sb	123	115	1	He	0.661	0.661	2.89	2963	0.02	300	
Ba	137	115	1	He	438.678	438.678	0.75	820845	0.05	10000	
W	182	209	1	He	0.512	0.512	2.64	8851	0.01	2500	
Tl	205	165	1	He	0.853	0.853	1.90	24986	0.00	5000	
Pb	208	209	1	He	94.096	94.096	0.73	3749201	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	909634	0.13	1631381	55.76	30	120	
Sc	45	1	He	545873	1.20	829696	65.79	30	120	
Sc	45	2	NoGas	4355000	0.41	6325638	68.85	30	120	
Rh	103	1	He	1632649	1.52	2345543	69.61	30	120	
In	115	1	He	988569	1.07	1419467	69.64	30	120	
Tb	159	1	He	3112999	0.40	3888262	80.06	30	120	
Ho	165	1	He	3184094	1.03	3932562	80.97	30	120	
Bi	209	1	He	2263170	1.26	2874805	78.72	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-15-b@2
Data File Name	205SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:03:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.716	3.716	1.73	10048	0.04	10000	
B	11	45	2	NoGas	18.622	18.622	1.57	49853	0.04	300	
Na	23	45	1	He	224.476	224.476	1.42	262615	0.09	500000	
Mg	24	45	1	He	11795.239	11795.239	1.17	7415343	0.16	500000	
Al	27	45	1	He	55784.290	55784.290	1.88	19878121	0.28	200000	
K	39	45	1	He	4033.203	4033.203	2.10	2410819	0.17	500000	
Ca	44	45	1	He	12654.008	12654.008	1.43	411562	3.07	500000	
Ti	47	45	1	He	484.339	484.339	1.69	88664	0.55	2500	
V	51	45	1	He	123.372	123.372	1.43	558494	0.02	10000	
Cr	52	45	1	He	102.111	102.111	1.42	557085	0.02	10000	
Mn	55	45	1	He	4938.523	4938.523	1.41	21113205	0.02	10000	
Fe	56	45	1	He	131729.360	131729.360	0.78	675723689	0.02	200000	
Co	59	103	1	He	49.555	49.555	1.87	400880	0.01	10000	
Ni	60	103	1	He	103.198	103.198	2.56	207035	0.05	10000	
Cu	63	103	1	He	67.562	67.562	1.74	357445	0.02	10000	
Zn	66	103	1	He	266.341	266.341	1.56	284990	0.09	10000	
As	75	103	1	He	89.754	89.754	2.04	61709	0.15	10000	
Se	78	103	1	He	5.187	5.187	5.97	409	1.27	10000	
Sr	88	103	1	He	70.219	70.219	1.56	391673	0.02	10000	
Mo	95	103	1	He	30.069	30.069	2.50	76229	0.04	2000	
Ag	107	103	1	He	0.202	0.202	5.06	1761	0.01	300	
Cd	111	103	1	He	1.263	1.263	1.68	2684	0.05	4000	
Sn	118	115	1	He	17.590	17.590	2.01	69575	0.03	2000	
Sb	123	115	1	He	0.846	0.846	2.85	3479	0.02	300	
Ba	137	115	1	He	488.729	488.729	0.89	868210	0.06	10000	
W	182	209	1	He	3.222	3.222	2.07	39297	0.01	2500	
Tl	205	165	1	He	0.859	0.859	1.64	24339	0.00	5000	
Pb	208	209	1	He	97.097	97.097	0.33	3786290	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	853478	0.67	1631381	52.32	30	120	
Sc	45	1	He	516816	0.98	829696	62.29	30	120	
Sc	45	2	NoGas	4139937	0.73	6325638	65.45	30	120	
Rh	103	1	He	1468826	1.52	2345543	62.62	30	120	
In	115	1	He	938538	0.94	1419467	66.12	30	120	
Tb	159	1	He	3015181	1.18	3888262	77.55	30	120	
Ho	165	1	He	3081207	1.33	3932562	78.35	30	120	
Bi	209	1	He	2214846	1.46	2874805	77.04	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-16-b@2
Data File Name	206SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:06:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.593	3.593	6.11	9481	0.04	10000	
B	11	45	2	NoGas	17.155	17.155	2.68	45360	0.04	300	
Na	23	45	1	He	178.879	178.879	1.35	205773	0.09	500000	
Mg	24	45	1	He	9614.646	9614.646	3.80	5860597	0.16	500000	
Al	27	45	1	He	52352.109	52352.109	1.12	18091816	0.29	200000	
K	39	45	1	He	3313.207	3313.207	1.60	1924733	0.17	500000	
Ca	44	45	1	He	8956.573	8956.573	1.03	282668	3.17	500000	
Ti	47	45	1	He	455.867	455.867	1.92	80925	0.56	2500	
V	51	45	1	He	121.226	121.226	1.55	532145	0.02	10000	
Cr	52	45	1	He	91.788	91.788	1.20	485770	0.02	10000	
Mn	55	45	1	He	8490.322	8490.322	1.51	35198353	0.02	10000	
Fe	56	45	1	He	123736.131	123736.131	1.36	615493024	0.02	200000	
Co	59	103	1	He	66.354	66.354	4.42	547309	0.01	10000	
Ni	60	103	1	He	82.580	82.580	5.00	168931	0.05	10000	
Cu	63	103	1	He	92.004	92.004	4.48	495922	0.02	10000	
Zn	66	103	1	He	350.274	350.274	4.94	381713	0.09	10000	
As	75	103	1	He	54.760	54.760	4.80	38427	0.14	10000	
Se	78	103	1	He	5.397	5.397	1.37	433	1.25	10000	
Sr	88	103	1	He	42.264	42.264	4.40	240407	0.02	10000	
Mo	95	103	1	He	12.192	12.192	5.47	31531	0.04	2000	
Ag	107	103	1	He	0.607	0.607	3.37	5394	0.01	300	
Cd	111	103	1	He	1.866	1.866	7.85	3667	0.05	4000	
Sn	118	115	1	He	18.655	18.655	1.71	72763	0.03	2000	
Sb	123	115	1	He	0.953	0.953	7.10	3815	0.02	300	
Ba	137	115	1	He	465.874	465.874	0.27	816655	0.06	10000	
W	182	209	1	He	0.727	0.727	5.38	10871	0.01	2500	
Tl	205	165	1	He	0.907	0.907	1.57	25655	0.00	5000	
Pb	208	209	1	He	134.712	134.712	0.55	5147853	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	832514	0.73	1631381	51.03	30	120	
Sc	45	1	He	501171	0.96	829696	60.40	30	120	
Sc	45	2	NoGas	4044417	0.77	6325638	63.94	30	120	
Rh	103	1	He	1499577	4.80	2345543	63.93	30	120	
In	115	1	He	926071	0.40	1419467	65.24	30	120	
Tb	159	1	He	3001058	1.17	3888262	77.18	30	120	
Ho	165	1	He	3073868	0.63	3932562	78.16	30	120	
Bi	209	1	He	2170586	0.82	2874805	75.50	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-17-b@2
Data File Name	207SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:10:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.059	3.059	6.34	8147	0.04	10000	
B	11	45	2	NoGas	18.995	18.995	1.24	50388	0.04	300	
Na	23	45	1	He	181.301	181.301	2.41	208824	0.09	500000	
Mg	24	45	1	He	11338.576	11338.576	1.88	6927803	0.16	500000	
Al	27	45	1	He	54595.736	54595.736	2.02	18909050	0.29	200000	
K	39	45	1	He	3779.572	3779.572	1.83	2197250	0.17	500000	
Ca	44	45	1	He	6948.260	6948.260	1.49	219922	3.16	500000	
Ti	47	45	1	He	396.704	396.704	2.31	70579	0.56	2500	
V	51	45	1	He	133.754	133.754	2.46	588398	0.02	10000	
Cr	52	45	1	He	90.338	90.338	2.01	479177	0.02	10000	
Mn	55	45	1	He	51618.348	51618.348	2.40	214454027	0.02	10000	>LDR
Fe	56	45	1	He	120768.135	120768.135	3.27	601960047	0.02	200000	
Co	59	103	1	He	52.161	52.161	3.41	422331	0.01	10000	
Ni	60	103	1	He	169.091	169.091	2.97	339549	0.05	10000	
Cu	63	103	1	He	82.292	82.292	2.90	435578	0.02	10000	
Zn	66	103	1	He	271.981	271.981	3.05	291282	0.09	10000	
As	75	103	1	He	55.589	55.589	3.49	38294	0.15	10000	
Se	78	103	1	He	4.929	4.929	4.68	390	1.26	10000	
Sr	88	103	1	He	55.813	55.813	2.65	311666	0.02	10000	
Mo	95	103	1	He	10.554	10.554	2.60	26814	0.04	2000	
Ag	107	103	1	He	0.210	0.210	3.96	1830	0.01	300	
Cd	111	103	1	He	1.009	1.009	2.67	2304	0.04	4000	
Sn	118	115	1	He	17.035	17.035	2.68	66713	0.03	2000	
Sb	123	115	1	He	1.092	1.092	0.57	4325	0.03	300	
Ba	137	115	1	He	824.629	824.629	0.49	1449752	0.06	10000	
W	182	209	1	He	3.746	3.746	3.22	44822	0.01	2500	
Tl	205	165	1	He	0.885	0.885	0.65	24997	0.00	5000	
Pb	208	209	1	He	99.785	99.785	0.61	3857680	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	840109	1.99	1631381	51.50	30	120	
Sc	45	1	He	502369	1.96	829696	60.55	30	120	
Sc	45	2	NoGas	4112330	0.36	6325638	65.01	30	120	
Rh	103	1	He	1470975	3.19	2345543	62.71	30	120	
In	115	1	He	928824	0.95	1419467	65.43	30	120	
Tb	159	1	He	3015207	0.37	3888262	77.55	30	120	
Ho	165	1	He	3070439	0.70	3932562	78.08	30	120	
Bi	209	1	He	2195817	0.39	2874805	76.38	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-18-b@2
Data File Name	208SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:14:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.380	3.380	4.22	8840	0.04	10000	
B	11	45	2	NoGas	17.311	17.311	0.50	46099	0.04	300	
Na	23	45	1	He	180.741	180.741	1.74	208143	0.09	500000	
Mg	24	45	1	He	14439.575	14439.575	2.07	8818121	0.16	500000	
Al	27	45	1	He	55741.047	55741.047	0.09	19298265	0.29	200000	
K	39	45	1	He	4234.910	4234.910	1.10	2458034	0.17	500000	
Ca	44	45	1	He	7250.006	7250.006	1.89	229316	3.16	500000	
Ti	47	45	1	He	390.118	390.118	0.48	69387	0.56	2500	
V	51	45	1	He	105.936	105.936	1.03	465870	0.02	10000	
Cr	52	45	1	He	94.160	94.160	1.74	499147	0.02	10000	
Mn	55	45	1	He	17317.103	17317.103	1.65	71916590	0.02	10000	>LDR
Fe	56	45	1	He	140412.021	140412.021	1.00	699688843	0.02	200000	
Co	59	103	1	He	54.628	54.628	2.95	429348	0.01	10000	
Ni	60	103	1	He	148.963	148.963	1.94	290395	0.05	10000	
Cu	63	103	1	He	104.447	104.447	2.34	536358	0.02	10000	
Zn	66	103	1	He	319.991	319.991	2.12	332465	0.10	10000	
As	75	103	1	He	75.367	75.367	1.70	50372	0.15	10000	
Se	78	103	1	He	5.717	5.717	3.95	435	1.32	10000	
Sr	88	103	1	He	58.733	58.733	2.45	318329	0.02	10000	
Mo	95	103	1	He	9.384	9.384	0.69	23151	0.04	2000	
Ag	107	103	1	He	0.133	0.133	0.96	1127	0.01	300	
Cd	111	103	1	He	1.156	1.156	4.04	2452	0.05	4000	
Sn	118	115	1	He	16.804	16.804	1.09	64819	0.03	2000	
Sb	123	115	1	He	0.830	0.830	1.99	3336	0.02	300	
Ba	137	115	1	He	995.920	995.920	1.39	1724555	0.06	10000	
W	182	209	1	He	1.230	1.230	3.30	16316	0.01	2500	
Tl	205	165	1	He	1.356	1.356	0.41	37960	0.00	5000	
Pb	208	209	1	He	86.345	86.345	1.16	3275203	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	825571	1.37	1631381	50.61	30	120	
Sc	45	1	He	502069	1.17	829696	60.51	30	120	
Sc	45	2	NoGas	4077817	0.59	6325638	64.46	30	120	
Rh	103	1	He	1427469	2.23	2345543	60.86	30	120	
In	115	1	He	914826	0.29	1419467	64.45	30	120	
Tb	159	1	He	3000751	0.52	3888262	77.17	30	120	
Ho	165	1	He	3046306	0.53	3932562	77.46	30	120	
Bi	209	1	He	2154479	0.72	2874805	74.94	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	209_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:18:18-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.314	0.890	131179	1.40	50	100.6	89.5	110.5	
B	11	45	2	NoGas	49.649	1.793	111797	1.36	50	99.3	89.5	110.5	
Na	23	45	1	He	24844.484	0.877	25622715	1.53	25000	99.4	89.5	110.5	
Mg	24	45	1	He	24993.265	2.255	14643117	0.61	25000	100.0	89.5	110.5	
Al	27	45	1	He	246.343	1.206	83368	2.29	250	98.5	89.5	110.5	
K	39	45	1	He	25946.497	1.193	14336399	1.26	25000	103.8	89.5	110.5	
Ca	44	45	1	He	25362.349	1.889	768240	0.58	25000	101.4	89.5	110.5	
Ti	47	45	1	He	50.106	2.384	8557	1.84	50	100.2	89.5	110.5	
V	51	45	1	He	50.376	2.008	212580	1.11	50	100.8	89.5	110.5	
Cr	52	45	1	He	50.951	1.223	259860	1.28	50	101.9	89.5	110.5	
Mn	55	45	1	He	260.693	1.781	1039466	0.72	250	104.3	89.5	110.5	
Fe	56	45	1	He	13048.969	2.276	62383826	0.55	12500	104.4	89.5	110.5	
Co	59	103	1	He	46.847	0.311	366004	0.32	50	93.7	89.5	110.5	
Ni	60	103	1	He	46.102	0.837	89378	0.84	50	92.2	89.5	110.5	
Cu	63	103	1	He	46.905	1.180	239986	1.17	50	93.8	89.5	110.5	
Zn	66	103	1	He	48.210	1.036	50798	1.03	50	96.4	89.5	110.5	
As	75	103	1	He	48.849	0.596	32483	0.60	50	97.7	89.5	110.5	
Se	78	103	1	He	49.555	1.782	3503	1.78	50	99.1	89.5	110.5	
Sr	88	103	1	He	51.684	1.289	278445	1.28	50	103.4	89.5	110.5	
Mo	95	103	1	He	52.674	1.752	128951	1.74	50	105.3	89.5	110.5	
Ag	107	103	1	He	52.387	0.620	440442	0.61	50	104.8	89.5	110.5	
Cd	111	103	1	He	53.696	1.470	79305	1.46	50	107.4	89.5	110.5	
Sn	118	115	1	He	50.820	1.175	197597	1.07	50	101.6	89.5	110.5	
Sb	123	115	1	He	53.212	0.546	190799	0.66	50	106.4	89.5	110.5	
Ba	137	115	1	He	53.114	0.966	93461	0.94	50	106.2	89.5	110.5	
W	182	209	1	He	47.743	0.493	533253	0.79	50	95.5	89.5	110.5	
Tl	205	165	1	He	48.590	0.981	1333170	0.95	50	97.2	89.5	110.5	
Pb	208	209	1	He	47.293	1.083	1813093	0.98	50	94.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	824681	0.74	1631381	50.55	30	120	
Sc	45	1	He	481796	2.40	829696	58.07	30	120	
Sc	45	2	NoGas	3788851	0.34	6325638	59.90	30	120	
Rh	103	1	He	1418359	0.02	2345543	60.47	30	120	
In	115	1	He	929021	0.23	1419467	65.45	30	120	
Tb	159	1	He	2908024	0.98	3888262	74.79	30	120	
Ho	165	1	He	2989532	0.17	3932562	76.02	30	120	
Bi	209	1	He	2177168	0.94	2874805	75.73	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	210_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:22:10-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.063	61.5	189	53.9	1	
B	11	45	2	NoGas	5.117	6.6	16719	6.0	20	
Na	23	45	1	He	21.468	3.5	34121	0.4	400	
Mg	24	45	1	He	2.749	12.5	2097	8.0	1000	
Al	27	45	1	He	2.697	6.6	2335	1.0	50	
K	39	45	1	He	13.026	22.6	28219	3.9	1000	
Ca	44	45	1	He	3.139	67.0	650	8.7	1000	
Ti	47	45	1	He	0.334	63.8	62	55.8	20	
V	51	45	1	He	0.062	155.4	313	126.2	2	
Cr	52	45	1	He	-0.004	-26.9	1415	2.0	2	
Mn	55	45	1	He	1.861	8.4	7798	6.0	2	
Fe	56	45	1	He	35.825	13.6	166841	12.4	50	
Co	59	103	1	He	0.006	56.0	88	34.5	1	
Ni	60	103	1	He	0.001	1365.1	89	31.9	2	
Cu	63	103	1	He	-0.035	-30.1	953	7.8	2	
Zn	66	103	1	He	-0.117	-85.2	1193	8.4	20	
As	75	103	1	He	0.041	3.7	140	1.3	2	
Se	78	103	1	He	0.107	61.4	43	11.3	2	
Sr	88	103	1	He	0.014	37.6	163	18.1	10	
Mo	95	103	1	He	0.934	14.9	2586	15.3	2	
Ag	107	103	1	He	0.010	27.6	93	25.0	0.2	
Cd	111	103	1	He	0.067	37.5	938	2.9	0.2	
Sn	118	115	1	He	0.305	10.6	1974	7.0	10	
Sb	123	115	1	He	0.330	16.1	1652	12.7	1	
Ba	137	115	1	He	0.034	85.3	130	40.3	5	
W	182	209	1	He	1.086	12.5	15163	9.7	10	
Tl	205	165	1	He	0.053	13.7	1487	11.7	0.5	
Pb	208	209	1	He	0.067	5.8	3244	4.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	834342	1.19	1631381	51.14	30	120	
Sc	45	1	He	462496	1.78	829696	55.74	30	120	
Sc	45	2	NoGas	3763584	1.83	6325638	59.50	30	120	
Rh	103	1	He	1578803	1.45	2345543	67.31	30	120	
In	115	1	He	960050	0.81	1419467	67.63	30	120	
Tb	159	1	He	2930798	0.71	3888262	75.38	30	120	
Ho	165	1	He	2969458	1.59	3932562	75.51	30	120	
Bi	209	1	He	2218201	0.42	2874805	77.16	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	211CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:26:01-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.143	1.143	3.491	3063	3.17	1	114.3	69.5	130.5	
B	11	2	NoGas	21.309	21.309	1.316	52805	1.33	20	106.5	69.5	130.5	
Na	23	1	He	1044.026	1044.026	0.630	1105674	0.60	1000	104.4	69.5	130.5	
Mg	24	1	He	1052.659	1052.659	0.718	626546	1.11	1000	105.3	69.5	130.5	
Al	27	1	He	47.628	47.628	1.350	17613	1.41	50	95.3	69.5	130.5	
K	39	1	He	1082.834	1082.834	0.898	628782	0.91	1000	108.3	69.5	130.5	
Ca	44	1	He	1043.835	1043.835	0.240	32658	0.90	1000	104.4	69.5	130.5	
Ti	47	1	He	10.678	10.678	1.435	1857	1.71	10	106.8	69.5	130.5	
V	51	1	He	5.384	5.384	3.256	23112	2.75	5	107.7	69.5	130.5	
Cr	52	1	He	2.062	2.062	1.748	12126	1.07	2	103.1	69.5	130.5	
Mn	55	1	He	6.658	6.658	1.514	27650	0.80	5	133.2	69.5	130.5	6020A CR1 Failed
Fe	56	1	He	118.023	118.023	0.518	575370	0.36	100	118.0	69.5	130.5	
Co	59	1	He	0.894	0.894	4.447	7688	4.36	1	89.4	69.5	130.5	
Ni	60	1	He	1.835	1.835	5.525	3980	5.24	2	91.7	69.5	130.5	
Cu	63	1	He	1.660	1.660	0.975	10402	0.54	2	83.0	69.5	130.5	
Zn	66	1	He	18.484	18.484	1.501	22152	1.58	20	92.4	69.5	130.5	
As	75	1	He	4.624	4.624	2.127	3468	2.31	5	92.5	69.5	130.5	
Se	78	1	He	4.932	4.932	6.985	413	6.72	5	98.6	69.5	130.5	
Sr	88	1	He	9.799	9.799	0.781	57919	0.44	10	98.0	69.5	130.5	
Mo	95	1	He	10.300	10.300	2.274	27669	2.54	10	103.0	69.5	130.5	
Ag	107	1	He	1.011	1.011	2.120	9323	2.30	1	101.1	69.5	130.5	
Cd	111	1	He	1.144	1.144	3.841	2651	2.32	1	114.4	69.5	130.5	
Sn	118	1	He	10.002	10.002	1.525	41392	1.41	10	100.0	69.5	130.5	
Sb	123	1	He	2.111	2.111	4.458	8358	4.45	2	105.5	69.5	130.5	
Ba	137	1	He	5.306	5.306	2.283	9852	2.52	5	106.1	69.5	130.5	
W	182	1	He	9.186	9.186	2.236	107879	3.02	10	91.9	69.5	130.5	
Tl	205	1	He	1.985	1.985	1.164	54945	1.52	2	99.2	69.5	130.5	
Pb	208	1	He	1.060	1.060	2.868	42387	1.96	1	106.0	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	841725	0.54	1631381	51.60	30	120	
Sc	45	1	He	488851	0.73	829696	58.92	30	120	
Sc	45	2	NoGas	3895567	0.49	6325638	61.58	30	120	
Rh	103	1	He	1554410	0.34	2345543	66.27	30	120	
In	115	1	He	974133	0.27	1419467	68.63	30	120	
Tb	159	1	He	2915710	0.45	3888262	74.99	30	120	
Ho	165	1	He	3013787	0.51	3932562	76.64	30	120	
Bi	209	1	He	2239001	0.86	2874805	77.88	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	212_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:29:54-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.071	2.466	126797	2.90	50	96.1	89.5	110.5	
B	11	45	2	NoGas	47.295	3.698	108862	3.23	50	94.6	89.5	110.5	
Na	23	45	1	He	23644.416	5.098	25590192	0.26	25000	94.6	89.5	110.5	
Mg	24	45	1	He	23814.495	4.937	14645632	0.59	25000	95.3	89.5	110.5	
Al	27	45	1	He	233.100	4.855	82873	0.32	250	93.2	89.5	110.5	
K	39	45	1	He	25177.870	3.635	14607732	1.57	25000	100.7	89.5	110.5	
Ca	44	45	1	He	24595.189	4.122	782196	0.75	25000	98.4	89.5	110.5	
Ti	47	45	1	He	48.091	3.279	8629	4.07	50	96.2	89.5	110.5	
V	51	45	1	He	49.705	5.194	220138	0.63	50	99.4	89.5	110.5	
Cr	52	45	1	He	48.881	4.058	261786	1.08	50	97.8	89.5	110.5	
Mn	55	45	1	He	249.649	4.483	1044995	0.62	250	99.9	89.5	110.5	
Fe	56	45	1	He	12572.005	5.654	63081204	2.02	12500	100.6	89.5	110.5	
Co	59	103	1	He	46.987	0.385	367541	0.21	50	94.0	89.5	110.5	
Ni	60	103	1	He	46.275	1.196	89823	1.15	50	92.6	89.5	110.5	
Cu	63	103	1	He	46.839	1.046	239938	0.90	50	93.7	89.5	110.5	
Zn	66	103	1	He	47.866	1.345	50504	1.11	50	95.7	89.5	110.5	
As	75	103	1	He	49.756	0.130	33125	0.34	50	99.5	89.5	110.5	
Se	78	103	1	He	51.968	0.768	3677	0.61	50	103.9	89.5	110.5	
Sr	88	103	1	He	52.697	0.618	284242	0.43	50	105.4	89.5	110.5	
Mo	95	103	1	He	52.510	1.426	128708	1.47	50	105.0	89.5	110.5	
Ag	107	103	1	He	52.380	0.423	440920	0.62	50	104.8	89.5	110.5	
Cd	111	103	1	He	53.787	1.056	79534	0.84	50	107.6	89.5	110.5	
Sn	118	115	1	He	50.213	0.916	197862	0.79	50	100.4	89.5	110.5	
Sb	123	115	1	He	53.115	1.001	192998	0.67	50	106.2	89.5	110.5	
Ba	137	115	1	He	52.572	1.040	93745	0.74	50	105.1	89.5	110.5	
W	182	209	1	He	48.032	0.772	528613	1.29	50	96.1	89.5	110.5	
Tl	205	165	1	He	47.611	1.464	1308629	0.41	50	95.2	89.5	110.5	
Pb	208	209	1	He	47.433	1.467	1791723	0.74	50	94.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	834267	0.44	1631381	51.14	30	120	
Sc	45	1	He	506373	4.95	829696	61.03	30	120	
Sc	45	2	NoGas	3863034	0.99	6325638	61.07	30	120	
Rh	103	1	He	1420086	0.21	2345543	60.54	30	120	
In	115	1	He	941465	0.35	1419467	66.33	30	120	
Tb	159	1	He	2916256	1.56	3888262	75.00	30	120	
Ho	165	1	He	2995231	1.36	3932562	76.16	30	120	
Bi	209	1	He	2145272	1.02	2874805	74.62	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	213_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:33:46-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.087	12.1	256	11.5	1	
B	11	45	2	NoGas	4.787	5.1	16363	2.6	20	
Na	23	45	1	He	20.392	5.3	33865	2.1	400	
Mg	24	45	1	He	2.074	26.4	1759	17.4	1000	
Al	27	45	1	He	0.559	77.2	1695	9.1	50	
K	39	45	1	He	13.074	6.5	28950	0.6	1000	
Ca	44	45	1	He	2.441	57.4	645	5.9	1000	
Ti	47	45	1	He	0.060	48.4	18	28.6	20	
V	51	45	1	He	-0.007	-151.1	31	148.4	2	
Cr	52	45	1	He	-0.011	-55.0	1415	3.4	2	
Mn	55	45	1	He	1.009	5.4	4656	4.7	2	
Fe	56	45	1	He	26.311	17.1	126331	16.7	50	
Co	59	103	1	He	0.005	68.3	73	39.6	1	
Ni	60	103	1	He	-0.008	-112.9	70	29.0	2	
Cu	63	103	1	He	-0.024	-40.4	1019	6.1	2	
Zn	66	103	1	He	-0.064	-208.6	1258	13.3	20	
As	75	103	1	He	0.036	38.8	137	7.3	2	
Se	78	103	1	He	0.166	21.0	48	6.7	2	
Sr	88	103	1	He	0.005	102.5	111	30.6	10	
Mo	95	103	1	He	0.958	18.7	2658	19.6	2	
Ag	107	103	1	He	0.008	8.5	76	9.2	0.2	
Cd	111	103	1	He	0.059	45.4	927	4.7	0.2	
Sn	118	115	1	He	0.342	9.4	2152	5.9	10	
Sb	123	115	1	He	0.358	6.9	1778	5.1	1	
Ba	137	115	1	He	0.027	23.5	119	9.8	5	
W	182	209	1	He	1.119	12.0	15701	9.6	10	
Tl	205	165	1	He	0.058	14.8	1672	13.8	0.5	
Pb	208	209	1	He	0.053	8.5	2732	6.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	843825	0.62	1631381	51.72	30	120	
Sc	45	1	He	473832	1.74	829696	57.11	30	120	
Sc	45	2	NoGas	3846200	0.80	6325638	60.80	30	120	
Rh	103	1	He	1580885	1.51	2345543	67.40	30	120	
In	115	1	He	972238	0.38	1419467	68.49	30	120	
Tb	159	1	He	2937155	1.22	3888262	75.54	30	120	
Ho	165	1	He	3015395	0.63	3932562	76.68	30	120	
Bi	209	1	He	2240143	0.31	2874805	77.92	30	120	

MTMSCCBDILH20-195 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/28/15 Analyst: AS Instrument: I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within coutrol limits? (*ICV:* = 90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

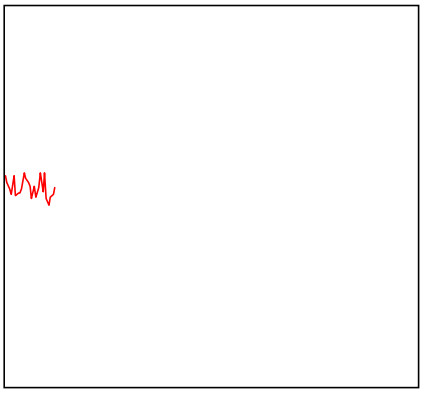
Level I Analyst: Anjali Sharma Date: 4/28/15 Time: 11:32 – 15:42
Level I Analyst: Date: Time:

Level II Reviewer: Date: 4/28/15 Time: 11:32 - 15:42
Level II Reviewer: Date: Time:

Comments:

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1046	1044.3	4.67
51	100	44	42.6	24.39
52	200	88	95.7	13.11
51/59	10	4.205 %	4.083 %	23.53
52/59	20	8.411 %	9.202 %	15.30
7	50	16	12.3	42.48
89	2000	1396	1318.8	4.71
205	5000	3280	3265.2	2.99
6	20	3	1.2	96.23
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

US EPA Tune Check Sample Report

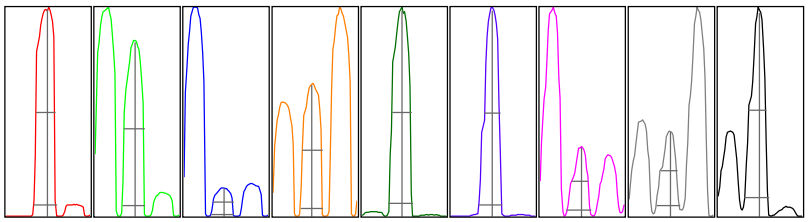
Batch Folder D:\Analytical Runs\I10042815A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	26808	1.36	5.00	
24	95703	0.93	5.00	
25	12904	0.72	5.00	
26	15055	1.27	5.00	
59	144118	0.82	5.00	
115	276194	0.82	5.00	
206	105047	0.62	5.00	
207	95124	0.50	5.00	
208	219613	1.00	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	26992	26210	27097	26720	27023
24	97281	95308	95497	95296	95136
25	12891	12825	12979	12808	13018
26	15113	14928	15367	14948	14921
59	143379	142832	145139	143674	145567
115	275918	273824	277915	274270	279040
206	105444	104867	105529	103988	105409
207	95478	94852	95340	94424	95529
208	219002	218383	221483	216962	222233

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	4202	9.00	8.9 - 9.1		0.782	0.850	
24	15289	23.95	23.9 - 24.1		0.784	0.850	
25	2048	24.95	24.9 - 25.1		0.787	0.850	
26	2377	25.90	25.9 - 26.1		0.786	0.850	
59	23078	58.95	58.9 - 59.1		0.816	0.850	
115	48535	115.00	114.9 - 115.1		0.808	0.850	
206	18289	206.00	205.9 - 206.1		0.817	0.850	
207	16211	207.00	206.9 - 207.1		0.816	0.850	
208	39353	208.00	207.9 - 208.1		0.811	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

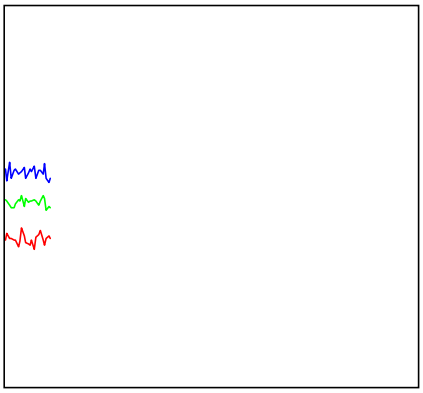
Cell Parameters

US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	1943	1932.9	3.48
89	10000	4691	4837.1	2.19
205	10000	5470	5628.1	2.48
156/140	2	0.845 %	0.837 %	15.97
70/140	2	0.935 %	1.006 %	14.16
115	50	29	26.2	30.82
63	2000	1265	1211.5	4.26
60	500	158	213.4	15.62
121	100	41	34.8	25.06
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

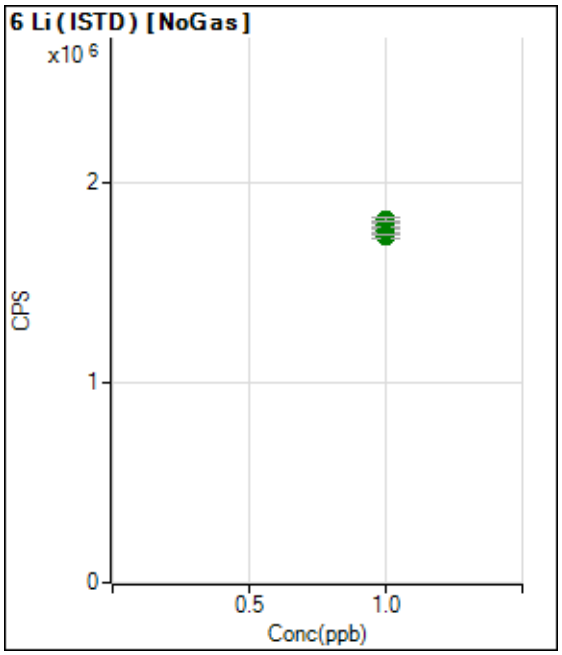
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

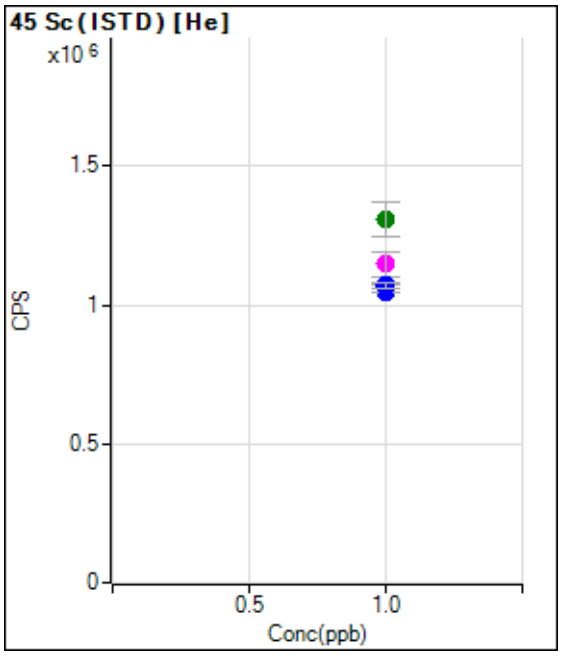
Calibration for 013_CCB.d

Batch Folder: D:\Analytical Runs\I10042815C.b\
Analysis File: I10042815C.batch.bin
DA Date-Time: 4/28/2015 12:20:04 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

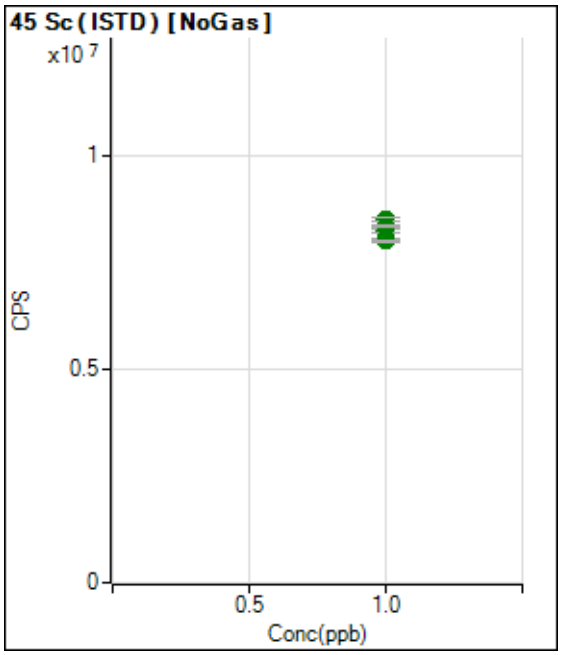
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/28/2015 11:36:07 AM
2	003CALS.d	STD1-1906323	4/28/2015 11:39:58 AM
3	004CALS.d	STD2-1904110	4/28/2015 11:43:47 AM
4	005CALS.d	STD3-1906333	4/28/2015 11:47:36 AM
5	006CALS.d	STD4-1906536	4/28/2015 11:51:20 AM



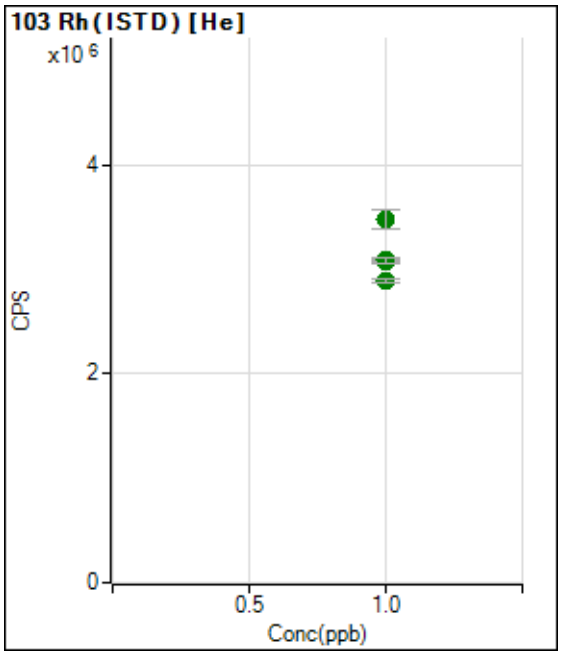
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1729956.15		A	1.7
2	☐	1.000		1752847.12		A	1.5
3	☐	1.000		1809070.55		A	2.0
4	☐	1.000		1788351.62		A	1.6
5	☐	1.000		1811248.90		A	1.2



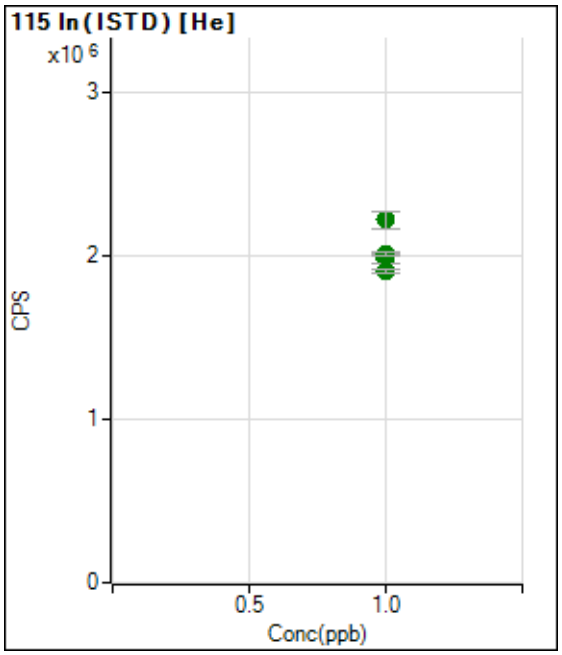
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1045873.45		P	0.5
2	☐	1.000		1068201.65		P	1.5
3	☐	1.000		1148490.48		M	8.0
4	☐	1.000		1071349.59		P	1.8
5	☐	1.000		1306222.32		A	9.6



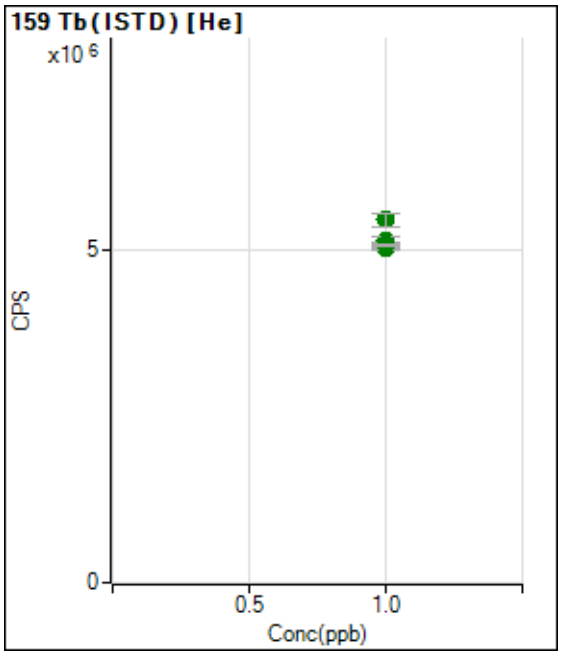
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		8041241.07		A	0.6
2	☐	1.000		8223474.67		A	1.4
3	☐	1.000		8480977.44		A	0.9
4	☐	1.000		8334682.17		A	0.5
5	☐	1.000		7987039.41		A	0.2



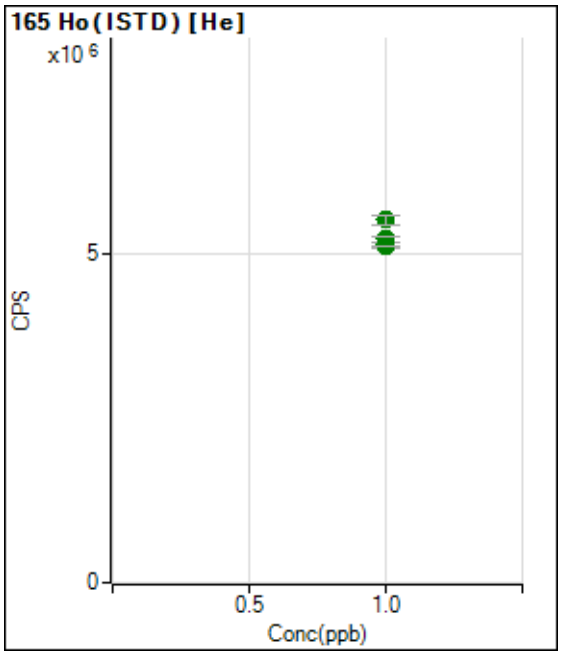
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3067945.57		A	1.4
2	☐	1.000		3067096.06		A	1.0
3	☐	1.000		3086914.53		A	2.0
4	☐	1.000		2889294.74		A	1.1
5	☐	1.000		3472422.64		A	5.4



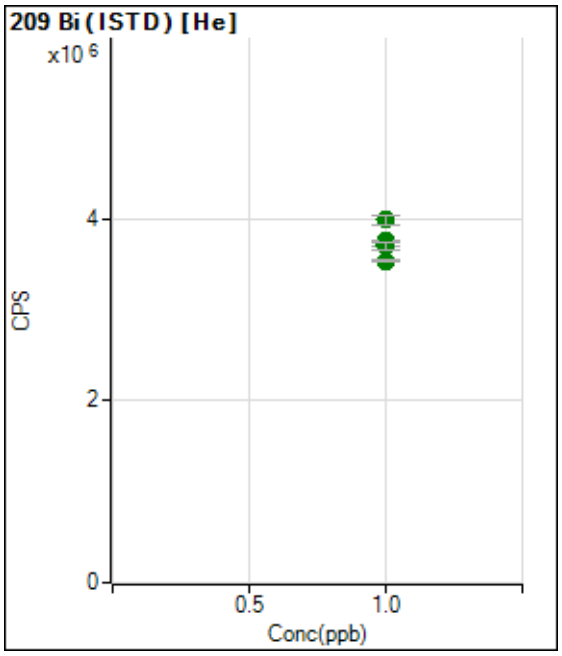
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1978772.15		A	2.0
2	☐	1.000		1986211.70		A	2.8
3	☐	1.000		2015769.81		A	1.1
4	☐	1.000		1908885.61		A	0.9
5	☐	1.000		2222143.76		A	4.9



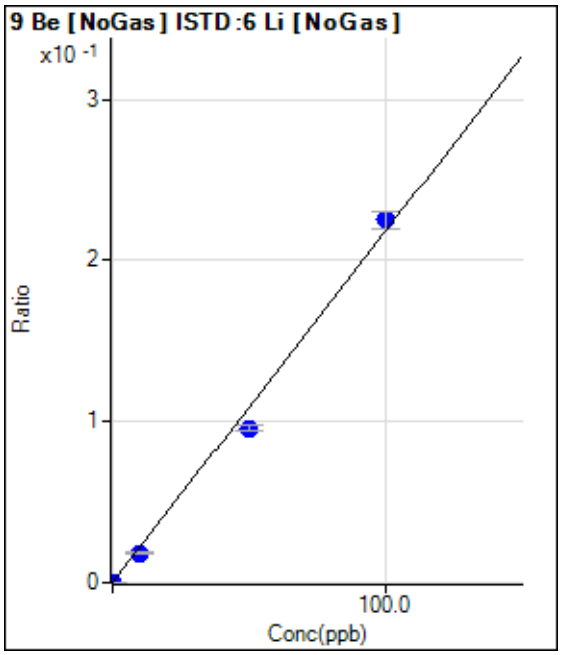
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5013528.97		A	0.4
2	☐	1.000		5081680.63		A	0.8
3	☐	1.000		5146691.32		A	1.5
4	☐	1.000		5071302.99		A	0.3
5	☐	1.000		5449425.75		A	3.8



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5115781.32		A	0.2
2	☐	1.000		5165339.38		A	0.9
3	☐	1.000		5235488.82		A	1.7
4	☐	1.000		5134278.69		A	0.3
5	☐	1.000		5529301.45		A	2.7



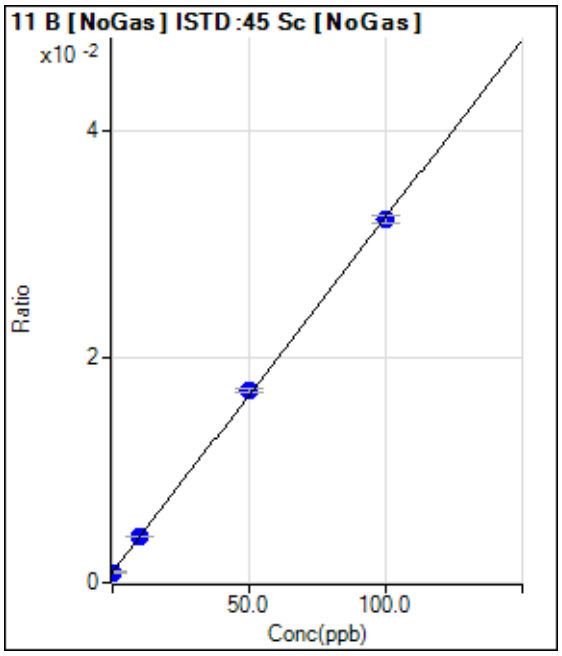
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3723642.91		A	0.9
2	☐	1.000		3755227.07		A	0.8
3	☐	1.000		3700168.74		A	2.1
4	☐	1.000		3536229.30		A	0.7
5	☐	1.000		3986621.78		A	2.8



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	311.13	0.0002	P	38.4
2	☐	10.000	8.372	32295.62	0.0184	P	3.9
3	☐	50.000	43.816	173047.39	0.0957	P	3.4
4	☐	100.000	103.255	402688.61	0.2252	P	4.6
5	☐			429.65	0.0002	P	19.7

y = 0.0022 * x + 1.8035E-004
R = 0.9969
DL = 0.09524
BEC = 0.08274

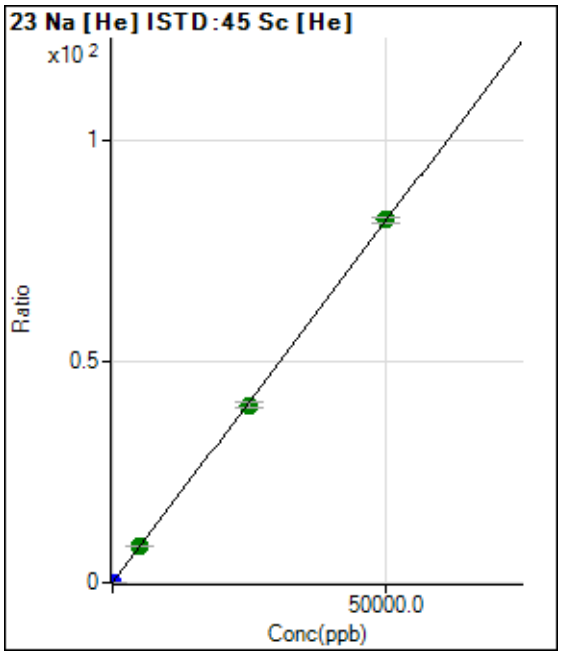
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7335.10	0.0009	P	9.4
2	☐	10.000	10.132	33694.71	0.0041	P	2.5
3	☐	50.000	51.323	144539.25	0.0170	P	2.8
4	☐			8376.29	0.0010	P	3.8
5	☐	100.000	99.326	256667.99	0.0321	P	2.0

y = 3.1435E-004 * x + 9.1204E-004
R = 0.9998
DL = 0.8191
BEC = 2.901

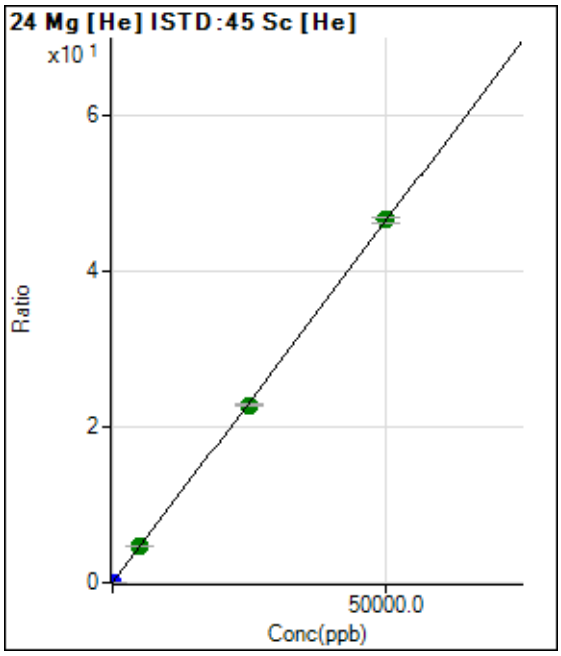
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22303.29	0.0213	P	3.0
2	☐	5000.000	5013.087	8780379.97	8.2205	A	0.9
3	☐	25000.000	24592.021	46134574.09	40.2429	A	3.5
4	☐	50000.000	50202.681	87976342.80	82.1305	A	1.4
5	☐			46167.44	0.0353	P	5.2

y = 0.0016 * x + 0.0213
R = 0.9999
DL = 1.179
BEC = 13.04

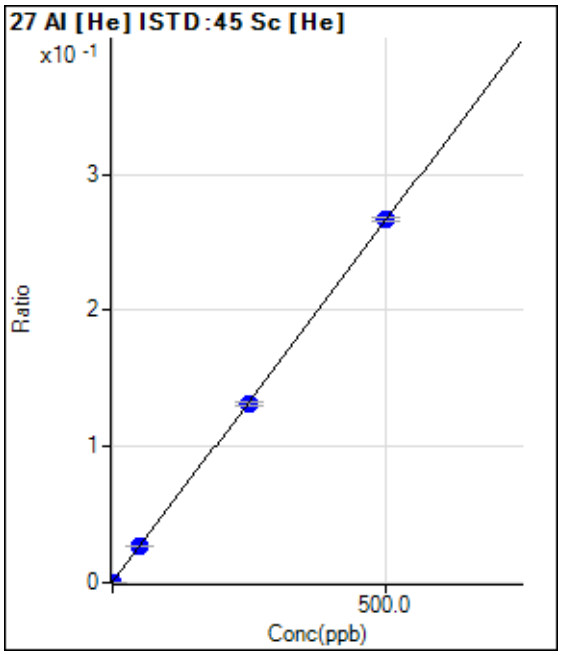
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1485.33	0.0014	P	3.0
2	☐	5000.000	5116.224	5075040.54	4.7509	A	2.0
3	☐	25000.000	24540.184	26145648.03	22.7826	A	1.5
4	☐	50000.000	50218.286	49936218.39	46.6201	A	1.8
5	☐			6812.71	0.0052	P	9.6

y = 9.2832E-004 * x + 0.0014
R = 0.9999
DL = 0.1391
BEC = 1.53

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	655.58	0.0006	P	4.1
2	☐	50.000	49.643	28764.64	0.0269	P	2.5
3	☐	250.000	247.101	150983.34	0.1316	P	1.7
4	☐	500.000	501.485	285349.62	0.2664	P	1.2
5	☐			2119.05	0.0016	P	4.0

y = 5.2994E-004 * x + 6.2675E-004

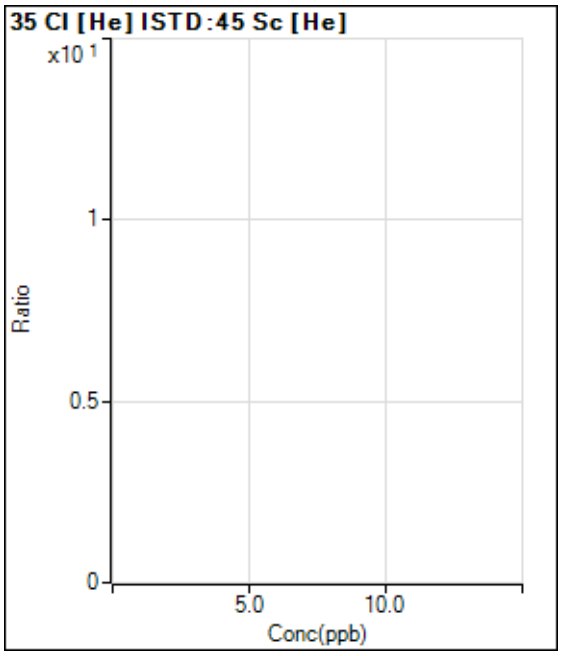
R = 1.0000

DL = 0.147

BEC = 1.183

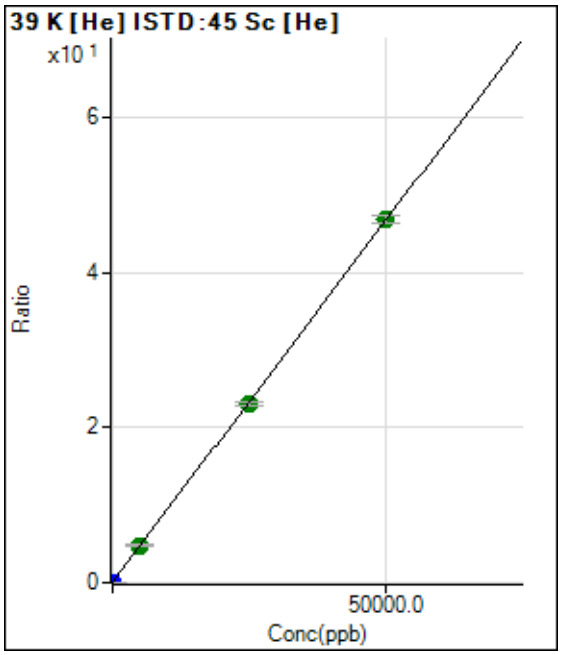
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			13514623.54	12.9217	A	0.5
2	☐			14067811.02	13.1705	A	0.7
3	☐			14914827.19	13.0069	A	3.0
4	☐			13809023.06	12.8934	A	2.7
5	☐			17622409.49	13.4909	A	2.6

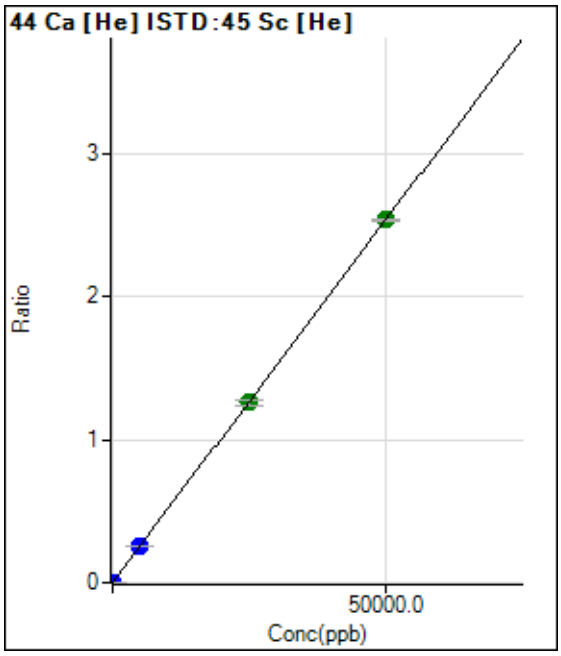
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	40442.42	0.0387	P	2.2
2	☐	5000.000	5119.138	5147060.10	4.8192	A	2.0
3	☐	25000.000	24712.187	26509817.47	23.1162	A	2.8
4	☐	50000.000	50131.993	50186677.64	46.8546	A	2.1
5	☐			61494.09	0.0469	P	5.0

y = 9.3385E-004 * x + 0.0387
R = 1.0000
DL = 2.79
BEC = 41.41

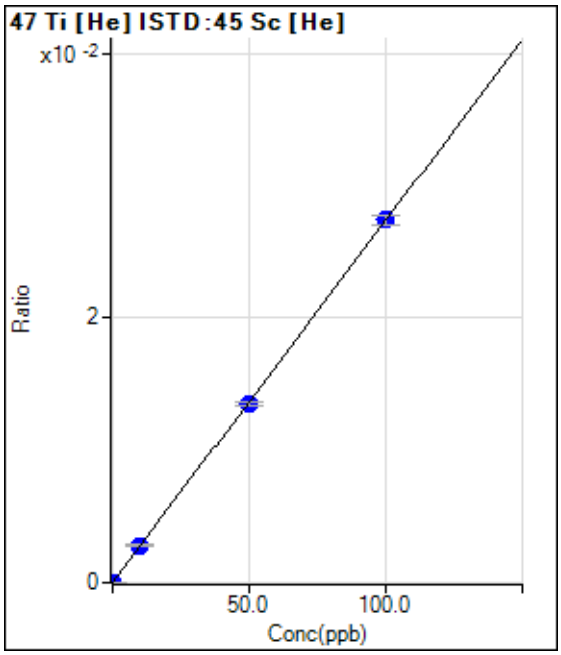
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	567.83	0.0005	P	15.1
2	☐	5000.000	4976.958	270205.90	0.2530	P	0.7
3	☐	25000.000	24887.624	1447545.95	1.2627	A	3.5
4	☐	50000.000	50058.492	2720376.30	2.5393	A	0.4
5	☐			951.96	0.0007	P	8.9

y = 5.0716E-005 * x + 5.4281E-004
R = 1.0000
DL = 4.853
BEC = 10.7

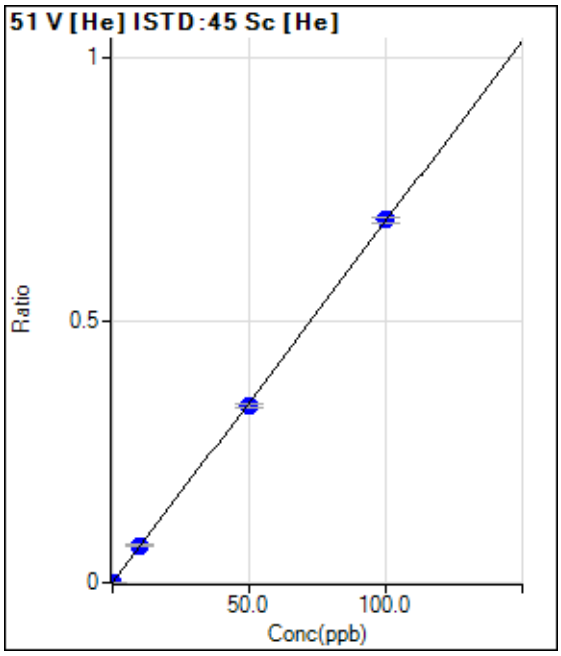
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.89	0.0000	P	94.1
2	☐	10.000	10.310	3020.29	0.0028	P	3.4
3	☐	50.000	49.481	15542.44	0.0135	P	2.2
4	☐			30.00	0.0000	P	39.8
5	☐	100.000	100.229	35789.29	0.0274	P	2.8

y = 2.7336E-004 * x + 8.4797E-006
R = 1.0000
DL = 0.08758
BEC = 0.03102

Weight: <None>
Min Conc: <None>

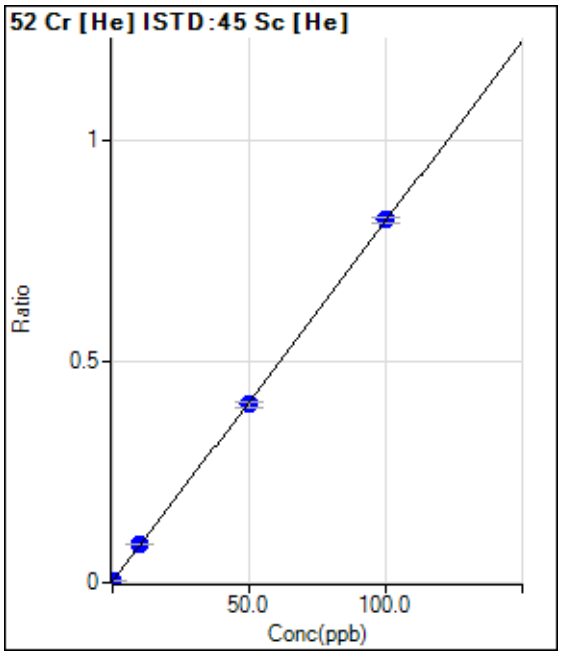


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-209.86	-0.0002	P	-149.2
2	☐	10.000	10.305	75548.63	0.0707	P	2.3
3	☐	50.000	48.994	386438.26	0.3370	P	3.1
4	☐	100.000	100.473	740614.06	0.6913	P	1.3
5	☐			211.76	0.0001	P	450.8

y = 0.0069 * x - 1.9962E-004
R = 0.9999
DL = 0.1298
BEC = -0.029

Weight: <None>
Min Conc: <None>

Calibration for 013_CCB.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2323.51	0.0022	P	3.0
2	☐	10.000	10.319	92108.49	0.0862	P	2.2
3	☐	50.000	49.159	461503.30	0.4025	P	2.9
4	☐	100.000	100.389	877876.98	0.8195	P	1.3
5	☐			4800.72	0.0037	P	2.4

y = 0.0081 * x + 0.0022

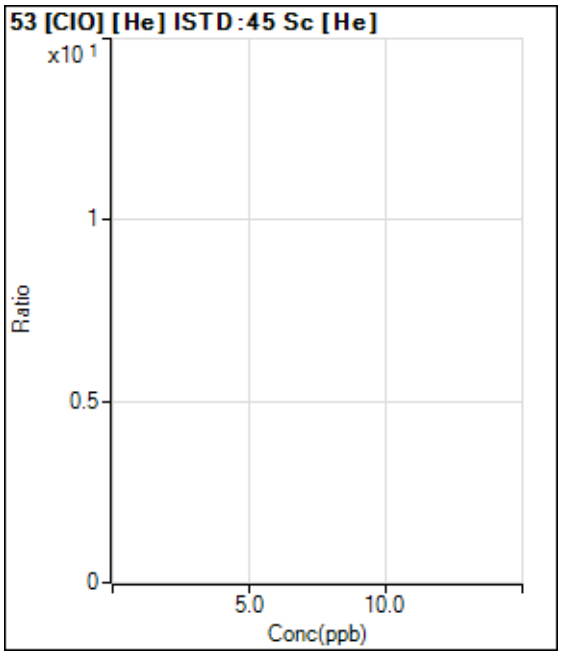
R = 0.9999

DL = 0.02485

BEC = 0.2729

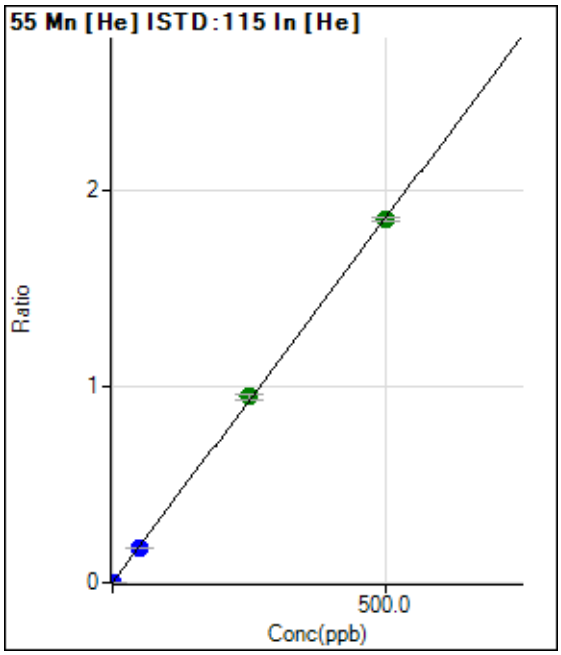
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1040.83	0.0010	P	6.6
2	☐			11485.68	0.0108	P	0.9
3	☐			57229.23	0.0499	P	3.0
4	☐			109428.13	0.1022	P	3.8
5	☐			1351.97	0.0010	P	13.6

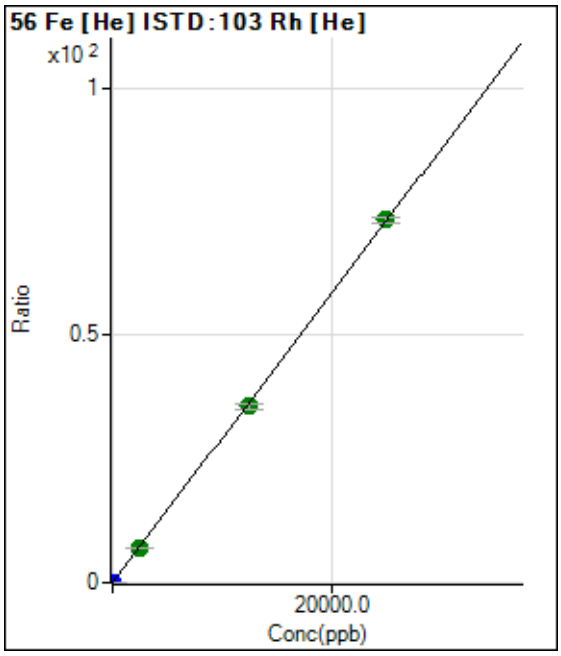
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	835.59	0.0004	P	11.1
2	☐	50.000	48.083	356063.54	0.1793	P	1.3
3	☐	250.000	255.081	1913977.63	0.9494	A	2.7
4	☐	500.000	497.651	3534734.72	1.8518	A	1.2
5	☐			1984.59	0.0009	P	3.0

y = 0.0037 * x + 4.2212E-004
R = 0.9999
DL = 0.03765
BEC = 0.1135

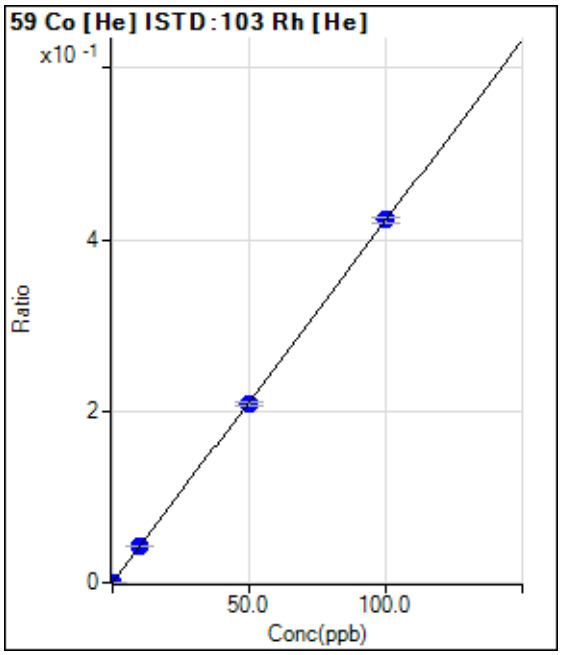
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14131.19	0.0046	P	4.1
2	☐	2500.000	2419.771	21665588.03	7.0641	A	1.2
3	☐	12500.000	12223.660	110143751.18	35.6662	A	3.0
4	☐	25000.000	25146.193	211952244.91	73.3668	A	1.8
5	☐			303802.19	0.0874	P	20.8

y = 0.0029 * x + 0.0046
R = 0.9999
DL = 0.1965
BEC = 1.579

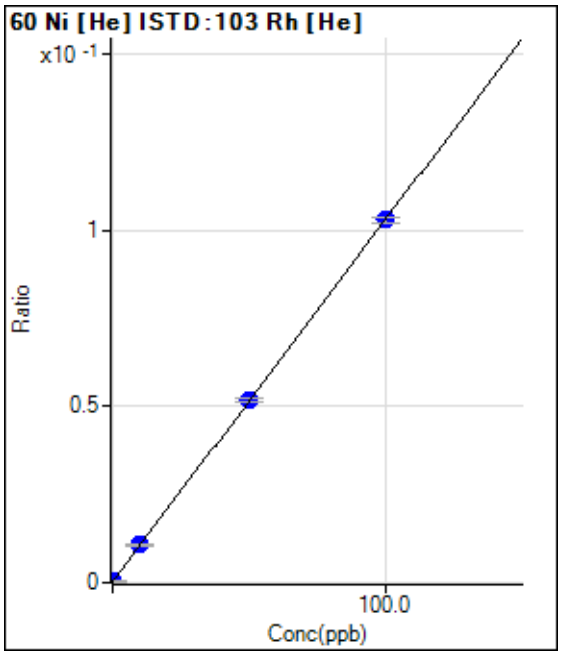
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	70.00	0.0000	P	26.7
2	☐	10.000	9.917	128418.24	0.0419	P	1.1
3	☐	50.000	49.448	644404.11	0.2087	P	2.9
4	☐	100.000	100.284	1222558.15	0.4232	P	1.4
5	☐			221.11	0.0001	P	13.1

y = 0.0042 * x + 2.2871E-005
R = 1.0000
DL = 0.004339
BEC = 0.00542

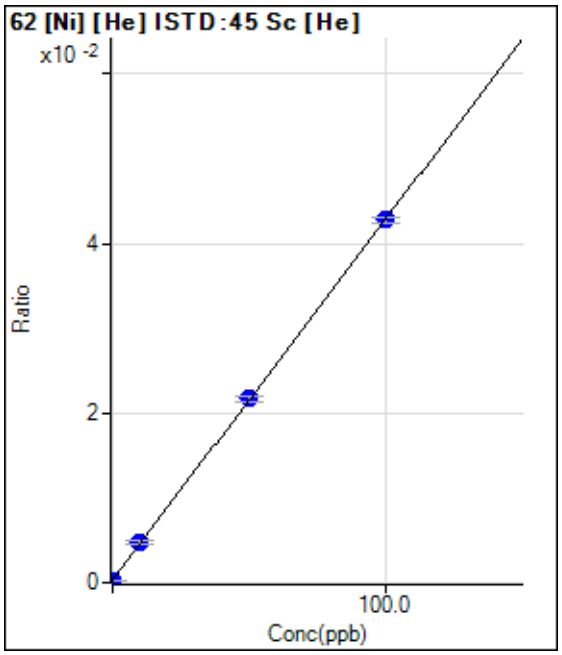
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	875.59	0.0003	P	10.7
2	☐	10.000	10.116	32785.63	0.0107	P	2.0
3	☐	50.000	50.140	160090.66	0.0518	P	2.4
4	☐	100.000	99.918	297648.49	0.1030	P	1.7
5	☐			1145.61	0.0003	P	8.2

y = 0.0010 * x + 2.8566E-004
R = 1.0000
DL = 0.08888
BEC = 0.2778

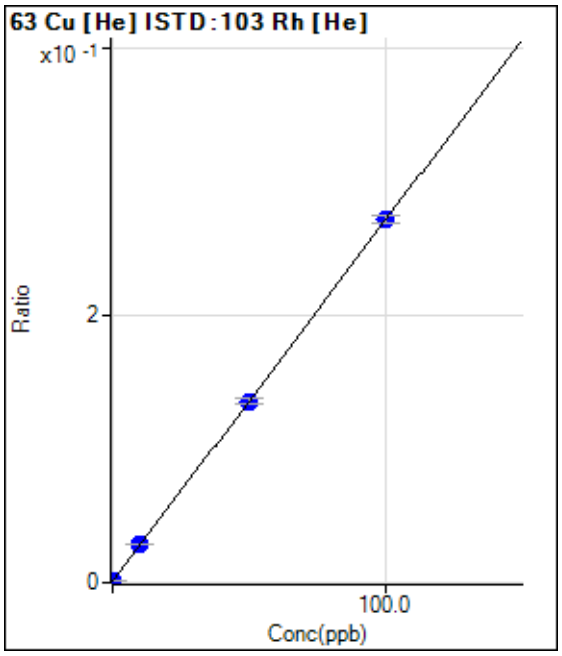
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	328.90	0.0003	P	14.3
2	☐	10.000	10.672	5180.82	0.0049	P	9.2
3	☐	50.000	50.176	24822.86	0.0217	P	4.1
4	☐	100.000	99.845	45831.63	0.0428	P	1.8
5	☐			415.56	0.0003	P	2.8

y = 4.2540E-004 * x + 3.1461E-004
R = 1.0000
DL = 0.3164
BEC = 0.7396

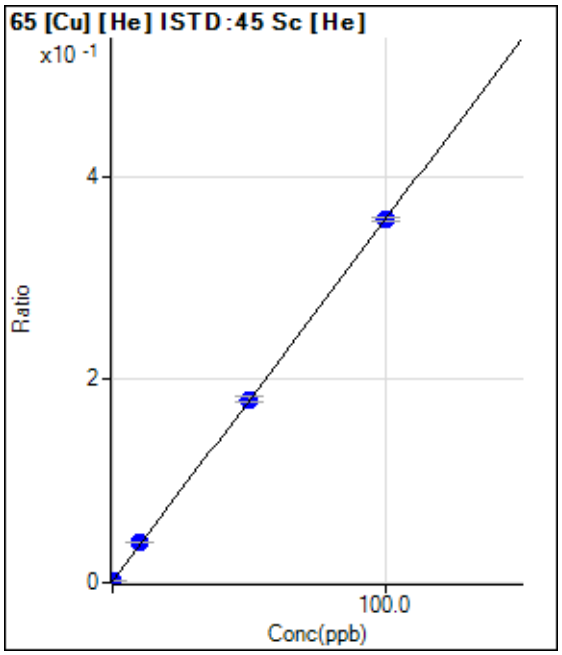
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3801.56	0.0012	P	4.2
2	☐	10.000	10.198	88268.79	0.0288	P	0.5
3	☐	50.000	49.816	419260.27	0.1358	P	2.7
4	☐	100.000	100.072	784292.35	0.2715	P	2.1
5	☐			4123.87	0.0012	P	5.0

y = 0.0027 * x + 0.0012
R = 1.0000
DL = 0.05778
BEC = 0.4587

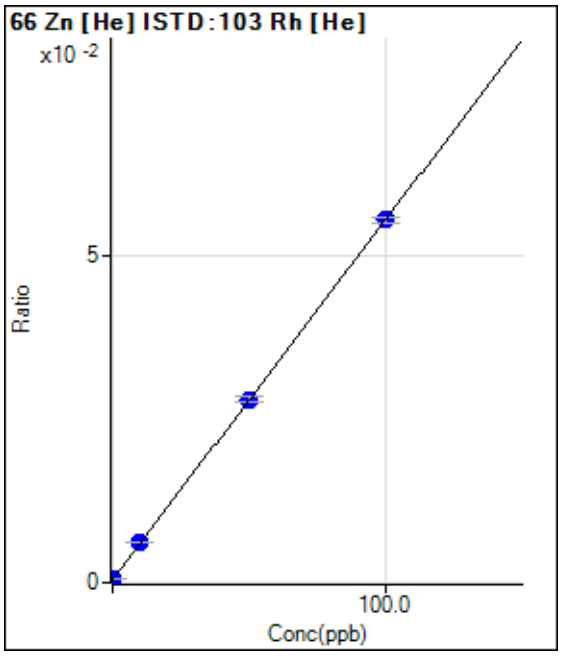
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1803.45	0.0017	P	5.6
2	☐	10.000	10.863	43227.56	0.0405	P	0.8
3	☐	50.000	50.266	207518.61	0.1810	P	3.2
4	☐	100.000	99.781	383058.70	0.3576	P	1.2
5	☐			1922.36	0.0015	P	10.2

y = 0.0036 * x + 0.0017
R = 1.0000
DL = 0.08178
BEC = 0.4836

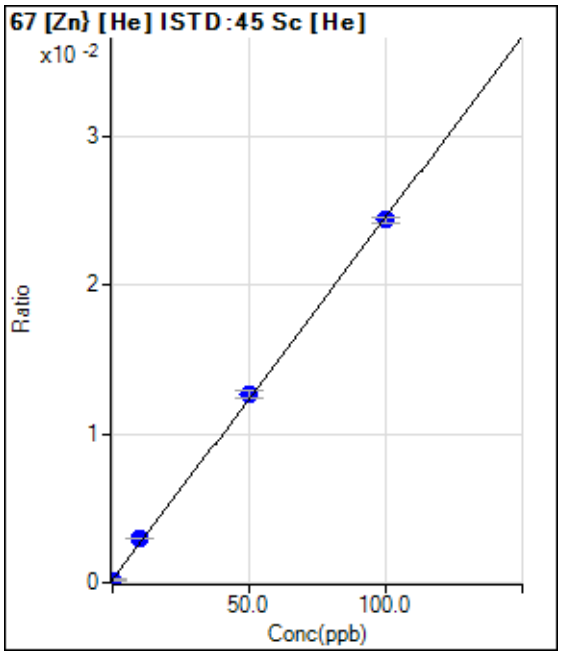
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1447.86	0.0005	P	7.8
2	☐	10.000	10.210	18714.38	0.0061	P	1.5
3	☐	50.000	50.020	86623.26	0.0281	P	3.2
4	☐	100.000	99.969	160597.44	0.0556	P	1.7
5	☐			1708.99	0.0005	P	10.6

y = 5.5136E-004 * x + 4.7184E-004
R = 1.0000
DL = 0.2006
BEC = 0.8558

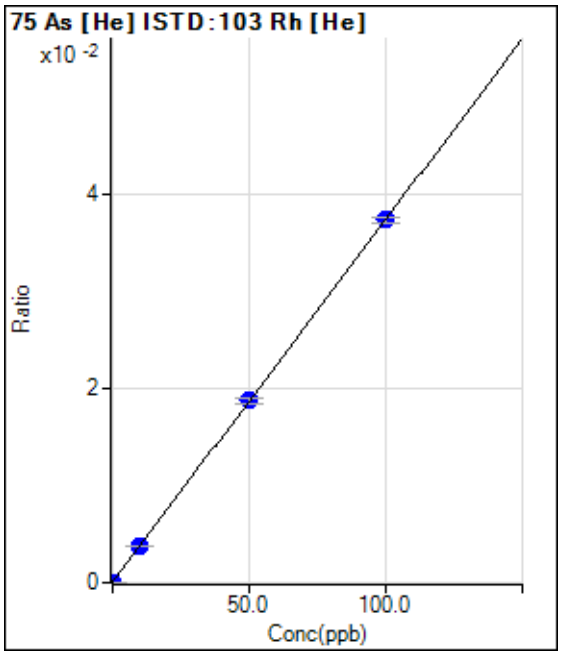
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	197.78	0.0002	P	29.1
2		10.000	11.199	3113.65	0.0029	P	0.5
3		50.000	51.058	14454.89	0.0126	P	4.4
4		100.000	99.351	26101.36	0.0244	P	1.9
5				255.56	0.0002	P	20.0

y = 2.4337E-004 * x + 1.8928E-004
R = 0.9999
DL = 0.6799
BEC = 0.7778

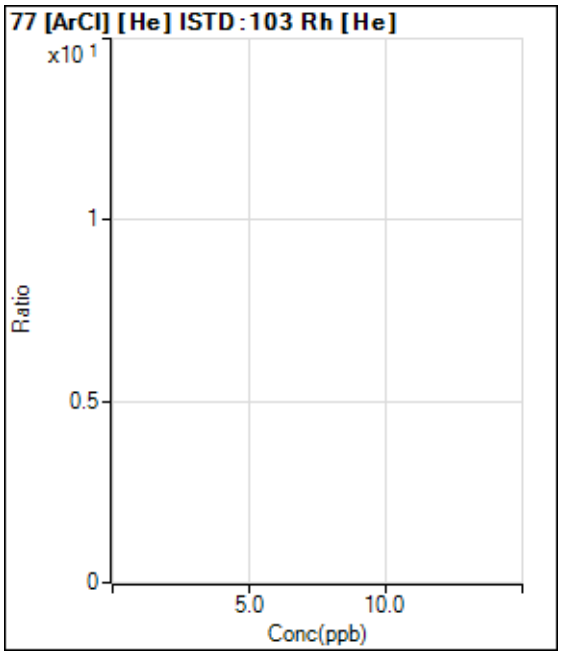
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	141.69	0.0000	P	17.4
2		10.000	9.882	11437.87	0.0037	P	0.9
3		50.000	50.027	57716.11	0.0187	P	2.7
4		100.000	99.998	107799.00	0.0373	P	1.3
5				699.22	0.0002	P	6.0

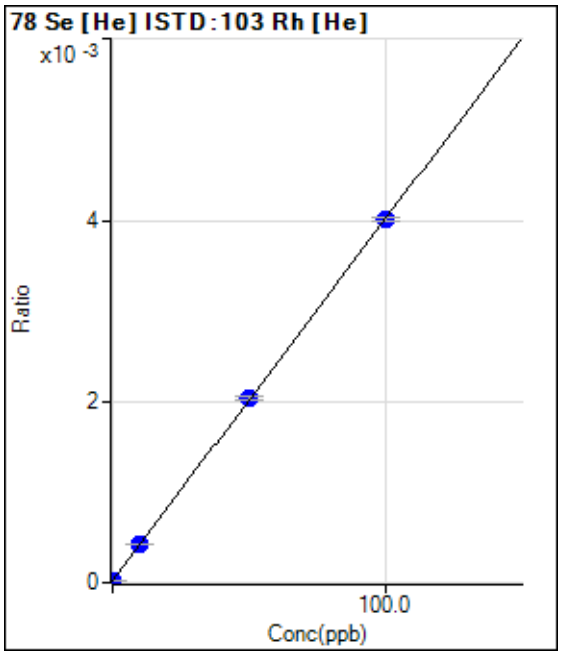
y = 3.7268E-004 * x + 4.6245E-005
R = 1.0000
DL = 0.0649
BEC = 0.1241

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			7.41	0.0000	P	86.6
2	☐			355.57	0.0001	P	27.6
3	☐			1959.48	0.0006	P	14.6
4	☐			3470.90	0.0012	P	6.9
5	☐			3.70	0.0000	P	173.2

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69.15	0.0000	P	13.6
2	☐	10.000	10.073	1303.37	0.0004	P	2.1
3	☐	50.000	50.540	6303.44	0.0020	P	2.6
4	☐	100.000	99.723	11573.23	0.0040	P	0.9
5	☐			133.50	0.0000	P	5.6

y = 3.9943E-005 * x + 2.2568E-005

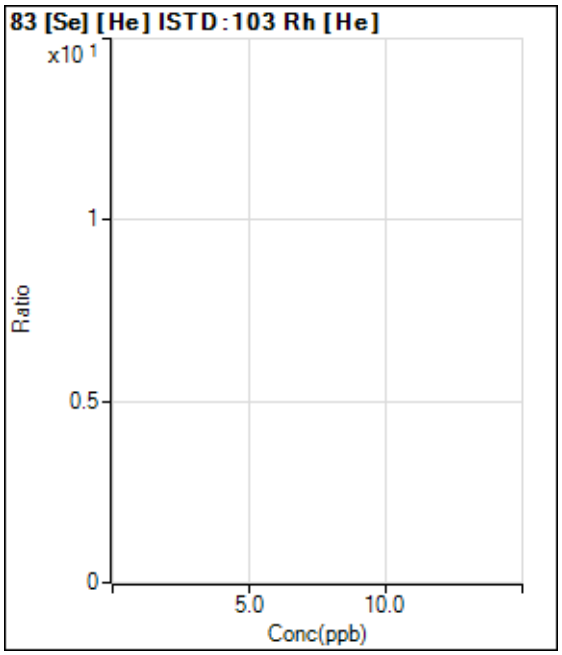
R = 1.0000

DL = 0.2303

BEC = 0.565

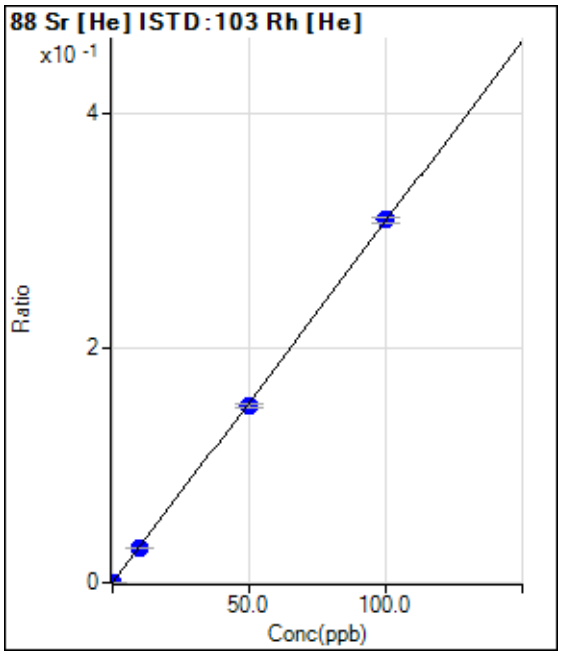
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			81.48	0.0000	P	14.5
2	☐			98.65	0.0000	P	17.9
3	☐			100.67	0.0000	P	4.3
4	☐			86.87	0.0000	P	11.0
5	☐			95.62	0.0000	P	9.4

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	145.56	0.0000	P	31.9
2	☐	10.000	9.694	91840.91	0.0299	P	0.5
3	☐	50.000	49.122	467870.66	0.1515	P	1.8
4	☐	100.000	100.470	895243.68	0.3099	P	1.4
5	☐			242.23	0.0001	P	8.2

y = 0.0031 * x + 4.7518E-005

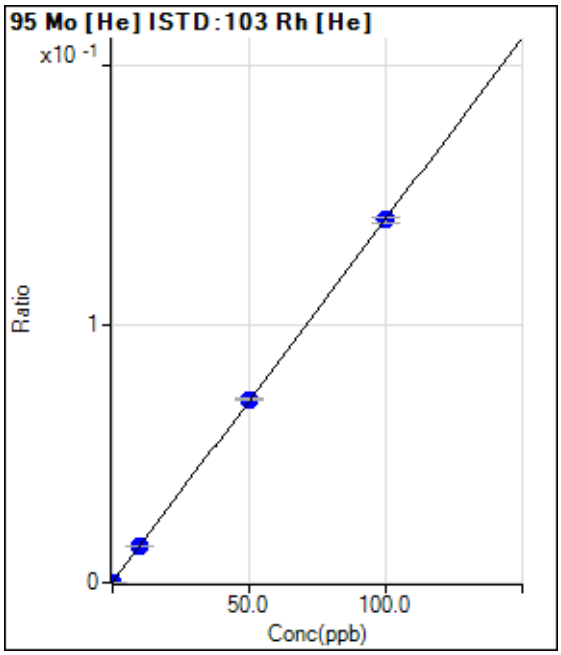
R = 0.9999

DL = 0.01474

BEC = 0.01541

Weight: <None>

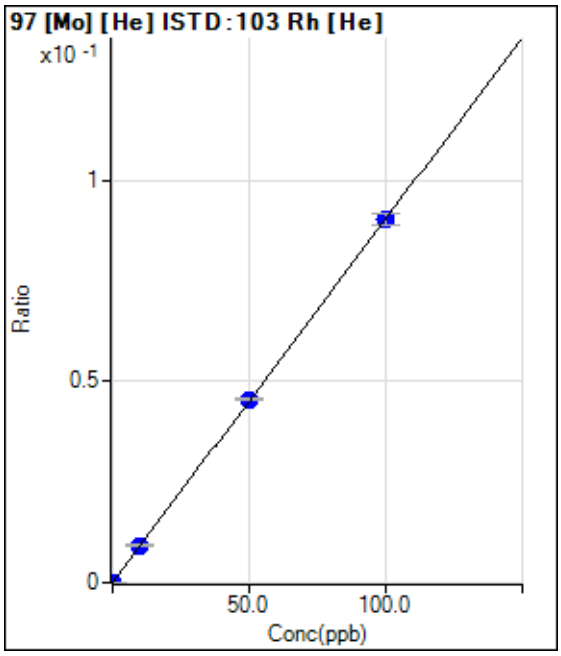
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	311.12	0.0001	P	10.3
2	☐	10.000	10.164	44157.78	0.0144	P	1.6
3	☐	50.000	50.338	218854.78	0.0709	P	1.1
4	☐			2910.29	0.0010	P	13.0
5	☐	100.000	99.814	488129.62	0.1405	P	1.6

y = 0.0014 * x + 1.0149E-004
R = 1.0000
DL = 0.02238
BEC = 0.07216

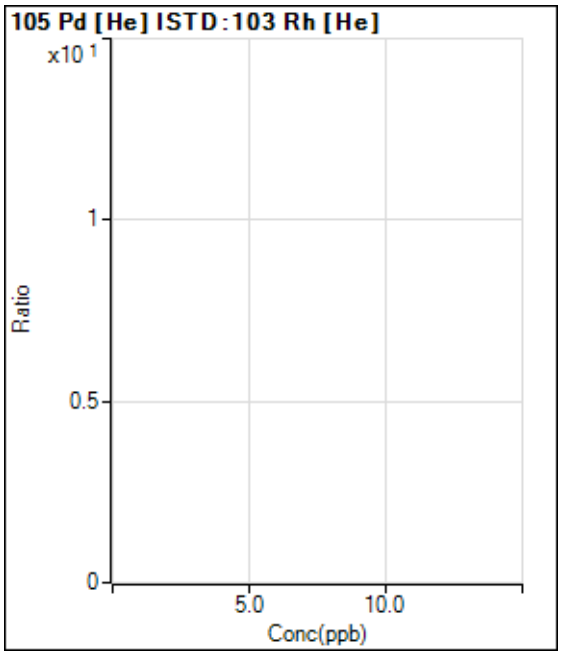
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92.59	0.0000	P	65.4
2	☐	10.000	10.118	28105.26	0.0092	P	4.4
3	☐	50.000	50.318	140310.06	0.0455	P	1.0
4	☐			1674.25	0.0006	P	7.4
5	☐	100.000	99.829	313365.19	0.0901	P	3.2

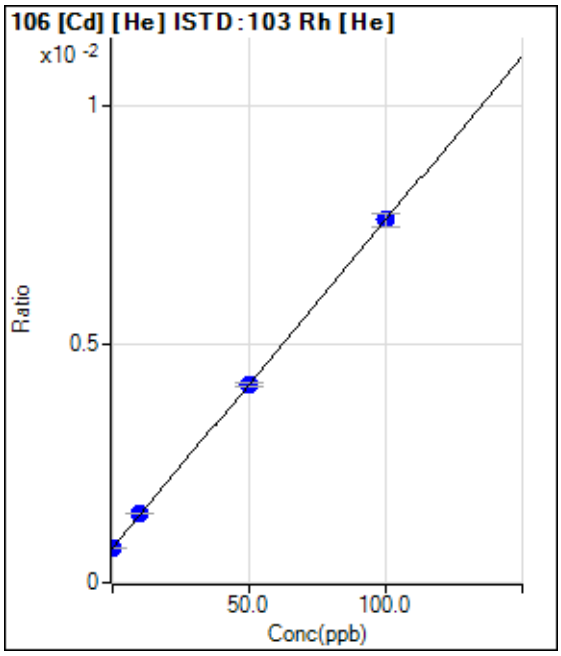
y = 9.0268E-004 * x + 3.0148E-005
R = 1.0000
DL = 0.0655
BEC = 0.0334

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2452.15	0.0008	P	6.0
2	☐			2578.09	0.0008	P	4.6
3	☐			2859.62	0.0009	P	10.1
4	☐			3263.42	0.0011	P	6.3
5	☐			3211.57	0.0009	P	13.6

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2231.80	0.0007	P	2.8
2	☐	10.000	10.520	4449.41	0.0015	P	2.3
3	☐	50.000	49.780	12813.49	0.0042	P	1.4
4	☐	100.000	100.058	21974.43	0.0076	P	3.4
5	☐			2767.91	0.0008	P	4.8

y = 6.8761E-005 * x + 7.2727E-004

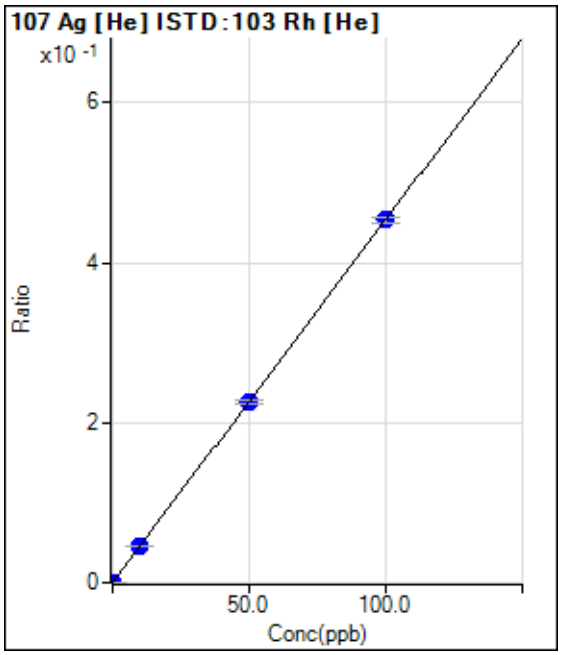
R = 1.0000

DL = 0.8873

BEC = 10.58

Weight: <None>

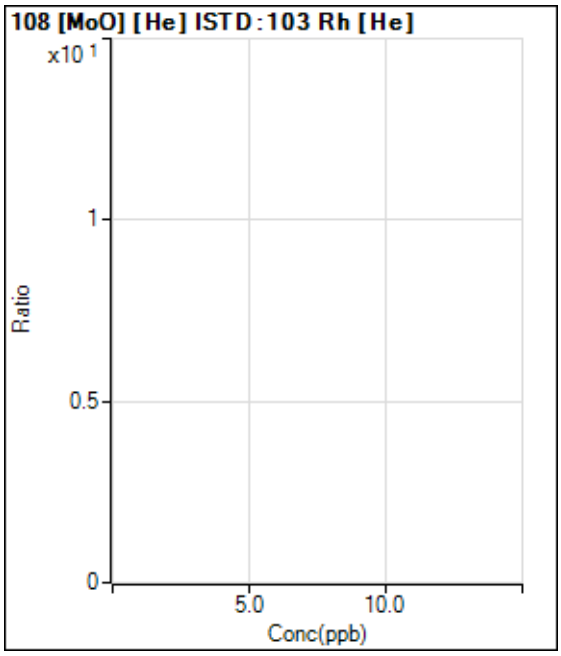
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.33	0.0000	P	25.9
2	☐	10.000	10.129	140914.60	0.0459	P	0.8
3	☐	50.000	49.940	699076.29	0.2264	P	1.7
4	☐	100.000	100.017	1309942.76	0.4534	P	1.6
5	☐			427.79	0.0001	P	10.5

y = 0.0045 * x + 2.7227E-005
R = 1.0000
DL = 0.00466
BEC = 0.006006

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			7.41	0.0000	P	173.2
2	☐			1681.64	0.0005	P	15.8
3	☐			7709.53	0.0025	P	7.1
4	☐			15155.52	0.0052	P	1.6
5	☐			151.86	0.0000	P	18.1

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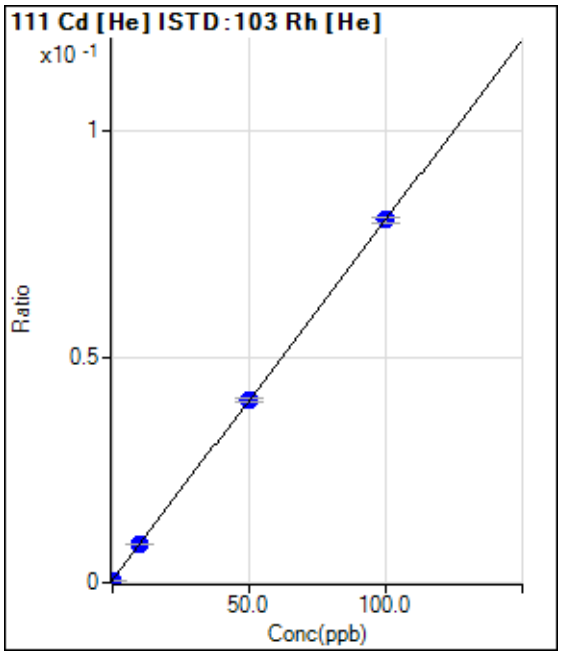
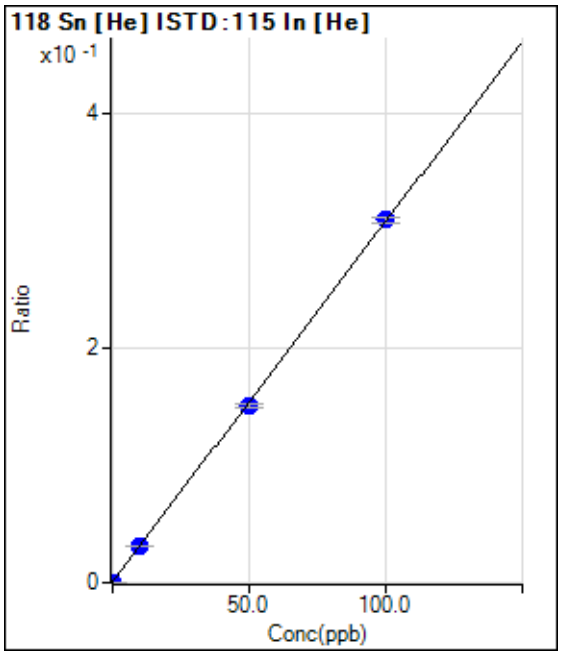


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1702.20	0.0006	P	3.7
2	☐	10.000	10.155	26564.69	0.0087	P	0.1
3	☐	50.000	49.873	124644.61	0.0404	P	2.1
4	☐	100.000	100.048	232329.25	0.0804	P	1.6
5	☐			2131.88	0.0006	P	4.8

y = 7.9827E-004 * x + 5.5464E-004
R = 1.0000
DL = 0.07742
BEC = 0.6948

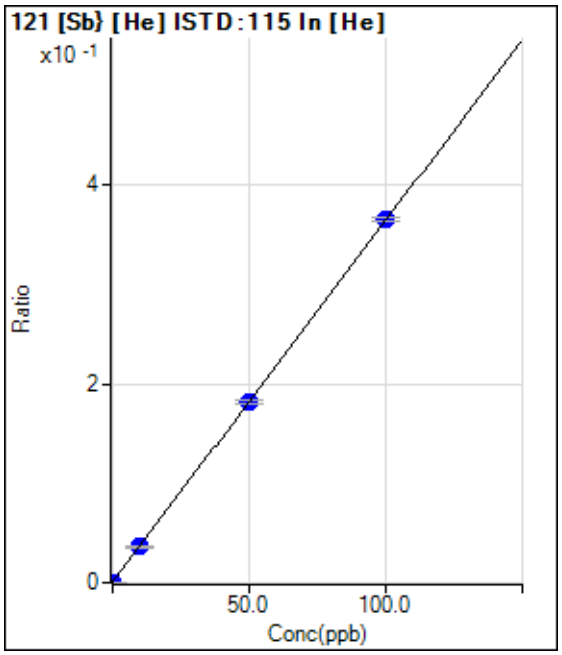
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1137.14	0.0006	P	20.5
2	☐	10.000	9.802	60809.07	0.0306	P	1.2
3	☐	50.000	49.025	304151.99	0.1509	P	2.4
4	☐			4623.06	0.0024	P	3.0
5	☐	100.000	100.507	686200.33	0.3087	P	1.3

y = 0.0031 * x + 5.7376E-004
R = 0.9999
DL = 0.1149
BEC = 0.1872

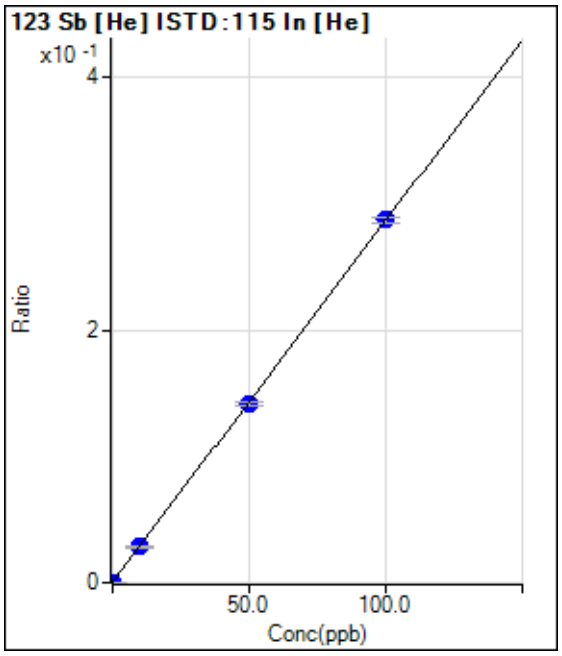
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1202.28	0.0006	P	4.6
2	☐	10.000	9.772	71703.29	0.0361	P	2.5
3	☐	50.000	49.632	364808.11	0.1810	P	2.0
4	☐			4780.74	0.0025	P	10.2
5	☐	100.000	100.207	810810.59	0.3647	P	1.1

y = 0.0036 * x + 6.0727E-004
R = 1.0000
DL = 0.02295
BEC = 0.1671

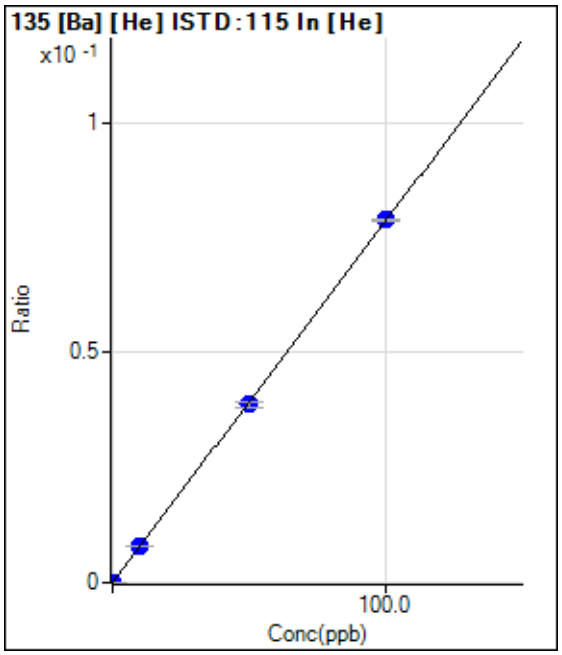
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	983.37	0.0005	P	10.6
2	☐	10.000	9.707	56119.44	0.0283	P	3.1
3	☐	50.000	49.535	286714.82	0.1422	P	2.0
4	☐			3809.37	0.0020	P	9.9
5	☐	100.000	100.262	638826.56	0.2874	P	1.3

y = 0.0029 * x + 4.9685E-004
R = 1.0000
DL = 0.05497
BEC = 0.1737

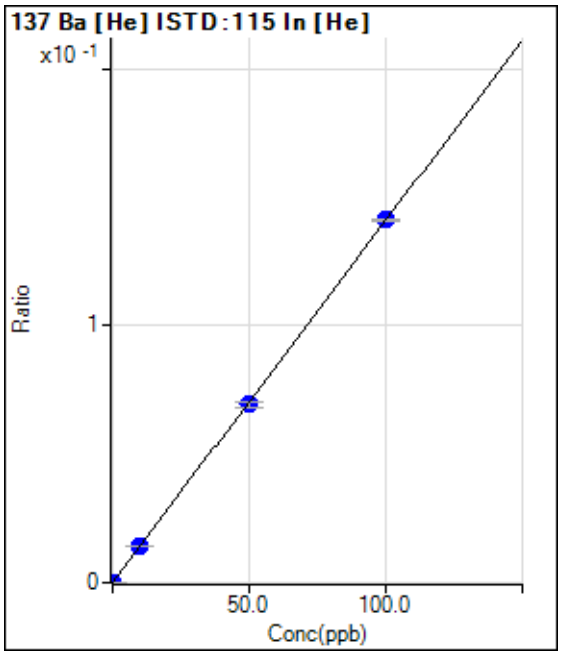
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.78	0.0000	P	21.8
2	☐	10.000	9.999	15648.46	0.0079	P	2.8
3	☐	50.000	49.281	78128.60	0.0388	P	2.6
4	☐	100.000	100.360	150601.32	0.0789	P	0.8
5	☐			102.22	0.0000	P	16.2

y = 7.8592E-004 * x + 2.4213E-005
R = 1.0000
DL = 0.02013
BEC = 0.03081

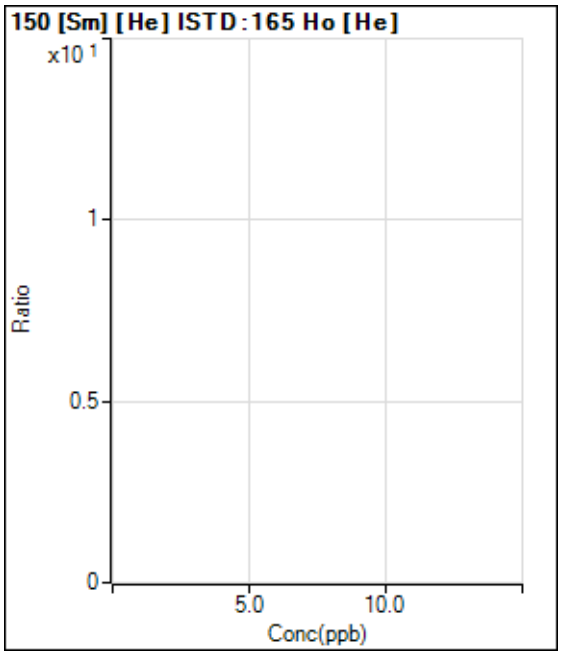
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52.22	0.0000	P	23.0
2	☐	10.000	9.986	27958.84	0.0141	P	1.6
3	☐	50.000	49.398	140156.81	0.0695	P	3.3
4	☐	100.000	100.303	269422.68	0.1411	P	0.4
5	☐			231.12	0.0001	P	9.9

y = 0.0014 * x + 2.6409E-005
R = 1.0000
DL = 0.01296
BEC = 0.01877

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2.00	0.0000	P	0.2
2	☐			11.33	0.0000	P	27.1
3	☐			10.67	0.0000	P	48.0
4	☐			34.67	0.0000	P	49.1
5	☐			5.33	0.0000	P	59.0

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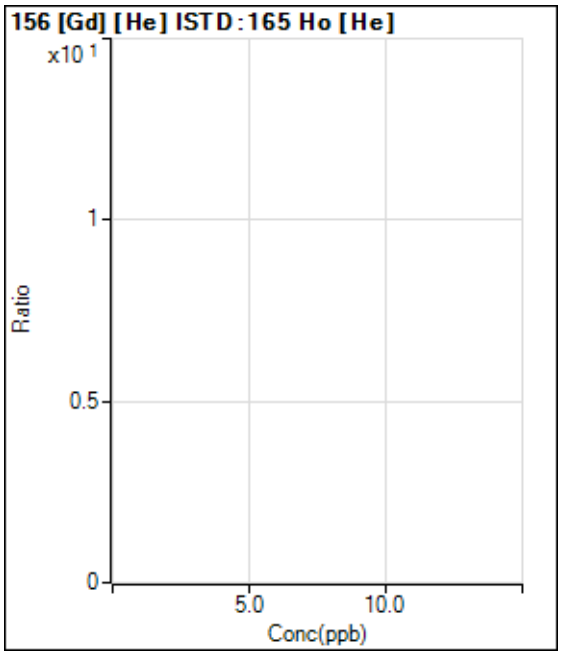
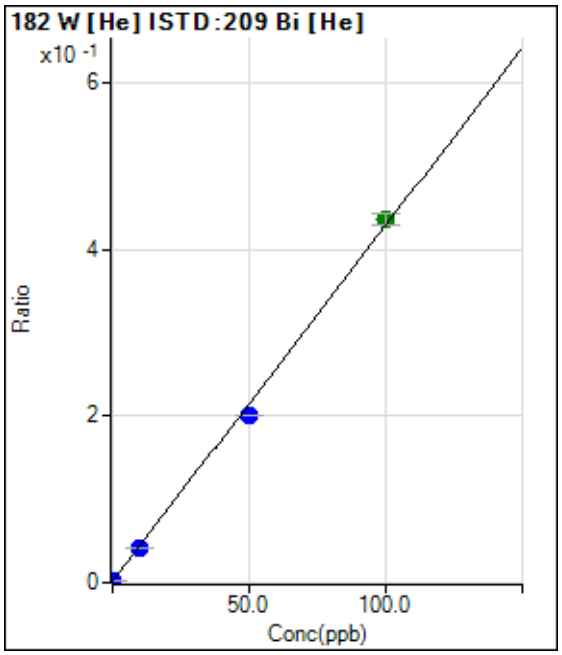


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			24.00	0.0000	P	33.3
2	☐			16.67	0.0000	P	47.8
3	☐			20.00	0.0000	P	44.3
4	☐			23.33	0.0000	P	9.6
5	☐			12.67	0.0000	P	37.3

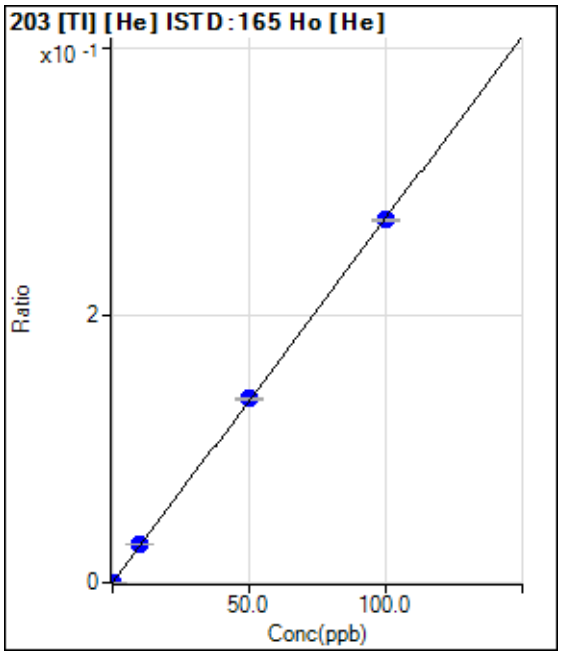
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5579.07	0.0015	P	7.0
2	☐	10.000	9.166	152609.57	0.0406	P	0.9
3	☐	50.000	46.895	746581.80	0.2018	P	0.2
4	☐			15841.81	0.0045	P	7.2
5	☐	100.000	101.636	1736480.60	0.4355	A	3.1

y = 0.0043 * x + 0.0015
R = 0.9992
DL = 0.07411
BEC = 0.3507

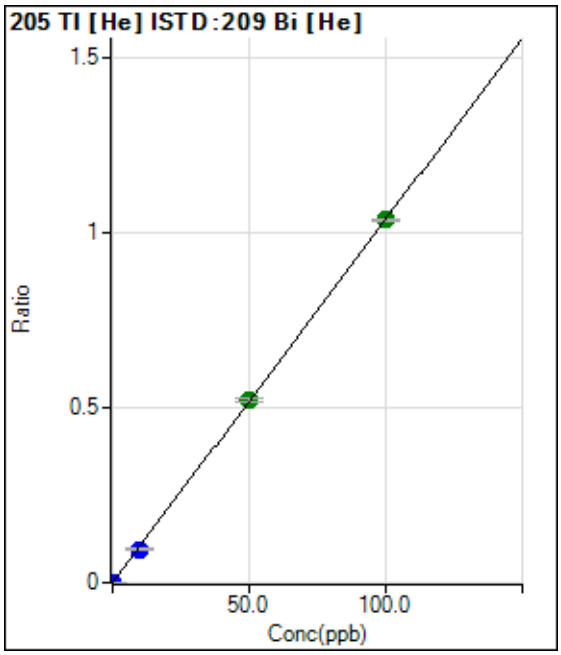
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	48.15	0.0000	P	104.0
2	☐	10.000	10.511	148073.57	0.0287	P	0.7
3	☐	50.000	50.639	722937.46	0.1381	P	0.9
4	☐	100.000	99.629	1394647.28	0.2716	P	0.2
5	☐			1552.01	0.0003	P	18.2

y = 0.0027 * x + 9.4032E-006
R = 1.0000
DL = 0.01076
BEC = 0.003449

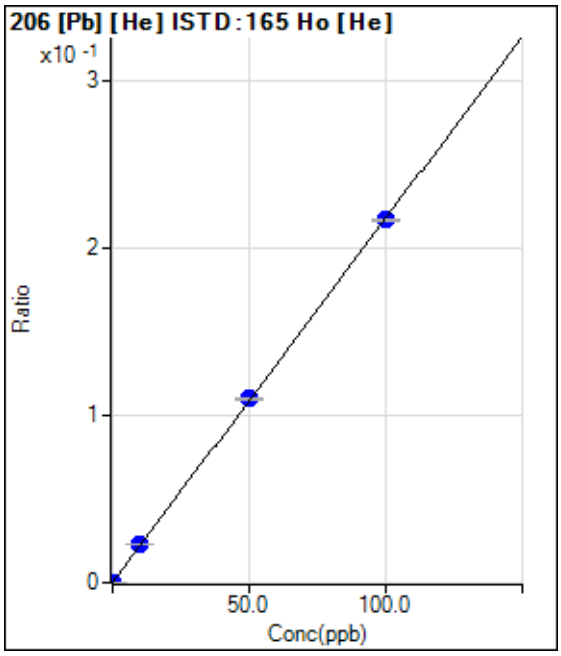
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	114.44	0.0000	P	28.6
2	☐	10.000	9.245	360093.82	0.0959	P	1.4
3	☐	50.000	50.244	1927785.41	0.5211	A	1.9
4	☐	100.000	99.954	3665287.49	1.0365	A	0.7
5	☐			1866.80	0.0005	P	19.7

y = 0.0104 * x + 3.0687E-005
R = 1.0000
DL = 0.002535
BEC = 0.002959

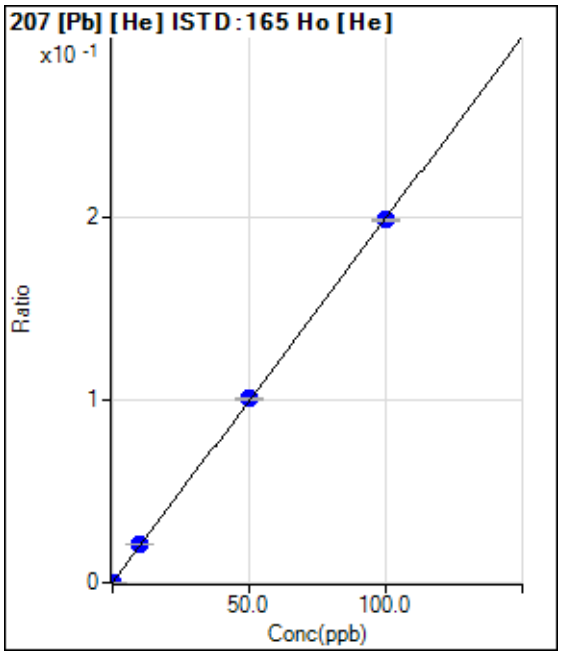
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	450.01	0.0001	P	11.0
2	☐	10.000	10.707	120828.00	0.0234	P	1.1
3	☐	50.000	50.554	576553.94	0.1101	P	1.2
4	☐	100.000	99.652	1113984.68	0.2170	P	0.4
5	☐			1580.10	0.0003	P	2.4

y = 0.0022 * x + 8.7961E-005
R = 1.0000
DL = 0.01331
BEC = 0.04042

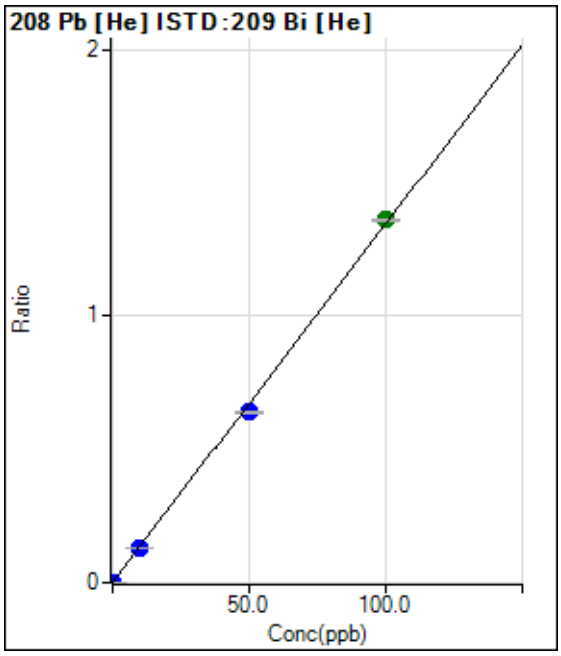
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	367.79	0.0001	P	10.2
2	☐	10.000	10.520	108727.95	0.0210	P	1.8
3	☐	50.000	50.558	528293.50	0.1009	P	1.5
4	☐	100.000	99.669	1020838.92	0.1988	P	0.6
5	☐			1296.74	0.0002	P	7.6

y = 0.0020 * x + 7.1887E-005
R = 1.0000
DL = 0.011
BEC = 0.03605

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1823.40	0.0005	P	5.7
2	☐	10.000	9.726	492510.23	0.1312	P	2.0
3	☐	50.000	47.620	2369327.39	0.6403	P	1.2
4	☐	100.000	101.218	4810705.85	1.3604	A	0.6
5	☐			6128.32	0.0015	P	6.8

y = 0.0134 * x + 4.8980E-004
R = 0.9995
DL = 0.006236
BEC = 0.03645

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:32:14-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	396	4.32
B	11	45	2	NoGas	7717	0.06
Na	23	45	1	He	22429	0.01
Mg	24	45	1	He	1530	0.29
Al	27	45	1	He	710	2.38
K	39	45	1	He	40699	0.01
Ca	44	45	1	He	531	0.79
Ti	47	45	1	He	16	210.41
V	51	45	1	He	172	149.62
Cr	52	45	1	He	2294	0.10
Mn	55	115	1	He	800	0.59
Fe	56	103	1	He	17144	0.05
Co	59	103	1	He	92	11.97
Ni	60	103	1	He	866	1.06
Cu	63	103	1	He	3984	0.12
Zn	66	103	1	He	1599	0.46
As	75	103	1	He	136	7.26
Se	78	103	1	He	61	29.80
Sr	88	103	1	He	109	11.71
Mo	95	103	1	He	487	4.75
Ag	107	103	1	He	72	51.25
Cd	111	103	1	He	1748	0.09
Sn	118	115	1	He	1189	1.36
Sb	123	115	1	He	1505	1.44
Ba	137	115	1	He	48	36.75
W	182	209	1	He	6750	0.11
Tl	205	209	1	He	122	5.61
Pb	208	209	1	He	2045	0.12

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1728429	1.86
Sc	45	1	He	1024267	0.41
Sc	45	2	NoGas	7990312	1.83
Rh	103	1	He	3056668	1.07
In	115	1	He	1970412	1.18
Tb	159	1	He	5065116	1.48
Ho	165	1	He	5171103	1.07
Bi	209	1	He	3732371	1.40

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:36:07-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	311	12.09
B	11	45	2	NoGas	7335	0.13
Na	23	45	1	He	22303	0.01
Mg	24	45	1	He	1485	0.24
Al	27	45	1	He	656	0.70
K	39	45	1	He	40442	0.01
Ca	44	45	1	He	568	2.70
Ti	47	45	1	He	9	1061.63
Cr	52	45	1	He	2324	0.13
Mn	55	115	1	He	836	1.39
Fe	56	103	1	He	14131	0.02
Co	59	103	1	He	70	36.00
Ni	60	103	1	He	876	1.07
Cu	63	103	1	He	3802	0.14
Zn	66	103	1	He	1448	0.57
As	75	103	1	He	142	11.55
Se	78	103	1	He	69	17.68
Sr	88	103	1	He	146	21.47
Mo	95	103	1	He	311	2.93
Ag	107	103	1	He	83	29.20
Cd	111	103	1	He	1702	0.30
Sn	118	115	1	He	1137	1.89
Sb	123	115	1	He	983	1.11
Ba	137	115	1	He	52	42.92
W	182	209	1	He	5579	0.14
Tl	205	209	1	He	114	25.62
Pb	208	209	1	He	1823	0.28

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1729956	1.68
Sc	45	1	He	1045873	0.53
Sc	45	2	NoGas	8041241	0.61
Rh	103	1	He	3067946	1.41
In	115	1	He	1978772	1.99
Tb	159	1	He	5013529	0.37
Ho	165	1	He	5115781	0.16
Bi	209	1	He	3723643	0.89

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:39:58-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	32296	0.01
B	11	2	NoGas	33695	0.01
Na	23	1	He	8780380	0.00
Mg	24	1	He	5075041	0.00
Al	27	1	He	28765	0.00
K	39	1	He	5147060	0.00
Ca	44	1	He	270206	0.00
Ti	47	1	He	3020	0.15
V	51	1	He	75549	0.00
Cr	52	1	He	92108	0.00
Mn	55	1	He	356064	0.00
Fe	56	1	He	21665588	0.00
Co	59	1	He	128418	0.00
Ni	60	1	He	32786	0.01
Cu	63	1	He	88269	0.00
Zn	66	1	He	18714	0.01
As	75	1	He	11438	0.02
Se	78	1	He	1303	0.20
Sr	88	1	He	91841	0.00
Mo	95	1	He	44158	0.00
Ag	107	1	He	140915	0.00
Cd	111	1	He	26565	0.00
Sn	118	1	He	60809	0.00
Sb	123	1	He	56119	0.00
Ba	137	1	He	27959	0.01
W	182	1	He	152610	0.00
Tl	205	1	He	360094	0.00
Pb	208	1	He	492510	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1752847	1.49	1729956	101.32	30	120	
Sc	45	1	He	1068202	1.53	1045873	102.13	30	120	
Sc	45	2	NoGas	8223475	1.43	8041241	102.27	30	120	
Rh	103	1	He	3067096	0.95	3067946	99.97	30	120	
In	115	1	He	1986212	2.78	1978772	100.38	30	120	
Tb	159	1	He	5081681	0.75	5013529	101.36	30	120	
Ho	165	1	He	5165339	0.86	5115781	100.97	30	120	
Bi	209	1	He	3755227	0.79	3723643	100.85	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:43:47-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	173047	0.00
B	11	2	NoGas	144539	0.00
Na	23	1	He	46134574	0.00
Mg	24	1	He	26145648	0.00
Al	27	1	He	150983	0.00
K	39	1	He	26509817	0.00
Ca	44	1	He	1447546	0.00
Ti	47	1	He	15542	0.05
V	51	1	He	386438	0.00
Cr	52	1	He	461503	0.00
Mn	55	1	He	1913978	0.00
Fe	56	1	He	110143751	0.00
Co	59	1	He	644404	0.00
Ni	60	1	He	160091	0.00
Cu	63	1	He	419260	0.00
Zn	66	1	He	86623	0.01
As	75	1	He	57716	0.01
Se	78	1	He	6303	0.07
Sr	88	1	He	467871	0.00
Mo	95	1	He	218855	0.00
Ag	107	1	He	699076	0.00
Cd	111	1	He	124645	0.00
Sn	118	1	He	304152	0.00
Sb	123	1	He	286715	0.00
Ba	137	1	He	140157	0.00
W	182	1	He	746582	0.00
Tl	205	1	He	1927785	0.00
Pb	208	1	He	2369327	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1809071	2.03	1729956	104.57	30	120	
Sc	45	1	He	1148490	7.97	1045873	109.81	30	120	
Sc	45	2	NoGas	8480977	0.93	8041241	105.47	30	120	
Rh	103	1	He	3086915	2.04	3067946	100.62	30	120	
In	115	1	He	2015770	1.13	1978772	101.87	30	120	
Tb	159	1	He	5146691	1.48	5013529	102.66	30	120	
Ho	165	1	He	5235489	1.66	5115781	102.34	30	120	
Bi	209	1	He	3700169	2.10	3723643	99.37	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:47:36-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	402689	0.00
B	11	2	NoGas	8376	0.05
Na	23	1	He	87976343	0.00
Mg	24	1	He	49936218	0.00
Al	27	1	He	285350	0.00
K	39	1	He	50186678	0.00
Ca	44	1	He	2720376	0.00
Ti	47	1	He	30	133.51
V	51	1	He	740614	0.00
Cr	52	1	He	877877	0.00
Mn	55	1	He	3534735	0.00
Fe	56	1	He	211952245	0.00
Co	59	1	He	1222558	0.00
Ni	60	1	He	297648	0.00
Cu	63	1	He	784292	0.00
Zn	66	1	He	160597	0.00
As	75	1	He	107799	0.00
Se	78	1	He	11573	0.00
Sr	88	1	He	895244	0.00
Mo	95	1	He	2910	0.41
Ag	107	1	He	1309943	0.00
Cd	111	1	He	232329	0.00
Sn	118	1	He	4623	0.07
Sb	123	1	He	3809	0.24
Ba	137	1	He	269423	0.00
W	182	1	He	15842	0.05
Tl	205	1	He	3665287	0.00
Pb	208	1	He	4810706	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1788352	1.56	1729956	103.38	30	120	
Sc	45	1	He	1071350	1.76	1045873	102.44	30	120	
Sc	45	2	NoGas	8334682	0.51	8041241	103.65	30	120	
Rh	103	1	He	2889295	1.11	3067946	94.18	30	120	
In	115	1	He	1908886	0.95	1978772	96.47	30	120	
Tb	159	1	He	5071303	0.25	5013529	101.15	30	120	
Ho	165	1	He	5134279	0.35	5115781	100.36	30	120	
Bi	209	1	He	3536229	0.65	3723643	94.97	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:51:20-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	430	4.56
B	11	2	NoGas	256668	0.00
Na	23	1	He	46167	0.03
Mg	24	1	He	6813	0.24
Al	27	1	He	2119	0.36
K	39	1	He	61494	0.02
Ca	44	1	He	952	0.92
Ti	47	1	He	35789	0.03
V	51	1	He	212	175.87
Cr	52	1	He	4801	0.25
Mn	55	1	He	1985	0.40
Fe	56	1	He	303802	0.01
Co	59	1	He	221	7.90
Ni	60	1	He	1146	1.14
Cu	63	1	He	4124	0.09
Zn	66	1	He	1709	0.95
As	75	1	He	699	1.29
Se	78	1	He	134	4.01
Sr	88	1	He	242	5.69
Mo	95	1	He	488130	0.00
Ag	107	1	He	428	3.36
Cd	111	1	He	2132	0.48
Sn	118	1	He	686200	0.00
Sb	123	1	He	638827	0.00
Ba	137	1	He	231	6.25
W	182	1	He	1736481	0.00
Tl	205	1	He	1867	1.01
Pb	208	1	He	6128	0.11

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1811249	1.21	1729956	104.70	30	120	
Sc	45	1	He	1306222	9.56	1045873	124.89	30	120	ISTD Failed
Sc	45	2	NoGas	7987039	0.22	8041241	99.33	30	120	
Rh	103	1	He	3472423	5.43	3067946	113.18	30	120	
In	115	1	He	2222144	4.94	1978772	112.30	30	120	
Tb	159	1	He	5449426	3.81	5013529	108.69	30	120	
Ho	165	1	He	5529301	2.66	5115781	108.08	30	120	
Bi	209	1	He	3986622	2.79	3723643	107.06	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:55:12-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	40.978	4.110	157461	2.11	40	102.4	89.5	110.5	
B	11	45	NoGas	47.642	1.228	130334	1.88	40	119.1	89.5	110.5	ICV Failed
Na	23	45	He	20348.572	3.436	36388536	4.24	20000	101.7	89.5	110.5	
Mg	24	45	He	20232.237	4.731	20510267	2.91	20000	101.2	89.5	110.5	
Al	27	45	He	201.972	3.719	117618	3.94	200	101.0	89.5	110.5	
K	39	45	He	20424.619	4.028	20877189	3.67	20000	102.1	89.5	110.5	
Ca	44	45	He	20002.109	1.724	1110012	6.03	20000	100.0	89.5	110.5	
Ti	47	45	He	41.547	8.815	12385	2.17	40	103.9	89.5	110.5	
V	51	45	He	40.675	5.184	305408	2.43	40	101.7	89.5	110.5	
Cr	52	45	He	40.483	4.965	362283	2.71	40	101.2	89.5	110.5	
Mn	55	115	He	205.345	2.166	1487765	4.91	200	102.7	89.5	110.5	
Fe	56	103	He	10067.527	1.838	86733988	1.55	10000	100.7	89.5	110.5	
Co	59	103	He	40.328	2.604	502488	2.31	40	100.8	89.5	110.5	
Ni	60	103	He	41.564	2.821	127033	2.51	40	103.9	89.5	110.5	
Cu	63	103	He	41.515	2.730	334677	2.40	40	103.8	89.5	110.5	
Zn	66	103	He	42.085	2.020	69903	1.69	40	105.2	89.5	110.5	
As	75	103	He	39.997	3.438	44145	3.13	40	100.0	89.5	110.5	
Se	78	103	He	41.761	2.863	4992	2.54	40	104.4	89.5	110.5	
Sr	88	103	He	40.817	2.901	371779	2.62	40	102.0	89.5	110.5	
Mo	95	103	He	43.355	0.593	180359	0.38	40	108.4	89.5	110.5	
Ag	107	103	He	41.615	2.452	557078	2.16	40	104.0	89.5	110.5	
Cd	111	103	He	41.190	2.663	98718	2.33	40	103.0	89.5	110.5	
Sn	118	115	He	41.069	1.465	246030	1.86	40	102.7	89.5	110.5	
Sb	123	115	He	36.019	5.578	201252	2.39	40	90.0	89.5	110.5	
Ba	137	115	He	41.027	1.749	112325	1.58	40	102.6	89.5	110.5	
W	182	209	He	38.154	0.555	596380	0.66	40	95.4	89.5	110.5	
Tl	205	209	He	39.013	5.130	1467933	6.27	40	97.5	89.5	110.5	
Pb	208	209	He	39.619	0.144	1932450	1.26	40	99.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1760309	2.05	1729956	101.75	30	120	
Sc	45	He	1094611	7.79	1045873	104.66	30	120	
Sc	45	NoGas	8203026	1.19	8041241	102.01	30	120	
Rh	103	He	2952662	0.29	3067946	96.24	30	120	
In	115	He	1945842	3.27	1978772	98.34	30	120	
Tb	159	He	5011007	0.73	5013529	99.95	30	120	
Ho	165	He	5181310	1.92	5115781	101.28	30	120	
Bi	209	He	3626875	1.13	3723643	97.40	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:58:58-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.056	53.7	27	33.1	20	
W	182	1	He	0.933	9.3	20989	6.3	10	
Ca	44	1	He	-0.609	-57.7	578	5.6	1000	
Na	23	1	He	6.077	22.3	35257	6.4	400	
Mg	24	1	He	2.146	23.2	3838	10.0	1000	
K	39	1	He	7.131	7.9	51148	3.8	1000	
V	51	1	He	0.074	66.8	341	111.2	2	
Cr	52	1	He	0.025	52.0	2736	7.9	2	
Mn	55	1	He	-0.029	-8.4	667	4.1	2	
Fe	56	1	He	14.706	17.0	155249	14.1	50	
Co	59	1	He	0.002	27.1	108	7.1	1	
Ni	60	1	He	-0.013	-150.5	891	9.7	2	
Cu	63	1	He	-0.141	-4.9	2807	0.3	2	
Zn	66	1	He	-0.328	-8.7	951	4.2	20	
As	75	1	He	0.058	28.5	222	11.4	2	
Se	78	1	He	0.116	103.5	89	20.1	2	
Sr	88	1	He	0.007	62.2	224	17.2	10	
Mo	95	1	He	0.666	13.4	3396	11.7	2	
Ag	107	1	He	0.009	13.1	223	6.0	0.2	
Cd	111	1	He	0.038	10.5	1913	1.9	0.2	
Ba	137	1	He	0.007	76.6	78	21.6	5	
Sn	118	1	He	0.274	8.0	2989	4.3	10	
Tl	205	1	He	0.021	12.3	969	10.2	0.5	
Pb	208	1	He	0.025	16.8	3174	6.9	1	
Al	27	1	He	0.169	76.6	811	13.6	50	
Sb	123	1	He	1.730	23.7	11487	20.1	1	ICB Failed
B	11	2	NoGas	0.763	20.7	9607	4.7	20	
Be	9	2	NoGas	0.051	19.0	515	6.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1766210	1.96	1729956	102.10	30	120	
Sc	45	1	He	1128728	4.60	1045873	107.92	30	120	
Sc	45	2	NoGas	8340200	0.74	8041241	103.72	30	120	
Rh	103	1	He	3272473	2.42	3067946	106.67	30	120	
In	115	1	He	2113848	2.08	1978772	106.83	30	120	

Tb	159	1	He	5271839	0.70	5013529	105.15	30	120	
Ho	165	1	He	5325749	0.89	5115781	104.10	30	120	
Bi	209	1	He	3830932	1.16	3723643	102.88	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:02:50-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.890	0.890	10.566	3860	9.00	1	89.0	69.5	130.5	
B	11	2	NoGas	21.481	21.481	1.349	64100	2.16	20	107.4	69.5	130.5	
Na	23	1	He	1061.480	1061.480	0.728	1884862	1.52	1000	106.1	69.5	130.5	
Mg	24	1	He	1054.877	1054.877	1.611	1051701	1.33	1000	105.5	69.5	130.5	
Al	27	1	He	51.398	51.398	3.762	29879	3.04	50	102.8	69.5	130.5	
K	39	1	He	1048.518	1048.518	1.035	1091530	0.14	1000	104.9	69.5	130.5	
Ca	44	1	He	1013.082	1013.082	0.487	55687	1.40	1000	101.3	69.5	130.5	
Ti	47	1	He	10.490	10.490	8.883	3086	9.70	10	104.9	69.5	130.5	
V	51	1	He	5.263	5.263	4.090	38628	3.43	5	105.3	69.5	130.5	
Cr	52	1	He	2.184	2.184	4.340	21449	2.93	2	109.2	69.5	130.5	
Mn	55	1	He	4.881	4.881	1.919	37331	0.34	5	97.6	69.5	130.5	
Fe	56	1	He	98.654	98.654	1.095	916328	0.96	100	98.7	69.5	130.5	
Co	59	1	He	1.004	1.004	4.519	13350	4.75	1	100.4	69.5	130.5	
Ni	60	1	He	2.059	2.059	0.755	7529	1.20	2	102.9	69.5	130.5	
Cu	63	1	He	1.927	1.927	3.338	20188	3.28	2	96.3	69.5	130.5	
Zn	66	1	He	20.153	20.153	0.880	36298	0.82	20	100.8	69.5	130.5	
As	75	1	He	4.905	4.905	1.189	5873	0.53	5	98.1	69.5	130.5	
Se	78	1	He	4.981	4.981	3.086	694	3.07	5	99.6	69.5	130.5	
Sr	88	1	He	9.504	9.504	0.840	91989	1.02	10	95.0	69.5	130.5	
Mo	95	1	He	10.382	10.382	0.562	46081	1.04	10	103.8	69.5	130.5	
Ag	107	1	He	1.038	1.038	2.644	14828	2.00	1	103.8	69.5	130.5	
Cd	111	1	He	1.033	1.033	2.414	4323	1.03	1	103.3	69.5	130.5	
Sn	118	1	He	10.092	10.092	1.560	63310	0.33	10	100.9	69.5	130.5	
Sb	123	1	He	2.358	2.358	1.673	14554	1.92	2	117.9	69.5	130.5	
Ba	137	1	He	4.904	4.904	2.754	13914	1.93	5	98.1	69.5	130.5	
W	182	1	He	9.390	9.390	1.752	157553	1.18	10	93.9	69.5	130.5	
Tl	205	1	He	1.883	1.883	2.382	74056	0.85	2	94.1	69.5	130.5	
Pb	208	1	He	1.047	1.047	4.158	55137	2.71	1	104.7	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1820391	1.08	1729956	105.23	30	120	
Sc	45	1	He	1072475	0.93	1045873	102.54	30	120	
Sc	45	2	NoGas	8362492	1.10	8041241	104.00	30	120	
Rh	103	1	He	3133637	0.66	3067946	102.14	30	120	
In	115	1	He	2009360	1.68	1978772	101.55	30	120	
Tb	159	1	He	5098378	1.39	5013529	101.69	30	120	
Ho	165	1	He	5202484	0.41	5115781	101.69	30	120	
Bi	209	1	He	3787947	1.58	3723643	101.73	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:06:40-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	-0.002	-768.9	256	22.6	1	
B	11	45	2	NoGas	0.916	29.6	8317	6.8	20	
Na	23	45	1	He	50017.876	3.0	78586460	2.3	75200	
Mg	24	45	1	He	50354.575	2.4	44902710	2.8	75200	
Al	27	45	1	He	48425.801	2.3	24652261	3.0	75200	
K	39	45	1	He	50083.296	2.2	44966578	3.0	75200	
Ca	44	45	1	He	50740.460	1.9	2472822	3.3	75200	
Ti	47	45	1	He	1022.609	2.3	268536	2.9	1505	
V	51	45	1	He	-0.013	-732.1	-279	-221.0	4	
Cr	52	45	1	He	0.718	1.8	7753	4.5	4	
Mn	55	115	1	He	0.274	7.1	2485	5.2	4	
Fe	56	103	1	He	50197.847	0.8	378278376	2.7	75200	
Co	59	103	1	He	0.030	16.3	387	15.8	2	
Ni	60	103	1	He	0.083	26.2	958	6.5	4	
Cu	63	103	1	He	0.205	3.1	4626	1.3	4	
Zn	66	103	1	He	1.260	7.2	3015	6.3	10	
As	75	103	1	He	0.121	17.9	235	7.5	4	
Se	78	103	1	He	0.115	43.9	70	8.2	4	
Sr	88	103	1	He	0.351	1.0	2916	2.3	20	
Mo	95	103	1	He	1110.912	2.9	4034454	0.9	1505	
Ag	107	103	1	He	0.014	2.7	232	2.2	1	
Cd	111	103	1	He	0.063	93.4	1563	9.6	1	
Sn	118	115	1	He	0.232	15.6	2211	8.3	20	
Sb	123	115	1	He	0.278	9.2	2222	5.6	1	
Ba	137	115	1	He	0.074	16.3	226	12.6	2	
W	182	209	1	He	0.417	7.7	10997	5.6	20	
Tl	205	209	1	He	0.009	7.6	408	7.6	1	
Pb	208	209	1	He	0.133	6.0	7611	2.9	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1456523	1.37	1729956	84.19	30	120	
Sc	45	1	He	961371	5.25	1045873	91.92	30	120	
Sc	45	2	NoGas	6932466	0.26	8041241	86.21	30	120	
Rh	103	1	He	2582709	2.02	3067946	84.18	30	120	
In	115	1	He	1721626	0.68	1978772	87.00	30	120	
Tb	159	1	He	4672224	1.31	5013529	93.19	30	120	
Ho	165	1	He	4775108	1.49	5115781	93.34	30	120	
Bi	209	1	He	3353837	1.83	3723643	90.07	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:10:27-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	114.434	2.445	352374	1.79	100	114.4	79.5	120.5	
B	11	45	2	NoGas	124.343	3.608	273484	2.71	100	124.3	79.5	120.5	Fail
Na	23	45	1	He	49423.954	0.492	72888697	1.75	50000	98.8	79.5	120.5	
Mg	24	45	1	He	50209.640	0.952	42018165	1.83	50000	100.4	79.5	120.5	
Al	27	45	1	He	48015.172	1.853	22934493	1.29	50000	96.0	79.5	120.5	
K	39	45	1	He	49704.585	1.368	41872167	0.94	50000	99.4	79.5	120.5	
Ca	44	45	1	He	50804.764	2.083	2322646	0.57	50000	101.6	79.5	120.5	
Ti	47	45	1	He	1127.651	1.336	277854	1.11	1100	102.5	79.5	120.5	
V	51	45	1	He	100.503	1.359	623321	0.96	100	100.5	79.5	120.5	
Cr	52	45	1	He	102.519	1.344	754337	1.29	100	102.5	79.5	120.5	
Mn	55	115	1	He	94.687	1.879	592850	1.19	100	94.7	79.5	120.5	
Fe	56	103	1	He	48799.623	1.911	360415737	1.59	50000	97.6	79.5	120.5	
Co	59	103	1	He	98.965	1.764	1057174	1.43	100	99.0	79.5	120.5	
Ni	60	103	1	He	98.821	1.294	257965	0.95	100	98.8	79.5	120.5	
Cu	63	103	1	He	99.089	1.188	680557	0.84	100	99.1	79.5	120.5	
Zn	66	103	1	He	99.041	0.562	139435	0.38	100	99.0	79.5	120.5	
As	75	103	1	He	99.848	1.397	94317	1.07	100	99.8	79.5	120.5	
Se	78	103	1	He	100.958	1.807	10265	1.46	100	101.0	79.5	120.5	
Sr	88	103	1	He	99.434	1.650	776374	1.34	100	99.4	79.5	120.5	
Mo	95	103	1	He	1188.977	1.627	4234253	1.95	1100	108.1	79.5	120.5	
Ag	107	103	1	He	101.183	1.589	1161229	1.27	100	101.2	79.5	120.5	
Cd	111	103	1	He	102.179	1.922	207886	1.57	100	102.2	79.5	120.5	
Sn	118	115	1	He	101.590	2.428	524460	1.62	100	101.6	79.5	120.5	
Sb	123	115	1	He	107.269	1.908	516738	1.11	100	107.3	79.5	120.5	
Ba	137	115	1	He	102.734	1.984	243002	1.25	100	102.7	79.5	120.5	
W	182	209	1	He	98.138	0.867	1395966	0.41	100	98.1	79.5	120.5	
Tl	205	209	1	He	100.755	0.503	3467870	0.84	100	100.8	79.5	120.5	
Pb	208	209	1	He	102.765	0.966	4584183	0.32	100	102.8	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1411840	1.04	1729956	81.61	30	120	
Sc	45	1	He	901520	2.24	1045873	86.20	30	120	
Sc	45	2	NoGas	6838680	0.96	8041241	85.05	30	120	
Rh	103	1	He	2531576	0.34	3067946	82.52	30	120	
In	115	1	He	1681118	0.82	1978772	84.96	30	120	
Tb	159	1	He	4616590	0.63	5013529	92.08	30	120	
Ho	165	1	He	4708815	0.29	5115781	92.04	30	120	
Bi	209	1	He	3319185	1.25	3723643	89.14	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:14:12-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.096	4.570	187889	2.34	50	96.2	89.5	110.5	
B	11	45	2	NoGas	56.634	0.126	159559	0.28	50	113.3	89.5	110.5	CCV Failed
Na	23	45	1	He	25187.538	0.912	43792403	1.75	25000	100.8	89.5	110.5	
Mg	24	45	1	He	25215.365	2.782	24864462	0.81	25000	100.9	89.5	110.5	
Al	27	45	1	He	258.511	1.684	146198	0.64	250	103.4	89.5	110.5	
K	39	45	1	He	25552.248	1.829	25390135	0.87	25000	102.2	89.5	110.5	
Ca	44	45	1	He	25348.992	1.388	1366736	3.04	25000	101.4	89.5	110.5	
Ti	47	45	1	He	52.193	3.200	15167	3.06	50	104.4	89.5	110.5	
V	51	45	1	He	51.443	0.855	375983	1.70	50	102.9	89.5	110.5	
Cr	52	45	1	He	51.211	0.525	445373	1.98	50	102.4	89.5	110.5	
Mn	55	115	1	He	253.617	1.508	1827546	1.06	250	101.4	89.5	110.5	
Fe	56	103	1	He	12467.245	0.149	108037689	0.98	12500	99.7	89.5	110.5	
Co	59	103	1	He	49.580	1.056	621374	0.99	50	99.2	89.5	110.5	
Ni	60	103	1	He	49.704	0.815	152646	1.52	50	99.4	89.5	110.5	
Cu	63	103	1	He	50.098	0.744	405477	0.78	50	100.2	89.5	110.5	
Zn	66	103	1	He	49.905	0.525	83121	1.25	50	99.8	89.5	110.5	
As	75	103	1	He	49.755	0.497	55207	1.07	50	99.5	89.5	110.5	
Se	78	103	1	He	50.193	1.481	6021	1.52	50	100.4	89.5	110.5	
Sr	88	103	1	He	49.516	0.739	453652	1.06	50	99.0	89.5	110.5	
Mo	95	103	1	He	70.061	4.695	292947	4.39	50	140.1	89.5	110.5	CCV Failed
Ag	107	103	1	He	50.969	0.996	686287	0.99	50	101.9	89.5	110.5	
Cd	111	103	1	He	50.797	0.752	122073	0.11	50	101.6	89.5	110.5	
Sn	118	115	1	He	50.275	1.472	299493	0.19	50	100.5	89.5	110.5	
Sb	123	115	1	He	51.184	1.867	284499	1.85	50	102.4	89.5	110.5	
Ba	137	115	1	He	49.961	1.507	136134	0.81	50	99.9	89.5	110.5	
W	182	209	1	He	48.816	1.412	762081	1.04	50	97.6	89.5	110.5	
Tl	205	209	1	He	51.244	0.891	1928872	1.12	50	102.5	89.5	110.5	
Pb	208	209	1	He	48.708	0.949	2377075	0.53	50	97.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1790337	2.22	1729956	103.49	30	120	
Sc	45	1	He	1062584	2.22	1045873	101.60	30	120	
Sc	45	2	NoGas	8525852	0.18	8041241	106.03	30	120	
Rh	103	1	He	2969932	0.84	3067946	96.81	30	120	
In	115	1	He	1936235	1.29	1978772	97.85	30	120	
Tb	159	1	He	5070344	0.50	5013529	101.13	30	120	
Ho	165	1	He	5216019	1.53	5115781	101.96	30	120	
Bi	209	1	He	3629597	0.44	3723643	97.47	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:17:57-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	-0.009	-240.3	274	28.5	1	
B	11	45	2	NoGas	1.444	8.0	11274	2.4	20	
Na	23	45	1	He	9.429	12.6	39588	11.1	400	
Mg	24	45	1	He	3.407	19.0	4949	18.6	1000	
Al	27	45	1	He	1.467	30.8	1519	22.9	50	
K	39	45	1	He	9.099	17.8	50773	9.1	1000	
Ca	44	45	1	He	2.311	38.1	711	11.5	1000	
Ti	47	45	1	He	0.303	12.5	98	8.6	20	
V	51	45	1	He	0.096	61.0	494	84.5	2	
Cr	52	45	1	He	0.027	46.3	2626	9.2	2	
Mn	55	115	1	He	0.021	26.9	1021	8.5	2	
Fe	56	103	1	He	19.193	15.4	194945	19.5	50	
Co	59	103	1	He	0.005	71.1	136	29.5	1	
Ni	60	103	1	He	-0.040	-34.0	781	0.9	2	
Cu	63	103	1	He	-0.130	-10.9	2848	8.8	2	
Zn	66	103	1	He	-0.071	-71.2	1389	11.2	20	
As	75	103	1	He	0.041	23.0	198	10.9	2	
Se	78	103	1	He	-0.036	-89.7	68	7.8	2	
Sr	88	103	1	He	0.001	254.9	164	16.4	10	
Mo	95	103	1	He	3.016	5.2	13929	10.0	2	CCB Failed
Ag	107	103	1	He	0.017	24.1	341	21.6	0.2	
Cd	111	103	1	He	0.027	74.6	1847	7.9	0.2	
Sn	118	115	1	He	0.321	6.5	3178	7.5	10	
Sb	123	115	1	He	0.456	18.2	3687	17.5	1	
Ba	137	115	1	He	0.015	68.8	98	34.1	5	
W	182	209	1	He	0.840	10.6	19231	9.5	10	
Tl	205	209	1	He	0.031	18.1	1337	18.4	0.5	
Pb	208	209	1	He	0.041	17.1	3916	10.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1716057	1.87	1729956	99.20	30	120	
Sc	45	1	He	1075162	5.78	1045873	102.80	30	120	
Sc	45	2	NoGas	8254136	0.82	8041241	102.65	30	120	
Rh	103	1	He	3201913	5.03	3067946	104.37	30	120	
In	115	1	He	2039389	4.31	1978772	103.06	30	120	
Tb	159	1	He	5191375	1.29	5013529	103.55	30	120	
Ho	165	1	He	5284059	2.19	5115781	103.29	30	120	
Bi	209	1	He	3777838	1.98	3723643	101.46	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	014SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:21:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2342.362	2342.362	0.67	7608882	0.03	10000	
B	11	45	2	NoGas	263.033	263.033	0.48	595960	0.04	300	
Na	23	45	1	He	19741.763	19741.763	2.40	34074339	0.06	500000	
Mg	24	45	1	He	20282.171	20282.171	1.78	19856732	0.10	500000	
Al	27	45	1	He	19351.285	19351.285	2.00	10814603	0.18	200000	
K	39	45	1	He	20054.988	20054.988	2.89	19786914	0.10	500000	
Ca	44	45	1	He	19003.263	19003.263	5.79	1017523	1.87	500000	
Ti	47	45	1	He	200.760	200.760	1.35	57886	0.35	2500	
V	51	45	1	He	1947.821	1947.821	1.73	14138799	0.01	10000	
Cr	52	45	1	He	1996.836	1996.836	1.54	17148243	0.01	10000	
Mn	55	115	1	He	2037.357	2037.357	1.08	13803006	0.01	10000	
Fe	56	103	1	He	20158.120	20158.120	1.93	165606905	0.01	200000	
Co	59	103	1	He	2034.302	2034.302	1.59	24169325	0.01	10000	
Ni	60	103	1	He	2074.219	2074.219	1.88	6006542	0.03	10000	
Cu	63	103	1	He	2066.485	2066.485	2.91	15717181	0.01	10000	
Zn	66	103	1	He	2133.063	2133.063	1.91	3312879	0.06	10000	
As	75	103	1	He	2086.263	2086.263	2.18	2189397	0.10	10000	
Se	78	103	1	He	1985.185	1985.185	2.97	223338	0.89	10000	
Sr	88	103	1	He	2082.288	2082.288	1.64	18081739	0.01	10000	
Mo	95	103	1	He	209.869	209.869	1.68	831540	0.03	2000	
Ag	107	103	1	He	221.135	221.135	3.35	2822716	0.01	300	
Cd	111	103	1	He	2164.188	2164.188	1.41	4865902	0.04	4000	
Sn	118	115	1	He	2240.883	2240.883	0.86	12506427	0.02	2000	>LDR
Sb	123	115	1	He	213.306	213.306	1.10	1111865	0.02	300	
Ba	137	115	1	He	2208.907	2208.907	1.50	5656607	0.04	10000	
W	182	209	1	He	210.589	210.589	1.14	3164048	0.01	2500	
Tl	205	209	1	He	504.067	504.067	1.39	18359761	0.00	5000	
Pb	208	209	1	He	2099.215	2099.215	1.41	99070113	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1490227	0.51	1729956	86.14	30	120	
Sc	45	1	He	1054836	3.91	1045873	100.86	30	120	
Sc	45	2	NoGas	7129021	0.30	8041241	88.66	30	120	
Rh	103	1	He	2815774	0.86	3067946	91.78	30	120	
In	115	1	He	1820636	2.69	1978772	92.01	30	120	
Tb	159	1	He	4934141	1.06	5013529	98.42	30	120	
Ho	165	1	He	4978308	1.19	5115781	97.31	30	120	
Bi	209	1	He	3512577	0.87	3723643	94.33	30	120	

Sample Report

Sample Table

Sample Name	240-49171-A-18-B@50
Data File Name	015SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:25:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.489	0.489	5.82	2004	0.02	10000	
B	11	45	2	NoGas	2.961	2.961	3.33	13817	0.02	300	
Na	23	45	1	He	13.538	13.538	3.38	40390	0.03	500000	
Mg	24	45	1	He	672.209	672.209	2.19	581062	0.12	500000	
Al	27	45	1	He	2816.701	2816.701	1.07	1387610	0.20	200000	
K	39	45	1	He	200.348	200.348	1.28	209773	0.10	500000	
Ca	44	45	1	He	198.680	198.680	1.20	9868	2.01	500000	
Ti	47	45	1	He	21.401	21.401	2.74	5445	0.39	2500	
V	51	45	1	He	5.026	5.026	2.09	31954	0.02	10000	
Cr	52	45	1	He	4.383	4.383	1.41	35220	0.01	10000	
Mn	55	115	1	He	107.715	107.715	1.05	732765	0.01	10000	
Fe	56	103	1	He	5778.791	5778.791	1.16	47001120	0.01	200000	
Co	59	103	1	He	2.339	2.339	0.52	27570	0.01	10000	
Ni	60	103	1	He	4.997	4.997	0.57	15118	0.03	10000	
Cu	63	103	1	He	4.729	4.729	2.05	39046	0.01	10000	
Zn	66	103	1	He	20.029	20.029	2.16	32091	0.06	10000	
As	75	103	1	He	3.867	3.867	0.48	4145	0.09	10000	
Se	78	103	1	He	1.141	1.141	6.60	190	0.60	10000	
Sr	88	103	1	He	1.278	1.278	1.96	11116	0.01	10000	
Mo	95	103	1	He	3.555	3.555	14.13	14215	0.03	2000	
Ag	107	103	1	He	0.038	0.038	26.45	550	0.01	300	
Cd	111	103	1	He	0.166	0.166	26.92	1916	0.01	4000	
Sn	118	115	1	He	9.662	9.662	8.77	55120	0.02	2000	
Sb	123	115	1	He	0.617	0.617	19.97	4131	0.01	300	
Ba	137	115	1	He	14.389	14.389	1.45	37024	0.04	10000	
W	182	209	1	He	2.633	2.633	15.70	46264	0.01	2500	
Tl	205	209	1	He	0.252	0.252	19.09	9581	0.00	5000	
Pb	208	209	1	He	3.588	3.588	2.71	176867	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1607074	1.78	1729956	92.90	30	120	
Sc	45	1	He	929298	1.94	1045873	88.85	30	120	
Sc	45	2	NoGas	7496735	0.79	8041241	93.23	30	120	
Rh	103	1	He	2787039	0.31	3067946	90.84	30	120	
In	115	1	He	1826723	1.29	1978772	92.32	30	120	
Tb	159	1	He	4784689	1.27	5013529	95.44	30	120	
Ho	165	1	He	4904334	1.45	5115781	95.87	30	120	
Bi	209	1	He	3632775	0.97	3723643	97.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177128/1-a@2
Data File Name	016_Blk.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:29:12-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.293	13.9	1259	18.5	1	
B	11	45	2	NoGas	3.114	9.7	13257	5.4	20	
Na	23	45	1	He	40.287	1.5	81337	5.5	400	
Mg	24	45	1	He	33.801	2.1	30582	5.3	1000	
Al	27	45	1	He	6.133	4.0	3619	8.6	50	
K	39	45	1	He	25.816	9.1	58620	8.8	1000	
Ca	44	45	1	He	109.077	3.2	5666	6.3	1000	
Ti	47	45	1	He	0.520	49.2	138	39.4	20	
V	51	45	1	He	0.197	132.8	1013	162.6	2	
Cr	52	45	1	He	0.946	2.5	9256	5.2	2	
Mn	55	115	1	He	0.325	8.7	2898	9.3	2	
Fe	56	103	1	He	31.202	9.7	264888	11.9	50	
Co	59	103	1	He	0.050	1.4	652	4.0	1	
Ni	60	103	1	He	0.159	2.4	1242	4.2	2	
Cu	63	103	1	He	2.601	11.4	22916	13.5	2	Blank Failed
Zn	66	103	1	He	3.563	7.2	6740	7.5	20	
As	75	103	1	He	0.574	2.1	720	5.5	2	
Se	78	103	1	He	0.428	16.9	110	11.5	2	
Sr	88	103	1	He	0.277	4.4	2491	6.6	10	
Mo	95	103	1	He	1.712	6.2	6953	9.7	2	
Ag	107	103	1	He	0.027	25.0	416	22.1	0.2	
Cd	111	103	1	He	0.040	37.3	1622	3.9	0.2	
Sn	118	115	1	He	24.436	6.9	133982	9.8	10	Blank Failed
Sb	123	115	1	He	0.613	6.7	3986	1.8	1	
Ba	137	115	1	He	0.928	3.0	2359	1.5	5	
W	182	209	1	He	0.897	3.6	19835	5.5	10	
Tl	205	209	1	He	0.110	17.5	4373	20.0	0.5	
Pb	208	209	1	He	0.508	5.3	27220	7.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1530541	10.72	1729956	88.47	30	120	
Sc	45	1	He	933034	6.54	1045873	89.21	30	120	
Sc	45	2	NoGas	7032697	10.13	8041241	87.46	30	120	
Rh	103	1	He	2766594	4.49	3067946	90.18	30	120	
In	115	1	He	1772760	3.70	1978772	89.59	30	120	
Tb	159	1	He	4682591	2.94	5013529	93.40	30	120	
Ho	165	1	He	4860417	2.27	5115781	95.01	30	120	
Bi	209	1	He	3719713	2.92	3723643	99.89	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177128/2-a@2
Data File Name	017LCSS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:33:03-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	536.948	536.948	0.844	1695345	0.80	500	107.4	78.6	110.5	
B	11	2	NoGas	69.957	69.957	2.010	154561	1.09	50	139.9	79.5	120.5	LCSS Failed
Na	23	1	He	5145.331	5145.331	0.623	7827808	1.88	5000	102.9	79.5	120.5	
Mg	24	1	He	5115.956	5115.956	1.480	4408023	2.67	5000	102.3	79.5	120.5	
Al	27	1	He	4895.304	4895.304	0.324	2407371	1.17	5000	97.9	79.5	120.5	
K	39	1	He	5026.386	5026.386	3.015	4391842	4.24	5000	100.5	79.5	120.5	
Ca	44	1	He	4683.936	4683.936	1.835	220928	3.08	5000	93.7	79.5	120.5	
Ti	47	1	He	50.810	50.810	1.572	12896	2.83	50	101.6	79.5	120.5	
V	51	1	He	508.481	508.481	1.689	3247168	2.77	500	101.7	71.5	110.5	
Cr	52	1	He	510.278	510.278	0.769	3856283	1.05	500	102.1	69.5	110.5	
Mn	55	1	He	476.135	476.135	0.185	3100347	2.48	500	95.2	79.5	120.5	
Fe	56	1	He	4689.362	4689.362	0.799	37508822	1.47	5000	93.8	79.5	120.5	
Co	59	1	He	475.607	475.607	1.081	5500645	2.05	500	95.1	73.9	110.5	
Ni	60	1	He	478.453	478.453	4.489	1349630	5.60	500	95.7	74.9	110.5	
Cu	63	1	He	488.840	488.840	0.777	3621844	2.02	500	97.8	72.6	110.5	
Zn	66	1	He	442.553	442.553	1.941	670075	2.48	500	88.5	71.5	113.4	
As	75	1	He	422.855	422.855	0.893	432046	1.64	500	84.6	73.4	110.5	
Se	78	1	He	409.231	409.231	1.033	44866	2.12	500	81.8	64.6	110.5	
Sr	88	1	He	476.847	476.847	1.950	4030517	2.33	500	95.4	79.5	120.5	
Mo	95	1	He	50.867	50.867	0.988	196383	1.77	50	101.7	29.5	140.5	
Ag	107	1	He	50.208	50.208	1.017	623890	1.61	50	100.4	59.5	114.5	
Cd	111	1	He	468.779	468.779	1.312	1027140	1.70	500	93.8	73.5	110.5	
Sn	118	1	He	559.597	559.597	1.449	3002230	1.23	500	111.9	79.5	120.5	
Sb	123	1	He	48.573	48.573	1.264	244011	1.72	50	97.1	67.5	113.4	
Ba	137	1	He	482.267	482.267	1.712	1186994	1.01	500	96.5	69.5	110.5	
W	182	1	He	45.855	45.855	1.981	699837	2.32	50	91.7	74.6	125.4	
Tl	205	1	He	118.390	118.390	0.513	4353994	0.65	125	94.7	70.6	110.5	
Pb	208	1	He	489.246	489.246	1.011	23313569	0.59	500	97.8	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1448294	0.37	1729956	83.72	30	120	
Sc	45	1	He	927770	1.26	1045873	88.71	30	120	
Sc	45	2	NoGas	6749472	1.28	8041241	83.94	30	120	
Rh	103	1	He	2741002	1.99	3067946	89.34	30	120	
In	115	1	He	1749895	2.65	1978772	88.43	30	120	
Tb	159	1	He	4796619	1.70	5013529	95.67	30	120	
Ho	165	1	He	4849093	1.57	5115781	94.79	30	120	
Bi	209	1	He	3546583	1.13	3723643	95.24	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-d@20
Data File Name	018SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:36:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.466	0.466	6.97	2160	0.02	10000	
B	11	45	2	NoGas	8.890	8.890	2.21	32188	0.03	300	
Na	23	45	1	He	209.761	209.761	2.12	401598	0.05	500000	
Mg	24	45	1	He	1276.265	1276.265	0.24	1307623	0.10	500000	
Al	27	45	1	He	4973.094	4973.094	1.51	2904908	0.17	200000	
K	39	45	1	He	1770.324	1770.324	1.37	1865218	0.09	500000	
Ca	44	45	1	He	28.548	28.548	52.14	2211	1.29	500000	
Ti	47	45	1	He	36.375	36.375	1.71	10969	0.33	2500	
V	51	45	1	He	8.287	8.287	3.53	62645	0.01	10000	
Cr	52	45	1	He	8.677	8.677	1.99	80292	0.01	10000	
Mn	55	115	1	He	1148.126	1148.126	2.23	8726192	0.01	10000	
Fe	56	103	1	He	10401.682	10401.682	2.28	96219427	0.01	200000	
Co	59	103	1	He	3.906	3.906	3.60	52305	0.01	10000	
Ni	60	103	1	He	10.188	10.188	2.04	34122	0.03	10000	
Cu	63	103	1	He	10.370	10.370	2.46	92716	0.01	10000	
Zn	66	103	1	He	24.970	24.970	2.76	45137	0.06	10000	
As	75	103	1	He	22.631	22.631	1.93	26887	0.08	10000	
Se	78	103	1	He	0.710	0.710	8.33	162	0.44	10000	
Sr	88	103	1	He	185.481	185.481	2.56	1813461	0.01	10000	
Mo	95	103	1	He	56.143	56.143	0.79	250782	0.02	2000	
Ag	107	103	1	He	0.018	0.018	19.53	338	0.01	300	
Cd	111	103	1	He	0.144	0.144	13.43	2123	0.01	4000	
Sn	118	115	1	He	2.338	2.338	6.18	15797	0.01	2000	
Sb	123	115	1	He	0.128	0.128	19.88	1759	0.01	300	
Ba	137	115	1	He	31.048	31.048	2.57	89261	0.03	10000	
W	182	209	1	He	2.023	2.023	1.92	38551	0.01	2500	
Tl	205	209	1	He	0.119	0.119	10.64	4817	0.00	5000	
Pb	208	209	1	He	38.499	38.499	2.46	1968736	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1807053	0.98	1729956	104.46	30	120	
Sc	45	1	He	1102358	3.43	1045873	105.40	30	120	
Sc	45	2	NoGas	8684356	0.53	8041241	108.00	30	120	
Rh	103	1	He	3172135	3.95	3067946	103.40	30	120	
In	115	1	He	2043484	3.57	1978772	103.27	30	120	
Tb	159	1	He	5227727	1.97	5013529	104.27	30	120	
Ho	165	1	He	5323212	0.84	5115781	104.05	30	120	
Bi	209	1	He	3803745	2.24	3723643	102.15	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-3-d@100
Data File Name	019SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:40:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.207	0.207	4.68	1104	0.02	10000	
B	11	45	2	NoGas	2.123	2.123	12.51	13294	0.02	300	
Na	23	45	1	He	40.736	40.736	0.11	92400	0.04	500000	
Mg	24	45	1	He	252.266	252.266	3.20	247526	0.10	500000	
Al	27	45	1	He	995.712	995.712	3.52	555014	0.18	200000	
K	39	45	1	He	348.864	348.864	1.30	382885	0.09	500000	
Ca	44	45	1	He	8.557	8.557	49.91	1027	0.83	500000	
Ti	47	45	1	He	6.732	6.732	1.26	1942	0.35	2500	
V	51	45	1	He	1.828	1.828	5.39	13008	0.01	10000	
Cr	52	45	1	He	1.790	1.790	3.37	17642	0.01	10000	
Mn	55	115	1	He	229.911	229.911	1.05	1704545	0.01	10000	
Fe	56	103	1	He	2059.264	2059.264	4.25	18490541	0.01	200000	
Co	59	103	1	He	0.776	0.776	3.28	10139	0.01	10000	
Ni	60	103	1	He	1.919	1.919	3.79	6947	0.03	10000	
Cu	63	103	1	He	1.939	1.939	4.01	19915	0.01	10000	
Zn	66	103	1	He	5.375	5.375	2.40	10567	0.05	10000	
As	75	103	1	He	4.631	4.631	3.43	5450	0.08	10000	
Se	78	103	1	He	0.176	0.176	20.75	91	0.19	10000	
Sr	88	103	1	He	34.140	34.140	3.65	323924	0.01	10000	
Mo	95	103	1	He	11.908	11.908	2.74	51823	0.02	2000	
Ag	107	103	1	He	0.005	0.005	26.93	152	0.00	300	
Cd	111	103	1	He	0.051	0.051	35.17	1830	0.00	4000	
Sn	118	115	1	He	0.557	0.557	3.75	4542	0.01	2000	
Sb	123	115	1	He	-0.039	-0.039	-13.54	769	-0.01	300	
Ba	137	115	1	He	6.179	6.179	3.67	17368	0.04	10000	
W	182	209	1	He	0.450	0.450	7.95	13013	0.00	2500	
Tl	205	209	1	He	0.026	0.026	15.29	1155	0.00	5000	
Pb	208	209	1	He	7.569	7.569	2.97	388711	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1749071	2.33	1729956	101.10	30	120	
Sc	45	1	He	1050579	0.30	1045873	100.45	30	120	
Sc	45	2	NoGas	8422769	1.63	8041241	104.74	30	120	
Rh	103	1	He	3075815	0.82	3067946	100.26	30	120	
In	115	1	He	1991741	0.82	1978772	100.66	30	120	
Tb	159	1	He	5110080	0.97	5013529	101.93	30	120	
Ho	165	1	He	5158695	0.30	5115781	100.84	30	120	
Bi	209	1	He	3803539	0.58	3723643	102.15	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-3-d@20
Data File Name	020SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:44:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1137.555	1137.555	1.30	3863295	0.03	10000	
B	11	45	2	NoGas	137.717	137.717	2.21	330293	0.04	300	
Na	23	45	1	He	10127.209	10127.209	4.73	18225072	0.06	500000	
Mg	24	45	1	He	11142.639	11142.639	3.68	11376225	0.10	500000	
Al	27	45	1	He	14181.381	14181.381	3.88	8263717	0.17	200000	
K	39	45	1	He	11578.770	11578.770	4.15	11930353	0.10	500000	
Ca	44	45	1	He	9070.947	9070.947	3.49	506611	1.79	500000	
Ti	47	45	1	He	134.429	134.429	4.81	40388	0.33	2500	
V	51	45	1	He	1001.391	1001.391	3.80	7578627	0.01	10000	
Cr	52	45	1	He	1010.067	1010.067	4.68	9039125	0.01	10000	
Mn	55	115	1	He	2155.032	2155.032	3.37	15358457	0.01	10000	
Fe	56	103	1	He	20450.394	20450.394	2.43	177277002	0.01	200000	
Co	59	103	1	He	1023.482	1023.482	2.26	12830601	0.01	10000	
Ni	60	103	1	He	1062.197	1062.197	2.52	3245925	0.03	10000	
Cu	63	103	1	He	1056.105	1056.105	3.36	8478861	0.01	10000	
Zn	66	103	1	He	1096.035	1096.035	2.19	1796758	0.06	10000	
As	75	103	1	He	1005.112	1005.112	2.35	1113041	0.09	10000	
Se	78	103	1	He	999.090	999.090	2.39	118634	0.84	10000	
Sr	88	103	1	He	1212.290	1212.290	2.32	11107323	0.01	10000	
Mo	95	103	1	He	157.339	157.339	0.62	657497	0.02	2000	
Ag	107	103	1	He	37.391	37.391	1.59	503612	0.01	300	
Cd	111	103	1	He	1092.242	1092.242	1.13	2591496	0.04	4000	
Sn	118	115	1	He	1102.675	1102.675	0.64	6473738	0.02	2000	
Sb	123	115	1	He	105.248	105.248	1.33	577554	0.02	300	
Ba	137	115	1	He	1130.828	1130.828	2.57	3046216	0.04	10000	
W	182	209	1	He	104.722	104.722	2.31	1623994	0.01	2500	
Tl	205	209	1	He	250.485	250.485	1.86	9402907	0.00	5000	
Pb	208	209	1	He	1089.867	1089.867	2.29	53012975	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1558000	1.11	1729956	90.06	30	120	
Sc	45	1	He	1102436	10.32	1045873	105.41	30	120	
Sc	45	2	NoGas	7472352	0.44	8041241	92.93	30	120	
Rh	103	1	He	2969739	2.84	3067946	96.80	30	120	
In	115	1	He	1914622	3.32	1978772	96.76	30	120	
Tb	159	1	He	4987693	2.81	5013529	99.48	30	120	
Ho	165	1	He	5108223	3.03	5115781	99.85	30	120	
Bi	209	1	He	3619460	1.38	3723643	97.20	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-e du@20
Data File Name	021SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:47:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.563	0.563	7.34	2282	0.02	10000	
B	11	45	2	NoGas	8.955	8.955	1.32	28489	0.03	300	
Na	23	45	1	He	188.390	188.390	0.81	316639	0.06	500000	
Mg	24	45	1	He	1109.868	1109.868	1.02	991606	0.11	500000	
Al	27	45	1	He	4230.773	4230.773	1.54	2155410	0.20	200000	
K	39	45	1	He	1578.003	1578.003	0.13	1453502	0.11	500000	
Ca	44	45	1	He	48.739	48.739	15.65	2898	1.68	500000	
Ti	47	45	1	He	36.855	36.855	4.03	9690	0.38	2500	
V	51	45	1	He	7.674	7.674	2.58	50570	0.02	10000	
Cr	52	45	1	He	8.119	8.119	0.56	65662	0.01	10000	
Mn	55	115	1	He	514.608	514.608	2.73	3543512	0.01	10000	
Fe	56	103	1	He	9370.245	9370.245	1.56	78277530	0.01	200000	
Co	59	103	1	He	3.597	3.597	0.72	43527	0.01	10000	
Ni	60	103	1	He	9.214	9.214	2.52	27941	0.03	10000	
Cu	63	103	1	He	8.040	8.040	1.11	65712	0.01	10000	
Zn	66	103	1	He	21.029	21.029	0.81	34552	0.06	10000	
As	75	103	1	He	21.279	21.279	0.34	22839	0.09	10000	
Se	78	103	1	He	1.162	1.162	6.75	198	0.59	10000	
Sr	88	103	1	He	124.467	124.467	0.32	1099154	0.01	10000	
Mo	95	103	1	He	55.199	55.199	0.10	222608	0.02	2000	
Ag	107	103	1	He	0.012	0.012	28.22	237	0.01	300	
Cd	111	103	1	He	0.140	0.140	9.39	1908	0.01	4000	
Sn	118	115	1	He	7.287	7.287	9.36	42380	0.02	2000	
Sb	123	115	1	He	0.189	0.189	9.86	1922	0.01	300	
Ba	137	115	1	He	27.345	27.345	2.88	71241	0.04	10000	
W	182	209	1	He	3.247	3.247	5.32	55775	0.01	2500	
Tl	205	209	1	He	0.200	0.200	18.08	7659	0.00	5000	
Pb	208	209	1	He	23.873	23.873	0.89	1166087	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1619890	1.72	1729956	93.64	30	120	
Sc	45	1	He	961123	0.32	1045873	91.90	30	120	
Sc	45	2	NoGas	7644821	1.77	8041241	95.07	30	120	
Rh	103	1	He	2863296	1.19	3067946	93.33	30	120	
In	115	1	He	1850950	1.41	1978772	93.54	30	120	
Tb	159	1	He	4852136	0.22	5013529	96.78	30	120	
Ho	165	1	He	4931971	0.48	5115781	96.41	30	120	
Bi	209	1	He	3629808	0.37	3723643	97.48	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-f ms@20
Data File Name	022SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:51:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.171	5.171	3.99	19567	0.03	10000	
B	11	45	2	NoGas	13.811	13.811	4.01	42861	0.03	300	
Na	23	45	1	He	664.163	664.163	1.83	1141277	0.06	500000	
Mg	24	45	1	He	1631.717	1631.717	1.10	1562275	0.10	500000	
Al	27	45	1	He	4839.629	4839.629	0.41	2643300	0.18	200000	
K	39	45	1	He	1982.818	1982.818	0.70	1947808	0.10	500000	
Ca	44	45	1	He	469.864	469.864	2.59	25114	1.87	500000	
Ti	47	45	1	He	47.366	47.366	2.82	13351	0.35	2500	
V	51	45	1	He	12.451	12.451	1.23	88100	0.01	10000	
Cr	52	45	1	He	12.446	12.446	0.83	106697	0.01	10000	
Mn	55	115	1	He	954.385	954.385	2.37	6843676	0.01	10000	
Fe	56	103	1	He	9626.159	9626.159	2.08	84262672	0.01	200000	
Co	59	103	1	He	8.067	8.067	1.07	102183	0.01	10000	
Ni	60	103	1	He	13.689	13.689	1.35	43091	0.03	10000	
Cu	63	103	1	He	13.754	13.754	0.69	115149	0.01	10000	
Zn	66	103	1	He	26.834	26.834	1.25	45802	0.06	10000	
As	75	103	1	He	24.578	24.578	0.21	27621	0.09	10000	
Se	78	103	1	He	4.922	4.922	4.44	658	0.75	10000	
Sr	88	103	1	He	196.959	196.959	1.64	1822315	0.01	10000	
Mo	95	103	1	He	57.320	57.320	1.78	242181	0.02	2000	
Ag	107	103	1	He	4.833	4.833	0.66	65816	0.01	300	
Cd	111	103	1	He	4.809	4.809	0.25	13181	0.04	4000	
Sn	118	115	1	He	7.472	7.472	1.53	45261	0.02	2000	
Sb	123	115	1	He	1.691	1.691	0.96	10284	0.02	300	
Ba	137	115	1	He	32.695	32.695	3.81	88681	0.04	10000	
W	182	209	1	He	5.230	5.230	0.66	88090	0.01	2500	
Tl	205	209	1	He	4.283	4.283	1.64	164253	0.00	5000	
Pb	208	209	1	He	41.406	41.406	1.18	2058062	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1708667	0.59	1729956	98.77	30	120	
Sc	45	1	He	1030402	0.11	1045873	98.52	30	120	
Sc	45	2	NoGas	8159414	1.10	8041241	101.47	30	120	
Rh	103	1	He	3000275	0.96	3067946	97.79	30	120	
In	115	1	He	1928000	2.49	1978772	97.43	30	120	
Tb	159	1	He	5068342	0.45	5013529	101.09	30	120	
Ho	165	1	He	5097508	0.64	5115781	99.64	30	120	
Bi	209	1	He	3696183	0.37	3723643	99.26	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-9-b@20
Data File Name	023SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:55:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.557	0.557	5.77	2623	0.02	10000	
B	11	45	2	NoGas	2.793	2.793	3.59	16126	0.02	300	
Na	23	45	1	He	20.485	20.485	2.61	61942	0.03	500000	
Mg	24	45	1	He	1722.676	1722.676	1.68	1808113	0.10	500000	
Al	27	45	1	He	7357.788	7357.788	0.72	4405416	0.17	200000	
K	39	45	1	He	606.952	606.952	1.89	683993	0.09	500000	
Ca	44	45	1	He	202.327	202.327	1.08	12205	1.66	500000	
Ti	47	45	1	He	45.755	45.755	0.79	14139	0.32	2500	
V	51	45	1	He	12.755	12.755	1.42	98949	0.01	10000	
Cr	52	45	1	He	11.399	11.399	0.59	107345	0.01	10000	
Mn	55	115	1	He	127.044	127.044	0.38	980314	0.01	10000	
Fe	56	103	1	He	15101.665	15101.665	0.93	140862297	0.01	200000	
Co	59	103	1	He	5.608	5.608	1.59	75721	0.01	10000	
Ni	60	103	1	He	13.178	13.178	1.56	44230	0.03	10000	
Cu	63	103	1	He	10.924	10.924	1.58	98273	0.01	10000	
Zn	66	103	1	He	32.517	32.517	2.04	58823	0.06	10000	
As	75	103	1	He	7.728	7.728	1.30	9354	0.08	10000	
Se	78	103	1	He	0.778	0.778	9.51	171	0.45	10000	
Sr	88	103	1	He	2.694	2.694	1.83	26710	0.01	10000	
Mo	95	103	1	He	1.477	1.477	4.09	6965	0.02	2000	
Ag	107	103	1	He	0.016	0.016	10.51	326	0.01	300	
Cd	111	103	1	He	0.098	0.098	25.05	2023	0.00	4000	
Sn	118	115	1	He	2.393	2.393	4.88	16398	0.01	2000	
Sb	123	115	1	He	0.017	0.017	69.92	1129	0.00	300	
Ba	137	115	1	He	38.293	38.293	0.67	111695	0.03	10000	
W	182	209	1	He	0.258	0.258	15.97	10015	0.00	2500	
Tl	205	209	1	He	0.119	0.119	9.56	4860	0.00	5000	
Pb	208	209	1	He	6.843	6.843	0.81	355925	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1879473	0.82	1729956	108.64	30	120	
Sc	45	1	He	1129646	0.37	1045873	108.01	30	120	
Sc	45	2	NoGas	9009492	0.35	8041241	112.04	30	120	
Rh	103	1	He	3196796	0.54	3067946	104.20	30	120	
In	115	1	He	2072300	1.34	1978772	104.73	30	120	
Tb	159	1	He	5205689	1.47	5013529	103.83	30	120	
Ho	165	1	He	5330134	0.37	5115781	104.19	30	120	
Bi	209	1	He	3850676	0.84	3723643	103.41	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	024_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:59:09-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.987	4.800	181552	5.26	50	92.0	89.5	110.5	
B	11	45	2	NoGas	55.255	2.689	153968	3.61	50	110.5	89.5	110.5	CCV Failed
Na	23	45	1	He	25273.266	2.843	47743804	5.45	25000	101.1	89.5	110.5	
Mg	24	45	1	He	25293.690	3.507	27101475	5.12	25000	101.2	89.5	110.5	
Al	27	45	1	He	253.136	1.557	155575	4.76	250	101.3	89.5	110.5	
K	39	45	1	He	25729.363	1.743	27796254	6.32	25000	102.9	89.5	110.5	
Ca	44	45	1	He	25330.147	2.338	1483843	5.58	25000	101.3	89.5	110.5	
Ti	47	45	1	He	50.211	3.507	15839	2.16	50	100.4	89.5	110.5	
V	51	45	1	He	49.646	1.780	394139	4.16	50	99.3	89.5	110.5	
Cr	52	45	1	He	49.884	2.354	471273	4.31	50	99.8	89.5	110.5	
Mn	55	115	1	He	258.511	1.494	1934889	4.33	250	103.4	89.5	110.5	
Fe	56	103	1	He	12664.508	2.399	113332262	4.96	12500	101.3	89.5	110.5	
Co	59	103	1	He	50.841	1.529	657918	4.09	50	101.7	89.5	110.5	
Ni	60	103	1	He	50.946	1.057	161495	3.25	50	101.9	89.5	110.5	
Cu	63	103	1	He	51.241	1.384	428087	3.58	50	102.5	89.5	110.5	
Zn	66	103	1	He	50.966	1.870	87628	4.58	50	101.9	89.5	110.5	
As	75	103	1	He	51.103	2.298	58551	4.81	50	102.2	89.5	110.5	
Se	78	103	1	He	51.310	0.806	6354	3.68	50	102.6	89.5	110.5	
Sr	88	103	1	He	49.934	1.654	472357	4.13	50	99.9	89.5	110.5	
Mo	95	103	1	He	51.378	2.159	221977	5.09	50	102.8	89.5	110.5	
Ag	107	103	1	He	50.935	0.904	707940	2.53	50	101.9	89.5	110.5	
Cd	111	103	1	He	50.688	1.339	125726	1.89	50	101.4	89.5	110.5	
Sn	118	115	1	He	49.763	0.543	307861	3.02	50	99.5	89.5	110.5	
Sb	123	115	1	He	50.317	1.489	290410	2.98	50	100.6	89.5	110.5	
Ba	137	115	1	He	49.975	1.073	141388	2.41	50	100.0	89.5	110.5	
W	182	209	1	He	47.810	0.696	753096	1.29	50	95.6	89.5	110.5	
Tl	205	209	1	He	51.337	1.402	1949388	1.88	50	102.7	89.5	110.5	
Pb	208	209	1	He	48.405	0.922	2383024	0.38	50	96.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1807948	2.11	1729956	104.51	30	120	
Sc	45	1	He	1154690	5.42	1045873	110.40	30	120	
Sc	45	2	NoGas	8421554	2.06	8041241	104.73	30	120	
Rh	103	1	He	3066013	3.09	3067946	99.94	30	120	
In	115	1	He	2010544	3.18	1978772	101.61	30	120	
Tb	159	1	He	5186523	1.71	5013529	103.45	30	120	
Ho	165	1	He	5256524	1.84	5115781	102.75	30	120	
Bi	209	1	He	3661626	1.30	3723643	98.33	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:02:57-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.129	17.2	859	21.9	1	
B	11	45	2	NoGas	1.029	5.0	10722	13.3	20	
Na	23	45	1	He	4.632	9.9	30300	8.7	400	
Mg	24	45	1	He	1.183	18.2	2634	7.7	1000	
Al	27	45	1	He	0.392	35.6	871	3.9	50	
K	39	45	1	He	6.834	28.5	47152	6.0	1000	
Ca	44	45	1	He	0.302	550.3	584	14.5	1000	
Ti	47	45	1	He	0.065	30.7	28	25.0	20	
V	51	45	1	He	0.111	66.2	600	89.5	2	
Cr	52	45	1	He	0.013	108.9	2439	8.8	2	
Mn	55	115	1	He	0.040	27.0	1140	8.7	2	
Fe	56	103	1	He	17.002	12.8	167748	9.5	50	
Co	59	103	1	He	0.010	15.2	203	11.5	1	
Ni	60	103	1	He	-0.097	-5.7	577	5.5	2	
Cu	63	103	1	He	-0.176	-7.7	2369	5.9	2	
Zn	66	103	1	He	-0.103	-7.6	1287	3.4	20	
As	75	103	1	He	0.072	27.4	227	12.6	2	
Se	78	103	1	He	0.054	93.1	77	8.5	2	
Sr	88	103	1	He	0.013	41.0	276	21.3	10	
Mo	95	103	1	He	0.724	7.7	3467	4.5	2	
Ag	107	103	1	He	0.008	5.0	198	5.4	0.2	
Cd	111	103	1	He	0.024	116.2	1778	5.6	0.2	
Sn	118	115	1	He	0.463	5.2	3978	6.0	10	
Sb	123	115	1	He	0.348	20.9	2969	11.8	1	
Ba	137	115	1	He	0.010	80.6	82	30.4	5	
W	182	209	1	He	0.734	10.2	17162	6.8	10	
Tl	205	209	1	He	0.032	10.7	1350	8.8	0.5	
Pb	208	209	1	He	0.106	1.6	7083	2.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1848927	12.10	1729956	106.88	30	120	
Sc	45	1	He	1047333	6.25	1045873	100.14	30	120	
Sc	45	2	NoGas	8669846	12.05	8041241	107.82	30	120	
Rh	103	1	He	3099703	2.57	3067946	101.04	30	120	
In	115	1	He	1994091	2.42	1978772	100.77	30	120	
Tb	159	1	He	5076802	2.66	5013529	101.26	30	120	
Ho	165	1	He	5131175	2.01	5115781	100.30	30	120	
Bi	209	1	He	3706498	1.92	3723643	99.54	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-10-b@20
Data File Name	026SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:06:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.459	0.459	14.61	2052	0.02	10000	
B	11	45	2	NoGas	1.812	1.812	10.01	12353	0.01	300	
Na	23	45	1	He	19.981	19.981	3.25	54626	0.04	500000	
Mg	24	45	1	He	1171.854	1171.854	1.16	1101563	0.11	500000	
Al	27	45	1	He	6573.057	6573.057	2.42	3522943	0.19	200000	
K	39	45	1	He	397.308	397.308	2.72	414306	0.10	500000	
Ca	44	45	1	He	191.257	191.257	0.35	10359	1.85	500000	
Ti	47	45	1	He	56.533	56.533	3.08	15635	0.36	2500	
V	51	45	1	He	13.593	13.593	2.72	94405	0.01	10000	
Cr	52	45	1	He	9.569	9.569	1.39	81030	0.01	10000	
Mn	55	115	1	He	427.185	427.185	2.58	2966584	0.01	10000	
Fe	56	103	1	He	12832.892	12832.892	1.37	109663622	0.01	200000	
Co	59	103	1	He	6.121	6.121	1.43	75708	0.01	10000	
Ni	60	103	1	He	8.990	8.990	2.91	27904	0.03	10000	
Cu	63	103	1	He	6.804	6.804	2.66	57432	0.01	10000	
Zn	66	103	1	He	28.980	28.980	1.46	48179	0.06	10000	
As	75	103	1	He	5.962	5.962	1.60	6643	0.09	10000	
Se	78	103	1	He	0.597	0.597	9.86	136	0.44	10000	
Sr	88	103	1	He	2.077	2.077	3.64	18895	0.01	10000	
Mo	95	103	1	He	0.878	0.878	8.35	3918	0.02	2000	
Ag	107	103	1	He	0.016	0.016	14.63	288	0.01	300	
Cd	111	103	1	He	0.073	0.073	63.62	1793	0.00	4000	
Sn	118	115	1	He	1.856	1.856	8.04	11690	0.02	2000	
Sb	123	115	1	He	0.123	0.123	23.13	1587	0.01	300	
Ba	137	115	1	He	39.240	39.240	1.86	103076	0.04	10000	
W	182	209	1	He	0.169	0.169	5.43	8158	0.00	2500	
Tl	205	209	1	He	0.098	0.098	3.48	3861	0.00	5000	
Pb	208	209	1	He	7.797	7.797	0.96	386533	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1736844	0.45	1729956	100.40	30	120	
Sc	45	1	He	1011356	1.02	1045873	96.70	30	120	
Sc	45	2	NoGas	8339062	0.88	8041241	103.70	30	120	
Rh	103	1	He	2929272	2.00	3067946	95.48	30	120	
In	115	1	He	1866305	0.49	1978772	94.32	30	120	
Tb	159	1	He	4927556	0.48	5013529	98.29	30	120	
Ho	165	1	He	5027113	1.36	5115781	98.27	30	120	
Bi	209	1	He	3672743	0.85	3723643	98.63	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-1-b@20
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:10:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.402	0.402	14.15	2137	0.02	10000	
B	11	45	2	NoGas	2.474	2.474	9.07	16171	0.02	300	
Na	23	45	1	He	24.190	24.190	1.94	68649	0.04	500000	
Mg	24	45	1	He	1491.575	1491.575	0.39	1562301	0.10	500000	
Al	27	45	1	He	5048.877	5048.877	2.30	3018064	0.17	200000	
K	39	45	1	He	405.790	405.790	0.46	470705	0.09	500000	
Ca	44	45	1	He	2618.208	2618.208	1.35	150342	1.74	500000	
Ti	47	45	1	He	47.684	47.684	1.28	14706	0.32	2500	
V	51	45	1	He	9.360	9.360	0.78	72381	0.01	10000	
Cr	52	45	1	He	8.969	8.969	0.74	84825	0.01	10000	
Mn	55	115	1	He	283.164	283.164	3.64	2172521	0.01	10000	
Fe	56	103	1	He	11451.838	11451.838	0.92	106636094	0.01	200000	
Co	59	103	1	He	4.154	4.154	1.58	56023	0.01	10000	
Ni	60	103	1	He	10.382	10.382	0.37	34979	0.03	10000	
Cu	63	103	1	He	6.501	6.501	2.41	59997	0.01	10000	
Zn	66	103	1	He	25.832	25.832	1.89	46969	0.05	10000	
As	75	103	1	He	7.121	7.121	0.63	8617	0.08	10000	
Se	78	103	1	He	0.496	0.496	1.98	135	0.37	10000	
Sr	88	103	1	He	6.528	6.528	2.34	64407	0.01	10000	
Mo	95	103	1	He	0.635	0.635	3.70	3173	0.02	2000	
Ag	107	103	1	He	0.022	0.022	7.45	401	0.01	300	
Cd	111	103	1	He	0.121	0.121	32.31	2080	0.01	4000	
Sn	118	115	1	He	1.896	1.896	2.43	13161	0.01	2000	
Sb	123	115	1	He	0.114	0.114	14.56	1698	0.01	300	
Ba	137	115	1	He	28.906	28.906	2.22	83878	0.03	10000	
W	182	209	1	He	0.129	0.129	27.87	7865	0.00	2500	
Tl	205	209	1	He	0.070	0.070	6.68	2890	0.00	5000	
Pb	208	209	1	He	7.745	7.745	0.87	401722	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2022785	2.24	1729956	116.93	30	120	
Sc	45	1	He	1127174	4.47	1045873	107.77	30	120	
Sc	45	2	NoGas	9577115	2.86	8041241	119.10	30	120	
Rh	103	1	He	3191129	2.53	3067946	104.02	30	120	
In	115	1	He	2060729	1.67	1978772	104.14	30	120	
Tb	159	1	He	5220866	2.01	5013529	104.14	30	120	
Ho	165	1	He	5317480	1.21	5115781	103.94	30	120	
Bi	209	1	He	3842649	2.12	3723643	103.20	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-2-b@20
Data File Name	028SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:14:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.448	0.448	20.42	2482	0.02	10000	
B	11	45	2	NoGas	1.831	1.831	4.33	15666	0.01	300	
Na	23	45	1	He	15.366	15.366	1.81	55881	0.03	500000	
Mg	24	45	1	He	1061.327	1061.327	2.36	1186542	0.09	500000	
Al	27	45	1	He	7377.718	7377.718	0.63	4703164	0.16	200000	
K	39	45	1	He	371.798	371.798	2.14	464063	0.08	500000	
Ca	44	45	1	He	420.266	420.266	2.24	26289	1.60	500000	
Ti	47	45	1	He	35.484	35.484	1.88	11677	0.30	2500	
V	51	45	1	He	14.837	14.837	2.88	122558	0.01	10000	
Cr	52	45	1	He	10.337	10.337	1.66	103895	0.01	10000	
Mn	55	115	1	He	352.898	352.898	1.60	2848053	0.01	10000	
Fe	56	103	1	He	13081.001	13081.001	0.68	128417386	0.01	200000	
Co	59	103	1	He	5.310	5.310	1.77	75458	0.01	10000	
Ni	60	103	1	He	9.814	9.814	2.76	34908	0.03	10000	
Cu	63	103	1	He	6.349	6.349	1.31	61856	0.01	10000	
Zn	66	103	1	He	34.467	34.467	2.48	65515	0.05	10000	
As	75	103	1	He	8.284	8.284	1.59	10543	0.08	10000	
Se	78	103	1	He	0.714	0.714	3.21	172	0.42	10000	
Sr	88	103	1	He	2.665	2.665	1.41	27812	0.01	10000	
Mo	95	103	1	He	0.823	0.823	2.30	4239	0.02	2000	
Ag	107	103	1	He	0.046	0.046	6.15	797	0.01	300	
Cd	111	103	1	He	0.121	0.121	5.12	2192	0.01	4000	
Sn	118	115	1	He	1.787	1.787	2.26	13128	0.01	2000	
Sb	123	115	1	He	0.069	0.069	7.80	1506	0.00	300	
Ba	137	115	1	He	36.731	36.731	1.54	112114	0.03	10000	
W	182	209	1	He	0.060	0.060	86.07	6961	0.00	2500	
Tl	205	209	1	He	0.107	0.107	3.39	4532	0.00	5000	
Pb	208	209	1	He	11.753	11.753	1.15	629314	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2158345	4.75	1729956	124.76	30	120	ISTD Failed
Sc	45	1	He	1202786	1.16	1045873	115.00	30	120	
Sc	45	2	NoGas	10527699	4.03	8041241	130.92	30	120	ISTD Failed
Rh	103	1	He	3364810	1.54	3067946	109.68	30	120	
In	115	1	He	2168675	1.08	1978772	109.60	30	120	
Tb	159	1	He	5414526	1.27	5013529	108.00	30	120	
Ho	165	1	He	5560378	0.77	5115781	108.69	30	120	
Bi	209	1	He	3973206	0.96	3723643	106.70	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-3-b@20
Data File Name	029SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:18:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.402	0.402	17.43	1982	0.02	10000	
B	11	45	2	NoGas	2.042	2.042	11.17	14328	0.01	300	
Na	23	45	1	He	16.983	16.983	3.82	60117	0.03	500000	
Mg	24	45	1	He	1030.263	1030.263	1.51	1172531	0.09	500000	
Al	27	45	1	He	7172.812	7172.812	1.95	4652772	0.15	200000	
K	39	45	1	He	390.936	390.936	1.73	494189	0.08	500000	
Ca	44	45	1	He	732.770	732.770	1.57	46153	1.59	500000	
Ti	47	45	1	He	43.974	43.974	3.15	14724	0.30	2500	
V	51	45	1	He	14.262	14.262	2.45	119941	0.01	10000	
Cr	52	45	1	He	11.274	11.274	1.88	115085	0.01	10000	
Mn	55	115	1	He	428.872	428.872	1.86	3460781	0.01	10000	
Fe	56	103	1	He	12699.655	12699.655	1.22	128166528	0.01	200000	
Co	59	103	1	He	6.425	6.425	1.06	93871	0.01	10000	
Ni	60	103	1	He	9.841	9.841	1.28	35992	0.03	10000	
Cu	63	103	1	He	6.305	6.305	0.88	63197	0.01	10000	
Zn	66	103	1	He	33.658	33.658	2.41	65803	0.05	10000	
As	75	103	1	He	8.107	8.107	2.51	10608	0.08	10000	
Se	78	103	1	He	0.786	0.786	28.71	186	0.42	10000	
Sr	88	103	1	He	3.603	3.603	1.76	38594	0.01	10000	
Mo	95	103	1	He	0.802	0.802	4.58	4252	0.02	2000	
Ag	107	103	1	He	0.039	0.039	3.58	710	0.01	300	
Cd	111	103	1	He	0.095	0.095	21.24	2182	0.00	4000	
Sn	118	115	1	He	1.871	1.871	9.03	13677	0.01	2000	
Sb	123	115	1	He	0.116	0.116	0.90	1797	0.01	300	
Ba	137	115	1	He	35.360	35.360	1.81	107939	0.03	10000	
W	182	209	1	He	0.065	0.065	18.95	7057	0.00	2500	
Tl	205	209	1	He	0.106	0.106	1.75	4497	0.00	5000	
Pb	208	209	1	He	12.373	12.373	1.27	663303	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1875541	0.60	1729956	108.42	30	120	
Sc	45	1	He	1224653	5.19	1045873	117.09	30	120	
Sc	45	2	NoGas	9223958	1.46	8041241	114.71	30	120	
Rh	103	1	He	3459629	3.88	3067946	112.77	30	120	
In	115	1	He	2168190	1.47	1978772	109.57	30	120	
Tb	159	1	He	5442788	2.27	5013529	108.56	30	120	
Ho	165	1	He	5530669	1.81	5115781	108.11	30	120	
Bi	209	1	He	3979179	2.62	3723643	106.86	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-4-b@20
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:21:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.397	0.397	13.23	2141	0.02	10000	
B	11	45	2	NoGas	2.948	2.948	7.23	18009	0.02	300	
Na	23	45	1	He	24.457	24.457	4.44	79364	0.03	500000	
Mg	24	45	1	He	891.774	891.774	2.07	1073339	0.08	500000	
Al	27	45	1	He	3848.143	3848.143	1.74	2641297	0.15	200000	
K	39	45	1	He	257.401	257.401	1.76	361303	0.07	500000	
Ca	44	45	1	He	2931.521	2931.521	0.72	193210	1.52	500000	
Ti	47	45	1	He	45.786	45.786	2.60	16230	0.28	2500	
V	51	45	1	He	8.656	8.656	0.99	76894	0.01	10000	
Cr	52	45	1	He	10.269	10.269	1.72	111124	0.01	10000	
Mn	55	115	1	He	435.854	435.854	1.30	3664089	0.01	10000	
Fe	56	103	1	He	11408.524	11408.524	1.92	117022115	0.01	200000	
Co	59	103	1	He	5.266	5.266	0.36	78187	0.01	10000	
Ni	60	103	1	He	11.474	11.474	0.86	42478	0.03	10000	
Cu	63	103	1	He	6.689	6.689	1.18	67841	0.01	10000	
Zn	66	103	1	He	25.166	25.166	1.68	50441	0.05	10000	
As	75	103	1	He	14.125	14.125	0.72	18667	0.08	10000	
Se	78	103	1	He	0.504	0.504	18.62	150	0.34	10000	
Sr	88	103	1	He	9.019	9.019	0.74	97928	0.01	10000	
Mo	95	103	1	He	0.682	0.682	4.17	3729	0.02	2000	
Ag	107	103	1	He	0.058	0.058	5.42	1016	0.01	300	
Cd	111	103	1	He	0.120	0.120	32.34	2286	0.01	4000	
Sn	118	115	1	He	1.936	1.936	0.86	14703	0.01	2000	
Sb	123	115	1	He	0.172	0.172	11.80	2232	0.01	300	
Ba	137	115	1	He	43.029	43.029	0.50	136810	0.03	10000	
W	182	209	1	He	0.044	0.044	32.18	6842	0.00	2500	
Tl	205	209	1	He	0.079	0.079	3.21	3444	0.00	5000	
Pb	208	209	1	He	13.970	13.970	0.89	764101	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2047532	0.92	1729956	118.36	30	120	
Sc	45	1	He	1294969	3.90	1045873	123.82	30	120	ISTD Failed
Sc	45	2	NoGas	9796648	0.65	8041241	121.83	30	120	ISTD Failed
Rh	103	1	He	3514929	2.31	3067946	114.57	30	120	
In	115	1	He	2258870	1.12	1978772	114.16	30	120	
Tb	159	1	He	5540108	1.31	5013529	110.50	30	120	
Ho	165	1	He	5629881	1.50	5115781	110.05	30	120	
Bi	209	1	He	4060322	0.44	3723643	109.04	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-4-b@20
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:25:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.374	0.374	4.62	2237	0.02	10000	
B	11	45	2	NoGas	0.978	0.978	6.85	13420	0.01	300	
Na	23	45	1	He	13.840	13.840	5.98	54764	0.03	500000	
Mg	24	45	1	He	970.844	970.844	2.08	1124700	0.09	500000	
Al	27	45	1	He	5769.995	5769.995	2.69	3810398	0.15	200000	
K	39	45	1	He	290.311	290.311	2.16	385997	0.08	500000	
Ca	44	45	1	He	252.329	252.329	5.64	16620	1.52	500000	
Ti	47	45	1	He	48.538	48.538	0.82	16548	0.29	2500	
V	51	45	1	He	13.286	13.286	2.14	113688	0.01	10000	
Cr	52	45	1	He	8.000	8.000	2.93	83910	0.01	10000	
Mn	55	115	1	He	1671.979	1671.979	3.54	13667485	0.01	10000	
Fe	56	103	1	He	12017.630	12017.630	1.68	121686026	0.01	200000	
Co	59	103	1	He	5.919	5.919	1.34	86764	0.01	10000	
Ni	60	103	1	He	7.232	7.232	0.97	26798	0.03	10000	
Cu	63	103	1	He	4.791	4.791	1.99	49192	0.01	10000	
Zn	66	103	1	He	54.104	54.104	1.81	105166	0.05	10000	
As	75	103	1	He	6.540	6.540	2.51	8620	0.08	10000	
Se	78	103	1	He	0.468	0.468	11.77	143	0.33	10000	
Sr	88	103	1	He	2.977	2.977	1.97	32024	0.01	10000	
Mo	95	103	1	He	0.793	0.793	1.48	4225	0.02	2000	
Ag	107	103	1	He	0.167	0.167	0.73	2718	0.01	300	
Cd	111	103	1	He	0.156	0.156	24.60	2355	0.01	4000	
Sn	118	115	1	He	1.657	1.657	4.55	12427	0.01	2000	
Sb	123	115	1	He	-0.005	-0.005	-284.00	1057	0.00	300	
Ba	137	115	1	He	46.580	46.580	2.38	144051	0.03	10000	
W	182	209	1	He	0.318	0.318	4.69	11401	0.00	2500	
Tl	205	209	1	He	0.117	0.117	1.21	4974	0.00	5000	
Pb	208	209	1	He	20.805	20.805	0.45	1117901	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2250543	4.95	1729956	130.09	30	120	ISTD Failed
Sc	45	1	He	1246624	3.92	1045873	119.19	30	120	
Sc	45	2	NoGas	11000008	3.46	8041241	136.79	30	120	ISTD Failed
Rh	103	1	He	3470398	0.80	3067946	113.12	30	120	
In	115	1	He	2197665	1.36	1978772	111.06	30	120	
Tb	159	1	He	5488929	0.32	5013529	109.48	30	120	
Ho	165	1	He	5628898	0.96	5115781	110.03	30	120	
Bi	209	1	He	3992032	0.69	3723643	107.21	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-6-b@20
Data File Name	032SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:29:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.276	0.276	20.04	1515	0.02	10000	
B	11	45	2	NoGas	1.365	1.365	5.22	12671	0.01	300	
Na	23	45	1	He	13.116	13.116	0.08	52401	0.03	500000	
Mg	24	45	1	He	905.283	905.283	0.94	1031328	0.09	500000	
Al	27	45	1	He	6091.522	6091.522	1.13	3955761	0.15	200000	
K	39	45	1	He	352.012	352.012	0.28	450057	0.08	500000	
Ca	44	45	1	He	98.955	98.955	3.33	6811	1.45	500000	
Ti	47	45	1	He	44.839	44.839	1.37	15023	0.30	2500	
V	51	45	1	He	13.716	13.716	1.10	115409	0.01	10000	
Cr	52	45	1	He	8.452	8.452	1.20	87024	0.01	10000	
Mn	55	115	1	He	765.649	765.649	2.19	6277906	0.01	10000	
Fe	56	103	1	He	11344.023	11344.023	1.86	115088073	0.01	200000	
Co	59	103	1	He	5.009	5.009	1.28	73566	0.01	10000	
Ni	60	103	1	He	7.604	7.604	3.92	28186	0.03	10000	
Cu	63	103	1	He	4.176	4.176	2.71	43522	0.01	10000	
Zn	66	103	1	He	28.801	28.801	1.74	56854	0.05	10000	
As	75	103	1	He	5.461	5.461	2.56	7237	0.08	10000	
Se	78	103	1	He	0.585	0.585	13.31	160	0.37	10000	
Sr	88	103	1	He	1.687	1.687	2.35	18260	0.01	10000	
Mo	95	103	1	He	0.662	0.662	7.63	3586	0.02	2000	
Ag	107	103	1	He	0.043	0.043	14.26	764	0.01	300	
Cd	111	103	1	He	0.115	0.115	15.40	2246	0.01	4000	
Sn	118	115	1	He	1.758	1.758	7.01	13143	0.01	2000	
Sb	123	115	1	He	-0.004	-0.004	-369.58	1067	0.00	300	
Ba	137	115	1	He	44.138	44.138	2.71	136906	0.03	10000	
W	182	209	1	He	0.053	0.053	36.29	6843	0.00	2500	
Tl	205	209	1	He	0.092	0.092	7.43	3902	0.00	5000	
Pb	208	209	1	He	10.338	10.338	1.80	552731	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1939869	1.42	1729956	112.13	30	120	
Sc	45	1	He	1224957	2.33	1045873	117.12	30	120	
Sc	45	2	NoGas	9447691	1.54	8041241	117.49	30	120	
Rh	103	1	He	3476614	1.61	3067946	113.32	30	120	
In	115	1	He	2203704	1.43	1978772	111.37	30	120	
Tb	159	1	He	5497977	1.18	5013529	109.66	30	120	
Ho	165	1	He	5608270	0.50	5115781	109.63	30	120	
Bi	209	1	He	3965252	0.25	3723643	106.49	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-8-b@20
Data File Name	033SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:33:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.382	0.382	4.89	1967	0.02	10000	
B	11	45	2	NoGas	1.572	1.572	13.20	13042	0.01	300	
Na	23	45	1	He	12.944	12.944	6.61	50920	0.03	500000	
Mg	24	45	1	He	898.362	898.362	0.35	1001113	0.09	500000	
Al	27	45	1	He	7093.477	7093.477	1.62	4505163	0.16	200000	
K	39	45	1	He	370.364	370.364	0.94	460789	0.08	500000	
Ca	44	45	1	He	154.041	154.041	3.93	10016	1.54	500000	
Ti	47	45	1	He	42.486	42.486	1.80	13930	0.30	2500	
V	51	45	1	He	15.354	15.354	1.03	126414	0.01	10000	
Cr	52	45	1	He	9.798	9.798	0.33	98263	0.01	10000	
Mn	55	115	1	He	732.788	732.788	2.03	5917697	0.01	10000	
Fe	56	103	1	He	12245.035	12245.035	1.28	121889817	0.01	200000	
Co	59	103	1	He	6.468	6.468	1.49	93191	0.01	10000	
Ni	60	103	1	He	10.002	10.002	1.13	36063	0.03	10000	
Cu	63	103	1	He	6.005	6.005	0.30	59555	0.01	10000	
Zn	66	103	1	He	31.597	31.597	0.71	61043	0.05	10000	
As	75	103	1	He	6.598	6.598	1.72	8546	0.08	10000	
Se	78	103	1	He	0.714	0.714	13.04	174	0.41	10000	
Sr	88	103	1	He	1.764	1.764	2.04	18717	0.01	10000	
Mo	95	103	1	He	0.768	0.768	3.47	4034	0.02	2000	
Ag	107	103	1	He	0.035	0.035	3.18	629	0.01	300	
Cd	111	103	1	He	0.071	0.071	56.21	2084	0.00	4000	
Sn	118	115	1	He	1.668	1.668	1.35	12346	0.01	2000	
Sb	123	115	1	He	0.010	0.010	128.51	1140	0.00	300	
Ba	137	115	1	He	49.581	49.581	1.11	151449	0.03	10000	
W	182	209	1	He	0.029	0.029	37.04	6428	0.00	2500	
Tl	205	209	1	He	0.103	0.103	1.69	4354	0.00	5000	
Pb	208	209	1	He	11.464	11.464	0.59	613063	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1941653	1.29	1729956	112.24	30	120	
Sc	45	1	He	1198390	1.22	1045873	114.58	30	120	
Sc	45	2	NoGas	9274866	0.90	8041241	115.34	30	120	
Rh	103	1	He	3411563	0.14	3067946	111.20	30	120	
In	115	1	He	2170528	1.47	1978772	109.69	30	120	
Tb	159	1	He	5414558	0.47	5013529	108.00	30	120	
Ho	165	1	He	5495907	1.62	5115781	107.43	30	120	
Bi	209	1	He	3967618	1.01	3723643	106.55	30	120	

Sample Report

Sample Table

Sample Name	240-49171-A-18-B@20
Data File Name	034SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:37:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.399	0.399	6.23	2011	0.02	10000	
B	11	45	2	NoGas	1.452	1.452	8.39	12916	0.01	300	
Na	23	45	1	He	18.739	18.739	4.40	61953	0.03	500000	
Mg	24	45	1	He	1615.820	1615.820	1.60	1789674	0.09	500000	
Al	27	45	1	He	6588.311	6588.311	0.87	4162564	0.16	200000	
K	39	45	1	He	464.259	464.259	1.12	562890	0.08	500000	
Ca	44	45	1	He	455.034	455.034	2.02	28154	1.62	500000	
Ti	47	45	1	He	50.287	50.287	3.54	16395	0.31	2500	
V	51	45	1	He	12.023	12.023	2.02	98397	0.01	10000	
Cr	52	45	1	He	10.104	10.104	1.56	100707	0.01	10000	
Mn	55	115	1	He	291.129	291.129	0.21	2300158	0.01	10000	
Fe	56	103	1	He	14484.102	14484.102	1.93	141878199	0.01	200000	
Co	59	103	1	He	5.615	5.615	1.93	79619	0.01	10000	
Ni	60	103	1	He	12.527	12.527	2.29	44201	0.03	10000	
Cu	63	103	1	He	10.684	10.684	1.61	101031	0.01	10000	
Zn	66	103	1	He	47.402	47.402	2.14	89325	0.05	10000	
As	75	103	1	He	7.296	7.296	0.58	9285	0.08	10000	
Se	78	103	1	He	0.565	0.565	9.62	152	0.37	10000	
Sr	88	103	1	He	2.978	2.978	1.13	31001	0.01	10000	
Mo	95	103	1	He	0.696	0.696	6.13	3627	0.02	2000	
Ag	107	103	1	He	0.014	0.014	19.66	302	0.00	300	
Cd	111	103	1	He	0.118	0.118	25.92	2178	0.01	4000	
Sn	118	115	1	He	1.742	1.742	1.94	12553	0.01	2000	
Sb	123	115	1	He	-0.039	-0.039	-31.41	818	0.00	300	
Ba	137	115	1	He	35.838	35.838	1.43	107085	0.03	10000	
W	182	209	1	He	0.012	0.012	191.64	6202	0.00	2500	
Tl	205	209	1	He	0.089	0.089	4.12	3796	0.00	5000	
Pb	208	209	1	He	7.563	7.563	1.21	408372	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1916947	1.52	1729956	110.81	30	120	
Sc	45	1	He	1192047	0.63	1045873	113.98	30	120	
Sc	45	2	NoGas	9439305	0.23	8041241	117.39	30	120	
Rh	103	1	He	3357836	1.56	3067946	109.45	30	120	
In	115	1	He	2122899	1.03	1978772	107.28	30	120	
Tb	159	1	He	5367580	0.53	5013529	107.06	30	120	
Ho	165	1	He	5452384	0.63	5115781	106.58	30	120	
Bi	209	1	He	3999820	0.59	3723643	107.42	30	120	

Sample Report

Sample Table

Sample Name	240-49171-A-18-B@50
Data File Name	035SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:40:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.141	0.141	16.60	937	0.02	10000	
B	11	45	2	NoGas	0.766	0.766	3.23	10685	0.01	300	
Na	23	45	1	He	6.865	6.865	2.37	38100	0.02	500000	
Mg	24	45	1	He	665.017	665.017	1.44	724155	0.09	500000	
Al	27	45	1	He	2836.368	2836.368	1.12	1759875	0.16	200000	
K	39	45	1	He	197.245	197.245	1.12	260829	0.08	500000	
Ca	44	45	1	He	194.479	194.479	0.72	12178	1.60	500000	
Ti	47	45	1	He	20.877	20.877	3.60	6688	0.31	2500	
V	51	45	1	He	4.970	4.970	1.06	39802	0.01	10000	
Cr	52	45	1	He	4.208	4.208	0.73	42691	0.01	10000	
Mn	55	115	1	He	113.625	113.625	0.32	902560	0.01	10000	
Fe	56	103	1	He	5935.622	5935.622	1.14	57865193	0.01	200000	
Co	59	103	1	He	2.295	2.295	0.99	32435	0.01	10000	
Ni	60	103	1	He	4.989	4.989	1.55	18093	0.03	10000	
Cu	63	103	1	He	4.241	4.241	1.70	42404	0.01	10000	
Zn	66	103	1	He	21.279	21.279	2.87	40777	0.05	10000	
As	75	103	1	He	2.959	2.959	1.40	3838	0.08	10000	
Se	78	103	1	He	0.268	0.268	33.68	111	0.24	10000	
Sr	88	103	1	He	1.218	1.218	3.73	12706	0.01	10000	
Mo	95	103	1	He	0.265	0.265	5.11	1585	0.02	2000	
Ag	107	103	1	He	0.006	0.006	6.01	180	0.00	300	
Cd	111	103	1	He	0.052	0.052	27.78	1991	0.00	4000	
Sn	118	115	1	He	0.630	0.630	7.97	5346	0.01	2000	
Sb	123	115	1	He	-0.088	-0.088	-6.56	522	-0.02	300	
Ba	137	115	1	He	14.428	14.428	2.74	43347	0.03	10000	
W	182	209	1	He	0.028	0.028	67.24	6413	0.00	2500	
Tl	205	209	1	He	0.037	0.037	1.81	1649	0.00	5000	
Pb	208	209	1	He	3.129	3.129	1.22	168468	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1916051	2.61	1729956	110.76	30	120	
Sc	45	1	He	1170328	0.49	1045873	111.90	30	120	
Sc	45	2	NoGas	9267485	0.36	8041241	115.25	30	120	
Rh	103	1	He	3340887	0.79	3067946	108.90	30	120	
In	115	1	He	2133050	1.18	1978772	107.80	30	120	
Tb	159	1	He	5347932	0.18	5013529	106.67	30	120	
Ho	165	1	He	5425260	0.58	5115781	106.05	30	120	
Bi	209	1	He	3961728	1.24	3723643	106.39	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	036_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:44:38-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.666	3.968	209868	8.56	50	101.3	89.5	110.5	
B	11	45	2	NoGas	58.641	1.791	172663	7.06	50	117.3	89.5	110.5	CCV Failed
Na	23	45	1	He	25269.291	2.247	43221992	0.52	25000	101.1	89.5	110.5	
Mg	24	45	1	He	25299.913	2.554	24549634	0.52	25000	101.2	89.5	110.5	
Al	27	45	1	He	254.273	2.542	141495	0.52	250	101.7	89.5	110.5	
K	39	45	1	He	25531.555	2.467	24961268	0.42	25000	102.1	89.5	110.5	
Ca	44	45	1	He	26025.732	2.096	1380357	1.60	25000	104.1	89.5	110.5	
Ti	47	45	1	He	51.671	4.052	14769	2.17	50	103.3	89.5	110.5	
V	51	45	1	He	51.147	2.886	367729	1.10	50	102.3	89.5	110.5	
Cr	52	45	1	He	51.375	1.652	439568	1.12	50	102.7	89.5	110.5	
Mn	55	115	1	He	257.552	4.324	1811459	2.94	250	103.0	89.5	110.5	
Fe	56	103	1	He	12311.818	1.724	104938111	1.61	12500	98.5	89.5	110.5	
Co	59	103	1	He	49.660	0.990	612172	0.90	50	99.3	89.5	110.5	
Ni	60	103	1	He	50.378	1.166	152161	1.12	50	100.8	89.5	110.5	
Cu	63	103	1	He	50.489	1.083	401915	0.94	50	101.0	89.5	110.5	
Zn	66	103	1	He	49.928	1.193	81793	1.04	50	99.9	89.5	110.5	
As	75	103	1	He	49.976	1.204	54541	1.09	50	100.0	89.5	110.5	
Se	78	103	1	He	49.756	1.900	5871	1.73	50	99.5	89.5	110.5	
Sr	88	103	1	He	48.874	0.576	440418	0.43	50	97.7	89.5	110.5	
Mo	95	103	1	He	50.960	1.332	209690	1.35	50	101.9	89.5	110.5	
Ag	107	103	1	He	50.847	0.626	673423	0.50	50	101.7	89.5	110.5	
Cd	111	103	1	He	50.440	0.831	119241	0.68	50	100.9	89.5	110.5	
Sn	118	115	1	He	49.938	3.791	290398	2.44	50	99.9	89.5	110.5	
Sb	123	115	1	He	51.132	1.760	277459	0.41	50	102.3	89.5	110.5	
Ba	137	115	1	He	50.438	2.167	134175	1.10	50	100.9	89.5	110.5	
W	182	209	1	He	48.127	0.289	730768	0.20	50	96.3	89.5	110.5	
Tl	205	209	1	He	51.961	0.651	1902021	0.52	50	103.9	89.5	110.5	
Pb	208	209	1	He	49.172	1.065	2333745	1.06	50	98.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1897340	7.91	1729956	109.68	30	120	
Sc	45	1	He	1045690	2.77	1045873	99.98	30	120	
Sc	45	2	NoGas	8922547	6.25	8041241	110.96	30	120	
Rh	103	1	He	2921200	0.15	3067946	95.22	30	120	
In	115	1	He	1890470	1.41	1978772	95.54	30	120	
Tb	159	1	He	4967557	0.31	5013529	99.08	30	120	
Ho	165	1	He	5089373	0.42	5115781	99.48	30	120	
Bi	209	1	He	3529772	0.13	3723643	94.79	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	037_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:48:27-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.027	68.1	407	15.0	1	
B	11	45	2	NoGas	0.358	12.3	8247	1.7	20	
Na	23	45	1	He	4.098	25.7	30059	9.7	400	
Mg	24	45	1	He	1.889	24.8	3386	8.8	1000	
Al	27	45	1	He	0.345	12.4	868	6.9	50	
K	39	45	1	He	6.513	38.4	48039	10.6	1000	
Ca	44	45	1	He	0.427	450.9	601	11.7	1000	
Ti	47	45	1	He	0.082	33.6	33	30.0	20	
V	51	45	1	He	-0.001	-9378.9	-207	-395.1	2	
Cr	52	45	1	He	0.026	39.4	2607	2.5	2	
Mn	55	115	1	He	0.009	41.5	929	8.3	2	
Fe	56	103	1	He	18.009	15.8	181841	19.0	50	
Co	59	103	1	He	0.003	61.7	110	19.9	1	
Ni	60	103	1	He	-0.152	-12.0	411	17.5	2	
Cu	63	103	1	He	-0.232	-6.2	1941	10.4	2	
Zn	66	103	1	He	-0.267	-15.0	1028	4.7	20	
As	75	103	1	He	0.040	31.4	193	3.8	2	
Se	78	103	1	He	0.049	80.8	78	3.4	2	
Sr	88	103	1	He	0.001	315.8	164	27.6	10	
Mo	95	103	1	He	0.625	17.0	3121	19.4	2	
Ag	107	103	1	He	0.006	46.5	172	20.1	0.2	
Cd	111	103	1	He	0.015	130.7	1797	7.0	0.2	
Sn	118	115	1	He	0.223	19.4	2567	16.2	10	
Sb	123	115	1	He	0.319	11.2	2874	13.7	1	
Ba	137	115	1	He	0.015	40.7	98	23.9	5	
W	182	209	1	He	0.694	10.9	16724	9.1	10	
Tl	205	209	1	He	0.023	16.5	1003	16.9	0.5	
Pb	208	209	1	He	0.036	3.0	3631	1.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1713581	1.84	1729956	99.05	30	120	
Sc	45	1	He	1071837	5.96	1045873	102.48	30	120	
Sc	45	2	NoGas	8049052	0.37	8041241	100.10	30	120	
Rh	103	1	He	3168920	4.27	3067946	103.29	30	120	
In	115	1	He	2033835	6.38	1978772	102.78	30	120	
Tb	159	1	He	5123038	3.43	5013529	102.18	30	120	
Ho	165	1	He	5197677	3.30	5115781	101.60	30	120	
Bi	209	1	He	3746504	2.63	3723643	100.61	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	038_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:52:18-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.594	1.933	184292	0.89	50	97.2	89.5	110.5	
B	11	45	2	NoGas	56.720	3.125	152835	2.61	50	113.4	89.5	110.5	CCV Failed
Na	23	45	1	He	24672.970	1.465	44419763	10.12	25000	98.7	89.5	110.5	
Mg	24	45	1	He	24789.763	2.373	25306139	9.46	25000	99.2	89.5	110.5	
Al	27	45	1	He	249.055	1.536	145961	10.84	250	99.6	89.5	110.5	
K	39	45	1	He	24963.715	1.612	25708065	11.19	25000	99.9	89.5	110.5	
Ca	44	45	1	He	25050.768	2.110	1397742	9.58	25000	100.2	89.5	110.5	
Ti	47	45	1	He	50.060	3.379	15043	8.21	50	100.1	89.5	110.5	
V	51	45	1	He	48.861	3.815	369331	8.85	50	97.7	89.5	110.5	
Cr	52	45	1	He	49.267	3.172	443156	8.37	50	98.5	89.5	110.5	
Mn	55	115	1	He	254.924	3.122	1833652	8.79	250	102.0	89.5	110.5	
Fe	56	103	1	He	12358.188	2.040	106211482	7.76	12500	98.9	89.5	110.5	
Co	59	103	1	He	49.853	1.735	619663	7.65	50	99.7	89.5	110.5	
Ni	60	103	1	He	50.138	1.665	152692	7.55	50	100.3	89.5	110.5	
Cu	63	103	1	He	50.008	1.750	401338	7.16	50	100.0	89.5	110.5	
Zn	66	103	1	He	49.775	1.151	82201	6.91	50	99.5	89.5	110.5	
As	75	103	1	He	50.031	2.548	55068	8.32	50	100.1	89.5	110.5	
Se	78	103	1	He	50.361	3.232	5995	9.14	50	100.7	89.5	110.5	
Sr	88	103	1	He	48.975	1.894	444996	7.67	50	98.0	89.5	110.5	
Mo	95	103	1	He	50.857	0.932	210935	6.78	50	101.7	89.5	110.5	
Ag	107	103	1	He	50.080	0.774	668289	5.78	50	100.2	89.5	110.5	
Cd	111	103	1	He	50.084	1.536	119263	4.83	50	100.2	89.5	110.5	
Sn	118	115	1	He	48.913	1.812	290719	7.17	50	97.8	89.5	110.5	
Sb	123	115	1	He	50.075	1.223	277572	6.18	50	100.2	89.5	110.5	
Ba	137	115	1	He	49.299	1.488	133953	6.13	50	98.6	89.5	110.5	
W	182	209	1	He	47.436	0.914	725998	3.04	50	94.9	89.5	110.5	
Tl	205	209	1	He	51.031	1.916	1882520	3.15	50	102.1	89.5	110.5	
Pb	208	209	1	He	48.479	1.050	2318603	2.35	50	97.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1737189	1.24	1729956	100.42	30	120	
Sc	45	1	He	1101412	11.65	1045873	105.31	30	120	
Sc	45	2	NoGas	8155390	0.57	8041241	101.42	30	120	
Rh	103	1	He	2943475	5.87	3067946	95.94	30	120	
In	115	1	He	1930964	6.41	1978772	97.58	30	120	
Tb	159	1	He	4993017	3.95	5013529	99.59	30	120	
Ho	165	1	He	5104367	3.59	5115781	99.78	30	120	
Bi	209	1	He	3557093	2.33	3723643	95.53	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	039_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:56:04-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.039	84.6	448	25.4	1	
B	11	45	2	NoGas	0.661	40.4	8747	7.4	20	
Na	23	45	1	He	4.327	10.9	29465	2.1	400	
Mg	24	45	1	He	1.332	18.7	2752	5.9	1000	
Al	27	45	1	He	0.380	14.3	859	2.4	50	
K	39	45	1	He	7.703	9.8	47601	3.9	1000	
Ca	44	45	1	He	-0.050	-1177.2	561	7.8	1000	
Ti	47	45	1	He	0.059	108.9	26	71.8	20	
V	51	45	1	He	0.124	84.8	663	108.5	2	
Cr	52	45	1	He	0.025	14.5	2515	3.7	2	
Mn	55	115	1	He	0.005	26.4	876	2.9	2	
Fe	56	103	1	He	16.696	15.7	166566	13.4	50	
Co	59	103	1	He	0.004	46.6	122	20.8	1	
Ni	60	103	1	He	-0.128	-2.7	482	0.8	2	
Cu	63	103	1	He	-0.237	-4.2	1873	5.9	2	
Zn	66	103	1	He	-0.240	-26.1	1061	9.6	20	
As	75	103	1	He	0.039	30.8	190	6.2	2	
Se	78	103	1	He	0.040	241.2	75	14.9	2	
Sr	88	103	1	He	0.000	-1542.2	147	15.9	10	
Mo	95	103	1	He	0.644	12.7	3147	10.5	2	
Ag	107	103	1	He	0.006	35.3	177	16.8	0.2	
Cd	111	103	1	He	0.031	71.5	1811	1.7	0.2	
Sn	118	115	1	He	0.290	7.1	2911	2.3	10	
Sb	123	115	1	He	0.332	17.3	2879	10.0	1	
Ba	137	115	1	He	0.010	99.5	80	33.1	5	
W	182	209	1	He	0.720	15.3	16880	9.7	10	
Tl	205	209	1	He	0.023	16.8	993	14.2	0.5	
Pb	208	209	1	He	0.039	14.3	3754	6.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1696496	1.87	1729956	98.07	30	120	
Sc	45	1	He	1037756	2.85	1045873	99.22	30	120	
Sc	45	2	NoGas	7811222	1.22	8041241	97.14	30	120	
Rh	103	1	He	3126729	1.55	3067946	101.92	30	120	
In	115	1	He	1991055	1.94	1978772	100.62	30	120	
Tb	159	1	He	5145001	2.68	5013529	102.62	30	120	
Ho	165	1	He	5194482	2.14	5115781	101.54	30	120	
Bi	209	1	He	3693918	0.70	3723643	99.20	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	040CRIA.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:59:55-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.853	0.853	4.692	3467	4.85	1	85.3	69.5	130.5	
B	11	2	NoGas	21.081	21.081	3.297	59284	2.69	20	105.4	69.5	130.5	
Na	23	1	He	1064.679	1064.679	0.955	1789719	1.24	1000	106.5	69.5	130.5	
Mg	24	1	He	1058.311	1058.311	1.415	998985	1.72	1000	105.8	69.5	130.5	
Al	27	1	He	51.959	51.959	1.652	28595	1.91	50	103.9	69.5	130.5	
K	39	1	He	1059.820	1059.820	1.006	1044172	1.29	1000	106.0	69.5	130.5	
Ca	44	1	He	1040.308	1040.308	1.958	54122	2.19	1000	104.0	69.5	130.5	
Ti	47	1	He	10.910	10.910	3.019	3037	3.32	10	109.1	69.5	130.5	
V	51	1	He	5.317	5.317	0.763	36955	0.59	5	106.3	69.5	130.5	
Cr	52	1	He	2.184	2.184	2.048	20306	2.14	2	109.2	69.5	130.5	
Mn	55	1	He	4.773	4.773	1.456	35429	2.03	5	95.5	69.5	130.5	
Fe	56	1	He	99.272	99.272	1.998	880255	1.37	100	99.3	69.5	130.5	
Co	59	1	He	1.003	1.003	2.340	12728	1.95	1	100.3	69.5	130.5	
Ni	60	1	He	1.910	1.910	2.679	6729	1.79	2	95.5	69.5	130.5	
Cu	63	1	He	1.833	1.833	3.713	18515	2.44	2	91.7	69.5	130.5	
Zn	66	1	He	20.489	20.489	2.218	35210	1.86	20	102.4	69.5	130.5	
As	75	1	He	4.915	4.915	1.570	5619	0.99	5	98.3	69.5	130.5	
Se	78	1	He	5.050	5.050	2.904	671	2.27	5	101.0	69.5	130.5	
Sr	88	1	He	9.530	9.530	2.434	88064	1.94	10	95.3	69.5	130.5	
Mo	95	1	He	10.194	10.194	2.430	43201	1.84	10	101.9	69.5	130.5	
Ag	107	1	He	1.042	1.042	1.268	14220	1.15	1	104.2	69.5	130.5	
Cd	111	1	He	1.034	1.034	4.801	4128	2.55	1	103.4	69.5	130.5	
Sn	118	1	He	9.812	9.812	1.075	59743	1.98	10	98.1	69.5	130.5	
Sb	123	1	He	1.951	1.951	2.439	11848	1.44	2	97.6	69.5	130.5	
Ba	137	1	He	4.860	4.860	1.520	13377	0.48	5	97.2	69.5	130.5	
W	182	1	He	9.347	9.347	0.878	152803	0.76	10	93.5	69.5	130.5	
Tl	205	1	He	1.851	1.851	1.452	70930	1.46	2	92.5	69.5	130.5	
Pb	208	1	He	1.042	1.042	1.687	53448	1.64	1	104.2	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1700386	1.76	1729956	98.29	30	120	
Sc	45	1	He	1015331	0.32	1045873	97.08	30	120	
Sc	45	2	NoGas	7864041	0.37	8041241	97.80	30	120	
Rh	103	1	He	2991999	0.61	3067946	97.52	30	120	
In	115	1	He	1948906	1.05	1978772	98.49	30	120	
Tb	159	1	He	4931169	0.98	5013529	98.36	30	120	
Ho	165	1	He	5090132	1.69	5115781	99.50	30	120	
Bi	209	1	He	3689565	0.09	3723643	99.08	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-178129/1-a
Data File Name	041_Blk.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:03:47-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.015	132.9	333	23.3	1	
B	11	45	2	NoGas	2.165	7.5	11452	3.1	20	
Na	23	45	1	He	91.722	0.6	183379	6.9	400	
Mg	24	45	1	He	49.628	2.8	50782	5.4	1000	
Al	27	45	1	He	3.647	4.1	2736	4.3	50	
K	39	45	1	He	34.970	8.2	76348	8.1	1000	
Ca	44	45	1	He	158.896	3.0	9195	4.5	1000	
Ti	47	45	1	He	0.176	30.4	61	31.5	20	
V	51	45	1	He	0.200	36.7	1254	44.0	2	
Cr	52	45	1	He	0.729	1.9	8724	6.0	2	
Mn	55	115	1	He	0.624	9.0	5315	10.8	2	
Fe	56	103	1	He	15.405	5.3	151157	7.9	50	
Co	59	103	1	He	0.005	9.0	140	6.3	1	
Ni	60	103	1	He	-0.041	-50.7	741	10.5	2	
Cu	63	103	1	He	0.662	12.9	9241	10.6	2	
Zn	66	103	1	He	4.412	4.9	8860	7.4	20	
As	75	103	1	He	0.149	20.6	310	12.1	2	
Se	78	103	1	He	0.083	106.1	79	15.5	2	
Sr	88	103	1	He	0.316	3.5	3118	6.1	10	
Mo	95	103	1	He	0.181	19.1	1087	16.7	2	
Ag	107	103	1	He	0.011	25.8	234	19.3	0.2	
Cd	111	103	1	He	0.024	63.5	1750	5.5	0.2	
Sn	118	115	1	He	1.029	1.1	7213	4.3	10	
Sb	123	115	1	He	0.372	7.7	3019	5.8	1	
Ba	137	115	1	He	0.776	7.3	2166	9.4	5	
W	182	209	1	He	0.203	5.9	9314	6.0	10	
Tl	205	209	1	He	0.007	13.7	416	13.3	0.5	
Pb	208	209	1	He	0.132	1.7	8902	2.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1562962	3.06	1729956	90.35	30	120	
Sc	45	1	He	1070399	7.19	1045873	102.34	30	120	
Sc	45	2	NoGas	7191691	0.55	8041241	89.44	30	120	
Rh	103	1	He	3047639	3.36	3067946	99.34	30	120	
In	115	1	He	1935039	3.42	1978772	97.79	30	120	
Tb	159	1	He	5007940	3.75	5013529	99.89	30	120	
Ho	165	1	He	5118986	3.27	5115781	100.06	30	120	
Bi	209	1	He	3933651	3.87	3723643	105.64	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-178129/3-a
Data File Name	042_LCS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:07:38-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1066.790	1066.790	2.732	3275233	1.95	1000	106.7	79.5	120.5	
B	11	2	NoGas	134.671	134.671	1.938	280493	1.85	100	134.7	79.5	120.5	LCS Failed
Na	23	1	He	9671.940	9671.940	0.857	13505662	2.50	10000	96.7	79.5	120.5	
Mg	24	1	He	9790.590	9790.590	1.757	7748462	0.90	10000	97.9	79.5	120.5	
Al	27	1	He	9189.989	9189.989	0.815	4152481	1.86	10000	91.9	79.5	120.5	
K	39	1	He	9517.625	9517.625	0.886	7611160	2.57	10000	95.2	79.5	120.5	
Ca	44	1	He	8736.220	8736.220	0.977	378195	2.00	10000	87.4	79.5	120.5	
Ti	47	1	He	95.119	95.119	1.692	22171	1.15	100	95.1	79.5	120.5	
V	51	1	He	953.775	953.775	0.404	5596956	2.37	1000	95.4	79.5	120.5	
Cr	52	1	He	961.017	961.017	0.235	6672723	2.22	1000	96.1	79.5	120.5	
Mn	55	1	He	897.564	897.564	0.780	5405282	1.62	1000	89.8	79.5	120.5	
Fe	56	1	He	8915.503	8915.503	1.495	65462755	1.66	10000	89.2	79.5	120.5	
Co	59	1	He	915.620	915.620	1.933	9721415	1.59	1000	91.6	79.5	120.5	
Ni	60	1	He	951.977	951.977	2.079	2463720	1.26	1000	95.2	79.5	120.5	
Cu	63	1	He	951.985	951.985	0.371	6472329	0.63	1000	95.2	79.5	120.5	
Zn	66	1	He	910.326	910.326	1.369	1264206	1.71	1000	91.0	79.5	120.5	
As	75	1	He	884.841	884.841	1.237	829907	1.43	1000	88.5	79.5	120.5	
Se	78	1	He	923.761	923.761	1.098	92906	1.36	1000	92.4	79.5	120.5	
Sr	88	1	He	920.810	920.810	0.945	7145910	1.56	1000	92.1	79.5	120.5	
Mo	95	1	He	96.318	96.318	0.877	341162	0.62	100	96.3	79.5	120.5	
Ag	107	1	He	97.517	97.517	0.965	1112463	1.09	100	97.5	79.5	120.5	
Cd	111	1	He	1032.330	1032.330	0.858	2075183	1.71	1000	103.2	79.5	120.5	
Sn	118	1	He	1030.893	1030.893	2.204	5116418	3.03	1000	103.1	79.5	120.5	
Sb	123	1	He	96.578	96.578	0.626	448026	1.19	100	96.6	79.5	120.5	
Ba	137	1	He	1032.263	1032.263	1.053	2350461	1.15	1000	103.2	79.5	120.5	
W	182	1	He	86.614	86.614	0.153	1245593	0.64	100	86.6	79.5	120.5	
Tl	205	1	He	224.698	224.698	0.337	7814849	0.78	250	89.9	79.5	120.5	
Pb	208	1	He	950.427	950.427	0.563	42830545	1.09	1000	95.0	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1408641	1.25	1729956	81.43	30	120	
Sc	45	1	He	852626	2.43	1045873	81.52	30	120	
Sc	45	2	NoGas	6486606	1.58	8041241	80.67	30	120	
Rh	103	1	He	2516387	0.96	3067946	82.02	30	120	
In	115	1	He	1618461	0.91	1978772	81.79	30	120	
Tb	159	1	He	4456463	1.39	5013529	88.89	30	120	
Ho	165	1	He	4597371	1.20	5115781	89.87	30	120	
Bi	209	1	He	3353837	0.53	3723643	90.07	30	120	

Sample Report

Sample Table

Sample Name	240-49777-a-1-a
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:11:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.291	0.291	15.56	1108	0.03	10000	
B	11	45	2	NoGas	51.606	51.606	0.76	106957	0.05	300	
Na	23	45	1	He	59897.084	59897.084	1.51	79646947	0.08	500000	
Mg	24	45	1	He	9015.339	9015.339	1.61	6803594	0.13	500000	
Al	27	45	1	He	160.503	160.503	3.44	69629	0.23	200000	
K	39	45	1	He	6846.681	6846.681	1.18	5229080	0.13	500000	
Ca	44	45	1	He	49255.399	49255.399	1.32	2030982	2.43	500000	
Ti	47	45	1	He	2.098	2.098	47.69	471	0.45	2500	
V	51	45	1	He	0.537	0.537	33.23	2856	0.02	10000	
Cr	52	45	1	He	3.010	3.010	2.02	21724	0.01	10000	
Mn	55	115	1	He	140.213	140.213	1.02	750181	0.02	10000	
Fe	56	103	1	He	388.504	388.504	1.73	2712600	0.01	200000	
Co	59	103	1	He	0.228	0.228	4.24	2350	0.01	10000	
Ni	60	103	1	He	0.980	0.980	8.36	3081	0.03	10000	
Cu	63	103	1	He	3.822	3.822	5.70	27555	0.01	10000	
Zn	66	103	1	He	10.233	10.233	3.04	14573	0.07	10000	
As	75	103	1	He	1.673	1.673	3.76	1596	0.10	10000	
Se	78	103	1	He	1.038	1.038	14.70	153	0.68	10000	
Sr	88	103	1	He	182.721	182.721	1.80	1343211	0.01	10000	
Mo	95	103	1	He	8.465	8.465	1.58	28622	0.03	2000	
Ag	107	103	1	He	1.396	1.396	1.24	15146	0.01	300	
Cd	111	103	1	He	0.080	0.080	28.91	1475	0.01	4000	
Sn	118	115	1	He	2.718	2.718	12.33	12805	0.02	2000	
Sb	123	115	1	He	0.659	0.659	3.31	3423	0.02	300	
Ba	137	115	1	He	43.712	43.712	1.05	88411	0.05	10000	
W	182	209	1	He	1.044	1.044	16.60	19057	0.01	2500	
Tl	205	209	1	He	0.144	0.144	30.05	4874	0.00	5000	
Pb	208	209	1	He	0.530	0.530	6.35	24335	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1358948	0.98	1729956	78.55	30	120	
Sc	45	1	He	812945	1.66	1045873	77.73	30	120	
Sc	45	2	NoGas	6242227	0.77	8041241	77.63	30	120	
Rh	103	1	He	2383630	0.25	3067946	77.69	30	120	
In	115	1	He	1436938	0.74	1978772	72.62	30	120	
Tb	159	1	He	4338536	0.80	5013529	86.54	30	120	
Ho	165	1	He	4493212	1.14	5115781	87.83	30	120	
Bi	209	1	He	3198130	0.63	3723643	85.89	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	044_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:15:01-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.273	4.475	185783	1.90	50	96.5	89.5	110.5	
B	11	45	2	NoGas	55.552	1.839	151656	0.34	50	111.1	89.5	110.5	CCV Failed
Na	23	45	1	He	25036.663	1.491	41050375	0.33	25000	100.1	89.5	110.5	
Mg	24	45	1	He	25054.928	2.364	23305291	1.62	25000	100.2	89.5	110.5	
Al	27	45	1	He	250.686	1.934	133733	1.00	250	100.3	89.5	110.5	
K	39	45	1	He	25366.360	3.406	23771995	2.74	25000	101.5	89.5	110.5	
Ca	44	45	1	He	24615.826	2.943	1251465	2.86	25000	98.5	89.5	110.5	
Ti	47	45	1	He	50.701	3.447	13893	2.30	50	101.4	89.5	110.5	
V	51	45	1	He	49.488	1.528	341086	0.81	50	99.0	89.5	110.5	
Cr	52	45	1	He	50.096	1.745	410883	0.94	50	100.2	89.5	110.5	
Mn	55	115	1	He	246.316	2.141	1682805	0.50	250	98.5	89.5	110.5	
Fe	56	103	1	He	12105.467	0.466	98942647	1.73	12500	96.8	89.5	110.5	
Co	59	103	1	He	48.855	1.521	577443	1.00	50	97.7	89.5	110.5	
Ni	60	103	1	He	49.289	1.110	142762	1.30	50	98.6	89.5	110.5	
Cu	63	103	1	He	49.625	1.405	378844	1.54	50	99.2	89.5	110.5	
Zn	66	103	1	He	49.677	1.313	78037	0.93	50	99.4	89.5	110.5	
As	75	103	1	He	49.141	0.706	51429	1.49	50	98.3	89.5	110.5	
Se	78	103	1	He	49.059	2.095	5551	0.33	50	98.1	89.5	110.5	
Sr	88	103	1	He	48.318	1.408	417476	0.85	50	96.6	89.5	110.5	
Mo	95	103	1	He	50.268	1.331	198386	3.12	50	100.5	89.5	110.5	
Ag	107	103	1	He	50.397	1.187	639976	1.01	50	100.8	89.5	110.5	
Cd	111	103	1	He	50.297	1.767	114002	0.46	50	100.6	89.5	110.5	
Sn	118	115	1	He	48.681	2.637	274961	0.28	50	97.4	89.5	110.5	
Sb	123	115	1	He	49.548	1.186	261170	1.46	50	99.1	89.5	110.5	
Ba	137	115	1	He	49.347	2.374	127478	0.44	50	98.7	89.5	110.5	
W	182	209	1	He	47.628	0.403	712401	1.03	50	95.3	89.5	110.5	
Tl	205	209	1	He	51.505	1.768	1856917	1.13	50	103.0	89.5	110.5	
Pb	208	209	1	He	48.354	1.164	2260421	0.32	50	96.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1763914	2.51	1729956	101.96	30	120	
Sc	45	1	He	1002074	1.16	1045873	95.81	30	120	
Sc	45	2	NoGas	8255278	1.83	8041241	102.66	30	120	
Rh	103	1	He	2801399	2.19	3067946	91.31	30	120	
In	115	1	He	1836223	2.64	1978772	92.80	30	120	
Tb	159	1	He	4876060	1.27	5013529	97.26	30	120	
Ho	165	1	He	4946617	1.27	5115781	96.69	30	120	
Bi	209	1	He	3476868	0.86	3723643	93.37	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	045_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:18:50-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.082	43.7	656	19.5	1	
B	11	45	2	NoGas	0.899	22.1	10025	4.1	20	
Na	23	45	1	He	7.515	26.3	38457	11.0	400	
Mg	24	45	1	He	0.898	56.2	2582	22.1	1000	
Al	27	45	1	He	0.400	22.6	959	6.1	50	
K	39	45	1	He	6.621	10.6	51270	3.0	1000	
Ca	44	45	1	He	-1.263	-62.2	547	7.1	1000	
Ti	47	45	1	He	0.058	58.0	28	38.6	20	
V	51	45	1	He	0.026	244.3	-19	-2697.6	2	
Cr	52	45	1	He	0.029	51.3	2814	6.2	2	
Mn	55	115	1	He	0.002	920.8	906	19.3	2	
Fe	56	103	1	He	15.924	18.7	168621	19.4	50	
Co	59	103	1	He	0.007	35.4	176	21.0	1	
Ni	60	103	1	He	-0.149	-4.9	437	3.3	2	
Cu	63	103	1	He	-0.182	-5.0	2465	5.6	2	
Zn	66	103	1	He	-0.191	-35.3	1208	11.8	20	
As	75	103	1	He	0.087	28.3	259	11.7	2	
Se	78	103	1	He	0.084	40.2	85	7.6	2	
Sr	88	103	1	He	0.006	77.1	214	22.7	10	
Mo	95	103	1	He	0.622	15.0	3223	15.7	2	
Ag	107	103	1	He	0.009	28.3	220	18.6	0.2	
Cd	111	103	1	He	0.026	103.4	1896	6.0	0.2	
Sn	118	115	1	He	0.269	13.3	2934	6.7	10	
Sb	123	115	1	He	0.420	18.4	3573	15.2	1	
Ba	137	115	1	He	0.008	92.4	80	30.0	5	
W	182	209	1	He	0.771	14.2	18226	11.3	10	
Tl	205	209	1	He	0.029	13.6	1266	13.6	0.5	
Pb	208	209	1	He	0.075	4.6	5695	4.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1830074	3.13	1729956	105.79	30	120	
Sc	45	1	He	1142948	1.58	1045873	109.28	30	120	
Sc	45	2	NoGas	8395724	1.10	8041241	104.41	30	120	
Rh	103	1	He	3293187	2.44	3067946	107.34	30	120	
In	115	1	He	2100904	2.61	1978772	106.17	30	120	
Tb	159	1	He	5238660	1.90	5013529	104.49	30	120	
Ho	165	1	He	5328692	1.78	5115781	104.16	30	120	
Bi	209	1	He	3799397	1.74	3723643	102.03	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177246/1-a@2
Data File Name	046_Blk.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:22:39-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.099	53.6	667	26.8	1	
B	11	45	2	NoGas	1.754	7.5	11701	4.7	20	
Na	23	45	1	He	33.883	4.2	77385	3.8	400	
Mg	24	45	1	He	33.665	2.4	32934	0.6	1000	
Al	27	45	1	He	5.857	2.6	3760	1.1	50	
K	39	45	1	He	23.339	5.9	60970	3.2	1000	
Ca	44	45	1	He	112.262	1.9	6289	3.3	1000	
Ti	47	45	1	He	0.183	29.7	59	23.6	20	
V	51	45	1	He	0.290	13.4	1805	13.5	2	
Cr	52	45	1	He	1.004	5.0	10479	2.0	2	
Mn	55	115	1	He	0.422	0.7	3727	1.2	2	
Fe	56	103	1	He	20.744	5.3	192194	6.0	50	
Co	59	103	1	He	0.017	17.2	284	11.9	1	
Ni	60	103	1	He	0.032	122.3	939	11.4	2	
Cu	63	103	1	He	0.697	0.4	9205	1.3	2	
Zn	66	103	1	He	9.044	1.4	16104	2.4	20	
As	75	103	1	He	0.210	15.6	367	8.6	2	
Se	78	103	1	He	0.136	35.4	83	6.0	2	
Sr	88	103	1	He	0.269	2.4	2590	2.6	10	
Mo	95	103	1	He	0.294	0.9	1520	2.0	2	
Ag	107	103	1	He	0.016	11.1	299	8.5	0.2	
Cd	111	103	1	He	0.022	76.8	1689	1.3	0.2	
Sn	118	115	1	He	17.794	3.7	103129	3.0	10	Blank Failed
Sb	123	115	1	He	0.364	8.0	2876	4.8	1	
Ba	137	115	1	He	1.112	1.4	2978	2.0	5	
W	182	209	1	He	0.348	7.6	11034	2.9	10	
Tl	205	209	1	He	0.020	16.3	883	14.1	0.5	
Pb	208	209	1	He	0.194	3.8	11477	3.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1694066	2.30	1729956	97.93	30	120	
Sc	45	1	He	1008352	2.18	1045873	96.41	30	120	
Sc	45	2	NoGas	7993476	2.09	8041241	99.41	30	120	
Rh	103	1	He	2950190	1.30	3067946	96.16	30	120	
In	115	1	He	1871177	0.65	1978772	94.56	30	120	
Tb	159	1	He	4909370	1.34	5013529	97.92	30	120	
Ho	165	1	He	4961311	1.25	5115781	96.98	30	120	
Bi	209	1	He	3698415	0.86	3723643	99.32	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177246/2-a@2
Data File Name	047LCSS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:26:29-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	555.702	555.702	0.708	1869965	0.97	500	111.1	78.6	110.5	LCSS Failed
B	11	2	NoGas	71.942	71.942	1.177	168113	0.78	50	143.9	79.5	120.5	LCSS Failed
Na	23	1	He	5266.596	5266.596	2.589	8079768	4.78	5000	105.3	79.5	120.5	
Mg	24	1	He	5289.300	5289.300	1.581	4597183	5.30	5000	105.8	79.5	120.5	
Al	27	1	He	5007.110	5007.110	2.514	2482854	4.00	5000	100.1	79.5	120.5	
K	39	1	He	5089.586	5089.586	0.176	4487615	6.68	5000	101.8	79.5	120.5	
Ca	44	1	He	4797.054	4797.054	1.097	228374	6.86	5000	95.9	79.5	120.5	
Ti	47	1	He	52.003	52.003	1.167	13318	6.16	50	104.0	79.5	120.5	
V	51	1	He	507.990	507.990	1.882	3271606	4.68	500	101.6	71.5	110.5	
Cr	52	1	He	516.736	516.736	2.302	3939147	5.08	500	103.3	69.5	110.5	
Mn	55	1	He	492.841	492.841	1.268	3219530	4.52	500	98.6	79.5	120.5	
Fe	56	1	He	4886.951	4886.951	2.278	38872626	5.11	5000	97.7	79.5	120.5	
Co	59	1	He	492.206	492.206	1.072	5659939	4.16	500	98.4	73.9	110.5	
Ni	60	1	He	493.450	493.450	5.749	1384885	8.90	500	98.7	74.9	110.5	
Cu	63	1	He	511.948	511.948	2.229	3771937	5.31	500	102.4	72.6	110.5	
Zn	66	1	He	455.177	455.177	2.235	685368	5.29	500	91.0	71.5	113.4	
As	75	1	He	432.141	432.141	2.181	439110	5.26	500	86.4	73.4	110.5	
Se	78	1	He	423.626	423.626	2.501	46187	5.57	500	84.7	64.6	110.5	
Sr	88	1	He	491.966	491.966	0.516	4134026	3.44	500	98.4	79.5	120.5	
Mo	95	1	He	52.453	52.453	0.135	201297	3.06	50	104.9	29.5	140.5	
Ag	107	1	He	51.454	51.454	0.930	635647	3.58	50	102.9	59.5	114.5	
Cd	111	1	He	474.186	474.186	1.097	1033062	4.14	500	94.8	73.5	110.5	
Sn	118	1	He	575.563	575.563	0.686	3098263	4.03	500	115.1	79.5	120.5	
Sb	123	1	He	50.041	50.041	0.431	252144	3.21	50	100.1	67.5	113.4	
Ba	137	1	He	489.039	489.039	0.980	1207692	3.83	500	97.8	69.5	110.5	
W	182	1	He	48.394	48.394	0.865	716707	2.73	50	96.8	74.6	125.4	
Tl	205	1	He	123.165	123.165	1.496	4397724	3.34	125	98.5	70.6	110.5	
Pb	208	1	He	511.728	511.728	0.334	23672485	2.26	500	102.3	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1543557	0.71	1729956	89.23	30	120	
Sc	45	1	He	936504	6.54	1045873	89.54	30	120	
Sc	45	2	NoGas	7145747	0.54	8041241	88.86	30	120	
Rh	103	1	He	2724582	3.09	3067946	88.81	30	120	
In	115	1	He	1755082	3.34	1978772	88.70	30	120	
Tb	159	1	He	4726152	1.79	5013529	94.27	30	120	
Ho	165	1	He	4772234	2.54	5115781	93.28	30	120	
Bi	209	1	He	3442606	1.94	3723643	92.45	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-d@20
Data File Name	048SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:30:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.594	0.594	4.53	2634	0.02	10000	
B	11	45	2	NoGas	1.901	1.901	18.15	12757	0.01	300	
Na	23	45	1	He	29.656	29.656	4.73	75872	0.04	500000	
Mg	24	45	1	He	1081.978	1081.978	1.97	1092637	0.10	500000	
Al	27	45	1	He	7059.295	7059.295	1.24	4065781	0.17	200000	
K	39	45	1	He	342.053	342.053	1.69	388977	0.09	500000	
Ca	44	45	1	He	214.667	214.667	4.80	12405	1.73	500000	
Ti	47	45	1	He	63.477	63.477	1.39	18869	0.34	2500	
V	51	45	1	He	15.080	15.080	0.95	112557	0.01	10000	
Cr	52	45	1	He	9.379	9.379	1.58	85353	0.01	10000	
Mn	55	115	1	He	1687.721	1687.721	0.79	12379468	0.01	10000	
Fe	56	103	1	He	11907.159	11907.159	1.01	107772311	0.01	200000	
Co	59	103	1	He	7.922	7.922	1.98	103769	0.01	10000	
Ni	60	103	1	He	10.167	10.167	0.72	33311	0.03	10000	
Cu	63	103	1	He	6.909	6.909	2.44	61731	0.01	10000	
Zn	66	103	1	He	34.069	34.069	1.74	59732	0.06	10000	
As	75	103	1	He	6.675	6.675	2.43	7861	0.08	10000	
Se	78	103	1	He	1.039	1.039	6.49	199	0.52	10000	
Sr	88	103	1	He	10.407	10.407	2.22	99709	0.01	10000	
Mo	95	103	1	He	1.338	1.338	3.63	6153	0.02	2000	
Ag	107	103	1	He	0.043	0.043	11.17	688	0.01	300	
Cd	111	103	1	He	0.145	0.145	9.63	2080	0.01	4000	
Sn	118	115	1	He	2.227	2.227	3.37	14588	0.02	2000	
Sb	123	115	1	He	0.134	0.134	7.89	1736	0.01	300	
Ba	137	115	1	He	57.694	57.694	0.81	160068	0.04	10000	
W	182	209	1	He	0.461	0.461	7.65	13009	0.00	2500	
Tl	205	209	1	He	0.172	0.172	13.11	6809	0.00	5000	
Pb	208	209	1	He	12.072	12.072	2.22	610664	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1785404	1.56	1729956	103.21	30	120	
Sc	45	1	He	1086683	4.20	1045873	103.90	30	120	
Sc	45	2	NoGas	8448324	0.63	8041241	105.06	30	120	
Rh	103	1	He	3101824	1.36	3067946	101.10	30	120	
In	115	1	He	1971307	1.83	1978772	99.62	30	120	
Tb	159	1	He	5093849	2.50	5013529	101.60	30	120	
Ho	165	1	He	5161066	2.04	5115781	100.89	30	120	
Bi	209	1	He	3753418	0.51	3723643	100.80	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49233-a-1-d@100
Data File Name	049SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:33:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.117	0.117	25.03	741	0.02	10000	
B	11	45	2	NoGas	0.863	0.863	22.26	9381	0.01	300	
Na	23	45	1	He	15.779	15.779	6.55	56443	0.03	500000	
Mg	24	45	1	He	221.783	221.783	2.62	248609	0.09	500000	
Al	27	45	1	He	1455.562	1455.562	2.80	925611	0.16	200000	
K	39	45	1	He	73.308	73.308	3.42	128371	0.06	500000	
Ca	44	45	1	He	49.459	49.459	4.55	3651	1.35	500000	
Ti	47	45	1	He	12.857	12.857	4.37	4232	0.30	2500	
V	51	45	1	He	3.134	3.134	4.25	25686	0.01	10000	
Cr	52	45	1	He	1.953	1.953	4.56	21702	0.01	10000	
Mn	55	115	1	He	357.366	357.366	3.02	2829073	0.01	10000	
Fe	56	103	1	He	2500.208	2500.208	4.07	24339190	0.01	200000	
Co	59	103	1	He	1.636	1.636	5.01	23102	0.01	10000	
Ni	60	103	1	He	2.042	2.042	4.13	7953	0.03	10000	
Cu	63	103	1	He	1.304	1.304	4.85	15869	0.01	10000	
Zn	66	103	1	He	9.604	9.604	5.23	19235	0.05	10000	
As	75	103	1	He	1.406	1.406	0.54	1900	0.07	10000	
Se	78	103	1	He	0.244	0.244	32.83	108	0.23	10000	
Sr	88	103	1	He	2.190	2.190	4.22	22686	0.01	10000	
Mo	95	103	1	He	0.266	0.266	13.24	1586	0.02	2000	
Ag	107	103	1	He	0.009	0.009	30.68	227	0.00	300	
Cd	111	103	1	He	0.068	0.068	33.76	2028	0.00	4000	
Sn	118	115	1	He	0.428	0.428	2.20	4008	0.01	2000	
Sb	123	115	1	He	-0.050	-0.050	-4.22	753	-0.01	300	
Ba	137	115	1	He	11.405	11.405	1.10	34161	0.03	10000	
W	182	209	1	He	0.105	0.105	2.24	7498	0.00	2500	
Tl	205	209	1	He	0.033	0.033	5.77	1420	0.00	5000	
Pb	208	209	1	He	2.472	2.472	2.15	130017	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1700042	1.76	1729956	98.27	30	120	
Sc	45	1	He	1199297	8.92	1045873	114.67	30	120	
Sc	45	2	NoGas	7927414	0.67	8041241	98.58	30	120	
Rh	103	1	He	3331608	3.58	3067946	108.59	30	120	
In	115	1	He	2125326	4.46	1978772	107.41	30	120	
Tb	159	1	He	5325481	2.08	5013529	106.22	30	120	
Ho	165	1	He	5381525	3.40	5115781	105.19	30	120	
Bi	209	1	He	3855942	2.27	3723643	103.55	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49233-a-1-d@20
Data File Name	050SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:37:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1177.066	1177.066	1.76	3891130	0.03	10000	
B	11	45	2	NoGas	131.899	131.899	1.88	307126	0.04	300	
Na	23	45	1	He	10074.000	10074.000	2.72	16291990	0.06	500000	
Mg	24	45	1	He	11226.982	11226.982	2.44	10294280	0.11	500000	
Al	27	45	1	He	16498.732	16498.732	2.06	8636415	0.19	200000	
K	39	45	1	He	10436.368	10436.368	2.77	9662270	0.11	500000	
Ca	44	45	1	He	9395.217	9395.217	3.18	471000	1.99	500000	
Ti	47	45	1	He	162.084	162.084	3.09	43757	0.37	2500	
V	51	45	1	He	1020.815	1020.815	1.59	6940634	0.01	10000	
Cr	52	45	1	He	1026.709	1026.709	2.37	8257719	0.01	10000	
Mn	55	115	1	He	2647.117	2647.117	1.38	17426579	0.02	10000	
Fe	56	103	1	He	21651.960	21651.960	0.75	174852962	0.01	200000	
Co	59	103	1	He	1009.408	1009.408	1.00	11789392	0.01	10000	
Ni	60	103	1	He	1058.641	1058.641	0.31	3013767	0.04	10000	
Cu	63	103	1	He	1036.800	1036.800	1.45	7753811	0.01	10000	
Zn	66	103	1	He	1103.442	1103.442	1.38	1685259	0.07	10000	
As	75	103	1	He	969.716	969.716	0.74	1000406	0.10	10000	
Se	78	103	1	He	979.842	979.842	0.54	108390	0.90	10000	
Sr	88	103	1	He	1019.192	1019.192	0.59	8698734	0.01	10000	
Mo	95	103	1	He	102.548	102.548	0.95	399476	0.03	2000	
Ag	107	103	1	He	37.128	37.128	0.61	465896	0.01	300	
Cd	111	103	1	He	1090.126	1090.126	1.01	2409836	0.05	4000	
Sn	118	115	1	He	1122.287	1122.287	0.98	6088331	0.02	2000	
Sb	123	115	1	He	105.869	105.869	1.06	536899	0.02	300	
Ba	137	115	1	He	1176.596	1176.596	1.18	2928976	0.04	10000	
W	182	209	1	He	92.131	92.131	1.61	1378873	0.01	2500	
Tl	205	209	1	He	247.993	247.993	0.70	8978925	0.00	5000	
Pb	208	209	1	He	1052.286	1052.286	0.55	49368736	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1516515	0.62	1729956	87.66	30	120	
Sc	45	1	He	988347	4.73	1045873	94.50	30	120	
Sc	45	2	NoGas	7247623	0.78	8041241	90.13	30	120	
Rh	103	1	He	2767719	1.42	3067946	90.21	30	120	
In	115	1	He	1769441	1.29	1978772	89.42	30	120	
Tb	159	1	He	4776695	1.13	5013529	95.28	30	120	
Ho	165	1	He	4933723	1.13	5115781	96.44	30	120	
Bi	209	1	He	3491703	1.33	3723643	93.77	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-e du@20
Data File Name	051SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:41:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.718	0.718	7.17	3034	0.02	10000	
B	11	45	2	NoGas	2.609	2.609	9.64	14365	0.02	300	
Na	23	45	1	He	33.642	33.642	4.01	75239	0.04	500000	
Mg	24	45	1	He	1248.170	1248.170	0.36	1143552	0.11	500000	
Al	27	45	1	He	8266.259	8266.259	0.51	4318384	0.19	200000	
K	39	45	1	He	395.515	395.515	2.12	402184	0.10	500000	
Ca	44	45	1	He	225.945	225.945	1.75	11829	1.91	500000	
Ti	47	45	1	He	61.716	61.716	0.31	16638	0.37	2500	
V	51	45	1	He	17.196	17.196	0.91	116459	0.01	10000	
Cr	52	45	1	He	10.773	10.773	0.84	88646	0.01	10000	
Mn	55	115	1	He	1870.857	1870.857	1.54	12996233	0.01	10000	
Fe	56	103	1	He	12972.434	12972.434	1.79	110134285	0.01	200000	
Co	59	103	1	He	9.736	9.736	0.62	119624	0.01	10000	
Ni	60	103	1	He	11.555	11.555	2.08	35403	0.03	10000	
Cu	63	103	1	He	7.940	7.940	2.42	65986	0.01	10000	
Zn	66	103	1	He	38.492	38.492	1.44	63129	0.06	10000	
As	75	103	1	He	7.194	7.194	0.89	7937	0.09	10000	
Se	78	103	1	He	1.551	1.551	4.00	246	0.63	10000	
Sr	88	103	1	He	10.988	10.988	0.83	98759	0.01	10000	
Mo	95	103	1	He	2.714	2.714	9.04	11391	0.02	2000	
Ag	107	103	1	He	0.042	0.042	13.75	633	0.01	300	
Cd	111	103	1	He	0.212	0.212	4.49	2106	0.01	4000	
Sn	118	115	1	He	7.072	7.072	9.57	41485	0.02	2000	
Sb	123	115	1	He	0.222	0.222	22.65	2110	0.01	300	
Ba	137	115	1	He	64.305	64.305	2.52	168939	0.04	10000	
W	182	209	1	He	1.614	1.614	17.69	30478	0.01	2500	
Tl	205	209	1	He	0.279	0.279	13.43	10613	0.00	5000	
Pb	208	209	1	He	12.826	12.826	1.25	628294	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1739353	2.66	1729956	100.54	30	120	
Sc	45	1	He	985690	1.25	1045873	94.25	30	120	
Sc	45	2	NoGas	8291860	0.60	8041241	103.12	30	120	
Rh	103	1	He	2910599	2.69	3067946	94.87	30	120	
In	115	1	He	1867700	3.08	1978772	94.39	30	120	
Tb	159	1	He	4929601	1.17	5013529	98.33	30	120	
Ho	165	1	He	5011185	1.61	5115781	97.96	30	120	
Bi	209	1	He	3635987	1.34	3723643	97.65	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-f ms@20
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:45:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.635	5.635	4.85	23697	0.02	10000	
B	11	45	2	NoGas	6.724	6.724	4.74	27554	0.02	300	
Na	23	45	1	He	517.034	517.034	1.01	974579	0.05	500000	
Mg	24	45	1	He	1696.385	1696.385	1.31	1771697	0.10	500000	
Al	27	45	1	He	8334.873	8334.873	0.58	4965683	0.17	200000	
K	39	45	1	He	863.877	863.877	1.08	950336	0.09	500000	
Ca	44	45	1	He	694.655	694.655	1.16	40211	1.73	500000	
Ti	47	45	1	He	59.988	59.988	0.24	18443	0.33	2500	
V	51	45	1	He	20.619	20.619	1.68	159290	0.01	10000	
Cr	52	45	1	He	14.847	14.847	1.03	138371	0.01	10000	
Mn	55	115	1	He	1358.733	1358.733	0.19	10435999	0.01	10000	
Fe	56	103	1	He	12268.899	12268.899	1.43	113460213	0.01	200000	
Co	59	103	1	He	12.314	12.314	1.08	164755	0.01	10000	
Ni	60	103	1	He	16.257	16.257	0.81	53890	0.03	10000	
Cu	63	103	1	He	12.195	12.195	2.42	108294	0.01	10000	
Zn	66	103	1	He	44.132	44.132	1.16	78619	0.06	10000	
As	75	103	1	He	11.318	11.318	0.58	13516	0.08	10000	
Se	78	103	1	He	5.432	5.432	1.09	759	0.72	10000	
Sr	88	103	1	He	13.586	13.586	1.62	132946	0.01	10000	
Mo	95	103	1	He	5.833	5.833	1.53	26328	0.02	2000	
Ag	107	103	1	He	4.815	4.815	1.52	69262	0.01	300	
Cd	111	103	1	He	4.953	4.953	0.00	14292	0.03	4000	
Sn	118	115	1	He	6.841	6.841	1.10	44474	0.02	2000	
Sb	123	115	1	He	1.418	1.418	0.65	9403	0.02	300	
Ba	137	115	1	He	61.035	61.035	0.86	177307	0.03	10000	
W	182	209	1	He	3.279	3.279	0.85	58670	0.01	2500	
Tl	205	209	1	He	4.326	4.326	2.16	169833	0.00	5000	
Pb	208	209	1	He	16.245	16.245	1.63	827710	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1901796	0.64	1729956	109.93	30	120	
Sc	45	1	He	1124108	0.99	1045873	107.48	30	120	
Sc	45	2	NoGas	9107010	0.43	8041241	113.25	30	120	
Rh	103	1	He	3169800	1.29	3067946	103.32	30	120	
In	115	1	He	2064382	1.59	1978772	104.33	30	120	
Tb	159	1	He	5175647	0.99	5013529	103.23	30	120	
Ho	165	1	He	5277051	1.20	5115781	103.15	30	120	
Bi	209	1	He	3784362	1.39	3723643	101.63	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-2-b@20
Data File Name	053SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:48:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.464	0.464	6.00	2689	0.02	10000	
B	11	45	2	NoGas	3.283	3.283	2.65	20483	0.02	300	
Na	23	45	1	He	30.222	30.222	1.33	96489	0.03	500000	
Mg	24	45	1	He	1088.275	1088.275	1.39	1379222	0.08	500000	
Al	27	45	1	He	5966.937	5966.937	2.77	4310555	0.14	200000	
K	39	45	1	He	368.778	368.778	0.87	522211	0.07	500000	
Ca	44	45	1	He	756.544	756.544	1.58	53053	1.43	500000	
Ti	47	45	1	He	48.272	48.272	4.02	17990	0.27	2500	
V	51	45	1	He	12.495	12.495	2.59	116935	0.01	10000	
Cr	52	45	1	He	8.876	8.876	1.23	101537	0.01	10000	
Mn	55	115	1	He	1021.490	1021.490	2.13	8713883	0.01	10000	
Fe	56	103	1	He	11214.101	11214.101	0.79	117329893	0.01	200000	
Co	59	103	1	He	5.514	5.514	0.39	83503	0.01	10000	
Ni	60	103	1	He	10.132	10.132	1.17	38382	0.03	10000	
Cu	63	103	1	He	5.891	5.891	0.96	61471	0.01	10000	
Zn	66	103	1	He	39.249	39.249	0.79	79283	0.05	10000	
As	75	103	1	He	5.526	5.526	1.75	7547	0.07	10000	
Se	78	103	1	He	0.764	0.764	6.80	190	0.40	10000	
Sr	88	103	1	He	4.352	4.352	1.55	48276	0.01	10000	
Mo	95	103	1	He	0.910	0.910	3.48	4949	0.02	2000	
Ag	107	103	1	He	0.063	0.063	5.95	1118	0.01	300	
Cd	111	103	1	He	0.222	0.222	6.42	2624	0.01	4000	
Sn	118	115	1	He	2.436	2.436	2.49	18440	0.01	2000	
Sb	123	115	1	He	0.029	0.029	48.94	1327	0.00	300	
Ba	137	115	1	He	46.970	46.970	2.57	151519	0.03	10000	
W	182	209	1	He	0.304	0.304	20.35	11386	0.00	2500	
Tl	205	209	1	He	0.127	0.127	5.51	5501	0.00	5000	
Pb	208	209	1	He	11.695	11.695	1.37	641344	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2262163	11.08	1729956	130.76	30	120	ISTD Failed
Sc	45	1	He	1363497	2.93	1045873	130.37	30	120	ISTD Failed
Sc	45	2	NoGas	10534016	8.34	8041241	131.00	30	120	ISTD Failed
Rh	103	1	He	3585372	2.50	3067946	116.87	30	120	
In	115	1	He	2292837	2.28	1978772	115.87	30	120	
Tb	159	1	He	5588161	2.06	5013529	111.46	30	120	
Ho	165	1	He	5696051	0.83	5115781	111.34	30	120	
Bi	209	1	He	4069285	1.05	3723643	109.28	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-9-b@20
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:52:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.432	0.432	13.21	2256	0.02	10000	
B	11	45	2	NoGas	1.697	1.697	6.03	13924	0.01	300	
Na	23	45	1	He	9.533	9.533	5.29	44588	0.02	500000	
Mg	24	45	1	He	996.437	996.437	3.58	1117501	0.09	500000	
Al	27	45	1	He	6134.421	6134.421	2.89	3923159	0.16	200000	
K	39	45	1	He	270.833	270.833	3.14	351841	0.08	500000	
Ca	44	45	1	He	97.744	97.744	4.33	6637	1.47	500000	
Ti	47	45	1	He	42.751	42.751	1.34	14125	0.30	2500	
V	51	45	1	He	11.183	11.183	2.75	92669	0.01	10000	
Cr	52	45	1	He	8.302	8.302	3.21	84234	0.01	10000	
Mn	55	115	1	He	229.229	229.229	2.04	1821763	0.01	10000	
Fe	56	103	1	He	10695.345	10695.345	1.03	104462689	0.01	200000	
Co	59	103	1	He	5.797	5.797	1.19	81926	0.01	10000	
Ni	60	103	1	He	8.448	8.448	2.35	30043	0.03	10000	
Cu	63	103	1	He	5.690	5.690	1.90	55588	0.01	10000	
Zn	66	103	1	He	29.417	29.417	0.66	55871	0.05	10000	
As	75	103	1	He	4.932	4.932	0.90	6306	0.08	10000	
Se	78	103	1	He	0.432	0.432	8.53	133	0.32	10000	
Sr	88	103	1	He	1.376	1.376	5.24	14357	0.01	10000	
Mo	95	103	1	He	0.652	0.652	6.99	3406	0.02	2000	
Ag	107	103	1	He	0.024	0.024	17.98	461	0.01	300	
Cd	111	103	1	He	0.130	0.130	21.18	2204	0.01	4000	
Sn	118	115	1	He	2.045	2.045	0.40	14607	0.01	2000	
Sb	123	115	1	He	-0.029	-0.029	-50.79	882	0.00	300	
Ba	137	115	1	He	28.072	28.072	1.09	84362	0.03	10000	
W	182	209	1	He	0.099	0.099	31.73	7521	0.00	2500	
Tl	205	209	1	He	0.085	0.085	3.35	3593	0.00	5000	
Pb	208	209	1	He	8.142	8.142	0.51	430495	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2014683	2.51	1729956	116.46	30	120	
Sc	45	1	He	1208037	6.51	1045873	115.51	30	120	
Sc	45	2	NoGas	9628353	3.52	8041241	119.74	30	120	
Rh	103	1	He	3346930	2.94	3067946	109.09	30	120	
In	115	1	He	2134536	2.15	1978772	107.87	30	120	
Tb	159	1	He	5303459	1.31	5013529	105.78	30	120	
Ho	165	1	He	5431456	2.67	5115781	106.17	30	120	
Bi	209	1	He	3917608	1.37	3723643	105.21	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-10-b@20
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:56:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.545	0.545	0.75	2967	0.02	10000	
B	11	45	2	NoGas	1.835	1.835	7.49	15440	0.01	300	
Na	23	45	1	He	13.888	13.888	6.48	59341	0.02	500000	
Mg	24	45	1	He	1139.455	1139.455	2.01	1427079	0.08	500000	
Al	27	45	1	He	7028.385	7028.385	1.56	5018670	0.14	200000	
K	39	45	1	He	401.400	401.400	2.27	557149	0.07	500000	
Ca	44	45	1	He	92.614	92.614	0.51	7057	1.31	500000	
Ti	47	45	1	He	43.295	43.295	2.13	15946	0.27	2500	
V	51	45	1	He	14.805	14.805	1.16	136991	0.01	10000	
Cr	52	45	1	He	9.207	9.207	0.65	103936	0.01	10000	
Mn	55	115	1	He	799.204	799.204	0.95	6794111	0.01	10000	
Fe	56	103	1	He	13476.034	13476.034	2.20	138992052	0.01	200000	
Co	59	103	1	He	7.438	7.438	1.10	111012	0.01	10000	
Ni	60	103	1	He	9.465	9.465	2.32	35408	0.03	10000	
Cu	63	103	1	He	5.284	5.284	2.88	54823	0.01	10000	
Zn	66	103	1	He	32.891	32.891	1.84	65750	0.05	10000	
As	75	103	1	He	6.445	6.445	2.56	8655	0.07	10000	
Se	78	103	1	He	0.741	0.741	13.30	185	0.40	10000	
Sr	88	103	1	He	4.346	4.346	2.07	47544	0.01	10000	
Mo	95	103	1	He	0.732	0.732	3.89	3996	0.02	2000	
Ag	107	103	1	He	0.026	0.026	13.57	518	0.01	300	
Cd	111	103	1	He	0.163	0.163	19.21	2422	0.01	4000	
Sn	118	115	1	He	1.949	1.949	2.95	14955	0.01	2000	
Sb	123	115	1	He	-0.022	-0.022	-38.84	993	0.00	300	
Ba	137	115	1	He	41.101	41.101	1.17	132143	0.03	10000	
W	182	209	1	He	0.079	0.079	15.85	7313	0.00	2500	
Tl	205	209	1	He	0.099	0.099	2.28	4221	0.00	5000	
Pb	208	209	1	He	10.410	10.410	0.88	558555	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2169910	1.63	1729956	125.43	30	120	ISTD Failed
Sc	45	1	He	1346761	3.78	1045873	128.77	30	120	ISTD Failed
Sc	45	2	NoGas	10372313	1.02	8041241	128.99	30	120	ISTD Failed
Rh	103	1	He	3534299	3.14	3067946	115.20	30	120	
In	115	1	He	2284338	2.83	1978772	115.44	30	120	
Tb	159	1	He	5543101	1.81	5013529	110.56	30	120	
Ho	165	1	He	5626815	1.90	5115781	109.99	30	120	
Bi	209	1	He	3979892	2.22	3723643	106.88	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	056_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:00:10-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.673	4.093	186539	3.88	50	97.3	89.5	110.5	
B	11	45	2	NoGas	55.754	3.241	150388	2.78	50	111.5	89.5	110.5	CCV Failed
Na	23	45	1	He	25330.611	1.875	44198894	1.72	25000	101.3	89.5	110.5	
Mg	24	45	1	He	25267.440	1.940	25012779	1.77	25000	101.1	89.5	110.5	
Al	27	45	1	He	253.753	1.429	144085	2.76	250	101.5	89.5	110.5	
K	39	45	1	He	25664.776	1.116	25601981	2.49	25000	102.7	89.5	110.5	
Ca	44	45	1	He	25099.374	1.559	1358268	3.14	25000	100.4	89.5	110.5	
Ti	47	45	1	He	50.474	0.505	14729	4.05	50	100.9	89.5	110.5	
V	51	45	1	He	50.440	1.672	369992	1.96	50	100.9	89.5	110.5	
Cr	52	45	1	He	50.861	1.057	444000	2.59	50	101.7	89.5	110.5	
Mn	55	115	1	He	260.029	0.997	1849337	2.75	250	104.0	89.5	110.5	
Fe	56	103	1	He	12574.543	2.081	107364876	2.45	12500	100.6	89.5	110.5	
Co	59	103	1	He	49.916	1.554	616398	1.92	50	99.8	89.5	110.5	
Ni	60	103	1	He	50.265	2.798	152086	3.05	50	100.5	89.5	110.5	
Cu	63	103	1	He	50.321	2.147	401294	2.56	50	100.6	89.5	110.5	
Zn	66	103	1	He	50.088	2.802	82193	3.00	50	100.2	89.5	110.5	
As	75	103	1	He	50.425	1.988	55127	2.43	50	100.9	89.5	110.5	
Se	78	103	1	He	50.766	1.780	6000	2.35	50	101.5	89.5	110.5	
Sr	88	103	1	He	49.019	2.032	442488	2.30	50	98.0	89.5	110.5	
Mo	95	103	1	He	50.492	0.928	208111	0.38	50	101.0	89.5	110.5	
Ag	107	103	1	He	50.224	1.565	666300	1.70	50	100.4	89.5	110.5	
Cd	111	103	1	He	50.098	2.211	118650	2.53	50	100.2	89.5	110.5	
Sn	118	115	1	He	49.178	0.860	289169	2.46	50	98.4	89.5	110.5	
Sb	123	115	1	He	50.006	0.369	274319	1.98	50	100.0	89.5	110.5	
Ba	137	115	1	He	50.021	0.047	134509	1.75	50	100.0	89.5	110.5	
W	182	209	1	He	47.623	0.464	719049	0.57	50	95.2	89.5	110.5	
Tl	205	209	1	He	51.476	1.034	1873612	1.47	50	103.0	89.5	110.5	
Pb	208	209	1	He	48.720	1.197	2299280	1.95	50	97.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1755527	1.66	1729956	101.48	30	120	
Sc	45	1	He	1066777	3.61	1045873	102.00	30	120	
Sc	45	2	NoGas	8156957	0.82	8041241	101.44	30	120	
Rh	103	1	He	2926159	0.66	3067946	95.38	30	120	
In	115	1	He	1910632	1.77	1978772	96.56	30	120	
Tb	159	1	He	5008671	1.40	5013529	99.90	30	120	
Ho	165	1	He	5079069	2.42	5115781	99.28	30	120	
Bi	209	1	He	3509738	0.98	3723643	94.26	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	057_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:03:58-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.044	52.9	519	21.1	1	
B	11	45	2	NoGas	0.813	36.4	10129	8.2	20	
Na	23	45	1	He	3.775	35.2	29565	6.3	400	
Mg	24	45	1	He	0.958	35.0	2482	11.9	1000	
Al	27	45	1	He	0.575	12.2	1002	3.3	50	
K	39	45	1	He	5.965	13.2	47593	0.8	1000	
Ca	44	45	1	He	-0.212	-316.2	572	4.9	1000	
Ti	47	45	1	He	0.101	13.8	39	9.9	20	
V	51	45	1	He	0.008	1137.2	-147	-465.8	2	
Cr	52	45	1	He	0.041	31.2	2754	5.5	2	
Mn	55	115	1	He	0.007	24.0	907	1.3	2	
Fe	56	103	1	He	18.610	14.3	184709	13.1	50	
Co	59	103	1	He	0.005	16.9	140	8.2	1	
Ni	60	103	1	He	-0.141	-3.0	442	3.4	2	
Cu	63	103	1	He	-0.258	-0.6	1698	0.8	2	
Zn	66	103	1	He	-0.211	-3.8	1114	1.0	20	
As	75	103	1	He	0.049	22.6	202	6.6	2	
Se	78	103	1	He	0.015	218.8	73	5.3	2	
Sr	88	103	1	He	0.001	462.0	156	19.4	10	
Mo	95	103	1	He	0.612	14.2	3017	12.6	2	
Ag	107	103	1	He	0.005	51.9	151	22.3	0.2	
Cd	111	103	1	He	0.057	44.4	1882	3.6	0.2	
Sn	118	115	1	He	0.345	2.2	3293	1.9	10	
Sb	123	115	1	He	0.346	26.5	3004	18.5	1	
Ba	137	115	1	He	0.003	204.6	63	32.9	5	
W	182	209	1	He	0.737	12.0	17039	7.6	10	
Tl	205	209	1	He	0.025	12.5	1051	10.7	0.5	
Pb	208	209	1	He	0.058	10.5	4631	5.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1865448	2.55	1729956	107.83	30	120	
Sc	45	1	He	1076036	1.75	1045873	102.88	30	120	
Sc	45	2	NoGas	8673582	1.26	8041241	107.86	30	120	
Rh	103	1	He	3136216	0.31	3067946	102.23	30	120	
In	115	1	He	2019973	0.84	1978772	102.08	30	120	
Tb	159	1	He	5124876	0.82	5013529	102.22	30	120	
Ho	165	1	He	5192950	0.38	5115781	101.51	30	120	
Bi	209	1	He	3667538	0.53	3723643	98.49	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-11-b@20
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:07:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.460	0.460	17.67	2215	0.02	10000	
B	11	45	2	NoGas	1.460	1.460	3.55	12375	0.01	300	
Na	23	45	1	He	13.293	13.293	6.22	49211	0.03	500000	
Mg	24	45	1	He	1137.991	1137.991	2.45	1210033	0.09	500000	
Al	27	45	1	He	7383.718	7383.718	2.33	4473154	0.17	200000	
K	39	45	1	He	350.034	350.034	2.11	417760	0.08	500000	
Ca	44	45	1	He	99.081	99.081	4.82	6359	1.56	500000	
Ti	47	45	1	He	50.759	50.759	2.36	15865	0.32	2500	
V	51	45	1	He	15.238	15.238	1.94	119658	0.01	10000	
Cr	52	45	1	He	9.739	9.739	3.08	93169	0.01	10000	
Mn	55	115	1	He	678.092	678.092	2.43	5115513	0.01	10000	
Fe	56	103	1	He	13020.779	13020.779	2.26	120376564	0.01	200000	
Co	59	103	1	He	7.375	7.375	3.05	98672	0.01	10000	
Ni	60	103	1	He	10.034	10.034	3.43	33596	0.03	10000	
Cu	63	103	1	He	6.106	6.106	2.10	56176	0.01	10000	
Zn	66	103	1	He	32.777	32.777	3.01	58756	0.06	10000	
As	75	103	1	He	6.095	6.095	3.88	7343	0.08	10000	
Se	78	103	1	He	0.684	0.684	12.73	158	0.43	10000	
Sr	88	103	1	He	2.087	2.087	0.37	20548	0.01	10000	
Mo	95	103	1	He	0.878	0.878	2.89	4236	0.02	2000	
Ag	107	103	1	He	0.026	0.026	11.22	461	0.01	300	
Cd	111	103	1	He	0.129	0.129	10.78	2084	0.01	4000	
Sn	118	115	1	He	1.849	1.849	2.48	12653	0.01	2000	
Sb	123	115	1	He	0.108	0.108	13.95	1631	0.01	300	
Ba	137	115	1	He	48.067	48.067	1.48	137152	0.04	10000	
W	182	209	1	He	0.194	0.194	13.32	8747	0.00	2500	
Tl	205	209	1	He	0.101	0.101	2.70	4045	0.00	5000	
Pb	208	209	1	He	10.767	10.767	1.14	545927	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1868440	1.60	1729956	108.01	30	120	
Sc	45	1	He	1143434	4.36	1045873	109.33	30	120	
Sc	45	2	NoGas	9025819	0.43	8041241	112.24	30	120	
Rh	103	1	He	3168564	0.24	3067946	103.28	30	120	
In	115	1	He	2027266	0.58	1978772	102.45	30	120	
Tb	159	1	He	5112999	0.90	5013529	101.98	30	120	
Ho	165	1	He	5209711	1.02	5115781	101.84	30	120	
Bi	209	1	He	3760877	0.42	3723643	101.00	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-12-b@20
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:11:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.468	0.468	10.98	2389	0.02	10000	
B	11	45	2	NoGas	1.239	1.239	2.40	12453	0.01	300	
Na	23	45	1	He	11.966	11.966	0.39	48416	0.02	500000	
Mg	24	45	1	He	1085.666	1085.666	0.14	1194836	0.09	500000	
Al	27	45	1	He	6395.483	6395.483	1.21	4013134	0.16	200000	
K	39	45	1	He	366.852	366.852	1.74	451364	0.08	500000	
Ca	44	45	1	He	165.945	165.945	4.21	10606	1.56	500000	
Ti	47	45	1	He	54.485	54.485	1.44	17643	0.31	2500	
V	51	45	1	He	12.426	12.426	2.00	101017	0.01	10000	
Cr	52	45	1	He	8.759	8.759	1.51	87051	0.01	10000	
Mn	55	115	1	He	551.339	551.339	2.07	4381997	0.01	10000	
Fe	56	103	1	He	10989.580	10989.580	1.40	105906369	0.01	200000	
Co	59	103	1	He	6.844	6.844	1.26	95452	0.01	10000	
Ni	60	103	1	He	10.900	10.900	2.63	37959	0.03	10000	
Cu	63	103	1	He	6.258	6.258	1.57	59903	0.01	10000	
Zn	66	103	1	He	31.589	31.589	0.01	59082	0.05	10000	
As	75	103	1	He	5.336	5.336	1.89	6720	0.08	10000	
Se	78	103	1	He	0.660	0.660	6.62	162	0.41	10000	
Sr	88	103	1	He	2.030	2.030	1.89	20831	0.01	10000	
Mo	95	103	1	He	0.772	0.772	6.39	3923	0.02	2000	
Ag	107	103	1	He	0.020	0.020	21.68	397	0.01	300	
Cd	111	103	1	He	0.150	0.150	20.14	2228	0.01	4000	
Sn	118	115	1	He	1.735	1.735	3.55	12587	0.01	2000	
Sb	123	115	1	He	0.037	0.037	63.29	1287	0.00	300	
Ba	137	115	1	He	44.979	44.979	1.21	135209	0.03	10000	
W	182	209	1	He	0.119	0.119	14.34	7776	0.00	2500	
Tl	205	209	1	He	0.094	0.094	4.94	3904	0.00	5000	
Pb	208	209	1	He	9.502	9.502	0.74	496971	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1993988	2.15	1729956	115.26	30	120	
Sc	45	1	He	1183862	0.36	1045873	113.19	30	120	
Sc	45	2	NoGas	9568324	0.52	8041241	118.99	30	120	
Rh	103	1	He	3302821	1.33	3067946	107.66	30	120	
In	115	1	He	2135929	1.20	1978772	107.94	30	120	
Tb	159	1	He	5274848	0.84	5013529	105.21	30	120	
Ho	165	1	He	5403713	0.41	5115781	105.63	30	120	
Bi	209	1	He	3877885	1.03	3723643	104.14	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-13-b@20
Data File Name	060SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:15:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.403	0.403	12.06	2119	0.02	10000	
B	11	45	2	NoGas	1.127	1.127	14.28	12030	0.01	300	
Na	23	45	1	He	10.038	10.038	6.83	45631	0.02	500000	
Mg	24	45	1	He	890.543	890.543	0.69	1001099	0.09	500000	
Al	27	45	1	He	6056.672	6056.672	0.25	3880756	0.16	200000	
K	39	45	1	He	310.334	310.334	0.43	397083	0.08	500000	
Ca	44	45	1	He	98.887	98.887	5.08	6718	1.47	500000	
Ti	47	45	1	He	47.617	47.617	1.84	15746	0.30	2500	
V	51	45	1	He	12.934	12.934	1.67	107372	0.01	10000	
Cr	52	45	1	He	9.014	9.014	0.76	91399	0.01	10000	
Mn	55	115	1	He	659.343	659.343	0.35	5341605	0.01	10000	
Fe	56	103	1	He	10512.303	10512.303	1.84	103901349	0.01	200000	
Co	59	103	1	He	7.003	7.003	1.65	100171	0.01	10000	
Ni	60	103	1	He	8.415	8.415	2.88	30278	0.03	10000	
Cu	63	103	1	He	4.933	4.933	1.95	49321	0.01	10000	
Zn	66	103	1	He	26.848	26.848	1.93	51741	0.05	10000	
As	75	103	1	He	5.039	5.039	2.05	6517	0.08	10000	
Se	78	103	1	He	0.593	0.593	7.37	157	0.38	10000	
Sr	88	103	1	He	1.766	1.766	1.95	18603	0.01	10000	
Mo	95	103	1	He	0.683	0.683	1.13	3600	0.02	2000	
Ag	107	103	1	He	0.017	0.017	19.68	358	0.00	300	
Cd	111	103	1	He	0.147	0.147	11.53	2278	0.01	4000	
Sn	118	115	1	He	1.867	1.867	0.73	13710	0.01	2000	
Sb	123	115	1	He	-0.013	-0.013	-144.26	1001	0.00	300	
Ba	137	115	1	He	41.372	41.372	1.21	126778	0.03	10000	
W	182	209	1	He	0.082	0.082	12.22	7184	0.00	2500	
Tl	205	209	1	He	0.083	0.083	6.16	3465	0.00	5000	
Pb	208	209	1	He	9.251	9.251	0.27	484944	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1998827	1.78	1729956	115.54	30	120	
Sc	45	1	He	1208865	0.46	1045873	115.58	30	120	
Sc	45	2	NoGas	9500708	0.67	8041241	118.15	30	120	
Rh	103	1	He	3387777	1.13	3067946	110.42	30	120	
In	115	1	He	2177244	0.95	1978772	110.03	30	120	
Tb	159	1	He	5319384	0.63	5013529	106.10	30	120	
Ho	165	1	He	5421425	0.77	5115781	105.97	30	120	
Bi	209	1	He	3886118	0.82	3723643	104.36	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-15-b@20
Data File Name	061SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:19:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.449	0.449	13.21	2282	0.02	10000	
B	11	45	2	NoGas	2.000	2.000	4.93	14559	0.01	300	
Na	23	45	1	He	21.194	21.194	3.88	67253	0.03	500000	
Mg	24	45	1	He	1442.887	1442.887	3.30	1610302	0.09	500000	
Al	27	45	1	He	6850.345	6850.345	1.84	4360821	0.16	200000	
K	39	45	1	He	443.253	443.253	2.47	543546	0.08	500000	
Ca	44	45	1	He	1448.309	1448.309	1.79	88869	1.63	500000	
Ti	47	45	1	He	57.069	57.069	2.16	18746	0.30	2500	
V	51	45	1	He	14.321	14.321	1.29	118162	0.01	10000	
Cr	52	45	1	He	11.985	11.985	1.40	119868	0.01	10000	
Mn	55	115	1	He	569.021	569.021	0.89	4471064	0.01	10000	
Fe	56	103	1	He	14749.263	14749.263	1.23	142699661	0.01	200000	
Co	59	103	1	He	6.017	6.017	0.12	84258	0.01	10000	
Ni	60	103	1	He	12.659	12.659	1.39	44109	0.03	10000	
Cu	63	103	1	He	8.293	8.293	0.77	78374	0.01	10000	
Zn	66	103	1	He	34.669	34.669	0.59	64949	0.05	10000	
As	75	103	1	He	10.744	10.744	0.46	13430	0.08	10000	
Se	78	103	1	He	0.696	0.696	4.87	167	0.42	10000	
Sr	88	103	1	He	7.525	7.525	0.22	77104	0.01	10000	
Mo	95	103	1	He	2.922	2.922	3.42	13965	0.02	2000	
Ag	107	103	1	He	0.021	0.021	10.91	406	0.01	300	
Cd	111	103	1	He	0.188	0.188	10.45	2337	0.01	4000	
Sn	118	115	1	He	1.865	1.865	4.87	13284	0.01	2000	
Sb	123	115	1	He	-0.009	-0.009	-103.38	992	0.00	300	
Ba	137	115	1	He	51.052	51.052	1.34	151721	0.03	10000	
W	182	209	1	He	0.348	0.348	13.80	11453	0.00	2500	
Tl	205	209	1	He	0.091	0.091	5.36	3754	0.00	5000	
Pb	208	209	1	He	10.373	10.373	0.75	536863	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1968171	0.73	1729956	113.77	30	120	
Sc	45	1	He	1201277	1.97	1045873	114.86	30	120	
Sc	45	2	NoGas	9450371	1.56	8041241	117.52	30	120	
Rh	103	1	He	3315935	0.42	3067946	108.08	30	120	
In	115	1	He	2111671	0.36	1978772	106.72	30	120	
Tb	159	1	He	5300684	0.64	5013529	105.73	30	120	
Ho	165	1	He	5362466	0.30	5115781	104.82	30	120	
Bi	209	1	He	3838658	0.69	3723643	103.09	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-16-b@20
Data File Name	062SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:22:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.411	0.411	6.99	2237	0.02	10000	
B	11	45	2	NoGas	1.353	1.353	14.07	13339	0.01	300	
Na	23	45	1	He	14.423	14.423	0.83	54499	0.03	500000	
Mg	24	45	1	He	1022.983	1022.983	0.28	1154016	0.09	500000	
Al	27	45	1	He	5807.485	5807.485	0.97	3734860	0.16	200000	
K	39	45	1	He	342.220	342.220	2.11	434651	0.08	500000	
Ca	44	45	1	He	932.663	932.663	1.28	58049	1.61	500000	
Ti	47	45	1	He	49.581	49.581	1.19	16455	0.30	2500	
V	51	45	1	He	12.965	12.965	1.76	108041	0.01	10000	
Cr	52	45	1	He	9.881	9.881	0.55	100306	0.01	10000	
Mn	55	115	1	He	876.812	876.812	0.98	7043203	0.01	10000	
Fe	56	103	1	He	12381.021	12381.021	1.82	121880586	0.01	200000	
Co	59	103	1	He	7.714	7.714	1.15	109900	0.01	10000	
Ni	60	103	1	He	9.675	9.675	1.33	34532	0.03	10000	
Cu	63	103	1	He	10.787	10.787	1.26	102469	0.01	10000	
Zn	66	103	1	He	43.754	43.754	2.45	82979	0.05	10000	
As	75	103	1	He	6.485	6.485	0.17	8310	0.08	10000	
Se	78	103	1	He	0.647	0.647	12.79	163	0.40	10000	
Sr	88	103	1	He	4.282	4.282	1.96	44710	0.01	10000	
Mo	95	103	1	He	1.153	1.153	5.05	5817	0.02	2000	
Ag	107	103	1	He	0.060	0.060	5.55	1006	0.01	300	
Cd	111	103	1	He	0.239	0.239	2.73	2515	0.01	4000	
Sn	118	115	1	He	1.866	1.866	4.41	13591	0.01	2000	
Sb	123	115	1	He	-0.015	-0.015	-30.54	979	0.00	300	
Ba	137	115	1	He	44.181	44.181	0.16	134249	0.03	10000	
W	182	209	1	He	0.079	0.079	28.69	7109	0.00	2500	
Tl	205	209	1	He	0.089	0.089	1.62	3689	0.00	5000	
Pb	208	209	1	He	13.338	13.338	1.02	695578	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2080472	0.85	1729956	120.26	30	120	ISTD Failed
Sc	45	1	He	1213382	0.81	1045873	116.02	30	120	
Sc	45	2	NoGas	9976567	1.28	8041241	124.07	30	120	ISTD Failed
Rh	103	1	He	3374139	0.81	3067946	109.98	30	120	
In	115	1	He	2158892	0.38	1978772	109.10	30	120	
Tb	159	1	He	5344636	0.68	5013529	106.60	30	120	
Ho	165	1	He	5442150	1.06	5115781	106.38	30	120	
Bi	209	1	He	3871039	0.92	3723643	103.96	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-17-b@100
Data File Name	063SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:26:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.088	0.088	15.26	815	0.01	10000	
B	11	45	2	NoGas	0.140	0.140	100.47	10133	0.00	300	
Na	23	45	1	He	2.032	2.032	52.47	34129	0.01	500000	
Mg	24	45	1	He	244.841	244.841	5.81	316803	0.08	500000	
Al	27	45	1	He	1221.964	1221.964	4.26	898522	0.14	200000	
K	39	45	1	He	78.005	78.005	4.58	154675	0.05	500000	
Ca	44	45	1	He	144.729	144.729	6.10	10927	1.32	500000	
Ti	47	45	1	He	8.567	8.567	0.77	3264	0.26	2500	
V	51	45	1	He	2.791	2.791	3.32	26371	0.01	10000	
Cr	52	45	1	He	1.922	1.922	5.39	24764	0.01	10000	
Mn	55	115	1	He	1090.842	1090.842	1.65	9602694	0.01	10000	
Fe	56	103	1	He	2504.365	2504.365	0.62	26891312	0.01	200000	
Co	59	103	1	He	1.212	1.212	1.53	18895	0.01	10000	
Ni	60	103	1	He	3.875	3.875	2.85	15714	0.02	10000	
Cu	63	103	1	He	1.684	1.684	2.94	21284	0.01	10000	
Zn	66	103	1	He	6.305	6.305	4.37	14531	0.04	10000	
As	75	103	1	He	1.314	1.314	3.62	1971	0.07	10000	
Se	78	103	1	He	0.160	0.160	23.06	106	0.15	10000	
Sr	88	103	1	He	1.122	1.122	3.28	12902	0.01	10000	
Mo	95	103	1	He	0.178	0.178	1.48	1292	0.01	2000	
Ag	107	103	1	He	0.005	0.005	54.74	177	0.00	300	
Cd	111	103	1	He	0.091	0.091	8.91	2309	0.00	4000	
Sn	118	115	1	He	0.279	0.279	10.87	3386	0.01	2000	
Sb	123	115	1	He	-0.090	-0.090	-6.33	566	-0.02	300	
Ba	137	115	1	He	15.550	15.550	2.63	51806	0.03	10000	
W	182	209	1	He	0.100	0.100	22.46	7813	0.00	2500	
Tl	205	209	1	He	0.017	0.017	7.78	857	0.00	5000	
Pb	208	209	1	He	1.985	1.985	2.41	110170	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2192305	1.95	1729956	126.73	30	120	ISTD Failed
Sc	45	1	He	1389110	7.37	1045873	132.82	30	120	ISTD Failed
Sc	45	2	NoGas	10600426	1.41	8041241	131.83	30	120	ISTD Failed
Rh	103	1	He	3678553	2.07	3067946	119.90	30	120	
In	115	1	He	2366469	3.07	1978772	119.59	30	120	
Tb	159	1	He	5658718	1.28	5013529	112.87	30	120	
Ho	165	1	He	5744712	2.31	5115781	112.29	30	120	
Bi	209	1	He	4058163	1.70	3723643	108.98	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-18-b@20
Data File Name	064SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:30:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.363	0.363	10.12	2093	0.02	10000	
B	11	45	2	NoGas	1.266	1.266	6.03	14054	0.01	300	
Na	23	45	1	He	14.016	14.016	5.77	64610	0.02	500000	
Mg	24	45	1	He	1560.296	1560.296	1.65	2118068	0.07	500000	
Al	27	45	1	He	6137.704	6137.704	0.69	4752746	0.13	200000	
K	39	45	1	He	427.021	427.021	0.46	639121	0.07	500000	
Ca	44	45	1	He	754.303	754.303	2.38	56661	1.33	500000	
Ti	47	45	1	He	40.512	40.512	5.64	16170	0.25	2500	
V	51	45	1	He	11.019	11.019	2.72	110489	0.01	10000	
Cr	52	45	1	He	9.752	9.752	2.09	119198	0.01	10000	
Mn	55	115	1	He	1870.067	1870.067	3.17	16629413	0.01	10000	
Fe	56	103	1	He	15187.412	15187.412	2.31	162846127	0.01	200000	
Co	59	103	1	He	6.343	6.343	3.80	98433	0.01	10000	
Ni	60	103	1	He	17.875	17.875	2.25	68596	0.03	10000	
Cu	63	103	1	He	12.331	12.331	2.94	126927	0.01	10000	
Zn	66	103	1	He	39.242	39.242	2.93	81241	0.05	10000	
As	75	103	1	He	8.953	8.953	4.19	12431	0.07	10000	
Se	78	103	1	He	0.746	0.746	11.69	192	0.39	10000	
Sr	88	103	1	He	5.993	5.993	3.19	68097	0.01	10000	
Mo	95	103	1	He	0.834	0.834	0.22	4685	0.02	2000	
Ag	107	103	1	He	0.011	0.011	14.28	290	0.00	300	
Cd	111	103	1	He	0.199	0.199	18.62	2624	0.01	4000	
Sn	118	115	1	He	1.626	1.626	2.66	13287	0.01	2000	
Sb	123	115	1	He	-0.033	-0.033	-18.59	959	0.00	300	
Ba	137	115	1	He	86.247	86.247	2.13	290064	0.03	10000	
W	182	209	1	He	0.133	0.133	18.68	8432	0.00	2500	
Tl	205	209	1	He	0.133	0.133	1.46	5746	0.00	5000	
Pb	208	209	1	He	8.523	8.523	0.34	469508	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2155578	0.54	1729956	124.60	30	120	ISTD Failed
Sc	45	1	He	1461212	4.20	1045873	139.71	30	120	ISTD Failed
Sc	45	2	NoGas	10728136	0.98	8041241	133.41	30	120	ISTD Failed
Rh	103	1	He	3675043	0.89	3067946	119.79	30	120	
In	115	1	He	2390084	1.13	1978772	120.79	30	120	ISTD Failed
Tb	159	1	He	5716095	0.81	5013529	114.01	30	120	
Ho	165	1	He	5817148	0.77	5115781	113.71	30	120	
Bi	209	1	He	4082310	1.34	3723643	109.63	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	065_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:34:26-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	52.898	1.077	233806	2.55	50	105.8	89.5	110.5	
B	11	45	2	NoGas	58.856	1.860	185505	2.01	50	117.7	89.5	110.5	CCV Failed
Na	23	45	1	He	24695.867	2.180	54390229	0.75	25000	98.8	89.5	110.5	
Mg	24	45	1	He	24679.533	2.351	30837102	1.39	25000	98.7	89.5	110.5	
Al	27	45	1	He	250.367	1.999	179425	1.43	250	100.1	89.5	110.5	
K	39	45	1	He	25607.468	3.069	32231035	0.22	25000	102.4	89.5	110.5	
Ca	44	45	1	He	25274.237	2.517	1725771	0.67	25000	101.1	89.5	110.5	
Ti	47	45	1	He	49.791	1.569	18335	2.58	50	99.6	89.5	110.5	
V	51	45	1	He	48.543	1.411	449468	1.49	50	97.1	89.5	110.5	
Cr	52	45	1	He	48.676	2.122	536363	0.79	50	97.4	89.5	110.5	
Mn	55	115	1	He	272.589	1.688	2207848	0.91	250	109.0	89.5	110.5	
Fe	56	103	1	He	13279.109	1.636	128434426	1.41	12500	106.2	89.5	110.5	
Co	59	103	1	He	52.901	1.066	740026	1.11	50	105.8	89.5	110.5	
Ni	60	103	1	He	53.036	2.121	181730	2.14	50	106.1	89.5	110.5	
Cu	63	103	1	He	52.915	1.257	477814	1.46	50	105.8	89.5	110.5	
Zn	66	103	1	He	52.539	0.677	97593	1.12	50	105.1	89.5	110.5	
As	75	103	1	He	52.972	0.443	65595	0.53	50	105.9	89.5	110.5	
Se	78	103	1	He	52.750	1.958	7059	1.85	50	105.5	89.5	110.5	
Sr	88	103	1	He	51.067	0.465	522200	0.44	50	102.1	89.5	110.5	
Mo	95	103	1	He	51.769	1.400	241722	1.42	50	103.5	89.5	110.5	
Ag	107	103	1	He	51.273	1.539	770574	1.42	50	102.5	89.5	110.5	
Cd	111	103	1	He	50.440	0.671	135313	0.71	50	100.9	89.5	110.5	
Sn	118	115	1	He	48.984	2.919	328033	2.35	50	98.0	89.5	110.5	
Sb	123	115	1	He	49.669	1.382	310346	0.61	50	99.3	89.5	110.5	
Ba	137	115	1	He	49.807	1.935	152562	1.87	50	99.6	89.5	110.5	
W	182	209	1	He	47.903	1.717	773027	1.48	50	95.8	89.5	110.5	
Tl	205	209	1	He	51.768	1.085	2013962	1.34	50	103.5	89.5	110.5	
Pb	208	209	1	He	48.536	0.855	2448218	0.91	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2024361	1.48	1729956	117.02	30	120	
Sc	45	1	He	1346438	2.92	1045873	128.74	30	120	ISTD Failed
Sc	45	2	NoGas	9556210	1.69	8041241	118.84	30	120	
Rh	103	1	He	3314928	0.49	3067946	108.05	30	120	
In	115	1	He	2176404	0.78	1978772	109.99	30	120	
Tb	159	1	He	5417604	1.29	5013529	108.06	30	120	
Ho	165	1	He	5465156	0.59	5115781	106.83	30	120	
Bi	209	1	He	3751370	0.32	3723643	100.74	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	066_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:38:12-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.024	83.6	422	19.0	1	
B	11	45	2	NoGas	0.163	73.5	8121	4.1	20	
Na	23	45	1	He	3.059	44.2	27922	7.5	400	
Mg	24	45	1	He	0.999	22.2	2489	7.7	1000	
Al	27	45	1	He	0.466	24.2	927	6.3	50	
K	39	45	1	He	5.598	12.6	46568	0.6	1000	
Ca	44	45	1	He	0.180	1044.1	586	17.8	1000	
Ti	47	45	1	He	0.038	31.4	20	16.7	20	
V	51	45	1	He	0.083	29.7	395	46.5	2	
Cr	52	45	1	He	0.024	38.8	2564	2.3	2	
Mn	55	115	1	He	0.041	25.1	1146	5.6	2	
Fe	56	103	1	He	19.179	18.6	188216	15.6	50	
Co	59	103	1	He	0.002	119.9	94	28.7	1	
Ni	60	103	1	He	-0.164	-5.3	366	7.8	2	
Cu	63	103	1	He	-0.268	-2.2	1603	2.3	2	
Zn	66	103	1	He	-0.230	-30.3	1076	12.5	20	
As	75	103	1	He	0.036	50.1	185	10.0	2	
Se	78	103	1	He	0.061	45.4	78	3.5	2	
Sr	88	103	1	He	-0.003	-91.0	123	18.9	10	
Mo	95	103	1	He	0.602	20.8	2948	17.0	2	
Ag	107	103	1	He	0.007	25.7	183	14.2	0.2	
Cd	111	103	1	He	0.051	120.3	1853	7.1	0.2	
Sn	118	115	1	He	0.257	21.1	2711	10.6	10	
Sb	123	115	1	He	0.323	23.5	2829	13.7	1	
Ba	137	115	1	He	0.003	172.0	62	27.5	5	
W	182	209	1	He	0.756	17.2	17277	10.8	10	
Tl	205	209	1	He	0.022	22.0	940	18.4	0.5	
Pb	208	209	1	He	0.027	14.2	3134	5.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1814179	0.20	1729956	104.87	30	120	
Sc	45	1	He	1060994	1.09	1045873	101.45	30	120	
Sc	45	2	NoGas	8430761	0.82	8041241	104.84	30	120	
Rh	103	1	He	3113265	1.52	3067946	101.48	30	120	
In	115	1	He	1994175	1.82	1978772	100.78	30	120	
Tb	159	1	He	5087015	0.96	5013529	101.47	30	120	
Ho	165	1	He	5159960	1.45	5115781	100.86	30	120	
Bi	209	1	He	3658598	1.02	3723643	98.25	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	067CRIA.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:42:03-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

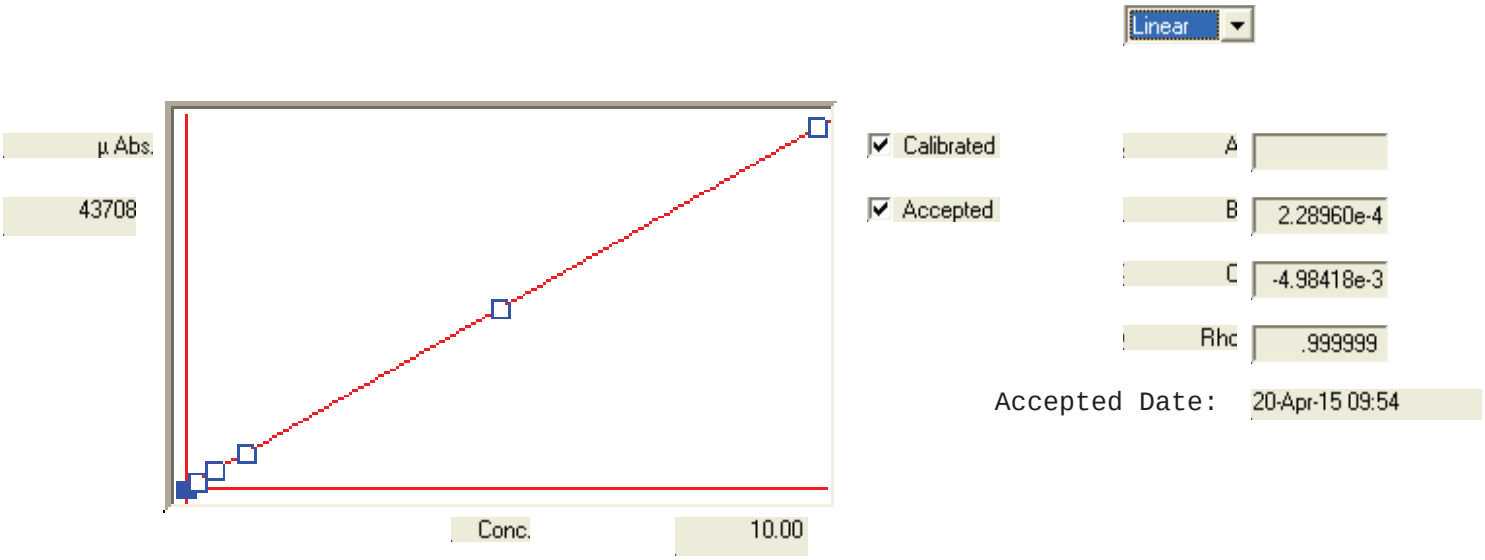
QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.956	0.956	7.167	4760	7.60	1	95.6	69.5	130.5	
B	11	2	NoGas	21.421	21.421	3.660	74442	1.90	20	107.1	69.5	130.5	
Na	23	1	He	1064.401	1064.401	1.011	2224686	0.83	1000	106.4	69.5	130.5	
Mg	24	1	He	1084.735	1084.735	1.023	1273021	0.34	1000	108.5	69.5	130.5	
Al	27	1	He	51.833	51.833	3.096	35462	1.86	50	103.7	69.5	130.5	
K	39	1	He	1093.903	1093.903	0.275	1338525	1.16	1000	109.4	69.5	130.5	
Ca	44	1	He	1028.541	1028.541	1.165	66536	0.19	1000	102.9	69.5	130.5	
Ti	47	1	He	10.429	10.429	4.764	3609	4.32	10	104.3	69.5	130.5	
V	51	1	He	5.105	5.105	2.644	44112	3.58	5	102.1	69.5	130.5	
Cr	52	1	He	2.138	2.138	0.680	24778	1.09	2	106.9	69.5	130.5	
Mn	55	1	He	5.196	5.196	2.939	42964	2.03	5	103.9	69.5	130.5	
Fe	56	1	He	105.844	105.844	0.719	1068865	0.80	100	105.8	69.5	130.5	
Co	59	1	He	1.046	1.046	1.699	15123	0.29	1	104.6	69.5	130.5	
Ni	60	1	He	1.949	1.949	1.266	7812	2.12	2	97.5	69.5	130.5	
Cu	63	1	He	1.869	1.869	4.538	21437	2.25	2	93.5	69.5	130.5	
Zn	66	1	He	21.016	21.016	3.017	41120	1.57	20	105.1	69.5	130.5	
As	75	1	He	5.204	5.204	0.675	6773	0.76	5	104.1	69.5	130.5	
Se	78	1	He	5.441	5.441	5.159	818	3.81	5	108.8	69.5	130.5	
Sr	88	1	He	9.996	9.996	1.771	105288	0.85	10	100.0	69.5	130.5	
Mo	95	1	He	10.457	10.457	1.376	50507	0.53	10	104.6	69.5	130.5	
Ag	107	1	He	1.067	1.067	2.393	16584	2.59	1	106.7	69.5	130.5	
Cd	111	1	He	1.117	1.117	3.957	4933	2.12	1	111.7	69.5	130.5	
Sn	118	1	He	10.065	10.065	2.113	68367	1.88	10	100.6	69.5	130.5	
Sb	123	1	He	2.012	2.012	3.095	13604	2.53	2	100.6	69.5	130.5	
Ba	137	1	He	5.068	5.068	1.239	15567	0.22	5	101.4	69.5	130.5	
W	182	1	He	9.439	9.439	0.861	161509	0.80	10	94.4	69.5	130.5	
Tl	205	1	He	1.878	1.878	3.006	75340	2.08	2	93.9	69.5	130.5	
Pb	208	1	He	1.051	1.051	2.711	56430	1.71	1	105.1	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2102247	4.47	1729956	121.52	30	120	ISTD Failed
Sc	45	1	He	1262525	1.31	1045873	120.71	30	120	ISTD Failed
Sc	45	2	NoGas	9744924	4.45	8041241	121.19	30	120	ISTD Failed
Rh	103	1	He	3410744	1.42	3067946	111.17	30	120	
In	115	1	He	2175483	1.18	1978772	109.94	30	120	
Tb	159	1	He	5381724	1.29	5013529	107.34	30	120	
Ho	165	1	He	5435650	0.87	5115781	106.25	30	120	
Bi	209	1	He	3863084	0.95	3723643	103.74	30	120	

Protocol: Hg-7471A



S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
01	.00000	.0117	.0117	73	0	73				
02	.20000	.1972	-.0028	884	0%	883				
03	.50000	.4909	-.0091	2166	0%	2166				
04	1.0000	1.002	.0020	4398	0%	4398				
05	5.0000	4.996	-.0043	21841	0%	21841				
06	10.000	10.00	.0024	43709	0%	43708				
07										
08										
09										
10										

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Standard: 1 Rep: 1              Seq:  1       09:43:19 20 Apr 15   HG

Hg    .0000   ppb      73

*** Standard: 2 Rep: 1              Seq:  2       09:45:37 20 Apr 15   HG

Hg    .2000   ppb      883

*** Standard: 3 Rep: 1              Seq:  3       09:47:24 20 Apr 15   HG

Hg    .5000   ppb      2166

*** Standard: 4 Rep: 1              Seq:  4       09:49:21 20 Apr 15   HG

Hg    1.000   ppb      4398

*** Standard: 5 Rep: 1              Seq:  5       09:51:44 20 Apr 15   HG

Hg    5.000   ppb      21841

*** Standard: 6 Rep: 1              Seq:  6       09:53:44 20 Apr 15   HG

Hg    10.00   ppb      43708

*** Check Standard: 2  Ck2ICV       Seq:  7       09:56:05 20 Apr 15   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          94.96    4.748   5.000  ppb        .0000

*** Check Standard: 3  Ck3ICB       Seq:  8       09:58:05 20 Apr 15   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          ^^^^^^  -.0361   .0000  ppb        .0000

*** Check Standard: 4  Ck4CRA\MRL   Seq:  9       10:00:05 20 Apr 15   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          102.7    .2054   .2000  ppb        .0000

*** Check Standard: 6  Ck6CCV       Seq:  10      10:07:03 20 Apr 15   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          101.3    5.066   5.000  ppb        .0000

*** Check Standard: 1  Ck1CCB       Seq:  11      10:10:31 20 Apr 15   HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.0052    .2400    ppb        .0000

*** Sample ID:                      Seq:  12      10:13:53 20 Apr 15   HG
                          mb 240-176869/1-a
Hg   -.0036   ppb       .0000    -.0036

*** Sample ID:                      Seq:  13      10:15:39 20 Apr 15   HG
                          lcs 240-176869/2-a
Hg    4.991   ppb       .0000     4.991

*** Sample ID:                      Seq:  14      10:18:05 20 Apr 15   HG
                          680-111357-a-2-m
Hg    .0133   ppb       .0000     .0133

*** Sample ID:                      Seq:  15      10:20:31 20 Apr 15   HG
                          680-111357-a-2-n ms
Hg    1.050   ppb       .0000     1.050

*** Sample ID:                      Seq:  16      10:22:28 20 Apr 15   HG
                          680-111357-a-2-o msd
Hg    1.032   ppb       .0000     1.032
```

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:				Seq: 17		10:24:26 20 Apr 15			HG
				180-38087-b-1-e@10					
Hg	.6579	ppb	.0000	.6579					
*** Sample ID:				Seq: 18		10:26:27 20 Apr 15			HG
				180-38087-b-2-c@10					
Hg	.7275	ppb	.0000	.7275					
*** Sample ID:				Seq: 19		10:28:15 20 Apr 15			HG
				180-38087-b-3-c@10					
Hg	.4126	ppb	.0000	.4126					
*** Sample ID:				Seq: 20		10:30:31 20 Apr 15			HG
				180-38087-b-4-c@10					
Hg	.3059	ppb	.0000	.3059					
*** Sample ID:				Seq: 21		10:33:00 20 Apr 15			HG
				180-38667-b-1-c@10					
Hg	1.054	ppb	.0000	1.054					
*** Check Standard: 6 Ck6CCV				Seq: 22		10:34:59 20 Apr 15			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		100.1	5.004	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB				Seq: 23		10:36:58 20 Apr 15			HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg		-.0563	.2400	ppb	.0000				
*** Sample ID:				Seq: 24		10:38:56 20 Apr 15			HG
				180-38667-b-2-c@10					
Hg	3.671	ppb	.0000	3.671					
*** Sample ID:				Seq: 25		10:40:54 20 Apr 15			HG
				180-38667-b-5-c@10					
Hg	8.988	ppb	.0000	8.988					
*** Sample ID:				Seq: 26		10:42:50 20 Apr 15			HG
				240-49330-a-2-h					
Hg	-.0535	ppb	.0000	-.0535					
*** Sample ID:				Seq: 27		10:44:36 20 Apr 15			HG
				240-49330-a-3-h					
Hg	.0321	ppb	.0000	.0321					
*** Sample ID:				Seq: 28		10:46:26 20 Apr 15			HG
				240-49409-f-1-b					
Hg	.0378	ppb	.0000	.0378					
*** Sample ID:				Seq: 29		10:48:16 20 Apr 15			HG
				240-49409-f-2-b					
Hg	.0207	ppb	.0000	.0207					
*** Sample ID:				Seq: 30		10:50:23 20 Apr 15			HG
				240-49409-f-3-b					
Hg	.0834	ppb	.0000	.0834					
*** Sample ID:				Seq: 31		10:52:35 20 Apr 15			HG
				240-49409-f-4-b					
Hg	.0481	ppb	.0000	.0481					
*** Sample ID:				Seq: 32		10:54:34 20 Apr 15			HG
				240-49409-f-5-b					
Hg	.1129	ppb	.0000	.1129					

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 33 10:56:21 20 Apr 15 HG
680-111357-a-3-f

Hg	.0037	ppb	.0000	.0037				

*** Check Standard: 6 Ck6CCV Seq: 34 10:58:33 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.1	5.056	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 35 11:00:39 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0290	.2400	ppb	.0000

*** Sample ID: Seq: 36 11:02:47 20 Apr 15 HG
680-111357-a-4-f

Hg	.0159	ppb	.0000	.0159				

*** Sample ID: Seq: 37 11:04:45 20 Apr 15 HG
680-111357-a-5-f

Hg	.9722	ppb	.0000	.9722				

*** Sample ID: Seq: 38 11:06:54 20 Apr 15 HG
680-111357-a-6-f

Hg	.1118	ppb	.0000	.1118				

*** Sample ID: Seq: 39 11:09:02 20 Apr 15 HG
190-7083-a-1-a

Hg	44.29 H	ppb	.0000	44.29				

*** Sample ID: Seq: 40 11:11:48 20 Apr 15 HG
mb 240-176711/1-a

Hg	-.0503	ppb	.0000	-.0503				

*** Sample ID: Seq: 41 11:13:36 20 Apr 15 HG
lcs 240-176711/2-a

Hg	5.035	ppb	.0000	5.035				

*** Sample ID: Seq: 42 11:15:33 20 Apr 15 HG
240-49171-a-1-g

Hg	.0571	ppb	.0000	.0571				

*** Sample ID: Seq: 43 11:17:20 20 Apr 15 HG
240-49171-a-1-h du

Hg	.1008	ppb	.0000	.1008				

*** Sample ID: Seq: 44 11:19:47 20 Apr 15 HG
240-49171-a-1-i ms

Hg	1.116	ppb	.0000	1.116				

*** Sample ID: Seq: 45 11:21:44 20 Apr 15 HG
240-49171-a-2-c

Hg	.1500	ppb	.0000	.1500				

*** Check Standard: 6 Ck6CCV Seq: 46 11:23:33 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.7	5.085	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 47 11:25:32 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0480	.2400	ppb	.0000

*** Sample ID: Seq: 48 11:27:19 20 Apr 15 HG
240-49171-a-4-c

Hg	.1198	ppb	.0000	.1198				

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 240-49171-a-11-c				Seq: 49	11:30:57 20 Apr 15	HG		
Hg	.2739	ppb	.0000	.2739				
*** Sample ID: 240-49171-a-13-c				Seq: 50	11:32:47 20 Apr 15	HG		
Hg	.1109	ppb	.0000	.1109				
*** Sample ID: 240-49171-a-14-c				Seq: 51	11:34:37 20 Apr 15	HG		
Hg	.2128	ppb	.0000	.2128				
*** Sample ID: 240-49171-a-15-c				Seq: 52	11:36:27 20 Apr 15	HG		
Hg	.1596	ppb	.0000	.1596				
*** Sample ID: 240-49171-a-16-c				Seq: 53	11:38:19 20 Apr 15	HG		
Hg	.1148	ppb	.0000	.1148				
*** Sample ID: 240-49171-a-17-c				Seq: 54	11:40:39 20 Apr 15	HG		
Hg	.1910	ppb	.0000	.1910				
*** Sample ID: 240-49171-a-18-c				Seq: 55	11:42:27 20 Apr 15	HG		
Hg	.1573	ppb	.0000	.1573				
*** Sample ID: 240-49171-a-20-c				Seq: 56	11:44:55 20 Apr 15	HG		
Hg	.1374	ppb	.0000	.1374				
*** Sample ID: 240-49171-a-21-c				Seq: 57	11:46:47 20 Apr 15	HG		
Hg	.0985	ppb	.0000	.0985				

*** Check Standard: 6 Ck6CCV Seq: 58 11:49:09 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.1	5.055	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 59 11:51:27 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0130	.2400	ppb	.0000

*** Sample ID: 240-49172-a-1-c				Seq: 60	11:53:16 20 Apr 15	HG		
Hg	.2125	ppb	.0000	.2125				
*** Sample ID: 240-49172-a-2-c				Seq: 61	11:55:18 20 Apr 15	HG		
Hg	.3069	ppb	.0000	.3069				
*** Sample ID: 240-49172-a-3-c				Seq: 62	11:57:16 20 Apr 15	HG		
Hg	.2304	ppb	.0000	.2304				
*** Sample ID: 240-49172-a-4-c				Seq: 63	11:59:08 20 Apr 15	HG		
Hg	.2817	ppb	.0000	.2817				
*** Sample ID: 240-49172-a-5-c				Seq: 64	12:00:57 20 Apr 15	HG		
Hg	.3719	ppb	.0000	.3719				

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 65 12:02:47 20 Apr 15 HG
240-49172-a-6-c
Hg .5521 ppb .0000 .5521

*** Sample ID: Seq: 66 12:04:47 20 Apr 15 HG
240-49172-a-7-c
Hg .1063 ppb .0000 .1063

*** Sample ID: Seq: 67 12:06:39 20 Apr 15 HG
240-49172-a-8-c
Hg .1663 ppb .0000 .1663

*** Check Standard: 4 Ck4CRA\MRL Seq: 68 12:08:51 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		100.3	.2006	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 69 12:10:37 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.5	5.124	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 70 12:12:38 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0297	.2400	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 71 12:21:19 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.2	5.108	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 72 12:23:23 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0096	.2400	ppb	.0000

*** Sample ID: Seq: 73 12:25:22 20 Apr 15 HG
180-38087-b-1-e
Hg 6.536 ppb .0000 6.536

*** Sample ID: Seq: 74 12:27:43 20 Apr 15 HG
180-38087-b-2-c
Hg 7.227 ppb .0000 7.227

*** Sample ID: Seq: 75 12:29:42 20 Apr 15 HG
180-38087-b-3-c
Hg 4.243 ppb .0000 4.243

*** Sample ID: Seq: 76 12:32:05 20 Apr 15 HG
180-38087-b-4-c
Hg 3.344 ppb .0000 3.344

*** Sample ID: Seq: 77 12:34:58 20 Apr 15 HG
190-7083-a-1-a@10
Hg 4.569 ppb .0000 4.569

*** Sample ID: Seq: 78 12:36:57 20 Apr 15 HG
mb 240-176885/1-a
Hg -.0505 ppb .0000 -.0505

*** Sample ID: Seq: 79 12:38:48 20 Apr 15 HG
lcs 240-176885/2-a
Hg 4.848 ppb .0000 4.848

*** Sample ID: Seq: 80 12:40:40 20 Apr 15 HG
240-49402-b-2-d
Hg -.0279 ppb .0000 -.0279

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 81 12:42:28 20 Apr 15 HG
240-49402-b-2-e ms

Hg	1.070	ppb	.0000	1.070

*** Sample ID: Seq: 82 12:44:36 20 Apr 15 HG
240-49402-b-2-f msd

Hg	1.062	ppb	.0000	1.062

*** Check Standard: 6 Ck6CCV Seq: 83 12:46:34 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		100.5	5.023	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 84 12:48:26 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0947	.2400	ppb	.0000

*** Sample ID: Seq: 85 12:50:22 20 Apr 15 HG
240-49412-k-1-b

Hg	.0758	ppb	.0000	.0758

*** Sample ID: Seq: 86 12:52:22 20 Apr 15 HG
240-49419-b-1-b

Hg	.1003	ppb	.0000	.1003

*** Sample ID: Seq: 87 12:54:10 20 Apr 15 HG
240-49419-b-2-b

Hg	-.0235	ppb	.0000	-.0235

*** Sample ID: Seq: 88 12:55:57 20 Apr 15 HG
240-49419-b-3-b

Hg	.1031	ppb	.0000	.1031

*** Sample ID: Seq: 89 12:57:46 20 Apr 15 HG
240-49419-b-4-b

Hg	.0291	ppb	.0000	.0291

*** Sample ID: Seq: 90 12:59:48 20 Apr 15 HG
240-49419-b-5-b

Hg	.0960	ppb	.0000	.0960

*** Sample ID: Seq: 91 13:01:42 20 Apr 15 HG
240-49419-b-6-b

Hg	.0612	ppb	.0000	.0612

*** Sample ID: Seq: 92 13:03:32 20 Apr 15 HG
240-49419-b-7-b

Hg	.0848	ppb	.0000	.0848

*** Sample ID: Seq: 93 13:06:05 20 Apr 15 HG
240-49419-b-8-b

Hg	.2063	ppb	.0000	.2063

*** Sample ID: Seq: 94 13:07:53 20 Apr 15 HG
240-49419-b-9-b

Hg	.0568	ppb	.0000	.0568

*** Check Standard: 6 Ck6CCV Seq: 95 13:09:42 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.5	5.076	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 96 13:11:39 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0517	.2400	ppb	.0000

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:				Seq: 97		13:13:50 20 Apr 15			HG
				240-49419-b-10-b					
Hg	.1461	ppb	.0000	.1461					
*** Sample ID:				Seq: 98		13:15:50 20 Apr 15			HG
				240-49419-b-11-b					
Hg	.1205	ppb	.0000	.1205					
*** Sample ID:				Seq: 99		13:17:41 20 Apr 15			HG
				240-49419-b-12-b					
Hg	.0307	ppb	.0000	.0307					
*** Sample ID:				Seq: 100		13:19:33 20 Apr 15			HG
				240-49330-a-8-h					
Hg	-.0089	ppb	.0000	-.0089					
*** Sample ID:				Seq: 101		13:21:36 20 Apr 15			HG
				240-49330-a-9-h					
Hg	.0149	ppb	.0000	.0149					
*** Sample ID:				Seq: 102		13:23:47 20 Apr 15			HG
				240-49330-a-4-i					
Hg	.0681	ppb	.0000	.0681					
*** Sample ID:				Seq: 103		13:25:50 20 Apr 15			HG
				240-49330-a-5-h					
Hg	.0690	ppb	.0000	.0690					
*** Sample ID:				Seq: 104		13:27:51 20 Apr 15			HG
				240-49330-a-6-h					
Hg	.0142	ppb	.0000	.0142					
*** Sample ID:				Seq: 105		13:29:55 20 Apr 15			HG
				240-49330-a-7-h					
Hg	.0046	ppb	.0000	.0046					

*** Check Standard: 6 Ck6CCV Seq: 106 13:31:49 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.5	5.077	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 107 13:33:47 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0579	.2400	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 108 13:51:11 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.2	5.058	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 109 13:53:09 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0412	.2400	ppb	.0000

*** Sample ID:				Seq: 110		13:55:24 20 Apr 15			HG
				mb 240-177023/1-a					
Hg	.0081	ppb	.0000	.0081					
*** Sample ID:				Seq: 111		13:57:10 20 Apr 15			HG
				lcs 240-177023/2-a					
Hg	5.208	ppb	.0000	5.208					
*** Sample ID:				Seq: 112		13:59:07 20 Apr 15			HG
				180-38696-b-19-a@10					
Hg	26.55 H	ppb	.0000	26.55					

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:					Seq: 113		14:01:37 20 Apr 15		HG
				180-38696-b19b ms@10					
Hg	23.54 H	ppb	.0000	23.54					
*** Sample ID:					Seq: 114		14:03:35 20 Apr 15		HG
				180-38696b19c msd@10					
Hg	22.74 H	ppb	.0000	22.74					
*** Sample ID:					Seq: 115		14:05:37 20 Apr 15		HG
				180-38696-b-20-a@10					
Hg	33.75 H	ppb	.0000	33.75					
*** Sample ID:					Seq: 116		14:08:14 20 Apr 15		HG
				180-38696-b-21-a@10					
Hg	22.99 H	ppb	.0000	22.99					
*** Sample ID:					Seq: 117		14:10:22 20 Apr 15		HG
				180-38696-b-22-a@10					
Hg	21.01 H	ppb	.0000	21.01					
*** Sample ID:					Seq: 118		14:12:32 20 Apr 15		HG
				180-38696-b-23-a@10					
Hg	53.41 H	ppb	.0000	53.41					
*** Sample ID:					Seq: 119		14:14:41 20 Apr 15		HG
				180-38696-b-24-a@10					
Hg	63.39 H	ppb	.0000	63.39					

*** Check Standard: 6 Ck6CCV Seq: 120 14:17:28 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		96.74	4.837	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 121 14:19:18 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.1632	.2400	ppb	.0000

*** Sample ID:					Seq: 122		14:21:44 20 Apr 15		HG
				180-38622-c-1-a@10					
Hg	7.612	ppb	.0000	7.612					
*** Sample ID:					Seq: 123		14:24:04 20 Apr 15		HG
				180-38622-b-11-a@10					
Hg	10.37 H	ppb	.0000	10.37					
*** Sample ID:					Seq: 124		14:26:11 20 Apr 15		HG
				180-38622-b-12-a@10					
Hg	10.01 H	ppb	.0000	10.01					
*** Sample ID:					Seq: 125		14:28:21 20 Apr 15		HG
				180-38622-b-13-a@10					
Hg	7.689	ppb	.0000	7.689					
*** Sample ID:					Seq: 126		14:30:53 20 Apr 15		HG
				180-38622-b-14-a@10					
Hg	7.153	ppb	.0000	7.153					
*** Sample ID:					Seq: 127		14:33:00 20 Apr 15		HG
				180-38622-b-21-a@10					
Hg	8.089	ppb	.0000	8.089					
*** Sample ID:					Seq: 128		14:34:59 20 Apr 15		HG
				180-38622-b-22-a@10					
Hg	9.446	ppb	.0000	9.446					

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 129 14:36:59 20 Apr 15 HG
180-38622-b-23-a@10

Hg	12.01 H	ppb	.0000	12.01				

*** Sample ID: Seq: 130 14:39:41 20 Apr 15 HG
180-38622-b-24-a@10

Hg	9.162	ppb	.0000	9.162				

*** Sample ID: Seq: 131 14:42:08 20 Apr 15 HG
180-38890-c-1-a@10

Hg	7.306	ppb	.0000	7.306				

*** Check Standard: 6 Ck6CCV Seq: 132 14:44:19 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.4	5.118	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 133 14:46:38 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0176	.2400	ppb	.0000

*** Sample ID: Seq: 134 14:48:50 20 Apr 15 HG
180-38890-b-7-a@10

Hg	12.99 H	ppb	.0000	12.99				

*** Sample ID: Seq: 135 14:50:58 20 Apr 15 HG
180-38890-b-8-a@10

Hg	16.59 H	ppb	.0000	16.59				

*** Sample ID: Seq: 136 14:53:08 20 Apr 15 HG
180-38890-b-9-a@10

Hg	10.80 H	ppb	.0000	10.80				

*** Sample ID: Seq: 137 14:55:09 20 Apr 15 HG
180-38890-b-10-a@10

Hg	7.926	ppb	.0000	7.926				

*** Check Standard: 6 Ck6CCV Seq: 138 14:57:06 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		100.8	5.038	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 139 14:59:07 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0331	.2400	ppb	.0000

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 6 Ck6CCV Seq: 140 15:05:15 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.7	5.187	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 141 15:07:14 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0409	.2400	ppb	.0000

*** Sample ID: Seq: 142 15:09:12 20 Apr 15 HG
180-38696-b-19-a@50

Hg	5.226	ppb	.0000	5.226

*** Sample ID: Seq: 143 15:11:22 20 Apr 15 HG
180-38696-b19b ms@50

Hg	4.683	ppb	.0000	4.683

*** Sample ID: Seq: 144 15:13:18 20 Apr 15 HG
180-38696b19c msd@50

Hg	4.505	ppb	.0000	4.505

*** Sample ID: Seq: 145 15:15:18 20 Apr 15 HG
180-38696-b-21-a@50

Hg	4.472	ppb	.0000	4.472

*** Sample ID: Seq: 146 15:17:16 20 Apr 15 HG
180-38696-b-22-a@50

Hg	4.152	ppb	.0000	4.152

*** Sample ID: Seq: 147 15:19:07 20 Apr 15 HG
180-38622-b-11-a@20

Hg	4.680	ppb	.0000	4.680

*** Sample ID: Seq: 148 15:21:36 20 Apr 15 HG
180-38622-b-12-a@20

Hg	4.811	ppb	.0000	4.811

*** Sample ID: Seq: 149 15:23:36 20 Apr 15 HG
180-38622-b-23-a@20

Hg	5.654	ppb	.0000	5.654

*** Sample ID: Seq: 150 15:25:29 20 Apr 15 HG
180-38696-b-23-a@100

Hg	5.545	ppb	.0000	5.545

*** Sample ID: Seq: 151 15:27:31 20 Apr 15 HG
180-38696-b-24-a@100

Hg	6.776	ppb	.0000	6.776

*** Check Standard: 6 Ck6CCV Seq: 152 15:29:28 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.1	5.155	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 153 15:31:49 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0192	.2400	ppb	.0000

*** Sample ID: Seq: 154 15:33:57 20 Apr 15 HG
180-38696-b-20-a@100

Hg	3.583	ppb	.0000	3.583

*** Sample ID: Seq: 155 15:36:15 20 Apr 15 HG
180-38890-b-7-a@20

Hg	6.271	ppb	.0000	6.271

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 156 15:38:12 20 Apr 15 HG
180-38890-b-8-a@20

Hg	7.980	ppb	.0000	7.980

*** Sample ID: Seq: 157 15:40:19 20 Apr 15 HG
180-38890-b-9-a@20

Hg	5.122	ppb	.0000	5.122

*** Check Standard: 6 Ck6CCV Seq: 158 15:42:18 20 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.3	5.113	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 159 15:44:19 20 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0549	.2400	ppb	.0000

TestAmerica North Canton Hg Data Review Checklist

Run/Project Information:

Circle Methods used: 7470A / 245.1 (7471) Batch: 177149

Run Date: 4-20-15 Analyst: BWaeppe Instrument: H4

Review Items

A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRA run?	✓			✓
B. Sample Results				
1. Were samples with concentrations > high calibration standard diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/ Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current IDL/MDL data on file?	✓			✓
3. Calculations and Transcription checked for error?	✓			✓
4. All client/project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Level I

Analyst: BWaeppe Date/Time: 4/20/15 Reviewed from 9:43 to 14:59

Analyst: BWaeppe Date/Time: 4-21-15 Reviewed from 15:05 to 15:44

Comments:

Level II

Reviewer: [signature] Date/Time: 4/20/15 Reviewed from 9:43 to 14:59

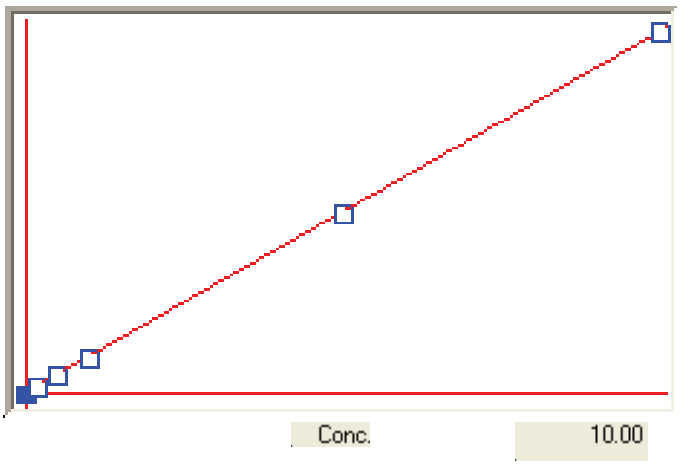
Reviewer: [signature] Date/Time: 04/21/2015 Reviewed from 15:05 to 15:44

Comments

Curve Date 4-20-15 Curve Time 8:28-8:58 DILUTION H20 00024

Revised 11/29/2012

Protocol: Hg-7471A



Linear

Calibrated

Accepted

A

B 2.28718e-4

C -9.49840e-3

Rhc .999998

Accepted Date: 21-Apr-15 08:29

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
01	.00000	.0040	.0040	59	1	59				
02	.20000	.1989	-.0011	911	0%	911				
03	.50000	.4893	-.0107	2181	0%	2181				
04	1.0000	1.000	.0003	4416	0%	4415				
05	5.0000	5.014	.0141	21964	0%	21964				
06	10.000	9.993	-.0065	43736	0%	43735				
07										
08										
09										
10										

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Standard: 1 Rep: 1				Seq: 1		08:18:41 21 Apr 15			HG
Hg	.0000	ppb	59						
*** Standard: 2 Rep: 1				Seq: 2		08:21:29 21 Apr 15			HG
Hg	.2000	ppb	911						
*** Standard: 3 Rep: 1				Seq: 3		08:23:16 21 Apr 15			HG
Hg	.5000	ppb	2181						
*** Standard: 4 Rep: 1				Seq: 4		08:25:23 21 Apr 15			HG
Hg	1.000	ppb	4415						
*** Standard: 5 Rep: 1				Seq: 5		08:27:15 21 Apr 15			HG
Hg	5.000	ppb	21964						
*** Standard: 6 Rep: 1				Seq: 6		08:29:22 21 Apr 15			HG
Hg	10.00	ppb	43735						

*** Check Standard: 2 Ck2ICV Seq: 7 08:31:40 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		94.60	4.730	5.000	ppb	.0000

*** Check Standard: 3 Ck3ICB Seq: 8 08:33:39 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		^^^^^^	-.0532	.0000	ppb	.0000

*** Check Standard: 4 Ck4CRA\MRL Seq: 9 08:35:28 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.06	.1961	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 10 08:52:19 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.3	5.066	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 11 08:54:15 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0559	.2400	ppb	.0000

*** Sample ID:				Seq: 12	08:56:01 21 Apr 15		HG
				mb 240-177025/1-a			
Hg	-.0017	ppb	.0000	-.0017			
*** Sample ID:				Seq: 13	08:57:47 21 Apr 15		HG
				lcs 240-177025/2-a			
Hg	5.042	ppb	.0000	5.042			
*** Sample ID:				Seq: 14	09:00:26 21 Apr 15		HG
				180-38961-c-1-a			
Hg	12.64 H	ppb	.0000	12.64			
*** Sample ID:				Seq: 15	09:02:26 21 Apr 15		HG
				180-38961-c1b ms@10			
Hg	15.17 H	ppb	.0000	15.17			
*** Sample ID:				Seq: 16	09:04:34 21 Apr 15		HG
				180-38961c1c msd@10			
Hg	14.17 H	ppb	.0000	14.17			

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:					Seq: 17		09:07:30 21 Apr 15		HG
				180-38961-c-2-a@10					
Hg	13.09 H	ppb	.0000	13.09					
*** Sample ID:					Seq: 18		09:09:38 21 Apr 15		HG
				180-38961-c-17-a@10					
Hg	32.45 H	ppb	.0000	32.45					
*** Sample ID:					Seq: 19		09:12:05 21 Apr 15		HG
				180-38961-c-18-a@10					
Hg	69.17 H	ppb	.0000	69.17					
*** Sample ID:					Seq: 20		09:14:43 21 Apr 15		HG
				180-38961-c-19-a@10					
Hg	53.94 H	ppb	.0000	53.94					
*** Sample ID:					Seq: 21		09:17:25 21 Apr 15		HG
				180-38961-c-20-a@10					
Hg	83.65 H	ppb	.0000	83.65					
*** Check Standard: 6 Ck6CCV					Seq: 22		09:19:35 21 Apr 15		HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		94.18	4.709	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB					Seq: 23		09:21:31 21 Apr 15		HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg		.0035	.2400	ppb	.0000				
*** Sample ID:					Seq: 24		09:23:50 21 Apr 15		HG
				180-38890-b-11-a@10					
Hg	7.914	ppb	.0000	7.914					
*** Sample ID:					Seq: 25		09:25:57 21 Apr 15		HG
				180-38890-b-12-a@10					
Hg	8.252	ppb	.0000	8.252					
*** Sample ID:					Seq: 26		09:27:55 21 Apr 15		HG
				180-38841-b-9-a@10					
Hg	6.572	ppb	.0000	6.572					
*** Sample ID:					Seq: 27		09:30:11 21 Apr 15		HG
				180-38841-b-10-a@10					
Hg	8.294	ppb	.0000	8.294					
*** Sample ID:					Seq: 28		09:32:19 21 Apr 15		HG
				180-38841-b-11-a@10					
Hg	3.580	ppb	.0000	3.580					
*** Sample ID:					Seq: 29		09:34:39 21 Apr 15		HG
				180-38841-b-12-a@10					
Hg	.0902	ppb	.0000	.0902					
*** Sample ID:					Seq: 30		09:36:40 21 Apr 15		HG
				180-38394-c-1-a@10					
Hg	28.35 H	ppb	.0000	28.35					
*** Sample ID:					Seq: 31		09:39:02 21 Apr 15		HG
				180-38618-b-6-a@10					
Hg	1.611	ppb	.0000	1.611					
*** Sample ID:					Seq: 32		09:40:54 21 Apr 15		HG
				180-38392-b-1-b@10					
Hg	4.541	ppb	.0000	4.541					

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 33 09:42:46 21 Apr 15 HG
180-38392-b-2-b@10

Hg	11.34 H	ppb	.0000	11.34

*** Check Standard: 6 Ck6CCV Seq: 34 09:45:04 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.6	5.080	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 35 09:47:03 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0626	.2400	ppb	.0000

*** Sample ID: Seq: 36 09:48:49 21 Apr 15 HG
180-38392-b-5-b@10

Hg	10.94 H	ppb	.0000	10.94

*** Sample ID: Seq: 37 09:51:50 21 Apr 15 HG
240-49430-a-1-a

Hg	.1870	ppb	.0000	.1870

*** Sample ID: Seq: 38 09:53:49 21 Apr 15 HG
240-49430-a-2-a

Hg	.2913	ppb	.0000	.2913

*** Sample ID: Seq: 39 09:55:36 21 Apr 15 HG
240-49430-a-3-a

Hg	.0228	ppb	.0000	.0228

*** Check Standard: 6 Ck6CCV Seq: 40 09:57:23 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.3	5.267	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 41 09:59:43 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0411	.2400	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 42 10:02:14 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.8	5.239	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 43 10:04:21 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0287	.2400	ppb	.0000

*** Sample ID: Seq: 44 10:06:21 21 Apr 15 HG
mb 240-177100/1-a

Hg	.0266	ppb	.0000	.0266

*** Sample ID: Seq: 45 10:08:19 21 Apr 15 HG
lcs 240-177100/2-a

Hg	5.037	ppb	.0000	5.037

*** Sample ID: Seq: 46 10:11:08 21 Apr 15 HG
240-49422-h-1-d

Hg	.0260	ppb	.0000	.0260

*** Sample ID: Seq: 47 10:13:08 21 Apr 15 HG
240-49422-h-1-e ms

Hg	1.307	ppb	.0000	1.307

*** Sample ID: Seq: 48 10:15:05 21 Apr 15 HG
240-49422-h-1-f msd

Hg	1.047	ppb	.0000	1.047

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 49	10:17:02 21 Apr 15	HG		
				240-49422-f-2-b				
Hg	.0269	ppb	.0000	.0269				
*** Sample ID:				Seq: 50	10:18:50 21 Apr 15	HG		
				240-49422-g-3-b				
Hg	.2076	ppb	.0000	.2076				
*** Sample ID:				Seq: 51	10:20:40 21 Apr 15	HG		
				240-49422-f-4-b				
Hg	.1595	ppb	.0000	.1595				
*** Sample ID:				Seq: 52	10:23:18 21 Apr 15	HG		
				240-49422-h-5-b				
Hg	.0616	ppb	.0000	.0616				
*** Sample ID:				Seq: 53	10:25:16 21 Apr 15	HG		
				240-49422-h-7-b				
Hg	.0781	ppb	.0000	.0781				
*** Check Standard: 6 Ck6CCV				Seq: 54	10:27:02 21 Apr 15	HG		
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		103.2	5.158	5.000	ppb	.0000		
*** Check Standard: 1 Ck1CCB				Seq: 55	10:29:00 21 Apr 15	HG		
Line	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg		-.1213	.2400	ppb	.0000			
*** Sample ID:				Seq: 56	10:31:38 21 Apr 15	HG		
				240-49422-h-8-b				
Hg	.0683	ppb	.0000	.0683				
*** Sample ID:				Seq: 57	10:33:40 21 Apr 15	HG		
				240-49422-g-9-b				
Hg	.2078	ppb	.0000	.2078				
*** Sample ID:				Seq: 58	10:35:58 21 Apr 15	HG		
				240-49422-g-10-b				
Hg	.0632	ppb	.0000	.0632				
*** Sample ID:				Seq: 59	10:38:06 21 Apr 15	HG		
				240-49422-f-13-b				
Hg	.0820	ppb	.0000	.0820				
*** Sample ID:				Seq: 60	10:40:04 21 Apr 15	HG		
				240-49422-f-14-b				
Hg	.0591	ppb	.0000	.0591				
*** Sample ID:				Seq: 61	10:42:06 21 Apr 15	HG		
				240-49422-b-15-b				
Hg	.0710	ppb	.0000	.0710				
*** Sample ID:				Seq: 62	10:44:03 21 Apr 15	HG		
				240-49419-b-13-b				
Hg	.0296	ppb	.0000	.0296				
*** Sample ID:				Seq: 63	10:45:51 21 Apr 15	HG		
				240-49419-b-14-b				
Hg	.0424	ppb	.0000	.0424				
*** Sample ID:				Seq: 64	10:47:41 21 Apr 15	HG		
				240-49419-b-15-b				
Hg	.0390	ppb	.0000	.0390				

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:				Seq: 65		10:50:11 21 Apr 15			HG
				240-49419-b-16-b					
Hg	.0834	ppb	.0000	.0834					
*** Check Standard: 6 Ck6CCV				Seq: 66		10:52:48 21 Apr 15			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		103.2	5.158	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB				Seq: 67		10:54:47 21 Apr 15			HG
Line	Flag	Found	Range(+/-)	Units		SD/RSD			
Hg		-.0706	.2400	ppb		.0000			
*** Sample ID:				Seq: 68		10:56:57 21 Apr 15			HG
				240-49419-b-17-b					
Hg	.0472	ppb	.0000	.0472					
*** Sample ID:				Seq: 69		10:58:45 21 Apr 15			HG
				240-49419-b-18-b					
Hg	.0205	ppb	.0000	.0205					
*** Sample ID:				Seq: 70		11:00:42 21 Apr 15			HG
				240-49419-b-19-b					
Hg	.0568	ppb	.0000	.0568					
*** Sample ID:				Seq: 71		11:02:31 21 Apr 15			HG
				240-49419-b-20-b					
Hg	.0916	ppb	.0000	.0916					
*** Sample ID:				Seq: 72		11:04:48 21 Apr 15			HG
				mb 240-177137/1-a					
Hg	-.0003	ppb	.0000	-.0003					
*** Sample ID:				Seq: 73		11:06:49 21 Apr 15			HG
				lcs 240-177137/2-a					
Hg	4.947	ppb	.0000	4.947					
*** Sample ID:				Seq: 74		11:08:52 21 Apr 15			HG
				240-49171-a-3-g					
Hg	.0459	ppb	.0000	.0459					
*** Sample ID:				Seq: 75		11:10:41 21 Apr 15			HG
				240-49171-a-3-h du					
Hg	.0774	ppb	.0000	.0774					
*** Sample ID:				Seq: 76		11:12:32 21 Apr 15			HG
				240-49171-a-3-i ms					
Hg	1.069	ppb	.0000	1.069					
*** Sample ID:				Seq: 77		11:14:25 21 Apr 15			HG
				240-49172-a-9-c					
Hg	.1117	ppb	.0000	.1117					
*** Check Standard: 6 Ck6CCV				Seq: 78		11:16:14 21 Apr 15			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		103.3	5.163	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB				Seq: 79		11:18:13 21 Apr 15			HG
Line	Flag	Found	Range(+/-)	Units		SD/RSD			
Hg		-.0690	.2400	ppb		.0000			
*** Sample ID:				Seq: 80		11:20:00 21 Apr 15			HG
				240-49172-a-10-c					
Hg	.2137	ppb	.0000	.2137					

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 81	11:21:48 21 Apr 15	HG		
				240-49173-a-1-c				
Hg	.2304	ppb	.0000	.2304				
*** Sample ID:				Seq: 82	11:23:36 21 Apr 15	HG		
				240-49173-a-2-c				
Hg	.2602	ppb	.0000	.2602				
*** Sample ID:				Seq: 83	11:25:38 21 Apr 15	HG		
				240-49173-a-3-c				
Hg	.2483	ppb	.0000	.2483				
*** Sample ID:				Seq: 84	11:27:26 21 Apr 15	HG		
				240-49173-a-4-c				
Hg	.2053	ppb	.0000	.2053				
*** Sample ID:				Seq: 85	11:29:35 21 Apr 15	HG		
				240-49233-a-4-c				
Hg	.3301	ppb	.0000	.3301				
*** Sample ID:				Seq: 86	11:31:23 21 Apr 15	HG		
				240-49233-a-6-c				
Hg	.2871	ppb	.0000	.2871				
*** Sample ID:				Seq: 87	11:33:21 21 Apr 15	HG		
				240-49233-a-8-c				
Hg	.3116	ppb	.0000	.3116				
*** Sample ID:				Seq: 88	11:35:30 21 Apr 15	HG		
				180-38618-c-1-b@10				
Hg	1.198	ppb	.0000	1.198				
*** Sample ID:				Seq: 89	11:37:23 21 Apr 15	HG		
				180-38618-c-2-b@10				
Hg	2.510	ppb	.0000	2.510				
*** Check Standard: 6 Ck6CCV				Seq: 90	11:39:30 21 Apr 15	HG		
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		104.5	5.226	5.000	ppb	.0000		
*** Check Standard: 1 Ck1CCB				Seq: 91	11:41:28 21 Apr 15	HG		
Line	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg		-.0559	.2400	ppb	.0000			
*** Sample ID:				Seq: 92	11:43:26 21 Apr 15	HG		
				180-38618-c-5-b@10				
Hg	16.31 H	ppb	.0000	16.31				
*** Sample ID:				Seq: 93	11:45:50 21 Apr 15	HG		
				180-38618-b-7-b@10				
Hg	31.17 H	ppb	.0000	31.17				
*** Sample ID:				Seq: 94	11:48:00 21 Apr 15	HG		
				180-38618-b-8-b@10				
Hg	45.04 H	ppb	.0000	45.04				
*** Sample ID:				Seq: 95	11:51:03 21 Apr 15	HG		
				180-38618-b-9-b@10				
Hg	5.506	ppb	.0000	5.506				
*** Sample ID:				Seq: 96	11:53:01 21 Apr 15	HG		
				180-38618-b-10-b@10				
Hg	1.102	ppb	.0000	1.102				

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 97 11:54:49 21 Apr 15 HG
190-7098-a-1-d

Hg	-.0061	ppb	.0000	-.0061				

*** Sample ID: Seq: 98 11:56:42 21 Apr 15 HG
190-7098-a-2-b

Hg	.0404	ppb	.0000	.0404				

*** Check Standard: 4 Ck4CRA\MRL Seq: 99 11:58:31 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		97.60	.1952	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 100 12:00:19 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.2	5.209	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 101 12:02:27 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0433	.2400	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 102 12:06:00 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.7	5.236	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 103 12:07:56 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0811	.2400	ppb	.0000

*** Sample ID: Seq: 104 12:09:46 21 Apr 15 HG
180-38841-b-12-a

Hg	1.167	ppb	.0000	1.167				

*** Sample ID: Seq: 105 12:11:39 21 Apr 15 HG
180-38961-c-1-a@20

Hg	6.395	ppb	.0000	6.395				

*** Sample ID: Seq: 106 12:13:58 21 Apr 15 HG
180-38961-c1b ms@20

Hg	7.656	ppb	.0000	7.656				

*** Sample ID: Seq: 107 12:16:09 21 Apr 15 HG
180-38961c1c msd@20

Hg	7.332	ppb	.0000	7.332				

*** Sample ID: Seq: 108 12:18:07 21 Apr 15 HG
180-38961-c-2-a@20

Hg	6.528	ppb	.0000	6.528				

*** Sample ID: Seq: 109 12:20:27 21 Apr 15 HG
180-38392-b-2-b@20

Hg	2.224	ppb	.0000	2.224				

*** Sample ID: Seq: 110 12:22:20 21 Apr 15 HG
180-38392-b-5-b@20

Hg	5.622	ppb	.0000	5.622				

*** Sample ID: Seq: 111 12:24:18 21 Apr 15 HG
180-38394-c-1-a@50

Hg	1.605	ppb	.0000	1.605				

*** Sample ID: Seq: 112 12:26:17 21 Apr 15 HG
180-38961-c-17-a@100

Hg	3.425	ppb	.0000	3.425				

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 113 12:28:35 21 Apr 15 HG
180-38961-c-18-a@100

Hg	7.682	ppb	.0000	7.682

*** Check Standard: 6 Ck6CCV Seq: 114 12:31:04 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.5	5.224	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 115 12:33:01 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0834	.2400	ppb	.0000

*** Sample ID: Seq: 116 12:34:50 21 Apr 15 HG
180-38961-c-19-a@100

Hg	5.616	ppb	.0000	5.616

*** Sample ID: Seq: 117 12:37:20 21 Apr 15 HG
180-38961-c-20-a@200

Hg	4.816	ppb	.0000	4.816

*** Sample ID: Seq: 118 12:39:19 21 Apr 15 HG
180-38618-c-5-b@50

Hg	3.404	ppb	.0000	3.404

*** Sample ID: Seq: 119 12:41:21 21 Apr 15 HG
180-38618-b-7-b@100

Hg	3.210	ppb	.0000	3.210

*** Sample ID: Seq: 120 12:43:13 21 Apr 15 HG
180-38618-b-8-b@100

Hg	4.663	ppb	.0000	4.663

*** Check Standard: 6 Ck6CCV Seq: 121 12:45:37 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.9	5.294	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 122 12:47:53 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0253	.2400	ppb	.0000

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 6 Ck6CCV Seq: 123 13:13:02 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		106.1	5.304	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 124 13:14:59 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0697	.2400	ppb	.0000

*** Sample ID: Seq: 125 13:16:49 21 Apr 15 HG
mb 240-177215/1-a

Hg	.0234	ppb	.0000	.0234

*** Sample ID: Seq: 126 13:19:05 21 Apr 15 HG
lcs 240-177215/2-a

Hg	5.337	ppb	.0000	5.337

*** Sample ID: Seq: 127 13:21:03 21 Apr 15 HG
680-111445-a-3-r

Hg	-.0303	ppb	.0000	-.0303

*** Sample ID: Seq: 128 13:22:53 21 Apr 15 HG
680-111445-a-3-s ms

Hg	1.057	ppb	.0000	1.057

*** Sample ID: Seq: 129 13:24:59 21 Apr 15 HG
680-111445-a-3-t msd

Hg	1.062	ppb	.0000	1.062

*** Sample ID: Seq: 130 13:26:49 21 Apr 15 HG
680-111445-a-2-m

Hg	-.0479	ppb	.0000	-.0479

*** Sample ID: Seq: 131 13:28:56 21 Apr 15 HG
680-111445-a-4-h

Hg	-.0022	ppb	.0000	-.0022

*** Sample ID: Seq: 132 13:30:55 21 Apr 15 HG
680-111445-a-5-h

Hg	.6170	ppb	.0000	.6170

*** Sample ID: Seq: 133 13:32:58 21 Apr 15 HG
680-111445-a-6-h

Hg	.0664	ppb	.0000	.0664

*** Sample ID: Seq: 134 13:34:45 21 Apr 15 HG
180-38392-b-6-b@10

Hg	6.166	ppb	.0000	6.166

*** Check Standard: 6 Ck6CCV Seq: 135 13:36:42 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.2	5.208	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 136 13:38:39 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0708	.2400	ppb	.0000

*** Sample ID: Seq: 137 13:40:37 21 Apr 15 HG
180-38392-c-7-b@10

Hg	7.965	ppb	.0000	7.965

*** Sample ID: Seq: 138 13:42:39 21 Apr 15 HG
180-38392-b-8-b@10

Hg	1.060	ppb	.0000	1.060

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 139 13:44:45 21 Apr 15 HG
180-38667-c-6-b@10
Hg 8.623 ppb .0000 8.623

*** Sample ID: Seq: 140 13:47:03 21 Apr 15 HG
180-38669-c-1-a@10
Hg 5.104 ppb .0000 5.104

*** Sample ID: Seq: 141 13:49:01 21 Apr 15 HG
180-38669-c-31-a@10
Hg 16.94 H ppb .0000 16.94

*** Sample ID: Seq: 142 13:51:19 21 Apr 15 HG
180-38669-c-32-a@10
Hg 19.27 H ppb .0000 19.27

*** Sample ID: Seq: 143 13:53:32 21 Apr 15 HG
180-38669-c-33-a@10
Hg 22.09 H ppb .0000 22.09

*** Sample ID: Seq: 144 13:55:45 21 Apr 15 HG
180-38669-c-34-a@10
Hg 31.49 H ppb .0000 31.49

*** Sample ID: Seq: 145 13:58:06 21 Apr 15 HG
180-38669-a-35-a@10
Hg 25.34 H ppb .0000 25.34

*** Sample ID: Seq: 146 14:00:13 21 Apr 15 HG
180-38669-b-36-a@10
Hg 21.91 H ppb .0000 21.91

*** Check Standard: 6 Ck6CCV Seq: 147 14:02:22 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.3	5.163	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 148 14:04:41 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0276	.2400	ppb	.0000

*** Sample ID: Seq: 149 14:06:28 21 Apr 15 HG
180-38669-b-37-a@10
Hg 18.03 H ppb .0000 18.03

*** Sample ID: Seq: 150 14:08:37 21 Apr 15 HG
180-38669-b-38-a@10
Hg 15.77 H ppb .0000 15.77

*** Sample ID: Seq: 151 14:10:37 21 Apr 15 HG
180-38394-b-16-a@10
Hg 34.90 H ppb .0000 34.90

*** Sample ID: Seq: 152 14:12:37 21 Apr 15 HG
180-38394-b-17-a@10
Hg 39.27 H ppb .0000 39.27

*** Check Standard: 6 Ck6CCV Seq: 153 14:14:55 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.7	5.087	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 154 14:16:54 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0877	.2400	ppb	.0000

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 6 Ck6CCV Seq: 155 14:30:17 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.2	5.162	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 156 14:32:14 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0802	.2400	ppb	.0000

*** Sample ID: Seq: 157 14:34:03 21 Apr 15 HG
180-38669-c-31-a@50

Hg	3.315	ppb	.0000	3.315

*** Sample ID: Seq: 158 14:36:02 21 Apr 15 HG
180-38669-c-32-a@50

Hg	3.871	ppb	.0000	3.871

*** Sample ID: Seq: 159 14:37:51 21 Apr 15 HG
180-38669-c-33-a@50

Hg	4.268	ppb	.0000	4.268

*** Sample ID: Seq: 160 14:39:50 21 Apr 15 HG
180-38669-c-34-a@50

Hg	6.279	ppb	.0000	6.279

*** Sample ID: Seq: 161 14:41:59 21 Apr 15 HG
180-38669-a-35-a@50

Hg	4.924	ppb	.0000	4.924

*** Sample ID: Seq: 162 14:44:06 21 Apr 15 HG
180-38669-b-36-a@50

Hg	4.303	ppb	.0000	4.303

*** Sample ID: Seq: 163 14:46:14 21 Apr 15 HG
180-38669-b-37-a@50

Hg	3.579	ppb	.0000	3.579

*** Sample ID: Seq: 164 14:48:16 21 Apr 15 HG
180-38669-b-38-a@50

Hg	3.069	ppb	.0000	3.069

*** Sample ID: Seq: 165 14:50:16 21 Apr 15 HG
180-38394-b-16-a@50

Hg	7.262	ppb	.0000	7.262

*** Sample ID: Seq: 166 14:52:14 21 Apr 15 HG
180-38394-b-17-a@50

Hg	7.886	ppb	.0000	7.886

*** Check Standard: 6 Ck6CCV Seq: 167 14:54:13 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.5	5.124	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 168 14:56:09 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0838	.2400	ppb	.0000

TestAmerica North Canton Hg Data Review Checklist

Run/Project Information:

Circle Methods used: 7470A / 245.1 (7471) Batch: 177294

Run Date: 4-21-15 Analyst: B. Walpole Instrument: #4

Review Items				
A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRA run?	✓			✓
B. Sample Results				
1. Were samples with concentrations > high calibration standard diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/ Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?		✓		✓
4. MSD or DU run at required frequency and RPD within SOP limits?		✓		✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current IDL/MDL data on file?	✓			✓
3. Calculations and Transcription checked for error?	✓			✓
4. All client/project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Level I

Analyst: B Walpole Date/Time: 4-21-15 Reviewed from 8:18 to 14:56

Analyst: _____ Date/Time: _____ Reviewed from _____ to _____

Comments: _____

Level II

Reviewer: [signature] Date/Time: 04/22/2015 Reviewed from 08:18 to 14:56

Reviewer: _____ Date/Time: _____ Reviewed from _____ to _____

Comments _____

Curve Date 4-20-15 Curve Time 8:28-8:58 DILUTION H20 00034

Revised 11/29/2012

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Batch Number: 176698 Batch Start Date: 04/16/15 09:58 Batch Analyst: Sutherland, Aaron

Batch Method: 3050B Batch End Date: 04/16/15 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	MT1TO1HN03 00947	MTH202 00041	MTICPMS2 00020
MB 240-176698/1		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	
LCS 240-176698/2		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	1 mL
240-49172-A-1-A	079SS-0369M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.32 g	100 mL	10 mL	10 mL	
240-49172-A-2-A	079SS-0370M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.13 g	100 mL	10 mL	10 mL	
240-49172-A-3-A	079SS-0371M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.22 g	100 mL	10 mL	10 mL	
240-49172-A-4-A	079SS-0372M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.36 g	100 mL	10 mL	10 mL	
240-49172-A-5-A	079SS-0373M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.15 g	100 mL	10 mL	10 mL	
240-49172-A-6-A	079SS-0374M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.07 g	100 mL	10 mL	10 mL	
240-49172-A-7-A	079SS-0375M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.06 g	100 mL	10 mL	10 mL	
240-49172-A-8-A	079SS-0376M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.05 g	100 mL	10 mL	10 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICPMSA 00022	MTICPMSB 00022	MTTMHCL 00062	MTTMHNO3 00054		
MB 240-176698/1		3050B, 6020				10 mL	5 mL		
LCS 240-176698/2		3050B, 6020		1 mL	1 mL	10 mL	5 mL		
240-49172-A-1-A	079SS-0369M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49172-A-2-A	079SS-0370M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49172-A-3-A	079SS-0371M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49172-A-4-A	079SS-0372M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49172-A-5-A	079SS-0373M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49172-A-6-A	079SS-0374M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49172-A-7-A	079SS-0375M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49172-A-8-A	079SS-0376M-0001-SO	3050B, 6020	T			10 mL	5 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Batch Number: 176698 Batch Start Date: 04/16/15 09:58 Batch Analyst: Sutherland, Aaron

Batch Method: 3050B Batch End Date: 04/16/15 17:00

Batch Notes	
Balance ID	b038
Blank Soil Lot Number	K565-4i009
Filter Paper Lot Number	9605292
Hot Block ID number	a1 a2 c3
Pipette ID	59L-66
Digestion Tube/Cup Lot #	150204

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Batch Number: 177128 Batch Start Date: 04/20/15 12:52 Batch Analyst: Elshaw, Dale

Batch Method: 3050B Batch End Date: 04/20/15 17:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	MT1TO1HN03 00949	MTH202 00042	MTICPMS2 00020
MB 240-177128/1		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	
LCS 240-177128/2		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	1 mL
240-49172-A-9-A	079SS-0377M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.12 g	100 mL	10 mL	10 mL	
240-49172-A-10-A	079SS-0378M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.21 g	100 mL	10 mL	10 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICPMSA 00022	MTICPMSB 00022	MTTMHCL 00063	MTTMHNO3 00054		
MB 240-177128/1		3050B, 6020				10 mL	5 mL		
LCS 240-177128/2		3050B, 6020		1 mL	1 mL	10 mL	5 mL		
240-49172-A-9-A	079SS-0377M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49172-A-10-A	079SS-0378M-0001-SO	3050B, 6020	T			10 mL	5 mL		

Batch Notes	
Balance ID	b039
Blank Soil Lot Number	K565-4i009
Filter Paper Lot Number	9605292
Hot Block ID number	a1 a2 c3
Pipette ID	64-66
Digestion Tube/Cup Lot #	150204

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Batch Number: 176711 Batch Start Date: 04/16/15 14:45 Batch Analyst: Sutherland, Aaron

Batch Method: 7471A Batch End Date: 04/16/15 15:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 00997	MTHGCALW 00883	MTKMN04W 00081	
MB 240-176711/1		7471A, 7471A		0.60 g	100 mL	5 mL		15 mL	
LCS 240-176711/2		7471A, 7471A		0.60 g	100 mL	5 mL	5 mL	15 mL	
240-49172-A-1-A	079SS-0369M-0001-SO	7471A, 7471A	T	0.67 g	100 mL	5 mL		15 mL	
240-49172-A-2-A	079SS-0370M-0001-SO	7471A, 7471A	T	0.67 g	100 mL	5 mL		15 mL	
240-49172-A-3-A	079SS-0371M-0001-SO	7471A, 7471A	T	0.63 g	100 mL	5 mL		15 mL	
240-49172-A-4-A	079SS-0372M-0001-SO	7471A, 7471A	T	0.65 g	100 mL	5 mL		15 mL	
240-49172-A-5-A	079SS-0373M-0001-SO	7471A, 7471A	T	0.70 g	100 mL	5 mL		15 mL	
240-49172-A-6-A	079SS-0374M-0001-SO	7471A, 7471A	T	0.67 g	100 mL	5 mL		15 mL	
240-49172-A-7-A	079SS-0375M-0001-SO	7471A, 7471A	T	0.68 g	100 mL	5 mL		15 mL	
240-49172-A-8-A	079SS-0376M-0001-SO	7471A, 7471A	T	0.59 g	100 mL	5 mL		15 mL	

Batch Notes	
Balance ID	b038
Blank Soil Lot Number	K565-4i009
Hot Block ID number	c2 c1 b1
Pipette ID	59L-64-66
Digestion Tube/Cup Lot #	1408268

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Batch Number: 177030 Batch Start Date: 04/20/15 08:28 Batch Analyst: Walpole, Barbara

Batch Method: 7471A Batch End Date: 04/20/15 08:58

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 01001	MTHGCALW 00885	MTHgStd 00016	MTKMN04W 00081
ICV 240-177030/7		7471A, 7471A		100 mL	100 mL	5 mL		0.5 mL	15 mL
ICB 240-177030/8		7471A, 7471A		100 mL	100 mL	5 mL			15 mL
CRA 240-177030/9		7471A, 7471A		100 mL	100 mL	5 mL	0.2 mL		15 mL
CCV 240-177030/10		7471A, 7471A		100 mL	100 mL	5 mL	5 mL		15 mL
CCB 240-177030/11		7471A, 7471A		100 mL	100 mL	5 mL			15 mL

Batch Notes	
Hot Block ID number	C1
Pipette ID	59L-64-66
Digestion Tube/Cup Lot #	1408268

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Batch Number: 177137 Batch Start Date: 04/20/15 15:40 Batch Analyst: Elshaw, Dale

Batch Method: 7471A Batch End Date: 04/20/15 16:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 01002	MTHGCALW 00885	MTKMN04W 00081	
MB 240-177137/1		7471A, 7471A		0.60 g	100 mL	5 mL		15 mL	
LCS 240-177137/2		7471A, 7471A		0.60 g	100 mL	5 mL	5 mL	15 mL	
240-49172-A-9-A	079SS-0377M-0001-SO	7471A, 7471A	T	0.54 g	100 mL	5 mL		15 mL	
240-49172-A-10-A	079SS-0378M-0001-SO	7471A, 7471A	T	0.57 g	100 mL	5 mL		15 mL	

Batch Notes	
Balance ID	b039
Blank Soil Lot Number	K565-4i009
Hot Block ID number	c2 c1
Pipette ID	59L-64-66
Digestion Tube/Cup Lot #	1408268

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Project: Ravenna Army Ammunition Plant

Client Sample ID	Lab Sample ID
079SS-0369M-0001-SO	240-49172-1
079SS-0370M-0001-SO	240-49172-2
079SS-0371M-0001-SO	240-49172-3
079SS-0372M-0001-SO	240-49172-4
079SS-0373M-0001-SO	240-49172-5
079SS-0374M-0001-SO	240-49172-6
079SS-0375M-0001-SO	240-49172-7
079SS-0376M-0001-SO	240-49172-8
079SS-0377M-0001-SO	240-49172-9
079SS-0378M-0001-SO	240-49172-10

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49172-1

SDG Number: CC RVAAP-79 Load Line 3

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture LOQ Date: 01/28/2010 09:24

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49172-1

SDG Number: CC RVAAP-79 Load Line 3

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	XRL (mg/L)	
Percent Moisture		10	
Percent Solids		10	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			10:47																										
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ZZZZZZ			16:38																										
240-49172-1	1	T	16:38	X	X																								
240-49172-2	1	T	16:38	X	X																								
240-49172-3	1	T	16:38	X	X																								
240-49172-4	1	T	16:38	X	X																								
240-49172-5	1	T	16:38	X	X																								
240-49172-6	1	T	16:38	X	X																								
240-49172-7	1	T	16:38	X	X																								
240-49172-8	1	T	16:38	X	X																								
240-49172-9 DU	1	T	16:38	X	X																								
240-49172-9	1	T	16:38	X	X																								
240-49172-10	1	T	16:38	X	X																								
ZZZZZZ			16:38																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			16:38	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
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Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Batch Number: 176546 Batch Start Date: 04/15/15 10:46 Batch Analyst: Matheny, Sarah

Batch Method: Moisture Batch End Date: 04/16/15 09:48

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-49172-A-1-A	079SS-0369M-0001-SO	Moisture	T	4.2418 g	18.2246 g	17.9380 g			
240-49172-A-2-A	079SS-0370M-0001-SO	Moisture	T	4.2418 g	18.3234 g	17.9888 g			
240-49172-A-3-A	079SS-0371M-0001-SO	Moisture	T	4.2418 g	19.1941 g	18.8539 g			
240-49172-A-4-A	079SS-0372M-0001-SO	Moisture	T	4.2418 g	19.5526 g	19.2270 g			
240-49172-A-5-A	079SS-0373M-0001-SO	Moisture	T	4.2418 g	18.7543 g	18.4453 g			
240-49172-A-6-A	079SS-0374M-0001-SO	Moisture	T	4.2418 g	15.7012 g	15.4568 g			
240-49172-A-7-A	079SS-0375M-0001-SO	Moisture	T	4.2418 g	21.1627 g	20.8641 g			
240-49172-A-8-A	079SS-0376M-0001-SO	Moisture	T	4.2418 g	21.5459 g	21.1417 g			
240-49172-A-9-A DU	079SS-0377M-0001-SO	Moisture	T	4.2418 g	12.0346 g	11.8648 g			
240-49172-A-9-A	079SS-0377M-0001-SO	Moisture	T	4.2418 g	14.2851 g	14.0663 g			
240-49172-A-10-A	079SS-0378M-0001-SO	Moisture	T	4.2418 g	20.5123 g	20.1693 g			

Batch Notes	
Balance ID	B047 No Unit
Date and Time Samples in Desiccator	4/15/15; 05:30
Date and Time Samples out of Desiccator	4/15/15; 10:15
Date samples were placed in the oven	4/15/2015
Oven Temp when samples are put in oven	103.1 Degrees C
Time samples were place in the oven	18:20
Date samples were removed from oven	4/16/15
Oven Temp when samples removed from oven	103.9 Degrees C
Time Samples were removed from oven	6:30
Oven ID	002
ID number of the thermometer	Tempguard Box-C #6

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49172-1

SDG No.: CC RVAAP-79 Load Line 3

Batch Number: 176546 Batch Start Date: 04/15/15 10:46 Batch Analyst: Matheny, Sarah

Batch Method: Moisture Batch End Date: 04/16/15 09:48

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS

4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Test America Project #: 24009157

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/9/2015	COC No: 003
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	__1__ of __1__ COCs
33 Boston Post Rd. W	**Analysis Turnaround Time**			For Lab Use Only:
Marlborough, MA, 01752	☑CALENDAR DAYS ☐WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☑ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Load Line 3	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler: KP - FR

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW71471A/ Mercury	Sample Specific Notes:
079SS-0369M-0001-SO	8-Apr-15	1020	ISM	SO	1	N	N			X						X	
079SS-0370M-0001-SO	8-Apr-15	1240	ISM	SO	1	N	N			X						X	
079SS-0371M-0001-SO	8-Apr-15	1150	ISM	SO	1	N	N			X						X	
079SS-0372M-0001-SO	8-Apr-15	1100	ISM	SO	1	N	N			X						X	
079SS-0373M-0001-SO	8-Apr-15	1340	ISM	SO	1	N	N			X						X	
079SS-0374M-0001-SO	8-Apr-15	1420	ISM	SO	1	N	N			X						X	
079SB-0375M-0001-SO	7-Apr-15	1400	ISM	SO	1	N	N			X						X	
079SB-0376M-0001-SO	7-Apr-15	1540	ISM	SO	1	N	N			X						X	
079SB-0377M-0001-SO	7-Apr-15	1600	ISM	SO	1	N	N			X						X	
079SB-0378M-0001-SO	7-Apr-15	1610	ISM	SO	1	N	N			X						X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time: 4-9-15 1243	Received by:	Company: TestAm	Date/Time: 4-9-15 1243
Relinquished by:	Company: TestAm 4/9/15	Date/Time: 1456	Received by:	Company: TA	Date/Time: 4-9-15 1451
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

TestAmerica Canton Sample Receipt Form/Narrative Login # : 49172
Canton Facility

Client ECC Site Name

Cooler Received on 4-9-15 Opened on 4.9.15

Cooler unpacked by:

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off ~~TestAmerica Courier~~ Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: ~~Wet Ice~~ Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

~~IR GUN# A (CF +4.0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

☑ See Multiple Cooler Form

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 4 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the sampler(s) clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Were sample(s) at the correct pH upon receipt? Yes No ~~NA~~ pH Strip Lot# HC425511
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a trip blank present in the cooler(s)? Trip Blank Lot # Yes No

Contacted PM Date by via Verbal Voice Mail Other

Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.

Time preserved: Preservative(s) added/Lot number(s):

TestAmerica Multiple Cooler Receipt Form/Narrative
Canton Facility

Login # : 49172

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
client	4	2.8	3.3	Ice
↓	↓	4.0	4.5	↓
		3.6	4.1	
		3.8	4.3	

ANALYTICAL REPORT

Job Number: 240-49173-1

SDG Number: CC RVAAP-79 Rt 80 Tank Farm

Job Description: Ravenna Army Ammunition Plant

For:
Environmental Chemical Corp.
33 Boston Post Road West
Suite 420
Marlborough, MA 01752

Attention: Mr. Jackson Kiker

Approved for release.
Mark J Loeb
Project Manager II
4/30/2015 5:32 PM

Mark J Loeb, Project Manager II
4101 Shuffel Street NW, North Canton, OH, 44720
(330)966-9387
mark.loeb@testamericainc.com
04/30/2015

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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Qualifiers

Metals

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
D	The reported value is from a dilution.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Environmental Chemical Corp.

Project: Ravenna Army Ammunition Plant

Report Number: 240-49173-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

TestAmerica utilizes USEPA approved methods and DOD QSM, where applicable, in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A summary of QC data for these analyses is included at the back of the report.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

All parameters for which TestAmerica North Canton has certification were evaluated to the limit of detection (LOD) and include qualified results where applicable. Parameters not certified under QSM, if any, were evaluated to the detection limit (DL) and include qualified results where applicable.

The sample(s) that contain constituents flagged with U are undetected. The result associated with this flag is the limit of detection (LOD).

RECEIPT

The samples were received on 4/9/2015 2:51 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.3º C, 4.1º C, 4.3º C and 4.5º C.

TOTAL METALS (ICPMS) WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SS-0347M-0001-SO (240-49173-1), 079SS-0348M-0001-SO (240-49173-2), 079SS-0349M-0001-SO (240-49173-3) and 079SS-0350M-0001-SO (240-49173-4) were analyzed for total metals (ICPMS) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 6020 DoD. The samples began the drying process on 04/14/2015, were prepared on 04/20/2015 and analyzed on 04/22/2015, 04/24/2015 and 04/28/2015.

Several analytes were detected in method blank MB 240-177128/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Samples 079SS-0347M-0001-SO (240-49173-1)[20X], 079SS-0348M-0001-SO (240-49173-2)[20X], 079SS-0349M-0001-SO (240-49173-3)[20X] and 079SS-0350M-0001-SO (240-49173-4)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MERCURY WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SS-0347M-0001-SO (240-49173-1), 079SS-0348M-0001-SO (240-49173-2), 079SS-0349M-0001-SO (240-49173-3) and 079SS-0350M-0001-SO (240-49173-4) were analyzed for mercury with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 7471A DOD. The samples began the drying process on 04/14/2015, were prepared on 04/20/2015 and analyzed on 04/21/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL SOLIDS/PERCENT MOISTURE

Samples 079SS-0347M-0001-SO (240-49173-1), 079SS-0348M-0001-SO (240-49173-2), 079SS-0349M-0001-SO (240-49173-3) and 079SS-0350M-0001-SO (240-49173-4) were analyzed for Total Solids/Percent Moisture in accordance with Percent Moisture method. The samples began the drying process on 04/14/2015, were analyzed on 04/15/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49173-1
SDG: CC RVAAP-79 Rt 80 Tank Farm

Client Sample ID: 079SS-0347M-0001-SO — Lab Sample ID: 240-49173-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8200	D	18	0.56	mg/Kg	2	☼	6020	Total/NA
Antimony	0.32	J D	0.36	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	12	D	0.90	0.023	mg/Kg	2	☼	6020	Total/NA
Barium	52	D	0.90	0.20	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.53	D	0.18	0.0099	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.15	J D	0.36	0.0033	mg/Kg	2	☼	6020	Total/NA
Calcium	4400	D	360	20	mg/Kg	2	☼	6020	Total/NA
Chromium	15	D	0.90	0.054	mg/Kg	2	☼	6020	Total/NA
Cobalt	7.3	D	0.18	0.0015	mg/Kg	2	☼	6020	Total/NA
Copper	12	D	0.72	0.087	mg/Kg	2	☼	6020	Total/NA
Iron	21000	D	90	2.9	mg/Kg	2	☼	6020	Total/NA
Lead	14	D	5.4	0.40	mg/Kg	20	☼	6020	Total/NA
Magnesium	2400	D	180	3.6	mg/Kg	2	☼	6020	Total/NA
Manganese	540	D	9.0	1.1	mg/Kg	20	☼	6020	Total/NA
Nickel	18	D	0.90	0.035	mg/Kg	2	☼	6020	Total/NA
Potassium	690	D	180	4.4	mg/Kg	2	☼	6020	Total/NA
Selenium	0.82	J D	0.90	0.036	mg/Kg	2	☼	6020	Total/NA
Silver	0.035	J D	0.18	0.0013	mg/Kg	2	☼	6020	Total/NA
Sodium	38	J D	180	7.8	mg/Kg	2	☼	6020	Total/NA
Thallium	0.12	J D	0.36	0.017	mg/Kg	2	☼	6020	Total/NA
Vanadium	16	D	0.90	0.033	mg/Kg	2	☼	6020	Total/NA
Zinc	42	D	7.2	0.45	mg/Kg	2	☼	6020	Total/NA
Mercury	0.040	J	0.10	0.014	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SS-0348M-0001-SO — Lab Sample ID: 240-49173-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11000	D	16	0.51	mg/Kg	2	☼	6020	Total/NA
Antimony	0.25	J D	0.33	0.012	mg/Kg	2	☼	6020	Total/NA
Arsenic	13	D	0.82	0.021	mg/Kg	2	☼	6020	Total/NA
Barium	60	D	0.82	0.18	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.51	D	0.16	0.0091	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.16	J D	0.33	0.0030	mg/Kg	2	☼	6020	Total/NA
Calcium	640	D	330	18	mg/Kg	2	☼	6020	Total/NA
Chromium	16	D	0.82	0.049	mg/Kg	2	☼	6020	Total/NA
Cobalt	8.4	D	0.16	0.0014	mg/Kg	2	☼	6020	Total/NA
Copper	10	D	0.66	0.080	mg/Kg	2	☼	6020	Total/NA
Iron	21000	D	82	2.6	mg/Kg	2	☼	6020	Total/NA
Lead	19	D	4.9	0.37	mg/Kg	20	☼	6020	Total/NA
Magnesium	1600	D	160	3.3	mg/Kg	2	☼	6020	Total/NA
Manganese	590	D	8.2	0.99	mg/Kg	20	☼	6020	Total/NA
Nickel	15	D	0.82	0.032	mg/Kg	2	☼	6020	Total/NA
Potassium	580	D	160	4.0	mg/Kg	2	☼	6020	Total/NA
Selenium	0.98	D	0.82	0.033	mg/Kg	2	☼	6020	Total/NA
Silver	0.073	J D	0.16	0.0012	mg/Kg	2	☼	6020	Total/NA
Sodium	24	J D	160	7.2	mg/Kg	2	☼	6020	Total/NA
Thallium	0.17	J D	0.33	0.016	mg/Kg	2	☼	6020	Total/NA
Vanadium	23	D	0.82	0.030	mg/Kg	2	☼	6020	Total/NA
Zinc	51	D	6.6	0.41	mg/Kg	2	☼	6020	Total/NA
Mercury	0.045	J	0.10	0.015	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49173-1
SDG: CC RVAAP-79 Rt 80 Tank Farm

Client Sample ID: 079SS-0349M-0001-SO — Lab Sample ID: 240-49173-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	12000	D	18	0.55	mg/Kg	2	☼	6020	Total/NA
Antimony	0.34	J D	0.35	0.012	mg/Kg	2	☼	6020	Total/NA
Arsenic	14	D	0.88	0.023	mg/Kg	2	☼	6020	Total/NA
Barium	62	D	0.88	0.19	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.54	D	0.18	0.0097	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.17	J D	0.35	0.0033	mg/Kg	2	☼	6020	Total/NA
Calcium	1200	D	350	19	mg/Kg	2	☼	6020	Total/NA
Chromium	19	D	0.88	0.053	mg/Kg	2	☼	6020	Total/NA
Cobalt	11	D	0.18	0.0015	mg/Kg	2	☼	6020	Total/NA
Copper	11	D	0.71	0.086	mg/Kg	2	☼	6020	Total/NA
Iron	23000	D	88	2.8	mg/Kg	2	☼	6020	Total/NA
Lead	22	D	5.3	0.40	mg/Kg	20	☼	6020	Total/NA
Magnesium	1700	D	180	3.5	mg/Kg	2	☼	6020	Total/NA
Manganese	790	D	8.8	1.1	mg/Kg	20	☼	6020	Total/NA
Nickel	17	D	0.88	0.034	mg/Kg	2	☼	6020	Total/NA
Potassium	650	D	180	4.3	mg/Kg	2	☼	6020	Total/NA
Selenium	1.0	D	0.88	0.035	mg/Kg	2	☼	6020	Total/NA
Silver	0.073	J D	0.18	0.0012	mg/Kg	2	☼	6020	Total/NA
Sodium	29	J D	180	7.7	mg/Kg	2	☼	6020	Total/NA
Thallium	0.18	J D	0.35	0.017	mg/Kg	2	☼	6020	Total/NA
Vanadium	24	D	0.88	0.033	mg/Kg	2	☼	6020	Total/NA
Zinc	54	D	7.1	0.44	mg/Kg	2	☼	6020	Total/NA
Mercury	0.050	J	0.12	0.017	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SS-0350M-0001-SO — Lab Sample ID: 240-49173-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5500	D	16	0.50	mg/Kg	2	☼	6020	Total/NA
Antimony	0.43	D	0.32	0.011	mg/Kg	2	☼	6020	Total/NA
Arsenic	21	D	0.81	0.021	mg/Kg	2	☼	6020	Total/NA
Barium	68	D	0.81	0.18	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.50	D	0.16	0.0089	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.15	J D	0.32	0.0030	mg/Kg	2	☼	6020	Total/NA
Calcium	4300	D	320	18	mg/Kg	2	☼	6020	Total/NA
Chromium	16	D	0.81	0.049	mg/Kg	2	☼	6020	Total/NA
Cobalt	7.9	D	0.16	0.0014	mg/Kg	2	☼	6020	Total/NA
Copper	10	D	0.65	0.079	mg/Kg	2	☼	6020	Total/NA
Iron	17000	D	81	2.6	mg/Kg	2	☼	6020	Total/NA
Lead	23	D	4.9	0.36	mg/Kg	20	☼	6020	Total/NA
Magnesium	1300	D	160	3.2	mg/Kg	2	☼	6020	Total/NA
Manganese	730	D	8.1	0.97	mg/Kg	20	☼	6020	Total/NA
Nickel	17	D	0.81	0.032	mg/Kg	2	☼	6020	Total/NA
Potassium	370	D	160	4.0	mg/Kg	2	☼	6020	Total/NA
Selenium	0.78	J D	0.81	0.032	mg/Kg	2	☼	6020	Total/NA
Silver	0.10	J D	0.16	0.0011	mg/Kg	2	☼	6020	Total/NA
Sodium	37	J D	160	7.0	mg/Kg	2	☼	6020	Total/NA
Thallium	0.12	J D	0.32	0.015	mg/Kg	2	☼	6020	Total/NA
Vanadium	13	D	0.81	0.030	mg/Kg	2	☼	6020	Total/NA
Zinc	35	D	6.5	0.41	mg/Kg	2	☼	6020	Total/NA
Mercury	0.032	J	0.092	0.013	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SS-0347M-0001-SO

Lab Sample ID: 240-49173-1

Date Collected: 04/06/15 17:10
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8200	D	18	0.56	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Antimony	0.32	J D	0.36	0.013	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Arsenic	12	D	0.90	0.023	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Barium	52	D	0.90	0.20	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Beryllium	0.53	D	0.18	0.0099	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Cadmium	0.15	J D	0.36	0.0033	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Calcium	4400	D	360	20	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Chromium	15	D	0.90	0.054	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Cobalt	7.3	D	0.18	0.0015	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Copper	12	D	0.72	0.087	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Iron	21000	D	90	2.9	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Lead	14	D	5.4	0.40	mg/Kg	☼	04/20/15 12:52	04/28/15 13:10	20
Magnesium	2400	D	180	3.6	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Manganese	540	D	9.0	1.1	mg/Kg	☼	04/20/15 12:52	04/24/15 14:59	20
Nickel	18	D	0.90	0.035	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Potassium	690	D	180	4.4	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Selenium	0.82	J D	0.90	0.036	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Silver	0.035	J D	0.18	0.0013	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Sodium	38	J D	180	7.8	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Thallium	0.12	J D	0.36	0.017	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Vanadium	16	D	0.90	0.033	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2
Zinc	42	D	7.2	0.45	mg/Kg	☼	04/20/15 12:52	04/22/15 19:46	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	J	0.10	0.014	mg/Kg	☼	04/20/15 15:40	04/21/15 11:21	1

Client Sample ID: 079SS-0348M-0001-SO

Lab Sample ID: 240-49173-2

Date Collected: 04/07/15 15:10
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	D	16	0.51	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Antimony	0.25	J D	0.33	0.012	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Arsenic	13	D	0.82	0.021	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Barium	60	D	0.82	0.18	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Beryllium	0.51	D	0.16	0.0091	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Cadmium	0.16	J D	0.33	0.0030	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Calcium	640	D	330	18	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Chromium	16	D	0.82	0.049	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Cobalt	8.4	D	0.16	0.0014	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Copper	10	D	0.66	0.080	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Iron	21000	D	82	2.6	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Lead	19	D	4.9	0.37	mg/Kg	☼	04/20/15 12:52	04/28/15 13:14	20
Magnesium	1600	D	160	3.3	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Manganese	590	D	8.2	0.99	mg/Kg	☼	04/20/15 12:52	04/24/15 15:03	20
Nickel	15	D	0.82	0.032	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Potassium	580	D	160	4.0	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Selenium	0.98	D	0.82	0.033	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2

Client Sample ID: 079SS-0348M-0001-SO

Lab Sample ID: 240-49173-2

Date Collected: 04/07/15 15:10
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.073	J D	0.16	0.0012	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Sodium	24	J D	160	7.2	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Thallium	0.17	J D	0.33	0.016	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Vanadium	23	D	0.82	0.030	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2
Zinc	51	D	6.6	0.41	mg/Kg	☼	04/20/15 12:52	04/22/15 19:50	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045	J	0.10	0.015	mg/Kg	☼	04/20/15 15:40	04/21/15 11:23	1

Client Sample ID: 079SS-0349M-0001-SO

Lab Sample ID: 240-49173-3

Date Collected: 04/07/15 00:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000	D	18	0.55	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Antimony	0.34	J D	0.35	0.012	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Arsenic	14	D	0.88	0.023	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Barium	62	D	0.88	0.19	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Beryllium	0.54	D	0.18	0.0097	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Cadmium	0.17	J D	0.35	0.0033	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Calcium	1200	D	350	19	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Chromium	19	D	0.88	0.053	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Cobalt	11	D	0.18	0.0015	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Copper	11	D	0.71	0.086	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Iron	23000	D	88	2.8	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Lead	22	D	5.3	0.40	mg/Kg	☼	04/20/15 12:52	04/28/15 13:18	20
Magnesium	1700	D	180	3.5	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Manganese	790	D	8.8	1.1	mg/Kg	☼	04/20/15 12:52	04/24/15 15:07	20
Nickel	17	D	0.88	0.034	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Potassium	650	D	180	4.3	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Selenium	1.0	D	0.88	0.035	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Silver	0.073	J D	0.18	0.0012	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Sodium	29	J D	180	7.7	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Thallium	0.18	J D	0.35	0.017	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Vanadium	24	D	0.88	0.033	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2
Zinc	54	D	7.1	0.44	mg/Kg	☼	04/20/15 12:52	04/22/15 19:54	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050	J	0.12	0.017	mg/Kg	☼	04/20/15 15:40	04/21/15 11:25	1

Client Sample ID: 079SS-0350M-0001-SO

Lab Sample ID: 240-49173-4

Date Collected: 04/07/15 12:05
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5500	D	16	0.50	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2

Client Sample ID: 079SS-0350M-0001-SO
Date Collected: 04/07/15 12:05
Date Received: 04/09/15 14:51

Lab Sample ID: 240-49173-4
Matrix: Solid
Percent Solids: 98.7

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.43	D	0.32	0.011	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Arsenic	21	D	0.81	0.021	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Barium	68	D	0.81	0.18	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Beryllium	0.50	D	0.16	0.0089	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Cadmium	0.15	J D	0.32	0.0030	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Calcium	4300	D	320	18	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Chromium	16	D	0.81	0.049	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Cobalt	7.9	D	0.16	0.0014	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Copper	10	D	0.65	0.079	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Iron	17000	D	81	2.6	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Lead	23	D	4.9	0.36	mg/Kg	☼	04/20/15 12:52	04/28/15 13:21	20
Magnesium	1300	D	160	3.2	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Manganese	730	D	8.1	0.97	mg/Kg	☼	04/20/15 12:52	04/24/15 15:11	20
Nickel	17	D	0.81	0.032	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Potassium	370	D	160	4.0	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Selenium	0.78	J D	0.81	0.032	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Silver	0.10	J D	0.16	0.0011	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Sodium	37	J D	160	7.0	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Thallium	0.12	J D	0.32	0.015	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Vanadium	13	D	0.81	0.030	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2
Zinc	35	D	6.5	0.41	mg/Kg	☼	04/20/15 12:52	04/22/15 19:58	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032	J	0.092	0.013	mg/Kg	☼	04/20/15 15:40	04/21/15 11:27	1

Default Detection Limits

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49173-1
SDG: CC RVAAP-79 Rt 80 Tank Farm

Method: 6020 - Metals (ICP/MS)

Analyte	LOQ	DL	Units	Method
Aluminum	20	0.62	mg/Kg	6020
Antimony	0.40	0.014	mg/Kg	6020
Arsenic	1.0	0.026	mg/Kg	6020
Barium	1.0	0.22	mg/Kg	6020
Beryllium	0.20	0.011	mg/Kg	6020
Cadmium	0.40	0.0037	mg/Kg	6020
Calcium	400	22	mg/Kg	6020
Chromium	1.0	0.060	mg/Kg	6020
Cobalt	0.20	0.0017	mg/Kg	6020
Copper	0.80	0.097	mg/Kg	6020
Iron	100	3.2	mg/Kg	6020
Lead	0.60	0.045	mg/Kg	6020
Magnesium	200	4.0	mg/Kg	6020
Manganese	1.0	0.12	mg/Kg	6020
Nickel	1.0	0.039	mg/Kg	6020
Potassium	200	4.9	mg/Kg	6020
Selenium	1.0	0.040	mg/Kg	6020
Silver	0.20	0.0014	mg/Kg	6020
Sodium	200	8.7	mg/Kg	6020
Thallium	0.40	0.019	mg/Kg	6020
Vanadium	1.0	0.037	mg/Kg	6020
Zinc	8.0	0.50	mg/Kg	6020

Method: 7471A - Mercury (CVAA)

Analyte	LOQ	DL	Units	Method
Mercury	0.10	0.014	mg/Kg	7471A

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-177128/1-A ^2
Matrix: Solid
Analysis Batch: 177559

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177128

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4.0	U	20	0.62	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Antimony	0.0474	J D	0.40	0.014	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Arsenic	0.0316	J D	1.0	0.026	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Barium	0.30	U	1.0	0.22	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Beryllium	0.10	U	0.20	0.011	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Cadmium	0.010	U	0.40	0.0037	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Calcium	100	U	400	22	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Chromium	0.163	J D	1.0	0.060	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Cobalt	0.00320	J D	0.20	0.0017	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Copper	0.308	J D	0.80	0.097	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Iron	5.93	J D	100	3.2	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Magnesium	6.13	J D	200	4.0	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Nickel	0.25	U	1.0	0.039	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Potassium	10	U	200	4.9	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Selenium	0.060	U	1.0	0.040	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Silver	0.050	U	0.20	0.0014	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Sodium	40	U	200	8.7	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Thallium	0.15	U	0.40	0.019	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Vanadium	0.0472	J D	1.0	0.037	mg/Kg		04/20/15 12:52	04/22/15 19:05	2
Zinc	0.612	J D	8.0	0.50	mg/Kg		04/20/15 12:52	04/22/15 19:05	2

Lab Sample ID: MB 240-177128/1-A ^2
Matrix: Solid
Analysis Batch: 177880

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177128

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.173	J D	0.60	0.045	mg/Kg		04/20/15 12:52	04/24/15 14:18	2
Manganese	0.40	U	1.0	0.12	mg/Kg		04/20/15 12:52	04/24/15 14:18	2

Lab Sample ID: MB 240-177128/1-A ^2
Matrix: Solid
Analysis Batch: 178352

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177128

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.102	J D	0.60	0.045	mg/Kg		04/20/15 12:52	04/28/15 12:29	2

Lab Sample ID: LCS 240-177128/2-A ^2
Matrix: Solid
Analysis Batch: 177559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1000	950	D	mg/Kg		95	80 - 120
Antimony	10.0	9.83	D	mg/Kg		98	68 - 113
Arsenic	100	88.2	D	mg/Kg		88	73 - 110
Barium	100	96.9	D	mg/Kg		97	70 - 110
Beryllium	100	96.8	D	mg/Kg		97	79 - 110
Cadmium	100	98.9	D	mg/Kg		99	74 - 110
Calcium	1000	910	D	mg/Kg		91	80 - 120
Chromium	100	101	D	mg/Kg		101	70 - 110

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-177128/2-A ^2
Matrix: Solid
Analysis Batch: 177559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	100	98.8	D	mg/Kg		99	74 - 110
Copper	100	101	D	mg/Kg		101	73 - 110
Iron	1000	1020	D	mg/Kg		102	80 - 120
Magnesium	1000	986	D	mg/Kg		99	80 - 120
Nickel	100	94.9	D	mg/Kg		95	75 - 110
Potassium	1000	993	D	mg/Kg		99	80 - 120
Selenium	100	84.2	D	mg/Kg		84	65 - 110
Silver	10.0	10.5	D	mg/Kg		105	60 - 114
Sodium	1000	966	D	mg/Kg		97	80 - 120
Thallium	25.0	24.3	D	mg/Kg		97	71 - 110
Vanadium	100	99.9	D	mg/Kg		100	72 - 110
Zinc	100	91.4	D	mg/Kg		91	72 - 113

Lab Sample ID: LCS 240-177128/2-A ^2
Matrix: Solid
Analysis Batch: 177880

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	100	94.0	D	mg/Kg		94	75 - 110
Manganese	100	100	D	mg/Kg		100	80 - 120

Lab Sample ID: LCS 240-177128/2-A ^2
Matrix: Solid
Analysis Batch: 178352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	100	97.8	D	mg/Kg		98	75 - 110

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-177137/1-A
Matrix: Solid
Analysis Batch: 177294

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 177137

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033	U	0.10	0.014	mg/Kg		04/20/15 15:40	04/21/15 11:04	1

Lab Sample ID: LCS 240-177137/2-A
Matrix: Solid
Analysis Batch: 177294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 177137

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.825		mg/Kg		99	80 - 120

Metals

ISM Prep Batch: 176431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49173-1	079SS-0347M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49173-2	079SS-0348M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49173-3	079SS-0349M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49173-4	079SS-0350M-0001-SO	Total/NA	Solid	Increment, Prep	

Prep Batch: 177030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CRA 240-177030/9-A	DL		Solid	7471A	

Prep Batch: 177128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49173-1	079SS-0347M-0001-SO	Total/NA	Solid	3050B	176431
240-49173-2	079SS-0348M-0001-SO	Total/NA	Solid	3050B	176431
240-49173-3	079SS-0349M-0001-SO	Total/NA	Solid	3050B	176431
240-49173-4	079SS-0350M-0001-SO	Total/NA	Solid	3050B	176431
LCS 240-177128/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-177128/1-A ^2	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 177137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49173-1	079SS-0347M-0001-SO	Total/NA	Solid	7471A	176431
240-49173-2	079SS-0348M-0001-SO	Total/NA	Solid	7471A	176431
240-49173-3	079SS-0349M-0001-SO	Total/NA	Solid	7471A	176431
240-49173-4	079SS-0350M-0001-SO	Total/NA	Solid	7471A	176431
LCS 240-177137/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-177137/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 177294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49173-1	079SS-0347M-0001-SO	Total/NA	Solid	7471A	177137
240-49173-2	079SS-0348M-0001-SO	Total/NA	Solid	7471A	177137
240-49173-3	079SS-0349M-0001-SO	Total/NA	Solid	7471A	177137
240-49173-4	079SS-0350M-0001-SO	Total/NA	Solid	7471A	177137
CRA 240-177030/9-A	DL		Solid	7471A	177030
CRA 240-177030/9-A	DL		Solid	7471A	177030
LCS 240-177137/2-A	Lab Control Sample	Total/NA	Solid	7471A	177137
MB 240-177137/1-A	Method Blank	Total/NA	Solid	7471A	177137

Analysis Batch: 177559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49173-1	079SS-0347M-0001-SO	Total/NA	Solid	6020	177128
240-49173-2	079SS-0348M-0001-SO	Total/NA	Solid	6020	177128
240-49173-3	079SS-0349M-0001-SO	Total/NA	Solid	6020	177128
240-49173-4	079SS-0350M-0001-SO	Total/NA	Solid	6020	177128
CRI 240-177559/88	DL		Solid	6020	
CRI 240-177559/9	DL		Solid	6020	
ICSA 240-177559/10	ICS		Solid	6020	
ICSAB 240-177559/11	ICS		Solid	6020	
LCS 240-177128/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	177128
MB 240-177128/1-A ^2	Method Blank	Total/NA	Solid	6020	177128

Metals (Continued)

Analysis Batch: 177880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49173-1	079SS-0347M-0001-SO	Total/NA	Solid	6020	177128
240-49173-2	079SS-0348M-0001-SO	Total/NA	Solid	6020	177128
240-49173-3	079SS-0349M-0001-SO	Total/NA	Solid	6020	177128
240-49173-4	079SS-0350M-0001-SO	Total/NA	Solid	6020	177128
CRI 240-177880/85	DL		Solid	6020	
CRI 240-177880/9	DL		Solid	6020	
ICSA 240-177880/10	ICS		Solid	6020	
ICSAB 240-177880/11	ICS		Solid	6020	
LCS 240-177128/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	177128
MB 240-177128/1-A ^2	Method Blank	Total/NA	Solid	6020	177128

Analysis Batch: 178352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49173-1	079SS-0347M-0001-SO	Total/NA	Solid	6020	177128
240-49173-2	079SS-0348M-0001-SO	Total/NA	Solid	6020	177128
240-49173-3	079SS-0349M-0001-SO	Total/NA	Solid	6020	177128
240-49173-4	079SS-0350M-0001-SO	Total/NA	Solid	6020	177128
CRI 240-178352/40	DL		Solid	6020	
CRI 240-178352/9	DL		Solid	6020	
ICSA 240-178352/10	ICS		Solid	6020	
ICSAB 240-178352/11	ICS		Solid	6020	
LCS 240-177128/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	177128
MB 240-177128/1-A ^2	Method Blank	Total/NA	Solid	6020	177128

General Chemistry

ISM Prep Batch: 176431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49173-1	079SS-0347M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49173-2	079SS-0348M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49173-3	079SS-0349M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49173-3 DU	079SS-0349M-0001-SO	Total/NA	Solid	Increment, Prep	
240-49173-4	079SS-0350M-0001-SO	Total/NA	Solid	Increment, Prep	

Analysis Batch: 176546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49173-1	079SS-0347M-0001-SO	Total/NA	Solid	Moisture	176431
240-49173-2	079SS-0348M-0001-SO	Total/NA	Solid	Moisture	176431
240-49173-3	079SS-0349M-0001-SO	Total/NA	Solid	Moisture	176431
240-49173-3 DU	079SS-0349M-0001-SO	Total/NA	Solid	Moisture	176431
240-49173-4	079SS-0350M-0001-SO	Total/NA	Solid	Moisture	176431

Client Sample ID: 079SS-0347M-0001-SO

Lab Sample ID: 240-49173-1
Date Collected: 04/06/15 17:10
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 19:46	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 14:59	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	178352	04/28/15 13:10	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	7471A			177137	04/20/15 15:40	DEE	TAL CAN
Total/NA	Analysis	7471A		1	177294	04/21/15 11:21	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 10:47	SEM	TAL CAN

Client Sample ID: 079SS-0348M-0001-SO

Lab Sample ID: 240-49173-2
Date Collected: 04/07/15 15:10
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 19:50	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 15:03	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	178352	04/28/15 13:14	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	7471A			177137	04/20/15 15:40	DEE	TAL CAN
Total/NA	Analysis	7471A		1	177294	04/21/15 11:23	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 10:47	SEM	TAL CAN

Client Sample ID: 079SS-0349M-0001-SO

Lab Sample ID: 240-49173-3
Date Collected: 04/07/15 00:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 19:54	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN

Client Sample ID: 079SS-0349M-0001-SO

Lab Sample ID: 240-49173-3

Date Collected: 04/07/15 00:00
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 15:07	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	178352	04/28/15 13:18	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	7471A			177137	04/20/15 15:40	DEE	TAL CAN
Total/NA	Analysis	7471A		1	177294	04/21/15 11:25	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Client Sample ID: 079SS-0350M-0001-SO

Lab Sample ID: 240-49173-4

Date Collected: 04/07/15 12:05
Matrix: Solid
Date Received: 04/09/15 14:51
Percent Solids: 98.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		2	177559	04/22/15 19:58	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	177880	04/24/15 15:11	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	3050B			177128	04/20/15 12:52	DEE	TAL CAN
Total/NA	Analysis	6020		20	178352	04/28/15 13:21	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Prep	7471A			177137	04/20/15 15:40	DEE	TAL CAN
Total/NA	Analysis	7471A		1	177294	04/21/15 11:27	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			176431	04/14/15 17:35	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	176546	04/15/15 16:38	SEM	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49173-1
SDG: CC RVAAP-79 Rt 80 Tank Farm

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-15 *
Connecticut	State Program	1	PH-0590	12-31-15
Florida	NELAP	4	E87225	06-30-15 *
Georgia	State Program	4	N/A	06-30-15 *
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	04-30-15 *
Kentucky (UST)	State Program	4	58	06-30-15 *
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	10-31-15
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49173-1
SDG: CC RVAAP-79 Rt 80 Tank Farm

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Environmental Chemical Corp.
Project/Site: Ravenna Army Ammunition Plant

TestAmerica Job ID: 240-49173-1
SDG: CC RVAAP-79 Rt 80 Tank Farm

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-49173-1	079SS-0347M-0001-SO	Solid	04/06/15 17:10	04/09/15 14:51
240-49173-2	079SS-0348M-0001-SO	Solid	04/07/15 15:10	04/09/15 14:51
240-49173-3	079SS-0349M-0001-SO	Solid	04/07/15 00:00	04/09/15 14:51
240-49173-4	079SS-0350M-0001-SO	Solid	04/07/15 12:05	04/09/15 14:51

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MT1TO1HN03_00949	04/20/15	04/20/15	DIWATER, Lot DI WATER	800 mL	MTTMHNO3_00054	400 mL	Nitric acid	0.5 mL/mL
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_01001	04/20/15	04/20/15	NA, Lot NA	80 mL	MTTMHCL_00062	60 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00054	20 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00062	04/02/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_01002	04/20/15	04/20/15	NA, Lot NA	320 mL	MTTMHCL_00062	240 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00054	80 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00062	04/02/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTH202_00042	10/01/16	Macron, Lot 0000092419			(Purchased Reagent)		Hydrogen Peroxide	30 %
MTHGCALW_00885	04/20/15	04/20/15	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00016	1 mL	Mercury	100 ug/L
					MTTMHNO3_00054	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00016	05/09/17	INORGANIC VENTURES, Lot H2-HG02126			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTHgStd_00016	10/07/15	HPS, Lot 1509117			(Purchased Reagent)		Mercury	1 ug/mL
MTICPMS2_00020	02/01/16	Inorganic Ventures, Lot H2-MEB559070			(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
MTICPMSA_00022	02/01/16	Inorganic Ventures, Lot H2-MEB552051			(Purchased Reagent)		Arsenic	100 ug/mL
							Barium	100 ug/mL
							Beryllium	100 ug/mL
							Cadmium	100 ug/mL
							Chromium	100 ug/mL
							Cobalt	100 ug/mL
							Copper	100 ug/mL
							Lead	100 ug/mL
							Manganese	100 ug/mL
							Nickel	100 ug/mL
							Selenium	100 ug/mL
							Sr	100 ug/mL
							Thallium	25 ug/mL
							Vanadium	100 ug/mL
							Zinc	100 ug/mL
MTICPMSB_00022	02/01/16	Inorganic Ventures, Lot H2-MEB559071			(Purchased Reagent)		Antimony	10 ug/mL
							B	10 ug/mL
							Mo	10 ug/mL
							Silver	10 ug/mL
							Sn	100 ug/mL
							Ti	10 ug/mL
							W	10 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MTKMN04W_00081	04/07/17	04/07/15	DIWATER, Lot DIWATER	2.5 L	MTKMN04_00022	125 g	Potassium Permanganate	0.05 g/g
.MTKMN04_00022	02/18/20	Fisher, Lot 121666			(Purchased Reagent)		Potassium Permanganate	1 g/g
MTMSCAL2CCVW_00110	10/01/15	03/10/15	DIWATER, Lot DIWATER	500 mL	MTMSCAL3_00008	5 mL	Aluminum	250 ug/L
							Arsenic	50 ug/L
							Barium	50 ug/L
							Beryllium	50 ug/L
							Cadmium	50 ug/L
							Calcium	25000 ug/L
							Chromium	50 ug/L
							Cobalt	50 ug/L
							Copper	50 ug/L
							Iron	12500 ug/L
							Lead	50 ug/L
							Magnesium	25000 ug/L
							Manganese	250 ug/L
							Nickel	50 ug/L
							Potassium	25000 ug/L
							Selenium	50 ug/L
							Silver	50 ug/L
							Sodium	25000 ug/L
							Thallium	50 ug/L
							Vanadium	50 ug/L
							Zinc	50 ug/L
					MTMSCAL4_00009	5 mL	Antimony	50 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCAL2CCVW_00116	10/01/15	04/09/15	DIWATER, Lot DIWATER	500 mL	MTMSCAL3_00008	5 mL	Aluminum	250 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Arsenic	50 ug/L
							Barium	50 ug/L
							Beryllium	50 ug/L
							Cadmium	50 ug/L
							Calcium	25000 ug/L
							Chromium	50 ug/L
							Cobalt	50 ug/L
							Copper	50 ug/L
							Iron	12500 ug/L
							Lead	50 ug/L
							Magnesium	25000 ug/L
							Manganese	250 ug/L
							Nickel	50 ug/L
							Potassium	25000 ug/L
							Selenium	50 ug/L
							Silver	50 ug/L
							Sodium	25000 ug/L
							Thallium	50 ug/L
							Vanadium	50 ug/L
							Zinc	50 ug/L
					MTMSCAL4_00009	5 mL	Antimony	50 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCAL3W_00039	10/01/15	03/11/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL3_00008	5 mL	Aluminum	500 ug/L
							Arsenic	100 ug/L
							Barium	100 ug/L
							Beryllium	100 ug/L

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cadmium	100 ug/L
							Calcium	50000 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Iron	25000 ug/L
							Lead	100 ug/L
							Magnesium	50000 ug/L
							Manganese	500 ug/L
							Nickel	100 ug/L
							Potassium	50000 ug/L
							Selenium	100 ug/L
							Silver	100 ug/L
							Sodium	50000 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L
							Zinc	100 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
MTMSCAL4W_00035	10/01/15	03/11/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL4_00009	5 mL	Antimony	100 ug/L
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCRI6020AW_00019	05/18/15	03/16/15	DIWATER, Lot DIWATER	500 mL	MS6020ACRIA_00002	0.5 mL	Aluminum	50 ug/L
							Arsenic	5 ug/L
							Barium	5 ug/L
							Beryllium	1 ug/L
							Cadmium	1 ug/L
							Calcium	1000 ug/L
							Chromium	2 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cobalt	1 ug/L
							Copper	2 ug/L
							Iron	100 ug/L
							Lead	1 ug/L
							Magnesium	1000 ug/L
							Manganese	5 ug/L
							Nickel	2 ug/L
							Potassium	1000 ug/L
							Selenium	5 ug/L
							Sodium	1000 ug/L
							Thallium	2 ug/L
							Vanadium	5 ug/L
							Zinc	20 ug/L
					MS6020ACRIB_00002	0.5 mL	Antimony	2 ug/L
					MTAGSPIKEW_00045	0.2 mL	Silver	1 ug/L
.MS6020ACRIA_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537060			(Purchased Reagent)		Aluminum	50 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	1 ug/mL
							Cadmium	1 ug/mL
							Calcium	1000 ug/mL
							Chromium	2 ug/mL
							Cobalt	1 ug/mL
							Copper	2 ug/mL
							Iron	100 ug/mL
							Lead	1 ug/mL
							Magnesium	1000 ug/mL
							Manganese	5 ug/mL
							Nickel	2 ug/mL
							Potassium	1000 ug/mL
							Selenium	5 ug/mL
							Sodium	1000 ug/mL
							Thallium	2 ug/mL
							Vanadium	5 ug/mL
							Zinc	20 ug/mL
.MS6020ACRIB_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537061			(Purchased Reagent)		Antimony	2 ug/mL
.MTAGSPIKEW_00045	05/18/15	11/18/14	DIWATER, Lot DIWATER	1000 mL	MTAG_00005	2.5 mL	Silver	2500 ug/L
..MTAG_00005	12/27/15	HIGH PURITY STANDARDS, Lot 1401302			(Purchased Reagent)		Silver	1000 ug/mL
MTMSCRI6020AW_00021	05/18/15	04/20/15	DIWATER, Lot DIWATER	500 mL	MS6020ACRIA_00002	0.5 mL	Aluminum	50 ug/L
							Arsenic	5 ug/L
							Barium	5 ug/L
							Beryllium	1 ug/L
							Cadmium	1 ug/L
							Calcium	1000 ug/L
							Chromium	2 ug/L
							Cobalt	1 ug/L
							Copper	2 ug/L

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Iron	100 ug/L
							Lead	1 ug/L
							Magnesium	1000 ug/L
							Manganese	5 ug/L
							Nickel	2 ug/L
							Potassium	1000 ug/L
							Selenium	5 ug/L
							Sodium	1000 ug/L
							Thallium	2 ug/L
							Vanadium	5 ug/L
							Zinc	20 ug/L
					MS6020ACRIB_00002	0.5 mL	Antimony	2 ug/L
					MTAGSPIKEW_00045	0.2 mL	Silver	1 ug/L
.MS6020ACRIA_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537060			(Purchased Reagent)		Aluminum	50 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	1 ug/mL
							Cadmium	1 ug/mL
							Calcium	1000 ug/mL
							Chromium	2 ug/mL
							Cobalt	1 ug/mL
							Copper	2 ug/mL
							Iron	100 ug/mL
							Lead	1 ug/mL
							Magnesium	1000 ug/mL
							Manganese	5 ug/mL
							Nickel	2 ug/mL
							Potassium	1000 ug/mL
							Selenium	5 ug/mL
							Sodium	1000 ug/mL
							Thallium	2 ug/mL
							Vanadium	5 ug/mL
							Zinc	20 ug/mL
.MS6020ACRIB_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537061			(Purchased Reagent)		Antimony	2 ug/mL
.MTAGSPIKEW_00045	05/18/15	11/18/14	DIWATER, Lot DIWATER	1000 mL	MTAG_00005	2.5 mL	Silver	2500 ug/L
..MTAG_00005	12/27/15	HIGH PURITY STANDARDS, Lot 1401302			(Purchased Reagent)		Silver	1000 ug/mL
MTMSICSABW_00043	05/01/15	02/20/15	DIWATER, Lot DIWATER	200 mL	MTMSICSA_00009	10 mL	Aluminum	50000 ug/L
							Calcium	50000 ug/L
							Iron	50000 ug/L
							Magnesium	50000 ug/L
							Mo	1100 ug/L
							Potassium	50000 ug/L
							Sodium	50000 ug/L
							Ti	1100 ug/L
					MTMSICSABSOLA_00006	1 mL	Arsenic	100 ug/L
							B	100 ug/L
							Barium	100 ug/L

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Lead	100 ug/L
							Manganese	100 ug/L
							Nickel	100 ug/L
							Selenium	100 ug/L
							Sr	100 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L
							Zinc	100 ug/L
					MTMSICSABSOLB_00006	1 mL	Antimony	100 ug/L
							Mo	1100 ug/L
							Silver	100 ug/L
							Sn	100 ug/L
							Ti	1100 ug/L
							W	100 ug/L
.MTMSICSA_00009	05/01/15	INORGANIC VENTURES, Lot G2-MEB476152MCA			(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Mo	20 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
							Ti	20 ug/mL
.MTMSICSABSOLA_00006	02/10/16	HIGH PURITY STANDARDS, Lot 1503726			(Purchased Reagent)		Arsenic	20 ug/mL
							B	20 ug/mL
							Barium	20 ug/mL
							Beryllium	20 ug/mL
							Cadmium	20 ug/mL
							Chromium	20 ug/mL
							Cobalt	20 ug/mL
							Copper	20 ug/mL
							Lead	20 ug/mL
							Manganese	20 ug/mL
							Nickel	20 ug/mL
							Selenium	20 ug/mL
							Sr	20 ug/mL
							Thallium	20 ug/mL
							Vanadium	20 ug/mL
							Zinc	20 ug/mL
.MTMSICSABSOLB_00006	02/10/16	HIGH PURITY STANDARDS, Lot 1504002			(Purchased Reagent)		Antimony	20 ug/mL
							Mo	20 ug/mL
							Silver	20 ug/mL
							Sn	20 ug/mL
							Ti	20 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							W	20 ug/mL
MTMSICSAW_00044	05/01/15	03/16/15	DIWATER, Lot DIWATER	200 mL	MTMSICSA_00009	10 mL	Aluminum	50000 ug/L
							Calcium	50000 ug/L
							Iron	50000 ug/L
							Magnesium	50000 ug/L
							Mo	1000 ug/L
							Potassium	50000 ug/L
							Sodium	50000 ug/L
							Ti	1000 ug/L
.MTMSICSA_00009	05/01/15	INORGANIC VENTURES, Lot G2-MEB476152MCA			(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Mo	20 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
							Ti	20 ug/mL
MTMSICVW_00043	08/01/15	03/11/15	DIWATER, Lot DIWATER	250 mL	MTMSICVA_00005	2.5 mL	Aluminum	200 ug/L
							Antimony	40 ug/L
							Arsenic	40 ug/L
							Barium	40 ug/L
							Beryllium	40 ug/L
							Cadmium	40 ug/L
							Chromium	40 ug/L
							Cobalt	40 ug/L
							Copper	40 ug/L
							Lead	40 ug/L
							Manganese	200 ug/L
							Nickel	40 ug/L
							Selenium	40 ug/L
							Silver	40 ug/L
							Thallium	40 ug/L
							Vanadium	40 ug/L
							Zinc	40 ug/L
					MTMSICVB_00005	2.5 mL	Calcium	20000 ug/L
							Iron	10000 ug/L
							Magnesium	20000 ug/L
							Potassium	20000 ug/L
							Sodium	20000 ug/L
.MTMSICVA_00005	08/01/15	CPI, Lot 1063211			(Purchased Reagent)		Aluminum	20 mg/L
							Antimony	4 mg/L
							Arsenic	4 mg/L
							Barium	4 mg/L
							Beryllium	4 mg/L
							Cadmium	4 mg/L
							Chromium	4 mg/L
							Cobalt	4 mg/L

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Copper	4 mg/L
							Lead	4 mg/L
							Manganese	20 mg/L
							Nickel	4 mg/L
							Selenium	4 mg/L
							Silver	4 mg/L
							Thallium	4 mg/L
							Vanadium	4 mg/L
							Zinc	4 mg/L
.MTMSICVB_00005	08/01/15	CPI, Lot 1063211			(Purchased Reagent)		Calcium	2000 mg/L
							Iron	1000 mg/L
							Magnesium	2000 mg/L
							Potassium	2000 mg/L
							Sodium	2000 mg/L
MTMSSCAL1_00014	10/01/15	03/11/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL3_00008	0.5 mL	Aluminum	50 ug/L
							Arsenic	10 ug/L
							Barium	10 ug/L
							Beryllium	10 ug/L
							Cadmium	10 ug/L
							Calcium	5000 ug/L
							Chromium	10 ug/L
							Cobalt	10 ug/L
							Copper	10 ug/L
							Iron	2500 ug/L
							Lead	10 ug/L
							Magnesium	5000 ug/L
							Manganese	50 ug/L
							Nickel	10 ug/L
							Potassium	5000 ug/L
							Selenium	10 ug/L
							Silver	10 ug/L
							Sodium	5000 ug/L
							Thallium	10 ug/L
							Vanadium	10 ug/L
							Zinc	10 ug/L
					MTMSCAL4_00009	0.5 mL	Antimony	10 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTTMHCL_00063	04/15/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
MTTMHNO3_00054	04/07/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %

Reagent

MS6020ACRIA_00002

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-6020A-CRI-A
Lot Number:	H2-MEB537060
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Ca, K, Mg, Na, 100 µg/mL ea: Fe, 50 µg/mL ea: Al, 20 µg/mL ea: B, Zn, 10 µg/mL ea: Sr, 5 µg/mL ea: As, Ba, Mn, Se, V, 2 µg/mL ea: Cr3, Cu, Ni, Tl, 1 µg/mL ea: Be, Cd, Co, Pb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	50.02 ± 0.30 µg/mL	Arsenic, As	5.001 ± 0.032 µg/mL	Barium, Ba	5.001 ± 0.032 µg/mL
Beryllium, Be	1.000 ± 0.007 µg/mL	Boron, B	20.00 ± 0.13 µg/mL	Cadmium, Cd	0.999 ± 0.008 µg/mL
Calcium, Ca	1,000 ± 6 µg/mL	Chromium+3, Cr3	2.000 ± 0.012 µg/mL	Cobalt, Co	0.999 ± 0.008 µg/mL
Copper, Cu	2.001 ± 0.013 µg/mL	Iron, Fe	100.0 ± 0.5 µg/mL	Lead, Pb	1.000 ± 0.006 µg/mL
Magnesium, Mg	1,000 ± 5 µg/mL	Manganese, Mn	5.000 ± 0.029 µg/mL	Nickel, Ni	2.000 ± 0.012 µg/mL
Potassium, K	1,001 ± 4 µg/mL	Selenium, Se	5.000 ± 0.029 µg/mL	Sodium, Na	999 ± 4 µg/mL
Strontium, Sr	10.00 ± 0.06 µg/mL	Thallium, Tl	2.001 ± 0.013 µg/mL	Vanadium, V	5.000 ± 0.032 µg/mL
Zinc, Zn	20.02 ± 0.11 µg/mL				

Certified Density: 1.036 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 14, 2014

11.2 Expiration Date

EXPIRES
1 AUG 2015

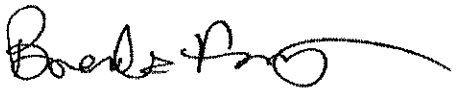
11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

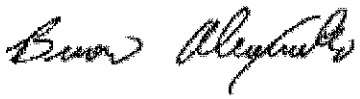
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

MS6020ACRIB_00002

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300 Technology Drive
Christiansburg, VA 24073 - USA
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-6020A-CRI-B
Lot Number:	H2-MEB537061
Matrix:	5% (v/v) HNO3 tr HF
Value / Analyte(s):	10 µg/mL ea: Mo, Sn, Ti, W, 2 µg/mL ea: Sb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	2.001 ± 0.013 µg/mL	Molybdenum, Mo	10.00 ± 0.06 µg/mL	Tin, Sn	10.00 ± 0.06 µg/mL
Titanium, Ti	10.00 ± 0.07 µg/mL	Tungsten, W	10.00 ± 0.06 µg/mL		

Certified Density: 1.023 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2
W	ICP Assay	3163	060331

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

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- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 14, 2014

11.2 Expiration Date

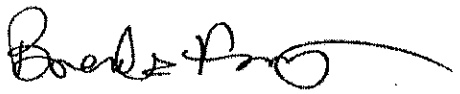
11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

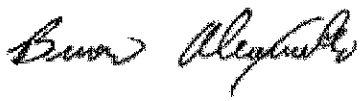
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



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Paul Gaines
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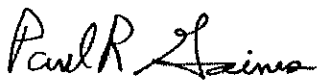

Reagent

MTAG_00005

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	Silver	Source Material:	Silver metal
Part Number:	**100051-1**	Material Purity:	99.999%
Lot Number:	**1401302**	Matrix:	2% (v/v) HNO_3

Certified Value: 1000 µg/mL ± 3 µg/mL

The Certified value is based on gravimetric and volumetric preparation, and confirmed against SRM 3151 (lot number 992212) by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

Density: 1.008 g/mL ± 0.002 g/mL @ 21.6°C

Uncertified Values:

Trace Metal Impurity Scan: The data reported are based upon a scan of this specific lot at 1000 µg/mL via ICP analysis. The values are reported in µg/L.

Ag		M	Cu	<	0.1	Li	<	0.5	Rb	<	0.02	Th	<	0.02
Al	<	0.1	Dy	<	0.02	Lu	<	0.02	Re	<	0.02	Ti	<	0.02
As	<	0.05	Er	<	0.02	Mg	<	0.5	Rh	<	0.02	Tl	<	0.02
Au	<	0.02	Eu	<	0.02	Mn	<	0.1	Ru	<	0.02	Tm	<	0.02
B	<	1	Fe	<	1	Mo	<	0.02	Sb	<	0.02	U	<	0.1
Ba	<	0.02	Ga	<	0.02	Na	<	3	Sc	<	0.02	V	<	0.05
Be	<	0.02	Gd	<	0.02	Nb	<	0.02	Se	<	0.1	W	<	0.02
Bi	<	0.02	Ge	<	0.02	Nd	<	0.02	Si	<	50	Y	<	0.02
Ca	<	1	Hf	<	0.02	Ni	<	0.1	Sm	<	0.02	Yb	<	0.02
Cd	<	0.02	Ho	<	0.02	Os	<	0.02	Sn	<	1	Zn	<	1
Ce	<	0.02	In	<	0.02	Pb	<	0.05	Sr	<	0.02	Zr	<	0.02
Co	<	1	Ir	<	0.02	Pd	<	0.1	Ta	<	0.02			
Cr	<	0.1	K	<	1	Pr	<	0.02	Tb	<	0.02			
Cs	<	6	La	<	0.02	Pt	<	0.02	Te	<	0.02			

Preparation Information:

The standard solution is prepared using high purity materials and assayed by analytical methods for conformity prior to use. This standard was prepared using the methods developed at NIST for SRM Spectrometric Standard Solutions under appropriate laboratory conditions.

Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Intended Use:

This Certified Reference Material (CRM) is intended for use as a calibration standard for the quantitative determination of silver, calibration of instruments such as ICPOES, ICPMS, AAS and XRF, and validation of analytical methods. It also can be used in EPA, ASTM and other methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
   The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
   The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.
b. **Volumetric Device**
   The calibration of volumetric vessels is checked annually using the ASTM method E542.
c. **Thermometer**
   The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.
d. **Calibration Standards:**
   The Calibration Standard is directly traceable to SRM 3100 Series Spectrometric Standard Solutions.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for eighteen months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**January 13, 2014**
Shipped Date:	**6/27/14**
Expiration Date:	**12/27/15**
Certificate Issue Date:	**February 28, 2014**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Certificate Revision History: Rev No.: **5.2.1** –modified uncertainty. Rev No.: **5.2.0** – Original Certificate.

Reagent

MTHGCAL_00016

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHGN-10PPM
Lot Number:	H2-HG02126
Matrix:	10% (v/v) HNO3
Value/Analyte(s):	10 µg/mL Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1780
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.009 ± 0.077 µg/mL

Certified Density: 1.050 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1

ICP Assay NIST SRM 3133 Lot Number: 061204

Assay Method #2

EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

No correction has been applied for transpiration that will occur after the CRM/RM bottle has been removed from the sealed aluminized bag. See Sec. 7.0 (Instructions for the Correct Use of this Reference Material) for more information.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004113	M	Er	<	0.010282	M	Mn	<	0.008226	O	S	<	0.025000	M	V	<	0.004113
O	Al			M	Eu	<	0.006169	M	Mo	<	0.004113	M	Sb	<	0.001028	M	W	<	0.020564
M	As	<	0.020564	O	Fe	<	0.001100	O	Na		0.000005	M	Sc	<	0.020564	M	Y	<	0.082257
M	Au	<	0.006169	M	Ga	<	0.002056	M	Nb	<	0.001028	M	Se	<	0.016451	M	Yb	<	0.002056
M	B	<	0.143950	M	Gd	<	0.002056	M	Nd	<	0.004113	O	Si	<	0.003400	M	Zn	<	0.041129
M	Ba	<	0.020564	O	Ge	<	0.018000	O	Ni	<	0.001000	M	Sm	<	0.002056	M	Zr	<	0.010282
M	Be	<	0.001028	M	Hf	<	0.004113	n	Os	<		M	Sn	<	0.010282				
M	Bi	<	0.000823	s	Hg	<		O	P	<	0.002600	M	Sr	<	0.001028				
O	Ca		0.000022	M	Ho	<	0.001028	M	Pb	<	0.006169	M	Ta	<	0.014395				
O	Cd	<	0.004600	M	In	<	0.020564	O	Pd	<	0.003800	M	Tb	<	0.000617				
M	Ce	<	0.010282	M	Ir	<	0.010282	M	Pr	<	0.000617	M	Te	<	0.061693				
M	Co	<	0.006169	O	K	<	0.002000	M	Pt	<	0.004113	M	Th	<	0.002056				
M	Cr	<	0.010282	M	La	<	0.001028	M	Rb	<	0.002056	M	Ti	<	0.102822				
M	Cs	<	0.000617	O	Li	<	0.000020	M	Re	<	0.002056	O	Tl	<	0.006000				
M	Cu	<	0.012339	M	Lu	<	0.000823	M	Rh	<	0.002056	M	Tm	<	0.000823				
M	Dy	<	0.012339	O	Mg		0.000006	M	Ru	<	0.004113	M	U	<	0.004113				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30°C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT.**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

- May 09, 2014

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec. 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of opening the sealed TCT bag or after the date given in Sec. 11.3, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.3 Lot Expiration Date

- May 09, 2017

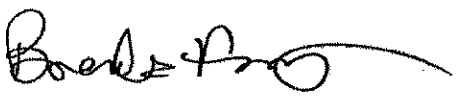
- The date after which this CRM/RM should not be used (See Sec. 11.2).

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

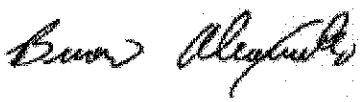
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



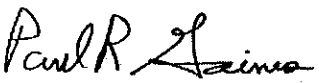
Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTHgStd_00016

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	Mercury	Source Material:	Mercury Metal
Part Number:	**1 33-1**	Material Purity:	99.9998%
Lot Number:	**1509117**	Matrix:	5% (v/v) HNO_3

Certified Value: 1.00 µg/mL ± 0.02 µg/mL

The Certified value is based on gravimetric and volumetric preparation, and confirmed against SRM 3133 (lot number 061204) by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

Preparation Information:

The standard solution is prepared using high purity materials and assayed by analytical methods for conformity prior to use. This standard was prepared using the methods developed at NIST for SRM Spectrometric Standard Solutions under appropriate laboratory conditions.

Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product.

Intended Use:

This Certified Reference Material (CRM) is intended for use as a calibration standard for the quantitative determination of mercury, calibration of instruments such as ICPOES, ICPMS, AAS and XRF, and validation of analytical methods. It also can be used in EPA, ASTM and other methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards:**
The Calibration Standard is directly traceable to SRM 3100 Series Spectrometric Standard Solutions.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for six months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**April 2, 2015**
Shipped Date:	**April 7, 2015**
Expiration Date:	**October 7, 2015**
Certificate Issue Date:	**April 2, 2015**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTICPMS2_00020

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CERTIFICATE OF ANALYSIS

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fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: TA-84

Lot Number: H2-MEB559070

Matrix: 3% (v/v) HNO3

Value / Analyte(s): 1 000 µg/mL ea:

Al,	Ca,	Fe,
K,	Mg,	Na

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum	1 000 ± 5 µg/mL	Calcium	1 000 ± 4 µg/mL
Iron	1 000 ± 5 µg/mL	Magnesium	1 000 ± 5 µg/mL
Potassium	1 000 ± 4 µg/mL	Sodium	1 000 ± 4 µg/mL

Certified Density: 1.035 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2 [\Sigma(s_i)^2]^{1/2}$ 2 = the coverage factor.
$[\Sigma(s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 30, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date EXPIRES 1 FEB 2016

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

MTICPMSA_00022

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300 Technology Drive
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CERTIFICATE OF ANALYSIS

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fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: TA-ICPMS-1A

Lot Number: H2-MEB552051

Matrix: 5% (v/v) HNO3

Value / Analyte(s): 100 µg/mL ea:

As,	Ba,	Be,
Cd,	Co,	Cr3,
Cu,	Mn,	Ni,
Pb,	Se,	Sr,
V,	Zn,	

25 µg/mL ea:
Tl

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic	100.0 ± 0.9 µg/mL	Barium	100.0 ± 0.5 µg/mL
Beryllium	100.0 ± 0.5 µg/mL	Cadmium	100.0 ± 0.5 µg/mL
Chromium+3	100.0 ± 0.6 µg/mL	Cobalt	100.0 ± 0.6 µg/mL
Copper	100.0 ± 0.6 µg/mL	Lead	100.0 ± 0.6 µg/mL
Manganese	100.0 ± 0.6 µg/mL	Nickel	100.0 ± 0.6 µg/mL
Selenium	100.0 ± 0.6 µg/mL	Strontium	100.0 ± 0.5 µg/mL
Thallium	25.01 ± 0.15 µg/mL	Vanadium	100.0 ± 0.6 µg/mL
Zinc	100.0 ± 0.7 µg/mL		

Certified Density: 1.029 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$

$(\bar{x})$ = mean
x_i = individual results
n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$

2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 22, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date

EXPIRES
1 FEB 2016

Reagent

MTICPMSB_00022

INORGANIC VENTURES™
300 Technology Drive
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CERTIFICATE OF ANALYSIS

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 · ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-1BREV1
Lot Number:	H2-MEB559071
Matrix:	5% (v/v) HNO3 tr HF
Value / Analyte(s):	100 µg/mL ea: Sn, 10 µg/mL ea: Ag, B, Mo, Sb, Ti, W

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony	10.01 ± 0.07 µg/mL	Boron	10.00 ± 0.06 µg/mL
Molybdenum	10.00 ± 0.06 µg/mL	Silver	10.00 ± 0.07 µg/mL
Tin	100.0 ± 0.5 µg/mL	Titanium	10.01 ± 0.06 µg/mL
Tungsten	10.00 ± 0.06 µg/mL		

Certified Density: 1.025 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2
W	ICP Assay	3163	080331

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2 [\Sigma(s_i)^2]^{1/2}$ 2 = the coverage factor.
$[\Sigma(s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

- **HF Note:** This standard should not be prepared or stored in glass.

- **Low Silver Note:** This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 30, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date EXPIRES 1 FEB 2016

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Donna Senn

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

Reagent

MTMSCAL3_00008

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CERTIFICATE OF ANALYSIS

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fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: STLPA-CAL-SPECA-REV

Lot Number: H2-MEB544052

Matrix: 3% (v/v) HNO3

Value / Analyte(s):

2 500 µg/mL ea:
Ca, K, Mg, Na,
1 250 µg/mL ea:
Fe,
25 µg/mL ea:
Al, Mn,
5 µg/mL ea:
Ag, As, Ba, Be, Cd, Co,
Cr3, Cu, Ni, Pb, Se, Sr,
Tl, V, Zn

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	25.01 ± 0.17 µg/mL	Arsenic, As	5.000 ± 0.032 µg/mL	Barium, Ba	5.002 ± 0.029 µg/mL
Beryllium, Be	4.999 ± 0.029 µg/mL	Cadmium, Cd	4.999 ± 0.032 µg/mL	Calcium, Ca	2 500 ± 11 µg/mL
Chromium+3, Cr3	5.002 ± 0.029 µg/mL	Cobalt, Co	5.000 ± 0.032 µg/mL	Copper, Cu	4.998 ± 0.032 µg/mL
Iron, Fe	1 250 ± 6 µg/mL	Lead, Pb	5.002 ± 0.025 µg/mL	Magnesium, Mg	2 500 ± 12 µg/mL
Manganese, Mn	25.01 ± 0.17 µg/mL	Nickel, Ni	5.000 ± 0.029 µg/mL	Potassium, K	2 501 ± 11 µg/mL
Selenium, Se	5.001 ± 0.029 µg/mL	Silver, Ag	4.999 ± 0.036 µg/mL	Sodium, Na	2 500 ± 11 µg/mL
Strontium, Sr	5.001 ± 0.032 µg/mL	Thallium, Tl	4.998 ± 0.032 µg/mL	Vanadium, V	5.000 ± 0.032 µg/mL
Zinc, Zn	5.002 ± 0.029 µg/mL				

Certified Density: 1.052 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 22, 2014

11.2 Expiration Date

EXPIRES
1 2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

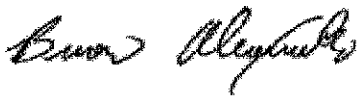
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Christy Shortridge
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

MTMSCAL4_00009

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CAL-SPECC
Lot Number:	H2-MEB544053
Matrix:	3% (v/v) HNO_3 tr. HF
Value / Analyte(s):	5 µg/mL ea: B, Mo, Sb, Sn, Ti, W

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	5.001 ± 0.047 µg/mL	Boron, B	5.000 ± 0.032 µg/mL	Molybdenum, Mo	5.001 ± 0.039 µg/mL
Tin, Sn	5.001 ± 0.036 µg/mL	Titanium, Ti	5.001 ± 0.043 µg/mL	Tungsten, W	5.002 ± 0.032 µg/mL

Certified Density: 1.017 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2
W	ICP Assay	3163	080331

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2\ [\ \Sigma(s_i)^2\ ]^{1/2}$ 2 = the coverage factor.
$[\ \Sigma(s_i)^2\ ]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 22, 2014

11.2 Expiration Date

EXPIRES
1 2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Christy Shortridge
Product Documentation Technician

Christy Shortridge

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

Reagent

MTMSICSA_00009

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CERTIFICATE OF ANALYSIS

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 960.02

2.0 **DESCRIPTION OF CRM**

Stock Solution

Catalog No.: 6020ICS-0A

Lot Number: **G2-MEB476152MCA**

Matrix: 1.4% HNO3(v/v)

10,000 µg/mL ea:
Chloride,

2,000 µg/mL ea:
C,

1,000 µg/mL ea:
Al, Ca, Fe, K, Mg, Na, P, S,

20 µg/mL ea:
Mo, Ti

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	1,002 ± 6 µg/mL	Calcium, Ca	1,002 ± 6 µg/mL	Carbon, C	2,004 ± 13 µg/mL
Chloride, Chloride	10,020.0 ± 50.0 µg/mL	Iron, Fe	1,002 ± 7 µg/mL	Magnesium, Mg	1,002 ± 4 µg/mL
Molybdenum, Mo	20.04 ± 0.14 µg/mL	Phosphorus, P	1,002 ± 7 µg/mL	Potassium, K	1,002 ± 4 µg/mL
Sodium, Na	1,002 ± 7 µg/mL	Sulfur, S	1,002 ± 5 µg/mL	Titanium, Ti	20.04 ± 0.13 µg/mL

Certified Density: 1.034 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

$$\text{Uncertainty } (\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$$

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.
- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
C	Gravimetric		See Sec. 4.2
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Chloride	Acidimetric	84L	84L
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	010728
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84k	84k
Ti	ICP Assay	3162a	060808

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 THERMOMETER CALIBRATION - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 GLASSWARE CALIBRATION - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL

Custom-Grade solutions are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Al		M	Dy	< 0.000100	O	Li	0.002000	M	Pr	< 0.000100	M	Te	< 0.012007
M	Sb	< 0.000600	M	Er	< 0.000100	M	Lu	< 0.000100	M	Re	< 0.000100	M	Tb	< 0.000100
O	As	< 0.020000	M	Eu	< 0.000100	s	Mg		M	Rh	< 0.000100	M	Tl	< 0.000100
O	Ba	< 0.000200	M	Gd	< 0.000100	O	Mn	0.003000	M	Rb	< 0.020012	M	Th	< 0.000100
O	Be	< 0.000090	M	Ga	< 0.001001	O	Hg	< 0.005000	M	Ru	< 0.000100	M	Tm	< 0.000100
M	Bi	< 0.005003	O	Ge	< 0.015000	s	Mo		M	Sm	< 0.000100	M	Sn	< 0.003002
O	B	< 0.005000	M	Au	< 0.001001	M	Nd	< 0.000100	O	Sc	< 0.000700	s	Tl	
O	Cd	0.003400	M	Hf	< 0.002001	O	Ni	< 0.002000	M	Se	< 0.050029	O	W	< 0.007000
s	Ca		M	Ho	< 0.000100	M	Nb	< 0.002001	n	Si		M	U	< 0.000100
M	Ce	< 0.000500	M	In	< 0.001001	n	Os		M	Ag	< 0.001001	O	V	< 0.004000
M	Cs	< 0.001001	M	Ir	< 0.000100	M	Pd	< 0.003002	s	Na		M	Yb	< 0.000100
O	Cr	< 0.010000	s	Fe		s	P		O	Sr	0.005000	M	Y	< 0.000100
M	Co	< 0.001001	M	La	< 0.000200	M	Pt	< 0.000100	s	S		M	Zn	0.016610
O	Cu	< 0.020000	M	Pb	0.002001	s	K		M	Ta	< 0.001001	M	Zr	< 0.004002

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- SAI Global File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: July 12, 2013

Expiration Date:

EXPIRES
01 May 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Zach Saunders
Product Documentation Technician

Certificate Approved By: Allyson Gulliams
Quality Control Supervisor

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Reagent

MTMSICSABSOLA_00006

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Part Number:	**SM-606-031**
	Solution A
Lot Number:	**1503726**
Matrix:	2% HNO_3
Purity:	99.99% - 99.9995%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
As	20.0 ± 0.2	3103a	100818	Pb	20.00 ± 0.12	3128	101026
Ba	20.00 ± 0.12	3104a	070222	Mn	20.0 ± 0.2	3132	050429
Be	20.0 ± 0.2	3105a	090514	Ni	20.0 ± 0.1	3136	120619
B	20.0 ± 0.1	3107	070514	Se	20.0 ± 0.2	3149	100901
Cd	20.0 ± 0.1	3108	130116	Sr	20.0 ± 0.1	3153a	990906
Cr	20.0 ± 0.1	3112a	030730	Tl	20.0 ± 0.1	3158	993012
Co	20.0 ± 0.1	3113	000630	V	20.00 ± 0.12	3165	992706
Cu	20.0 ± 0.1	3114	121207	Zn	20.0 ± 0.1	3168a	120629

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2
* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**February 6, 2015**
Shipped Date:	**February 10, 2015**
Expiration Date:	**February 10, 2016**
Certificate Issue Date:	**February 6, 2015**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTMSICSABSOLB_00006

HIGH-PURITY STANDARDS
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Phone (843) 767-7900
Fax (843) 767-7908

Certificate of Analysis

Product Description:

Part Number:	**SM-606-031**
	Solution B
Lot Number:	**1504002**
Matrix:	2% HNO_3 + Tr HF
Purity:	99.92% - 99.999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Sb	20.00 ± 0.12	*		Ti	20.00 ± 0.12	3162a	130925
Mo	20.00 ± 0.12	3134	891307	W	20.00 ± 0.12	3163	080331
Ag	20.0 ± 0.1	3151	992212	Zr	20.00 ± 0.12	3169	130920
Sn	20.00 ± 0.12	3161a	070330				

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**February 9, 2015**
Shipped Date:	**February 10, 2015**
Expiration Date:	**February 10, 2016**
Certificate Issue Date:	**February 9, 2015**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Angel Sellers
Quality Manager

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Reagent

MTMSICVA_00005

USA

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The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Additional Information:

Date Received: 29/Aug/2014

Container: 4 oz (125 mL) Narrow Mouth, LDPE clean

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

Element	Symbol	CAS No	SRM No	NIST Lot No	Source Lot No	Purity %	Concentration mg/L	Uncertainty ± mg/L
Aluminum	Al	7429-90-5	3101	060502	7001.46.7P	99.9995	20	0.09
Manganese	Mn	7439-96-5	3132	050429	7017.46.5P	99.95	20	0.07
Silver	Ag	7440-22-4	3151	992212	7000.29.1P	99.999	4	0.04001
Arsenic	As	7440-38-2	3103	010713	7002.46.5P	99.9999	4	0.04
Boron	B	7440-42-8	3107	070514	7003.46.5P	99.999	4	0.04
Barium	Ba	7440-39-3	3104	070222	7004.29.2P	99.997	4	0.04
Beryllium	Be	7440-41-7	3105	892707	7005.46.5P	99.999	4	0.04
Cadmium	Cd	7440-43-9	3108	060531	7007.46.3P	99.9999	4	0.04002
Cobalt	Co	7440-48-4	3113	000630	7008.46.8P	99.995	4	0.04003
Chromium	Cr	7440-47-3	3112	030730	7009.46.3P	99.998	4	0.044
Copper	Cu	7440-50-8	3114	011017	7011.46.5P	99.9995	4	0.04001
Molybdenum	Mo	7439-98-7	3134	891307	7018.29.3P	99.999	4	0.04
Nickel	Ni	7440-02-0	3136	000612	7021.46.8P	99.995	4	0.04001
Lead	Pb	7439-92-1	3128	030721	7023.29.2P	99.999	4	0.04001
Antimony	Sb	7440-36-0	3102	061229	7026.46.3P	99.999	4	0.04002
Selenium	Se	7782-49-2	3149	992106	7027.46.4P	99.999	4	0.04001
Tin	Sn	7440-31-5	3161	070330	7029.46.4P	99.999	4	0.04
Strontium	Sr	7440-24-6	3153	990906	7030.46.4P	99.998	4	0.04001
Titanium	Ti	7440-32-6	3162	060808	7033.343.1P	99.995	4	0.04001
Thallium	Tl	7440-28-0	3158	993012	7034.29.3P	99.999	4	0.04
Vanadium	V	7440-62-2	3165	992706	7036.46.5P	99.99	4	0.04
Tungsten	W	7440-33-7	3163	080331	7072.46.2P	99.99	4	0.044011
Zinc	Zn	7440-66-6	3168	080123	7037.46.5P	99.9995	4	0.04002
Calcium	Ca	7440-70-2	3109	050825	7006.29.2P	99.999	2000	7
Potassium	K	7440-09-7	3141	051220	7013.46.9P	99.999	2000	7
Magnesium	Mg	7439-95-4	3131	050302	7016.46.5P	99.99	2000	7
Sodium	Na	7440-23-5	3152	010728	7020.46.7P	99.999	2000	7
Iron	Fe	7439-89-6	3126	051031	7012.46.14P	99.99	1000	3.5

USA

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Europe

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The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Intended Uses:

This Certified Reference material, CRM, is intended for use as a calibration standard or a quality control standard for Inorganic Speetrometry Equipment such as ICP-OES, ICP-MS, AA, and XRF, It may aslo be used for various USEPA and ASTM methods.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

Packaging and Storage:

The Solution should be kept trightly capped and stored under normal laboratory conditions. Pre-cleaned polyethlene bottles are used to package this material. Special storage information: Ambient

Glassware Calibration:

Only Class A glassware is used in the manufacture and quality control of Standards. All Glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used perform daily checks on balances calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to the National Institute of Standards and Technology (NIST). Balances are checked daily in accordance to in house procedure O2-LB-004. Balances are calibrated annually by an ISO 17025 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-10 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC Guide 17025:2005 and ISO Guide 34:2009. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous information:

Refer to MSDS

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Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
$u_c = \sqrt{\sum u_i^2}$ where u_i are the individual uncertainty components for raw material, transportation, homogeneity, and shelf life.

Expiration Information:

The Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. This standard is guaranteed until the expiration date listed above.

Accreditation:

This standard was manufactured by an ISO 17025 Chemical Testing Lab (Certificate number 3031.01) and ISO Guide 34 Reference Material Producer (RMP) Certificate number 3031.02 accredited by The American Association of Laboratory Accreditation (A2LA). Manufacturer's Quality System audited and registered by NSF-ISR to ISO 9001:2008 (Certificate number IZ391-IS4).

Manufactured By:

Tiffany Kwasigroch

Manufacture Date: 7/18/2014

Certified By:

Zachary Spinelli

Certified Date:7/21/2014

Released By:

HuiChen Stavros, Ph.D.

Original Issue Date: 7/22/2014

Reagent

MTMSICVB_00005

USA

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Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Additional Information:

Date Received: 29/Aug/2014

Container: 4 oz (125 mL) Narrow Mouth, LDPE clean

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
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Silver	Ag	7440-22-4	3151	992212	7000.29.1P	99.999	4	0.04001
Arsenic	As	7440-38-2	3103	010713	7002.46.5P	99.9999	4	0.04
Boron	B	7440-42-8	3107	070514	7003.46.5P	99.999	4	0.04
Barium	Ba	7440-39-3	3104	070222	7004.29.2P	99.997	4	0.04
Beryllium	Be	7440-41-7	3105	892707	7005.46.5P	99.999	4	0.04
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Cobalt	Co	7440-48-4	3113	000630	7008.46.8P	99.995	4	0.04003
Chromium	Cr	7440-47-3	3112	030730	7009.46.3P	99.998	4	0.044
Copper	Cu	7440-50-8	3114	011017	7011.46.5P	99.9995	4	0.04001
Molybdenum	Mo	7439-98-7	3134	891307	7018.29.3P	99.999	4	0.04
Nickel	Ni	7440-02-0	3136	000612	7021.46.8P	99.995	4	0.04001
Lead	Pb	7439-92-1	3128	030721	7023.29.2P	99.999	4	0.04001
Antimony	Sb	7440-36-0	3102	061229	7026.46.3P	99.999	4	0.04002
Selenium	Se	7782-49-2	3149	992106	7027.46.4P	99.999	4	0.04001
Tin	Sn	7440-31-5	3161	070330	7029.46.4P	99.999	4	0.04
Strontium	Sr	7440-24-6	3153	990906	7030.46.4P	99.998	4	0.04001
Titanium	Ti	7440-32-6	3162	060808	7033.343.1P	99.995	4	0.04001
Thallium	Tl	7440-28-0	3158	993012	7034.29.3P	99.999	4	0.04
Vanadium	V	7440-62-2	3165	992706	7036.46.5P	99.99	4	0.04
Tungsten	W	7440-33-7	3163	080331	7072.46.2P	99.99	4	0.044011
Zinc	Zn	7440-66-6	3168	080123	7037.46.5P	99.9995	4	0.04002
Calcium	Ca	7440-70-2	3109	050825	7006.29.2P	99.999	2000	7
Potassium	K	7440-09-7	3141	051220	7013.46.9P	99.999	2000	7
Magnesium	Mg	7439-95-4	3131	050302	7016.46.5P	99.99	2000	7
Sodium	Na	7440-23-5	3152	010728	7020.46.7P	99.999	2000	7
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The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Intended Uses:

This Certified Reference material, CRM, is intended for use as a calibration standard or a quality control standard for Inorganic Speetrometry Equipment such as ICP-OES, ICP-MS, AA, and XRF, It may aslo be used for various USEPA and ASTM methods.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

Packaging and Storage:

The Solution should be kept trightly capped and stored under normal laboratory conditions. Pre-cleaned polyethlene bottles are used to package this material. Special storage information: Ambient

Glassware Calibration:

Only Class A glassware is used in the manufacture and quality control of Standards. All Glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used perform daily checks on balances calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to the National Institute of Standards and Technology (NIST). Balances are checked daily in accordance to in house procedure O2-LB-004. Balances are calibrated annually by an ISO 17025 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-10 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC Guide 17025:2005 and ISO Guide 34:2009. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous information:

Refer to MSDS

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Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
$u_c = \sqrt{\sum u_i^2}$ where u_i are the individual uncertainty components for raw material, transportation, homogeneity, and shelf life.

Expiration Information:

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Accreditation:

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Manufactured By:

Tiffany Kwasigroch

Manufacture Date: 7/18/2014

Certified By:

Zachary Spinelli

Certified Date:7/21/2014

Released By:

HuiChen Stavros, Ph.D.

Original Issue Date: 7/22/2014

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Project: Ravenna Army Ammunition Plant

Client Sample ID	Lab Sample ID
079SS-0347M-0001-SO	240-49173-1
079SS-0348M-0001-SO	240-49173-2
079SS-0349M-0001-SO	240-49173-3
079SS-0350M-0001-SO	240-49173-4

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0347M-0001-SO
Lab Sample ID: 240-49173-1
Lab Name: TestAmerica Canton
Job No.: 240-49173-1
SDG ID.: CC RVAAP-79 Rt 80 Tank Farm
Matrix: Solid
Date Sampled: 04/06/2015 17:10
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.5

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	8200	18	3.6	0.56	mg/Kg		D	2	6020
Antimony	0.32	0.36	0.13	0.013	mg/Kg	J	D	2	6020
Arsenic	12	0.90	0.13	0.023	mg/Kg		D	2	6020
Barium	52	0.90	0.27	0.20	mg/Kg		D	2	6020
Beryllium	0.53	0.18	0.090	0.0099	mg/Kg		D	2	6020
Cadmium	0.15	0.36	0.0090	0.0033	mg/Kg	J	D	2	6020
Calcium	4400	360	90	20	mg/Kg		D	2	6020
Chromium	15	0.90	0.40	0.054	mg/Kg		D	2	6020
Cobalt	7.3	0.18	0.013	0.0015	mg/Kg		D	2	6020
Copper	12	0.72	0.27	0.087	mg/Kg		D	2	6020
Iron	21000	90	27	2.9	mg/Kg		D	2	6020
Lead	14	5.4	1.8	0.40	mg/Kg		D	20	6020
Magnesium	2400	180	22	3.6	mg/Kg		D	2	6020
Manganese	540	9.0	3.6	1.1	mg/Kg		D	20	6020
Nickel	18	0.90	0.22	0.035	mg/Kg		D	2	6020
Potassium	690	180	9.0	4.4	mg/Kg		D	2	6020
Selenium	0.82	0.90	0.054	0.036	mg/Kg	J	D	2	6020
Silver	0.035	0.18	0.045	0.0013	mg/Kg	J	D	2	6020
Sodium	38	180	36	7.8	mg/Kg	J	D	2	6020
Thallium	0.12	0.36	0.13	0.017	mg/Kg	J	D	2	6020
Vanadium	16	0.90	0.090	0.033	mg/Kg		D	2	6020
Zinc	42	7.2	1.8	0.45	mg/Kg		D	2	6020
Mercury	0.040	0.10	0.034	0.014	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0348M-0001-SO
Lab Sample ID: 240-49173-2
Lab Name: TestAmerica Canton
Job No.: 240-49173-1
SDG ID.: CC RVAAP-79 Rt 80 Tank Farm
Matrix: Solid
Date Sampled: 04/07/2015 15:10
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	16	3.3	0.51	mg/Kg		D	2	6020
Antimony	0.25	0.33	0.12	0.012	mg/Kg	J	D	2	6020
Arsenic	13	0.82	0.12	0.021	mg/Kg		D	2	6020
Barium	60	0.82	0.25	0.18	mg/Kg		D	2	6020
Beryllium	0.51	0.16	0.082	0.0091	mg/Kg		D	2	6020
Cadmium	0.16	0.33	0.0082	0.0030	mg/Kg	J	D	2	6020
Calcium	640	330	82	18	mg/Kg		D	2	6020
Chromium	16	0.82	0.37	0.049	mg/Kg		D	2	6020
Cobalt	8.4	0.16	0.012	0.0014	mg/Kg		D	2	6020
Copper	10	0.66	0.25	0.080	mg/Kg		D	2	6020
Iron	21000	82	25	2.6	mg/Kg		D	2	6020
Lead	19	4.9	1.6	0.37	mg/Kg		D	20	6020
Magnesium	1600	160	21	3.3	mg/Kg		D	2	6020
Manganese	590	8.2	3.3	0.99	mg/Kg		D	20	6020
Nickel	15	0.82	0.21	0.032	mg/Kg		D	2	6020
Potassium	580	160	8.2	4.0	mg/Kg		D	2	6020
Selenium	0.98	0.82	0.049	0.033	mg/Kg		D	2	6020
Silver	0.073	0.16	0.041	0.0012	mg/Kg	J	D	2	6020
Sodium	24	160	33	7.2	mg/Kg	J	D	2	6020
Thallium	0.17	0.33	0.12	0.016	mg/Kg	J	D	2	6020
Vanadium	23	0.82	0.082	0.030	mg/Kg		D	2	6020
Zinc	51	6.6	1.6	0.41	mg/Kg		D	2	6020
Mercury	0.045	0.10	0.034	0.015	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0349M-0001-SO
Lab Sample ID: 240-49173-3
Lab Name: TestAmerica Canton
Job No.: 240-49173-1
SDG ID.: CC RVAAP-79 Rt 80 Tank Farm
Matrix: Solid
Date Sampled: 04/07/2015 00:00
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 97.7

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	12000	18	3.5	0.55	mg/Kg		D	2	6020
Antimony	0.34	0.35	0.13	0.012	mg/Kg	J	D	2	6020
Arsenic	14	0.88	0.13	0.023	mg/Kg		D	2	6020
Barium	62	0.88	0.26	0.19	mg/Kg		D	2	6020
Beryllium	0.54	0.18	0.088	0.0097	mg/Kg		D	2	6020
Cadmium	0.17	0.35	0.0088	0.0033	mg/Kg	J	D	2	6020
Calcium	1200	350	88	19	mg/Kg		D	2	6020
Chromium	19	0.88	0.40	0.053	mg/Kg		D	2	6020
Cobalt	11	0.18	0.013	0.0015	mg/Kg		D	2	6020
Copper	11	0.71	0.26	0.086	mg/Kg		D	2	6020
Iron	23000	88	26	2.8	mg/Kg		D	2	6020
Lead	22	5.3	1.8	0.40	mg/Kg		D	20	6020
Magnesium	1700	180	22	3.5	mg/Kg		D	2	6020
Manganese	790	8.8	3.5	1.1	mg/Kg		D	20	6020
Nickel	17	0.88	0.22	0.034	mg/Kg		D	2	6020
Potassium	650	180	8.8	4.3	mg/Kg		D	2	6020
Selenium	1.0	0.88	0.053	0.035	mg/Kg		D	2	6020
Silver	0.073	0.18	0.044	0.0012	mg/Kg	J	D	2	6020
Sodium	29	180	35	7.7	mg/Kg	J	D	2	6020
Thallium	0.18	0.35	0.13	0.017	mg/Kg	J	D	2	6020
Vanadium	24	0.88	0.088	0.033	mg/Kg		D	2	6020
Zinc	54	7.1	1.8	0.44	mg/Kg		D	2	6020
Mercury	0.050	0.12	0.040	0.017	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0350M-0001-SO
Lab Sample ID: 240-49173-4
Lab Name: TestAmerica Canton
Job No.: 240-49173-1
SDG ID.: CC RVAAP-79 Rt 80 Tank Farm
Matrix: Solid
Date Sampled: 04/07/2015 12:05
Reporting Basis: DRY
Date Received: 04/09/2015 14:51
% Solids: 98.7

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	5500	16	3.2	0.50	mg/Kg		D	2	6020
Antimony	0.43	0.32	0.12	0.011	mg/Kg		D	2	6020
Arsenic	21	0.81	0.12	0.021	mg/Kg		D	2	6020
Barium	68	0.81	0.24	0.18	mg/Kg		D	2	6020
Beryllium	0.50	0.16	0.081	0.0089	mg/Kg		D	2	6020
Cadmium	0.15	0.32	0.0081	0.0030	mg/Kg	J	D	2	6020
Calcium	4300	320	81	18	mg/Kg		D	2	6020
Chromium	16	0.81	0.36	0.049	mg/Kg		D	2	6020
Cobalt	7.9	0.16	0.012	0.0014	mg/Kg		D	2	6020
Copper	10	0.65	0.24	0.079	mg/Kg		D	2	6020
Iron	17000	81	24	2.6	mg/Kg		D	2	6020
Lead	23	4.9	1.6	0.36	mg/Kg		D	20	6020
Magnesium	1300	160	20	3.2	mg/Kg		D	2	6020
Manganese	730	8.1	3.2	0.97	mg/Kg		D	20	6020
Nickel	17	0.81	0.20	0.032	mg/Kg		D	2	6020
Potassium	370	160	8.1	4.0	mg/Kg		D	2	6020
Selenium	0.78	0.81	0.049	0.032	mg/Kg	J	D	2	6020
Silver	0.10	0.16	0.041	0.0011	mg/Kg	J	D	2	6020
Sodium	37	160	32	7.0	mg/Kg	J	D	2	6020
Thallium	0.12	0.32	0.12	0.015	mg/Kg	J	D	2	6020
Vanadium	13	0.81	0.081	0.030	mg/Kg		D	2	6020
Zinc	35	6.5	1.6	0.41	mg/Kg		D	2	6020
Mercury	0.032	0.092	0.030	0.013	mg/Kg	J		1	7471A

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-177559/7 04/22/2015 15:15				CCV 240-177559/65 04/22/2015 18:53				CCV 240-177559/77 04/22/2015 19:39			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	205		200	103	252		250	101	253		250	101
Antimony	41.6		40.0	104	51.3		50.0	103	51.7		50.0	103
Arsenic	39.7		40.0	99	51.1		50.0	102	51.3		50.0	103
Barium	40.8		40.0	102	50.5		50.0	101	51.0		50.0	102
Beryllium	39.0		40.0	98	47.4		50.0	95	48.7		50.0	97
Cadmium	40.9		40.0	102	53.7		50.0	107	54.1		50.0	108
Calcium	20100		20000	100	24800		25000	99	24800		25000	99
Chromium	41.0		40.0	103	51.4		50.0	103	51.9		50.0	104
Cobalt	40.1		40.0	100	49.9		50.0	100	50.0		50.0	100
Copper	41.5		40.0	104	50.3		50.0	101	50.8		50.0	102
Iron	10300		10000	103	13000		12500	104	13100		12500	105
Magnesium	20800		20000	104	25000		25000	100	25200		25000	101
Nickel	40.7		40.0	102	49.8		50.0	100	49.7		50.0	99
Potassium	20700		20000	104	25200		25000	101	25300		25000	101
Selenium	41.5		40.0	104	51.5		50.0	103	51.1		50.0	102
Silver	41.2		40.0	103	53.6		50.0	107	53.9		50.0	108
Sodium	20900		20000	104	25100		25000	100	25500		25000	102
Thallium	37.2		40.0	93	46.1		50.0	92	46.3		50.0	93
Vanadium	41.1		40.0	103	50.9		50.0	102	51.4		50.0	103
Zinc	42.0		40.0	105	50.6		50.0	101	50.3		50.0	101
Lead	39.1		40.0	98	47.7		50.0	95	47.9		50.0	96
Manganese	201		200	100	249		250	99	251		250	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-177559/86 04/22/2015 20:13											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	254		250	101								
Antimony	51.7		50.0	103								
Arsenic	51.5		50.0	103								
Barium	51.4		50.0	103								
Beryllium	50.0		50.0	100								
Cadmium	54.0		50.0	108								
Calcium	24800		25000	99								
Chromium	50.8		50.0	102								
Cobalt	50.1		50.0	100								
Copper	50.3		50.0	101								
Iron	13000		12500	104								
Magnesium	24900		25000	99								
Nickel	49.9		50.0	100								
Potassium	25400		25000	101								
Selenium	50.7		50.0	101								
Silver	53.7		50.0	107								
Sodium	24800		25000	99								
Thallium	45.8		50.0	92								
Vanadium	50.6		50.0	101								
Zinc	50.9		50.0	102								
Lead	47.4		50.0	95								
Manganese	248		250	99								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-177880/7 04/24/2015 09:22				CCV 240-177880/62 04/24/2015 14:06				CCV 240-177880/74 04/24/2015 14:51			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Lead	39.6		40.0	99	49.4		50.0	99	47.7		50.0	95
Manganese	208		200	104	256		250	102	255		250	102
Aluminum	203		200	101	244		250	98	242		250	97
Antimony	43.8		40.0	110	53.1		50.0	106	52.1		50.0	104
Arsenic	39.7		40.0	99	47.9		50.0	96	47.7		50.0	95
Barium	40.1		40.0	100	52.2		50.0	104	51.3		50.0	103
Beryllium	39.7		40.0	99	46.9		50.0	94	48.1		50.0	96
Cadmium	40.5		40.0	101	51.2		50.0	102	50.2		50.0	100
Calcium	20100		20000	100	25200		25000	101	24800		25000	99
Chromium	41.1		40.0	103	51.5		50.0	103	50.5		50.0	101
Cobalt	40.2		40.0	101	46.7		50.0	93	45.9		50.0	92
Copper	40.6		40.0	101	46.7		50.0	93	46.1		50.0	92
Iron	10200		10000	102	12900		12500	103	12700		12500	102
Magnesium	20600		20000	103	24900		25000	99	24400		25000	98
Nickel	40.8		40.0	102	46.1		50.0	92	45.7		50.0	91
Potassium	20600		20000	103	25400		25000	102	25100		25000	100
Selenium	42.1		40.0	105	48.4		50.0	97	48.2		50.0	96
Silver	41.0		40.0	103	50.6		50.0	101	49.5		50.0	99
Sodium	20300		20000	102	25000		25000	100	24400		25000	97
Thallium	39.2		40.0	98	51.0		50.0	102	51.4		50.0	103
Vanadium	40.7		40.0	102	51.2		50.0	102	50.5		50.0	101
Zinc	41.1		40.0	103	47.2		50.0	94	46.7		50.0	93

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-177880/83 04/24/2015 15:26											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Lead	47.9		50.0	96								
Manganese	255		250	102								
Aluminum	236		250	95								
Antimony	52.1		50.0	104								
Arsenic	49.1		50.0	98								
Barium	51.5		50.0	103								
Beryllium	50.0		50.0	100								
Cadmium	50.2		50.0	100								
Calcium	24600		25000	98								
Chromium	50.1		50.0	100								
Cobalt	47.4		50.0	95								
Copper	47.3		50.0	95								
Iron	12600		12500	101								
Magnesium	24000		25000	96								
Nickel	46.7		50.0	93								
Potassium	25100		25000	100								
Selenium	49.1		50.0	98								
Silver	49.9		50.0	100								
Sodium	24100		25000	96								
Thallium	51.0		50.0	102								
Vanadium	50.7		50.0	101								
Zinc	47.9		50.0	96								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	ICV 240-178352/7 04/28/2015 11:55				CCV 240-178352/12 04/28/2015 12:14				CCV 240-178352/24 04/28/2015 12:59			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Lead	39.6		40.0	99	48.7		50.0	97	48.4		50.0	97
Aluminum	202		200	101	259		250	103	253		250	101
Arsenic	40.0		40.0	100	49.8		50.0	100	51.1		50.0	102
Barium	41.0		40.0	103	50.0		50.0	100	50.0		50.0	100
Beryllium	41.0		40.0	102	48.1		50.0	96	46.0		50.0	92
Cadmium	41.2		40.0	103	50.8		50.0	102	50.7		50.0	101
Calcium	20000		20000	100	25300		25000	101	25300		25000	101
Cobalt	40.3		40.0	101	49.6		50.0	99	50.8		50.0	102
Copper	41.5		40.0	104	50.1		50.0	100	51.2		50.0	102
Iron	10100		10000	101	12500		12500	100	12700		12500	101
Magnesium	20200		20000	101	25200		25000	101	25300		25000	101
Manganese	205		200	103	254		250	101	259		250	103
Nickel	41.6		40.0	104	49.7		50.0	99	50.9		50.0	102
Potassium	20400		20000	102	25600		25000	102	25700		25000	103
Selenium	41.8		40.0	104	50.2		50.0	100	51.3		50.0	103
Silver	41.6		40.0	104	51.0		50.0	102	50.9		50.0	102
Sodium	20300		20000	102	25200		25000	101	25300		25000	101
Zinc	42.1		40.0	105	49.9		50.0	100	51.0		50.0	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICV Source: MTMSICVW_00043 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00116

Analyte	CCV 240-178352/36 04/28/2015 13:44											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Lead	49.2		50.0	98								
Aluminum	254		250	102								
Arsenic	50.0		50.0	100								
Barium	50.4		50.0	101								
Beryllium	50.7		50.0	101								
Cadmium	50.4		50.0	101								
Calcium	26000		25000	104								
Cobalt	49.7		50.0	99								
Copper	50.5		50.0	101								
Iron	12300		12500	98								
Magnesium	25300		25000	101								
Manganese	258		250	103								
Nickel	50.4		50.0	101								
Potassium	25500		25000	102								
Selenium	49.8		50.0	100								
Silver	50.8		50.0	102								
Sodium	25300		25000	101								
Zinc	49.9		50.0	100								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00885

Analyte	ICV 240-177030/7-A 04/21/2015 08:31				CCV 240-177030/10-A 04/21/2015 10:52				CCV 240-177030/10-A 04/21/2015 11:16			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.73		5.00	95	5.16		5.00	103	5.16		5.00	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00885

Analyte	CCV 240-177030/10-A 04/21/2015 11:39											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.23		5.00	105								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177559/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	51.2	J	102	70-130
Antimony	2.00	2.34		117	70-130
Arsenic	5.00	5.07		101	70-130
Barium	5.00	5.02		100	70-130
Beryllium	1.00	0.901	J	90	70-130
Cadmium	1.00	1.03	J	103	70-130
Calcium	1000	1020	J	102	70-130
Chromium	2.00	2.14		107	70-130
Cobalt	1.00	1.03		103	70-130
Copper	2.00	2.13	J	106	70-130
Iron	100	106	J	106	70-130
Lead	1.00	1.02		102	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	5.11		102	70-130
Nickel	2.00	2.12	J	106	70-130
Potassium	1000	1050		105	70-130
Selenium	5.00	5.36		107	70-130
Silver	1.00	1.07		107	70-130
Sodium	1000	1070		107	70-130
Thallium	2.00	1.88	J	94	70-130
Vanadium	5.00	5.43		109	70-130
Zinc	20.0	20.7	J	103	70-130

Lab Sample ID: CRI 240-177559/88 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	52.0	J	104	70-130
Antimony	2.00	2.10		105	70-130
Arsenic	5.00	5.22		104	70-130
Barium	5.00	5.12		102	70-130
Beryllium	1.00	0.934	J	93	70-130
Cadmium	1.00	1.11	J	111	70-130
Calcium	1000	1030	J	103	70-130
Chromium	2.00	2.18		109	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177559/88 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cobalt	1.00	1.07		107	70-130
Copper	2.00	2.19	J	109	70-130
Iron	100	118	J	118	70-130
Lead	1.00	1.08		108	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	6.16		123	70-130
Nickel	2.00	2.12	J	106	70-130
Potassium	1000	1050		105	70-130
Selenium	5.00	5.30		106	70-130
Silver	1.00	1.16		116	70-130
Sodium	1000	1070		107	70-130
Thallium	2.00	1.90	J	95	70-130
Vanadium	5.00	5.47		109	70-130
Zinc	20.0	21.1	J	106	70-130

Lab Sample ID: CRI 240-177880/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	48.1	J	96	70-130
Antimony	2.00	2.20		110	70-130
Arsenic	5.00	5.11		102	70-130
Barium	5.00	4.94	J	99	70-130
Beryllium	1.00	1.04		104	70-130
Cadmium	1.00	1.04	J	104	70-130
Calcium	1000	1020	J	102	70-130
Chromium	2.00	2.13		106	70-130
Cobalt	1.00	1.01		101	70-130
Copper	2.00	2.01	J	101	70-130
Iron	100	109	J	109	70-130
Lead	1.00	1.04		104	70-130
Magnesium	1000	1080		108	70-130
Manganese	5.00	5.21		104	70-130
Nickel	2.00	2.06	J	103	70-130
Potassium	1000	1080		108	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-177880/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Selenium	5.00	5.26		105	70-130
Silver	1.00	1.03		103	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	2.05		102	70-130
Vanadium	5.00	5.33		107	70-130
Zinc	20.0	20.6	J	103	70-130

Lab Sample ID: CRI 240-177880/85 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	46.8	J	94	70-130
Antimony	2.00	2.06		103	70-130
Arsenic	5.00	4.90	J	98	70-130
Barium	5.00	5.16		103	70-130
Beryllium	1.00	0.987	J	99	70-130
Cadmium	1.00	1.09	J	109	70-130
Calcium	1000	1030	J	103	70-130
Chromium	2.00	2.14		107	70-130
Cobalt	1.00	0.957	J	96	70-130
Copper	2.00	1.85	J	93	70-130
Iron	100	112	J	112	70-130
Lead	1.00	1.04		104	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	5.22		104	70-130
Nickel	2.00	1.94	J	97	70-130
Potassium	1000	1070		107	70-130
Selenium	5.00	5.14		103	70-130
Silver	1.00	1.06		106	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	2.06		103	70-130
Vanadium	5.00	5.30		106	70-130
Zinc	20.0	19.4	J	97	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-178352/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	51.4	J	103	70-130
Antimony	2.00	2.36		118	70-130
Arsenic	5.00	4.91	J	98	70-130
Barium	5.00	4.90	J	98	70-130
Beryllium	1.00	0.890	J	89	70-130
Cadmium	1.00	1.03	J	103	70-130
Calcium	1000	1010	J	101	70-130
Chromium	2.00	2.18		109	70-130
Cobalt	1.00	1.00		100	70-130
Copper	2.00	1.93	J	96	70-130
Iron	100	98.7	J	99	70-130
Lead	1.00	1.05		105	70-130
Magnesium	1000	1050		105	70-130
Manganese	5.00	4.88	J	98	70-130
Nickel	2.00	2.06	J	103	70-130
Potassium	1000	1050		105	70-130
Selenium	5.00	4.98	J	100	70-130
Silver	1.00	1.04		104	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	1.88	J	94	70-130
Vanadium	5.00	5.26		105	70-130
Zinc	20.0	20.2	J	101	70-130

Lab Sample ID: CRI 240-178352/40 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	52.0	J	104	70-130
Antimony	2.00	1.95	J	98	70-130
Arsenic	5.00	4.92	J	98	70-130
Barium	5.00	4.86	J	97	70-130
Beryllium	1.00	0.853	J	85	70-130
Cadmium	1.00	1.03	J	103	70-130
Calcium	1000	1040	J	104	70-130
Chromium	2.00	2.18		109	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-178352/40 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cobalt	1.00	1.00		100	70-130
Copper	2.00	1.83	J	92	70-130
Iron	100	99.3	J	99	70-130
Lead	1.00	1.04		104	70-130
Magnesium	1000	1060		106	70-130
Manganese	5.00	4.77	J	95	70-130
Nickel	2.00	1.91	J	96	70-130
Potassium	1000	1060		106	70-130
Selenium	5.00	5.05		101	70-130
Silver	1.00	1.04		104	70-130
Sodium	1000	1060		106	70-130
Thallium	2.00	1.85	J	93	70-130
Vanadium	5.00	5.32		106	70-130
Zinc	20.0	20.5	J	102	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Method: 7471A Instrument ID: H4

Lab Sample ID: CRA 240-177030/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00885

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.196	J	98	

Lab Sample ID: CRA 240-177030/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00885

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.195	J	98	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Concentration Units: ug/L

Analyte	RL	ICB 240-177559/8 04/22/2015 15:19		CCB 240-177559/66 04/22/2015 18:57		CCB 240-177559/78 04/22/2015 19:42		CCB 240-177559/87 04/22/2015 20:17	
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	60	U	60	U	60	U	60	U
Antimony	2.0	1.06	J	0.579	J	0.559	J	0.549	J
Arsenic	5.0	1.0	U	1.0	U	1.0	U	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	0.50	U	0.50	U	0.0590	J	0.50	U
Cadmium	2.0	0.40	U	0.40	U	0.40	U	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Cobalt	1.0	0.20	U	0.20	U	0.0260	J	0.20	U
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Iron	150	100	U	38.4	J	31.8	J	33.7	J
Magnesium	1000	300	U	300	U	300	U	300	U
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.331	J	0.50	U	0.50	U	0.50	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	400	U	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	40	20	U	20	U	20	U	20	U
Lead	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Manganese	5.0	3.0	U	3.0	U	1.21	J	1.43	J

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Concentration Units: ug/L

Analyte	RL	ICB 240-177880/8 04/24/2015 09:26		CCB 240-177880/63 04/24/2015 14:10		CCB 240-177880/75 04/24/2015 14:55		CCB 240-177880/84 04/24/2015 15:29	
		Found	C	Found	C	Found	C	Found	C
Lead	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Manganese	5.0	3.0	U	3.0	U	3.0	U	3.0	U
Aluminum	60	60	U	60	U	60	U	60	U
Antimony	2.0	0.522	J	0.552	J	0.523	J	0.497	J
Arsenic	5.0	1.0	U	1.0	U	1.0	U	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	0.50	U	0.0660	J	0.103	J	0.0780	J
Cadmium	2.0	0.40	U	0.40	U	0.40	U	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Cobalt	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Iron	150	19.4	J	17.7	J	22.4	J	23.7	J
Magnesium	1000	300	U	300	U	300	U	300	U
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.50	U	0.50	U	0.50	U	0.50	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	400	U	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	40	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Concentration Units: ug/L

Analyte	RL	ICB 240-178352/8 04/28/2015 11:58		CCB 240-178352/13 04/28/2015 12:17		CCB 240-178352/25 04/28/2015 13:02		CCB 240-178352/37 04/28/2015 13:48	
		Found	C	Found	C	Found	C	Found	C
Lead	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Aluminum	60	60	U	60	U	60	U	60	U
Antimony	2.0	1.73	J	0.456	J	0.348	J	0.319	J
Arsenic	5.0	1.0	U	1.0	U	1.0	U	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	0.50	U	0.50	U	0.129	J	0.50	U
Cadmium	2.0	0.40	U	0.40	U	0.40	U	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Cobalt	1.0	0.20	U	0.20	U	0.20	U	0.20	U
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Iron	150	100	U	19.2	J	17.0	J	18.0	J
Magnesium	1000	300	U	300	U	300	U	300	U
Manganese	5.0	3.0	U	3.0	U	3.0	U	3.0	U
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.50	U	0.50	U	0.50	U	0.50	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	400	U	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	40	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Concentration Units: ug/L

Analyte	RL	ICB 240-177030/8-A 04/21/2015 08:33		CCB 240-177030/11-A 04/21/2015 10:54		CCB 240-177030/11-A 04/21/2015 11:18		CCB 240-177030/11-A 04/21/2015 11:41	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Concentration Units: mg/Kg Lab Sample ID: MB 240-177128/1-A ^2

Instrument Code: I10 Batch No.: 177559

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	4.0	U		6020_DoD
7440-36-0	Antimony	0.0474	J	D	6020_DoD
7440-38-2	Arsenic	0.0316	J	D	6020_DoD
7440-39-3	Barium	0.30	U		6020_DoD
7440-41-7	Beryllium	0.10	U		6020_DoD
7440-43-9	Cadmium	0.010	U		6020_DoD
7440-70-2	Calcium	100	U		6020_DoD
7440-47-3	Chromium	0.163	J	D	6020_DoD
7440-48-4	Cobalt	0.00320	J	D	6020_DoD
7440-50-8	Copper	0.308	J	D	6020_DoD
7439-89-6	Iron	5.93	J	D	6020_DoD
7439-95-4	Magnesium	6.13	J	D	6020_DoD
7440-02-0	Nickel	0.25	U		6020_DoD
7440-09-7	Potassium	10	U		6020_DoD
7782-49-2	Selenium	0.060	U		6020_DoD
7440-22-4	Silver	0.050	U		6020_DoD
7440-23-5	Sodium	40	U		6020_DoD
7440-28-0	Thallium	0.15	U		6020_DoD
7440-62-2	Vanadium	0.0472	J	D	6020_DoD
7440-66-6	Zinc	0.612	J	D	6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Concentration Units: mg/Kg Lab Sample ID: MB 240-177128/1-A ^2

Instrument Code: I10 Batch No.: 177880

CAS No.	Analyte	Concentration	C	Q	Method
7439-92-1	Lead	0.173	J	D	6020_DoD
7439-96-5	Manganese	0.40	U		6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Concentration Units: mg/Kg Lab Sample ID: MB 240-177128/1-A ^2

Instrument Code: I10 Batch No.: 178352

CAS No.	Analyte	Concentration	C	Q	Method
7439-92-1	Lead	0.102	J	D	6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Concentration Units: mg/Kg Lab Sample ID: MB 240-177137/1-A

Instrument Code: H4 Batch No.: 177294

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.033	U		7471_DOD

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Lab Sample ID: ICSA 240-177559/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**50000**	**45805**	**92**
Antimony		**0.296**	
Arsenic		**0.314**	
Barium		**0.0520**	
Beryllium		**0.0100**	
Cadmium		**0.0480**	
Calcium	**50000**	**48824**	**98**
Chromium		**0.639**	
Cobalt		**0.0340**	
Copper		**0.340**	
Iron	**50000**	**47490**	**95**
Magnesium	**50000**	**47896**	**96**
Nickel		**0.100**	
Potassium	**50000**	**47596**	**95**
Selenium		**0.485**	
Silver		**0.0100**	
Sodium	**50000**	**47575**	**95**
Thallium		**0.0120**	
Vanadium		**0.0630**	
Zinc		**0.0880**	
Manganese		*0.417*	
Molybdenum	*1000*	*1062*	*106*
Strontium		*0.342*	
Ti	*1000*	*963*	*96*
Tin		*0.434*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Lab Sample ID: ICSAB 240-177559/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**50000**	**47367**	**95**
Antimony	**100**	**104**	**104**
Arsenic	**100**	**101**	**101**
Barium	**100**	**99.9**	**100**
Beryllium	**100**	**101**	**101**
Cadmium	**100**	**101**	**101**
Calcium	**50000**	**49369**	**99**
Chromium	**100**	**100**	**100**
Cobalt	**100**	**99.1**	**99**
Copper	**100**	**98.2**	**98**
Iron	**50000**	**49442**	**99**
Magnesium	**50000**	**49322**	**99**
Nickel	**100**	**97.8**	**98**
Potassium	**50000**	**49182**	**98**
Selenium	**100**	**102**	**102**
Silver	**100**	**99.7**	**100**
Sodium	**50000**	**49210**	**98**
Thallium	**100**	**101**	**101**
Vanadium	**100**	**99.2**	**99**
Zinc	**100**	**98.8**	**99**
Boron	*100*	*101*	*101*
Lead	*100*	*100*	*100*
Manganese	*100*	*97.3*	*97*
Molybdenum	*1100*	*1195*	*109*
Strontium	*100*	*99.2*	*99*
Ti	*1100*	*1082*	*98*
Tin	*100*	*98.7*	*99*
Tungsten	*100*	*102*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Lab Sample ID: ICSA 240-177880/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Manganese		**0.324**	
Aluminum	*50000*	*44548*	*89*
Antimony		*0.275*	
Arsenic		*0.0960*	
Barium		*0.0330*	
Beryllium		*0.0370*	
Boron		*0.854*	
Cadmium		*-0.0090*	
Calcium	*50000*	*48547*	*97*
Chromium		*0.640*	
Cobalt		*0.0320*	
Copper		*0.233*	
Iron	*50000*	*47084*	*94*
Magnesium	*50000*	*46830*	*94*
Molybdenum	*1000*	*1024*	*102*
Nickel		*0.111*	
Potassium	*50000*	*47217*	*94*
Selenium		*0.186*	
Silver		*0.0150*	
Sodium	*50000*	*46893*	*94*
Strontium		*0.338*	
Thallium		*0.0070*	
Ti	*1000*	*954*	*95*
Tin		*0.376*	
Vanadium		*0.0100*	
Zinc		*-0.0740*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Lab Sample ID: ICSAB 240-177880/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Lead	**100**	**101**	**101**
Manganese	**100**	**100.0**	**100**
Aluminum	*50000*	*46452*	*93*
Antimony	*100*	*107*	*107*
Arsenic	*100*	*100*	*100*
Barium	*100*	*101*	*101*
Beryllium	*100*	*103*	*103*
Boron	*100*	*102*	*102*
Cadmium	*100*	*99.8*	*100*
Calcium	*50000*	*49399*	*99*
Chromium	*100*	*101*	*101*
Cobalt	*100*	*99.5*	*100*
Copper	*100*	*98.4*	*98*
Iron	*50000*	*49769*	*100*
Magnesium	*50000*	*49499*	*99*
Molybdenum	*1100*	*1150*	*105*
Nickel	*100*	*98.3*	*98*
Potassium	*50000*	*49333*	*99*
Selenium	*100*	*102*	*102*
Silver	*100*	*99.7*	*100*
Sodium	*50000*	*48906*	*98*
Strontium	*100*	*99.2*	*99*
Thallium	*100*	*101*	*101*
Ti	*1100*	*1090*	*99*
Tin	*100*	*100*	*100*
Tungsten	*100*	*104*	*104*
Vanadium	*100*	*99.8*	*100*
Zinc	*100*	*98.3*	*98*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Lab Sample ID: ICSA 240-178352/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00044

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Lead		**0.133**	
Aluminum	*50000*	*48426*	*97*
Antimony		*0.278*	
Arsenic		*0.121*	
Barium		*0.0740*	
Beryllium		*-0.0020*	
Boron		*0.916*	
Cadmium		*0.0630*	
Calcium	*50000*	*50740*	*101*
Chromium		*0.718*	
Cobalt		*0.0300*	
Copper		*0.205*	
Iron	*50000*	*50198*	*100*
Magnesium	*50000*	*50355*	*101*
Manganese		*0.274*	
Molybdenum	*1000*	*1111*	*111*
Nickel		*0.0830*	
Potassium	*50000*	*50083*	*100*
Selenium		*0.115*	
Silver		*0.0140*	
Sodium	*50000*	*50018*	*100*
Strontium		*0.351*	
Thallium		*0.0090*	
Ti	*1000*	*1023*	*102*
Tin		*0.232*	
Vanadium		*-0.0130*	
Zinc		*1.26*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Lab Sample ID: ICSAB 240-178352/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00043

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Lead	**100**	**103**	**103**
Aluminum	*50000*	*48015*	*96*
Antimony	*100*	*107*	*107*
Arsenic	*100*	*99.8*	*100*
Barium	*100*	*103*	*103*
Beryllium	*100*	*114*	*114*
Cadmium	*100*	*102*	*102*
Calcium	*50000*	*50805*	*102*
Chromium	*100*	*103*	*103*
Cobalt	*100*	*99.0*	*99*
Copper	*100*	*99.1*	*99*
Iron	*50000*	*48800*	*98*
Magnesium	*50000*	*50210*	*100*
Manganese	*100*	*94.7*	*95*
Molybdenum	*1100*	*1189*	*108*
Nickel	*100*	*98.8*	*99*
Potassium	*50000*	*49705*	*99*
Selenium	*100*	*101*	*101*
Silver	*100*	*101*	*101*
Sodium	*50000*	*49424*	*99*
Strontium	*100*	*99.4*	*99*
Thallium	*100*	*101*	*101*
Ti	*1100*	*1128*	*103*
Tin	*100*	*102*	*102*
Tungsten	*100*	*98.1*	*98*
Vanadium	*100*	*101*	*101*
Zinc	*100*	*99.0*	*99*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-177128/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49173-1

Sample Matrix: Solid LCS Source: MTICPMS2_00020

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	1000	950		95	80	120	D	6020
Antimony	10.0	9.83		98	68	113	D	6020
Arsenic	100	88.2		88	73	110	D	6020
Barium	100	96.9		97	70	110	D	6020
Beryllium	100	96.8		97	79	110	D	6020
Cadmium	100	98.9		99	74	110	D	6020
Calcium	1000	910		91	80	120	D	6020
Chromium	100	101		101	70	110	D	6020
Cobalt	100	98.8		99	74	110	D	6020
Copper	100	101		101	73	110	D	6020
Iron	1000	1020		102	80	120	D	6020
Magnesium	1000	986		99	80	120	D	6020
Nickel	100	94.9		95	75	110	D	6020
Potassium	1000	993		99	80	120	D	6020
Selenium	100	84.2		84	65	110	D	6020
Silver	10.0	10.5		105	60	114	D	6020
Sodium	1000	966		97	80	120	D	6020
Thallium	25.0	24.3		97	71	110	D	6020
Vanadium	100	99.9		100	72	110	D	6020
Zinc	100	91.4		91	72	113	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-177128/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49173-1

Sample Matrix: Solid LCS Source: MTICPMSA_00022

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Lead	100	94.0		94	75	110	D	6020
Manganese	100	100		100	80	120	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-177128/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-49173-1

Sample Matrix: Solid LCS Source: MTICPMSA_00022

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Lead	100	97.8		98	75	110	D	6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-177137/2-A

Lab Name: TestAmerica Canton Job No.: 240-49173-1

Sample Matrix: Solid LCS Source: MTHGCALW_00885

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.825		99	80	120		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49173-1

SDG Number: CC RVAAP-79 Rt 80 Tank Farm

Matrix: Solid Instrument ID: I10

Method: 6020 DL Date: 09/15/2014 17:22

Prep Method: 3050B

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Aluminum	27.00	20	0.62
Antimony	121.00	0.4	0.014
Arsenic	75.00	1	0.026
Barium	137.00	1	0.22
Beryllium	9.00	0.2	0.011
Cadmium	111.00	0.4	0.0037
Calcium	43.00	400	22
Chromium	52.00	1	0.06
Cobalt	59.00	0.2	0.0017
Copper	65.00	0.8	0.097
Iron	56.00	100	3.2
Lead	208.00	0.6	0.045
Magnesium	25.00	200	4
Manganese	55.00	1	0.12
Nickel	60.00	1	0.039
Potassium	39.00	200	4.9
Selenium	78.00	1	0.04
Silver	107.00	0.2	0.0014
Sodium	23.00	200	8.7
Thallium	205.00	0.4	0.019
Vanadium	51.00	1	0.037
Zinc	66.00	8	0.5

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49173-1

SDG Number: CC RVAAP-79 Rt 80 Tank Farm

Matrix: Solid Instrument ID: I10

Method: 6020 XMDL Date: 09/15/2014 17:24

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum	27.00	60	9
Antimony	121.00	2	0.16
Arsenic	75.00	5	0.18
Barium	137.00	5	1.1
Beryllium	9.00	1	0.053
Cadmium	111.00	2	0.061
Calcium	43.00	2000	240
Chromium	52.00	2	0.2
Cobalt	59.00	1	0.021
Copper	65.00	4	0.75
Iron	56.00	150	16
Lead	208.00	1	0.11
Magnesium	25.00	1000	48
Manganese	55.00	5	1.1
Nickel	60.00	5	0.23
Potassium	39.00	1000	30
Selenium	78.00	5	0.25
Silver	107.00	1	0.02
Sodium	23.00	1000	68
Thallium	205.00	2	0.074
Vanadium	51.00	5	0.23
Zinc	66.00	40	7.3

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49173-1

SDG Number: CC RVAAP-79 Rt 80 Tank Farm

Matrix: Solid Instrument ID: H4

Method: 7471A DL Date: 02/16/2010 09:46

Prep Method: 7471A

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Mercury	253.7	0.1	0.014

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49173-1

SDG Number: CC RVAAP-79 Rt 80 Tank Farm

Matrix: Solid Instrument ID: H4

Method: 7471A XMDL Date: 09/17/2014 14:14

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.09

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: I10 Date: 10/20/2014 13:19

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Aluminum		200000	6020
Antimony		300	6020
Arsenic		10000	6020
Barium		10000	6020
Beryllium		10000	6020
Cadmium		4000	6020
Calcium		500000	6020
Chromium		10000	6020
Cobalt		10000	6020
Copper		10000	6020
Iron		200000	6020
Lead		4000	6020
Magnesium		500000	6020
Manganese		10000	6020
Nickel		10000	6020
Potassium		500000	6020
Selenium		10000	6020
Silver		300	6020
Sodium		500000	6020
Thallium		5000	6020
Vanadium		10000	6020
Zinc		10000	6020

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: H4 Date: 12/10/2013 15:55

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		10	7471A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-177128/1-A ^2	04/20/2015 12:52	177128	1.00		100
LCS 240-177128/2-A ^2	04/20/2015 12:52	177128	1.00		100
240-49173-1	04/20/2015 12:52	177128	1.13		100
240-49173-2	04/20/2015 12:52	177128	1.24		100
240-49173-3	04/20/2015 12:52	177128	1.16		100
240-49173-4	04/20/2015 12:52	177128	1.25		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-177137/1-A	04/20/2015 15:40	177137	0.60		100
LCS 240-177137/2-A	04/20/2015 15:40	177137	0.60		100
240-49173-1	04/20/2015 15:40	177137	0.59		100
240-49173-2	04/20/2015 15:40	177137	0.59		100
240-49173-3	04/20/2015 15:40	177137	0.51		100
240-49173-4	04/20/2015 15:40	177137	0.66		100

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/22/2015 14:52 End Date: 04/22/2015 20:28

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Na	Ni	Sb	Se	Tl	V	Zn						
ZZZZZZ			14:52																										
ICIS 240-177559/2			14:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD1 240-177559/3 IC	1		15:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD2 240-177559/4 IC	1		15:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD3 240-177559/5 IC	1		15:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD4 240-177559/6 IC	1		15:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICV 240-177559/7	1		15:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICB 240-177559/8	1		15:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CRI 240-177559/9	1		15:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSA 240-177559/10	1		15:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSAB 240-177559/11	1		15:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCV 240-177559/12			15:34																										
CCB 240-177559/13			15:38																										
ZZZZZZ			15:42																										
ZZZZZZ			15:46																										
ZZZZZZ			15:49																										
ZZZZZZ			15:53																										
ZZZZZZ			15:57																										
ZZZZZZ			16:00																										
ZZZZZZ			16:04																										
ZZZZZZ			16:08																										
ZZZZZZ			16:11																										
ZZZZZZ			16:15																										
CCV 240-177559/24			16:19																										
CCB 240-177559/25			16:23																										
ZZZZZZ			16:26																										
ZZZZZZ			16:30																										
ZZZZZZ			16:34																										
ZZZZZZ			16:37																										
ZZZZZZ			16:41																										
ZZZZZZ			16:45																										
ZZZZZZ			16:48																										
ZZZZZZ			16:52																										
ZZZZZZ			16:56																										
ZZZZZZ			17:00																										
CCV 240-177559/36			17:03																										
CCB 240-177559/37			17:07																										
ZZZZZZ			17:11																										
ZZZZZZ			17:15																										
ZZZZZZ			17:18																										
ZZZZZZ			17:22																										
ZZZZZZ			17:26																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/22/2015 14:52 End Date: 04/22/2015 20:28

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Na	Ni	Sb	Se	Tl	V	Zn						
ZZZZZZ			17:30																										
ZZZZZZ			17:34																										
ZZZZZZ			17:37																										
ZZZZZZ			17:41																										
ZZZZZZ			17:45																										
CCV 240-177559/48			17:49																										
CCB 240-177559/49			17:53																										
ZZZZZZ			17:56																										
ZZZZZZ			18:00																										
ZZZZZZ			18:04																										
ZZZZZZ			18:08																										
ZZZZZZ			18:12																										
ZZZZZZ			18:15																										
ZZZZZZ			18:19																										
ZZZZZZ			18:23																										
ZZZZZZ			18:27																										
ZZZZZZ			18:30																										
CCV 240-177559/60			18:34																										
CCB 240-177559/61			18:38																										
ZZZZZZ			18:42																										
ZZZZZZ			18:46																										
ZZZZZZ			18:49																										
CCV 240-177559/65	1		18:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177559/66	1		18:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CRI 240-177559/67			19:01																										
MB 240-177128/1-A ^2	2	T	19:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
LCS 240-177128/2-A ^2	2	T	19:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			19:12																										
ZZZZZZ			19:16																										
ZZZZZZ			19:20																										
ZZZZZZ			19:23																										
ZZZZZZ			19:27																										
ZZZZZZ			19:31																										
ZZZZZZ			19:35																										
CCV 240-177559/77	1		19:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-177559/78	1		19:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-49173-1	2	T	19:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-49173-2	2	T	19:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-49173-3	2	T	19:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-49173-4	2	T	19:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			20:01																										
ZZZZZZ			20:05																										

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/22/2015 14:52 End Date: 04/22/2015 20:28

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Na	Ni	Sb	Se	Tl	V	Zn							
ZZZZZZ			20:09																											
CCV 240-177559/86	1		20:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCB 240-177559/87	1		20:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CRI 240-177559/88	1		20:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCV 240-177559/89			20:24																											
CCB 240-177559/90			20:28																											

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																										
				Mn	Pb																									
ZZZZZZ			08:59																											
ICIS 240-177880/2			09:03	X	X																									
STD1 240-177880/3 IC	1		09:07	X	X																									
STD2 240-177880/4 IC	1		09:10	X	X																									
STD3 240-177880/5 IC	1		09:14	X	X																									
STD4 240-177880/6 IC	1		09:18	X	X																									
ICV 240-177880/7	1		09:22	X	X																									
ICB 240-177880/8	1		09:26	X	X																									
CRI 240-177880/9	1		09:30	X	X																									
ICSA 240-177880/10	1		09:33	X																										
ICSAB 240-177880/11	1		09:37	X	X																									
CCV 240-177880/12			09:41																											
CCB 240-177880/13			09:45																											
ZZZZZZ			10:21																											
ZZZZZZ			10:26																											
ZZZZZZ			10:30																											
ZZZZZZ			10:33																											
ZZZZZZ			10:37																											
ZZZZZZ			10:41																											
ZZZZZZ			10:44																											
ZZZZZZ			11:24																											
ZZZZZZ			11:28																											
ZZZZZZ			11:32																											
ZZZZZZ			11:36																											
ZZZZZZ			11:39																											
ZZZZZZ			11:43																											
CCV 240-177880/27			11:52																											
CCB 240-177880/28			11:56																											
ZZZZZZ			12:00																											
ZZZZZZ			12:04																											
CCV 240-177880/31			12:07																											
CCB 240-177880/32			12:11																											
CCV 240-177880/33			12:17																											
CCB 240-177880/34			12:21																											
ZZZZZZ			12:25																											
ZZZZZZ			12:29																											
CCV 240-177880/37			12:33																											
CCB 240-177880/38			12:36																											
ZZZZZZ			12:40																											
ZZZZZZ			12:44																											
ZZZZZZ			12:48																											
ZZZZZZ			12:51																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																										
				Mn	Pb																									
ZZZZZZ			12:55																											
ZZZZZZ			12:59																											
ZZZZZZ			13:03																											
ZZZZZZ			13:06																											
ZZZZZZ			13:10																											
ZZZZZZ			13:13																											
CCV 240-177880/49			13:17																											
CCB 240-177880/50			13:21																											
ZZZZZZ			13:25																											
ZZZZZZ			13:28																											
ZZZZZZ			13:32																											
ZZZZZZ			13:36																											
ZZZZZZ			13:40																											
ZZZZZZ			13:43																											
ZZZZZZ			13:47																											
ZZZZZZ			13:51																											
CCV 240-177880/59			13:55																											
CCB 240-177880/60			13:59																											
CRI 240-177880/61			14:03																											
CCV 240-177880/62	1		14:06	X	X																									
CCB 240-177880/63	1		14:10	X	X																									
ZZZZZZ			14:14																											
MB 240-177128/1-A ^2	2	T	14:18	X	X																									
LCS 240-177128/2-A ^2	2	T	14:21	X	X																									
ZZZZZZ			14:25																											
ZZZZZZ			14:29																											
ZZZZZZ			14:33																											
ZZZZZZ			14:36																											
ZZZZZZ			14:40																											
ZZZZZZ			14:44																											
ZZZZZZ			14:48																											
CCV 240-177880/74	1		14:51	X	X																									
CCB 240-177880/75	1		14:55	X	X																									
240-49173-1	20	T	14:59	X																										
240-49173-2	20	T	15:03	X																										
240-49173-3	20	T	15:07	X																										
240-49173-4	20	T	15:11	X																										
ZZZZZZ			15:14																											
ZZZZZZ			15:18																											
ZZZZZZ			15:22																											
CCV 240-177880/83	1		15:26	X	X																									
CCB 240-177880/84	1		15:29	X	X																									

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																										
				Mn	Pb																									
CRI 240-177880/85	1		15:33	X	X																									
ZZZZZZ			15:37																											
ZZZZZZ			15:41																											
ZZZZZZ			15:45																											
ZZZZZZ			15:48																											
ZZZZZZ			15:52																											
ZZZZZZ			15:56																											
ZZZZZZ			16:00																											
ZZZZZZ			16:03																											
ZZZZZZ			16:07																											
CCV 240-177880/95			16:11																											
CCB 240-177880/96			16:15																											
ZZZZZZ			16:19																											
ZZZZZZ			16:22																											
ZZZZZZ			16:26																											
ZZZZZZ			16:30																											
ZZZZZZ			16:34																											
ZZZZZZ			16:38																											
ZZZZZZ			16:41																											
ZZZZZZ			16:45																											
ZZZZZZ			16:49																											
ZZZZZZ			16:53																											
CCV 240-177880/107			16:57																											
CCB 240-177880/108			17:00																											
ZZZZZZ			17:04																											
ZZZZZZ			17:08																											
ZZZZZZ			17:12																											
ZZZZZZ			17:16																											
ZZZZZZ			17:19																											
ZZZZZZ			17:23																											
ZZZZZZ			17:27																											
CCV 240-177880/116			17:31																											
CCB 240-177880/117			17:35																											
CRI 240-177880/118			17:39																											
ZZZZZZ			17:42																											
ZZZZZZ			17:46																											
ZZZZZZ			17:50																											
ZZZZZZ			17:54																											
ZZZZZZ			17:57																											
ZZZZZZ			18:01																											
ZZZZZZ			18:04																											
ZZZZZZ			18:08																											

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																									
				Mn	Pb																								
ZZZZZZ			18:12																										
CCV 240-177880/128			18:15																										
CCB 240-177880/129			18:19																										
ZZZZZZ			18:23																										
ZZZZZZ			18:27																										
ZZZZZZ			18:30																										
ZZZZZZ			18:34																										
ZZZZZZ			18:38																										
ZZZZZZ			18:42																										
ZZZZZZ			18:46																										
ZZZZZZ			18:49																										
ZZZZZZ			18:53																										
ZZZZZZ			18:57																										
CCV 240-177880/140			19:01																										
CCB 240-177880/141			19:05																										
ZZZZZZ			19:09																										
CCV 240-177880/143			19:13																										
CCB 240-177880/144			19:16																										
CRI 240-177880/145			19:20																										
ZZZZZZ			19:24																										
ZZZZZZ			19:28																										
ZZZZZZ			19:32																										
ZZZZZZ			19:35																										
ZZZZZZ			19:39																										
ZZZZZZ			19:43																										
ZZZZZZ			19:46																										
ZZZZZZ			19:50																										
ZZZZZZ			19:54																										
CCV 240-177880/155			19:57																										
CCB 240-177880/156			20:01																										
ZZZZZZ			20:05																										
ZZZZZZ			20:09																										
ZZZZZZ			20:13																										
ZZZZZZ			20:16																										
ZZZZZZ			20:20																										
ZZZZZZ			20:24																										
ZZZZZZ			20:28																										
ZZZZZZ			20:32																										
ZZZZZZ			20:35																										
ZZZZZZ			20:39																										
CCV 240-177880/167			20:43																										
CCB 240-177880/168			20:47																										

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																										
				Mn	Pb																									
ZZZZZZ			20:51																											
ZZZZZZ			20:54																											
ZZZZZZ			20:58																											
ZZZZZZ			21:02																											
ZZZZZZ			21:06																											
ZZZZZZ			21:10																											
ZZZZZZ			21:13																											
CCV 240-177880/176			21:17																											
CCB 240-177880/177			21:21																											
CRI 240-177880/178			21:25																											
ZZZZZZ			21:29																											
ZZZZZZ			21:33																											
ZZZZZZ			21:36																											
ZZZZZZ			21:40																											
ZZZZZZ			21:44																											
ZZZZZZ			21:47																											
ZZZZZZ			21:51																											
ZZZZZZ			21:55																											
ZZZZZZ			21:58																											
CCV 240-177880/188			22:02																											
CCB 240-177880/189			22:06																											
ZZZZZZ			22:10																											
ZZZZZZ			22:14																											
ZZZZZZ			22:17																											
ZZZZZZ			22:21																											
ZZZZZZ			22:25																											
ZZZZZZ			22:28																											
ZZZZZZ			22:32																											
ZZZZZZ			22:36																											
ZZZZZZ			22:40																											
ZZZZZZ			22:44																											
CCV 240-177880/200			22:47																											
CCB 240-177880/201			22:51																											
ZZZZZZ			22:55																											
ZZZZZZ			22:59																											
ZZZZZZ			23:03																											
ZZZZZZ			23:06																											
ZZZZZZ			23:10																											
ZZZZZZ			23:14																											
CCV 240-177880/208			23:18																											
CCB 240-177880/209			23:22																											
CRI 240-177880/210			23:26																											

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/24/2015 08:59 End Date: 04/24/2015 23:33

Lab Sample Id	D/F	Type	Time	Analytes																								
				Mn	Pb																							
CCV 240-177880/211			23:29																									
CCB 240-177880/212			23:33																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/28/2015 11:32 End Date: 04/28/2015 15:42

Lab Sample Id	D/F	Type	Time	Analytes
				Pb
ZZZZZZ			11:32	
ICIS 240-178352/2			11:36	X
STD1 240-178352/3 IC			11:39	X
STD2 240-178352/4 IC			11:43	X
STD3 240-178352/5 IC			11:47	X
STD4 240-178352/6 IC	1		11:51	X
ICV 240-178352/7	1		11:55	X
ICB 240-178352/8	1		11:58	X
CRI 240-178352/9	1		12:02	X
ICSA 240-178352/10	1		12:06	X
ICSAB 240-178352/11	1		12:10	X
CCV 240-178352/12	1		12:14	X
CCB 240-178352/13	1		12:17	X
ZZZZZZ			12:21	
ZZZZZZ			12:25	
MB 240-177128/1-A ^2	2	T	12:29	X
LCS 240-177128/2-A ^2	2	T	12:33	X
ZZZZZZ			12:36	
ZZZZZZ			12:40	
ZZZZZZ			12:44	
ZZZZZZ			12:47	
ZZZZZZ			12:51	
ZZZZZZ			12:55	
CCV 240-178352/24	1		12:59	X
CCB 240-178352/25	1		13:02	X
ZZZZZZ			13:06	
240-49173-1	20	T	13:10	X
240-49173-2	20	T	13:14	X
240-49173-3	20	T	13:18	X
240-49173-4	20	T	13:21	X
ZZZZZZ			13:25	
ZZZZZZ			13:29	
ZZZZZZ			13:33	
ZZZZZZ			13:37	
ZZZZZZ			13:40	
CCV 240-178352/36	1		13:44	X
CCB 240-178352/37	1		13:48	X
CCV 240-178352/38			13:52	
CCB 240-178352/39			13:56	
CRI 240-178352/40	1		13:59	X
ZZZZZZ			14:03	
ZZZZZZ			14:07	

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: I10 Analysis Method: 6020

Start Date: 04/28/2015 11:32 End Date: 04/28/2015 15:42

Lab Sample Id	D/F	Type	Time	Analytes																								
				Pb																								
ZZZZZZ			14:11																									
CCV 240-178352/44			14:15																									
CCB 240-178352/45			14:18																									
ZZZZZZ			14:22																									
ZZZZZZ			14:26																									
ZZZZZZ			14:30																									
ZZZZZZ			14:33																									
ZZZZZZ			14:37																									
ZZZZZZ			14:41																									
ZZZZZZ			14:45																									
ZZZZZZ			14:48																									
ZZZZZZ			14:52																									
ZZZZZZ			14:56																									
CCV 240-178352/56			15:00																									
CCB 240-178352/57			15:03																									
ZZZZZZ			15:07																									
ZZZZZZ			15:11																									
ZZZZZZ			15:15																									
ZZZZZZ			15:19																									
ZZZZZZ			15:22																									
ZZZZZZ			15:26																									
ZZZZZZ			15:30																									
CCV 240-178352/65			15:34																									
CCB 240-178352/66			15:38																									
CRI 240-178352/67			15:42																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
IC 240-177030/1-A			08:18	X																								
IC 240-177030/2-A			08:21	X																								
IC 240-177030/3-A			08:23	X																								
IC 240-177030/4-A			08:25	X																								
IC 240-177030/5-A			08:27	X																								
IC 240-177030/6-A			08:29	X																								
ICV 240-177030/7-A	1		08:31	X																								
ICB 240-177030/8-A	1		08:33	X																								
CRA 240-177030/9-A	1		08:35	X																								
CCV 240-177030/10-A			08:52																									
CCB 240-177030/11-A			08:54																									
ZZZZZZ			08:56																									
ZZZZZZ			08:57																									
ZZZZZZ			09:00																									
ZZZZZZ			09:02																									
ZZZZZZ			09:04																									
ZZZZZZ			09:07																									
ZZZZZZ			09:09																									
ZZZZZZ			09:12																									
ZZZZZZ			09:14																									
ZZZZZZ			09:17																									
CCV 240-177030/10-A			09:19																									
CCB 240-177030/11-A			09:21																									
ZZZZZZ			09:23																									
ZZZZZZ			09:25																									
ZZZZZZ			09:27																									
ZZZZZZ			09:30																									
ZZZZZZ			09:32																									
ZZZZZZ			09:34																									
ZZZZZZ			09:36																									
ZZZZZZ			09:39																									
ZZZZZZ			09:40																									
ZZZZZZ			09:42																									
CCV 240-177030/10-A			09:45																									
CCB 240-177030/11-A			09:47																									
ZZZZZZ			09:48																									
ZZZZZZ			09:51																									
ZZZZZZ			09:53																									
ZZZZZZ			09:55																									
CCV 240-177030/10-A			09:57																									
CCB 240-177030/11-A			09:59																									
CCV 240-177030/10-A			10:02																									

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
CCB 240-177030/11-A			10:04	
ZZZZZZ			10:06	
ZZZZZZ			10:08	
ZZZZZZ			10:11	
ZZZZZZ			10:13	
ZZZZZZ			10:15	
ZZZZZZ			10:17	
ZZZZZZ			10:18	
ZZZZZZ			10:20	
ZZZZZZ			10:23	
ZZZZZZ			10:25	
CCV 240-177030/10-A			10:27	
CCB 240-177030/11-A			10:29	
ZZZZZZ			10:31	
ZZZZZZ			10:33	
ZZZZZZ			10:35	
ZZZZZZ			10:38	
ZZZZZZ			10:40	
ZZZZZZ			10:42	
ZZZZZZ			10:44	
ZZZZZZ			10:45	
ZZZZZZ			10:47	
ZZZZZZ			10:50	
CCV 240-177030/10-A	1		10:52	X
CCB 240-177030/11-A	1		10:54	X
ZZZZZZ			10:56	
ZZZZZZ			10:58	
ZZZZZZ			11:00	
ZZZZZZ			11:02	
MB 240-177137/1-A	1	T	11:04	X
LCS 240-177137/2-A	1	T	11:06	X
ZZZZZZ			11:08	
ZZZZZZ			11:10	
ZZZZZZ			11:12	
ZZZZZZ			11:14	
CCV 240-177030/10-A	1		11:16	X
CCB 240-177030/11-A	1		11:18	X
ZZZZZZ			11:20	
240-49173-1	1	T	11:21	X
240-49173-2	1	T	11:23	X
240-49173-3	1	T	11:25	X
240-49173-4	1	T	11:27	X

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			11:29																									
ZZZZZZ			11:31																									
ZZZZZZ			11:33																									
ZZZZZZ			11:35																									
ZZZZZZ			11:37																									
CCV 240-177030/10-A	1		11:39	X																								
CCB 240-177030/11-A	1		11:41	X																								
ZZZZZZ			11:43																									
ZZZZZZ			11:45																									
ZZZZZZ			11:48																									
ZZZZZZ			11:51																									
ZZZZZZ			11:53																									
ZZZZZZ			11:54																									
ZZZZZZ			11:56																									
CRA 240-177030/9-A	1		11:58	X																								
CCV 240-177030/10-A			12:00																									
CCB 240-177030/11-A			12:02																									
CCV 240-177030/10-A			12:06																									
CCB 240-177030/11-A			12:07																									
ZZZZZZ			12:09																									
ZZZZZZ			12:11																									
ZZZZZZ			12:13																									
ZZZZZZ			12:16																									
ZZZZZZ			12:18																									
ZZZZZZ			12:20																									
ZZZZZZ			12:22																									
ZZZZZZ			12:24																									
ZZZZZZ			12:26																									
ZZZZZZ			12:28																									
CCV 240-177030/10-A			12:31																									
CCB 240-177030/11-A			12:33																									
ZZZZZZ			12:34																									
ZZZZZZ			12:37																									
ZZZZZZ			12:39																									
ZZZZZZ			12:41																									
ZZZZZZ			12:43																									
CCV 240-177030/10-A			12:45																									
CCB 240-177030/11-A			12:47																									
CCV 240-177030/10-A			13:13																									
CCB 240-177030/11-A			13:14																									
ZZZZZZ			13:16																									
ZZZZZZ			13:19																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			13:21																									
ZZZZZZ			13:22																									
ZZZZZZ			13:24																									
ZZZZZZ			13:26																									
ZZZZZZ			13:28																									
ZZZZZZ			13:30																									
ZZZZZZ			13:32																									
ZZZZZZ			13:34																									
CCV 240-177030/10-A			13:36																									
CCB 240-177030/11-A			13:38																									
ZZZZZZ			13:40																									
ZZZZZZ			13:42																									
ZZZZZZ			13:44																									
ZZZZZZ			13:47																									
ZZZZZZ			13:49																									
ZZZZZZ			13:51																									
ZZZZZZ			13:53																									
ZZZZZZ			13:55																									
ZZZZZZ			13:58																									
ZZZZZZ			14:00																									
CCV 240-177030/10-A			14:02																									
CCB 240-177030/11-A			14:04																									
ZZZZZZ			14:06																									
ZZZZZZ			14:08																									
ZZZZZZ			14:10																									
ZZZZZZ			14:12																									
CCV 240-177030/10-A			14:14																									
CCB 240-177030/11-A			14:16																									
CCV 240-177030/10-A			14:30																									
CCB 240-177030/11-A			14:32																									
ZZZZZZ			14:34																									
ZZZZZZ			14:36																									
ZZZZZZ			14:37																									
ZZZZZZ			14:39																									
ZZZZZZ			14:41																									
ZZZZZZ			14:44																									
ZZZZZZ			14:46																									
ZZZZZZ			14:48																									
ZZZZZZ			14:50																									
ZZZZZZ			14:52																									
CCV 240-177030/10-A			14:54																									
CCB 240-177030/11-A			14:56																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: H4 Analysis Method: 7471A

Start Date: 04/21/2015 08:18 End Date: 04/21/2015 14:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								

Prep Types:
T = Total/NA

FORM XIII-IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICP-MS Instrument ID: I10 Start Date: 04/22/2015 End Date: 04/22/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-177559/3 IC	15:00	98		101		97		99		98	
STD2 240-177559/4 IC	15:04	98		100		98		95		94	
STD3 240-177559/5 IC	15:08	101		101		102		94		93	
STD4 240-177559/6 IC	15:11	100		103		100		103		100	
ICV 240-177559/7	15:15	103		102		101		99		96	
ICB 240-177559/8	15:19	102		100		101		102		100	
CRI 240-177559/9	15:23	101		102		101		102		100	
ICSA 240-177559/10	15:27	86		95		89		87		88	
ICSAB 240-177559/11	15:30	85		91		89		87		88	
CCV 240-177559/65	18:53	69		76		76		75		79	
CCB 240-177559/66	18:57	71		75		78		85		83	
MB 240-177128/1-A ^2	19:05	68		75		73		76		78	
LCS 240-177128/2-A ^:	19:09	65		74		73		73		75	
CCV 240-177559/77	19:39	67		73		73		72		76	
CCB 240-177559/78	19:42	69		73		76		77		79	
240-49173-1	19:46	66		73		73		68		72	
240-49173-2	19:50	65		73		73		69		73	
240-49173-3	19:54	63		71		73		67		71	
240-49173-4	19:58	64		71		73		68		71	
CCV 240-177559/86	20:13	66		73		75		70		75	
CCB 240-177559/87	20:17	68		71		74		78		79	
CRI 240-177559/88	20:20	68		73		72		74		78	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICP-MS Instrument ID: I10 Start Date: 04/22/2015 End Date: 04/22/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-177559/3 IC	15:00	99		99		97					
STD2 240-177559/4 IC	15:04	97		98		93					
STD3 240-177559/5 IC	15:08	98		98		91					
STD4 240-177559/6 IC	15:11	100		100		98					
ICV 240-177559/7	15:15	99		99		95					
ICB 240-177559/8	15:19	100		100		99					
CRI 240-177559/9	15:23	100		100		99					
ICSA 240-177559/10	15:27	94		93		89					
ICSAB 240-177559/11	15:30	95		94		90					
CCV 240-177559/65	18:53	87		87		83					
CCB 240-177559/66	18:57	89		88		87					
MB 240-177128/1-A ^2	19:05	86		85		85					
LCS 240-177128/2-A ^:	19:09	84		85		82					
CCV 240-177559/77	19:39	85		86		81					
CCB 240-177559/78	19:42	86		86		85					
240-49173-1	19:46	84		83		79					
240-49173-2	19:50	82		82		80					
240-49173-3	19:54	81		82		78					
240-49173-4	19:58	82		83		80					
CCV 240-177559/86	20:13	85		84		80					
CCB 240-177559/87	20:17	85		86		85					
CRI 240-177559/88	20:20	85		84		83					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICP-MS Instrument ID: I10 Start Date: 04/24/2015 End Date: 04/24/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-177880/3 IC	09:07	94		99		94		97		96	
STD2 240-177880/4 IC	09:10	94		97		94		91		91	
STD3 240-177880/5 IC	09:14	95		95		97		91		91	
STD4 240-177880/6 IC	09:18	92		97		93		97		96	
ICV 240-177880/7	09:22	98		98		100		95		95	
ICB 240-177880/8	09:26	100		96		100		101		100	
CRI 240-177880/9	09:30	92		102		92		103		101	
ICSA 240-177880/10	09:33	81		94		86		87		88	
ICSAB 240-177880/11	09:37	79		88		85		85		87	
CCV 240-177880/62	14:06	69		75		77		80		80	
CCB 240-177880/63	14:10	69		73		77		84		83	
MB 240-177128/1-A ^2	14:18	64		70		71		79		78	
LCS 240-177128/2-A ^:	14:21	63		70		70		78		75	
CCV 240-177880/74	14:51	71		80		80		84		84	
CCB 240-177880/75	14:55	73		76		79		88		88	
240-49173-1	14:59	70		78		79		84		84	
240-49173-2	15:03	75		82		84		89		89	
240-49173-3	15:07	74		85		85		92		90	
240-49173-4	15:11	75		85		88		91		90	
CCV 240-177880/83	15:26	75		86		84		86		87	
CCB 240-177880/84	15:29	76		81		84		91		90	
CRI 240-177880/85	15:33	77		84		85		91		90	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICP-MS Instrument ID: I10 Start Date: 04/24/2015 End Date: 04/24/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-177880/3 IC	09:07	97		98		97					
STD2 240-177880/4 IC	09:10	96		97		93					
STD3 240-177880/5 IC	09:14	96		96		91					
STD4 240-177880/6 IC	09:18	98		98		99					
ICV 240-177880/7	09:22	98		98		95					
ICB 240-177880/8	09:26	100		100		100					
CRI 240-177880/9	09:30	101		101		100					
ICSA 240-177880/10	09:33	93		94		90					
ICSAB 240-177880/11	09:37	92		93		90					
CCV 240-177880/62	14:06	88		90		87					
CCB 240-177880/63	14:10	89		90		91					
MB 240-177128/1-A ^2	14:18	87		88		93					
LCS 240-177128/2-A ^:	14:21	87		88		89					
CCV 240-177880/74	14:51	92		94		91					
CCB 240-177880/75	14:55	93		93		95					
240-49173-1	14:59	90		92		94					
240-49173-2	15:03	94		95		98					
240-49173-3	15:07	95		96		98					
240-49173-4	15:11	95		96		98					
CCV 240-177880/83	15:26	95		96		92					
CCB 240-177880/84	15:29	94		95		96					
CRI 240-177880/85	15:33	95		96		97					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICP-MS Instrument ID: I10 Start Date: 04/28/2015 End Date: 04/28/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q
STD4 240-178352/6 IC	11:51	105						99		113	
ICV 240-178352/7	11:55	102		105		105		102		96	
ICB 240-178352/8	11:58	102		108		108		104		107	
CRI 240-178352/9	12:02	105		103		103		104		102	
ICSA 240-178352/10	12:06	84		92		92		86		84	
ICSAB 240-178352/11	12:10	82		86		86		85		83	
CCV 240-178352/12	12:14	104		102		102		106		97	
CCB 240-178352/13	12:17	99		103		103		103		104	
MB 240-177128/1-A ^2	12:29	89		89		89		88		90	
LCS 240-177128/2-A ^2	12:33	84		89		89		84		89	
CCV 240-178352/24	12:59	105		110		110		105		100	
CCB 240-178352/25	13:02	107		100		100		108		101	
240-49173-1	13:10	117		108		108		119		104	
240-49173-2	13:14			115		115				110	
240-49173-3	13:18	108		117		117		115		113	
240-49173-4	13:21	118								115	
CCV 240-178352/36	13:44	110		100		100		111		95	
CCB 240-178352/37	13:48	99		103		103		100		103	
CRI 240-178352/40	13:59	98		97		97		98		98	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

ICP-MS Instrument ID: I10 Start Date: 04/28/2015 End Date: 04/28/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element In	Q	Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q
STD4 240-178352/6 IC	11:51	112		109		108		107			
ICV 240-178352/7	11:55	98		100		101		97			
ICB 240-178352/8	11:58	107		105		104		103			
CRI 240-178352/9	12:02	102		102		102		102			
ICSA 240-178352/10	12:06	87		93		93		90			
ICSAB 240-178352/11	12:10	85		92		92		89			
CCV 240-178352/12	12:14	98		101		102		98			
CCB 240-178352/13	12:17	103		104		103		102			
MB 240-177128/1-A ^2	12:29	90		93		95		100			
LCS 240-177128/2-A ^2	12:33	88		96		95		95			
CCV 240-178352/24	12:59	102		104		103		98			
CCB 240-178352/25	13:02	101		101		100		100			
240-49173-1	13:10	104		104		104		103			
240-49173-2	13:14	110		108		109		107			
240-49173-3	13:18	110		109		108		107			
240-49173-4	13:21	114		111		110		109			
CCV 240-178352/36	13:44	96		99		100		95			
CCB 240-178352/37	13:48	103		102		102		101			
CRI 240-178352/40	13:59	99		98		100		99			

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/22/15 **Analyst:** AS **Instrument:** I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* =90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

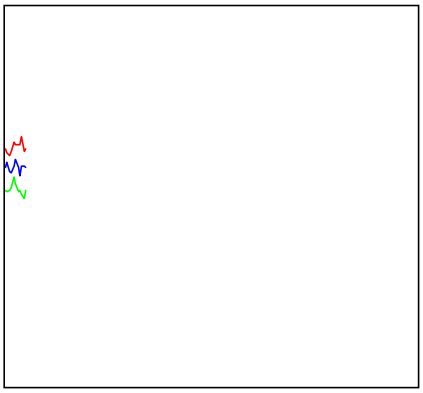
Level I Analyst: [signature] Date: 4/23/15 Time: 14:52-20:28
Level I Analyst: Date: Time:

Level II Reviewer: Karen L Conte Date: 4-24-15 Time: 14:52-20:28
Level II Reviewer: Date: Time:

Comments:

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	3133	3148.4	2.31
89	10000	5148	5177.6	2.81
205	10000	5748	5759.3	2.16
156/140	2	0.675 %	0.753 %	20.88
70/140	2	0.987 %	1.108 %	15.13
115	500	351	399.6	5.59
63	500	434	418.8	6.86
60	100	39	44.6	15.27
121	20	5	10.7	35.40
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	14.99	L/min
MU./Dil. Gas	0.65	L/min	Ar Gas Tank Press	5.85E+2	kPa			

Current Signal

[He]

Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1259	1310.0	4.41
51	50	41	42.5	10.50
52	200	99	110.3	13.83
51/59	5	3.255 %	3.247 %	10.45
52/59	20	7.861 %	8.420 %	12.92
7	50	24	15.2	36.45
89	2000	1536	1462.9	3.95
205	5000	3586	3519.0	2.47
6	20	3	1.3	90.83
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	14.99	L/min
MU./Dil. Gas	0.65	L/min	Ar Gas Tank Press	5.85E+2	kPa			

US EPA Tune Check Sample Report

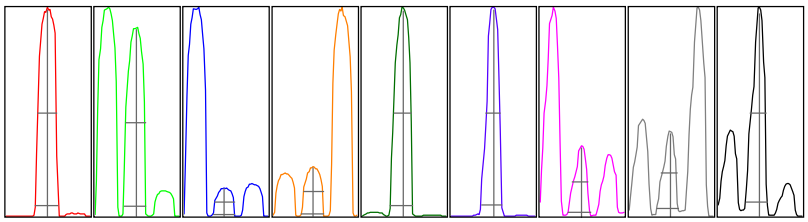
Batch Folder D:\Analytical Runs\I10042215A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	39308	0.80	5.00	
24	137578	1.54	5.00	
25	18200	1.48	5.00	
26	21091	1.71	5.00	
59	154157	0.30	5.00	
115	248898	0.25	5.00	
206	92385	0.68	5.00	
207	82690	0.56	5.00	
208	195008	0.23	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	39781	39353	39317	39159	38929
24	134097	137230	138076	139170	139316
25	17796	18170	18164	18345	18524
26	20671	20996	20860	21419	21509
59	154715	154282	153644	154432	153713
115	249921	248852	248582	248245	248888
206	92516	92915	91350	92845	92298
207	83511	82553	82523	82390	82475
208	195450	195157	194254	195191	194988

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6093	9.00	8.9 - 9.1		0.790	0.850	
24	21820	24.00	23.9 - 24.1		0.788	0.850	
25	2926	24.95	24.9 - 25.1		0.775	0.850	
26	3372	25.95	25.9 - 26.1		0.790	0.850	
59	25273	59.00	58.9 - 59.1		0.792	0.850	
115	47876	115.05	114.9 - 115.1		0.740	0.850	
206	18111	206.00	205.9 - 206.1		0.760	0.850	
207	15928	207.00	206.9 - 207.1		0.756	0.850	
208	38719	208.00	207.9 - 208.1		0.774	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

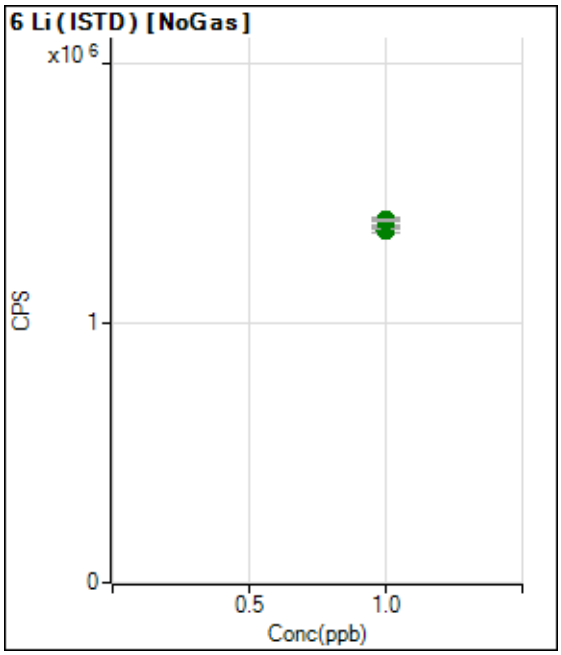
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

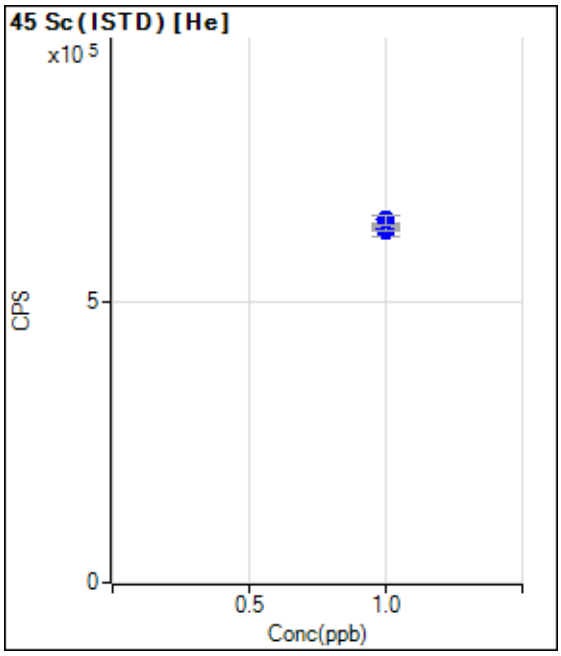
Calibration for 014SMPL.d

Batch Folder: D:\Analytical Runs\I10042215C.b\
Analysis File: I10042215C.batch.bin
DA Date-Time: 4/22/2015 3:44:27 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

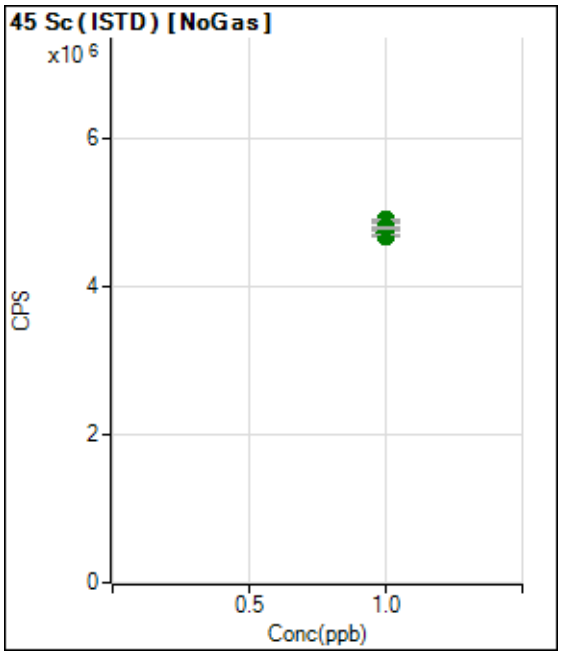
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/22/2015 2:56:39 PM
2	003CALS.d	STD1-1906323	4/22/2015 3:00:27 PM
3	004CALS.d	STD2-1904110	4/22/2015 3:04:15 PM
4	005CALS.d	STD3-1906333	4/22/2015 3:08:05 PM
5	006CALS.d	STD4-1906536	4/22/2015 3:11:51 PM



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1389655.32		A	1.3
2	☐	1.000		1357111.87		A	1.5
3	☐	1.000		1365209.99		A	0.2
4	☐	1.000		1398132.17		A	1.2
5	☐	1.000		1395034.51		A	0.3



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		628608.62		P	0.5
2	☐	1.000		634725.63		P	1.2
3	☐	1.000		630420.30		P	4.2
4	☐	1.000		632141.21		P	1.1
5	☐	1.000		647896.50		P	2.6



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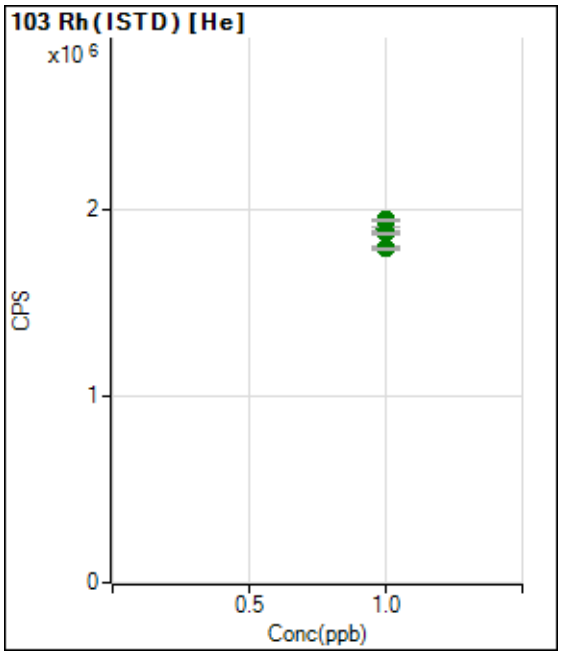
1	☐	1.000		4813296.20		A	1.5
2	☐	1.000		4676619.95		A	0.4
3	☐	1.000		4719343.15		A	1.2
4	☐	1.000		4898034.11		A	0.4
5	☐	1.000		4794715.23		A	0.6



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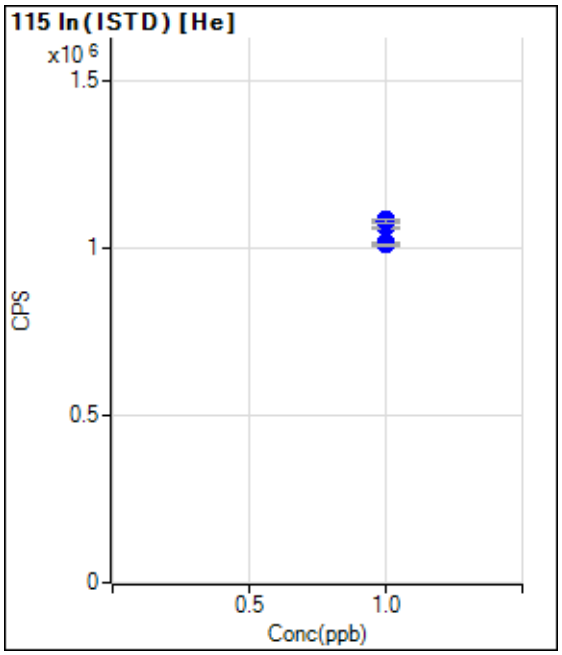
1	☐	1.000		1894468.74		A	1.0
2	☐	1.000		1871729.72		A	0.5
3	☐	1.000		1794555.21		A	0.7
4	☐	1.000		1789010.00		A	0.8
5	☐	1.000		1944156.87		A	0.7



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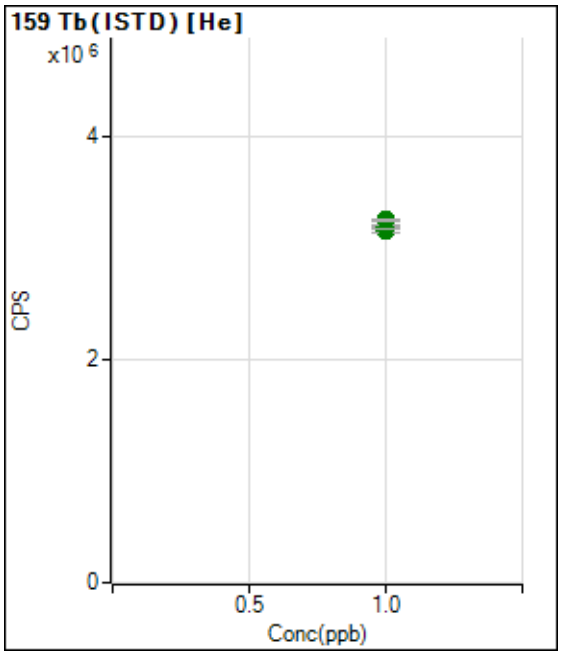
1	☐	1.000		1086371.43		P	0.2
2	☐	1.000		1062585.06		P	0.7
3	☐	1.000		1017533.21		P	0.4
4	☐	1.000		1011939.51		P	0.6
5	☐	1.000		1080936.13		P	1.0



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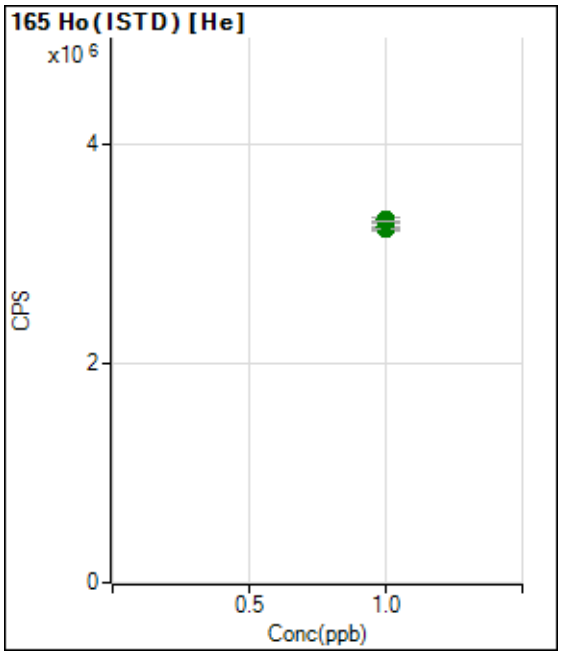
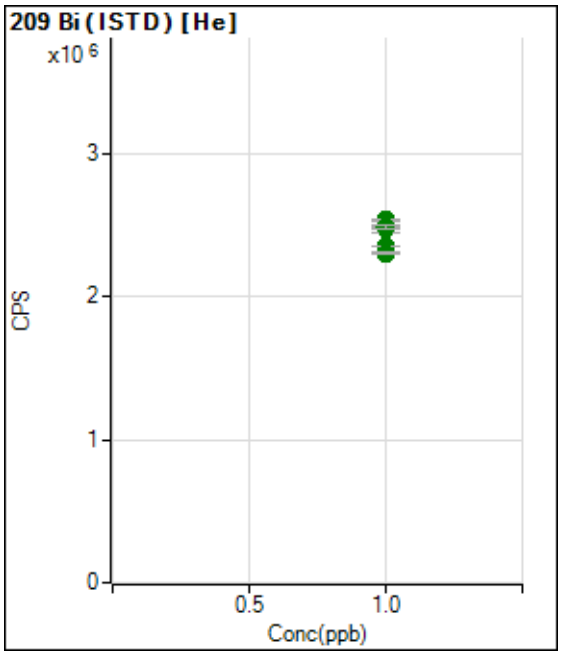
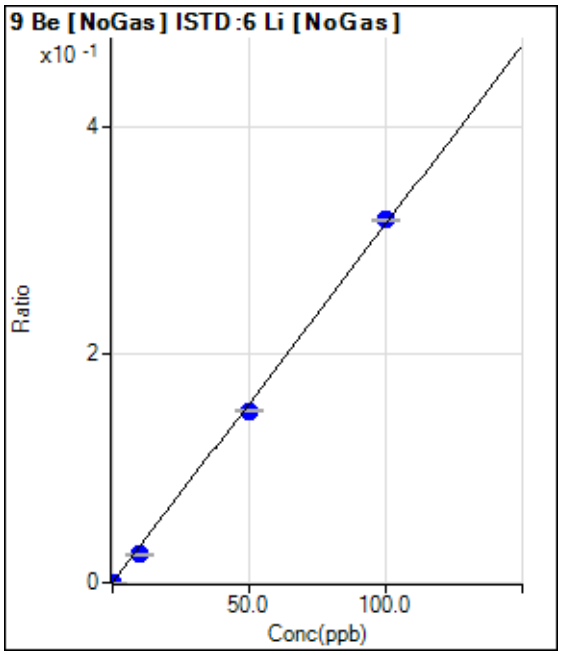
1	☐	1.000		3251379.18		A	0.2
2	☐	1.000		3202308.69		A	0.7
3	☐	1.000		3158032.44		A	1.7
4	☐	1.000		3182665.71		A	0.9
5	☐	1.000		3250918.20		A	0.9



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3312124.03		A	1.1
2	☐	1.000		3286570.49		A	0.6
3	☐	1.000		3231264.94		A	0.8
4	☐	1.000		3254943.62		A	1.7
5	☐	1.000		3301825.70		A	0.3



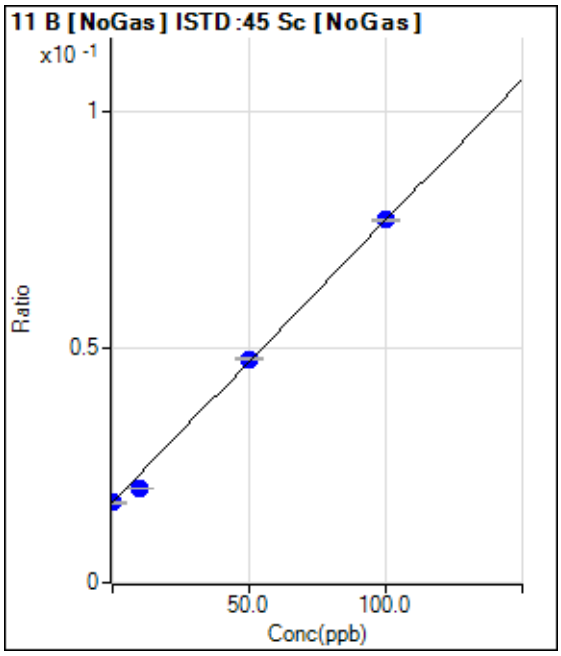
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2533294.07		A	0.5
2	☐	1.000		2466651.78		A	1.7
3	☐	1.000		2353558.31		A	0.2
4	☐	1.000		2300605.60		A	0.8
5	☐	1.000		2485448.79		A	1.4



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	211.12	0.0002	P	1.3
2	☐	10.000	7.844	33657.44	0.0248	P	3.7
3	☐	50.000	47.947	205937.56	0.1508	P	1.2
4	☐	100.000	101.242	445087.57	0.3184	P	0.5
5	☐			174.09	0.0001	P	32.3

y = 0.0031 * x + 1.5194E-004
R = 0.9995
DL = 0.001838
BEC = 0.04834

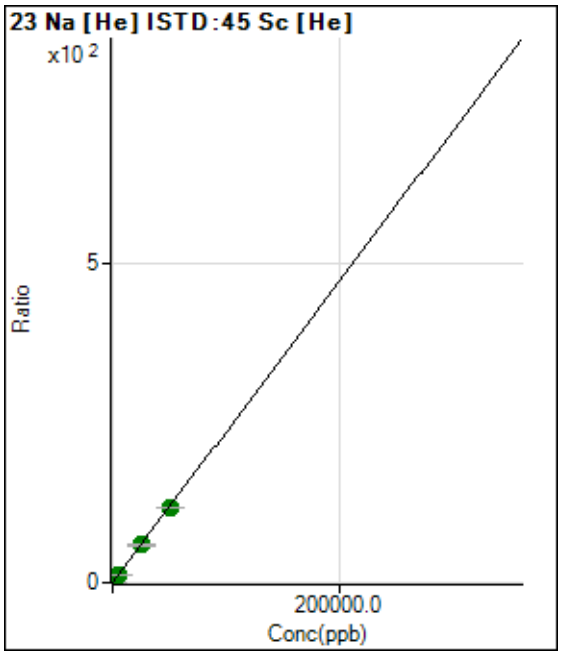
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	82180.37	0.0171	P	3.2
2	☐	10.000	5.074	94096.07	0.0201	P	0.1
3	☐	50.000	50.727	224126.71	0.0475	P	0.9
4	☐			59755.56	0.0122	P	0.8
5	☐	100.000	100.129	369729.10	0.0771	P	0.7

y = 5.9958E-004 * x + 0.0171
R = 0.9987
DL = 2.718
BEC = 28.48

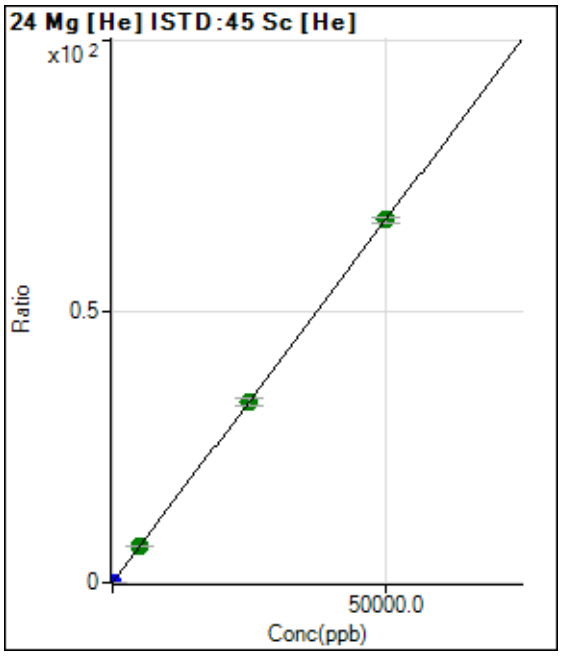
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	76365.42	0.1215	P	1.9
2	☐	5000.000	5142.659	7762385.80	12.2295	A	0.2
3	☐	25000.00	24879.74	36961197.60	58.6992	A	4.2
4	☐	50000.00	50045.86	74558561.85	117.951	A	0.6
5	☐			89260.25	0.1378	P	1.1

y = 0.0024 * x + 0.1215
R = 1.0000
DL = 2.986
BEC = 51.6

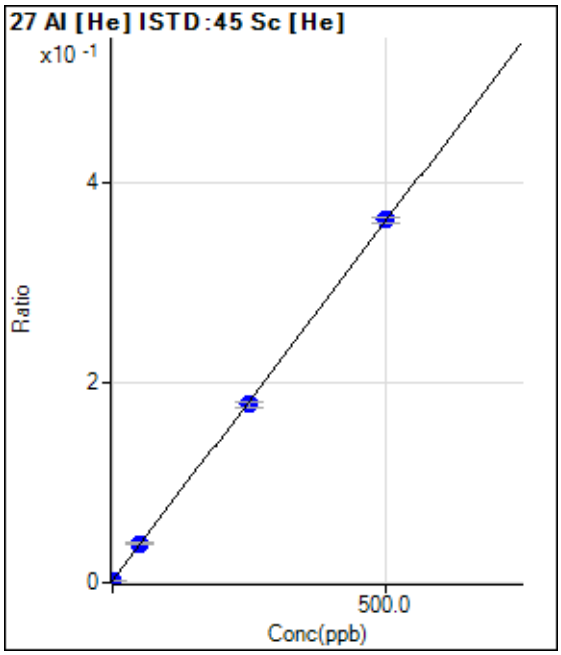
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1363.20	0.0022	P	3.8
2	☐	5000.000	5122.178	4346989.29	6.8492	A	1.0
3	☐	25000.00	24892.82	20958164.45	33.2774	A	3.6
4	☐	50000.00	50041.36	42282946.47	66.8944	A	1.4
5	☐			4541.55	0.0070	P	27.8

y = 0.0013 * x + 0.0022
R = 1.0000
DL = 0.1837
BEC = 1.622

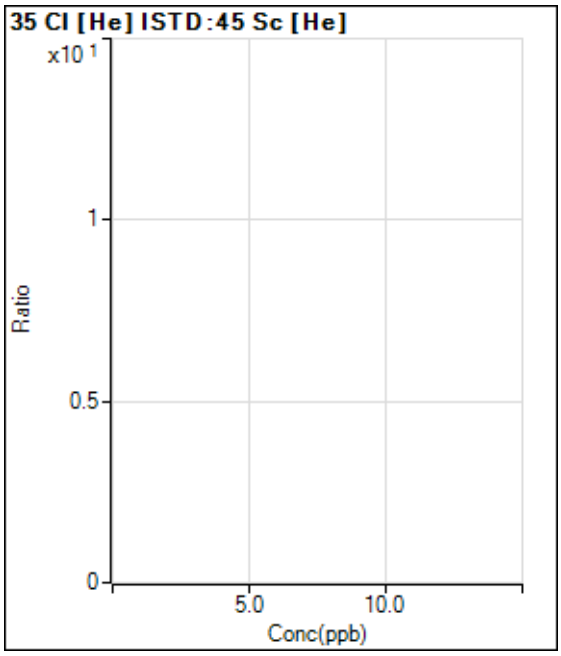
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1337.85	0.0021	P	5.6
2	☐	50.000	51.723	24970.28	0.0393	P	1.8
3	☐	250.000	245.254	112467.59	0.1786	P	3.6
4	☐	500.000	502.201	229730.35	0.3634	P	1.3
5	☐			2101.27	0.0032	P	4.8

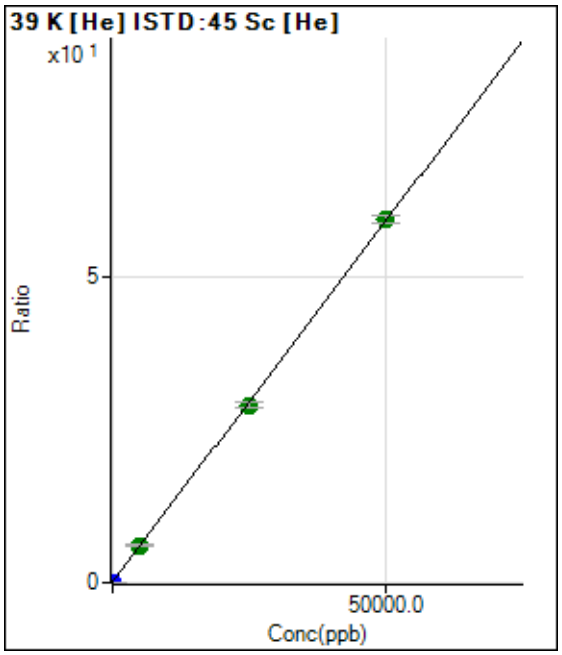
y = 7.1947E-004 * x + 0.0021
R = 0.9999
DL = 0.4956
BEC = 2.958

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			9396604.95	14.9485	A	0.5
2	☐			9934279.24	15.6522	A	0.9
3	☐			9987416.73	15.8627	A	4.6
4	☐			10092224.83	15.9673	A	2.0
5	☐			10756793.55	16.6083	A	2.1

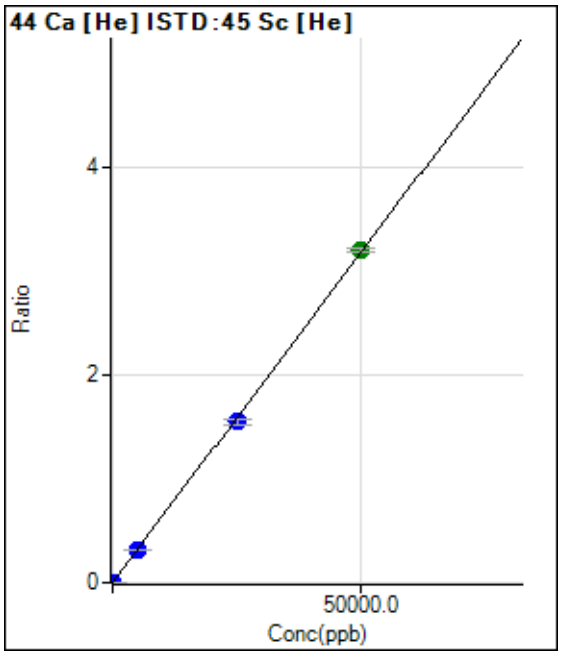
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33323.87	0.0530	P	2.2
2	☐	5000.000	5144.696	3882301.70	6.1167	A	1.4
3	☐	25000.00	24529.45	18243429.37	28.9640	A	3.1
4	☐	50000.00	50220.80	37444350.36	59.2443	A	2.3
5	☐			41570.89	0.0642	P	0.7

y = 0.0012 * x + 0.0530
R = 0.9999
DL = 2.942
BEC = 44.98

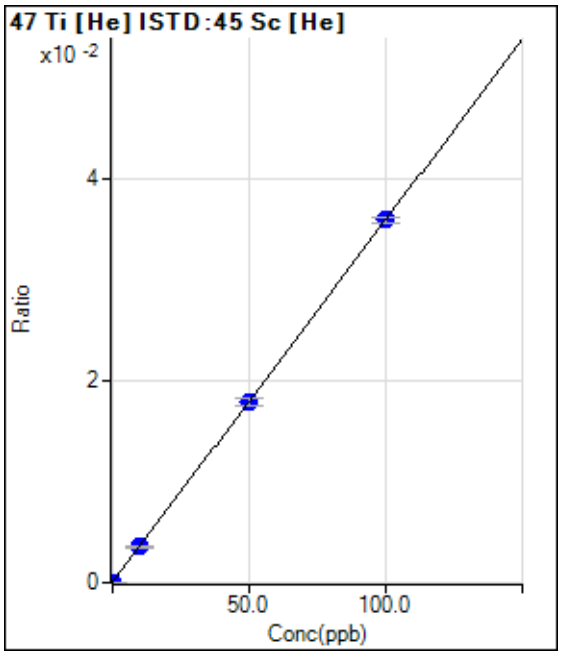
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	409.63	0.0007	P	9.4
2	☐	5000.000	5047.203	204244.95	0.3218	P	0.8
3	☐	25000.00	24347.64	976159.70	1.5499	P	3.3
4	☐	50000.00	50321.45	2024322.87	3.2026	A	1.1
5	☐			930.90	0.0014	P	0.9

y = 6.3630E-005 * x + 6.5170E-004
R = 0.9998
DL = 2.889
BEC = 10.24

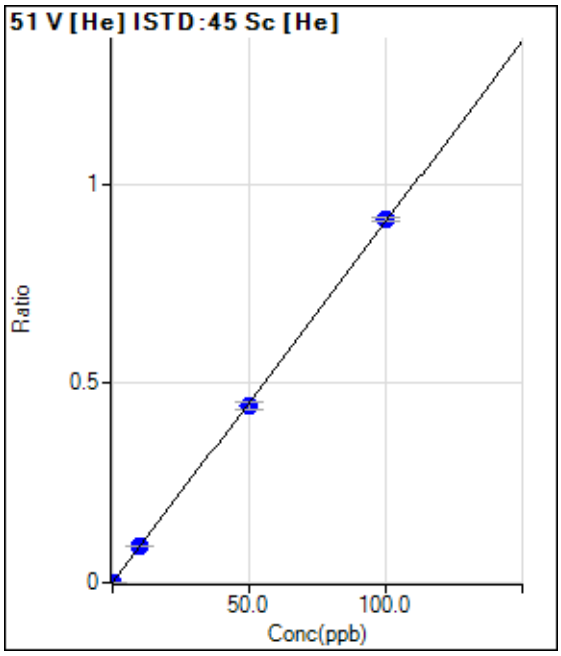
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24.44	0.0000	P	41.4
2	☐	10.000	9.833	2261.28	0.0036	P	3.8
3	☐	50.000	49.885	11281.39	0.0179	P	4.5
4	☐			40.00	0.0001	P	36.3
5	☐	100.000	100.074	23251.63	0.0359	P	1.7

y = 3.5833E-004 * x + 3.8860E-005
R = 1.0000
DL = 0.1347
BEC = 0.1084

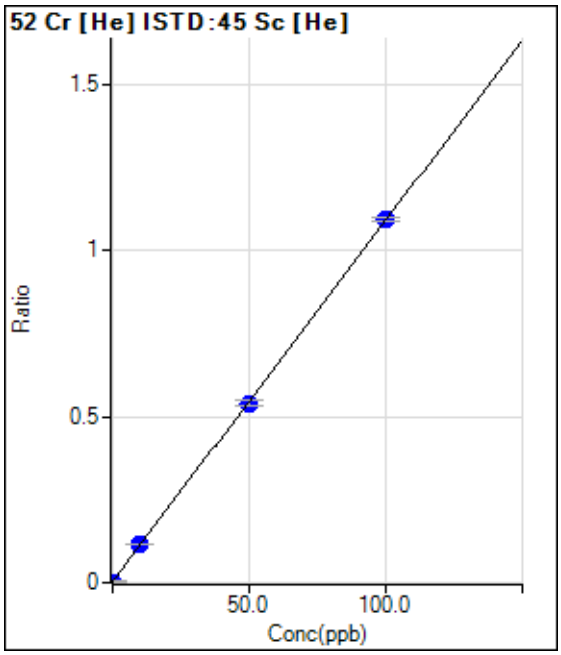
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-124.28	-0.0002	P	-214.
2	☐	10.000	10.030	57505.94	0.0906	P	1.7
3	☐	50.000	48.922	278770.28	0.4427	P	4.1
4	☐	100.000	100.536	575177.05	0.9100	P	1.2
5	☐			253.20	0.0004	P	189.2

y = 0.0091 * x - 1.9709E-004
R = 0.9999
DL = 0.1399
BEC = -0.02177

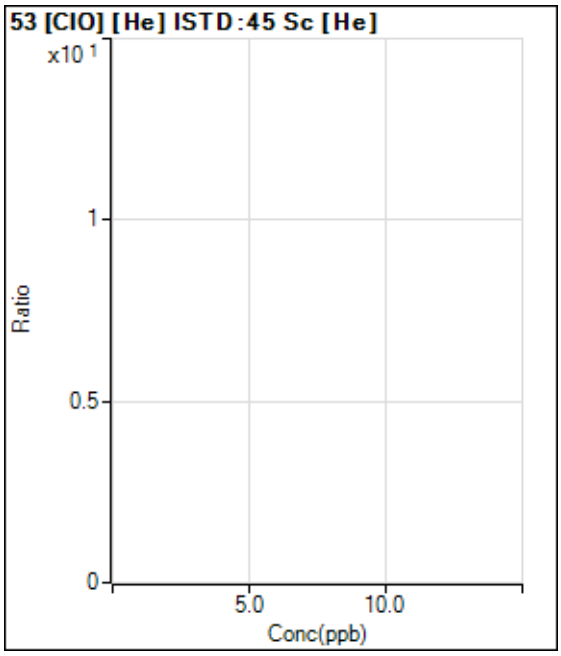
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1785.67	0.0028	P	4.1
2	☐	10.000	10.251	72560.63	0.1143	P	1.1
3	☐	50.000	49.488	340819.98	0.5411	P	2.9
4	☐	100.000	100.231	690834.02	1.0929	P	1.0
5	☐			3019.17	0.0047	P	3.0

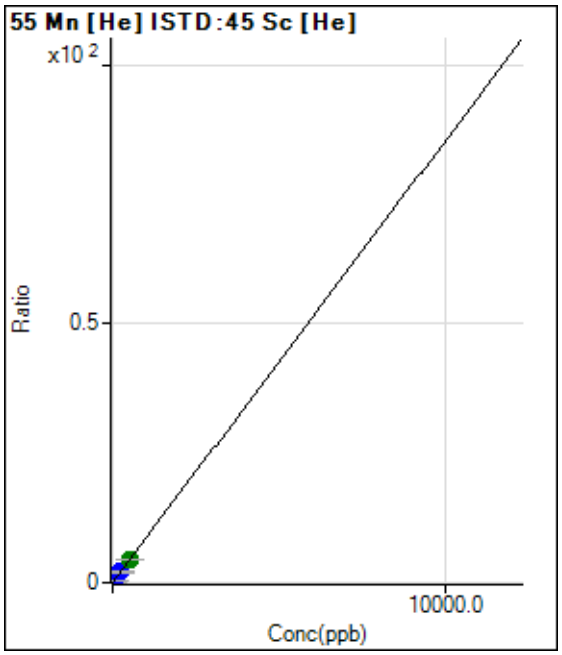
y = 0.0109 * x + 0.0028
R = 1.0000
DL = 0.03175
BEC = 0.2612

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			648.20	0.0010	P	13.6
2	☐			9113.81	0.0144	P	1.0
3	☐			41923.78	0.0665	P	1.1
4	☐			84639.70	0.1339	P	1.2
5	☐			640.78	0.0010	P	27.3

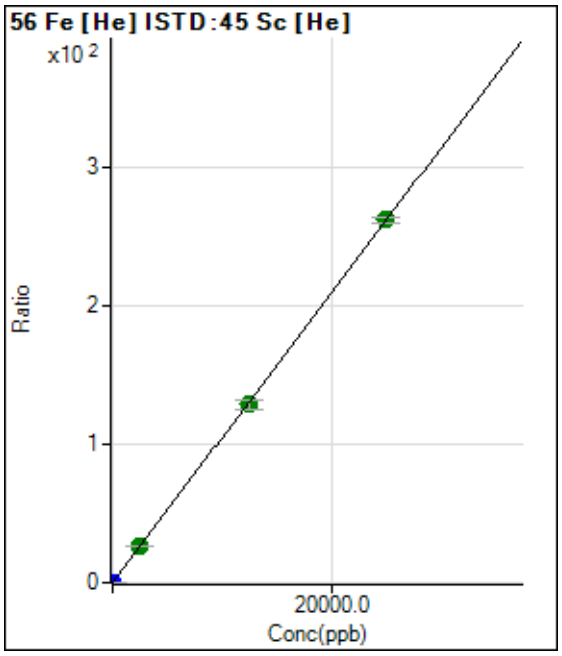
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	472.24	0.0008	P	3.9
2	☐	50.000	50.325	274057.60	0.4318	P	1.4
3	☐	250.000	240.166	1295962.24	2.0578	P	3.6
4	☐	500.000	504.884	2734298.08	4.3252	A	1.3
5	☐			1312.29	0.0020	P	4.8

y = 0.0086 * x + 7.5133E-004
R = 0.9997
DL = 0.01028
BEC = 0.08772

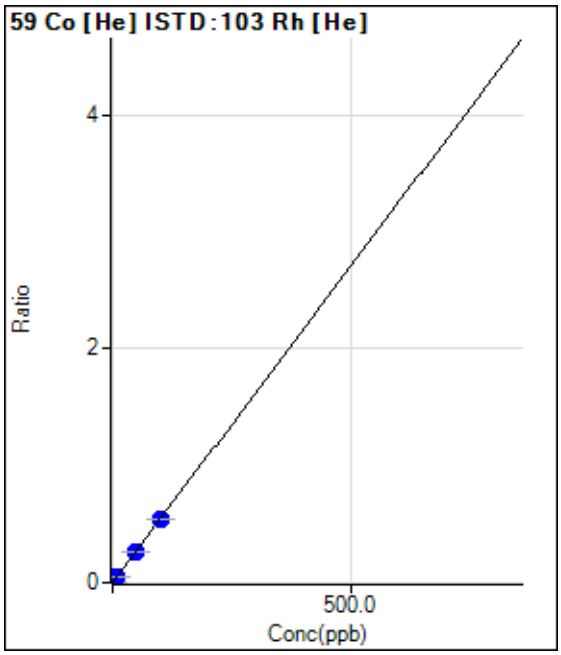
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5007.42	0.0080	P	3.2
2	☐	2500.000	2550.010	16911295.44	26.6454	A	1.2
3	☐	12500.00	12315.30	81000530.12	128.653	A	4.7
4	☐	25000.00	25087.34	165654397.8	262.070	A	1.5
5	☐			193090.48	0.2966	P	28.1

y = 0.0104 * x + 0.0080
R = 0.9999
DL = 0.07323
BEC = 0.7625

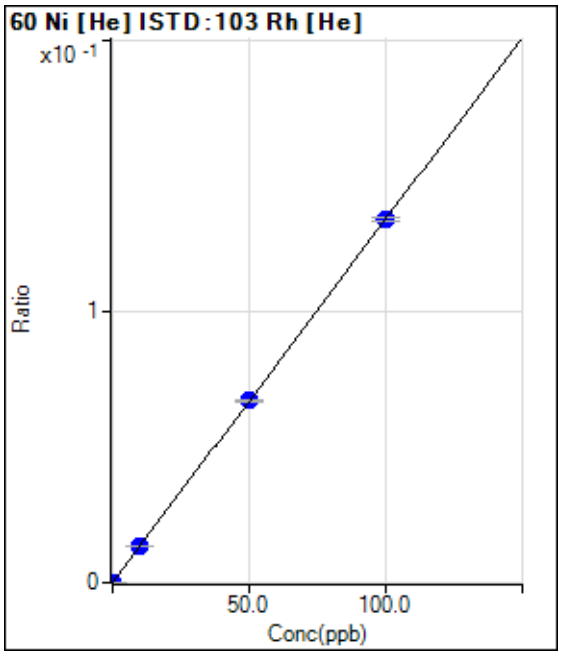
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.89	0.0000	P	62.2
2	☐	10.000	10.107	102346.26	0.0547	P	2.2
3	☐	50.000	49.466	480201.06	0.2676	P	1.0
4	☐	100.000	100.256	970195.83	0.5423	P	1.3
5	☐			140.00	0.0001	P	17.8

y = 0.0054 * x + 1.0003E-005
R = 1.0000
DL = 0.003452
BEC = 0.001849

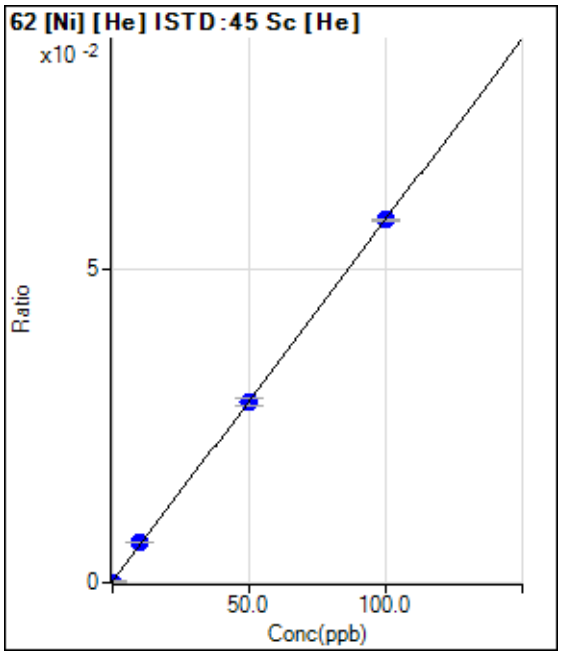
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	89.9
2	☐	10.000	9.994	25074.31	0.0134	P	1.7
3	☐	50.000	50.257	120793.33	0.0673	P	1.0
4	☐	100.000	99.872	239271.52	0.1338	P	1.1
5	☐			184.45	0.0001	P	4.3

y = 0.0013 * x + 1.4582E-005
R = 1.0000
DL = 0.02937
BEC = 0.01089

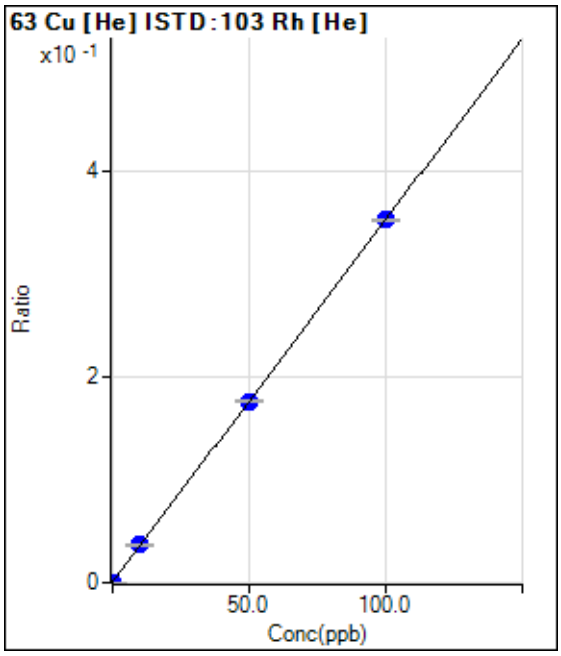
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.44	0.0002	P	19.8
2	☐	10.000	10.921	4106.08	0.0065	P	1.7
3	☐	50.000	49.900	18272.79	0.0290	P	4.1
4	☐	100.000	99.958	36650.61	0.0580	P	0.5
5	☐			156.67	0.0002	P	3.7

y = 5.7851E-004 * x + 1.5033E-004
R = 1.0000
DL = 0.1544
BEC = 0.2599

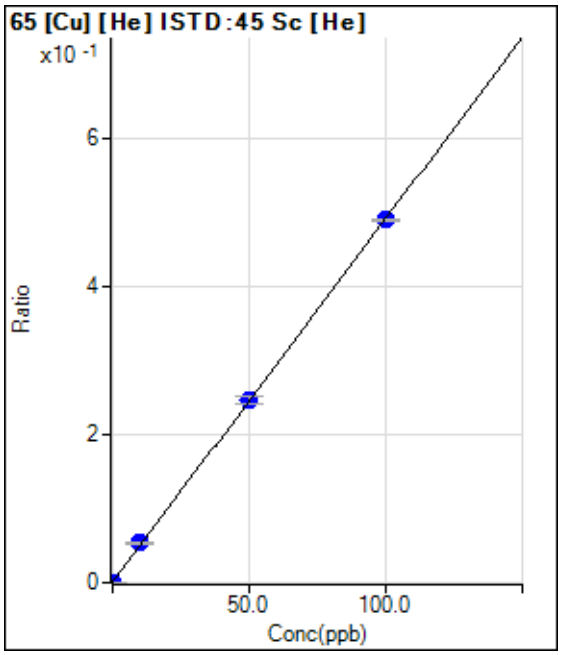
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	620.02	0.0003	P	3.1
2	☐	10.000	10.329	68593.22	0.0366	P	2.5
3	☐	50.000	49.908	315530.55	0.1758	P	0.9
4	☐	100.000	100.013	629755.93	0.3520	P	0.7
5	☐			1044.49	0.0005	P	6.6

y = 0.0035 * x + 3.2733E-004
R = 1.0000
DL = 0.008645
BEC = 0.09308

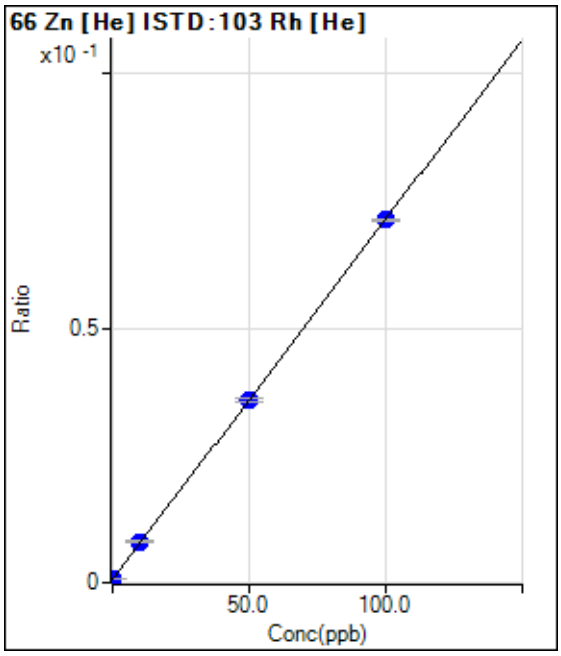
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	273.34	0.0004	P	10.1
2	☐	10.000	10.812	33886.52	0.0534	P	1.2
3	☐	50.000	50.311	155457.28	0.2469	P	3.8
4	☐	100.000	99.763	309152.29	0.4891	P	0.6
5	☐			532.24	0.0008	P	4.2

y = 0.0049 * x + 4.3470E-004
R = 1.0000
DL = 0.02701
BEC = 0.08875

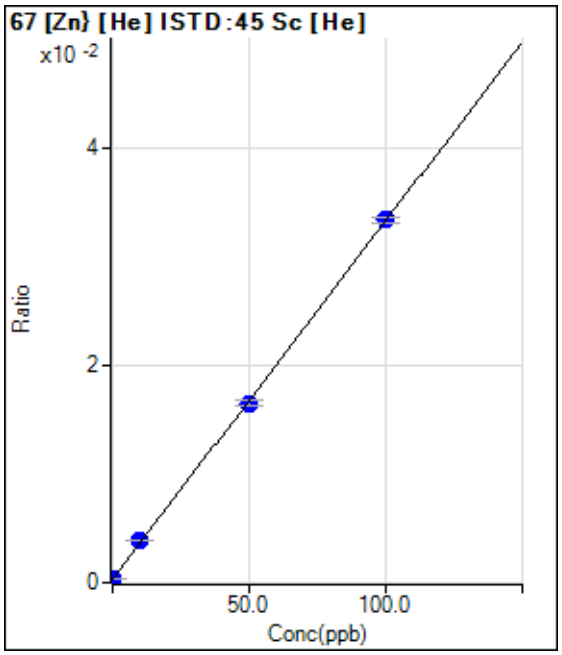
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1127.83	0.0006	P	3.5
2	☐	10.000	10.613	15154.32	0.0081	P	2.1
3	☐	50.000	50.024	64511.94	0.0360	P	2.6
4	☐	100.000	99.927	127417.34	0.0712	P	0.8
5	☐			1871.24	0.0010	P	5.6

y = 7.0679E-004 * x + 5.9526E-004
R = 1.0000
DL = 0.08938
BEC = 0.8422

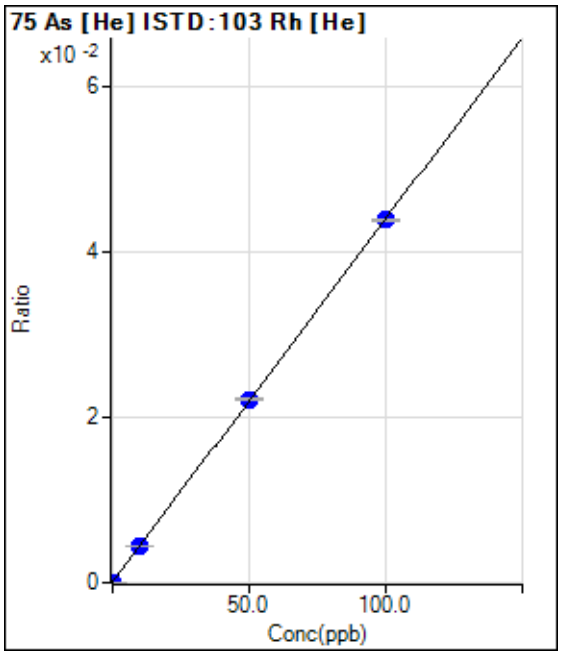
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	191.11	0.0003	P	16.0
2	☐	10.000	10.752	2439.09	0.0038	P	1.9
3	☐	50.000	49.138	10377.54	0.0165	P	2.8
4	☐	100.000	100.356	21070.32	0.0333	P	1.7
5	☐			264.45	0.0004	P	10.3

y = 3.2907E-004 * x + 3.0390E-004
R = 0.9999
DL = 0.4445
BEC = 0.9235

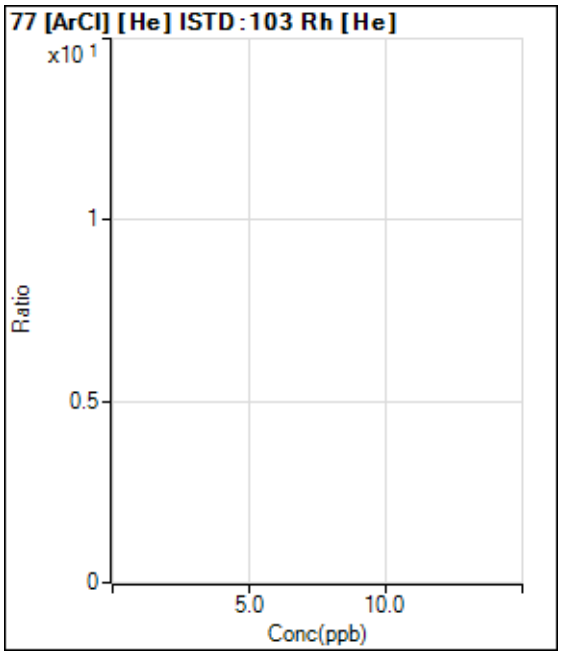
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	96.14	0.0001	P	10.8
2	☐	10.000	10.009	8327.69	0.0044	P	2.6
3	☐	50.000	50.393	39831.06	0.0222	P	0.7
4	☐	100.000	99.802	78552.40	0.0439	P	0.4
5	☐			1029.39	0.0005	P	11.4

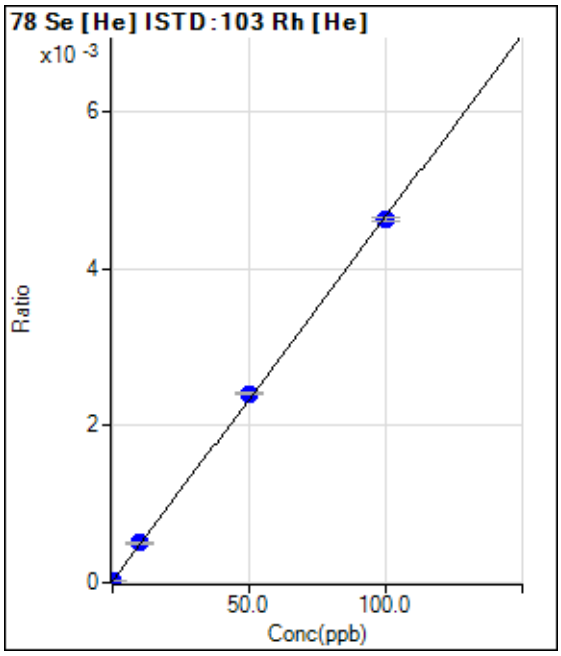
y = 4.3945E-004 * x + 5.0786E-005
R = 1.0000
DL = 0.03754
BEC = 0.1156

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			14.81	0.0000	P	86.6
2	☐			274.09	0.0001	P	32.4
3	☐			1155.65	0.0006	P	9.0
4	☐			2529.92	0.0014	P	3.7
5	☐			25.92	0.0000	P	25.4

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	34.33	0.0000	P	7.3
2	☐	10.000	10.438	940.33	0.0005	P	1.2
3	☐	50.000	51.547	4324.24	0.0024	P	1.0
4	☐	100.000	99.183	8265.43	0.0046	P	1.0
5	☐			121.06	0.0001	P	14.6

y = 4.6397E-005 * x + 1.8128E-005

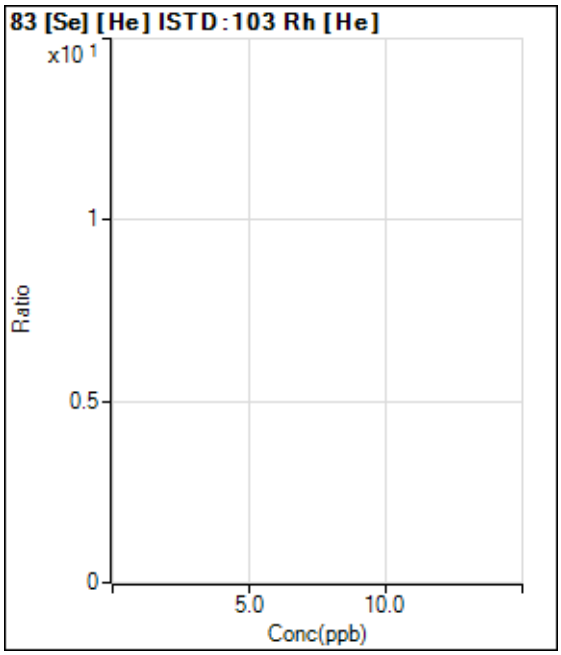
R = 0.9998

DL = 0.08536

BEC = 0.3907

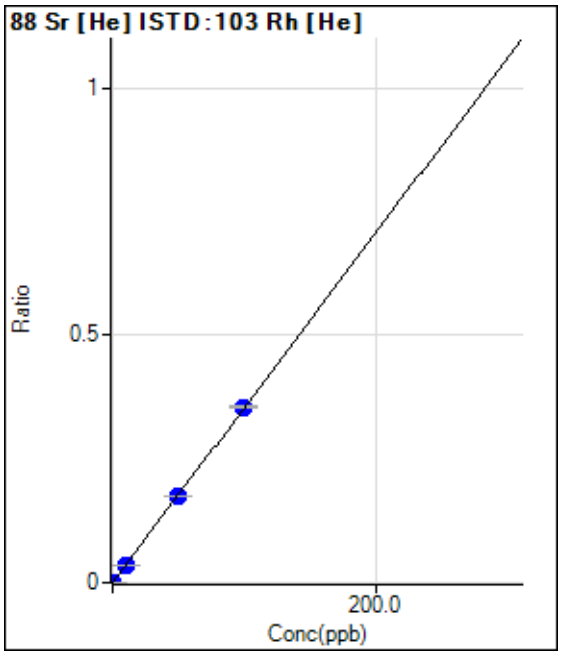
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			76.10	0.0000	P	5.7
2	☐			92.26	0.0000	P	11.6
3	☐			75.09	0.0000	P	10.2
4	☐			79.46	0.0000	P	5.0
5	☐			88.89	0.0000	P	13.2

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	173.34	0.0001	P	16.6
2	☐	10.000	9.922	65687.41	0.0351	P	2.7
3	☐	50.000	49.217	311758.09	0.1737	P	0.4
4	☐	100.000	100.399	633830.93	0.3543	P	0.7
5	☐			238.89	0.0001	P	12.4

y = 0.0035 * x + 9.1430E-005

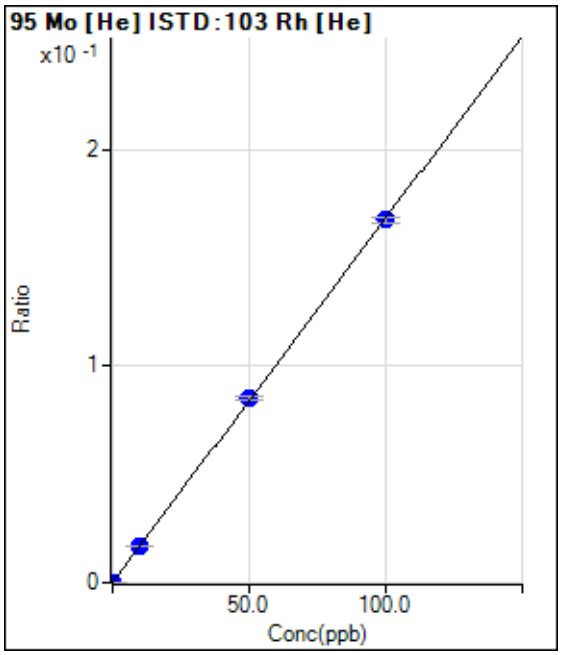
R = 0.9999

DL = 0.01288

BEC = 0.02592

Weight: <None>

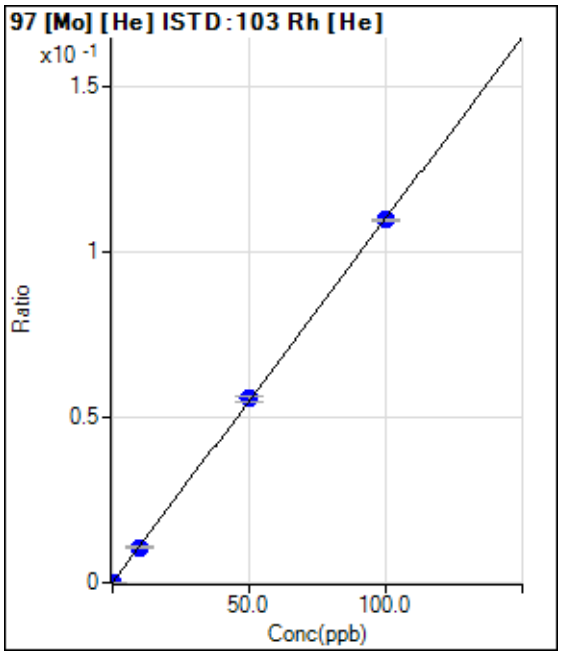
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.67	0.0000	P	5.7
2	☐	10.000	10.025	31607.51	0.0169	P	3.0
3	☐	50.000	50.690	152884.30	0.0852	P	2.3
4	☐			3011.42	0.0017	P	16.3
5	☐	100.000	99.652	325523.54	0.1674	P	1.6

y = 0.0017 * x + 4.5731E-005
R = 1.0000
DL = 0.004627
BEC = 0.02722

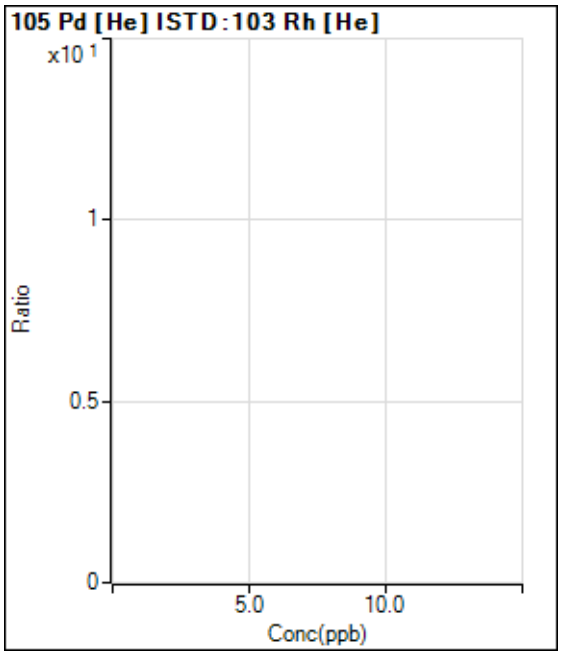
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88.90	0.0000	P	33.2
2	☐	10.000	9.717	20071.57	0.0107	P	2.6
3	☐	50.000	50.633	99938.43	0.0557	P	2.8
4	☐			2155.80	0.0012	P	23.0
5	☐	100.000	99.712	213113.87	0.1096	P	0.8

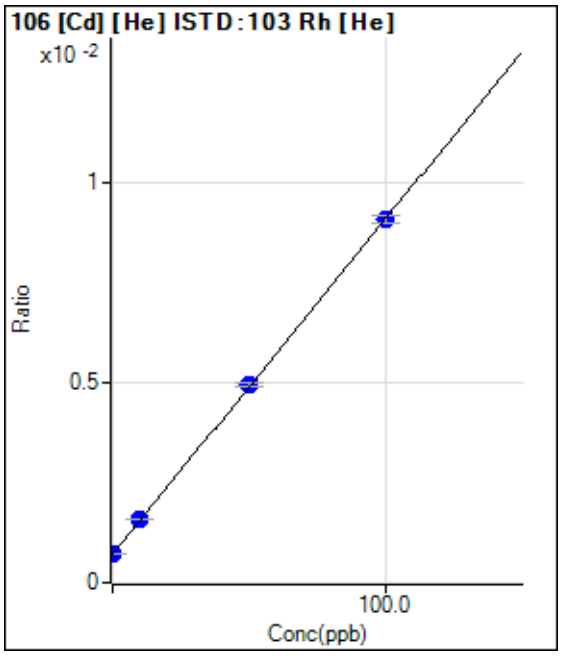
y = 0.0011 * x + 4.6922E-005
R = 1.0000
DL = 0.04247
BEC = 0.0427

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1292.70	0.0007	P	3.3
2	☐			1366.79	0.0007	P	4.8
3	☐			1511.25	0.0008	P	11.0
4	☐			1774.24	0.0010	P	12.0
5	☐			1507.55	0.0008	P	2.9

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1347.87	0.0007	P	3.8
2	☐	10.000	10.352	2953.46	0.0016	P	2.1
3	☐	50.000	50.539	8866.93	0.0049	P	1.5
4	☐	100.000	99.695	16199.46	0.0091	P	2.1
5	☐			1495.69	0.0008	P	4.6

y = 8.3698E-005 * x + 7.1136E-004

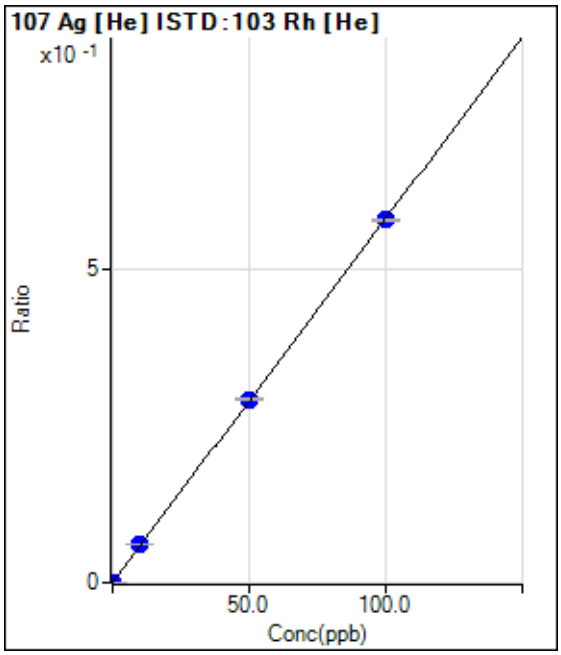
R = 1.0000

DL = 0.9692

BEC = 8.499

Weight: <None>

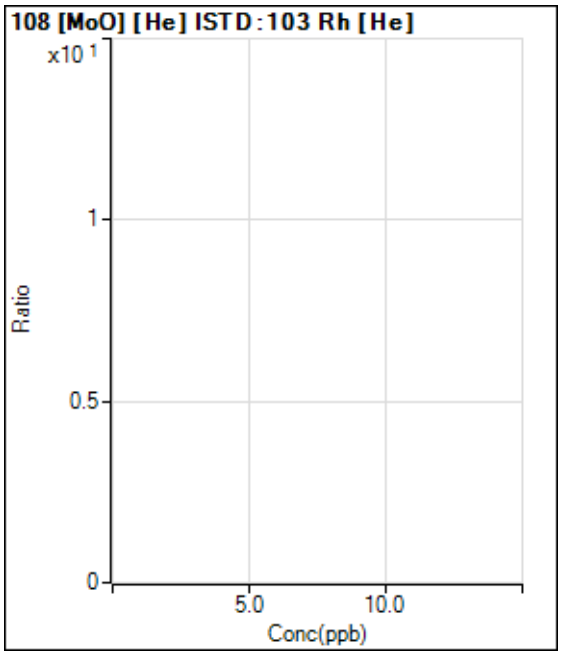
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	58.5
2	☐	10.000	10.508	114086.73	0.0610	P	1.3
3	☐	50.000	50.377	524216.35	0.2921	P	1.3
4	☐	100.000	99.761	1034892.11	0.5785	P	0.5
5	☐			281.12	0.0001	P	13.7

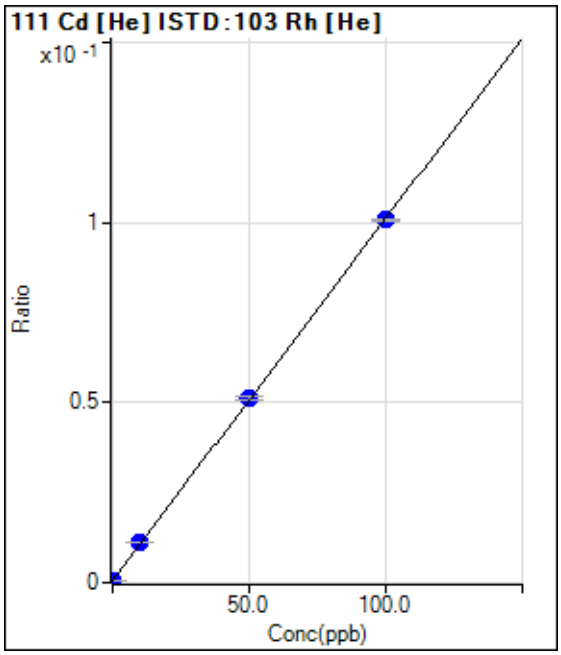
y = 0.0058 * x + 2.3462E-005
R = 1.0000
DL = 0.0071
BEC = 0.004046

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			0.00	0.0000	P	
2	☐			1251.96	0.0007	P	25.5
3	☐			6290.35	0.0035	P	4.7
4	☐			11370.95	0.0064	P	4.2
5	☐			107.41	0.0001	P	61.8

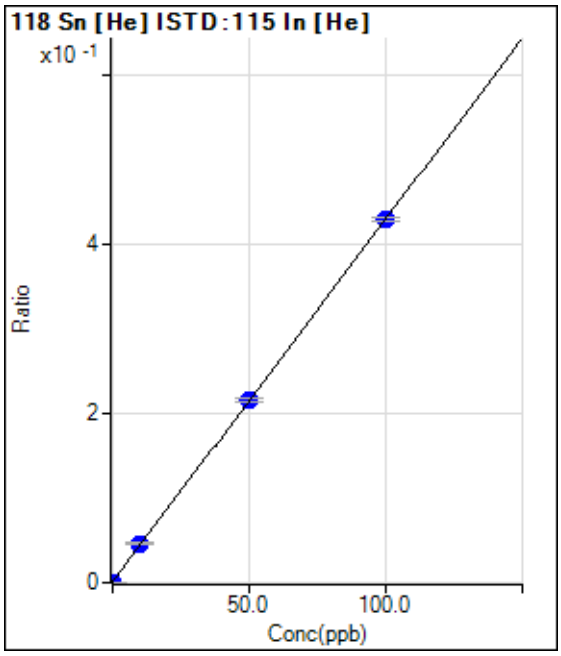
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1032.47	0.0005	P	3.8
2	☐	10.000	10.423	20626.30	0.0110	P	0.5
3	☐	50.000	50.391	91855.96	0.0512	P	2.0
4	☐	100.000	99.762	180348.86	0.1008	P	0.5
5	☐			1154.06	0.0006	P	9.6

y = 0.0010 * x + 5.4490E-004
R = 1.0000
DL = 0.06256
BEC = 0.5422

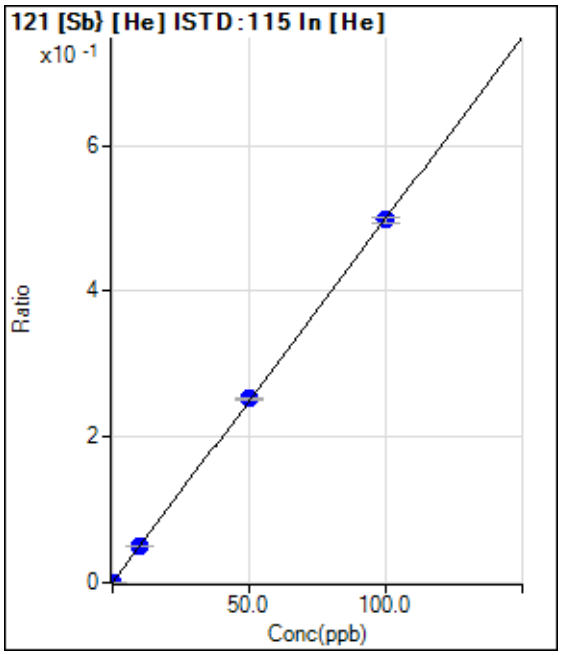
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1129.73	0.0010	P	13.3
2	☐	10.000	10.522	49049.70	0.0462	P	2.3
3	☐	50.000	50.190	220018.11	0.2162	P	1.8
4	☐			3237.52	0.0032	P	0.8
5	☐	100.000	99.853	463889.30	0.4292	P	1.1

y = 0.0043 * x + 0.0010
R = 1.0000
DL = 0.097
BEC = 0.2425

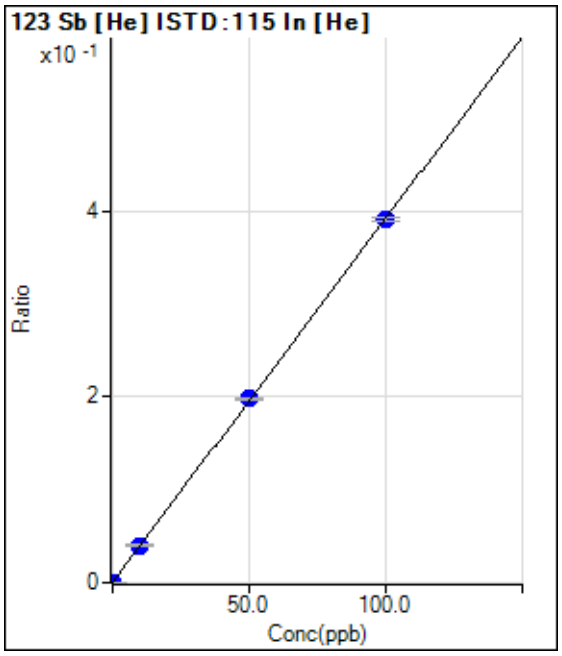
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	257.78	0.0002	P	8.4
2	☐	10.000	10.160	54137.19	0.0509	P	1.9
3	☐	50.000	50.488	256629.52	0.2522	P	1.6
4	☐			3942.74	0.0039	P	12.7
5	☐	100.000	99.740	538299.91	0.4980	P	1.3

y = 0.0050 * x + 2.3726E-004
R = 1.0000
DL = 0.01199
BEC = 0.04754

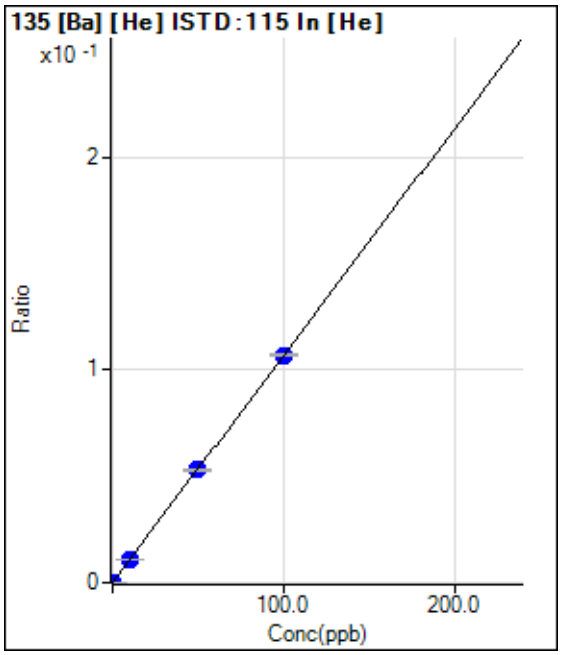
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	208.90	0.0002	P	14.8
2	☐	10.000	10.244	42806.70	0.0403	P	0.9
3	☐	50.000	50.525	201421.82	0.1980	P	0.9
4	☐			3187.02	0.0031	P	13.6
5	☐	100.000	99.713	422058.78	0.3905	P	1.0

y = 0.0039 * x + 1.9229E-004
R = 1.0000
DL = 0.02186
BEC = 0.04913

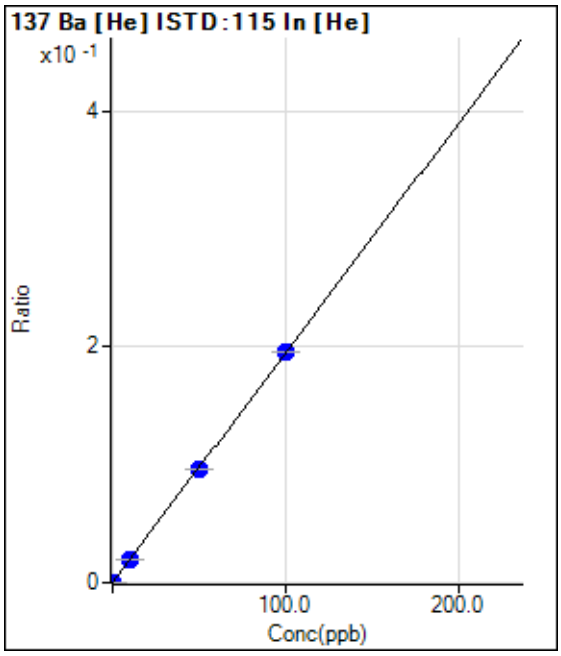
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24.44	0.0000	P	31.3
2	☐	10.000	9.758	11081.51	0.0104	P	0.4
3	☐	50.000	49.553	53797.23	0.0529	P	1.1
4	☐	100.000	100.248	108212.50	0.1069	P	0.5
5	☐			65.56	0.0001	P	29.8

y = 0.0011 * x + 2.2491E-005
R = 1.0000
DL = 0.01978
BEC = 0.02109

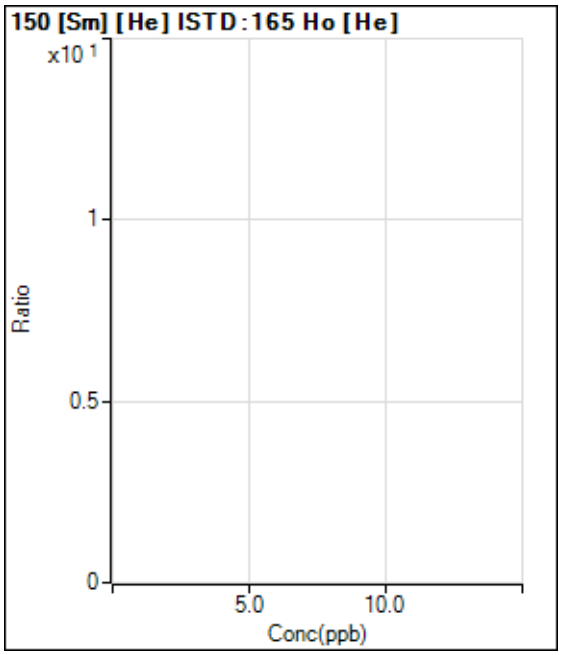
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	71.11	0.0001	P	16.7
2	☐	10.000	9.983	20766.21	0.0195	P	2.5
3	☐	50.000	49.333	98023.32	0.0963	P	0.3
4	☐	100.000	100.335	198194.61	0.1959	P	0.3
5	☐			152.23	0.0001	P	6.5

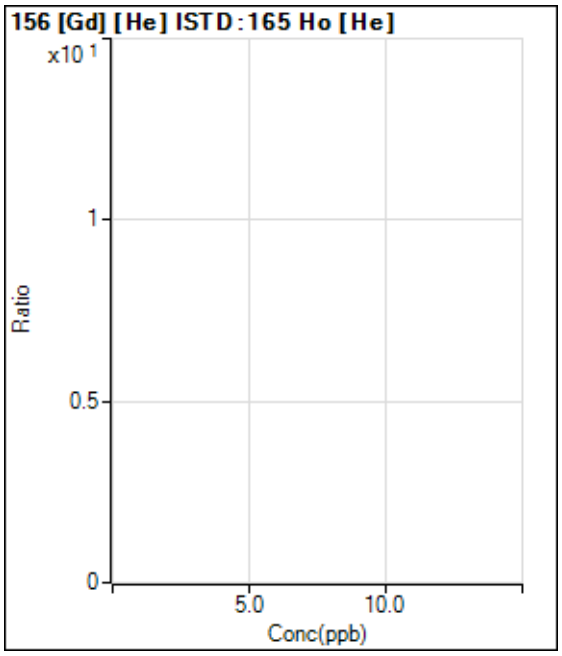
y = 0.0020 * x + 6.5472E-005
R = 1.0000
DL = 0.01678
BEC = 0.03355

Weight: <None>
Min Conc: <None>



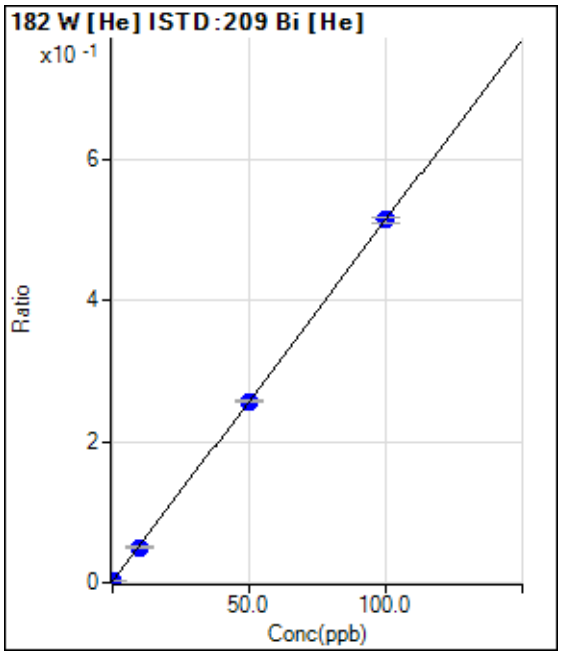
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4.67	0.0000	P	108.6
2	☐			2.67	0.0000	P	173.2
3	☐			7.33	0.0000	P	102.6
4	☐			14.00	0.0000	P	63.8
5	☐			4.67	0.0000	P	65.6

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			24.00	0.0000	P	7.3
2	☐			11.33	0.0000	P	36.6
3	☐			14.00	0.0000	P	51.7
4	☐			24.00	0.0000	P	37.9
5	☐			11.33	0.0000	P	20.5

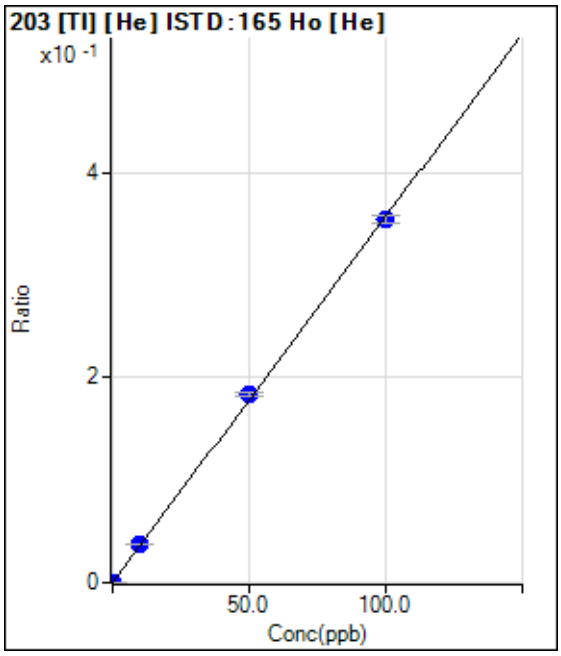
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3719.14	0.0015	P	8.4
2	☐	10.000	9.390	122298.10	0.0496	P	4.6
3	☐	50.000	49.894	605435.87	0.2572	P	0.7
4	☐			15419.27	0.0067	P	17.2
5	☐	100.000	100.114	1279074.95	0.5147	P	1.4

y = 0.0051 * x + 0.0015
R = 1.0000
DL = 0.07255
BEC = 0.2863

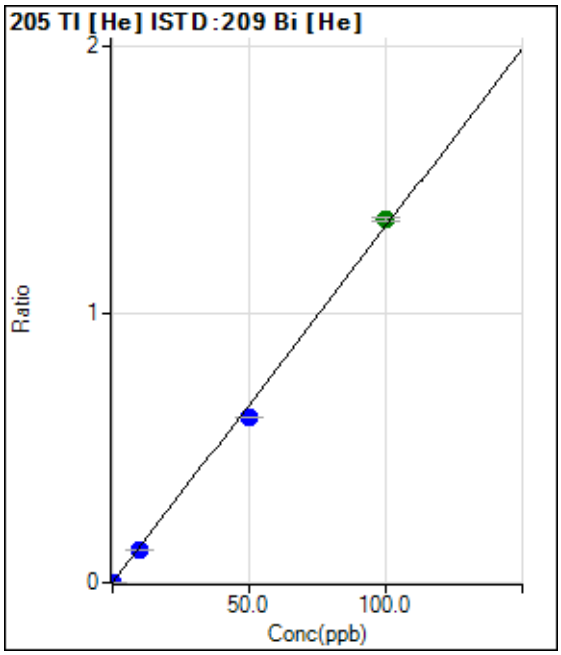
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.93	0.0000	P	64.5
2	☐	10.000	10.483	122851.61	0.0374	P	1.7
3	☐	50.000	51.533	593648.25	0.1837	P	1.7
4	☐	100.000	99.185	1150783.17	0.3536	P	2.1
5	☐			1792.78	0.0005	P	24.7

y = 0.0036 * x + 7.7927E-006
R = 0.9998
DL = 0.004229
BEC = 0.002186

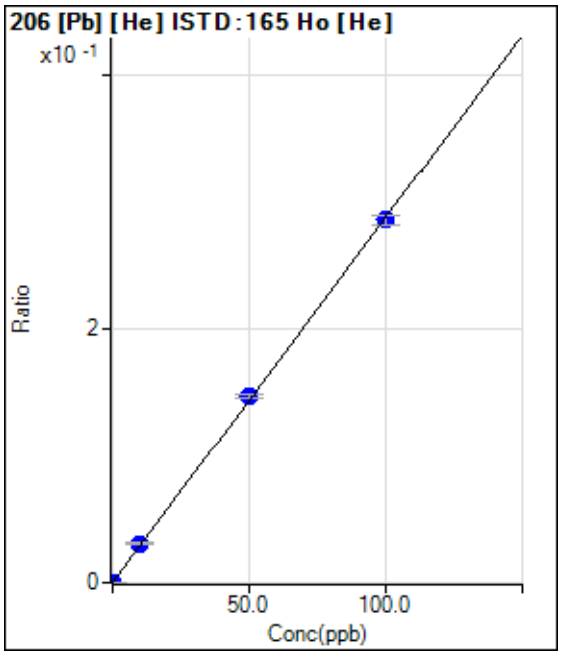
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.89	0.0000	P	21.6
2	☐	10.000	9.269	303167.15	0.1229	P	1.1
3	☐	50.000	46.351	1446391.61	0.6146	P	0.7
4	☐	100.000	101.898	3108044.39	1.3510	A	0.9
5	☐			3504.89	0.0014	P	23.6

y = 0.0133 * x + 2.3251E-005
R = 0.9989
DL = 0.001136
BEC = 0.001754

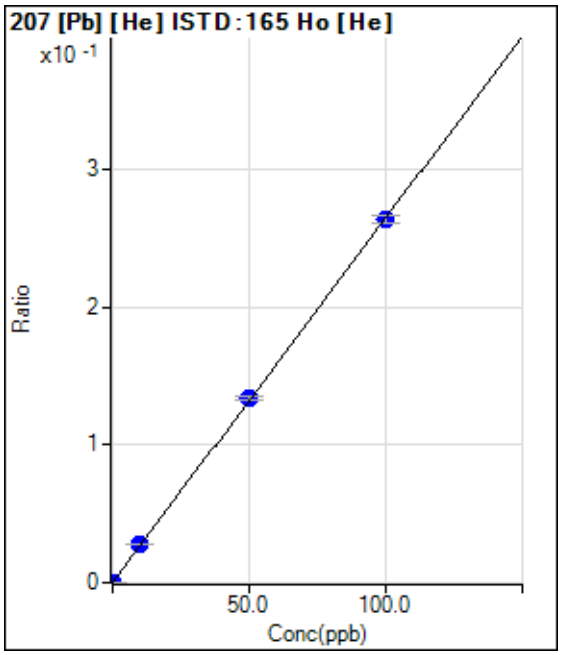
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	227.78	0.0001	P	5.1
2	☐	10.000	10.692	101109.49	0.0308	P	2.1
3	☐	50.000	50.964	472996.89	0.1464	P	1.8
4	☐	100.000	99.449	929341.49	0.2856	P	2.6
5	☐			925.60	0.0003	P	7.5

y = 0.0029 * x + 6.8773E-005
R = 0.9999
DL = 0.003634
BEC = 0.02395

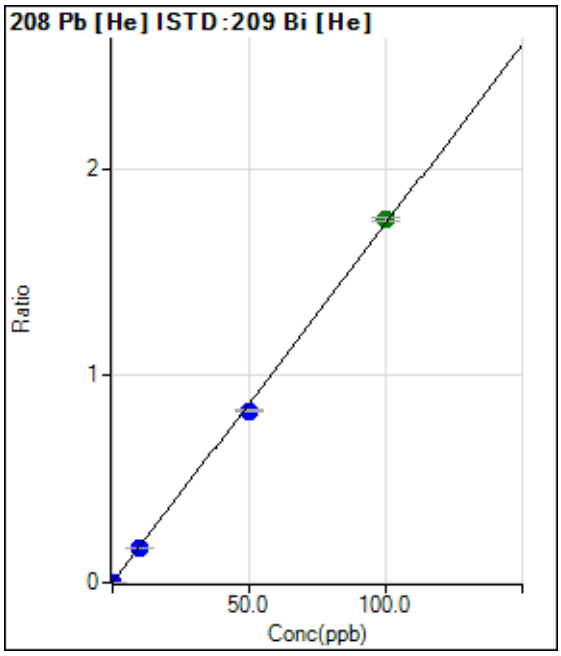
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	222.23	0.0001	P	12.7
2	☐	10.000	10.626	92510.78	0.0281	P	1.2
3	☐	50.000	50.722	433321.08	0.1341	P	1.9
4	☐	100.000	99.576	856593.16	0.2632	P	2.0
5	☐			805.59	0.0002	P	6.8

y = 0.0026 * x + 6.7069E-005
R = 0.9999
DL = 0.009671
BEC = 0.02538

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	948.92	0.0004	P	2.7
2	☐	10.000	9.736	416805.13	0.1690	P	1.2
3	☐	50.000	47.792	1948998.94	0.8281	P	1.1
4	☐	100.000	101.130	4030260.74	1.7519	A	1.1
5	☐			3758.00	0.0015	P	5.1

y = 0.0173 * x + 3.7457E-004
R = 0.9996
DL = 0.00178
BEC = 0.02163

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T14:52:49-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	196	9.27
B	11	45	2	NoGas	103828	0.00
Na	23	45	1	He	80743	0.00
Mg	24	45	1	He	1571	0.55
Al	27	45	1	He	1276	0.36
K	39	45	1	He	34088	0.01
Ca	44	45	1	He	444	0.99
Ti	47	45	1	He	18	121.86
V	51	45	1	He	518	14.37
Cr	52	45	1	He	1841	0.39
Mn	55	45	1	He	473	1.97
Fe	56	45	1	He	6223	0.11
Co	59	103	1	He	36	84.77
Ni	60	103	1	He	32	148.32
Cu	63	103	1	He	690	1.27
Zn	66	103	1	He	1080	0.48
As	75	103	1	He	102	1.46
Se	78	103	1	He	36	11.40
Sr	88	103	1	He	243	9.40
Mo	95	103	1	He	88	27.48
Ag	107	103	1	He	46	66.87
Cd	111	103	1	He	987	0.39
Sn	118	115	1	He	1219	0.92
Sb	123	115	1	He	200	8.82
Ba	137	115	1	He	66	27.25
W	182	209	1	He	3589	0.20
Tl	205	209	1	He	63	68.02
Pb	208	209	1	He	917	0.87

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1396251	0.54
Sc	45	1	He	637553	0.51
Sc	45	2	NoGas	4884031	1.32
Rh	103	1	He	1906680	1.18
In	115	1	He	1084697	0.42
Tb	159	1	He	3239190	0.43
Ho	165	1	He	3291602	0.50
Bi	209	1	He	2496837	1.01

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T14:56:39-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	211	0.00
B	11	45	2	NoGas	82180	0.00
Na	23	45	1	He	76365	0.00
Mg	24	45	1	He	1363	0.30
Al	27	45	1	He	1338	0.44
K	39	45	1	He	33324	0.01
Ca	44	45	1	He	410	2.27
Ti	47	45	1	He	24	170.45
Cr	52	45	1	He	1786	0.24
Mn	55	45	1	He	472	0.74
Fe	56	45	1	He	5007	0.07
Co	59	103	1	He	19	328.01
Ni	60	103	1	He	28	327.07
Cu	63	103	1	He	620	0.38
Zn	66	103	1	He	1128	0.37
As	75	103	1	He	96	10.31
Se	78	103	1	He	34	18.40
Sr	88	103	1	He	173	9.98
Mo	95	103	1	He	87	7.69
Ag	107	103	1	He	44	131.09
Cd	111	103	1	He	1032	0.44
Sn	118	115	1	He	1130	1.19
Sb	123	115	1	He	209	7.10
Ba	137	115	1	He	71	23.15
W	182	209	1	He	3719	0.24
Tl	205	209	1	He	59	36.40
Pb	208	209	1	He	949	0.30

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1389655	1.27
Sc	45	1	He	628609	0.48
Sc	45	2	NoGas	4813296	1.50
Rh	103	1	He	1894469	1.02
In	115	1	He	1086371	0.22
Tb	159	1	He	3251379	0.20
Ho	165	1	He	3312124	1.05
Bi	209	1	He	2533294	0.49

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:00:27-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	33657	0.01
B	11	2	NoGas	94096	0.00
Na	23	1	He	7762386	0.00
Mg	24	1	He	4346989	0.00
Al	27	1	He	24970	0.01
K	39	1	He	3882302	0.00
Ca	44	1	He	204245	0.00
Ti	47	1	He	2261	0.20
V	51	1	He	57506	0.00
Cr	52	1	He	72561	0.00
Mn	55	1	He	274058	0.00
Fe	56	1	He	16911295	0.00
Co	59	1	He	102346	0.00
Ni	60	1	He	25074	0.00
Cu	63	1	He	68593	0.00
Zn	66	1	He	15154	0.01
As	75	1	He	8328	0.03
Se	78	1	He	940	0.09
Sr	88	1	He	65687	0.00
Mo	95	1	He	31608	0.01
Ag	107	1	He	114087	0.00
Cd	111	1	He	20626	0.00
Sn	118	1	He	49050	0.01
Sb	123	1	He	42807	0.00
Ba	137	1	He	20766	0.01
W	182	1	He	122298	0.00
Tl	205	1	He	303167	0.00
Pb	208	1	He	416805	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1357112	1.51	1389655	97.66	30	120	
Sc	45	1	He	634726	1.24	628609	100.97	30	120	
Sc	45	2	NoGas	4676620	0.39	4813296	97.16	30	120	
Rh	103	1	He	1871730	0.53	1894469	98.80	30	120	
In	115	1	He	1062585	0.74	1086371	97.81	30	120	
Tb	159	1	He	3202309	0.67	3251379	98.49	30	120	
Ho	165	1	He	3286570	0.59	3312124	99.23	30	120	
Bi	209	1	He	2466652	1.72	2533294	97.37	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:04:15-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	205938	0.00
B	11	2	NoGas	224127	0.00
Na	23	1	He	36961198	0.00
Mg	24	1	He	20958164	0.00
Al	27	1	He	112468	0.00
K	39	1	He	18243429	0.00
Ca	44	1	He	976160	0.00
Ti	47	1	He	11281	0.02
V	51	1	He	278770	0.00
Cr	52	1	He	340820	0.00
Mn	55	1	He	1295962	0.00
Fe	56	1	He	81000530	0.00
Co	59	1	He	480201	0.00
Ni	60	1	He	120793	0.00
Cu	63	1	He	315531	0.00
Zn	66	1	He	64512	0.00
As	75	1	He	39831	0.00
Se	78	1	He	4324	0.01
Sr	88	1	He	311758	0.00
Mo	95	1	He	152884	0.00
Ag	107	1	He	524216	0.00
Cd	111	1	He	91856	0.00
Sn	118	1	He	220018	0.00
Sb	123	1	He	201422	0.00
Ba	137	1	He	98023	0.00
W	182	1	He	605436	0.00
Tl	205	1	He	1446392	0.00
Pb	208	1	He	1948999	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1365210	0.16	1389655	98.24	30	120	
Sc	45	1	He	630420	4.23	628609	100.29	30	120	
Sc	45	2	NoGas	4719343	1.22	4813296	98.05	30	120	
Rh	103	1	He	1794555	0.69	1894469	94.73	30	120	
In	115	1	He	1017533	0.41	1086371	93.66	30	120	
Tb	159	1	He	3158032	1.67	3251379	97.13	30	120	
Ho	165	1	He	3231265	0.80	3312124	97.56	30	120	
Bi	209	1	He	2353558	0.20	2533294	92.91	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:08:05-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	445088	0.00
B	11	2	NoGas	59756	0.00
Na	23	1	He	74558562	0.00
Mg	24	1	He	42282946	0.00
Al	27	1	He	229730	0.00
K	39	1	He	37444350	0.00
Ca	44	1	He	2024323	0.00
Ti	47	1	He	40	90.83
V	51	1	He	575177	0.00
Cr	52	1	He	690834	0.00
Mn	55	1	He	2734298	0.00
Fe	56	1	He	165654398	0.00
Co	59	1	He	970196	0.00
Ni	60	1	He	239272	0.00
Cu	63	1	He	629756	0.00
Zn	66	1	He	127417	0.00
As	75	1	He	78552	0.00
Se	78	1	He	8265	0.02
Sr	88	1	He	633831	0.00
Mo	95	1	He	3011	0.54
Ag	107	1	He	1034892	0.00
Cd	111	1	He	180349	0.00
Sn	118	1	He	3238	0.01
Sb	123	1	He	3187	0.44
Ba	137	1	He	198195	0.00
W	182	1	He	15419	0.11
Tl	205	1	He	3108044	0.00
Pb	208	1	He	4030261	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1398132	1.23	1389655	100.61	30	120	
Sc	45	1	He	632141	1.14	628609	100.56	30	120	
Sc	45	2	NoGas	4898034	0.44	4813296	101.76	30	120	
Rh	103	1	He	1789010	0.75	1894469	94.43	30	120	
In	115	1	He	1011940	0.63	1086371	93.15	30	120	
Tb	159	1	He	3182666	0.91	3251379	97.89	30	120	
Ho	165	1	He	3254944	1.74	3312124	98.27	30	120	
Bi	209	1	He	2300606	0.83	2533294	90.81	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:11:51-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	174	18.45
B	11	2	NoGas	369729	0.00
Na	23	1	He	89260	0.00
Mg	24	1	He	4542	0.66
Al	27	1	He	2101	0.20
K	39	1	He	41571	0.01
Ca	44	1	He	931	0.38
Ti	47	1	He	23252	0.00
V	51	1	He	253	72.73
Cr	52	1	He	3019	0.13
Mn	55	1	He	1312	0.56
Fe	56	1	He	193090	0.02
Co	59	1	He	140	12.84
Ni	60	1	He	184	2.26
Cu	63	1	He	1044	0.57
Zn	66	1	He	1871	0.34
As	75	1	He	1029	1.10
Se	78	1	He	121	11.97
Sr	88	1	He	239	5.40
Mo	95	1	He	325524	0.00
Ag	107	1	He	281	4.80
Cd	111	1	He	1154	0.77
Sn	118	1	He	463889	0.00
Sb	123	1	He	422059	0.00
Ba	137	1	He	152	3.62
W	182	1	He	1279075	0.00
Tl	205	1	He	3505	0.66
Pb	208	1	He	3758	0.14

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1395035	0.33	1389655	100.39	30	120	
Sc	45	1	He	647897	2.63	628609	103.07	30	120	
Sc	45	2	NoGas	4794715	0.65	4813296	99.61	30	120	
Rh	103	1	He	1944157	0.69	1894469	102.62	30	120	
In	115	1	He	1080936	1.02	1086371	99.50	30	120	
Tb	159	1	He	3250918	0.91	3251379	99.99	30	120	
Ho	165	1	He	3301826	0.31	3312124	99.69	30	120	
Bi	209	1	He	2485449	1.39	2533294	98.11	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:15:41-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	39.013	0.625	174997	0.88	40	97.5	89.5	110.5	
B	11	45	NoGas	35.957	3.286	188437	1.92	40	89.9	89.5	110.5	
Na	23	45	He	20850.463	1.793	31382448	0.52	20000	104.3	89.5	110.5	
Mg	24	45	He	20778.236	1.424	17714003	0.46	20000	103.9	89.5	110.5	
Al	27	45	He	205.431	1.580	95612	0.54	200	102.7	89.5	110.5	
K	39	45	He	20712.455	2.113	15600550	0.45	20000	103.6	89.5	110.5	
Ca	44	45	He	20050.722	1.512	814016	0.34	20000	100.3	89.5	110.5	
Ti	47	45	He	41.108	1.767	9418	0.39	40	102.8	89.5	110.5	
V	51	45	He	41.056	1.640	236905	1.02	40	102.6	89.5	110.5	
Cr	52	45	He	41.043	1.029	286484	0.87	40	102.6	89.5	110.5	
Mn	55	45	He	200.640	1.108	1096449	0.75	200	100.3	89.5	110.5	
Fe	56	45	He	10264.799	1.894	68381942	0.66	10000	102.6	89.5	110.5	
Co	59	103	He	40.117	0.826	404863	0.38	40	100.3	89.5	110.5	
Ni	60	103	He	40.704	1.513	101709	1.06	40	101.8	89.5	110.5	
Cu	63	103	He	41.478	1.133	272715	0.68	40	103.7	89.5	110.5	
Zn	66	103	He	41.990	0.773	56476	0.78	40	105.0	89.5	110.5	
As	75	103	He	39.654	1.136	32604	0.78	40	99.1	89.5	110.5	
Se	78	103	He	41.488	0.958	3625	1.19	40	103.7	89.5	110.5	
Sr	88	103	He	40.362	0.785	265817	0.45	40	100.9	89.5	110.5	
Mo	95	103	He	42.846	1.655	134352	1.89	40	107.1	89.5	110.5	
Ag	107	103	He	41.226	0.927	445989	0.62	40	103.1	89.5	110.5	
Cd	111	103	He	40.861	0.349	77629	0.13	40	102.2	89.5	110.5	
Sn	118	115	He	41.458	0.777	186793	0.98	40	103.6	89.5	110.5	
Sb	123	115	He	41.637	0.607	170459	0.26	40	104.1	89.5	110.5	
Ba	137	115	He	40.800	1.825	83241	1.33	40	102.0	89.5	110.5	
W	182	209	He	39.465	1.083	489869	1.18	40	98.7	89.5	110.5	
Tl	205	209	He	37.243	0.648	1187062	0.65	40	93.1	89.5	110.5	
Pb	208	209	He	39.074	0.985	1627735	0.99	40	97.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1425458	1.25	1389655	102.58	30	120	
Sc	45	He	637826	1.84	628609	101.47	30	120	
Sc	45	NoGas	4877061	0.64	4813296	101.32	30	120	
Rh	103	He	1865575	0.46	1894469	98.47	30	120	
In	115	He	1044746	0.84	1086371	96.17	30	120	
Tb	159	He	3212157	0.30	3251379	98.79	30	120	
Ho	165	He	3285176	1.19	3312124	99.19	30	120	
Bi	209	He	2403917	0.11	2533294	94.89	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:19:28-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.075	41.6	41	16.9	20	
W	182	1	He	1.243	13.5	19620	11.2	10	
Ca	44	1	He	-0.943	-224.7	370	22.0	1000	
Na	23	1	He	3.536	47.2	81331	2.1	400	
Mg	24	1	He	1.703	42.3	2782	20.8	1000	
K	39	1	He	7.184	25.5	38516	2.9	1000	
V	51	1	He	0.088	16.2	377	20.6	2	
Cr	52	1	He	0.013	54.7	1871	2.2	2	
Mn	55	1	He	-0.015	-79.9	390	15.7	2	
Fe	56	1	He	15.417	28.2	105739	26.1	50	
Co	59	1	He	0.007	12.5	89	10.8	1	
Ni	60	1	He	0.002	351.7	33	55.7	2	
Cu	63	1	He	0.026	13.2	806	3.8	2	
Zn	66	1	He	-0.268	-13.8	781	5.5	20	
As	75	1	He	0.166	14.4	238	7.6	2	
Se	78	1	He	0.331	19.1	65	8.5	2	
Sr	88	1	He	0.016	38.9	282	13.8	10	
Mo	95	1	He	1.007	20.1	3344	19.2	2	
Ag	107	1	He	0.006	19.2	111	10.5	0.2	
Cd	111	1	He	-0.003	-456.7	1044	1.8	0.2	
Ba	137	1	He	0.000	33717.4	71	16.5	5	
Sn	118	1	He	0.267	28.7	2371	14.6	10	
Tl	205	1	He	0.050	16.7	1726	16.4	0.5	
Pb	208	1	He	0.017	16.8	1660	7.6	1	
Al	27	1	He	-0.107	-222.7	1286	9.2	50	
Sb	123	1	He	1.062	19.0	4720	17.8	1	ICB Failed
B	11	2	NoGas	-9.766	-0.9	54332	0.1	20	
Be	9	2	NoGas	0.012	132.1	270	28.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1415813	1.32	1389655	101.88	30	120	
Sc	45	1	He	626628	0.95	628609	99.68	30	120	
Sc	45	2	NoGas	4841273	0.51	4813296	100.58	30	120	
Rh	103	1	He	1926152	0.98	1894469	101.67	30	120	
In	115	1	He	1085097	0.58	1086371	99.88	30	120	

Tb	159	1	He	3252878	0.75	3251379	100.05	30	120	
Ho	165	1	He	3319976	0.59	3312124	100.24	30	120	
Bi	209	1	He	2501369	0.34	2533294	98.74	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1912660
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:23:18-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.901	0.901	2.895	4204	3.70	1	90.1	69.5	130.5	
B	11	2	NoGas	11.625	11.625	1.378	117072	0.35	20	58.1	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1066.852	1066.852	0.480	1693946	0.46	1000	106.7	69.5	130.5	
Mg	24	1	He	1056.797	1056.797	1.155	910084	0.25	1000	105.7	69.5	130.5	
Al	27	1	He	51.239	51.239	3.397	25082	2.88	50	102.5	69.5	130.5	
K	39	1	He	1051.781	1051.781	0.711	831528	0.51	1000	105.2	69.5	130.5	
Ca	44	1	He	1019.304	1019.304	1.389	42138	0.48	1000	101.9	69.5	130.5	
Ti	47	1	He	10.926	10.926	3.978	2544	4.04	10	109.3	69.5	130.5	
V	51	1	He	5.427	5.427	4.224	31476	3.90	5	108.5	69.5	130.5	
Cr	52	1	He	2.144	2.144	2.580	16825	2.05	2	107.2	69.5	130.5	
Mn	55	1	He	5.108	5.108	1.841	28623	1.12	5	102.2	69.5	130.5	
Fe	56	1	He	105.993	105.993	1.041	717351	0.95	100	106.0	69.5	130.5	
Co	59	1	He	1.029	1.029	1.589	10738	0.56	1	102.9	69.5	130.5	
Ni	60	1	He	2.121	2.121	3.212	5500	2.34	2	106.1	69.5	130.5	
Cu	63	1	He	2.126	2.126	0.662	15036	0.76	2	106.3	69.5	130.5	
Zn	66	1	He	20.673	20.673	2.774	29292	1.41	20	103.4	69.5	130.5	
As	75	1	He	5.068	5.068	1.483	4388	1.08	5	101.4	69.5	130.5	
Se	78	1	He	5.355	5.355	3.022	514	2.49	5	107.1	69.5	130.5	
Sr	88	1	He	9.822	9.822	1.881	66927	0.56	10	98.2	69.5	130.5	
Mo	95	1	He	10.639	10.639	2.754	34510	1.36	10	106.4	69.5	130.5	
Ag	107	1	He	1.071	1.071	2.202	12004	0.95	1	107.1	69.5	130.5	
Cd	111	1	He	1.027	1.027	5.507	3037	3.13	1	102.7	69.5	130.5	
Sn	118	1	He	10.376	10.376	1.929	49313	1.70	10	103.8	69.5	130.5	
Sb	123	1	He	2.341	2.341	1.329	10131	1.17	2	117.0	69.5	130.5	
Ba	137	1	He	5.016	5.016	3.081	10672	3.22	5	100.3	69.5	130.5	
W	182	1	He	9.869	9.869	0.302	129930	0.89	10	98.7	69.5	130.5	
Tl	205	1	He	1.884	1.884	1.530	62398	1.72	2	94.2	69.5	130.5	
Pb	208	1	He	1.022	1.022	2.024	45112	1.52	1	102.2	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1409353	1.38	1389655	101.42	30	120	
Sc	45	1	He	643291	0.90	628609	102.34	30	120	
Sc	45	2	NoGas	4868159	0.51	4813296	101.14	30	120	
Rh	103	1	He	1926702	1.37	1894469	101.70	30	120	
In	115	1	He	1083111	0.26	1086371	99.70	30	120	
Tb	159	1	He	3241245	0.66	3251379	99.69	30	120	
Ho	165	1	He	3306863	0.76	3312124	99.84	30	120	
Bi	209	1	He	2495794	0.90	2533294	98.52	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:27:08-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.010	266.9	219	44.4	1	
B	11	45	2	NoGas	-11.462	-4.9	43793	1.9	20	
Na	23	45	1	He	47575.009	2.5	66868077	2.3	75200	
Mg	24	45	1	He	47895.599	2.8	38176725	2.1	75200	
Al	27	45	1	He	45805.099	2.6	19652441	2.1	75200	
K	39	45	1	He	47596.057	3.3	33476537	1.9	75200	
Ca	44	45	1	He	48823.937	3.9	1852443	2.4	75200	
Ti	47	45	1	He	962.784	4.2	205641	0.8	1505	
V	51	45	1	He	0.063	24.4	228	41.5	4	
Cr	52	45	1	He	0.639	7.0	5834	3.1	4	
Mn	55	45	1	He	0.417	1.6	2578	3.4	4	
Fe	56	45	1	He	47489.697	3.3	295749428	1.4	75200	
Co	59	103	1	He	0.034	13.4	319	11.5	2	
Ni	60	103	1	He	0.100	21.0	244	17.5	4	
Cu	63	103	1	He	0.340	10.5	2501	8.2	4	
Zn	66	103	1	He	0.088	55.0	1079	3.6	10	
As	75	103	1	He	0.314	4.0	310	2.1	4	
Se	78	103	1	He	0.485	16.9	67	8.1	4	
Sr	88	103	1	He	0.342	2.6	2133	3.3	20	
Mo	95	103	1	He	1062.348	3.0	2930149	2.0	1505	
Ag	107	103	1	He	0.010	4.3	133	4.3	1	
Cd	111	103	1	He	0.048	101.3	975	9.8	1	
Sn	118	115	1	He	0.434	21.5	2787	14.2	20	
Sb	123	115	1	He	0.296	8.1	1296	7.4	1	
Ba	137	115	1	He	0.052	27.6	160	16.3	2	
W	182	209	1	He	0.551	7.4	9651	6.5	20	
Tl	205	209	1	He	0.012	6.4	403	4.1	1	
Pb	208	209	1	He	0.577	0.8	23298	2.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1200114	1.62	1389655	86.36	30	120	
Sc	45	1	He	596769	4.66	628609	94.93	30	120	
Sc	45	2	NoGas	4292056	1.40	4813296	89.17	30	120	
Rh	103	1	He	1642409	1.61	1894469	86.69	30	120	
In	115	1	He	960143	0.55	1086371	88.38	30	120	
Tb	159	1	He	3042108	0.43	3251379	93.56	30	120	
Ho	165	1	He	3085400	0.54	3312124	93.15	30	120	
Bi	209	1	He	2248168	1.93	2533294	88.74	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:30:54-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	101.078	1.254	375994	0.59	100	101.1	79.5	120.5	
B	11	45	2	NoGas	100.636	2.074	331020	0.61	100	100.6	79.5	120.5	
Na	23	45	1	He	49210.061	2.176	66163234	0.64	50000	98.4	79.5	120.5	
Mg	24	45	1	He	49321.803	2.132	37612155	0.84	50000	98.6	79.5	120.5	
Al	27	45	1	He	47366.501	1.843	19443121	1.11	50000	94.7	79.5	120.5	
K	39	45	1	He	49182.483	2.399	33096737	0.45	50000	98.4	79.5	120.5	
Ca	44	45	1	He	49368.800	1.999	1792415	0.88	50000	98.7	79.5	120.5	
Ti	47	45	1	He	1081.600	2.499	221102	0.54	1100	98.3	79.5	120.5	
V	51	45	1	He	99.198	2.481	512172	0.90	100	99.2	79.5	120.5	
Cr	52	45	1	He	100.375	1.954	624388	0.93	100	100.4	79.5	120.5	
Mn	55	45	1	He	97.325	2.281	475957	0.74	100	97.3	79.5	120.5	
Fe	56	45	1	He	49442.188	2.289	294623046	0.54	50000	98.9	79.5	120.5	
Co	59	103	1	He	99.132	2.036	883239	0.17	100	99.1	79.5	120.5	
Ni	60	103	1	He	97.767	2.455	215640	0.59	100	97.8	79.5	120.5	
Cu	63	103	1	He	98.190	3.224	569149	1.10	100	98.2	79.5	120.5	
Zn	66	103	1	He	98.793	2.453	115979	0.32	100	98.8	79.5	120.5	
As	75	103	1	He	100.913	3.262	73111	1.13	100	100.9	79.5	120.5	
Se	78	103	1	He	101.519	2.907	7787	0.87	100	101.5	79.5	120.5	
Sr	88	103	1	He	99.219	2.058	576690	0.57	100	99.2	79.5	120.5	
Mo	95	103	1	He	1195.051	1.893	3307768	3.60	1100	108.6	79.5	120.5	
Ag	107	103	1	He	99.666	2.394	951830	0.43	100	99.7	79.5	120.5	
Cd	111	103	1	He	100.953	3.027	167986	0.90	100	101.0	79.5	120.5	
Sn	118	115	1	He	98.689	0.951	404297	0.48	100	98.7	79.5	120.5	
Sb	123	115	1	He	104.420	0.753	389740	0.44	100	104.4	79.5	120.5	
Ba	137	115	1	He	99.895	0.367	185862	0.21	100	99.9	79.5	120.5	
W	182	209	1	He	102.004	0.070	1189392	0.59	100	102.0	79.5	120.5	
Tl	205	209	1	He	100.627	0.922	3026093	0.47	100	100.6	79.5	120.5	
Pb	208	209	1	He	100.460	0.605	3947295	0.45	100	100.5	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1183046	0.73	1389655	85.13	30	120	
Sc	45	1	He	570687	2.81	628609	90.79	30	120	
Sc	45	2	NoGas	4276262	1.22	4813296	88.84	30	120	
Rh	103	1	He	1647507	2.10	1894469	86.96	30	120	
In	115	1	He	953149	0.47	1086371	87.74	30	120	
Tb	159	1	He	3071043	0.70	3251379	94.45	30	120	
Ho	165	1	He	3098145	0.08	3312124	93.54	30	120	
Bi	209	1	He	2268215	0.62	2533294	89.54	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:34:39-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.586	0.035	195860	0.51	50	97.2	89.5	110.5	
B	11	45	2	NoGas	49.122	3.699	210760	1.04	50	98.2	89.5	110.5	
Na	23	45	1	He	24998.945	2.053	35143825	1.01	25000	100.0	89.5	110.5	
Mg	24	45	1	He	24999.810	2.101	19913266	0.51	25000	100.0	89.5	110.5	
Al	27	45	1	He	249.822	1.085	108386	1.65	250	99.9	89.5	110.5	
K	39	45	1	He	25040.777	2.717	17615323	0.60	25000	100.2	89.5	110.5	
Ca	44	45	1	He	24649.039	1.708	934958	0.52	25000	98.6	89.5	110.5	
Ti	47	45	1	He	51.942	4.038	11111	2.62	50	103.9	89.5	110.5	
V	51	45	1	He	49.828	1.657	268705	1.63	50	99.7	89.5	110.5	
Cr	52	45	1	He	50.550	2.100	329268	0.51	50	101.1	89.5	110.5	
Mn	55	45	1	He	245.259	2.139	1252110	0.12	250	98.1	89.5	110.5	
Fe	56	45	1	He	12628.638	2.669	78600455	0.56	12500	101.0	89.5	110.5	
Co	59	103	1	He	49.275	1.366	467542	0.30	50	98.5	89.5	110.5	
Ni	60	103	1	He	48.844	0.329	114761	1.34	50	97.7	89.5	110.5	
Cu	63	103	1	He	49.517	1.650	305985	0.18	50	99.0	89.5	110.5	
Zn	66	103	1	He	49.488	1.292	62394	0.35	50	99.0	89.5	110.5	
As	75	103	1	He	49.749	1.051	38437	0.91	50	99.5	89.5	110.5	
Se	78	103	1	He	50.528	0.775	4144	1.68	50	101.1	89.5	110.5	
Sr	88	103	1	He	49.182	1.669	304498	0.70	50	98.4	89.5	110.5	
Mo	95	103	1	He	76.388	6.926	225001	5.28	50	152.8	89.5	110.5	CCV Failed
Ag	107	103	1	He	51.105	1.873	519776	0.26	50	102.2	89.5	110.5	
Cd	111	103	1	He	51.328	2.267	91429	0.64	50	102.7	89.5	110.5	
Sn	118	115	1	He	49.592	1.144	214721	1.18	50	99.2	89.5	110.5	
Sb	123	115	1	He	51.596	0.991	203134	0.70	50	103.2	89.5	110.5	
Ba	137	115	1	He	49.657	1.288	97438	0.92	50	99.3	89.5	110.5	
W	182	209	1	He	51.806	1.332	627968	0.67	50	103.6	89.5	110.5	
Tl	205	209	1	He	46.712	0.288	1456487	0.39	50	93.4	89.5	110.5	
Pb	208	209	1	He	48.090	0.543	1959580	0.37	50	96.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1281336	0.53	1389655	92.21	30	120	
Sc	45	1	He	596021	2.21	628609	94.82	30	120	
Sc	45	2	NoGas	4530389	1.40	4813296	94.12	30	120	
Rh	103	1	He	1754244	1.61	1894469	92.60	30	120	
In	115	1	He	1004908	0.37	1086371	92.50	30	120	
Tb	159	1	He	3215738	1.34	3251379	98.90	30	120	
Ho	165	1	He	3251002	1.30	3312124	98.15	30	120	
Bi	209	1	He	2351695	0.66	2533294	92.83	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:38:32-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.009	193.4	233	33.3	1	
B	11	45	2	NoGas	-12.896	-1.5	41788	1.6	20	
Na	23	45	1	He	5.011	54.0	76205	2.8	400	
Mg	24	45	1	He	2.827	20.0	3397	10.6	1000	
Al	27	45	1	He	1.574	16.6	1867	7.7	50	
K	39	45	1	He	11.301	12.8	37933	0.9	1000	
Ca	44	45	1	He	7.724	26.8	654	11.8	1000	
Ti	47	45	1	He	0.232	22.5	70	17.2	20	
V	51	45	1	He	0.027	183.2	24	1066.9	2	
Cr	52	45	1	He	0.015	136.0	1716	5.5	2	
Mn	55	45	1	He	0.256	17.3	1680	10.9	2	
Fe	56	45	1	He	17.478	26.3	108661	23.1	50	
Co	59	103	1	He	0.006	93.1	76	69.8	1	
Ni	60	103	1	He	0.005	125.3	39	39.6	2	
Cu	63	103	1	He	0.041	21.1	867	6.0	2	
Zn	66	103	1	He	0.191	25.3	1338	4.1	20	
As	75	103	1	He	0.128	17.3	196	8.3	2	
Se	78	103	1	He	0.142	33.8	45	8.3	2	
Sr	88	103	1	He	0.002	378.2	180	25.9	10	
Mo	95	103	1	He	3.587	11.9	11123	11.0	2	CCB Failed
Ag	107	103	1	He	0.010	27.1	146	18.5	0.2	
Cd	111	103	1	He	-0.036	-73.9	932	6.1	0.2	
Sn	118	115	1	He	0.316	10.9	2467	5.5	10	
Sb	123	115	1	He	0.673	13.6	2915	12.4	1	
Ba	137	115	1	He	-0.004	-265.4	59	38.5	5	
W	182	209	1	He	1.078	15.6	17065	13.6	10	
Tl	205	209	1	He	0.049	12.8	1648	13.6	0.5	
Pb	208	209	1	He	0.024	6.2	1920	4.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1280643	1.61	1389655	92.16	30	120	
Sc	45	1	He	572093	2.01	628609	91.01	30	120	
Sc	45	2	NoGas	4471198	1.39	4813296	92.89	30	120	
Rh	103	1	He	1833027	0.80	1894469	96.76	30	120	
In	115	1	He	1031302	0.83	1086371	94.93	30	120	
Tb	159	1	He	3199331	1.45	3251379	98.40	30	120	
Ho	165	1	He	3257406	0.21	3312124	98.35	30	120	
Bi	209	1	He	2437844	1.48	2533294	96.23	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-b
Data File Name	014SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:42:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.015	0.015	82.64	226	0.01	10000	
B	11	45	2	NoGas	36.880	36.880	1.22	160960	0.02	300	
Na	23	45	1	He	240625.405	240625.405	3.55	311644054	0.08	500000	
Mg	24	45	1	He	20904.377	20904.377	4.50	15365623	0.14	500000	
Al	27	45	1	He	18.348	18.348	5.47	8430	0.22	200000	
K	39	45	1	He	6637.978	6637.978	5.32	4329871	0.15	500000	
Ca	44	45	1	He	54849.300	54849.300	2.91	1920130	2.86	500000	
Ti	47	45	1	He	0.416	0.416	12.52	103	0.40	2500	
V	51	45	1	He	0.201	0.201	136.46	872	0.02	10000	
Cr	52	45	1	He	0.738	0.738	9.95	5971	0.01	10000	
Mn	55	45	1	He	8186.954	8186.954	3.63	38565246	0.02	10000	
Fe	56	45	1	He	15046.094	15046.094	4.35	86425245	0.02	200000	
Co	59	103	1	He	573.755	573.755	0.54	4842874	0.01	10000	
Ni	60	103	1	He	31.674	31.674	2.89	66193	0.05	10000	
Cu	63	103	1	He	3.491	3.491	2.62	19662	0.02	10000	
Zn	66	103	1	He	22.649	22.649	2.32	25904	0.09	10000	
As	75	103	1	He	0.856	0.856	4.12	666	0.13	10000	
Se	78	103	1	He	0.372	0.372	9.45	55	0.67	10000	
Sr	88	103	1	He	207.762	207.762	1.17	1143805	0.02	10000	
Mo	95	103	1	He	3.281	3.281	0.89	8670	0.04	2000	
Ag	107	103	1	He	0.014	0.014	35.02	160	0.01	300	
Cd	111	103	1	He	0.030	0.030	105.97	896	0.00	4000	
Sn	118	115	1	He	0.889	0.889	29.37	4316	0.02	2000	
Sb	123	115	1	He	0.668	0.668	3.72	2495	0.03	300	
Ba	137	115	1	He	157.766	157.766	0.49	273646	0.06	10000	
W	182	209	1	He	0.453	0.453	7.54	8065	0.01	2500	
Tl	205	209	1	He	0.523	0.523	3.82	14794	0.00	5000	
Pb	208	209	1	He	0.203	0.203	0.78	8264	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1136425	1.92	1389655	81.78	30	120	
Sc	45	1	He	550511	4.17	628609	87.58	30	120	
Sc	45	2	NoGas	4107134	1.20	4813296	85.33	30	120	
Rh	103	1	He	1560396	0.95	1894469	82.37	30	120	
In	115	1	He	888650	0.87	1086371	81.80	30	120	
Tb	159	1	He	2963282	0.99	3251379	91.14	30	120	
Ho	165	1	He	3043737	1.69	3312124	91.90	30	120	
Bi	209	1	He	2126730	0.85	2533294	83.95	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49409-g-6-b@5
Data File Name	015SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:46:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.012	0.012	143.39	230	0.01	10000	
B	11	45	2	NoGas	-4.570	-4.570	-8.71	62238	-0.01	300	
Na	23	45	1	He	51151.217	51151.217	0.91	68702536	0.07	500000	
Mg	24	45	1	He	4485.943	4485.943	0.60	3418666	0.13	500000	
Al	27	45	1	He	4.146	4.146	3.18	2912	0.14	200000	
K	39	45	1	He	1417.090	1417.090	0.48	982064	0.14	500000	
Ca	44	45	1	He	11495.790	11495.790	0.87	417227	2.76	500000	
Ti	47	45	1	He	0.066	0.066	62.82	36	0.18	2500	
V	51	45	1	He	0.070	0.070	175.42	250	0.03	10000	
Cr	52	45	1	He	0.159	0.159	8.01	2604	0.01	10000	
Mn	55	45	1	He	1781.144	1781.144	0.57	8694618	0.02	10000	
Fe	56	45	1	He	3258.045	3258.045	0.74	19399908	0.02	200000	
Co	59	103	1	He	115.801	115.801	1.31	1081651	0.01	10000	
Ni	60	103	1	He	6.552	6.552	2.27	15174	0.04	10000	
Cu	63	103	1	He	0.754	0.754	0.65	5143	0.01	10000	
Zn	66	103	1	He	4.703	4.703	1.68	6767	0.07	10000	
As	75	103	1	He	0.164	0.164	2.08	212	0.08	10000	
Se	78	103	1	He	0.104	0.104	106.95	40	0.26	10000	
Sr	88	103	1	He	41.417	41.417	1.29	252461	0.02	10000	
Mo	95	103	1	He	0.960	0.960	3.62	2864	0.03	2000	
Ag	107	103	1	He	0.005	0.005	43.32	92	0.01	300	
Cd	111	103	1	He	-0.006	-0.006	-551.92	929	0.00	4000	
Sn	118	115	1	He	-0.025	-0.025	-151.69	922	0.00	2000	
Sb	123	115	1	He	0.106	0.106	16.58	602	0.02	300	
Ba	137	115	1	He	31.091	31.091	1.15	60041	0.05	10000	
W	182	209	1	He	0.154	0.154	15.49	5305	0.00	2500	
Tl	205	209	1	He	0.108	0.108	1.71	3402	0.00	5000	
Pb	208	209	1	He	0.041	0.041	4.41	2537	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1218206	0.70	1389655	87.66	30	120	
Sc	45	1	He	569904	0.53	628609	90.66	30	120	
Sc	45	2	NoGas	4340533	0.22	4813296	90.18	30	120	
Rh	103	1	He	1726808	0.84	1894469	91.15	30	120	
In	115	1	He	988601	0.42	1086371	91.00	30	120	
Tb	159	1	He	3130184	0.81	3251379	96.27	30	120	
Ho	165	1	He	3203500	0.94	3312124	96.72	30	120	
Bi	209	1	He	2348175	0.26	2533294	92.69	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49409-g-6-b
Data File Name	016SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:49:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	986.862	986.862	0.90	3680941	0.03	10000	
B	11	45	2	NoGas	157.753	157.753	1.70	480867	0.03	300	
Na	23	45	1	He	249242.755	249242.755	1.71	326983780	0.08	500000	
Mg	24	45	1	He	30797.471	30797.471	1.56	22935932	0.13	500000	
Al	27	45	1	He	9897.013	9897.013	1.43	3968216	0.25	200000	
K	39	45	1	He	16628.555	16628.555	2.80	10946576	0.15	500000	
Ca	44	45	1	He	63453.046	63453.046	2.21	2249645	2.82	500000	
Ti	47	45	1	He	102.691	102.691	0.87	20526	0.50	2500	
V	51	45	1	He	1023.882	1023.882	2.38	5163400	0.02	10000	
Cr	52	45	1	He	1013.382	1013.382	1.78	6141387	0.02	10000	
Mn	55	45	1	He	9097.961	9097.961	1.35	43415814	0.02	10000	
Fe	56	45	1	He	25015.684	25015.684	1.86	145578274	0.02	200000	
Co	59	103	1	He	1568.075	1568.075	1.32	13438514	0.01	10000	
Ni	60	103	1	He	1065.034	1065.034	1.38	2259499	0.05	10000	
Cu	63	103	1	He	1035.638	1035.638	1.96	5769891	0.02	10000	
Zn	66	103	1	He	965.278	965.278	1.56	1081777	0.09	10000	
As	75	103	1	He	999.548	999.548	1.16	695986	0.14	10000	
Se	78	103	1	He	966.048	966.048	1.36	71038	1.36	10000	
Sr	88	103	1	He	1260.284	1260.284	2.56	7043760	0.02	10000	
Mo	95	103	1	He	118.119	118.119	0.54	314423	0.04	2000	
Ag	107	103	1	He	103.032	103.032	1.05	946545	0.01	300	
Cd	111	103	1	He	1082.334	1082.334	1.28	1724207	0.06	4000	
Sn	118	115	1	He	1155.086	1155.086	1.00	4327261	0.03	2000	
Sb	123	115	1	He	113.155	113.155	0.52	387070	0.03	300	
Ba	137	115	1	He	1326.152	1326.152	0.43	2260691	0.06	10000	
W	182	209	1	He	112.051	112.051	1.01	1229998	0.01	2500	
Tl	205	209	1	He	244.575	244.575	0.52	6926042	0.00	5000	
Pb	208	209	1	He	1051.534	1051.534	1.01	38898633	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1186816	1.86	1389655	85.40	30	120	
Sc	45	1	He	557180	1.48	628609	88.64	30	120	
Sc	45	2	NoGas	4306836	1.21	4813296	89.48	30	120	
Rh	103	1	He	1584434	1.25	1894469	83.63	30	120	
In	115	1	He	873561	0.08	1086371	80.41	30	120	
Tb	159	1	He	3019260	0.70	3251379	92.86	30	120	
Ho	165	1	He	3064942	0.19	3312124	92.54	30	120	
Bi	209	1	He	2135970	1.02	2533294	84.32	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-c ms
Data File Name	017SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:53:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1013.846	1013.846	1.90	3644245	0.03	10000	
B	11	45	2	NoGas	171.843	171.843	1.33	505333	0.03	300	
Na	23	45	1	He	289377.436	289377.436	0.93	367658667	0.08	500000	
Mg	24	45	1	He	34223.811	34223.811	0.85	24683817	0.14	500000	
Al	27	45	1	He	10042.517	10042.517	1.50	3899193	0.26	200000	
K	39	45	1	He	17989.975	17989.975	0.34	11469252	0.16	500000	
Ca	44	45	1	He	73314.311	73314.311	1.03	2517677	2.91	500000	
Ti	47	45	1	He	105.276	105.276	0.17	20376	0.52	2500	
V	51	45	1	He	1062.184	1062.184	2.10	5187487	0.02	10000	
Cr	52	45	1	He	1051.066	1051.066	1.69	6168699	0.02	10000	
Mn	55	45	1	He	10467.474	10467.474	1.24	48370638	0.02	10000	>LDR
Fe	56	45	1	He	27846.310	27846.310	0.84	156944705	0.02	200000	
Co	59	103	1	He	1688.274	1688.274	1.31	14255607	0.01	10000	
Ni	60	103	1	He	1094.521	1094.521	0.22	2287959	0.05	10000	
Cu	63	103	1	He	1035.153	1035.153	1.20	5682620	0.02	10000	
Zn	66	103	1	He	961.793	961.793	0.60	1062090	0.09	10000	
As	75	103	1	He	1001.520	1001.520	0.36	687118	0.15	10000	
Se	78	103	1	He	965.943	965.943	0.46	69988	1.38	10000	
Sr	88	103	1	He	1298.880	1298.880	1.57	7153137	0.02	10000	
Mo	95	103	1	He	123.259	123.259	1.44	323251	0.04	2000	
Ag	107	103	1	He	105.130	105.130	0.85	951598	0.01	300	
Cd	111	103	1	He	1096.298	1096.298	0.78	1720769	0.06	4000	
Sn	118	115	1	He	1193.254	1193.254	0.98	4360614	0.03	2000	
Sb	123	115	1	He	114.802	114.802	0.62	383076	0.03	300	
Ba	137	115	1	He	1390.671	1390.671	1.52	2312513	0.06	10000	
W	182	209	1	He	119.879	119.879	0.39	1268711	0.01	2500	
Tl	205	209	1	He	258.145	258.145	1.10	7048353	0.00	5000	
Pb	208	209	1	He	1092.406	1092.406	1.14	38963498	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1143588	0.09	1389655	82.29	30	120	
Sc	45	1	He	539572	1.42	628609	85.84	30	120	
Sc	45	2	NoGas	4207237	0.35	4813296	87.41	30	120	
Rh	103	1	He	1561040	0.71	1894469	82.40	30	120	
In	115	1	He	852163	0.43	1086371	78.44	30	120	
Tb	159	1	He	3011838	0.72	3251379	92.63	30	120	
Ho	165	1	He	3057165	0.89	3312124	92.30	30	120	
Bi	209	1	He	2059526	1.20	2533294	81.30	30	120	

Sample Report

Sample Table

Sample Name	240-49409-g-6-d msd
Data File Name	018SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T15:57:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	920.216	920.216	1.69	3409666	0.03	10000	
B	11	45	2	NoGas	159.334	159.334	2.00	473821	0.03	300	
Na	23	45	1	He	266822.863	266822.863	4.25	337934342	0.08	500000	
Mg	24	45	1	He	31635.959	31635.959	3.17	22749000	0.14	500000	
Al	27	45	1	He	9129.562	9129.562	2.31	3534899	0.26	200000	
K	39	45	1	He	16546.457	16546.457	3.55	10518298	0.16	500000	
Ca	44	45	1	He	66727.768	66727.768	1.68	2284829	2.92	500000	
Ti	47	45	1	He	96.667	96.667	1.85	18657	0.52	2500	
V	51	45	1	He	958.252	958.252	2.49	4667226	0.02	10000	
Cr	52	45	1	He	964.508	964.508	1.80	5645293	0.02	10000	
Mn	55	45	1	He	9687.903	9687.903	2.70	44640218	0.02	10000	
Fe	56	45	1	He	25449.042	25449.042	2.50	143019519	0.02	200000	
Co	59	103	1	He	1550.774	1550.774	2.47	13031736	0.01	10000	
Ni	60	103	1	He	1010.464	1010.464	2.07	2102088	0.05	10000	
Cu	63	103	1	He	964.500	964.500	2.36	5269495	0.02	10000	
Zn	66	103	1	He	894.352	894.352	1.63	982986	0.09	10000	
As	75	103	1	He	922.886	922.886	1.62	630167	0.15	10000	
Se	78	103	1	He	900.677	900.677	2.57	64943	1.39	10000	
Sr	88	103	1	He	1186.578	1186.578	0.94	6504853	0.02	10000	
Mo	95	103	1	He	112.712	112.712	1.26	294224	0.04	2000	
Ag	107	103	1	He	97.499	97.499	1.67	878353	0.01	300	
Cd	111	103	1	He	929.874	929.874	1.94	1452721	0.06	4000	
Sn	118	115	1	He	1075.364	1075.364	0.44	3987359	0.03	2000	
Sb	123	115	1	He	103.204	103.204	0.52	349423	0.03	300	
Ba	137	115	1	He	1244.879	1244.879	1.03	2100361	0.06	10000	
W	182	209	1	He	109.258	109.258	0.45	1168577	0.01	2500	
Tl	205	209	1	He	234.430	234.430	1.80	6467115	0.00	5000	
Pb	208	209	1	He	990.232	990.232	1.38	35686691	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1178927	0.77	1389655	84.84	30	120	
Sc	45	1	He	538177	2.33	628609	85.61	30	120	
Sc	45	2	NoGas	4208293	1.82	4813296	87.43	30	120	
Rh	103	1	He	1553948	2.04	1894469	82.03	30	120	
In	115	1	He	864615	0.51	1086371	79.59	30	120	
Tb	159	1	He	2991750	1.51	3251379	92.01	30	120	
Ho	165	1	He	3105741	0.09	3312124	93.77	30	120	
Bi	209	1	He	2081013	1.35	2533294	82.15	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177242/1-a
Data File Name	019_Blk.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:00:40-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.254	3.6	1189	1.9	1	
B	11	45	2	NoGas	-10.308	-8.8	47841	4.6	20	
Na	23	45	1	He	150.845	7.3	278994	7.3	400	
Mg	24	45	1	He	63.827	2.6	51161	1.1	1000	
Al	27	45	1	He	15.430	2.4	7741	3.9	50	
K	39	45	1	He	28.231	0.9	50471	2.1	1000	
Ca	44	45	1	He	190.586	1.4	7474	2.0	1000	
Ti	47	45	1	He	0.210	21.6	67	13.2	20	
V	51	45	1	He	0.346	58.7	1728	64.4	2	
Cr	52	45	1	He	1.087	3.4	8579	3.9	2	
Mn	55	45	1	He	1.757	14.4	9257	15.6	2	
Fe	56	45	1	He	26.908	9.6	169272	11.3	50	
Co	59	103	1	He	0.213	16.3	2163	14.7	1	
Ni	60	103	1	He	0.309	12.7	799	10.7	2	
Cu	63	103	1	He	0.727	12.2	5384	9.3	2	
Zn	66	103	1	He	4.440	3.2	6975	3.4	20	
As	75	103	1	He	1.273	7.3	1139	5.2	2	
Se	78	103	1	He	1.106	16.1	130	11.1	2	
Sr	88	103	1	He	0.554	6.0	3819	4.2	10	
Mo	95	103	1	He	1.089	12.6	3498	11.1	2	
Ag	107	103	1	He	0.022	18.2	280	13.7	0.2	
Cd	111	103	1	He	0.040	26.6	1092	0.7	0.2	
Sn	118	115	1	He	2.083	22.3	9985	19.5	10	
Sb	123	115	1	He	0.420	7.2	1839	6.0	1	
Ba	137	115	1	He	1.214	5.6	2438	5.1	5	
W	182	209	1	He	1.400	17.6	21263	13.0	10	
Tl	205	209	1	He	0.220	31.7	7210	29.9	0.5	
Pb	208	209	1	He	0.386	15.3	17356	12.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1252814	1.32	1389655	90.15	30	120	
Sc	45	1	He	584942	1.90	628609	93.05	30	120	
Sc	45	2	NoGas	4390531	0.93	4813296	91.22	30	120	
Rh	103	1	He	1868251	1.76	1894469	98.62	30	120	
In	115	1	He	1001966	0.48	1086371	92.23	30	120	
Tb	159	1	He	3189404	0.64	3251379	98.09	30	120	
Ho	165	1	He	3255841	0.21	3312124	98.30	30	120	
Bi	209	1	He	2463993	1.82	2533294	97.26	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177242/2-a
Data File Name	020_LCS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:04:32-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1051.213	1051.213	0.976	4040870	1.05	1000	105.1	79.5	120.5	
B	11	2	NoGas	123.483	123.483	1.427	388923	0.64	100	123.5	79.5	120.5	LCS Failed
Na	23	1	He	10856.350	10856.350	3.245	14327084	0.84	10000	108.6	79.5	120.5	
Mg	24	1	He	10689.057	10689.057	2.901	7972614	0.47	10000	106.9	79.5	120.5	
Al	27	1	He	9954.341	9954.341	1.473	3998357	2.45	10000	99.5	79.5	120.5	
K	39	1	He	10518.986	10518.986	2.640	6946589	0.46	10000	105.2	79.5	120.5	
Ca	44	1	He	9644.927	9644.927	2.018	342797	0.82	10000	96.4	79.5	120.5	
Ti	47	1	He	107.033	107.033	1.977	21424	1.72	100	107.0	79.5	120.5	
V	51	1	He	1081.906	1081.906	2.489	5464852	1.15	1000	108.2	79.5	120.5	
Cr	52	1	He	1101.677	1101.677	2.908	6686173	1.09	1000	110.2	79.5	120.5	
Mn	55	1	He	1071.052	1071.052	2.997	5118275	0.42	1000	107.1	79.5	120.5	
Fe	56	1	He	10806.171	10806.171	2.144	62988464	0.70	10000	108.1	79.5	120.5	
Co	59	1	He	1038.584	1038.584	1.273	9658862	0.55	1000	103.9	79.5	120.5	
Ni	60	1	He	1094.364	1094.364	2.888	2518947	1.15	1000	109.4	79.5	120.5	
Cu	63	1	He	1085.899	1085.899	3.356	6564548	2.34	1000	108.6	79.5	120.5	
Zn	66	1	He	1030.441	1030.441	2.123	1252999	0.36	1000	103.0	79.5	120.5	
As	75	1	He	1013.798	1013.798	1.978	765959	0.24	1000	101.4	79.5	120.5	
Se	78	1	He	1051.754	1051.754	2.408	83914	0.66	1000	105.2	79.5	120.5	
Sr	88	1	He	1028.260	1028.260	1.878	6236481	0.08	1000	102.8	79.5	120.5	
Mo	95	1	He	113.031	113.031	2.261	326455	0.72	100	113.0	79.5	120.5	
Ag	107	1	He	106.787	106.787	1.819	1064501	0.21	100	106.8	79.5	120.5	
Cd	111	1	He	1159.008	1159.008	4.637	2002754	2.92	1000	115.9	79.5	120.5	
Sn	118	1	He	1203.097	1203.097	1.202	4728303	1.98	1000	120.3	79.5	120.5	
Sb	123	1	He	115.747	115.747	0.291	415337	0.74	100	115.7	79.5	120.5	
Ba	137	1	He	1175.772	1175.772	2.560	2102288	1.71	1000	117.6	79.5	120.5	
W	182	1	He	110.470	110.470	0.951	1310735	0.87	100	110.5	79.5	120.5	
Tl	205	1	He	262.492	262.492	1.624	8034426	1.75	250	105.0	79.5	120.5	
Pb	208	1	He	1094.486	1094.486	1.099	43761000	0.77	1000	109.4	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1222988	0.14	1389655	88.01	30	120	
Sc	45	1	He	558171	2.62	628609	88.79	30	120	
Sc	45	2	NoGas	4268640	0.88	4813296	88.68	30	120	
Rh	103	1	He	1719475	1.81	1894469	90.76	30	120	
In	115	1	He	916381	0.87	1086371	84.35	30	120	
Tb	159	1	He	3141096	1.80	3251379	96.61	30	120	
Ho	165	1	He	3177866	0.75	3312124	95.95	30	120	
Bi	209	1	He	2308590	0.63	2533294	91.13	30	120	

Sample Report

Sample Table

Sample Name	190-7091-a-1-b
Data File Name	021SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:08:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.265	0.265	24.70	1174	0.02	10000	
B	11	45	2	NoGas	51.692	51.692	0.52	206595	0.03	300	
Na	23	45	1	He	209959.581	209959.581	2.27	273178248	0.08	500000	
Mg	24	45	1	He	3149.004	3149.004	1.62	2326950	0.14	500000	
Al	27	45	1	He	360.889	360.889	1.88	144632	0.25	200000	
K	39	45	1	He	8336.000	8336.000	2.40	5457393	0.15	500000	
Ca	44	45	1	He	43921.052	43921.052	2.37	1544351	2.84	500000	
Ti	47	45	1	He	2.177	2.177	10.80	452	0.48	2500	
V	51	45	1	He	4.543	4.543	2.75	22618	0.02	10000	
Cr	52	45	1	He	2.152	2.152	4.00	14499	0.01	10000	
Mn	55	45	1	He	11.261	11.261	2.33	53703	0.02	10000	
Fe	56	45	1	He	492.024	492.024	1.90	2844150	0.02	200000	
Co	59	103	1	He	0.490	0.490	6.64	4452	0.01	10000	
Ni	60	103	1	He	2.417	2.417	4.33	5439	0.04	10000	
Cu	63	103	1	He	25.408	25.408	1.64	149978	0.02	10000	
Zn	66	103	1	He	91.423	91.423	1.04	109070	0.08	10000	
As	75	103	1	He	2.930	2.930	7.33	2237	0.13	10000	
Se	78	103	1	He	2.779	2.779	13.21	246	1.13	10000	
Sr	88	103	1	He	574.809	574.809	2.21	3391618	0.02	10000	
Mo	95	103	1	He	44.143	44.143	0.82	124100	0.04	2000	
Ag	107	103	1	He	0.032	0.032	8.55	346	0.01	300	
Cd	111	103	1	He	0.201	0.201	24.43	1249	0.02	4000	
Sn	118	115	1	He	4.089	4.089	10.60	17239	0.02	2000	
Sb	123	115	1	He	0.999	0.999	5.27	3809	0.03	300	
Ba	137	115	1	He	18.553	18.553	1.36	33679	0.06	10000	
W	182	209	1	He	1.353	1.353	16.54	25135	0.01	2500	
Tl	205	209	1	He	0.189	0.189	32.48	7555	0.00	5000	
Pb	208	209	1	He	0.663	0.663	5.55	35467	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1192695	1.41	1389655	85.83	30	120	
Sc	45	1	He	552585	1.26	628609	87.91	30	120	
Sc	45	2	NoGas	4297604	1.12	4813296	89.29	30	120	
Rh	103	1	He	1672709	1.36	1894469	88.29	30	120	
In	115	1	He	928605	0.72	1086371	85.48	30	120	
Tb	159	1	He	3087423	0.63	3251379	94.96	30	120	
Ho	165	1	He	3141662	0.78	3312124	94.85	30	120	
Bi	209	1	He	2994034	1.21	2533294	118.19	30	120	

Sample Report

Sample Table

Sample Name	SD 190-7091-a-1-b@5
Data File Name	022SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:11:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.136	0.136	25.87	756	0.02	10000	
B	11	45	2	NoGas	1.847	1.847	17.87	83509	0.00	300	
Na	23	45	1	He	43967.295	43967.295	0.83	61564005	0.07	500000	
Mg	24	45	1	He	648.564	648.564	2.05	516240	0.13	500000	
Al	27	45	1	He	77.086	77.086	3.47	34203	0.23	200000	
K	39	45	1	He	1804.927	1804.927	2.20	1295017	0.14	500000	
Ca	44	45	1	He	9079.419	9079.419	3.08	343498	2.64	500000	
Ti	47	45	1	He	1.114	1.114	98.78	260	0.43	2500	
V	51	45	1	He	0.967	0.967	8.40	5085	0.02	10000	
Cr	52	45	1	He	0.500	0.500	7.21	4916	0.01	10000	
Mn	55	45	1	He	2.603	2.603	6.04	13683	0.02	10000	
Fe	56	45	1	He	100.005	100.005	2.48	625188	0.02	200000	
Co	59	103	1	He	0.136	0.136	2.92	1393	0.01	10000	
Ni	60	103	1	He	0.531	0.531	8.11	1356	0.04	10000	
Cu	63	103	1	He	5.296	5.296	2.38	35434	0.01	10000	
Zn	66	103	1	He	19.752	19.752	3.96	27209	0.07	10000	
As	75	103	1	He	0.527	0.527	11.84	528	0.10	10000	
Se	78	103	1	He	0.437	0.437	12.23	72	0.61	10000	
Sr	88	103	1	He	108.467	108.467	2.73	715541	0.02	10000	
Mo	95	103	1	He	8.851	8.851	1.75	27882	0.03	2000	
Ag	107	103	1	He	0.013	0.013	12.04	181	0.01	300	
Cd	111	103	1	He	0.001	0.001	815.62	1020	0.00	4000	
Sn	118	115	1	He	0.587	0.587	7.22	3727	0.02	2000	
Sb	123	115	1	He	0.260	0.260	5.11	1268	0.02	300	
Ba	137	115	1	He	3.699	3.699	5.85	7626	0.05	10000	
W	182	209	1	He	0.348	0.348	13.69	8599	0.00	2500	
Tl	205	209	1	He	0.043	0.043	5.79	1581	0.00	5000	
Pb	208	209	1	He	0.227	0.227	7.56	11366	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1302580	0.61	1389655	93.73	30	120	
Sc	45	1	He	594056	1.24	628609	94.50	30	120	
Sc	45	2	NoGas	4592088	0.70	4813296	95.40	30	120	
Rh	103	1	He	1869899	1.45	1894469	98.70	30	120	
In	115	1	He	1047656	1.43	1086371	96.44	30	120	
Tb	159	1	He	3289468	0.46	3251379	101.17	30	120	
Ho	165	1	He	3362173	0.69	3312124	101.51	30	120	
Bi	209	1	He	2646095	1.96	2533294	104.45	30	120	

Sample Report

Sample Table

Sample Name	PDS 190-7091-a-1-b
Data File Name	023SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:15:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1000.340	1000.340	1.28	3666403	0.03	10000	
B	11	45	2	NoGas	172.692	172.692	1.34	510344	0.03	300	
Na	23	45	1	He	206841.673	206841.673	4.15	272140893	0.08	500000	
Mg	24	45	1	He	13073.577	13073.577	2.37	9768983	0.13	500000	
Al	27	45	1	He	10124.039	10124.039	3.00	4071611	0.25	200000	
K	39	45	1	He	17714.261	17714.261	2.70	11697659	0.15	500000	
Ca	44	45	1	He	51270.485	51270.485	3.42	1823331	2.81	500000	
Ti	47	45	1	He	105.978	105.978	2.46	21264	0.50	2500	
V	51	45	1	He	1016.715	1016.715	1.65	5145066	0.02	10000	
Cr	52	45	1	He	1017.889	1017.889	2.63	6188651	0.02	10000	
Mn	55	45	1	He	986.202	986.202	2.62	4721192	0.02	10000	
Fe	56	45	1	He	10602.008	10602.008	2.54	61899509	0.02	200000	
Co	59	103	1	He	1003.311	1003.311	1.26	8680188	0.01	10000	
Ni	60	103	1	He	1031.421	1031.421	1.26	2209011	0.05	10000	
Cu	63	103	1	He	1048.345	1048.345	1.95	5896301	0.02	10000	
Zn	66	103	1	He	1027.107	1027.107	1.43	1161963	0.09	10000	
As	75	103	1	He	985.612	985.612	1.27	692798	0.14	10000	
Se	78	103	1	He	966.710	966.710	1.28	71763	1.35	10000	
Sr	88	103	1	He	1599.019	1599.019	1.95	9022127	0.02	10000	
Mo	95	103	1	He	158.953	158.953	0.62	427125	0.04	2000	
Ag	107	103	1	He	104.371	104.371	1.25	967940	0.01	300	
Cd	111	103	1	He	1078.640	1078.640	2.63	1734570	0.06	4000	
Sn	118	115	1	He	1186.492	1186.492	1.01	4436388	0.03	2000	
Sb	123	115	1	He	113.133	113.133	1.01	386253	0.03	300	
Ba	137	115	1	He	1188.666	1188.666	1.07	2022469	0.06	10000	
W	182	209	1	He	85.089	85.089	0.91	1263125	0.01	2500	
Tl	205	209	1	He	191.719	191.719	0.90	7335852	0.00	5000	
Pb	208	209	1	He	793.174	793.174	1.27	39646871	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1166200	1.27	1389655	83.92	30	120	
Sc	45	1	He	559180	3.26	628609	88.96	30	120	
Sc	45	2	NoGas	4231104	0.58	4813296	87.90	30	120	
Rh	103	1	He	1599471	1.04	1894469	84.43	30	120	
In	115	1	He	871936	0.90	1086371	80.26	30	120	
Tb	159	1	He	3043422	0.65	3251379	93.60	30	120	
Ho	165	1	He	3133634	0.62	3312124	94.61	30	120	
Bi	209	1	He	2886166	1.07	2533294	113.93	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	024_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:19:19-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.264	1.672	193287	1.78	50	94.5	89.5	110.5	
B	11	45	2	NoGas	40.579	1.639	195654	1.47	50	81.2	89.5	110.5	CCV Failed
Na	23	45	1	He	25050.504	2.360	37476388	2.57	25000	100.2	89.5	110.5	
Mg	24	45	1	He	24694.540	4.639	20917388	0.25	25000	98.8	89.5	110.5	
Al	27	45	1	He	241.169	4.030	111316	0.91	250	96.5	89.5	110.5	
K	39	45	1	He	24491.645	4.519	18324756	0.18	25000	98.0	89.5	110.5	
Ca	44	45	1	He	24023.426	3.255	969407	1.57	25000	96.1	89.5	110.5	
Ti	47	45	1	He	49.229	6.103	11197	1.49	50	98.5	89.5	110.5	
V	51	45	1	He	49.375	3.475	283213	1.32	50	98.8	89.5	110.5	
Cr	52	45	1	He	49.721	3.383	344575	1.37	50	99.4	89.5	110.5	
Mn	55	45	1	He	238.977	3.791	1297776	0.88	250	95.6	89.5	110.5	
Fe	56	45	1	He	12342.095	3.884	81714806	0.78	12500	98.7	89.5	110.5	
Co	59	103	1	He	49.084	0.991	492547	1.42	50	98.2	89.5	110.5	
Ni	60	103	1	He	49.498	0.971	122973	0.81	50	99.0	89.5	110.5	
Cu	63	103	1	He	49.587	1.175	324062	1.31	50	99.2	89.5	110.5	
Zn	66	103	1	He	48.732	1.057	64993	0.89	50	97.5	89.5	110.5	
As	75	103	1	He	49.633	0.422	40553	1.04	50	99.3	89.5	110.5	
Se	78	103	1	He	49.762	1.402	4316	1.81	50	99.5	89.5	110.5	
Sr	88	103	1	He	47.917	0.547	313756	1.07	50	95.8	89.5	110.5	
Mo	95	103	1	He	51.610	1.330	160880	0.63	50	103.2	89.5	110.5	
Ag	107	103	1	He	50.286	0.842	540925	1.32	50	100.6	89.5	110.5	
Cd	111	103	1	He	50.384	1.079	94943	1.50	50	100.8	89.5	110.5	
Sn	118	115	1	He	50.703	1.567	224624	1.57	50	101.4	89.5	110.5	
Sb	123	115	1	He	50.621	1.184	203939	0.63	50	101.2	89.5	110.5	
Ba	137	115	1	He	49.563	0.635	99525	0.87	50	99.1	89.5	110.5	
W	182	209	1	He	51.140	1.360	646399	1.01	50	102.3	89.5	110.5	
Tl	205	209	1	He	47.715	5.224	1551494	5.71	50	95.4	89.5	110.5	
Pb	208	209	1	He	47.607	0.891	2022744	1.47	50	95.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1299831	0.32	1389655	93.54	30	120	
Sc	45	1	He	634553	4.74	628609	100.95	30	120	
Sc	45	2	NoGas	4724780	0.60	4813296	98.16	30	120	
Rh	103	1	He	1854959	0.78	1894469	97.91	30	120	
In	115	1	He	1028341	0.63	1086371	94.66	30	120	
Tb	159	1	He	3291741	1.07	3251379	101.24	30	120	
Ho	165	1	He	3355855	0.76	3312124	101.32	30	120	
Bi	209	1	He	2452253	1.78	2533294	96.80	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:23:09-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.120	17.7	707	8.7	1	
B	11	45	2	NoGas	-16.293	-2.5	34036	2.3	20	
Na	23	45	1	He	118.174	8.1	237423	4.6	400	
Mg	24	45	1	He	1.913	36.7	2804	18.8	1000	
Al	27	45	1	He	0.918	12.2	1657	2.7	50	
K	39	45	1	He	23.503	11.8	47949	3.4	1000	
Ca	44	45	1	He	12.780	14.2	871	8.4	1000	
Ti	47	45	1	He	-0.020	-84.6	19	20.4	20	
V	51	45	1	He	0.125	8.4	554	9.9	2	
Cr	52	45	1	He	0.049	26.3	2005	2.9	2	
Mn	55	45	1	He	0.403	3.1	2500	3.5	2	
Fe	56	45	1	He	21.598	26.3	138547	24.4	50	
Co	59	103	1	He	0.050	8.0	540	8.6	1	
Ni	60	103	1	He	0.028	18.8	100	12.0	2	
Cu	63	103	1	He	0.139	13.0	1573	8.6	2	
Zn	66	103	1	He	0.359	7.4	1639	2.7	20	
As	75	103	1	He	0.195	5.4	263	4.0	2	
Se	78	103	1	He	0.264	46.6	59	19.9	2	
Sr	88	103	1	He	0.044	15.4	476	11.3	10	
Mo	95	103	1	He	1.080	20.6	3596	21.2	2	
Ag	107	103	1	He	0.015	21.0	214	16.6	0.2	
Cd	111	103	1	He	-0.017	-78.9	1020	3.8	0.2	
Sn	118	115	1	He	0.535	8.9	3534	5.8	10	
Sb	123	115	1	He	0.674	13.3	3000	12.1	1	
Ba	137	115	1	He	0.022	42.9	116	17.4	5	
W	182	209	1	He	1.171	14.8	18678	12.2	10	
Tl	205	209	1	He	0.068	15.4	2300	15.2	0.5	
Pb	208	209	1	He	0.125	9.7	6338	8.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1340998	4.03	1389655	96.50	30	120	
Sc	45	1	He	594219	1.28	628609	94.53	30	120	
Sc	45	2	NoGas	4657820	1.45	4813296	96.77	30	120	
Rh	103	1	He	1930421	1.58	1894469	101.90	30	120	
In	115	1	He	1060180	0.36	1086371	97.59	30	120	
Tb	159	1	He	3277030	0.32	3251379	100.79	30	120	
Ho	165	1	He	3345465	1.21	3312124	101.01	30	120	
Bi	209	1	He	2499180	0.85	2533294	98.65	30	120	

Sample Report

Sample Table

Sample Name	190-7091-a-1-c ms
Data File Name	026SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:26:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1077.587	1077.587	0.80	3930789	0.03	10000	
B	11	45	2	NoGas	178.956	178.956	0.99	523520	0.03	300	
Na	23	45	1	He	210458.854	210458.854	3.26	276820122	0.08	500000	
Mg	24	45	1	He	13503.564	13503.564	4.36	10079131	0.13	500000	
Al	27	45	1	He	10384.959	10384.959	3.92	4173198	0.25	200000	
K	39	45	1	He	18345.620	18345.620	4.70	12100931	0.15	500000	
Ca	44	45	1	He	53413.436	53413.436	3.93	1898087	2.81	500000	
Ti	47	45	1	He	113.414	113.414	5.54	22710	0.50	2500	
V	51	45	1	He	1098.362	1098.362	2.56	5553976	0.02	10000	
Cr	52	45	1	He	1079.722	1079.722	2.68	6560381	0.02	10000	
Mn	55	45	1	He	1060.726	1060.726	3.66	5073712	0.02	10000	
Fe	56	45	1	He	11072.960	11072.960	3.14	64602700	0.02	200000	
Co	59	103	1	He	1094.786	1094.786	0.79	9504593	0.01	10000	
Ni	60	103	1	He	1120.986	1120.986	2.03	2408892	0.05	10000	
Cu	63	103	1	He	1131.304	1131.304	1.00	6384914	0.02	10000	
Zn	66	103	1	He	1103.586	1103.586	0.78	1252725	0.09	10000	
As	75	103	1	He	1061.549	1061.549	0.65	748743	0.14	10000	
Se	78	103	1	He	1029.804	1029.804	1.01	76706	1.34	10000	
Sr	88	103	1	He	1658.579	1658.579	0.44	9390980	0.02	10000	
Mo	95	103	1	He	165.754	165.754	1.15	446899	0.04	2000	
Ag	107	103	1	He	106.430	106.430	1.61	990418	0.01	300	
Cd	111	103	1	He	1158.630	1158.630	1.49	1869563	0.06	4000	
Sn	118	115	1	He	1242.675	1242.675	0.83	4669340	0.03	2000	
Sb	123	115	1	He	119.634	119.634	0.30	410460	0.03	300	
Ba	137	115	1	He	1252.238	1252.238	0.11	2141143	0.06	10000	
W	182	209	1	He	85.848	85.848	1.36	1332697	0.01	2500	
Tl	205	209	1	He	184.203	184.203	0.44	7371578	0.00	5000	
Pb	208	209	1	He	813.899	813.899	0.46	42548886	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1160549	0.43	1389655	83.51	30	120	
Sc	45	1	He	558902	3.64	628609	88.91	30	120	
Sc	45	2	NoGas	4209195	1.14	4813296	87.45	30	120	
Rh	103	1	He	1604909	0.91	1894469	84.72	30	120	
In	115	1	He	876201	0.27	1086371	80.65	30	120	
Tb	159	1	He	3046123	0.87	3251379	93.69	30	120	
Ho	165	1	He	3120723	0.88	3312124	94.22	30	120	
Bi	209	1	He	3018426	0.82	2533294	119.15	30	120	

Sample Report

Sample Table

Sample Name	190-7091-a-1-d msd
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:30:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1078.825	1078.825	1.65	4015432	0.03	10000	
B	11	45	2	NoGas	182.533	182.533	1.17	537983	0.03	300	
Na	23	45	1	He	215374.469	215374.469	2.19	279925574	0.08	500000	
Mg	24	45	1	He	13691.109	13691.109	2.70	10101413	0.14	500000	
Al	27	45	1	He	10487.824	10487.824	2.54	4165444	0.25	200000	
K	39	45	1	He	18524.009	18524.009	3.09	12077127	0.15	500000	
Ca	44	45	1	He	54684.712	54684.712	2.15	1920898	2.85	500000	
Ti	47	45	1	He	111.802	111.802	3.09	22129	0.51	2500	
V	51	45	1	He	1125.344	1125.344	2.39	5622544	0.02	10000	
Cr	52	45	1	He	1112.695	1112.695	2.54	6679970	0.02	10000	
Mn	55	45	1	He	1095.298	1095.298	2.16	5178020	0.02	10000	
Fe	56	45	1	He	11422.348	11422.348	2.68	65850895	0.02	200000	
Co	59	103	1	He	1107.907	1107.907	1.07	9607267	0.01	10000	
Ni	60	103	1	He	1134.214	1134.214	1.03	2434687	0.05	10000	
Cu	63	103	1	He	1151.622	1151.622	2.53	6491381	0.02	10000	
Zn	66	103	1	He	1110.295	1110.295	1.71	1258818	0.09	10000	
As	75	103	1	He	1071.986	1071.986	1.43	755210	0.14	10000	
Se	78	103	1	He	1045.572	1045.572	1.12	77792	1.34	10000	
Sr	88	103	1	He	1686.443	1686.443	1.41	9537384	0.02	10000	
Mo	95	103	1	He	170.309	170.309	1.26	458650	0.04	2000	
Ag	107	103	1	He	106.840	106.840	0.68	993150	0.01	300	
Cd	111	103	1	He	1179.690	1179.690	1.05	1901461	0.06	4000	
Sn	118	115	1	He	1245.137	1245.137	1.18	4692034	0.03	2000	
Sb	123	115	1	He	119.790	119.790	0.28	412193	0.03	300	
Ba	137	115	1	He	1269.522	1269.522	0.63	2176952	0.06	10000	
W	182	209	1	He	82.019	82.019	0.83	1349822	0.01	2500	
Tl	205	209	1	He	175.344	175.344	1.32	7437285	0.00	5000	
Pb	208	209	1	He	770.428	770.428	0.47	42689619	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1184286	0.96	1389655	85.22	30	120	
Sc	45	1	He	552075	2.21	628609	87.82	30	120	
Sc	45	2	NoGas	4252386	1.08	4813296	88.35	30	120	
Rh	103	1	He	1603171	1.46	1894469	84.62	30	120	
In	115	1	He	878747	0.60	1086371	80.89	30	120	
Tb	159	1	He	3079662	1.89	3251379	94.72	30	120	
Ho	165	1	He	3138607	1.93	3312124	94.76	30	120	
Bi	209	1	He	3199260	0.56	2533294	126.29	30	120	ISTD Failed

Sample Report

Sample Table

Sample Name	190-7092-a-1-b
Data File Name	028SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:34:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.340	0.340	9.53	1508	0.02	10000	
B	11	45	2	NoGas	138.821	138.821	1.91	415221	0.03	300	
Na	23	45	1	He	149310.476	149310.476	0.08	190813504	0.08	500000	
Mg	24	45	1	He	8183.882	8183.882	0.87	5936831	0.14	500000	
Al	27	45	1	He	509.690	509.690	1.19	200123	0.25	200000	
K	39	45	1	He	27241.427	27241.427	1.81	17448331	0.16	500000	
Ca	44	45	1	He	57931.847	57931.847	1.89	2000305	2.90	500000	
Ti	47	45	1	He	6.461	6.461	6.88	1278	0.51	2500	
V	51	45	1	He	1.438	1.438	6.01	6953	0.02	10000	
Cr	52	45	1	He	2.639	2.639	1.54	17115	0.02	10000	
Mn	55	45	1	He	38.274	38.274	0.61	178280	0.02	10000	
Fe	56	45	1	He	866.272	866.272	1.19	4914030	0.02	200000	
Co	59	103	1	He	0.443	0.443	6.90	4121	0.01	10000	
Ni	60	103	1	He	2.724	2.724	4.70	6262	0.04	10000	
Cu	63	103	1	He	14.686	14.686	1.59	88910	0.02	10000	
Zn	66	103	1	He	269.005	269.005	2.47	326230	0.08	10000	
As	75	103	1	He	1.490	1.490	10.97	1206	0.12	10000	
Se	78	103	1	He	2.313	2.313	10.64	215	1.08	10000	
Sr	88	103	1	He	1211.788	1211.788	1.56	7313461	0.02	10000	
Mo	95	103	1	He	6.145	6.145	6.39	17731	0.03	2000	
Ag	107	103	1	He	0.057	0.057	16.16	601	0.01	300	
Cd	111	103	1	He	0.384	0.384	11.99	1592	0.02	4000	
Sn	118	115	1	He	4.547	4.547	10.05	19397	0.02	2000	
Sb	123	115	1	He	1.199	1.199	3.59	4612	0.03	300	
Ba	137	115	1	He	34.680	34.680	1.44	63979	0.05	10000	
W	182	209	1	He	1.423	1.423	12.00	21118	0.01	2500	
Tl	205	209	1	He	0.220	0.220	29.89	7105	0.00	5000	
Pb	208	209	1	He	1.486	1.486	3.01	62883	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1236104	2.18	1389655	88.95	30	120	
Sc	45	1	He	542603	0.97	628609	86.32	30	120	
Sc	45	2	NoGas	4139770	1.30	4813296	86.01	30	120	
Rh	103	1	He	1710937	1.69	1894469	90.31	30	120	
In	115	1	He	944645	1.96	1086371	86.95	30	120	
Tb	159	1	He	3119589	2.45	3251379	95.95	30	120	
Ho	165	1	He	3190456	1.32	3312124	96.33	30	120	
Bi	209	1	He	2408669	0.97	2533294	95.08	30	120	

Sample Report

Sample Table

Sample Name	190-7093-a-1-b
Data File Name	029SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:37:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.218	0.218	18.62	1056	0.02	10000	
B	11	45	2	NoGas	102.274	102.274	2.73	324574	0.03	300	
Na	23	45	1	He	862685.937	862685.937	4.28	1093837853	0.08	500000	>LDR
Mg	24	45	1	He	34874.889	34874.889	2.80	25113944	0.14	500000	
Al	27	45	1	He	443.043	443.043	3.19	172843	0.26	200000	
K	39	45	1	He	29464.620	29464.620	2.96	18735265	0.16	500000	
Ca	44	45	1	He	135884.329	135884.329	2.19	4658912	2.92	500000	
Ti	47	45	1	He	4.091	4.091	24.19	808	0.51	2500	
V	51	45	1	He	1.312	1.312	9.14	6311	0.02	10000	
Cr	52	45	1	He	4.475	4.475	1.86	27758	0.02	10000	
Mn	55	45	1	He	57.946	57.946	3.01	267753	0.02	10000	
Fe	56	45	1	He	2116.917	2116.917	3.32	11915329	0.02	200000	
Co	59	103	1	He	0.382	0.382	6.28	3311	0.01	10000	
Ni	60	103	1	He	15.192	15.192	1.74	32444	0.05	10000	
Cu	63	103	1	He	36.756	36.756	1.54	206506	0.02	10000	
Zn	66	103	1	He	570.653	570.653	1.88	643671	0.09	10000	
As	75	103	1	He	1.358	1.358	1.37	1032	0.13	10000	
Se	78	103	1	He	1.649	1.649	7.16	151	1.09	10000	
Sr	88	103	1	He	12871.953	12871.953	2.06	72366124	0.02	10000	>LDR
Mo	95	103	1	He	10.241	10.241	2.83	27484	0.04	2000	
Ag	107	103	1	He	0.091	0.091	3.91	882	0.01	300	
Cd	111	103	1	He	0.209	0.209	10.93	1203	0.02	4000	
Sn	118	115	1	He	4.775	4.775	3.39	19367	0.02	2000	
Sb	123	115	1	He	1.411	1.411	5.44	5145	0.03	300	
Ba	137	115	1	He	142.260	142.260	0.90	249984	0.06	10000	
W	182	209	1	He	0.352	0.352	12.13	8962	0.00	2500	
Tl	205	209	1	He	0.098	0.098	5.58	3612	0.00	5000	
Pb	208	209	1	He	0.510	0.510	1.27	25227	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1262202	0.35	1389655	90.83	30	120	
Sc	45	1	He	539028	3.42	628609	85.75	30	120	
Sc	45	2	NoGas	4140792	1.44	4813296	86.03	30	120	
Rh	103	1	He	1593847	1.61	1894469	84.13	30	120	
In	115	1	He	900316	0.46	1086371	82.87	30	120	
Tb	159	1	He	3061068	0.86	3251379	94.15	30	120	
Ho	165	1	He	3168065	0.36	3312124	95.65	30	120	
Bi	209	1	He	2739193	0.47	2533294	108.13	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:41:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1912.761	1912.761	2.15	7432105	0.03	10000	
B	11	45	2	NoGas	211.135	211.135	0.89	650623	0.03	300	
Na	23	45	1	He	19878.348	19878.348	3.96	29227458	0.07	500000	
Mg	24	45	1	He	19474.378	19474.378	3.51	16218148	0.12	500000	
Al	27	45	1	He	18253.985	18253.985	4.34	8180686	0.22	200000	
K	39	45	1	He	19151.263	19151.263	3.56	14094180	0.14	500000	
Ca	44	45	1	He	17414.072	17414.072	4.23	690518	2.52	500000	
Ti	47	45	1	He	190.265	190.265	3.42	42500	0.45	2500	
V	51	45	1	He	1913.076	1913.076	3.49	10789515	0.02	10000	
Cr	52	45	1	He	1941.053	1941.053	3.69	13152658	0.01	10000	
Mn	55	45	1	He	1898.395	1898.395	4.16	10127612	0.02	10000	
Fe	56	45	1	He	19530.003	19530.003	3.33	127102524	0.02	200000	
Co	59	103	1	He	1974.605	1974.605	0.38	19005029	0.01	10000	
Ni	60	103	1	He	2016.767	2016.767	0.91	4804711	0.04	10000	
Cu	63	103	1	He	2026.070	2026.070	1.50	12675452	0.02	10000	
Zn	66	103	1	He	2052.679	2052.679	0.69	2582534	0.08	10000	
As	75	103	1	He	1919.765	1919.765	1.11	1500981	0.13	10000	
Se	78	103	1	He	1909.238	1909.238	0.47	157634	1.21	10000	
Sr	88	103	1	He	2009.644	2009.644	0.82	12614041	0.02	10000	
Mo	95	103	1	He	202.465	202.465	3.32	605004	0.03	2000	
Ag	107	103	1	He	217.716	217.716	0.75	2246306	0.01	300	
Cd	111	103	1	He	2139.201	2139.201	1.20	3826001	0.06	4000	
Sn	118	115	1	He	2337.284	2337.284	1.39	9425919	0.02	2000	>LDR
Sb	123	115	1	He	229.394	229.394	0.93	844632	0.03	300	
Ba	137	115	1	He	2272.375	2272.375	1.46	4170426	0.05	10000	
W	182	209	1	He	226.503	226.503	4.06	2761544	0.01	2500	
Tl	205	209	1	He	502.584	502.584	2.53	15831773	0.00	5000	
Pb	208	209	1	He	2089.833	2089.833	1.95	86007189	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1236492	1.60	1389655	88.98	30	120	
Sc	45	1	He	623649	4.79	628609	99.21	30	120	
Sc	45	2	NoGas	4528418	1.08	4813296	94.08	30	120	
Rh	103	1	He	1779236	1.41	1894469	93.92	30	120	
In	115	1	He	940526	0.49	1086371	86.57	30	120	
Tb	159	1	He	3179922	0.30	3251379	97.80	30	120	
Ho	165	1	He	3286394	0.88	3312124	99.22	30	120	
Bi	209	1	He	2377008	2.74	2533294	93.83	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD Fe
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:45:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.423	0.423	13.00	1896	0.02	10000	
B	11	45	2	NoGas	-14.339	-14.339	-3.23	38919	-0.04	300	
Na	23	45	1	He	88.422	88.422	17.28	217840	0.04	500000	
Mg	24	45	1	He	3.085	3.085	52.84	4178	0.07	500000	
Al	27	45	1	He	2.652	2.652	40.41	2671	0.10	200000	
K	39	45	1	He	9.996	9.996	25.53	42751	0.02	500000	
Ca	44	45	1	He	8.451	8.451	22.53	783	1.08	500000	
Ti	47	45	1	He	0.228	0.228	78.64	79	0.29	2500	
V	51	45	1	He	0.326	0.326	43.73	1832	0.02	10000	
Cr	52	45	1	He	0.631	0.631	11.42	6411	0.01	10000	
Mn	55	45	1	He	2.210	2.210	4.09	12971	0.02	10000	
Fe	56	45	1	He	146818.289	146818.289	3.09	1010225027	0.01	200000	
Co	59	103	1	He	0.700	0.700	15.57	7314	0.01	10000	
Ni	60	103	1	He	1.136	1.136	8.97	2963	0.04	10000	
Cu	63	103	1	He	0.926	0.926	16.65	6899	0.01	10000	
Zn	66	103	1	He	0.609	0.609	25.11	1977	0.03	10000	
As	75	103	1	He	1.407	1.407	9.56	1289	0.11	10000	
Se	78	103	1	He	1.417	1.417	2.56	162	0.88	10000	
Sr	88	103	1	He	0.506	0.506	24.68	3610	0.01	10000	
Mo	95	103	1	He	3.729	3.729	12.62	12152	0.03	2000	
Ag	107	103	1	He	0.041	0.041	5.39	503	0.01	300	
Cd	111	103	1	He	0.188	0.188	64.03	1412	0.01	4000	
Sn	118	115	1	He	11.541	11.541	11.88	53586	0.02	2000	
Sb	123	115	1	He	0.972	0.972	4.71	4242	0.02	300	
Ba	137	115	1	He	0.230	0.230	58.98	543	0.04	10000	
W	182	209	1	He	3.304	3.304	12.24	47063	0.01	2500	
Tl	205	209	1	He	0.373	0.373	33.59	12718	0.00	5000	
Pb	208	209	1	He	0.606	0.606	17.55	27818	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1277741	1.92	1389655	91.95	30	120	
Sc	45	1	He	659156	3.48	628609	104.86	30	120	
Sc	45	2	NoGas	4589516	0.50	4813296	95.35	30	120	
Rh	103	1	He	1929599	2.23	1894469	101.85	30	120	
In	115	1	He	1061508	1.28	1086371	97.71	30	120	
Tb	159	1	He	3311336	0.68	3251379	101.84	30	120	
Ho	165	1	He	3403271	0.86	3312124	102.75	30	120	
Bi	209	1	He	2555214	1.19	2533294	100.87	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD Al
Data File Name	032SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:48:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.233	0.233	13.78	1204	0.02	10000	
B	11	45	2	NoGas	-13.541	-13.541	-0.79	42516	-0.03	300	
Na	23	45	1	He	45.237	45.237	3.39	131373	0.03	500000	
Mg	24	45	1	He	1.307	1.307	18.16	2259	0.06	500000	
Al	27	45	1	He	163155.172	163155.172	1.69	67638028	0.24	200000	
K	39	45	1	He	6.771	6.771	20.19	35139	0.02	500000	
Ca	44	45	1	He	19.075	19.075	20.20	1073	1.78	500000	
Ti	47	45	1	He	0.091	0.091	44.52	41	0.22	2500	
V	51	45	1	He	0.203	0.203	18.96	950	0.02	10000	
Cr	52	45	1	He	0.087	0.087	24.77	2185	0.00	10000	
Mn	55	45	1	He	1.060	1.060	2.05	5664	0.02	10000	
Fe	56	45	1	He	102.249	102.249	33.50	616866	0.02	200000	
Co	59	103	1	He	0.063	0.063	5.53	661	0.01	10000	
Ni	60	103	1	He	0.120	0.120	12.73	328	0.04	10000	
Cu	63	103	1	He	0.311	0.311	7.46	2664	0.01	10000	
Zn	66	103	1	He	12.233	12.233	2.74	17312	0.07	10000	
As	75	103	1	He	0.489	0.489	6.88	498	0.10	10000	
Se	78	103	1	He	0.457	0.457	25.97	74	0.62	10000	
Sr	88	103	1	He	0.203	0.203	4.49	1516	0.01	10000	
Mo	95	103	1	He	1.037	1.037	9.04	3350	0.03	2000	
Ag	107	103	1	He	0.021	0.021	15.15	270	0.01	300	
Cd	111	103	1	He	-0.001	-0.001	-3943.27	1019	0.00	4000	
Sn	118	115	1	He	3.691	3.691	3.87	17918	0.02	2000	
Sb	123	115	1	He	0.160	0.160	9.94	869	0.02	300	
Ba	137	115	1	He	0.052	0.052	38.78	178	0.03	10000	
W	182	209	1	He	1.122	1.122	11.00	17299	0.01	2500	
Tl	205	209	1	He	0.067	0.067	5.73	2195	0.00	5000	
Pb	208	209	1	He	0.227	0.227	7.15	10313	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1362440	1.50	1389655	98.04	30	120	
Sc	45	1	He	576351	2.46	628609	91.69	30	120	
Sc	45	2	NoGas	4745714	1.25	4813296	98.60	30	120	
Rh	103	1	He	1873508	0.67	1894469	98.89	30	120	
In	115	1	He	1062676	1.16	1086371	97.82	30	120	
Tb	159	1	He	3216013	0.62	3251379	98.91	30	120	
Ho	165	1	He	3269531	1.39	3312124	98.71	30	120	
Bi	209	1	He	2397404	1.12	2533294	94.64	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176698/1-a@2
Data File Name	033_Blk.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:52:45-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.220	4.9	1019	2.7	1	
B	11	45	2	NoGas	-13.798	-5.8	38021	3.8	20	
Na	23	45	1	He	51.699	7.9	142618	0.6	400	
Mg	24	45	1	He	37.327	1.2	30552	2.7	1000	
Al	27	45	1	He	23.619	34.1	11309	34.1	50	
K	39	45	1	He	24.798	15.2	48213	2.9	1000	
Ca	44	45	1	He	120.169	3.4	4869	3.9	1000	
Ti	47	45	1	He	0.511	33.4	131	31.4	20	
V	51	45	1	He	0.171	36.1	799	45.2	2	
Cr	52	45	1	He	0.820	1.9	6898	2.4	2	
Mn	55	45	1	He	1.353	0.4	7242	3.5	2	
Fe	56	45	1	He	36.368	13.4	228398	16.9	50	
Co	59	103	1	He	0.154	12.8	1508	11.5	1	
Ni	60	103	1	He	0.279	13.4	696	11.0	2	
Cu	63	103	1	He	0.691	2.3	4953	3.7	2	
Zn	66	103	1	He	2.293	10.6	3983	9.6	20	
As	75	103	1	He	0.887	3.7	792	4.8	2	
Se	78	103	1	He	0.684	21.9	89	12.8	2	
Sr	88	103	1	He	0.529	9.8	3509	7.6	10	
Mo	95	103	1	He	0.752	10.9	2352	12.3	2	
Ag	107	103	1	He	0.029	0.6	348	2.4	0.2	
Cd	111	103	1	He	0.028	18.9	1029	2.3	0.2	
Sn	118	115	1	He	21.913	5.4	94838	6.3	10	Blank Failed
Sb	123	115	1	He	0.199	7.0	968	5.7	1	
Ba	137	115	1	He	0.933	12.8	1883	12.6	5	
W	182	209	1	He	0.680	6.1	11920	5.0	10	
Tl	205	209	1	He	0.359	2.8	11518	3.5	0.5	
Pb	208	209	1	He	0.463	12.6	20216	12.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1208894	1.29	1389655	86.99	30	120	
Sc	45	1	He	586974	3.79	628609	93.38	30	120	
Sc	45	2	NoGas	4320745	2.12	4813296	89.77	30	120	
Rh	103	1	He	1795626	1.87	1894469	94.78	30	120	
In	115	1	He	998003	0.98	1086371	91.87	30	120	
Tb	159	1	He	3199014	1.62	3251379	98.39	30	120	
Ho	165	1	He	3243267	0.70	3312124	97.92	30	120	
Bi	209	1	He	2404825	0.78	2533294	94.93	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176698/2-a@2
Data File Name	034LCSS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T16:56:34-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	468.645	468.645	1.376	1677036	0.95	500	93.7	78.6	110.5	
B	11	2	NoGas	42.772	42.772	3.061	174636	1.58	50	85.5	79.5	120.5	
Na	23	1	He	4811.696	4811.696	2.036	6280139	1.12	5000	96.2	79.5	120.5	
Mg	24	1	He	4885.388	4885.388	3.548	3581880	0.90	5000	97.7	79.5	120.5	
Al	27	1	He	4564.349	4564.349	2.665	1802062	0.56	5000	91.3	79.5	120.5	
K	39	1	He	4725.112	4725.112	4.388	3082069	1.34	5000	94.5	79.5	120.5	
Ca	44	1	He	4391.734	4391.734	2.178	153619	1.01	5000	87.8	79.5	120.5	
Ti	47	1	He	46.645	46.645	2.983	9187	0.08	50	93.3	79.5	120.5	
V	51	1	He	490.970	490.970	4.338	2436777	2.01	500	98.2	71.5	110.5	
Cr	52	1	He	493.050	493.050	4.249	2941607	2.23	500	98.6	69.5	110.5	
Mn	55	1	He	481.322	481.322	2.328	2261395	0.87	500	96.3	79.5	120.5	
Fe	56	1	He	4858.917	4858.917	2.327	27840698	0.74	5000	97.2	79.5	120.5	
Co	59	1	He	460.527	460.527	0.837	4198209	0.80	500	92.1	73.9	110.5	
Ni	60	1	He	446.195	446.195	0.520	1006960	1.19	500	89.2	74.9	110.5	
Cu	63	1	He	478.586	478.586	1.052	2836625	0.59	500	95.7	72.6	110.5	
Zn	66	1	He	418.210	418.210	0.311	499132	0.73	500	83.6	71.5	113.4	
As	75	1	He	405.330	405.330	0.254	300266	0.78	500	81.1	73.4	110.5	
Se	78	1	He	392.402	392.402	0.382	30712	0.94	500	78.5	64.6	110.5	
Sr	88	1	He	468.126	468.126	0.727	2783409	1.07	500	93.6	79.5	120.5	
Mo	95	1	He	50.674	50.674	0.850	143522	1.13	50	101.3	29.5	140.5	
Ag	107	1	He	48.780	48.780	0.584	476697	0.45	50	97.6	59.5	114.5	
Cd	111	1	He	453.227	453.227	0.736	768534	0.35	500	90.6	73.5	110.5	
Sn	118	1	He	561.489	561.489	0.352	2186073	0.44	500	112.3	79.5	120.5	
Sb	123	1	He	49.077	49.077	0.525	174527	0.65	50	98.2	67.5	113.4	
Ba	137	1	He	472.019	472.019	0.380	836092	0.45	500	94.4	69.5	110.5	
W	182	1	He	49.232	49.232	2.046	582713	1.73	50	98.5	74.6	125.4	
Tl	205	1	He	118.069	118.069	0.830	3593561	0.72	125	94.5	70.6	110.5	
Pb	208	1	He	487.953	487.953	0.869	19400859	0.21	500	97.6	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1138561	1.40	1389655	81.93	30	120	
Sc	45	1	He	548696	3.11	628609	87.29	30	120	
Sc	45	2	NoGas	4087733	0.81	4813296	84.93	30	120	
Rh	103	1	He	1685267	1.04	1894469	88.96	30	120	
In	115	1	He	907651	0.13	1086371	83.55	30	120	
Tb	159	1	He	3058085	0.52	3251379	94.06	30	120	
Ho	165	1	He	3124511	1.08	3312124	94.34	30	120	
Bi	209	1	He	2295648	0.73	2533294	90.62	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-d@2
Data File Name	035SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:00:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.026	3.026	2.71	11597	0.03	10000	
B	11	45	2	NoGas	-7.947	-7.947	-3.47	56093	-0.01	300	
Na	23	45	1	He	115.148	115.148	3.81	240365	0.05	500000	
Mg	24	45	1	He	7023.141	7023.141	3.54	5748525	0.12	500000	
Al	27	45	1	He	36882.555	36882.555	3.97	16244889	0.23	200000	
K	39	45	1	He	3020.026	3020.026	3.14	2211595	0.14	500000	
Ca	44	45	1	He	579.507	579.507	1.26	22981	2.52	500000	
Ti	47	45	1	He	311.697	311.697	1.93	68412	0.46	2500	
V	51	45	1	He	103.131	103.131	2.34	571526	0.02	10000	
Cr	52	45	1	He	89.598	89.598	2.83	598324	0.01	10000	
Mn	55	45	1	He	7350.115	7350.115	2.44	38545440	0.02	10000	
Fe	56	45	1	He	187305.170	187305.170	2.23	1197966708	0.02	200000	
Co	59	103	1	He	55.793	55.793	0.86	527300	0.01	10000	
Ni	60	103	1	He	84.232	84.232	1.04	197098	0.04	10000	
Cu	63	103	1	He	55.919	55.919	1.15	344121	0.02	10000	
Zn	66	103	1	He	180.992	180.992	1.31	224521	0.08	10000	
As	75	103	1	He	65.173	65.173	0.99	50125	0.13	10000	
Se	78	103	1	He	4.972	4.972	2.24	435	1.14	10000	
Sr	88	103	1	He	20.228	20.228	0.78	124839	0.02	10000	
Mo	95	103	1	He	7.581	7.581	0.26	22328	0.03	2000	
Ag	107	103	1	He	0.097	0.097	2.58	1027	0.01	300	
Cd	111	103	1	He	0.483	0.483	10.13	1801	0.03	4000	
Sn	118	115	1	He	17.901	17.901	0.34	74200	0.02	2000	
Sb	123	115	1	He	0.878	0.878	0.35	3462	0.03	300	
Ba	137	115	1	He	290.313	290.313	0.62	540402	0.05	10000	
W	182	209	1	He	0.871	0.871	12.24	13769	0.01	2500	
Tl	205	209	1	He	0.852	0.852	4.56	26259	0.00	5000	
Pb	208	209	1	He	67.294	67.294	0.72	2706537	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1200505	1.02	1389655	86.39	30	120	
Sc	45	1	He	612440	1.90	628609	97.43	30	120	
Sc	45	2	NoGas	4555192	0.21	4813296	94.64	30	120	
Rh	103	1	He	1747188	1.22	1894469	92.23	30	120	
In	115	1	He	953797	0.33	1086371	87.80	30	120	
Tb	159	1	He	3192540	0.35	3251379	98.19	30	120	
Ho	165	1	He	3266107	0.23	3312124	98.61	30	120	
Bi	209	1	He	2321490	0.41	2533294	91.64	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	036_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:03:58-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.713	1.986	171304	1.75	50	91.4	89.5	110.5	
B	11	45	2	NoGas	38.611	2.705	167600	1.84	50	77.2	89.5	110.5	CCV Failed
Na	23	45	1	He	25159.466	1.669	33412403	0.69	25000	100.6	89.5	110.5	
Mg	24	45	1	He	25012.213	1.334	18824427	1.99	25000	100.0	89.5	110.5	
Al	27	45	1	He	246.222	0.787	100932	1.76	250	98.5	89.5	110.5	
K	39	45	1	He	24585.865	3.149	16337433	0.85	25000	98.3	89.5	110.5	
Ca	44	45	1	He	24160.182	2.296	865625	0.07	25000	96.6	89.5	110.5	
Ti	47	45	1	He	49.333	1.793	9973	1.26	50	98.7	89.5	110.5	
V	51	45	1	He	49.613	1.481	252734	1.38	50	99.2	89.5	110.5	
Cr	52	45	1	He	50.467	1.552	310564	1.10	50	100.9	89.5	110.5	
Mn	55	45	1	He	242.953	1.567	1171796	0.76	250	97.2	89.5	110.5	
Fe	56	45	1	He	12602.571	1.852	74106937	0.82	12500	100.8	89.5	110.5	
Co	59	103	1	He	47.422	0.699	442113	0.77	50	94.8	89.5	110.5	
Ni	60	103	1	He	47.482	0.510	109601	0.25	50	95.0	89.5	110.5	
Cu	63	103	1	He	48.363	0.834	293654	0.68	50	96.7	89.5	110.5	
Zn	66	103	1	He	47.060	0.851	58351	1.51	50	94.1	89.5	110.5	
As	75	103	1	He	47.540	0.888	36091	0.74	50	95.1	89.5	110.5	
Se	78	103	1	He	46.359	0.668	3738	1.32	50	92.7	89.5	110.5	
Sr	88	103	1	He	46.408	0.863	282312	0.23	50	92.8	89.5	110.5	
Mo	95	103	1	He	49.498	3.288	143347	2.63	50	99.0	89.5	110.5	
Ag	107	103	1	He	49.660	1.043	496272	0.48	50	99.3	89.5	110.5	
Cd	111	103	1	He	49.156	1.606	86077	1.35	50	98.3	89.5	110.5	
Sn	118	115	1	He	50.477	1.343	206166	0.94	50	101.0	89.5	110.5	
Sb	123	115	1	He	50.942	0.611	189217	0.38	50	101.9	89.5	110.5	
Ba	137	115	1	He	49.437	1.204	91518	0.71	50	98.9	89.5	110.5	
W	182	209	1	He	49.451	2.237	591300	0.78	50	98.9	89.5	110.5	
Tl	205	209	1	He	46.043	0.851	1415924	0.60	50	92.1	89.5	110.5	
Pb	208	209	1	He	47.692	0.653	1916728	0.83	50	95.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1191096	0.42	1389655	85.71	30	120	
Sc	45	1	He	563043	2.33	628609	89.57	30	120	
Sc	45	2	NoGas	4166386	1.61	4813296	86.56	30	120	
Rh	103	1	He	1723396	0.68	1894469	90.97	30	120	
In	115	1	He	948066	0.50	1086371	87.27	30	120	
Tb	159	1	He	3131651	1.95	3251379	96.32	30	120	
Ho	165	1	He	3195990	0.93	3312124	96.49	30	120	
Bi	209	1	He	2319563	1.45	2533294	91.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	037_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:07:48-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.140	39.4	719	28.6	1	
B	11	45	2	NoGas	-16.903	-1.8	29788	2.6	20	
Na	23	45	1	He	38.490	7.9	114999	2.0	400	
Mg	24	45	1	He	2.603	41.4	3056	24.0	1000	
Al	27	45	1	He	2.511	14.8	2132	5.1	50	
K	39	45	1	He	12.375	15.1	36646	1.7	1000	
Ca	44	45	1	He	13.047	18.0	803	8.6	1000	
Ti	47	45	1	He	0.091	112.8	39	52.4	20	
V	51	45	1	He	0.081	106.0	287	145.1	2	
Cr	52	45	1	He	0.013	206.4	1616	8.4	2	
Mn	55	45	1	He	0.484	7.6	2652	4.9	2	
Fe	56	45	1	He	31.461	20.1	182161	17.9	50	
Co	59	103	1	He	0.037	11.9	374	11.5	1	
Ni	60	103	1	He	0.032	45.4	103	34.0	2	
Cu	63	103	1	He	0.105	15.3	1256	8.3	2	
Zn	66	103	1	He	0.440	26.4	1636	9.0	20	
As	75	103	1	He	0.133	1.7	197	1.1	2	
Se	78	103	1	He	0.126	42.5	43	10.2	2	
Sr	88	103	1	He	0.060	42.0	549	29.5	10	
Mo	95	103	1	He	0.940	21.6	2933	21.1	2	
Ag	107	103	1	He	0.012	27.7	164	20.7	0.2	
Cd	111	103	1	He	-0.042	-24.4	907	2.1	0.2	
Sn	118	115	1	He	0.471	9.0	3045	5.6	10	
Sb	123	115	1	He	0.648	19.6	2714	17.7	1	
Ba	137	115	1	He	0.026	17.5	116	7.3	5	
W	182	209	1	He	1.036	22.4	16283	16.7	10	
Tl	205	209	1	He	0.054	12.7	1763	11.5	0.5	
Pb	208	209	1	He	0.075	9.1	4027	6.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1214949	0.65	1389655	87.43	30	120	
Sc	45	1	He	542343	1.72	628609	86.28	30	120	
Sc	45	2	NoGas	4289977	0.14	4813296	89.13	30	120	
Rh	103	1	He	1804385	0.18	1894469	95.24	30	120	
In	115	1	He	995596	0.45	1086371	91.64	30	120	
Tb	159	1	He	3134835	0.41	3251379	96.42	30	120	
Ho	165	1	He	3190883	1.12	3312124	96.34	30	120	
Bi	209	1	He	2404305	1.00	2533294	94.91	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-1-d@10
Data File Name	038SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:11:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.651	0.651	1.95	2674	0.02	10000	
B	11	45	2	NoGas	-16.291	-16.291	-2.05	31914	-0.05	300	
Na	23	45	1	He	29.301	29.301	4.67	115440	0.03	500000	
Mg	24	45	1	He	1486.315	1486.315	4.54	1204218	0.12	500000	
Al	27	45	1	He	7835.967	7835.967	4.79	3414250	0.23	200000	
K	39	45	1	He	617.306	617.306	5.40	472499	0.13	500000	
Ca	44	45	1	He	124.157	124.157	4.89	5177	2.40	500000	
Ti	47	45	1	He	64.546	64.546	5.59	14021	0.46	2500	
V	51	45	1	He	21.376	21.376	2.32	117173	0.02	10000	
Cr	52	45	1	He	18.371	18.371	3.57	122729	0.01	10000	
Mn	55	45	1	He	1537.430	1537.430	5.14	7971591	0.02	10000	
Fe	56	45	1	He	39082.020	39082.020	4.67	247163164	0.02	200000	
Co	59	103	1	He	11.292	11.292	0.71	109606	0.01	10000	
Ni	60	103	1	He	16.979	16.979	1.94	40815	0.04	10000	
Cu	63	103	1	He	11.424	11.424	1.34	72664	0.02	10000	
Zn	66	103	1	He	40.371	40.371	1.12	52260	0.08	10000	
As	75	103	1	He	13.831	13.831	1.48	10995	0.13	10000	
Se	78	103	1	He	1.034	1.034	12.14	119	0.87	10000	
Sr	88	103	1	He	4.094	4.094	1.66	26081	0.02	10000	
Mo	95	103	1	He	1.456	1.456	1.59	4470	0.03	2000	
Ag	107	103	1	He	0.024	0.024	11.37	290	0.01	300	
Cd	111	103	1	He	0.074	0.074	35.05	1111	0.01	4000	
Sn	118	115	1	He	3.502	3.502	2.59	16034	0.02	2000	
Sb	123	115	1	He	0.358	0.358	7.02	1590	0.02	300	
Ba	137	115	1	He	57.352	57.352	1.34	111824	0.05	10000	
W	182	209	1	He	0.258	0.258	9.87	6698	0.00	2500	
Tl	205	209	1	He	0.161	0.161	1.75	5176	0.00	5000	
Pb	208	209	1	He	13.365	13.365	0.56	556754	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1216154	1.52	1389655	87.51	30	120	
Sc	45	1	He	606422	5.43	628609	96.47	30	120	
Sc	45	2	NoGas	4365727	1.90	4813296	90.70	30	120	
Rh	103	1	He	1794240	1.62	1894469	94.71	30	120	
In	115	1	He	998537	0.73	1086371	91.91	30	120	
Tb	159	1	He	3178565	1.31	3251379	97.76	30	120	
Ho	165	1	He	3251632	0.38	3312124	98.17	30	120	
Bi	209	1	He	2401414	1.32	2533294	94.79	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-1-d@2
Data File Name	039SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:15:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	948.960	948.960	0.96	3375916	0.03	10000	
B	11	45	2	NoGas	103.243	103.243	1.63	339726	0.03	300	
Na	23	45	1	He	9902.100	9902.100	2.95	13788141	0.07	500000	
Mg	24	45	1	He	16469.716	16469.716	2.27	12955648	0.13	500000	
Al	27	45	1	He	44959.621	44959.621	3.10	19032146	0.24	200000	
K	39	45	1	He	12192.577	12192.577	2.20	8486802	0.14	500000	
Ca	44	45	1	He	9227.041	9227.041	1.48	345885	2.67	500000	
Ti	47	45	1	He	394.287	394.287	1.80	83162	0.47	2500	
V	51	45	1	He	1050.844	1050.844	1.30	5598692	0.02	10000	
Cr	52	45	1	He	1042.992	1042.992	2.22	6676606	0.02	10000	
Mn	55	45	1	He	8018.640	8018.640	1.69	40416286	0.02	10000	
Fe	56	45	1	He	190226.774	190226.774	1.33	1169417731	0.02	200000	
Co	59	103	1	He	1039.755	1039.755	1.10	9290677	0.01	10000	
Ni	60	103	1	He	1109.014	1109.014	2.33	2453037	0.05	10000	
Cu	63	103	1	He	1053.225	1053.225	0.83	6118352	0.02	10000	
Zn	66	103	1	He	1068.227	1068.227	0.77	1248116	0.09	10000	
As	75	103	1	He	949.574	949.574	1.21	689373	0.14	10000	
Se	78	103	1	He	845.817	845.817	1.85	64851	1.30	10000	
Sr	88	103	1	He	1017.951	1017.951	1.92	5932144	0.02	10000	
Mo	95	103	1	He	117.470	117.470	1.07	326005	0.04	2000	
Ag	107	103	1	He	102.070	102.070	1.25	977646	0.01	300	
Cd	111	103	1	He	1046.527	1046.527	0.46	1738305	0.06	4000	
Sn	118	115	1	He	1164.143	1164.143	0.63	4460870	0.03	2000	
Sb	123	115	1	He	108.448	108.448	1.15	379449	0.03	300	
Ba	137	115	1	He	1445.067	1445.067	0.28	2519774	0.06	10000	
W	182	209	1	He	106.543	106.543	1.74	1214959	0.01	2500	
Tl	205	209	1	He	253.850	253.850	0.53	7467316	0.00	5000	
Pb	208	209	1	He	1113.299	1113.299	0.99	42779606	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1131837	0.49	1389655	81.45	30	120	
Sc	45	1	He	588628	2.63	628609	93.64	30	120	
Sc	45	2	NoGas	4301421	0.48	4813296	89.37	30	120	
Rh	103	1	He	1651851	0.48	1894469	87.19	30	120	
In	115	1	He	893546	0.54	1086371	82.25	30	120	
Tb	159	1	He	3174147	0.70	3251379	97.62	30	120	
Ho	165	1	He	3190365	1.05	3312124	96.32	30	120	
Bi	209	1	He	2218747	0.98	2533294	87.58	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-e du@2
Data File Name	040SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:18:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.208	3.208	2.17	11949	0.03	10000	
B	11	45	2	NoGas	-7.630	-7.630	-3.79	55487	-0.01	300	
Na	23	45	1	He	117.366	117.366	1.90	230376	0.05	500000	
Mg	24	45	1	He	7657.393	7657.393	2.40	5928164	0.13	500000	
Al	27	45	1	He	43148.551	43148.551	1.43	17978619	0.24	200000	
K	39	45	1	He	3524.288	3524.288	3.05	2435756	0.14	500000	
Ca	44	45	1	He	652.504	652.504	3.71	24414	2.67	500000	
Ti	47	45	1	He	300.315	300.315	2.16	62336	0.48	2500	
V	51	45	1	He	111.948	111.948	1.87	586780	0.02	10000	
Cr	52	45	1	He	101.122	101.122	1.69	638496	0.02	10000	
Mn	55	45	1	He	6082.558	6082.558	2.49	30167471	0.02	10000	
Fe	56	45	1	He	185569.550	185569.550	2.80	1122369627	0.02	200000	
Co	59	103	1	He	49.558	49.558	1.44	442305	0.01	10000	
Ni	60	103	1	He	86.493	86.493	0.74	191110	0.05	10000	
Cu	63	103	1	He	57.501	57.501	0.62	334142	0.02	10000	
Zn	66	103	1	He	196.663	196.663	1.37	230299	0.09	10000	
As	75	103	1	He	66.343	66.343	0.94	48183	0.14	10000	
Se	78	103	1	He	5.880	5.880	7.85	480	1.22	10000	
Sr	88	103	1	He	22.826	22.826	1.08	133012	0.02	10000	
Mo	95	103	1	He	8.268	8.268	3.99	22989	0.04	2000	
Ag	107	103	1	He	0.093	0.093	3.71	930	0.01	300	
Cd	111	103	1	He	0.504	0.504	12.76	1735	0.03	4000	
Sn	118	115	1	He	18.123	18.123	1.54	71959	0.03	2000	
Sb	123	115	1	He	0.996	0.996	3.80	3738	0.03	300	
Ba	137	115	1	He	288.043	288.043	0.73	513730	0.06	10000	
W	182	209	1	He	1.751	1.751	19.96	23607	0.01	2500	
Tl	205	209	1	He	1.037	1.037	7.10	31138	0.00	5000	
Pb	208	209	1	He	67.976	67.976	0.46	2663317	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1167577	2.59	1389655	84.02	30	120	
Sc	45	1	He	579179	1.69	628609	92.14	30	120	
Sc	45	2	NoGas	4437630	0.65	4813296	92.20	30	120	
Rh	103	1	He	1649849	0.49	1894469	87.09	30	120	
In	115	1	He	913915	1.08	1086371	84.13	30	120	
Tb	159	1	He	3087264	0.41	3251379	94.95	30	120	
Ho	165	1	He	3177749	1.07	3312124	95.94	30	120	
Bi	209	1	He	2261525	0.72	2533294	89.27	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-f ms@2
Data File Name	041SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:22:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	46.970	46.970	1.01	163072	0.03	10000	
B	11	45	2	NoGas	31.444	31.444	3.69	152129	0.02	300	
Na	23	45	1	He	4449.308	4449.308	1.17	5839726	0.08	500000	
Mg	24	45	1	He	12015.600	12015.600	0.91	8852407	0.14	500000	
Al	27	45	1	He	47428.766	47428.766	1.22	18806083	0.25	200000	
K	39	45	1	He	6898.298	6898.298	2.34	4509587	0.15	500000	
Ca	44	45	1	He	4788.653	4788.653	1.74	168265	2.85	500000	
Ti	47	45	1	He	394.132	394.132	1.09	77856	0.51	2500	
V	51	45	1	He	162.453	162.453	1.08	810370	0.02	10000	
Cr	52	45	1	He	140.342	140.342	0.73	842697	0.02	10000	
Mn	55	45	1	He	7258.031	7258.031	0.46	34260089	0.02	10000	
Fe	56	45	1	He	197377.744	197377.744	0.53	1136256595	0.02	200000	
Co	59	103	1	He	102.192	102.192	0.47	880869	0.01	10000	
Ni	60	103	1	He	127.291	127.291	0.53	271626	0.05	10000	
Cu	63	103	1	He	103.583	103.583	0.63	580942	0.02	10000	
Zn	66	103	1	He	233.058	233.058	0.74	263425	0.09	10000	
As	75	103	1	He	109.759	109.759	0.64	76939	0.14	10000	
Se	78	103	1	He	41.938	41.938	1.29	3129	1.34	10000	
Sr	88	103	1	He	66.540	66.540	0.38	374211	0.02	10000	
Mo	95	103	1	He	56.683	56.683	0.53	151790	0.04	2000	
Ag	107	103	1	He	46.305	46.305	0.59	427873	0.01	300	
Cd	111	103	1	He	44.481	44.481	1.27	72102	0.06	4000	
Sn	118	115	1	He	56.861	56.861	1.24	214702	0.03	2000	
Sb	123	115	1	He	16.255	16.255	0.63	55962	0.03	300	
Ba	137	115	1	He	341.541	341.541	0.52	584516	0.06	10000	
W	182	209	1	He	35.621	35.621	0.92	400947	0.01	2500	
Tl	205	209	1	He	41.236	41.236	1.52	1190800	0.00	5000	
Pb	208	209	1	He	122.843	122.843	1.73	4634599	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1103492	0.16	1389655	79.41	30	120	
Sc	45	1	He	551114	1.16	628609	87.67	30	120	
Sc	45	2	NoGas	4234565	1.30	4813296	87.98	30	120	
Rh	103	1	He	1593439	0.34	1894469	84.11	30	120	
In	115	1	He	876939	0.30	1086371	80.72	30	120	
Tb	159	1	He	3022878	0.26	3251379	92.97	30	120	
Ho	165	1	He	3085122	0.45	3312124	93.15	30	120	
Bi	209	1	He	2178369	1.66	2533294	85.99	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-2-b@2
Data File Name	042SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:26:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.245	3.245	5.08	11682	0.03	10000	
B	11	45	2	NoGas	-3.409	-3.409	-4.73	66609	-0.01	300	
Na	23	45	1	He	151.129	151.129	1.72	270562	0.06	500000	
Mg	24	45	1	He	11368.282	11368.282	1.84	8615641	0.13	500000	
Al	27	45	1	He	57874.179	57874.179	1.41	23604364	0.25	200000	
K	39	45	1	He	4919.655	4919.655	0.88	3316911	0.15	500000	
Ca	44	45	1	He	896.201	896.201	0.82	32694	2.74	500000	
Ti	47	45	1	He	341.034	341.034	1.64	69291	0.49	2500	
V	51	45	1	He	116.342	116.342	0.93	596932	0.02	10000	
Cr	52	45	1	He	103.734	103.734	1.26	641105	0.02	10000	
Mn	55	45	1	He	3069.960	3069.960	1.56	14905034	0.02	10000	
Fe	56	45	1	He	172472.466	172472.466	0.75	1021267657	0.02	200000	
Co	59	103	1	He	47.568	47.568	0.50	420751	0.01	10000	
Ni	60	103	1	He	100.322	100.322	0.73	219679	0.05	10000	
Cu	63	103	1	He	87.575	87.575	0.45	504075	0.02	10000	
Zn	66	103	1	He	244.621	244.621	0.43	283670	0.09	10000	
As	75	103	1	He	72.540	72.540	0.15	52207	0.14	10000	
Se	78	103	1	He	6.874	6.874	4.48	551	1.25	10000	
Sr	88	103	1	He	33.282	33.282	1.37	192138	0.02	10000	
Mo	95	103	1	He	8.728	8.728	1.24	24047	0.04	2000	
Ag	107	103	1	He	0.088	0.088	10.25	876	0.01	300	
Cd	111	103	1	He	0.526	0.526	16.93	1756	0.03	4000	
Sn	118	115	1	He	17.163	17.163	2.16	67794	0.03	2000	
Sb	123	115	1	He	1.045	1.045	0.92	3891	0.03	300	
Ba	137	115	1	He	358.056	358.056	1.02	634824	0.06	10000	
W	182	209	1	He	0.868	0.868	18.51	13332	0.01	2500	
Tl	205	209	1	He	0.994	0.994	1.90	29770	0.00	5000	
Pb	208	209	1	He	92.702	92.702	1.61	3620227	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1128247	0.69	1389655	81.19	30	120	
Sc	45	1	He	566862	0.59	628609	90.18	30	120	
Sc	45	2	NoGas	4430321	0.64	4813296	92.04	30	120	
Rh	103	1	He	1635106	0.58	1894469	86.31	30	120	
In	115	1	He	908550	1.25	1086371	83.63	30	120	
Tb	159	1	He	3101567	1.08	3251379	95.39	30	120	
Ho	165	1	He	3170356	1.46	3312124	95.72	30	120	
Bi	209	1	He	2254613	1.33	2533294	89.00	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-4-b@2
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:30:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.652	2.652	4.85	9288	0.03	10000	
B	11	45	2	NoGas	43.764	43.764	0.31	178069	0.02	300	
Na	23	45	1	He	1795.833	1795.833	3.34	2301714	0.08	500000	
Mg	24	45	1	He	12368.483	12368.483	4.81	8746632	0.14	500000	
Al	27	45	1	He	44563.783	44563.783	4.49	16962257	0.26	200000	
K	39	45	1	He	15915.686	15915.686	3.33	9954388	0.16	500000	
Ca	44	45	1	He	164.252	164.252	5.92	5888	2.79	500000	
Ti	47	45	1	He	395.533	395.533	3.84	75008	0.53	2500	
V	51	45	1	He	76.955	76.955	3.72	368508	0.02	10000	
Cr	52	45	1	He	81.546	81.546	3.86	470728	0.02	10000	
Mn	55	45	1	He	6071.848	6071.848	4.05	27514979	0.02	10000	
Fe	56	45	1	He	111615.923	111615.923	4.89	616718820	0.02	200000	
Co	59	103	1	He	41.812	41.812	4.43	358713	0.01	10000	
Ni	60	103	1	He	104.618	104.618	5.01	222143	0.05	10000	
Cu	63	103	1	He	96.123	96.123	4.47	536542	0.02	10000	
Zn	66	103	1	He	226.325	226.325	4.57	254599	0.09	10000	
As	75	103	1	He	180.845	180.845	4.56	126101	0.14	10000	
Se	78	103	1	He	3.555	3.555	4.00	291	1.22	10000	
Sr	88	103	1	He	2135.363	2135.363	5.20	11943933	0.02	10000	
Mo	95	103	1	He	646.769	646.769	6.01	1722048	0.04	2000	
Ag	107	103	1	He	0.082	0.082	14.93	786	0.01	300	
Cd	111	103	1	He	0.394	0.394	15.45	1491	0.03	4000	
Sn	118	115	1	He	17.671	17.671	3.43	66895	0.03	2000	
Sb	123	115	1	He	0.583	0.583	11.01	2149	0.03	300	
Ba	137	115	1	He	319.343	319.343	5.40	542425	0.06	10000	
W	182	209	1	He	12.430	12.430	4.19	141214	0.01	2500	
Tl	205	209	1	He	0.552	0.552	4.22	15904	0.00	5000	
Pb	208	209	1	He	410.219	410.219	4.71	15388416	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1094573	0.57	1389655	78.77	30	120	
Sc	45	1	He	529592	3.81	628609	84.25	30	120	
Sc	45	2	NoGas	4110707	1.09	4813296	85.40	30	120	
Rh	103	1	He	1587806	4.36	1894469	83.81	30	120	
In	115	1	He	871881	4.91	1086371	80.26	30	120	
Tb	159	1	He	2993016	4.88	3251379	92.05	30	120	
Ho	165	1	He	3030714	5.10	3312124	91.50	30	120	
Bi	209	1	He	2168797	4.41	2533294	85.61	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-11-b@2
Data File Name	044SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:34:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.233	2.233	4.22	7776	0.03	10000	
B	11	45	2	NoGas	-7.700	-7.700	-3.39	50912	-0.02	300	
Na	23	45	1	He	306.725	306.725	0.77	450893	0.07	500000	
Mg	24	45	1	He	8633.916	8633.916	2.43	6168786	0.14	500000	
Al	27	45	1	He	54845.942	54845.942	1.11	21090190	0.26	200000	
K	39	45	1	He	3438.289	3438.289	1.19	2194230	0.16	500000	
Ca	44	45	1	He	4961.816	4961.816	1.31	169079	2.93	500000	
Ti	47	45	1	He	606.683	606.683	0.98	116214	0.52	2500	
V	51	45	1	He	106.026	106.026	0.28	512919	0.02	10000	
Cr	52	45	1	He	84.411	84.411	0.58	492168	0.02	10000	
Mn	55	45	1	He	4285.510	4285.510	0.25	19618966	0.02	10000	
Fe	56	45	1	He	83933.084	83933.084	0.38	468614399	0.02	200000	
Co	59	103	1	He	38.963	38.963	0.72	334997	0.01	10000	
Ni	60	103	1	He	103.683	103.683	0.21	220694	0.05	10000	
Cu	63	103	1	He	48.122	48.122	0.93	269470	0.02	10000	
Zn	66	103	1	He	241.112	241.112	1.19	271788	0.09	10000	
As	75	103	1	He	70.837	70.837	1.01	49556	0.14	10000	
Se	78	103	1	He	4.674	4.674	3.87	373	1.25	10000	
Sr	88	103	1	He	71.995	71.995	0.53	403840	0.02	10000	
Mo	95	103	1	He	13.862	13.862	10.57	37071	0.04	2000	
Ag	107	103	1	He	0.146	0.146	3.48	1382	0.01	300	
Cd	111	103	1	He	0.536	0.536	8.40	1723	0.03	4000	
Sn	118	115	1	He	16.243	16.243	2.36	62813	0.03	2000	
Sb	123	115	1	He	0.617	0.617	4.73	2317	0.03	300	
Ba	137	115	1	He	368.764	368.764	0.79	639508	0.06	10000	
W	182	209	1	He	0.535	0.535	2.99	9281	0.01	2500	
Tl	205	209	1	He	0.874	0.874	1.95	25572	0.00	5000	
Pb	208	209	1	He	47.926	47.926	1.19	1829638	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1084781	1.17	1389655	78.06	30	120	
Sc	45	1	He	534473	0.96	628609	85.02	30	120	
Sc	45	2	NoGas	4085495	0.33	4813296	84.88	30	120	
Rh	103	1	He	1589395	0.65	1894469	83.90	30	120	
In	115	1	He	888621	0.31	1086371	81.80	30	120	
Tb	159	1	He	3010350	0.57	3251379	92.59	30	120	
Ho	165	1	He	3034576	1.28	3312124	91.62	30	120	
Bi	209	1	He	2203423	1.17	2533294	86.98	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-13-b@2
Data File Name	045SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:37:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.201	2.201	4.23	7632	0.03	10000	
B	11	45	2	NoGas	-11.717	-11.717	-2.22	41147	-0.03	300	
Na	23	45	1	He	82.893	82.893	3.60	167457	0.05	500000	
Mg	24	45	1	He	5875.248	5875.248	1.66	4154296	0.14	500000	
Al	27	45	1	He	37743.283	37743.283	1.37	14361530	0.26	200000	
K	39	45	1	He	2807.042	2807.042	1.66	1777638	0.16	500000	
Ca	44	45	1	He	1011.895	1011.895	1.22	34394	2.94	500000	
Ti	47	45	1	He	414.082	414.082	0.39	78490	0.53	2500	
V	51	45	1	He	76.316	76.316	0.89	365291	0.02	10000	
Cr	52	45	1	He	72.307	72.307	0.89	417371	0.02	10000	
Mn	55	45	1	He	1989.659	1989.659	0.88	9012658	0.02	10000	
Fe	56	45	1	He	97319.030	97319.030	0.58	537619908	0.02	200000	
Co	59	103	1	He	42.033	42.033	1.92	370465	0.01	10000	
Ni	60	103	1	He	87.173	87.173	2.39	190195	0.05	10000	
Cu	63	103	1	He	47.203	47.203	2.29	270965	0.02	10000	
Zn	66	103	1	He	265.869	265.869	2.56	307096	0.09	10000	
As	75	103	1	He	102.092	102.092	1.95	73178	0.14	10000	
Se	78	103	1	He	3.895	3.895	6.01	324	1.20	10000	
Sr	88	103	1	He	17.558	17.558	1.95	101069	0.02	10000	
Mo	95	103	1	He	9.840	9.840	3.48	26998	0.04	2000	
Ag	107	103	1	He	0.092	0.092	4.65	904	0.01	300	
Cd	111	103	1	He	0.547	0.547	10.73	1784	0.03	4000	
Sn	118	115	1	He	16.696	16.696	2.87	64738	0.03	2000	
Sb	123	115	1	He	0.614	0.614	4.58	2316	0.03	300	
Ba	137	115	1	He	245.520	245.520	1.37	427142	0.06	10000	
W	182	209	1	He	0.326	0.326	15.39	6891	0.00	2500	
Tl	205	209	1	He	0.652	0.652	2.60	19027	0.00	5000	
Pb	208	209	1	He	52.053	52.053	0.61	1980389	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1079941	1.84	1389655	77.71	30	120	
Sc	45	1	He	528853	0.67	628609	84.13	30	120	
Sc	45	2	NoGas	4093302	1.20	4813296	85.04	30	120	
Rh	103	1	He	1629645	2.04	1894469	86.02	30	120	
In	115	1	He	891477	0.76	1086371	82.06	30	120	
Tb	159	1	He	3006377	0.75	3251379	92.46	30	120	
Ho	165	1	He	3052155	1.44	3312124	92.15	30	120	
Bi	209	1	He	2195880	1.01	2533294	86.68	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-14-b@2
Data File Name	046SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:41:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.218	2.218	3.79	7935	0.03	10000	
B	11	45	2	NoGas	-5.164	-5.164	-1.11	59481	-0.01	300	
Na	23	45	1	He	141.520	141.520	2.63	250188	0.06	500000	
Mg	24	45	1	He	8229.137	8229.137	1.74	6053722	0.14	500000	
Al	27	45	1	He	40183.202	40183.202	1.23	15909277	0.25	200000	
K	39	45	1	He	3934.032	3934.032	0.80	2580568	0.15	500000	
Ca	44	45	1	He	1084.914	1084.914	0.70	38344	2.83	500000	
Ti	47	45	1	He	493.718	493.718	0.94	97369	0.51	2500	
V	51	45	1	He	91.800	91.800	1.00	457189	0.02	10000	
Cr	52	45	1	He	80.395	80.395	0.98	482671	0.02	10000	
Mn	55	45	1	He	2934.214	2934.214	1.30	13829084	0.02	10000	
Fe	56	45	1	He	106910.619	106910.619	1.50	614489753	0.02	200000	
Co	59	103	1	He	113.353	113.353	1.82	1013006	0.01	10000	
Ni	60	103	1	He	132.960	132.960	0.97	294187	0.05	10000	
Cu	63	103	1	He	60.785	60.785	1.67	353670	0.02	10000	
Zn	66	103	1	He	574.947	574.947	1.75	672314	0.09	10000	
As	75	103	1	He	451.471	451.471	1.32	327863	0.14	10000	
Se	78	103	1	He	4.113	4.113	7.23	345	1.19	10000	
Sr	88	103	1	He	49.407	49.407	0.96	288141	0.02	10000	
Mo	95	103	1	He	10.113	10.113	2.26	28149	0.04	2000	
Ag	107	103	1	He	0.278	0.278	3.70	2704	0.01	300	
Cd	111	103	1	He	1.124	1.124	3.71	2766	0.04	4000	
Sn	118	115	1	He	16.770	16.770	1.33	66530	0.03	2000	
Sb	123	115	1	He	1.032	1.032	0.54	3859	0.03	300	
Ba	137	115	1	He	288.693	288.693	1.01	513805	0.06	10000	
W	182	209	1	He	0.345	0.345	15.60	7265	0.00	2500	
Tl	205	209	1	He	1.151	1.151	1.87	34272	0.00	5000	
Pb	208	209	1	He	76.020	76.020	4.15	2953270	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1114459	0.77	1389655	80.20	30	120	
Sc	45	1	He	550284	1.07	628609	87.54	30	120	
Sc	45	2	NoGas	4254194	1.59	4813296	88.38	30	120	
Rh	103	1	He	1652372	1.79	1894469	87.22	30	120	
In	115	1	He	912004	1.02	1086371	83.95	30	120	
Tb	159	1	He	3075037	1.00	3251379	94.58	30	120	
Ho	165	1	He	3121247	0.08	3312124	94.24	30	120	
Bi	209	1	He	2242851	0.98	2533294	88.53	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-15-b@2
Data File Name	047SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:45:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.791	3.791	4.15	13691	0.03	10000	
B	11	45	2	NoGas	-4.436	-4.436	-7.58	65025	-0.01	300	
Na	23	45	1	He	186.408	186.408	1.28	320720	0.06	500000	
Mg	24	45	1	He	17068.603	17068.603	1.13	13059742	0.13	500000	
Al	27	45	1	He	75963.178	75963.178	1.29	31280962	0.24	200000	
K	39	45	1	He	5398.143	5398.143	1.39	3671651	0.15	500000	
Ca	44	45	1	He	2077.070	2077.070	2.26	76015	2.73	500000	
Ti	47	45	1	He	796.423	796.423	1.06	163357	0.49	2500	
V	51	45	1	He	152.629	152.629	1.17	790713	0.02	10000	
Cr	52	45	1	He	140.148	140.148	0.98	873980	0.02	10000	
Mn	55	45	1	He	2495.824	2495.824	0.99	12235317	0.02	10000	
Fe	56	45	1	He	182713.597	182713.597	1.05	1092367992	0.02	200000	
Co	59	103	1	He	64.334	64.334	0.71	573899	0.01	10000	
Ni	60	103	1	He	145.781	145.781	1.00	321934	0.05	10000	
Cu	63	103	1	He	153.179	153.179	1.43	888785	0.02	10000	
Zn	66	103	1	He	435.089	435.089	1.12	508074	0.09	10000	
As	75	103	1	He	99.803	99.803	1.11	72407	0.14	10000	
Se	78	103	1	He	7.246	7.246	8.23	584	1.24	10000	
Sr	88	103	1	He	27.769	27.769	0.72	161713	0.02	10000	
Mo	95	103	1	He	12.250	12.250	0.69	34008	0.04	2000	
Ag	107	103	1	He	0.138	0.138	7.76	1359	0.01	300	
Cd	111	103	1	He	1.062	1.062	6.47	2658	0.04	4000	
Sn	118	115	1	He	18.347	18.347	2.26	72495	0.03	2000	
Sb	123	115	1	He	1.256	1.256	1.11	4646	0.03	300	
Ba	137	115	1	He	398.660	398.660	0.57	707655	0.06	10000	
W	182	209	1	He	0.444	0.444	5.02	8362	0.01	2500	
Tl	205	209	1	He	1.305	1.305	1.80	38693	0.00	5000	
Pb	208	209	1	He	123.174	123.174	0.99	4765874	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1134636	1.26	1389655	81.65	30	120	
Sc	45	1	He	572357	0.70	628609	91.05	30	120	
Sc	45	2	NoGas	4509566	1.18	4813296	93.69	30	120	
Rh	103	1	He	1649088	0.73	1894469	87.05	30	120	
In	115	1	He	909576	0.36	1086371	83.73	30	120	
Tb	159	1	He	3116755	1.42	3251379	95.86	30	120	
Ho	165	1	He	3174560	1.24	3312124	95.85	30	120	
Bi	209	1	He	2233776	0.95	2533294	88.18	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	048_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:49:14-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.527	2.352	156795	1.16	50	93.1	89.5	110.5	
B	11	45	2	NoGas	31.323	0.404	141711	0.71	50	62.6	89.5	110.5	CCV Failed
Na	23	45	1	He	25396.972	0.932	31345727	0.70	25000	101.6	89.5	110.5	
Mg	24	45	1	He	25411.426	1.029	17772072	1.05	25000	101.6	89.5	110.5	
Al	27	45	1	He	250.786	1.370	95522	2.37	250	100.3	89.5	110.5	
K	39	45	1	He	25063.183	1.113	15481830	1.08	25000	100.3	89.5	110.5	
Ca	44	45	1	He	24707.579	0.603	822835	1.03	25000	98.8	89.5	110.5	
Ti	47	45	1	He	51.020	0.900	9585	0.86	50	102.0	89.5	110.5	
V	51	45	1	He	50.888	1.935	240924	2.15	50	101.8	89.5	110.5	
Cr	52	45	1	He	51.580	1.188	294959	0.91	50	103.2	89.5	110.5	
Mn	55	45	1	He	248.858	0.946	1115498	0.67	250	99.5	89.5	110.5	
Fe	56	45	1	He	13082.692	0.561	71502039	1.06	12500	104.7	89.5	110.5	
Co	59	103	1	He	46.789	2.063	417571	1.24	50	93.6	89.5	110.5	
Ni	60	103	1	He	47.083	1.783	104039	1.20	50	94.2	89.5	110.5	
Cu	63	103	1	He	47.613	2.389	276750	1.47	50	95.2	89.5	110.5	
Zn	66	103	1	He	47.533	1.777	56407	1.02	50	95.1	89.5	110.5	
As	75	103	1	He	47.479	2.231	34504	1.21	50	95.0	89.5	110.5	
Se	78	103	1	He	46.944	1.858	3623	0.93	50	93.9	89.5	110.5	
Sr	88	103	1	He	47.108	1.718	274333	0.69	50	94.2	89.5	110.5	
Mo	95	103	1	He	49.856	1.718	138247	1.96	50	99.7	89.5	110.5	
Ag	107	103	1	He	50.168	1.958	479940	1.10	50	100.3	89.5	110.5	
Cd	111	103	1	He	50.054	3.271	83882	2.29	50	100.1	89.5	110.5	
Sn	118	115	1	He	49.854	1.082	196003	1.48	50	99.7	89.5	110.5	
Sb	123	115	1	He	51.233	0.612	183159	0.54	50	102.5	89.5	110.5	
Ba	137	115	1	He	50.643	0.772	90237	1.09	50	101.3	89.5	110.5	
W	182	209	1	He	50.587	2.383	576663	0.87	50	101.2	89.5	110.5	
Tl	205	209	1	He	46.861	0.624	1374114	1.20	50	93.7	89.5	110.5	
Pb	208	209	1	He	48.608	0.621	1862715	1.26	50	97.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1071323	1.34	1389655	77.09	30	120	
Sc	45	1	He	523205	1.62	628609	83.23	30	120	
Sc	45	2	NoGas	3951937	0.92	4813296	82.10	30	120	
Rh	103	1	He	1649931	1.05	1894469	87.09	30	120	
In	115	1	He	912498	0.44	1086371	84.00	30	120	
Tb	159	1	He	3025119	0.53	3251379	93.04	30	120	
Ho	165	1	He	3083045	0.98	3312124	93.08	30	120	
Bi	209	1	He	2211715	1.55	2533294	87.31	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	049_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:53:05-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.034	104.0	289	43.7	1	
B	11	45	2	NoGas	-21.882	-0.7	15852	2.1	20	
Na	23	45	1	He	-0.483	-473.8	62224	3.6	400	
Mg	24	45	1	He	2.785	17.0	3045	10.1	1000	
Al	27	45	1	He	3.923	3.4	2560	2.4	50	
K	39	45	1	He	7.619	20.8	32055	2.8	1000	
Ca	44	45	1	He	12.402	23.2	745	12.3	1000	
Ti	47	45	1	He	0.060	94.6	31	32.7	20	
V	51	45	1	He	0.061	148.3	185	231.4	2	
Cr	52	45	1	He	0.033	36.0	1657	4.2	2	
Mn	55	45	1	He	0.745	8.9	3687	7.6	2	
Fe	56	45	1	He	33.458	15.1	184660	13.6	50	
Co	59	103	1	He	0.019	20.2	192	18.2	1	
Ni	60	103	1	He	0.022	55.6	76	37.0	2	
Cu	63	103	1	He	0.047	21.4	856	7.5	2	
Zn	66	103	1	He	0.433	26.0	1566	9.2	20	
As	75	103	1	He	0.095	8.9	161	4.2	2	
Se	78	103	1	He	-0.045	-75.7	28	9.5	2	
Sr	88	103	1	He	0.031	29.8	350	15.9	10	
Mo	95	103	1	He	0.998	24.1	2991	23.7	2	
Ag	107	103	1	He	0.007	61.4	107	38.0	0.2	
Cd	111	103	1	He	-0.059	-23.6	843	3.2	0.2	
Sn	118	115	1	He	0.257	10.2	2045	5.6	10	
Sb	123	115	1	He	0.538	18.8	2194	17.4	1	
Ba	137	115	1	He	0.021	38.0	102	15.1	5	
W	182	209	1	He	0.937	17.2	14570	14.2	10	
Tl	205	209	1	He	0.054	8.5	1715	9.2	0.5	
Pb	208	209	1	He	0.065	8.9	3466	7.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1112008	1.74	1389655	80.02	30	120	
Sc	45	1	He	517163	1.25	628609	82.27	30	120	
Sc	45	2	NoGas	4004786	0.83	4813296	83.20	30	120	
Rh	103	1	He	1736644	0.39	1894469	91.67	30	120	
In	115	1	He	954954	0.42	1086371	87.90	30	120	
Tb	159	1	He	3008639	1.03	3251379	92.53	30	120	
Ho	165	1	He	3107947	0.38	3312124	93.84	30	120	
Bi	209	1	He	2321989	1.01	2533294	91.66	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-16-b@2
Data File Name	050SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T17:56:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.671	2.671	7.32	9092	0.03	10000	
B	11	45	2	NoGas	-6.593	-6.593	-7.93	53879	-0.01	300	
Na	23	45	1	He	190.830	190.830	2.77	309997	0.06	500000	
Mg	24	45	1	He	12577.328	12577.328	3.30	9131382	0.14	500000	
Al	27	45	1	He	44141.973	44141.973	3.02	17250521	0.26	200000	
K	39	45	1	He	4584.623	4584.623	2.52	2963320	0.15	500000	
Ca	44	45	1	He	3139.249	3139.249	2.73	108830	2.88	500000	
Ti	47	45	1	He	416.990	416.990	1.90	81177	0.51	2500	
V	51	45	1	He	87.096	87.096	2.90	428076	0.02	10000	
Cr	52	45	1	He	77.284	77.284	2.30	458029	0.02	10000	
Mn	55	45	1	He	2622.330	2622.330	2.35	12198609	0.02	10000	
Fe	56	45	1	He	116439.900	116439.900	1.03	660734552	0.02	200000	
Co	59	103	1	He	45.713	45.713	1.48	391933	0.01	10000	
Ni	60	103	1	He	101.149	101.149	0.83	214707	0.05	10000	
Cu	63	103	1	He	84.203	84.203	0.82	469834	0.02	10000	
Zn	66	103	1	He	264.356	264.356	1.10	297091	0.09	10000	
As	75	103	1	He	55.215	55.215	1.28	38539	0.14	10000	
Se	78	103	1	He	4.427	4.427	3.72	354	1.25	10000	
Sr	88	103	1	He	29.000	29.000	0.93	162304	0.02	10000	
Mo	95	103	1	He	6.570	6.570	2.54	17563	0.04	2000	
Ag	107	103	1	He	0.086	0.086	6.22	824	0.01	300	
Cd	111	103	1	He	0.514	0.514	6.96	1681	0.03	4000	
Sn	118	115	1	He	16.050	16.050	0.55	61958	0.03	2000	
Sb	123	115	1	He	0.952	0.952	2.15	3474	0.03	300	
Ba	137	115	1	He	299.342	299.342	1.04	518125	0.06	10000	
W	182	209	1	He	0.614	0.614	3.04	10085	0.01	2500	
Tl	205	209	1	He	0.768	0.768	1.07	22321	0.00	5000	
Pb	208	209	1	He	76.624	76.624	1.82	2901756	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1063744	0.33	1389655	76.55	30	120	
Sc	45	1	He	543312	2.62	628609	86.43	30	120	
Sc	45	2	NoGas	4105266	0.89	4813296	85.29	30	120	
Rh	103	1	He	1585050	1.07	1894469	83.67	30	120	
In	115	1	He	886929	0.61	1086371	81.64	30	120	
Tb	159	1	He	2985563	1.08	3251379	91.82	30	120	
Ho	165	1	He	3043983	0.60	3312124	91.90	30	120	
Bi	209	1	He	2185928	0.71	2533294	86.29	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-17-b@2
Data File Name	051SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:00:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.486	3.486	3.06	11945	0.03	10000	
B	11	45	2	NoGas	-6.419	-6.419	-2.39	55851	-0.01	300	
Na	23	45	1	He	178.284	178.284	0.99	291180	0.06	500000	
Mg	24	45	1	He	13238.574	13238.574	1.64	9521587	0.14	500000	
Al	27	45	1	He	60898.097	60898.097	1.55	23571865	0.26	200000	
K	39	45	1	He	4923.248	4923.248	2.57	3150017	0.16	500000	
Ca	44	45	1	He	4915.931	4915.931	0.95	168628	2.92	500000	
Ti	47	45	1	He	415.843	415.843	0.64	80185	0.52	2500	
V	51	45	1	He	116.658	116.658	1.35	568074	0.02	10000	
Cr	52	45	1	He	91.612	91.612	0.83	537546	0.02	10000	
Mn	55	45	1	He	4114.464	4114.464	1.24	18959291	0.02	10000	
Fe	56	45	1	He	169675.180	169675.180	0.38	953539198	0.02	200000	
Co	59	103	1	He	54.549	54.549	0.73	468770	0.01	10000	
Ni	60	103	1	He	104.171	104.171	0.90	221614	0.05	10000	
Cu	63	103	1	He	95.536	95.536	0.34	534199	0.02	10000	
Zn	66	103	1	He	298.373	298.373	1.13	335931	0.09	10000	
As	75	103	1	He	68.999	68.999	0.43	48247	0.14	10000	
Se	78	103	1	He	6.085	6.085	1.15	477	1.27	10000	
Sr	88	103	1	He	38.991	38.991	0.64	218673	0.02	10000	
Mo	95	103	1	He	8.772	8.772	2.15	23479	0.04	2000	
Ag	107	103	1	He	0.206	0.206	3.31	1935	0.01	300	
Cd	111	103	1	He	0.923	0.923	0.16	2340	0.04	4000	
Sn	118	115	1	He	17.327	17.327	0.50	66549	0.03	2000	
Sb	123	115	1	He	0.712	0.712	3.74	2632	0.03	300	
Ba	137	115	1	He	484.662	484.662	0.60	835550	0.06	10000	
W	182	209	1	He	0.375	0.375	19.69	7439	0.01	2500	
Tl	205	209	1	He	0.916	0.916	1.71	26726	0.00	5000	
Pb	208	209	1	He	84.431	84.431	1.27	3212154	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1075346	0.43	1389655	77.38	30	120	
Sc	45	1	He	537988	0.51	628609	85.58	30	120	
Sc	45	2	NoGas	4221759	0.31	4813296	87.71	30	120	
Rh	103	1	He	1588551	0.83	1894469	83.85	30	120	
In	115	1	He	883418	0.48	1086371	81.32	30	120	
Tb	159	1	He	3030634	0.85	3251379	93.21	30	120	
Ho	165	1	He	3078157	0.69	3312124	92.94	30	120	
Bi	209	1	He	2196364	1.57	2533294	86.70	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-18-b@2
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:04:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.105	3.105	2.56	10255	0.03	10000	
B	11	45	2	NoGas	-10.100	-10.100	-4.66	45256	-0.02	300	
Na	23	45	1	He	179.629	179.629	1.31	285159	0.06	500000	
Mg	24	45	1	He	14130.387	14130.387	1.34	9894479	0.14	500000	
Al	27	45	1	He	57402.799	57402.799	1.14	21633154	0.27	200000	
K	39	45	1	He	4207.218	4207.218	1.54	2624979	0.16	500000	
Ca	44	45	1	He	3944.755	3944.755	0.90	131813	2.99	500000	
Ti	47	45	1	He	443.362	443.362	1.02	83234	0.53	2500	
V	51	45	1	He	107.141	107.141	1.32	507943	0.02	10000	
Cr	52	45	1	He	91.157	91.157	1.48	520754	0.02	10000	
Mn	55	45	1	He	2563.426	2563.426	1.18	11500544	0.02	10000	
Fe	56	45	1	He	135851.278	135851.278	1.35	743292842	0.02	200000	
Co	59	103	1	He	49.585	49.585	2.13	420540	0.01	10000	
Ni	60	103	1	He	109.988	109.988	2.74	230911	0.05	10000	
Cu	63	103	1	He	94.779	94.779	2.29	523027	0.02	10000	
Zn	66	103	1	He	384.763	384.763	2.60	427255	0.09	10000	
As	75	103	1	He	61.943	61.943	2.22	42755	0.14	10000	
Se	78	103	1	He	4.647	4.647	5.20	366	1.27	10000	
Sr	88	103	1	He	26.631	26.631	2.09	147442	0.02	10000	
Mo	95	103	1	He	7.309	7.309	4.78	19314	0.04	2000	
Ag	107	103	1	He	0.132	0.132	13.27	1236	0.01	300	
Cd	111	103	1	He	0.700	0.700	4.68	1958	0.04	4000	
Sn	118	115	1	He	15.656	15.656	1.06	59415	0.03	2000	
Sb	123	115	1	He	0.562	0.562	4.40	2086	0.03	300	
Ba	137	115	1	He	335.708	335.708	0.99	571069	0.06	10000	
W	182	209	1	He	0.337	0.337	11.14	6928	0.00	2500	
Tl	205	209	1	He	0.885	0.885	1.41	25473	0.00	5000	
Pb	208	209	1	He	70.986	70.986	1.50	2665501	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1034845	1.57	1389655	74.47	30	120	
Sc	45	1	He	523809	0.81	628609	83.33	30	120	
Sc	45	2	NoGas	4106447	1.02	4813296	85.31	30	120	
Rh	103	1	He	1568159	1.79	1894469	82.78	30	120	
In	115	1	He	871696	0.90	1086371	80.24	30	120	
Tb	159	1	He	2964553	2.68	3251379	91.18	30	120	
Ho	165	1	He	3031056	1.60	3312124	91.51	30	120	
Bi	209	1	He	2167672	1.33	2533294	85.57	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-20-b@2
Data File Name	053SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:08:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.070	3.070	5.76	10151	0.03	10000	
B	11	45	2	NoGas	-2.433	-2.433	-16.15	63011	0.00	300	
Na	23	45	1	He	268.464	268.464	0.54	393147	0.07	500000	
Mg	24	45	1	He	17603.751	17603.751	0.21	12277751	0.14	500000	
Al	27	45	1	He	59358.678	59358.678	0.16	22281749	0.27	200000	
K	39	45	1	He	6484.297	6484.297	2.09	4014629	0.16	500000	
Ca	44	45	1	He	7359.390	7359.390	1.29	244635	3.01	500000	
Ti	47	45	1	He	433.516	433.516	0.95	81066	0.53	2500	
V	51	45	1	He	106.298	106.298	0.81	501944	0.02	10000	
Cr	52	45	1	He	100.812	100.812	0.21	573484	0.02	10000	
Mn	55	45	1	He	2623.745	2623.745	1.03	11724383	0.02	10000	
Fe	56	45	1	He	144548.123	144548.123	0.25	787761444	0.02	200000	
Co	59	103	1	He	66.599	66.599	4.40	534397	0.01	10000	
Ni	60	103	1	He	149.123	149.123	4.30	296225	0.05	10000	
Cu	63	103	1	He	108.563	108.563	3.87	566831	0.02	10000	
Zn	66	103	1	He	321.911	321.911	3.90	338407	0.10	10000	
As	75	103	1	He	65.149	65.149	3.79	42548	0.15	10000	
Se	78	103	1	He	5.008	5.008	2.52	372	1.35	10000	
Sr	88	103	1	He	41.415	41.415	4.24	216871	0.02	10000	
Mo	95	103	1	He	6.678	6.678	5.31	16701	0.04	2000	
Ag	107	103	1	He	0.105	0.105	5.52	940	0.01	300	
Cd	111	103	1	He	0.580	0.580	13.39	1675	0.03	4000	
Sn	118	115	1	He	17.032	17.032	3.59	63917	0.03	2000	
Sb	123	115	1	He	0.591	0.591	6.14	2165	0.03	300	
Ba	137	115	1	He	389.568	389.568	0.97	656198	0.06	10000	
W	182	209	1	He	0.230	0.230	6.75	5657	0.00	2500	
Tl	205	209	1	He	0.966	0.966	0.70	27434	0.00	5000	
Pb	208	209	1	He	64.207	64.207	1.08	2378686	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1036629	2.17	1389655	74.60	30	120	
Sc	45	1	He	521707	0.35	628609	82.99	30	120	
Sc	45	2	NoGas	4034222	0.70	4813296	83.81	30	120	
Rh	103	1	He	1484929	3.77	1894469	78.38	30	120	
In	115	1	He	863170	1.04	1086371	79.45	30	120	
Tb	159	1	He	2960437	1.23	3251379	91.05	30	120	
Ho	165	1	He	3008456	0.53	3312124	90.83	30	120	
Bi	209	1	He	2138385	0.49	2533294	84.41	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-21-b@2
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:12:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.617	3.617	2.47	11864	0.03	10000	
B	11	45	2	NoGas	3.596	3.596	17.68	78640	0.00	300	
Na	23	45	1	He	311.290	311.290	1.78	450100	0.07	500000	
Mg	24	45	1	He	18694.106	18694.106	0.36	13165899	0.14	500000	
Al	27	45	1	He	67761.499	67761.499	0.53	25684890	0.26	200000	
K	39	45	1	He	7567.283	7567.283	0.51	4726686	0.16	500000	
Ca	44	45	1	He	9959.241	9959.241	0.56	334188	2.98	500000	
Ti	47	45	1	He	454.862	454.862	0.99	85886	0.53	2500	
V	51	45	1	He	119.242	119.242	0.57	568615	0.02	10000	
Cr	52	45	1	He	123.150	123.150	0.52	707086	0.02	10000	
Mn	55	45	1	He	2786.516	2786.516	1.33	12573660	0.02	10000	
Fe	56	45	1	He	160568.222	160568.222	0.93	883626098	0.02	200000	
Co	59	103	1	He	79.932	79.932	3.34	638657	0.01	10000	
Ni	60	103	1	He	162.201	162.201	3.28	320831	0.05	10000	
Cu	63	103	1	He	133.775	133.775	3.54	695273	0.02	10000	
Zn	66	103	1	He	383.006	383.006	3.05	400731	0.10	10000	
As	75	103	1	He	85.409	85.409	2.87	55517	0.15	10000	
Se	78	103	1	He	8.440	8.440	3.83	605	1.39	10000	
Sr	88	103	1	He	49.826	49.826	2.53	259815	0.02	10000	
Mo	95	103	1	He	8.778	8.778	3.98	21843	0.04	2000	
Ag	107	103	1	He	0.125	0.125	7.73	1104	0.01	300	
Cd	111	103	1	He	0.863	0.863	4.88	2087	0.04	4000	
Sn	118	115	1	He	17.425	17.425	0.47	65128	0.03	2000	
Sb	123	115	1	He	0.799	0.799	5.18	2855	0.03	300	
Ba	137	115	1	He	389.194	389.194	0.91	652986	0.06	10000	
W	182	209	1	He	0.268	0.268	9.67	6116	0.00	2500	
Tl	205	209	1	He	1.024	1.024	3.43	29278	0.00	5000	
Pb	208	209	1	He	81.154	81.154	2.55	3026287	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1029981	0.57	1389655	74.12	30	120	
Sc	45	1	He	526825	0.44	628609	83.81	30	120	
Sc	45	2	NoGas	4088342	0.48	4813296	84.94	30	120	
Rh	103	1	He	1477994	3.03	1894469	78.02	30	120	
In	115	1	He	859745	0.62	1086371	79.14	30	120	
Tb	159	1	He	2998944	0.90	3251379	92.24	30	120	
Ho	165	1	He	3031216	1.56	3312124	91.52	30	120	
Bi	209	1	He	2153140	1.69	2533294	84.99	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-1-b@2
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:15:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.827	3.827	4.04	12364	0.03	10000	
B	11	45	2	NoGas	-1.931	-1.931	-22.81	62182	0.00	300	
Na	23	45	1	He	263.878	263.878	1.59	381006	0.07	500000	
Mg	24	45	1	He	18623.579	18623.579	0.26	12772299	0.15	500000	
Al	27	45	1	He	68816.391	68816.391	1.65	25397475	0.27	200000	
K	39	45	1	He	5982.058	5982.058	2.24	3643499	0.16	500000	
Ca	44	45	1	He	30398.604	30398.604	1.83	992467	3.06	500000	
Ti	47	45	1	He	386.147	386.147	1.87	70993	0.54	2500	
V	51	45	1	He	134.700	134.700	0.88	625470	0.02	10000	
Cr	52	45	1	He	108.323	108.323	1.34	605776	0.02	10000	
Mn	55	45	1	He	4203.884	4203.884	1.15	18470596	0.02	10000	
Fe	56	45	1	He	153444.540	153444.540	1.27	822220838	0.02	200000	
Co	59	103	1	He	59.017	59.017	4.48	474751	0.01	10000	
Ni	60	103	1	He	124.760	124.760	4.20	248468	0.05	10000	
Cu	63	103	1	He	75.585	75.585	4.45	395736	0.02	10000	
Zn	66	103	1	He	333.119	333.119	4.42	351005	0.09	10000	
As	75	103	1	He	68.703	68.703	4.26	44974	0.15	10000	
Se	78	103	1	He	5.731	5.731	4.90	423	1.36	10000	
Sr	88	103	1	He	84.457	84.457	4.22	443254	0.02	10000	
Mo	95	103	1	He	8.306	8.306	5.23	20813	0.04	2000	
Ag	107	103	1	He	0.334	0.334	3.26	2917	0.01	300	
Cd	111	103	1	He	1.099	1.099	5.79	2453	0.04	4000	
Sn	118	115	1	He	16.460	16.460	2.21	61679	0.03	2000	
Sb	123	115	1	He	13.844	13.844	1.32	46839	0.03	300	
Ba	137	115	1	He	432.963	432.963	0.19	727753	0.06	10000	
W	182	209	1	He	0.275	0.275	9.53	6135	0.00	2500	
Tl	205	209	1	He	0.954	0.954	2.33	27021	0.00	5000	
Pb	208	209	1	He	95.263	95.263	1.88	3520178	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1015432	1.09	1389655	73.07	30	120	
Sc	45	1	He	513013	1.38	628609	81.61	30	120	
Sc	45	2	NoGas	3905941	0.68	4813296	81.15	30	120	
Rh	103	1	He	1488699	3.77	1894469	78.58	30	120	
In	115	1	He	861309	0.47	1086371	79.28	30	120	
Tb	159	1	He	2914646	0.88	3251379	89.64	30	120	
Ho	165	1	He	2967600	0.82	3312124	89.60	30	120	
Bi	209	1	He	2133565	1.80	2533294	84.22	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-2-b@2
Data File Name	056SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:19:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.308	3.308	1.72	10744	0.03	10000	
B	11	45	2	NoGas	-12.918	-12.918	-2.88	36685	-0.04	300	
Na	23	45	1	He	130.152	130.152	2.06	219224	0.06	500000	
Mg	24	45	1	He	10267.488	10267.488	0.52	7032822	0.15	500000	
Al	27	45	1	He	61611.046	61611.046	2.15	22707191	0.27	200000	
K	39	45	1	He	3831.182	3831.182	2.68	2340102	0.16	500000	
Ca	44	45	1	He	2193.695	2193.695	1.41	71840	3.05	500000	
Ti	47	45	1	He	366.002	366.002	1.07	67209	0.54	2500	
V	51	45	1	He	131.795	131.795	2.44	611067	0.02	10000	
Cr	52	45	1	He	95.777	95.777	0.99	535098	0.02	10000	
Mn	55	45	1	He	4823.057	4823.057	1.87	21162355	0.02	10000	
Fe	56	45	1	He	128080.028	128080.028	2.27	685336275	0.02	200000	
Co	59	103	1	He	52.953	52.953	5.54	425244	0.01	10000	
Ni	60	103	1	He	102.215	102.215	5.33	203229	0.05	10000	
Cu	63	103	1	He	66.571	66.571	5.19	348051	0.02	10000	
Zn	66	103	1	He	285.506	285.506	5.32	300468	0.10	10000	
As	75	103	1	He	57.536	57.536	5.40	37612	0.15	10000	
Se	78	103	1	He	5.327	5.327	7.11	394	1.35	10000	
Sr	88	103	1	He	23.011	23.011	5.40	120658	0.02	10000	
Mo	95	103	1	He	7.851	7.851	5.93	19643	0.04	2000	
Ag	107	103	1	He	0.253	0.253	3.41	2218	0.01	300	
Cd	111	103	1	He	0.862	0.862	4.48	2097	0.04	4000	
Sn	118	115	1	He	17.526	17.526	1.98	65652	0.03	2000	
Sb	123	115	1	He	3.897	3.897	2.78	13312	0.03	300	
Ba	137	115	1	He	404.337	404.337	0.63	680013	0.06	10000	
W	182	209	1	He	0.270	0.270	11.88	6094	0.00	2500	
Tl	205	209	1	He	0.893	0.893	3.08	25374	0.00	5000	
Pb	208	209	1	He	98.102	98.102	2.06	3634410	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1018360	2.56	1389655	73.28	30	120	
Sc	45	1	He	512352	1.61	628609	81.51	30	120	
Sc	45	2	NoGas	3930556	0.64	4813296	81.66	30	120	
Rh	103	1	He	1487149	4.81	1894469	78.50	30	120	
In	115	1	He	861785	0.90	1086371	79.33	30	120	
Tb	159	1	He	2909634	0.65	3251379	89.49	30	120	
Ho	165	1	He	2977609	0.51	3312124	89.90	30	120	
Bi	209	1	He	2139005	1.55	2533294	84.44	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-3-b@2
Data File Name	057SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:23:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.306	4.306	1.15	13316	0.03	10000	
B	11	45	2	NoGas	-10.551	-10.551	-0.97	41986	-0.03	300	
Na	23	45	1	He	146.648	146.648	0.17	236019	0.06	500000	
Mg	24	45	1	He	12979.442	12979.442	0.37	8774172	0.15	500000	
Al	27	45	1	He	66441.546	66441.546	0.19	24172620	0.27	200000	
K	39	45	1	He	4462.838	4462.838	1.06	2686559	0.17	500000	
Ca	44	45	1	He	1961.135	1961.135	2.61	63425	3.09	500000	
Ti	47	45	1	He	454.074	454.074	0.92	82292	0.55	2500	
V	51	45	1	He	156.285	156.285	0.31	715331	0.02	10000	
Cr	52	45	1	He	114.671	114.671	0.71	632039	0.02	10000	
Mn	55	45	1	He	6637.378	6637.378	0.38	28746578	0.02	10000	
Fe	56	45	1	He	164618.099	164618.099	0.73	869530792	0.02	200000	
Co	59	103	1	He	74.774	74.774	4.04	585944	0.01	10000	
Ni	60	103	1	He	141.304	141.304	4.19	274099	0.05	10000	
Cu	63	103	1	He	81.255	81.255	3.88	414397	0.02	10000	
Zn	66	103	1	He	345.689	345.689	5.10	354675	0.10	10000	
As	75	103	1	He	71.103	71.103	4.51	45329	0.16	10000	
Se	78	103	1	He	6.337	6.337	6.62	452	1.40	10000	
Sr	88	103	1	He	29.502	29.502	4.27	150896	0.02	10000	
Mo	95	103	1	He	9.874	9.874	3.64	24095	0.04	2000	
Ag	107	103	1	He	0.268	0.268	4.01	2292	0.01	300	
Cd	111	103	1	He	1.049	1.049	18.24	2310	0.05	4000	
Sn	118	115	1	He	17.369	17.369	1.30	63824	0.03	2000	
Sb	123	115	1	He	1.033	1.033	4.52	3582	0.03	300	
Ba	137	115	1	He	566.262	566.262	0.41	934009	0.06	10000	
W	182	209	1	He	0.273	0.273	1.62	6109	0.00	2500	
Tl	205	209	1	He	0.988	0.988	2.66	27956	0.00	5000	
Pb	208	209	1	He	101.513	101.513	2.46	3744852	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	973024	1.33	1389655	70.02	30	120	
Sc	45	1	He	505651	0.33	628609	80.44	30	120	
Sc	45	2	NoGas	3904928	0.77	4813296	81.13	30	120	
Rh	103	1	He	1450312	4.52	1894469	76.56	30	120	
In	115	1	He	845211	0.32	1086371	77.80	30	120	
Tb	159	1	He	2907351	0.37	3251379	89.42	30	120	
Ho	165	1	He	2939418	1.00	3312124	88.75	30	120	
Bi	209	1	He	2130249	2.10	2533294	84.09	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-4-b@2
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:27:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.094	3.094	4.42	9614	0.03	10000	
B	11	45	2	NoGas	-14.857	-14.857	-1.50	31739	-0.05	300	
Na	23	45	1	He	138.664	138.664	1.80	223548	0.06	500000	
Mg	24	45	1	He	11262.698	11262.698	2.11	7513423	0.15	500000	
Al	27	45	1	He	71230.499	71230.499	1.49	25575543	0.28	200000	
K	39	45	1	He	3428.024	3428.024	1.46	2043022	0.17	500000	
Ca	44	45	1	He	2381.571	2381.571	3.25	75929	3.14	500000	
Ti	47	45	1	He	404.755	404.755	0.83	72402	0.56	2500	
V	51	45	1	He	153.330	153.330	0.80	692662	0.02	10000	
Cr	52	45	1	He	101.791	101.791	1.55	553851	0.02	10000	
Mn	55	45	1	He	4185.070	4185.070	1.90	17887292	0.02	10000	
Fe	56	45	1	He	140024.261	140024.261	1.66	729902887	0.02	200000	
Co	59	103	1	He	55.819	55.819	3.73	437431	0.01	10000	
Ni	60	103	1	He	97.393	97.393	3.31	188969	0.05	10000	
Cu	63	103	1	He	56.637	56.637	2.86	289053	0.02	10000	
Zn	66	103	1	He	374.899	374.899	3.47	384736	0.10	10000	
As	75	103	1	He	59.969	59.969	3.70	38251	0.16	10000	
Se	78	103	1	He	5.485	5.485	5.15	395	1.39	10000	
Sr	88	103	1	He	22.150	22.150	3.80	113337	0.02	10000	
Mo	95	103	1	He	9.502	9.502	4.15	23184	0.04	2000	
Ag	107	103	1	He	0.255	0.255	4.71	2179	0.01	300	
Cd	111	103	1	He	1.029	1.029	12.14	2286	0.05	4000	
Sn	118	115	1	He	17.712	17.712	2.82	65504	0.03	2000	
Sb	123	115	1	He	0.809	0.809	2.66	2858	0.03	300	
Ba	137	115	1	He	373.837	373.837	0.33	620807	0.06	10000	
W	182	209	1	He	0.261	0.261	18.28	5931	0.00	2500	
Tl	205	209	1	He	1.012	1.012	2.37	28405	0.00	5000	
Pb	208	209	1	He	111.061	111.061	1.68	4066842	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	973756	1.76	1389655	70.07	30	120	
Sc	45	1	He	499109	1.85	628609	79.40	30	120	
Sc	45	2	NoGas	3884758	0.85	4813296	80.71	30	120	
Rh	103	1	He	1449921	3.57	1894469	76.53	30	120	
In	115	1	He	850938	0.98	1086371	78.33	30	120	
Tb	159	1	He	2874093	1.03	3251379	88.40	30	120	
Ho	165	1	He	2947350	0.44	3312124	88.99	30	120	
Bi	209	1	He	2114343	2.18	2533294	83.46	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-5-b@2
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:30:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.213	3.213	1.07	9903	0.03	10000	
B	11	45	2	NoGas	-10.149	-10.149	-5.49	41258	-0.02	300	
Na	23	45	1	He	140.117	140.117	2.94	219750	0.06	500000	
Mg	24	45	1	He	10234.580	10234.580	1.11	6661715	0.15	500000	
Al	27	45	1	He	62779.145	62779.145	1.02	21991102	0.29	200000	
K	39	45	1	He	3700.021	3700.021	1.07	2148922	0.17	500000	
Ca	44	45	1	He	5246.958	5246.958	1.01	162858	3.22	500000	
Ti	47	45	1	He	501.382	501.382	0.49	87492	0.57	2500	
V	51	45	1	He	135.099	135.099	0.41	595386	0.02	10000	
Cr	52	45	1	He	96.382	96.382	0.59	511734	0.02	10000	
Mn	55	45	1	He	7068.615	7068.615	1.17	29476969	0.02	10000	
Fe	56	45	1	He	118757.529	118757.529	0.64	603986109	0.02	200000	
Co	59	103	1	He	56.335	56.335	0.23	429011	0.01	10000	
Ni	60	103	1	He	100.887	100.887	0.66	190202	0.05	10000	
Cu	63	103	1	He	55.231	55.231	0.76	273877	0.02	10000	
Zn	66	103	1	He	310.207	310.207	0.34	309484	0.10	10000	
As	75	103	1	He	52.567	52.567	0.91	32592	0.16	10000	
Se	78	103	1	He	5.807	5.807	6.54	405	1.43	10000	
Sr	88	103	1	He	34.027	34.027	0.51	169125	0.02	10000	
Mo	95	103	1	He	9.198	9.198	1.70	21813	0.04	2000	
Ag	107	103	1	He	0.293	0.293	4.61	2427	0.01	300	
Cd	111	103	1	He	1.276	1.276	4.68	2572	0.05	4000	
Sn	118	115	1	He	18.212	18.212	1.52	66456	0.03	2000	
Sb	123	115	1	He	1.157	1.157	2.32	3965	0.03	300	
Ba	137	115	1	He	494.827	494.827	0.90	811079	0.06	10000	
W	182	209	1	He	0.391	0.391	8.76	7361	0.01	2500	
Tl	205	209	1	He	0.969	0.969	2.44	27273	0.00	5000	
Pb	208	209	1	He	106.122	106.122	0.70	3895669	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	965943	0.58	1389655	69.51	30	120	
Sc	45	1	He	486870	0.63	628609	77.45	30	120	
Sc	45	2	NoGas	3752621	0.94	4813296	77.96	30	120	
Rh	103	1	He	1407738	0.17	1894469	74.31	30	120	
In	115	1	He	839955	0.75	1086371	77.32	30	120	
Tb	159	1	He	2848263	1.01	3251379	87.60	30	120	
Ho	165	1	He	2897974	1.70	3312124	87.50	30	120	
Bi	209	1	He	2119254	1.68	2533294	83.66	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	060_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:34:40-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.849	0.066	147789	1.37	50	93.7	89.5	110.5	
B	11	45	2	NoGas	29.166	3.598	129497	1.13	50	58.3	89.5	110.5	CCV Failed
Na	23	45	1	He	25038.347	0.673	29263534	1.17	25000	100.2	89.5	110.5	
Mg	24	45	1	He	24921.089	1.766	16501660	0.49	25000	99.7	89.5	110.5	
Al	27	45	1	He	250.327	0.559	90273	0.92	250	100.1	89.5	110.5	
K	39	45	1	He	25161.178	2.365	14714455	1.07	25000	100.6	89.5	110.5	
Ca	44	45	1	He	24642.087	1.159	777009	0.35	25000	98.6	89.5	110.5	
Ti	47	45	1	He	52.556	4.981	9349	5.23	50	105.1	89.5	110.5	
V	51	45	1	He	51.185	1.551	229433	0.35	50	102.4	89.5	110.5	
Cr	52	45	1	He	50.992	0.937	276123	0.58	50	102.0	89.5	110.5	
Mn	55	45	1	He	248.396	0.412	1054322	0.97	250	99.4	89.5	110.5	
Fe	56	45	1	He	12930.465	1.583	66908755	0.36	12500	103.4	89.5	110.5	
Co	59	103	1	He	47.202	1.659	397042	0.56	50	94.4	89.5	110.5	
Ni	60	103	1	He	46.805	1.188	97481	0.46	50	93.6	89.5	110.5	
Cu	63	103	1	He	47.418	2.403	259765	1.06	50	94.8	89.5	110.5	
Zn	66	103	1	He	47.721	1.066	53372	0.54	50	95.4	89.5	110.5	
As	75	103	1	He	47.793	1.410	32737	0.56	50	95.6	89.5	110.5	
Se	78	103	1	He	47.273	0.894	3439	1.74	50	94.5	89.5	110.5	
Sr	88	103	1	He	47.584	1.706	261169	0.51	50	95.2	89.5	110.5	
Mo	95	103	1	He	50.244	0.556	131323	1.78	50	100.5	89.5	110.5	
Ag	107	103	1	He	50.389	1.555	454343	0.41	50	100.8	89.5	110.5	
Cd	111	103	1	He	50.268	1.072	79406	0.38	50	100.5	89.5	110.5	
Sn	118	115	1	He	49.843	1.007	188705	0.33	50	99.7	89.5	110.5	
Sb	123	115	1	He	51.661	0.751	177861	0.68	50	103.3	89.5	110.5	
Ba	137	115	1	He	50.388	2.971	86450	2.04	50	100.8	89.5	110.5	
W	182	209	1	He	48.761	1.138	551860	0.25	50	97.5	89.5	110.5	
Tl	205	209	1	He	45.659	1.477	1328720	0.53	50	91.3	89.5	110.5	
Pb	208	209	1	He	47.138	2.388	1792558	1.25	50	94.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1002646	1.31	1389655	72.15	30	120	
Sc	45	1	He	495397	1.35	628609	78.81	30	120	
Sc	45	2	NoGas	3746703	0.84	4813296	77.84	30	120	
Rh	103	1	He	1555122	1.37	1894469	82.09	30	120	
In	115	1	He	878784	0.94	1086371	80.89	30	120	
Tb	159	1	He	2906138	0.57	3251379	89.38	30	120	
Ho	165	1	He	2981530	0.75	3312124	90.02	30	120	
Bi	209	1	He	2195087	1.37	2533294	86.65	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	061_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:38:29-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.033	42.9	252	17.8	1	
B	11	45	2	NoGas	-23.701	-1.3	10737	5.8	20	
Na	23	45	1	He	-5.293	-18.8	52178	1.4	400	
Mg	24	45	1	He	2.512	34.0	2641	19.6	1000	
Al	27	45	1	He	4.909	0.7	2709	1.4	50	
K	39	45	1	He	4.925	54.8	28137	4.1	1000	
Ca	44	45	1	He	11.993	23.0	677	11.3	1000	
Ti	47	45	1	He	0.106	65.8	37	31.5	20	
V	51	45	1	He	0.107	50.6	369	63.1	2	
Cr	52	45	1	He	0.040	61.8	1568	8.9	2	
Mn	55	45	1	He	1.100	5.4	4870	4.4	2	
Fe	56	45	1	He	36.710	14.3	187165	12.9	50	
Co	59	103	1	He	0.014	9.3	142	9.5	1	
Ni	60	103	1	He	0.031	32.3	93	23.4	2	
Cu	63	103	1	He	0.034	24.7	737	5.2	2	
Zn	66	103	1	He	0.310	8.4	1347	3.5	20	
As	75	103	1	He	0.076	19.9	140	8.6	2	
Se	78	103	1	He	0.089	50.3	37	8.9	2	
Sr	88	103	1	He	0.013	63.3	229	20.7	10	
Mo	95	103	1	He	0.912	23.3	2615	24.1	2	
Ag	107	103	1	He	0.002	126.8	60	45.5	0.2	
Cd	111	103	1	He	-0.060	-70.4	800	7.8	0.2	
Sn	118	115	1	He	0.233	17.9	1845	8.5	10	
Sb	123	115	1	He	0.582	20.2	2234	18.3	1	
Ba	137	115	1	He	0.024	44.5	102	18.8	5	
W	182	209	1	He	0.936	14.8	13881	11.2	10	
Tl	205	209	1	He	0.045	12.5	1387	12.1	0.5	
Pb	208	209	1	He	0.047	1.9	2627	1.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	981820	1.19	1389655	70.65	30	120	
Sc	45	1	He	478655	1.40	628609	76.15	30	120	
Sc	45	2	NoGas	3744986	0.91	4813296	77.81	30	120	
Rh	103	1	He	1653917	1.38	1894469	87.30	30	120	
In	115	1	He	904599	0.31	1086371	83.27	30	120	
Tb	159	1	He	2898817	0.70	3251379	89.16	30	120	
Ho	165	1	He	2983822	0.73	3312124	90.09	30	120	
Bi	209	1	He	2215619	0.97	2533294	87.46	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-6-b@2
Data File Name	062SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:42:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.955	2.955	3.53	8884	0.03	10000	
B	11	45	2	NoGas	-9.943	-9.943	-3.92	41299	-0.02	300	
Na	23	45	1	He	150.515	150.515	4.82	237596	0.06	500000	
Mg	24	45	1	He	10083.077	10083.077	4.92	6727343	0.15	500000	
Al	27	45	1	He	55513.616	55513.616	4.74	19933516	0.28	200000	
K	39	45	1	He	3428.824	3428.824	4.76	2043296	0.17	500000	
Ca	44	45	1	He	10237.977	10237.977	3.63	325548	3.14	500000	
Ti	47	45	1	He	403.207	403.207	3.45	72154	0.56	2500	
V	51	45	1	He	118.420	118.420	4.34	535010	0.02	10000	
Cr	52	45	1	He	89.749	89.749	4.34	488602	0.02	10000	
Mn	55	45	1	He	3172.880	3172.880	4.84	13563369	0.02	10000	
Fe	56	45	1	He	102858.705	102858.705	4.79	536213739	0.02	200000	
Co	59	103	1	He	43.826	43.826	0.34	330956	0.01	10000	
Ni	60	103	1	He	102.843	102.843	0.78	192259	0.05	10000	
Cu	63	103	1	He	69.333	69.333	0.58	340794	0.02	10000	
Zn	66	103	1	He	350.995	350.995	0.48	347125	0.10	10000	
As	75	103	1	He	49.090	49.090	0.92	30185	0.16	10000	
Se	78	103	1	He	4.630	4.630	2.47	325	1.42	10000	
Sr	88	103	1	He	67.907	67.907	0.69	334551	0.02	10000	
Mo	95	103	1	He	8.117	8.117	2.47	19095	0.04	2000	
Ag	107	103	1	He	0.247	0.247	3.22	2030	0.01	300	
Cd	111	103	1	He	1.101	1.101	0.97	2305	0.05	4000	
Sn	118	115	1	He	25.056	25.056	1.39	91501	0.03	2000	
Sb	123	115	1	He	2.001	2.001	2.09	6768	0.03	300	
Ba	137	115	1	He	551.294	551.294	0.50	907471	0.06	10000	
W	182	209	1	He	0.662	0.662	4.53	10244	0.01	2500	
Tl	205	209	1	He	0.846	0.846	2.07	23686	0.00	5000	
Pb	208	209	1	He	117.063	117.063	1.05	4272433	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	941270	0.94	1389655	67.73	30	120	
Sc	45	1	He	499834	4.95	628609	79.51	30	120	
Sc	45	2	NoGas	3715626	1.31	4813296	77.20	30	120	
Rh	103	1	He	1395923	0.39	1894469	73.68	30	120	
In	115	1	He	843496	0.73	1086371	77.64	30	120	
Tb	159	1	He	2806143	0.42	3251379	86.31	30	120	
Ho	165	1	He	2844404	2.03	3312124	85.88	30	120	
Bi	209	1	He	2107075	1.38	2533294	83.18	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-7-b@2
Data File Name	063SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:46:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.192	3.192	7.91	9599	0.03	10000	
B	11	45	2	NoGas	-8.787	-8.787	-2.14	45538	-0.02	300	
Na	23	45	1	He	188.313	188.313	1.46	281756	0.07	500000	
Mg	24	45	1	He	10860.366	10860.366	0.54	7242969	0.15	500000	
Al	27	45	1	He	44725.909	44725.909	1.39	16052414	0.28	200000	
K	39	45	1	He	5847.764	5847.764	0.68	3464557	0.17	500000	
Ca	44	45	1	He	2007.012	2007.012	0.58	64027	3.13	500000	
Ti	47	45	1	He	340.002	340.002	1.45	60790	0.56	2500	
V	51	45	1	He	82.750	82.750	1.07	373587	0.02	10000	
Cr	52	45	1	He	133.389	133.389	1.03	725051	0.02	10000	
Mn	55	45	1	He	1532.871	1532.871	0.51	6549525	0.02	10000	
Fe	56	45	1	He	120516.951	120516.951	0.76	627998091	0.02	200000	
Co	59	103	1	He	46.601	46.601	1.33	346367	0.01	10000	
Ni	60	103	1	He	141.885	141.885	1.02	261061	0.05	10000	
Cu	63	103	1	He	87.851	87.851	0.51	424917	0.02	10000	
Zn	66	103	1	He	216.482	216.482	0.44	211042	0.10	10000	
As	75	103	1	He	52.927	52.927	1.10	32026	0.17	10000	
Se	78	103	1	He	5.487	5.487	5.06	375	1.46	10000	
Sr	88	103	1	He	24.421	24.421	0.39	118507	0.02	10000	
Mo	95	103	1	He	4.631	4.631	2.69	10753	0.04	2000	
Ag	107	103	1	He	0.161	0.161	8.79	1315	0.01	300	
Cd	111	103	1	He	0.585	0.585	10.14	1556	0.04	4000	
Sn	118	115	1	He	16.803	16.803	0.21	60092	0.03	2000	
Sb	123	115	1	He	0.582	0.582	7.08	2032	0.03	300	
Ba	137	115	1	He	254.079	254.079	0.53	407725	0.06	10000	
W	182	209	1	He	0.293	0.293	19.09	6135	0.00	2500	
Tl	205	209	1	He	0.702	0.702	2.04	19255	0.00	5000	
Pb	208	209	1	He	74.261	74.261	1.25	2656282	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	943069	1.06	1389655	67.86	30	120	
Sc	45	1	He	498828	0.65	628609	79.35	30	120	
Sc	45	2	NoGas	3855832	0.54	4813296	80.11	30	120	
Rh	103	1	He	1373987	0.82	1894469	72.53	30	120	
In	115	1	He	822242	0.25	1086371	75.69	30	120	
Tb	159	1	He	2835787	0.09	3251379	87.22	30	120	
Ho	165	1	He	2877671	0.77	3312124	86.88	30	120	
Bi	209	1	He	2064868	1.11	2533294	81.51	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-8-b@2
Data File Name	064SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:49:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.331	3.331	4.70	10155	0.03	10000	
B	11	45	2	NoGas	-5.812	-5.812	-7.69	51888	-0.01	300	
Na	23	45	1	He	172.622	172.622	1.28	258980	0.07	500000	
Mg	24	45	1	He	12683.024	12683.024	0.82	8318202	0.15	500000	
Al	27	45	1	He	74466.028	74466.028	1.09	26284836	0.28	200000	
K	39	45	1	He	6215.257	6215.257	1.73	3619536	0.17	500000	
Ca	44	45	1	He	1309.341	1309.341	0.93	41190	3.18	500000	
Ti	47	45	1	He	391.931	391.931	0.80	68916	0.57	2500	
V	51	45	1	He	130.205	130.205	0.55	578195	0.02	10000	
Cr	52	45	1	He	107.806	107.806	0.50	576588	0.02	10000	
Mn	55	45	1	He	764.223	764.223	1.39	3211427	0.02	10000	
Fe	56	45	1	He	146660.908	146660.908	0.56	751593943	0.02	200000	
Co	59	103	1	He	40.878	40.878	0.48	301193	0.01	10000	
Ni	60	103	1	He	96.817	96.817	0.50	176601	0.05	10000	
Cu	63	103	1	He	98.760	98.760	0.22	473468	0.02	10000	
Zn	66	103	1	He	256.023	256.023	0.93	247273	0.10	10000	
As	75	103	1	He	69.068	69.068	0.62	41410	0.17	10000	
Se	78	103	1	He	6.380	6.380	5.14	428	1.49	10000	
Sr	88	103	1	He	21.948	21.948	0.73	105591	0.02	10000	
Mo	95	103	1	He	6.161	6.161	3.54	14157	0.04	2000	
Ag	107	103	1	He	0.216	0.216	4.33	1736	0.01	300	
Cd	111	103	1	He	0.732	0.732	4.31	1744	0.04	4000	
Sn	118	115	1	He	16.800	16.800	1.69	59701	0.03	2000	
Sb	123	115	1	He	0.832	0.832	3.29	2819	0.03	300	
Ba	137	115	1	He	316.674	316.674	0.88	504939	0.06	10000	
W	182	209	1	He	0.219	0.219	3.51	5334	0.00	2500	
Tl	205	209	1	He	0.952	0.952	0.86	26040	0.00	5000	
Pb	208	209	1	He	66.204	66.204	1.04	2363007	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	956259	0.79	1389655	68.81	30	120	
Sc	45	1	He	490595	0.82	628609	78.04	30	120	
Sc	45	2	NoGas	3817661	1.56	4813296	79.31	30	120	
Rh	103	1	He	1362022	0.13	1894469	71.89	30	120	
In	115	1	He	817042	0.51	1086371	75.21	30	120	
Tb	159	1	He	2803415	0.90	3251379	86.22	30	120	
Ho	165	1	He	2851044	0.66	3312124	86.08	30	120	
Bi	209	1	He	2060257	0.60	2533294	81.33	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV -1945747
Data File Name	065_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:53:47-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.427	2.108	143257	1.47	50	94.9	89.5	110.5	
B	11	45	2	NoGas	27.693	1.273	123357	1.85	50	55.4	89.5	110.5	CCV Failed
Na	23	45	1	He	25056.436	2.743	28327286	1.47	25000	100.2	89.5	110.5	
Mg	24	45	1	He	24950.694	1.210	15985325	0.31	25000	99.8	89.5	110.5	
Al	27	45	1	He	252.406	0.437	88064	1.70	250	101.0	89.5	110.5	
K	39	45	1	He	25164.505	0.610	14241545	1.67	25000	100.7	89.5	110.5	
Ca	44	45	1	He	24756.544	0.818	755288	0.82	25000	99.0	89.5	110.5	
Ti	47	45	1	He	52.772	2.178	9083	3.27	50	105.5	89.5	110.5	
V	51	45	1	He	50.894	2.366	220699	1.09	50	101.8	89.5	110.5	
Cr	52	45	1	He	51.355	0.975	269039	0.34	50	102.7	89.5	110.5	
Mn	55	45	1	He	248.516	1.052	1020503	0.37	250	99.4	89.5	110.5	
Fe	56	45	1	He	12999.790	0.848	65086500	0.61	12500	104.0	89.5	110.5	
Co	59	103	1	He	49.913	0.875	383169	0.57	50	99.8	89.5	110.5	
Ni	60	103	1	He	49.796	0.824	94646	0.50	50	99.6	89.5	110.5	
Cu	63	103	1	He	50.299	0.200	251475	0.52	50	100.6	89.5	110.5	
Zn	66	103	1	He	50.595	1.882	51589	1.48	50	101.2	89.5	110.5	
As	75	103	1	He	51.051	0.988	31909	0.81	50	102.1	89.5	110.5	
Se	78	103	1	He	51.499	1.159	3416	0.77	50	103.0	89.5	110.5	
Sr	88	103	1	He	50.845	1.069	254685	0.62	50	101.7	89.5	110.5	
Mo	95	103	1	He	53.783	2.276	128265	2.06	50	107.6	89.5	110.5	
Ag	107	103	1	He	53.586	1.072	440969	0.88	50	107.2	89.5	110.5	
Cd	111	103	1	He	53.741	0.426	77421	0.58	50	107.5	89.5	110.5	
Sn	118	115	1	He	49.601	0.838	183580	0.78	50	99.2	89.5	110.5	
Sb	123	115	1	He	51.340	0.442	172787	0.49	50	102.7	89.5	110.5	
Ba	137	115	1	He	50.480	0.644	84674	0.62	50	101.0	89.5	110.5	
W	182	209	1	He	49.236	1.586	535764	1.30	50	98.5	89.5	110.5	
Tl	205	209	1	He	46.056	0.986	1288750	0.74	50	92.1	89.5	110.5	
Pb	208	209	1	He	47.700	0.992	1744349	0.97	50	95.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	960192	1.06	1389655	69.10	30	120	
Sc	45	1	He	479301	1.30	628609	76.25	30	120	
Sc	45	2	NoGas	3662172	1.42	4813296	76.08	30	120	
Rh	103	1	He	1419117	0.45	1894469	74.91	30	120	
In	115	1	He	859020	0.10	1086371	79.07	30	120	
Tb	159	1	He	2832842	1.47	3251379	87.13	30	120	
Ho	165	1	He	2865572	1.16	3312124	86.52	30	120	
Bi	209	1	He	2110495	0.60	2533294	83.31	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	066_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T18:57:39-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.016	76.5	200	20.0	1	
B	11	45	2	NoGas	-22.439	-0.3	13572	2.1	20	
Na	23	45	1	He	-8.930	-19.1	47622	3.0	400	
Mg	24	45	1	He	3.194	27.9	3049	17.5	1000	
Al	27	45	1	He	5.499	6.2	2886	5.0	50	
K	39	45	1	He	6.166	19.0	28575	1.4	1000	
Ca	44	45	1	He	12.415	20.4	684	11.5	1000	
Ti	47	45	1	He	0.068	125.9	30	48.4	20	
V	51	45	1	He	0.094	18.8	310	24.2	2	
Cr	52	45	1	He	0.036	42.2	1533	4.6	2	
Mn	55	45	1	He	0.746	6.1	3385	4.5	2	
Fe	56	45	1	He	38.353	10.7	193600	9.5	50	
Co	59	103	1	He	0.013	26.4	132	23.4	1	
Ni	60	103	1	He	0.010	82.6	44	38.5	2	
Cu	63	103	1	He	0.024	61.8	667	12.7	2	
Zn	66	103	1	He	0.357	31.2	1368	8.9	20	
As	75	103	1	He	0.053	24.2	120	7.2	2	
Se	78	103	1	He	0.085	94.6	36	16.6	2	
Sr	88	103	1	He	0.009	23.7	201	6.3	10	
Mo	95	103	1	He	1.018	11.8	2836	11.7	2	
Ag	107	103	1	He	0.004	26.5	77	13.0	0.2	
Cd	111	103	1	He	-0.041	-14.0	814	0.8	0.2	
Sn	118	115	1	He	0.261	32.9	1948	17.0	10	
Sb	123	115	1	He	0.579	19.1	2218	17.6	1	
Ba	137	115	1	He	0.029	28.3	110	13.2	5	
W	182	209	1	He	0.975	15.8	14233	11.1	10	
Tl	205	209	1	He	0.046	15.5	1389	13.9	0.5	
Pb	208	209	1	He	0.045	9.8	2528	5.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	986111	1.11	1389655	70.96	30	120	
Sc	45	1	He	474143	1.02	628609	75.43	30	120	
Sc	45	2	NoGas	3744230	1.16	4813296	77.79	30	120	
Rh	103	1	He	1614439	0.37	1894469	85.22	30	120	
In	115	1	He	902126	0.09	1086371	83.04	30	120	
Tb	159	1	He	2878459	0.58	3251379	88.53	30	120	
Ho	165	1	He	2912652	0.83	3312124	87.94	30	120	
Bi	209	1	He	2203329	1.18	2533294	86.97	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	067CRIA.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:01:29-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.998	0.998	4.925	3304	5.09	1	99.8	69.5	130.5	
B	11	2	NoGas	-2.801	-2.801	-4.472	58188	0.65	20	-14.0	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1073.753	1073.753	1.643	1310869	0.73	1000	107.4	69.5	130.5	
Mg	24	1	He	1066.454	1066.454	0.479	706464	1.51	1000	106.6	69.5	130.5	
Al	27	1	He	51.674	51.674	1.917	19450	2.63	50	103.3	69.5	130.5	
K	39	1	He	1056.929	1056.929	1.628	642536	0.45	1000	105.7	69.5	130.5	
Ca	44	1	He	1045.241	1045.241	2.457	33232	2.87	1000	104.5	69.5	130.5	
Ti	47	1	He	11.265	11.265	4.414	2016	2.72	10	112.7	69.5	130.5	
V	51	1	He	5.341	5.341	2.065	23832	3.31	5	106.8	69.5	130.5	
Cr	52	1	He	2.206	2.206	1.188	13277	1.43	2	110.3	69.5	130.5	
Mn	55	1	He	5.705	5.705	2.774	24546	1.95	5	114.1	69.5	130.5	
Fe	56	1	He	120.911	120.911	1.264	628848	0.90	100	120.9	69.5	130.5	
Co	59	1	He	0.982	0.982	3.463	8660	1.97	1	98.2	69.5	130.5	
Ni	60	1	He	1.944	1.944	2.116	4261	0.92	2	97.2	69.5	130.5	
Cu	63	1	He	1.991	1.991	3.769	11931	2.13	2	99.6	69.5	130.5	
Zn	66	1	He	19.884	19.884	2.521	23847	1.22	20	99.4	69.5	130.5	
As	75	1	He	4.903	4.903	3.139	3590	1.57	5	98.1	69.5	130.5	
Se	78	1	He	5.049	5.049	6.132	411	5.77	5	101.0	69.5	130.5	
Sr	88	1	He	9.581	9.581	2.007	55176	0.51	10	95.8	69.5	130.5	
Mo	95	1	He	10.474	10.474	0.668	28721	1.63	10	104.7	69.5	130.5	
Ag	107	1	He	1.038	1.038	2.381	9843	3.60	1	103.8	69.5	130.5	
Cd	111	1	He	1.026	1.026	5.865	2565	2.42	1	102.6	69.5	130.5	
Sn	118	1	He	10.183	10.183	3.567	40597	3.18	10	101.8	69.5	130.5	
Sb	123	1	He	2.181	2.181	5.558	7929	5.29	2	109.1	69.5	130.5	
Ba	137	1	He	5.087	5.087	0.077	9076	0.39	5	101.7	69.5	130.5	
W	182	1	He	9.692	9.692	1.202	114219	0.38	10	96.9	69.5	130.5	
Tl	205	1	He	1.894	1.894	1.667	56131	1.11	2	94.7	69.5	130.5	
Pb	208	1	He	1.058	1.058	1.413	41750	0.96	1	105.8	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1004346	0.41	1389655	72.27	30	120	
Sc	45	1	He	494843	1.96	628609	78.72	30	120	
Sc	45	2	NoGas	3778648	0.18	4813296	78.50	30	120	
Rh	103	1	He	1628249	1.51	1894469	85.95	30	120	
In	115	1	He	908231	0.34	1086371	83.60	30	120	
Tb	159	1	He	2891676	1.09	3251379	88.94	30	120	
Ho	165	1	He	2969822	0.20	3312124	89.67	30	120	
Bi	209	1	He	2232967	0.80	2533294	88.14	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177128/1-a@2
Data File Name	068_Blk.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:05:18-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.023	150.0	215	49.7	1	
B	11	45	2	NoGas	-22.714	-0.5	12123	0.9	20	
Na	23	45	1	He	19.124	4.2	78631	0.9	400	
Mg	24	45	1	He	30.627	1.5	20360	2.7	1000	
Al	27	45	1	He	2.665	7.5	1910	3.1	50	
K	39	45	1	He	21.083	11.6	36757	2.5	1000	
Ca	44	45	1	He	98.493	5.3	3266	3.2	1000	
Ti	47	45	1	He	0.240	25.6	59	17.3	20	
V	51	45	1	He	0.236	31.3	917	34.1	2	
Cr	52	45	1	He	0.817	4.8	5536	1.8	2	
Mn	55	45	1	He	0.789	7.5	3543	5.0	2	
Fe	56	45	1	He	29.667	4.7	150201	6.4	50	
Co	59	103	1	He	0.016	19.7	139	18.0	1	
Ni	60	103	1	He	0.157	7.4	322	6.9	2	
Cu	63	103	1	He	1.540	25.7	8254	24.4	2	
Zn	66	103	1	He	3.060	1.9	3963	1.8	20	
As	75	103	1	He	0.158	13.7	173	7.5	2	
Se	78	103	1	He	0.139	20.6	35	5.1	2	
Sr	88	103	1	He	0.238	6.6	1340	6.3	10	
Mo	95	103	1	He	0.429	25.0	1100	23.6	2	
Ag	107	103	1	He	0.003	118.7	57	48.2	0.2	
Cd	111	103	1	He	0.005	152.1	791	1.5	0.2	
Sn	118	115	1	He	18.578	1.3	68683	1.2	10	Blank Failed
Sb	123	115	1	He	0.237	6.6	953	5.9	1	
Ba	137	115	1	He	0.835	5.1	1442	4.8	5	
W	182	209	1	He	0.483	21.5	8510	12.4	10	
Tl	205	209	1	He	0.032	7.8	954	7.4	0.5	
Pb	208	209	1	He	0.183	2.3	7672	2.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	948619	1.62	1389655	68.26	30	120	
Sc	45	1	He	472279	1.92	628609	75.13	30	120	
Sc	45	2	NoGas	3504707	1.24	4813296	72.81	30	120	
Rh	103	1	He	1436788	0.37	1894469	75.84	30	120	
In	115	1	He	851142	0.44	1086371	78.35	30	120	
Tb	159	1	He	2779597	0.57	3251379	85.49	30	120	
Ho	165	1	He	2823069	0.35	3312124	85.23	30	120	
Bi	209	1	He	2160068	1.32	2533294	85.27	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177128/2-a@2
Data File Name	069LCSS.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:09:10-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	484.078	484.078	1.788	1383267	0.51	500	96.8	78.6	110.5	
B	11	2	NoGas	31.261	31.261	2.235	125385	0.91	50	62.5	79.5	120.5	LCSS Failed
Na	23	1	He	4828.166	4828.166	1.591	5312775	0.80	5000	96.6	79.5	120.5	
Mg	24	1	He	4928.950	4928.950	1.463	3047812	0.93	5000	98.6	79.5	120.5	
Al	27	1	He	4750.099	4750.099	2.086	1581230	0.69	5000	95.0	79.5	120.5	
K	39	1	He	4966.359	4966.359	1.643	2731196	0.27	5000	99.3	79.5	120.5	
Ca	44	1	He	4547.686	4547.686	2.274	134104	1.36	5000	91.0	79.5	120.5	
Ti	47	1	He	48.238	48.238	1.590	8011	0.32	50	96.5	79.5	120.5	
V	51	1	He	499.524	499.524	3.285	2090716	1.88	500	99.9	71.5	110.5	
Cr	52	1	He	507.296	507.296	1.827	2552462	0.30	500	101.5	69.5	110.5	
Mn	55	1	He	496.594	496.594	2.239	1967011	0.43	500	99.3	79.5	120.5	
Fe	56	1	He	5079.638	5079.638	1.770	24539655	0.47	5000	101.6	79.5	120.5	
Co	59	1	He	494.185	494.185	0.677	3698618	0.71	500	98.8	73.9	110.5	
Ni	60	1	He	474.292	474.292	0.316	878737	0.53	500	94.9	74.9	110.5	
Cu	63	1	He	503.429	503.429	0.825	2449731	0.30	500	100.7	72.6	110.5	
Zn	66	1	He	456.883	456.883	0.669	447594	0.61	500	91.4	71.5	113.4	
As	75	1	He	440.912	440.912	0.423	268148	0.58	500	88.2	73.4	110.5	
Se	78	1	He	420.952	420.952	0.656	27047	0.68	500	84.2	64.6	110.5	
Sr	88	1	He	514.982	514.982	0.502	2513812	0.22	500	103.0	79.5	120.5	
Mo	95	1	He	54.447	54.447	0.521	126598	0.83	50	108.9	29.5	140.5	
Ag	107	1	He	52.261	52.261	0.519	419290	0.56	50	104.5	59.5	114.5	
Cd	111	1	He	494.543	494.543	0.698	688423	0.76	500	98.9	73.5	110.5	
Sn	118	1	He	562.352	562.352	1.399	1964945	1.10	500	112.5	79.5	120.5	
Sb	123	1	He	49.173	49.173	0.535	156942	0.48	50	98.3	67.5	113.4	
Ba	137	1	He	484.297	484.297	0.568	769905	0.66	500	96.9	69.5	110.5	
W	182	1	He	47.880	47.880	1.333	510685	0.17	50	95.8	74.6	125.4	
Tl	205	1	He	121.550	121.550	0.535	3333360	0.84	125	97.2	70.6	110.5	
Pb	208	1	He	494.075	494.075	1.346	17699137	0.56	500	98.8	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	909339	2.29	1389655	65.44	30	120	
Sc	45	1	He	462504	1.91	628609	73.58	30	120	
Sc	45	2	NoGas	3500262	0.26	4813296	72.72	30	120	
Rh	103	1	He	1383559	0.54	1894469	73.03	30	120	
In	115	1	He	814614	0.33	1086371	74.98	30	120	
Tb	159	1	He	2745227	0.90	3251379	84.43	30	120	
Ho	165	1	He	2817665	0.71	3312124	85.07	30	120	
Bi	209	1	He	2068480	1.33	2533294	81.65	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-d@2
Data File Name	070SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:12:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.579	2.579	1.80	7828	0.03	10000	
B	11	45	2	NoGas	45.279	45.279	3.86	166967	0.03	300	
Na	23	45	1	He	1899.836	1899.836	3.03	2290992	0.08	500000	
Mg	24	45	1	He	11067.031	11067.031	2.45	7378310	0.15	500000	
Al	27	45	1	He	42633.516	42633.516	2.68	15296589	0.28	200000	
K	39	45	1	He	15372.977	15372.977	1.97	9062564	0.17	500000	
Ca	44	45	1	He	104.045	104.045	58.63	3638	2.86	500000	
Ti	47	45	1	He	323.123	323.123	1.56	57767	0.56	2500	
V	51	45	1	He	75.350	75.350	0.84	340169	0.02	10000	
Cr	52	45	1	He	77.411	77.411	2.31	421280	0.02	10000	
Mn	55	45	1	He	10781.740	10781.740	2.24	46054697	0.02	10000	>LDR
Fe	56	45	1	He	100096.597	100096.597	1.61	521490806	0.02	200000	
Co	59	103	1	He	37.995	37.995	0.92	281455	0.01	10000	
Ni	60	103	1	He	97.761	97.761	0.34	179273	0.05	10000	
Cu	63	103	1	He	99.825	99.825	1.00	481133	0.02	10000	
Zn	66	103	1	He	229.625	229.625	1.12	223053	0.10	10000	
As	75	103	1	He	217.730	217.730	0.26	131087	0.17	10000	
Se	78	103	1	He	4.138	4.138	3.10	288	1.44	10000	
Sr	88	103	1	He	1899.420	1899.420	0.93	9176197	0.02	10000	
Mo	95	103	1	He	685.153	685.153	1.45	1575894	0.04	2000	
Ag	107	103	1	He	0.087	0.087	15.34	726	0.01	300	
Cd	111	103	1	He	0.551	0.551	8.03	1504	0.04	4000	
Sn	118	115	1	He	17.310	17.310	1.21	62504	0.03	2000	
Sb	123	115	1	He	0.700	0.700	7.38	2435	0.03	300	
Ba	137	115	1	He	306.709	306.709	0.06	497128	0.06	10000	
W	182	209	1	He	17.599	17.599	0.54	190544	0.01	2500	
Tl	205	209	1	He	0.561	0.561	4.85	15493	0.00	5000	
Pb	208	209	1	He	393.167	393.167	0.16	14151943	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	947844	0.94	1389655	68.21	30	120	
Sc	45	1	He	498870	2.44	628609	79.36	30	120	
Sc	45	2	NoGas	3775956	1.47	4813296	78.45	30	120	
Rh	103	1	He	1369301	0.39	1894469	72.28	30	120	
In	115	1	He	830522	0.45	1086371	76.45	30	120	
Tb	159	1	He	2816256	0.23	3251379	86.62	30	120	
Ho	165	1	He	2886292	0.53	3312124	87.14	30	120	
Bi	209	1	He	2078159	0.06	2533294	82.03	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-3-d@10
Data File Name	071SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:16:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.482	0.482	12.28	1608	0.03	10000	
B	11	45	2	NoGas	-9.306	-9.306	-8.44	42260	-0.02	300	
Na	23	45	1	He	380.468	380.468	1.31	484181	0.08	500000	
Mg	24	45	1	He	2427.171	2427.171	0.83	1545230	0.16	500000	
Al	27	45	1	He	9507.214	9507.214	0.84	3256570	0.29	200000	
K	39	45	1	He	3416.736	3416.736	1.80	1941645	0.18	500000	
Ca	44	45	1	He	-52.487	-52.487	-53.97	-1291	4.07	500000	
Ti	47	45	1	He	70.058	70.058	1.49	11966	0.59	2500	
V	51	45	1	He	16.428	16.428	1.93	70695	0.02	10000	
Cr	52	45	1	He	16.758	16.758	0.95	88096	0.02	10000	
Mn	55	45	1	He	2334.115	2334.115	2.14	9513957	0.02	10000	
Fe	56	45	1	He	21788.426	21788.426	2.22	108312611	0.02	200000	
Co	59	103	1	He	7.609	7.609	0.54	58716	0.01	10000	
Ni	60	103	1	He	19.641	19.641	0.82	37535	0.05	10000	
Cu	63	103	1	He	20.175	20.175	0.55	101654	0.02	10000	
Zn	66	103	1	He	48.427	48.427	1.02	49667	0.10	10000	
As	75	103	1	He	45.126	45.126	0.52	28357	0.16	10000	
Se	78	103	1	He	0.782	0.782	21.04	78	1.01	10000	
Sr	88	103	1	He	389.645	389.645	0.68	1960759	0.02	10000	
Mo	95	103	1	He	124.223	124.223	0.40	297674	0.04	2000	
Ag	107	103	1	He	0.014	0.014	31.43	146	0.01	300	
Cd	111	103	1	He	0.155	0.155	6.97	1000	0.02	4000	
Sn	118	115	1	He	3.340	3.340	3.15	13113	0.03	2000	
Sb	123	115	1	He	0.134	0.134	12.00	611	0.02	300	
Ba	137	115	1	He	61.453	61.453	1.10	102429	0.06	10000	
W	182	209	1	He	3.538	3.538	5.53	42167	0.01	2500	
Tl	205	209	1	He	0.117	0.117	4.02	3384	0.00	5000	
Pb	208	209	1	He	71.915	71.915	1.90	2680837	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	964189	0.43	1389655	69.38	30	120	
Sc	45	1	He	475994	1.96	628609	75.72	30	120	
Sc	45	2	NoGas	3676918	1.88	4813296	76.39	30	120	
Rh	103	1	He	1426264	0.46	1894469	75.29	30	120	
In	115	1	He	853683	0.49	1086371	78.58	30	120	
Tb	159	1	He	2839697	0.37	3251379	87.34	30	120	
Ho	165	1	He	2869723	1.76	3312124	86.64	30	120	
Bi	209	1	He	2152102	1.59	2533294	84.95	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-3-d@2
Data File Name	072SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:20:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	975.122	975.122	1.07	2872670	0.03	10000	
B	11	45	2	NoGas	155.583	155.583	0.58	394951	0.04	300	
Na	23	45	1	He	11640.561	11640.561	1.86	13084623	0.09	500000	
Mg	24	45	1	He	20799.919	20799.919	1.15	13217718	0.16	500000	
Al	27	45	1	He	51935.474	51935.474	0.84	17763462	0.29	200000	
K	39	45	1	He	24973.108	24973.108	2.03	14015193	0.18	500000	
Ca	44	45	1	He	8797.770	8797.770	1.96	266387	3.30	500000	
Ti	47	45	1	He	414.421	414.421	1.92	70604	0.59	2500	
V	51	45	1	He	1066.737	1066.737	1.21	4590459	0.02	10000	
Cr	52	45	1	He	1070.777	1070.777	1.51	5536840	0.02	10000	
Mn	55	45	1	He	11577.302	11577.302	1.14	47136520	0.02	10000	>LDR
Fe	56	45	1	He	109256.558	109256.558	1.68	542488530	0.02	200000	
Co	59	103	1	He	1090.629	1090.629	1.21	7669994	0.01	10000	
Ni	60	103	1	He	1192.502	1192.502	1.33	2075981	0.06	10000	
Cu	63	103	1	He	1180.192	1180.192	1.61	5395921	0.02	10000	
Zn	66	103	1	He	1192.997	1192.997	0.99	1096974	0.11	10000	
As	75	103	1	He	1183.696	1183.696	1.08	676323	0.18	10000	
Se	78	103	1	He	942.801	942.801	1.08	56892	1.66	10000	
Sr	88	103	1	He	2997.837	2997.837	1.01	13750038	0.02	10000	
Mo	95	103	1	He	815.103	815.103	0.73	1780084	0.05	2000	
Ag	107	103	1	He	111.273	111.273	1.16	838830	0.01	300	
Cd	111	103	1	He	1072.133	1072.133	0.80	1401565	0.08	4000	
Sn	118	115	1	He	1201.583	1201.583	1.20	3972367	0.03	2000	
Sb	123	115	1	He	110.647	110.647	1.32	334010	0.03	300	
Ba	137	115	1	He	1516.163	1516.163	2.46	2280594	0.07	10000	
W	182	209	1	He	119.845	119.845	1.46	1231618	0.01	2500	
Tl	205	209	1	He	254.525	254.525	0.63	6749068	0.00	5000	
Pb	208	209	1	He	1429.862	1429.862	0.47	49530034	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	937267	0.98	1389655	67.45	30	120	
Sc	45	1	He	475401	1.52	628609	75.63	30	120	
Sc	45	2	NoGas	3578585	0.61	4813296	74.35	30	120	
Rh	103	1	He	1300103	0.63	1894469	68.63	30	120	
In	115	1	He	770962	1.18	1086371	70.97	30	120	
Tb	159	1	He	2760177	1.07	3251379	84.89	30	120	
Ho	165	1	He	2785899	1.15	3312124	84.11	30	120	
Bi	209	1	He	2000023	0.84	2533294	78.95	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-e du@2
Data File Name	073SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:23:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.403	2.403	7.11	6991	0.03	10000	
B	11	45	2	NoGas	43.928	43.928	1.69	153690	0.03	300	
Na	23	45	1	He	1793.993	1793.993	1.88	1968167	0.09	500000	
Mg	24	45	1	He	10301.995	10301.995	0.72	6239059	0.17	500000	
Al	27	45	1	He	38574.848	38574.848	1.00	12572449	0.31	200000	
K	39	45	1	He	14271.628	14271.628	1.83	7642877	0.19	500000	
Ca	44	45	1	He	294.062	294.062	13.29	8769	3.35	500000	
Ti	47	45	1	He	352.261	352.261	0.79	57196	0.62	2500	
V	51	45	1	He	69.537	69.537	1.03	285061	0.02	10000	
Cr	52	45	1	He	74.123	74.123	1.22	366430	0.02	10000	
Mn	55	45	1	He	5159.864	5159.864	1.46	20018368	0.03	10000	
Fe	56	45	1	He	97297.954	97297.954	1.00	460387519	0.02	200000	
Co	59	103	1	He	35.875	35.875	0.62	252079	0.01	10000	
Ni	60	103	1	He	90.839	90.839	0.17	158014	0.06	10000	
Cu	63	103	1	He	80.242	80.242	0.95	366928	0.02	10000	
Zn	66	103	1	He	195.095	195.095	0.47	179872	0.11	10000	
As	75	103	1	He	202.616	202.616	0.87	115716	0.18	10000	
Se	78	103	1	He	4.189	4.189	14.74	276	1.52	10000	
Sr	88	103	1	He	1389.372	1389.372	0.84	6366673	0.02	10000	
Mo	95	103	1	He	617.231	617.231	0.53	1346686	0.05	2000	
Ag	107	103	1	He	0.082	0.082	10.54	647	0.01	300	
Cd	111	103	1	He	0.614	0.614	9.82	1509	0.04	4000	
Sn	118	115	1	He	20.190	20.190	3.89	68275	0.03	2000	
Sb	123	115	1	He	0.996	0.996	6.73	3187	0.03	300	
Ba	137	115	1	He	274.831	274.831	0.53	418005	0.07	10000	
W	182	209	1	He	20.400	20.400	1.82	209341	0.01	2500	
Tl	205	209	1	He	0.809	0.809	12.71	21237	0.00	5000	
Pb	208	209	1	He	256.224	256.224	0.33	8760531	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	907423	2.40	1389655	65.30	30	120	
Sc	45	1	He	452993	1.08	628609	72.06	30	120	
Sc	45	2	NoGas	3539829	0.18	4813296	73.54	30	120	
Rh	103	1	He	1298868	0.38	1894469	68.56	30	120	
In	115	1	He	779334	0.30	1086371	71.74	30	120	
Tb	159	1	He	2690155	0.76	3251379	82.74	30	120	
Ho	165	1	He	2754614	1.03	3312124	83.17	30	120	
Bi	209	1	He	1973919	0.83	2533294	77.92	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-f ms@2
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:27:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	48.135	48.135	0.40	135800	0.04	10000	
B	11	45	2	NoGas	91.342	91.342	1.53	251636	0.04	300	
Na	23	45	1	He	6233.776	6233.776	1.56	6624175	0.09	500000	
Mg	24	45	1	He	14852.197	14852.197	0.41	8888705	0.17	500000	
Al	27	45	1	He	44219.578	44219.578	1.07	14242643	0.31	200000	
K	39	45	1	He	18190.790	18190.790	0.79	9621203	0.19	500000	
Ca	44	45	1	He	4361.198	4361.198	0.43	124515	3.50	500000	
Ti	47	45	1	He	439.210	439.210	1.40	70467	0.62	2500	
V	51	45	1	He	115.093	115.093	1.01	466334	0.02	10000	
Cr	52	45	1	He	117.111	117.111	1.13	571411	0.02	10000	
Mn	55	45	1	He	9604.956	9604.956	1.51	36825879	0.03	10000	
Fe	56	45	1	He	97684.410	97684.410	1.23	456772746	0.02	200000	
Co	59	103	1	He	80.535	80.535	0.07	554800	0.01	10000	
Ni	60	103	1	He	133.486	133.486	0.95	227644	0.06	10000	
Cu	63	103	1	He	133.933	133.933	0.54	600187	0.02	10000	
Zn	66	103	1	He	240.851	240.851	0.41	217544	0.11	10000	
As	75	103	1	He	235.065	235.065	0.31	131613	0.18	10000	
Se	78	103	1	He	42.970	42.970	1.74	2562	1.68	10000	
Sr	88	103	1	He	2055.593	2055.593	0.21	9235458	0.02	10000	
Mo	95	103	1	He	713.031	713.031	0.48	1525306	0.05	2000	
Ag	107	103	1	He	50.228	50.228	0.24	370918	0.01	300	
Cd	111	103	1	He	49.042	49.042	1.28	63459	0.08	4000	
Sn	118	115	1	He	61.705	61.705	1.97	203351	0.03	2000	
Sb	123	115	1	He	17.061	17.061	1.44	51281	0.03	300	
Ba	137	115	1	He	324.750	324.750	1.03	485241	0.07	10000	
W	182	209	1	He	54.912	54.912	0.85	553228	0.01	2500	
Tl	205	209	1	He	41.695	41.695	0.79	1080815	0.00	5000	
Pb	208	209	1	He	434.146	434.146	0.82	14701284	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	896750	0.89	1389655	64.53	30	120	
Sc	45	1	He	447663	0.88	628609	71.21	30	120	
Sc	45	2	NoGas	3502779	1.26	4813296	72.77	30	120	
Rh	103	1	He	1273474	0.45	1894469	67.22	30	120	
In	115	1	He	765657	0.67	1086371	70.48	30	120	
Tb	159	1	He	2669950	0.93	3251379	82.12	30	120	
Ho	165	1	He	2722368	1.30	3312124	82.19	30	120	
Bi	209	1	He	1955125	0.57	2533294	77.18	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-9-b@2
Data File Name	075SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:31:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.695	3.695	2.66	10789	0.03	10000	
B	11	45	2	NoGas	-7.734	-7.734	-4.61	46106	-0.02	300	
Na	23	45	1	He	186.716	186.716	1.82	266837	0.07	500000	
Mg	24	45	1	He	15244.654	15244.654	2.40	9690807	0.16	500000	
Al	27	45	1	He	65400.635	65400.635	1.70	22377068	0.29	200000	
K	39	45	1	He	5596.714	5596.714	1.47	3162119	0.18	500000	
Ca	44	45	1	He	1839.056	1839.056	0.42	55964	3.29	500000	
Ti	47	45	1	He	407.960	407.960	1.64	69535	0.59	2500	
V	51	45	1	He	117.965	117.965	1.26	507783	0.02	10000	
Cr	52	45	1	He	103.221	103.221	1.48	535200	0.02	10000	
Mn	55	45	1	He	1238.026	1238.026	1.85	5042963	0.02	10000	
Fe	56	45	1	He	144657.630	144657.630	1.19	718620149	0.02	200000	
Co	59	103	1	He	53.862	53.862	0.32	381867	0.01	10000	
Ni	60	103	1	He	125.570	125.570	1.17	220392	0.06	10000	
Cu	63	103	1	He	105.005	105.005	0.59	484354	0.02	10000	
Zn	66	103	1	He	288.001	288.001	0.33	267551	0.11	10000	
As	75	103	1	He	71.830	71.830	0.23	41435	0.17	10000	
Se	78	103	1	He	6.158	6.158	6.79	398	1.55	10000	
Sr	88	103	1	He	27.930	27.930	1.27	129256	0.02	10000	
Mo	95	103	1	He	13.584	13.584	11.76	29959	0.05	2000	
Ag	107	103	1	He	0.151	0.151	8.69	1176	0.01	300	
Cd	111	103	1	He	0.826	0.826	8.21	1801	0.05	4000	
Sn	118	115	1	He	17.009	17.009	2.37	58676	0.03	2000	
Sb	123	115	1	He	0.858	0.858	4.00	2816	0.03	300	
Ba	137	115	1	He	379.917	379.917	0.71	588097	0.06	10000	
W	182	209	1	He	1.085	1.085	10.60	14192	0.01	2500	
Tl	205	209	1	He	1.010	1.010	1.43	27065	0.00	5000	
Pb	208	209	1	He	64.206	64.206	1.11	2245204	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	916964	0.89	1389655	65.99	30	120	
Sc	45	1	He	475620	1.60	628609	75.66	30	120	
Sc	45	2	NoGas	3705745	0.37	4813296	76.99	30	120	
Rh	103	1	He	1310564	0.34	1894469	69.18	30	120	
In	115	1	He	793204	0.33	1086371	73.01	30	120	
Tb	159	1	He	2737535	0.82	3251379	84.20	30	120	
Ho	165	1	He	2803446	1.51	3312124	84.64	30	120	
Bi	209	1	He	2018538	1.24	2533294	79.68	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-10-b@2
Data File Name	076SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:35:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.254	3.254	3.15	9418	0.03	10000	
B	11	45	2	NoGas	-13.347	-13.347	-3.02	32296	-0.04	300	
Na	23	45	1	He	158.513	158.513	0.44	227563	0.07	500000	
Mg	24	45	1	He	10635.735	10635.735	0.97	6540640	0.16	500000	
Al	27	45	1	He	59204.014	59204.014	1.39	19593823	0.30	200000	
K	39	45	1	He	3773.752	3773.752	1.37	2070347	0.18	500000	
Ca	44	45	1	He	1790.015	1790.015	0.15	52694	3.40	500000	
Ti	47	45	1	He	511.805	511.805	1.00	84380	0.61	2500	
V	51	45	1	He	129.318	129.318	1.59	538415	0.02	10000	
Cr	52	45	1	He	89.584	89.584	1.43	449449	0.02	10000	
Mn	55	45	1	He	4082.591	4082.591	0.51	16085615	0.03	10000	
Fe	56	45	1	He	129017.310	129017.310	1.34	619958642	0.02	200000	
Co	59	103	1	He	61.393	61.393	1.41	427766	0.01	10000	
Ni	60	103	1	He	89.269	89.269	0.45	153990	0.06	10000	
Cu	63	103	1	He	68.413	68.413	0.87	310296	0.02	10000	
Zn	66	103	1	He	259.930	259.930	1.21	237397	0.11	10000	
As	75	103	1	He	58.130	58.130	0.93	32969	0.18	10000	
Se	78	103	1	He	5.118	5.118	1.38	329	1.55	10000	
Sr	88	103	1	He	21.776	21.776	1.39	99070	0.02	10000	
Mo	95	103	1	He	9.807	9.807	1.20	21277	0.05	2000	
Ag	107	103	1	He	0.163	0.163	8.26	1250	0.01	300	
Cd	111	103	1	He	0.716	0.716	2.19	1628	0.04	4000	
Sn	118	115	1	He	16.422	16.422	0.62	55707	0.03	2000	
Sb	123	115	1	He	0.755	0.755	3.97	2452	0.03	300	
Ba	137	115	1	He	380.086	380.086	0.50	578305	0.07	10000	
W	182	209	1	He	0.506	0.506	6.52	8025	0.01	2500	
Tl	205	209	1	He	0.919	0.919	1.03	24138	0.00	5000	
Pb	208	209	1	He	74.238	74.238	0.85	2541879	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	907314	1.11	1389655	65.29	30	120	
Sc	45	1	He	460011	1.03	628609	73.18	30	120	
Sc	45	2	NoGas	3557942	1.21	4813296	73.92	30	120	
Rh	103	1	He	1288060	0.38	1894469	67.99	30	120	
In	115	1	He	779644	0.46	1086371	71.77	30	120	
Tb	159	1	He	2656871	0.11	3251379	81.72	30	120	
Ho	165	1	He	2713597	0.25	3312124	81.93	30	120	
Bi	209	1	He	1976385	0.13	2533294	78.02	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	077_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:39:05-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.678	0.951	142687	0.61	50	97.4	89.5	110.5	
B	11	45	2	NoGas	28.222	2.592	119945	1.73	50	56.4	89.5	110.5	CCV Failed
Na	23	45	1	He	25463.427	0.878	27514040	0.80	25000	101.9	89.5	110.5	
Mg	24	45	1	He	25239.581	1.890	15451855	0.39	25000	101.0	89.5	110.5	
Al	27	45	1	He	253.183	0.698	84409	1.42	250	101.3	89.5	110.5	
K	39	45	1	He	25322.624	1.437	13692988	0.23	25000	101.3	89.5	110.5	
Ca	44	45	1	He	24846.583	1.145	724384	0.82	25000	99.4	89.5	110.5	
Ti	47	45	1	He	52.668	0.175	8662	1.44	50	105.3	89.5	110.5	
V	51	45	1	He	51.435	1.168	213198	1.94	50	102.9	89.5	110.5	
Cr	52	45	1	He	51.935	0.996	259992	0.57	50	103.9	89.5	110.5	
Mn	55	45	1	He	251.405	0.991	986565	0.57	250	100.6	89.5	110.5	
Fe	56	45	1	He	13131.255	2.562	62817178	1.14	12500	105.1	89.5	110.5	
Co	59	103	1	He	49.989	1.080	367573	0.54	50	100.0	89.5	110.5	
Ni	60	103	1	He	49.721	0.555	90520	0.24	50	99.4	89.5	110.5	
Cu	63	103	1	He	50.828	0.953	243396	0.42	50	101.7	89.5	110.5	
Zn	66	103	1	He	50.260	2.443	49090	1.75	50	100.5	89.5	110.5	
As	75	103	1	He	51.277	0.720	30699	0.10	50	102.6	89.5	110.5	
Se	78	103	1	He	51.085	1.862	3247	2.52	50	102.2	89.5	110.5	
Sr	88	103	1	He	51.634	1.031	247741	1.18	50	103.3	89.5	110.5	
Mo	95	103	1	He	54.459	1.479	124410	1.79	50	108.9	89.5	110.5	
Ag	107	103	1	He	53.924	1.143	425039	0.83	50	107.8	89.5	110.5	
Cd	111	103	1	He	54.105	1.281	74652	0.54	50	108.2	89.5	110.5	
Sn	118	115	1	He	49.529	1.159	176073	1.15	50	99.1	89.5	110.5	
Sb	123	115	1	He	51.696	0.505	167109	0.55	50	103.4	89.5	110.5	
Ba	137	115	1	He	51.000	0.899	82167	1.01	50	102.0	89.5	110.5	
W	182	209	1	He	49.124	0.239	518940	1.13	50	98.2	89.5	110.5	
Tl	205	209	1	He	46.269	1.649	1256729	0.76	50	92.5	89.5	110.5	
Pb	208	209	1	He	47.863	2.030	1698915	1.16	50	95.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	931731	0.40	1389655	67.05	30	120	
Sc	45	1	He	458045	1.56	628609	72.87	30	120	
Sc	45	2	NoGas	3527715	0.78	4813296	73.29	30	120	
Rh	103	1	He	1359312	0.73	1894469	71.75	30	120	
In	115	1	He	825082	0.15	1086371	75.95	30	120	
Tb	159	1	He	2767101	0.76	3251379	85.11	30	120	
Ho	165	1	He	2853533	1.26	3312124	86.15	30	120	
Bi	209	1	He	2048750	0.90	2533294	80.87	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	078_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:42:56-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.059	7.6	326	5.2	1	
B	11	45	2	NoGas	-23.114	-1.2	11708	5.8	20	
Na	23	45	1	He	-10.141	-20.5	44529	3.9	400	
Mg	24	45	1	He	2.916	45.2	2763	28.0	1000	
Al	27	45	1	He	4.240	19.6	2361	10.4	50	
K	39	45	1	He	6.545	41.6	27700	4.2	1000	
Ca	44	45	1	He	12.689	46.2	665	24.9	1000	
Ti	47	45	1	He	0.143	80.5	41	46.1	20	
V	51	45	1	He	0.079	39.8	238	55.5	2	
Cr	52	45	1	He	0.037	58.2	1478	6.1	2	
Mn	55	45	1	He	1.209	6.8	5066	5.5	2	
Fe	56	45	1	He	31.789	16.5	154990	14.9	50	
Co	59	103	1	He	0.026	16.5	223	13.3	1	
Ni	60	103	1	He	0.026	48.4	72	37.6	2	
Cu	63	103	1	He	0.047	32.6	721	9.7	2	
Zn	66	103	1	He	0.433	19.7	1316	3.6	20	
As	75	103	1	He	0.113	20.9	147	8.1	2	
Se	78	103	1	He	0.168	42.9	38	15.2	2	
Sr	88	103	1	He	0.040	34.4	341	18.4	10	
Mo	95	103	1	He	1.246	16.8	3117	14.1	2	
Ag	107	103	1	He	0.004	39.1	67	17.3	0.2	
Cd	111	103	1	He	0.000	-9568.5	796	2.1	0.2	
Sn	118	115	1	He	0.257	33.5	1837	17.0	10	
Sb	123	115	1	He	0.559	14.3	2040	12.9	1	
Ba	137	115	1	He	0.021	53.7	91	20.1	5	
W	182	209	1	He	0.973	15.6	13821	12.1	10	
Tl	205	209	1	He	0.059	6.4	1737	6.0	0.5	
Pb	208	209	1	He	0.088	7.0	4078	5.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	962293	1.02	1389655	69.25	30	120	
Sc	45	1	He	456348	1.13	628609	72.60	30	120	
Sc	45	2	NoGas	3635633	1.72	4813296	75.53	30	120	
Rh	103	1	He	1461720	3.28	1894469	77.16	30	120	
In	115	1	He	857646	0.58	1086371	78.95	30	120	
Tb	159	1	He	2781769	0.64	3251379	85.56	30	120	
Ho	165	1	He	2840462	0.40	3312124	85.76	30	120	
Bi	209	1	He	2141094	0.26	2533294	84.52	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-1-b@2
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:46:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.928	2.928	8.46	8528	0.03	10000	
B	11	45	2	NoGas	-7.516	-7.516	-8.56	44406	-0.02	300	
Na	23	45	1	He	211.725	211.725	3.54	284826	0.07	500000	
Mg	24	45	1	He	13494.934	13494.934	2.28	8289927	0.16	500000	
Al	27	45	1	He	45682.984	45682.984	2.85	15100701	0.30	200000	
K	39	45	1	He	3837.786	3837.786	1.78	2102833	0.18	500000	
Ca	44	45	1	He	24374.762	24374.762	1.71	712978	3.42	500000	
Ti	47	45	1	He	441.222	441.222	2.26	72660	0.61	2500	
V	51	45	1	He	88.624	88.624	2.43	368543	0.02	10000	
Cr	52	45	1	He	84.780	84.780	1.78	424993	0.02	10000	
Mn	55	45	1	He	2693.128	2693.128	1.47	10600433	0.03	10000	
Fe	56	45	1	He	114886.435	114886.435	2.29	551407836	0.02	200000	
Co	59	103	1	He	40.908	40.908	1.39	285439	0.01	10000	
Ni	60	103	1	He	101.157	101.157	1.48	174736	0.06	10000	
Cu	63	103	1	He	64.403	64.403	1.46	292536	0.02	10000	
Zn	66	103	1	He	233.318	233.318	1.41	213468	0.11	10000	
As	75	103	1	He	67.608	67.608	1.17	38387	0.18	10000	
Se	78	103	1	He	4.541	4.541	2.33	295	1.54	10000	
Sr	88	103	1	He	68.493	68.493	1.55	311796	0.02	10000	
Mo	95	103	1	He	7.208	7.208	1.58	15677	0.05	2000	
Ag	107	103	1	He	0.193	0.193	4.99	1471	0.01	300	
Cd	111	103	1	He	0.855	0.855	12.27	1810	0.05	4000	
Sn	118	115	1	He	17.127	17.127	1.51	58241	0.03	2000	
Sb	123	115	1	He	1.758	1.758	4.61	5531	0.03	300	
Ba	137	115	1	He	291.598	291.598	1.03	445066	0.07	10000	
W	182	209	1	He	0.671	0.671	6.58	9800	0.01	2500	
Tl	205	209	1	He	0.692	0.692	1.35	18368	0.00	5000	
Pb	208	209	1	He	74.434	74.434	0.55	2575019	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	912234	1.25	1389655	65.64	30	120	
Sc	45	1	He	459658	2.86	628609	73.12	30	120	
Sc	45	2	NoGas	3533010	1.31	4813296	73.40	30	120	
Rh	103	1	He	1289939	0.92	1894469	68.09	30	120	
In	115	1	He	782115	0.82	1086371	71.99	30	120	
Tb	159	1	He	2714979	0.33	3251379	83.50	30	120	
Ho	165	1	He	2747900	0.37	3312124	82.96	30	120	
Bi	209	1	He	1996909	0.79	2533294	78.83	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-2-b@2
Data File Name	080SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:50:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.093	3.093	1.66	8877	0.03	10000	
B	11	45	2	NoGas	-13.040	-13.040	-5.65	32693	-0.04	300	
Na	23	45	1	He	142.963	142.963	2.34	210615	0.07	500000	
Mg	24	45	1	He	9692.066	9692.066	0.90	5958465	0.16	500000	
Al	27	45	1	He	66740.951	66740.951	2.24	22076511	0.30	200000	
K	39	45	1	He	3500.535	3500.535	1.68	1921436	0.18	500000	
Ca	44	45	1	He	3914.095	3914.095	1.34	114813	3.41	500000	
Ti	47	45	1	He	334.742	334.742	2.55	55159	0.61	2500	
V	51	45	1	He	136.832	136.832	1.81	569455	0.02	10000	
Cr	52	45	1	He	95.895	95.895	1.97	480790	0.02	10000	
Mn	55	45	1	He	3285.761	3285.761	2.15	12938750	0.03	10000	
Fe	56	45	1	He	127666.610	127666.610	1.87	613136207	0.02	200000	
Co	59	103	1	He	51.161	51.161	0.49	361941	0.01	10000	
Ni	60	103	1	He	92.902	92.902	0.26	162709	0.06	10000	
Cu	63	103	1	He	61.557	61.557	0.59	283516	0.02	10000	
Zn	66	103	1	He	308.349	308.349	0.96	285781	0.11	10000	
As	75	103	1	He	77.340	77.340	0.38	44514	0.17	10000	
Se	78	103	1	He	5.926	5.926	3.40	383	1.55	10000	
Sr	88	103	1	He	26.718	26.718	1.48	123389	0.02	10000	
Mo	95	103	1	He	8.989	8.989	0.68	19805	0.05	2000	
Ag	107	103	1	He	0.440	0.440	2.00	3366	0.01	300	
Cd	111	103	1	He	0.966	0.966	3.13	1983	0.05	4000	
Sn	118	115	1	He	17.129	17.129	2.17	59062	0.03	2000	
Sb	123	115	1	He	1.508	1.508	1.41	4833	0.03	300	
Ba	137	115	1	He	363.020	363.020	0.55	561790	0.06	10000	
W	182	209	1	He	0.420	0.420	6.87	7306	0.01	2500	
Tl	205	209	1	He	1.021	1.021	1.46	27385	0.00	5000	
Pb	208	209	1	He	118.287	118.287	0.57	4136062	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	898826	1.51	1389655	64.68	30	120	
Sc	45	1	He	459901	2.54	628609	73.16	30	120	
Sc	45	2	NoGas	3530717	0.37	4813296	73.35	30	120	
Rh	103	1	He	1307750	0.40	1894469	69.03	30	120	
In	115	1	He	792973	0.38	1086371	72.99	30	120	
Tb	159	1	He	2663604	1.00	3251379	81.92	30	120	
Ho	165	1	He	2724857	1.20	3312124	82.27	30	120	
Bi	209	1	He	2018572	0.65	2533294	79.68	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-3-b@2
Data File Name	081SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:54:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.036	3.036	2.38	8436	0.04	10000	
B	11	45	2	NoGas	-10.858	-10.858	-7.34	36868	-0.03	300	
Na	23	45	1	He	162.982	162.982	1.68	225477	0.07	500000	
Mg	24	45	1	He	9603.294	9603.294	2.74	5729017	0.17	500000	
Al	27	45	1	He	66154.156	66154.156	2.98	21238026	0.31	200000	
K	39	45	1	He	3712.475	3712.475	2.06	1976347	0.19	500000	
Ca	44	45	1	He	6881.549	6881.549	1.69	195702	3.52	500000	
Ti	47	45	1	He	399.620	399.620	1.78	63923	0.63	2500	
V	51	45	1	He	136.505	136.505	1.68	551453	0.02	10000	
Cr	52	45	1	He	105.884	105.884	1.77	515170	0.02	10000	
Mn	55	45	1	He	3968.711	3968.711	2.60	15168776	0.03	10000	
Fe	56	45	1	He	127922.998	127922.998	2.15	596308385	0.02	200000	
Co	59	103	1	He	62.117	62.117	0.23	428148	0.01	10000	
Ni	60	103	1	He	94.735	94.735	0.74	161653	0.06	10000	
Cu	63	103	1	He	61.744	61.744	0.40	277061	0.02	10000	
Zn	66	103	1	He	303.538	303.538	0.13	274104	0.11	10000	
As	75	103	1	He	77.348	77.348	0.45	43373	0.18	10000	
Se	78	103	1	He	5.781	5.781	3.28	365	1.58	10000	
Sr	88	103	1	He	37.300	37.300	1.55	167789	0.02	10000	
Mo	95	103	1	He	8.918	8.918	3.25	19143	0.05	2000	
Ag	107	103	1	He	0.414	0.414	1.12	3088	0.01	300	
Cd	111	103	1	He	0.987	0.987	1.58	1958	0.05	4000	
Sn	118	115	1	He	17.983	17.983	1.67	60486	0.03	2000	
Sb	123	115	1	He	1.927	1.927	3.98	5986	0.03	300	
Ba	137	115	1	He	349.764	349.764	1.12	528375	0.07	10000	
W	182	209	1	He	0.458	0.458	2.59	7498	0.01	2500	
Tl	205	209	1	He	1.010	1.010	2.54	26364	0.00	5000	
Pb	208	209	1	He	124.901	124.901	2.13	4251500	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	870419	1.85	1389655	62.64	30	120	
Sc	45	1	He	446366	1.97	628609	71.01	30	120	
Sc	45	2	NoGas	3487895	1.18	4813296	72.46	30	120	
Rh	103	1	He	1274127	0.21	1894469	67.26	30	120	
In	115	1	He	774090	0.78	1086371	71.25	30	120	
Tb	159	1	He	2643770	0.26	3251379	81.31	30	120	
Ho	165	1	He	2714324	0.10	3312124	81.95	30	120	
Bi	209	1	He	1965488	1.77	2533294	77.59	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-4-b@2
Data File Name	082SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T19:58:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.066	3.066	4.16	8673	0.04	10000	
B	11	45	2	NoGas	-5.622	-5.622	-4.68	47989	-0.01	300	
Na	23	45	1	He	227.963	227.963	3.10	294069	0.08	500000	
Mg	24	45	1	He	8101.291	8101.291	2.52	4839146	0.17	500000	
Al	27	45	1	He	33852.228	33852.228	3.21	10881363	0.31	200000	
K	39	45	1	He	2285.723	2285.723	2.92	1227226	0.19	500000	
Ca	44	45	1	He	26667.537	26667.537	1.92	758444	3.52	500000	
Ti	47	45	1	He	405.041	405.041	2.62	64864	0.62	2500	
V	51	45	1	He	80.031	80.031	2.41	323626	0.02	10000	
Cr	52	45	1	He	96.039	96.039	2.17	467939	0.02	10000	
Mn	55	45	1	He	3963.404	3963.404	1.57	15169125	0.03	10000	
Fe	56	45	1	He	107990.159	107990.159	3.12	503946060	0.02	200000	
Co	59	103	1	He	48.492	48.492	1.00	337112	0.01	10000	
Ni	60	103	1	He	104.115	104.115	0.34	179181	0.06	10000	
Cu	63	103	1	He	61.835	61.835	0.70	279851	0.02	10000	
Zn	66	103	1	He	215.488	215.488	0.87	196486	0.11	10000	
As	75	103	1	He	127.347	127.347	0.28	71981	0.18	10000	
Se	78	103	1	He	4.783	4.783	2.45	308	1.55	10000	
Sr	88	103	1	He	87.713	87.713	0.68	397780	0.02	10000	
Mo	95	103	1	He	7.442	7.442	1.07	16123	0.05	2000	
Ag	107	103	1	He	0.621	0.621	2.97	4656	0.01	300	
Cd	111	103	1	He	0.932	0.932	9.89	1904	0.05	4000	
Sn	118	115	1	He	18.471	18.471	1.90	62084	0.03	2000	
Sb	123	115	1	He	2.633	2.633	2.96	8124	0.03	300	
Ba	137	115	1	He	422.524	422.524	0.80	637980	0.07	10000	
W	182	209	1	He	1.067	1.067	10.44	13982	0.01	2500	
Tl	205	209	1	He	0.718	0.718	1.55	19234	0.00	5000	
Pb	208	209	1	He	136.836	136.836	0.38	4779432	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	885856	1.47	1389655	63.75	30	120	
Sc	45	1	He	446915	1.98	628609	71.10	30	120	
Sc	45	2	NoGas	3501280	1.28	4813296	72.74	30	120	
Rh	103	1	He	1285065	0.20	1894469	67.83	30	120	
In	115	1	He	773732	0.60	1086371	71.22	30	120	
Tb	159	1	He	2663487	2.19	3251379	81.92	30	120	
Ho	165	1	He	2737997	0.79	3312124	82.67	30	120	
Bi	209	1	He	2016417	0.94	2533294	79.60	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-4-b@2
Data File Name	083SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:01:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.967	2.967	7.53	8310	0.04	10000	
B	11	45	2	NoGas	-16.295	-16.295	-1.95	25285	-0.06	300	
Na	23	45	1	He	143.808	143.808	2.48	203901	0.07	500000	
Mg	24	45	1	He	9412.672	9412.672	2.49	5577338	0.17	500000	
Al	27	45	1	He	55495.881	55495.881	1.98	17696079	0.31	200000	
K	39	45	1	He	2847.595	2847.595	0.54	1511158	0.19	500000	
Ca	44	45	1	He	2391.146	2391.146	1.05	67724	3.53	500000	
Ti	47	45	1	He	466.643	466.643	0.30	74138	0.63	2500	
V	51	45	1	He	129.895	129.895	0.75	521149	0.02	10000	
Cr	52	45	1	He	78.407	78.407	1.57	379189	0.02	10000	
Mn	55	45	1	He	16263.248	16263.248	0.12	61746844	0.03	10000	>LDR
Fe	56	45	1	He	123493.628	123493.628	2.63	571704937	0.02	200000	
Co	59	103	1	He	59.106	59.106	1.21	405727	0.01	10000	
Ni	60	103	1	He	71.518	71.518	1.74	121545	0.06	10000	
Cu	63	103	1	He	48.860	48.860	0.13	218441	0.02	10000	
Zn	66	103	1	He	499.456	499.456	0.66	448711	0.11	10000	
As	75	103	1	He	62.190	62.190	0.76	34744	0.18	10000	
Se	78	103	1	He	5.161	5.161	4.26	327	1.58	10000	
Sr	88	103	1	He	31.670	31.670	0.25	141895	0.02	10000	
Mo	95	103	1	He	9.792	9.792	1.31	20928	0.05	2000	
Ag	107	103	1	He	1.754	1.754	1.01	12937	0.01	300	
Cd	111	103	1	He	1.526	1.526	6.79	2638	0.06	4000	
Sn	118	115	1	He	16.630	16.630	1.45	55406	0.03	2000	
Sb	123	115	1	He	0.898	0.898	0.89	2840	0.03	300	
Ba	137	115	1	He	478.836	478.836	0.61	715684	0.07	10000	
W	182	209	1	He	3.475	3.475	1.75	37608	0.01	2500	
Tl	205	209	1	He	1.137	1.137	0.27	29446	0.00	5000	
Pb	208	209	1	He	222.371	222.371	0.23	7511837	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	877347	1.56	1389655	63.13	30	120	
Sc	45	1	He	443274	1.65	628609	70.52	30	120	
Sc	45	2	NoGas	3460120	1.26	4813296	71.89	30	120	
Rh	103	1	He	1268947	0.50	1894469	66.98	30	120	
In	115	1	He	765873	0.23	1086371	70.50	30	120	
Tb	159	1	He	2619884	0.94	3251379	80.58	30	120	
Ho	165	1	He	2664295	0.67	3312124	80.44	30	120	
Bi	209	1	He	1950236	0.45	2533294	76.98	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-6-b@2
Data File Name	084SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:05:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.577	2.577	3.24	7246	0.04	10000	
B	11	45	2	NoGas	-14.404	-14.404	-4.31	29220	-0.05	300	
Na	23	45	1	He	134.655	134.655	0.42	194890	0.07	500000	
Mg	24	45	1	He	8590.553	8590.553	1.57	5103905	0.17	500000	
Al	27	45	1	He	56639.330	56639.330	1.20	18110352	0.31	200000	
K	39	45	1	He	3392.943	3392.943	1.36	1800630	0.19	500000	
Ca	44	45	1	He	938.917	938.917	1.96	26840	3.50	500000	
Ti	47	45	1	He	407.940	407.940	1.38	64975	0.63	2500	
V	51	45	1	He	129.864	129.864	0.98	522372	0.02	10000	
Cr	52	45	1	He	80.386	80.386	1.15	389765	0.02	10000	
Mn	55	45	1	He	7440.999	7440.999	1.50	28321598	0.03	10000	
Fe	56	45	1	He	115945.296	115945.296	0.54	538248939	0.02	200000	
Co	59	103	1	He	48.987	48.987	0.28	339702	0.01	10000	
Ni	60	103	1	He	73.218	73.218	0.71	125697	0.06	10000	
Cu	63	103	1	He	42.361	42.361	1.53	191366	0.02	10000	
Zn	66	103	1	He	261.808	261.808	1.63	237958	0.11	10000	
As	75	103	1	He	52.647	52.647	0.42	29722	0.18	10000	
Se	78	103	1	He	4.739	4.739	3.57	305	1.55	10000	
Sr	88	103	1	He	17.622	17.622	0.78	79809	0.02	10000	
Mo	95	103	1	He	8.136	8.136	2.07	17578	0.05	2000	
Ag	107	103	1	He	0.421	0.421	0.65	3157	0.01	300	
Cd	111	103	1	He	0.876	0.876	5.08	1827	0.05	4000	
Sn	118	115	1	He	17.333	17.333	1.26	58319	0.03	2000	
Sb	123	115	1	He	0.881	0.881	7.43	2817	0.03	300	
Ba	137	115	1	He	447.870	447.870	0.41	676457	0.07	10000	
W	182	209	1	He	0.593	0.593	5.51	8970	0.01	2500	
Tl	205	209	1	He	0.904	0.904	1.15	23907	0.00	5000	
Pb	208	209	1	He	105.174	105.174	2.06	3625000	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	878487	1.36	1389655	63.22	30	120	
Sc	45	1	He	444416	1.05	628609	70.70	30	120	
Sc	45	2	NoGas	3462259	1.04	4813296	71.93	30	120	
Rh	103	1	He	1281872	0.61	1894469	67.66	30	120	
In	115	1	He	773941	0.45	1086371	71.24	30	120	
Tb	159	1	He	2644182	0.65	3251379	81.32	30	120	
Ho	165	1	He	2680831	1.02	3312124	80.94	30	120	
Bi	209	1	He	1990117	1.72	2533294	78.56	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-8-b@2
Data File Name	085SMPL.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:09:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.164	3.164	8.20	8943	0.04	10000	
B	11	45	2	NoGas	-11.974	-11.974	-6.19	34151	-0.04	300	
Na	23	45	1	He	130.066	130.066	1.22	190536	0.07	500000	
Mg	24	45	1	He	8408.604	8408.604	2.34	5007532	0.17	500000	
Al	27	45	1	He	66177.505	66177.505	2.65	21208509	0.31	200000	
K	39	45	1	He	3512.638	3512.638	1.99	1867731	0.19	500000	
Ca	44	45	1	He	1392.436	1392.436	0.87	39763	3.50	500000	
Ti	47	45	1	He	406.861	406.861	1.28	64961	0.63	2500	
V	51	45	1	He	142.056	142.056	1.11	572797	0.02	10000	
Cr	52	45	1	He	92.052	92.052	1.00	447233	0.02	10000	
Mn	55	45	1	He	7073.335	7073.335	1.85	26986789	0.03	10000	
Fe	56	45	1	He	124176.733	124176.733	1.23	577828813	0.02	200000	
Co	59	103	1	He	63.029	63.029	0.09	432641	0.01	10000	
Ni	60	103	1	He	96.344	96.344	0.65	163718	0.06	10000	
Cu	63	103	1	He	59.348	59.348	0.47	265234	0.02	10000	
Zn	66	103	1	He	288.759	288.759	0.21	259722	0.11	10000	
As	75	103	1	He	63.142	63.142	0.54	35274	0.18	10000	
Se	78	103	1	He	5.953	5.953	2.37	373	1.59	10000	
Sr	88	103	1	He	18.599	18.599	0.40	83376	0.02	10000	
Mo	95	103	1	He	9.243	9.243	1.95	19759	0.05	2000	
Ag	107	103	1	He	0.346	0.346	1.55	2572	0.01	300	
Cd	111	103	1	He	0.877	0.877	4.11	1810	0.05	4000	
Sn	118	115	1	He	18.122	18.122	1.10	60798	0.03	2000	
Sb	123	115	1	He	1.176	1.176	9.75	3704	0.03	300	
Ba	137	115	1	He	498.501	498.501	0.72	751194	0.07	10000	
W	182	209	1	He	0.403	0.403	8.99	6954	0.01	2500	
Tl	205	209	1	He	1.025	1.025	1.15	26759	0.00	5000	
Pb	208	209	1	He	117.701	117.701	1.07	4008319	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	886241	2.61	1389655	63.77	30	120	
Sc	45	1	He	445493	1.05	628609	70.87	30	120	
Sc	45	2	NoGas	3449947	0.99	4813296	71.68	30	120	
Rh	103	1	He	1268888	0.38	1894469	66.98	30	120	
In	115	1	He	772160	0.35	1086371	71.08	30	120	
Tb	159	1	He	2662809	0.44	3251379	81.90	30	120	
Ho	165	1	He	2694528	0.78	3312124	81.35	30	120	
Bi	209	1	He	1966040	0.93	2533294	77.61	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV -1945747
Data File Name	086_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:13:15-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.950	1.171	145027	2.48	50	99.9	89.5	110.5	
B	11	45	2	NoGas	26.993	3.367	119284	2.10	50	54.0	89.5	110.5	CCV Failed
Na	23	45	1	He	24823.210	2.813	26687577	0.91	25000	99.3	89.5	110.5	
Mg	24	45	1	He	24857.260	2.028	15143782	0.23	25000	99.4	89.5	110.5	
Al	27	45	1	He	253.590	1.355	84127	0.93	250	101.4	89.5	110.5	
K	39	45	1	He	25351.812	2.759	13640124	0.85	25000	101.4	89.5	110.5	
Ca	44	45	1	He	24831.714	1.398	720419	0.53	25000	99.3	89.5	110.5	
Ti	47	45	1	He	50.440	3.621	8253	1.80	50	100.9	89.5	110.5	
V	51	45	1	He	50.589	2.155	208631	0.84	50	101.2	89.5	110.5	
Cr	52	45	1	He	50.793	1.805	253054	0.28	50	101.6	89.5	110.5	
Mn	55	45	1	He	248.436	2.022	970085	0.10	250	99.4	89.5	110.5	
Fe	56	45	1	He	12978.967	1.951	61791106	0.06	12500	103.8	89.5	110.5	
Co	59	103	1	He	50.143	0.741	361287	0.47	50	100.3	89.5	110.5	
Ni	60	103	1	He	49.943	1.231	89091	0.52	50	99.9	89.5	110.5	
Cu	63	103	1	He	50.273	0.435	235903	0.79	50	100.5	89.5	110.5	
Zn	66	103	1	He	50.893	1.243	48700	0.50	50	101.8	89.5	110.5	
As	75	103	1	He	51.483	0.674	30201	0.37	50	103.0	89.5	110.5	
Se	78	103	1	He	50.733	1.853	3159	2.33	50	101.5	89.5	110.5	
Sr	88	103	1	He	51.735	0.872	243218	0.25	50	103.5	89.5	110.5	
Mo	95	103	1	He	54.556	3.060	122116	3.05	50	109.1	89.5	110.5	
Ag	107	103	1	He	53.724	0.627	414934	0.18	50	107.4	89.5	110.5	
Cd	111	103	1	He	54.010	1.936	73019	1.21	50	108.0	89.5	110.5	
Sn	118	115	1	He	49.915	1.435	174459	0.86	50	99.8	89.5	110.5	
Sb	123	115	1	He	51.726	1.295	164414	1.77	50	103.5	89.5	110.5	
Ba	137	115	1	He	51.416	0.450	81449	0.18	50	102.8	89.5	110.5	
W	182	209	1	He	48.605	1.672	508964	1.82	50	97.2	89.5	110.5	
Tl	205	209	1	He	45.752	1.346	1231763	0.59	50	91.5	89.5	110.5	
Pb	208	209	1	He	47.429	0.780	1668802	0.07	50	94.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	922813	1.38	1389655	66.41	30	120	
Sc	45	1	He	455847	1.93	628609	72.52	30	120	
Sc	45	2	NoGas	3586061	1.24	4813296	74.50	30	120	
Rh	103	1	He	1331934	0.72	1894469	70.31	30	120	
In	115	1	He	811272	0.62	1086371	74.68	30	120	
Tb	159	1	He	2758704	0.59	3251379	84.85	30	120	
Ho	165	1	He	2795215	0.13	3312124	84.39	30	120	
Bi	209	1	He	2030692	0.82	2533294	80.16	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	087_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:17:04-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.010	311.9	174	54.3	1	
B	11	45	2	NoGas	-23.129	-0.3	11374	0.5	20	
Na	23	45	1	He	-13.516	-12.1	40234	4.2	400	
Mg	24	45	1	He	1.631	54.4	1948	26.4	1000	
Al	27	45	1	He	3.383	13.7	2047	7.2	50	
K	39	45	1	He	3.887	73.7	25834	5.1	1000	
Ca	44	45	1	He	9.862	7.6	574	4.4	1000	
Ti	47	45	1	He	0.202	9.3	50	6.7	20	
V	51	45	1	He	0.045	43.8	95	84.9	2	
Cr	52	45	1	He	0.018	116.0	1365	8.0	2	
Mn	55	45	1	He	1.430	1.4	5832	1.6	2	
Fe	56	45	1	He	33.689	16.7	161360	15.5	50	
Co	59	103	1	He	0.013	38.6	120	34.1	1	
Ni	60	103	1	He	0.021	21.2	64	16.6	2	
Cu	63	103	1	He	0.018	28.4	581	1.8	2	
Zn	66	103	1	He	0.428	13.4	1332	5.6	20	
As	75	103	1	He	0.092	18.5	135	5.1	2	
Se	78	103	1	He	0.099	151.7	34	27.6	2	
Sr	88	103	1	He	0.007	54.2	173	8.8	10	
Mo	95	103	1	He	0.919	22.4	2356	21.7	2	
Ag	107	103	1	He	0.006	70.9	83	41.8	0.2	
Cd	111	103	1	He	-0.026	-76.0	770	0.8	0.2	
Sn	118	115	1	He	0.271	26.3	1878	13.9	10	
Sb	123	115	1	He	0.549	21.3	1995	19.5	1	
Ba	137	115	1	He	0.027	7.8	100	3.3	5	
W	182	209	1	He	0.900	22.2	12998	15.5	10	
Tl	205	209	1	He	0.044	9.7	1306	8.0	0.5	
Pb	208	209	1	He	0.068	6.3	3315	3.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	945940	1.26	1389655	68.07	30	120	
Sc	45	1	He	448720	0.78	628609	71.38	30	120	
Sc	45	2	NoGas	3543089	0.85	4813296	73.61	30	120	
Rh	103	1	He	1483569	2.99	1894469	78.31	30	120	
In	115	1	He	852387	0.13	1086371	78.46	30	120	
Tb	159	1	He	2767487	0.77	3251379	85.12	30	120	
Ho	165	1	He	2848485	0.36	3312124	86.00	30	120	
Bi	209	1	He	2140678	1.43	2533294	84.50	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	088CRIA.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:20:53-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.934	0.934	12.750	2897	13.30	1	93.4	69.5	130.5	
B	11	2	NoGas	-3.089	-3.089	-20.284	52987	2.40	20	-15.4	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1070.160	1070.160	2.129	1211177	0.26	1000	107.0	69.5	130.5	
Mg	24	1	He	1059.961	1059.961	1.608	650824	1.18	1000	106.0	69.5	130.5	
Al	27	1	He	52.044	52.044	1.126	18150	1.35	50	104.1	69.5	130.5	
K	39	1	He	1048.548	1048.548	1.718	591134	1.73	1000	104.9	69.5	130.5	
Ca	44	1	He	1027.063	1027.063	1.767	30271	1.25	1000	102.7	69.5	130.5	
Ti	47	1	He	10.564	10.564	3.425	1753	1.62	10	105.6	69.5	130.5	
V	51	1	He	5.471	5.471	1.376	22629	2.39	5	109.4	69.5	130.5	
Cr	52	1	He	2.181	2.181	2.905	12179	0.97	2	109.0	69.5	130.5	
Mn	55	1	He	6.158	6.158	2.106	24538	2.25	5	123.2	69.5	130.5	
Fe	56	1	He	118.143	118.143	1.797	569622	0.33	100	118.1	69.5	130.5	
Co	59	1	He	1.065	1.065	1.826	8056	1.19	1	106.5	69.5	130.5	
Ni	60	1	He	2.115	2.115	7.202	3974	7.07	2	105.8	69.5	130.5	
Cu	63	1	He	2.185	2.185	3.292	11179	2.36	2	109.2	69.5	130.5	
Zn	66	1	He	21.103	21.103	2.345	21652	2.83	20	105.5	69.5	130.5	
As	75	1	He	5.222	5.222	1.536	3274	1.85	5	104.4	69.5	130.5	
Se	78	1	He	5.301	5.301	4.681	369	4.79	5	106.0	69.5	130.5	
Sr	88	1	He	10.310	10.310	0.336	50901	0.73	10	103.1	69.5	130.5	
Mo	95	1	He	11.293	11.293	0.562	26541	0.52	10	112.9	69.5	130.5	
Ag	107	1	He	1.157	1.157	2.254	9396	1.89	1	115.7	69.5	130.5	
Cd	111	1	He	1.109	1.109	2.130	2316	0.64	1	110.9	69.5	130.5	
Sn	118	1	He	10.294	10.294	0.235	38155	0.64	10	102.9	69.5	130.5	
Sb	123	1	He	2.097	2.097	3.362	7095	3.15	2	104.9	69.5	130.5	
Ba	137	1	He	5.115	5.115	1.442	8484	1.72	5	102.3	69.5	130.5	
W	182	1	He	9.812	9.812	2.619	108352	1.52	10	98.1	69.5	130.5	
Tl	205	1	He	1.899	1.899	1.937	52761	0.90	2	95.0	69.5	130.5	
Pb	208	1	He	1.082	1.082	0.947	40011	0.46	1	108.2	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	937638	1.80	1389655	67.47	30	120	
Sc	45	1	He	458696	1.78	628609	72.97	30	120	
Sc	45	2	NoGas	3480084	0.63	4813296	72.30	30	120	
Rh	103	1	He	1395849	0.87	1894469	73.68	30	120	
In	115	1	He	844537	0.41	1086371	77.74	30	120	
Tb	159	1	He	2753624	1.30	3251379	84.69	30	120	
Ho	165	1	He	2794387	0.35	3312124	84.37	30	120	
Bi	209	1	He	2093433	1.06	2533294	82.64	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	089_CCV.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:24:46-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.326	2.140	141836	1.33	50	96.7	89.5	110.5	
B	11	45	2	NoGas	27.954	2.874	117575	1.85	50	55.9	89.5	110.5	CCV Failed
Na	23	45	1	He	24377.420	4.789	27073599	1.04	25000	97.5	89.5	110.5	
Mg	24	45	1	He	24552.522	5.065	15448530	1.15	25000	98.2	89.5	110.5	
Al	27	45	1	He	238.763	4.634	81865	0.52	250	95.5	89.5	110.5	
K	39	45	1	He	24404.040	4.113	13566680	0.97	25000	97.6	89.5	110.5	
Ca	44	45	1	He	23995.144	4.262	719088	0.80	25000	96.0	89.5	110.5	
Ti	47	45	1	He	48.116	3.929	8137	2.49	50	96.2	89.5	110.5	
V	51	45	1	He	48.941	5.462	208406	0.47	50	97.9	89.5	110.5	
Cr	52	45	1	He	49.578	4.997	255120	0.76	50	99.2	89.5	110.5	
Mn	55	45	1	He	241.346	4.798	973351	0.24	250	96.5	89.5	110.5	
Fe	56	45	1	He	12545.736	4.760	61690002	0.51	12500	100.4	89.5	110.5	
Co	59	103	1	He	50.992	0.261	362889	0.63	50	102.0	89.5	110.5	
Ni	60	103	1	He	50.591	0.894	89142	1.26	50	101.2	89.5	110.5	
Cu	63	103	1	He	51.259	1.308	237554	1.04	50	102.5	89.5	110.5	
Zn	66	103	1	He	51.560	0.684	48723	0.36	50	103.1	89.5	110.5	
As	75	103	1	He	52.318	0.487	30313	0.70	50	104.6	89.5	110.5	
Se	78	103	1	He	53.180	0.655	3270	0.96	50	106.4	89.5	110.5	
Sr	88	103	1	He	52.276	0.465	242743	0.51	50	104.6	89.5	110.5	
Mo	95	103	1	He	55.081	1.595	121773	1.54	50	110.2	89.5	110.5	
Ag	107	103	1	He	54.119	0.786	412845	0.64	50	108.2	89.5	110.5	
Cd	111	103	1	He	54.543	0.376	72832	0.76	50	109.1	89.5	110.5	
Sn	118	115	1	He	49.904	0.867	173804	0.79	50	99.8	89.5	110.5	
Sb	123	115	1	He	51.761	0.772	163925	0.44	50	103.5	89.5	110.5	
Ba	137	115	1	He	50.645	0.575	79943	0.94	50	101.3	89.5	110.5	
W	182	209	1	He	49.267	1.175	510940	1.15	50	98.5	89.5	110.5	
Tl	205	209	1	He	45.533	1.991	1214163	0.74	50	91.1	89.5	110.5	
Pb	208	209	1	He	47.297	1.829	1648244	0.67	50	94.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	933004	0.93	1389655	67.14	30	120	
Sc	45	1	He	471469	5.18	628609	75.00	30	120	
Sc	45	2	NoGas	3474433	0.88	4813296	72.18	30	120	
Rh	103	1	He	1315536	0.46	1894469	69.44	30	120	
In	115	1	He	808356	0.37	1086371	74.41	30	120	
Tb	159	1	He	2700930	1.56	3251379	83.07	30	120	
Ho	165	1	He	2741282	0.83	3312124	82.77	30	120	
Bi	209	1	He	2011476	1.26	2533294	79.40	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	090_CCB.d
Data Path Name	D:\Analytical Runs\I10042215C.b
Acq Date Time	2015-04-22T20:28:37-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	-0.015	-135.1	96	63.6	1	
B	11	45	2	NoGas	-24.339	-0.7	8536	3.2	20	
Na	23	45	1	He	-11.180	-23.3	41964	4.8	400	
Mg	24	45	1	He	2.240	31.4	2274	17.1	1000	
Al	27	45	1	He	1.339	5.3	1365	3.3	50	
K	39	45	1	He	5.516	61.7	26257	6.7	1000	
Ca	44	45	1	He	12.312	15.1	633	6.5	1000	
Ti	47	45	1	He	0.096	70.2	32	31.6	20	
V	51	45	1	He	0.087	77.7	258	104.1	2	
Cr	52	45	1	He	0.032	67.9	1407	5.8	2	
Mn	55	45	1	He	1.134	4.0	4617	2.8	2	
Fe	56	45	1	He	24.997	21.0	118612	19.7	50	
Co	59	103	1	He	0.011	22.7	96	22.4	1	
Ni	60	103	1	He	0.008	68.1	37	32.8	2	
Cu	63	103	1	He	0.028	17.0	600	5.5	2	
Zn	66	103	1	He	0.401	16.4	1239	8.3	20	
As	75	103	1	He	0.067	28.2	113	12.8	2	
Se	78	103	1	He	0.195	14.8	38	7.9	2	
Sr	88	103	1	He	-0.001	-713.0	121	38.6	10	
Mo	95	103	1	He	0.989	14.9	2411	17.6	2	
Ag	107	103	1	He	0.009	40.3	107	30.8	0.2	
Cd	111	103	1	He	-0.007	-161.6	758	4.0	0.2	
Sn	118	115	1	He	0.220	4.9	1652	2.1	10	
Sb	123	115	1	He	0.517	27.4	1847	25.3	1	
Ba	137	115	1	He	0.022	67.5	90	26.7	5	
W	182	209	1	He	1.027	20.9	13814	14.9	10	
Tl	205	209	1	He	0.048	20.5	1363	18.6	0.5	
Pb	208	209	1	He	0.051	12.7	2579	8.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	924508	1.11	1389655	66.53	30	120	
Sc	45	1	He	441272	1.83	628609	70.20	30	120	
Sc	45	2	NoGas	3435390	1.08	4813296	71.37	30	120	
Rh	103	1	He	1408218	2.91	1894469	74.33	30	120	
In	115	1	He	833465	0.46	1086371	76.72	30	120	
Tb	159	1	He	2647059	1.80	3251379	81.41	30	120	
Ho	165	1	He	2769191	2.08	3312124	83.61	30	120	
Bi	209	1	He	2055526	2.35	2533294	81.14	30	120	

MTMSCCBDILH20-193 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/24/15 Analyst: AS Instrument: I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* = 90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

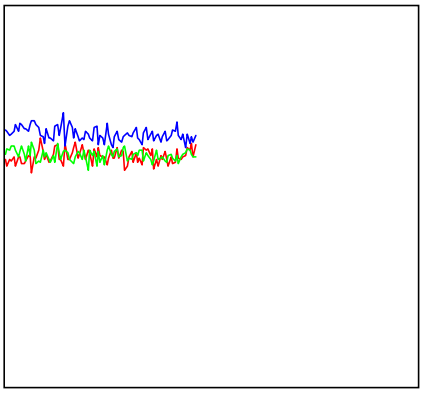
Level I Analyst: Anjali Sharma Date: 4/24/15 Time: 8:59 - 10:44 - 12:11
Level I Analyst: Anjali Sharma Date: 4/27/15 Time: 8:59 - 23:33

Level II Reviewer: ~~Karen L. Lantz~~ Date: ~~4/24/15~~ Time: ~~8:59 - 10:44~~ 4/24/15 KL
Level II Reviewer: Karen L. Lantz Date: 4-24-15 Time: 8:59 - 12:11
Anu Mantri 4/27/15 12:17 - 23:33

Comments:

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	3176	3029.5	2.99
89	10000	6043	6084.1	2.43
205	10000	6596	6646.6	2.76
156/140	2	0.776 %	0.753 %	19.66
70/140	2	0.959 %	1.169 %	14.50
115	50	9	10.2	40.41
63	500	298	291.4	8.07
60	200	34	50.9	34.47
121	50	26	30.5	24.36
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

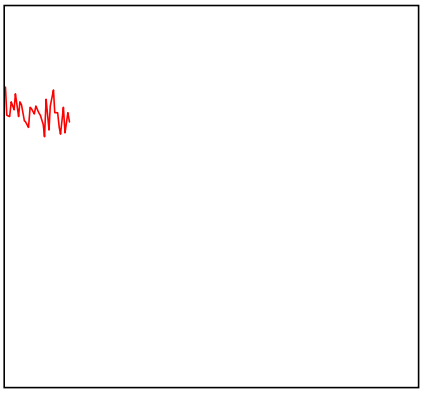
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	15.02	L/min
MU./Dil. Gas	0.65	L/min	Ar Gas Tank Press	6.61E+2	kPa			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1396	1437.7	4.55
51	200	99	90.4	14.99
52	200	122	117.1	13.55
51/59	10	7.094 %	6.301 %	15.82
52/59	20	8.742 %	8.162 %	14.36
7	50	18	15.7	33.15
89	2000	1748	1659.3	3.49
205	5000	3840	3790.8	3.13
6	20	1	0.9	129.76
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

Aux Gas	0.90	L/min	Carrier Gas	0.55	L/min	Plasma Gas	14.98	L/min
MU./Dil. Gas	0.65	L/min	Ar Gas Tank Press	6.61E+2	kPa			

US EPA Tune Check Sample Report

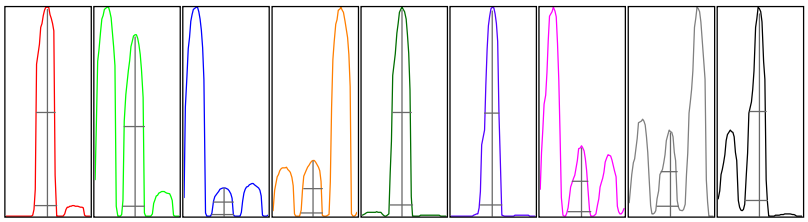
Batch Folder D:\Analytical Runs\I10042415A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	38712	0.48	5.00	
24	148944	0.35	5.00	
25	20171	0.23	5.00	
26	23195	0.63	5.00	
59	189400	0.43	5.00	
115	326901	0.41	5.00	
206	117611	0.63	5.00	
207	105343	0.61	5.00	
208	247680	0.65	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	39009	38733	38540	38573	38705
24	149714	148356	148787	148706	149155
25	20193	20232	20107	20174	20148
26	23410	23151	23018	23249	23146
59	190676	189028	189047	189659	188593
115	329064	327310	326319	325796	326014
206	118591	117774	117733	117415	116542
207	106339	105027	105531	105161	104659
208	249910	247925	245606	248140	246819

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6178	9.00	8.9 - 9.1		0.778	0.850	
24	24262	23.95	23.9 - 24.1		0.769	0.850	
25	3274	24.95	24.9 - 25.1		0.775	0.850	
26	3754	25.95	25.9 - 26.1		0.774	0.850	
59	31063	58.95	58.9 - 59.1		0.809	0.850	
115	60121	115.00	114.9 - 115.1		0.781	0.850	
206	21853	206.00	205.9 - 206.1		0.794	0.850	
207	19226	207.00	206.9 - 207.1		0.777	0.850	
208	46898	208.00	207.9 - 208.1		0.790	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

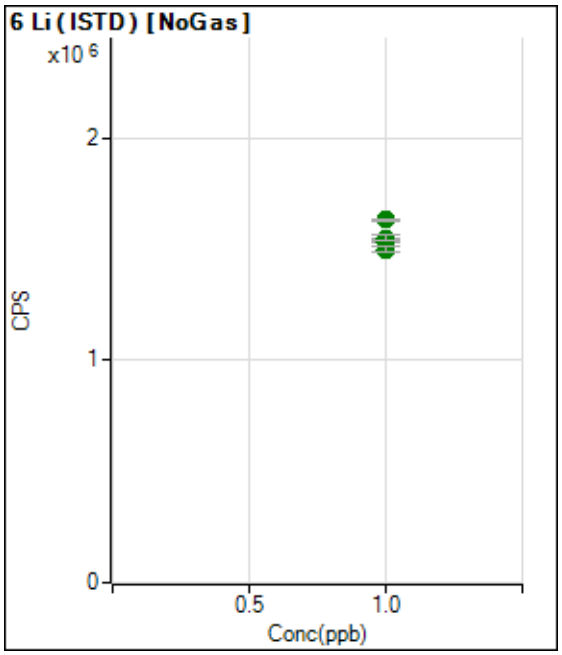
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

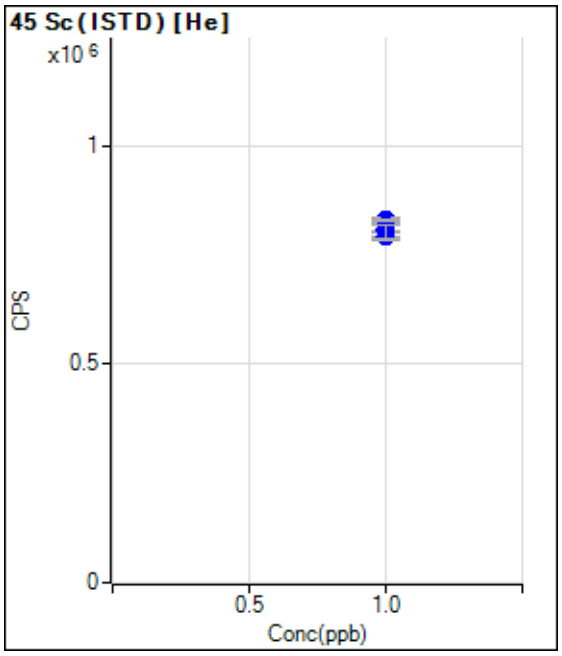
Calibration for 020SMPL.d

Batch Folder: D:\Analytical Runs\I10042415A.b\
Analysis File: I10042415A.batch.bin
DA Date-Time: 4/24/2015 10:47:10 AM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

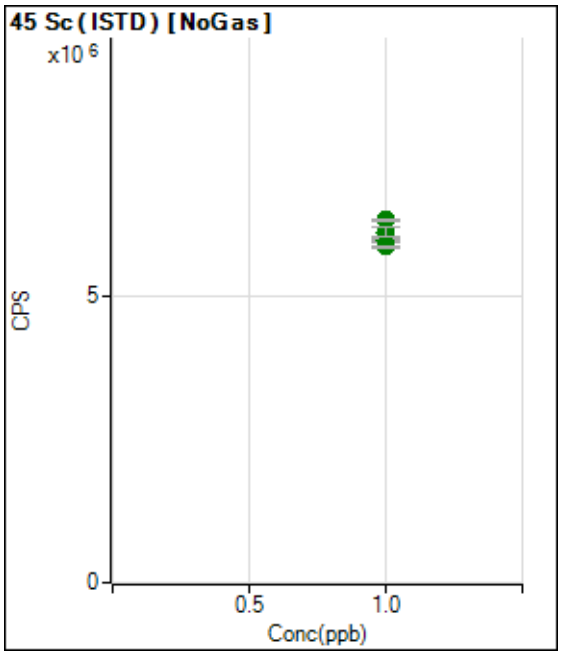
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/24/2015 9:03:11 AM
2	003CALS.d	STD1-1906323	4/24/2015 9:07:04 AM
3	004CALS.d	STD2-1904110	4/24/2015 9:10:52 AM
4	005CALS.d	STD3-1906333	4/24/2015 9:14:41 AM
5	006CALS.d	STD4-1906536	4/24/2015 9:18:28 AM



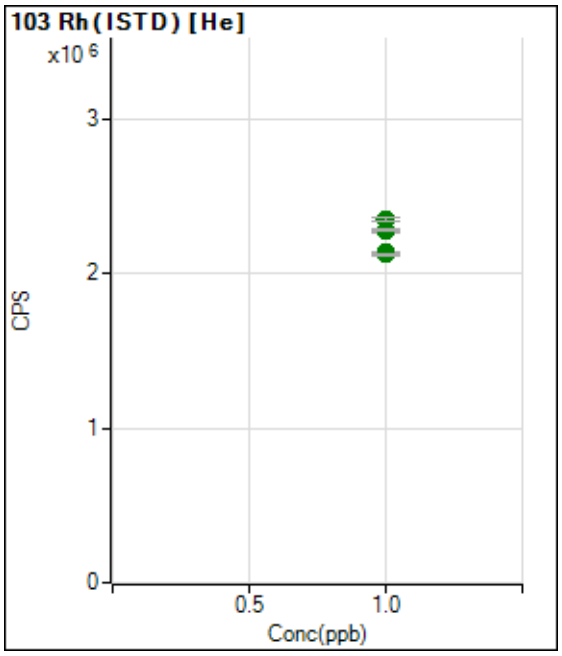
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1631380.70		A	0.7
2	☐	1.000		1540307.15		A	0.8
3	☐	1.000		1526248.41		A	1.7
4	☐	1.000		1551780.36		A	1.6
5	☐	1.000		1498103.13		A	2.0



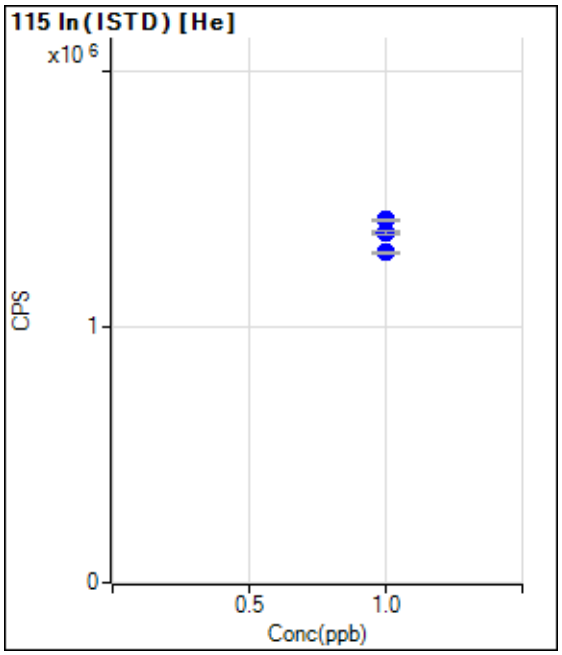
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		829695.59		P	1.4
2	☐	1.000		817537.88		P	3.3
3	☐	1.000		807513.79		P	4.4
4	☐	1.000		790122.88		P	2.1
5	☐	1.000		803039.60		P	4.2



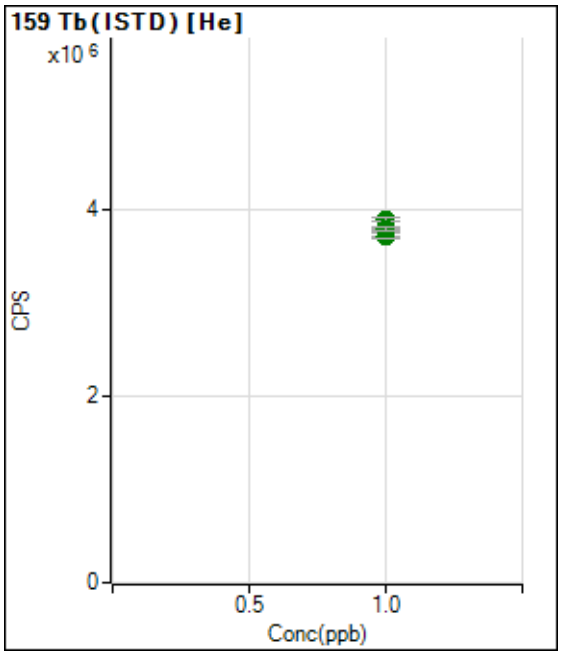
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6325637.53		A	0.2
2	☐	1.000		5950417.40		A	0.6
3	☐	1.000		5970501.43		A	1.1
4	☐	1.000		6107044.76		A	2.8
5	☐	1.000		5852964.49		A	0.7



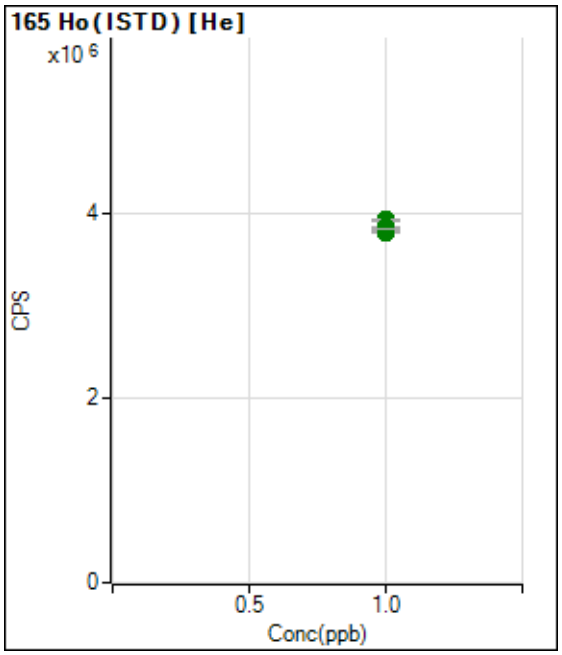
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2345542.75		A	1.1
2	☐	1.000		2270622.48		A	0.4
3	☐	1.000		2138680.75		A	0.2
4	☐	1.000		2121899.08		A	0.8
5	☐	1.000		2278765.60		A	0.7



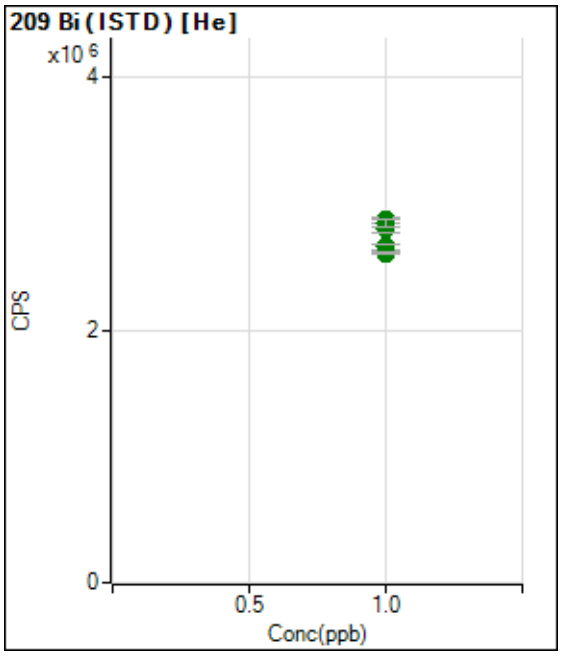
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1419467.00		P	0.5
2	☐	1.000		1368321.56		P	0.6
3	☐	1.000		1291611.85		P	0.6
4	☐	1.000		1290416.56		P	0.6
5	☐	1.000		1367724.92		P	1.0



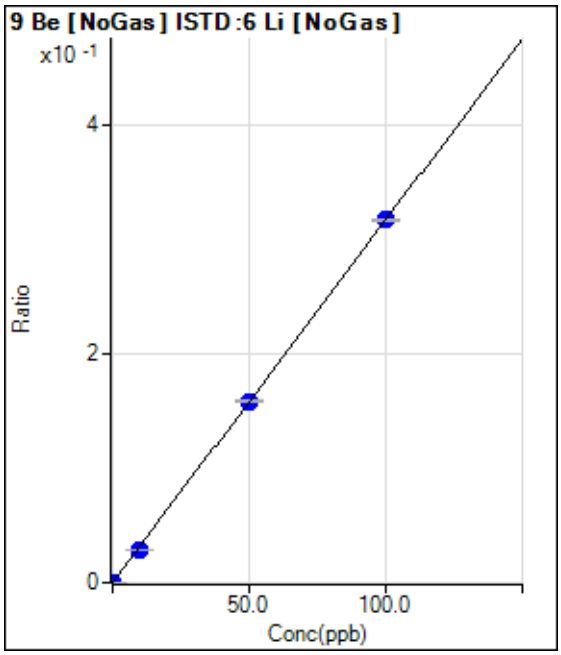
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3888261.79		A	1.0
2	☐	1.000		3779425.55		A	0.9
3	☐	1.000		3744716.52		A	1.9
4	☐	1.000		3712947.49		A	1.7
5	☐	1.000		3796091.10		A	1.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3932561.79		A	0.4
2	☐	1.000		3846649.57		A	0.7
3	☐	1.000		3795686.66		A	0.5
4	☐	1.000		3791295.96		A	0.3
5	☐	1.000		3835106.79		A	0.5



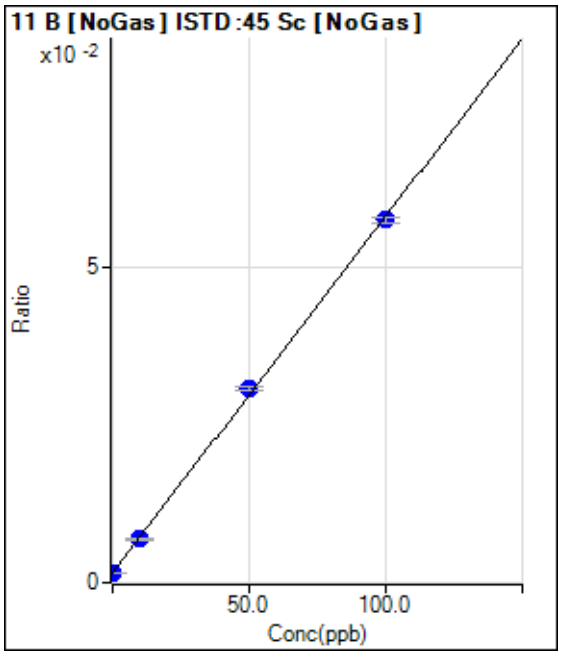
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2874804.82		A	1.3
2	☐	1.000		2797035.03		A	1.2
3	☐	1.000		2659575.52		A	1.4
4	☐	1.000		2611397.26		A	1.0
5	☐	1.000		2853757.74		A	2.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	74.5
2	☐	10.000	9.067	44179.23	0.0287	P	2.9
3	☐	50.000	49.944	240950.08	0.1579	P	1.3
4	☐	100.000	100.121	491107.69	0.3165	P	0.6
5	☐			151.86	0.0001	P	15.0

y = 0.0032 * x + 2.7200E-005
R = 1.0000
DL = 0.01924
BEC = 0.008605

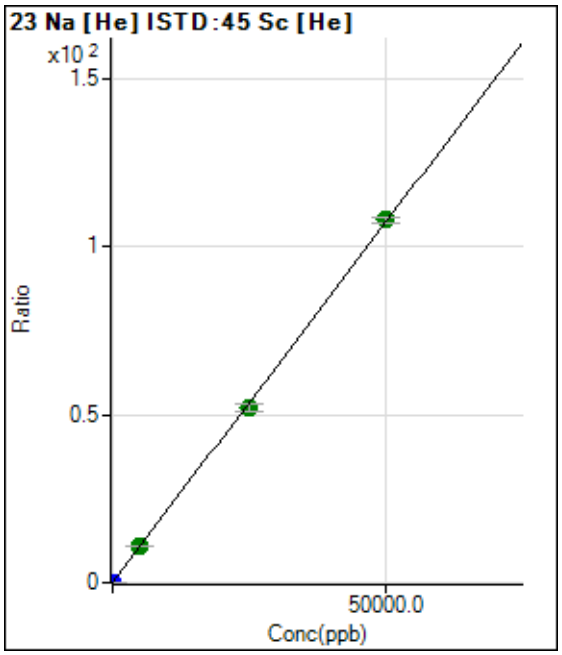
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9869.75	0.0016	P	4.4
2	☐	10.000	9.616	41488.21	0.0070	P	4.6
3	☐	50.000	51.866	183611.44	0.0308	P	1.9
4	☐			12245.17	0.0020	P	2.3
5	☐	100.000	99.105	335668.74	0.0573	P	1.6

y = 5.6290E-004 * x + 0.0016
R = 0.9997
DL = 0.3637
BEC = 2.772

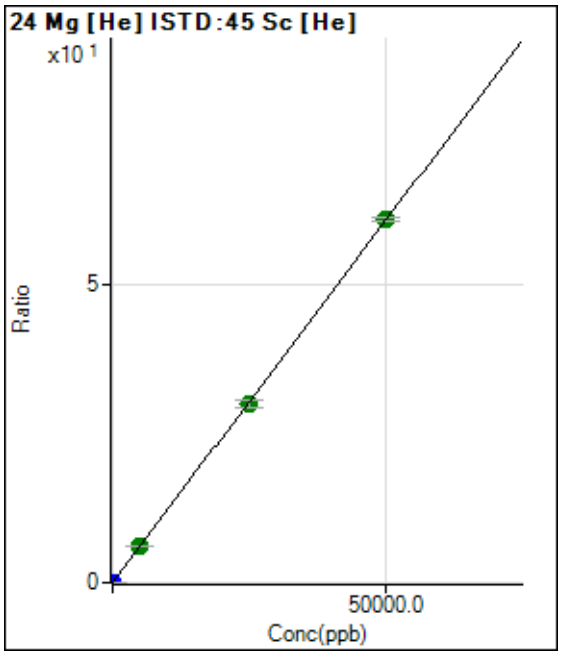
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23119.03	0.0279	P	2.1
2	☐	5000.000	5068.973	8886942.47	10.8742	A	2.0
3	☐	25000.000	24210.598	41801990.93	51.8327	A	4.4
4	☐	50000.000	50387.804	85188646.61	107.8457	A	1.9
5	☐			39064.96	0.0486	P	4.7

y = 0.0021 * x + 0.0279
R = 0.9998
DL = 0.8254
BEC = 13.02

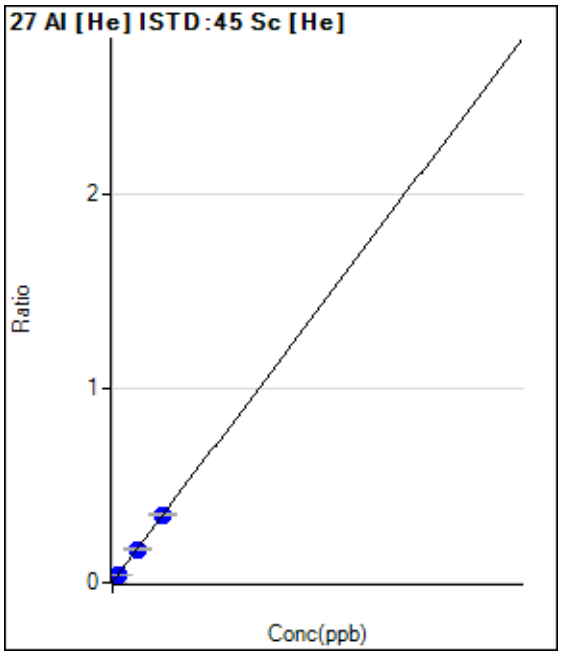
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	988.97	0.0012	P	15.1
2	☐	5000.000	5140.359	5111829.19	6.2540	A	1.6
3	☐	25000.000	24674.041	24209588.85	30.0151	A	4.0
4	☐	50000.000	50148.944	48191972.16	61.0031	A	1.2
5	☐			5475.15	0.0068	P	13.1

y = 0.0012 * x + 0.0012
R = 1.0000
DL = 0.4453
BEC = 0.981

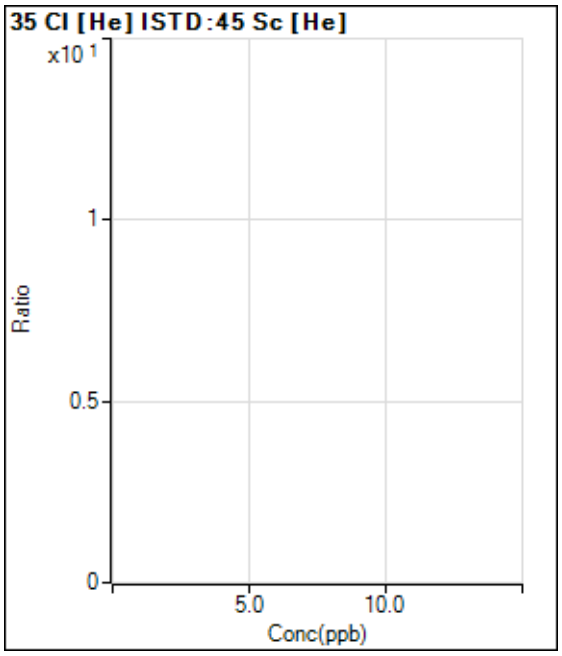
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2648.00	0.0032	P	7.6
2	☐	50.000	49.865	30708.98	0.0376	P	1.3
3	☐	250.000	245.708	139162.76	0.1726	P	5.5
4	☐	500.000	502.160	276019.85	0.3494	P	2.0
5	☐			2865.82	0.0036	P	5.3

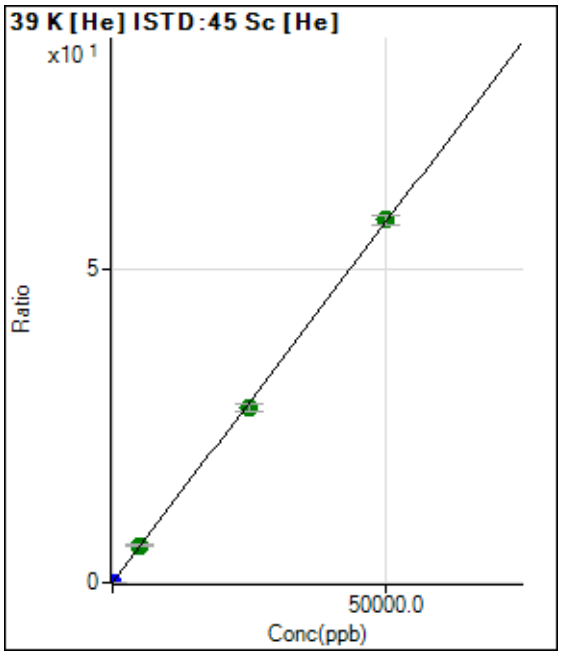
y = 6.8952E-004 * x + 0.0032
R = 0.9999
DL = 1.048
BEC = 4.626

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			13349840.67	16.0920	A	1.5
2	☐			12632885.61	15.4604	A	2.4
3	☐			12470725.43	15.4634	A	4.5
4	☐			12109121.74	15.3298	A	2.0
5	☐			12941196.25	16.1304	A	3.5

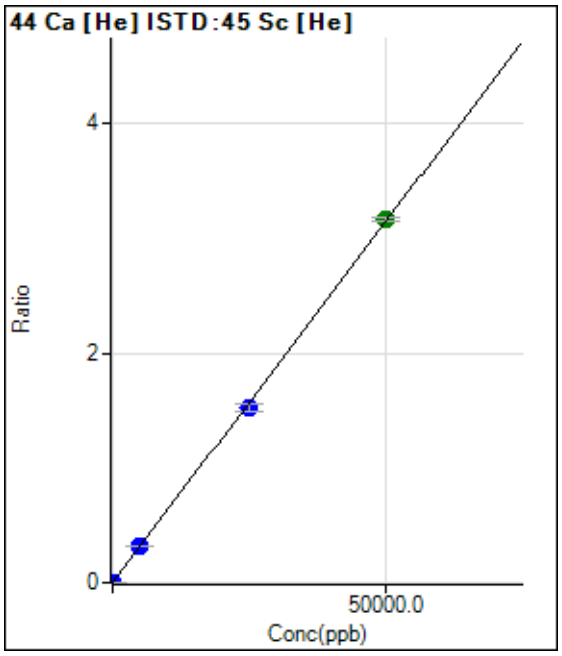
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38274.64	0.0461	P	1.7
2	☐	5000.000	5141.355	4849697.38	5.9343	A	2.0
3	☐	25000.000	24265.021	22452697.25	27.8360	A	4.0
4	☐	50000.000	50353.354	45584978.74	57.7140	A	2.5
5	☐			42461.49	0.0529	P	0.8

y = 0.0011 * x + 0.0461
R = 0.9998
DL = 2.058
BEC = 40.28

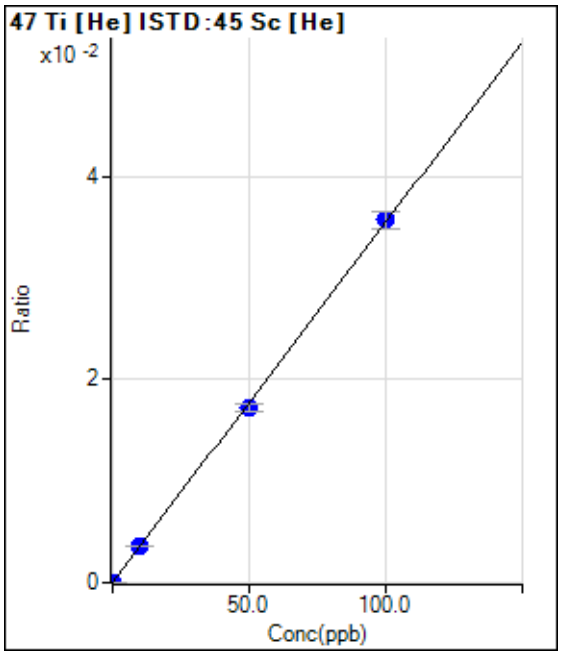
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1003.83	0.0012	P	15.0
2	☐	5000.000	5000.793	257825.02	0.3155	P	1.5
3	☐	25000.000	24363.660	1235832.22	1.5323	P	4.2
4	☐	50000.000	50318.091	2499004.66	3.1633	A	1.2
5	☐			1139.06	0.0014	P	7.6

y = 6.2841E-005 * x + 0.0012
R = 0.9999
DL = 8.639
BEC = 19.23

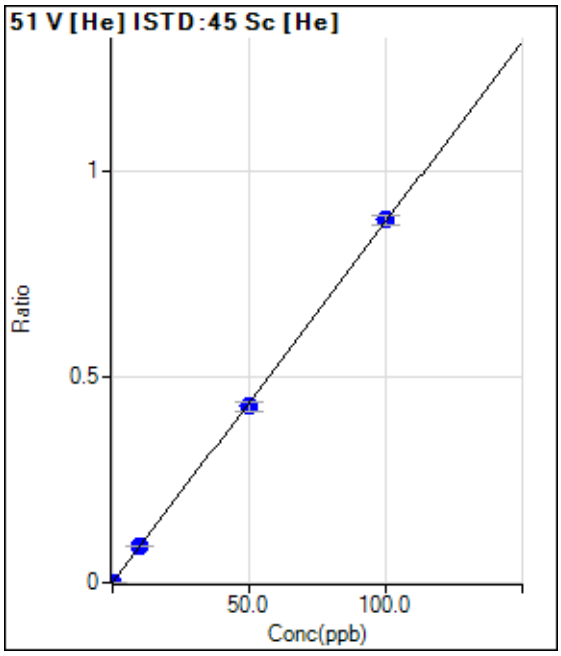
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	26.0
2	☐	10.000	9.980	2902.49	0.0036	P	1.2
3	☐	50.000	48.605	13902.14	0.0172	P	3.9
4	☐			17.78	0.0000	P	29.8
5	☐	100.000	100.700	28623.77	0.0357	P	4.5

y = 3.5421E-004 * x + 1.6103E-005
R = 0.9998
DL = 0.03548
BEC = 0.04546

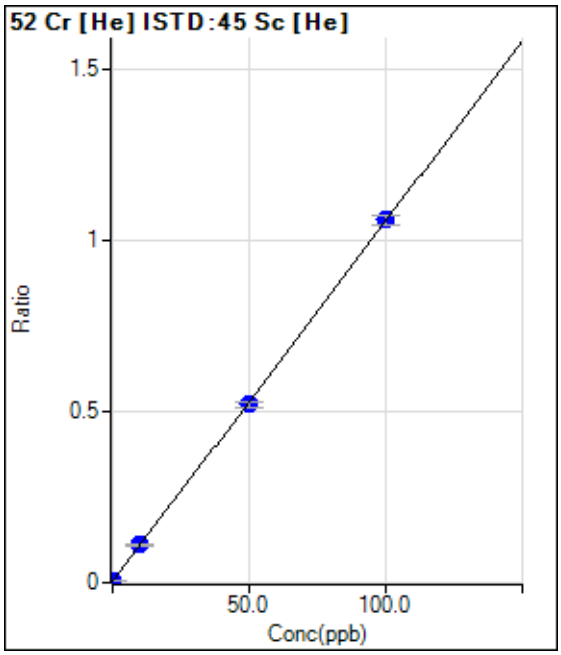
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.14	0.0001	P	728.1
2	☐	10.000	10.044	71999.45	0.0881	P	2.3
3	☐	50.000	48.849	345100.92	0.4280	P	5.0
4	☐	100.000	100.571	695861.57	0.8810	P	2.3
5	☐			541.49	0.0007	P	57.6

y = 0.0088 * x + 1.2709E-004
R = 0.9999
DL = 0.3169
BEC = 0.01451

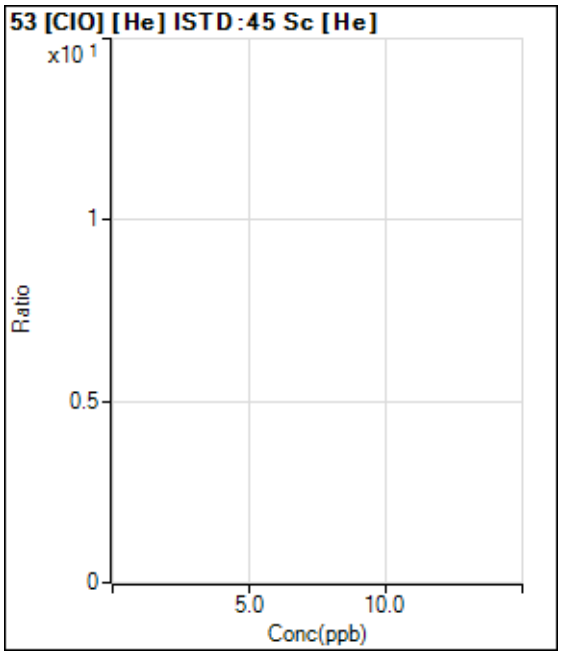
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2573.55	0.0031	P	5.3
2	☐	10.000	10.125	89657.22	0.1097	P	0.8
3	☐	50.000	49.138	419721.65	0.5204	P	4.0
4	☐	100.000	100.419	837413.89	1.0602	P	2.3
5	☐			3677.10	0.0046	P	3.6

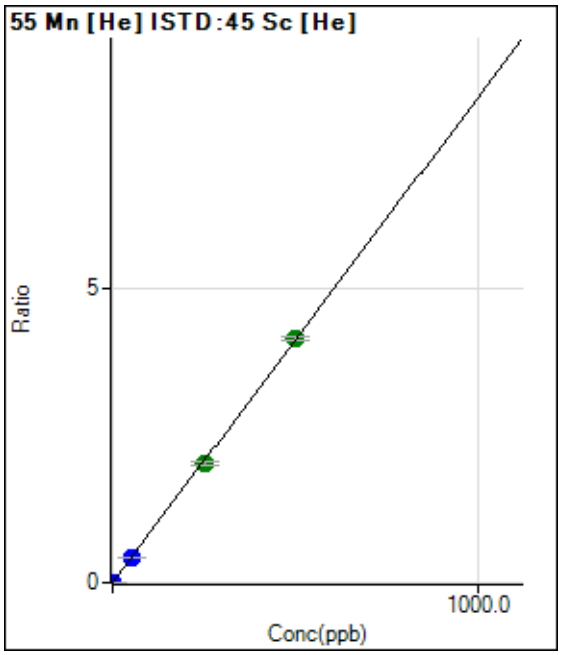
y = 0.0105 * x + 0.0031
R = 0.9999
DL = 0.04688
BEC = 0.2948

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1966.88	0.0024	P	15.0
2	☐			11400.40	0.0139	P	6.2
3	☐			51794.52	0.0642	P	3.2
4	☐			102393.77	0.1296	P	2.5
5	☐			733.38	0.0009	P	15.6

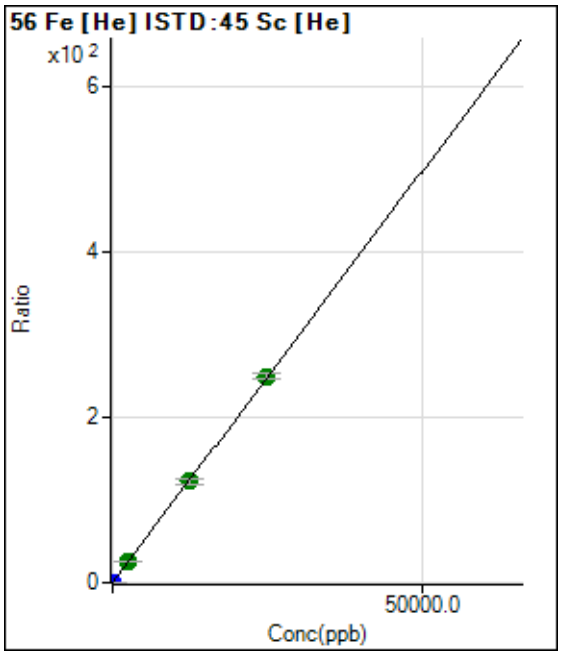
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1230.06	0.0015	P	2.4
2	☐	50.000	50.534	342909.72	0.4195	P	1.1
3	☐	250.000	245.959	1642241.12	2.0362	A	4.3
4	☐	500.000	501.967	3281596.40	4.1541	A	1.3
5	☐			1567.87	0.0020	P	14.0

y = 0.0083 * x + 0.0015
R = 0.9999
DL = 0.01307
BEC = 0.1792

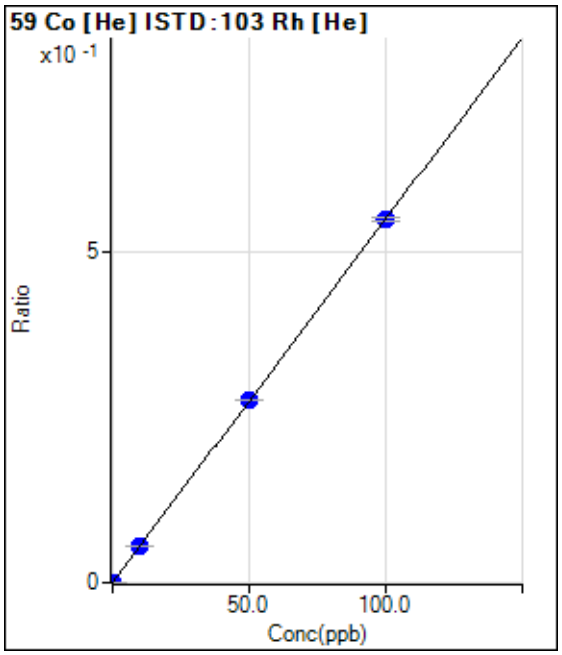
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4585.09	0.0055	P	5.7
2	☐	2500.000	2535.095	20566579.74	25.1686	A	2.3
3	☐	12500.000	12329.704	98690627.19	122.3886	A	4.9
4	☐	25000.000	25081.639	196640618.85	248.9628	A	2.6
5	☐			275375.27	0.3410	P	21.9

y = 0.0099 * x + 0.0055
R = 1.0000
DL = 0.0957
BEC = 0.557

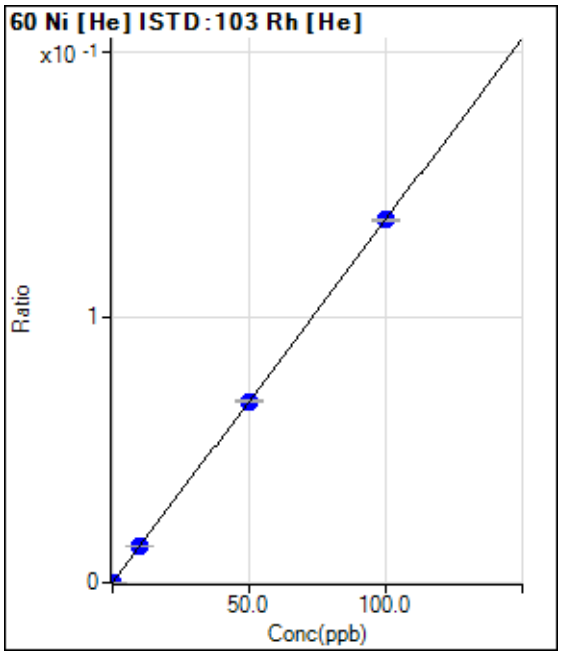
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.78	0.0000	P	54.1
2	☐	10.000	10.103	126406.59	0.0557	P	1.7
3	☐	50.000	50.282	592350.12	0.2770	P	0.3
4	☐	100.000	99.848	1166939.02	0.5500	P	0.9
5	☐			220.01	0.0001	P	31.5

y = 0.0055 * x + 2.0382E-005
R = 1.0000
DL = 0.006004
BEC = 0.0037

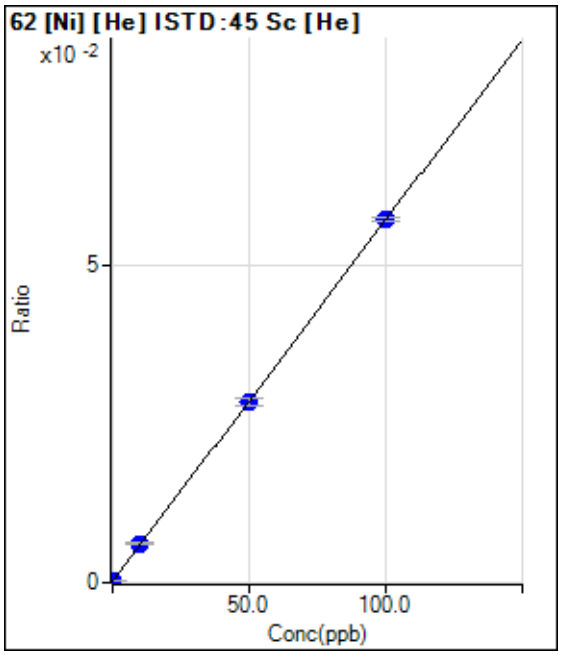
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	128.89	0.0001	P	21.0
2	☐	10.000	9.919	30883.23	0.0136	P	2.0
3	☐	50.000	50.028	146236.59	0.0684	P	0.8
4	☐	100.000	99.994	289874.62	0.1366	P	0.5
5	☐			330.01	0.0001	P	14.4

y = 0.0014 * x + 5.4954E-005
R = 1.0000
DL = 0.02537
BEC = 0.04024

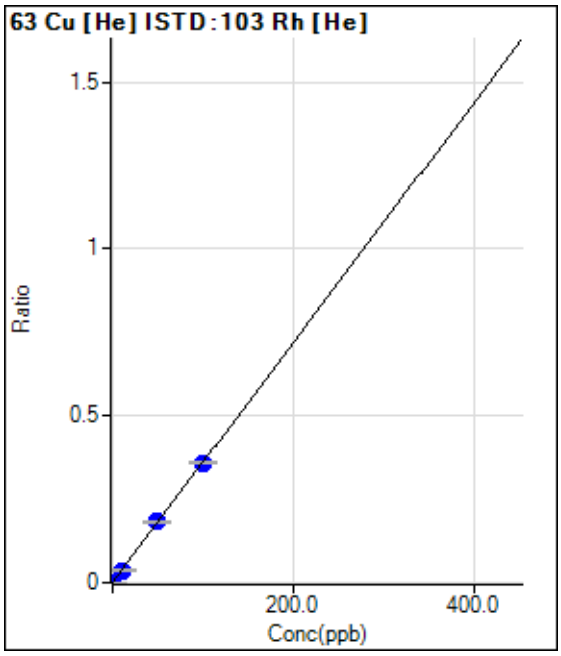
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	147.78	0.0002	P	25.0
2	☐	10.000	10.511	5028.54	0.0062	P	2.7
3	☐	50.000	49.679	22927.00	0.0284	P	4.2
4	☐	100.000	100.110	45107.56	0.0571	P	1.1
5	☐			208.89	0.0003	P	14.4

y = 5.6855E-004 * x + 1.7849E-004
R = 1.0000
DL = 0.2351
BEC = 0.3139

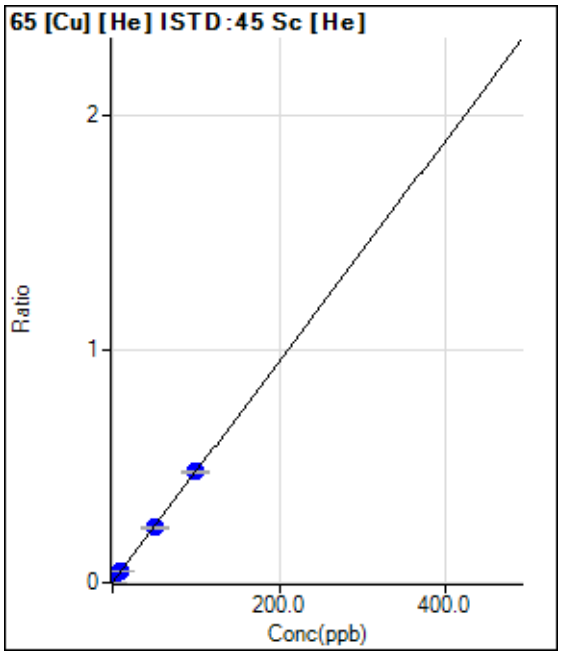
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1714.55	0.0007	P	4.5
2	☐	10.000	10.195	84808.34	0.0373	P	2.5
3	☐	50.000	50.307	387992.67	0.1814	P	0.5
4	☐	100.000	99.827	762296.27	0.3593	P	1.5
5	☐			1535.65	0.0007	P	8.4

y = 0.0036 * x + 7.3091E-004
R = 1.0000
DL = 0.02761
BEC = 0.2035

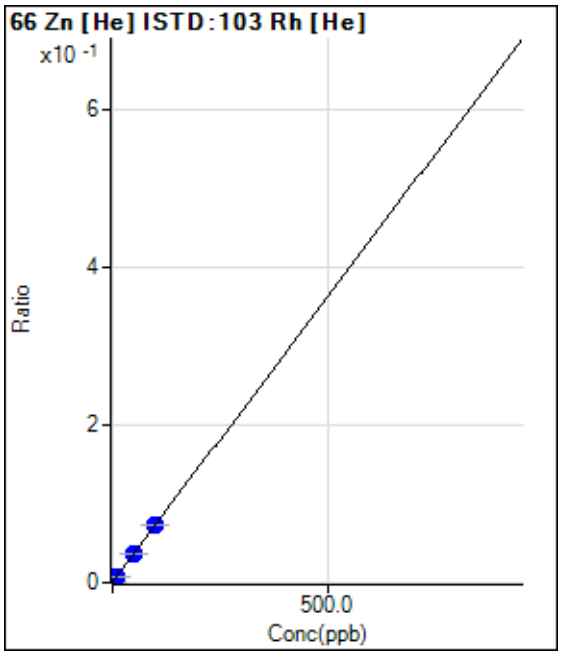
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	778.92	0.0009	P	11.3
2	☐	10.000	10.605	41834.23	0.0512	P	0.9
3	☐	50.000	49.647	190470.21	0.2362	P	4.3
4	☐	100.000	100.116	375449.34	0.4753	P	1.5
5	☐			832.26	0.0010	P	6.7

y = 0.0047 * x + 9.3938E-004
R = 1.0000
DL = 0.06726
BEC = 0.1983

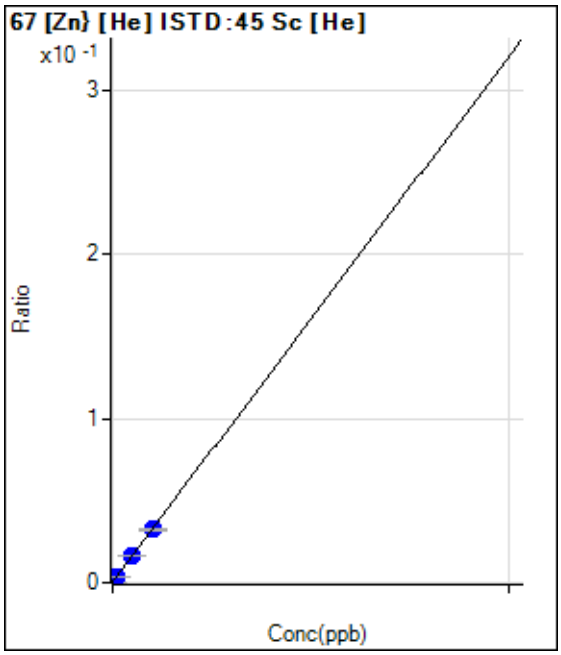
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1973.47	0.0008	P	2.0
2	☐	10.000	10.041	18451.86	0.0081	P	3.1
3	☐	50.000	49.532	78647.36	0.0368	P	0.5
4	☐	100.000	100.230	156069.00	0.0736	P	0.1
5	☐			2237.95	0.0010	P	0.7

y = 7.2544E-004 * x + 8.4125E-004
R = 1.0000
DL = 0.071
BEC = 1.16

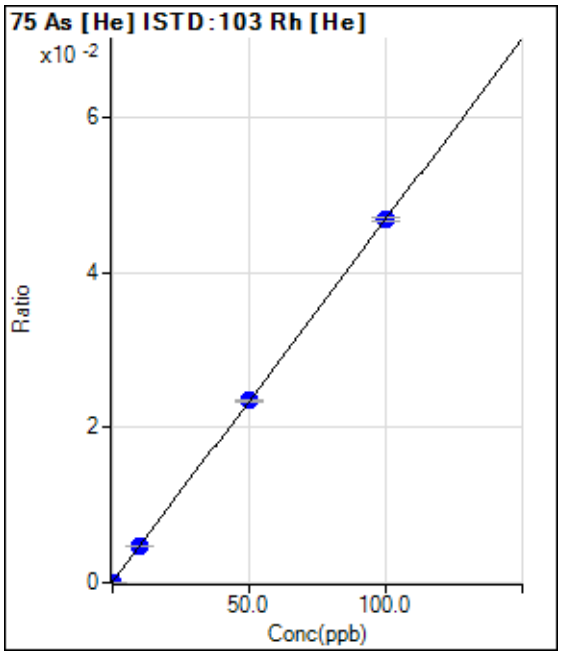
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	296.67	0.0004	P	17.7
2	☐	10.000	10.592	3066.97	0.0037	P	7.5
3	☐	50.000	49.169	12980.42	0.0161	P	2.8
4	☐	100.000	100.356	25641.79	0.0325	P	2.7
5	☐			368.90	0.0005	P	7.8

y = 3.1990E-004 * x + 3.5812E-004
R = 0.9999
DL = 0.5949
BEC = 1.119

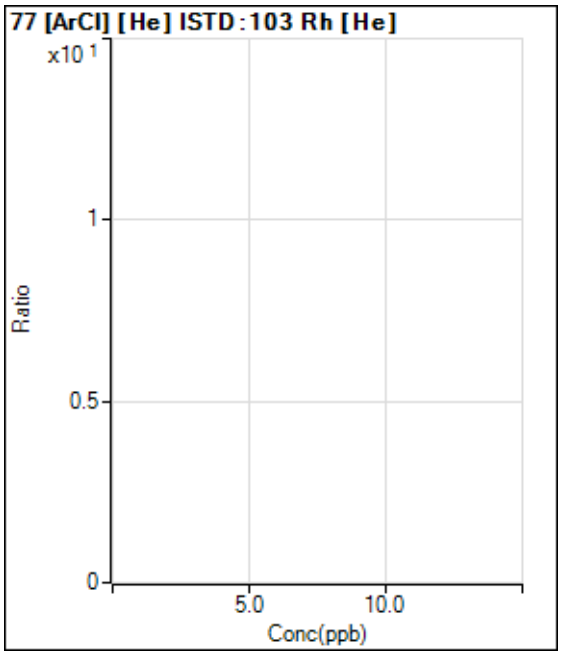
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	163.13	0.0001	P	11.3
2	☐	10.000	10.045	10819.04	0.0048	P	1.9
3	☐	50.000	50.119	50248.45	0.0235	P	0.7
4	☐	100.000	99.936	99257.85	0.0468	P	1.1
5	☐			460.83	0.0002	P	10.5

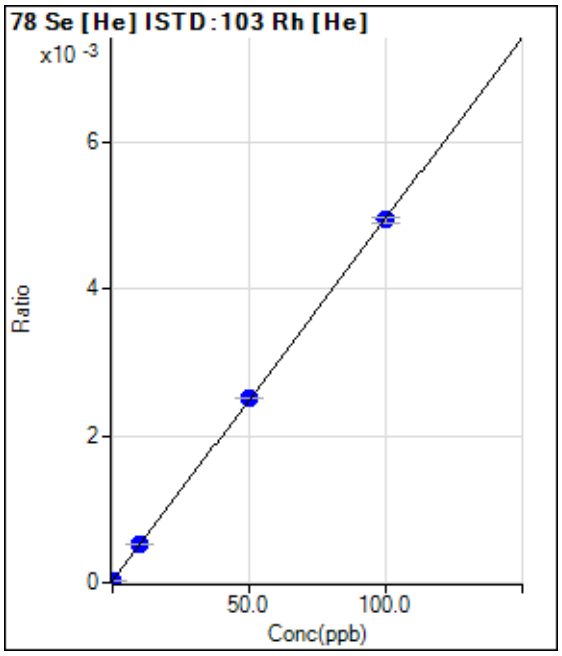
y = 4.6741E-004 * x + 6.9592E-005
R = 1.0000
DL = 0.0504
BEC = 0.1489

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			22.22	0.0000	P	100.5
2	☐			348.17	0.0002	P	12.8
3	☐			1600.15	0.0007	P	10.3
4	☐			3222.67	0.0015	P	11.0
5	☐			14.81	0.0000	P	43.0

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51.90	0.0000	P	8.0
2	☐	10.000	10.188	1192.91	0.0005	P	2.6
3	☐	50.000	50.627	5395.52	0.0025	P	0.5
4	☐	100.000	99.668	10492.30	0.0049	P	1.7
5	☐			90.88	0.0000	P	21.8

y = 4.9395E-005 * x + 2.2119E-005

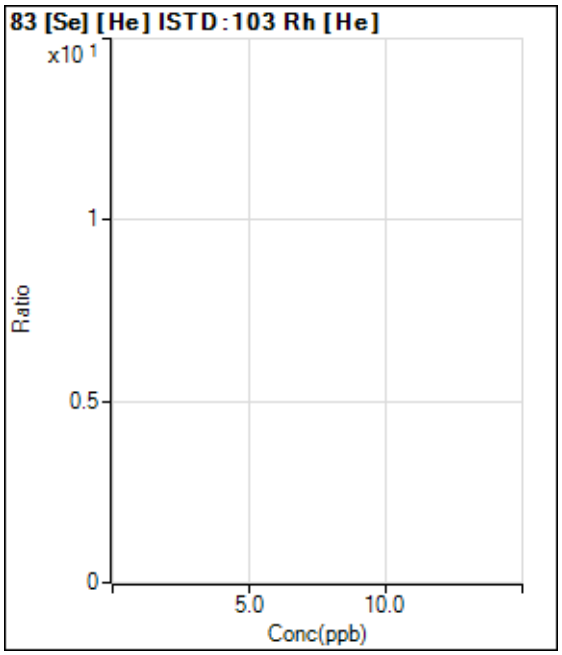
R = 1.0000

DL = 0.107

BEC = 0.4478

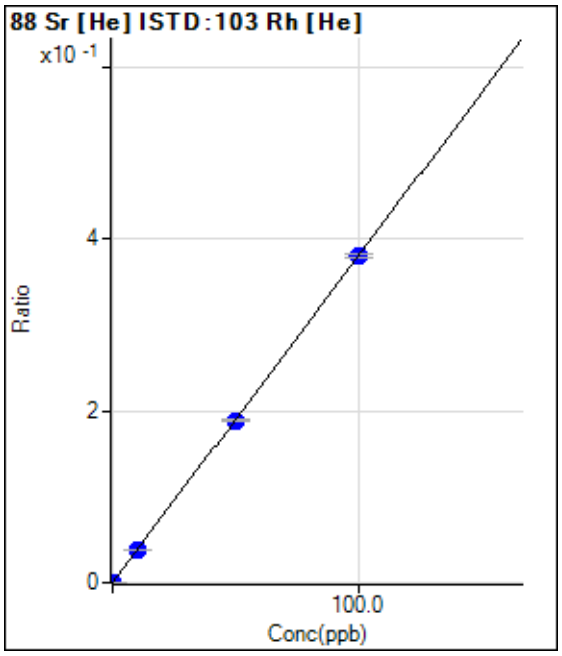
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			95.29	0.0000	P	19.8
2	☐			105.05	0.0000	P	19.3
3	☐			102.69	0.0000	P	12.4
4	☐			106.06	0.0000	P	8.6
5	☐			102.36	0.0000	P	9.1

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	117.78	0.0001	P	30.1
2	☐	10.000	9.848	85029.26	0.0374	P	2.7
3	☐	50.000	49.625	403131.16	0.1885	P	1.0
4	☐	100.000	100.203	807469.52	0.3806	P	0.9
5	☐			288.90	0.0001	P	13.9

y = 0.0038 * x + 5.0104E-005

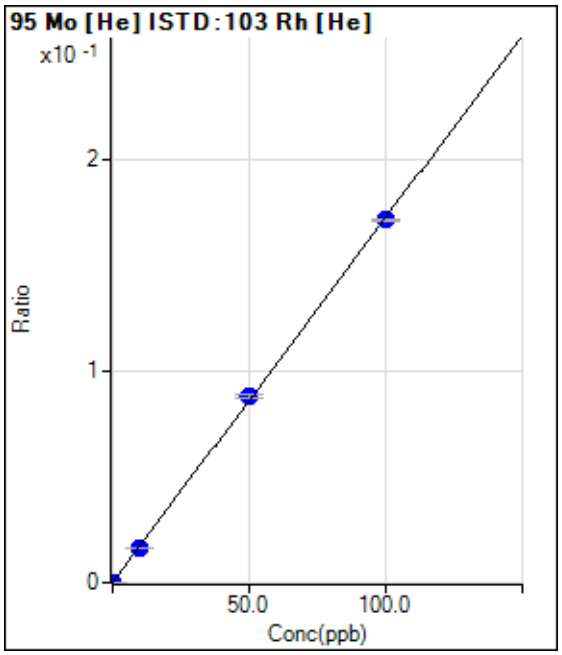
R = 1.0000

DL = 0.01193

BEC = 0.01319

Weight: <None>

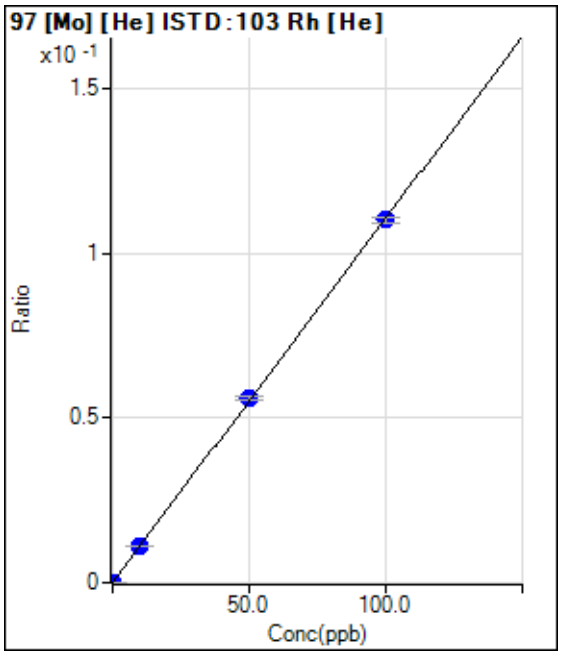
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0000	P	37.2
2	☐	10.000	9.672	37953.38	0.0167	P	1.1
3	☐	50.000	51.117	188697.31	0.0882	P	1.6
4	☐			3195.90	0.0015	P	17.1
5	☐	100.000	99.474	391196.37	0.1717	P	0.3

y = 0.0017 * x + 2.6123E-005
R = 0.9999
DL = 0.0169
BEC = 0.01514

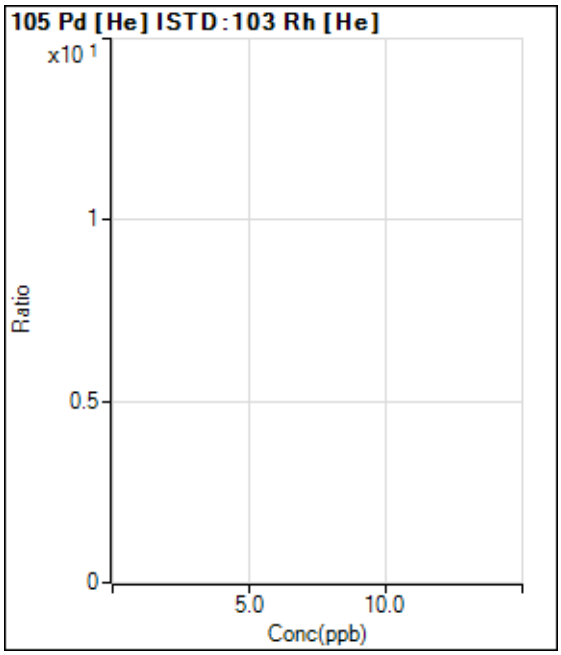
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.81	0.0000	P	86.6
2	☐	10.000	10.027	25145.08	0.0111	P	3.4
3	☐	50.000	50.627	119533.62	0.0559	P	2.0
4	☐			1800.19	0.0008	P	15.3
5	☐	100.000	99.684	250745.61	0.1100	P	1.5

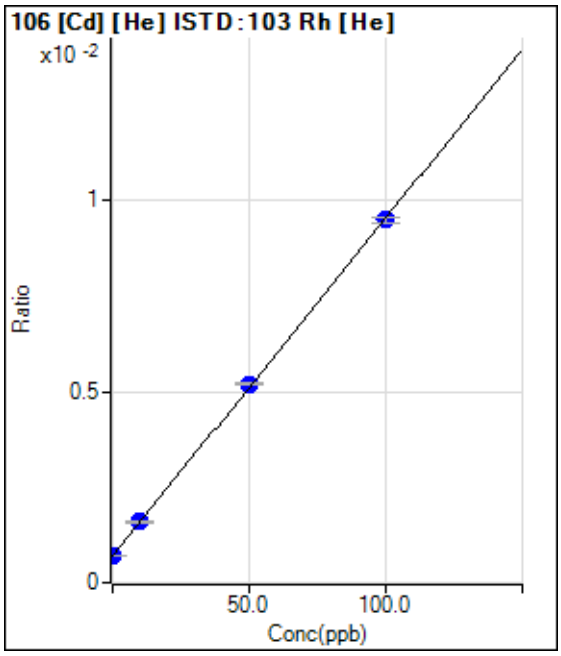
y = 0.0011 * x + 6.3218E-006
R = 1.0000
DL = 0.01488
BEC = 0.005727

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1670.56	0.0007	P	11.0
2	☐			1807.60	0.0008	P	24.7
3	☐			2055.78	0.0010	P	6.3
4	☐			2441.05	0.0011	P	9.7
5	☐			1748.34	0.0008	P	13.5

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1626.35	0.0007	P	2.2
2	☐	10.000	10.112	3602.41	0.0016	P	2.2
3	☐	50.000	50.938	11105.24	0.0052	P	0.5
4	☐	100.000	99.520	20122.04	0.0095	P	1.6
5	☐			1730.06	0.0008	P	2.5

y = 8.8330E-005 * x + 6.9328E-004

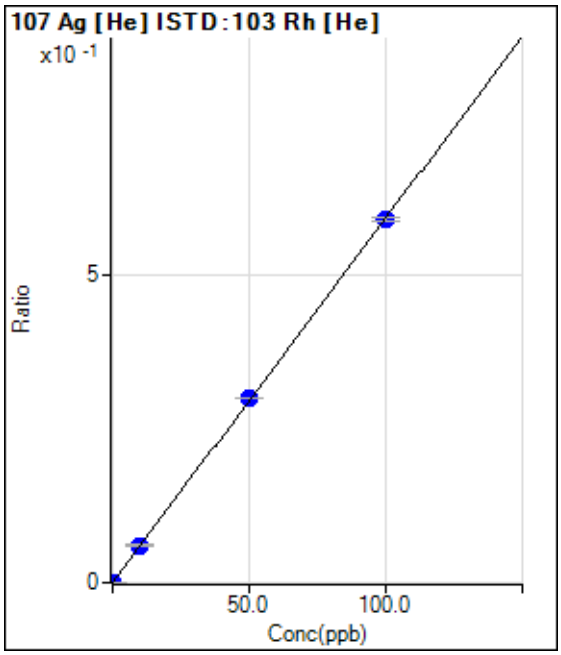
R = 0.9999

DL = 0.5141

BEC = 7.849

Weight: <None>

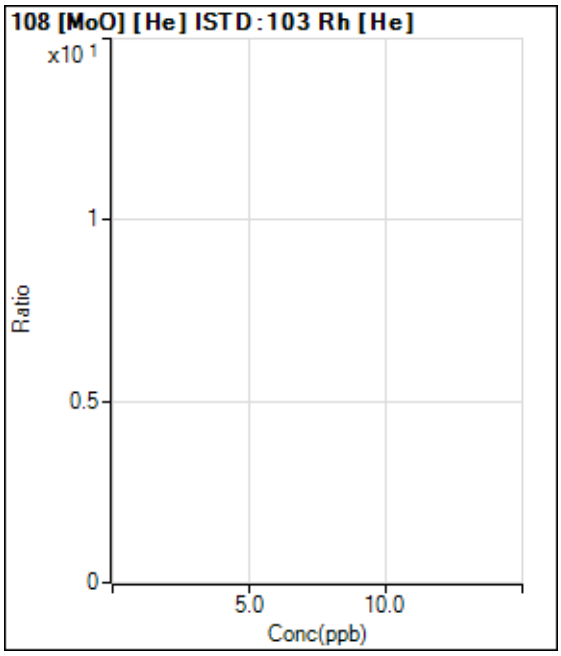
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.56	0.0000	P	91.3
2	☐	10.000	10.272	138266.67	0.0609	P	1.7
3	☐	50.000	50.678	642464.04	0.3004	P	0.1
4	☐	100.000	99.634	1253098.01	0.5906	P	1.1
5	☐			250.01	0.0001	P	17.1

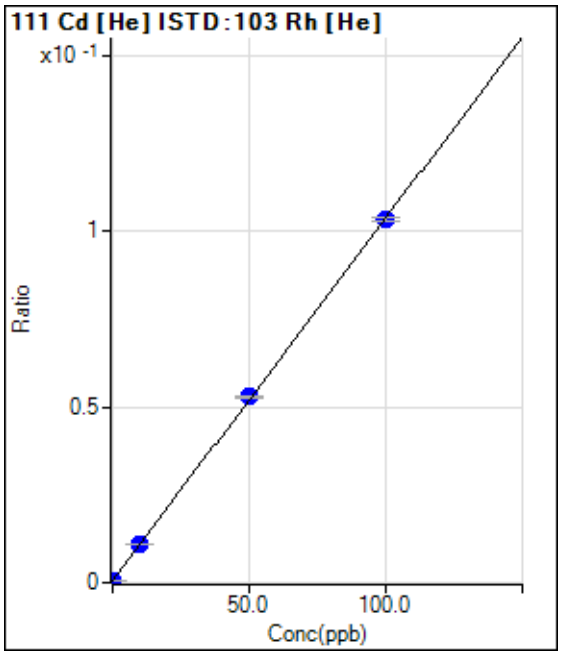
y = 0.0059 * x + 2.3780E-006
R = 1.0000
DL = 0.001099
BEC = 0.0004012

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			14.81	0.0000	P	86.6
2	☐			1500.15	0.0007	P	14.0
3	☐			7049.98	0.0033	P	3.9
4	☐			13806.18	0.0065	P	4.9
5	☐			100.01	0.0000	P	50.5

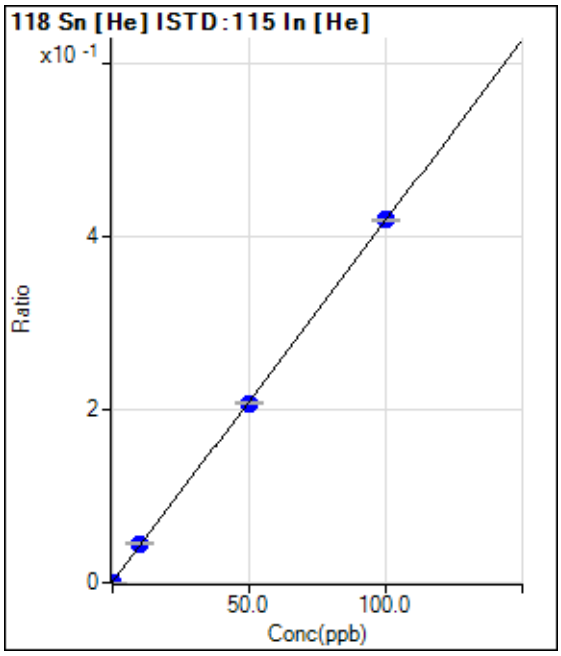
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1232.01	0.0005	P	1.8
2	☐	10.000	10.146	24958.20	0.0110	P	3.1
3	☐	50.000	50.737	113053.77	0.0529	P	0.5
4	☐	100.000	99.617	219141.23	0.1033	P	1.0
5	☐			1362.94	0.0006	P	6.3

y = 0.0010 * x + 5.2519E-004
R = 1.0000
DL = 0.0269
BEC = 0.5091

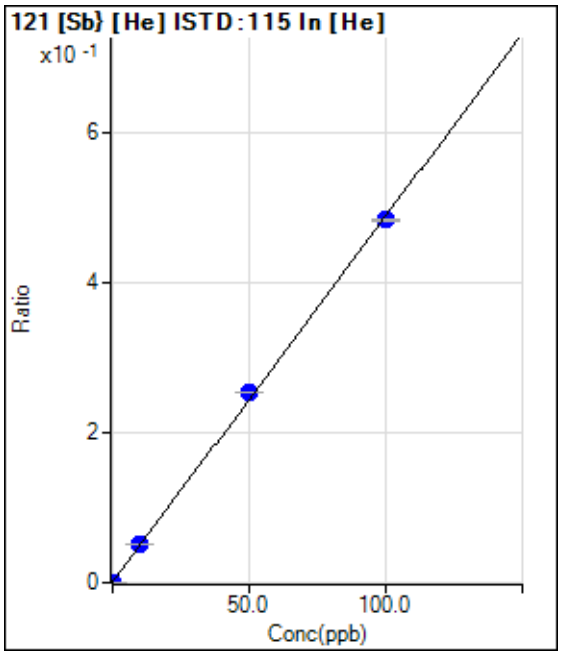
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1114.93	0.0008	P	11.0
2	☐	10.000	10.627	61713.30	0.0451	P	2.3
3	☐	50.000	49.477	267481.25	0.2071	P	1.6
4	☐			4634.35	0.0036	P	9.1
5	☐	100.000	100.199	572523.27	0.4186	P	0.2

y = 0.0042 * x + 7.8560E-004
R = 0.9999
DL = 0.06215
BEC = 0.1884

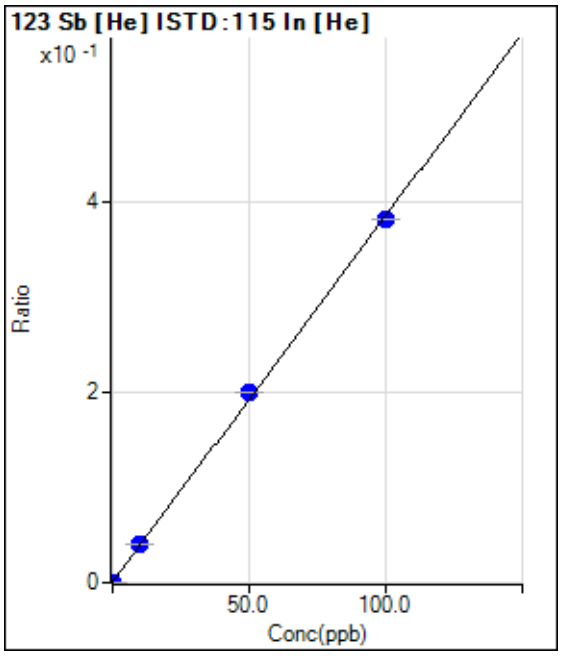
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	823.37	0.0006	P	3.4
2	☐	10.000	10.307	69477.45	0.0508	P	1.5
3	☐	50.000	51.821	326682.70	0.2529	P	0.4
4	☐			4210.58	0.0033	P	9.1
5	☐	100.000	99.059	660543.62	0.4830	P	0.6

y = 0.0049 * x + 5.7999E-004
R = 0.9997
DL = 0.01213
BEC = 0.1191

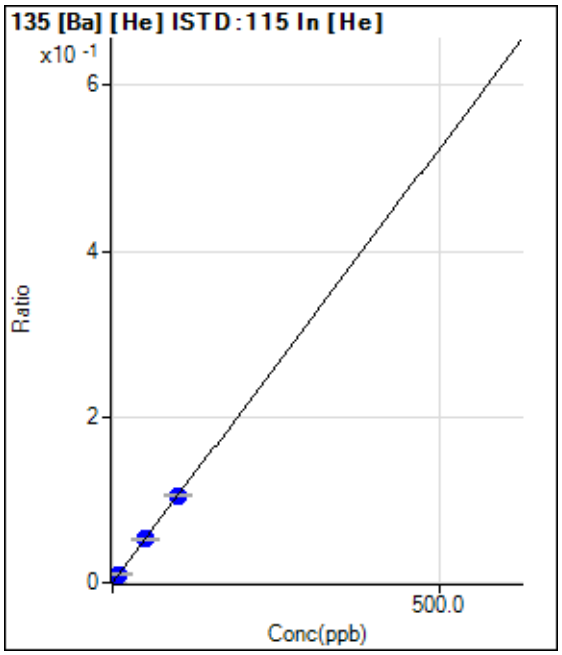
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	638.91	0.0004	P	9.4
2	☐	10.000	10.266	54718.16	0.0400	P	1.4
3	☐	50.000	51.957	259021.83	0.2005	P	0.3
4	☐			3329.26	0.0026	P	9.9
5	☐	100.000	98.995	522052.36	0.3817	P	0.1

y = 0.0039 * x + 4.4999E-004
R = 0.9997
DL = 0.03288
BEC = 0.1168

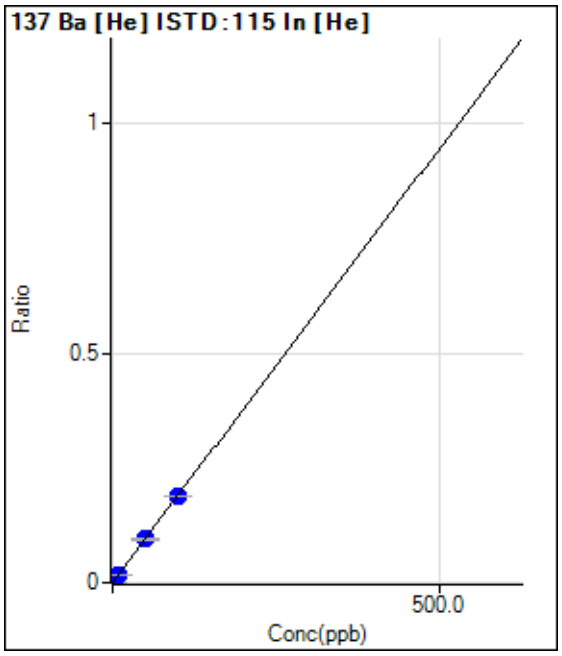
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46.67	0.0000	P	18.8
2	☐	10.000	9.807	14098.25	0.0103	P	2.7
3	☐	50.000	49.994	67659.62	0.0524	P	1.5
4	☐	100.000	100.023	135205.73	0.1048	P	1.8
5	☐			81.11	0.0001	P	28.2

y = 0.0010 * x + 3.2873E-005
R = 1.0000
DL = 0.01769
BEC = 0.03139

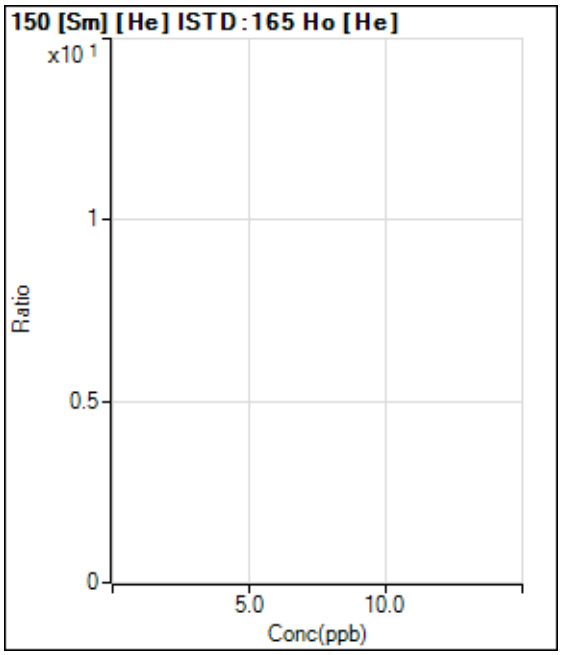
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.00	0.0001	P	14.9
2	☐	10.000	9.749	25346.97	0.0185	P	2.3
3	☐	50.000	49.960	122218.87	0.0946	P	1.9
4	☐	100.000	100.045	244440.15	0.1894	P	1.0
5	☐			183.34	0.0001	P	22.1

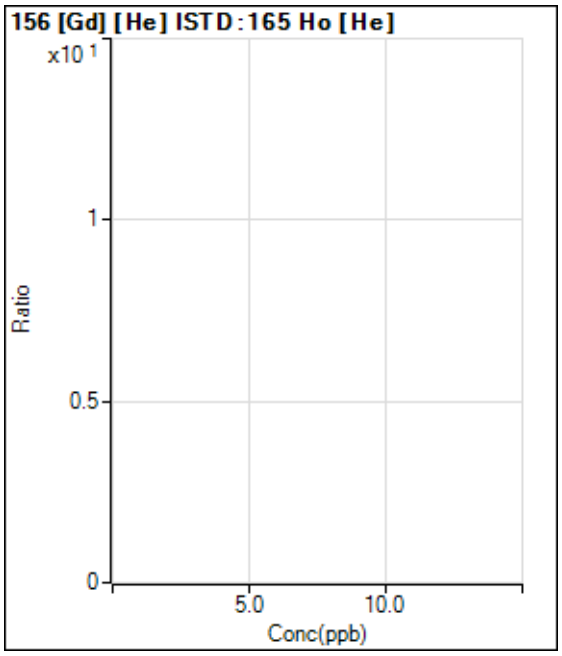
y = 0.0019 * x + 7.0421E-005
R = 1.0000
DL = 0.01662
BEC = 0.03721

Weight: <None>
Min Conc: <None>



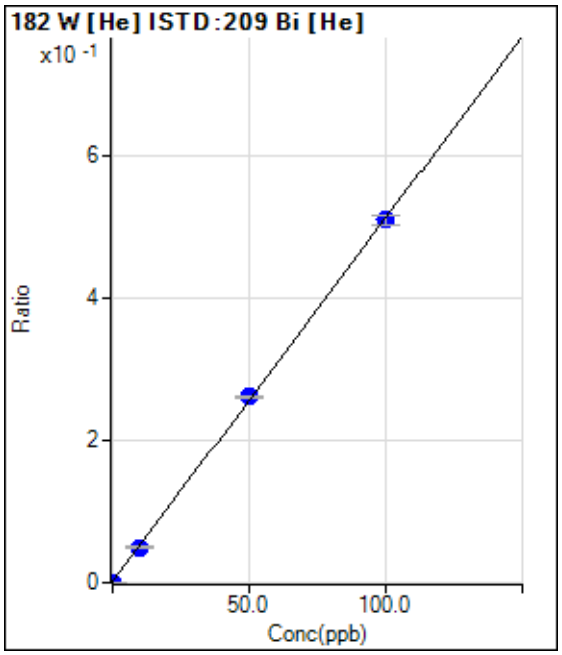
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2.00	0.0000	P	100.0
2	☐			3.33	0.0000	P	91.4
3	☐			19.33	0.0000	P	86.5
4	☐			20.00	0.0000	P	86.7
5	☐			3.33	0.0000	P	34.3

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			10.00	0.0000	P	72.2
2	☐			14.00	0.0000	P	51.6
3	☐			14.67	0.0000	P	20.5
4	☐			24.67	0.0000	P	38.2
5	☐			8.67	0.0000	P	35.0

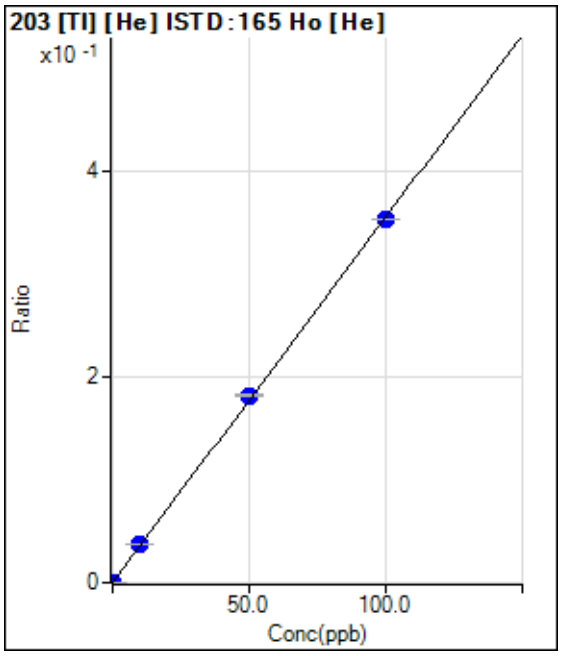
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3730.24	0.0013	P	3.8
2	☐	10.000	9.501	139239.39	0.0498	P	0.9
3	☐	50.000	50.947	694844.75	0.2613	P	1.2
4	☐			17232.09	0.0066	P	13.9
5	☐	100.000	99.576	1453299.54	0.5094	P	2.7

y = 0.0051 * x + 0.0013
R = 0.9999
DL = 0.0287
BEC = 0.2543

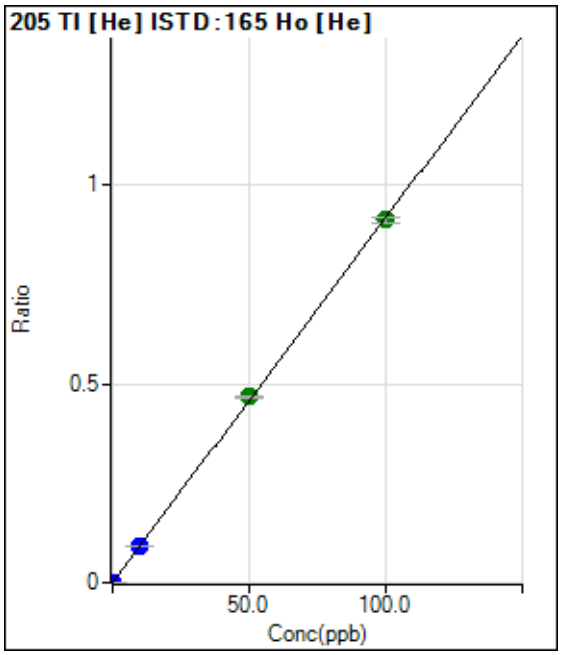
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	66.8
2	☐	10.000	10.361	141504.54	0.0368	P	1.1
3	☐	50.000	51.189	689715.22	0.1817	P	1.0
4	☐	100.000	99.369	1337353.48	0.3527	P	0.1
5	☐			1744.63	0.0005	P	15.1

y = 0.0035 * x + 8.4870E-006
R = 0.9999
DL = 0.004791
BEC = 0.002391

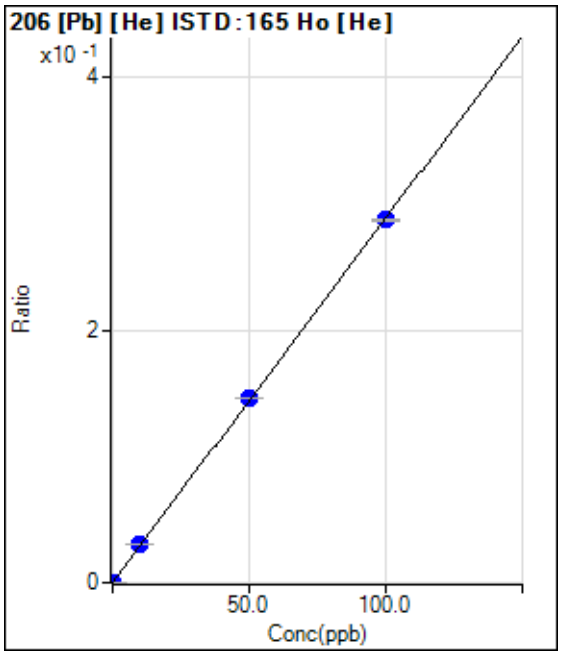
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	71.11	0.0000	P	54.3
2	☐	10.000	9.889	349176.26	0.0908	P	1.5
3	☐	50.000	50.982	1775994.23	0.4679	A	1.6
4	☐	100.000	99.520	3462823.20	0.9133	A	1.3
5	☐			3024.79	0.0008	P	31.5

y = 0.0092 * x + 1.8106E-005
R = 0.9999
DL = 0.003214
BEC = 0.001973

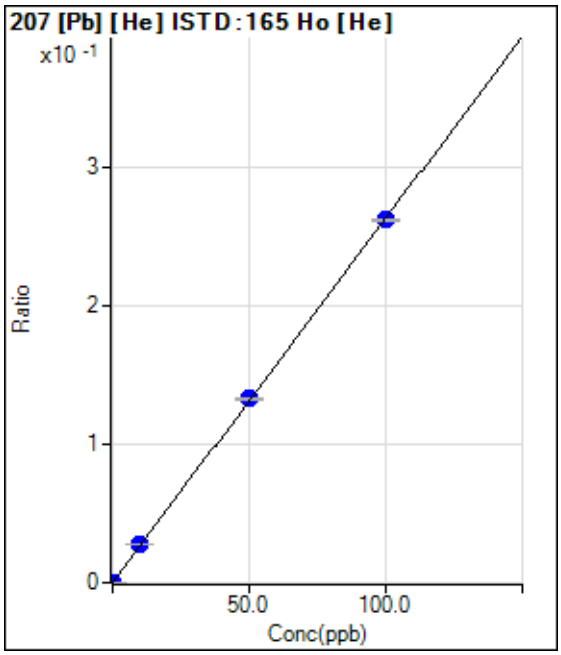
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	193.34	0.0000	P	9.3
2	☐	10.000	10.588	117572.20	0.0306	P	2.2
3	☐	50.000	50.599	553648.48	0.1459	P	0.7
4	☐	100.000	99.642	1088833.67	0.2872	P	0.4
5	☐			744.48	0.0002	P	4.1

y = 0.0029 * x + 4.9175E-005
R = 1.0000
DL = 0.004754
BEC = 0.01706

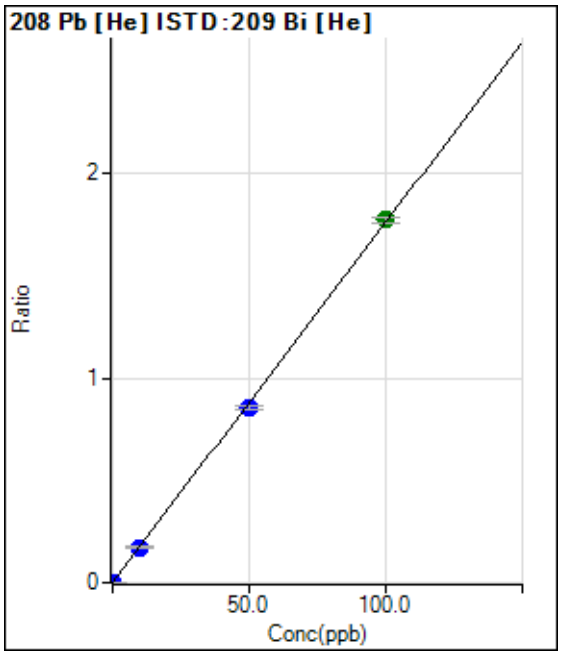
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	170.00	0.0000	P	17.3
2	☐	10.000	10.537	106826.61	0.0278	P	1.8
3	☐	50.000	50.567	505183.85	0.1331	P	0.7
4	☐	100.000	99.663	994368.78	0.2623	P	0.4
5	☐			720.03	0.0002	P	11.9

y = 0.0026 * x + 4.3223E-005
R = 1.0000
DL = 0.008541
BEC = 0.01643

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	807.80	0.0003	P	7.4
2	☐	10.000	9.757	481158.37	0.1720	P	2.3
3	☐	50.000	48.647	2277930.97	0.8566	P	1.7
4	☐	100.000	100.701	4629581.73	1.7730	A	1.3
5	☐			3266.86	0.0011	P	11.7

y = 0.0176 * x + 2.8103E-004
R = 0.9998
DL = 0.003544
BEC = 0.01596

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T08:59:18-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	70	131.47
B	11	45	2	NoGas	10785	0.06
Na	23	45	1	He	22681	0.01
Mg	24	45	1	He	1100	1.75
Al	27	45	1	He	2700	0.07
K	39	45	1	He	37829	0.01
Ca	44	45	1	He	1147	0.60
Ti	47	45	1	He	52	117.45
Cr	52	45	1	He	2584	0.18
Mn	55	45	1	He	1275	0.25
Fe	56	45	1	He	9614	0.28
Co	59	103	1	He	61	53.80
Ni	60	103	1	He	149	8.55
Cu	63	103	1	He	1688	0.66
Zn	66	103	1	He	1962	0.04
As	75	103	1	He	209	8.65
Se	78	103	1	He	57	13.78
Sr	88	103	1	He	129	13.36
Mo	95	103	1	He	596	6.75
Ag	107	103	1	He	12	1054.29
Cd	111	103	1	He	1301	0.34
Sn	118	115	1	He	1896	1.58
Sb	123	115	1	He	1092	2.27
Ba	137	115	1	He	100	23.34
W	182	209	1	He	5824	0.21
Tl	205	165	1	He	230	5.38
Pb	208	209	1	He	834	0.56

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1705161	0.85
Sc	45	1	He	844110	0.55
Sc	45	2	NoGas	6525731	1.04
Rh	103	1	He	2402308	0.48
In	115	1	He	1433973	0.24
Tb	159	1	He	3915650	1.00
Ho	165	1	He	4002193	0.94
Bi	209	1	He	2891682	0.51

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:03:11-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	44	168.74
B	11	45	2	NoGas	9870	0.05
Na	23	45	1	He	23119	0.02
Mg	24	45	1	He	989	1.42
Al	27	45	1	He	2648	0.33
K	39	45	1	He	38275	0.00
Ca	44	45	1	He	1004	1.62
Ti	47	45	1	He	13	187.59
V	51	45	1	He	111	624.55
Cr	52	45	1	He	2574	0.17
Mn	55	45	1	He	1230	0.26
Fe	56	45	1	He	4585	0.11
Co	59	103	1	He	48	113.42
Ni	60	103	1	He	129	16.34
Cu	63	103	1	He	1715	0.29
Zn	66	103	1	He	1973	0.16
As	75	103	1	He	163	6.39
Se	78	103	1	He	52	17.06
Sr	88	103	1	He	118	26.36
Mo	95	103	1	He	61	59.42
Ag	107	103	1	He	6	1649.19
Cd	111	103	1	He	1232	0.23
Sn	118	115	1	He	1115	0.96
Sb	123	115	1	He	639	1.53
Ba	137	115	1	He	100	15.28
W	182	209	1	He	3730	0.10
Tl	205	165	1	He	71	76.11
Pb	208	209	1	He	808	0.90

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1631381	0.72
Sc	45	1	He	829696	1.36
Sc	45	2	NoGas	6325638	0.21
Rh	103	1	He	2345543	1.11
In	115	1	He	1419467	0.49
Tb	159	1	He	3888262	0.98
Ho	165	1	He	3932562	0.35
Bi	209	1	He	2874805	1.34

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:07:04-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	44179	0.00
B	11	2	NoGas	41488	0.01
Na	23	1	He	8886942	0.00
Mg	24	1	He	5111829	0.00
Al	27	1	He	30709	0.01
K	39	1	He	4849697	0.00
Ca	44	1	He	257825	0.00
Ti	47	1	He	2902	0.07
V	51	1	He	71999	0.00
Cr	52	1	He	89657	0.00
Mn	55	1	He	342910	0.00
Fe	56	1	He	20566580	0.00
Co	59	1	He	126407	0.00
Ni	60	1	He	30883	0.01
Cu	63	1	He	84808	0.00
Zn	66	1	He	18452	0.02
As	75	1	He	10819	0.02
Se	78	1	He	1193	0.24
Sr	88	1	He	85029	0.00
Mo	95	1	He	37953	0.00
Ag	107	1	He	138267	0.00
Cd	111	1	He	24958	0.01
Sn	118	1	He	61713	0.00
Sb	123	1	He	54718	0.00
Ba	137	1	He	25347	0.01
W	182	1	He	139239	0.00
Tl	205	1	He	349176	0.00
Pb	208	1	He	481158	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1540307	0.83	1631381	94.42	30	120	
Sc	45	1	He	817538	3.25	829696	98.53	30	120	
Sc	45	2	NoGas	5950417	0.56	6325638	94.07	30	120	
Rh	103	1	He	2270622	0.38	2345543	96.81	30	120	
In	115	1	He	1368322	0.64	1419467	96.40	30	120	
Tb	159	1	He	3779426	0.90	3888262	97.20	30	120	
Ho	165	1	He	3846650	0.70	3932562	97.82	30	120	
Bi	209	1	He	2797035	1.23	2874805	97.29	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:10:52-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	240950	0.00
B	11	2	NoGas	183611	0.00
Na	23	1	He	41801991	0.00
Mg	24	1	He	24209589	0.00
Al	27	1	He	139163	0.00
K	39	1	He	22452697	0.00
Ca	44	1	He	1235832	0.00
Ti	47	1	He	13902	0.02
V	51	1	He	345101	0.00
Cr	52	1	He	419722	0.00
Mn	55	1	He	1642241	0.00
Fe	56	1	He	98690627	0.00
Co	59	1	He	592350	0.00
Ni	60	1	He	146237	0.00
Cu	63	1	He	387993	0.00
Zn	66	1	He	78647	0.00
As	75	1	He	50248	0.00
Se	78	1	He	5396	0.01
Sr	88	1	He	403131	0.00
Mo	95	1	He	188697	0.00
Ag	107	1	He	642464	0.00
Cd	111	1	He	113054	0.00
Sn	118	1	He	267481	0.00
Sb	123	1	He	259022	0.00
Ba	137	1	He	122219	0.00
W	182	1	He	694845	0.00
Tl	205	1	He	1775994	0.00
Pb	208	1	He	2277931	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1526248	1.73	1631381	93.56	30	120	
Sc	45	1	He	807514	4.37	829696	97.33	30	120	
Sc	45	2	NoGas	5970501	1.09	6325638	94.39	30	120	
Rh	103	1	He	2138681	0.22	2345543	91.18	30	120	
In	115	1	He	1291612	0.62	1419467	90.99	30	120	
Tb	159	1	He	3744717	1.88	3888262	96.31	30	120	
Ho	165	1	He	3795687	0.46	3932562	96.52	30	120	
Bi	209	1	He	2659576	1.42	2874805	92.51	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:14:41-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	491108	0.00
B	11	2	NoGas	12245	0.04
Na	23	1	He	85188647	0.00
Mg	24	1	He	48191972	0.00
Al	27	1	He	276020	0.00
K	39	1	He	45584979	0.00
Ca	44	1	He	2499005	0.00
Ti	47	1	He	18	161.10
V	51	1	He	695862	0.00
Cr	52	1	He	837414	0.00
Mn	55	1	He	3281596	0.00
Fe	56	1	He	196640619	0.00
Co	59	1	He	1166939	0.00
Ni	60	1	He	289875	0.00
Cu	63	1	He	762296	0.00
Zn	66	1	He	156069	0.00
As	75	1	He	99258	0.00
Se	78	1	He	10492	0.01
Sr	88	1	He	807470	0.00
Mo	95	1	He	3196	0.51
Ag	107	1	He	1253098	0.00
Cd	111	1	He	219141	0.00
Sn	118	1	He	4634	0.20
Sb	123	1	He	3329	0.31
Ba	137	1	He	244440	0.00
W	182	1	He	17232	0.08
Tl	205	1	He	3462823	0.00
Pb	208	1	He	4629582	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1551780	1.55	1631381	95.12	30	120	
Sc	45	1	He	790123	2.12	829696	95.23	30	120	
Sc	45	2	NoGas	6107045	2.81	6325638	96.54	30	120	
Rh	103	1	He	2121899	0.80	2345543	90.47	30	120	
In	115	1	He	1290417	0.61	1419467	90.91	30	120	
Tb	159	1	He	3712947	1.73	3888262	95.49	30	120	
Ho	165	1	He	3791296	0.31	3932562	96.41	30	120	
Bi	209	1	He	2611397	0.96	2874805	90.84	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:18:28-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	152	10.03
B	11	2	NoGas	335669	0.00
Na	23	1	He	39065	0.02
Mg	24	1	He	5475	0.32
Al	27	1	He	2866	0.19
K	39	1	He	42461	0.01
Ca	44	1	He	1139	0.73
Ti	47	1	He	28624	0.01
V	51	1	He	541	11.48
Cr	52	1	He	3677	0.21
Mn	55	1	He	1568	0.99
Fe	56	1	He	275375	0.01
Co	59	1	He	220	14.51
Ni	60	1	He	330	4.32
Cu	63	1	He	1536	0.54
Zn	66	1	He	2238	0.06
As	75	1	He	461	2.39
Se	78	1	He	91	24.27
Sr	88	1	He	289	4.59
Mo	95	1	He	391196	0.00
Ag	107	1	He	250	6.97
Cd	111	1	He	1363	0.41
Sn	118	1	He	572523	0.00
Sb	123	1	He	522052	0.00
Ba	137	1	He	183	12.19
W	182	1	He	1453300	0.00
Tl	205	1	He	3025	1.03
Pb	208	1	He	3267	0.31

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1498103	1.99	1631381	91.83	30	120	
Sc	45	1	He	803040	4.17	829696	96.79	30	120	
Sc	45	2	NoGas	5852964	0.67	6325638	92.53	30	120	
Rh	103	1	He	2278766	0.70	2345543	97.15	30	120	
In	115	1	He	1367725	0.97	1419467	96.35	30	120	
Tb	159	1	He	3796091	0.97	3888262	97.63	30	120	
Ho	165	1	He	3835107	0.48	3932562	97.52	30	120	
Bi	209	1	He	2853758	2.05	2874805	99.27	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:22:19-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	39.719	2.977	199844	1.68	40	99.3	89.5	110.5	
B	11	45	NoGas	42.614	1.107	160744	0.12	40	106.5	89.5	110.5	
Na	23	45	He	20347.473	2.253	35423057	0.91	20000	101.7	89.5	110.5	
Mg	24	45	He	20572.318	1.718	20349026	0.69	20000	102.9	89.5	110.5	
Al	27	45	He	202.762	1.205	116282	0.87	200	101.4	89.5	110.5	
K	39	45	He	20635.545	2.407	19252292	0.57	20000	103.2	89.5	110.5	
Ca	44	45	He	20094.657	1.450	1027800	0.55	20000	100.5	89.5	110.5	
Ti	47	45	He	40.693	4.295	11732	3.36	40	101.7	89.5	110.5	
V	51	45	He	40.709	2.273	290021	1.52	40	101.8	89.5	110.5	
Cr	52	45	He	41.092	1.340	354283	1.10	40	102.7	89.5	110.5	
Mn	55	45	He	207.587	0.717	1397977	2.61	200	103.8	89.5	110.5	
Fe	56	45	He	10216.638	2.075	82465319	1.66	10000	102.2	89.5	110.5	
Co	59	103	He	40.223	0.218	494721	0.36	40	100.6	89.5	110.5	
Ni	60	103	He	40.791	0.971	124511	1.27	40	102.0	89.5	110.5	
Cu	63	103	He	40.594	1.245	327179	0.95	40	101.5	89.5	110.5	
Zn	66	103	He	41.119	0.557	68483	0.07	40	102.8	89.5	110.5	
As	75	103	He	39.716	0.668	41605	0.24	40	99.3	89.5	110.5	
Se	78	103	He	42.068	1.056	4689	0.72	40	105.2	89.5	110.5	
Sr	88	103	He	40.385	1.039	342529	0.55	40	101.0	89.5	110.5	
Mo	95	103	He	42.603	1.507	164192	1.02	40	106.5	89.5	110.5	
Ag	107	103	He	41.029	0.289	543038	0.26	40	102.6	89.5	110.5	
Cd	111	103	He	40.453	1.072	94346	1.20	40	101.1	89.5	110.5	
Sn	118	115	He	40.657	1.079	228942	1.44	40	101.6	89.5	110.5	
Sb	123	115	He	43.806	1.643	227377	1.99	40	109.5	89.5	110.5	
Ba	137	115	He	40.105	0.393	102127	0.38	40	100.3	89.5	110.5	
W	182	209	He	40.649	0.952	568386	1.13	40	101.6	89.5	110.5	
Tl	205	165	He	39.187	1.277	1386061	1.22	40	98.0	89.5	110.5	
Pb	208	209	He	39.641	1.401	1900915	1.28	40	99.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1591870	1.37	1631381	97.58	30	120	
Sc	45	He	813295	1.95	829696	98.02	30	120	
Sc	45	NoGas	6292310	1.09	6325638	99.47	30	120	
Rh	103	He	2232877	0.55	2345543	95.20	30	120	
In	115	He	1344152	0.38	1419467	94.69	30	120	
Tb	159	He	3806803	1.92	3888262	97.91	30	120	
Ho	165	He	3853877	0.16	3932562	98.00	30	120	
Bi	209	He	2723051	0.66	2874805	94.72	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:26:10-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.029	20.7	21	9.1	20	
W	182	1	He	1.241	13.8	21845	10.8	10	
Ca	44	1	He	-9.642	-20.9	480	21.1	1000	
Na	23	1	He	3.422	19.7	28015	2.8	400	
Mg	24	1	He	2.011	34.1	2893	21.6	1000	
K	39	1	He	4.594	28.0	40936	2.4	1000	
V	51	1	He	0.039	94.2	376	69.2	2	
Cr	52	1	He	-0.004	-280.4	2440	2.3	2	
Mn	55	1	He	-0.122	-7.9	378	16.3	2	
Fe	56	1	He	19.417	24.3	157605	22.3	50	
Co	59	1	He	0.003	103.4	82	43.4	1	
Ni	60	1	He	-0.001	-647.6	126	22.1	2	
Cu	63	1	He	-0.072	-7.4	1113	4.0	2	
Zn	66	1	He	-0.315	-15.3	1443	4.5	20	
As	75	1	He	0.022	87.8	188	10.0	2	
Se	78	1	He	0.089	8.1	63	2.6	2	
Sr	88	1	He	0.013	22.7	236	11.5	10	
Mo	95	1	He	0.911	16.4	3769	16.7	2	
Ag	107	1	He	0.010	14.6	147	14.9	0.2	
Cd	111	1	He	0.044	53.3	1345	2.8	0.2	
Ba	137	1	He	-0.007	-36.3	81	8.6	5	
Sn	118	1	He	0.360	14.4	3226	9.7	10	
Tl	205	1	He	0.044	30.2	1647	28.8	0.5	
Pb	208	1	He	0.010	22.6	1331	8.2	1	
Al	27	1	He	1.396	26.9	3306	4.9	50	
Sb	123	1	He	0.522	7.3	3474	6.3	1	
B	11	2	NoGas	0.981	9.6	13376	2.7	20	
Be	9	2	NoGas	0.007	176.7	78	75.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1631422	0.57	1631381	100.00	30	120	
Sc	45	1	He	796577	1.31	829696	96.01	30	120	
Sc	45	2	NoGas	6332474	0.34	6325638	100.11	30	120	
Rh	103	1	He	2358192	1.43	2345543	100.54	30	120	
In	115	1	He	1411905	0.37	1419467	99.47	30	120	

Tb	159	1	He	3887187	0.02	3888262	99.97	30	120	
Ho	165	1	He	3914967	0.86	3932562	99.55	30	120	
Bi	209	1	He	2863182	0.75	2874805	99.60	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1912660
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:30:04-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.044	1.044	4.154	5012	5.57	1	104.4	69.5	130.5	
B	11	2	NoGas	23.577	23.577	5.104	85976	2.56	20	117.9	69.5	130.5	
Na	23	1	He	1060.776	1060.776	2.000	1948698	1.12	1000	106.1	69.5	130.5	
Mg	24	1	He	1077.817	1077.817	0.945	1113136	1.71	1000	107.8	69.5	130.5	
Al	27	1	He	48.108	48.108	1.960	30838	0.13	50	96.2	69.5	130.5	
K	39	1	He	1075.149	1075.149	0.905	1083552	1.05	1000	107.5	69.5	130.5	
Ca	44	1	He	1018.635	1018.635	1.033	55324	1.77	1000	101.9	69.5	130.5	
Ti	47	1	He	10.758	10.758	4.676	3245	3.49	10	107.6	69.5	130.5	
V	51	1	He	5.329	5.329	1.886	39693	1.08	5	106.6	69.5	130.5	
Cr	52	1	He	2.125	2.125	2.771	21599	1.26	2	106.2	69.5	130.5	
Mn	55	1	He	5.209	5.209	1.204	37808	1.32	5	104.2	69.5	130.5	
Fe	56	1	He	108.979	108.979	0.564	922254	1.52	100	109.0	69.5	130.5	
Co	59	1	He	1.006	1.006	2.830	13385	2.63	1	100.6	69.5	130.5	
Ni	60	1	He	2.057	2.057	3.238	6891	3.22	2	102.9	69.5	130.5	
Cu	63	1	He	2.013	2.013	1.822	19151	1.52	2	100.6	69.5	130.5	
Zn	66	1	He	20.587	20.587	1.916	37955	2.01	20	102.9	69.5	130.5	
As	75	1	He	5.113	5.113	0.636	5917	0.83	5	102.3	69.5	130.5	
Se	78	1	He	5.261	5.261	2.021	678	1.96	5	105.2	69.5	130.5	
Sr	88	1	He	9.637	9.637	0.665	88162	0.55	10	96.4	69.5	130.5	
Mo	95	1	He	10.468	10.468	1.161	43518	1.07	10	104.7	69.5	130.5	
Ag	107	1	He	1.033	1.033	0.742	14738	0.91	1	103.3	69.5	130.5	
Cd	111	1	He	1.042	1.042	0.157	3850	0.28	1	104.2	69.5	130.5	
Sn	118	1	He	10.088	10.088	0.541	61370	0.85	10	100.9	69.5	130.5	
Sb	123	1	He	2.203	2.203	1.821	12797	1.19	2	110.2	69.5	130.5	
Ba	137	1	He	4.941	4.941	1.793	13493	1.38	5	98.8	69.5	130.5	
W	182	1	He	10.180	10.180	2.063	152706	2.18	10	101.8	69.5	130.5	
Tl	205	1	He	2.046	2.046	1.873	74530	1.26	2	102.3	69.5	130.5	
Pb	208	1	He	1.044	1.044	3.177	53518	1.96	1	104.4	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1506387	2.35	1631381	92.34	30	120	
Sc	45	1	He	848301	1.92	829696	102.24	30	120	
Sc	45	2	NoGas	5800348	2.08	6325638	91.70	30	120	
Rh	103	1	He	2405851	0.22	2345543	102.57	30	120	
In	115	1	He	1432276	1.12	1419467	100.90	30	120	
Tb	159	1	He	3907047	1.39	3888262	100.48	30	120	
Ho	165	1	He	3966512	0.80	3932562	100.86	30	120	
Bi	209	1	He	2868080	1.15	2874805	99.77	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	ZZZZ
Data File Name	014_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:21:13-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	-0.007	-19.2	15	86.6	1	
B	11	45	2	NoGas	-1.703	-1.1	7083	1.1	20	
Na	23	45	1	He	-5.719	-48.6	16130	5.3	400	
Mg	24	45	1	He	0.504	74.6	1926	13.0	1000	
Al	27	45	1	He	8.258	64.7	9096	13.1	50	
K	39	45	1	He	-23.759	-24.6	19703	14.3	1000	
Ca	44	45	1	He	-15.961	-9.0	213	36.2	1000	
Ti	47	45	1	He	16.237	140.5	4501	120.8	20	
V	51	45	1	He	0.065	91.7	704	61.9	2	
Cr	52	45	1	He	-0.171	-48.5	1249	27.1	2	
Mn	55	45	1	He	-0.151	-7.2	243	6.3	2	
Fe	56	45	1	He	2.215	44.8	28785	23.1	50	
Co	59	103	1	He	-0.002	-74.8	58	54.8	1	
Ni	60	103	1	He	-0.031	-5.7	72	2.7	2	
Cu	63	103	1	He	-0.157	-7.7	963	8.2	2	
Zn	66	103	1	He	-1.090	-2.1	290	18.9	20	
As	75	103	1	He	-0.099	-15.8	134	18.3	2	
Se	78	103	1	He	-0.232	-10.8	63	11.9	2	
Sr	88	103	1	He	-0.001	-775.1	257	50.9	10	
Mo	95	103	1	He	0.033	39.6	506	38.1	2	
Ag	107	103	1	He	0.001	47.9	33	36.1	0.2	
Cd	111	103	1	He	0.053	8.0	3436	15.6	0.2	
Sn	118	115	1	He	-0.044	-109.0	2208	12.8	10	
Sb	123	115	1	He	-0.054	-16.9	914	13.8	1	
Ba	137	115	1	He	-0.002	-669.1	239	28.6	5	
W	182	209	1	He	1.124	47.9	36712	5.4	10	
Tl	205	165	1	He	-0.001	-13.4	58	8.8	0.5	
Pb	208	209	1	He	-0.003	-138.1	1203	6.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3126201	7.17	1631381	191.63	30	120	ISTD Failed
Sc	45	1	He	1132578	34.83	829696	136.51	30	120	ISTD Failed
Sc	45	2	NoGas	11780520	2.46	6325638	186.23	30	120	ISTD Failed
Rh	103	1	He	5927199	16.20	2345543	252.70	30	120	ISTD Failed
In	115	1	He	3796197	17.17	1419467	267.44	30	120	ISTD Failed
Tb	159	1	He	10072430	17.72	3888262	259.05	30	120	ISTD Failed
Ho	165	1	He	10325492	17.55	3932562	262.56	30	120	ISTD Failed
Bi	209	1	He	5693580	32.63	2874805	198.05	30	120	ISTD Failed

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:33:55-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.037	43.9	189	35.8	1	
B	11	45	2	NoGas	0.854	9.8	11130	2.3	20	
Na	23	45	1	He	46893.482	5.5	77934886	1.5	75200	
Mg	24	45	1	He	46829.550	4.5	44252768	2.5	75200	
Al	27	45	1	He	44548.464	4.6	23863820	2.4	75200	
K	39	45	1	He	47217.109	6.1	42012656	0.9	75200	
Ca	44	45	1	He	48546.792	5.1	2370274	2.0	75200	
Ti	47	45	1	He	953.546	5.4	262293	1.9	1505	
V	51	45	1	He	0.010	753.6	184	302.8	4	
Cr	52	45	1	He	0.640	7.1	7645	2.7	4	
Mn	55	45	1	He	0.324	12.6	3231	1.2	4	
Fe	56	45	1	He	47084.230	5.6	362884439	1.6	75200	
Co	59	103	1	He	0.032	8.2	400	6.8	2	
Ni	60	103	1	He	0.111	13.0	419	7.7	4	
Cu	63	103	1	He	0.233	9.9	3196	5.7	4	
Zn	66	103	1	He	-0.074	-104.6	1603	6.7	10	
As	75	103	1	He	0.096	15.6	233	6.3	4	
Se	78	103	1	He	0.186	31.5	64	7.8	4	
Sr	88	103	1	He	0.338	1.3	2712	1.6	20	
Mo	95	103	1	He	1024.383	3.9	3598715	2.2	1505	
Ag	107	103	1	He	0.015	11.6	190	9.3	1	
Cd	111	103	1	He	-0.009	-294.0	1050	6.3	1	
Sn	118	115	1	He	0.376	7.5	2934	5.6	20	
Sb	123	115	1	He	0.275	3.4	1882	2.2	1	
Ba	137	115	1	He	0.033	16.9	166	8.4	2	
W	182	209	1	He	0.557	6.7	10704	5.8	20	
Tl	205	165	1	He	0.007	9.5	289	7.7	1	
Pb	208	209	1	He	0.588	1.0	27487	1.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1323780	1.30	1631381	81.14	30	120	
Sc	45	1	He	778498	7.08	829696	93.83	30	120	
Sc	45	2	NoGas	5452568	0.27	6325638	86.20	30	120	
Rh	103	1	He	2036887	1.94	2345543	86.84	30	120	
In	115	1	He	1246815	0.70	1419467	87.84	30	120	
Tb	159	1	He	3610330	0.91	3888262	92.85	30	120	
Ho	165	1	He	3689701	0.43	3932562	93.82	30	120	
Bi	209	1	He	2584461	1.52	2874805	89.90	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:37:43-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	103.161	1.732	422098	0.63	100	103.2	79.5	120.5	
B	11	45	2	NoGas	101.808	0.539	317813	0.31	100	101.8	79.5	120.5	
Na	23	45	1	He	48905.835	3.174	76203843	1.25	50000	97.8	79.5	120.5	
Mg	24	45	1	He	49498.614	2.387	43844959	2.01	50000	99.0	79.5	120.5	
Al	27	45	1	He	46451.633	2.726	23322202	1.43	50000	92.9	79.5	120.5	
K	39	45	1	He	49332.806	4.159	41155260	1.17	50000	98.7	79.5	120.5	
Ca	44	45	1	He	49399.110	3.186	2260798	1.04	50000	98.8	79.5	120.5	
Ti	47	45	1	He	1090.099	3.420	281091	0.71	1100	99.1	79.5	120.5	
V	51	45	1	He	99.787	2.751	636425	1.34	100	99.8	79.5	120.5	
Cr	52	45	1	He	101.461	3.280	779782	0.83	100	101.5	79.5	120.5	
Mn	55	45	1	He	99.986	3.161	603232	0.95	100	100.0	79.5	120.5	
Fe	56	45	1	He	49769.280	3.090	359642635	1.02	50000	99.5	79.5	120.5	
Co	59	103	1	He	99.532	0.565	1097986	0.97	100	99.5	79.5	120.5	
Ni	60	103	1	He	98.338	0.839	269079	1.14	100	98.3	79.5	120.5	
Cu	63	103	1	He	98.361	0.856	709028	1.48	100	98.4	79.5	120.5	
Zn	66	103	1	He	98.303	0.399	144510	0.98	100	98.3	79.5	120.5	
As	75	103	1	He	100.199	0.927	93936	1.13	100	100.2	79.5	120.5	
Se	78	103	1	He	101.968	1.030	10132	1.24	100	102.0	79.5	120.5	
Sr	88	103	1	He	99.168	0.926	754330	1.54	100	99.2	79.5	120.5	
Mo	95	103	1	He	1150.327	2.590	3974943	1.95	1100	104.6	79.5	120.5	
Ag	107	103	1	He	99.725	0.349	1183901	0.84	100	99.7	79.5	120.5	
Cd	111	103	1	He	99.777	0.637	207181	0.95	100	99.8	79.5	120.5	
Sn	118	115	1	He	100.220	0.655	515295	0.25	100	100.2	79.5	120.5	
Sb	123	115	1	He	107.017	0.458	507806	0.96	100	107.0	79.5	120.5	
Ba	137	115	1	He	101.398	1.341	236308	1.85	100	101.4	79.5	120.5	
W	182	209	1	He	104.183	1.103	1371723	1.66	100	104.2	79.5	120.5	
Tl	205	165	1	He	100.889	0.814	3374765	0.68	100	100.9	79.5	120.5	
Pb	208	209	1	He	100.721	1.389	4563854	0.96	100	100.7	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1294518	1.11	1631381	79.35	30	120	
Sc	45	1	He	728623	4.12	829696	87.82	30	120	
Sc	45	2	NoGas	5398752	0.32	6325638	85.35	30	120	
Rh	103	1	He	2002767	0.64	2345543	85.39	30	120	
In	115	1	He	1230771	0.52	1419467	86.71	30	120	
Tb	159	1	He	3577698	1.08	3888262	92.01	30	120	
Ho	165	1	He	3644844	0.26	3932562	92.68	30	120	
Bi	209	1	He	2573850	1.36	2874805	89.53	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:41:28-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.358	1.596	216344	1.21	50	96.7	89.5	110.5	
B	11	45	2	NoGas	50.520	2.049	173149	1.02	50	101.0	89.5	110.5	
Na	23	45	1	He	24518.014	1.488	40303200	0.51	25000	98.1	89.5	110.5	
Mg	24	45	1	He	24629.636	1.834	23003582	0.16	25000	98.5	89.5	110.5	
Al	27	45	1	He	248.890	2.562	134199	0.56	250	99.6	89.5	110.5	
K	39	45	1	He	24742.369	2.831	21789028	1.00	25000	99.0	89.5	110.5	
Ca	44	45	1	He	24690.607	2.296	1192142	0.41	25000	98.8	89.5	110.5	
Ti	47	45	1	He	52.536	1.766	14300	0.55	50	105.1	89.5	110.5	
V	51	45	1	He	49.902	1.809	335673	0.18	50	99.8	89.5	110.5	
Cr	52	45	1	He	50.186	1.313	408038	0.94	50	100.4	89.5	110.5	
Mn	55	45	1	He	255.723	1.482	1625502	1.07	250	102.3	89.5	110.5	
Fe	56	45	1	He	12527.034	2.229	95466696	0.27	12500	100.2	89.5	110.5	
Co	59	103	1	He	47.839	1.598	577362	0.56	50	95.7	89.5	110.5	
Ni	60	103	1	He	47.427	1.091	142037	0.25	50	94.9	89.5	110.5	
Cu	63	103	1	He	47.975	1.729	379140	0.99	50	95.9	89.5	110.5	
Zn	66	103	1	He	48.175	0.783	78420	0.69	50	96.3	89.5	110.5	
As	75	103	1	He	47.961	1.698	49269	0.56	50	95.9	89.5	110.5	
Se	78	103	1	He	49.101	0.920	5363	0.38	50	98.2	89.5	110.5	
Sr	88	103	1	He	47.867	1.854	398367	0.84	50	95.7	89.5	110.5	
Mo	95	103	1	He	75.599	8.576	285717	7.42	50	151.2	89.5	110.5	CCV Failed
Ag	107	103	1	He	49.325	2.369	640565	1.22	50	98.6	89.5	110.5	
Cd	111	103	1	He	49.108	1.709	112137	0.55	50	98.2	89.5	110.5	
Sn	118	115	1	He	50.441	0.828	273517	0.57	50	100.9	89.5	110.5	
Sb	123	115	1	He	52.224	0.532	261149	0.35	50	104.4	89.5	110.5	
Ba	137	115	1	He	50.111	1.482	122973	1.26	50	100.2	89.5	110.5	
W	182	209	1	He	52.203	2.192	725299	0.40	50	104.4	89.5	110.5	
Tl	205	165	1	He	51.105	1.941	1794388	1.71	50	102.2	89.5	110.5	
Pb	208	209	1	He	48.229	2.137	2301107	0.87	50	96.5	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1415190	0.55	1631381	86.75	30	120	
Sc	45	1	He	767969	1.98	829696	92.56	30	120	
Sc	45	2	NoGas	5772792	1.15	6325638	91.26	30	120	
Rh	103	1	He	2191270	1.14	2345543	93.42	30	120	
In	115	1	He	1295591	0.26	1419467	91.27	30	120	
Tb	159	1	He	3757351	0.82	3888262	96.63	30	120	
Ho	165	1	He	3825930	0.84	3932562	97.29	30	120	
Bi	209	1	He	2710286	2.25	2874805	94.28	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T09:45:18-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.027	6.4	167	6.7	1	
B	11	45	2	NoGas	1.505	6.0	14395	2.5	20	
Na	23	45	1	He	8.168	29.2	33728	9.4	400	
Mg	24	45	1	He	3.010	25.2	3608	17.2	1000	
Al	27	45	1	He	1.215	17.0	2999	1.6	50	
K	39	45	1	He	7.613	19.0	40854	1.2	1000	
Ca	44	45	1	He	2.138	73.0	1001	9.4	1000	
Ti	47	45	1	He	0.348	35.4	103	29.6	20	
V	51	45	1	He	0.007	1018.6	138	346.8	2	
Cr	52	45	1	He	0.007	171.6	2362	2.9	2	
Mn	55	45	1	He	0.036	17.2	1329	3.3	2	
Fe	56	45	1	He	28.563	18.9	214873	16.8	50	
Co	59	103	1	He	0.004	32.7	94	16.3	1	
Ni	60	103	1	He	0.063	149.5	322	91.8	2	
Cu	63	103	1	He	0.024	33.5	1863	3.5	2	
Zn	66	103	1	He	-0.094	-82.7	1761	8.0	20	
As	75	103	1	He	0.005	206.3	163	5.5	2	
Se	78	103	1	He	0.061	41.0	57	5.4	2	
Sr	88	103	1	He	0.002	187.8	131	24.4	10	
Mo	95	103	1	He	5.418	4.8	21343	4.8	2	CCB Failed
Ag	107	103	1	He	0.025	28.0	341	27.0	0.2	
Cd	111	103	1	He	0.048	13.0	1309	1.6	0.2	
Sn	118	115	1	He	0.480	6.3	3797	3.8	10	
Sb	123	115	1	He	0.495	2.3	3207	1.1	1	
Ba	137	115	1	He	0.008	79.3	116	13.0	5	
W	182	209	1	He	1.387	12.3	23559	11.2	10	
Tl	205	165	1	He	0.048	14.0	1786	14.7	0.5	
Pb	208	209	1	He	0.036	9.3	2585	7.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1481255	1.83	1631381	90.80	30	120	
Sc	45	1	He	745079	2.01	829696	89.80	30	120	
Sc	45	2	NoGas	5979116	0.65	6325638	94.52	30	120	
Rh	103	1	He	2276868	0.78	2345543	97.07	30	120	
In	115	1	He	1361849	0.76	1419467	95.94	30	120	
Tb	159	1	He	3830821	1.31	3888262	98.52	30	120	
Ho	165	1	He	3892891	1.66	3932562	98.99	30	120	
Bi	209	1	He	2811174	0.82	2874805	97.79	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-175943/1-a
Data File Name	015_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:26:21-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.016	95.0	111	62.5	1	
B	11	45	2	NoGas	3.067	2.3	18032	1.7	20	
Na	23	45	1	He	88.554	5.7	167976	1.2	400	
Mg	24	45	1	He	54.100	4.5	51796	2.2	1000	
Al	27	45	1	He	3.203	12.9	4172	1.8	50	
K	39	45	1	He	23.669	14.4	56596	0.5	1000	
Ca	44	45	1	He	209.525	6.1	11107	0.2	1000	
Ti	47	45	1	He	0.141	54.4	51	39.9	20	
V	51	45	1	He	0.183	31.4	1343	31.7	2	
Cr	52	45	1	He	0.660	10.8	7762	2.9	2	
Mn	55	45	1	He	0.197	6.2	2405	3.8	2	
Fe	56	45	1	He	11.753	4.6	94453	1.5	50	
Co	59	103	1	He	0.005	17.8	109	11.6	1	
Ni	60	103	1	He	0.133	22.4	514	18.2	2	
Cu	63	103	1	He	0.904	4.4	8660	3.0	2	
Zn	66	103	1	He	11.708	3.1	20316	1.7	20	
As	75	103	1	He	0.103	14.3	256	4.9	2	
Se	78	103	1	He	0.072	108.6	56	15.0	2	
Sr	88	103	1	He	0.408	2.3	3484	3.0	10	
Mo	95	103	1	He	0.192	2.0	778	2.9	2	
Ag	107	103	1	He	0.013	22.8	169	21.7	0.2	
Cd	111	103	1	He	0.053	21.6	1262	2.1	0.2	
Sn	118	115	1	He	0.773	11.8	5212	9.0	10	
Sb	123	115	1	He	1.316	11.7	7178	11.2	1	Blank Failed
Ba	137	115	1	He	0.749	2.9	1935	3.2	5	
W	182	209	1	He	0.029	61.2	4434	2.3	10	
Tl	205	165	1	He	0.001	102.8	91	25.7	0.5	
Pb	208	209	1	He	0.130	2.8	7886	3.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1406462	0.40	1631381	86.21	30	120	
Sc	45	1	He	774342	5.91	829696	93.33	30	120	
Sc	45	2	NoGas	5485822	0.90	6325638	86.72	30	120	
Rh	103	1	He	2176808	1.15	2345543	92.81	30	120	
In	115	1	He	1300688	0.47	1419467	91.63	30	120	
Tb	159	1	He	3648202	0.34	3888262	93.83	30	120	
Ho	165	1	He	3744596	0.88	3932562	95.22	30	120	
Bi	209	1	He	3068742	4.50	2874805	106.75	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-175943/3-a
Data File Name	016_LCS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:30:11-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1013.639	1013.639	2.624	4452594	2.11	1000	101.4	79.5	120.5	
B	11	2	NoGas	119.383	119.383	1.504	381188	0.23	100	119.4	79.5	120.5	
Na	23	1	He	10345.742	10345.742	2.390	16357652	0.77	10000	103.5	79.5	120.5	
Mg	24	1	He	10346.264	10346.264	2.836	9287772	0.02	10000	103.5	79.5	120.5	
Al	27	1	He	9552.988	9552.988	3.327	4862619	1.01	10000	95.5	79.5	120.5	
K	39	1	He	10098.744	10098.744	2.945	8568512	0.65	10000	101.0	79.5	120.5	
Ca	44	1	He	9522.837	9522.837	2.550	442515	0.90	10000	95.2	79.5	120.5	
Ti	47	1	He	100.258	100.258	4.079	26216	2.62	100	100.3	79.5	120.5	
V	51	1	He	985.194	985.194	2.932	6367348	0.23	1000	98.5	79.5	120.5	
Cr	52	1	He	1012.845	1012.845	3.248	7869424	0.63	1000	101.3	79.5	120.5	
Mn	55	1	He	1007.883	1007.883	2.438	6154727	1.73	1000	100.8	79.5	120.5	
Fe	56	1	He	10473.443	10473.443	2.174	76730479	1.50	10000	104.7	79.5	120.5	
Co	59	1	He	975.095	975.095	1.638	11418348	0.86	1000	97.5	79.5	120.5	
Ni	60	1	He	995.251	995.251	1.611	2889844	1.10	1000	99.5	79.5	120.5	
Cu	63	1	He	1000.862	1000.862	0.273	7644715	0.56	1000	100.1	79.5	120.5	
Zn	66	1	He	1014.516	1014.516	0.419	1566622	0.94	1000	101.5	79.5	120.5	
As	75	1	He	947.964	947.964	0.923	942194	0.39	1000	94.8	79.5	120.5	
Se	78	1	He	980.210	980.210	0.841	102989	0.52	1000	98.0	79.5	120.5	
Sr	88	1	He	959.702	959.702	1.198	7748331	0.53	1000	96.0	79.5	120.5	
Mo	95	1	He	107.642	107.642	0.536	394974	0.88	100	107.6	79.5	120.5	
Ag	107	1	He	103.649	103.649	1.570	1306210	0.75	100	103.6	79.5	120.5	
Cd	111	1	He	1042.679	1042.679	2.068	2287698	1.30	1000	104.3	79.5	120.5	
Sn	118	1	He	1109.838	1109.838	0.787	5623604	0.84	1000	111.0	79.5	120.5	
Sb	123	1	He	109.180	109.180	0.435	511396	0.40	100	109.2	79.5	120.5	
Ba	137	1	He	1084.923	1084.923	0.361	2494981	0.30	1000	108.5	79.5	120.5	
W	182	1	He	104.024	104.024	1.377	1459848	1.25	100	104.0	79.5	120.5	
Tl	205	1	He	252.177	252.177	1.028	8629754	1.10	250	100.9	79.5	120.5	
Pb	208	1	He	975.992	975.992	0.650	47133830	0.24	1000	97.6	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1389816	0.53	1631381	85.19	30	120	
Sc	45	1	He	738317	2.90	829696	88.99	30	120	
Sc	45	2	NoGas	5544472	1.57	6325638	87.65	30	120	
Rh	103	1	He	2126213	0.83	2345543	90.65	30	120	
In	115	1	He	1214958	0.06	1419467	85.59	30	120	
Tb	159	1	He	3676347	1.35	3888262	94.55	30	120	
Ho	165	1	He	3728817	0.34	3932562	94.82	30	120	
Bi	209	1	He	2743402	0.54	2874805	95.43	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	Xmb 240-177133/1-a@2
Data File Name	017_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:33:41-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.162	13.0	752	11.9	1	
B	11	45	2	NoGas	1.573	8.6	13598	1.9	20	
Na	23	45	1	He	38.258	2.9	81383	2.6	400	
Mg	24	45	1	He	30.352	4.3	28267	4.1	1000	
Al	27	45	1	He	3.956	16.1	4392	8.9	50	
K	39	45	1	He	22.089	6.8	52970	1.2	1000	
Ca	44	45	1	He	86.001	6.1	4903	4.2	1000	
Ti	47	45	1	He	0.178	30.8	59	26.1	20	
V	51	45	1	He	0.316	53.8	2158	53.0	2	
Cr	52	45	1	He	0.928	1.6	9546	2.2	2	
Mn	55	45	1	He	0.263	21.4	2717	14.2	2	
Fe	56	45	1	He	21.119	10.3	159733	11.5	50	
Co	59	103	1	He	0.096	26.4	1223	25.1	1	
Ni	60	103	1	He	0.244	26.9	863	22.5	2	
Cu	63	103	1	He	1.629	8.2	14641	7.1	2	
Zn	66	103	1	He	2.831	4.7	6439	3.0	20	
As	75	103	1	He	0.780	15.5	966	12.5	2	
Se	78	103	1	He	0.784	22.8	135	14.0	2	
Sr	88	103	1	He	0.291	13.2	2571	12.1	10	
Mo	95	103	1	He	1.087	15.0	4227	14.3	2	
Ag	107	103	1	He	0.025	22.0	338	21.1	0.2	
Cd	111	103	1	He	0.106	62.6	1411	10.3	0.2	
Sn	118	115	1	He	18.814	4.0	101761	4.0	10	Blank Failed
Sb	123	115	1	He	0.625	6.7	3669	5.7	1	
Ba	137	115	1	He	1.042	5.2	2624	5.1	5	
W	182	209	1	He	1.399	21.1	23711	17.7	10	
Tl	205	165	1	He	0.186	43.3	6616	43.9	0.5	
Pb	208	209	1	He	0.423	7.5	21722	7.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1393807	3.33	1631381	85.44	30	120	
Sc	45	1	He	741712	1.48	829696	89.40	30	120	
Sc	45	2	NoGas	5560954	1.24	6325638	87.91	30	120	
Rh	103	1	He	2224484	0.53	2345543	94.84	30	120	
In	115	1	He	1284255	0.30	1419467	90.47	30	120	
Tb	159	1	He	3759152	0.92	3888262	96.68	30	120	
Ho	165	1	He	3821187	1.62	3932562	97.17	30	120	
Bi	209	1	He	2811009	0.49	2874805	97.78	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	Xlcs 240-177133/2-a@2
Data File Name	018LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:37:31-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	456.764	456.764	2.750	2034483	0.92	500	91.4	78.6	110.5	
B	11	2	NoGas	56.335	56.335	1.221	186710	0.65	50	112.7	79.5	120.5	
Na	23	1	He	5063.063	5063.063	3.448	8158114	1.55	5000	101.3	79.5	120.5	
Mg	24	1	He	4976.818	4976.818	1.594	4549038	0.45	5000	99.5	79.5	120.5	
Al	27	1	He	4638.868	4638.868	1.286	2405536	0.92	5000	92.8	79.5	120.5	
K	39	1	He	4976.132	4976.132	0.700	4316667	1.24	5000	99.5	79.5	120.5	
Ca	44	1	He	4715.233	4715.233	1.691	223521	0.79	5000	94.3	79.5	120.5	
Ti	47	1	He	48.104	48.104	3.501	12811	2.36	50	96.2	79.5	120.5	
V	51	1	He	467.736	467.736	2.787	3077555	1.60	500	93.5	71.5	110.5	
Cr	52	1	He	479.955	479.955	1.623	3798150	0.78	500	96.0	69.5	110.5	
Mn	55	1	He	482.743	482.743	1.491	3001490	1.05	500	96.5	79.5	120.5	
Fe	56	1	He	5006.376	5006.376	2.407	37333256	0.61	5000	100.1	79.5	120.5	
Co	59	1	He	445.210	445.210	1.361	5400212	0.92	500	89.0	73.9	110.5	
Ni	60	1	He	445.863	445.863	0.487	1341088	0.34	500	89.2	74.9	110.5	
Cu	63	1	He	461.430	461.430	1.015	3651350	0.34	500	92.3	72.6	110.5	
Zn	66	1	He	420.210	420.210	0.775	673176	0.33	500	84.0	71.5	113.4	
As	75	1	He	402.838	402.838	1.257	414799	0.58	500	80.6	73.4	110.5	
Se	78	1	He	393.234	393.234	0.721	42825	0.08	500	78.6	64.6	110.5	
Sr	88	1	He	448.344	448.344	0.600	3749718	1.25	500	89.7	79.5	120.5	
Mo	95	1	He	51.247	51.247	1.475	194797	1.35	50	102.5	29.5	140.5	
Ag	107	1	He	48.717	48.717	0.893	635945	0.22	50	97.4	59.5	114.5	
Cd	111	1	He	439.099	439.099	0.604	998640	0.17	500	87.8	73.5	110.5	
Sn	118	1	He	542.177	542.177	1.365	2861779	1.37	500	108.4	79.5	120.5	
Sb	123	1	He	49.208	49.208	0.991	240365	0.79	50	98.4	67.5	113.4	
Ba	137	1	He	462.985	462.985	0.041	1108972	0.25	500	92.6	69.5	110.5	
W	182	1	He	50.492	50.492	1.682	707162	0.36	50	101.0	74.6	125.4	
Tl	205	1	He	116.886	116.886	2.531	4150205	1.58	125	93.5	70.6	110.5	
Pb	208	1	He	465.853	465.853	1.444	22395183	0.28	500	93.2	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1409591	1.84	1631381	86.40	30	120	
Sc	45	1	He	751430	1.94	829696	90.57	30	120	
Sc	45	2	NoGas	5612046	0.95	6325638	88.72	30	120	
Rh	103	1	He	2202307	0.68	2345543	93.89	30	120	
In	115	1	He	1265394	0.21	1419467	89.15	30	120	
Tb	159	1	He	3748886	0.94	3888262	96.42	30	120	
Ho	165	1	He	3869457	0.94	3932562	98.40	30	120	
Bi	209	1	He	2731256	1.70	2874805	95.01	30	120	

Sample Report

Sample Table

Sample Name	190-7094-a-1-a@2
Data File Name	019SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:41:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.268	0.268	7.98	1282	0.02	10000	
B	11	45	2	NoGas	49.432	49.432	1.16	168250	0.03	300	
Na	23	45	1	He	1925.432	1925.432	2.31	3185150	0.06	500000	
Mg	24	45	1	He	6708.117	6708.117	0.88	6268331	0.11	500000	
Al	27	45	1	He	5360.238	5360.238	1.14	2841175	0.19	200000	
K	39	45	1	He	1324.613	1324.613	1.77	1200481	0.11	500000	
Ca	44	45	1	He	45807.079	45807.079	1.89	2211668	2.07	500000	
Ti	47	45	1	He	89.982	89.982	0.28	24497	0.37	2500	
V	51	45	1	He	11.018	11.018	7.70	74231	0.01	10000	
Cr	52	45	1	He	109.857	109.857	2.02	890462	0.01	10000	
Mn	55	45	1	He	1823.433	1823.433	2.84	11583633	0.02	10000	
Fe	56	45	1	He	98429.289	98429.289	2.64	750203970	0.01	200000	
Co	59	103	1	He	10.999	10.999	3.47	135161	0.01	10000	
Ni	60	103	1	He	46.265	46.265	1.66	141080	0.03	10000	
Cu	63	103	1	He	594.940	594.940	1.55	4768701	0.01	10000	
Zn	66	103	1	He	1288.447	1288.447	1.30	2087170	0.06	10000	
As	75	103	1	He	11.477	11.477	2.20	12123	0.09	10000	
Se	78	103	1	He	8.300	8.300	5.77	964	0.86	10000	
Sr	88	103	1	He	205.227	205.227	2.71	1738486	0.01	10000	
Mo	95	103	1	He	23.447	23.447	2.04	90311	0.03	2000	
Ag	107	103	1	He	10.554	10.554	2.45	139560	0.01	300	
Cd	111	103	1	He	2.154	2.154	4.30	6127	0.04	4000	
Sn	118	115	1	He	58.297	58.297	0.11	323368	0.02	2000	
Sb	123	115	1	He	4.309	4.309	1.19	22599	0.02	300	
Ba	137	115	1	He	756.101	756.101	0.72	1897706	0.04	10000	
W	182	209	1	He	15.268	15.268	1.40	340200	0.00	2500	
Tl	205	165	1	He	0.265	0.265	11.40	9596	0.00	5000	
Pb	208	209	1	He	36.777	36.777	1.32	2781815	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1465488	0.66	1631381	89.83	30	120	
Sc	45	1	He	768175	2.31	829696	92.59	30	120	
Sc	45	2	NoGas	5725723	0.67	6325638	90.52	30	120	
Rh	103	1	He	2231290	1.75	2345543	95.13	30	120	
In	115	1	He	1325967	0.16	1419467	93.41	30	120	
Tb	159	1	He	3807544	1.13	3888262	97.92	30	120	
Ho	165	1	He	3920832	0.88	3932562	99.70	30	120	
Bi	209	1	He	4295330	0.97	2874805	149.41	30	120	ISTD Failed

Sample Report

Sample Table

Sample Name	190-7094-a-2-a@2
Data File Name	020SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T10:44:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.158	0.158	21.15	748	0.02	10000	
B	11	45	2	NoGas	36.247	36.247	2.10	121228	0.03	300	
Na	23	45	1	He	1009.218	1009.218	2.20	1635103	0.06	500000	
Mg	24	45	1	He	3431.297	3431.297	2.55	3120725	0.11	500000	
Al	27	45	1	He	2698.646	2698.646	1.93	1393467	0.19	200000	
K	39	45	1	He	1392.571	1392.571	1.71	1226759	0.11	500000	
Ca	44	45	1	He	24634.463	24634.463	1.98	1158125	2.13	500000	
Ti	47	45	1	He	64.768	64.768	13.11	17146	0.38	2500	
V	51	45	1	He	5.791	5.791	7.73	38024	0.02	10000	
Cr	52	45	1	He	48.091	48.091	1.38	380787	0.01	10000	
Mn	55	45	1	He	747.144	747.144	2.59	4621032	0.02	10000	
Fe	56	45	1	He	44137.183	44137.183	2.18	327486814	0.01	200000	
Co	59	103	1	He	4.953	4.953	1.00	60656	0.01	10000	
Ni	60	103	1	He	23.004	23.004	1.08	69926	0.03	10000	
Cu	63	103	1	He	302.307	302.307	1.51	2414067	0.01	10000	
Zn	66	103	1	He	632.846	632.846	1.42	1021908	0.06	10000	
As	75	103	1	He	5.191	5.191	0.34	5546	0.09	10000	
Se	78	103	1	He	4.107	4.107	5.51	500	0.82	10000	
Sr	88	103	1	He	111.161	111.161	2.29	937941	0.01	10000	
Mo	95	103	1	He	11.919	11.919	1.53	45753	0.03	2000	
Ag	107	103	1	He	5.655	5.655	1.54	74478	0.01	300	
Cd	111	103	1	He	1.142	1.142	5.42	3784	0.03	4000	
Sn	118	115	1	He	33.643	33.643	1.24	183470	0.02	2000	
Sb	123	115	1	He	3.706	3.706	0.31	19149	0.02	300	
Ba	137	115	1	He	417.261	417.261	1.46	1027183	0.04	10000	
W	182	209	1	He	7.162	7.162	2.08	138022	0.01	2500	
Tl	205	165	1	He	0.109	0.109	3.72	3925	0.00	5000	
Pb	208	209	1	He	18.365	18.365	1.40	1180049	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1421156	0.47	1631381	87.11	30	120	
Sc	45	1	He	747740	2.17	829696	90.12	30	120	
Sc	45	2	NoGas	5519575	0.52	6325638	87.26	30	120	
Rh	103	1	He	2222081	1.19	2345543	94.74	30	120	
In	115	1	He	1300569	0.64	1419467	91.62	30	120	
Tb	159	1	He	3803185	0.41	3888262	97.81	30	120	
Ho	165	1	He	3849085	1.57	3932562	97.88	30	120	
Bi	209	1	He	3647159	0.80	2874805	126.87	30	120	ISTD Failed

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177401/1-a@2
Data File Name	022_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:24:57-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.013	50.5	111	30.0	1	
B	11	45	2	NoGas	0.230	56.2	10852	3.0	20	
Na	23	45	1	He	30.639	6.8	82577	0.8	400	
Mg	24	45	1	He	13.077	8.2	15103	3.7	1000	
Al	27	45	1	He	1.726	14.4	3876	5.4	50	
K	39	45	1	He	20.867	10.9	61929	1.8	1000	
Ca	44	45	1	He	41.718	3.0	3388	2.2	1000	
Ti	47	45	1	He	0.130	38.1	54	24.7	20	
V	51	45	1	He	0.123	34.1	1060	27.1	2	
Cr	52	45	1	He	0.834	8.0	10501	1.9	2	
Mn	55	45	1	He	0.153	7.5	2432	6.0	2	
Fe	56	45	1	He	10.398	3.6	96153	1.2	50	
Co	59	103	1	He	0.011	20.6	194	15.4	1	
Ni	60	103	1	He	0.171	7.6	696	6.1	2	
Cu	63	103	1	He	0.458	3.4	5740	2.4	2	
Zn	66	103	1	He	2.356	3.3	6158	2.4	20	
As	75	103	1	He	0.052	28.5	226	7.3	2	
Se	78	103	1	He	-0.046	-170.0	48	19.4	2	
Sr	88	103	1	He	0.157	7.6	1559	7.0	10	
Mo	95	103	1	He	0.077	25.3	386	20.9	2	
Ag	107	103	1	He	0.008	7.3	122	6.9	0.2	
Cd	111	103	1	He	0.047	55.1	1385	4.9	0.2	
Sn	118	115	1	He	16.231	1.5	98539	1.2	10	Blank Failed
Sb	123	115	1	He	0.093	15.5	1161	6.7	1	
Ba	137	115	1	He	1.517	2.9	4234	2.7	5	
W	182	209	1	He	0.086	17.2	5475	2.1	10	
Tl	205	165	1	He	0.003	26.2	164	15.7	0.5	
Pb	208	209	1	He	0.242	13.7	14351	15.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1629858	0.89	1631381	99.91	30	120	
Sc	45	1	He	885100	4.14	829696	106.68	30	120	
Sc	45	2	NoGas	6424383	1.33	6325638	101.56	30	120	
Rh	103	1	He	2414051	0.25	2345543	102.92	30	120	
In	115	1	He	1439274	0.25	1419467	101.40	30	120	
Tb	159	1	He	3940151	1.33	3888262	101.33	30	120	
Ho	165	1	He	3994213	1.04	3932562	101.57	30	120	
Bi	209	1	He	3150976	2.32	2874805	109.61	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177401/2-a@2
Data File Name	023LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:28:52-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	463.516	463.516	1.596	2322592	1.25	500	92.7	78.6	110.5	
B	11	2	NoGas	55.460	55.460	0.336	207191	1.00	50	110.9	79.5	120.5	
Na	23	1	He	4989.253	4989.253	2.413	8937747	0.73	5000	99.8	79.5	120.5	
Mg	24	1	He	4982.178	4982.178	2.063	5061737	0.42	5000	99.6	79.5	120.5	
Al	27	1	He	4687.675	4687.675	1.280	2701975	0.44	5000	93.8	79.5	120.5	
K	39	1	He	4941.028	4941.028	3.240	4763274	1.54	5000	98.8	79.5	120.5	
Ca	44	1	He	4673.358	4673.358	1.475	246263	0.21	5000	93.5	79.5	120.5	
Ti	47	1	He	47.662	47.662	2.053	14111	0.43	50	95.3	79.5	120.5	
V	51	1	He	472.124	472.124	1.701	3453380	0.89	500	94.4	71.5	110.5	
Cr	52	1	He	480.895	480.895	1.788	4230057	0.52	500	96.2	69.5	110.5	
Mn	55	1	He	485.540	485.540	1.572	3355569	0.46	500	97.1	79.5	120.5	
Fe	56	1	He	4913.927	4913.927	2.763	40731026	1.10	5000	98.3	79.5	120.5	
Co	59	1	He	467.543	467.543	1.004	5995689	1.13	500	93.5	73.9	110.5	
Ni	60	1	He	490.494	490.494	0.527	1559773	1.30	500	98.1	74.9	110.5	
Cu	63	1	He	487.569	487.569	1.308	4078704	0.71	500	97.5	72.6	110.5	
Zn	66	1	He	441.108	441.108	0.655	746998	0.99	500	88.2	71.5	113.4	
As	75	1	He	424.369	424.369	0.886	461961	0.44	500	84.9	73.4	110.5	
Se	78	1	He	415.230	415.230	1.305	47801	0.18	500	83.0	64.6	110.5	
Sr	88	1	He	463.180	463.180	0.885	4095453	1.68	500	92.6	79.5	120.5	
Mo	95	1	He	52.127	52.127	1.119	209467	0.26	50	104.3	29.5	140.5	
Ag	107	1	He	49.565	49.565	0.749	684043	0.98	50	99.1	59.5	114.5	
Cd	111	1	He	453.332	453.332	0.835	1089930	0.56	500	90.7	73.5	110.5	
Sn	118	1	He	539.487	539.487	0.626	3044403	1.14	500	107.9	79.5	120.5	
Sb	123	1	He	48.247	48.247	1.111	251967	0.92	50	96.5	67.5	113.4	
Ba	137	1	He	470.664	470.664	0.209	1205258	0.60	500	94.1	69.5	110.5	
W	182	1	He	49.703	49.703	0.743	731038	0.71	50	99.4	74.6	125.4	
Tl	205	1	He	120.251	120.251	0.507	4403117	1.15	125	96.2	70.6	110.5	
Pb	208	1	He	469.246	469.246	0.668	23687299	0.40	500	93.8	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1585354	1.16	1631381	97.18	30	120	
Sc	45	1	He	835243	1.68	829696	100.67	30	120	
Sc	45	2	NoGas	6321094	1.31	6325638	99.93	30	120	
Rh	103	1	He	2328356	1.31	2345543	99.27	30	120	
In	115	1	He	1352831	0.67	1419467	95.31	30	120	
Tb	159	1	He	3917170	1.17	3888262	100.74	30	120	
Ho	165	1	He	3989811	1.17	3932562	101.46	30	120	
Bi	209	1	He	2867534	0.50	2874805	99.75	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-f@2
Data File Name	024SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:32:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.526	0.526	9.48	2222	0.02	10000	
B	11	45	2	NoGas	11.445	11.445	4.59	73156	0.02	300	
Na	23	45	1	He	1293.587	1293.587	4.33	3844720	0.03	500000	
Mg	24	45	1	He	2039.979	2039.979	3.14	3416308	0.06	500000	
Al	27	45	1	He	12801.110	12801.110	2.00	12155610	0.11	200000	
K	39	45	1	He	163.404	163.404	3.13	321076	0.05	500000	
Ca	44	45	1	He	623507.521	623507.521	2.17	53938464	1.16	500000	>LDR
Ti	47	45	1	He	35258.350	35258.350	2.11	17192240	0.21	2500	>LDR
V	51	45	1	He	3898.312	3898.312	1.57	47021371	0.01	10000	
Cr	52	45	1	He	1461.633	1461.633	3.23	21175120	0.01	10000	
Mn	55	45	1	He	203.798	203.798	1.13	2324048	0.01	10000	
Fe	56	45	1	He	11486.654	11486.654	2.76	156951016	0.01	200000	
Co	59	103	1	He	3.082	3.082	4.76	31399	0.01	10000	
Ni	60	103	1	He	11.260	11.260	1.90	28502	0.04	10000	
Cu	63	103	1	He	15.723	15.723	2.74	105659	0.01	10000	
Zn	66	103	1	He	263.614	263.614	1.69	354734	0.07	10000	
As	75	103	1	He	5.779	5.779	2.00	5117	0.11	10000	
Se	78	103	1	He	2.401	2.401	9.61	260	0.92	10000	
Sr	88	103	1	He	21524.942	21524.942	1.50	150952465	0.01	10000	>LDR
Mo	95	103	1	He	8.038	8.038	2.11	25658	0.03	2000	
Ag	107	103	1	He	2.222	2.222	6.59	24295	0.01	300	
Cd	111	103	1	He	10.320	10.320	5.79	20611	0.05	4000	
Sn	118	115	1	He	72.947	72.947	0.99	351600	0.02	2000	
Sb	123	115	1	He	7.182	7.182	2.38	32415	0.02	300	
Ba	137	115	1	He	41.685	41.685	0.88	91046	0.05	10000	
W	182	209	1	He	13.594	13.594	0.63	162686	0.01	2500	
Tl	205	165	1	He	0.175	0.175	16.61	5793	0.00	5000	
Pb	208	209	1	He	56.537	56.537	0.41	2291705	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1315358	0.94	1631381	80.63	30	120	
Sc	45	1	He	1377973	7.18	829696	166.08	30	120	ISTD Failed
Sc	45	2	NoGas	9142317	0.91	6325638	144.53	30	120	ISTD Failed
Rh	103	1	He	1846320	2.56	2345543	78.72	30	120	
In	115	1	He	1152784	2.21	1419467	81.21	30	120	
Tb	159	1	He	3469100	1.08	3888262	89.22	30	120	
Ho	165	1	He	3554253	1.47	3932562	90.38	30	120	
Bi	209	1	He	2302074	1.42	2874805	80.08	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111548-a-3-f@10
Data File Name	025SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:36:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.202	0.202	5.75	852	0.02	10000	
B	11	45	2	NoGas	3.155	3.155	4.10	19615	0.02	300	
Na	23	45	1	He	446.214	446.214	2.35	757035	0.06	500000	
Mg	24	45	1	He	704.527	704.527	2.16	661161	0.11	500000	
Al	27	45	1	He	4496.947	4496.947	2.00	2391351	0.19	200000	
K	39	45	1	He	57.830	57.830	5.47	86561	0.07	500000	
Ca	44	45	1	He	211368.603	211368.603	1.82	10234351	2.07	500000	
Ti	47	45	1	He	11999.786	11999.786	2.24	3274622	0.37	2500	>LDR
V	51	45	1	He	1324.466	1324.466	3.08	8936500	0.01	10000	
Cr	52	45	1	He	511.811	511.811	3.77	4152623	0.01	10000	
Mn	55	45	1	He	69.131	69.131	2.17	441738	0.02	10000	
Fe	56	45	1	He	4070.193	4070.193	2.46	31128153	0.01	200000	
Co	59	103	1	He	0.601	0.601	1.43	6386	0.01	10000	
Ni	60	103	1	He	2.236	2.236	0.80	5962	0.04	10000	
Cu	63	103	1	He	3.217	3.217	3.60	23552	0.01	10000	
Zn	66	103	1	He	56.797	56.797	2.56	80610	0.07	10000	
As	75	103	1	He	0.853	0.853	0.88	898	0.09	10000	
Se	78	103	1	He	0.412	0.412	14.90	81	0.51	10000	
Sr	88	103	1	He	4054.123	4054.123	3.92	29511123	0.01	10000	
Mo	95	103	1	He	1.620	1.620	2.43	5410	0.03	2000	
Ag	107	103	1	He	0.439	0.439	4.61	4995	0.01	300	
Cd	111	103	1	He	2.073	2.073	10.62	5109	0.04	4000	
Sn	118	115	1	He	14.874	14.874	5.44	72864	0.02	2000	
Sb	123	115	1	He	1.497	1.497	5.03	7213	0.02	300	
Ba	137	115	1	He	8.518	8.518	5.76	18785	0.05	10000	
W	182	209	1	He	2.590	2.590	1.29	36903	0.01	2500	
Tl	205	165	1	He	0.030	0.030	11.33	1058	0.00	5000	
Pb	208	209	1	He	11.462	11.462	3.44	513512	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1279863	1.89	1631381	78.45	30	120	
Sc	45	1	He	770560	1.36	829696	92.87	30	120	
Sc	45	2	NoGas	5878627	0.39	6325638	92.93	30	120	
Rh	103	1	He	1917919	2.03	2345543	81.77	30	120	
In	115	1	He	1161106	2.44	1419467	81.80	30	120	
Tb	159	1	He	3511623	2.53	3888262	90.31	30	120	
Ho	165	1	He	3608591	3.50	3932562	91.76	30	120	
Bi	209	1	He	2542471	1.71	2874805	88.44	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111548-a-3-f@2
Data File Name	026SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:39:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	901.808	901.808	1.74	3398087	0.03	10000	
B	11	45	2	NoGas	73.172	73.172	0.76	360256	0.02	300	
Na	23	45	1	He	6999.026	6999.026	1.75	16904600	0.04	500000	
Mg	24	45	1	He	7562.398	7562.398	0.18	10365587	0.07	500000	
Al	27	45	1	He	18160.827	18160.827	1.60	14112165	0.13	200000	
K	39	45	1	He	5727.040	5727.040	1.49	7441245	0.08	500000	
Ca	44	45	1	He	645966.894	645966.894	0.70	45734908	1.41	500000	>LDR
Ti	47	45	1	He	36207.679	36207.679	1.22	14448846	0.25	2500	>LDR
V	51	45	1	He	4514.152	4514.152	0.70	44543952	0.01	10000	
Cr	52	45	1	He	2055.387	2055.387	1.63	24379056	0.01	10000	
Mn	55	45	1	He	746.372	746.372	1.07	6957761	0.01	10000	
Fe	56	45	1	He	17327.243	17327.243	0.86	193774748	0.01	200000	
Co	59	103	1	He	964.091	964.091	0.22	8854437	0.01	10000	
Ni	60	103	1	He	969.352	969.352	1.86	2207379	0.04	10000	
Cu	63	103	1	He	939.476	939.476	0.47	5627723	0.02	10000	
Zn	66	103	1	He	1095.742	1095.742	0.86	1326842	0.08	10000	
As	75	103	1	He	1015.956	1015.956	1.05	791920	0.13	10000	
Se	78	103	1	He	1045.228	1045.228	0.76	86127	1.21	10000	
Sr	88	103	1	He	21867.143	21867.143	0.34	138465634	0.02	10000	>LDR
Mo	95	103	1	He	124.062	124.062	0.83	356995	0.03	2000	
Ag	107	103	1	He	98.572	98.572	0.87	974270	0.01	300	
Cd	111	103	1	He	991.396	991.396	1.75	1706065	0.06	4000	
Sn	118	115	1	He	1165.143	1165.143	1.25	5005594	0.02	2000	
Sb	123	115	1	He	110.270	110.270	1.19	437924	0.03	300	
Ba	137	115	1	He	1137.122	1137.122	0.61	2217282	0.05	10000	
W	182	209	1	He	126.116	126.116	0.19	1429131	0.01	2500	
Tl	205	165	1	He	244.321	244.321	1.05	7522677	0.00	5000	
Pb	208	209	1	He	1061.007	1061.007	1.35	41387795	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1192240	2.67	1631381	73.08	30	120	
Sc	45	1	He	1126668	0.94	829696	135.79	30	120	ISTD Failed
Sc	45	2	NoGas	8427012	0.99	6325638	133.22	30	120	ISTD Failed
Rh	103	1	He	1667473	0.54	2345543	71.09	30	120	
In	115	1	He	1030157	0.52	1419467	72.57	30	120	
Tb	159	1	He	3256364	1.42	3888262	83.75	30	120	
Ho	165	1	He	3355091	0.61	3932562	85.32	30	120	
Bi	209	1	He	2216154	1.33	2874805	77.09	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-g ms@2
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:43:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	437.883	437.883	2.04	1524410	0.03	10000	
B	11	45	2	NoGas	38.973	38.973	1.57	179440	0.02	300	
Na	23	45	1	He	4152.147	4152.147	1.56	9344389	0.04	500000	
Mg	24	45	1	He	4751.935	4751.935	0.65	6062244	0.08	500000	
Al	27	45	1	He	15412.477	15412.477	0.99	11145905	0.14	200000	
K	39	45	1	He	2861.789	2861.789	1.68	3484861	0.08	500000	
Ca	44	45	1	He	758935.521	758935.521	1.11	50009006	1.52	500000	>LDR
Ti	47	45	1	He	36022.321	36022.321	0.91	13379106	0.27	2500	>LDR
V	51	45	1	He	4208.231	4208.231	1.40	38645168	0.01	10000	
Cr	52	45	1	He	1772.763	1772.763	0.62	19570394	0.01	10000	
Mn	55	45	1	He	479.244	479.244	1.04	4158396	0.01	10000	
Fe	56	45	1	He	14562.113	14562.113	1.64	151552678	0.01	200000	
Co	59	103	1	He	458.370	458.370	2.34	4095540	0.01	10000	
Ni	60	103	1	He	447.001	447.001	0.76	990432	0.05	10000	
Cu	63	103	1	He	459.386	459.386	1.82	2677800	0.02	10000	
Zn	66	103	1	He	631.134	631.134	0.71	744145	0.08	10000	
As	75	103	1	He	439.911	439.911	0.95	333677	0.13	10000	
Se	78	103	1	He	481.216	481.216	0.85	38598	1.25	10000	
Sr	88	103	1	He	25532.098	25532.098	0.86	157294136	0.02	10000	>LDR
Mo	95	103	1	He	58.759	58.759	0.78	164526	0.04	2000	
Ag	107	103	1	He	47.565	47.565	1.06	457380	0.01	300	
Cd	111	103	1	He	450.664	450.664	0.78	754998	0.06	4000	
Sn	118	115	1	He	595.796	595.796	0.82	2493485	0.02	2000	
Sb	123	115	1	He	46.287	46.287	0.72	179311	0.03	300	
Ba	137	115	1	He	517.180	517.180	1.00	982225	0.05	10000	
W	182	209	1	He	32.088	32.088	0.78	357978	0.01	2500	
Tl	205	165	1	He	118.318	118.318	0.71	3582177	0.00	5000	
Pb	208	209	1	He	538.938	538.938	0.45	20578155	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1101638	1.92	1631381	67.53	30	120	
Sc	45	1	He	1048539	0.80	829696	126.38	30	120	ISTD Failed
Sc	45	2	NoGas	7636331	0.72	6325638	120.72	30	120	ISTD Failed
Rh	103	1	He	1622361	1.13	2345543	69.17	30	120	
In	115	1	He	1003416	1.24	1419467	70.69	30	120	
Tb	159	1	He	3219276	0.31	3888262	82.79	30	120	
Ho	165	1	He	3299027	0.78	3932562	83.89	30	120	
Bi	209	1	He	2169026	0.75	2874805	75.45	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	028_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:52:44-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.691	2.049	185029	3.26	50	93.4	89.5	110.5	
B	11	45	2	NoGas	50.054	0.623	151163	0.54	50	100.1	89.5	110.5	
Na	23	45	1	He	26276.468	0.916	36833223	1.49	25000	105.1	89.5	110.5	
Mg	24	45	1	He	25994.056	1.567	20702442	0.92	25000	104.0	89.5	110.5	
Al	27	45	1	He	251.642	0.754	115694	0.65	250	100.7	89.5	110.5	
K	39	45	1	He	25880.193	1.858	19434986	0.94	25000	103.5	89.5	110.5	
Ca	44	45	1	He	25667.856	1.524	1056872	1.27	25000	102.7	89.5	110.5	
Ti	47	45	1	He	71.273	0.881	16541	1.47	50	142.5	89.5	110.5	CCV Failed
V	51	45	1	He	52.951	1.493	303720	0.62	50	105.9	89.5	110.5	
Cr	52	45	1	He	52.623	1.956	364708	1.40	50	105.2	89.5	110.5	
Mn	55	45	1	He	261.986	2.051	1419872	1.22	250	104.8	89.5	110.5	
Fe	56	45	1	He	13120.721	1.158	85270952	0.46	12500	105.0	89.5	110.5	
Co	59	103	1	He	47.676	1.519	511472	0.72	50	95.4	89.5	110.5	
Ni	60	103	1	He	47.455	1.910	126328	1.38	50	94.9	89.5	110.5	
Cu	63	103	1	He	48.125	1.654	338058	0.74	50	96.2	89.5	110.5	
Zn	66	103	1	He	48.183	1.962	69712	0.89	50	96.4	89.5	110.5	
As	75	103	1	He	47.859	2.274	43700	1.22	50	95.7	89.5	110.5	
Se	78	103	1	He	48.963	1.967	4753	0.90	50	97.9	89.5	110.5	
Sr	88	103	1	He	48.718	1.858	360393	0.96	50	97.4	89.5	110.5	
Mo	95	103	1	He	51.113	1.522	171830	1.44	50	102.2	89.5	110.5	
Ag	107	103	1	He	50.783	2.454	586226	1.51	50	101.6	89.5	110.5	
Cd	111	103	1	He	51.864	1.602	105221	1.39	50	103.7	89.5	110.5	
Sn	118	115	1	He	50.261	1.445	249374	1.66	50	100.5	89.5	110.5	
Sb	123	115	1	He	51.735	0.778	236707	0.38	50	103.5	89.5	110.5	
Ba	137	115	1	He	49.900	0.525	112041	0.39	50	99.8	89.5	110.5	
W	182	209	1	He	52.072	1.588	683100	1.36	50	104.1	89.5	110.5	
Tl	205	165	1	He	51.695	2.366	1722937	2.89	50	103.4	89.5	110.5	
Pb	208	209	1	He	49.317	1.655	2221506	0.96	50	98.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1253401	2.11	1631381	76.83	30	120	
Sc	45	1	He	654768	1.02	829696	78.92	30	120	
Sc	45	2	NoGas	5083669	0.96	6325638	80.37	30	120	
Rh	103	1	He	1947782	1.06	2345543	83.04	30	120	
In	115	1	He	1185405	0.41	1419467	83.51	30	120	
Tb	159	1	He	3495343	1.24	3888262	89.89	30	120	
Ho	165	1	He	3631250	0.81	3932562	92.34	30	120	
Bi	209	1	He	2558267	0.70	2874805	88.99	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	029_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T11:56:31-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.082	3.3	367	3.0	1	
B	11	45	2	NoGas	-0.091	-145.3	7809	4.7	20	
Na	23	45	1	He	7.778	12.0	29135	3.6	400	
Mg	24	45	1	He	1.940	41.8	2322	26.8	1000	
Al	27	45	1	He	0.460	32.5	2297	4.2	50	
K	39	45	1	He	6.233	58.1	34872	7.0	1000	
Ca	44	45	1	He	8.811	17.5	1154	5.7	1000	
Ti	47	45	1	He	2.887	12.2	680	11.6	20	
V	51	45	1	He	0.100	34.6	655	29.2	2	
Cr	52	45	1	He	0.011	284.4	2106	9.0	2	
Mn	55	45	1	He	0.045	51.8	1216	9.3	2	
Fe	56	45	1	He	14.673	20.5	98860	18.8	50	
Co	59	103	1	He	0.007	29.7	119	20.3	1	
Ni	60	103	1	He	-0.005	-208.3	99	30.6	2	
Cu	63	103	1	He	0.096	11.7	2225	4.8	2	
Zn	66	103	1	He	-0.038	-248.6	1680	7.7	20	
As	75	103	1	He	0.084	5.9	225	2.1	2	
Se	78	103	1	He	0.109	64.7	57	13.3	2	
Sr	88	103	1	He	0.151	8.9	1292	9.3	10	
Mo	95	103	1	He	0.940	13.5	3405	13.5	2	
Ag	107	103	1	He	0.016	15.2	202	13.7	0.2	
Cd	111	103	1	He	0.023	139.6	1133	5.0	0.2	
Sn	118	115	1	He	0.369	7.3	2860	4.4	10	
Sb	123	115	1	He	0.533	9.7	3077	7.1	1	
Ba	137	115	1	He	0.014	52.0	120	13.9	5	
W	182	209	1	He	1.070	16.8	18282	12.1	10	
Tl	205	165	1	He	0.039	19.4	1380	18.2	0.5	
Pb	208	209	1	He	0.093	13.7	5186	10.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1284934	0.93	1631381	78.76	30	120	
Sc	45	1	He	654884	1.37	829696	78.93	30	120	
Sc	45	2	NoGas	5176097	0.22	6325638	81.83	30	120	
Rh	103	1	He	2066171	1.16	2345543	88.09	30	120	
In	115	1	He	1230524	0.94	1419467	86.69	30	120	
Tb	159	1	He	3591874	0.85	3888262	92.38	30	120	
Ho	165	1	He	3671995	1.14	3932562	93.37	30	120	
Bi	209	1	He	2707559	1.44	2874805	94.18	30	120	

Sample Report

Sample Table

Sample Name	190-7094-a-1-a@2
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:00:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.246	0.246	13.14	1022	0.02	10000	
B	11	45	2	NoGas	48.062	48.062	1.16	146723	0.03	300	
Na	23	45	1	He	1997.089	1997.089	2.55	2805567	0.07	500000	
Mg	24	45	1	He	6777.663	6777.663	1.92	5378419	0.13	500000	
Al	27	45	1	He	5393.824	5393.824	2.29	2427949	0.22	200000	
K	39	45	1	He	1326.245	1326.245	3.07	1020812	0.13	500000	
Ca	44	45	1	He	46538.997	46538.997	2.10	1908418	2.44	500000	
Ti	47	45	1	He	103.273	103.273	2.34	23874	0.43	2500	
V	51	45	1	He	10.697	10.697	1.37	61206	0.02	10000	
Cr	52	45	1	He	110.517	110.517	1.59	760893	0.01	10000	
Mn	55	45	1	He	1831.703	1831.703	2.26	9884558	0.02	10000	
Fe	56	45	1	He	99904.367	99904.367	3.18	646774374	0.02	200000	
Co	59	103	1	He	10.307	10.307	1.41	114044	0.01	10000	
Ni	60	103	1	He	43.555	43.555	1.91	119560	0.04	10000	
Cu	63	103	1	He	566.132	566.132	2.50	4084693	0.01	10000	
Zn	66	103	1	He	1243.589	1243.589	1.81	1813391	0.07	10000	
As	75	103	1	He	10.788	10.788	3.10	10265	0.11	10000	
Se	78	103	1	He	7.757	7.757	1.79	814	0.95	10000	
Sr	88	103	1	He	195.347	195.347	3.09	1489702	0.01	10000	
Mo	95	103	1	He	23.040	23.040	1.28	79886	0.03	2000	
Ag	107	103	1	He	10.497	10.497	1.62	124961	0.01	300	
Cd	111	103	1	He	2.613	2.613	3.08	6469	0.04	4000	
Sn	118	115	1	He	57.513	57.513	0.79	288713	0.02	2000	
Sb	123	115	1	He	4.382	4.382	1.37	20794	0.02	300	
Ba	137	115	1	He	760.243	760.243	0.69	1726711	0.04	10000	
W	182	209	1	He	14.737	14.737	0.93	317495	0.00	2500	
Tl	205	165	1	He	0.204	0.204	2.02	6962	0.00	5000	
Pb	208	209	1	He	36.191	36.191	0.31	2645212	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1268369	0.29	1631381	77.75	30	120	
Sc	45	1	He	652343	0.99	829696	78.62	30	120	
Sc	45	2	NoGas	5127599	0.67	6325638	81.06	30	120	
Rh	103	1	He	2008164	0.53	2345543	85.62	30	120	
In	115	1	He	1199962	1.03	1419467	84.54	30	120	
Tb	159	1	He	3614038	0.81	3888262	92.95	30	120	
Ho	165	1	He	3690706	1.66	3932562	93.85	30	120	
Bi	209	1	He	4150211	0.61	2874805	144.36	30	120	ISTD Failed

Sample Report

Sample Table

Sample Name	190-7094-a-2-a@2
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:04:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.129	0.129	8.06	596	0.02	10000	
B	11	45	2	NoGas	34.537	34.537	1.31	114316	0.03	300	
Na	23	45	1	He	1042.257	1042.257	2.17	1566447	0.07	500000	
Mg	24	45	1	He	3487.173	3487.173	0.85	2943523	0.12	500000	
Al	27	45	1	He	2686.282	2686.282	1.86	1287140	0.21	200000	
K	39	45	1	He	1408.932	1408.932	0.36	1151453	0.12	500000	
Ca	44	45	1	He	25129.832	25129.832	0.57	1096383	2.29	500000	
Ti	47	45	1	He	64.920	64.920	6.98	15967	0.41	2500	
V	51	45	1	He	5.938	5.938	3.31	36171	0.02	10000	
Cr	52	45	1	He	48.625	48.625	0.54	357271	0.01	10000	
Mn	55	45	1	He	765.705	765.705	0.71	4395660	0.02	10000	
Fe	56	45	1	He	45141.924	45141.924	1.06	310842494	0.01	200000	
Co	59	103	1	He	4.868	4.868	0.87	57350	0.01	10000	
Ni	60	103	1	He	22.413	22.413	0.59	65543	0.03	10000	
Cu	63	103	1	He	295.374	295.374	0.26	2269236	0.01	10000	
Zn	66	103	1	He	622.613	622.613	0.34	967214	0.06	10000	
As	75	103	1	He	5.121	5.121	1.19	5265	0.10	10000	
Se	78	103	1	He	4.024	4.024	6.09	472	0.85	10000	
Sr	88	103	1	He	111.502	111.502	0.47	905137	0.01	10000	
Mo	95	103	1	He	11.934	11.934	1.51	44075	0.03	2000	
Ag	107	103	1	He	5.688	5.688	0.83	72063	0.01	300	
Cd	111	103	1	He	1.300	1.300	9.11	3988	0.03	4000	
Sn	118	115	1	He	33.851	33.851	0.88	178075	0.02	2000	
Sb	123	115	1	He	3.750	3.750	0.96	18685	0.02	300	
Ba	137	115	1	He	424.890	424.890	0.90	1009034	0.04	10000	
W	182	209	1	He	7.124	7.124	2.44	138926	0.01	2500	
Tl	205	165	1	He	0.099	0.099	6.24	3618	0.00	5000	
Pb	208	209	1	He	18.069	18.069	1.21	1174681	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1372156	1.37	1631381	84.11	30	120	
Sc	45	1	He	693755	0.73	829696	83.62	30	120	
Sc	45	2	NoGas	5443189	0.36	6325638	86.05	30	120	
Rh	103	1	He	2137494	1.08	2345543	91.13	30	120	
In	115	1	He	1254645	1.01	1419467	88.39	30	120	
Tb	159	1	He	3789824	0.38	3888262	97.47	30	120	
Ho	165	1	He	3897954	1.33	3932562	99.12	30	120	
Bi	209	1	He	3690104	1.15	2874805	128.36	30	120	ISTD Failed

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	032_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:07:50-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.781	2.541	228211	1.32	50	95.6	89.5	110.5	
B	11	45	2	NoGas	49.484	2.737	183521	2.71	50	99.0	89.5	110.5	
Na	23	45	1	He	25053.728	2.691	44151866	0.35	25000	100.2	89.5	110.5	
Mg	24	45	1	He	25007.922	2.896	25040582	0.26	25000	100.0	89.5	110.5	
Al	27	45	1	He	242.751	2.506	140415	0.75	250	97.1	89.5	110.5	
K	39	45	1	He	24987.506	2.947	23594532	1.21	25000	100.0	89.5	110.5	
Ca	44	45	1	He	24786.721	2.246	1283300	0.87	25000	99.1	89.5	110.5	
Ti	47	45	1	He	52.002	5.853	15169	3.72	50	104.0	89.5	110.5	
V	51	45	1	He	50.894	2.061	367082	0.97	50	101.8	89.5	110.5	
Cr	52	45	1	He	51.156	2.728	445837	0.29	50	102.3	89.5	110.5	
Mn	55	45	1	He	256.058	3.064	1744765	0.22	250	102.4	89.5	110.5	
Fe	56	45	1	He	12730.668	2.748	104020783	0.32	12500	101.8	89.5	110.5	
Co	59	103	1	He	48.670	0.218	626692	1.32	50	97.3	89.5	110.5	
Ni	60	103	1	He	48.010	0.705	153389	0.75	50	96.0	89.5	110.5	
Cu	63	103	1	He	49.115	1.367	414041	0.87	50	98.2	89.5	110.5	
Zn	66	103	1	He	48.232	1.953	83745	0.83	50	96.5	89.5	110.5	
As	75	103	1	He	48.639	0.358	53305	1.09	50	97.3	89.5	110.5	
Se	78	103	1	He	47.855	0.778	5577	0.45	50	95.7	89.5	110.5	
Sr	88	103	1	He	48.239	0.484	428325	1.23	50	96.5	89.5	110.5	
Mo	95	103	1	He	51.133	2.964	206265	1.87	50	102.3	89.5	110.5	
Ag	107	103	1	He	50.328	1.118	697312	0.69	50	100.7	89.5	110.5	
Cd	111	103	1	He	50.261	1.221	122410	0.26	50	100.5	89.5	110.5	
Sn	118	115	1	He	50.056	1.040	291843	0.74	50	100.1	89.5	110.5	
Sb	123	115	1	He	51.579	1.245	277317	0.85	50	103.2	89.5	110.5	
Ba	137	115	1	He	50.742	0.969	133885	1.17	50	101.5	89.5	110.5	
W	182	209	1	He	51.578	0.749	774404	1.94	50	103.2	89.5	110.5	
Tl	205	165	1	He	51.837	1.313	1983145	0.96	50	103.7	89.5	110.5	
Pb	208	209	1	He	48.783	1.736	2514565	0.43	50	97.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1511095	1.32	1631381	92.63	30	120	
Sc	45	1	He	823607	3.01	829696	99.27	30	120	
Sc	45	2	NoGas	6238980	0.67	6325638	98.63	30	120	
Rh	103	1	He	2337601	1.22	2345543	99.66	30	120	
In	115	1	He	1392996	0.48	1419467	98.14	30	120	
Tb	159	1	He	4060112	0.85	3888262	104.42	30	120	
Ho	165	1	He	4168644	0.40	3932562	106.00	30	120	
Bi	209	1	He	2927642	1.39	2874805	101.84	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	033_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:11:40-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.061	19.3	330	16.6	1	
B	11	45	2	NoGas	0.213	40.4	10296	2.7	20	
Na	23	45	1	He	7.698	16.9	34864	5.6	400	
Mg	24	45	1	He	2.682	39.3	3501	28.1	1000	
Al	27	45	1	He	0.349	117.3	2698	7.9	50	
K	39	45	1	He	7.066	37.5	42647	5.0	1000	
Ca	44	45	1	He	5.548	42.3	1225	9.2	1000	
Ti	47	45	1	He	0.904	5.6	264	5.7	20	
V	51	45	1	He	0.013	329.0	190	156.4	2	
Cr	52	45	1	He	0.008	111.8	2505	2.3	2	
Mn	55	45	1	He	0.057	22.4	1536	5.0	2	
Fe	56	45	1	He	27.916	22.4	222106	21.3	50	
Co	59	103	1	He	0.004	54.8	107	28.6	1	
Ni	60	103	1	He	-0.011	-57.8	98	20.8	2	
Cu	63	103	1	He	0.070	26.0	2397	7.0	2	
Zn	66	103	1	He	0.021	171.7	2090	3.5	20	
As	75	103	1	He	0.017	21.5	190	2.8	2	
Se	78	103	1	He	0.035	150.2	58	10.7	2	
Sr	88	103	1	He	0.034	9.1	441	6.2	10	
Mo	95	103	1	He	0.943	18.2	4034	17.3	2	
Ag	107	103	1	He	0.016	20.7	241	19.9	0.2	
Cd	111	103	1	He	0.039	38.9	1380	2.2	0.2	
Sn	118	115	1	He	0.349	22.6	3238	15.0	10	
Sb	123	115	1	He	0.548	19.9	3697	16.7	1	
Ba	137	115	1	He	0.022	42.1	162	15.6	5	
W	182	209	1	He	1.128	22.4	21122	18.0	10	
Tl	205	165	1	He	0.032	25.9	1305	24.5	0.5	
Pb	208	209	1	He	0.056	9.0	3774	6.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1491301	1.01	1631381	91.41	30	120	
Sc	45	1	He	786652	0.67	829696	94.81	30	120	
Sc	45	2	NoGas	6128606	1.37	6325638	96.89	30	120	
Rh	103	1	He	2441025	0.61	2345543	104.07	30	120	
In	115	1	He	1443065	0.60	1419467	101.66	30	120	
Tb	159	1	He	4018686	0.44	3888262	103.35	30	120	
Ho	165	1	He	4149414	0.08	3932562	105.51	30	120	
Bi	209	1	He	2994424	0.85	2874805	104.16	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	034_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:17:59-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.117	1.269	226910	1.11	50	94.2	89.5	110.5	
B	11	45	2	NoGas	48.861	2.100	185189	0.67	50	97.7	89.5	110.5	
Na	23	45	1	He	24008.049	4.317	44358568	0.24	25000	96.0	89.5	110.5	
Mg	24	45	1	He	23905.092	2.344	25111684	2.24	25000	95.6	89.5	110.5	
Al	27	45	1	He	235.924	3.833	143166	0.61	250	94.4	89.5	110.5	
K	39	45	1	He	24339.665	3.353	24103699	1.06	25000	97.4	89.5	110.5	
Ca	44	45	1	He	24132.538	2.601	1310583	2.28	25000	96.5	89.5	110.5	
Ti	47	45	1	He	50.083	2.519	15332	1.95	50	100.2	89.5	110.5	
V	51	45	1	He	48.720	3.840	368424	0.59	50	97.4	89.5	110.5	
Cr	52	45	1	He	48.951	4.214	447409	0.33	50	97.9	89.5	110.5	
Mn	55	45	1	He	245.747	4.711	1755654	1.23	250	98.3	89.5	110.5	
Fe	56	45	1	He	12132.847	3.927	103949178	0.43	12500	97.1	89.5	110.5	
Co	59	103	1	He	48.828	0.884	626958	0.36	50	97.7	89.5	110.5	
Ni	60	103	1	He	48.431	0.811	154307	0.28	50	96.9	89.5	110.5	
Cu	63	103	1	He	49.495	1.180	416091	0.78	50	99.0	89.5	110.5	
Zn	66	103	1	He	48.756	0.304	84413	0.70	50	97.5	89.5	110.5	
As	75	103	1	He	49.678	1.030	54289	0.61	50	99.4	89.5	110.5	
Se	78	103	1	He	49.343	2.211	5733	2.34	50	98.7	89.5	110.5	
Sr	88	103	1	He	48.903	1.145	432996	0.73	50	97.8	89.5	110.5	
Mo	95	103	1	He	50.327	1.498	202505	2.01	50	100.7	89.5	110.5	
Ag	107	103	1	He	50.462	1.147	697252	0.62	50	100.9	89.5	110.5	
Cd	111	103	1	He	50.075	0.919	121632	0.56	50	100.2	89.5	110.5	
Sn	118	115	1	He	50.100	0.942	293168	0.72	50	100.2	89.5	110.5	
Sb	123	115	1	He	51.851	0.346	279808	0.46	50	103.7	89.5	110.5	
Ba	137	115	1	He	50.362	0.961	133367	0.88	50	100.7	89.5	110.5	
W	182	209	1	He	50.808	0.792	761041	1.24	50	101.6	89.5	110.5	
Tl	205	165	1	He	51.546	0.771	1956396	0.21	50	103.1	89.5	110.5	
Pb	208	209	1	He	48.219	1.388	2479691	0.67	50	96.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1523478	1.65	1631381	93.39	30	120	
Sc	45	1	He	864118	4.43	829696	104.15	30	120	
Sc	45	2	NoGas	6373033	1.66	6325638	100.75	30	120	
Rh	103	1	He	2331119	0.53	2345543	99.39	30	120	
In	115	1	He	1398092	0.26	1419467	98.49	30	120	
Tb	159	1	He	4024439	1.12	3888262	103.50	30	120	
Ho	165	1	He	4135633	0.57	3932562	105.16	30	120	
Bi	209	1	He	2920573	0.77	2874805	101.59	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	035_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:21:44-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.040	32.5	237	27.5	1	
B	11	45	2	NoGas	0.724	23.5	12590	4.2	20	
Na	23	45	1	He	6.795	14.6	34337	3.8	400	
Mg	24	45	1	He	2.448	56.0	3371	38.9	1000	
Al	27	45	1	He	0.152	121.4	2668	2.7	50	
K	39	45	1	He	7.538	26.8	44355	3.0	1000	
Ca	44	45	1	He	3.545	46.1	1160	8.3	1000	
Ti	47	45	1	He	0.655	7.7	201	8.2	20	
V	51	45	1	He	0.009	302.1	167	116.1	2	
Cr	52	45	1	He	0.006	104.2	2567	2.4	2	
Mn	55	45	1	He	0.071	6.2	1680	1.9	2	
Fe	56	45	1	He	24.917	22.4	204550	20.8	50	
Co	59	103	1	He	0.005	42.4	118	24.4	1	
Ni	60	103	1	He	-0.003	-408.2	128	33.0	2	
Cu	63	103	1	He	0.057	23.7	2348	5.8	2	
Zn	66	103	1	He	-0.029	-120.2	2056	2.8	20	
As	75	103	1	He	0.025	15.2	204	2.2	2	
Se	78	103	1	He	0.095	129.3	67	23.4	2	
Sr	88	103	1	He	0.018	30.2	299	17.3	10	
Mo	95	103	1	He	0.936	24.8	4118	25.0	2	
Ag	107	103	1	He	0.021	12.4	312	12.8	0.2	
Cd	111	103	1	He	0.029	59.2	1391	2.7	0.2	
Sn	118	115	1	He	0.358	13.3	3352	8.2	10	
Sb	123	115	1	He	0.590	19.8	4006	16.0	1	
Ba	137	115	1	He	0.013	103.9	139	25.9	5	
W	182	209	1	He	1.093	11.7	21118	9.1	10	
Tl	205	165	1	He	0.035	30.7	1393	28.3	0.5	
Pb	208	209	1	He	0.042	6.2	3110	4.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1552882	0.78	1631381	95.19	30	120	
Sc	45	1	He	810154	1.23	829696	97.64	30	120	
Sc	45	2	NoGas	6398729	0.70	6325638	101.16	30	120	
Rh	103	1	He	2507027	0.65	2345543	106.88	30	120	
In	115	1	He	1471504	0.54	1419467	103.67	30	120	
Tb	159	1	He	4104515	0.91	3888262	105.56	30	120	
Ho	165	1	He	4155840	0.79	3932562	105.68	30	120	
Bi	209	1	He	3071982	0.42	2874805	106.86	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-175943/1-a
Data File Name	036_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:25:36-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.055	25.3	296	21.3	1	
B	11	45	2	NoGas	2.393	2.9	17301	0.6	20	
Na	23	45	1	He	95.317	1.7	184330	1.5	400	
Mg	24	45	1	He	56.572	0.8	55677	2.3	1000	
Al	27	45	1	He	3.285	8.5	4337	3.2	50	
K	39	45	1	He	29.320	6.7	63370	0.7	1000	
Ca	44	45	1	He	214.087	1.0	11661	2.6	1000	
Ti	47	45	1	He	0.871	37.1	257	33.1	20	
V	51	45	1	He	0.089	20.4	719	15.2	2	
Cr	52	45	1	He	0.651	3.8	7916	1.5	2	
Mn	55	45	1	He	0.248	3.0	2811	2.9	2	
Fe	56	45	1	He	21.703	7.3	175892	9.3	50	
Co	59	103	1	He	0.006	34.1	121	22.1	1	
Ni	60	103	1	He	0.099	28.6	446	21.7	2	
Cu	63	103	1	He	0.736	4.3	7909	1.6	2	
Zn	66	103	1	He	11.819	3.8	22056	1.9	20	
As	75	103	1	He	0.083	34.0	254	10.3	2	
Se	78	103	1	He	0.076	130.7	61	17.1	2	
Sr	88	103	1	He	0.417	4.4	3829	2.9	10	
Mo	95	103	1	He	0.224	9.3	964	7.6	2	
Ag	107	103	1	He	0.021	29.0	292	27.2	0.2	
Cd	111	103	1	He	0.031	20.8	1305	0.9	0.2	
Sn	118	115	1	He	0.979	7.2	6746	6.3	10	
Sb	123	115	1	He	1.194	9.7	6987	7.5	1	Blank Failed
Ba	137	115	1	He	0.773	7.7	2126	7.2	5	
W	182	209	1	He	0.277	6.7	8347	3.7	10	
Tl	205	165	1	He	0.010	17.4	419	12.9	0.5	
Pb	208	209	1	He	0.168	3.7	9954	3.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1481735	1.49	1631381	90.83	30	120	
Sc	45	1	He	795371	2.77	829696	95.86	30	120	
Sc	45	2	NoGas	5951014	0.75	6325638	94.08	30	120	
Rh	103	1	He	2343473	1.82	2345543	99.91	30	120	
In	115	1	He	1385640	1.36	1419467	97.62	30	120	
Tb	159	1	He	3892844	1.91	3888262	100.12	30	120	
Ho	165	1	He	3979716	2.70	3932562	101.20	30	120	
Bi	209	1	He	3080165	0.39	2874805	107.14	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-175943/3-a
Data File Name	037_LCS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:29:28-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	971.750	971.750	1.886	4358624	0.86	1000	97.2	79.5	120.5	
B	11	2	NoGas	116.130	116.130	1.212	379795	0.42	100	116.1	79.5	120.5	
Na	23	1	He	10303.213	10303.213	2.092	16367517	0.18	10000	103.0	79.5	120.5	
Mg	24	1	He	10299.638	10299.638	3.315	9288893	1.12	10000	103.0	79.5	120.5	
Al	27	1	He	9354.165	9354.165	2.531	4784835	1.56	10000	93.5	79.5	120.5	
K	39	1	He	10198.061	10198.061	2.942	8693165	0.72	10000	102.0	79.5	120.5	
Ca	44	1	He	9301.064	9301.064	2.789	434236	0.56	10000	93.0	79.5	120.5	
Ti	47	1	He	99.100	99.100	2.310	26040	1.08	100	99.1	79.5	120.5	
V	51	1	He	995.940	995.940	3.220	6466903	1.00	1000	99.6	79.5	120.5	
Cr	52	1	He	1018.541	1018.541	1.521	7953187	0.87	1000	101.9	79.5	120.5	
Mn	55	1	He	1015.058	1015.058	0.781	6228750	1.70	1000	101.5	79.5	120.5	
Fe	56	1	He	10375.553	10375.553	1.793	76369544	0.53	10000	103.8	79.5	120.5	
Co	59	1	He	958.081	958.081	2.974	11388225	1.34	1000	95.8	79.5	120.5	
Ni	60	1	He	983.492	983.492	2.121	2898992	0.77	1000	98.3	79.5	120.5	
Cu	63	1	He	983.526	983.526	1.117	7626758	1.09	1000	98.4	79.5	120.5	
Zn	66	1	He	1007.219	1007.219	1.030	1579053	1.16	1000	100.7	79.5	120.5	
As	75	1	He	936.694	936.694	1.217	945166	0.41	1000	93.7	79.5	120.5	
Se	78	1	He	959.837	959.837	0.942	102387	0.68	1000	96.0	79.5	120.5	
Sr	88	1	He	948.877	948.877	2.292	7776827	0.81	1000	94.9	79.5	120.5	
Mo	95	1	He	107.776	107.776	0.566	401509	1.39	100	107.8	79.5	120.5	
Ag	107	1	He	103.625	103.625	1.661	1325783	0.23	100	103.6	79.5	120.5	
Cd	111	1	He	1046.935	1046.935	1.928	2331967	0.32	1000	104.7	79.5	120.5	
Sn	118	1	He	1125.628	1125.628	0.616	5741229	0.40	1000	112.6	79.5	120.5	
Sb	123	1	He	111.044	111.044	0.808	523549	0.70	100	111.0	79.5	120.5	
Ba	137	1	He	1103.207	1103.207	0.914	2553773	0.77	1000	110.3	79.5	120.5	
W	182	1	He	109.633	109.633	5.713	1566994	4.88	100	109.6	79.5	120.5	
Tl	205	1	He	252.717	252.717	0.477	8965815	0.97	250	101.1	79.5	120.5	
Pb	208	1	He	994.280	994.280	0.833	48923363	0.10	1000	99.4	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1419417	2.43	1631381	87.01	30	120	
Sc	45	1	He	741709	2.27	829696	89.40	30	120	
Sc	45	2	NoGas	5674892	0.93	6325638	89.71	30	120	
Rh	103	1	He	2158763	1.61	2345543	92.04	30	120	
In	115	1	He	1222989	0.32	1419467	86.16	30	120	
Tb	159	1	He	3762548	1.17	3888262	96.77	30	120	
Ho	165	1	He	3865772	0.92	3932562	98.30	30	120	
Bi	209	1	He	2795259	0.87	2874805	97.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	038_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:33:01-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.589	2.792	244003	1.68	50	97.2	89.5	110.5	
B	11	45	2	NoGas	51.577	2.487	197992	2.22	50	103.2	89.5	110.5	
Na	23	45	1	He	24936.666	2.854	45750276	0.32	25000	99.7	89.5	110.5	
Mg	24	45	1	He	25166.021	2.943	26234511	0.63	25000	100.7	89.5	110.5	
Al	27	45	1	He	242.671	3.400	146112	0.48	250	97.1	89.5	110.5	
K	39	45	1	He	25195.122	2.812	24767696	0.56	25000	100.8	89.5	110.5	
Ca	44	45	1	He	25006.574	4.436	1347324	1.76	25000	100.0	89.5	110.5	
Ti	47	45	1	He	50.800	0.938	15440	2.04	50	101.6	89.5	110.5	
V	51	45	1	He	50.686	3.282	380513	0.39	50	101.4	89.5	110.5	
Cr	52	45	1	He	50.856	2.973	461428	0.04	50	101.7	89.5	110.5	
Mn	55	45	1	He	255.228	3.689	1810399	1.00	250	102.1	89.5	110.5	
Fe	56	45	1	He	12732.305	3.516	108293416	0.61	12500	101.9	89.5	110.5	
Co	59	103	1	He	49.032	1.206	649280	0.27	50	98.1	89.5	110.5	
Ni	60	103	1	He	48.878	1.206	160603	0.28	50	97.8	89.5	110.5	
Cu	63	103	1	He	49.454	1.269	428762	0.41	50	98.9	89.5	110.5	
Zn	66	103	1	He	48.930	2.367	87347	1.35	50	97.9	89.5	110.5	
As	75	103	1	He	49.775	1.077	56097	0.13	50	99.6	89.5	110.5	
Se	78	103	1	He	48.877	2.167	5857	1.45	50	97.8	89.5	110.5	
Sr	88	103	1	He	48.206	1.703	440178	0.90	50	96.4	89.5	110.5	
Mo	95	103	1	He	51.425	2.009	213397	2.25	50	102.8	89.5	110.5	
Ag	107	103	1	He	49.928	1.515	711459	0.66	50	99.9	89.5	110.5	
Cd	111	103	1	He	49.938	1.369	125094	0.39	50	99.9	89.5	110.5	
Sn	118	115	1	He	51.525	0.250	305659	0.88	50	103.1	89.5	110.5	
Sb	123	115	1	He	52.043	1.435	284707	0.39	50	104.1	89.5	110.5	
Ba	137	115	1	He	50.554	2.099	135714	1.17	50	101.1	89.5	110.5	
W	182	209	1	He	53.351	0.716	802797	0.46	50	106.7	89.5	110.5	
Tl	205	165	1	He	51.430	0.585	1992819	0.71	50	102.9	89.5	110.5	
Pb	208	209	1	He	49.019	0.570	2533261	0.60	50	98.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1588916	1.94	1631381	97.40	30	120	
Sc	45	1	He	857436	2.90	829696	103.34	30	120	
Sc	45	2	NoGas	6471963	0.51	6325638	102.31	30	120	
Rh	103	1	He	2404170	0.97	2345543	102.50	30	120	
In	115	1	He	1417487	1.08	1419467	99.86	30	120	
Tb	159	1	He	4118013	1.07	3888262	105.91	30	120	
Ho	165	1	He	4221973	0.21	3932562	107.36	30	120	
Bi	209	1	He	2934762	0.26	2874805	102.09	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	039_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:36:50-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.126	33.9	674	31.5	1	
B	11	45	2	NoGas	0.761	15.0	12801	3.8	20	
Na	23	45	1	He	7.745	17.0	36333	3.9	400	
Mg	24	45	1	He	2.829	69.2	3764	49.2	1000	
Al	27	45	1	He	0.589	24.8	2943	1.8	50	
K	39	45	1	He	7.407	51.9	44660	6.0	1000	
Ca	44	45	1	He	2.050	114.6	1093	9.3	1000	
Ti	47	45	1	He	0.340	22.6	112	22.3	20	
V	51	45	1	He	0.027	117.5	297	76.7	2	
Cr	52	45	1	He	0.013	115.9	2647	3.6	2	
Mn	55	45	1	He	0.067	35.5	1662	7.4	2	
Fe	56	45	1	He	26.044	26.3	215263	23.4	50	
Co	59	103	1	He	0.021	33.7	348	28.8	1	
Ni	60	103	1	He	0.017	44.9	199	13.4	2	
Cu	63	103	1	He	0.092	22.5	2699	7.2	2	
Zn	66	103	1	He	-0.006	-784.4	2126	3.4	20	
As	75	103	1	He	0.154	7.6	359	3.7	2	
Se	78	103	1	He	0.215	31.1	83	10.2	2	
Sr	88	103	1	He	0.020	37.6	321	22.7	10	
Mo	95	103	1	He	1.083	20.2	4816	19.8	2	
Ag	107	103	1	He	0.020	27.0	301	26.8	0.2	
Cd	111	103	1	He	0.043	69.5	1447	5.3	0.2	
Sn	118	115	1	He	0.616	10.1	4931	7.2	10	
Sb	123	115	1	He	0.643	16.8	4302	13.9	1	
Ba	137	115	1	He	0.011	111.5	134	26.0	5	
W	182	209	1	He	1.374	13.6	25169	10.4	10	
Tl	205	165	1	He	0.063	22.6	2519	22.8	0.5	
Pb	208	209	1	He	0.135	13.4	8044	11.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1584656	1.66	1631381	97.14	30	120	
Sc	45	1	He	818596	2.51	829696	98.66	30	120	
Sc	45	2	NoGas	6436098	0.60	6325638	101.75	30	120	
Rh	103	1	He	2541409	0.99	2345543	108.35	30	120	
In	115	1	He	1470450	0.55	1419467	103.59	30	120	
Tb	159	1	He	4111614	0.59	3888262	105.74	30	120	
Ho	165	1	He	4241790	1.11	3932562	107.86	30	120	
Bi	209	1	He	3031213	1.04	2874805	105.44	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177401/1-a@2
Data File Name	040_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:40:43-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.095	24.4	489	21.7	1	
B	11	45	2	NoGas	0.939	17.4	12809	3.8	20	
Na	23	45	1	He	34.575	3.6	83269	1.7	400	
Mg	24	45	1	He	14.448	8.0	15333	5.3	1000	
Al	27	45	1	He	1.213	11.7	3291	1.0	50	
K	39	45	1	He	22.417	4.1	58721	1.5	1000	
Ca	44	45	1	He	44.694	3.3	3284	1.0	1000	
Ti	47	45	1	He	0.772	33.7	236	29.5	20	
V	51	45	1	He	0.179	37.5	1392	36.3	2	
Cr	52	45	1	He	0.834	8.3	9714	4.4	2	
Mn	55	45	1	He	0.183	6.0	2451	1.1	2	
Fe	56	45	1	He	21.140	9.1	176403	11.4	50	
Co	59	103	1	He	0.019	18.8	298	16.5	1	
Ni	60	103	1	He	0.151	20.7	628	17.6	2	
Cu	63	103	1	He	0.425	4.4	5424	3.5	2	
Zn	66	103	1	He	2.220	5.8	5887	2.6	20	
As	75	103	1	He	0.208	11.8	401	5.9	2	
Se	78	103	1	He	0.145	83.3	70	18.6	2	
Sr	88	103	1	He	0.184	1.0	1802	2.5	10	
Mo	95	103	1	He	0.466	15.6	1992	14.2	2	
Ag	107	103	1	He	0.017	10.9	248	9.4	0.2	
Cd	111	103	1	He	0.050	20.8	1384	2.5	0.2	
Sn	118	115	1	He	17.459	2.0	102823	2.0	10	Blank Failed
Sb	123	115	1	He	0.431	5.2	2947	4.0	1	
Ba	137	115	1	He	1.541	2.8	4175	2.9	5	
W	182	209	1	He	0.576	5.1	12921	3.2	10	
Tl	205	165	1	He	0.031	21.3	1239	19.5	0.5	
Pb	208	209	1	He	0.277	13.3	15734	13.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1499469	1.90	1631381	91.91	30	120	
Sc	45	1	He	817932	2.59	829696	98.58	30	120	
Sc	45	2	NoGas	6132866	0.70	6325638	96.95	30	120	
Rh	103	1	He	2401990	1.59	2345543	102.41	30	120	
In	115	1	He	1397303	0.17	1419467	98.44	30	120	
Tb	159	1	He	4034218	0.14	3888262	103.75	30	120	
Ho	165	1	He	4111677	1.07	3932562	104.55	30	120	
Bi	209	1	He	3050016	0.68	2874805	106.09	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177401/2-a@2
Data File Name	041LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:44:35-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	453.144	453.144	1.337	2014594	0.37	500	90.6	78.6	110.5	
B	11	2	NoGas	54.649	54.649	1.092	184147	1.44	50	109.3	79.5	120.5	
Na	23	1	He	4907.618	4907.618	1.153	7890802	0.46	5000	98.2	79.5	120.5	
Mg	24	1	He	4962.514	4962.514	1.249	4525113	1.48	5000	99.3	79.5	120.5	
Al	27	1	He	4573.718	4573.718	1.453	2365899	1.26	5000	91.5	79.5	120.5	
K	39	1	He	4858.995	4858.995	0.967	4205354	1.38	5000	97.2	79.5	120.5	
Ca	44	1	He	4520.885	4520.885	1.651	213817	1.12	5000	90.4	79.5	120.5	
Ti	47	1	He	48.176	48.176	5.423	12799	4.83	50	96.4	79.5	120.5	
V	51	1	He	481.105	481.105	1.808	3157920	0.89	500	96.2	71.5	110.5	
Cr	52	1	He	484.358	484.358	0.192	3823921	1.38	500	96.9	69.5	110.5	
Mn	55	1	He	488.898	488.898	0.483	3032408	1.22	500	97.8	79.5	120.5	
Fe	56	1	He	4986.277	4986.277	1.510	37094690	0.18	5000	99.7	79.5	120.5	
Co	59	1	He	453.805	453.805	0.904	5523715	0.69	500	90.8	73.9	110.5	
Ni	60	1	He	452.810	452.810	1.324	1366663	0.71	500	90.6	74.9	110.5	
Cu	63	1	He	464.711	464.711	1.429	3690007	0.75	500	92.9	72.6	110.5	
Zn	66	1	He	424.258	424.258	1.460	681981	0.78	500	84.9	71.5	113.4	
As	75	1	He	411.091	411.091	0.961	424773	0.52	500	82.2	73.4	110.5	
Se	78	1	He	394.947	394.947	1.518	43159	0.90	500	79.0	64.6	110.5	
Sr	88	1	He	451.961	451.961	0.976	3792964	1.04	500	90.4	79.5	120.5	
Mo	95	1	He	51.350	51.350	1.091	195866	0.63	50	102.7	29.5	140.5	
Ag	107	1	He	49.060	49.060	0.804	642660	0.56	50	98.1	59.5	114.5	
Cd	111	1	He	453.196	453.196	1.021	1034231	0.59	500	90.6	73.5	110.5	
Sn	118	1	He	545.338	545.338	0.198	2895987	0.28	500	109.1	79.5	120.5	
Sb	123	1	He	49.515	49.515	0.552	243336	0.36	50	99.0	67.5	113.4	
Ba	137	1	He	481.104	481.104	0.167	1159386	0.40	500	96.2	69.5	110.5	
W	182	1	He	50.561	50.561	0.086	729846	0.42	50	101.1	74.6	125.4	
Tl	205	1	He	121.075	121.075	1.922	4392743	0.80	125	96.9	70.6	110.5	
Pb	208	1	He	472.585	472.585	0.964	23415078	0.94	500	94.5	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1406617	1.06	1631381	86.22	30	120	
Sc	45	1	He	749524	1.55	829696	90.34	30	120	
Sc	45	2	NoGas	5697295	1.27	6325638	90.07	30	120	
Rh	103	1	He	2209962	0.71	2345543	94.22	30	120	
In	115	1	He	1273098	0.24	1419467	89.69	30	120	
Tb	159	1	He	3827680	1.10	3888262	98.44	30	120	
Ho	165	1	He	3953933	1.40	3932562	100.54	30	120	
Bi	209	1	He	2814525	0.43	2874805	97.90	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-f@2
Data File Name	042SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:48:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.666	0.666	1.70	2567	0.03	10000	
B	11	45	2	NoGas	11.367	11.367	3.37	69349	0.02	300	
Na	23	45	1	He	1288.731	1288.731	3.33	3475211	0.04	500000	
Mg	24	45	1	He	2041.489	2041.489	2.67	3100673	0.07	500000	
Al	27	45	1	He	12805.600	12805.600	2.60	11022721	0.12	200000	
K	39	45	1	He	163.193	163.193	3.05	290808	0.06	500000	
Ca	44	45	1	He	627265.669	627265.669	1.78	49208187	1.27	500000	>LDR
Ti	47	45	1	He	35827.838	35827.838	3.22	15832631	0.23	2500	>LDR
V	51	45	1	He	3917.408	3917.408	2.24	42823107	0.01	10000	
Cr	52	45	1	He	1491.578	1491.578	2.53	19597835	0.01	10000	
Mn	55	45	1	He	207.440	207.440	2.24	2143547	0.01	10000	
Fe	56	45	1	He	11695.335	11695.335	3.05	144847079	0.01	200000	
Co	59	103	1	He	2.952	2.952	3.78	29017	0.01	10000	
Ni	60	103	1	He	10.700	10.700	2.18	26140	0.04	10000	
Cu	63	103	1	He	15.099	15.099	3.15	97958	0.02	10000	
Zn	66	103	1	He	254.505	254.505	2.90	330561	0.08	10000	
As	75	103	1	He	5.831	5.831	0.37	4980	0.12	10000	
Se	78	103	1	He	2.344	2.344	9.58	246	0.95	10000	
Sr	88	103	1	He	20871.717	20871.717	1.97	141250043	0.01	10000	>LDR
Mo	95	103	1	He	8.106	8.106	2.15	24968	0.03	2000	
Ag	107	103	1	He	2.255	2.255	4.53	23815	0.01	300	
Cd	111	103	1	He	10.695	10.695	6.48	20582	0.05	4000	
Sn	118	115	1	He	73.720	73.720	0.16	342220	0.02	2000	
Sb	123	115	1	He	7.296	7.296	1.89	31688	0.02	300	
Ba	137	115	1	He	42.099	42.099	1.03	88543	0.05	10000	
W	182	209	1	He	13.468	13.468	0.62	161629	0.01	2500	
Tl	205	165	1	He	0.203	0.203	15.04	6682	0.00	5000	
Pb	208	209	1	He	56.684	56.684	0.43	2303839	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1204775	1.08	1631381	73.85	30	120	
Sc	45	1	He	1249166	6.11	829696	150.56	30	120	ISTD Failed
Sc	45	2	NoGas	8714720	0.87	6325638	137.77	30	120	ISTD Failed
Rh	103	1	He	1781910	1.80	2345543	75.97	30	120	
In	115	1	He	1110403	3.04	1419467	78.23	30	120	
Tb	159	1	He	3432372	1.66	3888262	88.28	30	120	
Ho	165	1	He	3544857	1.77	3932562	90.14	30	120	
Bi	209	1	He	2308090	1.60	2874805	80.29	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-f@10
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:51:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.180	0.180	19.19	682	0.03	10000	
B	11	45	2	NoGas	3.406	3.406	3.01	18970	0.02	300	
Na	23	45	1	He	438.085	438.085	1.24	697485	0.06	500000	
Mg	24	45	1	He	692.214	692.214	0.65	609309	0.11	500000	
Al	27	45	1	He	4420.003	4420.003	0.40	2204429	0.20	200000	
K	39	45	1	He	54.181	54.181	6.47	78209	0.07	500000	
Ca	44	45	1	He	208784.786	208784.786	1.91	9482950	2.20	500000	
Ti	47	45	1	He	11759.639	11759.639	1.54	3009666	0.39	2500	>LDR
V	51	45	1	He	1316.686	1316.686	1.55	8333684	0.02	10000	
Cr	52	45	1	He	510.004	510.004	1.06	3881150	0.01	10000	
Mn	55	45	1	He	69.033	69.033	1.02	413724	0.02	10000	
Fe	56	45	1	He	4026.677	4026.677	1.54	28886869	0.01	200000	
Co	59	103	1	He	0.573	0.573	0.97	5902	0.01	10000	
Ni	60	103	1	He	2.078	2.078	7.63	5375	0.04	10000	
Cu	63	103	1	He	3.074	3.074	1.78	21872	0.01	10000	
Zn	66	103	1	He	54.511	54.511	2.62	75040	0.07	10000	
As	75	103	1	He	0.827	0.827	4.52	847	0.10	10000	
Se	78	103	1	He	0.422	0.422	20.91	80	0.53	10000	
Sr	88	103	1	He	4011.709	4011.709	2.65	28304573	0.01	10000	
Mo	95	103	1	He	1.575	1.575	3.19	5101	0.03	2000	
Ag	107	103	1	He	0.432	0.432	2.76	4765	0.01	300	
Cd	111	103	1	He	1.914	1.914	9.51	4644	0.04	4000	
Sn	118	115	1	He	14.866	14.866	1.67	71271	0.02	2000	
Sb	123	115	1	He	1.507	1.507	0.50	7102	0.02	300	
Ba	137	115	1	He	8.389	8.389	1.95	18110	0.05	10000	
W	182	209	1	He	2.498	2.498	2.84	36002	0.01	2500	
Tl	205	165	1	He	0.031	0.031	2.90	1083	0.00	5000	
Pb	208	209	1	He	11.176	11.176	0.97	505044	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1146923	1.09	1631381	70.30	30	120	
Sc	45	1	He	722584	1.89	829696	87.09	30	120	
Sc	45	2	NoGas	5454702	0.60	6325638	86.23	30	120	
Rh	103	1	He	1858185	1.01	2345543	79.22	30	120	
In	115	1	He	1135417	0.99	1419467	79.99	30	120	
Tb	159	1	He	3504211	0.75	3888262	90.12	30	120	
Ho	165	1	He	3572451	0.74	3932562	90.84	30	120	
Bi	209	1	He	2563411	0.65	2874805	89.17	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111548-a-3-f@10
Data File Name	044SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:55:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.203	0.203	13.36	752	0.03	10000	
B	11	45	2	NoGas	3.472	3.472	6.43	19051	0.02	300	
Na	23	45	1	He	428.245	428.245	0.45	674104	0.06	500000	
Mg	24	45	1	He	685.657	685.657	0.54	596350	0.11	500000	
Al	27	45	1	He	4332.684	4332.684	0.36	2135163	0.20	200000	
K	39	45	1	He	55.802	55.802	2.58	78566	0.07	500000	
Ca	44	45	1	He	206908.499	206908.499	1.38	9283216	2.23	500000	
Ti	47	45	1	He	11736.590	11736.590	0.76	2968225	0.40	2500	>LDR
V	51	45	1	He	1317.782	1317.782	0.48	8240415	0.02	10000	
Cr	52	45	1	He	507.289	507.289	0.81	3814775	0.01	10000	
Mn	55	45	1	He	67.990	67.990	0.60	402621	0.02	10000	
Fe	56	45	1	He	3979.695	3979.695	1.20	28204631	0.01	200000	
Co	59	103	1	He	0.545	0.545	1.43	5495	0.01	10000	
Ni	60	103	1	He	2.080	2.080	3.54	5259	0.04	10000	
Cu	63	103	1	He	3.075	3.075	2.96	21391	0.01	10000	
Zn	66	103	1	He	55.408	55.408	1.15	74552	0.07	10000	
As	75	103	1	He	0.748	0.748	0.12	762	0.10	10000	
Se	78	103	1	He	0.367	0.367	4.60	73	0.50	10000	
Sr	88	103	1	He	4000.519	4000.519	1.80	27597874	0.01	10000	
Mo	95	103	1	He	1.502	1.502	0.76	4757	0.03	2000	
Ag	107	103	1	He	0.481	0.481	4.74	5184	0.01	300	
Cd	111	103	1	He	2.334	2.334	3.08	5327	0.04	4000	
Sn	118	115	1	He	14.546	14.546	0.35	69037	0.02	2000	
Sb	123	115	1	He	1.489	1.489	2.34	6950	0.02	300	
Ba	137	115	1	He	8.485	8.485	3.12	18124	0.05	10000	
W	182	209	1	He	2.438	2.438	1.53	34920	0.01	2500	
Tl	205	165	1	He	0.029	0.029	9.72	992	0.00	5000	
Pb	208	209	1	He	11.098	11.098	1.30	497148	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1121344	1.59	1631381	68.74	30	120	
Sc	45	1	He	713962	1.03	829696	86.05	30	120	
Sc	45	2	NoGas	5419189	1.03	6325638	85.67	30	120	
Rh	103	1	He	1816859	0.96	2345543	77.46	30	120	
In	115	1	He	1123650	0.30	1419467	79.16	30	120	
Tb	159	1	He	3472601	0.90	3888262	89.31	30	120	
Ho	165	1	He	3538501	0.63	3932562	89.98	30	120	
Bi	209	1	He	2541337	1.23	2874805	88.40	30	120	

Sample Report

Sample Table

Sample Name	SD 680-111548-a-3-f@50
Data File Name	045SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T12:59:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.100	0.100	3.93	407	0.02	10000	
B	11	45	2	NoGas	0.561	0.561	21.65	9484	0.01	300	
Na	23	45	1	He	102.825	102.825	2.75	163172	0.06	500000	
Mg	24	45	1	He	159.628	159.628	1.44	128623	0.12	500000	
Al	27	45	1	He	1025.745	1025.745	1.07	467716	0.22	200000	
K	39	45	1	He	15.751	15.751	9.01	42250	0.04	500000	
Ca	44	45	1	He	49445.845	49445.845	0.67	2046499	2.42	500000	
Ti	47	45	1	He	2704.285	2704.285	1.39	630640	0.43	2500	>LDR
V	51	45	1	He	314.254	314.254	2.12	1812167	0.02	10000	
Cr	52	45	1	He	119.258	119.258	1.80	828523	0.01	10000	
Mn	55	45	1	He	16.095	16.095	1.63	88631	0.02	10000	
Fe	56	45	1	He	946.644	946.644	0.89	6189826	0.02	200000	
Co	59	103	1	He	0.108	0.108	5.07	1225	0.01	10000	
Ni	60	103	1	He	0.409	0.409	13.14	1221	0.03	10000	
Cu	63	103	1	He	0.594	0.594	6.92	5711	0.01	10000	
Zn	66	103	1	He	11.191	11.191	4.55	17851	0.06	10000	
As	75	103	1	He	0.131	0.131	14.56	261	0.05	10000	
Se	78	103	1	He	0.068	0.068	89.51	51	0.13	10000	
Sr	88	103	1	He	792.054	792.054	1.12	5993459	0.01	10000	
Mo	95	103	1	He	0.317	0.317	8.91	1141	0.03	2000	
Ag	107	103	1	He	0.088	0.088	6.56	1040	0.01	300	
Cd	111	103	1	He	0.445	0.445	23.18	1960	0.02	4000	
Sn	118	115	1	He	2.891	2.891	6.35	15345	0.02	2000	
Sb	123	115	1	He	0.294	0.294	9.19	1889	0.02	300	
Ba	137	115	1	He	1.717	1.717	3.37	3969	0.04	10000	
W	182	209	1	He	0.470	0.470	7.82	10115	0.00	2500	
Tl	205	165	1	He	0.008	0.008	18.93	323	0.00	5000	
Pb	208	209	1	He	2.219	2.219	1.69	107652	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1188793	0.72	1631381	72.87	30	120	
Sc	45	1	He	658377	0.99	829696	79.35	30	120	
Sc	45	2	NoGas	5055722	1.21	6325638	79.92	30	120	
Rh	103	1	He	1992622	0.75	2345543	84.95	30	120	
In	115	1	He	1195320	0.32	1419467	84.21	30	120	
Tb	159	1	He	3525348	0.74	3888262	90.67	30	120	
Ho	165	1	He	3666834	0.76	3932562	93.24	30	120	
Bi	209	1	He	2736470	0.56	2874805	95.19	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111548-a-3-f@2
Data File Name	046SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:03:13-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	885.722	885.722	1.33	2962162	0.03	10000	
B	11	45	2	NoGas	69.015	69.015	0.90	314445	0.02	300	
Na	23	45	1	He	6952.876	6952.876	1.13	15153396	0.05	500000	
Mg	24	45	1	He	7568.957	7568.957	0.75	9361395	0.08	500000	
Al	27	45	1	He	18172.773	18172.773	0.44	12742383	0.14	200000	
K	39	45	1	He	5788.973	5788.973	0.18	6787228	0.09	500000	
Ca	44	45	1	He	645090.975	645090.975	1.32	41214669	1.57	500000	>LDR
Ti	47	45	1	He	36017.411	36017.411	0.72	12970562	0.28	2500	>LDR
V	51	45	1	He	4561.240	4561.240	0.50	40615610	0.01	10000	
Cr	52	45	1	He	2067.685	2067.685	0.99	22132272	0.01	10000	
Mn	55	45	1	He	758.062	758.062	0.87	6377200	0.01	10000	
Fe	56	45	1	He	17651.345	17651.345	1.08	178131811	0.01	200000	
Co	59	103	1	He	927.409	927.409	0.76	8106045	0.01	10000	
Ni	60	103	1	He	930.592	930.592	0.87	2016873	0.05	10000	
Cu	63	103	1	He	898.380	898.380	1.05	5121518	0.02	10000	
Zn	66	103	1	He	1050.484	1050.484	0.70	1210654	0.09	10000	
As	75	103	1	He	983.440	983.440	1.04	729544	0.13	10000	
Se	78	103	1	He	1003.230	1003.230	0.76	78673	1.28	10000	
Sr	88	103	1	He	21312.814	21312.814	1.00	128430502	0.02	10000	>LDR
Mo	95	103	1	He	121.144	121.144	0.70	331757	0.04	2000	
Ag	107	103	1	He	97.413	97.413	0.88	916303	0.01	300	
Cd	111	103	1	He	960.480	960.480	0.23	1573077	0.06	4000	
Sn	118	115	1	He	1160.185	1160.185	0.50	4733738	0.02	2000	
Sb	123	115	1	He	111.073	111.073	1.08	418921	0.03	300	
Ba	137	115	1	He	1154.521	1154.521	1.33	2137855	0.05	10000	
W	182	209	1	He	121.488	121.488	1.60	1370819	0.01	2500	
Tl	205	165	1	He	240.722	240.722	0.59	7258805	0.00	5000	
Pb	208	209	1	He	1042.633	1042.633	1.46	40498355	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058146	1.23	1631381	64.86	30	120	
Sc	45	1	He	1016651	0.35	829696	122.53	30	120	ISTD Failed
Sc	45	2	NoGas	7781518	1.37	6325638	123.02	30	120	ISTD Failed
Rh	103	1	He	1586918	0.78	2345543	67.66	30	120	
In	115	1	He	978343	0.57	1419467	68.92	30	120	
Tb	159	1	He	3180107	0.80	3888262	81.79	30	120	
Ho	165	1	He	3285769	0.69	3932562	83.55	30	120	
Bi	209	1	He	2206758	1.30	2874805	76.76	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-111548-a-3-f@10
Data File Name	047SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:06:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	951.980	951.980	1.24	3355818	0.03	10000	
B	11	45	2	NoGas	97.444	97.444	0.87	304710	0.03	300	
Na	23	45	1	He	9370.901	9370.901	1.26	13817617	0.07	500000	
Mg	24	45	1	He	9630.059	9630.059	0.56	8062326	0.12	500000	
Al	27	45	1	He	12497.130	12497.130	1.35	5931842	0.21	200000	
K	39	45	1	He	8939.639	8939.639	0.18	7077482	0.13	500000	
Ca	44	45	1	He	215273.892	215273.892	1.10	9310339	2.31	500000	
Ti	47	45	1	He	11903.511	11903.511	0.80	2901633	0.41	2500	>LDR
V	51	45	1	He	2213.193	2213.193	1.37	13339157	0.02	10000	
Cr	52	45	1	He	1397.691	1397.691	1.75	10126749	0.01	10000	
Mn	55	45	1	He	962.364	962.364	1.33	5479516	0.02	10000	
Fe	56	45	1	He	13100.949	13100.949	0.50	89491139	0.01	200000	
Co	59	103	1	He	915.088	915.088	1.17	9098566	0.01	10000	
Ni	60	103	1	He	923.263	923.263	1.19	2276315	0.04	10000	
Cu	63	103	1	He	911.174	911.174	1.45	5909071	0.02	10000	
Zn	66	103	1	He	930.270	930.270	0.93	1219766	0.08	10000	
As	75	103	1	He	937.493	937.493	0.86	791144	0.12	10000	
Se	78	103	1	He	927.322	927.322	0.68	82728	1.12	10000	
Sr	88	103	1	He	4873.892	4873.892	0.16	33411421	0.01	10000	
Mo	95	103	1	He	108.893	108.893	0.88	339245	0.03	2000	
Ag	107	103	1	He	98.838	98.838	0.58	1057615	0.01	300	
Cd	111	103	1	He	1026.436	1026.436	0.61	1912319	0.05	4000	
Sn	118	115	1	He	1137.929	1137.929	1.30	5082754	0.02	2000	
Sb	123	115	1	He	109.274	109.274	0.10	451214	0.02	300	
Ba	137	115	1	He	1126.268	1126.268	0.99	2283242	0.05	10000	
W	182	209	1	He	109.400	109.400	2.51	1397598	0.01	2500	
Tl	205	165	1	He	252.634	252.634	1.71	8327219	0.00	5000	
Pb	208	209	1	He	1011.672	1011.672	0.70	44483087	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1115299	0.99	1631381	68.37	30	120	
Sc	45	1	He	688176	0.68	829696	82.94	30	120	
Sc	45	2	NoGas	5401492	0.15	6325638	85.39	30	120	
Rh	103	1	He	1805234	0.34	2345543	76.96	30	120	
In	115	1	He	1071059	0.69	1419467	75.46	30	120	
Tb	159	1	He	3476813	1.00	3888262	89.42	30	120	
Ho	165	1	He	3591755	0.46	3932562	91.33	30	120	
Bi	209	1	He	2497770	0.41	2874805	86.88	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-g ms@2
Data File Name	048SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:10:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	433.651	433.651	3.71	1424826	0.03	10000	
B	11	45	2	NoGas	38.211	38.211	1.14	175321	0.02	300	
Na	23	45	1	He	4029.731	4029.731	0.19	8532320	0.05	500000	
Mg	24	45	1	He	4704.157	4704.157	0.64	5645178	0.08	500000	
Al	27	45	1	He	15045.638	15045.638	0.55	10235512	0.15	200000	
K	39	45	1	He	2813.435	2813.435	0.75	3223397	0.09	500000	
Ca	44	45	1	He	751017.261	751017.261	1.20	46554511	1.61	500000	>LDR
Ti	47	45	1	He	35464.393	35464.393	0.85	12390698	0.29	2500	>LDR
V	51	45	1	He	4169.737	4169.737	1.17	36024658	0.01	10000	
Cr	52	45	1	He	1764.151	1764.151	0.16	18320285	0.01	10000	
Mn	55	45	1	He	470.093	470.093	0.99	3837414	0.01	10000	
Fe	56	45	1	He	14410.874	14410.874	0.69	141096786	0.01	200000	
Co	59	103	1	He	460.151	460.151	2.52	3866191	0.01	10000	
Ni	60	103	1	He	445.795	445.795	1.74	928916	0.05	10000	
Cu	63	103	1	He	453.702	453.702	0.72	2487652	0.02	10000	
Zn	66	103	1	He	629.667	629.667	2.14	698108	0.09	10000	
As	75	103	1	He	443.534	443.534	2.45	316348	0.14	10000	
Se	78	103	1	He	481.256	481.256	1.81	36301	1.33	10000	
Sr	88	103	1	He	25531.644	25531.644	1.87	147908674	0.02	10000	>LDR
Mo	95	103	1	He	60.487	60.487	3.18	159228	0.04	2000	
Ag	107	103	1	He	48.402	48.402	2.60	437630	0.01	300	
Cd	111	103	1	He	458.243	458.243	2.43	721840	0.06	4000	
Sn	118	115	1	He	602.545	602.545	2.01	2425054	0.02	2000	
Sb	123	115	1	He	47.124	47.124	1.45	175537	0.03	300	
Ba	137	115	1	He	521.558	521.558	0.55	952560	0.05	10000	
W	182	209	1	He	32.713	32.713	1.78	357500	0.01	2500	
Tl	205	165	1	He	115.455	115.455	1.67	3453302	0.00	5000	
Pb	208	209	1	He	536.378	536.378	0.78	20064800	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1039733	1.09	1631381	63.73	30	120	
Sc	45	1	He	986322	1.14	829696	118.88	30	120	
Sc	45	2	NoGas	7599650	0.28	6325638	120.14	30	120	ISTD Failed
Rh	103	1	He	1526114	2.94	2345543	65.06	30	120	
In	115	1	He	964856	0.38	1419467	67.97	30	120	
Tb	159	1	He	3097678	1.47	3888262	79.67	30	120	
Ho	165	1	He	3259425	0.88	3932562	82.88	30	120	
Bi	209	1	He	2125018	0.50	2874805	73.92	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-g ms@10
Data File Name	049SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:13:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	91.817	91.817	0.12	305130	0.03	10000	
B	11	45	2	NoGas	11.872	11.872	1.80	41700	0.03	300	
Na	23	45	1	He	1311.034	1311.034	1.12	1845225	0.07	500000	
Mg	24	45	1	He	1516.321	1516.321	0.79	1202077	0.13	500000	
Al	27	45	1	He	4867.719	4867.719	1.34	2188078	0.22	200000	
K	39	45	1	He	884.418	884.418	0.73	689737	0.13	500000	
Ca	44	45	1	He	236027.661	236027.661	0.79	9660960	2.44	500000	
Ti	47	45	1	He	11326.901	11326.901	0.84	2613114	0.43	2500	>LDR
V	51	45	1	He	1344.177	1344.177	0.18	7667807	0.02	10000	
Cr	52	45	1	He	578.697	578.697	1.72	3969602	0.01	10000	
Mn	55	45	1	He	149.851	149.851	0.60	808347	0.02	10000	
Fe	56	45	1	He	4680.847	4680.847	1.85	30263953	0.02	200000	
Co	59	103	1	He	87.498	87.498	0.88	844856	0.01	10000	
Ni	60	103	1	He	87.247	87.247	0.64	208980	0.04	10000	
Cu	63	103	1	He	88.378	88.378	0.82	557732	0.02	10000	
Zn	66	103	1	He	132.823	132.823	2.23	170381	0.08	10000	
As	75	103	1	He	81.341	81.341	0.95	66769	0.12	10000	
Se	78	103	1	He	84.652	84.652	0.87	7369	1.15	10000	
Sr	88	103	1	He	4777.933	4777.933	1.08	31806961	0.02	10000	
Mo	95	103	1	He	10.896	10.896	1.98	33003	0.03	2000	
Ag	107	103	1	He	9.834	9.834	1.02	102204	0.01	300	
Cd	111	103	1	He	94.776	94.776	1.34	172291	0.06	4000	
Sn	118	115	1	He	113.216	113.216	1.22	501300	0.02	2000	
Sb	123	115	1	He	9.578	9.578	1.30	39579	0.02	300	
Ba	137	115	1	He	103.079	103.079	1.33	206910	0.05	10000	
W	182	209	1	He	5.921	5.921	4.30	77328	0.01	2500	
Tl	205	165	1	He	23.377	23.377	1.93	732365	0.00	5000	
Pb	208	209	1	He	105.290	105.290	0.71	4548365	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1051272	0.46	1631381	64.44	30	120	
Sc	45	1	He	651294	0.10	829696	78.50	30	120	
Sc	45	2	NoGas	5059076	0.36	6325638	79.98	30	120	
Rh	103	1	He	1753075	1.02	2345543	74.74	30	120	
In	115	1	He	1060148	0.55	1419467	74.69	30	120	
Tb	159	1	He	3355930	2.04	3888262	86.31	30	120	
Ho	165	1	He	3413809	0.88	3932562	86.81	30	120	
Bi	209	1	He	2453706	1.08	2874805	85.35	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	050_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:17:37-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.316	2.766	166051	1.71	50	92.6	89.5	110.5	
B	11	45	2	NoGas	48.314	0.363	136198	1.27	50	96.6	89.5	110.5	
Na	23	45	1	He	26464.165	2.965	33522336	1.74	25000	105.9	89.5	110.5	
Mg	24	45	1	He	26185.797	1.906	18849422	0.69	25000	104.7	89.5	110.5	
Al	27	45	1	He	251.419	2.266	104469	1.13	250	100.6	89.5	110.5	
K	39	45	1	He	26218.004	1.304	17796272	0.39	25000	104.9	89.5	110.5	
Ca	44	45	1	He	26006.449	1.507	967827	0.47	25000	104.0	89.5	110.5	
Ti	47	45	1	He	86.819	5.768	18201	4.53	50	173.6	89.5	110.5	CCV Failed
V	51	45	1	He	53.156	1.547	275596	1.23	50	106.3	89.5	110.5	
Cr	52	45	1	He	53.730	1.788	336543	0.93	50	107.5	89.5	110.5	
Mn	55	45	1	He	264.086	2.324	1293605	1.11	250	105.6	89.5	110.5	
Fe	56	45	1	He	13428.787	1.955	78878939	0.96	12500	107.4	89.5	110.5	
Co	59	103	1	He	45.907	0.611	473799	0.72	50	91.8	89.5	110.5	
Ni	60	103	1	He	45.477	1.376	116471	1.47	50	91.0	89.5	110.5	
Cu	63	103	1	He	46.707	1.016	315687	1.12	50	93.4	89.5	110.5	
Zn	66	103	1	He	46.508	1.213	64791	1.09	50	93.0	89.5	110.5	
As	75	103	1	He	46.260	0.451	40643	0.50	50	92.5	89.5	110.5	
Se	78	103	1	He	46.403	1.204	4336	1.12	50	92.8	89.5	110.5	
Sr	88	103	1	He	47.273	0.541	336446	0.63	50	94.5	89.5	110.5	
Mo	95	103	1	He	50.502	0.971	163322	0.90	50	101.0	89.5	110.5	
Ag	107	103	1	He	50.289	0.889	558532	0.99	50	100.6	89.5	110.5	
Cd	111	103	1	He	51.409	1.218	100344	1.31	50	102.8	89.5	110.5	
Sn	118	115	1	He	51.639	1.072	241909	0.74	50	103.3	89.5	110.5	
Sb	123	115	1	He	52.449	0.317	226608	0.30	50	104.9	89.5	110.5	
Ba	137	115	1	He	51.584	0.365	109372	0.61	50	103.2	89.5	110.5	
W	182	209	1	He	51.261	1.268	668471	0.63	50	102.5	89.5	110.5	
Tl	205	165	1	He	50.414	2.136	1654230	2.43	50	100.8	89.5	110.5	
Pb	208	209	1	He	48.659	1.858	2178741	1.25	50	97.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1134300	1.51	1631381	69.53	30	120	
Sc	45	1	He	591835	1.20	829696	71.33	30	120	
Sc	45	2	NoGas	4736464	1.61	6325638	74.88	30	120	
Rh	103	1	He	1873655	0.11	2345543	79.88	30	120	
In	115	1	He	1119411	0.61	1419467	78.86	30	120	
Tb	159	1	He	3469285	0.45	3888262	89.22	30	120	
Ho	165	1	He	3575100	0.32	3932562	90.91	30	120	
Bi	209	1	He	2543000	1.13	2874805	88.46	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	051_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:21:28-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.150	11.2	567	11.9	1	
B	11	45	2	NoGas	0.457	40.1	8551	5.7	20	
Na	23	45	1	He	11.287	20.8	32430	9.2	400	
Mg	24	45	1	He	2.240	61.8	2441	42.5	1000	
Al	27	45	1	He	1.180	18.0	2497	3.6	50	
K	39	45	1	He	8.322	17.7	34716	2.6	1000	
Ca	44	45	1	He	19.311	11.1	1510	5.0	1000	
Ti	47	45	1	He	4.179	6.5	933	6.6	20	
V	51	45	1	He	0.139	39.8	837	36.0	2	
Cr	52	45	1	He	0.027	93.5	2112	8.3	2	
Mn	55	45	1	He	0.092	47.1	1398	15.7	2	
Fe	56	45	1	He	15.093	20.2	96845	19.2	50	
Co	59	103	1	He	0.014	33.6	197	26.9	1	
Ni	60	103	1	He	0.000	-2075.8	111	4.6	2	
Cu	63	103	1	He	0.135	13.2	2466	6.5	2	
Zn	66	103	1	He	-0.007	-1062.6	1696	6.2	20	
As	75	103	1	He	0.214	5.5	344	2.3	2	
Se	78	103	1	He	0.126	53.6	57	10.5	2	
Sr	88	103	1	He	0.265	6.8	2140	6.6	10	
Mo	95	103	1	He	0.925	16.0	3291	16.4	2	
Ag	107	103	1	He	0.015	9.9	190	10.7	0.2	
Cd	111	103	1	He	0.010	238.8	1085	3.6	0.2	
Sn	118	115	1	He	0.535	17.3	3560	13.1	10	
Sb	123	115	1	He	0.539	17.0	2981	13.9	1	
Ba	137	115	1	He	0.009	14.4	103	3.2	5	
W	182	209	1	He	1.156	7.9	19331	7.2	10	
Tl	205	165	1	He	0.047	24.7	1621	24.2	0.5	
Pb	208	209	1	He	0.129	5.9	6835	6.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1130581	1.69	1631381	69.30	30	120	
Sc	45	1	He	623699	0.59	829696	75.17	30	120	
Sc	45	2	NoGas	4705370	1.81	6325638	74.39	30	120	
Rh	103	1	He	2027114	1.30	2345543	86.42	30	120	
In	115	1	He	1179723	0.42	1419467	83.11	30	120	
Tb	159	1	He	3521407	0.64	3888262	90.57	30	120	
Ho	165	1	He	3604970	0.48	3932562	91.67	30	120	
Bi	209	1	He	2684585	1.09	2874805	93.38	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-h msd@2
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:25:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	416.847	416.847	2.27	1273261	0.03	10000	
B	11	45	2	NoGas	37.734	37.734	0.82	156073	0.02	300	
Na	23	45	1	He	4019.982	4019.982	0.97	7987329	0.05	500000	
Mg	24	45	1	He	4578.684	4578.684	0.97	5155948	0.09	500000	
Al	27	45	1	He	14589.844	14589.844	1.35	9312747	0.16	200000	
K	39	45	1	He	2875.467	2875.467	1.04	3090683	0.09	500000	
Ca	44	45	1	He	731043.754	731043.754	0.66	42524349	1.72	500000	>LDR
Ti	47	45	1	He	33614.900	33614.900	0.87	11020605	0.31	2500	>LDR
V	51	45	1	He	4019.866	4019.866	1.38	32584473	0.01	10000	
Cr	52	45	1	He	1698.176	1698.176	1.40	16546288	0.01	10000	
Mn	55	45	1	He	462.137	462.137	1.02	3539938	0.01	10000	
Fe	56	45	1	He	14157.359	14157.359	1.24	130055404	0.01	200000	
Co	59	103	1	He	436.348	436.348	2.14	3572227	0.01	10000	
Ni	60	103	1	He	423.719	423.719	1.76	860096	0.05	10000	
Cu	63	103	1	He	440.609	440.609	0.50	2353765	0.02	10000	
Zn	66	103	1	He	604.455	604.455	1.49	653000	0.09	10000	
As	75	103	1	He	431.530	431.530	2.04	299876	0.14	10000	
Se	78	103	1	He	471.754	471.754	1.97	34677	1.36	10000	
Sr	88	103	1	He	24823.933	24823.933	2.15	140104048	0.02	10000	>LDR
Mo	95	103	1	He	55.723	55.723	2.21	142921	0.04	2000	
Ag	107	103	1	He	48.281	48.281	3.10	425174	0.01	300	
Cd	111	103	1	He	454.215	454.215	2.24	696979	0.07	4000	
Sn	118	115	1	He	582.421	582.421	2.56	2297895	0.03	2000	
Sb	123	115	1	He	43.680	43.680	1.35	159533	0.03	300	
Ba	137	115	1	He	509.142	509.142	0.83	911441	0.06	10000	
W	182	209	1	He	25.032	25.032	3.59	281282	0.01	2500	
Tl	205	165	1	He	113.889	113.889	1.86	3351303	0.00	5000	
Pb	208	209	1	He	506.280	506.280	0.95	19437383	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	966716	2.65	1631381	59.26	30	120	
Sc	45	1	He	925762	4.03	829696	111.58	30	120	
Sc	45	2	NoGas	6844933	0.59	6325638	108.21	30	120	
Rh	103	1	He	1486870	4.40	2345543	63.39	30	120	
In	115	1	He	945721	1.47	1419467	66.63	30	120	
Tb	159	1	He	3083958	0.92	3888262	79.31	30	120	
Ho	165	1	He	3206363	2.25	3932562	81.53	30	120	
Bi	209	1	He	2181117	2.51	2874805	75.87	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-3-h msd@10
Data File Name	053SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:28:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	88.695	88.695	2.98	267076	0.03	10000	
B	11	45	2	NoGas	11.246	11.246	3.18	36392	0.03	300	
Na	23	45	1	He	1268.724	1268.724	0.95	1666460	0.08	500000	
Mg	24	45	1	He	1449.000	1449.000	0.84	1071670	0.14	500000	
Al	27	45	1	He	4540.172	4540.172	0.56	1904097	0.24	200000	
K	39	45	1	He	867.372	867.372	0.96	631593	0.14	500000	
Ca	44	45	1	He	223425.072	223425.072	0.88	8531957	2.62	500000	
Ti	47	45	1	He	10493.271	10493.271	1.10	2258508	0.46	2500	>LDR
V	51	45	1	He	1255.190	1255.190	0.31	6679902	0.02	10000	
Cr	52	45	1	He	536.892	536.892	1.01	3435906	0.02	10000	
Mn	55	45	1	He	142.915	142.915	0.30	719262	0.02	10000	
Fe	56	45	1	He	4480.036	4480.036	0.20	27022395	0.02	200000	
Co	59	103	1	He	82.834	82.834	1.91	761268	0.01	10000	
Ni	60	103	1	He	82.657	82.657	1.30	188448	0.04	10000	
Cu	63	103	1	He	83.856	83.856	1.85	503747	0.02	10000	
Zn	66	103	1	He	125.948	125.948	0.97	153859	0.08	10000	
As	75	103	1	He	77.918	77.918	1.74	60882	0.13	10000	
Se	78	103	1	He	81.291	81.291	1.42	6737	1.21	10000	
Sr	88	103	1	He	4541.335	4541.335	2.34	28772100	0.02	10000	
Mo	95	103	1	He	10.182	10.182	1.41	29359	0.03	2000	
Ag	107	103	1	He	9.654	9.654	2.74	95469	0.01	300	
Cd	111	103	1	He	92.506	92.506	0.58	160100	0.06	4000	
Sn	118	115	1	He	108.764	108.764	1.45	459475	0.02	2000	
Sb	123	115	1	He	9.035	9.035	1.15	35647	0.03	300	
Ba	137	115	1	He	100.295	100.295	0.06	192062	0.05	10000	
W	182	209	1	He	4.772	4.772	4.41	61868	0.01	2500	
Tl	205	165	1	He	22.812	22.812	0.86	698792	0.00	5000	
Pb	208	209	1	He	101.853	101.853	0.78	4326021	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	953022	2.50	1631381	58.42	30	120	
Sc	45	1	He	607607	0.62	829696	73.23	30	120	
Sc	45	2	NoGas	4612348	0.43	6325638	72.92	30	120	
Rh	103	1	He	1668709	1.25	2345543	71.14	30	120	
In	115	1	He	1011366	0.28	1419467	71.25	30	120	
Tb	159	1	He	3200709	0.38	3888262	82.32	30	120	
Ho	165	1	He	3337453	0.65	3932562	84.87	30	120	
Bi	209	1	He	2412362	0.64	2874805	83.91	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-2-m@2
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:32:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.796	0.796	6.24	2393	0.03	10000	
B	11	45	2	NoGas	9.840	9.840	1.03	51353	0.02	300	
Na	23	45	1	He	1126.450	1126.450	2.11	2347899	0.05	500000	
Mg	24	45	1	He	2156.655	2156.655	0.62	2527392	0.09	500000	
Al	27	45	1	He	13397.916	13397.916	0.33	8898909	0.15	200000	
K	39	45	1	He	119.730	119.730	1.83	176472	0.07	500000	
Ca	44	45	1	He	597025.936	597025.936	0.77	36127337	1.65	500000	>LDR
Ti	47	45	1	He	36222.513	36222.513	0.45	12354940	0.29	2500	>LDR
V	51	45	1	He	4227.223	4227.223	0.94	35654166	0.01	10000	
Cr	52	45	1	He	1644.138	1644.138	0.51	16669693	0.01	10000	
Mn	55	45	1	He	249.901	249.901	1.57	1992141	0.01	10000	
Fe	56	45	1	He	12689.603	12689.603	0.29	121292066	0.01	200000	
Co	59	103	1	He	3.364	3.364	1.95	26711	0.01	10000	
Ni	60	103	1	He	11.666	11.666	2.62	23020	0.05	10000	
Cu	63	103	1	He	15.798	15.798	1.25	82761	0.02	10000	
Zn	66	103	1	He	233.855	233.855	1.56	245507	0.10	10000	
As	75	103	1	He	5.108	5.108	1.84	3539	0.14	10000	
Se	78	103	1	He	1.902	1.902	9.47	167	1.14	10000	
Sr	88	103	1	He	19552.016	19552.016	0.57	106917665	0.02	10000	>LDR
Mo	95	103	1	He	10.103	10.103	1.41	25141	0.04	2000	
Ag	107	103	1	He	2.944	2.944	1.27	25135	0.01	300	
Cd	111	103	1	He	13.981	13.981	1.14	21525	0.06	4000	
Sn	118	115	1	He	69.758	69.758	0.63	272983	0.03	2000	
Sb	123	115	1	He	3.945	3.945	2.82	14640	0.03	300	
Ba	137	115	1	He	40.314	40.314	1.07	71484	0.06	10000	
W	182	209	1	He	13.940	13.940	1.69	152046	0.01	2500	
Tl	205	165	1	He	0.168	0.168	13.86	4894	0.00	5000	
Pb	208	209	1	He	63.705	63.705	1.53	2354621	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	941255	2.02	1631381	57.70	30	120	
Sc	45	1	He	962941	0.79	829696	116.06	30	120	
Sc	45	2	NoGas	7233774	0.32	6325638	114.36	30	120	
Rh	103	1	He	1440059	0.63	2345543	61.40	30	120	
In	115	1	He	935957	0.33	1419467	65.94	30	120	
Tb	159	1	He	3023583	1.00	3888262	77.76	30	120	
Ho	165	1	He	3136470	0.55	3932562	79.76	30	120	
Bi	209	1	He	2099492	1.62	2874805	73.03	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-2-m@10
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:36:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.231	0.231	12.67	733	0.03	10000	
B	11	45	2	NoGas	3.181	3.181	5.78	16137	0.02	300	
Na	23	45	1	He	371.997	371.997	1.06	516018	0.07	500000	
Mg	24	45	1	He	719.202	719.202	0.86	548726	0.13	500000	
Al	27	45	1	He	4601.563	4601.563	0.90	1989493	0.23	200000	
K	39	45	1	He	41.116	41.116	1.54	58394	0.07	500000	
Ca	44	45	1	He	196124.997	196124.997	2.03	7720196	2.54	500000	
Ti	47	45	1	He	12112.861	12112.861	0.58	2687487	0.45	2500	>LDR
V	51	45	1	He	1415.118	1415.118	1.44	7763212	0.02	10000	
Cr	52	45	1	He	554.291	554.291	1.28	3656661	0.02	10000	
Mn	55	45	1	He	80.500	80.500	1.51	418048	0.02	10000	
Fe	56	45	1	He	4282.885	4282.885	1.50	26630751	0.02	200000	
Co	59	103	1	He	0.634	0.634	0.85	5881	0.01	10000	
Ni	60	103	1	He	2.230	2.230	0.33	5193	0.04	10000	
Cu	63	103	1	He	3.123	3.123	1.42	20010	0.02	10000	
Zn	66	103	1	He	48.789	48.789	0.52	60698	0.08	10000	
As	75	103	1	He	0.784	0.784	4.93	731	0.11	10000	
Se	78	103	1	He	0.197	0.197	23.02	53	0.37	10000	
Sr	88	103	1	He	3631.053	3631.053	0.35	23097638	0.02	10000	
Mo	95	103	1	He	1.852	1.852	3.23	5398	0.03	2000	
Ag	107	103	1	He	0.517	0.517	1.55	5135	0.01	300	
Cd	111	103	1	He	2.293	2.293	3.89	4843	0.05	4000	
Sn	118	115	1	He	14.092	14.092	3.60	61088	0.02	2000	
Sb	123	115	1	He	0.787	0.787	7.76	3569	0.02	300	
Ba	137	115	1	He	7.974	7.974	0.78	15556	0.05	10000	
W	182	209	1	He	2.591	2.591	1.16	34924	0.01	2500	
Tl	205	165	1	He	0.030	0.030	3.64	993	0.00	5000	
Pb	208	209	1	He	12.666	12.666	1.75	536949	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	968366	1.47	1631381	59.36	30	120	
Sc	45	1	He	626393	0.93	829696	75.50	30	120	
Sc	45	2	NoGas	4816530	0.84	6325638	76.14	30	120	
Rh	103	1	He	1675155	0.80	2345543	71.42	30	120	
In	115	1	He	1025878	0.46	1419467	72.27	30	120	
Tb	159	1	He	3257259	0.84	3888262	83.77	30	120	
Ho	165	1	He	3362131	0.47	3932562	85.49	30	120	
Bi	209	1	He	2405484	0.83	2874805	83.67	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-4-e@2
Data File Name	056SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:40:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.585	0.585	4.91	1674	0.03	10000	
B	11	45	2	NoGas	9.821	9.821	3.53	44866	0.02	300	
Na	23	45	1	He	1250.320	1250.320	0.17	2275806	0.05	500000	
Mg	24	45	1	He	1740.707	1740.707	0.93	1783505	0.10	500000	
Al	27	45	1	He	12192.726	12192.726	0.91	7079965	0.17	200000	
K	39	45	1	He	127.481	127.481	1.05	161761	0.08	500000	
Ca	44	45	1	He	659958.412	659958.412	0.91	34916626	1.89	500000	>LDR
Ti	47	45	1	He	30302.037	30302.037	0.72	9036406	0.34	2500	>LDR
V	51	45	1	He	3675.640	3675.640	0.91	27103217	0.01	10000	
Cr	52	45	1	He	1396.259	1396.259	0.40	12376696	0.01	10000	
Mn	55	45	1	He	149.666	149.666	0.43	1043580	0.01	10000	
Fe	56	45	1	He	9521.752	9521.752	0.30	79571064	0.01	200000	
Co	59	103	1	He	2.143	2.143	1.05	16543	0.01	10000	
Ni	60	103	1	He	7.938	7.938	2.51	15240	0.05	10000	
Cu	63	103	1	He	8.819	8.819	1.30	45332	0.02	10000	
Zn	66	103	1	He	175.877	175.877	0.96	179662	0.10	10000	
As	75	103	1	He	4.663	4.663	1.59	3147	0.15	10000	
Se	78	103	1	He	1.671	1.671	3.58	146	1.14	10000	
Sr	88	103	1	He	21486.444	21486.444	0.97	114136755	0.02	10000	>LDR
Mo	95	103	1	He	8.084	8.084	1.54	19551	0.04	2000	
Ag	107	103	1	He	2.555	2.555	1.23	21187	0.01	300	
Cd	111	103	1	He	11.971	11.971	4.04	18009	0.07	4000	
Sn	118	115	1	He	69.877	69.877	1.22	267014	0.03	2000	
Sb	123	115	1	He	1.946	1.946	4.30	7259	0.03	300	
Ba	137	115	1	He	33.013	33.013	0.98	57172	0.06	10000	
W	182	209	1	He	16.786	16.786	0.76	179448	0.01	2500	
Tl	205	165	1	He	0.093	0.093	5.72	2684	0.00	5000	
Pb	208	209	1	He	52.824	52.824	0.34	1919593	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	891440	0.73	1631381	54.64	30	120	
Sc	45	1	He	841873	0.97	829696	101.47	30	120	
Sc	45	2	NoGas	6329863	0.37	6325638	100.07	30	120	
Rh	103	1	He	1398886	0.49	2345543	59.64	30	120	
In	115	1	He	913931	0.14	1419467	64.39	30	120	
Tb	159	1	He	2996703	0.39	3888262	77.07	30	120	
Ho	165	1	He	3092974	0.44	3932562	78.65	30	120	
Bi	209	1	He	2063699	0.41	2874805	71.79	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-4-e@10
Data File Name	057SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:43:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.235	0.235	6.40	726	0.03	10000	
B	11	45	2	NoGas	2.591	2.591	4.68	13817	0.02	300	
Na	23	45	1	He	387.324	387.324	1.34	507484	0.08	500000	
Mg	24	45	1	He	538.448	538.448	0.72	388722	0.14	500000	
Al	27	45	1	He	3880.489	3880.489	1.27	1586969	0.24	200000	
K	39	45	1	He	40.029	40.029	6.35	54490	0.07	500000	
Ca	44	45	1	He	201267.917	201267.917	0.35	7493523	2.69	500000	
Ti	47	45	1	He	9472.309	9472.309	1.32	1987677	0.48	2500	>LDR
V	51	45	1	He	1152.777	1152.777	0.57	5981462	0.02	10000	
Cr	52	45	1	He	440.772	440.772	0.94	2750593	0.02	10000	
Mn	55	45	1	He	46.899	46.899	1.21	230717	0.02	10000	
Fe	56	45	1	He	3023.889	3023.889	0.46	17784375	0.02	200000	
Co	59	103	1	He	0.391	0.391	2.49	3639	0.01	10000	
Ni	60	103	1	He	1.399	1.399	5.90	3286	0.04	10000	
Cu	63	103	1	He	1.678	1.678	2.79	11301	0.01	10000	
Zn	66	103	1	He	35.747	35.747	0.73	44771	0.08	10000	
As	75	103	1	He	0.708	0.708	1.73	670	0.11	10000	
Se	78	103	1	He	0.285	0.285	30.54	61	0.47	10000	
Sr	88	103	1	He	3913.212	3913.212	1.49	24846935	0.02	10000	
Mo	95	103	1	He	1.528	1.528	4.50	4451	0.03	2000	
Ag	107	103	1	He	0.409	0.409	4.59	4059	0.01	300	
Cd	111	103	1	He	1.982	1.982	4.62	4297	0.05	4000	
Sn	118	115	1	He	14.137	14.137	0.72	60642	0.02	2000	
Sb	123	115	1	He	0.353	0.353	7.21	1838	0.02	300	
Ba	137	115	1	He	6.623	6.623	1.87	12798	0.05	10000	
W	182	209	1	He	3.189	3.189	2.00	42336	0.01	2500	
Tl	205	165	1	He	0.020	0.020	8.70	669	0.00	5000	
Pb	208	209	1	He	10.434	10.434	1.17	443212	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	943009	0.43	1631381	57.80	30	120	
Sc	45	1	He	592415	0.16	829696	71.40	30	120	
Sc	45	2	NoGas	4577806	1.21	6325638	72.37	30	120	
Rh	103	1	He	1672193	1.12	2345543	71.29	30	120	
In	115	1	He	1015195	0.09	1419467	71.52	30	120	
Tb	159	1	He	3243502	0.36	3888262	83.42	30	120	
Ho	165	1	He	3331583	0.25	3932562	84.72	30	120	
Bi	209	1	He	2409276	0.18	2874805	83.81	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-5-e@2
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:47:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	8.603	8.603	1.50	28297	0.03	10000	
B	11	45	2	NoGas	51.550	51.550	1.17	165544	0.03	300	
Na	23	45	1	He	12423.802	12423.802	1.79	17266459	0.07	500000	
Mg	24	45	1	He	23094.933	23094.933	0.28	18236129	0.13	500000	
Al	27	45	1	He	86331.135	86331.135	0.31	38641127	0.22	200000	
K	39	45	1	He	9994.328	9994.328	0.34	7459346	0.13	500000	
Ca	44	45	1	He	28492.381	28492.381	0.73	1162835	2.45	500000	
Ti	47	45	1	He	1745.179	1745.179	2.58	401005	0.44	2500	
V	51	45	1	He	421.746	421.746	2.12	2396536	0.02	10000	
Cr	52	45	1	He	261.792	261.792	1.47	1790689	0.01	10000	
Mn	55	45	1	He	1828.743	1828.743	1.55	9818000	0.02	10000	
Fe	56	45	1	He	155738.752	155738.752	1.73	1003000813	0.02	200000	
Co	59	103	1	He	54.422	54.422	0.59	509390	0.01	10000	
Ni	60	103	1	He	67.885	67.885	0.84	157635	0.04	10000	
Cu	63	103	1	He	63.399	63.399	0.47	388228	0.02	10000	
Zn	66	103	1	He	242.948	242.948	0.89	300875	0.08	10000	
As	75	103	1	He	63.057	63.057	0.58	50199	0.13	10000	
Se	78	103	1	He	10.891	10.891	2.41	951	1.14	10000	
Sr	88	103	1	He	683.272	683.272	0.87	4408498	0.02	10000	
Mo	95	103	1	He	8.494	8.494	1.85	24944	0.03	2000	
Ag	107	103	1	He	0.811	0.811	7.92	8158	0.01	300	
Cd	111	103	1	He	3.644	3.644	5.24	7276	0.05	4000	
Sn	118	115	1	He	23.765	23.765	1.80	101742	0.02	2000	
Sb	123	115	1	He	0.493	0.493	7.74	2394	0.02	300	
Ba	137	115	1	He	251.826	251.826	1.16	485693	0.05	10000	
W	182	209	1	He	1.339	1.339	6.26	19598	0.01	2500	
Tl	205	165	1	He	1.067	1.067	1.79	35190	0.00	5000	
Pb	208	209	1	He	114.598	114.598	0.80	4864374	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1039734	2.43	1631381	63.73	30	120	
Sc	45	1	He	649133	4.04	829696	78.24	30	120	
Sc	45	2	NoGas	5414130	0.77	6325638	85.59	30	120	
Rh	103	1	He	1699316	2.88	2345543	72.45	30	120	
In	115	1	He	1019024	3.12	1419467	71.79	30	120	
Tb	159	1	He	3444143	2.70	3888262	88.58	30	120	
Ho	165	1	He	3586296	2.04	3932562	91.19	30	120	
Bi	209	1	He	2410951	1.10	2874805	83.86	30	120	

Sample Report

Sample Table

Sample Name	680-111548-a-5-e@10
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:51:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.677	1.677	1.66	5886	0.03	10000	
B	11	45	2	NoGas	11.075	11.075	5.12	39335	0.03	300	
Na	23	45	1	He	2823.478	2823.478	0.62	3904059	0.07	500000	
Mg	24	45	1	He	5200.306	5200.306	0.63	4069475	0.13	500000	
Al	27	45	1	He	19455.746	19455.746	0.99	8630492	0.23	200000	
K	39	45	1	He	2333.254	2333.254	2.25	1748315	0.13	500000	
Ca	44	45	1	He	6486.751	6486.751	0.59	262972	2.47	500000	
Ti	47	45	1	He	393.039	393.039	1.34	89555	0.44	2500	
V	51	45	1	He	91.436	91.436	1.77	515168	0.02	10000	
Cr	52	45	1	He	57.869	57.869	0.84	393819	0.01	10000	
Mn	55	45	1	He	419.679	419.679	0.75	2234087	0.02	10000	
Fe	56	45	1	He	35001.956	35001.956	0.22	223471200	0.02	200000	
Co	59	103	1	He	10.771	10.771	0.79	116350	0.01	10000	
Ni	60	103	1	He	13.550	13.550	1.57	36387	0.04	10000	
Cu	63	103	1	He	12.946	12.946	1.38	92594	0.01	10000	
Zn	66	103	1	He	51.651	51.651	0.62	75113	0.07	10000	
As	75	103	1	He	12.925	12.925	0.59	11981	0.11	10000	
Se	78	103	1	He	2.104	2.104	6.25	247	0.85	10000	
Sr	88	103	1	He	126.467	126.467	0.25	941676	0.01	10000	
Mo	95	103	1	He	1.636	1.636	2.24	5588	0.03	2000	
Ag	107	103	1	He	0.119	0.119	14.20	1387	0.01	300	
Cd	111	103	1	He	0.526	0.526	9.62	2093	0.03	4000	
Sn	118	115	1	He	4.514	4.514	0.92	22972	0.02	2000	
Sb	123	115	1	He	0.049	0.049	24.71	749	0.01	300	
Ba	137	115	1	He	48.022	48.022	0.84	106557	0.05	10000	
W	182	209	1	He	0.286	0.286	1.36	7398	0.00	2500	
Tl	205	165	1	He	0.224	0.224	3.09	7750	0.00	5000	
Pb	208	209	1	He	21.755	21.755	0.66	1028662	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1104792	0.92	1631381	67.72	30	120	
Sc	45	1	He	643217	0.65	829696	77.52	30	120	
Sc	45	2	NoGas	5048336	1.26	6325638	79.81	30	120	
Rh	103	1	He	1960625	0.42	2345543	83.59	30	120	
In	115	1	He	1171427	0.25	1419467	82.53	30	120	
Tb	159	1	He	3623637	0.74	3888262	93.19	30	120	
Ho	165	1	He	3744029	0.33	3932562	95.21	30	120	
Bi	209	1	He	2684154	0.57	2874805	93.37	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	060_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:55:17-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.947	0.983	162744	1.77	50	95.9	89.5	110.5	
B	11	45	2	NoGas	46.236	0.271	129163	1.19	50	92.5	89.5	110.5	
Na	23	45	1	He	25624.860	1.395	33007146	0.76	25000	102.5	89.5	110.5	
Mg	24	45	1	He	25445.606	2.116	18622830	1.11	25000	101.8	89.5	110.5	
Al	27	45	1	He	251.638	1.294	106317	1.01	250	100.7	89.5	110.5	
K	39	45	1	He	25877.183	1.888	17857946	0.54	25000	103.5	89.5	110.5	
Ca	44	45	1	He	25528.306	1.013	966031	1.46	25000	102.1	89.5	110.5	
Ti	47	45	1	He	63.012	2.747	13441	3.14	50	126.0	89.5	110.5	CCV Failed
V	51	45	1	He	52.432	1.252	276390	1.00	50	104.9	89.5	110.5	
Cr	52	45	1	He	52.449	0.819	334093	1.34	50	104.9	89.5	110.5	
Mn	55	45	1	He	258.382	1.710	1286941	1.04	250	103.4	89.5	110.5	
Fe	56	45	1	He	13048.345	1.733	77926515	0.60	12500	104.4	89.5	110.5	
Co	59	103	1	He	45.311	1.427	472410	1.04	50	90.6	89.5	110.5	
Ni	60	103	1	He	44.481	1.384	115086	1.22	50	89.0	89.5	110.5	CCV Failed
Cu	63	103	1	He	45.764	1.704	312483	0.81	50	91.5	89.5	110.5	
Zn	66	103	1	He	45.807	0.804	64491	0.58	50	91.6	89.5	110.5	
As	75	103	1	He	45.977	1.733	40806	1.25	50	92.0	89.5	110.5	
Se	78	103	1	He	45.685	1.257	4313	1.40	50	91.4	89.5	110.5	
Sr	88	103	1	He	47.481	1.368	341377	1.35	50	95.0	89.5	110.5	
Mo	95	103	1	He	50.067	2.098	163556	1.15	50	100.1	89.5	110.5	
Ag	107	103	1	He	49.619	1.772	556727	1.79	50	99.2	89.5	110.5	
Cd	111	103	1	He	49.853	1.722	98328	1.24	50	99.7	89.5	110.5	
Sn	118	115	1	He	50.636	1.440	241323	1.23	50	101.3	89.5	110.5	
Sb	123	115	1	He	52.002	1.179	228556	0.93	50	104.0	89.5	110.5	
Ba	137	115	1	He	51.731	1.127	111575	1.09	50	103.5	89.5	110.5	
W	182	209	1	He	50.266	0.303	652542	0.62	50	100.5	89.5	110.5	
Tl	205	165	1	He	51.109	4.129	1660246	3.44	50	102.2	89.5	110.5	
Pb	208	209	1	He	48.823	1.152	2176010	0.66	50	97.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1073592	0.90	1631381	65.81	30	120	
Sc	45	1	He	601792	2.14	829696	72.53	30	120	
Sc	45	2	NoGas	4682044	1.04	6325638	74.02	30	120	
Rh	103	1	He	1892885	0.96	2345543	80.70	30	120	
In	115	1	He	1138725	0.52	1419467	80.22	30	120	
Tb	159	1	He	3479244	1.48	3888262	89.48	30	120	
Ho	165	1	He	3540151	0.70	3932562	90.02	30	120	
Bi	209	1	He	2531140	0.81	2874805	88.05	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	061_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T13:59:06-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.066	7.0	263	4.9	1	
B	11	45	2	NoGas	0.340	49.5	8298	5.4	20	
Na	23	45	1	He	9.181	13.9	28697	5.5	400	
Mg	24	45	1	He	2.594	36.9	2626	26.5	1000	
Al	27	45	1	He	1.862	12.4	2702	3.3	50	
K	39	45	1	He	11.548	5.7	35862	1.1	1000	
Ca	44	45	1	He	10.671	17.8	1135	6.1	1000	
Ti	47	45	1	He	2.021	4.1	442	4.2	20	
V	51	45	1	He	0.095	67.1	577	57.9	2	
Cr	52	45	1	He	-0.006	-84.7	1833	1.6	2	
Mn	55	45	1	He	0.061	31.8	1202	7.8	2	
Fe	56	45	1	He	19.632	16.3	121036	15.6	50	
Co	59	103	1	He	0.004	72.0	84	38.3	1	
Ni	60	103	1	He	-0.004	-203.8	97	26.0	2	
Cu	63	103	1	He	0.028	67.4	1631	7.7	2	
Zn	66	103	1	He	0.005	1538.5	1659	3.0	20	
As	75	103	1	He	0.140	12.8	265	4.0	2	
Se	78	103	1	He	0.142	42.6	57	7.7	2	
Sr	88	103	1	He	0.101	10.1	849	5.7	10	
Mo	95	103	1	He	0.852	12.0	2940	11.3	2	
Ag	107	103	1	He	0.013	17.6	154	18.1	0.2	
Cd	111	103	1	He	0.007	278.1	1046	3.5	0.2	
Sn	118	115	1	He	0.323	19.7	2519	12.4	10	
Sb	123	115	1	He	0.500	20.3	2806	16.4	1	
Ba	137	115	1	He	0.015	49.5	117	14.3	5	
W	182	209	1	He	1.043	14.5	17540	11.2	10	
Tl	205	165	1	He	0.037	20.2	1285	17.4	0.5	
Pb	208	209	1	He	0.063	10.8	3675	8.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1121210	1.44	1631381	68.73	30	120	
Sc	45	1	He	604159	0.27	829696	72.82	30	120	
Sc	45	2	NoGas	4738285	0.37	6325638	74.91	30	120	
Rh	103	1	He	1966726	4.03	2345543	83.85	30	120	
In	115	1	He	1181373	0.08	1419467	83.23	30	120	
Tb	159	1	He	3469979	2.03	3888262	89.24	30	120	
Ho	165	1	He	3630176	1.69	3932562	92.31	30	120	
Bi	209	1	He	2649694	0.65	2874805	92.17	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	062CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:03:00-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.908	0.908	12.474	3234	11.70	1	90.8	69.5	130.5	
B	11	2	NoGas	18.168	18.168	0.656	57003	0.37	20	90.8	69.5	130.5	
Na	23	1	He	1047.573	1047.573	0.440	1417644	0.52	1000	104.8	69.5	130.5	
Mg	24	1	He	1061.516	1061.516	0.901	807366	1.18	1000	106.2	69.5	130.5	
Al	27	1	He	46.344	46.344	1.571	21953	1.19	50	92.7	69.5	130.5	
K	39	1	He	1069.882	1069.882	1.425	794236	1.48	1000	107.0	69.5	130.5	
Ca	44	1	He	1038.200	1038.200	0.094	41510	0.68	1000	103.8	69.5	130.5	
Ti	47	1	He	11.613	11.613	7.749	2579	7.35	10	116.1	69.5	130.5	
V	51	1	He	5.323	5.323	2.324	29204	2.82	5	106.5	69.5	130.5	
Cr	52	1	He	2.160	2.160	0.218	16143	0.93	2	108.0	69.5	130.5	
Mn	55	1	He	5.309	5.309	2.070	28361	1.27	5	106.2	69.5	130.5	
Fe	56	1	He	114.021	114.021	0.904	710417	0.38	100	114.0	69.5	130.5	
Co	59	1	He	0.940	0.940	4.638	10355	2.46	1	94.0	69.5	130.5	
Ni	60	1	He	1.855	1.855	4.446	5154	2.23	2	92.7	69.5	130.5	
Cu	63	1	He	1.865	1.865	0.892	14802	2.27	2	93.2	69.5	130.5	
Zn	66	1	He	18.512	18.512	3.590	28426	1.55	20	92.6	69.5	130.5	
As	75	1	He	4.505	4.505	3.176	4333	1.14	5	90.1	69.5	130.5	
Se	78	1	He	4.732	4.732	2.458	510	1.72	5	94.6	69.5	130.5	
Sr	88	1	He	9.383	9.383	3.458	71066	1.18	10	93.8	69.5	130.5	
Mo	95	1	He	10.099	10.099	0.640	34780	2.67	10	101.0	69.5	130.5	
Ag	107	1	He	1.018	1.018	2.262	12027	1.37	1	101.8	69.5	130.5	
Cd	111	1	He	1.043	1.043	4.534	3189	1.63	1	104.3	69.5	130.5	
Sn	118	1	He	10.137	10.137	2.500	51564	2.75	10	101.4	69.5	130.5	
Sb	123	1	He	2.137	2.137	1.654	10397	1.56	2	106.9	69.5	130.5	
Ba	137	1	He	5.069	5.069	2.831	11573	2.87	5	101.4	69.5	130.5	
W	182	1	He	9.531	9.531	2.016	133705	1.98	10	95.3	69.5	130.5	
Tl	205	1	He	2.045	2.045	0.798	67699	0.94	2	102.2	69.5	130.5	
Pb	208	1	He	1.066	1.066	0.220	50981	0.60	1	106.6	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1117252	0.74	1631381	68.49	30	120	
Sc	45	1	He	624684	0.74	829696	75.29	30	120	
Sc	45	2	NoGas	4836219	0.26	6325638	76.45	30	120	
Rh	103	1	He	1992857	2.31	2345543	84.96	30	120	
In	115	1	He	1197533	0.35	1419467	84.36	30	120	
Tb	159	1	He	3567034	0.40	3888262	91.74	30	120	
Ho	165	1	He	3604014	0.64	3932562	91.65	30	120	
Bi	209	1	He	2677441	0.39	2874805	93.13	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	063_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:06:53-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	46.914	1.550	166381	1.02	50	93.8	89.5	110.5	
B	11	45	2	NoGas	46.175	1.803	133482	0.91	50	92.4	89.5	110.5	
Na	23	45	1	He	25004.929	8.081	33233466	0.13	25000	100.0	89.5	110.5	
Mg	24	45	1	He	24869.154	8.061	18781175	0.14	25000	99.5	89.5	110.5	
Al	27	45	1	He	243.758	8.057	106332	0.20	250	97.5	89.5	110.5	
K	39	45	1	He	25440.391	8.415	18113514	0.51	25000	101.8	89.5	110.5	
Ca	44	45	1	He	25228.241	7.990	985020	0.60	25000	100.9	89.5	110.5	
Ti	47	45	1	He	54.874	7.991	12081	3.20	50	109.7	89.5	110.5	
V	51	45	1	He	51.168	8.493	278241	0.60	50	102.3	89.5	110.5	
Cr	52	45	1	He	51.504	7.609	338610	0.82	50	103.0	89.5	110.5	
Mn	55	45	1	He	256.238	7.766	1317136	1.17	250	102.5	89.5	110.5	
Fe	56	45	1	He	12864.815	7.354	79307744	0.97	12500	102.9	89.5	110.5	
Co	59	103	1	He	46.749	9.772	477790	0.93	50	93.5	89.5	110.5	
Ni	60	103	1	He	46.142	8.392	117122	1.46	50	92.3	89.5	110.5	
Cu	63	103	1	He	46.743	9.489	312916	0.92	50	93.5	89.5	110.5	
Zn	66	103	1	He	47.170	9.295	65080	0.75	50	94.3	89.5	110.5	
As	75	103	1	He	47.894	9.435	41674	0.57	50	95.8	89.5	110.5	
Se	78	103	1	He	48.406	8.763	4480	0.51	50	96.8	89.5	110.5	
Sr	88	103	1	He	48.831	9.670	344173	1.38	50	97.7	89.5	110.5	
Mo	95	103	1	He	51.991	9.879	166496	0.81	50	104.0	89.5	110.5	
Ag	107	103	1	He	50.587	9.018	556620	0.56	50	101.2	89.5	110.5	
Cd	111	103	1	He	51.235	9.356	99063	0.33	50	102.5	89.5	110.5	
Sn	118	115	1	He	50.734	8.281	241238	0.66	50	101.5	89.5	110.5	
Sb	123	115	1	He	53.091	7.692	232862	0.33	50	106.2	89.5	110.5	
Ba	137	115	1	He	52.154	7.579	112268	1.17	50	104.3	89.5	110.5	
W	182	209	1	He	51.415	7.083	656769	0.31	50	102.8	89.5	110.5	
Tl	205	165	1	He	50.988	7.722	1644516	2.28	50	102.0	89.5	110.5	
Pb	208	209	1	He	49.367	6.873	2165495	0.52	50	98.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1121903	1.25	1631381	68.77	30	120	
Sc	45	1	He	623372	7.64	829696	75.13	30	120	
Sc	45	2	NoGas	4845095	0.84	6325638	76.59	30	120	
Rh	103	1	He	1866468	9.09	2345543	79.58	30	120	
In	115	1	He	1140959	7.80	1419467	80.38	30	120	
Tb	159	1	He	3427156	7.83	3888262	88.14	30	120	
Ho	165	1	He	3526970	7.40	3932562	89.69	30	120	
Bi	209	1	He	2498679	6.67	2874805	86.92	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	064_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:10:40-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.066	20.9	267	19.1	1	
B	11	45	2	NoGas	0.401	37.0	8669	3.7	20	
Na	23	45	1	He	9.907	19.9	29577	8.2	400	
Mg	24	45	1	He	2.541	41.1	2582	29.4	1000	
Al	27	45	1	He	1.077	5.7	2371	1.4	50	
K	39	45	1	He	11.309	14.8	35629	3.0	1000	
Ca	44	45	1	He	7.397	44.8	1009	12.2	1000	
Ti	47	45	1	He	1.156	6.2	257	5.7	20	
V	51	45	1	He	0.092	99.1	564	85.9	2	
Cr	52	45	1	He	0.000	-16557.6	1870	8.4	2	
Mn	55	45	1	He	0.060	42.2	1192	10.2	2	
Fe	56	45	1	He	17.691	21.6	109170	20.6	50	
Co	59	103	1	He	0.003	36.6	77	17.4	1	
Ni	60	103	1	He	-0.004	-68.1	99	7.0	2	
Cu	63	103	1	He	0.024	45.8	1613	4.0	2	
Zn	66	103	1	He	0.079	83.6	1778	4.6	20	
As	75	103	1	He	0.093	7.6	224	3.3	2	
Se	78	103	1	He	0.073	84.5	51	12.4	2	
Sr	88	103	1	He	0.037	19.0	380	14.5	10	
Mo	95	103	1	He	0.946	20.6	3284	20.4	2	
Ag	107	103	1	He	0.015	42.4	187	41.8	0.2	
Cd	111	103	1	He	0.029	82.2	1098	5.0	0.2	
Sn	118	115	1	He	0.394	21.1	2860	15.1	10	
Sb	123	115	1	He	0.552	15.8	3036	13.8	1	
Ba	137	115	1	He	0.002	665.0	88	36.9	5	
W	182	209	1	He	1.154	18.6	18819	15.5	10	
Tl	205	165	1	He	0.038	22.4	1308	21.4	0.5	
Pb	208	209	1	He	0.047	15.7	2880	11.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1125804	0.87	1631381	69.01	30	120	
Sc	45	1	He	603020	0.38	829696	72.68	30	120	
Sc	45	2	NoGas	4856037	0.99	6325638	76.77	30	120	
Rh	103	1	He	1979085	0.78	2345543	84.38	30	120	
In	115	1	He	1177373	0.72	1419467	82.94	30	120	
Tb	159	1	He	3453965	0.76	3888262	88.83	30	120	
Ho	165	1	He	3534366	0.48	3932562	89.87	30	120	
Bi	209	1	He	2617231	0.43	2874805	91.04	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	065SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:14:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1969.949	1969.949	0.72	6287912	0.03	10000	
B	11	45	2	NoGas	199.351	199.351	0.39	502556	0.04	300	
Na	23	45	1	He	19747.869	19747.869	2.79	25461485	0.08	500000	
Mg	24	45	1	He	19765.140	19765.140	2.36	14480729	0.14	500000	
Al	27	45	1	He	18520.438	18520.438	2.78	7692308	0.24	200000	
K	39	45	1	He	19995.125	19995.125	3.68	13813914	0.14	500000	
Ca	44	45	1	He	17863.033	17863.033	3.66	676500	2.64	500000	
Ti	47	45	1	He	200.192	200.192	2.70	42716	0.47	2500	
V	51	45	1	He	1950.802	1950.802	2.73	10288726	0.02	10000	
Cr	52	45	1	He	2008.130	2008.130	3.15	12730124	0.02	10000	
Mn	55	45	1	He	2028.481	2028.481	2.39	10107521	0.02	10000	
Fe	56	45	1	He	20594.400	20594.400	2.66	123101475	0.02	200000	
Co	59	103	1	He	1816.725	1816.725	1.14	18157257	0.01	10000	
Ni	60	103	1	He	1819.912	1819.912	2.61	4509921	0.04	10000	
Cu	63	103	1	He	1823.828	1823.828	0.46	11888481	0.02	10000	
Zn	66	103	1	He	1921.708	1921.708	1.00	2531292	0.08	10000	
As	75	103	1	He	1818.910	1818.910	1.25	1542835	0.12	10000	
Se	78	103	1	He	1831.691	1831.691	1.29	164216	1.12	10000	
Sr	88	103	1	He	1945.669	1945.669	1.29	13407306	0.01	10000	
Mo	95	103	1	He	200.924	200.924	1.35	629168	0.03	2000	
Ag	107	103	1	He	208.997	208.997	1.31	2247993	0.01	300	
Cd	111	103	1	He	2086.056	2086.056	2.38	3905231	0.05	4000	
Sn	118	115	1	He	2263.803	2263.803	1.92	9876208	0.02	2000	>LDR
Sb	123	115	1	He	221.438	221.438	0.58	892602	0.02	300	
Ba	137	115	1	He	2295.425	2295.425	0.48	4545196	0.05	10000	
W	182	209	1	He	215.291	215.291	2.11	2738983	0.01	2500	
Tl	205	165	1	He	516.761	516.761	0.97	16344275	0.00	5000	
Pb	208	209	1	He	2008.738	2008.738	0.74	88055843	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1009830	0.97	1631381	61.90	30	120	
Sc	45	1	He	602576	3.91	829696	72.63	30	120	
Sc	45	2	NoGas	4417018	0.50	6325638	69.83	30	120	
Rh	103	1	He	1814701	1.03	2345543	77.37	30	120	
In	115	1	He	1046146	0.35	1419467	73.70	30	120	
Tb	159	1	He	3376304	1.01	3888262	86.83	30	120	
Ho	165	1	He	3446537	0.95	3932562	87.64	30	120	
Bi	209	1	He	2490267	0.67	2874805	86.62	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177128/1-a@2
Data File Name	066_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:18:02-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.427	18.0	1441	18.3	1	
B	11	45	2	NoGas	2.055	10.1	12208	3.9	20	
Na	23	45	1	He	51.030	0.5	79226	0.6	400	
Mg	24	45	1	He	33.299	2.8	24102	2.0	1000	
Al	27	45	1	He	5.149	20.6	3894	10.0	50	
K	39	45	1	He	37.864	3.3	51734	0.8	1000	
Ca	44	45	1	He	105.324	6.9	4523	4.8	1000	
Ti	47	45	1	He	2.101	19.4	440	19.7	20	
V	51	45	1	He	0.574	42.6	2972	41.1	2	
Cr	52	45	1	He	1.071	4.0	8310	2.7	2	
Mn	55	45	1	He	0.555	14.1	3507	9.7	2	
Fe	56	45	1	He	42.119	19.1	244810	18.7	50	
Co	59	103	1	He	0.222	23.7	2292	22.7	1	
Ni	60	103	1	He	0.379	30.1	1053	26.6	2	
Cu	63	103	1	He	1.403	22.5	10623	19.1	2	
Zn	66	103	1	He	2.990	8.6	5544	5.6	20	
As	75	103	1	He	2.923	12.8	2644	11.6	2	Blank Failed
Se	78	103	1	He	2.086	5.3	231	3.8	2	Blank Failed
Sr	88	103	1	He	0.546	5.4	3913	4.7	10	
Mo	95	103	1	He	4.301	28.1	13707	27.5	2	Blank Failed
Ag	107	103	1	He	0.049	12.1	541	11.5	0.2	
Cd	111	103	1	He	0.261	22.4	1463	7.0	0.2	Blank Failed
Sn	118	115	1	He	37.408	17.0	172618	15.5	10	Blank Failed
Sb	123	115	1	He	2.116	18.8	9466	16.5	1	Blank Failed
Ba	137	115	1	He	1.146	11.3	2467	9.7	5	
W	182	209	1	He	4.564	24.3	65443	23.1	10	
Tl	205	165	1	He	0.297	56.3	9491	54.9	0.5	
Pb	208	209	1	He	0.864	19.4	41216	19.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1045564	1.05	1631381	64.09	30	120	
Sc	45	1	He	578089	1.00	829696	69.67	30	120	
Sc	45	2	NoGas	4493425	0.48	6325638	71.04	30	120	
Rh	103	1	He	1842276	0.61	2345543	78.54	30	120	
In	115	1	He	1102668	1.28	1419467	77.68	30	120	
Tb	159	1	He	3369762	0.94	3888262	86.66	30	120	
Ho	165	1	He	3473591	1.02	3932562	88.33	30	120	
Bi	209	1	He	2661404	0.13	2874805	92.58	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177128/2-a@2
Data File Name	067LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:21:53-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	465.285	465.285	2.520	1507852	0.61	500	93.1	78.6	110.5	
B	11	2	NoGas	51.599	51.599	0.880	136215	1.02	50	103.2	79.5	120.5	
Na	23	1	He	4903.245	4903.245	1.329	6096230	0.18	5000	98.1	79.5	120.5	
Mg	24	1	He	4987.094	4987.094	0.827	3516679	1.70	5000	99.7	79.5	120.5	
Al	27	1	He	4522.939	4522.939	0.862	1809290	1.28	5000	90.5	79.5	120.5	
K	39	1	He	4933.237	4933.237	0.944	3301036	0.72	5000	98.7	79.5	120.5	
Ca	44	1	He	4534.917	4534.917	2.028	165838	0.53	5000	90.7	79.5	120.5	
Ti	47	1	He	50.873	50.873	1.166	10453	1.70	50	101.7	79.5	120.5	
V	51	1	He	490.662	490.662	1.262	2490529	0.25	500	98.1	71.5	110.5	
Cr	52	1	He	496.983	496.983	0.608	3033898	1.22	500	99.4	69.5	110.5	
Mn	55	1	He	500.060	500.060	0.459	2398378	1.05	500	100.0	79.5	120.5	
Fe	56	1	He	5066.026	5066.026	1.283	29144050	0.51	5000	101.3	79.5	120.5	
Co	59	1	He	435.949	435.949	0.100	4366783	0.30	500	87.2	73.9	110.5	
Ni	60	1	He	428.932	428.932	0.892	1065406	1.04	500	85.8	74.9	110.5	
Cu	63	1	He	449.082	449.082	1.375	2934600	1.19	500	89.8	72.6	110.5	
Zn	66	1	He	415.345	415.345	0.704	549491	0.90	500	83.1	71.5	113.4	
As	75	1	He	400.522	400.522	0.198	340579	0.36	500	80.1	73.4	110.5	
Se	78	1	He	390.231	390.231	0.696	35095	0.78	500	78.0	64.6	110.5	
Sr	88	1	He	462.944	462.944	0.578	3197128	0.46	500	92.6	79.5	120.5	
Mo	95	1	He	51.000	51.000	1.242	160088	1.44	50	102.0	29.5	140.5	
Ag	107	1	He	48.298	48.298	0.491	520644	0.31	50	96.6	59.5	114.5	
Cd	111	1	He	461.083	461.083	0.187	865903	0.06	500	92.2	73.5	110.5	
Sn	118	1	He	554.456	554.456	0.629	2458361	0.72	500	110.9	79.5	120.5	
Sb	123	1	He	50.451	50.451	0.600	206997	0.22	50	100.9	67.5	113.4	
Ba	137	1	He	495.465	495.465	0.350	996891	0.19	500	99.1	69.5	110.5	
W	182	1	He	48.119	48.119	1.293	631586	1.31	50	96.2	74.6	125.4	
Tl	205	1	He	121.711	121.711	0.434	3883309	0.62	125	97.4	70.6	110.5	
Pb	208	1	He	469.953	469.953	0.174	21166898	0.20	500	94.0	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1025720	2.85	1631381	62.87	30	120	
Sc	45	1	He	579587	1.51	829696	69.86	30	120	
Sc	45	2	NoGas	4450628	0.48	6325638	70.36	30	120	
Rh	103	1	He	1818594	0.21	2345543	77.53	30	120	
In	115	1	He	1062949	0.40	1419467	74.88	30	120	
Tb	159	1	He	3361556	1.29	3888262	86.45	30	120	
Ho	165	1	He	3476641	1.05	3932562	88.41	30	120	
Bi	209	1	He	2558519	0.11	2874805	89.00	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-d@20
Data File Name	068SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:25:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.508	0.508	12.81	1859	0.03	10000	
B	11	45	2	NoGas	7.558	7.558	1.98	28541	0.03	300	
Na	23	45	1	He	216.958	216.958	1.47	309313	0.07	500000	
Mg	24	45	1	He	1284.435	1284.435	0.99	982819	0.13	500000	
Al	27	45	1	He	4947.942	4947.942	1.95	2146325	0.23	200000	
K	39	45	1	He	1827.240	1827.240	2.40	1344446	0.14	500000	
Ca	44	45	1	He	3.894	3.894	154.40	913	0.43	500000	
Ti	47	45	1	He	36.444	36.444	1.78	8124	0.45	2500	
V	51	45	1	He	8.621	8.621	4.67	47543	0.02	10000	
Cr	52	45	1	He	8.797	8.797	1.16	60160	0.01	10000	
Mn	55	45	1	He	1249.096	1249.096	2.70	6495308	0.02	10000	
Fe	56	45	1	He	11591.762	11591.762	0.92	72325993	0.02	200000	
Co	59	103	1	He	3.746	3.746	0.39	40904	0.01	10000	
Ni	60	103	1	He	9.380	9.380	3.54	25471	0.04	10000	
Cu	63	103	1	He	9.683	9.683	1.51	70315	0.01	10000	
Zn	66	103	1	He	23.302	23.302	1.55	35140	0.07	10000	
As	75	103	1	He	21.959	21.959	2.68	20460	0.11	10000	
Se	78	103	1	He	1.011	1.011	6.88	143	0.71	10000	
Sr	88	103	1	He	173.193	173.193	1.65	1302452	0.01	10000	
Mo	95	103	1	He	56.721	56.721	3.46	193824	0.03	2000	
Ag	107	103	1	He	0.023	0.023	4.36	276	0.01	300	
Cd	111	103	1	He	0.136	0.136	13.87	1318	0.01	4000	
Sn	118	115	1	He	2.649	2.649	4.95	13958	0.02	2000	
Sb	123	115	1	He	0.261	0.261	4.74	1715	0.02	300	
Ba	137	115	1	He	33.063	33.063	0.58	73908	0.04	10000	
W	182	209	1	He	2.385	2.385	4.48	36353	0.01	2500	
Tl	205	165	1	He	0.145	0.145	23.22	4941	0.00	5000	
Pb	208	209	1	He	38.508	38.508	0.77	1830280	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1138119	1.40	1631381	69.76	30	120	
Sc	45	1	He	628620	1.39	829696	75.77	30	120	
Sc	45	2	NoGas	4908383	0.61	6325638	77.60	30	120	
Rh	103	1	He	1980553	1.63	2345543	84.44	30	120	
In	115	1	He	1179686	0.30	1419467	83.11	30	120	
Tb	159	1	He	3528951	1.13	3888262	90.76	30	120	
Ho	165	1	He	3666957	1.54	3932562	93.25	30	120	
Bi	209	1	He	2698943	0.79	2874805	93.88	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-3-d@100
Data File Name	069SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:29:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.207	0.207	11.36	785	0.03	10000	
B	11	45	2	NoGas	1.318	1.318	6.36	11574	0.01	300	
Na	23	45	1	He	46.061	46.061	0.95	78254	0.06	500000	
Mg	24	45	1	He	252.722	252.722	1.95	190995	0.13	500000	
Al	27	45	1	He	980.108	980.108	3.29	420154	0.23	200000	
K	39	45	1	He	357.230	357.230	3.15	281725	0.13	500000	
Ca	44	45	1	He	-0.315	-0.315	-2896.78	732	-0.04	500000	
Ti	47	45	1	He	7.503	7.503	3.19	1655	0.45	2500	
V	51	45	1	He	1.756	1.756	7.79	9590	0.02	10000	
Cr	52	45	1	He	1.756	1.756	2.63	13362	0.01	10000	
Mn	55	45	1	He	247.026	247.026	2.31	1265589	0.02	10000	
Fe	56	45	1	He	2307.397	2307.397	2.19	14177389	0.02	200000	
Co	59	103	1	He	0.739	0.739	4.91	8060	0.01	10000	
Ni	60	103	1	He	1.878	1.878	4.09	5162	0.04	10000	
Cu	63	103	1	He	1.923	1.923	4.20	15048	0.01	10000	
Zn	66	103	1	He	4.319	4.319	5.35	7831	0.06	10000	
As	75	103	1	He	4.463	4.463	2.50	4249	0.11	10000	
Se	78	103	1	He	0.272	0.272	20.06	70	0.39	10000	
Sr	88	103	1	He	33.518	33.518	3.86	250879	0.01	10000	
Mo	95	103	1	He	12.096	12.096	4.30	41172	0.03	2000	
Ag	107	103	1	He	0.014	0.014	7.08	168	0.01	300	
Cd	111	103	1	He	0.063	0.063	36.84	1165	0.01	4000	
Sn	118	115	1	He	0.583	0.583	5.49	3852	0.02	2000	
Sb	123	115	1	He	0.081	0.081	7.00	912	0.01	300	
Ba	137	115	1	He	6.291	6.291	5.82	14335	0.04	10000	
W	182	209	1	He	0.605	0.605	8.56	11760	0.01	2500	
Tl	205	165	1	He	0.029	0.029	3.85	1012	0.00	5000	
Pb	208	209	1	He	7.410	7.410	5.63	350757	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1151567	1.04	1631381	70.59	30	120	
Sc	45	1	He	619028	1.74	829696	74.61	30	120	
Sc	45	2	NoGas	5027689	0.43	6325638	79.48	30	120	
Rh	103	1	He	1971722	2.81	2345543	84.06	30	120	
In	115	1	He	1198238	2.92	1419467	84.41	30	120	
Tb	159	1	He	3480680	5.26	3888262	89.52	30	120	
Ho	165	1	He	3607539	2.21	3932562	91.74	30	120	
Bi	209	1	He	2688243	4.87	2874805	93.51	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-3-d@20
Data File Name	070SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:33:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1022.166	1022.166	1.37	3458033	0.03	10000	
B	11	45	2	NoGas	109.541	109.541	1.41	296380	0.04	300	
Na	23	45	1	He	9924.295	9924.295	3.56	13455056	0.07	500000	
Mg	24	45	1	He	11079.556	11079.556	3.08	8529972	0.13	500000	
Al	27	45	1	He	13783.110	13783.110	3.17	6016733	0.23	200000	
K	39	45	1	He	11698.866	11698.866	4.99	8503239	0.14	500000	
Ca	44	45	1	He	8878.395	8878.395	3.13	353854	2.51	500000	
Ti	47	45	1	He	131.138	131.138	2.93	29408	0.45	2500	
V	51	45	1	He	994.197	994.197	3.29	5510692	0.02	10000	
Cr	52	45	1	He	1001.072	1001.072	3.92	6669454	0.02	10000	
Mn	55	45	1	He	2119.568	2119.568	3.36	11097016	0.02	10000	
Fe	56	45	1	He	20704.884	20704.884	3.05	130073822	0.02	200000	
Co	59	103	1	He	923.933	923.933	1.80	9548327	0.01	10000	
Ni	60	103	1	He	951.448	951.448	0.92	2438081	0.04	10000	
Cu	63	103	1	He	948.993	948.993	1.34	6396682	0.01	10000	
Zn	66	103	1	He	968.213	968.213	1.28	1319440	0.07	10000	
As	75	103	1	He	950.091	950.091	1.42	833341	0.11	10000	
Se	78	103	1	He	948.245	948.245	1.27	87924	1.08	10000	
Sr	88	103	1	He	1167.865	1167.865	1.64	8320985	0.01	10000	
Mo	95	103	1	He	155.704	155.704	1.09	504170	0.03	2000	
Ag	107	103	1	He	101.084	101.084	1.62	1124236	0.01	300	
Cd	111	103	1	He	1069.293	1069.293	0.91	2070557	0.05	4000	
Sn	118	115	1	He	1129.843	1129.843	1.21	5214222	0.02	2000	
Sb	123	115	1	He	109.298	109.298	0.51	466289	0.02	300	
Ba	137	115	1	He	1183.287	1183.287	1.16	2478595	0.05	10000	
W	182	209	1	He	98.391	98.391	3.22	1303478	0.01	2500	
Tl	205	165	1	He	259.172	259.172	0.79	8448145	0.00	5000	
Pb	208	209	1	He	1035.549	1035.549	1.51	47215874	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1070345	1.47	1631381	65.61	30	120	
Sc	45	1	He	633492	4.89	829696	76.35	30	120	
Sc	45	2	NoGas	4688296	0.85	6325638	74.12	30	120	
Rh	103	1	He	1876317	0.34	2345543	80.00	30	120	
In	115	1	He	1106608	0.67	1419467	77.96	30	120	
Tb	159	1	He	3476649	1.44	3888262	89.41	30	120	
Ho	165	1	He	3551950	0.78	3932562	90.32	30	120	
Bi	209	1	He	2590579	2.18	2874805	90.11	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-e du@20
Data File Name	071SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:36:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.544	0.544	9.63	1959	0.03	10000	
B	11	45	2	NoGas	6.222	6.222	4.47	24517	0.03	300	
Na	23	45	1	He	196.492	196.492	0.68	272426	0.07	500000	
Mg	24	45	1	He	1123.804	1123.804	1.25	831392	0.14	500000	
Al	27	45	1	He	4204.951	4204.951	1.76	1763741	0.24	200000	
K	39	45	1	He	1576.873	1576.873	0.51	1125451	0.14	500000	
Ca	44	45	1	He	13.580	13.580	105.86	1252	1.09	500000	
Ti	47	45	1	He	38.133	38.133	1.21	8218	0.46	2500	
V	51	45	1	He	7.777	7.777	2.78	41465	0.02	10000	
Cr	52	45	1	He	8.034	8.034	1.62	53275	0.02	10000	
Mn	55	45	1	He	577.326	577.326	0.51	2903205	0.02	10000	
Fe	56	45	1	He	10624.498	10624.498	1.03	64087269	0.02	200000	
Co	59	103	1	He	3.440	3.440	1.90	36224	0.01	10000	
Ni	60	103	1	He	8.697	8.697	1.49	22786	0.04	10000	
Cu	63	103	1	He	7.827	7.827	0.68	55073	0.01	10000	
Zn	66	103	1	He	20.575	20.575	1.58	30106	0.07	10000	
As	75	103	1	He	21.359	21.359	1.13	19196	0.11	10000	
Se	78	103	1	He	1.515	1.515	8.00	185	0.82	10000	
Sr	88	103	1	He	126.230	126.230	0.31	915425	0.01	10000	
Mo	95	103	1	He	56.290	56.290	0.09	185524	0.03	2000	
Ag	107	103	1	He	0.030	0.030	16.36	348	0.01	300	
Cd	111	103	1	He	0.214	0.214	18.14	1425	0.02	4000	
Sn	118	115	1	He	8.216	8.216	12.55	40658	0.02	2000	
Sb	123	115	1	He	1.012	1.012	20.62	5043	0.02	300	
Ba	137	115	1	He	28.552	28.552	1.17	62797	0.05	10000	
W	182	209	1	He	3.981	3.981	9.15	57407	0.01	2500	
Tl	205	165	1	He	0.193	0.193	18.14	6368	0.00	5000	
Pb	208	209	1	He	23.892	23.892	0.62	1117783	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1123503	1.72	1631381	68.87	30	120	
Sc	45	1	He	607678	0.58	829696	73.24	30	120	
Sc	45	2	NoGas	4842265	0.27	6325638	76.55	30	120	
Rh	103	1	He	1909563	0.67	2345543	81.41	30	120	
In	115	1	He	1160525	0.48	1419467	81.76	30	120	
Tb	159	1	He	3496085	0.88	3888262	89.91	30	120	
Ho	165	1	He	3567499	0.34	3932562	90.72	30	120	
Bi	209	1	He	2655980	0.22	2874805	92.39	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-f ms@20
Data File Name	072SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:40:32-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.018	5.018	1.52	18261	0.03	10000	
B	11	45	2	NoGas	10.445	10.445	1.15	37776	0.03	300	
Na	23	45	1	He	655.836	655.836	2.51	930081	0.07	500000	
Mg	24	45	1	He	1554.467	1554.467	2.24	1229573	0.13	500000	
Al	27	45	1	He	4648.071	4648.071	0.61	2085073	0.22	200000	
K	39	45	1	He	1983.329	1983.329	2.78	1505998	0.13	500000	
Ca	44	45	1	He	451.838	451.838	5.12	19233	2.35	500000	
Ti	47	45	1	He	46.084	46.084	1.29	10620	0.43	2500	
V	51	45	1	He	12.299	12.299	1.57	70093	0.02	10000	
Cr	52	45	1	He	12.333	12.333	0.65	86394	0.01	10000	
Mn	55	45	1	He	1025.882	1025.882	1.36	5516481	0.02	10000	
Fe	56	45	1	He	10423.756	10423.756	1.68	67243144	0.02	200000	
Co	59	103	1	He	7.460	7.460	0.43	83230	0.01	10000	
Ni	60	103	1	He	12.238	12.238	1.50	33948	0.04	10000	
Cu	63	103	1	He	12.565	12.565	1.07	92851	0.01	10000	
Zn	66	103	1	He	24.262	24.262	1.13	37342	0.06	10000	
As	75	103	1	He	23.288	23.288	0.35	22180	0.10	10000	
Se	78	103	1	He	5.148	5.148	5.26	560	0.92	10000	
Sr	88	103	1	He	180.388	180.388	1.14	1386968	0.01	10000	
Mo	95	103	1	He	56.604	56.604	0.47	197807	0.03	2000	
Ag	107	103	1	He	4.611	4.611	0.59	55341	0.01	300	
Cd	111	103	1	He	4.824	4.824	0.81	11138	0.04	4000	
Sn	118	115	1	He	7.767	7.767	2.08	39982	0.02	2000	
Sb	123	115	1	He	1.926	1.926	1.84	9484	0.02	300	
Ba	137	115	1	He	32.805	32.805	0.41	74922	0.04	10000	
W	182	209	1	He	5.419	5.419	1.68	78427	0.01	2500	
Tl	205	165	1	He	4.541	4.541	1.15	152206	0.00	5000	
Pb	208	209	1	He	40.440	40.440	0.87	1929072	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1149472	0.69	1631381	70.46	30	120	
Sc	45	1	He	649967	1.28	829696	78.34	30	120	
Sc	45	2	NoGas	5077635	0.22	6325638	80.27	30	120	
Rh	103	1	He	2024739	0.98	2345543	86.32	30	120	
In	115	1	He	1205291	0.66	1419467	84.91	30	120	
Tb	159	1	He	3582116	1.47	3888262	92.13	30	120	
Ho	165	1	He	3650351	0.13	3932562	92.82	30	120	
Bi	209	1	He	2708770	0.30	2874805	94.22	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-9-b@20
Data File Name	073SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:44:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.556	0.556	10.55	2197	0.03	10000	
B	11	45	2	NoGas	1.350	1.350	8.93	12508	0.01	300	
Na	23	45	1	He	25.038	25.038	3.31	56401	0.04	500000	
Mg	24	45	1	He	1749.250	1749.250	2.35	1474532	0.12	500000	
Al	27	45	1	He	7414.876	7414.876	0.68	3543862	0.21	200000	
K	39	45	1	He	636.718	636.718	2.43	536991	0.12	500000	
Ca	44	45	1	He	210.949	210.949	1.60	10023	2.10	500000	
Ti	47	45	1	He	46.394	46.394	0.82	11395	0.41	2500	
V	51	45	1	He	13.406	13.406	2.56	81405	0.02	10000	
Cr	52	45	1	He	11.846	11.846	2.79	88508	0.01	10000	
Mn	55	45	1	He	139.952	139.952	2.06	802896	0.02	10000	
Fe	56	45	1	He	16647.830	16647.830	2.25	114450911	0.01	200000	
Co	59	103	1	He	5.304	5.304	0.91	61780	0.01	10000	
Ni	60	103	1	He	12.405	12.405	1.13	35917	0.03	10000	
Cu	63	103	1	He	10.486	10.486	0.24	81138	0.01	10000	
Zn	66	103	1	He	30.929	30.929	1.53	49193	0.06	10000	
As	75	103	1	He	7.692	7.692	0.90	7745	0.10	10000	
Se	78	103	1	He	0.853	0.853	14.41	136	0.63	10000	
Sr	88	103	1	He	2.778	2.778	1.82	22403	0.01	10000	
Mo	95	103	1	He	1.933	1.933	6.70	7103	0.03	2000	
Ag	107	103	1	He	0.020	0.020	18.55	254	0.01	300	
Cd	111	103	1	He	0.115	0.115	13.11	1360	0.01	4000	
Sn	118	115	1	He	2.526	2.526	0.68	14195	0.02	2000	
Sb	123	115	1	He	0.164	0.164	12.26	1359	0.01	300	
Ba	137	115	1	He	40.903	40.903	0.17	97193	0.04	10000	
W	182	209	1	He	0.406	0.406	8.86	9385	0.00	2500	
Tl	205	165	1	He	0.124	0.124	2.06	4322	0.00	5000	
Pb	208	209	1	He	6.929	6.929	0.99	340369	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1232885	2.19	1631381	75.57	30	120	
Sc	45	1	He	692778	1.85	829696	83.50	30	120	
Sc	45	2	NoGas	5391701	0.98	6325638	85.24	30	120	
Rh	103	1	He	2113358	0.64	2345543	90.10	30	120	
In	115	1	He	1254278	0.48	1419467	88.36	30	120	
Tb	159	1	He	3681703	0.65	3888262	94.69	30	120	
Ho	165	1	He	3749595	0.58	3932562	95.35	30	120	
Bi	209	1	He	2784149	0.82	2874805	96.85	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-10-b@20
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:48:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.484	0.484	6.98	1911	0.03	10000	
B	11	45	2	NoGas	0.604	0.604	23.60	10296	0.01	300	
Na	23	45	1	He	19.949	19.949	4.60	49103	0.04	500000	
Mg	24	45	1	He	1157.619	1157.619	0.42	981035	0.12	500000	
Al	27	45	1	He	6428.759	6428.759	1.47	3087729	0.21	200000	
K	39	45	1	He	405.553	405.553	1.14	355426	0.11	500000	
Ca	44	45	1	He	192.256	192.256	2.51	9251	2.08	500000	
Ti	47	45	1	He	54.834	54.834	3.88	13532	0.41	2500	
V	51	45	1	He	13.675	13.675	0.26	83461	0.02	10000	
Cr	52	45	1	He	9.641	9.641	1.41	72806	0.01	10000	
Mn	55	45	1	He	455.449	455.449	0.32	2623750	0.02	10000	
Fe	56	45	1	He	13884.717	13884.717	0.70	95937376	0.01	200000	
Co	59	103	1	He	5.652	5.652	0.57	66765	0.01	10000	
Ni	60	103	1	He	8.485	8.485	1.78	24951	0.03	10000	
Cu	63	103	1	He	6.501	6.501	0.48	51609	0.01	10000	
Zn	66	103	1	He	26.328	26.328	2.34	42731	0.06	10000	
As	75	103	1	He	5.874	5.874	1.71	6033	0.10	10000	
Se	78	103	1	He	0.566	0.566	10.00	107	0.53	10000	
Sr	88	103	1	He	2.104	2.104	1.91	17233	0.01	10000	
Mo	95	103	1	He	1.078	1.078	2.48	4044	0.03	2000	
Ag	107	103	1	He	0.020	0.020	14.87	256	0.01	300	
Cd	111	103	1	He	0.126	0.126	12.77	1405	0.01	4000	
Sn	118	115	1	He	1.998	1.998	3.77	11712	0.02	2000	
Sb	123	115	1	He	0.089	0.089	8.84	1017	0.01	300	
Ba	137	115	1	He	38.990	38.990	1.61	94906	0.04	10000	
W	182	209	1	He	0.209	0.209	8.29	6639	0.00	2500	
Tl	205	165	1	He	0.100	0.100	1.12	3569	0.00	5000	
Pb	208	209	1	He	7.639	7.639	2.52	378349	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1226390	0.55	1631381	75.17	30	120	
Sc	45	1	He	696099	0.54	829696	83.90	30	120	
Sc	45	2	NoGas	5415955	1.28	6325638	85.62	30	120	
Rh	103	1	He	2143216	1.04	2345543	91.37	30	120	
In	115	1	He	1284818	0.31	1419467	90.51	30	120	
Tb	159	1	He	3739917	0.80	3888262	96.18	30	120	
Ho	165	1	He	3825374	0.68	3932562	97.27	30	120	
Bi	209	1	He	2808842	2.37	2874805	97.71	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	075_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:51:57-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.113	1.315	176212	1.36	50	96.2	89.5	110.5	
B	11	45	2	NoGas	45.782	3.014	137846	2.54	50	91.6	89.5	110.5	
Na	23	45	1	He	24366.199	2.082	34721495	1.12	25000	97.5	89.5	110.5	
Mg	24	45	1	He	24393.161	2.001	19750728	1.06	25000	97.6	89.5	110.5	
Al	27	45	1	He	242.154	1.688	113264	1.20	250	96.9	89.5	110.5	
K	39	45	1	He	25080.816	1.446	19151372	1.40	25000	100.3	89.5	110.5	
Ca	44	45	1	He	24762.688	1.391	1036696	1.68	25000	99.1	89.5	110.5	
Ti	47	45	1	He	50.571	2.324	11940	4.18	50	101.1	89.5	110.5	
V	51	45	1	He	50.478	2.012	294355	0.96	50	101.0	89.5	110.5	
Cr	52	45	1	He	50.481	0.964	355846	2.07	50	101.0	89.5	110.5	
Mn	55	45	1	He	254.887	1.448	1404830	2.64	250	102.0	89.5	110.5	
Fe	56	45	1	He	12689.435	1.548	83845652	1.37	12500	101.5	89.5	110.5	
Co	59	103	1	He	45.856	1.224	499056	1.47	50	91.7	89.5	110.5	
Ni	60	103	1	He	45.729	2.136	123496	2.23	50	91.5	89.5	110.5	
Cu	63	103	1	He	46.088	1.580	328496	1.72	50	92.2	89.5	110.5	
Zn	66	103	1	He	46.664	2.031	68546	2.20	50	93.3	89.5	110.5	
As	75	103	1	He	47.663	0.782	44153	0.92	50	95.3	89.5	110.5	
Se	78	103	1	He	48.234	2.849	4751	2.55	50	96.5	89.5	110.5	
Sr	88	103	1	He	48.405	1.405	363269	1.62	50	96.8	89.5	110.5	
Mo	95	103	1	He	50.342	2.313	171664	1.88	50	100.7	89.5	110.5	
Ag	107	103	1	He	49.500	0.911	579708	0.65	50	99.0	89.5	110.5	
Cd	111	103	1	He	50.197	0.558	103339	0.54	50	100.4	89.5	110.5	
Sn	118	115	1	He	50.151	0.526	251607	0.81	50	100.3	89.5	110.5	
Sb	123	115	1	He	52.068	0.534	240894	0.37	50	104.1	89.5	110.5	
Ba	137	115	1	He	51.263	1.049	116391	1.37	50	102.5	89.5	110.5	
W	182	209	1	He	49.553	1.582	666272	1.18	50	99.1	89.5	110.5	
Tl	205	165	1	He	51.442	2.792	1746427	1.51	50	102.9	89.5	110.5	
Pb	208	209	1	He	47.700	0.475	2201949	0.98	50	95.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1158617	1.89	1631381	71.02	30	120	
Sc	45	1	He	665848	2.86	829696	80.25	30	120	
Sc	45	2	NoGas	5043861	0.30	6325638	79.74	30	120	
Rh	103	1	He	1975738	0.47	2345543	84.23	30	120	
In	115	1	He	1198670	0.61	1419467	84.45	30	120	
Tb	159	1	He	3583975	0.74	3888262	92.17	30	120	
Ho	165	1	He	3700053	1.48	3932562	94.09	30	120	
Bi	209	1	He	2621466	0.71	2874805	91.19	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	076_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:55:45-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.103	11.6	422	9.5	1	
B	11	45	2	NoGas	0.442	20.6	9069	2.9	20	
Na	23	45	1	He	7.680	15.1	28056	5.3	400	
Mg	24	45	1	He	1.625	19.1	2008	11.3	1000	
Al	27	45	1	He	1.177	15.3	2535	3.4	50	
K	39	45	1	He	10.322	8.9	36712	1.2	1000	
Ca	44	45	1	He	5.780	52.6	996	12.4	1000	
Ti	47	45	1	He	0.306	7.5	79	6.5	20	
V	51	45	1	He	0.039	187.7	294	136.9	2	
Cr	52	45	1	He	-0.004	-457.1	1940	5.2	2	
Mn	55	45	1	He	0.080	27.9	1358	8.4	2	
Fe	56	45	1	He	22.360	21.9	143970	20.7	50	
Co	59	103	1	He	0.006	12.4	111	7.5	1	
Ni	60	103	1	He	-0.001	-1531.4	111	21.3	2	
Cu	63	103	1	He	0.005	51.5	1538	0.5	2	
Zn	66	103	1	He	0.042	229.7	1789	7.4	20	
As	75	103	1	He	0.160	10.3	296	4.7	2	
Se	78	103	1	He	0.244	34.0	70	11.3	2	
Sr	88	103	1	He	0.014	30.9	211	15.8	10	
Mo	95	103	1	He	1.034	22.7	3712	21.8	2	
Ag	107	103	1	He	0.015	18.6	186	18.1	0.2	
Cd	111	103	1	He	0.050	42.9	1183	3.2	0.2	
Sn	118	115	1	He	0.557	7.7	3867	5.8	10	
Sb	123	115	1	He	0.523	20.0	3065	16.2	1	
Ba	137	115	1	He	0.005	239.3	100	29.6	5	
W	182	209	1	He	1.208	16.9	20366	14.1	10	
Tl	205	165	1	He	0.043	20.6	1516	19.9	0.5	
Pb	208	209	1	He	0.074	7.5	4304	5.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1195526	2.28	1631381	73.28	30	120	
Sc	45	1	He	633493	0.66	829696	76.35	30	120	
Sc	45	2	NoGas	5012784	0.33	6325638	79.25	30	120	
Rh	103	1	He	2052793	0.82	2345543	87.52	30	120	
In	115	1	He	1243549	0.17	1419467	87.61	30	120	
Tb	159	1	He	3606082	0.58	3888262	92.74	30	120	
Ho	165	1	He	3668309	0.32	3932562	93.28	30	120	
Bi	209	1	He	2729394	1.26	2874805	94.94	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-1-b@20
Data File Name	077SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T14:59:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.406	0.406	6.91	1489	0.03	10000	
B	11	45	2	NoGas	1.779	1.779	12.01	12723	0.01	300	
Na	23	45	1	He	28.886	28.886	3.93	57918	0.05	500000	
Mg	24	45	1	He	1477.016	1477.016	1.41	1161488	0.13	500000	
Al	27	45	1	He	4858.170	4858.170	1.81	2166022	0.22	200000	
K	39	45	1	He	412.341	412.341	1.75	334882	0.12	500000	
Ca	44	45	1	He	2661.496	2661.496	1.76	108826	2.45	500000	
Ti	47	45	1	He	46.579	46.579	2.64	10670	0.44	2500	
V	51	45	1	He	9.494	9.494	4.63	53780	0.02	10000	
Cr	52	45	1	He	9.016	9.016	2.27	63313	0.01	10000	
Mn	55	45	1	He	302.576	302.576	1.16	1618129	0.02	10000	
Fe	56	45	1	He	12331.837	12331.837	1.52	79080544	0.02	200000	
Co	59	103	1	He	3.831	3.831	1.46	41738	0.01	10000	
Ni	60	103	1	He	9.598	9.598	1.15	26013	0.04	10000	
Cu	63	103	1	He	5.945	5.945	2.38	43643	0.01	10000	
Zn	66	103	1	He	24.514	24.514	1.73	36807	0.07	10000	
As	75	103	1	He	6.805	6.805	1.00	6423	0.11	10000	
Se	78	103	1	He	0.488	0.488	17.84	91	0.53	10000	
Sr	88	103	1	He	6.519	6.519	2.54	49018	0.01	10000	
Mo	95	103	1	He	0.809	0.809	3.85	2811	0.03	2000	
Ag	107	103	1	He	0.025	0.025	10.43	296	0.01	300	
Cd	111	103	1	He	0.123	0.123	22.27	1288	0.01	4000	
Sn	118	115	1	He	2.047	2.047	4.45	11082	0.02	2000	
Sb	123	115	1	He	0.329	0.329	4.30	2040	0.02	300	
Ba	137	115	1	He	30.571	30.571	1.75	68890	0.04	10000	
W	182	209	1	He	0.320	0.320	6.24	7921	0.00	2500	
Tl	205	165	1	He	0.085	0.085	3.17	2887	0.00	5000	
Pb	208	209	1	He	7.814	7.814	0.44	372663	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1135861	1.54	1631381	69.63	30	120	
Sc	45	1	He	646188	2.45	829696	77.88	30	120	
Sc	45	2	NoGas	4969060	1.39	6325638	78.55	30	120	
Rh	103	1	He	1976187	0.50	2345543	84.25	30	120	
In	115	1	He	1189090	0.31	1419467	83.77	30	120	
Tb	159	1	He	3494289	0.49	3888262	89.87	30	120	
Ho	165	1	He	3621315	0.53	3932562	92.09	30	120	
Bi	209	1	He	2703796	0.81	2874805	94.05	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-2-b@20
Data File Name	078SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:03:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.409	0.409	8.30	1608	0.03	10000	
B	11	45	2	NoGas	0.971	0.971	18.09	11222	0.01	300	
Na	23	45	1	He	18.986	18.986	2.40	46738	0.04	500000	
Mg	24	45	1	He	1029.882	1029.882	1.83	855736	0.12	500000	
Al	27	45	1	He	6864.071	6864.071	2.24	3231756	0.21	200000	
K	39	45	1	He	370.820	370.820	2.63	321266	0.12	500000	
Ca	44	45	1	He	420.661	420.661	3.66	18864	2.23	500000	
Ti	47	45	1	He	34.756	34.756	5.80	8409	0.41	2500	
V	51	45	1	He	14.603	14.603	1.23	87373	0.02	10000	
Cr	52	45	1	He	10.005	10.005	2.54	73987	0.01	10000	
Mn	55	45	1	He	358.713	358.713	3.14	2025736	0.02	10000	
Fe	56	45	1	He	13339.352	13339.352	2.26	90352425	0.01	200000	
Co	59	103	1	He	4.725	4.725	2.55	54513	0.01	10000	
Ni	60	103	1	He	8.656	8.656	2.60	24856	0.03	10000	
Cu	63	103	1	He	5.811	5.811	3.81	45207	0.01	10000	
Zn	66	103	1	He	31.001	31.001	0.91	48839	0.06	10000	
As	75	103	1	He	7.497	7.497	2.12	7480	0.10	10000	
Se	78	103	1	He	0.591	0.591	23.75	107	0.55	10000	
Sr	88	103	1	He	2.534	2.534	2.28	20245	0.01	10000	
Mo	95	103	1	He	0.865	0.865	2.52	3178	0.03	2000	
Ag	107	103	1	He	0.043	0.043	12.04	543	0.01	300	
Cd	111	103	1	He	0.132	0.132	23.38	1384	0.01	4000	
Sn	118	115	1	He	1.842	1.842	1.27	10637	0.02	2000	
Sb	123	115	1	He	0.208	0.208	9.33	1570	0.01	300	
Ba	137	115	1	He	36.875	36.875	0.95	87762	0.04	10000	
W	182	209	1	He	0.181	0.181	7.73	6227	0.00	2500	
Tl	205	165	1	He	0.114	0.114	3.31	4003	0.00	5000	
Pb	208	209	1	He	11.348	11.348	1.70	560577	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1216083	1.74	1631381	74.54	30	120	
Sc	45	1	He	682566	1.98	829696	82.27	30	120	
Sc	45	2	NoGas	5326580	0.13	6325638	84.21	30	120	
Rh	103	1	He	2093535	1.68	2345543	89.26	30	120	
In	115	1	He	1256198	0.67	1419467	88.50	30	120	
Tb	159	1	He	3664529	0.99	3888262	94.25	30	120	
Ho	165	1	He	3745472	0.68	3932562	95.24	30	120	
Bi	209	1	He	2802473	1.08	2874805	97.48	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-3-b@20
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:07:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.432	0.432	6.99	1689	0.03	10000	
B	11	45	2	NoGas	0.790	0.790	12.88	10729	0.01	300	
Na	23	45	1	He	21.349	21.349	8.49	51807	0.04	500000	
Mg	24	45	1	He	1079.212	1079.212	0.47	925825	0.12	500000	
Al	27	45	1	He	7165.974	7165.974	1.21	3483701	0.21	200000	
K	39	45	1	He	411.730	411.730	1.89	364724	0.11	500000	
Ca	44	45	1	He	779.509	779.509	0.89	35366	2.20	500000	
Ti	47	45	1	He	44.759	44.759	3.90	11184	0.40	2500	
V	51	45	1	He	15.364	15.364	1.19	94900	0.02	10000	
Cr	52	45	1	He	11.636	11.636	0.65	88493	0.01	10000	
Mn	55	45	1	He	446.901	446.901	0.11	2606027	0.02	10000	
Fe	56	45	1	He	14101.694	14101.694	1.32	98623165	0.01	200000	
Co	59	103	1	He	6.135	6.135	1.75	72557	0.01	10000	
Ni	60	103	1	He	9.298	9.298	0.55	27367	0.03	10000	
Cu	63	103	1	He	6.189	6.189	0.57	49271	0.01	10000	
Zn	66	103	1	He	32.352	32.352	0.95	52169	0.06	10000	
As	75	103	1	He	8.056	8.056	1.16	8229	0.10	10000	
Se	78	103	1	He	0.684	0.684	6.72	120	0.57	10000	
Sr	88	103	1	He	3.664	3.664	1.99	29968	0.01	10000	
Mo	95	103	1	He	0.875	0.875	2.86	3297	0.03	2000	
Ag	107	103	1	He	0.045	0.045	8.63	580	0.01	300	
Cd	111	103	1	He	0.126	0.126	2.45	1407	0.01	4000	
Sn	118	115	1	He	1.971	1.971	3.48	11556	0.02	2000	
Sb	123	115	1	He	0.234	0.234	7.35	1732	0.01	300	
Ba	137	115	1	He	37.704	37.704	2.28	91675	0.04	10000	
W	182	209	1	He	0.124	0.124	11.59	5446	0.00	2500	
Tl	205	165	1	He	0.116	0.116	2.26	4112	0.00	5000	
Pb	208	209	1	He	12.663	12.663	1.75	629740	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1212063	1.57	1631381	74.30	30	120	
Sc	45	1	He	704619	0.94	829696	84.92	30	120	
Sc	45	2	NoGas	5351460	0.73	6325638	84.60	30	120	
Rh	103	1	He	2145971	0.52	2345543	91.49	30	120	
In	115	1	He	1283551	1.08	1419467	90.42	30	120	
Tb	159	1	He	3707740	1.63	3888262	95.36	30	120	
Ho	165	1	He	3790847	0.78	3932562	96.40	30	120	
Bi	209	1	He	2821995	1.30	2874805	98.16	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-4-b@20
Data File Name	080SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:11:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.412	0.412	12.11	1633	0.03	10000	
B	11	45	2	NoGas	1.625	1.625	11.06	13720	0.01	300	
Na	23	45	1	He	29.928	29.928	1.47	64446	0.05	500000	
Mg	24	45	1	He	909.397	909.397	2.04	776509	0.12	500000	
Al	27	45	1	He	3781.261	3781.261	2.07	1830344	0.21	200000	
K	39	45	1	He	269.743	269.743	2.97	248938	0.11	500000	
Ca	44	45	1	He	3039.215	3039.215	2.65	134751	2.26	500000	
Ti	47	45	1	He	45.070	45.070	2.38	11206	0.40	2500	
V	51	45	1	He	8.848	8.848	3.41	54460	0.02	10000	
Cr	52	45	1	He	10.664	10.664	0.74	80907	0.01	10000	
Mn	55	45	1	He	453.499	453.499	2.00	2631619	0.02	10000	
Fe	56	45	1	He	12007.790	12007.790	3.09	83561294	0.01	200000	
Co	59	103	1	He	4.823	4.823	1.76	56800	0.01	10000	
Ni	60	103	1	He	10.429	10.429	0.78	30549	0.03	10000	
Cu	63	103	1	He	6.182	6.182	1.75	48995	0.01	10000	
Zn	66	103	1	He	23.318	23.318	2.25	37934	0.06	10000	
As	75	103	1	He	13.416	13.416	1.49	13545	0.10	10000	
Se	78	103	1	He	0.684	0.684	13.92	119	0.57	10000	
Sr	88	103	1	He	8.937	8.937	1.41	72616	0.01	10000	
Mo	95	103	1	He	0.726	0.726	4.16	2735	0.03	2000	
Ag	107	103	1	He	0.073	0.073	7.33	923	0.01	300	
Cd	111	103	1	He	0.110	0.110	31.56	1365	0.01	4000	
Sn	118	115	1	He	2.001	2.001	1.87	11701	0.02	2000	
Sb	123	115	1	He	0.303	0.303	7.03	2073	0.01	300	
Ba	137	115	1	He	45.856	45.856	0.77	111332	0.04	10000	
W	182	209	1	He	0.132	0.132	11.01	5553	0.00	2500	
Tl	205	165	1	He	0.085	0.085	2.49	2986	0.00	5000	
Pb	208	209	1	He	14.107	14.107	0.47	701109	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1230100	0.14	1631381	75.40	30	120	
Sc	45	1	He	701381	2.27	829696	84.53	30	120	
Sc	45	2	NoGas	5543287	0.45	6325638	87.63	30	120	
Rh	103	1	He	2136636	1.32	2345543	91.09	30	120	
In	115	1	He	1281686	0.58	1419467	90.29	30	120	
Tb	159	1	He	3705187	0.39	3888262	95.29	30	120	
Ho	165	1	He	3761004	0.74	3932562	95.64	30	120	
Bi	209	1	He	2820192	0.30	2874805	98.10	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-4-b@20
Data File Name	081SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:14:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.370	0.370	11.45	1530	0.02	10000	
B	11	45	2	NoGas	0.641	0.641	27.18	10863	0.01	300	
Na	23	45	1	He	18.344	18.344	3.65	48406	0.04	500000	
Mg	24	45	1	He	997.206	997.206	2.68	875681	0.11	500000	
Al	27	45	1	He	5798.553	5798.553	3.02	2885786	0.20	200000	
K	39	45	1	He	300.221	300.221	4.01	281217	0.11	500000	
Ca	44	45	1	He	247.475	247.475	0.90	12092	2.05	500000	
Ti	47	45	1	He	49.024	49.024	2.52	12536	0.39	2500	
V	51	45	1	He	13.848	13.848	3.61	87560	0.02	10000	
Cr	52	45	1	He	8.273	8.273	1.61	65058	0.01	10000	
Mn	55	45	1	He	1747.803	1747.803	1.38	10430360	0.02	10000	
Fe	56	45	1	He	13058.869	13058.869	1.95	93493594	0.01	200000	
Co	59	103	1	He	5.616	5.616	0.59	68156	0.01	10000	
Ni	60	103	1	He	6.713	6.713	0.53	20310	0.03	10000	
Cu	63	103	1	He	4.610	4.610	1.65	38076	0.01	10000	
Zn	66	103	1	He	51.168	51.168	1.04	83591	0.06	10000	
As	75	103	1	He	6.299	6.299	0.62	6637	0.09	10000	
Se	78	103	1	He	0.577	0.577	21.11	111	0.52	10000	
Sr	88	103	1	He	3.040	3.040	2.32	25526	0.01	10000	
Mo	95	103	1	He	0.911	0.911	1.81	3518	0.03	2000	
Ag	107	103	1	He	0.163	0.163	4.69	2133	0.01	300	
Cd	111	103	1	He	0.190	0.190	5.62	1587	0.01	4000	
Sn	118	115	1	He	1.725	1.725	4.18	10507	0.02	2000	
Sb	123	115	1	He	0.096	0.096	11.41	1079	0.01	300	
Ba	137	115	1	He	48.545	48.545	0.35	121106	0.04	10000	
W	182	209	1	He	0.389	0.389	2.64	9459	0.00	2500	
Tl	205	165	1	He	0.121	0.121	2.24	4353	0.00	5000	
Pb	208	209	1	He	20.840	20.840	0.86	1058576	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1281007	1.78	1631381	78.52	30	120	
Sc	45	1	He	721423	1.79	829696	86.95	30	120	
Sc	45	2	NoGas	5655989	1.12	6325638	89.41	30	120	
Rh	103	1	He	2202161	0.78	2345543	93.89	30	120	
In	115	1	He	1317052	1.06	1419467	92.78	30	120	
Tb	159	1	He	3779939	1.11	3888262	97.21	30	120	
Ho	165	1	He	3856707	0.68	3932562	98.07	30	120	
Bi	209	1	He	2883411	0.58	2874805	100.30	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-6-b@20
Data File Name	082SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:18:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.340	0.340	3.51	1404	0.02	10000	
B	11	45	2	NoGas	0.685	0.685	22.47	10981	0.01	300	
Na	23	45	1	He	16.769	16.769	2.15	46745	0.04	500000	
Mg	24	45	1	He	901.118	901.118	0.41	804811	0.11	500000	
Al	27	45	1	He	5906.172	5906.172	0.88	2989568	0.20	200000	
K	39	45	1	He	352.585	352.585	1.60	329958	0.11	500000	
Ca	44	45	1	He	94.639	94.639	4.37	5247	1.80	500000	
Ti	47	45	1	He	42.902	42.902	2.61	11156	0.38	2500	
V	51	45	1	He	13.472	13.472	1.49	86631	0.02	10000	
Cr	52	45	1	He	8.303	8.303	2.09	66367	0.01	10000	
Mn	55	45	1	He	782.097	782.097	1.98	4746178	0.02	10000	
Fe	56	45	1	He	12058.229	12058.229	1.85	87774577	0.01	200000	
Co	59	103	1	He	4.630	4.630	0.57	57427	0.01	10000	
Ni	60	103	1	He	6.951	6.951	0.77	21483	0.03	10000	
Cu	63	103	1	He	3.976	3.976	0.70	33776	0.01	10000	
Zn	66	103	1	He	26.262	26.262	1.55	44757	0.06	10000	
As	75	103	1	He	5.206	5.206	0.65	5632	0.09	10000	
Se	78	103	1	He	0.537	0.537	17.68	109	0.49	10000	
Sr	88	103	1	He	1.674	1.674	1.64	14418	0.01	10000	
Mo	95	103	1	He	0.744	0.744	4.80	2948	0.03	2000	
Ag	107	103	1	He	0.042	0.042	9.76	570	0.01	300	
Cd	111	103	1	He	0.125	0.125	19.13	1472	0.01	4000	
Sn	118	115	1	He	1.748	1.748	3.37	10756	0.02	2000	
Sb	123	115	1	He	0.069	0.069	10.92	954	0.01	300	
Ba	137	115	1	He	44.950	44.950	1.01	113433	0.04	10000	
W	182	209	1	He	0.128	0.128	11.24	5635	0.00	2500	
Tl	205	165	1	He	0.100	0.100	0.75	3630	0.00	5000	
Pb	208	209	1	He	10.139	10.139	1.10	517065	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1275668	0.46	1631381	78.20	30	120	
Sc	45	1	He	733458	1.72	829696	88.40	30	120	
Sc	45	2	NoGas	5645193	1.07	6325638	89.24	30	120	
Rh	103	1	He	2250062	0.90	2345543	95.93	30	120	
In	115	1	He	1332174	0.30	1419467	93.85	30	120	
Tb	159	1	He	3818595	0.35	3888262	98.21	30	120	
Ho	165	1	He	3875926	0.79	3932562	98.56	30	120	
Bi	209	1	He	2892618	0.79	2874805	100.62	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-8-b@20
Data File Name	083SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:22:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.418	0.418	5.46	1785	0.02	10000	
B	11	45	2	NoGas	0.427	0.427	39.01	10641	0.00	300	
Na	23	45	1	He	17.231	17.231	2.58	49597	0.03	500000	
Mg	24	45	1	He	897.225	897.225	0.98	837153	0.11	500000	
Al	27	45	1	He	6903.003	6903.003	1.17	3649352	0.19	200000	
K	39	45	1	He	374.269	374.269	1.54	363770	0.10	500000	
Ca	44	45	1	He	151.892	151.892	3.94	8240	1.84	500000	
Ti	47	45	1	He	42.644	42.644	3.00	11586	0.37	2500	
V	51	45	1	He	14.951	14.951	1.04	100441	0.01	10000	
Cr	52	45	1	He	9.725	9.725	1.42	80814	0.01	10000	
Mn	55	45	1	He	759.866	759.866	1.32	4817439	0.02	10000	
Fe	56	45	1	He	13064.034	13064.034	0.59	99363743	0.01	200000	
Co	59	103	1	He	6.105	6.105	2.42	76494	0.01	10000	
Ni	60	103	1	He	9.285	9.285	1.59	28955	0.03	10000	
Cu	63	103	1	He	5.717	5.717	1.21	48355	0.01	10000	
Zn	66	103	1	He	30.168	30.168	0.68	51674	0.06	10000	
As	75	103	1	He	6.401	6.401	2.65	6959	0.09	10000	
Se	78	103	1	He	0.664	0.664	2.55	125	0.53	10000	
Sr	88	103	1	He	1.837	1.837	2.50	15970	0.01	10000	
Mo	95	103	1	He	0.880	0.880	3.81	3513	0.03	2000	
Ag	107	103	1	He	0.035	0.035	9.56	483	0.01	300	
Cd	111	103	1	He	0.112	0.112	10.43	1457	0.01	4000	
Sn	118	115	1	He	1.793	1.793	4.98	11301	0.02	2000	
Sb	123	115	1	He	0.073	0.073	23.84	1000	0.01	300	
Ba	137	115	1	He	50.700	50.700	0.95	131347	0.04	10000	
W	182	209	1	He	0.090	0.090	20.22	5083	0.00	2500	
Tl	205	165	1	He	0.107	0.107	5.47	3966	0.00	5000	
Pb	208	209	1	He	11.359	11.359	0.76	579984	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1324905	0.88	1631381	81.21	30	120	
Sc	45	1	He	766256	1.02	829696	92.35	30	120	
Sc	45	2	NoGas	5907458	1.55	6325638	93.39	30	120	
Rh	103	1	He	2273882	1.52	2345543	96.94	30	120	
In	115	1	He	1367734	0.35	1419467	96.36	30	120	
Tb	159	1	He	3857192	1.03	3888262	99.20	30	120	
Ho	165	1	He	3976714	0.99	3932562	101.12	30	120	
Bi	209	1	He	2896559	0.76	2874805	100.76	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	084_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:26:08-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.972	1.570	193830	1.05	50	99.9	89.5	110.5	
B	11	45	2	NoGas	46.674	1.727	147706	1.96	50	93.3	89.5	110.5	
Na	23	45	1	He	24069.364	2.232	36532812	1.14	25000	96.3	89.5	110.5	
Mg	24	45	1	He	24041.143	2.392	20732680	0.91	25000	96.2	89.5	110.5	
Al	27	45	1	He	236.384	2.249	117814	1.03	250	94.6	89.5	110.5	
K	39	45	1	He	25069.714	2.922	20385336	1.14	25000	100.3	89.5	110.5	
Ca	44	45	1	He	24583.415	2.262	1096076	1.04	25000	98.3	89.5	110.5	
Ti	47	45	1	He	51.450	2.438	12934	2.61	50	102.9	89.5	110.5	
V	51	45	1	He	50.656	3.259	314563	0.72	50	101.3	89.5	110.5	
Cr	52	45	1	He	50.116	2.452	376201	0.80	50	100.2	89.5	110.5	
Mn	55	45	1	He	255.226	2.711	1497749	0.48	250	102.1	89.5	110.5	
Fe	56	45	1	He	12572.521	2.055	88479399	1.21	12500	100.6	89.5	110.5	
Co	59	103	1	He	47.386	1.913	528463	1.77	50	94.8	89.5	110.5	
Ni	60	103	1	He	46.679	2.277	129160	0.46	50	93.4	89.5	110.5	
Cu	63	103	1	He	47.319	2.591	345529	1.42	50	94.6	89.5	110.5	
Zn	66	103	1	He	47.868	2.005	72006	1.38	50	95.7	89.5	110.5	
As	75	103	1	He	49.066	2.290	46567	0.98	50	98.1	89.5	110.5	
Se	78	103	1	He	49.100	3.123	4954	1.73	50	98.2	89.5	110.5	
Sr	88	103	1	He	49.544	1.999	380984	1.14	50	99.1	89.5	110.5	
Mo	95	103	1	He	50.631	2.779	176907	1.57	50	101.3	89.5	110.5	
Ag	107	103	1	He	49.922	2.965	599016	1.64	50	99.8	89.5	110.5	
Cd	111	103	1	He	50.198	2.352	105884	0.58	50	100.4	89.5	110.5	
Sn	118	115	1	He	50.035	1.853	258496	0.82	50	100.1	89.5	110.5	
Sb	123	115	1	He	52.148	0.663	248463	0.39	50	104.3	89.5	110.5	
Ba	137	115	1	He	51.491	1.906	120390	1.58	50	103.0	89.5	110.5	
W	182	209	1	He	50.159	1.707	680402	1.61	50	100.3	89.5	110.5	
Tl	205	165	1	He	51.034	0.610	1759115	1.61	50	102.1	89.5	110.5	
Pb	208	209	1	He	47.888	1.241	2230266	1.19	50	95.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1227045	1.38	1631381	75.22	30	120	
Sc	45	1	He	709282	3.20	829696	85.49	30	120	
Sc	45	2	NoGas	5306633	0.35	6325638	83.89	30	120	
Rh	103	1	He	2024969	2.07	2345543	86.33	30	120	
In	115	1	He	1234490	1.03	1419467	86.97	30	120	
Tb	159	1	He	3681433	0.96	3888262	94.68	30	120	
Ho	165	1	He	3755620	1.04	3932562	95.50	30	120	
Bi	209	1	He	2644816	0.62	2874805	92.00	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	085_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:29:56-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.078	11.8	337	9.5	1	
B	11	45	2	NoGas	0.260	65.7	9099	5.9	20	
Na	23	45	1	He	7.025	21.6	28634	5.6	400	
Mg	24	45	1	He	1.839	71.2	2278	44.5	1000	
Al	27	45	1	He	1.290	16.9	2725	2.5	50	
K	39	45	1	He	10.265	12.3	38683	2.6	1000	
Ca	44	45	1	He	5.186	38.3	1025	7.1	1000	
Ti	47	45	1	He	0.312	13.2	84	9.9	20	
V	51	45	1	He	0.026	353.5	233	232.4	2	
Cr	52	45	1	He	-0.007	-74.3	2027	2.6	2	
Mn	55	45	1	He	0.076	40.9	1411	10.4	2	
Fe	56	45	1	He	23.662	21.3	160208	18.7	50	
Co	59	103	1	He	0.004	47.6	87	23.1	1	
Ni	60	103	1	He	-0.021	-28.3	56	30.8	2	
Cu	63	103	1	He	0.004	157.5	1585	1.9	2	
Zn	66	103	1	He	-0.037	-169.2	1736	5.1	20	
As	75	103	1	He	0.079	7.3	227	3.2	2	
Se	78	103	1	He	0.171	15.8	65	4.0	2	
Sr	88	103	1	He	0.013	30.4	216	15.9	10	
Mo	95	103	1	He	0.894	20.2	3346	20.3	2	
Ag	107	103	1	He	0.013	36.2	167	35.6	0.2	
Cd	111	103	1	He	0.039	21.9	1205	1.0	0.2	
Sn	118	115	1	He	0.405	11.7	3149	6.4	10	
Sb	123	115	1	He	0.497	14.0	3009	9.8	1	
Ba	137	115	1	He	0.006	132.4	104	17.6	5	
W	182	209	1	He	1.072	16.0	18723	12.9	10	
Tl	205	165	1	He	0.041	25.4	1481	24.4	0.5	
Pb	208	209	1	He	0.042	12.2	2831	9.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1232465	1.35	1631381	75.55	30	120	
Sc	45	1	He	668278	2.00	829696	80.55	30	120	
Sc	45	2	NoGas	5332089	0.52	6325638	84.29	30	120	
Rh	103	1	He	2130954	0.75	2345543	90.85	30	120	
In	115	1	He	1273716	1.73	1419467	89.73	30	120	
Tb	159	1	He	3636833	0.72	3888262	93.53	30	120	
Ho	165	1	He	3729127	0.56	3932562	94.83	30	120	
Bi	209	1	He	2766107	0.33	2874805	96.22	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	086CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:33:46-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.987	0.987	4.067	3949	3.16	1	98.7	69.5	130.5	
B	11	2	NoGas	18.141	18.141	4.614	63305	2.63	20	90.7	69.5	130.5	
Na	23	1	He	1060.712	1060.712	2.082	1600027	2.03	1000	106.1	69.5	130.5	
Mg	24	1	He	1057.138	1057.138	0.261	896364	0.12	1000	105.7	69.5	130.5	
Al	27	1	He	46.811	46.811	1.441	24699	1.15	50	93.6	69.5	130.5	
K	39	1	He	1071.984	1071.984	0.775	887112	0.47	1000	107.2	69.5	130.5	
Ca	44	1	He	1027.605	1027.605	0.770	45814	0.99	1000	102.8	69.5	130.5	
Ti	47	1	He	10.230	10.230	4.596	2535	4.32	10	102.3	69.5	130.5	
V	51	1	He	5.296	5.296	2.881	32393	2.62	5	105.9	69.5	130.5	
Cr	52	1	He	2.142	2.142	1.155	17861	0.96	2	107.1	69.5	130.5	
Mn	55	1	He	5.223	5.223	0.742	31125	0.91	5	104.5	69.5	130.5	
Fe	56	1	He	111.584	111.584	0.387	775184	0.59	100	111.6	69.5	130.5	
Co	59	1	He	0.957	0.957	0.376	11254	0.85	1	95.7	69.5	130.5	
Ni	60	1	He	1.940	1.940	3.731	5749	3.18	2	97.0	69.5	130.5	
Cu	63	1	He	1.852	1.852	4.074	15695	3.24	2	92.6	69.5	130.5	
Zn	66	1	He	19.367	19.367	1.295	31657	0.77	20	96.8	69.5	130.5	
As	75	1	He	4.896	4.896	1.404	5013	1.59	5	97.9	69.5	130.5	
Se	78	1	He	5.136	5.136	1.404	586	1.60	5	102.7	69.5	130.5	
Sr	88	1	He	9.599	9.599	2.338	77603	2.38	10	96.0	69.5	130.5	
Mo	95	1	He	10.339	10.339	0.315	37985	0.74	10	103.4	69.5	130.5	
Ag	107	1	He	1.057	1.057	1.857	13329	1.97	1	105.7	69.5	130.5	
Cd	111	1	He	1.093	1.093	8.269	3514	5.40	1	109.3	69.5	130.5	
Sn	118	1	He	10.212	10.212	2.203	55469	2.31	10	102.1	69.5	130.5	
Sb	123	1	He	2.061	2.061	0.378	10728	0.81	2	103.1	69.5	130.5	
Ba	137	1	He	5.155	5.155	2.173	12569	1.72	5	103.1	69.5	130.5	
W	182	1	He	9.639	9.639	1.119	140950	1.35	10	96.4	69.5	130.5	
Tl	205	1	He	2.059	2.059	3.092	71031	2.09	2	103.0	69.5	130.5	
Pb	208	1	He	1.038	1.038	2.448	51786	2.16	1	103.8	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1254792	1.41	1631381	76.92	30	120	
Sc	45	1	He	696417	0.28	829696	83.94	30	120	
Sc	45	2	NoGas	5379970	1.88	6325638	85.05	30	120	
Rh	103	1	He	2126052	0.48	2345543	90.64	30	120	
In	115	1	He	1279074	0.72	1419467	90.11	30	120	
Tb	159	1	He	3679669	1.11	3888262	94.64	30	120	
Ho	165	1	He	3756192	1.11	3932562	95.52	30	120	
Bi	209	1	He	2791841	0.37	2874805	97.11	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176698/1-a@2
Data File Name	087_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:37:37-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.082	30.2	333	27.3	1	
B	11	45	2	NoGas	0.269	107.4	8495	7.9	20	
Na	23	45	1	He	41.922	4.9	77187	2.2	400	
Mg	24	45	1	He	38.035	1.8	31187	4.4	1000	
Al	27	45	1	He	2.071	25.3	3038	10.5	50	
K	39	45	1	He	34.647	3.5	56366	2.4	1000	
Ca	44	45	1	He	114.094	0.3	5505	3.7	1000	
Ti	47	45	1	He	0.738	28.6	181	23.3	20	
V	51	45	1	He	0.091	27.4	609	26.1	2	
Cr	52	45	1	He	0.833	10.5	7786	3.9	2	
Mn	55	45	1	He	0.299	7.8	2598	1.7	2	
Fe	56	45	1	He	21.706	4.6	145380	8.5	50	
Co	59	103	1	He	0.087	12.1	990	12.8	1	
Ni	60	103	1	He	0.228	12.8	728	10.3	2	
Cu	63	103	1	He	0.281	5.4	3465	3.4	2	
Zn	66	103	1	He	1.659	1.8	4069	1.7	20	
As	75	103	1	He	0.414	3.4	523	2.9	2	
Se	78	103	1	He	0.438	19.8	87	10.0	2	
Sr	88	103	1	He	0.372	5.1	2907	3.9	10	
Mo	95	103	1	He	0.592	17.3	2086	16.8	2	
Ag	107	103	1	He	0.025	18.1	296	18.1	0.2	
Cd	111	103	1	He	0.051	52.5	1150	3.8	0.2	
Sn	118	115	1	He	17.642	1.5	88682	1.7	10	Blank Failed
Sb	123	115	1	He	0.395	6.5	2350	6.1	1	
Ba	137	115	1	He	0.853	10.2	2009	8.6	5	
W	182	209	1	He	0.435	22.0	9781	14.5	10	
Tl	205	165	1	He	0.326	3.0	10780	2.5	0.5	
Pb	208	209	1	He	0.190	2.2	10071	1.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1159817	1.72	1631381	71.09	30	120	
Sc	45	1	He	657114	3.97	829696	79.20	30	120	
Sc	45	2	NoGas	4967497	1.59	6325638	78.53	30	120	
Rh	103	1	He	1990053	1.12	2345543	84.84	30	120	
In	115	1	He	1192775	1.11	1419467	84.03	30	120	
Tb	159	1	He	3477857	1.29	3888262	89.45	30	120	
Ho	165	1	He	3587273	0.99	3932562	91.22	30	120	
Bi	209	1	He	2778059	1.37	2874805	96.63	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176698/2-a@2
Data File Name	088LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:41:27-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	453.088	453.088	1.445	1552860	2.09	500	90.6	78.6	110.5	
B	11	2	NoGas	49.636	49.636	0.474	134443	0.57	50	99.3	79.5	120.5	
Na	23	1	He	4765.751	4765.751	1.623	6100939	1.27	5000	95.3	79.5	120.5	
Mg	24	1	He	4854.251	4854.251	1.507	3523839	1.37	5000	97.1	79.5	120.5	
Al	27	1	He	4558.474	4558.474	1.863	1877293	1.81	5000	91.2	79.5	120.5	
K	39	1	He	4869.542	4869.542	1.930	3354754	0.93	5000	97.4	79.5	120.5	
Ca	44	1	He	4380.194	4380.194	1.243	164961	1.48	5000	87.6	79.5	120.5	
Ti	47	1	He	48.383	48.383	1.376	10235	1.37	50	96.8	79.5	120.5	
V	51	1	He	480.535	480.535	2.035	2511040	0.93	500	96.1	71.5	110.5	
Cr	52	1	He	487.340	487.340	2.172	3062426	0.82	500	97.5	69.5	110.5	
Mn	55	1	He	495.065	495.065	2.837	2443864	0.52	500	99.0	79.5	120.5	
Fe	56	1	He	4934.431	4934.431	1.865	29224330	0.84	5000	98.7	79.5	120.5	
Co	59	1	He	425.871	425.871	0.124	4349044	0.26	500	85.2	73.9	110.5	
Ni	60	1	He	420.496	420.496	0.318	1064825	0.54	500	84.1	74.9	110.5	
Cu	63	1	He	439.315	439.315	0.451	2926878	0.68	500	87.9	72.6	110.5	
Zn	66	1	He	404.843	404.843	0.606	546084	0.79	500	81.0	71.5	113.4	
As	75	1	He	396.051	396.051	1.164	343353	1.39	500	79.2	73.4	110.5	
Se	78	1	He	387.080	387.080	1.061	35491	1.22	500	77.4	64.6	110.5	
Sr	88	1	He	457.277	457.277	0.903	3219657	1.13	500	91.5	79.5	120.5	
Mo	95	1	He	49.440	49.440	0.155	158220	0.33	50	98.9	29.5	140.5	
Ag	107	1	He	47.520	47.520	1.041	522268	1.26	50	95.0	59.5	114.5	
Cd	111	1	He	447.506	447.506	0.427	856836	0.65	500	89.5	73.5	110.5	
Sn	118	1	He	544.221	544.221	1.309	2463172	1.45	500	108.8	79.5	120.5	
Sb	123	1	He	49.256	49.256	0.222	206315	0.86	50	98.5	67.5	113.4	
Ba	137	1	He	483.477	483.477	0.724	993032	1.30	500	96.7	69.5	110.5	
W	182	1	He	46.262	46.262	2.220	611239	0.32	50	92.5	74.6	125.4	
Tl	205	1	He	120.081	120.081	1.953	3821197	0.86	125	96.1	70.6	110.5	
Pb	208	1	He	456.060	456.060	0.846	20677425	1.35	500	91.2	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1084208	0.89	1631381	66.46	30	120	
Sc	45	1	He	596812	2.73	829696	71.93	30	120	
Sc	45	2	NoGas	4557301	0.13	6325638	72.04	30	120	
Rh	103	1	He	1854069	0.23	2345543	79.05	30	120	
In	115	1	He	1085051	0.65	1419467	76.44	30	120	
Tb	159	1	He	3405101	0.79	3888262	87.57	30	120	
Ho	165	1	He	3467870	1.15	3932562	88.18	30	120	
Bi	209	1	He	2575718	1.94	2874805	89.60	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-d@20
Data File Name	089SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:45:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.429	0.429	1.41	1682	0.03	10000	
B	11	45	2	NoGas	0.902	0.902	9.82	10748	0.01	300	
Na	23	45	1	He	12.661	12.661	2.52	36745	0.03	500000	
Mg	24	45	1	He	760.198	760.198	1.21	619148	0.12	500000	
Al	27	45	1	He	4009.435	4009.435	1.89	1850663	0.22	200000	
K	39	45	1	He	331.075	331.075	2.09	284379	0.12	500000	
Ca	44	45	1	He	64.743	64.743	3.22	3528	1.83	500000	
Ti	47	45	1	He	33.655	33.655	4.13	7981	0.42	2500	
V	51	45	1	He	11.037	11.037	3.49	64717	0.02	10000	
Cr	52	45	1	He	9.831	9.831	0.88	71282	0.01	10000	
Mn	55	45	1	He	815.405	815.405	1.02	4511709	0.02	10000	
Fe	56	45	1	He	20372.567	20372.567	1.25	135221492	0.02	200000	
Co	59	103	1	He	5.451	5.451	0.34	61020	0.01	10000	
Ni	60	103	1	He	8.125	8.125	1.74	22648	0.04	10000	
Cu	63	103	1	He	5.550	5.550	0.19	41975	0.01	10000	
Zn	66	103	1	He	19.198	19.198	1.36	29996	0.06	10000	
As	75	103	1	He	7.144	7.144	1.37	6924	0.10	10000	
Se	78	103	1	He	1.004	1.004	3.18	146	0.69	10000	
Sr	88	103	1	He	2.079	2.079	3.07	16134	0.01	10000	
Mo	95	103	1	He	0.992	0.992	8.39	3532	0.03	2000	
Ag	107	103	1	He	0.023	0.023	8.43	277	0.01	300	
Cd	111	103	1	He	0.156	0.156	12.87	1394	0.01	4000	
Sn	118	115	1	He	2.204	2.204	6.09	12112	0.02	2000	
Sb	123	115	1	He	0.262	0.262	16.22	1771	0.01	300	
Ba	137	115	1	He	30.115	30.115	2.13	69312	0.04	10000	
W	182	209	1	He	0.613	0.613	14.94	12124	0.01	2500	
Tl	205	165	1	He	0.160	0.160	12.22	5474	0.00	5000	
Pb	208	209	1	He	6.744	6.744	0.07	325559	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1215406	2.28	1631381	74.50	30	120	
Sc	45	1	He	668727	0.94	829696	80.60	30	120	
Sc	45	2	NoGas	5196121	1.54	6325638	82.14	30	120	
Rh	103	1	He	2031059	0.47	2345543	86.59	30	120	
In	115	1	He	1214562	0.44	1419467	85.56	30	120	
Tb	159	1	He	3569566	0.82	3888262	91.80	30	120	
Ho	165	1	He	3680434	0.94	3932562	93.59	30	120	
Bi	209	1	He	2735887	1.10	2874805	95.17	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-1-d@100
Data File Name	090SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:48:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.125	0.125	2.36	507	0.02	10000	
B	11	45	2	NoGas	-0.191	-0.191	-53.14	7472	0.00	300	
Na	23	45	1	He	3.854	3.854	1.11	23924	0.02	500000	
Mg	24	45	1	He	158.051	158.051	0.13	128186	0.12	500000	
Al	27	45	1	He	845.935	845.935	0.86	388592	0.22	200000	
K	39	45	1	He	71.279	71.279	3.79	84664	0.08	500000	
Ca	44	45	1	He	12.241	12.241	5.36	1310	0.93	500000	
Ti	47	45	1	He	6.795	6.795	9.77	1605	0.42	2500	
V	51	45	1	He	2.413	2.413	4.94	14096	0.02	10000	
Cr	52	45	1	He	2.003	2.003	1.22	16028	0.01	10000	
Mn	55	45	1	He	170.526	170.526	0.45	935716	0.02	10000	
Fe	56	45	1	He	4281.929	4281.929	1.42	28164314	0.02	200000	
Co	59	103	1	He	1.110	1.110	1.50	12645	0.01	10000	
Ni	60	103	1	He	1.627	1.627	5.75	4694	0.03	10000	
Cu	63	103	1	He	1.082	1.082	4.15	9514	0.01	10000	
Zn	66	103	1	He	3.834	3.834	3.65	7469	0.05	10000	
As	75	103	1	He	1.465	1.465	3.69	1555	0.09	10000	
Se	78	103	1	He	0.224	0.224	30.82	68	0.33	10000	
Sr	88	103	1	He	0.419	0.419	2.36	3381	0.01	10000	
Mo	95	103	1	He	0.229	0.229	9.23	869	0.03	2000	
Ag	107	103	1	He	0.006	0.006	24.63	76	0.01	300	
Cd	111	103	1	He	0.080	0.080	51.38	1253	0.01	4000	
Sn	118	115	1	He	0.413	0.413	10.02	3123	0.01	2000	
Sb	123	115	1	He	0.029	0.029	33.80	699	0.00	300	
Ba	137	115	1	He	5.975	5.975	0.66	14178	0.04	10000	
W	182	209	1	He	0.165	0.165	23.07	5898	0.00	2500	
Tl	205	165	1	He	0.030	0.030	8.96	1082	0.00	5000	
Pb	208	209	1	He	1.389	1.389	0.72	68240	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1199620	1.04	1631381	73.53	30	120	
Sc	45	1	He	662630	1.23	829696	79.86	30	120	
Sc	45	2	NoGas	5144449	2.60	6325638	81.33	30	120	
Rh	103	1	He	2061403	0.86	2345543	87.89	30	120	
In	115	1	He	1245896	0.22	1419467	87.77	30	120	
Tb	159	1	He	3632495	0.73	3888262	93.42	30	120	
Ho	165	1	He	3724335	1.65	3932562	94.71	30	120	
Bi	209	1	He	2758092	0.84	2874805	95.94	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-1-d@20
Data File Name	091SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:52:45-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	992.707	992.707	1.10	3465841	0.03	10000	
B	11	45	2	NoGas	100.229	100.229	1.46	282310	0.04	300	
Na	23	45	1	He	9614.176	9614.176	4.53	13653520	0.07	500000	
Mg	24	45	1	He	10421.737	10421.737	5.66	8399155	0.12	500000	
Al	27	45	1	He	12829.584	12829.584	3.51	5867836	0.22	200000	
K	39	45	1	He	10248.698	10248.698	4.73	7809784	0.13	500000	
Ca	44	45	1	He	8821.553	8821.553	3.68	368351	2.39	500000	
Ti	47	45	1	He	126.391	126.391	5.22	29675	0.43	2500	
V	51	45	1	He	969.040	969.040	3.20	5628384	0.02	10000	
Cr	52	45	1	He	969.836	969.836	3.77	6770832	0.01	10000	
Mn	55	45	1	He	1756.092	1756.092	4.26	9631484	0.02	10000	
Fe	56	45	1	He	29531.031	29531.031	4.03	194325086	0.02	200000	
Co	59	103	1	He	919.939	919.939	0.89	9746717	0.01	10000	
Ni	60	103	1	He	947.352	947.352	0.69	2488539	0.04	10000	
Cu	63	103	1	He	941.043	941.043	0.67	6502333	0.01	10000	
Zn	66	103	1	He	951.089	951.089	0.60	1328706	0.07	10000	
As	75	103	1	He	922.709	922.709	0.78	829640	0.11	10000	
Se	78	103	1	He	934.493	934.493	0.90	88822	1.05	10000	
Sr	88	103	1	He	979.202	979.202	1.13	7152011	0.01	10000	
Mo	95	103	1	He	99.214	99.214	2.82	329230	0.03	2000	
Ag	107	103	1	He	99.288	99.288	0.96	1131951	0.01	300	
Cd	111	103	1	He	1043.018	1043.018	0.43	2070481	0.05	4000	
Sn	118	115	1	He	1100.448	1100.448	1.34	5223078	0.02	2000	
Sb	123	115	1	He	105.784	105.784	0.77	464131	0.02	300	
Ba	137	115	1	He	1152.614	1152.614	1.27	2482836	0.05	10000	
W	182	209	1	He	94.385	94.385	1.05	1250426	0.01	2500	
Tl	205	165	1	He	254.353	254.353	1.58	8339423	0.00	5000	
Pb	208	209	1	He	991.858	991.858	0.80	45210965	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1104639	1.53	1631381	67.71	30	120	
Sc	45	1	He	663990	6.03	829696	80.03	30	120	
Sc	45	2	NoGas	4869439	0.71	6325638	76.98	30	120	
Rh	103	1	He	1923572	2.11	2345543	82.01	30	120	
In	115	1	He	1137997	0.59	1419467	80.17	30	120	
Tb	159	1	He	3459432	1.39	3888262	88.97	30	120	
Ho	165	1	He	3572857	1.07	3932562	90.85	30	120	
Bi	209	1	He	2589269	0.80	2874805	90.07	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-e du@20
Data File Name	092SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T15:56:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.577	0.577	12.08	2156	0.03	10000	
B	11	45	2	NoGas	1.062	1.062	10.48	11044	0.01	300	
Na	23	45	1	He	16.126	16.126	2.10	40364	0.04	500000	
Mg	24	45	1	He	850.408	850.408	0.80	670284	0.13	500000	
Al	27	45	1	He	4722.972	4722.972	1.37	2109702	0.22	200000	
K	39	45	1	He	400.822	400.822	1.18	326988	0.12	500000	
Ca	44	45	1	He	69.559	69.559	5.03	3612	1.93	500000	
Ti	47	45	1	He	32.551	32.551	1.89	7474	0.44	2500	
V	51	45	1	He	12.460	12.460	2.19	70722	0.02	10000	
Cr	52	45	1	He	11.112	11.112	0.73	77716	0.01	10000	
Mn	55	45	1	He	693.326	693.326	0.86	3713176	0.02	10000	
Fe	56	45	1	He	20858.480	20858.480	1.12	133998261	0.02	200000	
Co	59	103	1	He	4.921	4.921	1.89	54074	0.01	10000	
Ni	60	103	1	He	8.508	8.508	1.89	23275	0.04	10000	
Cu	63	103	1	He	5.763	5.763	2.84	42723	0.01	10000	
Zn	66	103	1	He	20.602	20.602	1.50	31477	0.07	10000	
As	75	103	1	He	7.799	7.799	3.40	7405	0.11	10000	
Se	78	103	1	He	1.625	1.625	3.89	204	0.80	10000	
Sr	88	103	1	He	2.413	2.413	5.01	18362	0.01	10000	
Mo	95	103	1	He	2.532	2.532	14.89	8752	0.03	2000	
Ag	107	103	1	He	0.027	0.027	32.39	322	0.01	300	
Cd	111	103	1	He	0.188	0.188	15.08	1434	0.01	4000	
Sn	118	115	1	He	7.525	7.525	9.60	38322	0.02	2000	
Sb	123	115	1	He	0.896	0.896	13.95	4646	0.02	300	
Ba	137	115	1	He	29.949	29.949	1.71	67659	0.04	10000	
W	182	209	1	He	2.183	2.183	12.46	33354	0.01	2500	
Tl	205	165	1	He	0.233	0.233	15.47	7806	0.00	5000	
Pb	208	209	1	He	7.086	7.086	1.06	335294	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1165247	0.88	1631381	71.43	30	120	
Sc	45	1	He	647233	0.77	829696	78.01	30	120	
Sc	45	2	NoGas	5117030	0.59	6325638	80.89	30	120	
Rh	103	1	He	1994121	1.62	2345543	85.02	30	120	
In	115	1	He	1192217	1.04	1419467	83.99	30	120	
Tb	159	1	He	3520877	1.90	3888262	90.55	30	120	
Ho	165	1	He	3626811	0.42	3932562	92.23	30	120	
Bi	209	1	He	2682163	0.43	2874805	93.30	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-1-f ms@20
Data File Name	093SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:00:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.166	5.166	3.77	20245	0.03	10000	
B	11	45	2	NoGas	4.331	4.331	0.76	21661	0.02	300	
Na	23	45	1	He	476.243	476.243	0.56	730995	0.07	500000	
Mg	24	45	1	He	1302.356	1302.356	1.06	1106965	0.12	500000	
Al	27	45	1	He	5171.155	5171.155	0.90	2491909	0.21	200000	
K	39	45	1	He	763.129	763.129	1.74	642430	0.12	500000	
Ca	44	45	1	He	540.689	540.689	1.37	24568	2.20	500000	
Ti	47	45	1	He	42.444	42.444	0.07	10509	0.40	2500	
V	51	45	1	He	17.592	17.592	1.71	107674	0.02	10000	
Cr	52	45	1	He	15.066	15.066	1.19	112910	0.01	10000	
Mn	55	45	1	He	805.138	805.138	0.58	4651656	0.02	10000	
Fe	56	45	1	He	21674.817	21674.817	1.86	150217087	0.01	200000	
Co	59	103	1	He	10.378	10.378	0.44	118081	0.01	10000	
Ni	60	103	1	He	12.898	12.898	2.04	36484	0.04	10000	
Cu	63	103	1	He	10.263	10.263	1.34	77625	0.01	10000	
Zn	66	103	1	He	25.475	25.475	0.59	39900	0.06	10000	
As	75	103	1	He	12.260	12.260	2.46	11975	0.10	10000	
Se	78	103	1	He	5.153	5.153	4.67	571	0.90	10000	
Sr	88	103	1	He	6.881	6.881	1.21	54055	0.01	10000	
Mo	95	103	1	He	5.483	5.483	0.79	19591	0.03	2000	
Ag	107	103	1	He	4.717	4.717	0.93	57745	0.01	300	
Cd	111	103	1	He	4.767	4.767	1.02	11239	0.04	4000	
Sn	118	115	1	He	7.253	7.253	2.69	38682	0.02	2000	
Sb	123	115	1	He	1.859	1.859	0.39	9486	0.02	300	
Ba	137	115	1	He	34.923	34.923	1.28	82484	0.04	10000	
W	182	209	1	He	3.559	3.559	1.35	53266	0.01	2500	
Tl	205	165	1	He	4.468	4.468	1.05	151627	0.00	5000	
Pb	208	209	1	He	11.849	11.849	1.48	571700	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1238432	1.90	1631381	75.91	30	120	
Sc	45	1	He	698242	0.49	829696	84.16	30	120	
Sc	45	2	NoGas	5417956	1.27	6325638	85.65	30	120	
Rh	103	1	He	2064968	1.05	2345543	88.04	30	120	
In	115	1	He	1246579	0.62	1419467	87.82	30	120	
Tb	159	1	He	3589538	1.31	3888262	92.32	30	120	
Ho	165	1	He	3696058	0.98	3932562	93.99	30	120	
Bi	209	1	He	2737596	1.43	2874805	95.23	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-2-b@20
Data File Name	094SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:03:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.467	0.467	13.87	1893	0.02	10000	
B	11	45	2	NoGas	0.891	0.891	11.13	11478	0.01	300	
Na	23	45	1	He	17.001	17.001	5.08	46356	0.04	500000	
Mg	24	45	1	He	1201.776	1201.776	2.07	1055856	0.11	500000	
Al	27	45	1	He	6065.473	6065.473	1.34	3020675	0.20	200000	
K	39	45	1	He	538.160	538.160	1.20	478104	0.11	500000	
Ca	44	45	1	He	97.548	97.548	3.92	5297	1.84	500000	
Ti	47	45	1	He	35.332	35.332	1.95	9043	0.39	2500	
V	51	45	1	He	12.309	12.309	1.14	77903	0.02	10000	
Cr	52	45	1	He	10.877	10.877	1.99	84869	0.01	10000	
Mn	55	45	1	He	338.146	338.146	0.58	2019972	0.02	10000	
Fe	56	45	1	He	18569.541	18569.541	2.56	133018844	0.01	200000	
Co	59	103	1	He	4.647	4.647	2.29	55409	0.01	10000	
Ni	60	103	1	He	9.780	9.780	2.26	29013	0.03	10000	
Cu	63	103	1	He	8.571	8.571	1.19	68183	0.01	10000	
Zn	66	103	1	He	25.270	25.270	3.19	41472	0.06	10000	
As	75	103	1	He	7.458	7.458	1.67	7692	0.10	10000	
Se	78	103	1	He	0.855	0.855	16.73	139	0.61	10000	
Sr	88	103	1	He	3.344	3.344	2.40	27582	0.01	10000	
Mo	95	103	1	He	0.915	0.915	6.19	3472	0.03	2000	
Ag	107	103	1	He	0.014	0.014	8.48	186	0.01	300	
Cd	111	103	1	He	0.124	0.124	11.97	1414	0.01	4000	
Sn	118	115	1	He	2.248	2.248	2.61	13150	0.02	2000	
Sb	123	115	1	He	0.176	0.176	4.23	1460	0.01	300	
Ba	137	115	1	He	36.163	36.163	1.47	88698	0.04	10000	
W	182	209	1	He	0.298	0.298	2.24	7962	0.00	2500	
Tl	205	165	1	He	0.115	0.115	5.18	4107	0.00	5000	
Pb	208	209	1	He	8.609	8.609	1.52	429061	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1257849	0.40	1631381	77.10	30	120	
Sc	45	1	He	721740	0.76	829696	86.99	30	120	
Sc	45	2	NoGas	5566403	0.86	6325638	88.00	30	120	
Rh	103	1	He	2163899	2.04	2345543	92.26	30	120	
In	115	1	He	1294608	0.82	1419467	91.20	30	120	
Tb	159	1	He	3737830	1.40	3888262	96.13	30	120	
Ho	165	1	He	3841436	1.59	3932562	97.68	30	120	
Bi	209	1	He	2826382	1.21	2874805	98.32	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-4-b@20
Data File Name	095SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:07:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.415	0.415	13.86	1689	0.02	10000	
B	11	45	2	NoGas	5.003	5.003	4.47	24521	0.02	300	
Na	23	45	1	He	188.462	188.462	1.63	311570	0.06	500000	
Mg	24	45	1	He	1345.872	1345.872	2.64	1183829	0.11	500000	
Al	27	45	1	He	4815.102	4815.102	2.63	2401439	0.20	200000	
K	39	45	1	He	1850.909	1850.909	4.24	1564762	0.12	500000	
Ca	44	45	1	He	-31.607	-31.607	-38.04	-568	5.56	500000	
Ti	47	45	1	He	43.488	43.488	2.72	11142	0.39	2500	
V	51	45	1	He	8.606	8.606	3.69	54548	0.02	10000	
Cr	52	45	1	He	8.793	8.793	2.53	69126	0.01	10000	
Mn	55	45	1	He	676.560	676.560	2.53	4045357	0.02	10000	
Fe	56	45	1	He	12296.296	12296.296	3.24	88189008	0.01	200000	
Co	59	103	1	He	4.329	4.329	2.07	51757	0.01	10000	
Ni	60	103	1	He	10.642	10.642	1.16	31643	0.03	10000	
Cu	63	103	1	He	9.818	9.818	2.01	78066	0.01	10000	
Zn	66	103	1	He	25.404	25.404	2.55	41794	0.06	10000	
As	75	103	1	He	20.187	20.187	1.98	20616	0.10	10000	
Se	78	103	1	He	0.458	0.458	7.02	97	0.47	10000	
Sr	88	103	1	He	229.505	229.505	0.80	1890490	0.01	10000	
Mo	95	103	1	He	58.203	58.203	2.78	217863	0.03	2000	
Ag	107	103	1	He	0.015	0.015	9.73	203	0.01	300	
Cd	111	103	1	He	0.136	0.136	26.80	1442	0.01	4000	
Sn	118	115	1	He	2.126	2.126	0.37	12516	0.02	2000	
Sb	123	115	1	He	0.068	0.068	2.22	923	0.01	300	
Ba	137	115	1	He	33.687	33.687	1.38	82796	0.04	10000	
W	182	209	1	He	1.270	1.270	6.30	21834	0.01	2500	
Tl	205	165	1	He	0.063	0.063	2.35	2289	0.00	5000	
Pb	208	209	1	He	38.823	38.823	1.33	1919125	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1262952	2.29	1631381	77.42	30	120	
Sc	45	1	He	722845	2.11	829696	87.12	30	120	
Sc	45	2	NoGas	5602676	0.58	6325638	88.57	30	120	
Rh	103	1	He	2169173	1.08	2345543	92.48	30	120	
In	115	1	He	1297211	0.99	1419467	91.39	30	120	
Tb	159	1	He	3720269	0.72	3888262	95.68	30	120	
Ho	165	1	He	3843567	0.81	3932562	97.74	30	120	
Bi	209	1	He	2807378	1.55	2874805	97.65	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	096_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:11:29-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.142	2.538	178372	3.17	50	96.3	89.5	110.5	
B	11	45	2	NoGas	45.329	1.085	137145	2.36	50	90.7	89.5	110.5	
Na	23	45	1	He	24413.908	2.817	35068214	0.97	25000	97.7	89.5	110.5	
Mg	24	45	1	He	24597.227	3.001	20075914	1.64	25000	98.4	89.5	110.5	
Al	27	45	1	He	240.832	1.682	113586	2.05	250	96.3	89.5	110.5	
K	39	45	1	He	25306.817	3.269	19474373	0.53	25000	101.2	89.5	110.5	
Ca	44	45	1	He	24753.276	2.103	1044608	1.21	25000	99.0	89.5	110.5	
Ti	47	45	1	He	50.608	2.733	12044	3.92	50	101.2	89.5	110.5	
V	51	45	1	He	50.152	1.889	294874	1.98	50	100.3	89.5	110.5	
Cr	52	45	1	He	50.461	1.569	358571	1.76	50	100.9	89.5	110.5	
Mn	55	45	1	He	256.426	2.297	1424461	1.63	250	102.6	89.5	110.5	
Fe	56	45	1	He	12682.992	2.209	84477223	1.17	12500	101.5	89.5	110.5	
Co	59	103	1	He	46.325	0.383	502053	2.04	50	92.7	89.5	110.5	
Ni	60	103	1	He	45.999	0.905	123703	2.04	50	92.0	89.5	110.5	
Cu	63	103	1	He	46.710	1.108	331467	0.63	50	93.4	89.5	110.5	
Zn	66	103	1	He	47.045	0.729	68802	2.11	50	94.1	89.5	110.5	
As	75	103	1	He	48.029	0.464	44304	1.94	50	96.1	89.5	110.5	
Se	78	103	1	He	47.998	0.301	4708	1.49	50	96.0	89.5	110.5	
Sr	88	103	1	He	48.211	1.083	360248	1.03	50	96.4	89.5	110.5	
Mo	95	103	1	He	50.820	2.463	172534	1.39	50	101.6	89.5	110.5	
Ag	107	103	1	He	49.320	0.795	575129	0.96	50	98.6	89.5	110.5	
Cd	111	103	1	He	49.673	0.421	101840	1.74	50	99.3	89.5	110.5	
Sn	118	115	1	He	50.481	0.962	251084	0.17	50	101.0	89.5	110.5	
Sb	123	115	1	He	51.709	0.161	237199	0.91	50	103.4	89.5	110.5	
Ba	137	115	1	He	51.233	0.362	115330	1.01	50	102.5	89.5	110.5	
W	182	209	1	He	48.907	2.330	650772	1.45	50	97.8	89.5	110.5	
Tl	205	165	1	He	50.124	5.143	1671040	4.33	50	100.2	89.5	110.5	
Pb	208	209	1	He	47.350	0.722	2163204	1.03	50	94.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1171880	1.12	1631381	71.83	30	120	
Sc	45	1	He	671339	3.35	829696	80.91	30	120	
Sc	45	2	NoGas	5064740	1.41	6325638	80.07	30	120	
Rh	103	1	He	1967420	1.73	2345543	83.88	30	120	
In	115	1	He	1188437	0.79	1419467	83.72	30	120	
Tb	159	1	He	3513397	0.68	3888262	90.36	30	120	
Ho	165	1	He	3633573	0.84	3932562	92.40	30	120	
Bi	209	1	He	2594468	1.35	2874805	90.25	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	097_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:15:16-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.073	46.6	307	41.9	1	
B	11	45	2	NoGas	0.480	110.3	9180	16.4	20	
Na	23	45	1	He	5.899	21.0	25615	5.3	400	
Mg	24	45	1	He	1.413	62.8	1837	35.7	1000	
Al	27	45	1	He	0.176	101.1	2096	3.0	50	
K	39	45	1	He	9.600	23.2	36156	3.1	1000	
Ca	44	45	1	He	1.999	78.7	844	5.9	1000	
Ti	47	45	1	He	0.286	16.6	74	15.7	20	
V	51	45	1	He	0.095	71.9	605	61.0	2	
Cr	52	45	1	He	0.011	134.7	2036	3.5	2	
Mn	55	45	1	He	0.047	23.6	1183	3.9	2	
Fe	56	45	1	He	24.205	22.4	155263	20.3	50	
Co	59	103	1	He	0.005	71.5	92	39.7	1	
Ni	60	103	1	He	-0.005	-205.0	98	29.0	2	
Cu	63	103	1	He	-0.003	-627.2	1468	8.5	2	
Zn	66	103	1	He	-0.084	-39.2	1588	2.2	20	
As	75	103	1	He	0.103	14.1	240	6.6	2	
Se	78	103	1	He	0.123	37.0	57	8.6	2	
Sr	88	103	1	He	0.010	69.5	181	29.8	10	
Mo	95	103	1	He	1.096	17.8	3906	18.5	2	
Ag	107	103	1	He	0.012	18.7	153	17.3	0.2	
Cd	111	103	1	He	0.059	52.4	1191	4.5	0.2	
Sn	118	115	1	He	0.485	6.1	3430	4.0	10	
Sb	123	115	1	He	0.545	20.2	3113	15.9	1	
Ba	137	115	1	He	0.000	-1213.5	86	6.0	5	
W	182	209	1	He	1.130	12.7	18849	10.2	10	
Tl	205	165	1	He	0.042	22.0	1448	21.0	0.5	
Pb	208	209	1	He	0.062	5.8	3685	4.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1191214	1.03	1631381	73.02	30	120	
Sc	45	1	He	633128	1.53	829696	76.31	30	120	
Sc	45	2	NoGas	5014953	0.15	6325638	79.28	30	120	
Rh	103	1	He	2034734	0.93	2345543	86.75	30	120	
In	115	1	He	1221412	0.73	1419467	86.05	30	120	
Tb	159	1	He	3538460	2.29	3888262	91.00	30	120	
Ho	165	1	He	3615402	0.07	3932562	91.94	30	120	
Bi	209	1	He	2668069	0.15	2874805	92.81	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-11-b@20
Data File Name	098SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:19:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.283	0.283	9.26	1141	0.02	10000	
B	11	45	2	NoGas	0.619	0.619	34.55	10029	0.01	300	
Na	23	45	1	He	35.280	35.280	1.83	69227	0.05	500000	
Mg	24	45	1	He	893.550	893.550	1.18	728582	0.12	500000	
Al	27	45	1	He	5726.538	5726.538	2.80	2645118	0.22	200000	
K	39	45	1	He	364.692	364.692	2.56	310477	0.12	500000	
Ca	44	45	1	He	532.910	532.910	1.95	23229	2.29	500000	
Ti	47	45	1	He	62.182	62.182	2.47	14755	0.42	2500	
V	51	45	1	He	10.880	10.880	4.59	63865	0.02	10000	
Cr	52	45	1	He	8.698	8.698	1.54	63379	0.01	10000	
Mn	55	45	1	He	463.906	463.906	1.99	2570144	0.02	10000	
Fe	56	45	1	He	8837.164	8837.164	3.11	58716182	0.02	200000	
Co	59	103	1	He	3.744	3.744	1.79	42112	0.01	10000	
Ni	60	103	1	He	10.018	10.018	2.74	28023	0.04	10000	
Cu	63	103	1	He	4.652	4.652	2.21	35583	0.01	10000	
Zn	66	103	1	He	23.609	23.609	2.91	36656	0.06	10000	
As	75	103	1	He	7.181	7.181	2.09	6991	0.10	10000	
Se	78	103	1	He	0.525	0.525	26.73	98	0.54	10000	
Sr	88	103	1	He	7.278	7.278	1.00	56503	0.01	10000	
Mo	95	103	1	He	0.925	0.925	4.45	3309	0.03	2000	
Ag	107	103	1	He	0.022	0.022	3.59	271	0.01	300	
Cd	111	103	1	He	0.105	0.105	43.33	1293	0.01	4000	
Sn	118	115	1	He	1.800	1.800	3.24	10022	0.02	2000	
Sb	123	115	1	He	0.195	0.195	6.15	1450	0.01	300	
Ba	137	115	1	He	37.886	37.886	1.44	86776	0.04	10000	
W	182	209	1	He	0.290	0.290	5.71	7487	0.00	2500	
Tl	205	165	1	He	0.096	0.096	7.47	3295	0.00	5000	
Pb	208	209	1	He	4.781	4.781	0.92	227785	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1236865	0.82	1631381	75.82	30	120	
Sc	45	1	He	669697	2.79	829696	80.72	30	120	
Sc	45	2	NoGas	5257615	1.12	6325638	83.12	30	120	
Rh	103	1	He	2040782	1.79	2345543	87.01	30	120	
In	115	1	He	1208953	0.19	1419467	85.17	30	120	
Tb	159	1	He	3553843	1.06	3888262	91.40	30	120	
Ho	165	1	He	3663154	0.37	3932562	93.15	30	120	
Bi	209	1	He	2697422	0.36	2874805	93.83	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-13-b@20
Data File Name	099SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:22:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.304	0.304	12.45	1248	0.02	10000	
B	11	45	2	NoGas	0.125	0.125	64.19	8999	0.00	300	
Na	23	45	1	He	10.950	10.950	1.53	36129	0.03	500000	
Mg	24	45	1	He	613.830	613.830	0.96	526812	0.12	500000	
Al	27	45	1	He	3990.504	3990.504	1.32	1940377	0.21	200000	
K	39	45	1	He	296.836	296.836	2.24	271945	0.11	500000	
Ca	44	45	1	He	107.479	107.479	3.55	5608	1.92	500000	
Ti	47	45	1	He	42.599	42.599	1.37	10641	0.40	2500	
V	51	45	1	He	7.897	7.897	0.64	48813	0.02	10000	
Cr	52	45	1	He	7.505	7.505	1.11	57839	0.01	10000	
Mn	55	45	1	He	210.647	210.647	0.89	1228535	0.02	10000	
Fe	56	45	1	He	10188.155	10188.155	0.76	71238393	0.01	200000	
Co	59	103	1	He	4.225	4.225	1.62	49567	0.01	10000	
Ni	60	103	1	He	8.725	8.725	0.43	25471	0.03	10000	
Cu	63	103	1	He	4.777	4.777	0.58	38067	0.01	10000	
Zn	66	103	1	He	29.524	29.524	2.73	47362	0.06	10000	
As	75	103	1	He	10.929	10.929	0.20	11018	0.10	10000	
Se	78	103	1	He	0.472	0.472	19.91	97	0.49	10000	
Sr	88	103	1	He	1.844	1.844	2.57	15009	0.01	10000	
Mo	95	103	1	He	0.845	0.845	7.02	3158	0.03	2000	
Ag	107	103	1	He	0.014	0.014	20.19	181	0.01	300	
Cd	111	103	1	He	0.139	0.139	10.03	1423	0.01	4000	
Sn	118	115	1	He	1.697	1.697	2.68	10000	0.02	2000	
Sb	123	115	1	He	0.090	0.090	10.20	1011	0.01	300	
Ba	137	115	1	He	24.867	24.867	0.70	59988	0.04	10000	
W	182	209	1	He	0.136	0.136	24.64	5564	0.00	2500	
Tl	205	165	1	He	0.070	0.070	2.44	2480	0.00	5000	
Pb	208	209	1	He	5.182	5.182	0.50	255917	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1264330	1.35	1631381	77.50	30	120	
Sc	45	1	He	704445	0.97	829696	84.90	30	120	
Sc	45	2	NoGas	5518604	1.14	6325638	87.24	30	120	
Rh	103	1	He	2127860	0.31	2345543	90.72	30	120	
In	115	1	He	1272540	1.48	1419467	89.65	30	120	
Tb	159	1	He	3681597	0.66	3888262	94.68	30	120	
Ho	165	1	He	3769797	0.91	3932562	95.86	30	120	
Bi	209	1	He	2796734	1.07	2874805	97.28	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-14-b@20
Data File Name	100SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:26:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.307	0.307	2.97	1300	0.02	10000	
B	11	45	2	NoGas	0.842	0.842	3.51	11534	0.01	300	
Na	23	45	1	He	16.855	16.855	3.41	46456	0.04	500000	
Mg	24	45	1	He	875.475	875.475	1.60	774607	0.11	500000	
Al	27	45	1	He	4245.382	4245.382	1.89	2129231	0.20	200000	
K	39	45	1	He	423.380	423.380	2.71	385779	0.11	500000	
Ca	44	45	1	He	120.276	120.276	1.33	6371	1.89	500000	
Ti	47	45	1	He	51.701	51.701	3.17	13316	0.39	2500	
V	51	45	1	He	9.655	9.655	0.26	61544	0.02	10000	
Cr	52	45	1	He	8.530	8.530	2.07	67488	0.01	10000	
Mn	55	45	1	He	317.555	317.555	2.56	1909584	0.02	10000	
Fe	56	45	1	He	11300.374	11300.374	1.65	81498223	0.01	200000	
Co	59	103	1	He	11.276	11.276	2.74	135272	0.01	10000	
Ni	60	103	1	He	13.417	13.417	2.43	40019	0.03	10000	
Cu	63	103	1	He	6.088	6.088	1.81	49210	0.01	10000	
Zn	66	103	1	He	63.113	63.113	2.69	101524	0.06	10000	
As	75	103	1	He	48.011	48.011	1.41	49021	0.10	10000	
Se	78	103	1	He	0.442	0.442	32.88	96	0.46	10000	
Sr	88	103	1	He	5.045	5.045	1.63	41829	0.01	10000	
Mo	95	103	1	He	0.986	0.986	4.15	3760	0.03	2000	
Ag	107	103	1	He	0.030	0.030	14.81	397	0.01	300	
Cd	111	103	1	He	0.172	0.172	4.54	1532	0.01	4000	
Sn	118	115	1	He	1.700	1.700	5.30	10329	0.02	2000	
Sb	123	115	1	He	0.116	0.116	12.76	1178	0.01	300	
Ba	137	115	1	He	29.214	29.214	0.72	72626	0.04	10000	
W	182	209	1	He	0.118	0.118	34.63	5412	0.00	2500	
Tl	205	165	1	He	0.122	0.122	2.12	4384	0.00	5000	
Pb	208	209	1	He	7.265	7.265	0.74	365399	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1303349	0.36	1631381	79.89	30	120	
Sc	45	1	He	726662	1.49	829696	87.58	30	120	
Sc	45	2	NoGas	5669713	1.03	6325638	89.63	30	120	
Rh	103	1	He	2178048	1.65	2345543	92.86	30	120	
In	115	1	He	1311744	0.48	1419467	92.41	30	120	
Tb	159	1	He	3732204	0.21	3888262	95.99	30	120	
Ho	165	1	He	3858171	1.19	3932562	98.11	30	120	
Bi	209	1	He	2850874	0.91	2874805	99.17	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-15-b@20
Data File Name	101SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:30:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.397	0.397	16.79	1711	0.02	10000	
B	11	45	2	NoGas	0.894	0.894	10.28	12064	0.01	300	
Na	23	45	1	He	23.729	23.729	3.18	56108	0.04	500000	
Mg	24	45	1	He	1912.131	1912.131	2.38	1660414	0.12	500000	
Al	27	45	1	He	8371.495	8371.495	2.81	4120539	0.20	200000	
K	39	45	1	He	611.174	611.174	1.82	532388	0.11	500000	
Ca	44	45	1	He	234.667	234.667	2.79	11385	2.06	500000	
Ti	47	45	1	He	87.675	87.675	3.28	22167	0.40	2500	
V	51	45	1	He	16.837	16.837	3.37	105296	0.02	10000	
Cr	52	45	1	He	15.488	15.488	2.53	118543	0.01	10000	
Mn	55	45	1	He	290.036	290.036	2.23	1713048	0.02	10000	
Fe	56	45	1	He	20534.344	20534.344	2.22	145434643	0.01	200000	
Co	59	103	1	He	6.834	6.834	14.78	76637	0.01	10000	
Ni	60	103	1	He	15.491	15.491	14.92	43154	0.04	10000	
Cu	63	103	1	He	16.293	16.293	15.04	120548	0.01	10000	
Zn	66	103	1	He	51.624	51.624	15.08	77916	0.07	10000	
As	75	103	1	He	11.469	11.469	14.72	11052	0.10	10000	
Se	78	103	1	He	1.061	1.061	29.75	151	0.70	10000	
Sr	88	103	1	He	3.049	3.049	15.62	23648	0.01	10000	
Mo	95	103	1	He	1.300	1.300	14.95	4618	0.03	2000	
Ag	107	103	1	He	0.017	0.017	15.35	213	0.01	300	
Cd	111	103	1	He	0.185	0.185	29.13	1467	0.01	4000	
Sn	118	115	1	He	1.987	1.987	6.16	11412	0.02	2000	
Sb	123	115	1	He	0.132	0.132	11.72	1207	0.01	300	
Ba	137	115	1	He	41.732	41.732	8.52	99297	0.04	10000	
W	182	209	1	He	0.133	0.133	10.09	5249	0.00	2500	
Tl	205	165	1	He	0.150	0.150	10.23	4923	0.00	5000	
Pb	208	209	1	He	12.386	12.386	11.01	576382	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1331834	1.69	1631381	81.64	30	120	
Sc	45	1	He	713749	2.20	829696	86.03	30	120	
Sc	45	2	NoGas	5847554	0.71	6325638	92.44	30	120	
Rh	103	1	He	2061656	13.25	2345543	87.90	30	120	
In	115	1	He	1261327	7.45	1419467	88.86	30	120	
Tb	159	1	He	3542268	10.59	3888262	91.10	30	120	
Ho	165	1	He	3560353	10.11	3932562	90.54	30	120	
Bi	209	1	He	2658922	9.63	2874805	92.49	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-16-b@20
Data File Name	102SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:34:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.335	0.335	18.78	1422	0.02	10000	
B	11	45	2	NoGas	0.492	0.492	23.26	10448	0.00	300	
Na	23	45	1	He	21.767	21.767	1.48	55314	0.04	500000	
Mg	24	45	1	He	1371.614	1371.614	0.06	1240824	0.11	500000	
Al	27	45	1	He	4802.742	4802.742	2.11	2463040	0.19	200000	
K	39	45	1	He	513.805	513.805	1.10	471557	0.11	500000	
Ca	44	45	1	He	345.990	345.990	0.22	17056	2.03	500000	
Ti	47	45	1	He	44.467	44.467	2.91	11715	0.38	2500	
V	51	45	1	He	9.447	9.447	2.98	61570	0.02	10000	
Cr	52	45	1	He	8.438	8.438	0.26	68315	0.01	10000	
Mn	55	45	1	He	294.038	294.038	0.53	1808823	0.02	10000	
Fe	56	45	1	He	12691.068	12691.068	0.61	93616694	0.01	200000	
Co	59	103	1	He	4.593	4.593	0.53	56442	0.01	10000	
Ni	60	103	1	He	10.208	10.208	0.49	31204	0.03	10000	
Cu	63	103	1	He	8.522	8.522	1.16	69876	0.01	10000	
Zn	66	103	1	He	28.986	28.986	1.60	48753	0.06	10000	
As	75	103	1	He	5.898	5.898	0.87	6302	0.09	10000	
Se	78	103	1	He	0.507	0.507	27.09	105	0.48	10000	
Sr	88	103	1	He	2.911	2.911	0.85	24756	0.01	10000	
Mo	95	103	1	He	0.633	0.633	6.02	2494	0.03	2000	
Ag	107	103	1	He	0.012	0.012	3.81	170	0.01	300	
Cd	111	103	1	He	0.095	0.095	14.80	1390	0.01	4000	
Sn	118	115	1	He	1.600	1.600	1.53	9926	0.02	2000	
Sb	123	115	1	He	0.038	0.038	43.38	792	0.00	300	
Ba	137	115	1	He	30.902	30.902	1.71	77955	0.04	10000	
W	182	209	1	He	0.082	0.082	17.51	4894	0.00	2500	
Tl	205	165	1	He	0.080	0.080	0.97	2938	0.00	5000	
Pb	208	209	1	He	7.495	7.495	1.77	376783	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1312378	0.93	1631381	80.45	30	120	
Sc	45	1	He	743167	1.26	829696	89.57	30	120	
Sc	45	2	NoGas	5686182	0.42	6325638	89.89	30	120	
Rh	103	1	He	2229609	1.15	2345543	95.06	30	120	
In	115	1	He	1331199	0.26	1419467	93.78	30	120	
Tb	159	1	He	3765700	1.57	3888262	96.85	30	120	
Ho	165	1	He	3892095	0.88	3932562	98.97	30	120	
Bi	209	1	He	2850195	1.07	2874805	99.14	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-17-b@20
Data File Name	103SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:38:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.381	0.381	6.92	1559	0.02	10000	
B	11	45	2	NoGas	0.435	0.435	41.44	9825	0.00	300	
Na	23	45	1	He	20.041	20.041	7.68	51521	0.04	500000	
Mg	24	45	1	He	1387.067	1387.067	3.53	1229953	0.11	500000	
Al	27	45	1	He	6404.423	6404.423	1.91	3220493	0.20	200000	
K	39	45	1	He	531.467	531.467	2.67	477098	0.11	500000	
Ca	44	45	1	He	523.326	523.326	0.79	24857	2.11	500000	
Ti	47	45	1	He	42.495	42.495	1.25	10982	0.39	2500	
V	51	45	1	He	12.116	12.116	3.54	77405	0.02	10000	
Cr	52	45	1	He	9.445	9.445	1.29	74731	0.01	10000	
Mn	55	45	1	He	447.742	447.742	3.39	2699613	0.02	10000	
Fe	56	45	1	He	17868.988	17868.988	2.27	129245648	0.01	200000	
Co	59	103	1	He	5.477	5.477	0.85	64865	0.01	10000	
Ni	60	103	1	He	10.594	10.594	3.65	31196	0.03	10000	
Cu	63	103	1	He	9.604	9.604	2.06	75674	0.01	10000	
Zn	66	103	1	He	32.015	32.015	0.59	51714	0.06	10000	
As	75	103	1	He	7.243	7.243	1.95	7422	0.10	10000	
Se	78	103	1	He	0.637	0.637	20.10	115	0.55	10000	
Sr	88	103	1	He	4.022	4.022	2.27	32920	0.01	10000	
Mo	95	103	1	He	0.866	0.866	8.80	3266	0.03	2000	
Ag	107	103	1	He	0.020	0.020	19.10	257	0.01	300	
Cd	111	103	1	He	0.166	0.166	12.48	1496	0.01	4000	
Sn	118	115	1	He	1.765	1.765	6.54	10541	0.02	2000	
Sb	123	115	1	He	0.048	0.048	26.88	821	0.01	300	
Ba	137	115	1	He	48.570	48.570	0.74	119086	0.04	10000	
W	182	209	1	He	0.063	0.063	47.84	4538	0.00	2500	
Tl	205	165	1	He	0.097	0.097	2.13	3455	0.00	5000	
Pb	208	209	1	He	7.936	7.936	1.08	392095	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1266955	0.27	1631381	77.66	30	120	
Sc	45	1	He	728981	3.09	829696	87.86	30	120	
Sc	45	2	NoGas	5442592	1.38	6325638	86.04	30	120	
Rh	103	1	He	2148706	1.78	2345543	91.61	30	120	
In	115	1	He	1294341	0.79	1419467	91.19	30	120	
Tb	159	1	He	3719214	0.35	3888262	95.65	30	120	
Ho	165	1	He	3796814	0.77	3932562	96.55	30	120	
Bi	209	1	He	2801115	0.48	2874805	97.44	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-18-b@20
Data File Name	104SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:41:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.062	0.062	36.31	256	0.02	10000	
B	11	45	2	NoGas	-0.665	-0.665	-23.47	5875	-0.01	300	
Na	23	45	1	He	1.411	1.411	39.47	19393	0.01	500000	
Mg	24	45	1	He	-0.417	-0.417	-27.95	430	-0.10	500000	
Al	27	45	1	He	2.549	2.549	18.35	3105	0.08	200000	
K	39	45	1	He	5.818	5.818	36.89	33146	0.02	500000	
Ca	44	45	1	He	-0.777	-0.777	-151.58	728	-0.11	500000	
Ti	47	45	1	He	0.103	0.103	86.23	33	0.31	2500	
V	51	45	1	He	0.017	0.017	517.24	166	0.01	10000	
Cr	52	45	1	He	0.009	0.009	183.09	2010	0.00	10000	
Mn	55	45	1	He	0.028	0.028	84.33	1073	0.00	10000	
Fe	56	45	1	He	25.576	25.576	20.27	162450	0.02	200000	
Co	59	103	1	He	0.002	0.002	25.58	58	0.00	10000	
Ni	60	103	1	He	-0.012	-0.012	-51.58	76	-0.02	10000	
Cu	63	103	1	He	-0.003	-0.003	-417.35	1421	0.00	10000	
Zn	66	103	1	He	-0.253	-0.253	-18.24	1302	-0.02	10000	
As	75	103	1	He	-0.001	-0.001	-2018.62	137	0.00	10000	
Se	78	103	1	He	0.030	0.030	193.60	47	0.06	10000	
Sr	88	103	1	He	0.005	0.005	47.00	141	0.00	10000	
Mo	95	103	1	He	0.039	0.039	8.24	187	0.02	2000	
Ag	107	103	1	He	0.004	0.004	11.53	49	0.01	300	
Cd	111	103	1	He	0.051	0.051	59.59	1144	0.00	4000	
Sn	118	115	1	He	0.010	0.010	314.82	982	0.00	2000	
Sb	123	115	1	He	-0.024	-0.024	-17.42	426	-0.01	300	
Ba	137	115	1	He	0.003	0.003	131.04	91	0.00	10000	
W	182	209	1	He	0.063	0.063	6.57	4219	0.00	2500	
Tl	205	165	1	He	0.001	0.001	72.77	83	0.00	5000	
Pb	208	209	1	He	0.018	0.018	15.41	1577	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1154172	1.53	1631381	70.75	30	120	
Sc	45	1	He	628270	2.52	829696	75.72	30	120	
Sc	45	2	NoGas	4956869	0.88	6325638	78.36	30	120	
Rh	103	1	He	1980527	4.52	2345543	84.44	30	120	
In	115	1	He	1191448	4.08	1419467	83.94	30	120	
Tb	159	1	He	3445817	4.81	3888262	88.62	30	120	
Ho	165	1	He	3502002	4.60	3932562	89.05	30	120	
Bi	209	1	He	2608659	3.32	2874805	90.74	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-20-b@20
Data File Name	105SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:45:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.386	0.386	8.83	1471	0.03	10000	
B	11	45	2	NoGas	0.265	0.265	21.28	8647	0.00	300	
Na	23	45	1	He	20.161	20.161	5.40	48019	0.04	500000	
Mg	24	45	1	He	1497.472	1497.472	2.92	1232598	0.12	500000	
Al	27	45	1	He	5984.845	5984.845	3.97	2792164	0.21	200000	
K	39	45	1	He	444.632	444.632	3.89	375488	0.12	500000	
Ca	44	45	1	He	415.005	415.005	4.99	18448	2.25	500000	
Ti	47	45	1	He	45.380	45.380	0.95	10888	0.42	2500	
V	51	45	1	He	10.774	10.774	4.36	63880	0.02	10000	
Cr	52	45	1	He	9.383	9.383	3.53	68882	0.01	10000	
Mn	55	45	1	He	276.119	276.119	2.64	1545739	0.02	10000	
Fe	56	45	1	He	14200.830	14200.830	3.25	95313212	0.01	200000	
Co	59	103	1	He	5.000	5.000	2.63	54823	0.01	10000	
Ni	60	103	1	He	10.942	10.942	1.67	29840	0.04	10000	
Cu	63	103	1	He	9.520	9.520	2.10	69483	0.01	10000	
Zn	66	103	1	He	42.222	42.222	1.51	62616	0.07	10000	
As	75	103	1	He	6.418	6.418	1.43	6107	0.11	10000	
Se	78	103	1	He	0.498	0.498	14.54	93	0.54	10000	
Sr	88	103	1	He	2.769	2.769	3.62	21017	0.01	10000	
Mo	95	103	1	He	0.714	0.714	6.42	2506	0.03	2000	
Ag	107	103	1	He	0.017	0.017	13.45	202	0.01	300	
Cd	111	103	1	He	0.168	0.168	5.64	1389	0.01	4000	
Sn	118	115	1	He	1.693	1.693	3.93	9451	0.02	2000	
Sb	123	115	1	He	0.067	0.067	27.49	854	0.01	300	
Ba	137	115	1	He	34.057	34.057	1.78	77740	0.04	10000	
W	182	209	1	He	0.079	0.079	11.23	4553	0.00	2500	
Tl	205	165	1	He	0.094	0.094	2.70	3197	0.00	5000	
Pb	208	209	1	He	7.176	7.176	0.53	338687	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1180871	1.69	1631381	72.38	30	120	
Sc	45	1	He	676619	3.10	829696	81.55	30	120	
Sc	45	2	NoGas	5059381	0.68	6325638	79.98	30	120	
Rh	103	1	He	1990014	1.90	2345543	84.84	30	120	
In	115	1	He	1204759	0.51	1419467	84.87	30	120	
Tb	159	1	He	3567484	0.83	3888262	91.75	30	120	
Ho	165	1	He	3644411	0.83	3932562	92.67	30	120	
Bi	209	1	He	2675257	0.55	2874805	93.06	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-21-b@20
Data File Name	106SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:49:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.355	0.355	14.69	1330	0.03	10000	
B	11	45	2	NoGas	0.675	0.675	27.14	9625	0.01	300	
Na	23	45	1	He	29.994	29.994	1.57	60288	0.05	500000	
Mg	24	45	1	He	1896.549	1896.549	1.65	1511702	0.13	500000	
Al	27	45	1	He	6280.878	6280.878	2.56	2838417	0.22	200000	
K	39	45	1	He	697.120	697.120	2.25	553051	0.13	500000	
Ca	44	45	1	He	794.836	794.836	2.27	33501	2.37	500000	
Ti	47	45	1	He	43.906	43.906	2.49	10195	0.43	2500	
V	51	45	1	He	11.204	11.204	4.88	64325	0.02	10000	
Cr	52	45	1	He	10.567	10.567	1.75	74882	0.01	10000	
Mn	55	45	1	He	289.664	289.664	1.46	1570368	0.02	10000	
Fe	56	45	1	He	15354.836	15354.836	1.17	99825343	0.02	200000	
Co	59	103	1	He	6.228	6.228	0.32	67717	0.01	10000	
Ni	60	103	1	He	14.162	14.162	1.03	38264	0.04	10000	
Cu	63	103	1	He	10.334	10.334	1.07	74664	0.01	10000	
Zn	66	103	1	He	33.330	33.330	1.36	49361	0.07	10000	
As	75	103	1	He	6.397	6.397	0.29	6036	0.11	10000	
Se	78	103	1	He	0.440	0.440	1.06	87	0.51	10000	
Sr	88	103	1	He	3.988	3.988	0.45	29977	0.01	10000	
Mo	95	103	1	He	0.642	0.642	3.28	2238	0.03	2000	
Ag	107	103	1	He	0.013	0.013	21.14	159	0.01	300	
Cd	111	103	1	He	0.137	0.137	6.31	1316	0.01	4000	
Sn	118	115	1	He	1.654	1.654	1.21	9173	0.02	2000	
Sb	123	115	1	He	0.019	0.019	71.63	626	0.00	300	
Ba	137	115	1	He	39.793	39.793	1.42	90027	0.04	10000	
W	182	209	1	He	0.078	0.078	20.01	4519	0.00	2500	
Tl	205	165	1	He	0.104	0.104	6.90	3476	0.00	5000	
Pb	208	209	1	He	6.400	6.400	0.62	300993	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1157485	0.26	1631381	70.95	30	120	
Sc	45	1	He	655057	2.02	829696	78.95	30	120	
Sc	45	2	NoGas	4963057	1.13	6325638	78.46	30	120	
Rh	103	1	He	1972889	1.04	2345543	84.11	30	120	
In	115	1	He	1194163	0.60	1419467	84.13	30	120	
Tb	159	1	He	3513832	0.62	3888262	90.37	30	120	
Ho	165	1	He	3559156	1.23	3932562	90.50	30	120	
Bi	209	1	He	2664806	0.32	2874805	92.70	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-1-b@20
Data File Name	107SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:53:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.402	0.402	13.17	1522	0.03	10000	
B	11	45	2	NoGas	1.262	1.262	9.58	11274	0.01	300	
Na	23	45	1	He	34.509	34.509	3.18	66751	0.05	500000	
Mg	24	45	1	He	2045.865	2045.865	0.96	1634139	0.13	500000	
Al	27	45	1	He	7268.429	7268.429	0.76	3291502	0.22	200000	
K	39	45	1	He	826.504	826.504	0.73	651542	0.13	500000	
Ca	44	45	1	He	1075.653	1075.653	0.99	45159	2.38	500000	
Ti	47	45	1	He	47.470	47.470	1.77	11047	0.43	2500	
V	51	45	1	He	12.358	12.358	4.35	71131	0.02	10000	
Cr	52	45	1	He	12.927	12.927	0.35	91352	0.01	10000	
Mn	55	45	1	He	308.369	308.369	1.89	1675356	0.02	10000	
Fe	56	45	1	He	17315.132	17315.132	2.02	112810393	0.02	200000	
Co	59	103	1	He	7.435	7.435	0.32	81296	0.01	10000	
Ni	60	103	1	He	15.227	15.227	0.77	41368	0.04	10000	
Cu	63	103	1	He	12.715	12.715	1.77	92059	0.01	10000	
Zn	66	103	1	He	39.097	39.097	0.87	57943	0.07	10000	
As	75	103	1	He	8.471	8.471	1.44	7994	0.11	10000	
Se	78	103	1	He	0.865	0.865	13.44	129	0.67	10000	
Sr	88	103	1	He	4.793	4.793	1.62	36208	0.01	10000	
Mo	95	103	1	He	0.807	0.807	4.31	2816	0.03	2000	
Ag	107	103	1	He	0.012	0.012	12.34	142	0.01	300	
Cd	111	103	1	He	0.140	0.140	16.32	1329	0.01	4000	
Sn	118	115	1	He	1.743	1.743	3.45	9533	0.02	2000	
Sb	123	115	1	He	0.034	0.034	24.05	686	0.00	300	
Ba	137	115	1	He	39.330	39.330	1.19	88209	0.04	10000	
W	182	209	1	He	0.079	0.079	6.71	4456	0.00	2500	
Tl	205	165	1	He	0.110	0.110	4.84	3677	0.00	5000	
Pb	208	209	1	He	7.758	7.758	0.88	358917	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1171324	1.16	1631381	71.80	30	120	
Sc	45	1	He	656340	0.25	829696	79.11	30	120	
Sc	45	2	NoGas	4965045	0.76	6325638	78.49	30	120	
Rh	103	1	He	1984166	0.51	2345543	84.59	30	120	
In	115	1	He	1183848	0.33	1419467	83.40	30	120	
Tb	159	1	He	3476903	0.33	3888262	89.42	30	120	
Ho	165	1	He	3589383	0.84	3932562	91.27	30	120	
Bi	209	1	He	2622664	0.61	2874805	91.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	108_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T16:57:03-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	47.765	1.181	163830	0.68	50	95.5	89.5	110.5	
B	11	45	2	NoGas	45.721	1.606	125565	1.13	50	91.4	89.5	110.5	
Na	23	45	1	He	24631.854	2.658	32541193	1.06	25000	98.5	89.5	110.5	
Mg	24	45	1	He	24767.413	1.880	18598295	2.81	25000	99.1	89.5	110.5	
Al	27	45	1	He	241.404	1.098	104716	2.19	250	96.6	89.5	110.5	
K	39	45	1	He	25242.453	2.546	17868053	0.96	25000	101.0	89.5	110.5	
Ca	44	45	1	He	24919.313	1.964	967193	1.29	25000	99.7	89.5	110.5	
Ti	47	45	1	He	50.089	1.959	10961	2.33	50	100.2	89.5	110.5	
V	51	45	1	He	51.033	2.205	275935	1.68	50	102.1	89.5	110.5	
Cr	52	45	1	He	50.319	0.915	328902	2.37	50	100.6	89.5	110.5	
Mn	55	45	1	He	252.233	1.660	1288804	1.78	250	100.9	89.5	110.5	
Fe	56	45	1	He	12843.178	1.924	78680368	1.48	12500	102.7	89.5	110.5	
Co	59	103	1	He	46.309	1.615	463411	1.99	50	92.6	89.5	110.5	
Ni	60	103	1	He	45.807	1.116	113744	1.26	50	91.6	89.5	110.5	
Cu	63	103	1	He	46.168	1.684	302568	2.03	50	92.3	89.5	110.5	
Zn	66	103	1	He	47.494	1.464	64121	1.84	50	95.0	89.5	110.5	
As	75	103	1	He	47.824	1.371	40735	1.72	50	95.6	89.5	110.5	
Se	78	103	1	He	48.128	0.499	4359	0.73	50	96.3	89.5	110.5	
Sr	88	103	1	He	48.599	0.602	335350	0.83	50	97.2	89.5	110.5	
Mo	95	103	1	He	50.059	2.021	156952	1.59	50	100.1	89.5	110.5	
Ag	107	103	1	He	49.890	2.031	537234	2.27	50	99.8	89.5	110.5	
Cd	111	103	1	He	50.474	1.240	95538	1.59	50	100.9	89.5	110.5	
Sn	118	115	1	He	49.858	0.830	230976	0.31	50	99.7	89.5	110.5	
Sb	123	115	1	He	52.102	0.739	222587	0.93	50	104.2	89.5	110.5	
Ba	137	115	1	He	51.125	1.797	107198	2.74	50	102.3	89.5	110.5	
W	182	209	1	He	49.560	1.097	623279	0.82	50	99.1	89.5	110.5	
Tl	205	165	1	He	48.107	1.816	1532741	1.57	50	96.2	89.5	110.5	
Pb	208	209	1	He	47.842	1.380	2065874	2.22	50	95.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1085016	1.34	1631381	66.51	30	120	
Sc	45	1	He	617423	3.28	829696	74.42	30	120	
Sc	45	2	NoGas	4600612	1.81	6325638	72.73	30	120	
Rh	103	1	He	1816605	0.44	2345543	77.45	30	120	
In	115	1	He	1106883	1.14	1419467	77.98	30	120	
Tb	159	1	He	3325549	0.93	3888262	85.53	30	120	
Ho	165	1	He	3471673	0.35	3932562	88.28	30	120	
Bi	209	1	He	2451989	1.01	2874805	85.29	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	109_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:00:54-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.060	42.0	244	38.8	1	
B	11	45	2	NoGas	-0.359	-55.1	6294	9.3	20	
Na	23	45	1	He	5.759	19.9	23571	5.1	400	
Mg	24	45	1	He	1.374	50.6	1678	28.5	1000	
Al	27	45	1	He	0.204	101.9	1955	4.8	50	
K	39	45	1	He	10.069	18.1	33840	3.6	1000	
Ca	44	45	1	He	0.246	422.2	718	4.9	1000	
Ti	47	45	1	He	0.275	19.6	67	18.0	20	
V	51	45	1	He	0.076	31.7	467	27.8	2	
Cr	52	45	1	He	0.000	5511.9	1822	4.1	2	
Mn	55	45	1	He	0.012	149.2	926	8.0	2	
Fe	56	45	1	He	23.029	20.4	137190	18.8	50	
Co	59	103	1	He	0.004	5.8	80	4.2	1	
Ni	60	103	1	He	-0.012	-52.7	72	23.2	2	
Cu	63	103	1	He	-0.028	-67.8	1197	10.3	2	
Zn	66	103	1	He	-0.101	-19.6	1461	1.7	20	
As	75	103	1	He	0.038	32.5	166	5.5	2	
Se	78	103	1	He	0.071	79.7	49	11.6	2	
Sr	88	103	1	He	0.005	48.9	131	12.5	10	
Mo	95	103	1	He	0.820	22.9	2740	21.8	2	
Ag	107	103	1	He	0.008	9.2	97	9.1	0.2	
Cd	111	103	1	He	0.067	42.7	1131	3.8	0.2	
Sn	118	115	1	He	0.306	9.2	2360	6.1	10	
Sb	123	115	1	He	0.518	24.3	2797	19.2	1	
Ba	137	115	1	He	0.011	54.5	104	12.1	5	
W	182	209	1	He	1.011	15.7	16461	13.1	10	
Tl	205	165	1	He	0.035	27.1	1159	24.3	0.5	
Pb	208	209	1	He	0.036	13.8	2320	10.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1116010	3.09	1631381	68.41	30	120	
Sc	45	1	He	586847	1.14	829696	70.73	30	120	
Sc	45	2	NoGas	4631612	1.23	6325638	73.22	30	120	
Rh	103	1	He	1902751	1.41	2345543	81.12	30	120	
In	115	1	He	1145517	0.57	1419467	80.70	30	120	
Tb	159	1	He	3350240	0.81	3888262	86.16	30	120	
Ho	165	1	He	3426303	1.45	3932562	87.13	30	120	
Bi	209	1	He	2548339	1.16	2874805	88.64	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-2-b@20
Data File Name	110SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:04:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.367	0.367	2.68	1422	0.03	10000	
B	11	45	2	NoGas	-0.082	-0.082	-387.10	7561	0.00	300	
Na	23	45	1	He	17.610	17.610	3.80	43047	0.04	500000	
Mg	24	45	1	He	1076.965	1076.965	0.94	861268	0.13	500000	
Al	27	45	1	He	6439.100	6439.100	1.99	2918249	0.22	200000	
K	39	45	1	He	395.052	395.052	1.89	327474	0.12	500000	
Ca	44	45	1	He	231.886	231.886	2.74	10365	2.24	500000	
Ti	47	45	1	He	37.041	37.041	3.78	8628	0.43	2500	
V	51	45	1	He	13.286	13.286	4.17	76509	0.02	10000	
Cr	52	45	1	He	9.574	9.574	1.24	68240	0.01	10000	
Mn	55	45	1	He	516.737	516.737	1.28	2808761	0.02	10000	
Fe	56	45	1	He	13056.211	13056.211	1.29	85125768	0.02	200000	
Co	59	103	1	He	5.009	5.009	0.30	54082	0.01	10000	
Ni	60	103	1	He	9.615	9.615	0.45	25829	0.04	10000	
Cu	63	103	1	He	6.244	6.244	1.74	45354	0.01	10000	
Zn	66	103	1	He	28.976	28.976	0.06	42823	0.07	10000	
As	75	103	1	He	5.565	5.565	2.39	5231	0.11	10000	
Se	78	103	1	He	0.528	0.528	13.90	94	0.56	10000	
Sr	88	103	1	He	2.210	2.210	1.14	16537	0.01	10000	
Mo	95	103	1	He	0.814	0.814	2.13	2801	0.03	2000	
Ag	107	103	1	He	0.031	0.031	34.02	370	0.01	300	
Cd	111	103	1	He	0.170	0.170	13.48	1373	0.01	4000	
Sn	118	115	1	He	1.772	1.772	3.12	9633	0.02	2000	
Sb	123	115	1	He	0.476	0.476	4.14	2692	0.02	300	
Ba	137	115	1	He	40.895	40.895	0.66	91306	0.04	10000	
W	182	209	1	He	0.239	0.239	10.43	6691	0.00	2500	
Tl	205	165	1	He	0.104	0.104	3.84	3459	0.00	5000	
Pb	208	209	1	He	9.097	9.097	0.50	426020	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1197979	0.89	1631381	73.43	30	120	
Sc	45	1	He	656861	0.57	829696	79.17	30	120	
Sc	45	2	NoGas	4994839	1.31	6325638	78.96	30	120	
Rh	103	1	He	1958854	0.99	2345543	83.51	30	120	
In	115	1	He	1178515	0.74	1419467	83.03	30	120	
Tb	159	1	He	3470228	1.36	3888262	89.25	30	120	
Ho	165	1	He	3562355	1.48	3932562	90.59	30	120	
Bi	209	1	He	2655686	0.12	2874805	92.38	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-3-b@20
Data File Name	111SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:08:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.452	0.452	10.73	1745	0.03	10000	
B	11	45	2	NoGas	0.001	0.001	13458.61	8098	0.00	300	
Na	23	45	1	He	18.396	18.396	0.26	45294	0.04	500000	
Mg	24	45	1	He	1396.908	1396.908	1.84	1145472	0.12	500000	
Al	27	45	1	He	7020.556	7020.556	1.04	3263501	0.22	200000	
K	39	45	1	He	475.415	475.415	1.82	397872	0.12	500000	
Ca	44	45	1	He	201.199	201.199	0.54	9333	2.16	500000	
Ti	47	45	1	He	47.725	47.725	3.55	11398	0.42	2500	
V	51	45	1	He	15.926	15.926	1.46	94062	0.02	10000	
Cr	52	45	1	He	11.715	11.715	1.85	85165	0.01	10000	
Mn	55	45	1	He	710.315	710.315	0.92	3960006	0.02	10000	
Fe	56	45	1	He	17234.604	17234.604	1.22	115253658	0.01	200000	
Co	59	103	1	He	6.945	6.945	1.89	77193	0.01	10000	
Ni	60	103	1	He	13.228	13.228	1.64	36547	0.04	10000	
Cu	63	103	1	He	7.557	7.557	1.62	56225	0.01	10000	
Zn	66	103	1	He	35.282	35.282	0.15	53324	0.07	10000	
As	75	103	1	He	7.010	7.010	2.22	6748	0.10	10000	
Se	78	103	1	He	0.681	0.681	10.13	112	0.61	10000	
Sr	88	103	1	He	2.847	2.847	1.84	21909	0.01	10000	
Mo	95	103	1	He	0.933	0.933	4.82	3300	0.03	2000	
Ag	107	103	1	He	0.031	0.031	5.02	377	0.01	300	
Cd	111	103	1	He	0.183	0.183	12.73	1440	0.01	4000	
Sn	118	115	1	He	1.763	1.763	3.17	9866	0.02	2000	
Sb	123	115	1	He	0.157	0.157	7.34	1277	0.01	300	
Ba	137	115	1	He	56.700	56.700	1.29	130205	0.04	10000	
W	182	209	1	He	0.136	0.136	26.96	5286	0.00	2500	
Tl	205	165	1	He	0.106	0.106	10.16	3562	0.00	5000	
Pb	208	209	1	He	9.613	9.613	0.87	450105	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1199918	0.98	1631381	73.55	30	120	
Sc	45	1	He	673799	1.90	829696	81.21	30	120	
Sc	45	2	NoGas	5188362	0.45	6325638	82.02	30	120	
Rh	103	1	He	2017134	1.40	2345543	86.00	30	120	
In	115	1	He	1212505	0.36	1419467	85.42	30	120	
Tb	159	1	He	3526662	0.48	3888262	90.70	30	120	
Ho	165	1	He	3607891	1.16	3932562	91.74	30	120	
Bi	209	1	He	2655473	0.82	2874805	92.37	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-4-b@20
Data File Name	112SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:12:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.321	0.321	10.63	1267	0.03	10000	
B	11	45	2	NoGas	-0.113	-0.113	-146.73	7772	0.00	300	
Na	23	45	1	He	16.408	16.408	7.21	42824	0.04	500000	
Mg	24	45	1	He	1188.406	1188.406	1.23	984213	0.12	500000	
Al	27	45	1	He	7386.876	7386.876	2.16	3466842	0.21	200000	
K	39	45	1	He	364.741	364.741	1.62	315545	0.12	500000	
Ca	44	45	1	He	246.240	246.240	2.69	11347	2.17	500000	
Ti	47	45	1	He	41.740	41.740	4.15	10067	0.41	2500	
V	51	45	1	He	15.793	15.793	0.53	94193	0.02	10000	
Cr	52	45	1	He	10.444	10.444	1.23	76906	0.01	10000	
Mn	55	45	1	He	445.548	445.548	2.63	2507995	0.02	10000	
Fe	56	45	1	He	14540.990	14540.990	1.59	98185938	0.01	200000	
Co	59	103	1	He	5.212	5.212	1.76	59121	0.01	10000	
Ni	60	103	1	He	9.146	9.146	1.71	25818	0.04	10000	
Cu	63	103	1	He	5.314	5.314	0.66	40783	0.01	10000	
Zn	66	103	1	He	37.557	37.557	1.25	57803	0.06	10000	
As	75	103	1	He	5.745	5.745	0.29	5670	0.10	10000	
Se	78	103	1	He	0.549	0.549	18.76	101	0.54	10000	
Sr	88	103	1	He	2.187	2.187	1.48	17194	0.01	10000	
Mo	95	103	1	He	0.873	0.873	5.11	3155	0.03	2000	
Ag	107	103	1	He	0.024	0.024	8.19	296	0.01	300	
Cd	111	103	1	He	0.175	0.175	0.98	1451	0.01	4000	
Sn	118	115	1	He	1.801	1.801	6.36	10178	0.02	2000	
Sb	123	115	1	He	0.093	0.093	14.60	990	0.01	300	
Ba	137	115	1	He	37.622	37.622	1.57	87474	0.04	10000	
W	182	209	1	He	0.109	0.109	9.66	5020	0.00	2500	
Tl	205	165	1	He	0.107	0.107	4.52	3637	0.00	5000	
Pb	208	209	1	He	10.383	10.383	0.31	496293	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1215305	0.65	1631381	74.50	30	120	
Sc	45	1	He	680364	1.65	829696	82.00	30	120	
Sc	45	2	NoGas	5194189	1.09	6325638	82.11	30	120	
Rh	103	1	He	2058096	0.56	2345543	87.74	30	120	
In	115	1	He	1227296	0.82	1419467	86.46	30	120	
Tb	159	1	He	3567643	0.95	3888262	91.75	30	120	
Ho	165	1	He	3635838	0.73	3932562	92.45	30	120	
Bi	209	1	He	2711188	0.43	2874805	94.31	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-5-b@20
Data File Name	113SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:16:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.396	0.396	10.17	1567	0.03	10000	
B	11	45	2	NoGas	0.265	0.265	24.47	8836	0.00	300	
Na	23	45	1	He	18.427	18.427	5.00	43909	0.04	500000	
Mg	24	45	1	He	1076.692	1076.692	3.96	855260	0.13	500000	
Al	27	45	1	He	6575.975	6575.975	4.21	2960178	0.22	200000	
K	39	45	1	He	394.792	394.792	3.30	325144	0.12	500000	
Ca	44	45	1	He	568.037	568.037	5.40	24072	2.36	500000	
Ti	47	45	1	He	52.086	52.086	3.12	12050	0.43	2500	
V	51	45	1	He	13.949	13.949	5.70	79767	0.02	10000	
Cr	52	45	1	He	9.919	9.919	3.51	70155	0.01	10000	
Mn	55	45	1	He	754.836	754.836	4.30	4074715	0.02	10000	
Fe	56	45	1	He	12296.211	12296.211	2.99	79647166	0.02	200000	
Co	59	103	1	He	5.276	5.276	6.51	57608	0.01	10000	
Ni	60	103	1	He	9.490	9.490	5.83	25789	0.04	10000	
Cu	63	103	1	He	5.125	5.125	6.33	37919	0.01	10000	
Zn	66	103	1	He	32.519	32.519	7.18	48388	0.07	10000	
As	75	103	1	He	5.180	5.180	7.75	4932	0.11	10000	
Se	78	103	1	He	0.626	0.626	6.92	105	0.59	10000	
Sr	88	103	1	He	3.300	3.300	8.34	24904	0.01	10000	
Mo	95	103	1	He	0.832	0.832	12.25	2890	0.03	2000	
Ag	107	103	1	He	0.034	0.034	27.86	404	0.01	300	
Cd	111	103	1	He	0.165	0.165	16.54	1379	0.01	4000	
Sn	118	115	1	He	1.858	1.858	5.72	10129	0.02	2000	
Sb	123	115	1	He	0.129	0.129	20.62	1121	0.01	300	
Ba	137	115	1	He	50.126	50.126	6.85	112554	0.04	10000	
W	182	209	1	He	0.104	0.104	22.05	4779	0.00	2500	
Tl	205	165	1	He	0.106	0.106	4.13	3469	0.00	5000	
Pb	208	209	1	He	10.150	10.150	5.63	466855	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1224331	0.90	1631381	75.05	30	120	
Sc	45	1	He	652897	2.76	829696	78.69	30	120	
Sc	45	2	NoGas	5168883	0.66	6325638	81.71	30	120	
Rh	103	1	He	1986082	6.10	2345543	84.67	30	120	
In	115	1	He	1188179	5.04	1419467	83.71	30	120	
Tb	159	1	He	3462573	5.50	3888262	89.05	30	120	
Ho	165	1	He	3518070	5.46	3932562	89.46	30	120	
Bi	209	1	He	2613779	5.16	2874805	90.92	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-6-b@20
Data File Name	114SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:19:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.335	0.335	12.06	1304	0.03	10000	
B	11	45	2	NoGas	-0.056	-0.056	-114.36	7850	0.00	300	
Na	23	45	1	He	18.830	18.830	8.05	45647	0.04	500000	
Mg	24	45	1	He	1089.386	1089.386	1.88	888788	0.12	500000	
Al	27	45	1	He	5934.168	5934.168	3.21	2743471	0.22	200000	
K	39	45	1	He	366.086	366.086	2.79	311839	0.12	500000	
Ca	44	45	1	He	1113.326	1113.326	2.80	47686	2.33	500000	
Ti	47	45	1	He	42.099	42.099	3.51	10003	0.42	2500	
V	51	45	1	He	12.468	12.468	1.41	73288	0.02	10000	
Cr	52	45	1	He	9.467	9.467	1.45	68870	0.01	10000	
Mn	55	45	1	He	351.520	351.520	2.38	1949418	0.02	10000	
Fe	56	45	1	He	10938.834	10938.834	1.09	72769739	0.02	200000	
Co	59	103	1	He	4.096	4.096	1.44	45512	0.01	10000	
Ni	60	103	1	He	9.498	9.498	1.85	26253	0.04	10000	
Cu	63	103	1	He	6.552	6.552	2.61	48898	0.01	10000	
Zn	66	103	1	He	35.285	35.285	1.09	53285	0.07	10000	
As	75	103	1	He	4.699	4.699	0.51	4567	0.10	10000	
Se	78	103	1	He	0.542	0.542	2.02	99	0.55	10000	
Sr	88	103	1	He	6.394	6.394	0.39	49037	0.01	10000	
Mo	95	103	1	He	0.701	0.701	2.38	2489	0.03	2000	
Ag	107	103	1	He	0.025	0.025	1.35	307	0.01	300	
Cd	111	103	1	He	0.174	0.174	17.57	1419	0.01	4000	
Sn	118	115	1	He	2.387	2.387	3.45	13043	0.02	2000	
Sb	123	115	1	He	0.145	0.145	2.58	1226	0.01	300	
Ba	137	115	1	He	55.539	55.539	0.73	127739	0.04	10000	
W	182	209	1	He	0.061	0.061	33.73	4327	0.00	2500	
Tl	205	165	1	He	0.088	0.088	2.62	2983	0.00	5000	
Pb	208	209	1	He	11.059	11.059	1.16	524171	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1200764	0.69	1631381	73.60	30	120	
Sc	45	1	He	670291	2.49	829696	80.79	30	120	
Sc	45	2	NoGas	5135934	0.34	6325638	81.19	30	120	
Rh	103	1	He	2015535	0.62	2345543	85.93	30	120	
In	115	1	He	1214370	0.23	1419467	85.55	30	120	
Tb	159	1	He	3518854	0.91	3888262	90.50	30	120	
Ho	165	1	He	3609590	0.98	3932562	91.79	30	120	
Bi	209	1	He	2688939	1.10	2874805	93.53	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-7-b@20
Data File Name	115SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:23:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.391	0.391	14.28	1530	0.03	10000	
B	11	45	2	NoGas	0.111	0.111	183.22	8447	0.00	300	
Na	23	45	1	He	21.244	21.244	2.69	49375	0.04	500000	
Mg	24	45	1	He	1238.388	1238.388	0.50	1015304	0.12	500000	
Al	27	45	1	He	5038.233	5038.233	1.90	2341774	0.22	200000	
K	39	45	1	He	673.654	673.654	0.35	550662	0.12	500000	
Ca	44	45	1	He	214.082	214.082	0.27	9874	2.17	500000	
Ti	47	45	1	He	37.663	37.663	4.26	8995	0.42	2500	
V	51	45	1	He	9.178	9.178	2.31	54222	0.02	10000	
Cr	52	45	1	He	14.956	14.956	1.31	108118	0.01	10000	
Mn	55	45	1	He	173.555	173.555	0.43	967936	0.02	10000	
Fe	56	45	1	He	13471.089	13471.089	1.30	90051836	0.01	200000	
Co	59	103	1	He	4.548	4.548	0.59	50562	0.01	10000	
Ni	60	103	1	He	13.765	13.765	1.37	38022	0.04	10000	
Cu	63	103	1	He	8.522	8.522	1.20	63203	0.01	10000	
Zn	66	103	1	He	22.622	22.622	0.75	34794	0.07	10000	
As	75	103	1	He	5.340	5.340	1.02	5174	0.10	10000	
Se	78	103	1	He	0.624	0.624	14.58	107	0.58	10000	
Sr	88	103	1	He	2.393	2.393	1.23	18430	0.01	10000	
Mo	95	103	1	He	0.416	0.416	6.41	1500	0.03	2000	
Ag	107	103	1	He	0.017	0.017	6.96	212	0.01	300	
Cd	111	103	1	He	0.143	0.143	13.46	1356	0.01	4000	
Sn	118	115	1	He	1.664	1.664	1.05	9399	0.02	2000	
Sb	123	115	1	He	0.006	0.006	161.50	578	0.00	300	
Ba	137	115	1	He	26.479	26.479	1.13	61062	0.04	10000	
W	182	209	1	He	0.074	0.074	14.92	4471	0.00	2500	
Tl	205	165	1	He	0.076	0.076	3.38	2582	0.00	5000	
Pb	208	209	1	He	7.671	7.671	1.05	361136	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1213114	0.71	1631381	74.36	30	120	
Sc	45	1	He	673473	0.49	829696	81.17	30	120	
Sc	45	2	NoGas	5205749	0.40	6325638	82.30	30	120	
Rh	103	1	He	2016791	0.34	2345543	85.98	30	120	
In	115	1	He	1216691	0.40	1419467	85.71	30	120	
Tb	159	1	He	3529528	0.06	3888262	90.77	30	120	
Ho	165	1	He	3608292	0.68	3932562	91.75	30	120	
Bi	209	1	He	2669052	1.20	2874805	92.84	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-8-b@20
Data File Name	116SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:27:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.385	0.385	7.74	1489	0.03	10000	
B	11	45	2	NoGas	0.559	0.559	28.38	9755	0.01	300	
Na	23	45	1	He	18.555	18.555	8.47	46248	0.04	500000	
Mg	24	45	1	He	1343.240	1343.240	2.12	1119720	0.12	500000	
Al	27	45	1	He	7774.605	7774.605	2.20	3673137	0.21	200000	
K	39	45	1	He	656.086	656.086	3.19	546066	0.12	500000	
Ca	44	45	1	He	130.357	130.357	4.21	6436	2.03	500000	
Ti	47	45	1	He	41.033	41.033	0.93	9968	0.41	2500	
V	51	45	1	He	13.662	13.662	3.24	82016	0.02	10000	
Cr	52	45	1	He	11.130	11.130	1.97	82366	0.01	10000	
Mn	55	45	1	He	79.220	79.220	1.53	449836	0.02	10000	
Fe	56	45	1	He	15210.828	15210.828	1.68	103400243	0.01	200000	
Co	59	103	1	He	3.763	3.763	1.86	42383	0.01	10000	
Ni	60	103	1	He	8.759	8.759	1.70	24549	0.04	10000	
Cu	63	103	1	He	8.998	8.998	1.22	67515	0.01	10000	
Zn	66	103	1	He	25.014	25.014	1.70	38789	0.06	10000	
As	75	103	1	He	6.722	6.722	1.33	6560	0.10	10000	
Se	78	103	1	He	0.689	0.689	15.31	115	0.60	10000	
Sr	88	103	1	He	2.069	2.069	3.58	16150	0.01	10000	
Mo	95	103	1	He	0.510	0.510	5.85	1850	0.03	2000	
Ag	107	103	1	He	0.019	0.019	13.21	239	0.01	300	
Cd	111	103	1	He	0.142	0.142	14.43	1372	0.01	4000	
Sn	118	115	1	He	1.628	1.628	5.48	9296	0.02	2000	
Sb	123	115	1	He	0.055	0.055	10.74	810	0.01	300	
Ba	137	115	1	He	31.439	31.439	1.12	73097	0.04	10000	
W	182	209	1	He	0.078	0.078	17.29	4597	0.00	2500	
Tl	205	165	1	He	0.097	0.097	3.26	3299	0.00	5000	
Pb	208	209	1	He	6.491	6.491	1.11	310374	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1197426	1.22	1631381	73.40	30	120	
Sc	45	1	He	685001	2.22	829696	82.56	30	120	
Sc	45	2	NoGas	5201047	1.82	6325638	82.22	30	120	
Rh	103	1	He	2042901	0.64	2345543	87.10	30	120	
In	115	1	He	1226931	0.21	1419467	86.44	30	120	
Tb	159	1	He	3560815	1.24	3888262	91.58	30	120	
Ho	165	1	He	3622319	0.26	3932562	92.11	30	120	
Bi	209	1	He	2709529	0.38	2874805	94.25	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	117_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:31:27-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.012	2.842	166532	2.85	50	96.0	89.5	110.5	
B	11	45	2	NoGas	45.620	0.714	126796	1.67	50	91.2	89.5	110.5	
Na	23	45	1	He	24449.161	3.767	32865856	0.32	25000	97.8	89.5	110.5	
Mg	24	45	1	He	24478.029	3.032	18700296	1.07	25000	97.9	89.5	110.5	
Al	27	45	1	He	239.523	2.697	105735	1.46	250	95.8	89.5	110.5	
K	39	45	1	He	25225.347	2.794	18173882	1.55	25000	100.9	89.5	110.5	
Ca	44	45	1	He	24764.276	2.159	978333	1.96	25000	99.1	89.5	110.5	
Ti	47	45	1	He	50.044	5.840	11135	2.22	50	100.1	89.5	110.5	
V	51	45	1	He	49.402	2.261	271885	2.05	50	98.8	89.5	110.5	
Cr	52	45	1	He	49.810	3.290	331230	0.95	50	99.6	89.5	110.5	
Mn	55	45	1	He	251.060	2.314	1305531	1.76	250	100.4	89.5	110.5	
Fe	56	45	1	He	12681.808	2.702	79065170	1.48	12500	101.5	89.5	110.5	
Co	59	103	1	He	47.240	2.309	468605	2.48	50	94.5	89.5	110.5	
Ni	60	103	1	He	47.176	1.271	116116	0.81	50	94.4	89.5	110.5	
Cu	63	103	1	He	47.180	1.826	306469	1.68	50	94.4	89.5	110.5	
Zn	66	103	1	He	47.786	1.929	63945	2.35	50	95.6	89.5	110.5	
As	75	103	1	He	48.358	2.051	40828	1.95	50	96.7	89.5	110.5	
Se	78	103	1	He	49.060	2.286	4404	2.68	50	98.1	89.5	110.5	
Sr	88	103	1	He	49.412	1.591	337983	1.58	50	98.8	89.5	110.5	
Mo	95	103	1	He	50.978	1.815	158438	0.84	50	102.0	89.5	110.5	
Ag	107	103	1	He	50.655	1.001	540712	1.11	50	101.3	89.5	110.5	
Cd	111	103	1	He	51.101	1.857	95869	1.81	50	102.2	89.5	110.5	
Sn	118	115	1	He	50.047	1.985	231974	2.34	50	100.1	89.5	110.5	
Sb	123	115	1	He	52.217	0.377	223182	0.10	50	104.4	89.5	110.5	
Ba	137	115	1	He	51.360	0.366	107728	0.81	50	102.7	89.5	110.5	
W	182	209	1	He	49.461	1.024	622194	0.83	50	98.9	89.5	110.5	
Tl	205	165	1	He	48.302	1.036	1533123	0.69	50	96.6	89.5	110.5	
Pb	208	209	1	He	48.091	1.046	2076862	1.08	50	96.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1097153	0.59	1631381	67.25	30	120	
Sc	45	1	He	628541	4.12	829696	75.76	30	120	
Sc	45	2	NoGas	4654556	1.01	6325638	73.58	30	120	
Rh	103	1	He	1800855	1.00	2345543	76.78	30	120	
In	115	1	He	1107365	0.45	1419467	78.01	30	120	
Tb	159	1	He	3343253	0.71	3888262	85.98	30	120	
Ho	165	1	He	3458587	0.94	3932562	87.95	30	120	
Bi	209	1	He	2452474	0.23	2874805	85.31	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	118_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:35:16-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.028	31.1	130	21.6	1	
B	11	45	2	NoGas	-0.771	-8.1	5212	1.9	20	
Na	23	45	1	He	5.638	27.7	23460	7.5	400	
Mg	24	45	1	He	2.005	59.8	2130	39.1	1000	
Al	27	45	1	He	0.335	99.7	2010	5.8	50	
K	39	45	1	He	11.230	11.6	34678	1.6	1000	
Ca	44	45	1	He	1.016	76.8	748	4.7	1000	
Ti	47	45	1	He	0.152	26.3	41	20.4	20	
V	51	45	1	He	0.012	218.2	138	100.4	2	
Cr	52	45	1	He	-0.002	-402.9	1813	1.8	2	
Mn	55	45	1	He	0.021	39.4	972	4.2	2	
Fe	56	45	1	He	24.302	21.9	144871	20.4	50	
Co	59	103	1	He	0.002	143.6	56	44.2	1	
Ni	60	103	1	He	-0.018	-67.5	58	52.4	2	
Cu	63	103	1	He	-0.027	-80.1	1192	11.3	2	
Zn	66	103	1	He	-0.059	-104.5	1499	6.3	20	
As	75	103	1	He	0.032	79.3	159	13.5	2	
Se	78	103	1	He	0.060	92.6	47	10.4	2	
Sr	88	103	1	He	0.005	28.5	129	8.3	10	
Mo	95	103	1	He	0.865	20.1	2849	19.1	2	
Ag	107	103	1	He	0.011	3.5	123	2.7	0.2	
Cd	111	103	1	He	0.068	15.1	1117	1.6	0.2	
Sn	118	115	1	He	0.313	32.7	2389	20.1	10	
Sb	123	115	1	He	0.496	21.9	2696	17.5	1	
Ba	137	115	1	He	-0.002	-679.8	76	43.3	5	
W	182	209	1	He	1.042	17.5	16617	14.0	10	
Tl	205	165	1	He	0.036	28.1	1216	26.8	0.5	
Pb	208	209	1	He	0.033	14.0	2183	9.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1113044	3.27	1631381	68.23	30	120	
Sc	45	1	He	587895	0.95	829696	70.86	30	120	
Sc	45	2	NoGas	4629998	1.46	6325638	73.19	30	120	
Rh	103	1	He	1877361	0.71	2345543	80.04	30	120	
In	115	1	He	1142580	0.25	1419467	80.49	30	120	
Tb	159	1	He	3369454	0.75	3888262	86.66	30	120	
Ho	165	1	He	3452663	0.47	3932562	87.80	30	120	
Bi	209	1	He	2511449	0.28	2874805	87.36	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	119CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:39:06-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.940	0.940	4.160	3371	3.20	1	94.0	69.5	130.5	
B	11	2	NoGas	17.664	17.664	3.969	53381	3.46	20	88.3	69.5	130.5	
Na	23	1	He	1079.314	1079.314	1.191	1429545	0.30	1000	107.9	69.5	130.5	
Mg	24	1	He	1061.798	1061.798	0.582	790713	0.43	1000	106.2	69.5	130.5	
Al	27	1	He	46.861	46.861	0.993	21714	1.10	50	93.7	69.5	130.5	
K	39	1	He	1080.493	1080.493	1.439	785081	1.23	1000	108.0	69.5	130.5	
Ca	44	1	He	1047.307	1047.307	1.204	40992	0.60	1000	104.7	69.5	130.5	
Ti	47	1	He	10.685	10.685	2.112	2325	1.15	10	106.9	69.5	130.5	
V	51	1	He	5.152	5.152	2.669	27676	1.81	5	103.0	69.5	130.5	
Cr	52	1	He	2.140	2.140	1.481	15679	0.90	2	107.0	69.5	130.5	
Mn	55	1	He	5.228	5.228	1.907	27357	1.24	5	104.6	69.5	130.5	
Fe	56	1	He	112.570	112.570	1.172	686773	0.38	100	112.6	69.5	130.5	
Co	59	1	He	0.911	0.911	5.792	9642	5.07	1	91.1	69.5	130.5	
Ni	60	1	He	1.851	1.851	2.443	4946	2.24	2	92.6	69.5	130.5	
Cu	63	1	He	1.787	1.787	2.068	13688	0.88	2	89.3	69.5	130.5	
Zn	66	1	He	19.010	19.010	0.496	28019	1.47	20	95.1	69.5	130.5	
As	75	1	He	4.659	4.659	0.256	4303	1.20	5	93.2	69.5	130.5	
Se	78	1	He	4.773	4.773	1.878	494	2.70	5	95.5	69.5	130.5	
Sr	88	1	He	9.425	9.425	1.023	68624	1.15	10	94.2	69.5	130.5	
Mo	95	1	He	10.161	10.161	1.968	33626	2.96	10	101.6	69.5	130.5	
Ag	107	1	He	1.029	1.029	2.202	11679	1.95	1	102.9	69.5	130.5	
Cd	111	1	He	1.075	1.075	3.451	3128	1.35	1	107.5	69.5	130.5	
Sn	118	1	He	10.207	10.207	2.464	49870	2.60	10	102.1	69.5	130.5	
Sb	123	1	He	2.097	2.097	2.374	9806	1.53	2	104.8	69.5	130.5	
Ba	137	1	He	4.966	4.966	2.656	10893	1.92	5	99.3	69.5	130.5	
W	182	1	He	9.473	9.473	1.944	126598	1.45	10	94.7	69.5	130.5	
Tl	205	1	He	2.017	2.017	0.757	64011	1.00	2	100.9	69.5	130.5	
Pb	208	1	He	1.014	1.014	2.504	46236	1.82	1	101.4	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1124956	0.91	1631381	68.96	30	120	
Sc	45	1	He	611661	0.99	829696	73.72	30	120	
Sc	45	2	NoGas	4640446	0.28	6325638	73.36	30	120	
Rh	103	1	He	1914826	1.00	2345543	81.64	30	120	
In	115	1	He	1150496	0.73	1419467	81.05	30	120	
Tb	159	1	He	3358277	1.63	3888262	86.37	30	120	
Ho	165	1	He	3453951	0.47	3932562	87.83	30	120	
Bi	209	1	He	2550554	1.06	2874805	88.72	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-176764/1-a
Data File Name	120_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:42:57-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.043	81.7	178	69.6	1	
B	11	45	2	NoGas	1.085	2.7	9814	1.4	20	
Na	23	45	1	He	61.121	3.8	95344	1.0	400	
Mg	24	45	1	He	70.485	3.5	52245	1.5	1000	
Al	27	45	1	He	0.225	82.0	2012	6.4	50	
K	39	45	1	He	12.868	18.6	36571	1.0	1000	
Ca	44	45	1	He	404.255	3.8	15992	0.2	1000	
Ti	47	45	1	He	0.226	18.0	58	13.3	20	
V	51	45	1	He	0.198	106.5	1092	100.2	2	
Cr	52	45	1	He	0.711	10.4	6361	4.9	2	
Mn	55	45	1	He	0.090	17.5	1339	7.7	2	
Fe	56	45	1	He	21.674	1.6	132767	5.2	50	
Co	59	103	1	He	0.010	19.6	137	14.8	1	
Ni	60	103	1	He	0.066	15.9	269	9.1	2	
Cu	63	103	1	He	0.382	4.3	3892	1.8	2	
Zn	66	103	1	He	5.642	2.8	9131	3.5	20	
As	75	103	1	He	0.103	32.4	218	12.3	2	
Se	78	103	1	He	0.187	80.3	58	22.7	2	
Sr	88	103	1	He	0.493	1.0	3557	1.9	10	
Mo	95	103	1	He	0.310	8.2	1038	8.3	2	
Ag	107	103	1	He	0.011	24.3	129	23.2	0.2	
Cd	111	103	1	He	0.070	33.8	1105	4.0	0.2	
Sn	118	115	1	He	1.002	11.8	5434	10.2	10	
Sb	123	115	1	He	0.839	7.0	4027	5.8	1	
Ba	137	115	1	He	1.274	6.0	2718	6.2	5	
W	182	209	1	He	0.380	19.4	8673	13.2	10	
Tl	205	165	1	He	0.010	22.5	378	18.4	0.5	
Pb	208	209	1	He	0.132	2.3	6956	0.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1071570	1.65	1631381	65.68	30	120	
Sc	45	1	He	601444	3.63	829696	72.49	30	120	
Sc	45	2	NoGas	4520538	1.16	6325638	71.46	30	120	
Rh	103	1	He	1850403	1.13	2345543	78.89	30	120	
In	115	1	He	1094665	0.42	1419467	77.12	30	120	
Tb	159	1	He	3251130	0.25	3888262	83.61	30	120	
Ho	165	1	He	3341080	0.64	3932562	84.96	30	120	
Bi	209	1	He	2677348	1.71	2874805	93.13	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-176764/2-a
Data File Name	121_LCS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:46:49-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	997.039	997.039	2.741	3199585	0.63	1000	99.7	79.5	120.5	
B	11	2	NoGas	104.908	104.908	1.140	259451	1.22	100	104.9	79.5	120.5	
Na	23	1	He	9945.683	9945.683	2.867	12310821	0.69	10000	99.5	79.5	120.5	
Mg	24	1	He	10013.300	10013.300	2.480	7038293	1.27	10000	100.1	79.5	120.5	
Al	27	1	He	9250.759	9250.759	3.290	3686491	0.25	10000	92.5	79.5	120.5	
K	39	1	He	10116.448	10116.448	3.670	6718876	0.31	10000	101.2	79.5	120.5	
Ca	44	1	He	9251.133	9251.133	3.371	336519	0.28	10000	92.5	79.5	120.5	
Ti	47	1	He	95.967	95.967	0.884	19660	3.33	100	96.0	79.5	120.5	
V	51	1	He	954.115	954.115	2.693	4828121	0.91	1000	95.4	79.5	120.5	
Cr	52	1	He	969.191	969.191	1.994	5897529	1.93	1000	96.9	79.5	120.5	
Mn	55	1	He	976.921	976.921	2.558	4670302	1.37	1000	97.7	79.5	120.5	
Fe	56	1	He	10268.503	10268.503	3.263	58881842	0.61	10000	102.7	79.5	120.5	
Co	59	1	He	883.484	883.484	0.695	8478250	0.98	1000	88.3	79.5	120.5	
Ni	60	1	He	907.085	907.085	1.226	2158479	1.70	1000	90.7	79.5	120.5	
Cu	63	1	He	907.174	907.174	0.748	5678692	2.00	1000	90.7	79.5	120.5	
Zn	66	1	He	895.699	895.699	0.316	1133611	1.36	1000	89.6	79.5	120.5	
As	75	1	He	886.986	886.986	1.003	722415	0.61	1000	88.7	79.5	120.5	
Se	78	1	He	924.951	924.951	1.017	79636	0.29	1000	92.5	79.5	120.5	
Sr	88	1	He	934.383	934.383	0.701	6182141	1.07	1000	93.4	79.5	120.5	
Mo	95	1	He	101.470	101.470	2.608	305043	1.32	100	101.5	79.5	120.5	
Ag	107	1	He	98.686	98.686	1.088	1019131	0.21	100	98.7	79.5	120.5	
Cd	111	1	He	1024.183	1024.183	0.535	1841603	1.10	1000	102.4	79.5	120.5	
Sn	118	1	He	1088.662	1088.662	0.682	4616392	0.57	1000	108.9	79.5	120.5	
Sb	123	1	He	106.794	106.794	1.206	418610	0.64	100	106.8	79.5	120.5	
Ba	137	1	He	1091.078	1091.078	1.455	2099743	1.05	1000	109.1	79.5	120.5	
W	182	1	He	94.709	94.709	1.354	1186641	0.86	100	94.7	79.5	120.5	
Tl	205	1	He	244.014	244.014	0.600	7377185	0.86	250	97.6	79.5	120.5	
Pb	208	1	He	935.221	935.221	0.909	40314761	0.81	1000	93.5	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1015757	2.84	1631381	62.26	30	120	
Sc	45	1	He	578118	3.59	829696	69.68	30	120	
Sc	45	2	NoGas	4280479	0.73	6325638	67.67	30	120	
Rh	103	1	He	1742358	1.31	2345543	74.28	30	120	
In	115	1	He	1016769	0.60	1419467	71.63	30	120	
Tb	159	1	He	3195862	0.84	3888262	82.19	30	120	
Ho	165	1	He	3294300	0.98	3932562	83.77	30	120	
Bi	209	1	He	2448841	1.02	2874805	85.18	30	120	

Sample Report

Sample Table

Sample Name	240-49393-s-1-a
Data File Name	122SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:50:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.231	0.231	6.77	867	0.03	10000	
B	11	45	2	NoGas	212.092	212.092	1.00	584466	0.04	300	
Na	23	45	1	He	143533.269	143533.269	2.64	182054915	0.08	500000	
Mg	24	45	1	He	82653.355	82653.355	1.19	59589935	0.14	500000	
Al	27	45	1	He	1.288	1.288	12.10	2417	0.05	200000	
K	39	45	1	He	2445.093	2445.093	1.31	1687004	0.14	500000	
Ca	44	45	1	He	103204.890	103204.890	1.29	3844609	2.68	500000	
Ti	47	45	1	He	0.548	0.548	24.30	124	0.44	2500	
V	51	45	1	He	0.418	0.418	46.50	2241	0.02	10000	
Cr	52	45	1	He	1.464	1.464	0.46	10973	0.01	10000	
Mn	55	45	1	He	95.552	95.552	0.76	469380	0.02	10000	
Fe	56	45	1	He	3176.050	3176.050	1.52	18688438	0.02	200000	
Co	59	103	1	He	0.433	0.433	9.36	4086	0.01	10000	
Ni	60	103	1	He	1.487	1.487	6.54	3546	0.04	10000	
Cu	63	103	1	He	0.227	0.227	30.94	2622	0.01	10000	
Zn	66	103	1	He	2.629	2.629	3.37	4674	0.06	10000	
As	75	103	1	He	1.572	1.572	7.63	1367	0.11	10000	
Se	78	103	1	He	1.217	1.217	17.86	140	0.87	10000	
Sr	88	103	1	He	184.819	184.819	1.29	1193723	0.02	10000	
Mo	95	103	1	He	1.781	1.781	11.70	5263	0.03	2000	
Ag	107	103	1	He	0.024	0.024	6.40	249	0.01	300	
Cd	111	103	1	He	0.194	0.194	29.70	1232	0.02	4000	
Sn	118	115	1	He	2.840	2.840	19.42	13032	0.02	2000	
Sb	123	115	1	He	1.032	1.032	1.13	4576	0.02	300	
Ba	137	115	1	He	103.152	103.152	1.81	202020	0.05	10000	
W	182	209	1	He	1.542	1.542	15.80	21148	0.01	2500	
Tl	205	165	1	He	0.180	0.180	36.84	5625	0.00	5000	
Pb	208	209	1	He	0.296	0.296	24.61	12678	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1146547	1.26	1631381	70.28	30	120	
Sc	45	1	He	592710	0.98	829696	71.44	30	120	
Sc	45	2	NoGas	4832414	0.77	6325638	76.39	30	120	
Rh	103	1	He	1701015	2.02	2345543	72.52	30	120	
In	115	1	He	1034616	2.16	1419467	72.89	30	120	
Tb	159	1	He	3242193	1.66	3888262	83.38	30	120	
Ho	165	1	He	3374817	2.22	3932562	85.82	30	120	
Bi	209	1	He	2307098	0.28	2874805	80.25	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49393-s-1-a@5
Data File Name	123SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:54:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.125	0.125	4.27	519	0.02	10000	
B	11	45	2	NoGas	39.537	39.537	0.93	123655	0.03	300	
Na	23	45	1	He	28958.657	28958.657	1.68	41259292	0.07	500000	
Mg	24	45	1	He	16839.493	16839.493	0.15	13635761	0.12	500000	
Al	27	45	1	He	2.730	2.730	7.12	3377	0.08	200000	
K	39	45	1	He	493.568	493.568	1.56	406924	0.12	500000	
Ca	44	45	1	He	21135.311	21135.311	0.93	884855	2.39	500000	
Ti	47	45	1	He	0.129	0.129	22.89	41	0.31	2500	
V	51	45	1	He	-0.064	-0.064	-188.77	-289	0.02	10000	
Cr	52	45	1	He	0.317	0.317	5.48	4283	0.01	10000	
Mn	55	45	1	He	15.830	15.830	0.57	88153	0.02	10000	
Fe	56	45	1	He	653.661	653.661	1.05	4322487	0.02	200000	
Co	59	103	1	He	0.070	0.070	11.40	812	0.01	10000	
Ni	60	103	1	He	0.268	0.268	8.15	841	0.03	10000	
Cu	63	103	1	He	-0.040	-0.040	-42.78	1170	0.00	10000	
Zn	66	103	1	He	0.090	0.090	55.24	1810	0.00	10000	
As	75	103	1	He	0.267	0.267	10.61	388	0.07	10000	
Se	78	103	1	He	0.168	0.168	44.44	61	0.28	10000	
Sr	88	103	1	He	36.086	36.086	0.13	273809	0.01	10000	
Mo	95	103	1	He	0.299	0.299	10.01	1083	0.03	2000	
Ag	107	103	1	He	0.012	0.012	23.21	144	0.01	300	
Cd	111	103	1	He	0.092	0.092	27.77	1238	0.01	4000	
Sn	118	115	1	He	0.124	0.124	15.27	1559	0.01	2000	
Sb	123	115	1	He	0.134	0.134	15.66	1157	0.01	300	
Ba	137	115	1	He	20.193	20.193	1.57	45897	0.04	10000	
W	182	209	1	He	0.289	0.289	11.62	7187	0.00	2500	
Tl	205	165	1	He	0.023	0.023	7.43	840	0.00	5000	
Pb	208	209	1	He	0.082	0.082	4.88	4473	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1227667	1.06	1631381	75.25	30	120	
Sc	45	1	He	665656	1.69	829696	80.23	30	120	
Sc	45	2	NoGas	5192020	0.26	6325638	82.08	30	120	
Rh	103	1	He	1997347	1.52	2345543	85.15	30	120	
In	115	1	He	1198644	0.52	1419467	84.44	30	120	
Tb	159	1	He	3523537	1.21	3888262	90.62	30	120	
Ho	165	1	He	3636602	0.69	3932562	92.47	30	120	
Bi	209	1	He	2593395	1.14	2874805	90.21	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49393-s-1-a
Data File Name	124SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T17:57:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1008.390	1008.390	1.69	3472331	0.03	10000	
B	11	45	2	NoGas	313.529	313.529	1.93	833885	0.04	300	>LDR
Na	23	45	1	He	145658.232	145658.232	2.26	185119604	0.08	500000	
Mg	24	45	1	He	88044.949	88044.949	1.77	63612170	0.14	500000	
Al	27	45	1	He	9472.798	9472.798	2.76	3880667	0.24	200000	
K	39	45	1	He	12320.590	12320.590	2.73	8406833	0.15	500000	
Ca	44	45	1	He	108850.908	108850.908	1.59	4063658	2.68	500000	
Ti	47	45	1	He	101.554	101.554	1.49	21376	0.48	2500	
V	51	45	1	He	1012.179	1012.179	3.01	5264444	0.02	10000	
Cr	52	45	1	He	1000.309	1000.309	2.94	6254899	0.02	10000	
Mn	55	45	1	He	1082.966	1082.966	3.22	5320670	0.02	10000	
Fe	56	45	1	He	13046.948	13046.948	1.85	76920101	0.02	200000	
Co	59	103	1	He	927.193	927.193	1.48	8696606	0.01	10000	
Ni	60	103	1	He	944.572	944.572	1.70	2196752	0.04	10000	
Cu	63	103	1	He	926.251	926.251	2.69	5666022	0.02	10000	
Zn	66	103	1	He	890.115	890.115	1.41	1101037	0.08	10000	
As	75	103	1	He	937.345	937.345	1.21	746200	0.13	10000	
Se	78	103	1	He	932.991	932.991	0.71	78519	1.19	10000	
Sr	88	103	1	He	1193.699	1193.699	1.36	7719241	0.02	10000	
Mo	95	103	1	He	112.412	112.412	1.92	330346	0.03	2000	
Ag	107	103	1	He	98.671	98.671	0.67	996049	0.01	300	
Cd	111	103	1	He	1039.725	1039.725	1.07	1827290	0.06	4000	
Sn	118	115	1	He	1152.842	1152.842	0.27	4766348	0.02	2000	
Sb	123	115	1	He	111.863	111.863	0.23	427518	0.03	300	
Ba	137	115	1	He	1265.441	1265.441	1.59	2374390	0.05	10000	
W	182	209	1	He	107.522	107.522	1.91	1257479	0.01	2500	
Tl	205	165	1	He	244.005	244.005	2.86	7429600	0.00	5000	
Pb	208	209	1	He	1000.960	1000.960	1.63	40288000	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1089605	1.92	1631381	66.79	30	120	
Sc	45	1	He	594129	2.61	829696	71.61	30	120	
Sc	45	2	NoGas	4684023	0.97	6325638	74.05	30	120	
Rh	103	1	He	1703048	0.96	2345543	72.61	30	120	
In	115	1	He	991359	0.64	1419467	69.84	30	120	
Tb	159	1	He	3229215	0.73	3888262	83.05	30	120	
Ho	165	1	He	3318977	1.95	3932562	84.40	30	120	
Bi	209	1	He	2286595	0.86	2874805	79.54	30	120	

Sample Report

Sample Table

Sample Name	240-49393-s-1-b ms
Data File Name	125SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:01:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1083.256	1083.256	1.10	3692679	0.03	10000	
B	11	45	2	NoGas	332.106	332.106	0.90	883832	0.04	300	>LDR
Na	23	45	1	He	156620.915	156620.915	1.68	196667955	0.08	500000	
Mg	24	45	1	He	93929.994	93929.994	1.98	67043562	0.14	500000	
Al	27	45	1	He	10194.612	10194.612	1.69	4126756	0.25	200000	
K	39	45	1	He	13287.535	13287.535	1.67	8956743	0.15	500000	
Ca	44	45	1	He	115798.176	115798.176	2.63	4270355	2.71	500000	
Ti	47	45	1	He	105.953	105.953	3.58	22031	0.48	2500	
V	51	45	1	He	1070.170	1070.170	1.70	5500453	0.02	10000	
Cr	52	45	1	He	1056.849	1056.849	1.44	6530333	0.02	10000	
Mn	55	45	1	He	1140.503	1140.503	2.58	5536572	0.02	10000	
Fe	56	45	1	He	14545.965	14545.965	1.91	84722208	0.02	200000	
Co	59	103	1	He	977.125	977.125	0.76	9193253	0.01	10000	
Ni	60	103	1	He	981.701	981.701	0.85	2290208	0.04	10000	
Cu	63	103	1	He	972.748	972.748	0.83	5969284	0.02	10000	
Zn	66	103	1	He	917.053	917.053	1.04	1137819	0.08	10000	
As	75	103	1	He	975.320	975.320	0.38	778823	0.13	10000	
Se	78	103	1	He	961.654	961.654	0.72	81177	1.18	10000	
Sr	88	103	1	He	1243.146	1243.146	1.16	8064048	0.02	10000	
Mo	95	103	1	He	118.628	118.628	2.18	349698	0.03	2000	
Ag	107	103	1	He	104.234	104.234	0.61	1055401	0.01	300	
Cd	111	103	1	He	1074.114	1074.114	0.46	1893494	0.06	4000	
Sn	118	115	1	He	1190.936	1190.936	0.35	4986642	0.02	2000	
Sb	123	115	1	He	115.628	115.628	0.15	447532	0.03	300	
Ba	137	115	1	He	1318.385	1318.385	0.28	2505432	0.05	10000	
W	182	209	1	He	115.123	115.123	1.88	1353707	0.01	2500	
Tl	205	165	1	He	254.317	254.317	0.43	7798094	0.00	5000	
Pb	208	209	1	He	1047.794	1047.794	1.53	42409905	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1078550	1.46	1631381	66.11	30	120	
Sc	45	1	He	586909	1.87	829696	70.74	30	120	
Sc	45	2	NoGas	4688708	0.93	6325638	74.12	30	120	
Rh	103	1	He	1708190	0.39	2345543	72.83	30	120	
In	115	1	He	1004000	0.20	1419467	70.73	30	120	
Tb	159	1	He	3222439	0.89	3888262	82.88	30	120	
Ho	165	1	He	3341085	0.80	3932562	84.96	30	120	
Bi	209	1	He	2299512	1.19	2874805	79.99	30	120	

Sample Report

Sample Table

Sample Name	240-49393-s-1-c msd
Data File Name	126SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:04:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1166.859	1166.859	22.57	3604414	0.03	10000	
B	11	45	2	NoGas	350.436	350.436	22.36	882526	0.04	300	>LDR
Na	23	45	1	He	155433.373	155433.373	0.94	199177496	0.08	500000	
Mg	24	45	1	He	93272.742	93272.742	1.40	67939273	0.14	500000	
Al	27	45	1	He	9942.815	9942.815	2.55	4106677	0.24	200000	
K	39	45	1	He	13136.774	13136.774	1.94	9036049	0.15	500000	
Ca	44	45	1	He	114203.771	114203.771	2.60	4297605	2.66	500000	
Ti	47	45	1	He	105.000	105.000	1.89	22279	0.47	2500	
V	51	45	1	He	1062.837	1062.837	1.25	5574283	0.02	10000	
Cr	52	45	1	He	1047.593	1047.593	0.64	6606153	0.02	10000	
Mn	55	45	1	He	1103.622	1103.622	1.06	5467926	0.02	10000	
Fe	56	45	1	He	13804.132	13804.132	0.40	82056870	0.02	200000	
Co	59	103	1	He	958.498	958.498	2.42	9216248	0.01	10000	
Ni	60	103	1	He	964.352	964.352	1.84	2299442	0.04	10000	
Cu	63	103	1	He	955.363	955.363	0.92	5992240	0.02	10000	
Zn	66	103	1	He	907.151	907.151	1.36	1150388	0.08	10000	
As	75	103	1	He	957.034	957.034	0.76	781111	0.12	10000	
Se	78	103	1	He	949.895	949.895	1.01	81956	1.16	10000	
Sr	88	103	1	He	1207.191	1207.191	1.31	8004077	0.02	10000	
Mo	95	103	1	He	117.143	117.143	1.36	352939	0.03	2000	
Ag	107	103	1	He	101.963	101.963	1.16	1055186	0.01	300	
Cd	111	103	1	He	1052.178	1052.178	1.50	1895733	0.06	4000	
Sn	118	115	1	He	1188.937	1188.937	0.46	5003817	0.02	2000	
Sb	123	115	1	He	115.246	115.246	0.45	448327	0.03	300	
Ba	137	115	1	He	1306.318	1306.318	1.41	2495018	0.05	10000	
W	182	209	1	He	113.880	113.880	1.89	1350996	0.01	2500	
Tl	205	165	1	He	250.476	250.476	0.63	7770389	0.00	5000	
Pb	208	209	1	He	1039.980	1039.980	1.50	42466042	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1011589	22.60	1631381	62.01	30	120	
Sc	45	1	He	598871	1.43	829696	72.18	30	120	
Sc	45	2	NoGas	4598186	23.44	6325638	72.69	30	120	
Rh	103	1	He	1746011	1.14	2345543	74.44	30	120	
In	115	1	He	1009138	0.83	1419467	71.09	30	120	
Tb	159	1	He	3294564	0.24	3888262	84.73	30	120	
Ho	165	1	He	3380265	0.28	3932562	85.96	30	120	
Bi	209	1	He	2319730	0.67	2874805	80.69	30	120	

Sample Report

Sample Table

Sample Name	240-49393-v-1-a
Data File Name	127SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:08:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.506	0.506	7.30	1963	0.03	10000	
B	11	45	2	NoGas	212.530	212.530	1.33	628969	0.03	300	
Na	23	45	1	He	141731.725	141731.725	2.05	192970881	0.07	500000	
Mg	24	45	1	He	81723.256	81723.256	2.22	63247805	0.13	500000	
Al	27	45	1	He	3.533	3.533	13.35	3580	0.10	200000	
K	39	45	1	He	2417.181	2417.181	1.70	1790738	0.13	500000	
Ca	44	45	1	He	104358.326	104358.326	2.39	4173105	2.50	500000	
Ti	47	45	1	He	0.552	0.552	12.55	134	0.41	2500	
V	51	45	1	He	0.521	0.521	70.20	3003	0.02	10000	
Cr	52	45	1	He	1.115	1.115	3.39	9445	0.01	10000	
Mn	55	45	1	He	77.031	77.031	1.41	406407	0.02	10000	
Fe	56	45	1	He	3058.103	3058.103	1.17	19317748	0.02	200000	
Co	59	103	1	He	0.467	0.467	7.24	4710	0.01	10000	
Ni	60	103	1	He	1.468	1.468	1.55	3746	0.04	10000	
Cu	63	103	1	He	0.430	0.430	11.13	4135	0.01	10000	
Zn	66	103	1	He	1.869	1.869	9.16	3995	0.05	10000	
As	75	103	1	He	1.788	1.788	4.29	1646	0.11	10000	
Se	78	103	1	He	1.495	1.495	3.28	174	0.86	10000	
Sr	88	103	1	He	186.009	186.009	0.55	1284332	0.01	10000	
Mo	95	103	1	He	1.929	1.929	11.90	6100	0.03	2000	
Ag	107	103	1	He	0.043	0.043	7.86	471	0.01	300	
Cd	111	103	1	He	0.228	0.228	26.73	1383	0.02	4000	
Sn	118	115	1	He	2.651	2.651	19.95	12958	0.02	2000	
Sb	123	115	1	He	0.970	0.970	2.39	4583	0.02	300	
Ba	137	115	1	He	103.495	103.495	1.17	214572	0.05	10000	
W	182	209	1	He	1.937	1.937	21.11	26486	0.01	2500	
Tl	205	165	1	He	0.276	0.276	29.83	8892	0.00	5000	
Pb	208	209	1	He	0.554	0.554	21.17	23744	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1206836	0.48	1631381	73.98	30	120	
Sc	45	1	He	636356	1.36	829696	76.70	30	120	
Sc	45	2	NoGas	5189826	0.33	6325638	82.04	30	120	
Rh	103	1	He	1818157	0.25	2345543	77.52	30	120	
In	115	1	He	1095030	0.64	1419467	77.14	30	120	
Tb	159	1	He	3398135	1.35	3888262	87.39	30	120	
Ho	165	1	He	3478746	0.98	3932562	88.46	30	120	
Bi	209	1	He	2370557	0.90	2874805	82.46	30	120	

Sample Report

Sample Table

Sample Name	240-49393-v-1-b ms
Data File Name	128SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:12:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1039.748	1039.748	1.87	3636244	0.03	10000	
B	11	45	2	NoGas	319.718	319.718	2.18	871211	0.04	300	>LDR
Na	23	45	1	He	149228.696	149228.696	2.68	192982392	0.08	500000	
Mg	24	45	1	He	90044.415	90044.415	2.87	66189407	0.14	500000	
Al	27	45	1	He	9392.978	9392.978	2.40	3916216	0.24	200000	
K	39	45	1	He	12514.976	12514.976	2.44	8690183	0.14	500000	
Ca	44	45	1	He	110925.285	110925.285	3.30	4212738	2.63	500000	
Ti	47	45	1	He	102.651	102.651	0.49	21992	0.47	2500	
V	51	45	1	He	1054.267	1054.267	2.20	5580909	0.02	10000	
Cr	52	45	1	He	1039.116	1039.116	2.75	6612130	0.02	10000	
Mn	55	45	1	He	1115.966	1115.966	3.15	5579369	0.02	10000	
Fe	56	45	1	He	13248.034	13248.034	2.64	79469930	0.02	200000	
Co	59	103	1	He	943.742	943.742	1.15	9275660	0.01	10000	
Ni	60	103	1	He	952.453	952.453	0.71	2321232	0.04	10000	
Cu	63	103	1	He	945.045	945.045	0.89	6058437	0.02	10000	
Zn	66	103	1	He	890.077	890.077	1.02	1153742	0.08	10000	
As	75	103	1	He	943.964	943.964	1.01	787450	0.12	10000	
Se	78	103	1	He	932.498	932.498	1.19	82233	1.13	10000	
Sr	88	103	1	He	1188.029	1188.029	1.72	8050168	0.01	10000	
Mo	95	103	1	He	113.430	113.430	1.96	349294	0.03	2000	
Ag	107	103	1	He	100.028	100.028	0.97	1058057	0.01	300	
Cd	111	103	1	He	1032.433	1032.433	2.16	1901250	0.05	4000	
Sn	118	115	1	He	1183.589	1183.589	0.95	5018615	0.02	2000	
Sb	123	115	1	He	114.889	114.889	0.75	450298	0.03	300	
Ba	137	115	1	He	1305.492	1305.492	1.24	2512244	0.05	10000	
W	182	209	1	He	112.051	112.051	0.36	1327985	0.01	2500	
Tl	205	165	1	He	248.851	248.851	1.07	7781960	0.00	5000	
Pb	208	209	1	He	1032.269	1032.269	1.25	42106836	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1106279	0.91	1631381	67.81	30	120	
Sc	45	1	He	604632	2.97	829696	72.87	30	120	
Sc	45	2	NoGas	4799654	1.62	6325638	75.88	30	120	
Rh	103	1	He	1784533	0.77	2345543	76.08	30	120	
In	115	1	He	1016727	0.61	1419467	71.63	30	120	
Tb	159	1	He	3321984	0.51	3888262	85.44	30	120	
Ho	165	1	He	3407661	1.25	3932562	86.65	30	120	
Bi	209	1	He	2317190	0.25	2874805	80.60	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	129_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:15:51-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.353	0.170	197226	1.00	50	98.7	89.5	110.5	
B	11	45	2	NoGas	52.583	0.557	168427	0.49	50	105.2	89.5	110.5	
Na	23	45	1	He	24722.276	2.130	36878125	1.12	25000	98.9	89.5	110.5	
Mg	24	45	1	He	24722.596	2.278	20954736	1.44	25000	98.9	89.5	110.5	
Al	27	45	1	He	240.422	1.484	117744	1.67	250	96.2	89.5	110.5	
K	39	45	1	He	25185.143	2.527	20127496	0.53	25000	100.7	89.5	110.5	
Ca	44	45	1	He	24784.744	2.226	1086032	0.97	25000	99.1	89.5	110.5	
Ti	47	45	1	He	50.116	2.161	12380	0.83	50	100.2	89.5	110.5	
V	51	45	1	He	49.904	1.560	304672	1.60	50	99.8	89.5	110.5	
Cr	52	45	1	He	50.233	1.351	370659	1.67	50	100.5	89.5	110.5	
Mn	55	45	1	He	259.785	3.601	1498075	1.55	250	103.9	89.5	110.5	
Fe	56	45	1	He	12692.940	1.979	87790357	1.16	12500	101.5	89.5	110.5	
Co	59	103	1	He	47.185	0.937	521782	0.95	50	94.4	89.5	110.5	
Ni	60	103	1	He	47.162	1.700	129407	1.40	50	94.3	89.5	110.5	
Cu	63	103	1	He	47.653	1.316	345070	1.34	50	95.3	89.5	110.5	
Zn	66	103	1	He	47.360	1.554	70664	1.79	50	94.7	89.5	110.5	
As	75	103	1	He	49.107	0.577	46218	0.52	50	98.2	89.5	110.5	
Se	78	103	1	He	49.290	1.307	4932	0.96	50	98.6	89.5	110.5	
Sr	88	103	1	He	48.740	0.822	371676	1.10	50	97.5	89.5	110.5	
Mo	95	103	1	He	50.757	1.139	175878	1.16	50	101.5	89.5	110.5	
Ag	107	103	1	He	49.514	1.261	589211	1.09	50	99.0	89.5	110.5	
Cd	111	103	1	He	50.032	1.282	104662	1.31	50	100.1	89.5	110.5	
Sn	118	115	1	He	51.465	0.679	259658	0.23	50	102.9	89.5	110.5	
Sb	123	115	1	He	52.644	0.633	244953	0.30	50	105.3	89.5	110.5	
Ba	137	115	1	He	51.645	0.846	117927	0.35	50	103.3	89.5	110.5	
W	182	209	1	He	50.721	1.616	674415	0.14	50	101.4	89.5	110.5	
Tl	205	165	1	He	51.498	1.355	1744408	0.93	50	103.0	89.5	110.5	
Pb	208	209	1	He	48.421	1.296	2210740	1.02	50	96.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1264044	0.94	1631381	77.48	30	120	
Sc	45	1	He	697051	3.01	829696	84.01	30	120	
Sc	45	2	NoGas	5405379	0.12	6325638	85.45	30	120	
Rh	103	1	He	2007561	0.48	2345543	85.59	30	120	
In	115	1	He	1205569	0.53	1419467	84.93	30	120	
Tb	159	1	He	3600837	0.32	3888262	92.61	30	120	
Ho	165	1	He	3691015	0.79	3932562	93.86	30	120	
Bi	209	1	He	2592993	1.50	2874805	90.20	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	130_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:19:41-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.266	12.7	1115	13.0	1	
B	11	45	2	NoGas	4.407	3.4	21728	1.3	20	
Na	23	45	1	He	45.880	6.5	82938	3.7	400	
Mg	24	45	1	He	4.488	27.3	4371	20.9	1000	
Al	27	45	1	He	0.362	47.7	2264	2.0	50	
K	39	45	1	He	11.680	16.1	39180	3.8	1000	
Ca	44	45	1	He	5.025	28.8	1003	5.2	1000	
Ti	47	45	1	He	0.141	27.6	43	20.4	20	
V	51	45	1	He	0.077	160.8	529	136.6	2	
Cr	52	45	1	He	0.037	54.8	2299	5.1	2	
Mn	55	45	1	He	0.042	39.4	1206	6.1	2	
Fe	56	45	1	He	22.339	23.2	149316	21.2	50	
Co	59	103	1	He	0.022	2.3	300	2.9	1	
Ni	60	103	1	He	0.013	155.9	152	37.7	2	
Cu	63	103	1	He	0.205	13.9	3090	6.5	2	
Zn	66	103	1	He	0.012	458.2	1790	5.6	20	
As	75	103	1	He	0.249	6.8	392	3.3	2	
Se	78	103	1	He	0.280	39.5	76	14.2	2	
Sr	88	103	1	He	0.036	15.3	390	12.1	10	
Mo	95	103	1	He	0.957	19.7	3527	18.4	2	
Ag	107	103	1	He	0.024	13.1	308	11.9	0.2	
Cd	111	103	1	He	0.117	20.2	1360	2.8	0.2	
Sn	118	115	1	He	0.522	1.7	3719	1.5	10	
Sb	123	115	1	He	0.530	21.1	3125	16.9	1	
Ba	137	115	1	He	0.015	91.3	123	25.8	5	
W	182	209	1	He	1.306	12.7	21690	10.9	10	
Tl	205	165	1	He	0.089	14.4	3070	13.2	0.5	
Pb	208	209	1	He	0.184	3.3	9599	3.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1281837	0.86	1631381	78.57	30	120	
Sc	45	1	He	658383	1.40	829696	79.35	30	120	
Sc	45	2	NoGas	5378840	2.79	6325638	85.03	30	120	
Rh	103	1	He	2105025	0.99	2345543	89.75	30	120	
In	115	1	He	1255019	0.29	1419467	88.41	30	120	
Tb	159	1	He	3557435	1.58	3888262	91.49	30	120	
Ho	165	1	He	3665451	1.03	3932562	93.21	30	120	
Bi	209	1	He	2722672	0.39	2874805	94.71	30	120	

Sample Report

Sample Table

Sample Name	240-49393-v-1-c msd
Data File Name	131SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:23:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1045.637	1045.637	0.46	3669044	0.03	10000	
B	11	45	2	NoGas	325.422	325.422	1.04	884007	0.04	300	>LDR
Na	23	45	1	He	153441.527	153441.527	4.91	197681466	0.08	500000	
Mg	24	45	1	He	91913.169	91913.169	2.66	67349301	0.14	500000	
Al	27	45	1	He	9999.012	9999.012	4.15	4153413	0.24	200000	
K	39	45	1	He	13081.447	13081.447	5.90	9046020	0.14	500000	
Ca	44	45	1	He	113227.746	113227.746	3.45	4285962	2.64	500000	
Ti	47	45	1	He	106.334	106.334	4.50	22690	0.47	2500	
V	51	45	1	He	1048.671	1048.671	4.21	5530669	0.02	10000	
Cr	52	45	1	He	1044.082	1044.082	3.53	6621019	0.02	10000	
Mn	55	45	1	He	1115.470	1115.470	4.56	5556865	0.02	10000	
Fe	56	45	1	He	13808.240	13808.240	3.80	82540054	0.02	200000	
Co	59	103	1	He	977.774	977.774	0.60	9171179	0.01	10000	
Ni	60	103	1	He	987.986	987.986	0.22	2297852	0.04	10000	
Cu	63	103	1	He	983.250	983.250	1.29	6014842	0.02	10000	
Zn	66	103	1	He	932.554	932.554	0.54	1153466	0.08	10000	
As	75	103	1	He	988.200	988.200	0.72	786664	0.13	10000	
Se	78	103	1	He	983.064	983.064	1.07	82726	1.19	10000	
Sr	88	103	1	He	1249.165	1249.165	1.45	8077681	0.02	10000	
Mo	95	103	1	He	118.580	118.580	0.41	348496	0.03	2000	
Ag	107	103	1	He	103.822	103.822	1.02	1047958	0.01	300	
Cd	111	103	1	He	1081.130	1081.130	0.23	1900006	0.06	4000	
Sn	118	115	1	He	1199.466	1199.466	1.09	5009637	0.02	2000	
Sb	123	115	1	He	116.074	116.074	0.69	448123	0.03	300	
Ba	137	115	1	He	1329.243	1329.243	0.15	2519758	0.05	10000	
W	182	209	1	He	113.132	113.132	1.38	1320298	0.01	2500	
Tl	205	165	1	He	252.502	252.502	0.29	7773269	0.00	5000	
Pb	208	209	1	He	1051.247	1051.247	0.49	42227589	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1110102	0.23	1631381	68.05	30	120	
Sc	45	1	He	602761	3.69	829696	72.65	30	120	
Sc	45	2	NoGas	4785281	0.74	6325638	75.65	30	120	
Rh	103	1	He	1702948	0.81	2345543	72.60	30	120	
In	115	1	He	1001502	0.71	1419467	70.55	30	120	
Tb	159	1	He	3239571	1.37	3888262	83.32	30	120	
Ho	165	1	He	3354407	0.22	3932562	85.30	30	120	
Bi	209	1	He	2281866	0.51	2874805	79.37	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-2-a
Data File Name	132SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:27:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.472	0.472	5.09	1704	0.03	10000	
B	11	45	2	NoGas	1385.873	1385.873	0.65	3794390	0.04	300	>LDR
Na	23	45	1	He	109526.890	109526.890	2.07	144987791	0.08	500000	
Mg	24	45	1	He	26656.875	26656.875	2.73	20056332	0.13	500000	
Al	27	45	1	He	111.799	111.799	2.94	49651	0.23	200000	
K	39	45	1	He	17586.558	17586.558	3.49	12484450	0.14	500000	
Ca	44	45	1	He	44187.026	44187.026	3.02	1718115	2.57	500000	
Ti	47	45	1	He	1.899	1.899	26.86	428	0.44	2500	
V	51	45	1	He	0.638	0.638	15.48	3544	0.02	10000	
Cr	52	45	1	He	1.477	1.477	3.69	11537	0.01	10000	
Mn	55	45	1	He	163.472	163.472	2.24	837415	0.02	10000	
Fe	56	45	1	He	3813.042	3813.042	2.11	23415118	0.02	200000	
Co	59	103	1	He	0.465	0.465	10.28	4627	0.01	10000	
Ni	60	103	1	He	1.303	1.303	4.48	3289	0.04	10000	
Cu	63	103	1	He	1.253	1.253	5.52	9379	0.01	10000	
Zn	66	103	1	He	8.930	8.930	1.18	13123	0.07	10000	
As	75	103	1	He	3.732	3.732	1.34	3252	0.11	10000	
Se	78	103	1	He	1.346	1.346	8.65	159	0.85	10000	
Sr	88	103	1	He	1321.588	1321.588	0.70	8997281	0.01	10000	
Mo	95	103	1	He	1.532	1.532	9.25	4787	0.03	2000	
Ag	107	103	1	He	0.040	0.040	18.79	427	0.01	300	
Cd	111	103	1	He	0.246	0.246	2.83	1396	0.02	4000	
Sn	118	115	1	He	2.443	2.443	15.64	11953	0.02	2000	
Sb	123	115	1	He	0.870	0.870	1.17	4139	0.02	300	
Ba	137	115	1	He	152.882	152.882	0.56	315177	0.05	10000	
W	182	209	1	He	2.802	2.802	8.20	36947	0.01	2500	
Tl	205	165	1	He	0.266	0.266	29.85	8578	0.00	5000	
Pb	208	209	1	He	0.815	0.815	11.36	34664	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1120610	1.12	1631381	68.69	30	120	
Sc	45	1	He	618795	2.57	829696	74.58	30	120	
Sc	45	2	NoGas	4854173	0.42	6325638	76.74	30	120	
Rh	103	1	He	1792753	0.35	2345543	76.43	30	120	
In	115	1	He	1088948	0.71	1419467	76.72	30	120	
Tb	159	1	He	3402246	1.22	3888262	87.50	30	120	
Ho	165	1	He	3484974	1.13	3932562	88.62	30	120	
Bi	209	1	He	2368881	0.53	2874805	82.40	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-2-a
Data File Name	133SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:30:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.267	0.267	6.99	985	0.03	10000	
B	11	45	2	NoGas	1495.368	1495.368	1.22	4118672	0.04	300	>LDR
Na	23	45	1	He	115800.209	115800.209	3.62	153825872	0.08	500000	
Mg	24	45	1	He	28121.632	28121.632	2.33	21239880	0.13	500000	
Al	27	45	1	He	1.121	1.121	25.02	2460	0.05	200000	
K	39	45	1	He	18529.085	18529.085	2.50	13203921	0.14	500000	
Ca	44	45	1	He	46275.394	46275.394	1.71	1806536	2.56	500000	
Ti	47	45	1	He	0.393	0.393	53.42	96	0.41	2500	
V	51	45	1	He	0.443	0.443	27.78	2482	0.02	10000	
Cr	52	45	1	He	1.227	1.227	10.54	9931	0.01	10000	
Mn	55	45	1	He	172.267	172.267	2.59	885703	0.02	10000	
Fe	56	45	1	He	3868.686	3868.686	3.12	23841813	0.02	200000	
Co	59	103	1	He	0.390	0.390	5.42	3924	0.01	10000	
Ni	60	103	1	He	1.601	1.601	4.85	4055	0.04	10000	
Cu	63	103	1	He	0.647	0.647	2.16	5526	0.01	10000	
Zn	66	103	1	He	8.444	8.444	1.96	12599	0.07	10000	
As	75	103	1	He	3.057	3.057	1.26	2710	0.11	10000	
Se	78	103	1	He	0.618	0.618	16.23	95	0.65	10000	
Sr	88	103	1	He	1400.938	1400.938	1.38	9620715	0.01	10000	
Mo	95	103	1	He	0.750	0.750	7.24	2388	0.03	2000	
Ag	107	103	1	He	0.030	0.030	19.75	329	0.01	300	
Cd	111	103	1	He	0.116	0.116	7.44	1166	0.01	4000	
Sn	118	115	1	He	0.671	0.671	15.49	3878	0.02	2000	
Sb	123	115	1	He	0.693	0.693	6.03	3378	0.02	300	
Ba	137	115	1	He	157.035	157.035	1.48	321869	0.05	10000	
W	182	209	1	He	1.766	1.766	2.70	24252	0.01	2500	
Tl	205	165	1	He	0.048	0.048	13.75	1575	0.00	5000	
Pb	208	209	1	He	0.253	0.253	8.71	11151	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1130580	1.82	1631381	69.30	30	120	
Sc	45	1	He	621188	3.10	829696	74.87	30	120	
Sc	45	2	NoGas	4884701	1.93	6325638	77.22	30	120	
Rh	103	1	He	1808623	1.30	2345543	77.11	30	120	
In	115	1	He	1082690	0.40	1419467	76.27	30	120	
Tb	159	1	He	3379022	0.69	3888262	86.90	30	120	
Ho	165	1	He	3451851	1.14	3932562	87.78	30	120	
Bi	209	1	He	2352011	0.35	2874805	81.81	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-3-a
Data File Name	134SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:34:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.255	0.255	4.06	1022	0.02	10000	
B	11	45	2	NoGas	285.108	285.108	0.71	851231	0.03	300	
Na	23	45	1	He	78268.139	78268.139	2.31	107917044	0.07	500000	
Mg	24	45	1	He	77507.779	77507.779	2.29	60744862	0.13	500000	
Al	27	45	1	He	-0.386	-0.386	-36.21	1883	-0.02	200000	
K	39	45	1	He	2485.873	2485.873	2.20	1864091	0.13	500000	
Ca	44	45	1	He	85615.954	85615.954	3.40	3466946	2.47	500000	
Ti	47	45	1	He	0.270	0.270	24.13	72	0.37	2500	
V	51	45	1	He	0.011	0.011	1723.96	152	0.01	10000	
Cr	52	45	1	He	1.092	1.092	7.00	9401	0.01	10000	
Mn	55	45	1	He	284.156	284.156	1.66	1515622	0.02	10000	
Fe	56	45	1	He	580.817	580.817	2.16	3717828	0.02	200000	
Co	59	103	1	He	0.221	0.221	4.04	2280	0.01	10000	
Ni	60	103	1	He	1.134	1.134	2.98	2951	0.04	10000	
Cu	63	103	1	He	0.549	0.549	8.88	4972	0.01	10000	
Zn	66	103	1	He	4.054	4.054	2.57	6959	0.06	10000	
As	75	103	1	He	0.884	0.884	4.56	889	0.10	10000	
Se	78	103	1	He	0.759	0.759	17.43	110	0.69	10000	
Sr	88	103	1	He	351.719	351.719	1.32	2457832	0.01	10000	
Mo	95	103	1	He	3.152	3.152	1.71	10056	0.03	2000	
Ag	107	103	1	He	0.033	0.033	9.18	368	0.01	300	
Cd	111	103	1	He	0.118	0.118	14.73	1191	0.01	4000	
Sn	118	115	1	He	0.395	0.395	12.78	2693	0.01	2000	
Sb	123	115	1	He	0.545	0.545	3.52	2827	0.02	300	
Ba	137	115	1	He	193.413	193.413	0.99	405780	0.05	10000	
W	182	209	1	He	0.379	0.379	1.45	7695	0.00	2500	
Tl	205	165	1	He	0.024	0.024	3.45	850	0.00	5000	
Pb	208	209	1	He	0.228	0.228	7.45	10198	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1226131	1.78	1631381	75.16	30	120	
Sc	45	1	He	644378	1.22	829696	77.66	30	120	
Sc	45	2	NoGas	5253114	1.31	6325638	83.04	30	120	
Rh	103	1	He	1840196	1.42	2345543	78.46	30	120	
In	115	1	He	1108316	1.22	1419467	78.08	30	120	
Tb	159	1	He	3397727	0.98	3888262	87.38	30	120	
Ho	165	1	He	3522807	0.22	3932562	89.58	30	120	
Bi	209	1	He	2381016	1.67	2874805	82.82	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-3-a
Data File Name	135SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:38:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.204	0.204	19.74	837	0.02	10000	
B	11	45	2	NoGas	271.476	271.476	0.56	809846	0.03	300	
Na	23	45	1	He	82969.948	82969.948	3.16	118259880	0.07	500000	
Mg	24	45	1	He	75175.221	75175.221	3.30	60901951	0.12	500000	
Al	27	45	1	He	-1.289	-1.289	-13.46	1533	-0.08	200000	
K	39	45	1	He	2432.411	2432.411	3.36	1886027	0.13	500000	
Ca	44	45	1	He	84610.163	84610.163	2.89	3542518	2.39	500000	
Ti	47	45	1	He	0.288	0.288	59.75	78	0.37	2500	
V	51	45	1	He	-0.221	-0.221	-152.84	-1220	0.02	10000	
Cr	52	45	1	He	1.041	1.041	2.11	9370	0.01	10000	
Mn	55	45	1	He	229.334	229.334	2.43	1264786	0.02	10000	
Fe	56	45	1	He	380.978	380.978	2.99	2522487	0.02	200000	
Co	59	103	1	He	0.236	0.236	1.23	2499	0.01	10000	
Ni	60	103	1	He	1.207	1.207	1.44	3224	0.04	10000	
Cu	63	103	1	He	0.363	0.363	6.75	3853	0.01	10000	
Zn	66	103	1	He	1.546	1.546	2.36	3714	0.04	10000	
As	75	103	1	He	0.820	0.820	2.88	856	0.10	10000	
Se	78	103	1	He	0.365	0.365	19.20	76	0.48	10000	
Sr	88	103	1	He	328.109	328.109	1.64	2357465	0.01	10000	
Mo	95	103	1	He	3.007	3.007	3.37	9866	0.03	2000	
Ag	107	103	1	He	0.032	0.032	4.43	369	0.01	300	
Cd	111	103	1	He	0.105	0.105	17.37	1199	0.01	4000	
Sn	118	115	1	He	0.333	0.333	9.32	2482	0.01	2000	
Sb	123	115	1	He	0.424	0.424	2.72	2378	0.02	300	
Ba	137	115	1	He	178.620	178.620	1.25	385931	0.05	10000	
W	182	209	1	He	0.253	0.253	19.93	6227	0.00	2500	
Tl	205	165	1	He	0.012	0.012	11.07	469	0.00	5000	
Pb	208	209	1	He	0.164	0.164	7.24	7642	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1247504	0.79	1631381	76.47	30	120	
Sc	45	1	He	666572	3.98	829696	80.34	30	120	
Sc	45	2	NoGas	5246003	1.59	6325638	82.93	30	120	
Rh	103	1	He	1892070	0.83	2345543	80.67	30	120	
In	115	1	He	1141308	0.31	1419467	80.40	30	120	
Tb	159	1	He	3511225	1.07	3888262	90.30	30	120	
Ho	165	1	He	3562462	0.36	3932562	90.59	30	120	
Bi	209	1	He	2406871	1.24	2874805	83.72	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-4-a
Data File Name	136SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:42:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.204	0.204	10.08	822	0.02	10000	
B	11	45	2	NoGas	265.586	265.586	0.61	799046	0.03	300	
Na	23	45	1	He	83857.904	83857.904	2.51	120357069	0.07	500000	
Mg	24	45	1	He	67175.490	67175.490	2.66	54800385	0.12	500000	
Al	27	45	1	He	3.852	3.852	13.63	3920	0.10	200000	
K	39	45	1	He	2621.569	2621.569	1.58	2044906	0.13	500000	
Ca	44	45	1	He	86376.492	86376.492	3.20	3640698	2.37	500000	
Ti	47	45	1	He	0.487	0.487	24.28	127	0.38	2500	
V	51	45	1	He	-0.052	-0.052	-53.90	-221	0.02	10000	
Cr	52	45	1	He	1.082	1.082	8.47	9715	0.01	10000	
Mn	55	45	1	He	138.035	138.035	1.78	766882	0.02	10000	
Fe	56	45	1	He	1056.047	1056.047	2.52	7033477	0.02	200000	
Co	59	103	1	He	0.399	0.399	2.18	4168	0.01	10000	
Ni	60	103	1	He	1.281	1.281	5.26	3394	0.04	10000	
Cu	63	103	1	He	0.699	0.699	1.74	6094	0.01	10000	
Zn	66	103	1	He	2.569	2.569	2.12	5087	0.05	10000	
As	75	103	1	He	0.828	0.828	0.53	859	0.10	10000	
Se	78	103	1	He	0.370	0.370	26.00	76	0.49	10000	
Sr	88	103	1	He	287.304	287.304	1.08	2052266	0.01	10000	
Mo	95	103	1	He	3.113	3.113	2.13	10152	0.03	2000	
Ag	107	103	1	He	0.024	0.024	3.65	274	0.01	300	
Cd	111	103	1	He	0.122	0.122	28.70	1223	0.01	4000	
Sn	118	115	1	He	0.299	0.299	22.31	2289	0.01	2000	
Sb	123	115	1	He	0.458	0.458	6.08	2495	0.02	300	
Ba	137	115	1	He	130.031	130.031	1.17	277580	0.05	10000	
W	182	209	1	He	0.318	0.318	6.89	7050	0.00	2500	
Tl	205	165	1	He	0.011	0.011	7.13	427	0.00	5000	
Pb	208	209	1	He	0.153	0.153	5.49	7191	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1223943	1.09	1631381	75.02	30	120	
Sc	45	1	He	670883	2.19	829696	80.86	30	120	
Sc	45	2	NoGas	5289490	0.67	6325638	83.62	30	120	
Rh	103	1	He	1880905	0.65	2345543	80.19	30	120	
In	115	1	He	1127575	0.59	1419467	79.44	30	120	
Tb	159	1	He	3458627	0.61	3888262	88.95	30	120	
Ho	165	1	He	3531941	0.63	3932562	89.81	30	120	
Bi	209	1	He	2412968	1.60	2874805	83.94	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-4-a
Data File Name	137SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:46:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.145	0.145	12.19	593	0.02	10000	
B	11	45	2	NoGas	271.329	271.329	0.48	811466	0.03	300	
Na	23	45	1	He	88620.095	88620.095	2.89	126147402	0.07	500000	
Mg	24	45	1	He	68446.413	68446.413	2.55	55382955	0.12	500000	
Al	27	45	1	He	0.897	0.897	37.62	2532	0.04	200000	
K	39	45	1	He	2713.117	2713.117	2.82	2097453	0.13	500000	
Ca	44	45	1	He	87158.422	87158.422	2.11	3644335	2.39	500000	
Ti	47	45	1	He	0.304	0.304	19.88	82	0.37	2500	
V	51	45	1	He	-0.171	-0.171	-191.82	-882	0.02	10000	
Cr	52	45	1	He	1.000	1.000	6.85	9066	0.01	10000	
Mn	55	45	1	He	123.347	123.347	2.37	679749	0.02	10000	
Fe	56	45	1	He	812.154	812.154	1.89	5366509	0.02	200000	
Co	59	103	1	He	0.366	0.366	5.92	3833	0.01	10000	
Ni	60	103	1	He	2.252	2.252	1.40	5888	0.04	10000	
Cu	63	103	1	He	0.874	0.874	2.31	7282	0.01	10000	
Zn	66	103	1	He	2.398	2.398	7.52	4853	0.05	10000	
As	75	103	1	He	0.843	0.843	10.02	872	0.10	10000	
Se	78	103	1	He	0.347	0.347	6.34	74	0.47	10000	
Sr	88	103	1	He	287.719	287.719	1.94	2054966	0.01	10000	
Mo	95	103	1	He	3.047	3.047	1.10	9938	0.03	2000	
Ag	107	103	1	He	0.021	0.021	1.03	242	0.01	300	
Cd	111	103	1	He	0.093	0.093	1.84	1169	0.01	4000	
Sn	118	115	1	He	0.264	0.264	17.28	2137	0.01	2000	
Sb	123	115	1	He	0.504	0.504	11.37	2709	0.02	300	
Ba	137	115	1	He	128.619	128.619	1.17	276015	0.05	10000	
W	182	209	1	He	0.333	0.333	9.09	7276	0.00	2500	
Tl	205	165	1	He	0.009	0.009	12.26	339	0.00	5000	
Pb	208	209	1	He	0.090	0.090	2.50	4539	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1223138	0.30	1631381	74.98	30	120	
Sc	45	1	He	665460	2.57	829696	80.21	30	120	
Sc	45	2	NoGas	5259315	0.90	6325638	83.14	30	120	
Rh	103	1	He	1880929	1.10	2345543	80.19	30	120	
In	115	1	He	1133495	0.31	1419467	79.85	30	120	
Tb	159	1	He	3460571	0.52	3888262	89.00	30	120	
Ho	165	1	He	3508519	0.76	3932562	89.22	30	120	
Bi	209	1	He	2428996	1.20	2874805	84.49	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-5-a
Data File Name	138SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:49:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.118	0.118	7.37	489	0.02	10000	
B	11	45	2	NoGas	108.169	108.169	0.15	318838	0.03	300	
Na	23	45	1	He	9468.726	9468.726	1.05	13189268	0.07	500000	
Mg	24	45	1	He	54291.429	54291.429	1.83	42928357	0.13	500000	
Al	27	45	1	He	4.158	4.158	11.03	3942	0.11	200000	
K	39	45	1	He	1408.911	1408.911	1.94	1078780	0.13	500000	
Ca	44	45	1	He	117379.211	117379.211	2.58	4794591	2.45	500000	
Ti	47	45	1	He	0.243	0.243	22.27	67	0.36	2500	
V	51	45	1	He	0.043	0.043	511.68	322	0.01	10000	
Cr	52	45	1	He	1.107	1.107	6.88	9586	0.01	10000	
Mn	55	45	1	He	156.723	156.723	2.35	843592	0.02	10000	
Fe	56	45	1	He	69.942	69.942	2.72	454766	0.02	200000	
Co	59	103	1	He	0.557	0.557	1.60	5761	0.01	10000	
Ni	60	103	1	He	1.297	1.297	2.99	3409	0.04	10000	
Cu	63	103	1	He	1.286	1.286	2.72	9987	0.01	10000	
Zn	66	103	1	He	2.022	2.022	8.11	4308	0.05	10000	
As	75	103	1	He	0.993	0.993	6.78	996	0.10	10000	
Se	78	103	1	He	0.847	0.847	7.13	119	0.71	10000	
Sr	88	103	1	He	228.188	228.188	1.86	1617417	0.01	10000	
Mo	95	103	1	He	1.140	1.140	1.55	3722	0.03	2000	
Ag	107	103	1	He	0.022	0.022	10.13	250	0.01	300	
Cd	111	103	1	He	0.128	0.128	15.83	1226	0.01	4000	
Sn	118	115	1	He	0.232	0.232	33.09	1974	0.01	2000	
Sb	123	115	1	He	0.481	0.481	11.85	2591	0.02	300	
Ba	137	115	1	He	54.814	54.814	1.24	116963	0.05	10000	
W	182	209	1	He	0.194	0.194	9.46	5560	0.00	2500	
Tl	205	165	1	He	0.012	0.012	15.28	450	0.00	5000	
Pb	208	209	1	He	0.119	0.119	6.53	5779	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1217814	1.24	1631381	74.65	30	120	
Sc	45	1	He	650209	2.83	829696	78.37	30	120	
Sc	45	2	NoGas	5105552	0.95	6325638	80.71	30	120	
Rh	103	1	He	1866606	0.66	2345543	79.58	30	120	
In	115	1	He	1126580	0.25	1419467	79.37	30	120	
Tb	159	1	He	3434179	1.18	3888262	88.32	30	120	
Ho	165	1	He	3575832	1.72	3932562	90.93	30	120	
Bi	209	1	He	2432042	0.55	2874805	84.60	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-5-a
Data File Name	139SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:53:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.121	0.121	25.82	496	0.02	10000	
B	11	45	2	NoGas	105.253	105.253	0.65	308311	0.03	300	
Na	23	45	1	He	9451.577	9451.577	2.13	13153278	0.07	500000	
Mg	24	45	1	He	53403.789	53403.789	2.10	42190278	0.13	500000	
Al	27	45	1	He	11.962	11.962	2.57	7430	0.16	200000	
K	39	45	1	He	1404.544	1404.544	2.89	1074577	0.13	500000	
Ca	44	45	1	He	115296.746	115296.746	2.10	4706382	2.45	500000	
Ti	47	45	1	He	0.307	0.307	5.25	81	0.38	2500	
V	51	45	1	He	-0.092	-0.092	-264.93	-442	0.02	10000	
Cr	52	45	1	He	1.488	1.488	5.76	12188	0.01	10000	
Mn	55	45	1	He	142.770	142.770	0.90	768126	0.02	10000	
Fe	56	45	1	He	29.048	29.048	1.15	190869	0.02	200000	
Co	59	103	1	He	0.503	0.503	4.73	5166	0.01	10000	
Ni	60	103	1	He	1.529	1.529	2.45	3968	0.04	10000	
Cu	63	103	1	He	1.322	1.322	1.62	10146	0.01	10000	
Zn	66	103	1	He	2.075	2.075	8.67	4345	0.05	10000	
As	75	103	1	He	1.006	1.006	1.92	999	0.10	10000	
Se	78	103	1	He	0.857	0.857	11.47	119	0.72	10000	
Sr	88	103	1	He	225.894	225.894	1.60	1588872	0.01	10000	
Mo	95	103	1	He	1.184	1.184	3.03	3832	0.03	2000	
Ag	107	103	1	He	0.020	0.020	5.11	227	0.01	300	
Cd	111	103	1	He	0.110	0.110	18.85	1182	0.01	4000	
Sn	118	115	1	He	0.227	0.227	27.86	1934	0.01	2000	
Sb	123	115	1	He	0.426	0.426	4.69	2334	0.02	300	
Ba	137	115	1	He	53.533	53.533	0.48	113108	0.05	10000	
W	182	209	1	He	0.177	0.177	9.98	5412	0.00	2500	
Tl	205	165	1	He	0.011	0.011	25.72	429	0.00	5000	
Pb	208	209	1	He	0.075	0.075	2.27	3928	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1210750	1.51	1631381	74.22	30	120	
Sc	45	1	He	649610	1.69	829696	78.29	30	120	
Sc	45	2	NoGas	5070279	0.08	6325638	80.15	30	120	
Rh	103	1	He	1852045	0.55	2345543	78.96	30	120	
In	115	1	He	1115531	0.36	1419467	78.59	30	120	
Tb	159	1	He	3369958	1.01	3888262	86.67	30	120	
Ho	165	1	He	3512803	0.64	3932562	89.33	30	120	
Bi	209	1	He	2458847	1.22	2874805	85.53	30	120	

Sample Report

Sample Table

Sample Name	240-49393-g-6-a
Data File Name	140SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T18:57:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.126	0.126	12.59	522	0.02	10000	
B	11	45	2	NoGas	277.545	277.545	1.17	808181	0.03	300	
Na	23	45	1	He	40959.045	40959.045	2.27	56966490	0.07	500000	
Mg	24	45	1	He	63334.729	63334.729	2.49	50059609	0.13	500000	
Al	27	45	1	He	0.307	0.307	64.82	2211	0.01	200000	
K	39	45	1	He	4933.478	4933.478	1.80	3701846	0.13	500000	
Ca	44	45	1	He	99746.939	99746.939	1.35	4074568	2.45	500000	
Ti	47	45	1	He	0.241	0.241	41.80	66	0.37	2500	
V	51	45	1	He	-0.013	-0.013	-1723.21	27	-0.05	10000	
Cr	52	45	1	He	0.977	0.977	8.81	8690	0.01	10000	
Mn	55	45	1	He	3.580	3.580	0.96	20214	0.02	10000	
Fe	56	45	1	He	10.131	10.131	2.73	68935	0.01	200000	
Co	59	103	1	He	0.378	0.378	0.48	3872	0.01	10000	
Ni	60	103	1	He	2.790	2.790	3.10	7125	0.04	10000	
Cu	63	103	1	He	0.308	0.308	2.99	3389	0.01	10000	
Zn	66	103	1	He	4.918	4.918	2.94	8125	0.06	10000	
As	75	103	1	He	0.922	0.922	5.60	923	0.10	10000	
Se	78	103	1	He	0.266	0.266	2.71	65	0.41	10000	
Sr	88	103	1	He	519.376	519.376	1.20	3635228	0.01	10000	
Mo	95	103	1	He	3.637	3.637	0.14	11614	0.03	2000	
Ag	107	103	1	He	0.017	0.017	17.30	193	0.01	300	
Cd	111	103	1	He	0.098	0.098	22.79	1154	0.01	4000	
Sn	118	115	1	He	0.160	0.160	31.57	1615	0.01	2000	
Sb	123	115	1	He	0.466	0.466	8.56	2492	0.02	300	
Ba	137	115	1	He	48.444	48.444	0.61	101861	0.05	10000	
W	182	209	1	He	0.164	0.164	18.74	5097	0.00	2500	
Tl	205	165	1	He	0.034	0.034	4.88	1158	0.00	5000	
Pb	208	209	1	He	0.076	0.076	5.88	3849	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1225515	2.02	1631381	75.12	30	120	
Sc	45	1	He	650025	2.48	829696	78.34	30	120	
Sc	45	2	NoGas	5122209	1.21	6325638	80.98	30	120	
Rh	103	1	He	1843117	0.32	2345543	78.58	30	120	
In	115	1	He	1110057	0.33	1419467	78.20	30	120	
Tb	159	1	He	3404746	0.38	3888262	87.56	30	120	
Ho	165	1	He	3501767	0.77	3932562	89.05	30	120	
Bi	209	1	He	2391506	1.58	2874805	83.19	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	141_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:01:27-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.869	1.467	191750	0.32	50	99.7	89.5	110.5	
B	11	45	2	NoGas	62.579	2.150	190634	1.05	50	125.2	89.5	110.5	CCV Failed
Na	23	45	1	He	24347.335	2.301	35353336	1.84	25000	97.4	89.5	110.5	
Mg	24	45	1	He	24352.714	3.533	20085860	1.06	25000	97.4	89.5	110.5	
Al	27	45	1	He	236.666	3.253	112820	1.58	250	94.7	89.5	110.5	
K	39	45	1	He	25052.715	3.208	19486335	0.92	25000	100.2	89.5	110.5	
Ca	44	45	1	He	24567.589	3.364	1047612	0.75	25000	98.3	89.5	110.5	
Ti	47	45	1	He	48.877	6.511	11739	2.50	50	97.8	89.5	110.5	
V	51	45	1	He	49.223	1.526	292554	2.62	50	98.4	89.5	110.5	
Cr	52	45	1	He	49.693	3.298	356801	0.83	50	99.4	89.5	110.5	
Mn	55	45	1	He	253.734	3.674	1424118	0.64	250	101.5	89.5	110.5	
Fe	56	45	1	He	12404.585	3.375	83489108	1.05	12500	99.2	89.5	110.5	
Co	59	103	1	He	47.108	0.730	498976	0.89	50	94.2	89.5	110.5	
Ni	60	103	1	He	46.843	1.437	123116	1.21	50	93.7	89.5	110.5	
Cu	63	103	1	He	47.137	0.440	326977	1.29	50	94.3	89.5	110.5	
Zn	66	103	1	He	47.378	1.386	67706	0.93	50	94.8	89.5	110.5	
As	75	103	1	He	48.500	0.556	43726	1.24	50	97.0	89.5	110.5	
Se	78	103	1	He	48.909	0.810	4688	0.63	50	97.8	89.5	110.5	
Sr	88	103	1	He	49.154	0.589	359036	1.29	50	98.3	89.5	110.5	
Mo	95	103	1	He	49.956	2.766	165785	2.02	50	99.9	89.5	110.5	
Ag	107	103	1	He	49.527	0.636	564559	1.45	50	99.1	89.5	110.5	
Cd	111	103	1	He	49.970	0.638	100129	0.94	50	99.9	89.5	110.5	
Sn	118	115	1	He	50.475	0.254	243918	0.44	50	100.9	89.5	110.5	
Sb	123	115	1	He	52.646	0.752	234607	0.38	50	105.3	89.5	110.5	
Ba	137	115	1	He	52.063	0.690	113862	1.20	50	104.1	89.5	110.5	
W	182	209	1	He	49.701	1.692	632800	0.66	50	99.4	89.5	110.5	
Tl	205	165	1	He	49.560	5.601	1616865	5.63	50	99.1	89.5	110.5	
Pb	208	209	1	He	48.622	1.077	2125472	0.66	50	97.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1216394	1.22	1631381	74.56	30	120	
Sc	45	1	He	678672	4.18	829696	81.80	30	120	
Sc	45	2	NoGas	5182912	1.06	6325638	81.94	30	120	
Rh	103	1	He	1922965	0.85	2345543	81.98	30	120	
In	115	1	He	1154612	0.53	1419467	81.34	30	120	
Tb	159	1	He	3442051	1.52	3888262	88.52	30	120	
Ho	165	1	He	3554675	0.15	3932562	90.39	30	120	
Bi	209	1	He	2482641	1.36	2874805	86.36	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	142_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:05:18-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.108	20.0	452	18.1	1	
B	11	45	2	NoGas	12.620	2.9	43916	1.1	20	
Na	23	45	1	He	37.516	8.3	68996	4.6	400	
Mg	24	45	1	He	4.176	24.6	3997	18.4	1000	
Al	27	45	1	He	-0.023	-407.0	2027	3.5	50	
K	39	45	1	He	9.366	24.2	36289	3.3	1000	
Ca	44	45	1	He	5.381	51.1	987	10.8	1000	
Ti	47	45	1	He	0.078	73.1	28	45.4	20	
V	51	45	1	He	-0.004	-3389.4	55	1538.0	2	
Cr	52	45	1	He	0.033	56.0	2204	4.4	2	
Mn	55	45	1	He	0.038	28.5	1148	3.5	2	
Fe	56	45	1	He	20.883	26.0	135523	23.7	50	
Co	59	103	1	He	0.006	47.6	104	29.7	1	
Ni	60	103	1	He	-0.009	-34.2	88	8.8	2	
Cu	63	103	1	He	0.217	3.1	3073	1.9	2	
Zn	66	103	1	He	-0.076	-81.3	1598	6.7	20	
As	75	103	1	He	0.081	17.2	219	6.9	2	
Se	78	103	1	He	0.115	68.0	57	14.8	2	
Sr	88	103	1	He	0.023	45.4	281	28.4	10	
Mo	95	103	1	He	0.805	20.2	2876	19.6	2	
Ag	107	103	1	He	0.015	17.2	184	16.8	0.2	
Cd	111	103	1	He	0.090	36.3	1257	4.7	0.2	
Sn	118	115	1	He	0.335	10.5	2641	6.7	10	
Sb	123	115	1	He	0.433	23.5	2562	18.4	1	
Ba	137	115	1	He	0.005	178.0	97	21.0	5	
W	182	209	1	He	1.091	14.7	18052	11.1	10	
Tl	205	165	1	He	0.040	26.4	1395	24.8	0.5	
Pb	208	209	1	He	0.038	12.3	2485	7.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1221612	2.11	1631381	74.88	30	120	
Sc	45	1	He	638459	1.54	829696	76.95	30	120	
Sc	45	2	NoGas	5069803	1.54	6325638	80.15	30	120	
Rh	103	1	He	2032744	0.89	2345543	86.66	30	120	
In	115	1	He	1210660	0.06	1419467	85.29	30	120	
Tb	159	1	He	3505091	0.45	3888262	90.15	30	120	
Ho	165	1	He	3595334	0.54	3932562	91.42	30	120	
Bi	209	1	He	2631894	1.09	2874805	91.55	30	120	

Sample Report

Sample Table

Sample Name	240-49393-h-6-a
Data File Name	143SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:09:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.130	0.130	13.54	515	0.03	10000	
B	11	45	2	NoGas	260.414	260.414	2.16	750457	0.03	300	
Na	23	45	1	He	40360.978	40360.978	2.12	55425748	0.07	500000	
Mg	24	45	1	He	62466.248	62466.248	3.34	48742930	0.13	500000	
Al	27	45	1	He	-0.426	-0.426	-45.30	1858	-0.02	200000	
K	39	45	1	He	4776.596	4776.596	2.21	3539269	0.13	500000	
Ca	44	45	1	He	100097.571	100097.571	2.74	4036084	2.48	500000	
Ti	47	45	1	He	0.253	0.253	5.40	68	0.37	2500	
V	51	45	1	He	-0.023	-0.023	-856.37	-43	0.05	10000	
Cr	52	45	1	He	0.909	0.909	6.53	8129	0.01	10000	
Mn	55	45	1	He	4.185	4.185	1.67	23166	0.02	10000	
Fe	56	45	1	He	13.366	13.366	9.05	88761	0.02	200000	
Co	59	103	1	He	0.432	0.432	2.82	4319	0.01	10000	
Ni	60	103	1	He	2.871	2.871	5.33	7147	0.04	10000	
Cu	63	103	1	He	0.377	0.377	12.10	3745	0.01	10000	
Zn	66	103	1	He	5.308	5.308	4.01	8437	0.06	10000	
As	75	103	1	He	0.709	0.709	9.74	721	0.10	10000	
Se	78	103	1	He	0.203	0.203	45.61	58	0.35	10000	
Sr	88	103	1	He	501.055	501.055	3.23	3421458	0.01	10000	
Mo	95	103	1	He	3.997	3.997	3.04	12451	0.03	2000	
Ag	107	103	1	He	0.020	0.020	2.66	217	0.01	300	
Cd	111	103	1	He	0.120	0.120	34.81	1166	0.01	4000	
Sn	118	115	1	He	0.476	0.476	17.24	3037	0.02	2000	
Sb	123	115	1	He	0.586	0.586	3.47	2970	0.02	300	
Ba	137	115	1	He	47.621	47.621	0.34	99040	0.05	10000	
W	182	209	1	He	0.409	0.409	7.90	8162	0.01	2500	
Tl	205	165	1	He	0.045	0.045	5.96	1472	0.00	5000	
Pb	208	209	1	He	0.080	0.080	6.38	4089	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1179006	0.94	1631381	72.27	30	120	
Sc	45	1	He	641734	1.86	829696	77.35	30	120	
Sc	45	2	NoGas	5067252	2.32	6325638	80.11	30	120	
Rh	103	1	He	1799174	2.85	2345543	76.71	30	120	
In	115	1	He	1097922	1.20	1419467	77.35	30	120	
Tb	159	1	He	3351247	0.65	3888262	86.19	30	120	
Ho	165	1	He	3397871	1.51	3932562	86.40	30	120	
Bi	209	1	He	2410448	0.69	2874805	83.85	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	144_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:13:08-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.179	1.217	185699	0.46	50	96.4	89.5	110.5	
B	11	45	2	NoGas	58.900	1.426	180210	1.81	50	117.8	89.5	110.5	CCV Failed
Na	23	45	1	He	24905.042	8.617	34784033	0.18	25000	99.6	89.5	110.5	
Mg	24	45	1	He	25071.542	8.393	19901311	1.45	25000	100.3	89.5	110.5	
Al	27	45	1	He	244.743	8.356	112203	0.77	250	97.9	89.5	110.5	
K	39	45	1	He	26161.966	8.814	19575127	1.22	25000	104.6	89.5	110.5	
Ca	44	45	1	He	25253.200	7.980	1036512	1.10	25000	101.0	89.5	110.5	
Ti	47	45	1	He	50.401	7.385	11669	3.07	50	100.8	89.5	110.5	
V	51	45	1	He	51.531	10.268	294236	1.55	50	103.1	89.5	110.5	
Cr	52	45	1	He	50.790	8.613	350857	0.92	50	101.6	89.5	110.5	
Mn	55	45	1	He	252.614	8.744	1364223	0.54	250	101.0	89.5	110.5	
Fe	56	45	1	He	12762.112	9.493	82602992	0.96	12500	102.1	89.5	110.5	
Co	59	103	1	He	47.724	3.403	488083	1.04	50	95.4	89.5	110.5	
Ni	60	103	1	He	47.401	2.341	120320	1.44	50	94.8	89.5	110.5	
Cu	63	103	1	He	48.020	2.652	321620	0.18	50	96.0	89.5	110.5	
Zn	66	103	1	He	47.998	3.108	66215	0.40	50	96.0	89.5	110.5	
As	75	103	1	He	49.182	2.711	42815	0.34	50	98.4	89.5	110.5	
Se	78	103	1	He	50.368	2.258	4661	0.69	50	100.7	89.5	110.5	
Sr	88	103	1	He	50.277	2.731	354622	0.95	50	100.6	89.5	110.5	
Mo	95	103	1	He	50.536	4.402	161938	2.44	50	101.1	89.5	110.5	
Ag	107	103	1	He	50.661	2.204	557665	0.62	50	101.3	89.5	110.5	
Cd	111	103	1	He	51.186	2.639	99022	1.22	50	102.4	89.5	110.5	
Sn	118	115	1	He	51.469	2.065	241678	2.32	50	102.9	89.5	110.5	
Sb	123	115	1	He	53.618	3.476	232083	0.37	50	107.2	89.5	110.5	
Ba	137	115	1	He	52.748	3.002	112066	1.26	50	105.5	89.5	110.5	
W	182	209	1	He	49.686	4.461	621442	1.29	50	99.4	89.5	110.5	
Tl	205	165	1	He	50.353	6.877	1585778	3.90	50	100.7	89.5	110.5	
Pb	208	209	1	He	48.532	2.749	2084856	1.67	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1219264	0.93	1631381	74.74	30	120	
Sc	45	1	He	655776	9.03	829696	79.04	30	120	
Sc	45	2	NoGas	5191071	1.03	6325638	82.06	30	120	
Rh	103	1	He	1857743	2.59	2345543	79.20	30	120	
In	115	1	He	1122346	3.24	1419467	79.07	30	120	
Tb	159	1	He	3331128	3.05	3888262	85.67	30	120	
Ho	165	1	He	3436388	3.22	3932562	87.38	30	120	
Bi	209	1	He	2440754	3.19	2874805	84.90	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	145_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:16:56-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.066	15.2	293	14.4	1	
B	11	45	2	NoGas	12.416	1.2	44591	1.4	20	
Na	23	45	1	He	31.657	8.1	61016	3.9	400	
Mg	24	45	1	He	3.856	23.6	3749	16.9	1000	
Al	27	45	1	He	0.065	479.0	2066	6.8	50	
K	39	45	1	He	11.215	22.8	37647	3.0	1000	
Ca	44	45	1	He	3.207	112.2	899	14.2	1000	
Ti	47	45	1	He	0.107	50.3	34	34.0	20	
V	51	45	1	He	0.065	67.5	444	54.3	2	
Cr	52	45	1	He	0.001	284.8	1990	0.8	2	
Mn	55	45	1	He	0.022	86.9	1063	8.1	2	
Fe	56	45	1	He	22.154	25.9	143534	23.4	50	
Co	59	103	1	He	0.005	85.8	94	47.9	1	
Ni	60	103	1	He	-0.012	-32.0	78	13.1	2	
Cu	63	103	1	He	0.122	14.7	2361	5.5	2	
Zn	66	103	1	He	-0.090	-51.4	1569	4.9	20	
As	75	103	1	He	0.082	28.3	218	10.6	2	
Se	78	103	1	He	0.174	45.4	62	12.0	2	
Sr	88	103	1	He	0.016	4.5	223	3.0	10	
Mo	95	103	1	He	0.853	21.0	3029	20.6	2	
Ag	107	103	1	He	0.016	26.4	199	26.5	0.2	
Cd	111	103	1	He	0.095	12.1	1259	2.6	0.2	
Sn	118	115	1	He	0.296	30.4	2445	18.1	10	
Sb	123	115	1	He	0.431	11.4	2556	8.3	1	
Ba	137	115	1	He	0.004	147.7	93	12.4	5	
W	182	209	1	He	1.156	13.0	18782	10.6	10	
Tl	205	165	1	He	0.044	20.0	1486	19.7	0.5	
Pb	208	209	1	He	0.039	18.1	2522	12.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1238949	1.16	1631381	75.94	30	120	
Sc	45	1	He	638734	1.94	829696	76.98	30	120	
Sc	45	2	NoGas	5215755	0.67	6325638	82.45	30	120	
Rh	103	1	He	2021216	0.72	2345543	86.17	30	120	
In	115	1	He	1211056	0.67	1419467	85.32	30	120	
Tb	159	1	He	3475600	1.30	3888262	89.39	30	120	
Ho	165	1	He	3540066	0.55	3932562	90.02	30	120	
Bi	209	1	He	2609350	1.03	2874805	90.77	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	146CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:20:48-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.039	1.039	6.625	4064	6.01	1	103.9	69.5	130.5	
B	11	2	NoGas	28.471	28.471	2.150	91561	0.58	20	142.4	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1080.635	1080.635	0.869	1560450	1.61	1000	108.1	69.5	130.5	
Mg	24	1	He	1064.644	1064.644	2.399	864176	1.20	1000	106.5	69.5	130.5	
Al	27	1	He	48.098	48.098	1.086	24240	1.38	50	96.2	69.5	130.5	
K	39	1	He	1090.392	1090.392	1.616	863381	1.06	1000	109.0	69.5	130.5	
Ca	44	1	He	1051.874	1051.874	1.312	44879	1.02	1000	105.2	69.5	130.5	
Ti	47	1	He	10.693	10.693	8.564	2537	8.98	10	106.9	69.5	130.5	
V	51	1	He	5.319	5.319	4.172	31134	2.03	5	106.4	69.5	130.5	
Cr	52	1	He	2.150	2.150	2.001	17166	3.32	2	107.5	69.5	130.5	
Mn	55	1	He	5.160	5.160	0.753	29454	2.13	5	103.2	69.5	130.5	
Fe	56	1	He	109.306	109.306	0.963	727125	1.33	100	109.3	69.5	130.5	
Co	59	1	He	0.970	0.970	0.854	10707	2.22	1	97.0	69.5	130.5	
Ni	60	1	He	1.885	1.885	3.412	5244	1.62	2	94.2	69.5	130.5	
Cu	63	1	He	2.051	2.051	3.621	16162	3.71	2	102.6	69.5	130.5	
Zn	66	1	He	19.477	19.477	2.700	29870	1.29	20	97.4	69.5	130.5	
As	75	1	He	4.876	4.876	1.746	4686	0.71	5	97.5	69.5	130.5	
Se	78	1	He	5.026	5.026	0.492	540	2.19	5	100.5	69.5	130.5	
Sr	88	1	He	9.789	9.789	2.419	74272	1.68	10	97.9	69.5	130.5	
Mo	95	1	He	10.452	10.452	1.926	36038	0.22	10	104.5	69.5	130.5	
Ag	107	1	He	1.038	1.038	1.511	12278	1.36	1	103.8	69.5	130.5	
Cd	111	1	He	1.147	1.147	8.213	3408	4.36	1	114.7	69.5	130.5	
Sn	118	1	He	10.126	10.126	1.693	52782	1.55	10	101.3	69.5	130.5	
Sb	123	1	He	2.095	2.095	2.099	10454	1.75	2	104.8	69.5	130.5	
Ba	137	1	He	5.131	5.131	0.998	12007	1.27	5	102.6	69.5	130.5	
W	182	1	He	9.733	9.733	1.285	133491	1.68	10	97.3	69.5	130.5	
Tl	205	1	He	2.048	2.048	2.140	66483	1.33	2	102.4	69.5	130.5	
Pb	208	1	He	1.031	1.031	3.149	48248	2.66	1	103.1	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1227370	0.63	1631381	75.24	30	120	
Sc	45	1	He	666879	2.19	829696	80.38	30	120	
Sc	45	2	NoGas	5207299	1.43	6325638	82.32	30	120	
Rh	103	1	He	1995728	1.75	2345543	85.09	30	120	
In	115	1	He	1227273	0.35	1419467	86.46	30	120	
Tb	159	1	He	3495476	0.61	3888262	89.90	30	120	
Ho	165	1	He	3534623	1.49	3932562	89.88	30	120	
Bi	209	1	He	2619221	0.43	2874805	91.11	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177036/1-a
Data File Name	147_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:24:40-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.104	26.6	400	24.7	1	
B	11	45	2	NoGas	12.862	0.9	41915	0.3	20	
Na	23	45	1	He	104.576	4.8	158701	1.9	400	
Mg	24	45	1	He	74.622	3.4	58011	1.2	1000	
Al	27	45	1	He	9.289	4.2	6053	1.9	50	
K	39	45	1	He	26.872	11.3	48499	0.9	1000	
Ca	44	45	1	He	242.004	8.2	10351	5.9	1000	
Ti	47	45	1	He	0.152	51.8	44	41.3	20	
V	51	45	1	He	0.145	88.6	872	77.5	2	
Cr	52	45	1	He	0.795	9.2	7232	3.2	2	
Mn	55	45	1	He	0.473	10.0	3401	5.5	2	
Fe	56	45	1	He	20.026	1.1	128958	3.3	50	
Co	59	103	1	He	0.013	39.4	177	30.0	1	
Ni	60	103	1	He	0.172	12.2	553	9.7	2	
Cu	63	103	1	He	1.086	6.9	8842	5.8	2	
Zn	66	103	1	He	8.336	3.6	13144	1.8	20	
As	75	103	1	He	0.156	17.2	272	9.2	2	
Se	78	103	1	He	0.120	15.3	54	3.5	2	
Sr	88	103	1	He	0.550	4.5	4082	3.0	10	
Mo	95	103	1	He	0.269	17.9	937	17.9	2	
Ag	107	103	1	He	0.011	20.8	127	21.1	0.2	
Cd	111	103	1	He	0.057	35.8	1114	3.3	0.2	
Sn	118	115	1	He	1.601	4.9	8417	3.9	10	
Sb	123	115	1	He	0.446	5.1	2445	3.6	1	
Ba	137	115	1	He	1.353	2.8	2969	2.3	5	
W	182	209	1	He	0.455	11.9	9411	7.5	10	
Tl	205	165	1	He	0.013	13.8	483	12.7	0.5	
Pb	208	209	1	He	0.178	4.2	8887	4.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1128511	1.21	1631381	69.18	30	120	
Sc	45	1	He	631352	4.07	829696	76.09	30	120	
Sc	45	2	NoGas	4763131	0.90	6325638	75.30	30	120	
Rh	103	1	He	1908604	1.33	2345543	81.37	30	120	
In	115	1	He	1128448	0.50	1419467	79.50	30	120	
Tb	159	1	He	3361932	0.91	3888262	86.46	30	120	
Ho	165	1	He	3409686	0.63	3932562	86.70	30	120	
Bi	209	1	He	2600722	0.62	2874805	90.47	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177036/3-a
Data File Name	148_LCS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:28:29-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1060.781	1060.781	2.220	3503078	1.24	1000	106.1	79.5	120.5	
B	11	2	NoGas	123.052	123.052	1.475	321787	1.25	100	123.1	79.5	120.5	LCS Failed
Na	23	1	He	10331.860	10331.860	3.300	12863643	0.23	10000	103.3	79.5	120.5	
Mg	24	1	He	10382.257	10382.257	4.259	7338363	1.17	10000	103.8	79.5	120.5	
Al	27	1	He	9682.678	9682.678	3.756	3881285	0.42	10000	96.8	79.5	120.5	
K	39	1	He	10453.238	10453.238	3.854	6983475	1.44	10000	104.5	79.5	120.5	
Ca	44	1	He	9291.013	9291.013	2.306	340088	1.46	10000	92.9	79.5	120.5	
Ti	47	1	He	102.129	102.129	5.339	21022	2.02	100	102.1	79.5	120.5	
V	51	1	He	1021.926	1021.926	4.094	5200846	1.34	1000	102.2	79.5	120.5	
Cr	52	1	He	1025.938	1025.938	4.114	6276818	0.79	1000	102.6	79.5	120.5	
Mn	55	1	He	1045.248	1045.248	3.101	5026079	0.48	1000	104.5	79.5	120.5	
Fe	56	1	He	10708.021	10708.021	3.939	61760515	0.65	10000	107.1	79.5	120.5	
Co	59	1	He	938.375	938.375	0.613	9071623	0.19	1000	93.8	79.5	120.5	
Ni	60	1	He	963.194	963.194	0.458	2308888	0.24	1000	96.3	79.5	120.5	
Cu	63	1	He	956.646	956.646	0.575	6032037	0.24	1000	95.7	79.5	120.5	
Zn	66	1	He	937.135	937.135	0.572	1194716	0.40	1000	93.7	79.5	120.5	
As	75	1	He	931.362	931.362	0.376	764199	0.29	1000	93.1	79.5	120.5	
Se	78	1	He	967.439	967.439	0.819	83913	0.60	1000	96.7	79.5	120.5	
Sr	88	1	He	997.809	997.809	1.558	6650437	1.18	1000	99.8	79.5	120.5	
Mo	95	1	He	108.472	108.472	2.174	328559	1.99	100	108.5	79.5	120.5	
Ag	107	1	He	102.829	102.829	0.785	1069828	0.59	100	102.8	79.5	120.5	
Cd	111	1	He	1080.496	1080.496	0.907	1957142	0.53	1000	108.0	79.5	120.5	
Sn	118	1	He	1165.383	1165.383	1.907	4904632	1.94	1000	116.5	79.5	120.5	
Sb	123	1	He	113.203	113.203	0.963	440389	0.84	100	113.2	79.5	120.5	
Ba	137	1	He	1152.096	1152.096	1.394	2200631	1.52	1000	115.2	79.5	120.5	
W	182	1	He	103.420	103.420	2.454	1269559	2.20	100	103.4	79.5	120.5	
Tl	205	1	He	256.644	256.644	1.499	7857491	0.61	250	102.7	79.5	120.5	
Pb	208	1	He	1011.016	1011.016	0.564	42709888	0.37	1000	101.1	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1044906	1.02	1631381	64.05	30	120	
Sc	45	1	He	581564	3.40	829696	70.09	30	120	
Sc	45	2	NoGas	4543422	0.45	6325638	71.83	30	120	
Rh	103	1	He	1755208	0.43	2345543	74.83	30	120	
In	115	1	He	1009129	0.16	1419467	71.09	30	120	
Tb	159	1	He	3211595	0.92	3888262	82.60	30	120	
Ho	165	1	He	3336337	0.89	3932562	84.84	30	120	
Bi	209	1	He	2399762	0.27	2874805	83.48	30	120	

Sample Report

Sample Table

Sample Name	240-49480-f-3-a
Data File Name	149SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:32:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.341	1.341	5.76	4227	0.03	10000	
B	11	45	2	NoGas	150.012	150.012	1.66	378018	0.04	300	
Na	23	45	1	He	115283.065	115283.065	1.18	136177502	0.08	500000	
Mg	24	45	1	He	40820.211	40820.211	2.41	27405208	0.15	500000	
Al	27	45	1	He	635.525	635.525	1.65	243630	0.26	200000	
K	39	45	1	He	5602.031	5602.031	2.53	3566345	0.16	500000	
Ca	44	45	1	He	55368.280	55368.280	1.06	1921270	2.88	500000	
Ti	47	45	1	He	0.960	0.960	5.90	197	0.49	2500	
V	51	45	1	He	0.579	0.579	43.70	2886	0.02	10000	
Cr	52	45	1	He	1.564	1.564	1.98	10804	0.01	10000	
Mn	55	45	1	He	1350.743	1350.743	1.44	6168579	0.02	10000	
Fe	56	45	1	He	25317.822	25317.822	1.61	138711501	0.02	200000	
Co	59	103	1	He	105.382	105.382	0.75	944638	0.01	10000	
Ni	60	103	1	He	168.619	168.619	0.75	374847	0.04	10000	
Cu	63	103	1	He	1.123	1.123	13.55	7752	0.01	10000	
Zn	66	103	1	He	895.983	895.983	1.49	1059107	0.08	10000	
As	75	103	1	He	2.733	2.733	7.88	2192	0.12	10000	
Se	78	103	1	He	1.845	1.845	13.29	184	1.00	10000	
Sr	88	103	1	He	274.271	274.271	1.58	1695011	0.02	10000	
Mo	95	103	1	He	1.073	1.073	19.97	3053	0.04	2000	
Ag	107	103	1	He	0.030	0.030	35.66	293	0.01	300	
Cd	111	103	1	He	3.851	3.851	3.77	7318	0.05	4000	
Sn	118	115	1	He	2.662	2.662	21.49	11668	0.02	2000	
Sb	123	115	1	He	0.986	0.986	3.56	4173	0.02	300	
Ba	137	115	1	He	12.323	12.323	0.92	22979	0.05	10000	
W	182	209	1	He	1.691	1.691	14.73	22347	0.01	2500	
Tl	205	165	1	He	2.969	2.969	3.56	88370	0.00	5000	
Pb	208	209	1	He	1.798	1.798	5.17	71911	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	991396	0.87	1631381	60.77	30	120	
Sc	45	1	He	552057	1.71	829696	66.54	30	120	
Sc	45	2	NoGas	4396062	1.69	6325638	69.50	30	120	
Rh	103	1	He	1627480	0.91	2345543	69.39	30	120	
In	115	1	He	982208	0.34	1419467	69.20	30	120	
Tb	159	1	He	3136604	0.61	3888262	80.67	30	120	
Ho	165	1	He	3242119	1.14	3932562	82.44	30	120	
Bi	209	1	He	2252976	0.84	2874805	78.37	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49480-f-3-a@5
Data File Name	150SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:35:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.404	0.404	4.94	1411	0.03	10000	
B	11	45	2	NoGas	35.817	35.817	3.67	102098	0.04	300	
Na	23	45	1	He	24122.857	24122.857	1.36	31102782	0.08	500000	
Mg	24	45	1	He	8527.482	8527.482	1.10	6248129	0.14	500000	
Al	27	45	1	He	130.527	130.527	1.52	56122	0.23	200000	
K	39	45	1	He	1176.715	1176.715	0.59	839466	0.14	500000	
Ca	44	45	1	He	11313.719	11313.719	1.42	428899	2.64	500000	
Ti	47	45	1	He	0.175	0.175	97.31	47	0.37	2500	
V	51	45	1	He	0.026	0.026	259.40	208	0.01	10000	
Cr	52	45	1	He	0.335	0.335	5.91	3996	0.01	10000	
Mn	55	45	1	He	291.704	291.704	1.03	1454244	0.02	10000	
Fe	56	45	1	He	5353.574	5353.574	1.36	32008105	0.02	200000	
Co	59	103	1	He	21.662	21.662	2.14	217591	0.01	10000	
Ni	60	103	1	He	35.827	35.827	1.61	89321	0.04	10000	
Cu	63	103	1	He	0.151	0.151	9.97	2325	0.01	10000	
Zn	66	103	1	He	199.290	199.290	1.42	265156	0.08	10000	
As	75	103	1	He	0.420	0.420	7.50	485	0.09	10000	
Se	78	103	1	He	0.340	0.340	9.64	71	0.48	10000	
Sr	88	103	1	He	52.798	52.798	2.12	365672	0.01	10000	
Mo	95	103	1	He	0.169	0.169	13.49	579	0.03	2000	
Ag	107	103	1	He	0.009	0.009	11.19	102	0.01	300	
Cd	111	103	1	He	0.859	0.859	1.01	2574	0.03	4000	
Sn	118	115	1	He	0.140	0.140	26.06	1526	0.01	2000	
Sb	123	115	1	He	0.173	0.173	19.68	1241	0.01	300	
Ba	137	115	1	He	2.425	2.425	3.17	5189	0.05	10000	
W	182	209	1	He	0.323	0.323	9.36	7421	0.00	2500	
Tl	205	165	1	He	0.619	0.619	3.72	19739	0.00	5000	
Pb	208	209	1	He	0.370	0.370	1.22	17142	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1082820	0.05	1631381	66.37	30	120	
Sc	45	1	He	602330	1.65	829696	72.60	30	120	
Sc	45	2	NoGas	4700899	0.65	6325638	74.32	30	120	
Rh	103	1	He	1823561	0.76	2345543	77.75	30	120	
In	115	1	He	1113186	0.38	1419467	78.42	30	120	
Tb	159	1	He	3337362	0.70	3888262	85.83	30	120	
Ho	165	1	He	3462678	1.25	3932562	88.05	30	120	
Bi	209	1	He	2519521	1.43	2874805	87.64	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49480-f-3-a
Data File Name	151SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:39:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1913.618	1913.618	1.46	6143885	0.03	10000	
B	11	45	2	NoGas	345.543	345.543	1.27	862670	0.04	300	>LDR
Na	23	45	1	He	128120.394	128120.394	1.96	152825683	0.08	500000	
Mg	24	45	1	He	57834.630	57834.630	2.65	39209574	0.15	500000	
Al	27	45	1	He	18734.263	18734.263	2.82	7200682	0.26	200000	
K	39	45	1	He	25018.084	25018.084	3.53	15991482	0.16	500000	
Ca	44	45	1	He	70203.209	70203.209	2.35	2459645	2.85	500000	
Ti	47	45	1	He	189.369	189.369	3.54	37385	0.51	2500	
V	51	45	1	He	1900.193	1900.193	2.88	9275062	0.02	10000	
Cr	52	45	1	He	1928.327	1928.327	3.08	11314020	0.02	10000	
Mn	55	45	1	He	3189.007	3189.007	3.19	14702047	0.02	10000	
Fe	56	45	1	He	43777.670	43777.670	3.30	242139777	0.02	200000	
Co	59	103	1	He	1884.938	1884.938	1.23	16968674	0.01	10000	
Ni	60	103	1	He	1946.156	1946.156	2.12	4344028	0.04	10000	
Cu	63	103	1	He	1774.346	1774.346	0.95	10417288	0.02	10000	
Zn	66	103	1	He	2626.049	2626.049	0.93	3115188	0.08	10000	
As	75	103	1	He	1792.726	1792.726	0.68	1369677	0.13	10000	
Se	78	103	1	He	1812.500	1812.500	0.88	146367	1.24	10000	
Sr	88	103	1	He	2199.569	2199.569	1.08	13652151	0.02	10000	
Mo	95	103	1	He	214.137	214.137	0.70	603974	0.04	2000	
Ag	107	103	1	He	203.744	203.744	0.57	1973969	0.01	300	
Cd	111	103	1	He	1983.536	1983.536	0.20	3345124	0.06	4000	
Sn	118	115	1	He	2294.038	2294.038	1.04	8908349	0.03	2000	>LDR
Sb	123	115	1	He	221.502	221.502	0.56	794766	0.03	300	
Ba	137	115	1	He	2290.971	2290.971	1.16	4037937	0.06	10000	
W	182	209	1	He	229.809	229.809	2.24	2592987	0.01	2500	
Tl	205	165	1	He	473.185	473.185	0.20	14031961	0.00	5000	
Pb	208	209	1	He	1967.059	1967.059	0.23	76489046	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1015795	1.09	1631381	62.27	30	120	
Sc	45	1	He	557645	3.33	829696	67.21	30	120	
Sc	45	2	NoGas	4399952	1.43	6325638	69.56	30	120	
Rh	103	1	He	1634508	0.70	2345543	69.69	30	120	
In	115	1	He	931217	0.36	1419467	65.60	30	120	
Tb	159	1	He	3141965	0.83	3888262	80.81	30	120	
Ho	165	1	He	3231233	0.20	3932562	82.17	30	120	
Bi	209	1	He	2208937	1.01	2874805	76.84	30	120	

Sample Report

Sample Table

Sample Name	240-49480-f-3-d ms
Data File Name	152SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:43:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1006.520	1006.520	1.46	3142270	0.03	10000	
B	11	45	2	NoGas	243.134	243.134	0.42	615765	0.04	300	
Na	23	45	1	He	123791.665	123791.665	2.54	148228642	0.08	500000	
Mg	24	45	1	He	49788.130	49788.130	2.58	33887477	0.15	500000	
Al	27	45	1	He	10049.705	10049.705	3.35	3878535	0.26	200000	
K	39	45	1	He	15539.166	15539.166	2.75	9983434	0.16	500000	
Ca	44	45	1	He	63279.825	63279.825	2.05	2225869	2.84	500000	
Ti	47	45	1	He	101.158	101.158	3.38	20056	0.50	2500	
V	51	45	1	He	1011.811	1011.811	2.53	4958714	0.02	10000	
Cr	52	45	1	He	998.484	998.484	2.18	5883265	0.02	10000	
Mn	55	45	1	He	2308.536	2308.536	2.72	10686481	0.02	10000	
Fe	56	45	1	He	35352.253	35352.253	2.08	196362121	0.02	200000	
Co	59	103	1	He	1012.602	1012.602	0.46	9259794	0.01	10000	
Ni	60	103	1	He	1082.109	1082.109	0.24	2453600	0.04	10000	
Cu	63	103	1	He	915.023	915.023	1.56	5456881	0.02	10000	
Zn	66	103	1	He	1849.752	1849.752	1.01	2229080	0.08	10000	
As	75	103	1	He	923.807	923.807	0.98	716944	0.13	10000	
Se	78	103	1	He	935.628	935.628	1.41	76757	1.22	10000	
Sr	88	103	1	He	1244.436	1244.436	1.47	7844879	0.02	10000	
Mo	95	103	1	He	111.108	111.108	1.51	318309	0.03	2000	
Ag	107	103	1	He	99.170	99.170	1.67	975827	0.01	300	
Cd	111	103	1	He	1032.075	1032.075	1.73	1768230	0.06	4000	
Sn	118	115	1	He	1144.092	1144.092	0.59	4636635	0.02	2000	
Sb	123	115	1	He	111.152	111.152	0.59	416406	0.03	300	
Ba	137	115	1	He	1157.151	1157.151	0.87	2128406	0.05	10000	
W	182	209	1	He	109.171	109.171	0.02	1248743	0.01	2500	
Tl	205	165	1	He	241.926	241.926	0.39	7279298	0.00	5000	
Pb	208	209	1	He	1010.840	1010.840	1.08	39792402	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	987748	0.86	1631381	60.55	30	120	
Sc	45	1	He	559751	2.32	829696	67.46	30	120	
Sc	45	2	NoGas	4448558	0.90	6325638	70.33	30	120	
Rh	103	1	He	1660263	1.32	2345543	70.78	30	120	
In	115	1	He	971749	0.22	1419467	68.46	30	120	
Tb	159	1	He	3200878	0.49	3888262	82.32	30	120	
Ho	165	1	He	3278596	0.33	3932562	83.37	30	120	
Bi	209	1	He	2236258	0.40	2874805	77.79	30	120	

Sample Report

Sample Table

Sample Name	240-49480-f-3-e msd
Data File Name	153SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:46:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	981.744	981.744	4.16	3089950	0.03	10000	
B	11	45	2	NoGas	240.736	240.736	1.61	620115	0.04	300	
Na	23	45	1	He	121019.492	121019.492	1.09	146589820	0.08	500000	
Mg	24	45	1	He	48481.685	48481.685	1.29	33380501	0.15	500000	
Al	27	45	1	He	9591.772	9591.772	1.21	3745279	0.26	200000	
K	39	45	1	He	15312.809	15312.809	2.29	9951049	0.15	500000	
Ca	44	45	1	He	61862.177	61862.177	2.75	2200718	2.81	500000	
Ti	47	45	1	He	95.581	95.581	3.03	19168	0.50	2500	
V	51	45	1	He	977.599	977.599	1.77	4846131	0.02	10000	
Cr	52	45	1	He	970.911	970.911	1.58	5786525	0.02	10000	
Mn	55	45	1	He	2274.019	2274.019	2.00	10647983	0.02	10000	
Fe	56	45	1	He	34320.017	34320.017	3.09	192770721	0.02	200000	
Co	59	103	1	He	990.522	990.522	1.17	9074420	0.01	10000	
Ni	60	103	1	He	1075.114	1075.114	0.30	2442373	0.04	10000	
Cu	63	103	1	He	898.367	898.367	0.70	5368181	0.02	10000	
Zn	66	103	1	He	1789.185	1789.185	0.33	2160356	0.08	10000	
As	75	103	1	He	910.238	910.238	0.79	707772	0.13	10000	
Se	78	103	1	He	918.013	918.013	0.31	75462	1.22	10000	
Sr	88	103	1	He	1222.901	1222.901	1.34	7724132	0.02	10000	
Mo	95	103	1	He	109.133	109.133	0.69	313267	0.03	2000	
Ag	107	103	1	He	98.893	98.893	0.21	975053	0.01	300	
Cd	111	103	1	He	1011.175	1011.175	1.71	1735817	0.06	4000	
Sn	118	115	1	He	1131.569	1131.569	0.19	4610625	0.02	2000	
Sb	123	115	1	He	109.613	109.613	0.37	412849	0.03	300	
Ba	137	115	1	He	1134.696	1134.696	2.15	2098252	0.05	10000	
W	182	209	1	He	105.986	105.986	1.51	1229044	0.01	2500	
Tl	205	165	1	He	240.160	240.160	0.73	7223244	0.00	5000	
Pb	208	209	1	He	988.802	988.802	1.58	39460664	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	996312	2.17	1631381	61.07	30	120	
Sc	45	1	He	566111	2.09	829696	68.23	30	120	
Sc	45	2	NoGas	4524283	0.54	6325638	71.52	30	120	
Rh	103	1	He	1663373	0.69	2345543	70.92	30	120	
In	115	1	He	976980	0.46	1419467	68.83	30	120	
Tb	159	1	He	3209222	1.75	3888262	82.54	30	120	
Ho	165	1	He	3277308	0.88	3932562	83.34	30	120	
Bi	209	1	He	2267185	0.96	2874805	78.86	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-1-a
Data File Name	154SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:50:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.530	0.530	5.98	1804	0.03	10000	
B	11	45	2	NoGas	32.213	32.213	1.66	90009	0.04	300	
Na	23	45	1	He	15764.292	15764.292	1.43	19855376	0.08	500000	
Mg	24	45	1	He	14116.515	14116.515	1.85	10099483	0.14	500000	
Al	27	45	1	He	16.203	16.203	2.04	8449	0.19	200000	
K	39	45	1	He	136.764	136.764	4.77	119228	0.11	500000	
Ca	44	45	1	He	21800.474	21800.474	2.38	806359	2.70	500000	
Ti	47	45	1	He	0.484	0.484	29.95	110	0.44	2500	
V	51	45	1	He	0.312	0.312	21.49	1689	0.02	10000	
Cr	52	45	1	He	0.954	0.954	2.27	7735	0.01	10000	
Mn	55	45	1	He	178.857	178.857	1.78	871052	0.02	10000	
Fe	56	45	1	He	3641.655	3641.655	1.52	21262992	0.02	200000	
Co	59	103	1	He	4.184	4.184	1.49	42036	0.01	10000	
Ni	60	103	1	He	21.274	21.274	2.07	53048	0.04	10000	
Cu	63	103	1	He	0.931	0.931	5.83	7422	0.01	10000	
Zn	66	103	1	He	110.478	110.478	1.84	147590	0.07	10000	
As	75	103	1	He	1.271	1.271	8.82	1209	0.11	10000	
Se	78	103	1	He	1.372	1.372	16.16	164	0.84	10000	
Sr	88	103	1	He	113.317	113.317	1.35	784322	0.01	10000	
Mo	95	103	1	He	1.112	1.112	13.77	3542	0.03	2000	
Ag	107	103	1	He	0.030	0.030	24.44	326	0.01	300	
Cd	111	103	1	He	0.168	0.168	18.72	1274	0.01	4000	
Sn	118	115	1	He	2.200	2.200	21.38	10711	0.02	2000	
Sb	123	115	1	He	0.838	0.838	5.46	3957	0.02	300	
Ba	137	115	1	He	22.465	22.465	1.74	45813	0.05	10000	
W	182	209	1	He	1.765	1.765	16.12	25039	0.01	2500	
Tl	205	165	1	He	0.292	0.292	30.51	9122	0.00	5000	
Pb	208	209	1	He	0.616	0.616	15.88	27024	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058520	2.16	1631381	64.88	30	120	
Sc	45	1	He	588239	1.78	829696	70.90	30	120	
Sc	45	2	NoGas	4570226	0.95	6325638	72.25	30	120	
Rh	103	1	He	1822708	1.37	2345543	77.71	30	120	
In	115	1	He	1075705	0.27	1419467	75.78	30	120	
Tb	159	1	He	3323795	1.29	3888262	85.48	30	120	
Ho	165	1	He	3381622	0.26	3932562	85.99	30	120	
Bi	209	1	He	2430615	1.09	2874805	84.55	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-2-a
Data File Name	155SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:54:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.323	0.323	6.84	1126	0.03	10000	
B	11	45	2	NoGas	12.798	12.798	3.97	40126	0.03	300	
Na	23	45	1	He	958.012	958.012	3.76	1246878	0.08	500000	
Mg	24	45	1	He	58.742	58.742	3.14	43605	0.13	500000	
Al	27	45	1	He	16.112	16.112	6.25	8580	0.19	200000	
K	39	45	1	He	18.233	18.233	9.46	40227	0.05	500000	
Ca	44	45	1	He	151.996	151.996	6.90	6455	2.35	500000	
Ti	47	45	1	He	0.190	0.190	34.24	50	0.38	2500	
V	51	45	1	He	0.091	0.091	168.54	561	0.02	10000	
Cr	52	45	1	He	4.230	4.230	2.00	28600	0.01	10000	
Mn	55	45	1	He	1.278	1.278	2.91	7237	0.02	10000	
Fe	56	45	1	He	65.262	65.262	1.59	392246	0.02	200000	
Co	59	103	1	He	0.097	0.097	6.22	1052	0.01	10000	
Ni	60	103	1	He	0.807	0.807	2.15	2196	0.04	10000	
Cu	63	103	1	He	0.453	0.453	2.10	4475	0.01	10000	
Zn	66	103	1	He	7.379	7.379	1.55	11758	0.06	10000	
As	75	103	1	He	0.377	0.377	3.19	467	0.08	10000	
Se	78	103	1	He	0.307	0.307	21.01	71	0.43	10000	
Sr	88	103	1	He	0.253	0.253	8.15	1920	0.01	10000	
Mo	95	103	1	He	0.248	0.248	7.15	861	0.03	2000	
Ag	107	103	1	He	0.018	0.018	21.99	202	0.01	300	
Cd	111	103	1	He	0.085	0.085	22.86	1162	0.01	4000	
Sn	118	115	1	He	0.616	0.616	0.47	3708	0.02	2000	
Sb	123	115	1	He	0.527	0.527	5.07	2744	0.02	300	
Ba	137	115	1	He	0.363	0.363	7.10	838	0.04	10000	
W	182	209	1	He	0.452	0.452	1.42	9136	0.00	2500	
Tl	205	165	1	He	0.068	0.068	14.17	2188	0.00	5000	
Pb	208	209	1	He	0.326	0.326	5.65	15249	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1072919	2.31	1631381	65.77	30	120	
Sc	45	1	He	600515	2.78	829696	72.38	30	120	
Sc	45	2	NoGas	4579468	1.78	6325638	72.40	30	120	
Rh	103	1	He	1898215	0.59	2345543	80.93	30	120	
In	115	1	He	1105814	0.42	1419467	77.90	30	120	
Tb	159	1	He	3323594	0.85	3888262	85.48	30	120	
Ho	165	1	He	3403906	0.81	3932562	86.56	30	120	
Bi	209	1	He	2536529	0.13	2874805	88.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	156_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T19:57:57-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.108	2.141	186417	1.22	50	100.2	89.5	110.5	
B	11	45	2	NoGas	53.500	2.483	160838	1.50	50	107.0	89.5	110.5	
Na	23	45	1	He	24290.226	5.497	33985020	0.77	25000	97.2	89.5	110.5	
Mg	24	45	1	He	24332.697	4.862	19347922	0.02	25000	97.3	89.5	110.5	
Al	27	45	1	He	236.203	5.809	108512	0.88	250	94.5	89.5	110.5	
K	39	45	1	He	25358.385	6.137	19006546	1.70	25000	101.4	89.5	110.5	
Ca	44	45	1	He	24664.347	4.493	1014050	0.75	25000	98.7	89.5	110.5	
Ti	47	45	1	He	50.144	6.647	11616	3.19	50	100.3	89.5	110.5	
V	51	45	1	He	50.276	4.955	287909	0.44	50	100.6	89.5	110.5	
Cr	52	45	1	He	49.767	4.596	344509	0.72	50	99.5	89.5	110.5	
Mn	55	45	1	He	246.610	4.543	1334638	0.54	250	98.6	89.5	110.5	
Fe	56	45	1	He	12617.876	5.807	81851572	2.05	12500	100.9	89.5	110.5	
Co	59	103	1	He	46.187	1.185	484336	0.74	50	92.4	89.5	110.5	
Ni	60	103	1	He	45.883	1.142	119393	0.54	50	91.8	89.5	110.5	
Cu	63	103	1	He	46.210	1.255	317348	0.53	50	92.4	89.5	110.5	
Zn	66	103	1	He	46.406	0.497	65695	1.28	50	92.8	89.5	110.5	
As	75	103	1	He	47.411	1.198	42319	0.26	50	94.8	89.5	110.5	
Se	78	103	1	He	48.511	1.345	4604	0.83	50	97.0	89.5	110.5	
Sr	88	103	1	He	48.801	1.764	352867	0.84	50	97.6	89.5	110.5	
Mo	95	103	1	He	49.135	3.830	161426	2.88	50	98.3	89.5	110.5	
Ag	107	103	1	He	49.135	1.365	554459	0.73	50	98.3	89.5	110.5	
Cd	111	103	1	He	49.542	0.901	98287	0.50	50	99.1	89.5	110.5	
Sn	118	115	1	He	49.841	0.392	238876	0.50	50	99.7	89.5	110.5	
Sb	123	115	1	He	52.441	0.416	231766	0.29	50	104.9	89.5	110.5	
Ba	137	115	1	He	51.901	1.253	112565	1.10	50	103.8	89.5	110.5	
W	182	209	1	He	49.418	1.822	630410	1.84	50	98.8	89.5	110.5	
Tl	205	165	1	He	49.979	3.989	1608500	3.47	50	100.0	89.5	110.5	
Pb	208	209	1	He	47.897	1.762	2097410	0.44	50	95.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1176941	1.03	1631381	72.14	30	120	
Sc	45	1	He	654699	4.95	829696	78.91	30	120	
Sc	45	2	NoGas	5078679	1.56	6325638	80.29	30	120	
Rh	103	1	He	1903860	1.17	2345543	81.17	30	120	
In	115	1	He	1145054	0.18	1419467	80.67	30	120	
Tb	159	1	He	3420856	0.39	3888262	87.98	30	120	
Ho	165	1	He	3507285	0.89	3932562	89.19	30	120	
Bi	209	1	He	2487164	1.40	2874805	86.52	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	157_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:01:45-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.226	15.2	900	14.2	1	
B	11	45	2	NoGas	9.130	1.9	34340	1.4	20	
Na	23	45	1	He	33.745	1.9	61763	3.1	400	
Mg	24	45	1	He	2.484	30.4	2604	23.0	1000	
Al	27	45	1	He	0.400	66.7	2137	2.3	50	
K	39	45	1	He	12.560	21.5	37325	3.1	1000	
Ca	44	45	1	He	2.525	80.9	844	9.5	1000	
Ti	47	45	1	He	0.098	74.9	31	48.3	20	
V	51	45	1	He	0.103	44.3	636	38.4	2	
Cr	52	45	1	He	0.081	32.9	2438	3.9	2	
Mn	55	45	1	He	0.079	19.2	1318	5.3	2	
Fe	56	45	1	He	25.251	27.0	158410	28.0	50	
Co	59	103	1	He	0.024	44.6	296	37.5	1	
Ni	60	103	1	He	0.003	566.3	117	42.9	2	
Cu	63	103	1	He	0.067	16.1	1906	4.0	2	
Zn	66	103	1	He	-0.004	-2076.5	1642	5.7	20	
As	75	103	1	He	0.146	5.1	270	0.9	2	
Se	78	103	1	He	0.263	26.6	69	8.9	2	
Sr	88	103	1	He	0.035	40.5	358	28.8	10	
Mo	95	103	1	He	0.987	26.3	3384	25.0	2	
Ag	107	103	1	He	0.020	22.3	236	21.2	0.2	
Cd	111	103	1	He	0.127	15.1	1287	2.9	0.2	
Sn	118	115	1	He	0.376	9.6	2797	8.0	10	
Sb	123	115	1	He	0.462	22.4	2647	18.6	1	
Ba	137	115	1	He	0.029	50.0	149	23.9	5	
W	182	209	1	He	1.280	16.3	20099	14.2	10	
Tl	205	165	1	He	0.069	18.6	2268	18.3	0.5	
Pb	208	209	1	He	0.127	6.6	6467	5.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1211841	0.40	1631381	74.28	30	120	
Sc	45	1	He	617274	3.11	829696	74.40	30	120	
Sc	45	2	NoGas	5125709	0.27	6325638	81.03	30	120	
Rh	103	1	He	1960314	1.70	2345543	83.58	30	120	
In	115	1	He	1187598	2.64	1419467	83.67	30	120	
Tb	159	1	He	3411495	3.59	3888262	87.74	30	120	
Ho	165	1	He	3498974	1.50	3932562	88.97	30	120	
Bi	209	1	He	2566627	3.69	2874805	89.28	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-4-a
Data File Name	158SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:05:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.276	0.276	10.05	967	0.03	10000	
B	11	45	2	NoGas	152.047	152.047	0.50	407015	0.04	300	
Na	23	45	1	He	67835.352	67835.352	3.88	87393363	0.08	500000	
Mg	24	45	1	He	34329.060	34329.060	4.17	25136829	0.14	500000	
Al	27	45	1	He	7.173	7.173	9.31	4896	0.15	200000	
K	39	45	1	He	2355.331	2355.331	3.87	1651596	0.14	500000	
Ca	44	45	1	He	70528.197	70528.197	4.08	2668596	2.64	500000	
Ti	47	45	1	He	0.476	0.476	44.98	112	0.42	2500	
V	51	45	1	He	0.260	0.260	60.19	1431	0.02	10000	
Cr	52	45	1	He	1.032	1.032	6.16	8403	0.01	10000	
Mn	55	45	1	He	943.395	943.395	4.33	4698362	0.02	10000	
Fe	56	45	1	He	2529.715	2529.715	4.42	15116816	0.02	200000	
Co	59	103	1	He	12.775	12.775	0.13	121887	0.01	10000	
Ni	60	103	1	He	17.162	17.162	0.44	40684	0.04	10000	
Cu	63	103	1	He	1.255	1.255	1.41	9069	0.01	10000	
Zn	66	103	1	He	13.647	13.647	2.05	18600	0.07	10000	
As	75	103	1	He	0.545	0.545	3.03	562	0.10	10000	
Se	78	103	1	He	0.450	0.450	12.66	77	0.59	10000	
Sr	88	103	1	He	352.405	352.405	0.80	2317589	0.02	10000	
Mo	95	103	1	He	3.133	3.133	2.21	9406	0.03	2000	
Ag	107	103	1	He	0.022	0.022	9.82	232	0.01	300	
Cd	111	103	1	He	0.224	0.224	7.02	1310	0.02	4000	
Sn	118	115	1	He	0.795	0.795	15.18	4345	0.02	2000	
Sb	123	115	1	He	0.625	0.625	5.12	3029	0.02	300	
Ba	137	115	1	He	67.042	67.042	0.53	134649	0.05	10000	
W	182	209	1	He	0.522	0.522	3.64	9325	0.01	2500	
Tl	205	165	1	He	0.351	0.351	3.62	10837	0.00	5000	
Pb	208	209	1	He	0.228	0.228	6.79	10107	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1077086	3.01	1631381	66.02	30	120	
Sc	45	1	He	602497	3.40	829696	72.62	30	120	
Sc	45	2	NoGas	4670402	0.33	6325638	73.83	30	120	
Rh	103	1	He	1731727	0.71	2345543	73.83	30	120	
In	115	1	He	1060528	0.72	1419467	74.71	30	120	
Tb	159	1	He	3255591	1.17	3888262	83.73	30	120	
Ho	165	1	He	3342720	1.13	3932562	85.00	30	120	
Bi	209	1	He	2354007	0.43	2874805	81.88	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-5-a
Data File Name	159SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:09:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.239	0.239	12.70	830	0.03	10000	
B	11	45	2	NoGas	63.172	63.172	1.16	173195	0.04	300	
Na	23	45	1	He	53502.414	53502.414	2.25	68493979	0.08	500000	
Mg	24	45	1	He	23283.236	23283.236	3.03	16939002	0.14	500000	
Al	27	45	1	He	11.268	11.268	2.62	6556	0.17	200000	
K	39	45	1	He	1072.267	1072.267	2.85	762065	0.14	500000	
Ca	44	45	1	He	39217.407	39217.407	3.50	1474488	2.66	500000	
Ti	47	45	1	He	0.501	0.501	18.91	116	0.43	2500	
V	51	45	1	He	0.224	0.224	37.63	1248	0.02	10000	
Cr	52	45	1	He	0.838	0.838	8.24	7130	0.01	10000	
Mn	55	45	1	He	642.183	642.183	2.92	3178146	0.02	10000	
Fe	56	45	1	He	1011.760	1011.760	3.64	6008621	0.02	200000	
Co	59	103	1	He	7.518	7.518	1.94	72780	0.01	10000	
Ni	60	103	1	He	22.753	22.753	0.74	54684	0.04	10000	
Cu	63	103	1	He	0.807	0.807	5.27	6372	0.01	10000	
Zn	66	103	1	He	11.749	11.749	0.93	16451	0.07	10000	
As	75	103	1	He	0.362	0.362	12.63	419	0.09	10000	
Se	78	103	1	He	0.271	0.271	22.48	62	0.43	10000	
Sr	88	103	1	He	166.476	166.476	1.03	1110621	0.01	10000	
Mo	95	103	1	He	0.713	0.713	2.63	2207	0.03	2000	
Ag	107	103	1	He	0.033	0.033	18.17	343	0.01	300	
Cd	111	103	1	He	0.148	0.148	11.93	1191	0.01	4000	
Sn	118	115	1	He	0.397	0.397	28.25	2626	0.02	2000	
Sb	123	115	1	He	0.391	0.391	3.98	2108	0.02	300	
Ba	137	115	1	He	13.407	13.407	1.07	27411	0.05	10000	
W	182	209	1	He	0.258	0.258	8.99	6290	0.00	2500	
Tl	205	165	1	He	0.156	0.156	1.21	4934	0.00	5000	
Pb	208	209	1	He	0.173	0.173	3.34	8005	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058707	1.01	1631381	64.90	30	120	
Sc	45	1	He	598411	2.95	829696	72.12	30	120	
Sc	45	2	NoGas	4666563	2.20	6325638	73.77	30	120	
Rh	103	1	He	1756712	0.25	2345543	74.90	30	120	
In	115	1	He	1077160	0.51	1419467	75.88	30	120	
Tb	159	1	He	3293865	0.46	3888262	84.71	30	120	
Ho	165	1	He	3398869	0.89	3932562	86.43	30	120	
Bi	209	1	He	2404846	0.41	2874805	83.65	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-6-a
Data File Name	160SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:13:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.297	0.297	8.20	1037	0.03	10000	
B	11	45	2	NoGas	98.290	98.290	0.68	266596	0.04	300	
Na	23	45	1	He	412229.116	412229.116	4.21	515737135	0.08	500000	
Mg	24	45	1	He	98102.318	98102.318	3.39	69784019	0.14	500000	
Al	27	45	1	He	33.364	33.364	4.45	15321	0.22	200000	
K	39	45	1	He	4435.511	4435.511	4.65	2996752	0.15	500000	
Ca	44	45	1	He	111688.481	111688.481	4.30	4104244	2.72	500000	
Ti	47	45	1	He	0.475	0.475	7.80	108	0.44	2500	
V	51	45	1	He	-0.008	-0.008	-2412.74	43	-0.02	10000	
Cr	52	45	1	He	1.170	1.170	11.46	9005	0.01	10000	
Mn	55	45	1	He	5031.283	5031.283	2.98	24341941	0.02	10000	
Fe	56	45	1	He	317.386	317.386	2.34	1845915	0.02	200000	
Co	59	103	1	He	29.181	29.181	1.75	264603	0.01	10000	
Ni	60	103	1	He	183.894	183.894	1.33	413514	0.04	10000	
Cu	63	103	1	He	3.221	3.221	1.86	20257	0.02	10000	
Zn	66	103	1	He	178.949	178.949	1.38	215090	0.08	10000	
As	75	103	1	He	0.743	0.743	16.15	688	0.11	10000	
Se	78	103	1	He	0.543	0.543	6.25	81	0.67	10000	
Sr	88	103	1	He	814.023	814.023	1.32	5088816	0.02	10000	
Mo	95	103	1	He	0.500	0.500	7.38	1463	0.03	2000	
Ag	107	103	1	He	0.026	0.026	8.63	256	0.01	300	
Cd	111	103	1	He	1.023	1.023	3.75	2601	0.04	4000	
Sn	118	115	1	He	0.387	0.387	23.37	2463	0.02	2000	
Sb	123	115	1	He	0.361	0.361	1.37	1889	0.02	300	
Ba	137	115	1	He	21.575	21.575	1.09	41999	0.05	10000	
W	182	209	1	He	0.230	0.230	16.68	5427	0.00	2500	
Tl	205	165	1	He	0.175	0.175	5.16	5411	0.00	5000	
Pb	208	209	1	He	0.217	0.217	4.16	9013	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1072646	0.95	1631381	65.75	30	120	
Sc	45	1	He	585175	3.08	829696	70.53	30	120	
Sc	45	2	NoGas	4686355	0.11	6325638	74.09	30	120	
Rh	103	1	He	1646458	1.84	2345543	70.20	30	120	
In	115	1	He	1026681	0.36	1419467	72.33	30	120	
Tb	159	1	He	3223366	0.51	3888262	82.90	30	120	
Ho	165	1	He	3328362	0.80	3932562	84.64	30	120	
Bi	209	1	He	2196888	1.73	2874805	76.42	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-7-a
Data File Name	161SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:16:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.611	1.611	5.29	5305	0.03	10000	
B	11	45	2	NoGas	32.338	32.338	1.71	92075	0.04	300	
Na	23	45	1	He	116831.018	116831.018	2.15	146270205	0.08	500000	
Mg	24	45	1	He	27341.196	27341.196	1.55	19458682	0.14	500000	
Al	27	45	1	He	779.901	779.901	1.48	316483	0.25	200000	
K	39	45	1	He	1654.762	1654.762	2.22	1135706	0.15	500000	
Ca	44	45	1	He	29243.217	29243.217	1.78	1075834	2.72	500000	
Ti	47	45	1	He	0.577	0.577	26.80	129	0.45	2500	
V	51	45	1	He	-0.133	-0.133	-95.77	-604	0.02	10000	
Cr	52	45	1	He	2.870	2.870	4.12	19489	0.01	10000	
Mn	55	45	1	He	507.363	507.363	1.42	2456490	0.02	10000	
Fe	56	45	1	He	1858.302	1858.302	2.31	10794179	0.02	200000	
Co	59	103	1	He	45.493	45.493	1.49	432023	0.01	10000	
Ni	60	103	1	He	99.235	99.235	2.00	233727	0.04	10000	
Cu	63	103	1	He	20.309	20.309	1.58	127016	0.02	10000	
Zn	66	103	1	He	375.611	375.611	1.90	471190	0.08	10000	
As	75	103	1	He	0.432	0.432	8.84	469	0.09	10000	
Se	78	103	1	He	0.501	0.501	19.66	81	0.62	10000	
Sr	88	103	1	He	241.215	241.215	1.65	1579571	0.02	10000	
Mo	95	103	1	He	0.534	0.534	2.72	1633	0.03	2000	
Ag	107	103	1	He	0.066	0.066	6.70	676	0.01	300	
Cd	111	103	1	He	1.995	1.995	1.96	4453	0.04	4000	
Sn	118	115	1	He	0.409	0.409	6.47	2630	0.02	2000	
Sb	123	115	1	He	0.377	0.377	6.37	2010	0.02	300	
Ba	137	115	1	He	18.606	18.606	0.82	37279	0.05	10000	
W	182	209	1	He	0.211	0.211	7.59	5579	0.00	2500	
Tl	205	165	1	He	0.400	0.400	2.02	12484	0.00	5000	
Pb	208	209	1	He	1.684	1.684	1.39	70237	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1035941	0.81	1631381	63.50	30	120	
Sc	45	1	He	585113	0.99	829696	70.52	30	120	
Sc	45	2	NoGas	4658855	0.16	6325638	73.65	30	120	
Rh	103	1	He	1724288	1.72	2345543	73.51	30	120	
In	115	1	He	1056419	0.75	1419467	74.42	30	120	
Tb	159	1	He	3278094	1.48	3888262	84.31	30	120	
Ho	165	1	He	3380548	1.66	3932562	85.96	30	120	
Bi	209	1	He	2347285	0.34	2874805	81.65	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-8-a
Data File Name	162SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:20:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.462	1.462	11.05	4482	0.03	10000	
B	11	45	2	NoGas	126.860	126.860	1.27	318451	0.04	300	
Na	23	45	1	He	265259.427	265259.427	3.01	314598773	0.08	500000	
Mg	24	45	1	He	79807.504	79807.504	3.39	53799942	0.15	500000	
Al	27	45	1	He	1279.595	1279.595	3.73	490691	0.26	200000	
K	39	45	1	He	6461.668	6461.668	3.32	4126822	0.16	500000	
Ca	44	45	1	He	107452.236	107452.236	2.65	3743510	2.87	500000	
Ti	47	45	1	He	0.722	0.722	26.78	150	0.48	2500	
V	51	45	1	He	0.223	0.223	56.58	1169	0.02	10000	
Cr	52	45	1	He	1.026	1.026	6.69	7703	0.01	10000	
Mn	55	45	1	He	3603.917	3603.917	3.52	16522505	0.02	10000	
Fe	56	45	1	He	23317.575	23317.575	3.51	128264079	0.02	200000	
Co	59	103	1	He	203.901	203.901	0.55	1750257	0.01	10000	
Ni	60	103	1	He	342.045	342.045	0.59	728062	0.05	10000	
Cu	63	103	1	He	11.501	11.501	1.83	65509	0.02	10000	
Zn	66	103	1	He	1741.535	1741.535	1.74	1970059	0.09	10000	
As	75	103	1	He	0.786	0.786	1.40	681	0.12	10000	
Se	78	103	1	He	0.732	0.732	33.61	91	0.81	10000	
Sr	88	103	1	He	691.697	691.697	0.82	4093576	0.02	10000	
Mo	95	103	1	He	0.500	0.500	5.55	1385	0.04	2000	
Ag	107	103	1	He	0.023	0.023	26.86	213	0.01	300	
Cd	111	103	1	He	8.496	8.496	2.01	14476	0.06	4000	
Sn	118	115	1	He	0.292	0.292	24.15	1959	0.01	2000	
Sb	123	115	1	He	0.372	0.372	11.13	1842	0.02	300	
Ba	137	115	1	He	15.578	15.578	1.65	28933	0.05	10000	
W	182	209	1	He	0.244	0.244	9.17	5546	0.00	2500	
Tl	205	165	1	He	1.012	1.012	1.32	30282	0.00	5000	
Pb	208	209	1	He	0.203	0.203	6.37	8423	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	963774	1.43	1631381	59.08	30	120	
Sc	45	1	He	554653	3.78	829696	66.85	30	120	
Sc	45	2	NoGas	4364375	0.75	6325638	69.00	30	120	
Rh	103	1	He	1558483	0.94	2345543	66.44	30	120	
In	115	1	He	979028	0.88	1419467	68.97	30	120	
Tb	159	1	He	3168813	1.09	3888262	81.50	30	120	
Ho	165	1	He	3253811	1.13	3932562	82.74	30	120	
Bi	209	1	He	2181400	0.07	2874805	75.88	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-9-a
Data File Name	163SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:24:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.689	2.689	5.29	8317	0.03	10000	
B	11	45	2	NoGas	80.797	80.797	1.40	207829	0.04	300	
Na	23	45	1	He	145764.065	145764.065	3.26	172515660	0.08	500000	
Mg	24	45	1	He	38622.900	38622.900	2.99	25985510	0.15	500000	
Al	27	45	1	He	1497.912	1497.912	3.04	573008	0.26	200000	
K	39	45	1	He	6116.950	6116.950	3.13	3900130	0.16	500000	
Ca	44	45	1	He	53725.852	53725.852	3.26	1867909	2.88	500000	
Ti	47	45	1	He	0.785	0.785	28.92	163	0.48	2500	
V	51	45	1	He	0.290	0.290	44.87	1465	0.02	10000	
Cr	52	45	1	He	1.030	1.030	7.40	7710	0.01	10000	
Mn	55	45	1	He	828.934	828.934	3.09	3793503	0.02	10000	
Fe	56	45	1	He	34526.700	34526.700	2.52	189570988	0.02	200000	
Co	59	103	1	He	182.440	182.440	1.97	1633227	0.01	10000	
Ni	60	103	1	He	247.864	247.864	1.24	550248	0.05	10000	
Cu	63	103	1	He	10.127	10.127	0.85	60307	0.02	10000	
Zn	66	103	1	He	709.310	709.310	0.74	837674	0.08	10000	
As	75	103	1	He	0.439	0.439	4.12	447	0.10	10000	
Se	78	103	1	He	0.424	0.424	13.56	70	0.61	10000	
Sr	88	103	1	He	330.746	330.746	0.44	2041395	0.02	10000	
Mo	95	103	1	He	0.242	0.242	12.01	722	0.03	2000	
Ag	107	103	1	He	0.042	0.042	15.07	407	0.01	300	
Cd	111	103	1	He	2.757	2.757	3.44	5475	0.05	4000	
Sn	118	115	1	He	0.291	0.291	7.27	1974	0.01	2000	
Sb	123	115	1	He	0.347	0.347	12.07	1763	0.02	300	
Ba	137	115	1	He	19.406	19.406	0.71	36337	0.05	10000	
W	182	209	1	He	0.177	0.177	13.10	4945	0.00	2500	
Tl	205	165	1	He	3.625	3.625	0.51	109055	0.00	5000	
Pb	208	209	1	He	4.076	4.076	0.17	161994	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	975988	1.94	1631381	59.83	30	120	
Sc	45	1	He	553409	2.92	829696	66.70	30	120	
Sc	45	2	NoGas	4417842	0.77	6325638	69.84	30	120	
Rh	103	1	He	1625296	0.24	2345543	69.29	30	120	
In	115	1	He	987394	0.34	1419467	69.56	30	120	
Tb	159	1	He	3223483	0.85	3888262	82.90	30	120	
Ho	165	1	He	3276160	1.15	3932562	83.31	30	120	
Bi	209	1	He	2249061	0.33	2874805	78.23	30	120	

Sample Report

Sample Table

Sample Name	240-49480-b-10-a
Data File Name	164SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:28:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.788	2.788	5.40	8699	0.03	10000	
B	11	45	2	NoGas	82.234	82.234	1.34	212562	0.04	300	
Na	23	45	1	He	149324.688	149324.688	3.59	177958493	0.08	500000	
Mg	24	45	1	He	39752.877	39752.877	3.39	26931417	0.15	500000	
Al	27	45	1	He	1525.781	1525.781	3.29	587719	0.26	200000	
K	39	45	1	He	6236.093	6236.093	3.27	4003322	0.16	500000	
Ca	44	45	1	He	54100.915	54100.915	3.48	1894057	2.86	500000	
Ti	47	45	1	He	0.873	0.873	7.46	181	0.48	2500	
V	51	45	1	He	0.272	0.272	73.31	1387	0.02	10000	
Cr	52	45	1	He	1.074	1.074	8.54	8021	0.01	10000	
Mn	55	45	1	He	851.120	851.120	3.59	3921958	0.02	10000	
Fe	56	45	1	He	35149.528	35149.528	2.28	194346299	0.02	200000	
Co	59	103	1	He	185.026	185.026	0.61	1674267	0.01	10000	
Ni	60	103	1	He	249.678	249.678	0.30	560272	0.04	10000	
Cu	63	103	1	He	10.146	10.146	1.39	61065	0.02	10000	
Zn	66	103	1	He	721.541	721.541	0.72	861308	0.08	10000	
As	75	103	1	He	0.454	0.454	8.97	463	0.10	10000	
Se	78	103	1	He	0.486	0.486	12.12	76	0.64	10000	
Sr	88	103	1	He	336.368	336.368	0.50	2098563	0.02	10000	
Mo	95	103	1	He	0.246	0.246	9.00	740	0.03	2000	
Ag	107	103	1	He	0.037	0.037	18.62	364	0.01	300	
Cd	111	103	1	He	2.891	2.891	0.91	5762	0.05	4000	
Sn	118	115	1	He	0.249	0.249	12.72	1826	0.01	2000	
Sb	123	115	1	He	0.325	0.325	3.71	1706	0.02	300	
Ba	137	115	1	He	19.502	19.502	2.05	37054	0.05	10000	
W	182	209	1	He	0.158	0.158	13.92	4794	0.00	2500	
Tl	205	165	1	He	3.698	3.698	1.27	112002	0.00	5000	
Pb	208	209	1	He	4.029	4.029	0.91	162189	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	984136	0.46	1631381	60.33	30	120	
Sc	45	1	He	557261	2.69	829696	67.16	30	120	
Sc	45	2	NoGas	4442800	1.79	6325638	70.23	30	120	
Rh	103	1	He	1642879	0.42	2345543	70.04	30	120	
In	115	1	He	1002011	0.57	1419467	70.59	30	120	
Tb	159	1	He	3173575	0.19	3888262	81.62	30	120	
Ho	165	1	He	3298300	0.33	3932562	83.87	30	120	
Bi	209	1	He	2277503	0.42	2874805	79.22	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-1-a
Data File Name	165SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:32:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.143	0.143	24.71	541	0.03	10000	
B	11	45	2	NoGas	1219.827	1219.827	4.54	3317411	0.04	300	>LDR
Na	23	45	1	He	31295.177	31295.177	2.44	40808585	0.08	500000	
Mg	24	45	1	He	43368.653	43368.653	3.78	32130434	0.13	500000	
Al	27	45	1	He	24.296	24.296	2.74	12149	0.20	200000	
K	39	45	1	He	13796.256	13796.256	2.83	9652657	0.14	500000	
Ca	44	45	1	He	69244.092	69244.092	2.52	2651476	2.61	500000	
Ti	47	45	1	He	0.418	0.418	9.34	100	0.42	2500	
V	51	45	1	He	0.024	0.024	440.67	209	0.01	10000	
Cr	52	45	1	He	1.030	1.030	9.64	8490	0.01	10000	
Mn	55	45	1	He	11.270	11.270	1.61	57705	0.02	10000	
Fe	56	45	1	He	157.889	157.889	1.12	958406	0.02	200000	
Co	59	103	1	He	0.088	0.088	8.07	914	0.01	10000	
Ni	60	103	1	He	0.308	0.308	11.54	860	0.04	10000	
Cu	63	103	1	He	0.448	0.448	8.68	4236	0.01	10000	
Zn	66	103	1	He	13.081	13.081	1.20	18703	0.07	10000	
As	75	103	1	He	0.447	0.447	13.10	504	0.09	10000	
Se	78	103	1	He	0.189	0.189	46.51	57	0.33	10000	
Sr	88	103	1	He	1130.718	1130.718	1.31	7773710	0.01	10000	
Mo	95	103	1	He	0.072	0.072	18.60	273	0.03	2000	
Ag	107	103	1	He	0.019	0.019	24.90	204	0.01	300	
Cd	111	103	1	He	0.086	0.086	7.51	1112	0.01	4000	
Sn	118	115	1	He	0.321	0.321	5.06	2341	0.01	2000	
Sb	123	115	1	He	0.321	0.321	4.30	1856	0.02	300	
Ba	137	115	1	He	20.255	20.255	1.93	42297	0.05	10000	
W	182	209	1	He	0.524	0.524	3.30	9581	0.01	2500	
Tl	205	165	1	He	0.008	0.008	16.13	327	0.00	5000	
Pb	208	209	1	He	0.226	0.226	0.31	10290	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1128224	1.59	1631381	69.16	30	120	
Sc	45	1	He	609361	2.08	829696	73.44	30	120	
Sc	45	2	NoGas	4824002	2.49	6325638	76.26	30	120	
Rh	103	1	He	1810653	1.54	2345543	77.20	30	120	
In	115	1	He	1101447	1.37	1419467	77.60	30	120	
Tb	159	1	He	3392292	1.14	3888262	87.24	30	120	
Ho	165	1	He	3480263	0.97	3932562	88.50	30	120	
Bi	209	1	He	2412871	0.67	2874805	83.93	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-1-a
Data File Name	166SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:35:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.115	0.115	30.55	456	0.03	10000	
B	11	45	2	NoGas	1215.848	1215.848	2.33	3490350	0.03	300	>LDR
Na	23	45	1	He	32510.763	32510.763	3.04	44227067	0.07	500000	
Mg	24	45	1	He	44533.063	44533.063	2.16	34430300	0.13	500000	
Al	27	45	1	He	13.097	13.097	5.88	7767	0.17	200000	
K	39	45	1	He	14248.054	14248.054	2.43	10400468	0.14	500000	
Ca	44	45	1	He	71122.659	71122.659	2.14	2841453	2.50	500000	
Ti	47	45	1	He	0.212	0.212	31.15	58	0.37	2500	
V	51	45	1	He	0.118	0.118	111.73	747	0.02	10000	
Cr	52	45	1	He	0.969	0.969	5.59	8453	0.01	10000	
Mn	55	45	1	He	11.187	11.187	3.86	59749	0.02	10000	
Fe	56	45	1	He	119.420	119.420	1.85	756926	0.02	200000	
Co	59	103	1	He	0.075	0.075	5.22	802	0.01	10000	
Ni	60	103	1	He	0.431	0.431	10.81	1191	0.04	10000	
Cu	63	103	1	He	0.239	0.239	4.56	2946	0.01	10000	
Zn	66	103	1	He	9.562	9.562	5.23	14409	0.07	10000	
As	75	103	1	He	0.502	0.502	5.81	564	0.09	10000	
Se	78	103	1	He	0.144	0.144	11.61	54	0.27	10000	
Sr	88	103	1	He	1167.918	1167.918	2.13	8219353	0.01	10000	
Mo	95	103	1	He	0.073	0.073	6.11	282	0.03	2000	
Ag	107	103	1	He	0.015	0.015	6.70	167	0.01	300	
Cd	111	103	1	He	0.090	0.090	28.31	1145	0.01	4000	
Sn	118	115	1	He	0.415	0.415	15.17	2837	0.01	2000	
Sb	123	115	1	He	0.293	0.293	12.95	1780	0.02	300	
Ba	137	115	1	He	20.475	20.475	1.75	43762	0.05	10000	
W	182	209	1	He	0.505	0.505	9.29	9537	0.01	2500	
Tl	205	165	1	He	0.003	0.003	20.95	153	0.00	5000	
Pb	208	209	1	He	0.096	0.096	4.08	4860	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1166586	1.56	1631381	71.51	30	120	
Sc	45	1	He	635739	1.79	829696	76.62	30	120	
Sc	45	2	NoGas	5089148	1.17	6325638	80.45	30	120	
Rh	103	1	He	1853917	2.55	2345543	79.04	30	120	
In	115	1	He	1127244	0.69	1419467	79.41	30	120	
Tb	159	1	He	3441887	0.82	3888262	88.52	30	120	
Ho	165	1	He	3534772	0.97	3932562	89.88	30	120	
Bi	209	1	He	2462209	0.98	2874805	85.65	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-2-a
Data File Name	167SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:39:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.142	0.142	21.63	504	0.03	10000	
B	11	45	2	NoGas	102.376	102.376	1.60	278051	0.04	300	
Na	23	45	1	He	43838.812	43838.812	2.75	57356876	0.08	500000	
Mg	24	45	1	He	109968.060	109968.060	3.42	81753134	0.13	500000	
Al	27	45	1	He	32.762	32.762	2.65	15765	0.21	200000	
K	39	45	1	He	4647.914	4647.914	2.10	3282735	0.14	500000	
Ca	44	45	1	He	140720.068	140720.068	2.64	5406437	2.60	500000	
Ti	47	45	1	He	0.506	0.506	21.46	119	0.43	2500	
V	51	45	1	He	0.355	0.355	45.53	1971	0.02	10000	
Cr	52	45	1	He	1.303	1.303	3.92	10283	0.01	10000	
Mn	55	45	1	He	137.540	137.540	2.44	696474	0.02	10000	
Fe	56	45	1	He	9194.214	9194.214	3.57	55775411	0.02	200000	
Co	59	103	1	He	0.838	0.838	0.53	8190	0.01	10000	
Ni	60	103	1	He	0.740	0.740	2.61	1882	0.04	10000	
Cu	63	103	1	He	0.350	0.350	7.80	3510	0.01	10000	
Zn	66	103	1	He	4.058	4.058	2.55	6682	0.06	10000	
As	75	103	1	He	0.895	0.895	5.43	862	0.10	10000	
Se	78	103	1	He	0.227	0.227	55.79	59	0.39	10000	
Sr	88	103	1	He	270.281	270.281	1.00	1812300	0.01	10000	
Mo	95	103	1	He	0.590	0.590	5.93	1842	0.03	2000	
Ag	107	103	1	He	0.014	0.014	13.10	154	0.01	300	
Cd	111	103	1	He	0.102	0.102	30.15	1115	0.01	4000	
Sn	118	115	1	He	0.164	0.164	16.76	1567	0.01	2000	
Sb	123	115	1	He	0.236	0.236	11.22	1452	0.02	300	
Ba	137	115	1	He	233.365	233.365	0.42	471753	0.05	10000	
W	182	209	1	He	0.258	0.258	13.57	6127	0.00	2500	
Tl	205	165	1	He	0.001	0.001	50.77	101	0.00	5000	
Pb	208	209	1	He	0.105	0.105	3.35	4989	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058483	0.38	1631381	64.88	30	120	
Sc	45	1	He	611722	4.08	829696	73.73	30	120	
Sc	45	2	NoGas	4698009	0.53	6325638	74.27	30	120	
Rh	103	1	He	1765905	2.10	2345543	75.29	30	120	
In	115	1	He	1067845	0.80	1419467	75.23	30	120	
Tb	159	1	He	3324240	2.10	3888262	85.49	30	120	
Ho	165	1	He	3412186	0.70	3932562	86.77	30	120	
Bi	209	1	He	2341925	1.21	2874805	81.46	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	168_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:43:30-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	51.261	1.220	188912	0.55	50	102.5	89.5	110.5	
B	11	45	2	NoGas	62.351	0.668	189026	0.44	50	124.7	89.5	110.5	CCV Failed
Na	23	45	1	He	24673.674	3.372	34555152	0.25	25000	98.7	89.5	110.5	
Mg	24	45	1	He	24718.014	3.793	19667683	0.32	25000	98.9	89.5	110.5	
Al	27	45	1	He	239.105	3.105	109945	0.68	250	95.6	89.5	110.5	
K	39	45	1	He	25741.733	2.979	19317339	0.53	25000	103.0	89.5	110.5	
Ca	44	45	1	He	24990.156	3.448	1028075	0.14	25000	100.0	89.5	110.5	
Ti	47	45	1	He	49.500	3.263	11482	1.51	50	99.0	89.5	110.5	
V	51	45	1	He	50.512	1.925	289593	1.64	50	101.0	89.5	110.5	
Cr	52	45	1	He	50.054	3.209	346729	0.32	50	100.1	89.5	110.5	
Mn	55	45	1	He	255.445	3.460	1383308	0.16	250	102.2	89.5	110.5	
Fe	56	45	1	He	12719.591	2.780	82605223	0.79	12500	101.8	89.5	110.5	
Co	59	103	1	He	47.141	1.553	492502	0.86	50	94.3	89.5	110.5	
Ni	60	103	1	He	46.612	0.893	120843	0.46	50	93.2	89.5	110.5	
Cu	63	103	1	He	47.256	1.434	323301	0.52	50	94.5	89.5	110.5	
Zn	66	103	1	He	47.198	1.391	66536	0.47	50	94.4	89.5	110.5	
As	75	103	1	He	48.563	0.653	43186	0.65	50	97.1	89.5	110.5	
Se	78	103	1	He	49.426	2.032	4672	1.07	50	98.9	89.5	110.5	
Sr	88	103	1	He	49.359	1.245	355601	0.79	50	98.7	89.5	110.5	
Mo	95	103	1	He	49.930	1.821	163482	2.57	50	99.9	89.5	110.5	
Ag	107	103	1	He	49.651	1.042	558213	0.13	50	99.3	89.5	110.5	
Cd	111	103	1	He	50.352	1.563	99504	0.63	50	100.7	89.5	110.5	
Sn	118	115	1	He	50.847	0.944	244818	1.00	50	101.7	89.5	110.5	
Sb	123	115	1	He	52.633	1.495	233690	0.98	50	105.3	89.5	110.5	
Ba	137	115	1	He	51.960	0.683	113221	0.99	50	103.9	89.5	110.5	
W	182	209	1	He	48.408	1.274	628720	0.43	50	96.8	89.5	110.5	
Tl	205	165	1	He	49.481	4.116	1594389	3.61	50	99.0	89.5	110.5	
Pb	208	209	1	He	47.380	0.671	2112510	0.93	50	94.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1165870	1.74	1631381	71.47	30	120	
Sc	45	1	He	654684	3.56	829696	78.91	30	120	
Sc	45	2	NoGas	5156640	0.88	6325638	81.52	30	120	
Rh	103	1	He	1896806	0.96	2345543	80.87	30	120	
In	115	1	He	1150426	0.81	1419467	81.05	30	120	
Tb	159	1	He	3443810	0.69	3888262	88.57	30	120	
Ho	165	1	He	3511441	0.63	3932562	89.29	30	120	
Bi	209	1	He	2531986	0.93	2874805	88.08	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	169_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:47:17-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.099	6.4	407	6.9	1	
B	11	45	2	NoGas	16.158	0.7	54406	0.5	20	
Na	23	45	1	He	49.957	6.4	85245	3.6	400	
Mg	24	45	1	He	4.962	11.1	4575	9.1	1000	
Al	27	45	1	He	-0.136	-47.5	1959	0.9	50	
K	39	45	1	He	10.400	22.0	36723	3.2	1000	
Ca	44	45	1	He	3.487	30.0	904	6.0	1000	
Ti	47	45	1	He	0.132	57.1	40	44.1	20	
V	51	45	1	He	0.023	381.6	204	238.8	2	
Cr	52	45	1	He	0.048	53.9	2287	8.4	2	
Mn	55	45	1	He	0.073	12.1	1320	4.7	2	
Fe	56	45	1	He	24.028	26.3	154101	24.4	50	
Co	59	103	1	He	0.008	28.7	126	18.6	1	
Ni	60	103	1	He	0.004	236.1	120	19.4	2	
Cu	63	103	1	He	0.063	12.2	1915	3.7	2	
Zn	66	103	1	He	-0.033	-95.2	1635	2.6	20	
As	75	103	1	He	0.082	16.7	216	7.3	2	
Se	78	103	1	He	0.175	36.1	62	10.0	2	
Sr	88	103	1	He	0.031	19.5	338	12.9	10	
Mo	95	103	1	He	0.911	21.7	3198	21.3	2	
Ag	107	103	1	He	0.016	19.4	191	17.9	0.2	
Cd	111	103	1	He	0.096	10.7	1249	2.1	0.2	
Sn	118	115	1	He	0.298	5.3	2467	3.2	10	
Sb	123	115	1	He	0.393	15.6	2387	12.3	1	
Ba	137	115	1	He	0.008	49.8	104	9.8	5	
W	182	209	1	He	1.149	16.9	19109	14.0	10	
Tl	205	165	1	He	0.041	20.6	1423	19.9	0.5	
Pb	208	209	1	He	0.036	9.3	2462	6.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1196359	1.06	1631381	73.33	30	120	
Sc	45	1	He	632919	1.55	829696	76.28	30	120	
Sc	45	2	NoGas	5106029	1.08	6325638	80.72	30	120	
Rh	103	1	He	2000430	1.30	2345543	85.29	30	120	
In	115	1	He	1215339	0.89	1419467	85.62	30	120	
Tb	159	1	He	3505960	1.14	3888262	90.17	30	120	
Ho	165	1	He	3583759	0.62	3932562	91.13	30	120	
Bi	209	1	He	2668542	0.17	2874805	92.83	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-2-a
Data File Name	170SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:51:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.100	0.100	34.94	363	0.03	10000	
B	11	45	2	NoGas	96.116	96.116	0.56	263002	0.04	300	
Na	23	45	1	He	44261.231	44261.231	2.95	57202853	0.08	500000	
Mg	24	45	1	He	110997.298	110997.298	3.45	81518458	0.14	500000	
Al	27	45	1	He	28.769	28.769	3.87	13905	0.21	200000	
K	39	45	1	He	4725.548	4725.548	3.86	3295097	0.14	500000	
Ca	44	45	1	He	143617.161	143617.161	3.55	5449711	2.64	500000	
Ti	47	45	1	He	0.480	0.480	14.19	112	0.43	2500	
V	51	45	1	He	0.202	0.202	35.86	1153	0.02	10000	
Cr	52	45	1	He	0.901	0.901	6.54	7599	0.01	10000	
Mn	55	45	1	He	139.228	139.228	2.50	696404	0.02	10000	
Fe	56	45	1	He	8120.083	8120.083	2.27	48675733	0.02	200000	
Co	59	103	1	He	0.877	0.877	2.74	8319	0.01	10000	
Ni	60	103	1	He	0.700	0.700	5.66	1733	0.04	10000	
Cu	63	103	1	He	0.165	0.165	8.32	2268	0.01	10000	
Zn	66	103	1	He	7.727	7.727	0.97	11057	0.07	10000	
As	75	103	1	He	0.811	0.811	5.46	770	0.11	10000	
Se	78	103	1	He	0.192	0.192	14.75	54	0.35	10000	
Sr	88	103	1	He	281.469	281.469	1.15	1833221	0.02	10000	
Mo	95	103	1	He	0.946	0.946	10.66	2842	0.03	2000	
Ag	107	103	1	He	0.014	0.014	4.97	148	0.01	300	
Cd	111	103	1	He	0.129	0.129	14.44	1129	0.01	4000	
Sn	118	115	1	He	0.475	0.475	12.48	2908	0.02	2000	
Sb	123	115	1	He	0.481	0.481	6.41	2420	0.02	300	
Ba	137	115	1	He	235.998	235.998	1.59	469685	0.05	10000	
W	182	209	1	He	0.589	0.589	4.32	10059	0.01	2500	
Tl	205	165	1	He	0.011	0.011	22.57	412	0.00	5000	
Pb	208	209	1	He	0.092	0.092	5.84	4461	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1063302	1.51	1631381	65.18	30	120	
Sc	45	1	He	604142	2.85	829696	72.81	30	120	
Sc	45	2	NoGas	4724857	0.42	6325638	74.69	30	120	
Rh	103	1	He	1715150	0.74	2345543	73.12	30	120	
In	115	1	He	1051403	0.69	1419467	74.07	30	120	
Tb	159	1	He	3254139	0.71	3888262	83.69	30	120	
Ho	165	1	He	3353365	0.75	3932562	85.27	30	120	
Bi	209	1	He	2338294	0.72	2874805	81.34	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-3-a
Data File Name	171SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:54:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.096	0.096	11.70	382	0.03	10000	
B	11	45	2	NoGas	166.368	166.368	1.35	474339	0.04	300	
Na	23	45	1	He	24242.195	24242.195	2.47	33544858	0.07	500000	
Mg	24	45	1	He	87173.727	87173.727	2.22	68540118	0.13	500000	
Al	27	45	1	He	13.498	13.498	6.38	8075	0.17	200000	
K	39	45	1	He	5232.257	5232.257	2.92	3902631	0.13	500000	
Ca	44	45	1	He	127615.955	127615.955	3.21	5183582	2.46	500000	
Ti	47	45	1	He	0.446	0.446	13.21	112	0.40	2500	
V	51	45	1	He	0.090	0.090	209.24	611	0.01	10000	
Cr	52	45	1	He	0.909	0.909	2.94	8193	0.01	10000	
Mn	55	45	1	He	10.373	10.373	3.51	56412	0.02	10000	
Fe	56	45	1	He	36.223	36.223	6.73	235868	0.02	200000	
Co	59	103	1	He	0.128	0.128	2.48	1338	0.01	10000	
Ni	60	103	1	He	1.012	1.012	4.83	2644	0.04	10000	
Cu	63	103	1	He	0.300	0.300	5.81	3327	0.01	10000	
Zn	66	103	1	He	5.157	5.157	6.78	8425	0.06	10000	
As	75	103	1	He	0.829	0.829	3.59	842	0.10	10000	
Se	78	103	1	He	0.194	0.194	11.53	58	0.33	10000	
Sr	88	103	1	He	293.164	293.164	3.65	2047598	0.01	10000	
Mo	95	103	1	He	0.125	0.125	17.96	444	0.03	2000	
Ag	107	103	1	He	0.013	0.013	8.30	147	0.01	300	
Cd	111	103	1	He	0.124	0.124	19.41	1203	0.01	4000	
Sn	118	115	1	He	0.157	0.157	17.19	1611	0.01	2000	
Sb	123	115	1	He	0.260	0.260	16.50	1622	0.02	300	
Ba	137	115	1	He	16.888	16.888	4.54	35907	0.05	10000	
W	182	209	1	He	0.360	0.360	10.14	7606	0.00	2500	
Tl	205	165	1	He	0.004	0.004	44.99	178	0.00	5000	
Pb	208	209	1	He	0.095	0.095	8.05	4715	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1156824	0.44	1631381	70.91	30	120	
Sc	45	1	He	646609	2.65	829696	77.93	30	120	
Sc	45	2	NoGas	4982570	1.15	6325638	78.77	30	120	
Rh	103	1	He	1840364	2.60	2345543	78.46	30	120	
In	115	1	He	1122138	3.75	1419467	79.05	30	120	
Tb	159	1	He	3437898	4.12	3888262	88.42	30	120	
Ho	165	1	He	3500144	2.07	3932562	89.00	30	120	
Bi	209	1	He	2424565	2.54	2874805	84.34	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-3-a
Data File Name	172SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T20:58:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.086	0.086	38.22	344	0.02	10000	
B	11	45	2	NoGas	163.050	163.050	0.48	469841	0.03	300	
Na	23	45	1	He	23833.938	23833.938	3.23	32728238	0.07	500000	
Mg	24	45	1	He	85090.782	85090.782	3.51	66384527	0.13	500000	
Al	27	45	1	He	6.796	6.796	10.38	5051	0.13	200000	
K	39	45	1	He	5168.372	5168.372	2.90	3826482	0.14	500000	
Ca	44	45	1	He	125895.357	125895.357	2.80	5075672	2.48	500000	
Ti	47	45	1	He	0.274	0.274	36.55	72	0.38	2500	
V	51	45	1	He	0.048	0.048	684.36	311	0.02	10000	
Cr	52	45	1	He	0.959	0.959	7.18	8462	0.01	10000	
Mn	55	45	1	He	9.885	9.885	4.47	53387	0.02	10000	
Fe	56	45	1	He	15.030	15.030	3.70	99223	0.02	200000	
Co	59	103	1	He	0.123	0.123	4.38	1266	0.01	10000	
Ni	60	103	1	He	0.977	0.977	1.81	2526	0.04	10000	
Cu	63	103	1	He	0.128	0.128	9.83	2165	0.01	10000	
Zn	66	103	1	He	3.714	3.714	4.59	6425	0.06	10000	
As	75	103	1	He	0.859	0.859	3.10	856	0.10	10000	
Se	78	103	1	He	0.186	0.186	11.35	57	0.33	10000	
Sr	88	103	1	He	290.222	290.222	0.69	2002849	0.01	10000	
Mo	95	103	1	He	0.101	0.101	7.03	363	0.03	2000	
Ag	107	103	1	He	0.011	0.011	8.95	128	0.01	300	
Cd	111	103	1	He	0.115	0.115	21.37	1169	0.01	4000	
Sn	118	115	1	He	0.174	0.174	6.50	1678	0.01	2000	
Sb	123	115	1	He	0.276	0.276	2.07	1682	0.02	300	
Ba	137	115	1	He	16.519	16.519	0.41	34810	0.05	10000	
W	182	209	1	He	0.347	0.347	16.38	7280	0.00	2500	
Tl	205	165	1	He	0.001	0.001	61.38	103	0.00	5000	
Pb	208	209	1	He	0.081	0.081	3.53	4067	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1152621	1.17	1631381	70.65	30	120	
Sc	45	1	He	641884	3.56	829696	77.36	30	120	
Sc	45	2	NoGas	5033684	0.92	6325638	79.58	30	120	
Rh	103	1	He	1817255	0.29	2345543	77.48	30	120	
In	115	1	He	1110810	0.40	1419467	78.26	30	120	
Tb	159	1	He	3330439	0.22	3888262	85.65	30	120	
Ho	165	1	He	3478842	0.78	3932562	88.46	30	120	
Bi	209	1	He	2372950	0.20	2874805	82.54	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-4-a
Data File Name	173SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:02:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.071	0.071	39.98	282	0.03	10000	
B	11	45	2	NoGas	1579.863	1579.863	1.87	4294332	0.04	300	>LDR
Na	23	45	1	He	58506.750	58506.750	3.03	75806523	0.08	500000	
Mg	24	45	1	He	44678.905	44678.905	3.25	32902963	0.14	500000	
Al	27	45	1	He	20.946	20.946	3.36	10678	0.20	200000	
K	39	45	1	He	15642.645	15642.645	3.15	10873468	0.14	500000	
Ca	44	45	1	He	62919.010	62919.010	3.75	2394100	2.63	500000	
Ti	47	45	1	He	0.637	0.637	33.13	146	0.44	2500	
V	51	45	1	He	0.193	0.193	47.05	1095	0.02	10000	
Cr	52	45	1	He	1.712	1.712	6.57	12784	0.01	10000	
Mn	55	45	1	He	95.762	95.762	3.47	480461	0.02	10000	
Fe	56	45	1	He	1909.633	1909.633	2.31	11480060	0.02	200000	
Co	59	103	1	He	0.227	0.227	3.59	2239	0.01	10000	
Ni	60	103	1	He	0.571	0.571	3.82	1473	0.04	10000	
Cu	63	103	1	He	0.795	0.795	4.50	6327	0.01	10000	
Zn	66	103	1	He	7.266	7.266	2.46	10786	0.07	10000	
As	75	103	1	He	2.218	2.218	0.78	1952	0.11	10000	
Se	78	103	1	He	0.077	0.077	45.46	46	0.17	10000	
Sr	88	103	1	He	1124.672	1124.672	0.99	7536457	0.01	10000	
Mo	95	103	1	He	1.324	1.324	7.42	4077	0.03	2000	
Ag	107	103	1	He	0.012	0.012	21.83	130	0.01	300	
Cd	111	103	1	He	0.097	0.097	15.39	1103	0.01	4000	
Sn	118	115	1	He	0.237	0.237	14.47	1882	0.01	2000	
Sb	123	115	1	He	0.365	0.365	4.88	1972	0.02	300	
Ba	137	115	1	He	56.090	56.090	1.57	112850	0.05	10000	
W	182	209	1	He	0.220	0.220	12.59	5664	0.00	2500	
Tl	205	165	1	He	0.001	0.001	54.25	84	0.00	5000	
Pb	208	209	1	He	0.205	0.205	1.93	9120	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1112450	0.87	1631381	68.19	30	120	
Sc	45	1	He	605729	2.75	829696	73.01	30	120	
Sc	45	2	NoGas	4820867	1.14	6325638	76.21	30	120	
Rh	103	1	He	1764565	0.82	2345543	75.23	30	120	
In	115	1	He	1062358	1.20	1419467	74.84	30	120	
Tb	159	1	He	3293107	1.58	3888262	84.69	30	120	
Ho	165	1	He	3377658	1.41	3932562	85.89	30	120	
Bi	209	1	He	2341389	0.59	2874805	81.45	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-4-a
Data File Name	174SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:06:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.089	0.089	8.52	344	0.03	10000	
B	11	45	2	NoGas	1578.355	1578.355	1.36	4343048	0.04	300	>LDR
Na	23	45	1	He	57395.514	57395.514	2.96	75765101	0.08	500000	
Mg	24	45	1	He	43666.679	43666.679	2.63	32764408	0.13	500000	
Al	27	45	1	He	11.675	11.675	5.04	6931	0.17	200000	
K	39	45	1	He	15330.472	15330.472	4.60	10854142	0.14	500000	
Ca	44	45	1	He	61680.086	61680.086	3.74	2391083	2.58	500000	
Ti	47	45	1	He	0.240	0.240	26.54	62	0.39	2500	
V	51	45	1	He	0.057	0.057	97.57	393	0.01	10000	
Cr	52	45	1	He	1.138	1.138	9.49	9295	0.01	10000	
Mn	55	45	1	He	92.510	92.510	4.05	472819	0.02	10000	
Fe	56	45	1	He	1445.785	1445.785	4.40	8852102	0.02	200000	
Co	59	103	1	He	0.217	0.217	8.89	2166	0.01	10000	
Ni	60	103	1	He	0.630	0.630	6.49	1633	0.04	10000	
Cu	63	103	1	He	0.242	0.242	11.77	2858	0.01	10000	
Zn	66	103	1	He	6.663	6.663	2.01	10126	0.07	10000	
As	75	103	1	He	1.925	1.925	0.61	1730	0.11	10000	
Se	78	103	1	He	0.130	0.130	25.56	51	0.26	10000	
Sr	88	103	1	He	1100.646	1100.646	0.23	7458294	0.01	10000	
Mo	95	103	1	He	1.273	1.273	2.91	3965	0.03	2000	
Ag	107	103	1	He	0.011	0.011	14.49	116	0.01	300	
Cd	111	103	1	He	0.100	0.100	42.86	1122	0.01	4000	
Sn	118	115	1	He	0.956	0.956	15.29	5138	0.02	2000	
Sb	123	115	1	He	0.270	0.270	10.65	1605	0.02	300	
Ba	137	115	1	He	53.859	53.859	0.55	109878	0.05	10000	
W	182	209	1	He	0.188	0.188	17.51	5349	0.00	2500	
Tl	205	165	1	He	0.002	0.002	12.40	120	0.00	5000	
Pb	208	209	1	He	0.064	0.064	5.26	3350	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1113397	1.86	1631381	68.25	30	120	
Sc	45	1	He	617171	3.24	829696	74.39	30	120	
Sc	45	2	NoGas	4879925	0.78	6325638	77.15	30	120	
Rh	103	1	He	1784425	0.76	2345543	76.08	30	120	
In	115	1	He	1077112	0.32	1419467	75.88	30	120	
Tb	159	1	He	3345049	1.46	3888262	86.03	30	120	
Ho	165	1	He	3440917	0.70	3932562	87.50	30	120	
Bi	209	1	He	2369879	0.76	2874805	82.44	30	120	

Sample Report

Sample Table

Sample Name	240-49486-i-5-a
Data File Name	175SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:10:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.055	0.055	13.89	219	0.03	10000	
B	11	45	2	NoGas	140.150	140.150	1.56	389378	0.04	300	
Na	23	45	1	He	82128.863	82128.863	3.15	108176748	0.08	500000	
Mg	24	45	1	He	123606.123	123606.123	3.00	92543496	0.13	500000	
Al	27	45	1	He	7.793	7.793	11.12	5267	0.15	200000	
K	39	45	1	He	2987.071	2987.071	3.09	2133956	0.14	500000	
Ca	44	45	1	He	216834.846	216834.846	2.66	8388385	2.58	500000	
Ti	47	45	1	He	0.431	0.431	46.14	103	0.42	2500	
V	51	45	1	He	0.183	0.183	68.84	1050	0.02	10000	
Cr	52	45	1	He	0.685	0.685	9.40	6347	0.01	10000	
Mn	55	45	1	He	346.170	346.170	1.64	1764193	0.02	10000	
Fe	56	45	1	He	6812.919	6812.919	2.31	41633784	0.02	200000	
Co	59	103	1	He	35.965	35.965	0.98	335833	0.01	10000	
Ni	60	103	1	He	17.175	17.175	1.77	39853	0.04	10000	
Cu	63	103	1	He	1.163	1.163	4.45	8320	0.01	10000	
Zn	66	103	1	He	5.368	5.368	3.25	8029	0.07	10000	
As	75	103	1	He	1.649	1.649	2.41	1425	0.12	10000	
Se	78	103	1	He	0.319	0.319	25.87	64	0.50	10000	
Sr	88	103	1	He	533.894	533.894	0.93	3436717	0.02	10000	
Mo	95	103	1	He	1.368	1.368	3.35	4045	0.03	2000	
Ag	107	103	1	He	0.021	0.021	16.88	214	0.01	300	
Cd	111	103	1	He	0.130	0.130	24.77	1117	0.01	4000	
Sn	118	115	1	He	0.144	0.144	6.58	1471	0.01	2000	
Sb	123	115	1	He	0.178	0.178	15.21	1205	0.01	300	
Ba	137	115	1	He	77.590	77.590	1.46	155738	0.05	10000	
W	182	209	1	He	0.155	0.155	13.76	4742	0.00	2500	
Tl	205	165	1	He	0.007	0.007	3.30	286	0.00	5000	
Pb	208	209	1	He	0.135	0.135	3.79	6045	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1082813	1.29	1631381	66.37	30	120	
Sc	45	1	He	615969	3.89	829696	74.24	30	120	
Sc	45	2	NoGas	4840685	1.60	6325638	76.52	30	120	
Rh	103	1	He	1695172	1.02	2345543	72.27	30	120	
In	115	1	He	1059961	0.58	1419467	74.67	30	120	
Tb	159	1	He	3296492	1.45	3888262	84.78	30	120	
Ho	165	1	He	3378679	0.49	3932562	85.92	30	120	
Bi	209	1	He	2270030	1.41	2874805	78.96	30	120	

Sample Report

Sample Table

Sample Name	240-49486-j-5-a
Data File Name	176SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:13:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.085	0.085	13.08	319	0.03	10000	
B	11	45	2	NoGas	145.365	145.365	1.22	392847	0.04	300	
Na	23	45	1	He	82914.669	82914.669	2.50	105271814	0.08	500000	
Mg	24	45	1	He	123635.046	123635.046	2.36	89223993	0.14	500000	
Al	27	45	1	He	5.889	5.889	8.15	4299	0.14	200000	
K	39	45	1	He	3028.623	3028.623	3.49	2084834	0.15	500000	
Ca	44	45	1	He	216924.265	216924.265	2.62	8087699	2.68	500000	
Ti	47	45	1	He	0.366	0.366	14.62	87	0.42	2500	
V	51	45	1	He	0.054	0.054	97.34	358	0.01	10000	
Cr	52	45	1	He	0.980	0.980	4.40	7961	0.01	10000	
Mn	55	45	1	He	339.467	339.467	3.54	1666596	0.02	10000	
Fe	56	45	1	He	5691.547	5691.547	1.83	33522439	0.02	200000	
Co	59	103	1	He	34.865	34.865	0.76	320874	0.01	10000	
Ni	60	103	1	He	16.962	16.962	1.88	38797	0.04	10000	
Cu	63	103	1	He	0.439	0.439	6.02	3856	0.01	10000	
Zn	66	103	1	He	5.462	5.462	0.81	8025	0.07	10000	
As	75	103	1	He	1.614	1.614	3.18	1377	0.12	10000	
Se	78	103	1	He	0.338	0.338	17.96	65	0.52	10000	
Sr	88	103	1	He	517.882	517.882	1.13	3285773	0.02	10000	
Mo	95	103	1	He	1.375	1.375	6.82	4007	0.03	2000	
Ag	107	103	1	He	0.014	0.014	2.75	147	0.01	300	
Cd	111	103	1	He	0.112	0.112	14.11	1070	0.01	4000	
Sn	118	115	1	He	0.180	0.180	13.18	1578	0.01	2000	
Sb	123	115	1	He	0.320	0.320	19.66	1726	0.02	300	
Ba	137	115	1	He	76.322	76.322	0.68	148315	0.05	10000	
W	182	209	1	He	0.264	0.264	15.95	5842	0.00	2500	
Tl	205	165	1	He	0.007	0.007	34.68	278	0.00	5000	
Pb	208	209	1	He	0.069	0.069	10.50	3289	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1078303	0.73	1631381	66.10	30	120	
Sc	45	1	He	593521	2.68	829696	71.53	30	120	
Sc	45	2	NoGas	4711682	1.53	6325638	74.49	30	120	
Rh	103	1	He	1670808	0.80	2345543	71.23	30	120	
In	115	1	He	1026186	0.41	1419467	72.29	30	120	
Tb	159	1	He	3227037	0.39	3888262	82.99	30	120	
Ho	165	1	He	3315457	0.60	3932562	84.31	30	120	
Bi	209	1	He	2206935	1.15	2874805	76.77	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	177_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:17:40-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.766	1.551	182284	2.05	50	101.5	89.5	110.5	
B	11	45	2	NoGas	68.623	0.716	197593	0.87	50	137.2	89.5	110.5	CCV Failed
Na	23	45	1	He	24701.289	3.098	33310765	1.16	25000	98.8	89.5	110.5	
Mg	24	45	1	He	24847.748	3.218	19038622	0.80	25000	99.4	89.5	110.5	
Al	27	45	1	He	243.991	2.484	107998	1.55	250	97.6	89.5	110.5	
K	39	45	1	He	25581.753	4.388	18477226	0.69	25000	102.3	89.5	110.5	
Ca	44	45	1	He	25097.023	3.866	993982	0.63	25000	100.4	89.5	110.5	
Ti	47	45	1	He	49.122	1.505	10975	2.34	50	98.2	89.5	110.5	
V	51	45	1	He	50.012	2.674	276018	1.14	50	100.0	89.5	110.5	
Cr	52	45	1	He	50.250	2.946	335169	1.19	50	100.5	89.5	110.5	
Mn	55	45	1	He	251.493	3.441	1311284	0.36	250	100.6	89.5	110.5	
Fe	56	45	1	He	12892.494	3.607	80599470	0.68	12500	103.1	89.5	110.5	
Co	59	103	1	He	46.673	0.552	470696	0.45	50	93.3	89.5	110.5	
Ni	60	103	1	He	46.135	1.168	115459	1.60	50	92.3	89.5	110.5	
Cu	63	103	1	He	46.630	0.599	307986	1.51	50	93.3	89.5	110.5	
Zn	66	103	1	He	47.084	2.442	64069	1.67	50	94.2	89.5	110.5	
As	75	103	1	He	48.082	0.709	41274	0.95	50	96.2	89.5	110.5	
Se	78	103	1	He	49.844	0.974	4548	0.30	50	99.7	89.5	110.5	
Sr	88	103	1	He	49.624	0.919	345093	0.37	50	99.2	89.5	110.5	
Mo	95	103	1	He	50.212	2.838	158654	1.94	50	100.4	89.5	110.5	
Ag	107	103	1	He	49.715	0.529	539537	0.46	50	99.4	89.5	110.5	
Cd	111	103	1	He	50.328	0.639	96007	0.48	50	100.7	89.5	110.5	
Sn	118	115	1	He	50.397	1.604	235338	1.44	50	100.8	89.5	110.5	
Sb	123	115	1	He	52.806	0.066	227400	0.38	50	105.6	89.5	110.5	
Ba	137	115	1	He	52.192	0.782	110294	0.51	50	104.4	89.5	110.5	
W	182	209	1	He	49.004	3.438	615555	1.89	50	98.0	89.5	110.5	
Tl	205	165	1	He	48.138	0.821	1520269	0.25	50	96.3	89.5	110.5	
Pb	208	209	1	He	48.099	1.424	2074620	0.90	50	96.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1135782	1.37	1631381	69.62	30	120	
Sc	45	1	He	630379	3.83	829696	75.98	30	120	
Sc	45	2	NoGas	4916830	1.21	6325638	77.73	30	120	
Rh	103	1	He	1830896	0.92	2345543	78.06	30	120	
In	115	1	He	1115727	0.34	1419467	78.60	30	120	
Tb	159	1	He	3329750	0.26	3888262	85.64	30	120	
Ho	165	1	He	3441179	0.59	3932562	87.50	30	120	
Bi	209	1	He	2449722	1.75	2874805	85.21	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	178_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:21:30-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.089	5.8	359	7.1	1	
B	11	45	2	NoGas	16.941	1.9	54860	1.0	20	
Na	23	45	1	He	52.628	9.3	84999	6.2	400	
Mg	24	45	1	He	8.281	25.7	6809	21.8	1000	
Al	27	45	1	He	0.201	113.5	2015	3.8	50	
K	39	45	1	He	10.896	16.0	35480	2.2	1000	
Ca	44	45	1	He	12.046	36.6	1189	12.9	1000	
Ti	47	45	1	He	0.105	83.3	32	57.0	20	
V	51	45	1	He	0.057	87.4	377	68.5	2	
Cr	52	45	1	He	0.039	56.9	2125	5.9	2	
Mn	55	45	1	He	0.074	11.1	1269	2.2	2	
Fe	56	45	1	He	24.214	26.5	148554	24.6	50	
Co	59	103	1	He	0.010	72.1	141	52.4	1	
Ni	60	103	1	He	-0.010	-19.3	79	6.5	2	
Cu	63	103	1	He	0.059	10.2	1816	3.1	2	
Zn	66	103	1	He	0.009	930.9	1631	7.5	20	
As	75	103	1	He	0.061	35.9	188	9.8	2	
Se	78	103	1	He	0.111	25.2	53	4.2	2	
Sr	88	103	1	He	0.070	53.1	611	45.1	10	
Mo	95	103	1	He	0.894	28.1	3021	28.1	2	
Ag	107	103	1	He	0.014	18.3	168	18.5	0.2	
Cd	111	103	1	He	0.097	8.8	1203	2.2	0.2	
Sn	118	115	1	He	0.262	13.7	2204	7.9	10	
Sb	123	115	1	He	0.381	22.5	2247	17.1	1	
Ba	137	115	1	He	0.006	173.1	96	23.7	5	
W	182	209	1	He	1.159	13.8	18501	12.3	10	
Tl	205	165	1	He	0.041	25.2	1367	24.5	0.5	
Pb	208	209	1	He	0.026	19.9	1911	13.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1164687	1.84	1631381	71.39	30	120	
Sc	45	1	He	605489	1.29	829696	72.98	30	120	
Sc	45	2	NoGas	4944394	1.19	6325638	78.16	30	120	
Rh	103	1	He	1923636	0.84	2345543	82.01	30	120	
In	115	1	He	1173200	0.48	1419467	82.65	30	120	
Tb	159	1	He	3369179	0.57	3888262	86.65	30	120	
Ho	165	1	He	3438135	0.61	3932562	87.43	30	120	
Bi	209	1	He	2562681	1.19	2874805	89.14	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	179CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:25:23-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.033	1.033	5.803	3982	4.33	1	103.3	69.5	130.5	
B	11	2	NoGas	36.614	36.614	0.809	110853	1.47	20	183.1	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1093.029	1093.029	2.184	1505718	0.58	1000	109.3	69.5	130.5	
Mg	24	1	He	1061.237	1061.237	2.305	822052	1.00	1000	106.1	69.5	130.5	
Al	27	1	He	47.804	47.804	2.506	23000	1.07	50	95.6	69.5	130.5	
K	39	1	He	1083.854	1083.854	1.615	819145	0.56	1000	108.4	69.5	130.5	
Ca	44	1	He	1040.705	1040.705	1.910	42382	1.63	1000	104.1	69.5	130.5	
Ti	47	1	He	10.374	10.374	8.267	2347	6.91	10	103.7	69.5	130.5	
V	51	1	He	5.083	5.083	4.815	28397	3.51	5	101.7	69.5	130.5	
Cr	52	1	He	2.141	2.141	2.276	16314	1.22	2	107.0	69.5	130.5	
Mn	55	1	He	5.263	5.263	2.826	28644	1.17	5	105.3	69.5	130.5	
Fe	56	1	He	109.812	109.812	1.453	697033	0.29	100	109.8	69.5	130.5	
Co	59	1	He	0.927	0.927	1.276	9909	0.63	1	92.7	69.5	130.5	
Ni	60	1	He	1.867	1.867	5.684	5035	4.87	2	93.4	69.5	130.5	
Cu	63	1	He	1.859	1.859	5.340	14315	3.72	2	92.9	69.5	130.5	
Zn	66	1	He	19.080	19.080	1.818	28381	1.16	20	95.4	69.5	130.5	
As	75	1	He	4.766	4.766	1.801	4440	0.93	5	95.3	69.5	130.5	
Se	78	1	He	5.424	5.424	8.118	561	6.97	5	108.5	69.5	130.5	
Sr	88	1	He	9.836	9.836	2.366	72288	1.26	10	98.4	69.5	130.5	
Mo	95	1	He	10.277	10.277	2.848	34325	2.04	10	102.8	69.5	130.5	
Ag	107	1	He	1.027	1.027	0.328	11770	1.44	1	102.7	69.5	130.5	
Cd	111	1	He	1.135	1.135	4.467	3279	3.49	1	113.5	69.5	130.5	
Sn	118	1	He	10.170	10.170	1.782	50680	1.47	10	101.7	69.5	130.5	
Sb	123	1	He	2.071	2.071	2.341	9885	2.16	2	103.5	69.5	130.5	
Ba	137	1	He	5.130	5.130	3.383	11475	3.50	5	102.6	69.5	130.5	
W	182	1	He	9.457	9.457	1.786	127520	2.09	10	94.6	69.5	130.5	
Tl	205	1	He	2.027	2.027	1.661	64261	1.74	2	101.4	69.5	130.5	
Pb	208	1	He	1.004	1.004	1.228	46182	0.73	1	100.4	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1209607	1.49	1631381	74.15	30	120	
Sc	45	1	He	636361	1.60	829696	76.70	30	120	
Sc	45	2	NoGas	4999983	1.11	6325638	79.04	30	120	
Rh	103	1	He	1933186	1.12	2345543	82.42	30	120	
In	115	1	He	1173375	0.28	1419467	82.66	30	120	
Tb	159	1	He	3354976	0.32	3888262	86.28	30	120	
Ho	165	1	He	3450628	0.50	3932562	87.75	30	120	
Bi	209	1	He	2573069	0.80	2874805	89.50	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177625/1-a@2
Data File Name	180_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:29:14-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.055	31.0	219	28.0	1	
B	11	45	2	NoGas	22.075	1.7	64784	2.1	20	Blank Failed
Na	23	45	1	He	60.250	3.2	93465	0.2	400	
Mg	24	45	1	He	19.290	1.7	14703	1.1	1000	
Al	27	45	1	He	-1.470	-7.5	1297	2.3	50	
K	39	45	1	He	25.458	5.6	44897	2.4	1000	
Ca	44	45	1	He	59.690	6.3	2956	3.6	1000	
Ti	47	45	1	He	0.176	11.8	47	7.1	20	
V	51	45	1	He	0.195	80.7	1081	74.0	2	
Cr	52	45	1	He	0.928	6.8	7672	3.1	2	
Mn	55	45	1	He	0.198	1.3	1861	2.7	2	
Fe	56	45	1	He	17.272	5.1	105632	7.4	50	
Co	59	103	1	He	0.008	44.1	121	29.4	1	
Ni	60	103	1	He	0.089	19.3	326	12.1	2	
Cu	63	103	1	He	0.207	6.9	2717	2.9	2	
Zn	66	103	1	He	1.120	3.7	3047	2.7	20	
As	75	103	1	He	0.197	22.4	298	14.1	2	
Se	78	103	1	He	0.157	41.2	55	12.0	2	
Sr	88	103	1	He	0.162	7.6	1225	8.0	10	
Mo	95	103	1	He	0.324	21.0	1076	19.4	2	
Ag	107	103	1	He	0.014	46.6	162	44.7	0.2	
Cd	111	103	1	He	0.062	15.4	1085	0.7	0.2	
Sn	118	115	1	He	17.488	1.9	81075	2.1	10	Blank Failed
Sb	123	115	1	He	0.191	17.8	1303	11.2	1	
Ba	137	115	1	He	0.392	6.7	893	6.2	5	
W	182	209	1	He	0.765	6.7	12958	6.2	10	
Tl	205	165	1	He	0.014	13.0	507	11.9	0.5	
Pb	208	209	1	He	0.169	24.5	8126	24.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1083598	1.80	1631381	66.42	30	120	
Sc	45	1	He	596419	2.50	829696	71.88	30	120	
Sc	45	2	NoGas	4631771	0.86	6325638	73.22	30	120	
Rh	103	1	He	1842199	1.32	2345543	78.54	30	120	
In	115	1	He	1099924	0.48	1419467	77.49	30	120	
Tb	159	1	He	3274953	0.55	3888262	84.23	30	120	
Ho	165	1	He	3354706	0.48	3932562	85.31	30	120	
Bi	209	1	He	2489647	1.59	2874805	86.60	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177625/3-a@2
Data File Name	181LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:33:04-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	488.624	488.624	2.018	1516515	1.15	500	97.7	78.6	110.5	
B	11	2	NoGas	69.771	69.771	1.238	174470	0.83	50	139.5	79.5	120.5	LCSS Failed
Na	23	1	He	4911.757	4911.757	1.925	5823652	0.55	5000	98.2	79.5	120.5	
Mg	24	1	He	5014.577	5014.577	2.275	3371504	0.58	5000	100.3	79.5	120.5	
Al	27	1	He	4674.219	4674.219	2.807	1782695	1.04	5000	93.5	79.5	120.5	
K	39	1	He	5057.794	5057.794	2.106	3226575	0.17	5000	101.2	79.5	120.5	
Ca	44	1	He	4422.833	4422.833	1.788	154269	0.38	5000	88.5	79.5	120.5	
Ti	47	1	He	47.212	47.212	2.437	9251	2.06	50	94.4	79.5	120.5	
V	51	1	He	494.178	494.178	1.949	2392177	1.35	500	98.8	71.5	110.5	
Cr	52	1	He	500.384	500.384	2.321	2912568	0.43	500	100.1	69.5	110.5	
Mn	55	1	He	505.393	505.393	1.548	2311458	0.49	500	101.1	79.5	120.5	
Fe	56	1	He	5069.878	5069.878	2.112	27812824	0.45	5000	101.4	79.5	120.5	
Co	59	1	He	444.163	444.163	1.112	4130910	1.36	500	88.8	73.9	110.5	
Ni	60	1	He	429.273	429.273	0.305	989979	0.24	500	85.9	74.9	110.5	
Cu	63	1	He	458.515	458.515	0.265	2781958	0.39	500	91.7	72.6	110.5	
Zn	66	1	He	413.306	413.306	0.465	507691	0.71	500	82.7	71.5	113.4	
As	75	1	He	403.860	403.860	0.159	318852	0.15	500	80.8	73.4	110.5	
Se	78	1	He	403.293	403.293	0.260	33674	0.40	500	80.7	64.6	110.5	
Sr	88	1	He	482.488	482.488	0.371	3093762	0.07	500	96.5	79.5	120.5	
Mo	95	1	He	50.970	50.970	0.451	148549	0.69	50	101.9	29.5	140.5	
Ag	107	1	He	48.826	48.826	0.219	488688	0.09	50	97.7	59.5	114.5	
Cd	111	1	He	464.533	464.533	0.320	809985	0.60	500	92.9	73.5	110.5	
Sn	118	1	He	564.610	564.610	1.742	2378856	1.60	500	112.9	79.5	120.5	
Sb	123	1	He	49.583	49.583	0.833	193333	0.82	50	99.2	67.5	113.4	
Ba	137	1	He	500.415	500.415	0.781	956786	0.61	500	100.1	69.5	110.5	
W	182	1	He	47.656	47.656	0.826	579124	0.46	50	95.3	74.6	125.4	
Tl	205	1	He	125.377	125.377	3.247	3732067	0.95	125	100.3	70.6	110.5	
Pb	208	1	He	477.284	477.284	0.670	19902034	0.31	500	95.5	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	981994	0.92	1631381	60.19	30	120	
Sc	45	1	He	552775	1.96	829696	66.62	30	120	
Sc	45	2	NoGas	4272801	0.90	6325638	67.55	30	120	
Rh	103	1	He	1688518	0.30	2345543	71.99	30	120	
In	115	1	He	1010097	0.20	1419467	71.16	30	120	
Tb	159	1	He	3206287	0.94	3888262	82.46	30	120	
Ho	165	1	He	3245249	2.64	3932562	82.52	30	120	
Bi	209	1	He	2368775	0.90	2874805	82.40	30	120	

Sample Report

Sample Table

Sample Name	240-49628-c-13-d@2
Data File Name	182SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:36:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.340	1.340	14.21	4412	0.03	10000	
B	11	45	2	NoGas	53.562	53.562	0.41	143528	0.04	300	
Na	23	45	1	He	1002.147	1002.147	2.06	1212769	0.08	500000	
Mg	24	45	1	He	9988.026	9988.026	1.95	6782877	0.15	500000	
Al	27	45	1	He	23649.185	23649.185	2.01	9104403	0.26	200000	
K	39	45	1	He	4403.844	4403.844	0.95	2841666	0.15	500000	
Ca	44	45	1	He	1483455.104	1483455.104	1.40	52044179	2.85	500000	>LDR
Ti	47	45	1	He	1005.696	1005.696	2.08	198863	0.51	2500	
V	51	45	1	He	105.409	105.409	2.30	515412	0.02	10000	
Cr	52	45	1	He	46.180	46.180	2.06	273101	0.02	10000	
Mn	55	45	1	He	1184.968	1184.968	1.96	5472973	0.02	10000	
Fe	56	45	1	He	35838.345	35838.345	2.35	198569054	0.02	200000	
Co	59	103	1	He	9.810	9.810	1.15	75980	0.01	10000	
Ni	60	103	1	He	31.283	31.283	0.75	60130	0.05	10000	
Cu	63	103	1	He	17.479	17.479	0.64	89273	0.02	10000	
Zn	66	103	1	He	78.777	78.777	1.28	81512	0.10	10000	
As	75	103	1	He	28.635	28.635	0.46	18911	0.15	10000	
Se	78	103	1	He	2.968	2.968	8.74	237	1.25	10000	
Sr	88	103	1	He	1205.909	1205.909	0.41	6436943	0.02	10000	
Mo	95	103	1	He	3.775	3.775	2.20	9194	0.04	2000	
Ag	107	103	1	He	0.082	0.082	8.83	690	0.01	300	
Cd	111	103	1	He	1.085	1.085	8.21	2311	0.05	4000	
Sn	118	115	1	He	17.657	17.657	0.90	70342	0.03	2000	
Sb	123	115	1	He	0.905	0.905	0.75	3722	0.02	300	
Ba	137	115	1	He	237.340	237.340	0.16	424696	0.06	10000	
W	182	209	1	He	3.355	3.355	0.97	36669	0.01	2500	
Tl	205	165	1	He	0.280	0.280	15.15	7843	0.00	5000	
Pb	208	209	1	He	22.146	22.146	1.24	776608	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1035726	1.93	1631381	63.49	30	120	
Sc	45	1	He	558398	2.41	829696	67.30	30	120	
Sc	45	2	NoGas	4526275	1.04	6325638	71.55	30	120	
Rh	103	1	He	1405642	0.07	2345543	59.93	30	120	
In	115	1	He	945256	0.61	1419467	66.59	30	120	
Tb	159	1	He	2957995	0.63	3888262	76.07	30	120	
Ho	165	1	He	3030891	0.76	3932562	77.07	30	120	
Bi	209	1	He	1990891	1.50	2874805	69.25	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49628-c-13-d@10
Data File Name	183SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:40:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.339	0.339	13.95	1241	0.03	10000	
B	11	45	2	NoGas	22.886	22.886	1.92	71913	0.03	300	
Na	23	45	1	He	221.266	221.266	2.22	309010	0.07	500000	
Mg	24	45	1	He	2140.628	2140.628	1.76	1605828	0.13	500000	
Al	27	45	1	He	5031.654	5031.654	1.20	2140696	0.24	200000	
K	39	45	1	He	879.425	879.425	2.37	649248	0.14	500000	
Ca	44	45	1	He	304837.274	304837.274	2.46	11808331	2.58	500000	
Ti	47	45	1	He	204.191	204.191	2.12	44592	0.46	2500	
V	51	45	1	He	21.688	21.688	1.22	117180	0.02	10000	
Cr	52	45	1	He	9.438	9.438	0.80	63164	0.01	10000	
Mn	55	45	1	He	243.895	243.895	1.64	1244633	0.02	10000	
Fe	56	45	1	He	7534.177	7534.177	1.42	46102516	0.02	200000	
Co	59	103	1	He	1.847	1.847	3.58	17959	0.01	10000	
Ni	60	103	1	He	5.959	5.959	0.91	14433	0.04	10000	
Cu	63	103	1	He	3.368	3.368	3.08	22599	0.01	10000	
Zn	66	103	1	He	16.110	16.110	2.20	22072	0.07	10000	
As	75	103	1	He	5.068	5.068	1.32	4296	0.12	10000	
Se	78	103	1	He	0.467	0.467	13.95	80	0.59	10000	
Sr	88	103	1	He	211.327	211.327	0.66	1413809	0.01	10000	
Mo	95	103	1	He	0.672	0.672	5.95	2089	0.03	2000	
Ag	107	103	1	He	0.020	0.020	2.01	217	0.01	300	
Cd	111	103	1	He	0.310	0.310	5.84	1488	0.02	4000	
Sn	118	115	1	He	3.293	3.293	2.07	15971	0.02	2000	
Sb	123	115	1	He	0.136	0.136	7.60	1072	0.01	300	
Ba	137	115	1	He	46.532	46.532	1.42	96978	0.05	10000	
W	182	209	1	He	0.698	0.698	4.63	11594	0.01	2500	
Tl	205	165	1	He	0.051	0.051	2.68	1671	0.00	5000	
Pb	208	209	1	He	4.309	4.309	0.45	181575	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1128914	0.73	1631381	69.20	30	120	
Sc	45	1	He	616508	1.28	829696	74.31	30	120	
Sc	45	2	NoGas	4979062	1.65	6325638	78.71	30	120	
Rh	103	1	He	1761692	0.48	2345543	75.11	30	120	
In	115	1	He	1100238	0.53	1419467	77.51	30	120	
Tb	159	1	He	3333018	0.58	3888262	85.72	30	120	
Ho	165	1	He	3418499	1.36	3932562	86.93	30	120	
Bi	209	1	He	2385052	0.55	2874805	82.96	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49628-c-13-d@2
Data File Name	184SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:44:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	960.213	960.213	1.14	3249027	0.03	10000	
B	11	45	2	NoGas	150.819	150.819	1.26	404631	0.04	300	
Na	23	45	1	He	10967.334	10967.334	2.38	13388785	0.08	500000	
Mg	24	45	1	He	19621.826	19621.826	2.90	13600849	0.14	500000	
Al	27	45	1	He	32800.708	32800.708	2.03	12890679	0.25	200000	
K	39	45	1	He	14687.819	14687.819	1.75	9613167	0.15	500000	
Ca	44	45	1	He	1483195.767	1483195.767	2.83	53110322	2.79	500000	>LDR
Ti	47	45	1	He	1090.037	1090.037	2.45	220037	0.50	2500	
V	51	45	1	He	1118.271	1118.271	2.01	5581766	0.02	10000	
Cr	52	45	1	He	1017.621	1017.621	1.82	6107053	0.02	10000	
Mn	55	45	1	He	2122.853	2122.853	2.91	10007420	0.02	10000	
Fe	56	45	1	He	45129.869	45129.869	2.53	255263563	0.02	200000	
Co	59	103	1	He	979.026	979.026	4.70	8013666	0.01	10000	
Ni	60	103	1	He	989.638	989.638	3.76	2009138	0.05	10000	
Cu	63	103	1	He	929.900	929.900	4.01	4965471	0.02	10000	
Zn	66	103	1	He	890.892	890.892	4.11	961859	0.09	10000	
As	75	103	1	He	993.899	993.899	3.97	690616	0.14	10000	
Se	78	103	1	He	890.788	890.788	4.14	65432	1.36	10000	
Sr	88	103	1	He	2265.178	2265.178	3.61	12787083	0.02	10000	
Mo	95	103	1	He	123.343	123.343	4.40	316354	0.04	2000	
Ag	107	103	1	He	96.253	96.253	3.72	848121	0.01	300	
Cd	111	103	1	He	945.256	945.256	3.97	1450093	0.07	4000	
Sn	118	115	1	He	1149.266	1149.266	0.80	4539506	0.03	2000	
Sb	123	115	1	He	104.536	104.536	0.58	381714	0.03	300	
Ba	137	115	1	He	1405.787	1405.787	0.25	2520089	0.06	10000	
W	182	209	1	He	114.272	114.272	1.47	1182419	0.01	2500	
Tl	205	165	1	He	245.162	245.162	1.73	6861539	0.00	5000	
Pb	208	209	1	He	1039.024	1039.024	1.02	37005740	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1070513	0.61	1631381	65.62	30	120	
Sc	45	1	He	570064	2.39	829696	68.71	30	120	
Sc	45	2	NoGas	4680485	0.94	6325638	73.99	30	120	
Rh	103	1	He	1488085	4.28	2345543	63.44	30	120	
In	115	1	He	947098	0.52	1419467	66.72	30	120	
Tb	159	1	He	3009624	0.71	3888262	77.40	30	120	
Ho	165	1	He	3049799	0.54	3932562	77.55	30	120	
Bi	209	1	He	2023372	1.29	2874805	70.38	30	120	

Sample Report

Sample Table

Sample Name	240-49628-c-13-e ms@2
Data File Name	185SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:47:51-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	436.002	436.002	2.00	1416438	0.03	10000	
B	11	45	2	NoGas	105.826	105.826	0.63	277738	0.04	300	
Na	23	45	1	He	5743.937	5743.937	1.29	6736457	0.09	500000	
Mg	24	45	1	He	16847.085	16847.085	2.22	11206166	0.15	500000	
Al	27	45	1	He	34871.751	34871.751	2.14	13149878	0.27	200000	
K	39	45	1	He	10123.573	10123.573	2.70	6364472	0.16	500000	
Ca	44	45	1	He	1806936.287	1806936.287	1.33	62096050	2.91	500000	>LDR
Ti	47	45	1	He	1314.268	1314.268	1.62	254580	0.52	2500	
V	51	45	1	He	597.580	597.580	1.35	2862280	0.02	10000	
Cr	52	45	1	He	498.014	498.014	1.77	2868496	0.02	10000	
Mn	55	45	1	He	1872.312	1872.312	2.02	8470398	0.02	10000	
Fe	56	45	1	He	46504.231	46504.231	1.88	252412319	0.02	200000	
Co	59	103	1	He	471.665	471.665	0.36	3564462	0.01	10000	
Ni	60	103	1	He	460.769	460.769	0.67	863453	0.05	10000	
Cu	63	103	1	He	457.833	457.833	1.76	2257170	0.02	10000	
Zn	66	103	1	He	455.481	455.481	0.33	454515	0.10	10000	
As	75	103	1	He	486.574	486.574	0.30	312139	0.16	10000	
Se	78	103	1	He	412.664	412.664	0.92	27998	1.47	10000	
Sr	88	103	1	He	1987.248	1987.248	0.45	10354123	0.02	10000	
Mo	95	103	1	He	60.988	60.988	0.56	144427	0.04	2000	
Ag	107	103	1	He	45.214	45.214	0.44	367732	0.01	300	
Cd	111	103	1	He	441.501	441.501	0.42	625578	0.07	4000	
Sn	118	115	1	He	515.572	515.572	0.82	1982333	0.03	2000	
Sb	123	115	1	He	22.969	22.969	1.12	81953	0.03	300	
Ba	137	115	1	He	724.287	724.287	1.07	1263652	0.06	10000	
W	182	209	1	He	45.422	45.422	0.87	452053	0.01	2500	
Tl	205	165	1	He	114.039	114.039	0.74	3074298	0.00	5000	
Pb	208	209	1	He	487.307	487.307	0.80	16637143	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1027946	1.42	1631381	63.01	30	120	
Sc	45	1	He	546943	1.85	829696	65.92	30	120	
Sc	45	2	NoGas	4543478	0.39	6325638	71.83	30	120	
Rh	103	1	He	1372059	0.15	2345543	58.50	30	120	
In	115	1	He	921773	0.73	1419467	64.94	30	120	
Tb	159	1	He	2897667	0.67	3888262	74.52	30	120	
Ho	165	1	He	2937479	0.65	3932562	74.70	30	120	
Bi	209	1	He	1939436	0.64	2874805	67.46	30	120	

Sample Report

Sample Table

Sample Name	240-49628-c-13-f msd@2
Data File Name	186SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:51:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	432.990	432.990	3.64	1377704	0.03	10000	
B	11	45	2	NoGas	102.838	102.838	1.28	268825	0.04	300	
Na	23	45	1	He	5644.077	5644.077	0.90	6527655	0.09	500000	
Mg	24	45	1	He	16428.576	16428.576	0.68	10777367	0.15	500000	
Al	27	45	1	He	33579.836	33579.836	1.24	12487743	0.27	200000	
K	39	45	1	He	10168.890	10168.890	0.60	6305789	0.16	500000	
Ca	44	45	1	He	1812547.234	1812547.234	1.34	61420693	2.95	500000	>LDR
Ti	47	45	1	He	1264.642	1264.642	1.94	241549	0.52	2500	
V	51	45	1	He	595.399	595.399	2.04	2811905	0.02	10000	
Cr	52	45	1	He	494.594	494.594	2.03	2809137	0.02	10000	
Mn	55	45	1	He	1854.102	1854.102	0.58	8272302	0.02	10000	
Fe	56	45	1	He	48612.349	48612.349	1.21	260197199	0.02	200000	
Co	59	103	1	He	467.678	467.678	0.96	3505692	0.01	10000	
Ni	60	103	1	He	459.098	459.098	0.39	853339	0.05	10000	
Cu	63	103	1	He	454.604	454.604	0.92	2223056	0.02	10000	
Zn	66	103	1	He	450.166	450.166	0.47	445582	0.10	10000	
As	75	103	1	He	485.716	485.716	0.43	309059	0.16	10000	
Se	78	103	1	He	409.785	409.785	1.21	27577	1.49	10000	
Sr	88	103	1	He	1953.478	1953.478	0.35	10095565	0.02	10000	
Mo	95	103	1	He	59.661	59.661	0.45	140136	0.04	2000	
Ag	107	103	1	He	45.319	45.319	0.63	365588	0.01	300	
Cd	111	103	1	He	442.551	442.551	0.11	621973	0.07	4000	
Sn	118	115	1	He	512.921	512.921	1.15	1952305	0.03	2000	
Sb	123	115	1	He	22.267	22.267	0.66	78658	0.03	300	
Ba	137	115	1	He	720.811	720.811	0.80	1244954	0.06	10000	
W	182	209	1	He	43.778	43.778	2.77	431940	0.01	2500	
Tl	205	165	1	He	115.206	115.206	0.86	3087276	0.00	5000	
Pb	208	209	1	He	487.090	487.090	2.11	16484327	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1007097	2.25	1631381	61.73	30	120	
Sc	45	1	He	539307	1.66	829696	65.00	30	120	
Sc	45	2	NoGas	4522226	0.88	6325638	71.49	30	120	
Rh	103	1	He	1360921	0.31	2345543	58.02	30	120	
In	115	1	He	912471	0.14	1419467	64.28	30	120	
Tb	159	1	He	2870364	1.18	3888262	73.82	30	120	
Ho	165	1	He	2920141	1.14	3932562	74.26	30	120	
Bi	209	1	He	1922868	1.67	2874805	66.89	30	120	

Sample Report

Sample Table

Sample Name	310-53259-c-1-a@2
Data File Name	187SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:55:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	14.262	14.262	2.37	45374	0.03	10000	
B	11	45	2	NoGas	534.865	534.865	0.97	1797022	0.03	300	>LDR
Na	23	45	1	He	143469.755	143469.755	2.21	220230199	0.07	500000	
Mg	24	45	1	He	82626.610	82626.610	2.14	72094414	0.11	500000	
Al	27	45	1	He	302812.004	302812.004	1.40	149787354	0.20	200000	>LDR
K	39	45	1	He	16569.434	16569.434	1.80	13645429	0.12	500000	
Ca	44	45	1	He	344995.580	344995.580	1.32	15553869	2.22	500000	
Ti	47	45	1	He	16192.228	16192.228	2.89	4113635	0.39	2500	>LDR
V	51	45	1	He	603.803	603.803	1.48	3793790	0.02	10000	
Cr	52	45	1	He	198.569	198.569	2.08	1501608	0.01	10000	
Mn	55	45	1	He	1594.636	1594.636	1.25	9464614	0.02	10000	
Fe	56	45	1	He	182976.072	182976.072	2.59	1302680517	0.01	200000	
Co	59	103	1	He	237.673	237.673	0.46	1836701	0.01	10000	
Ni	60	103	1	He	138.967	138.967	0.29	266344	0.05	10000	
Cu	63	103	1	He	531.416	531.416	0.48	2678911	0.02	10000	
Zn	66	103	1	He	2698.591	2698.591	0.25	2747815	0.10	10000	
As	75	103	1	He	7.930	7.930	1.40	5298	0.15	10000	
Se	78	103	1	He	8.920	8.920	4.37	649	1.37	10000	
Sr	88	103	1	He	28447.878	28447.878	0.78	151566714	0.02	10000	>LDR
Mo	95	103	1	He	29.171	29.171	1.11	70660	0.04	2000	
Ag	107	103	1	He	0.293	0.293	9.32	2444	0.01	300	
Cd	111	103	1	He	2.715	2.715	1.85	4665	0.06	4000	
Sn	118	115	1	He	17.168	17.168	2.00	67638	0.03	2000	
Sb	123	115	1	He	1.360	1.360	2.79	5318	0.03	300	
Ba	137	115	1	He	60342.274	60342.274	0.49	106745114	0.06	10000	>LDR
W	182	209	1	He	3.514	3.514	1.98	38369	0.01	2500	
Tl	205	165	1	He	0.148	0.148	16.68	4214	0.00	5000	
Pb	208	209	1	He	5.317	5.317	1.85	187296	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1006120	1.21	1631381	61.67	30	120	
Sc	45	1	He	717506	2.12	829696	86.48	30	120	
Sc	45	2	NoGas	5938085	0.62	6325638	93.87	30	120	
Rh	103	1	He	1403008	0.40	2345543	59.82	30	120	
In	115	1	He	934607	0.42	1419467	65.84	30	120	
Tb	159	1	He	2970158	0.66	3888262	76.39	30	120	
Ho	165	1	He	3057155	0.36	3932562	77.74	30	120	
Bi	209	1	He	1995166	0.91	2874805	69.40	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177246/1-a@2
Data File Name	188_Blk.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T21:58:51-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.254	8.6	759	8.6	1	
B	11	45	2	NoGas	17.768	1.7	47807	1.8	20	
Na	23	45	1	He	88.434	7.9	109121	5.2	400	
Mg	24	45	1	He	41.830	7.8	26175	6.0	1000	
Al	27	45	1	He	33.526	38.0	13181	31.7	50	
K	39	45	1	He	27.686	13.8	39132	3.7	1000	
Ca	44	45	1	He	189.949	17.3	6600	13.9	1000	
Ti	47	45	1	He	18.279	28.8	3254	27.0	20	
V	51	45	1	He	0.410	11.8	1873	13.4	2	
Cr	52	45	1	He	1.023	5.2	6979	4.7	2	
Mn	55	45	1	He	0.593	7.7	3209	4.0	2	
Fe	56	45	1	He	74.104	28.6	371629	26.7	50	Blank Failed
Co	59	103	1	He	0.041	10.8	403	12.2	1	
Ni	60	103	1	He	0.140	9.0	404	5.0	2	
Cu	63	103	1	He	0.460	5.3	3922	1.5	2	
Zn	66	103	1	He	8.002	3.4	10937	2.6	20	
As	75	103	1	He	0.241	5.8	300	1.6	2	
Se	78	103	1	He	0.238	10.8	56	1.5	2	
Sr	88	103	1	He	2.080	32.5	13034	30.9	10	
Mo	95	103	1	He	0.747	21.8	2160	19.9	2	
Ag	107	103	1	He	0.046	8.6	450	8.1	0.2	
Cd	111	103	1	He	0.254	17.4	1295	3.7	0.2	Blank Failed
Sn	118	115	1	He	17.650	0.2	73470	1.3	10	Blank Failed
Sb	123	115	1	He	0.109	8.2	860	2.8	1	
Ba	137	115	1	He	5.733	30.5	10765	29.3	5	Blank Failed
W	182	209	1	He	0.527	3.6	9444	2.1	10	
Tl	205	165	1	He	0.051	12.8	1535	10.9	0.5	
Pb	208	209	1	He	0.334	20.3	14594	20.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	915040	1.32	1631381	56.09	30	120	
Sc	45	1	He	503073	1.95	829696	60.63	30	120	
Sc	45	2	NoGas	4134785	0.59	6325638	65.37	30	120	
Rh	103	1	He	1645943	2.24	2345543	70.17	30	120	
In	115	1	He	987693	1.19	1419467	69.58	30	120	
Tb	159	1	He	3111658	0.90	3888262	80.03	30	120	
Ho	165	1	He	3169138	2.02	3932562	80.59	30	120	
Bi	209	1	He	2368781	0.91	2874805	82.40	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	189_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:02:42-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	51.133	2.814	165433	2.58	50	102.3	89.5	110.5	
B	11	45	2	NoGas	56.047	1.925	153098	0.75	50	112.1	89.5	110.5	CCV Failed
Na	23	45	1	He	25622.349	0.518	30858544	2.33	25000	102.5	89.5	110.5	
Mg	24	45	1	He	25544.591	0.778	17479163	1.58	25000	102.2	89.5	110.5	
Al	27	45	1	He	260.687	1.223	102925	3.14	250	104.3	89.5	110.5	
K	39	45	1	He	26986.507	1.149	17410024	1.26	25000	107.9	89.5	110.5	
Ca	44	45	1	He	26138.408	0.191	924725	2.25	25000	104.6	89.5	110.5	
Ti	47	45	1	He	56.726	3.008	11316	4.77	50	113.5	89.5	110.5	CCV Failed
V	51	45	1	He	51.799	0.436	255295	2.27	50	103.6	89.5	110.5	
Cr	52	45	1	He	51.782	0.162	308399	2.28	50	103.6	89.5	110.5	
Mn	55	45	1	He	262.706	0.546	1223308	1.61	250	105.1	89.5	110.5	
Fe	56	45	1	He	13171.801	1.139	73542153	1.37	12500	105.4	89.5	110.5	
Co	59	103	1	He	45.869	0.911	438660	2.58	50	91.7	89.5	110.5	
Ni	60	103	1	He	44.825	0.886	106364	1.86	50	89.6	89.5	110.5	
Cu	63	103	1	He	45.813	0.157	286923	1.92	50	91.6	89.5	110.5	
Zn	66	103	1	He	46.070	0.211	59478	1.59	50	92.1	89.5	110.5	
As	75	103	1	He	47.673	0.842	38802	1.80	50	95.3	89.5	110.5	
Se	78	103	1	He	47.754	1.089	4134	2.82	50	95.5	89.5	110.5	
Sr	88	103	1	He	49.936	0.404	329285	1.96	50	99.9	89.5	110.5	
Mo	95	103	1	He	50.295	1.255	150690	1.37	50	100.6	89.5	110.5	
Ag	107	103	1	He	50.129	0.260	515855	2.00	50	100.3	89.5	110.5	
Cd	111	103	1	He	51.424	0.554	92992	1.35	50	102.8	89.5	110.5	
Sn	118	115	1	He	50.706	0.425	227055	0.62	50	101.4	89.5	110.5	
Sb	123	115	1	He	52.832	0.899	218184	1.88	50	105.7	89.5	110.5	
Ba	137	115	1	He	53.541	1.907	108514	2.88	50	107.1	89.5	110.5	
W	182	209	1	He	48.424	1.228	589770	1.15	50	96.8	89.5	110.5	
Tl	205	165	1	He	47.654	0.551	1467732	1.56	50	95.3	89.5	110.5	
Pb	208	209	1	He	47.915	1.077	2003423	2.02	50	95.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1023466	0.99	1631381	62.74	30	120	
Sc	45	1	He	562551	2.13	829696	67.80	30	120	
Sc	45	2	NoGas	4624866	1.59	6325638	73.11	30	120	
Rh	103	1	He	1735989	1.78	2345543	74.01	30	120	
In	115	1	He	1069925	1.00	1419467	75.38	30	120	
Tb	159	1	He	3254483	1.08	3888262	83.70	30	120	
Ho	165	1	He	3355769	1.06	3932562	85.33	30	120	
Bi	209	1	He	2374268	1.00	2874805	82.59	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	190_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:06:32-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.152	18.5	533	17.8	1	
B	11	45	2	NoGas	12.553	1.1	40003	1.2	20	
Na	23	45	1	He	51.981	6.1	79300	4.1	400	
Mg	24	45	1	He	3.601	58.1	3171	44.8	1000	
Al	27	45	1	He	3.076	24.7	3027	9.0	50	
K	39	45	1	He	11.143	12.7	33584	2.0	1000	
Ca	44	45	1	He	23.064	34.4	1514	17.8	1000	
Ti	47	45	1	He	0.555	33.3	121	30.2	20	
V	51	45	1	He	0.069	38.3	419	32.0	2	
Cr	52	45	1	He	0.044	84.7	2035	10.6	2	
Mn	55	45	1	He	0.060	60.4	1129	14.8	2	
Fe	56	45	1	He	21.047	21.3	122153	19.9	50	
Co	59	103	1	He	0.014	53.6	173	42.3	1	
Ni	60	103	1	He	-0.001	-1665.6	98	35.5	2	
Cu	63	103	1	He	0.100	40.6	1981	12.9	2	
Zn	66	103	1	He	-0.038	-90.4	1479	3.1	20	
As	75	103	1	He	0.079	15.4	194	5.3	2	
Se	78	103	1	He	0.198	8.0	58	2.6	2	
Sr	88	103	1	He	0.205	34.1	1510	32.1	10	
Mo	95	103	1	He	1.094	14.0	3480	13.7	2	
Ag	107	103	1	He	0.012	22.5	131	21.6	0.2	
Cd	111	103	1	He	0.108	25.3	1158	5.1	0.2	
Sn	118	115	1	He	0.308	10.8	2308	6.5	10	
Sb	123	115	1	He	0.375	17.7	2111	13.4	1	
Ba	137	115	1	He	0.389	12.5	898	11.5	5	
W	182	209	1	He	1.160	10.8	18014	8.1	10	
Tl	205	165	1	He	0.059	24.2	1863	22.7	0.5	
Pb	208	209	1	He	0.097	10.9	4947	8.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1050978	0.35	1631381	64.42	30	120	
Sc	45	1	He	570298	0.85	829696	68.74	30	120	
Sc	45	2	NoGas	4637405	0.90	6325638	73.31	30	120	
Rh	103	1	He	1818297	0.91	2345543	77.52	30	120	
In	115	1	He	1113969	0.20	1419467	78.48	30	120	
Tb	159	1	He	3272521	2.23	3888262	84.16	30	120	
Ho	165	1	He	3332090	1.00	3932562	84.73	30	120	
Bi	209	1	He	2496617	0.97	2874805	86.84	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177246/2-a@2
Data File Name	191LCSS.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:10:21-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	507.823	507.823	0.794	1441000	1.31	500	101.6	78.6	110.5	
B	11	2	NoGas	65.947	65.947	1.536	160256	0.78	50	131.9	79.5	120.5	LCSS Failed
Na	23	1	He	5069.575	5069.575	1.831	5665784	0.65	5000	101.4	79.5	120.5	
Mg	24	1	He	5187.100	5187.100	3.687	3286811	1.45	5000	103.7	79.5	120.5	
Al	27	1	He	4849.604	4849.604	2.503	1743521	0.30	5000	97.0	79.5	120.5	
K	39	1	He	5302.715	5302.715	1.002	3188808	2.65	5000	106.1	79.5	120.5	
Ca	44	1	He	4668.673	4668.673	1.183	153487	1.05	5000	93.4	79.5	120.5	
Ti	47	1	He	52.716	52.716	2.810	9743	4.99	50	105.4	79.5	120.5	
V	51	1	He	511.972	511.972	1.690	2336371	1.68	500	102.4	71.5	110.5	
Cr	52	1	He	524.976	524.976	1.160	2880974	1.30	500	105.0	69.5	110.5	
Mn	55	1	He	531.780	531.780	1.393	2293052	2.23	500	106.4	79.5	120.5	
Fe	56	1	He	5277.366	5277.366	1.863	27292653	0.93	5000	105.5	79.5	120.5	
Co	59	1	He	443.280	443.280	0.302	4042280	0.75	500	88.7	73.9	110.5	
Ni	60	1	He	429.006	429.006	0.802	970067	0.71	500	85.8	74.9	110.5	
Cu	63	1	He	455.602	455.602	1.929	2710190	1.26	500	91.1	72.6	110.5	
Zn	66	1	He	418.764	418.764	0.475	504362	1.22	500	83.8	71.5	113.4	
As	75	1	He	411.265	411.265	0.291	318370	0.74	500	82.3	73.4	110.5	
Se	78	1	He	406.386	406.386	0.584	33271	1.00	500	81.3	64.6	110.5	
Sr	88	1	He	492.396	492.396	1.201	3095778	1.36	500	98.5	79.5	120.5	
Mo	95	1	He	53.216	53.216	0.334	152073	1.17	50	106.4	29.5	140.5	
Ag	107	1	He	50.091	50.091	0.185	491587	0.93	50	100.2	59.5	114.5	
Cd	111	1	He	472.349	472.349	0.178	807556	0.97	500	94.5	73.5	110.5	
Sn	118	1	He	596.181	596.181	0.900	2439351	0.55	500	119.2	79.5	120.5	
Sb	123	1	He	53.026	53.026	0.745	200761	0.61	50	106.1	67.5	113.4	
Ba	137	1	He	520.087	520.087	0.843	965704	0.69	500	104.0	69.5	110.5	
W	182	1	He	49.874	49.874	0.991	590035	1.32	50	99.7	74.6	125.4	
Tl	205	1	He	124.799	124.799	0.803	3677475	1.21	125	99.8	70.6	110.5	
Pb	208	1	He	487.937	487.937	0.330	19812011	0.24	500	97.6	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	897734	1.34	1631381	55.03	30	120	
Sc	45	1	He	521102	2.22	829696	62.81	30	120	
Sc	45	2	NoGas	4143158	0.70	6325638	65.50	30	120	
Rh	103	1	He	1655646	1.03	2345543	70.59	30	120	
In	115	1	He	980979	0.92	1419467	69.11	30	120	
Tb	159	1	He	3104539	0.38	3888262	79.84	30	120	
Ho	165	1	He	3210759	0.68	3932562	81.65	30	120	
Bi	209	1	He	2306515	0.56	2874805	80.23	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-d@2
Data File Name	192SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:14:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.092	4.092	1.41	13053	0.03	10000	
B	11	45	2	NoGas	21.171	21.171	2.45	65728	0.03	300	
Na	23	45	1	He	306.221	306.221	2.80	403530	0.08	500000	
Mg	24	45	1	He	10009.255	10009.255	2.22	7194234	0.14	500000	
Al	27	45	1	He	63859.069	63859.069	2.52	26014036	0.25	200000	
K	39	45	1	He	3413.069	3413.069	3.05	2336622	0.15	500000	
Ca	44	45	1	He	2030.283	2030.283	2.25	76095	2.67	500000	
Ti	47	45	1	He	607.370	607.370	2.38	127111	0.48	2500	
V	51	45	1	He	145.457	145.457	1.64	752703	0.02	10000	
Cr	52	45	1	He	89.617	89.617	1.97	559133	0.02	10000	
Mn	55	45	1	He	16749.149	16749.149	1.52	81855923	0.02	10000	>LDR
Fe	56	45	1	He	124557.780	124557.780	1.32	730386584	0.02	200000	
Co	59	103	1	He	72.615	72.615	0.55	692540	0.01	10000	
Ni	60	103	1	He	91.717	91.717	1.44	216948	0.04	10000	
Cu	63	103	1	He	62.463	62.463	1.74	389638	0.02	10000	
Zn	66	103	1	He	282.130	282.130	1.75	355759	0.08	10000	
As	75	103	1	He	57.828	57.828	1.55	46915	0.12	10000	
Se	78	103	1	He	6.787	6.787	1.95	619	1.10	10000	
Sr	88	103	1	He	106.066	106.066	0.97	697411	0.02	10000	
Mo	95	103	1	He	13.317	13.317	2.15	39820	0.03	2000	
Ag	107	103	1	He	0.341	0.341	0.28	3502	0.01	300	
Cd	111	103	1	He	1.222	1.222	7.37	3092	0.04	4000	
Sn	118	115	1	He	19.038	19.038	3.36	83813	0.02	2000	
Sb	123	115	1	He	1.151	1.151	5.10	5102	0.02	300	
Ba	137	115	1	He	610.060	610.060	0.47	1207607	0.05	10000	
W	182	209	1	He	1.534	1.534	8.48	21675	0.01	2500	
Tl	205	165	1	He	1.282	1.282	1.67	39639	0.00	5000	
Pb	208	209	1	He	122.313	122.313	0.95	5117474	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1007062	0.90	1631381	61.73	30	120	
Sc	45	1	He	590793	1.12	829696	71.21	30	120	
Sc	45	2	NoGas	4877173	0.51	6325638	77.10	30	120	
Rh	103	1	He	1731548	2.53	2345543	73.82	30	120	
In	115	1	He	1045782	1.64	1419467	73.67	30	120	
Tb	159	1	He	3301949	2.41	3888262	84.92	30	120	
Ho	165	1	He	3363082	1.02	3932562	85.52	30	120	
Bi	209	1	He	2376442	1.16	2874805	82.66	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49233-a-1-d@10
Data File Name	193SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:17:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.969	0.969	6.38	3056	0.03	10000	
B	11	45	2	NoGas	10.833	10.833	0.32	34492	0.03	300	
Na	23	45	1	He	81.750	81.750	0.71	117512	0.07	500000	
Mg	24	45	1	He	2116.285	2116.285	1.83	1492355	0.14	500000	
Al	27	45	1	He	13505.362	13505.362	2.09	5397321	0.25	200000	
K	39	45	1	He	695.733	695.733	1.19	488463	0.14	500000	
Ca	44	45	1	He	416.986	416.986	0.57	15885	2.63	500000	
Ti	47	45	1	He	124.601	124.601	1.77	25581	0.49	2500	
V	51	45	1	He	30.103	30.103	0.60	152863	0.02	10000	
Cr	52	45	1	He	18.183	18.183	1.74	112703	0.02	10000	
Mn	55	45	1	He	3493.861	3493.861	1.34	16748289	0.02	10000	
Fe	56	45	1	He	25655.212	25655.212	1.25	147556047	0.02	200000	
Co	59	103	1	He	14.600	14.600	1.54	142844	0.01	10000	
Ni	60	103	1	He	18.315	18.315	1.93	44517	0.04	10000	
Cu	63	103	1	He	12.619	12.619	0.95	81800	0.02	10000	
Zn	66	103	1	He	61.361	61.361	1.08	80554	0.08	10000	
As	75	103	1	He	12.117	12.117	2.03	10181	0.12	10000	
Se	78	103	1	He	1.505	1.505	14.02	171	0.88	10000	
Sr	88	103	1	He	21.270	21.270	1.03	143543	0.01	10000	
Mo	95	103	1	He	2.553	2.553	2.83	7867	0.03	2000	
Ag	107	103	1	He	0.066	0.066	5.18	701	0.01	300	
Cd	111	103	1	He	0.305	0.305	14.09	1493	0.02	4000	
Sn	118	115	1	He	3.683	3.683	2.22	17513	0.02	2000	
Sb	123	115	1	He	0.167	0.167	6.70	1187	0.01	300	
Ba	137	115	1	He	120.036	120.036	1.78	246505	0.05	10000	
W	182	209	1	He	0.320	0.320	4.00	7176	0.00	2500	
Tl	205	165	1	He	0.260	0.260	2.62	8027	0.00	5000	
Pb	208	209	1	He	23.357	23.357	1.86	1007969	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	989089	1.86	1631381	60.63	30	120	
Sc	45	1	He	579511	1.61	829696	69.85	30	120	
Sc	45	2	NoGas	4503941	0.44	6325638	71.20	30	120	
Rh	103	1	He	1776163	1.37	2345543	75.73	30	120	
In	115	1	He	1084737	0.82	1419467	76.42	30	120	
Tb	159	1	He	3264580	0.52	3888262	83.96	30	120	
Ho	165	1	He	3344787	0.50	3932562	85.05	30	120	
Bi	209	1	He	2450129	1.27	2874805	85.23	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49233-a-1-d@2
Data File Name	194SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:21:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1021.402	1021.402	1.90	3059558	0.03	10000	
B	11	45	2	NoGas	113.994	113.994	1.23	298357	0.04	300	
Na	23	45	1	He	9965.074	9965.074	0.79	11932383	0.08	500000	
Mg	24	45	1	He	19330.092	19330.092	0.48	13141579	0.15	500000	
Al	27	45	1	He	71417.507	71417.507	1.09	27523586	0.26	200000	
K	39	45	1	He	13155.871	13155.871	1.31	8446560	0.16	500000	
Ca	44	45	1	He	10806.176	10806.176	0.83	380196	2.84	500000	
Ti	47	45	1	He	672.015	672.015	2.09	133053	0.51	2500	
V	51	45	1	He	1130.158	1130.158	1.08	5532250	0.02	10000	
Cr	52	45	1	He	1066.158	1066.158	1.42	6274363	0.02	10000	
Mn	55	45	1	He	17155.072	17155.072	0.84	79315846	0.02	10000	>LDR
Fe	56	45	1	He	129573.377	129573.377	0.57	718771545	0.02	200000	
Co	59	103	1	He	987.138	987.138	2.08	8906446	0.01	10000	
Ni	60	103	1	He	1017.079	1017.079	0.89	2275945	0.04	10000	
Cu	63	103	1	He	974.219	974.219	1.42	5733897	0.02	10000	
Zn	66	103	1	He	1123.183	1123.183	1.53	1336234	0.08	10000	
As	75	103	1	He	924.483	924.483	1.15	708066	0.13	10000	
Se	78	103	1	He	853.467	853.467	1.14	69105	1.24	10000	
Sr	88	103	1	He	1116.034	1116.034	0.67	6944208	0.02	10000	
Mo	95	103	1	He	121.730	121.730	0.81	344213	0.04	2000	
Ag	107	103	1	He	100.588	100.588	1.76	976744	0.01	300	
Cd	111	103	1	He	1030.133	1030.133	3.11	1741100	0.06	4000	
Sn	118	115	1	He	1180.382	1180.382	1.37	4761271	0.02	2000	
Sb	123	115	1	He	110.449	110.449	0.61	411806	0.03	300	
Ba	137	115	1	He	1837.959	1837.959	0.73	3364873	0.05	10000	
W	182	209	1	He	101.764	101.764	2.04	1195405	0.01	2500	
Tl	205	165	1	He	249.556	249.556	1.57	7420772	0.00	5000	
Pb	208	209	1	He	1109.207	1109.207	0.50	44831288	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	947867	1.85	1631381	58.10	30	120	
Sc	45	1	He	558856	0.87	829696	67.36	30	120	
Sc	45	2	NoGas	4539063	0.91	6325638	71.76	30	120	
Rh	103	1	He	1638751	3.05	2345543	69.87	30	120	
In	115	1	He	967184	1.73	1419467	68.14	30	120	
Tb	159	1	He	3139412	1.52	3888262	80.74	30	120	
Ho	165	1	He	3240671	2.02	3932562	82.41	30	120	
Bi	209	1	He	2295931	0.81	2874805	79.86	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-e du@2
Data File Name	195SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:25:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.164	4.164	0.78	13272	0.03	10000	
B	11	45	2	NoGas	21.708	21.708	0.68	66423	0.03	300	
Na	23	45	1	He	347.076	347.076	0.69	457928	0.08	500000	
Mg	24	45	1	He	10040.724	10040.724	0.62	7259543	0.14	500000	
Al	27	45	1	He	64078.074	64078.074	0.67	26260563	0.24	200000	
K	39	45	1	He	3750.897	3750.897	2.17	2580360	0.15	500000	
Ca	44	45	1	He	1947.409	1947.409	1.18	73451	2.65	500000	
Ti	47	45	1	He	500.811	500.811	0.54	105440	0.47	2500	
V	51	45	1	He	141.426	141.426	0.35	736251	0.02	10000	
Cr	52	45	1	He	86.947	86.947	0.24	545819	0.02	10000	
Mn	55	45	1	He	16974.387	16974.387	0.34	83456028	0.02	10000	>LDR
Fe	56	45	1	He	117088.009	117088.009	1.01	690737039	0.02	200000	
Co	59	103	1	He	79.449	79.449	1.83	768302	0.01	10000	
Ni	60	103	1	He	92.079	92.079	1.74	220872	0.04	10000	
Cu	63	103	1	He	64.427	64.427	1.80	407552	0.02	10000	
Zn	66	103	1	He	295.658	295.658	1.83	378040	0.08	10000	
As	75	103	1	He	55.637	55.637	2.01	45777	0.12	10000	
Se	78	103	1	He	6.647	6.647	3.67	615	1.08	10000	
Sr	88	103	1	He	99.272	99.272	1.63	661945	0.01	10000	
Mo	95	103	1	He	13.308	13.308	3.31	40353	0.03	2000	
Ag	107	103	1	He	0.352	0.352	4.78	3666	0.01	300	
Cd	111	103	1	He	1.221	1.221	1.94	3134	0.04	4000	
Sn	118	115	1	He	19.006	19.006	2.38	84830	0.02	2000	
Sb	123	115	1	He	1.129	1.129	1.09	5084	0.02	300	
Ba	137	115	1	He	609.535	609.535	0.40	1222809	0.05	10000	
W	182	209	1	He	1.873	1.873	10.00	25669	0.01	2500	
Tl	205	165	1	He	1.401	1.401	4.94	43570	0.00	5000	
Pb	208	209	1	He	122.327	122.327	1.22	5091805	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1006449	0.95	1631381	61.69	30	120	
Sc	45	1	He	594319	0.36	829696	71.63	30	120	
Sc	45	2	NoGas	4820287	1.10	6325638	76.20	30	120	
Rh	103	1	He	1756057	1.89	2345543	74.87	30	120	
In	115	1	He	1059845	0.17	1419467	74.67	30	120	
Tb	159	1	He	3311977	0.77	3888262	85.18	30	120	
Ho	165	1	He	3386130	1.69	3932562	86.10	30	120	
Bi	209	1	He	2364445	1.08	2874805	82.25	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-f ms@2
Data File Name	196SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:28:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	50.412	50.412	2.04	154524	0.03	10000	
B	11	45	2	NoGas	49.449	49.449	2.17	135275	0.04	300	
Na	23	45	1	He	4935.512	4935.512	2.03	5842059	0.08	500000	
Mg	24	45	1	He	15555.351	15555.351	0.23	10440276	0.15	500000	
Al	27	45	1	He	77904.449	77904.449	0.42	29638432	0.26	200000	
K	39	45	1	He	8453.436	8453.436	2.08	5366788	0.16	500000	
Ca	44	45	1	He	6713.534	6713.534	1.01	233434	2.88	500000	
Ti	47	45	1	He	583.374	583.374	1.33	114019	0.51	2500	
V	51	45	1	He	199.813	199.813	1.54	965659	0.02	10000	
Cr	52	45	1	He	141.724	141.724	1.99	824854	0.02	10000	
Mn	55	45	1	He	13955.936	13955.936	2.06	63701353	0.02	10000	>LDR
Fe	56	45	1	He	125523.844	125523.844	2.02	687435119	0.02	200000	
Co	59	103	1	He	110.473	110.473	1.88	986554	0.01	10000	
Ni	60	103	1	He	141.092	141.092	2.00	312482	0.05	10000	
Cu	63	103	1	He	107.105	107.105	1.86	624886	0.02	10000	
Zn	66	103	1	He	366.304	366.304	2.02	432183	0.08	10000	
As	75	103	1	He	97.894	97.894	1.74	74302	0.13	10000	
Se	78	103	1	He	44.275	44.275	2.45	3581	1.24	10000	
Sr	88	103	1	He	135.558	135.558	1.83	834679	0.02	10000	
Mo	95	103	1	He	59.555	59.555	0.78	166699	0.04	2000	
Ag	107	103	1	He	46.798	46.798	2.76	449668	0.01	300	
Cd	111	103	1	He	47.070	47.070	2.40	79562	0.06	4000	
Sn	118	115	1	He	59.047	59.047	0.87	243721	0.02	2000	
Sb	123	115	1	He	15.188	15.188	0.18	58158	0.03	300	
Ba	137	115	1	He	654.652	654.652	0.73	1222618	0.05	10000	
W	182	209	1	He	32.838	32.838	1.69	382809	0.01	2500	
Tl	205	165	1	He	43.484	43.484	0.49	1295118	0.00	5000	
Pb	208	209	1	He	167.522	167.522	1.42	6685244	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	969636	0.87	1631381	59.44	30	120	
Sc	45	1	He	551728	0.39	829696	66.50	30	120	
Sc	45	2	NoGas	4602360	1.39	6325638	72.76	30	120	
Rh	103	1	He	1621972	3.34	2345543	69.15	30	120	
In	115	1	He	986700	1.53	1419467	69.51	30	120	
Tb	159	1	He	3157656	0.70	3888262	81.21	30	120	
Ho	165	1	He	3245318	0.87	3932562	82.52	30	120	
Bi	209	1	He	2267135	1.82	2874805	78.86	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-2-b@2
Data File Name	197SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:32:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.594	3.594	4.96	10314	0.03	10000	
B	11	45	2	NoGas	19.634	19.634	1.22	54391	0.04	300	
Na	23	45	1	He	204.243	204.243	2.07	242451	0.08	500000	
Mg	24	45	1	He	10646.640	10646.640	1.97	6754781	0.16	500000	
Al	27	45	1	He	58237.105	58237.105	1.63	20944498	0.28	200000	
K	39	45	1	He	3777.822	3777.822	2.08	2280640	0.17	500000	
Ca	44	45	1	He	7733.072	7733.072	1.08	254081	3.04	500000	
Ti	47	45	1	He	476.905	476.905	1.75	88108	0.54	2500	
V	51	45	1	He	125.706	125.706	1.86	574266	0.02	10000	
Cr	52	45	1	He	89.345	89.345	2.84	492114	0.02	10000	
Mn	55	45	1	He	10070.230	10070.230	1.82	43448203	0.02	10000	>LDR
Fe	56	45	1	He	113681.266	113681.266	1.61	588489452	0.02	200000	
Co	59	103	1	He	51.137	51.137	2.29	424521	0.01	10000	
Ni	60	103	1	He	91.724	91.724	2.74	188850	0.05	10000	
Cu	63	103	1	He	53.629	53.629	3.94	291276	0.02	10000	
Zn	66	103	1	He	333.242	333.242	3.02	365540	0.09	10000	
As	75	103	1	He	48.633	48.633	2.97	34358	0.14	10000	
Se	78	103	1	He	5.276	5.276	4.49	426	1.24	10000	
Sr	88	103	1	He	44.952	44.952	2.66	257317	0.02	10000	
Mo	95	103	1	He	9.150	9.150	2.70	23833	0.04	2000	
Ag	107	103	1	He	0.616	0.616	1.87	5509	0.01	300	
Cd	111	103	1	He	1.418	1.418	5.91	2994	0.05	4000	
Sn	118	115	1	He	18.544	18.544	0.96	74348	0.02	2000	
Sb	123	115	1	He	0.944	0.944	0.89	3888	0.02	300	
Ba	137	115	1	He	512.058	512.058	1.06	922547	0.06	10000	
W	182	209	1	He	1.624	1.624	8.79	21345	0.01	2500	
Tl	205	165	1	He	1.117	1.117	1.69	32090	0.00	5000	
Pb	208	209	1	He	120.737	120.737	0.27	4733953	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	905793	1.30	1631381	55.52	30	120	
Sc	45	1	He	521587	1.02	829696	62.86	30	120	
Sc	45	2	NoGas	4312427	1.40	6325638	68.17	30	120	
Rh	103	1	He	1507966	3.76	2345543	64.29	30	120	
In	115	1	He	951868	1.14	1419467	67.06	30	120	
Tb	159	1	He	3039131	0.92	3888262	78.16	30	120	
Ho	165	1	He	3124046	1.84	3932562	79.44	30	120	
Bi	209	1	He	2227026	0.26	2874805	77.47	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-9-b@2
Data File Name	198SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:36:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2.791	2.791	2.51	8050	0.03	10000	
B	11	45	2	NoGas	18.046	18.046	1.21	50373	0.04	300	
Na	23	45	1	He	140.874	140.874	3.62	165851	0.08	500000	
Mg	24	45	1	He	9712.533	9712.533	3.71	5950387	0.16	500000	
Al	27	45	1	He	58037.207	58037.207	2.29	20159738	0.29	200000	
K	39	45	1	He	2822.682	2822.682	3.28	1651322	0.17	500000	
Ca	44	45	1	He	939.552	939.552	2.80	30348	3.10	500000	
Ti	47	45	1	He	403.878	403.878	2.21	72075	0.56	2500	
V	51	45	1	He	109.278	109.278	2.23	482221	0.02	10000	
Cr	52	45	1	He	80.685	80.685	2.18	429434	0.02	10000	
Mn	55	45	1	He	2286.156	2286.156	3.69	9525203	0.02	10000	
Fe	56	45	1	He	111044.473	111044.473	3.21	555133009	0.02	200000	
Co	59	103	1	He	53.020	53.020	4.87	432166	0.01	10000	
Ni	60	103	1	He	76.831	76.831	4.89	155348	0.05	10000	
Cu	63	103	1	He	52.790	52.790	4.49	281723	0.02	10000	
Zn	66	103	1	He	246.772	246.772	5.13	266132	0.09	10000	
As	75	103	1	He	44.507	44.507	5.11	30884	0.14	10000	
Se	78	103	1	He	4.598	4.598	5.32	370	1.24	10000	
Sr	88	103	1	He	14.259	14.259	4.69	80208	0.02	10000	
Mo	95	103	1	He	7.323	7.323	5.41	18736	0.04	2000	
Ag	107	103	1	He	0.216	0.216	14.06	1893	0.01	300	
Cd	111	103	1	He	0.723	0.723	6.18	1885	0.04	4000	
Sn	118	115	1	He	17.774	17.774	6.25	69815	0.03	2000	
Sb	123	115	1	He	0.657	0.657	3.05	2782	0.02	300	
Ba	137	115	1	He	298.891	298.891	3.70	527687	0.06	10000	
W	182	209	1	He	0.638	0.638	4.35	10148	0.01	2500	
Tl	205	165	1	He	0.789	0.789	3.77	22265	0.00	5000	
Pb	208	209	1	He	82.225	82.225	3.15	3226059	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	909767	1.50	1631381	55.77	30	120	
Sc	45	1	He	503984	3.28	829696	60.74	30	120	
Sc	45	2	NoGas	4298433	0.55	6325638	67.95	30	120	
Rh	103	1	He	1482590	5.84	2345543	63.21	30	120	
In	115	1	He	933743	4.77	1419467	65.78	30	120	
Tb	159	1	He	2990955	4.39	3888262	76.92	30	120	
Ho	165	1	He	3069556	4.81	3932562	78.05	30	120	
Bi	209	1	He	2229840	3.25	2874805	77.56	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-10-b@2
Data File Name	199SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:40:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.521	3.521	1.04	10559	0.03	10000	
B	11	45	2	NoGas	17.469	17.469	0.61	51212	0.03	300	
Na	23	45	1	He	173.712	173.712	1.41	217662	0.08	500000	
Mg	24	45	1	He	10078.988	10078.988	1.00	6679505	0.15	500000	
Al	27	45	1	He	62600.269	62600.269	1.72	23516192	0.27	200000	
K	39	45	1	He	3923.805	3923.805	0.96	2473390	0.16	500000	
Ca	44	45	1	He	787.208	787.208	2.68	27609	2.85	500000	
Ti	47	45	1	He	396.276	396.276	1.44	76480	0.52	2500	
V	51	45	1	He	139.294	139.294	1.96	664685	0.02	10000	
Cr	52	45	1	He	86.630	86.630	1.21	498511	0.02	10000	
Mn	55	45	1	He	7316.733	7316.733	1.88	32976642	0.02	10000	
Fe	56	45	1	He	125944.687	125944.687	1.55	681051884	0.02	200000	
Co	59	103	1	He	59.851	59.851	1.10	540074	0.01	10000	
Ni	60	103	1	He	75.187	75.187	1.05	168297	0.04	10000	
Cu	63	103	1	He	43.223	43.223	0.89	255498	0.02	10000	
Zn	66	103	1	He	250.680	250.680	0.60	299276	0.08	10000	
As	75	103	1	He	51.554	51.554	0.27	39590	0.13	10000	
Se	78	103	1	He	4.752	4.752	5.53	421	1.13	10000	
Sr	88	103	1	He	40.217	40.217	0.29	250264	0.02	10000	
Mo	95	103	1	He	7.663	7.663	2.80	21707	0.04	2000	
Ag	107	103	1	He	0.261	0.261	4.00	2534	0.01	300	
Cd	111	103	1	He	0.860	0.860	12.91	2312	0.04	4000	
Sn	118	115	1	He	17.398	17.398	2.38	72585	0.02	2000	
Sb	123	115	1	He	0.721	0.721	2.70	3195	0.02	300	
Ba	137	115	1	He	418.964	418.964	0.34	784787	0.05	10000	
W	182	209	1	He	0.462	0.462	9.50	8388	0.01	2500	
Tl	205	165	1	He	0.944	0.944	2.50	27723	0.00	5000	
Pb	208	209	1	He	101.402	101.402	0.77	4098383	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	946485	1.79	1631381	58.02	30	120	
Sc	45	1	He	544795	1.14	829696	65.66	30	120	
Sc	45	2	NoGas	4494962	0.65	6325638	71.06	30	120	
Rh	103	1	He	1638191	1.24	2345543	69.84	30	120	
In	115	1	He	989580	1.27	1419467	69.71	30	120	
Tb	159	1	He	3127842	1.27	3888262	80.44	30	120	
Ho	165	1	He	3194729	2.29	3932562	81.24	30	120	
Bi	209	1	He	2295687	0.65	2874805	79.86	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-11-b@2
Data File Name	200SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:44:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	4.282	4.282	4.49	12523	0.03	10000	
B	11	45	2	NoGas	15.252	15.252	1.02	44525	0.03	300	
Na	23	45	1	He	158.236	158.236	2.06	197316	0.08	500000	
Mg	24	45	1	He	10308.687	10308.687	1.59	6752817	0.15	500000	
Al	27	45	1	He	67316.574	67316.574	2.07	24995516	0.27	200000	
K	39	45	1	He	3490.980	3490.980	0.93	2177784	0.16	500000	
Ca	44	45	1	He	901.450	901.450	0.89	31156	2.89	500000	
Ti	47	45	1	He	479.366	479.366	2.80	91442	0.52	2500	
V	51	45	1	He	149.178	149.178	2.21	703652	0.02	10000	
Cr	52	45	1	He	93.196	93.196	1.69	529957	0.02	10000	
Mn	55	45	1	He	6565.910	6565.910	1.34	29249223	0.02	10000	
Fe	56	45	1	He	129641.119	129641.119	0.96	692924524	0.02	200000	
Co	59	103	1	He	64.565	64.565	1.61	570771	0.01	10000	
Ni	60	103	1	He	87.291	87.291	2.00	191396	0.05	10000	
Cu	63	103	1	He	54.068	54.068	1.81	312838	0.02	10000	
Zn	66	103	1	He	267.231	267.231	1.84	312459	0.09	10000	
As	75	103	1	He	52.747	52.747	1.49	39682	0.13	10000	
Se	78	103	1	He	5.534	5.534	5.24	474	1.17	10000	
Sr	88	103	1	He	20.498	20.498	2.73	124977	0.02	10000	
Mo	95	103	1	He	9.112	9.112	1.80	25274	0.04	2000	
Ag	107	103	1	He	0.238	0.238	2.37	2264	0.01	300	
Cd	111	103	1	He	0.867	0.867	12.55	2275	0.04	4000	
Sn	118	115	1	He	17.702	17.702	1.49	72781	0.02	2000	
Sb	123	115	1	He	0.762	0.762	5.17	3301	0.02	300	
Ba	137	115	1	He	502.128	502.128	0.36	927361	0.05	10000	
W	182	209	1	He	0.489	0.489	6.46	8595	0.01	2500	
Tl	205	165	1	He	0.991	0.991	1.85	29132	0.00	5000	
Pb	208	209	1	He	108.956	108.956	1.06	4348457	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	923798	1.63	1631381	56.63	30	120	
Sc	45	1	He	538496	0.72	829696	64.90	30	120	
Sc	45	2	NoGas	4388757	0.59	6325638	69.38	30	120	
Rh	103	1	He	1605252	2.35	2345543	68.44	30	120	
In	115	1	He	975664	0.91	1419467	68.73	30	120	
Tb	159	1	He	3099093	0.60	3888262	79.70	30	120	
Ho	165	1	He	3195990	0.49	3932562	81.27	30	120	
Bi	209	1	He	2267006	1.61	2874805	78.86	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	201_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:47:51-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.261	1.739	137564	1.63	50	100.5	89.5	110.5	
B	11	45	2	NoGas	52.506	1.226	122083	0.76	50	105.0	89.5	110.5	
Na	23	45	1	He	25032.346	1.978	26535604	0.62	25000	100.1	89.5	110.5	
Mg	24	45	1	He	25160.069	1.895	15154873	0.66	25000	100.6	89.5	110.5	
Al	27	45	1	He	249.774	2.335	86855	1.24	250	99.9	89.5	110.5	
K	39	45	1	He	25868.069	1.448	14692739	0.04	25000	103.5	89.5	110.5	
Ca	44	45	1	He	25459.898	1.474	792855	0.71	25000	101.8	89.5	110.5	
Ti	47	45	1	He	51.368	4.359	9016	3.15	50	102.7	89.5	110.5	
V	51	45	1	He	50.749	1.438	220162	0.54	50	101.5	89.5	110.5	
Cr	52	45	1	He	51.353	1.366	269224	0.44	50	102.7	89.5	110.5	
Mn	55	45	1	He	259.050	1.366	1061910	0.33	250	103.6	89.5	110.5	
Fe	56	45	1	He	13215.505	1.347	64957997	0.14	12500	105.7	89.5	110.5	
Co	59	103	1	He	47.065	0.836	376744	0.29	50	94.1	89.5	110.5	
Ni	60	103	1	He	46.464	0.852	92293	0.45	50	92.9	89.5	110.5	
Cu	63	103	1	He	46.806	1.259	245361	0.60	50	93.6	89.5	110.5	
Zn	66	103	1	He	47.401	0.619	51194	0.32	50	94.8	89.5	110.5	
As	75	103	1	He	49.104	0.456	33455	0.33	50	98.2	89.5	110.5	
Se	78	103	1	He	49.092	0.608	3556	0.27	50	98.2	89.5	110.5	
Sr	88	103	1	He	51.591	0.664	284774	0.44	50	103.2	89.5	110.5	
Mo	95	103	1	He	52.802	1.511	132450	1.99	50	105.6	89.5	110.5	
Ag	107	103	1	He	52.304	1.108	450544	0.41	50	104.6	89.5	110.5	
Cd	111	103	1	He	53.552	0.866	81037	0.42	50	107.1	89.5	110.5	
Sn	118	115	1	He	50.616	0.310	201264	0.61	50	101.2	89.5	110.5	
Sb	123	115	1	He	53.388	0.492	195764	0.81	50	106.8	89.5	110.5	
Ba	137	115	1	He	53.091	0.587	95536	0.91	50	106.2	89.5	110.5	
W	182	209	1	He	48.506	2.000	546279	1.36	50	97.0	89.5	110.5	
Tl	205	165	1	He	48.378	1.908	1353517	0.40	50	96.8	89.5	110.5	
Pb	208	209	1	He	47.888	1.934	1851250	0.33	50	95.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	865762	0.20	1631381	53.07	30	120	
Sc	45	1	He	495242	1.44	829696	59.69	30	120	
Sc	45	2	NoGas	3923689	0.84	6325638	62.03	30	120	
Rh	103	1	He	1453258	0.70	2345543	61.96	30	120	
In	115	1	He	950044	0.37	1419467	66.93	30	120	
Tb	159	1	He	3016728	2.20	3888262	77.59	30	120	
Ho	165	1	He	3049089	1.55	3932562	77.53	30	120	
Bi	209	1	He	2195818	1.85	2874805	76.38	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	202_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:51:43-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.088	25.7	267	26.0	1	
B	11	45	2	NoGas	7.683	1.6	23404	1.7	20	
Na	23	45	1	He	26.036	9.2	40943	4.2	400	
Mg	24	45	1	He	2.435	40.5	2030	27.2	1000	
Al	27	45	1	He	2.927	28.2	2550	9.2	50	
K	39	45	1	He	11.899	26.4	29280	4.2	1000	
Ca	44	45	1	He	3.137	36.2	689	5.4	1000	
Ti	47	45	1	He	0.147	27.7	33	20.0	20	
V	51	45	1	He	0.137	53.3	651	48.1	2	
Cr	52	45	1	He	0.001	1171.2	1526	3.8	2	
Mn	55	45	1	He	0.494	7.8	2729	3.9	2	
Fe	56	45	1	He	33.546	18.6	165589	16.3	50	
Co	59	103	1	He	0.008	66.6	102	46.3	1	
Ni	60	103	1	He	-0.009	-115.2	69	34.3	2	
Cu	63	103	1	He	-0.020	-39.4	1081	4.6	2	
Zn	66	103	1	He	-0.043	-163.4	1332	6.7	20	
As	75	103	1	He	0.050	59.0	153	15.3	2	
Se	78	103	1	He	0.159	35.4	49	8.8	2	
Sr	88	103	1	He	0.008	38.3	134	16.1	10	
Mo	95	103	1	He	0.873	17.8	2525	19.2	2	
Ag	107	103	1	He	0.007	15.6	73	15.7	0.2	
Cd	111	103	1	He	0.066	36.3	975	4.8	0.2	
Sn	118	115	1	He	0.328	22.9	2156	14.4	10	
Sb	123	115	1	He	0.375	20.6	1898	15.4	1	
Ba	137	115	1	He	0.032	55.9	131	25.6	5	
W	182	209	1	He	1.124	15.8	16090	13.2	10	
Tl	205	165	1	He	0.061	16.9	1779	15.7	0.5	
Pb	208	209	1	He	0.076	5.3	3714	4.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	865944	2.64	1631381	53.08	30	120	
Sc	45	1	He	490312	1.96	829696	59.10	30	120	
Sc	45	2	NoGas	3976787	0.55	6325638	62.87	30	120	
Rh	103	1	He	1643809	1.73	2345543	70.08	30	120	
In	115	1	He	1001445	0.33	1419467	70.55	30	120	
Tb	159	1	He	2984429	1.34	3888262	76.75	30	120	
Ho	165	1	He	3093888	1.07	3932562	78.67	30	120	
Bi	209	1	He	2286541	0.88	2874805	79.54	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-12-b@2
Data File Name	203SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:55:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.926	3.926	5.70	10959	0.04	10000	
B	11	45	2	NoGas	14.540	14.540	0.61	41581	0.03	300	
Na	23	45	1	He	145.399	145.399	3.75	185017	0.08	500000	
Mg	24	45	1	He	9770.990	9770.990	3.73	6487659	0.15	500000	
Al	27	45	1	He	55919.580	55919.580	3.18	21047567	0.27	200000	
K	39	45	1	He	3438.654	3438.654	2.99	2174836	0.16	500000	
Ca	44	45	1	He	1439.874	1439.874	1.86	50058	2.88	500000	
Ti	47	45	1	He	479.717	479.717	3.52	92753	0.52	2500	
V	51	45	1	He	113.699	113.699	2.60	543675	0.02	10000	
Cr	52	45	1	He	79.148	79.148	2.68	456503	0.02	10000	
Mn	55	45	1	He	5269.344	5269.344	2.07	23798202	0.02	10000	
Fe	56	45	1	He	105905.316	105905.316	3.06	573787906	0.02	200000	
Co	59	103	1	He	57.631	57.631	0.33	507741	0.01	10000	
Ni	60	103	1	He	90.533	90.533	1.64	197835	0.05	10000	
Cu	63	103	1	He	53.407	53.407	1.61	307953	0.02	10000	
Zn	66	103	1	He	232.732	232.732	0.74	271376	0.09	10000	
As	75	103	1	He	44.162	44.162	1.11	33125	0.13	10000	
Se	78	103	1	He	5.135	5.135	4.80	441	1.16	10000	
Sr	88	103	1	He	19.482	19.482	0.62	118405	0.02	10000	
Mo	95	103	1	He	7.745	7.745	0.49	21418	0.04	2000	
Ag	107	103	1	He	0.200	0.200	5.20	1900	0.01	300	
Cd	111	103	1	He	1.060	1.060	5.90	2589	0.04	4000	
Sn	118	115	1	He	17.188	17.188	0.97	70308	0.02	2000	
Sb	123	115	1	He	0.881	0.881	1.43	3730	0.02	300	
Ba	137	115	1	He	469.180	469.180	0.39	861784	0.05	10000	
W	182	209	1	He	0.816	0.816	6.60	12513	0.01	2500	
Tl	205	165	1	He	0.924	0.924	1.93	26982	0.00	5000	
Pb	208	209	1	He	93.272	93.272	1.48	3760745	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	881233	0.83	1631381	54.02	30	120	
Sc	45	1	He	546090	2.28	829696	65.82	30	120	
Sc	45	2	NoGas	4267111	0.52	6325638	67.46	30	120	
Rh	103	1	He	1599444	0.66	2345543	68.19	30	120	
In	115	1	He	970366	0.33	1419467	68.36	30	120	
Tb	159	1	He	3100195	0.64	3888262	79.73	30	120	
Ho	165	1	He	3175869	0.95	3932562	80.76	30	120	
Bi	209	1	He	2290358	1.36	2874805	79.67	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-13-b@2
Data File Name	204SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T22:59:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.666	3.666	1.11	10566	0.03	10000	
B	11	45	2	NoGas	13.812	13.812	3.53	40653	0.03	300	
Na	23	45	1	He	132.402	132.402	1.94	169848	0.08	500000	
Mg	24	45	1	He	8201.977	8201.977	1.11	5446347	0.15	500000	
Al	27	45	1	He	54896.378	54896.378	1.35	20662509	0.27	200000	
K	39	45	1	He	3012.360	3012.360	2.66	1908038	0.16	500000	
Ca	44	45	1	He	862.327	862.327	4.47	30230	2.85	500000	
Ti	47	45	1	He	442.061	442.061	1.90	85471	0.52	2500	
V	51	45	1	He	121.982	121.982	1.85	583192	0.02	10000	
Cr	52	45	1	He	84.373	84.373	0.91	486494	0.02	10000	
Mn	55	45	1	He	6358.044	6358.044	2.06	28707628	0.02	10000	
Fe	56	45	1	He	105857.576	105857.576	1.02	573522608	0.02	200000	
Co	59	103	1	He	61.683	61.683	1.41	554638	0.01	10000	
Ni	60	103	1	He	72.922	72.922	2.16	162646	0.04	10000	
Cu	63	103	1	He	43.892	43.892	0.82	258555	0.02	10000	
Zn	66	103	1	He	214.391	214.391	1.36	255261	0.08	10000	
As	75	103	1	He	43.039	43.039	0.71	32955	0.13	10000	
Se	78	103	1	He	4.783	4.783	3.76	422	1.13	10000	
Sr	88	103	1	He	17.214	17.214	0.68	106801	0.02	10000	
Mo	95	103	1	He	7.662	7.662	1.89	21631	0.04	2000	
Ag	107	103	1	He	0.186	0.186	6.60	1809	0.01	300	
Cd	111	103	1	He	0.854	0.854	12.89	2294	0.04	4000	
Sn	118	115	1	He	18.723	18.723	1.35	77953	0.02	2000	
Sb	123	115	1	He	0.661	0.661	2.89	2963	0.02	300	
Ba	137	115	1	He	438.678	438.678	0.75	820845	0.05	10000	
W	182	209	1	He	0.512	0.512	2.64	8851	0.01	2500	
Tl	205	165	1	He	0.853	0.853	1.90	24986	0.00	5000	
Pb	208	209	1	He	94.096	94.096	0.73	3749201	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	909634	0.13	1631381	55.76	30	120	
Sc	45	1	He	545873	1.20	829696	65.79	30	120	
Sc	45	2	NoGas	4355000	0.41	6325638	68.85	30	120	
Rh	103	1	He	1632649	1.52	2345543	69.61	30	120	
In	115	1	He	988569	1.07	1419467	69.64	30	120	
Tb	159	1	He	3112999	0.40	3888262	80.06	30	120	
Ho	165	1	He	3184094	1.03	3932562	80.97	30	120	
Bi	209	1	He	2263170	1.26	2874805	78.72	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-15-b@2
Data File Name	205SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:03:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.716	3.716	1.73	10048	0.04	10000	
B	11	45	2	NoGas	18.622	18.622	1.57	49853	0.04	300	
Na	23	45	1	He	224.476	224.476	1.42	262615	0.09	500000	
Mg	24	45	1	He	11795.239	11795.239	1.17	7415343	0.16	500000	
Al	27	45	1	He	55784.290	55784.290	1.88	19878121	0.28	200000	
K	39	45	1	He	4033.203	4033.203	2.10	2410819	0.17	500000	
Ca	44	45	1	He	12654.008	12654.008	1.43	411562	3.07	500000	
Ti	47	45	1	He	484.339	484.339	1.69	88664	0.55	2500	
V	51	45	1	He	123.372	123.372	1.43	558494	0.02	10000	
Cr	52	45	1	He	102.111	102.111	1.42	557085	0.02	10000	
Mn	55	45	1	He	4938.523	4938.523	1.41	21113205	0.02	10000	
Fe	56	45	1	He	131729.360	131729.360	0.78	675723689	0.02	200000	
Co	59	103	1	He	49.555	49.555	1.87	400880	0.01	10000	
Ni	60	103	1	He	103.198	103.198	2.56	207035	0.05	10000	
Cu	63	103	1	He	67.562	67.562	1.74	357445	0.02	10000	
Zn	66	103	1	He	266.341	266.341	1.56	284990	0.09	10000	
As	75	103	1	He	89.754	89.754	2.04	61709	0.15	10000	
Se	78	103	1	He	5.187	5.187	5.97	409	1.27	10000	
Sr	88	103	1	He	70.219	70.219	1.56	391673	0.02	10000	
Mo	95	103	1	He	30.069	30.069	2.50	76229	0.04	2000	
Ag	107	103	1	He	0.202	0.202	5.06	1761	0.01	300	
Cd	111	103	1	He	1.263	1.263	1.68	2684	0.05	4000	
Sn	118	115	1	He	17.590	17.590	2.01	69575	0.03	2000	
Sb	123	115	1	He	0.846	0.846	2.85	3479	0.02	300	
Ba	137	115	1	He	488.729	488.729	0.89	868210	0.06	10000	
W	182	209	1	He	3.222	3.222	2.07	39297	0.01	2500	
Tl	205	165	1	He	0.859	0.859	1.64	24339	0.00	5000	
Pb	208	209	1	He	97.097	97.097	0.33	3786290	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	853478	0.67	1631381	52.32	30	120	
Sc	45	1	He	516816	0.98	829696	62.29	30	120	
Sc	45	2	NoGas	4139937	0.73	6325638	65.45	30	120	
Rh	103	1	He	1468826	1.52	2345543	62.62	30	120	
In	115	1	He	938538	0.94	1419467	66.12	30	120	
Tb	159	1	He	3015181	1.18	3888262	77.55	30	120	
Ho	165	1	He	3081207	1.33	3932562	78.35	30	120	
Bi	209	1	He	2214846	1.46	2874805	77.04	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-16-b@2
Data File Name	206SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:06:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.593	3.593	6.11	9481	0.04	10000	
B	11	45	2	NoGas	17.155	17.155	2.68	45360	0.04	300	
Na	23	45	1	He	178.879	178.879	1.35	205773	0.09	500000	
Mg	24	45	1	He	9614.646	9614.646	3.80	5860597	0.16	500000	
Al	27	45	1	He	52352.109	52352.109	1.12	18091816	0.29	200000	
K	39	45	1	He	3313.207	3313.207	1.60	1924733	0.17	500000	
Ca	44	45	1	He	8956.573	8956.573	1.03	282668	3.17	500000	
Ti	47	45	1	He	455.867	455.867	1.92	80925	0.56	2500	
V	51	45	1	He	121.226	121.226	1.55	532145	0.02	10000	
Cr	52	45	1	He	91.788	91.788	1.20	485770	0.02	10000	
Mn	55	45	1	He	8490.322	8490.322	1.51	35198353	0.02	10000	
Fe	56	45	1	He	123736.131	123736.131	1.36	615493024	0.02	200000	
Co	59	103	1	He	66.354	66.354	4.42	547309	0.01	10000	
Ni	60	103	1	He	82.580	82.580	5.00	168931	0.05	10000	
Cu	63	103	1	He	92.004	92.004	4.48	495922	0.02	10000	
Zn	66	103	1	He	350.274	350.274	4.94	381713	0.09	10000	
As	75	103	1	He	54.760	54.760	4.80	38427	0.14	10000	
Se	78	103	1	He	5.397	5.397	1.37	433	1.25	10000	
Sr	88	103	1	He	42.264	42.264	4.40	240407	0.02	10000	
Mo	95	103	1	He	12.192	12.192	5.47	31531	0.04	2000	
Ag	107	103	1	He	0.607	0.607	3.37	5394	0.01	300	
Cd	111	103	1	He	1.866	1.866	7.85	3667	0.05	4000	
Sn	118	115	1	He	18.655	18.655	1.71	72763	0.03	2000	
Sb	123	115	1	He	0.953	0.953	7.10	3815	0.02	300	
Ba	137	115	1	He	465.874	465.874	0.27	816655	0.06	10000	
W	182	209	1	He	0.727	0.727	5.38	10871	0.01	2500	
Tl	205	165	1	He	0.907	0.907	1.57	25655	0.00	5000	
Pb	208	209	1	He	134.712	134.712	0.55	5147853	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	832514	0.73	1631381	51.03	30	120	
Sc	45	1	He	501171	0.96	829696	60.40	30	120	
Sc	45	2	NoGas	4044417	0.77	6325638	63.94	30	120	
Rh	103	1	He	1499577	4.80	2345543	63.93	30	120	
In	115	1	He	926071	0.40	1419467	65.24	30	120	
Tb	159	1	He	3001058	1.17	3888262	77.18	30	120	
Ho	165	1	He	3073868	0.63	3932562	78.16	30	120	
Bi	209	1	He	2170586	0.82	2874805	75.50	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-17-b@2
Data File Name	207SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:10:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.059	3.059	6.34	8147	0.04	10000	
B	11	45	2	NoGas	18.995	18.995	1.24	50388	0.04	300	
Na	23	45	1	He	181.301	181.301	2.41	208824	0.09	500000	
Mg	24	45	1	He	11338.576	11338.576	1.88	6927803	0.16	500000	
Al	27	45	1	He	54595.736	54595.736	2.02	18909050	0.29	200000	
K	39	45	1	He	3779.572	3779.572	1.83	2197250	0.17	500000	
Ca	44	45	1	He	6948.260	6948.260	1.49	219922	3.16	500000	
Ti	47	45	1	He	396.704	396.704	2.31	70579	0.56	2500	
V	51	45	1	He	133.754	133.754	2.46	588398	0.02	10000	
Cr	52	45	1	He	90.338	90.338	2.01	479177	0.02	10000	
Mn	55	45	1	He	51618.348	51618.348	2.40	214454027	0.02	10000	>LDR
Fe	56	45	1	He	120768.135	120768.135	3.27	601960047	0.02	200000	
Co	59	103	1	He	52.161	52.161	3.41	422331	0.01	10000	
Ni	60	103	1	He	169.091	169.091	2.97	339549	0.05	10000	
Cu	63	103	1	He	82.292	82.292	2.90	435578	0.02	10000	
Zn	66	103	1	He	271.981	271.981	3.05	291282	0.09	10000	
As	75	103	1	He	55.589	55.589	3.49	38294	0.15	10000	
Se	78	103	1	He	4.929	4.929	4.68	390	1.26	10000	
Sr	88	103	1	He	55.813	55.813	2.65	311666	0.02	10000	
Mo	95	103	1	He	10.554	10.554	2.60	26814	0.04	2000	
Ag	107	103	1	He	0.210	0.210	3.96	1830	0.01	300	
Cd	111	103	1	He	1.009	1.009	2.67	2304	0.04	4000	
Sn	118	115	1	He	17.035	17.035	2.68	66713	0.03	2000	
Sb	123	115	1	He	1.092	1.092	0.57	4325	0.03	300	
Ba	137	115	1	He	824.629	824.629	0.49	1449752	0.06	10000	
W	182	209	1	He	3.746	3.746	3.22	44822	0.01	2500	
Tl	205	165	1	He	0.885	0.885	0.65	24997	0.00	5000	
Pb	208	209	1	He	99.785	99.785	0.61	3857680	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	840109	1.99	1631381	51.50	30	120	
Sc	45	1	He	502369	1.96	829696	60.55	30	120	
Sc	45	2	NoGas	4112330	0.36	6325638	65.01	30	120	
Rh	103	1	He	1470975	3.19	2345543	62.71	30	120	
In	115	1	He	928824	0.95	1419467	65.43	30	120	
Tb	159	1	He	3015207	0.37	3888262	77.55	30	120	
Ho	165	1	He	3070439	0.70	3932562	78.08	30	120	
Bi	209	1	He	2195817	0.39	2874805	76.38	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-18-b@2
Data File Name	208SMPL.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:14:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.380	3.380	4.22	8840	0.04	10000	
B	11	45	2	NoGas	17.311	17.311	0.50	46099	0.04	300	
Na	23	45	1	He	180.741	180.741	1.74	208143	0.09	500000	
Mg	24	45	1	He	14439.575	14439.575	2.07	8818121	0.16	500000	
Al	27	45	1	He	55741.047	55741.047	0.09	19298265	0.29	200000	
K	39	45	1	He	4234.910	4234.910	1.10	2458034	0.17	500000	
Ca	44	45	1	He	7250.006	7250.006	1.89	229316	3.16	500000	
Ti	47	45	1	He	390.118	390.118	0.48	69387	0.56	2500	
V	51	45	1	He	105.936	105.936	1.03	465870	0.02	10000	
Cr	52	45	1	He	94.160	94.160	1.74	499147	0.02	10000	
Mn	55	45	1	He	17317.103	17317.103	1.65	71916590	0.02	10000	>LDR
Fe	56	45	1	He	140412.021	140412.021	1.00	699688843	0.02	200000	
Co	59	103	1	He	54.628	54.628	2.95	429348	0.01	10000	
Ni	60	103	1	He	148.963	148.963	1.94	290395	0.05	10000	
Cu	63	103	1	He	104.447	104.447	2.34	536358	0.02	10000	
Zn	66	103	1	He	319.991	319.991	2.12	332465	0.10	10000	
As	75	103	1	He	75.367	75.367	1.70	50372	0.15	10000	
Se	78	103	1	He	5.717	5.717	3.95	435	1.32	10000	
Sr	88	103	1	He	58.733	58.733	2.45	318329	0.02	10000	
Mo	95	103	1	He	9.384	9.384	0.69	23151	0.04	2000	
Ag	107	103	1	He	0.133	0.133	0.96	1127	0.01	300	
Cd	111	103	1	He	1.156	1.156	4.04	2452	0.05	4000	
Sn	118	115	1	He	16.804	16.804	1.09	64819	0.03	2000	
Sb	123	115	1	He	0.830	0.830	1.99	3336	0.02	300	
Ba	137	115	1	He	995.920	995.920	1.39	1724555	0.06	10000	
W	182	209	1	He	1.230	1.230	3.30	16316	0.01	2500	
Tl	205	165	1	He	1.356	1.356	0.41	37960	0.00	5000	
Pb	208	209	1	He	86.345	86.345	1.16	3275203	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	825571	1.37	1631381	50.61	30	120	
Sc	45	1	He	502069	1.17	829696	60.51	30	120	
Sc	45	2	NoGas	4077817	0.59	6325638	64.46	30	120	
Rh	103	1	He	1427469	2.23	2345543	60.86	30	120	
In	115	1	He	914826	0.29	1419467	64.45	30	120	
Tb	159	1	He	3000751	0.52	3888262	77.17	30	120	
Ho	165	1	He	3046306	0.53	3932562	77.46	30	120	
Bi	209	1	He	2154479	0.72	2874805	74.94	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	209_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:18:18-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.314	0.890	131179	1.40	50	100.6	89.5	110.5	
B	11	45	2	NoGas	49.649	1.793	111797	1.36	50	99.3	89.5	110.5	
Na	23	45	1	He	24844.484	0.877	25622715	1.53	25000	99.4	89.5	110.5	
Mg	24	45	1	He	24993.265	2.255	14643117	0.61	25000	100.0	89.5	110.5	
Al	27	45	1	He	246.343	1.206	83368	2.29	250	98.5	89.5	110.5	
K	39	45	1	He	25946.497	1.193	14336399	1.26	25000	103.8	89.5	110.5	
Ca	44	45	1	He	25362.349	1.889	768240	0.58	25000	101.4	89.5	110.5	
Ti	47	45	1	He	50.106	2.384	8557	1.84	50	100.2	89.5	110.5	
V	51	45	1	He	50.376	2.008	212580	1.11	50	100.8	89.5	110.5	
Cr	52	45	1	He	50.951	1.223	259860	1.28	50	101.9	89.5	110.5	
Mn	55	45	1	He	260.693	1.781	1039466	0.72	250	104.3	89.5	110.5	
Fe	56	45	1	He	13048.969	2.276	62383826	0.55	12500	104.4	89.5	110.5	
Co	59	103	1	He	46.847	0.311	366004	0.32	50	93.7	89.5	110.5	
Ni	60	103	1	He	46.102	0.837	89378	0.84	50	92.2	89.5	110.5	
Cu	63	103	1	He	46.905	1.180	239986	1.17	50	93.8	89.5	110.5	
Zn	66	103	1	He	48.210	1.036	50798	1.03	50	96.4	89.5	110.5	
As	75	103	1	He	48.849	0.596	32483	0.60	50	97.7	89.5	110.5	
Se	78	103	1	He	49.555	1.782	3503	1.78	50	99.1	89.5	110.5	
Sr	88	103	1	He	51.684	1.289	278445	1.28	50	103.4	89.5	110.5	
Mo	95	103	1	He	52.674	1.752	128951	1.74	50	105.3	89.5	110.5	
Ag	107	103	1	He	52.387	0.620	440442	0.61	50	104.8	89.5	110.5	
Cd	111	103	1	He	53.696	1.470	79305	1.46	50	107.4	89.5	110.5	
Sn	118	115	1	He	50.820	1.175	197597	1.07	50	101.6	89.5	110.5	
Sb	123	115	1	He	53.212	0.546	190799	0.66	50	106.4	89.5	110.5	
Ba	137	115	1	He	53.114	0.966	93461	0.94	50	106.2	89.5	110.5	
W	182	209	1	He	47.743	0.493	533253	0.79	50	95.5	89.5	110.5	
Tl	205	165	1	He	48.590	0.981	1333170	0.95	50	97.2	89.5	110.5	
Pb	208	209	1	He	47.293	1.083	1813093	0.98	50	94.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	824681	0.74	1631381	50.55	30	120	
Sc	45	1	He	481796	2.40	829696	58.07	30	120	
Sc	45	2	NoGas	3788851	0.34	6325638	59.90	30	120	
Rh	103	1	He	1418359	0.02	2345543	60.47	30	120	
In	115	1	He	929021	0.23	1419467	65.45	30	120	
Tb	159	1	He	2908024	0.98	3888262	74.79	30	120	
Ho	165	1	He	2989532	0.17	3932562	76.02	30	120	
Bi	209	1	He	2177168	0.94	2874805	75.73	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	210_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:22:10-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.063	61.5	189	53.9	1	
B	11	45	2	NoGas	5.117	6.6	16719	6.0	20	
Na	23	45	1	He	21.468	3.5	34121	0.4	400	
Mg	24	45	1	He	2.749	12.5	2097	8.0	1000	
Al	27	45	1	He	2.697	6.6	2335	1.0	50	
K	39	45	1	He	13.026	22.6	28219	3.9	1000	
Ca	44	45	1	He	3.139	67.0	650	8.7	1000	
Ti	47	45	1	He	0.334	63.8	62	55.8	20	
V	51	45	1	He	0.062	155.4	313	126.2	2	
Cr	52	45	1	He	-0.004	-26.9	1415	2.0	2	
Mn	55	45	1	He	1.861	8.4	7798	6.0	2	
Fe	56	45	1	He	35.825	13.6	166841	12.4	50	
Co	59	103	1	He	0.006	56.0	88	34.5	1	
Ni	60	103	1	He	0.001	1365.1	89	31.9	2	
Cu	63	103	1	He	-0.035	-30.1	953	7.8	2	
Zn	66	103	1	He	-0.117	-85.2	1193	8.4	20	
As	75	103	1	He	0.041	3.7	140	1.3	2	
Se	78	103	1	He	0.107	61.4	43	11.3	2	
Sr	88	103	1	He	0.014	37.6	163	18.1	10	
Mo	95	103	1	He	0.934	14.9	2586	15.3	2	
Ag	107	103	1	He	0.010	27.6	93	25.0	0.2	
Cd	111	103	1	He	0.067	37.5	938	2.9	0.2	
Sn	118	115	1	He	0.305	10.6	1974	7.0	10	
Sb	123	115	1	He	0.330	16.1	1652	12.7	1	
Ba	137	115	1	He	0.034	85.3	130	40.3	5	
W	182	209	1	He	1.086	12.5	15163	9.7	10	
Tl	205	165	1	He	0.053	13.7	1487	11.7	0.5	
Pb	208	209	1	He	0.067	5.8	3244	4.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	834342	1.19	1631381	51.14	30	120	
Sc	45	1	He	462496	1.78	829696	55.74	30	120	
Sc	45	2	NoGas	3763584	1.83	6325638	59.50	30	120	
Rh	103	1	He	1578803	1.45	2345543	67.31	30	120	
In	115	1	He	960050	0.81	1419467	67.63	30	120	
Tb	159	1	He	2930798	0.71	3888262	75.38	30	120	
Ho	165	1	He	2969458	1.59	3932562	75.51	30	120	
Bi	209	1	He	2218201	0.42	2874805	77.16	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	211CRIA.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:26:01-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1.143	1.143	3.491	3063	3.17	1	114.3	69.5	130.5	
B	11	2	NoGas	21.309	21.309	1.316	52805	1.33	20	106.5	69.5	130.5	
Na	23	1	He	1044.026	1044.026	0.630	1105674	0.60	1000	104.4	69.5	130.5	
Mg	24	1	He	1052.659	1052.659	0.718	626546	1.11	1000	105.3	69.5	130.5	
Al	27	1	He	47.628	47.628	1.350	17613	1.41	50	95.3	69.5	130.5	
K	39	1	He	1082.834	1082.834	0.898	628782	0.91	1000	108.3	69.5	130.5	
Ca	44	1	He	1043.835	1043.835	0.240	32658	0.90	1000	104.4	69.5	130.5	
Ti	47	1	He	10.678	10.678	1.435	1857	1.71	10	106.8	69.5	130.5	
V	51	1	He	5.384	5.384	3.256	23112	2.75	5	107.7	69.5	130.5	
Cr	52	1	He	2.062	2.062	1.748	12126	1.07	2	103.1	69.5	130.5	
Mn	55	1	He	6.658	6.658	1.514	27650	0.80	5	133.2	69.5	130.5	6020A CR1 Failed
Fe	56	1	He	118.023	118.023	0.518	575370	0.36	100	118.0	69.5	130.5	
Co	59	1	He	0.894	0.894	4.447	7688	4.36	1	89.4	69.5	130.5	
Ni	60	1	He	1.835	1.835	5.525	3980	5.24	2	91.7	69.5	130.5	
Cu	63	1	He	1.660	1.660	0.975	10402	0.54	2	83.0	69.5	130.5	
Zn	66	1	He	18.484	18.484	1.501	22152	1.58	20	92.4	69.5	130.5	
As	75	1	He	4.624	4.624	2.127	3468	2.31	5	92.5	69.5	130.5	
Se	78	1	He	4.932	4.932	6.985	413	6.72	5	98.6	69.5	130.5	
Sr	88	1	He	9.799	9.799	0.781	57919	0.44	10	98.0	69.5	130.5	
Mo	95	1	He	10.300	10.300	2.274	27669	2.54	10	103.0	69.5	130.5	
Ag	107	1	He	1.011	1.011	2.120	9323	2.30	1	101.1	69.5	130.5	
Cd	111	1	He	1.144	1.144	3.841	2651	2.32	1	114.4	69.5	130.5	
Sn	118	1	He	10.002	10.002	1.525	41392	1.41	10	100.0	69.5	130.5	
Sb	123	1	He	2.111	2.111	4.458	8358	4.45	2	105.5	69.5	130.5	
Ba	137	1	He	5.306	5.306	2.283	9852	2.52	5	106.1	69.5	130.5	
W	182	1	He	9.186	9.186	2.236	107879	3.02	10	91.9	69.5	130.5	
Tl	205	1	He	1.985	1.985	1.164	54945	1.52	2	99.2	69.5	130.5	
Pb	208	1	He	1.060	1.060	2.868	42387	1.96	1	106.0	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	841725	0.54	1631381	51.60	30	120	
Sc	45	1	He	488851	0.73	829696	58.92	30	120	
Sc	45	2	NoGas	3895567	0.49	6325638	61.58	30	120	
Rh	103	1	He	1554410	0.34	2345543	66.27	30	120	
In	115	1	He	974133	0.27	1419467	68.63	30	120	
Tb	159	1	He	2915710	0.45	3888262	74.99	30	120	
Ho	165	1	He	3013787	0.51	3932562	76.64	30	120	
Bi	209	1	He	2239001	0.86	2874805	77.88	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	212_CCV.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:29:54-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.071	2.466	126797	2.90	50	96.1	89.5	110.5	
B	11	45	2	NoGas	47.295	3.698	108862	3.23	50	94.6	89.5	110.5	
Na	23	45	1	He	23644.416	5.098	25590192	0.26	25000	94.6	89.5	110.5	
Mg	24	45	1	He	23814.495	4.937	14645632	0.59	25000	95.3	89.5	110.5	
Al	27	45	1	He	233.100	4.855	82873	0.32	250	93.2	89.5	110.5	
K	39	45	1	He	25177.870	3.635	14607732	1.57	25000	100.7	89.5	110.5	
Ca	44	45	1	He	24595.189	4.122	782196	0.75	25000	98.4	89.5	110.5	
Ti	47	45	1	He	48.091	3.279	8629	4.07	50	96.2	89.5	110.5	
V	51	45	1	He	49.705	5.194	220138	0.63	50	99.4	89.5	110.5	
Cr	52	45	1	He	48.881	4.058	261786	1.08	50	97.8	89.5	110.5	
Mn	55	45	1	He	249.649	4.483	1044995	0.62	250	99.9	89.5	110.5	
Fe	56	45	1	He	12572.005	5.654	63081204	2.02	12500	100.6	89.5	110.5	
Co	59	103	1	He	46.987	0.385	367541	0.21	50	94.0	89.5	110.5	
Ni	60	103	1	He	46.275	1.196	89823	1.15	50	92.6	89.5	110.5	
Cu	63	103	1	He	46.839	1.046	239938	0.90	50	93.7	89.5	110.5	
Zn	66	103	1	He	47.866	1.345	50504	1.11	50	95.7	89.5	110.5	
As	75	103	1	He	49.756	0.130	33125	0.34	50	99.5	89.5	110.5	
Se	78	103	1	He	51.968	0.768	3677	0.61	50	103.9	89.5	110.5	
Sr	88	103	1	He	52.697	0.618	284242	0.43	50	105.4	89.5	110.5	
Mo	95	103	1	He	52.510	1.426	128708	1.47	50	105.0	89.5	110.5	
Ag	107	103	1	He	52.380	0.423	440920	0.62	50	104.8	89.5	110.5	
Cd	111	103	1	He	53.787	1.056	79534	0.84	50	107.6	89.5	110.5	
Sn	118	115	1	He	50.213	0.916	197862	0.79	50	100.4	89.5	110.5	
Sb	123	115	1	He	53.115	1.001	192998	0.67	50	106.2	89.5	110.5	
Ba	137	115	1	He	52.572	1.040	93745	0.74	50	105.1	89.5	110.5	
W	182	209	1	He	48.032	0.772	528613	1.29	50	96.1	89.5	110.5	
Tl	205	165	1	He	47.611	1.464	1308629	0.41	50	95.2	89.5	110.5	
Pb	208	209	1	He	47.433	1.467	1791723	0.74	50	94.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	834267	0.44	1631381	51.14	30	120	
Sc	45	1	He	506373	4.95	829696	61.03	30	120	
Sc	45	2	NoGas	3863034	0.99	6325638	61.07	30	120	
Rh	103	1	He	1420086	0.21	2345543	60.54	30	120	
In	115	1	He	941465	0.35	1419467	66.33	30	120	
Tb	159	1	He	2916256	1.56	3888262	75.00	30	120	
Ho	165	1	He	2995231	1.36	3932562	76.16	30	120	
Bi	209	1	He	2145272	1.02	2874805	74.62	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	213_CCB.d
Data Path Name	D:\Analytical Runs\I10042415A.b
Acq Date Time	2015-04-24T23:33:46-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.087	12.1	256	11.5	1	
B	11	45	2	NoGas	4.787	5.1	16363	2.6	20	
Na	23	45	1	He	20.392	5.3	33865	2.1	400	
Mg	24	45	1	He	2.074	26.4	1759	17.4	1000	
Al	27	45	1	He	0.559	77.2	1695	9.1	50	
K	39	45	1	He	13.074	6.5	28950	0.6	1000	
Ca	44	45	1	He	2.441	57.4	645	5.9	1000	
Ti	47	45	1	He	0.060	48.4	18	28.6	20	
V	51	45	1	He	-0.007	-151.1	31	148.4	2	
Cr	52	45	1	He	-0.011	-55.0	1415	3.4	2	
Mn	55	45	1	He	1.009	5.4	4656	4.7	2	
Fe	56	45	1	He	26.311	17.1	126331	16.7	50	
Co	59	103	1	He	0.005	68.3	73	39.6	1	
Ni	60	103	1	He	-0.008	-112.9	70	29.0	2	
Cu	63	103	1	He	-0.024	-40.4	1019	6.1	2	
Zn	66	103	1	He	-0.064	-208.6	1258	13.3	20	
As	75	103	1	He	0.036	38.8	137	7.3	2	
Se	78	103	1	He	0.166	21.0	48	6.7	2	
Sr	88	103	1	He	0.005	102.5	111	30.6	10	
Mo	95	103	1	He	0.958	18.7	2658	19.6	2	
Ag	107	103	1	He	0.008	8.5	76	9.2	0.2	
Cd	111	103	1	He	0.059	45.4	927	4.7	0.2	
Sn	118	115	1	He	0.342	9.4	2152	5.9	10	
Sb	123	115	1	He	0.358	6.9	1778	5.1	1	
Ba	137	115	1	He	0.027	23.5	119	9.8	5	
W	182	209	1	He	1.119	12.0	15701	9.6	10	
Tl	205	165	1	He	0.058	14.8	1672	13.8	0.5	
Pb	208	209	1	He	0.053	8.5	2732	6.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	843825	0.62	1631381	51.72	30	120	
Sc	45	1	He	473832	1.74	829696	57.11	30	120	
Sc	45	2	NoGas	3846200	0.80	6325638	60.80	30	120	
Rh	103	1	He	1580885	1.51	2345543	67.40	30	120	
In	115	1	He	972238	0.38	1419467	68.49	30	120	
Tb	159	1	He	2937155	1.22	3888262	75.54	30	120	
Ho	165	1	He	3015395	0.63	3932562	76.68	30	120	
Bi	209	1	He	2240143	0.31	2874805	77.92	30	120	

MTMSCCBDILH20-195 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 4/28/15 Analyst: AS Instrument: I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV*: = 90 – 110%) (*CCV*: 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

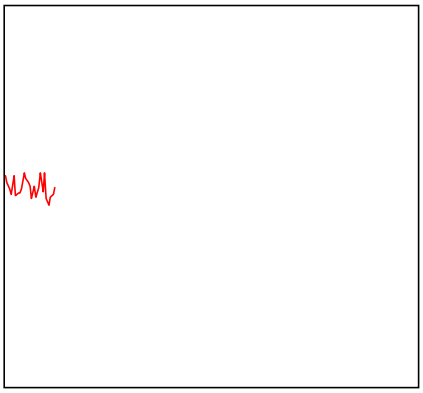
Level I Analyst: Anjali Sharma Date: 4/28/15 Time: 11:32 – 15:42
Level I Analyst: Date: Time:

Level II Reviewer: Date: 4/28/15 Time: 11:32 - 15:42
Level II Reviewer: Date: Time:

Comments:

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1046	1044.3	4.67
51	100	44	42.6	24.39
52	200	88	95.7	13.11
51/59	10	4.205 %	4.083 %	23.53
52/59	20	8.411 %	9.202 %	15.30
7	50	16	12.3	42.48
89	2000	1396	1318.8	4.71
205	5000	3280	3265.2	2.99
6	20	3	1.2	96.23
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

US EPA Tune Check Sample Report

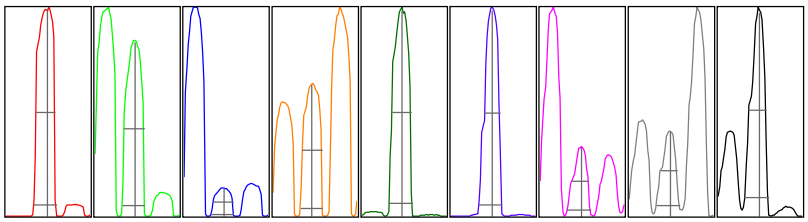
Batch Folder D:\Analytical Runs\I10042815A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	26808	1.36	5.00	
24	95703	0.93	5.00	
25	12904	0.72	5.00	
26	15055	1.27	5.00	
59	144118	0.82	5.00	
115	276194	0.82	5.00	
206	105047	0.62	5.00	
207	95124	0.50	5.00	
208	219613	1.00	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	26992	26210	27097	26720	27023
24	97281	95308	95497	95296	95136
25	12891	12825	12979	12808	13018
26	15113	14928	15367	14948	14921
59	143379	142832	145139	143674	145567
115	275918	273824	277915	274270	279040
206	105444	104867	105529	103988	105409
207	95478	94852	95340	94424	95529
208	219002	218383	221483	216962	222233

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	4202	9.00	8.9 - 9.1		0.782	0.850	
24	15289	23.95	23.9 - 24.1		0.784	0.850	
25	2048	24.95	24.9 - 25.1		0.787	0.850	
26	2377	25.90	25.9 - 26.1		0.786	0.850	
59	23078	58.95	58.9 - 59.1		0.816	0.850	
115	48535	115.00	114.9 - 115.1		0.808	0.850	
206	18289	206.00	205.9 - 206.1		0.817	0.850	
207	16211	207.00	206.9 - 207.1		0.816	0.850	
208	39353	208.00	207.9 - 208.1		0.811	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

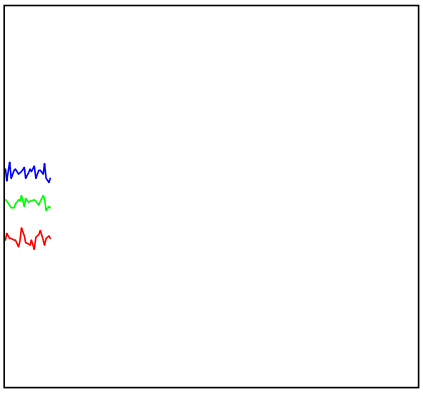
Cell Parameters

US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	1943	1932.9	3.48
89	10000	4691	4837.1	2.19
205	10000	5470	5628.1	2.48
156/140	2	0.845 %	0.837 %	15.97
70/140	2	0.935 %	1.006 %	14.16
115	50	29	26.2	30.82
63	2000	1265	1211.5	4.26
60	500	158	213.4	15.62
121	100	41	34.8	25.06
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.65	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

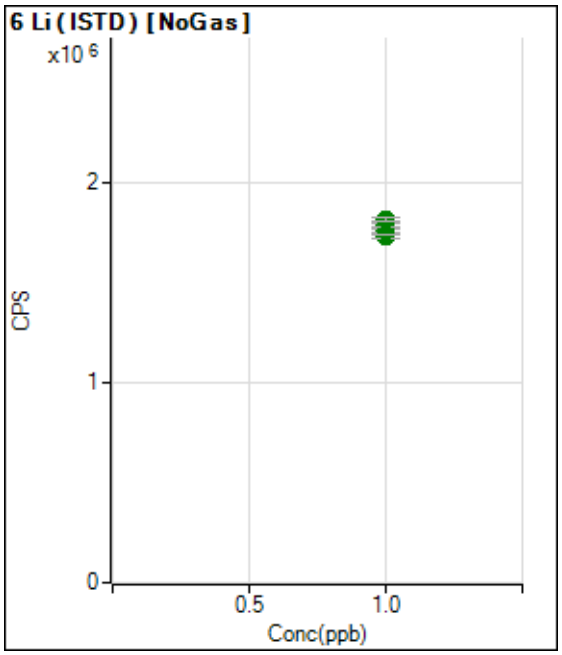
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

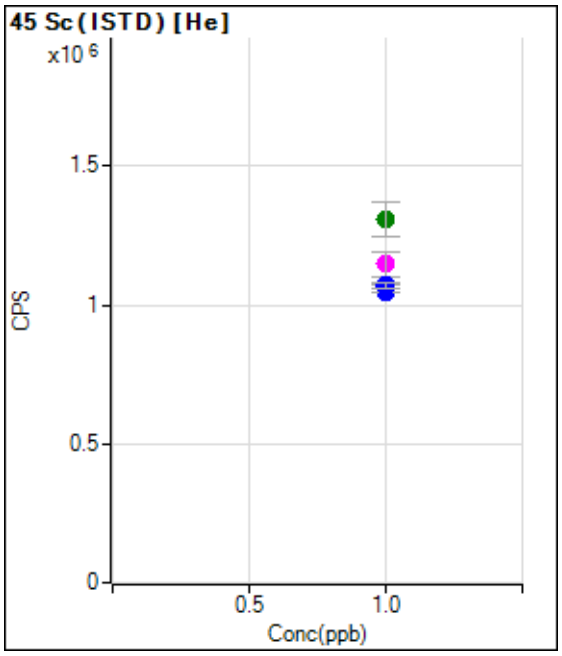
Calibration for 013_CCB.d

Batch Folder: D:\Analytical Runs\I10042815C.b\
Analysis File: I10042815C.batch.bin
DA Date-Time: 4/28/2015 12:20:04 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

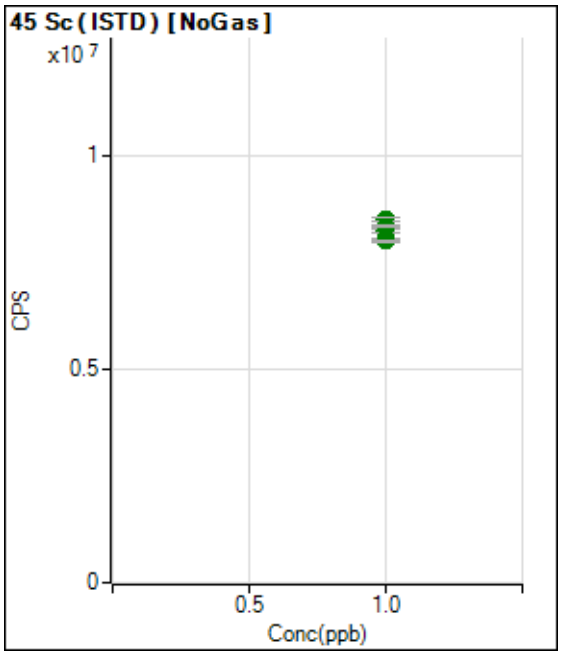
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	4/28/2015 11:36:07 AM
2	003CALS.d	STD1-1906323	4/28/2015 11:39:58 AM
3	004CALS.d	STD2-1904110	4/28/2015 11:43:47 AM
4	005CALS.d	STD3-1906333	4/28/2015 11:47:36 AM
5	006CALS.d	STD4-1906536	4/28/2015 11:51:20 AM



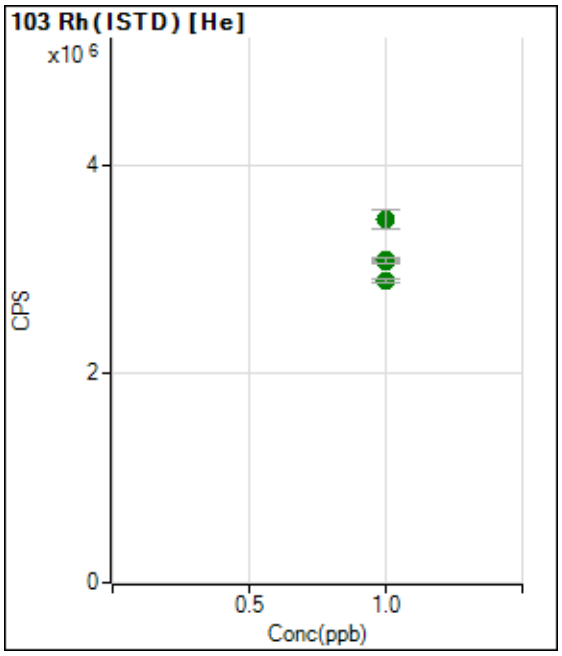
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1729956.15		A	1.7
2	☐	1.000		1752847.12		A	1.5
3	☐	1.000		1809070.55		A	2.0
4	☐	1.000		1788351.62		A	1.6
5	☐	1.000		1811248.90		A	1.2



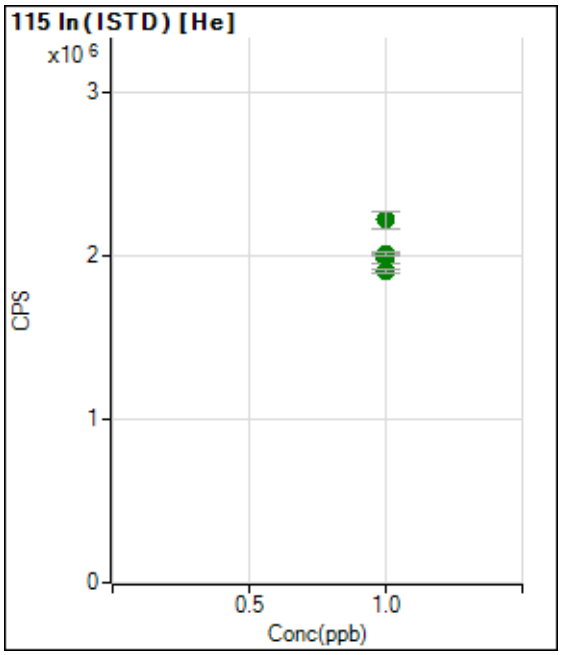
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1045873.45		P	0.5
2	☐	1.000		1068201.65		P	1.5
3	☐	1.000		1148490.48		M	8.0
4	☐	1.000		1071349.59		P	1.8
5	☐	1.000		1306222.32		A	9.6



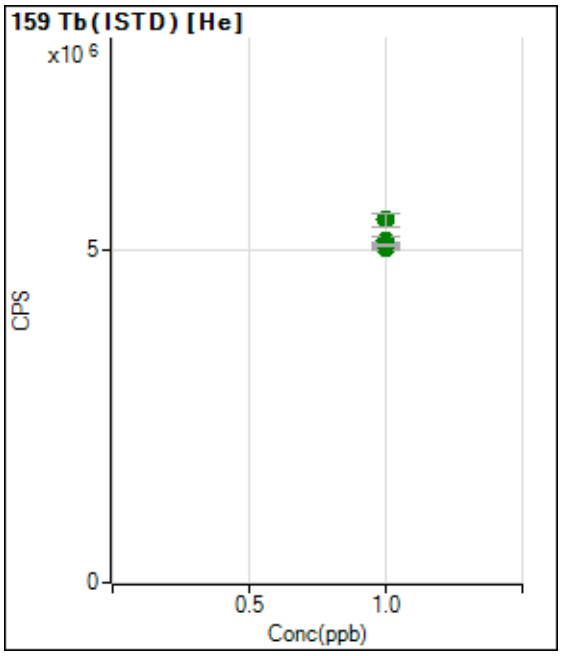
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		8041241.07		A	0.6
2	☐	1.000		8223474.67		A	1.4
3	☐	1.000		8480977.44		A	0.9
4	☐	1.000		8334682.17		A	0.5
5	☐	1.000		7987039.41		A	0.2



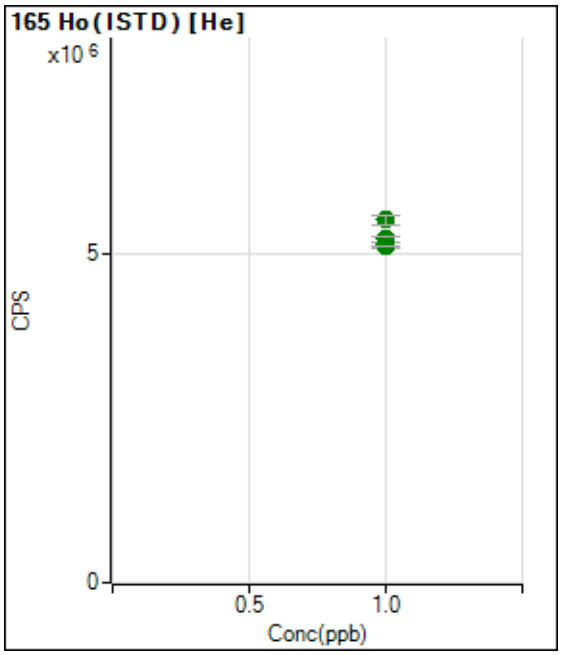
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3067945.57		A	1.4
2	☐	1.000		3067096.06		A	1.0
3	☐	1.000		3086914.53		A	2.0
4	☐	1.000		2889294.74		A	1.1
5	☐	1.000		3472422.64		A	5.4



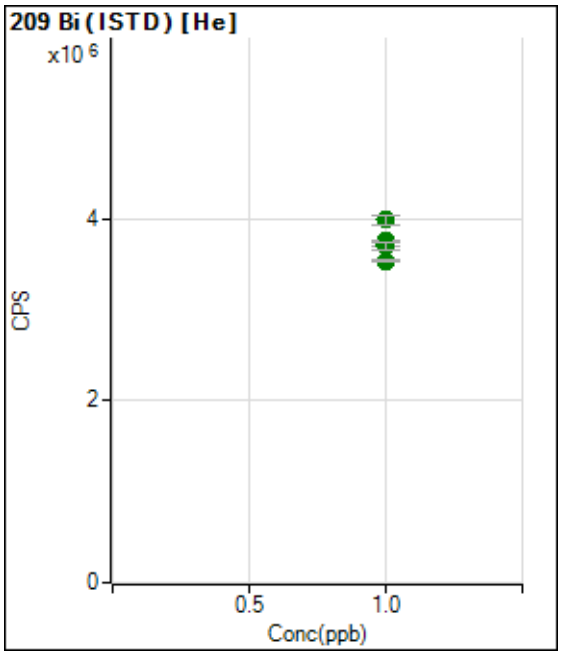
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1978772.15		A	2.0
2	☐	1.000		1986211.70		A	2.8
3	☐	1.000		2015769.81		A	1.1
4	☐	1.000		1908885.61		A	0.9
5	☐	1.000		2222143.76		A	4.9



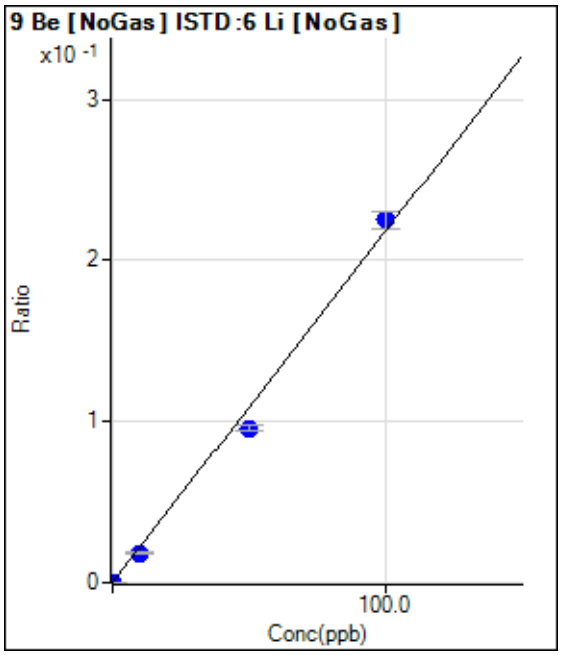
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5013528.97		A	0.4
2	☐	1.000		5081680.63		A	0.8
3	☐	1.000		5146691.32		A	1.5
4	☐	1.000		5071302.99		A	0.3
5	☐	1.000		5449425.75		A	3.8



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5115781.32		A	0.2
2	☐	1.000		5165339.38		A	0.9
3	☐	1.000		5235488.82		A	1.7
4	☐	1.000		5134278.69		A	0.3
5	☐	1.000		5529301.45		A	2.7



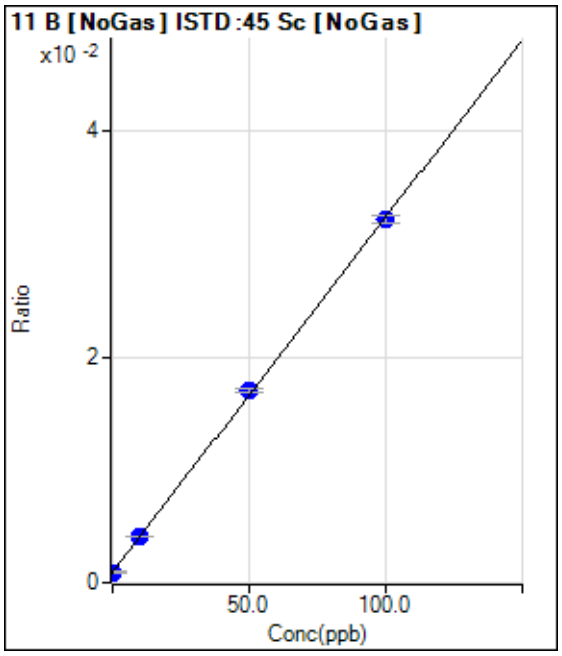
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3723642.91		A	0.9
2	☐	1.000		3755227.07		A	0.8
3	☐	1.000		3700168.74		A	2.1
4	☐	1.000		3536229.30		A	0.7
5	☐	1.000		3986621.78		A	2.8



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	311.13	0.0002	P	38.4
2	☐	10.000	8.372	32295.62	0.0184	P	3.9
3	☐	50.000	43.816	173047.39	0.0957	P	3.4
4	☐	100.000	103.255	402688.61	0.2252	P	4.6
5	☐			429.65	0.0002	P	19.7

y = 0.0022 * x + 1.8035E-004
R = 0.9969
DL = 0.09524
BEC = 0.08274

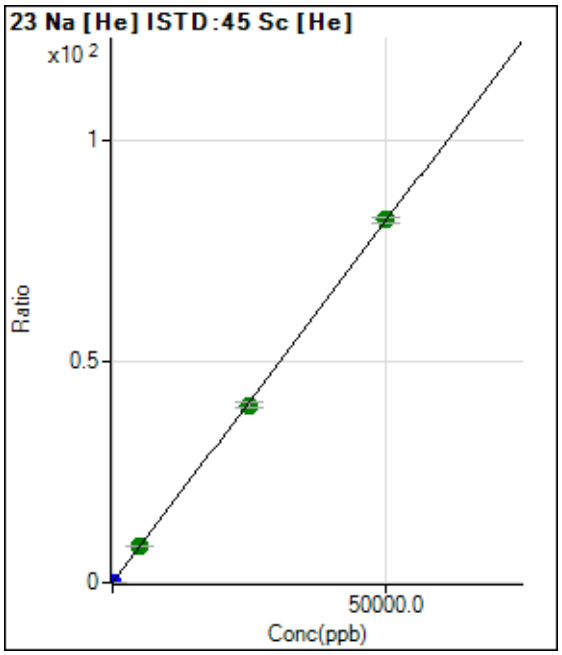
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7335.10	0.0009	P	9.4
2	☐	10.000	10.132	33694.71	0.0041	P	2.5
3	☐	50.000	51.323	144539.25	0.0170	P	2.8
4	☐			8376.29	0.0010	P	3.8
5	☐	100.000	99.326	256667.99	0.0321	P	2.0

y = 3.1435E-004 * x + 9.1204E-004
R = 0.9998
DL = 0.8191
BEC = 2.901

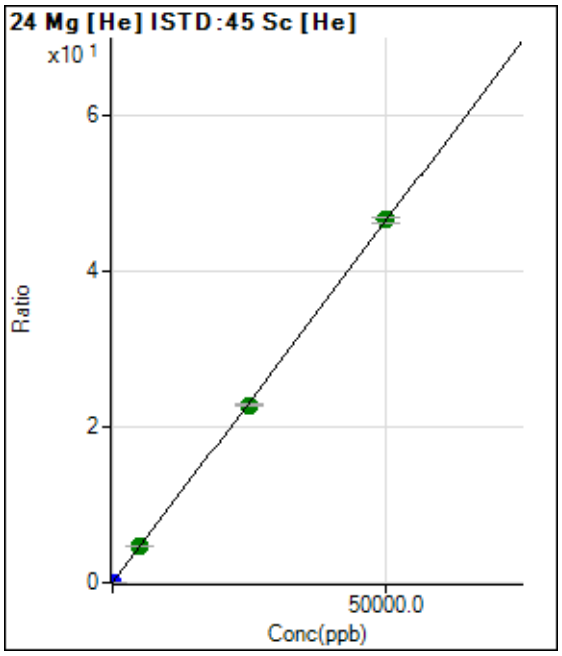
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22303.29	0.0213	P	3.0
2	☐	5000.000	5013.087	8780379.97	8.2205	A	0.9
3	☐	25000.000	24592.021	46134574.09	40.2429	A	3.5
4	☐	50000.000	50202.681	87976342.80	82.1305	A	1.4
5	☐			46167.44	0.0353	P	5.2

y = 0.0016 * x + 0.0213
R = 0.9999
DL = 1.179
BEC = 13.04

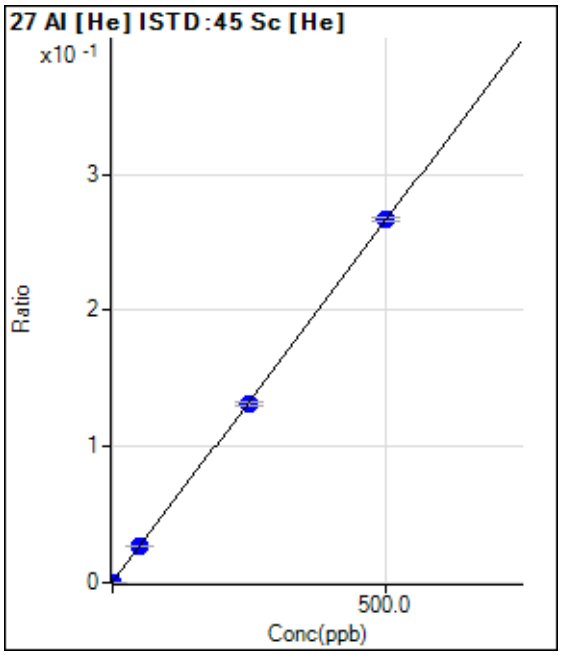
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1485.33	0.0014	P	3.0
2	☐	5000.000	5116.224	5075040.54	4.7509	A	2.0
3	☐	25000.000	24540.184	26145648.03	22.7826	A	1.5
4	☐	50000.000	50218.286	49936218.39	46.6201	A	1.8
5	☐			6812.71	0.0052	P	9.6

y = 9.2832E-004 * x + 0.0014
R = 0.9999
DL = 0.1391
BEC = 1.53

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	655.58	0.0006	P	4.1
2	☐	50.000	49.643	28764.64	0.0269	P	2.5
3	☐	250.000	247.101	150983.34	0.1316	P	1.7
4	☐	500.000	501.485	285349.62	0.2664	P	1.2
5	☐			2119.05	0.0016	P	4.0

y = 5.2994E-004 * x + 6.2675E-004

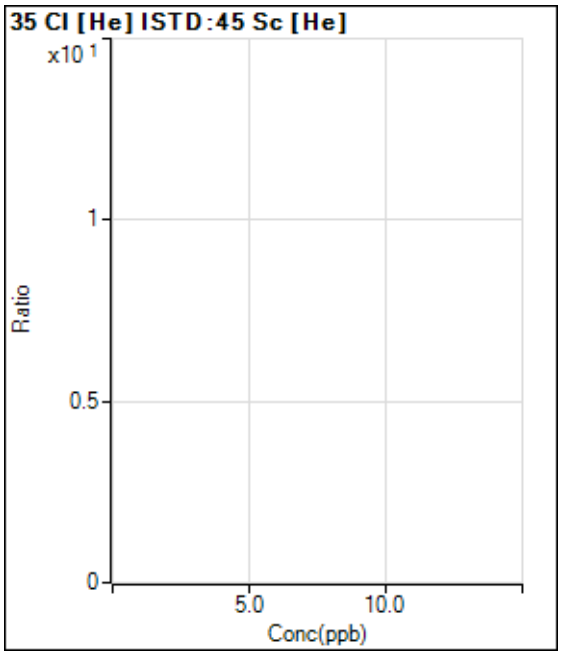
R = 1.0000

DL = 0.147

BEC = 1.183

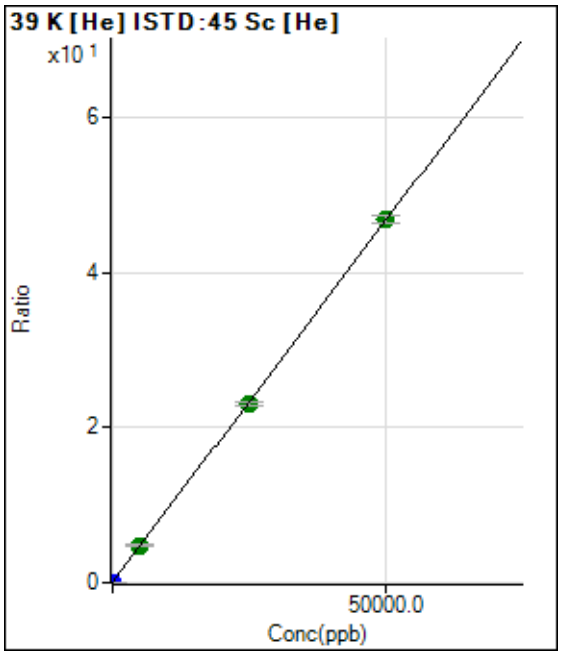
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			13514623.54	12.9217	A	0.5
2	☐			14067811.02	13.1705	A	0.7
3	☐			14914827.19	13.0069	A	3.0
4	☐			13809023.06	12.8934	A	2.7
5	☐			17622409.49	13.4909	A	2.6

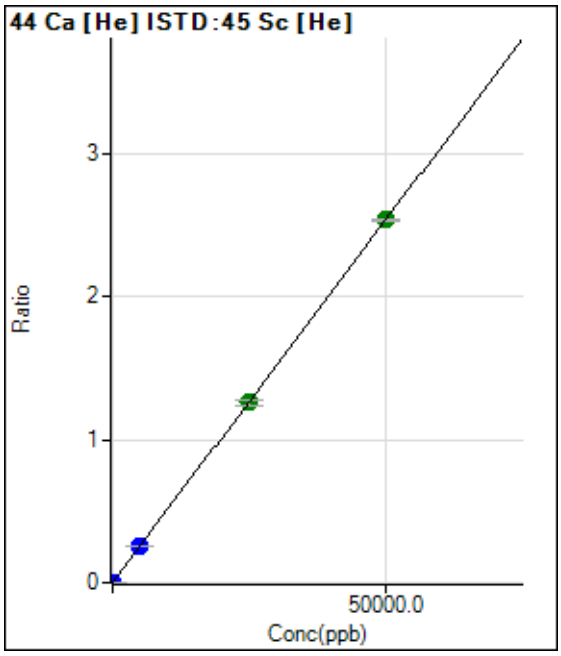
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	40442.42	0.0387	P	2.2
2	☐	5000.000	5119.138	5147060.10	4.8192	A	2.0
3	☐	25000.000	24712.187	26509817.47	23.1162	A	2.8
4	☐	50000.000	50131.993	50186677.64	46.8546	A	2.1
5	☐			61494.09	0.0469	P	5.0

y = 9.3385E-004 * x + 0.0387
R = 1.0000
DL = 2.79
BEC = 41.41

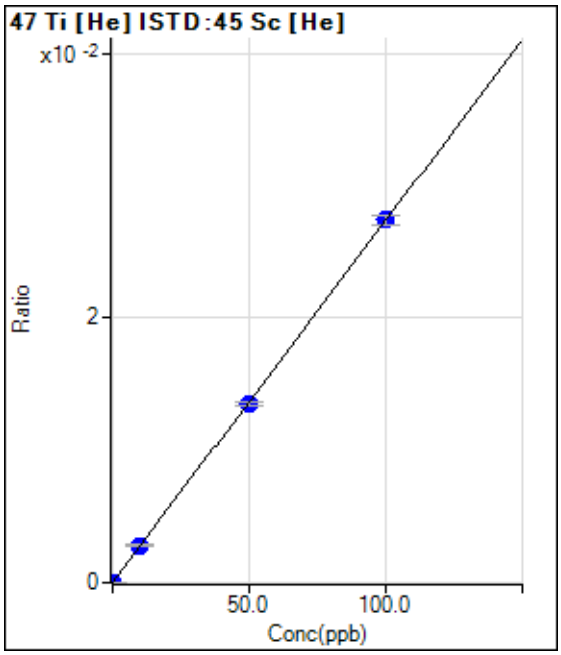
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	567.83	0.0005	P	15.1
2	☐	5000.000	4976.958	270205.90	0.2530	P	0.7
3	☐	25000.000	24887.624	1447545.95	1.2627	A	3.5
4	☐	50000.000	50058.492	2720376.30	2.5393	A	0.4
5	☐			951.96	0.0007	P	8.9

y = 5.0716E-005 * x + 5.4281E-004
R = 1.0000
DL = 4.853
BEC = 10.7

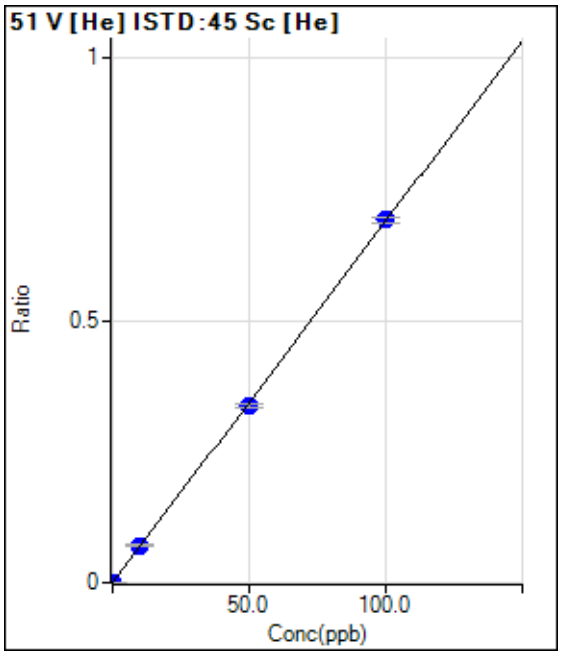
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.89	0.0000	P	94.1
2	☐	10.000	10.310	3020.29	0.0028	P	3.4
3	☐	50.000	49.481	15542.44	0.0135	P	2.2
4	☐			30.00	0.0000	P	39.8
5	☐	100.000	100.229	35789.29	0.0274	P	2.8

y = 2.7336E-004 * x + 8.4797E-006
R = 1.0000
DL = 0.08758
BEC = 0.03102

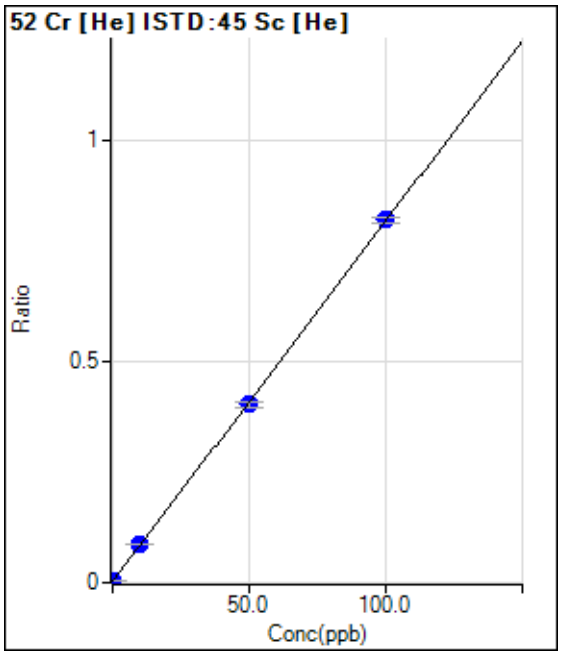
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-209.86	-0.0002	P	-149.2
2	☐	10.000	10.305	75548.63	0.0707	P	2.3
3	☐	50.000	48.994	386438.26	0.3370	P	3.1
4	☐	100.000	100.473	740614.06	0.6913	P	1.3
5	☐			211.76	0.0001	P	450.8

y = 0.0069 * x - 1.9962E-004
R = 0.9999
DL = 0.1298
BEC = -0.029

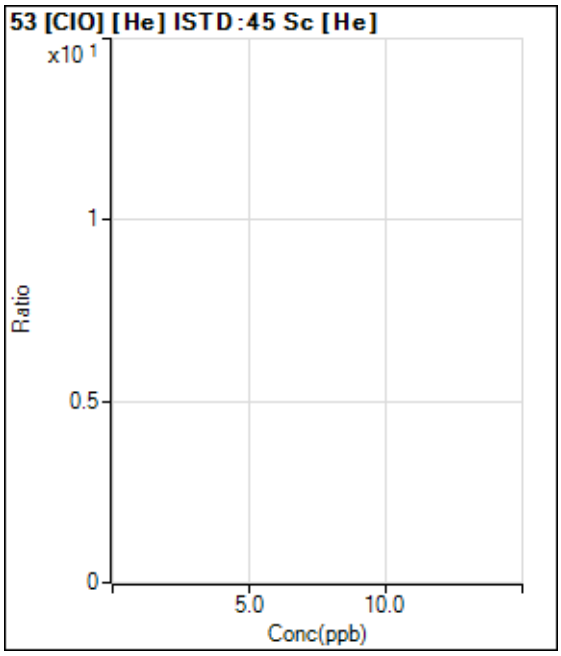
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2323.51	0.0022	P	3.0
2	☐	10.000	10.319	92108.49	0.0862	P	2.2
3	☐	50.000	49.159	461503.30	0.4025	P	2.9
4	☐	100.000	100.389	877876.98	0.8195	P	1.3
5	☐			4800.72	0.0037	P	2.4

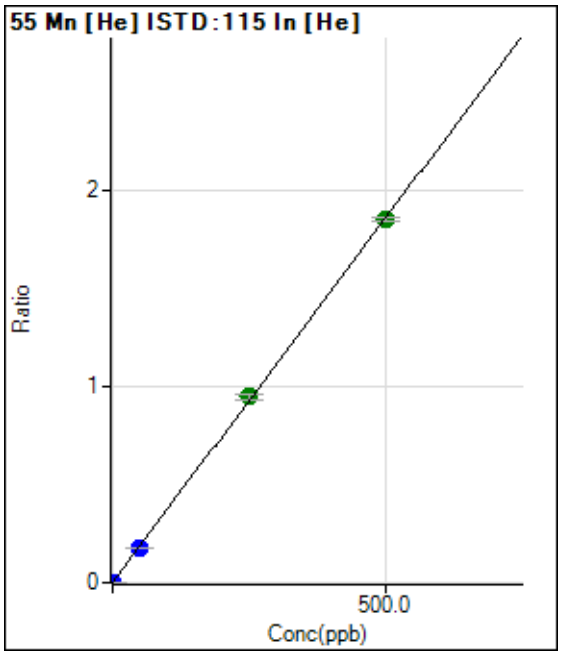
y = 0.0081 * x + 0.0022
R = 0.9999
DL = 0.02485
BEC = 0.2729

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1040.83	0.0010	P	6.6
2	☐			11485.68	0.0108	P	0.9
3	☐			57229.23	0.0499	P	3.0
4	☐			109428.13	0.1022	P	3.8
5	☐			1351.97	0.0010	P	13.6

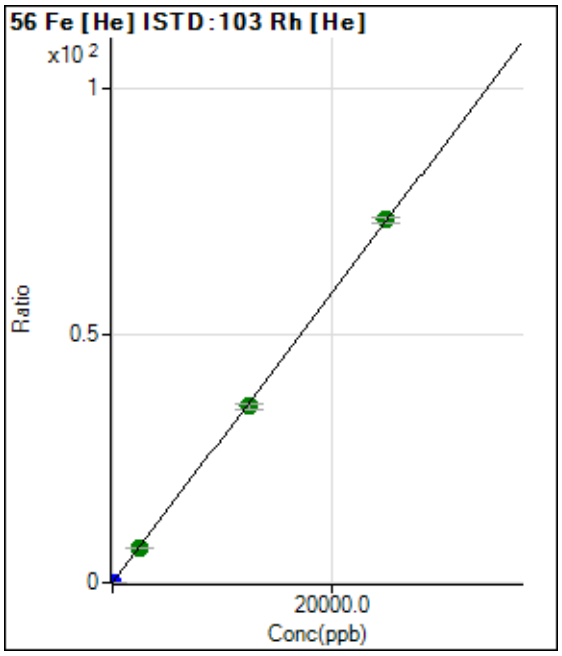
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	835.59	0.0004	P	11.1
2	☐	50.000	48.083	356063.54	0.1793	P	1.3
3	☐	250.000	255.081	1913977.63	0.9494	A	2.7
4	☐	500.000	497.651	3534734.72	1.8518	A	1.2
5	☐			1984.59	0.0009	P	3.0

y = 0.0037 * x + 4.2212E-004
R = 0.9999
DL = 0.03765
BEC = 0.1135

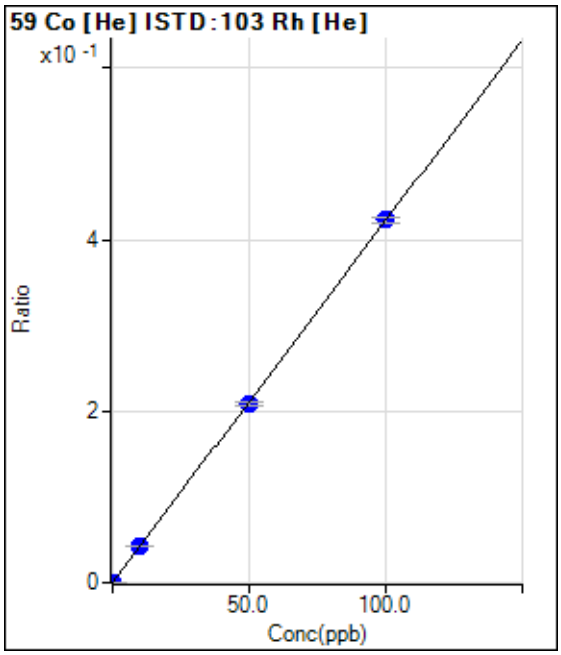
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14131.19	0.0046	P	4.1
2	☐	2500.000	2419.771	21665588.03	7.0641	A	1.2
3	☐	12500.000	12223.660	110143751.18	35.6662	A	3.0
4	☐	25000.000	25146.193	211952244.91	73.3668	A	1.8
5	☐			303802.19	0.0874	P	20.8

y = 0.0029 * x + 0.0046
R = 0.9999
DL = 0.1965
BEC = 1.579

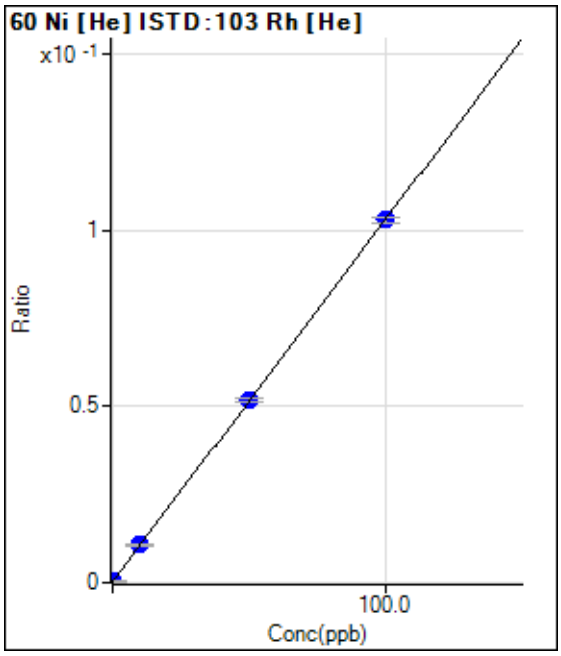
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	70.00	0.0000	P	26.7
2	☐	10.000	9.917	128418.24	0.0419	P	1.1
3	☐	50.000	49.448	644404.11	0.2087	P	2.9
4	☐	100.000	100.284	1222558.15	0.4232	P	1.4
5	☐			221.11	0.0001	P	13.1

y = 0.0042 * x + 2.2871E-005
R = 1.0000
DL = 0.004339
BEC = 0.00542

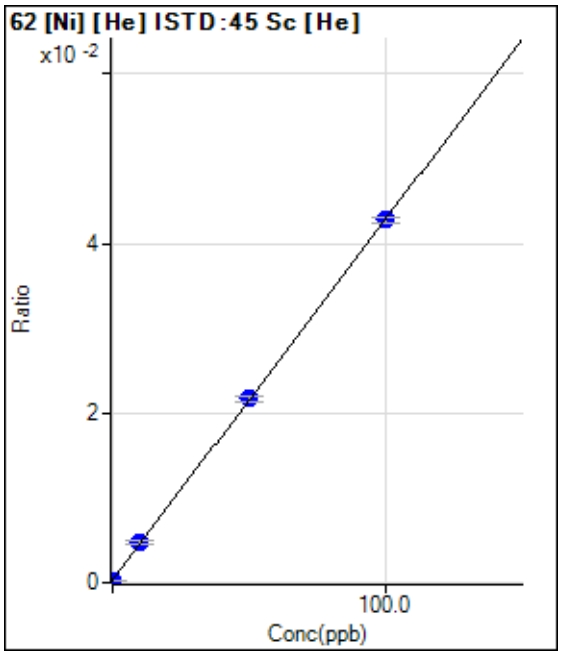
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	875.59	0.0003	P	10.7
2	☐	10.000	10.116	32785.63	0.0107	P	2.0
3	☐	50.000	50.140	160090.66	0.0518	P	2.4
4	☐	100.000	99.918	297648.49	0.1030	P	1.7
5	☐			1145.61	0.0003	P	8.2

y = 0.0010 * x + 2.8566E-004
R = 1.0000
DL = 0.08888
BEC = 0.2778

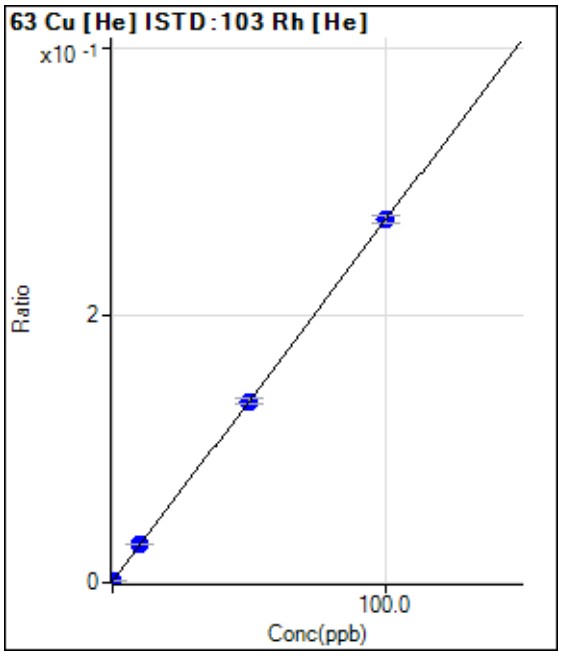
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	328.90	0.0003	P	14.3
2	☐	10.000	10.672	5180.82	0.0049	P	9.2
3	☐	50.000	50.176	24822.86	0.0217	P	4.1
4	☐	100.000	99.845	45831.63	0.0428	P	1.8
5	☐			415.56	0.0003	P	2.8

y = 4.2540E-004 * x + 3.1461E-004
R = 1.0000
DL = 0.3164
BEC = 0.7396

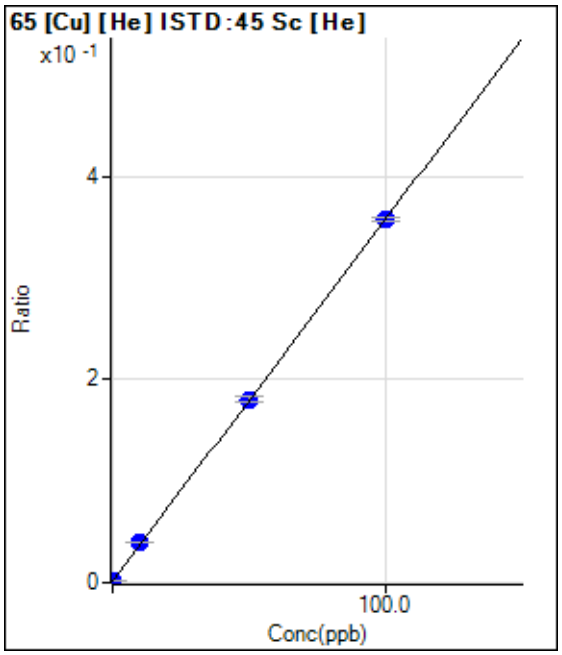
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3801.56	0.0012	P	4.2
2	☐	10.000	10.198	88268.79	0.0288	P	0.5
3	☐	50.000	49.816	419260.27	0.1358	P	2.7
4	☐	100.000	100.072	784292.35	0.2715	P	2.1
5	☐			4123.87	0.0012	P	5.0

y = 0.0027 * x + 0.0012
R = 1.0000
DL = 0.05778
BEC = 0.4587

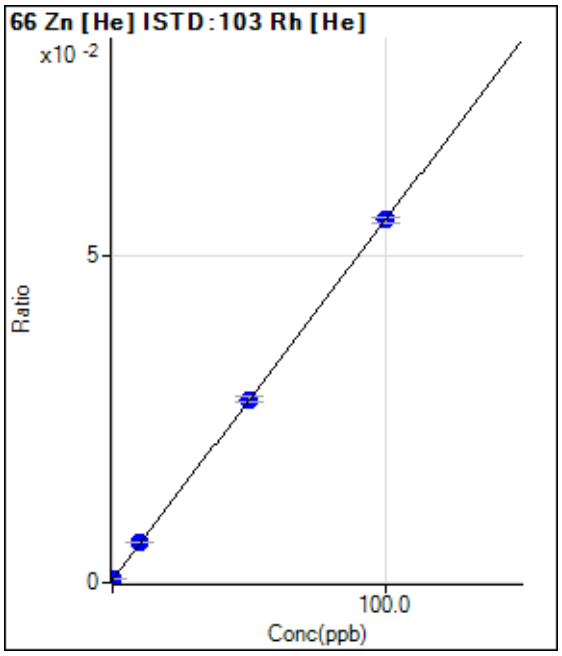
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1803.45	0.0017	P	5.6
2	☐	10.000	10.863	43227.56	0.0405	P	0.8
3	☐	50.000	50.266	207518.61	0.1810	P	3.2
4	☐	100.000	99.781	383058.70	0.3576	P	1.2
5	☐			1922.36	0.0015	P	10.2

y = 0.0036 * x + 0.0017
R = 1.0000
DL = 0.08178
BEC = 0.4836

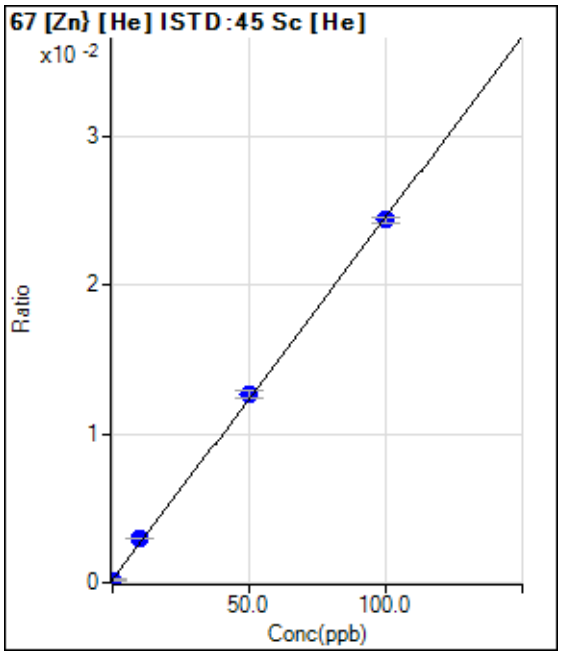
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1447.86	0.0005	P	7.8
2	☐	10.000	10.210	18714.38	0.0061	P	1.5
3	☐	50.000	50.020	86623.26	0.0281	P	3.2
4	☐	100.000	99.969	160597.44	0.0556	P	1.7
5	☐			1708.99	0.0005	P	10.6

y = 5.5136E-004 * x + 4.7184E-004
R = 1.0000
DL = 0.2006
BEC = 0.8558

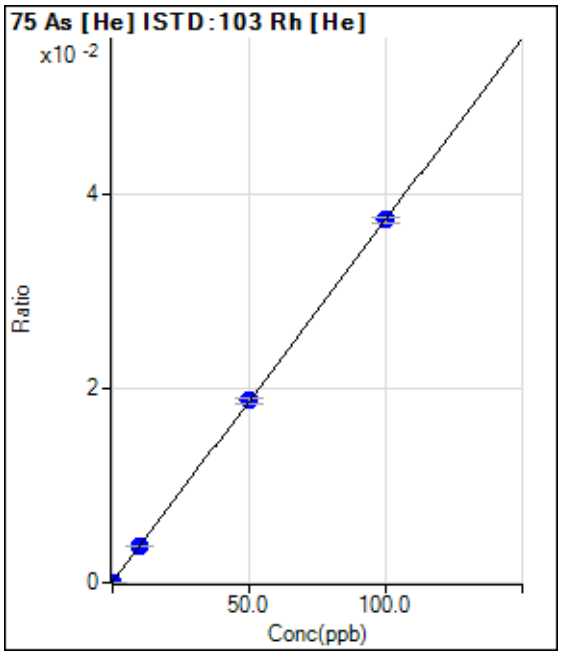
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	197.78	0.0002	P	29.1
2	☐	10.000	11.199	3113.65	0.0029	P	0.5
3	☐	50.000	51.058	14454.89	0.0126	P	4.4
4	☐	100.000	99.351	26101.36	0.0244	P	1.9
5	☐			255.56	0.0002	P	20.0

y = 2.4337E-004 * x + 1.8928E-004
R = 0.9999
DL = 0.6799
BEC = 0.7778

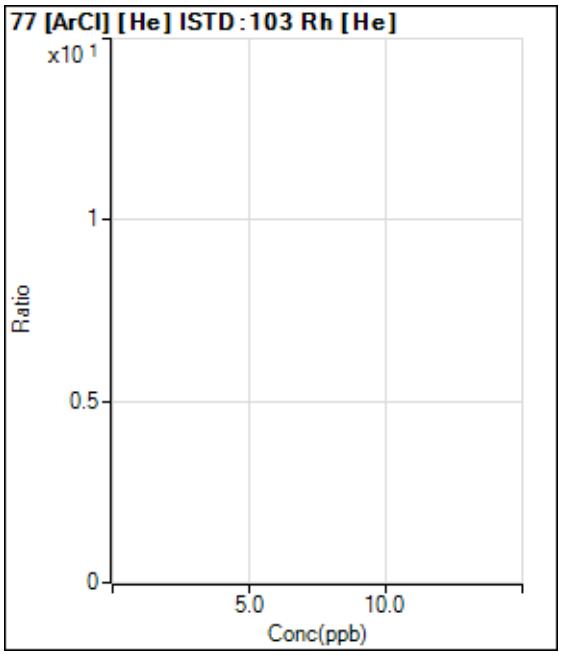
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	141.69	0.0000	P	17.4
2	☐	10.000	9.882	11437.87	0.0037	P	0.9
3	☐	50.000	50.027	57716.11	0.0187	P	2.7
4	☐	100.000	99.998	107799.00	0.0373	P	1.3
5	☐			699.22	0.0002	P	6.0

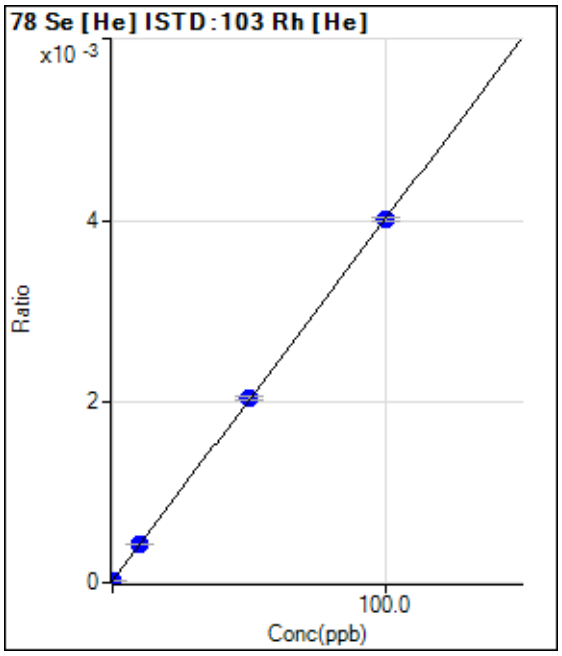
y = 3.7268E-004 * x + 4.6245E-005
R = 1.0000
DL = 0.0649
BEC = 0.1241

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			7.41	0.0000	P	86.6
2	☐			355.57	0.0001	P	27.6
3	☐			1959.48	0.0006	P	14.6
4	☐			3470.90	0.0012	P	6.9
5	☐			3.70	0.0000	P	173.2

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69.15	0.0000	P	13.6
2	☐	10.000	10.073	1303.37	0.0004	P	2.1
3	☐	50.000	50.540	6303.44	0.0020	P	2.6
4	☐	100.000	99.723	11573.23	0.0040	P	0.9
5	☐			133.50	0.0000	P	5.6

y = 3.9943E-005 * x + 2.2568E-005

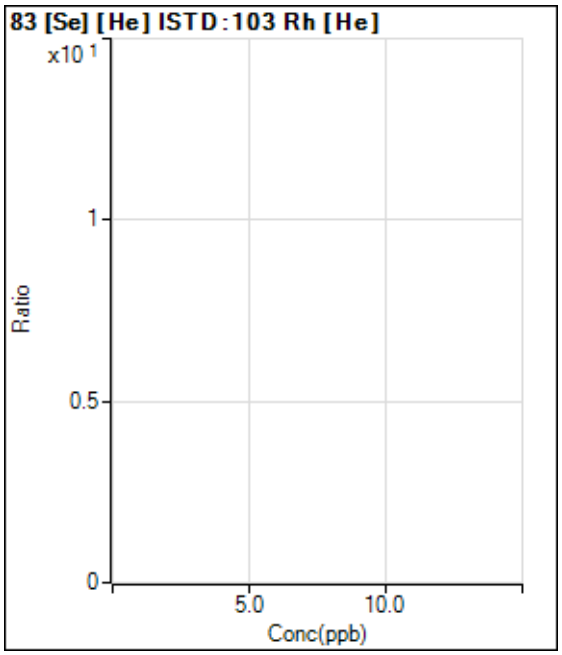
R = 1.0000

DL = 0.2303

BEC = 0.565

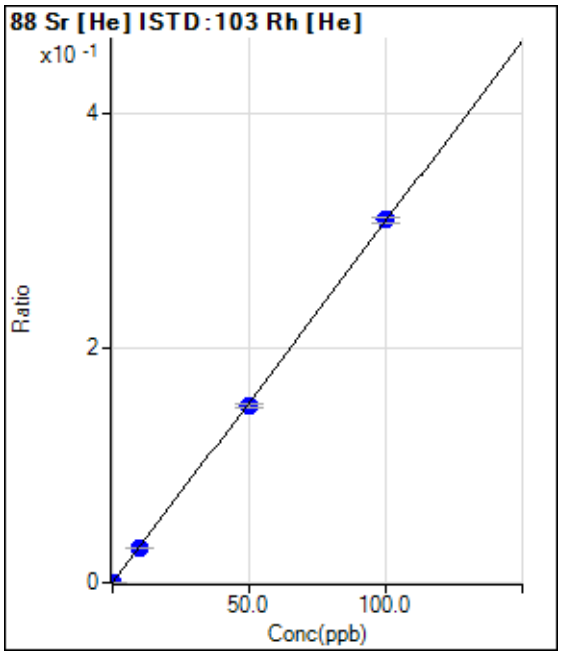
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			81.48	0.0000	P	14.5
2	☐			98.65	0.0000	P	17.9
3	☐			100.67	0.0000	P	4.3
4	☐			86.87	0.0000	P	11.0
5	☐			95.62	0.0000	P	9.4

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	145.56	0.0000	P	31.9
2	☐	10.000	9.694	91840.91	0.0299	P	0.5
3	☐	50.000	49.122	467870.66	0.1515	P	1.8
4	☐	100.000	100.470	895243.68	0.3099	P	1.4
5	☐			242.23	0.0001	P	8.2

y = 0.0031 * x + 4.7518E-005

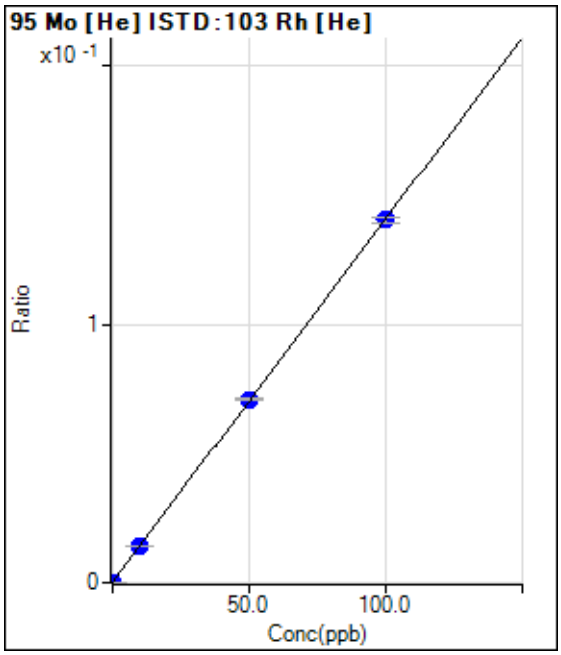
R = 0.9999

DL = 0.01474

BEC = 0.01541

Weight: <None>

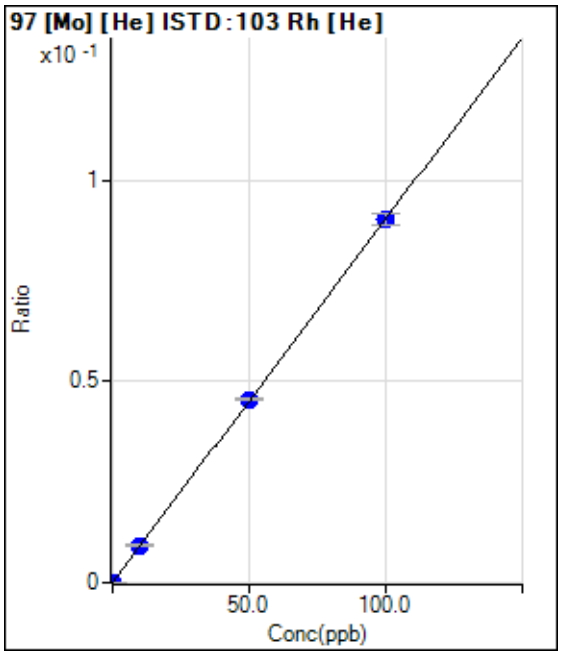
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	311.12	0.0001	P	10.3
2	☐	10.000	10.164	44157.78	0.0144	P	1.6
3	☐	50.000	50.338	218854.78	0.0709	P	1.1
4	☐			2910.29	0.0010	P	13.0
5	☐	100.000	99.814	488129.62	0.1405	P	1.6

y = 0.0014 * x + 1.0149E-004
R = 1.0000
DL = 0.02238
BEC = 0.07216

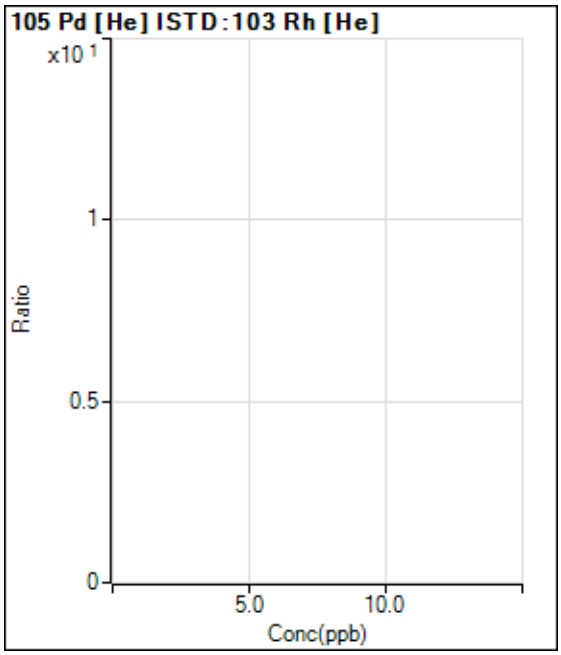
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92.59	0.0000	P	65.4
2	☐	10.000	10.118	28105.26	0.0092	P	4.4
3	☐	50.000	50.318	140310.06	0.0455	P	1.0
4	☐			1674.25	0.0006	P	7.4
5	☐	100.000	99.829	313365.19	0.0901	P	3.2

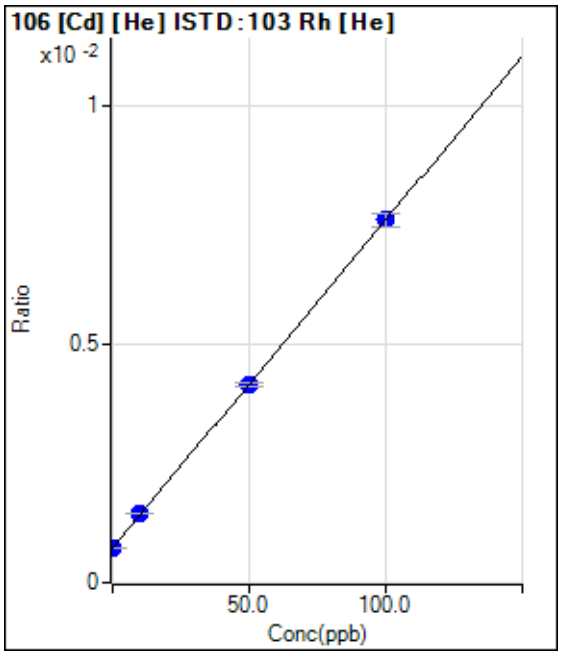
y = 9.0268E-004 * x + 3.0148E-005
R = 1.0000
DL = 0.0655
BEC = 0.0334

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2452.15	0.0008	P	6.0
2	☐			2578.09	0.0008	P	4.6
3	☐			2859.62	0.0009	P	10.1
4	☐			3263.42	0.0011	P	6.3
5	☐			3211.57	0.0009	P	13.6

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2231.80	0.0007	P	2.8
2	☐	10.000	10.520	4449.41	0.0015	P	2.3
3	☐	50.000	49.780	12813.49	0.0042	P	1.4
4	☐	100.000	100.058	21974.43	0.0076	P	3.4
5	☐			2767.91	0.0008	P	4.8

y = 6.8761E-005 * x + 7.2727E-004

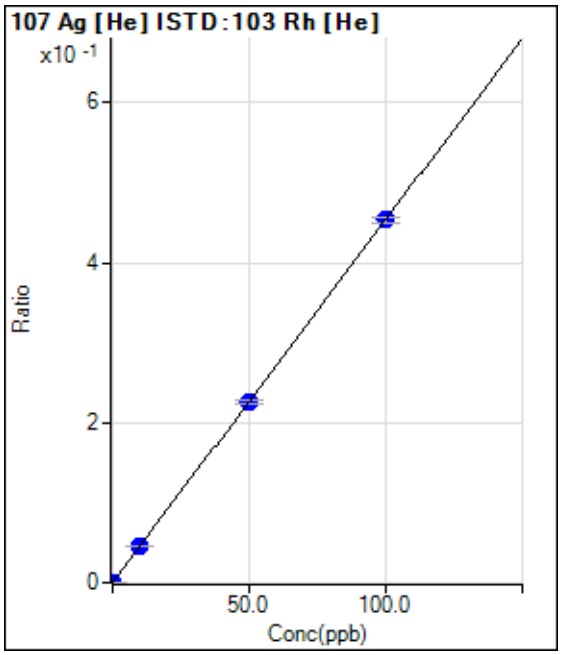
R = 1.0000

DL = 0.8873

BEC = 10.58

Weight: <None>

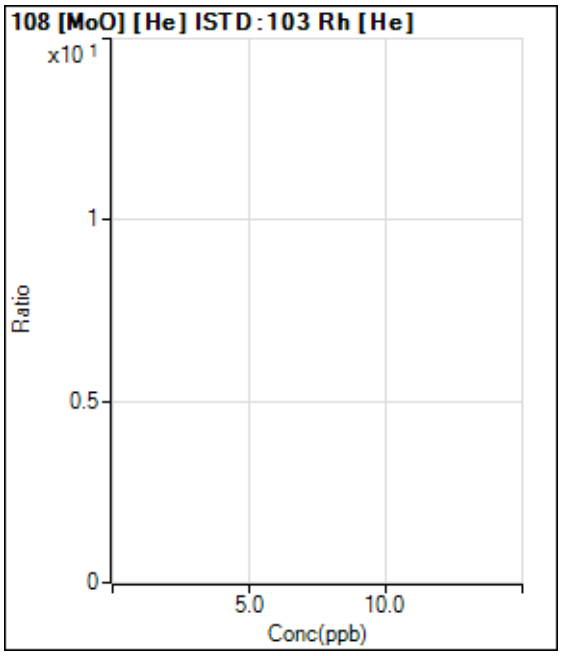
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.33	0.0000	P	25.9
2	☐	10.000	10.129	140914.60	0.0459	P	0.8
3	☐	50.000	49.940	699076.29	0.2264	P	1.7
4	☐	100.000	100.017	1309942.76	0.4534	P	1.6
5	☐			427.79	0.0001	P	10.5

y = 0.0045 * x + 2.7227E-005
R = 1.0000
DL = 0.00466
BEC = 0.006006

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			7.41	0.0000	P	173.2
2	☐			1681.64	0.0005	P	15.8
3	☐			7709.53	0.0025	P	7.1
4	☐			15155.52	0.0052	P	1.6
5	☐			151.86	0.0000	P	18.1

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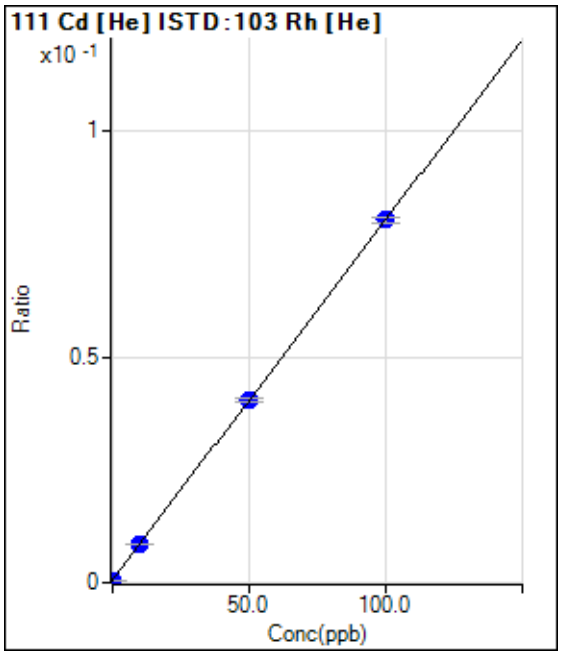
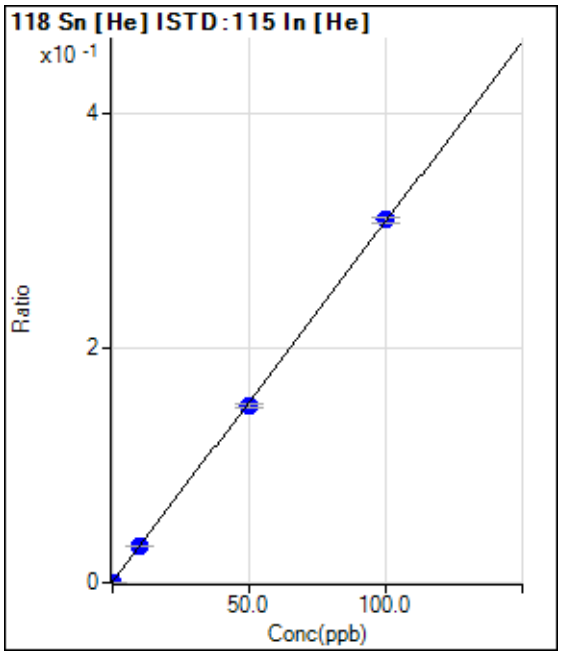


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1702.20	0.0006	P	3.7
2	☐	10.000	10.155	26564.69	0.0087	P	0.1
3	☐	50.000	49.873	124644.61	0.0404	P	2.1
4	☐	100.000	100.048	232329.25	0.0804	P	1.6
5	☐			2131.88	0.0006	P	4.8

y = 7.9827E-004 * x + 5.5464E-004
R = 1.0000
DL = 0.07742
BEC = 0.6948

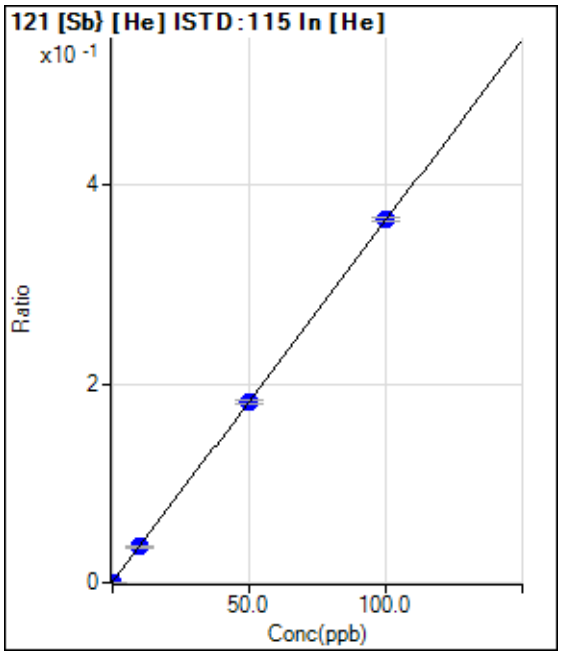
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1137.14	0.0006	P	20.5
2	☐	10.000	9.802	60809.07	0.0306	P	1.2
3	☐	50.000	49.025	304151.99	0.1509	P	2.4
4	☐			4623.06	0.0024	P	3.0
5	☐	100.000	100.507	686200.33	0.3087	P	1.3

y = 0.0031 * x + 5.7376E-004
R = 0.9999
DL = 0.1149
BEC = 0.1872

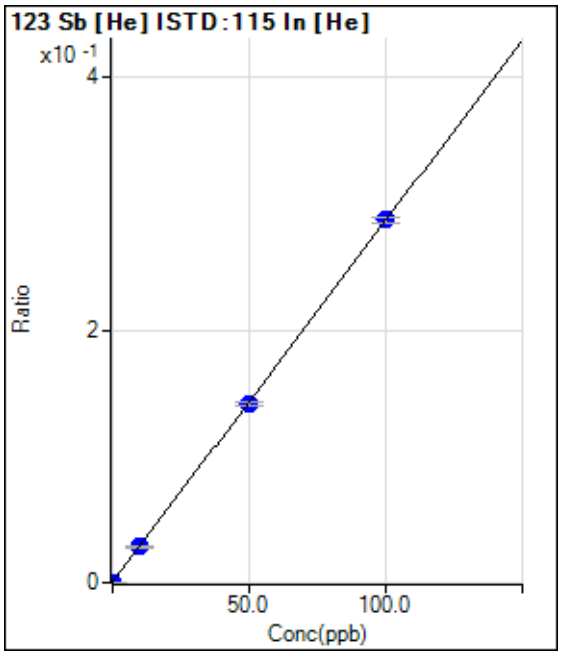
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1202.28	0.0006	P	4.6
2	☐	10.000	9.772	71703.29	0.0361	P	2.5
3	☐	50.000	49.632	364808.11	0.1810	P	2.0
4	☐			4780.74	0.0025	P	10.2
5	☐	100.000	100.207	810810.59	0.3647	P	1.1

y = 0.0036 * x + 6.0727E-004
R = 1.0000
DL = 0.02295
BEC = 0.1671

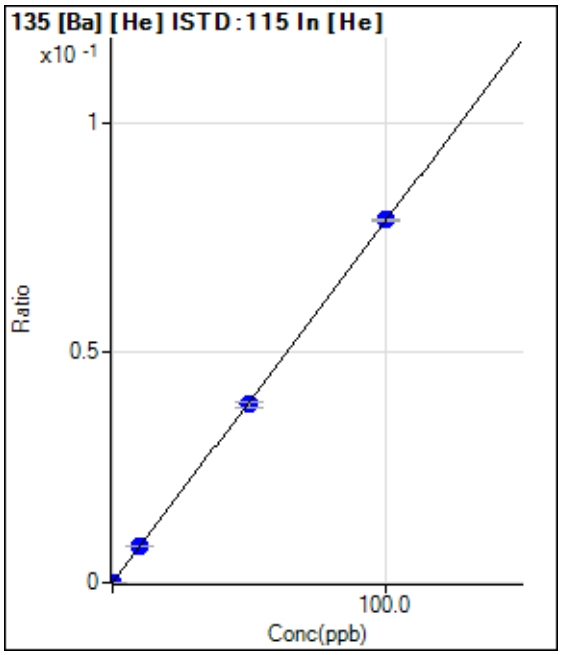
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	983.37	0.0005	P	10.6
2	☐	10.000	9.707	56119.44	0.0283	P	3.1
3	☐	50.000	49.535	286714.82	0.1422	P	2.0
4	☐			3809.37	0.0020	P	9.9
5	☐	100.000	100.262	638826.56	0.2874	P	1.3

y = 0.0029 * x + 4.9685E-004
R = 1.0000
DL = 0.05497
BEC = 0.1737

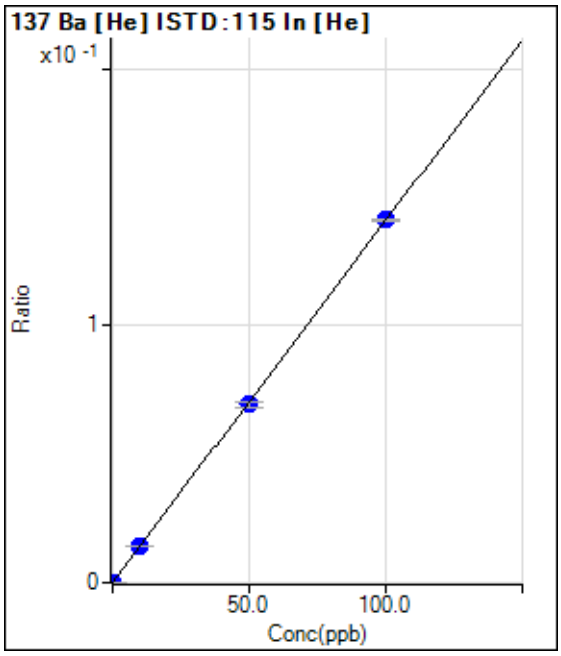
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.78	0.0000	P	21.8
2	☐	10.000	9.999	15648.46	0.0079	P	2.8
3	☐	50.000	49.281	78128.60	0.0388	P	2.6
4	☐	100.000	100.360	150601.32	0.0789	P	0.8
5	☐			102.22	0.0000	P	16.2

y = 7.8592E-004 * x + 2.4213E-005
R = 1.0000
DL = 0.02013
BEC = 0.03081

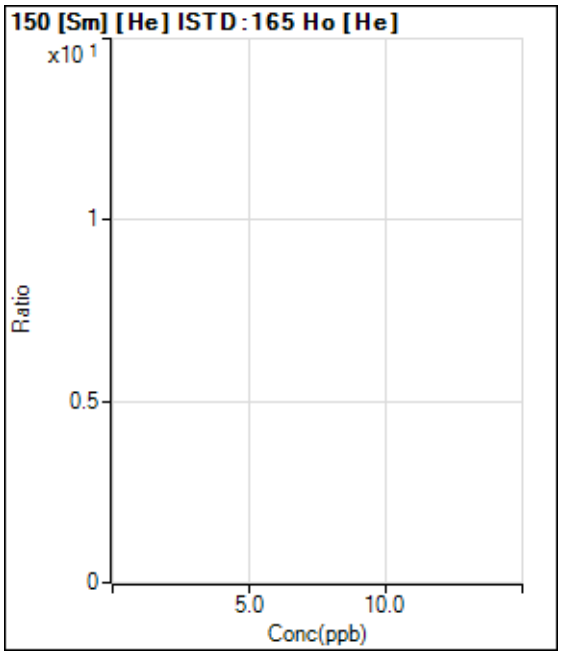
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52.22	0.0000	P	23.0
2	☐	10.000	9.986	27958.84	0.0141	P	1.6
3	☐	50.000	49.398	140156.81	0.0695	P	3.3
4	☐	100.000	100.303	269422.68	0.1411	P	0.4
5	☐			231.12	0.0001	P	9.9

y = 0.0014 * x + 2.6409E-005
R = 1.0000
DL = 0.01296
BEC = 0.01877

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2.00	0.0000	P	0.2
2	☐			11.33	0.0000	P	27.1
3	☐			10.67	0.0000	P	48.0
4	☐			34.67	0.0000	P	49.1
5	☐			5.33	0.0000	P	59.0

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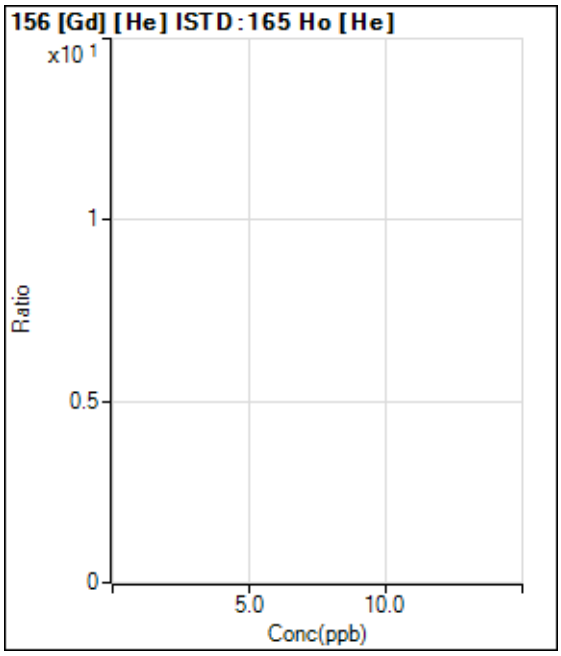
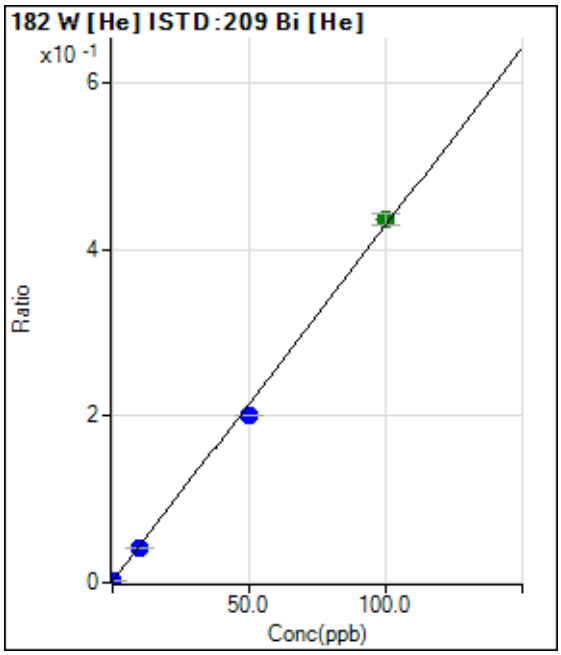


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			24.00	0.0000	P	33.3
2	☐			16.67	0.0000	P	47.8
3	☐			20.00	0.0000	P	44.3
4	☐			23.33	0.0000	P	9.6
5	☐			12.67	0.0000	P	37.3

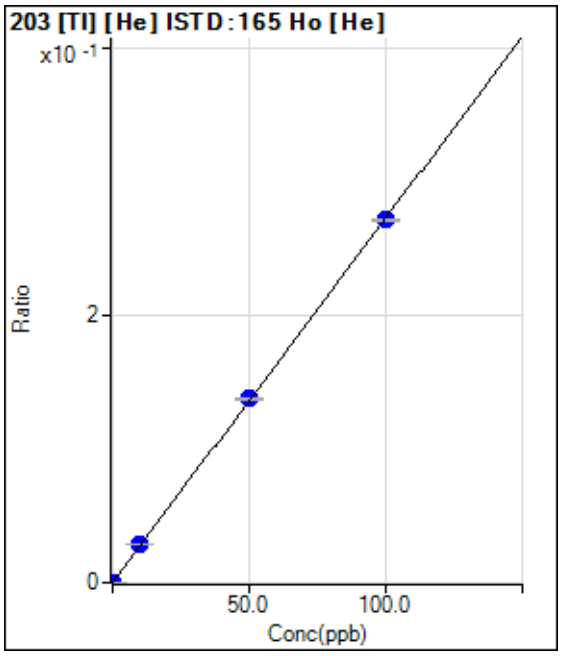
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5579.07	0.0015	P	7.0
2	☐	10.000	9.166	152609.57	0.0406	P	0.9
3	☐	50.000	46.895	746581.80	0.2018	P	0.2
4	☐			15841.81	0.0045	P	7.2
5	☐	100.000	101.636	1736480.60	0.4355	A	3.1

y = 0.0043 * x + 0.0015
R = 0.9992
DL = 0.07411
BEC = 0.3507

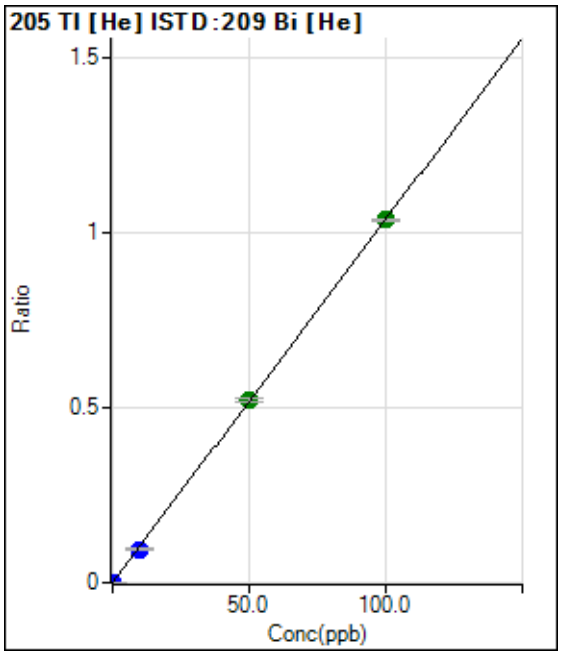
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	48.15	0.0000	P	104.0
2	☐	10.000	10.511	148073.57	0.0287	P	0.7
3	☐	50.000	50.639	722937.46	0.1381	P	0.9
4	☐	100.000	99.629	1394647.28	0.2716	P	0.2
5	☐			1552.01	0.0003	P	18.2

y = 0.0027 * x + 9.4032E-006
R = 1.0000
DL = 0.01076
BEC = 0.003449

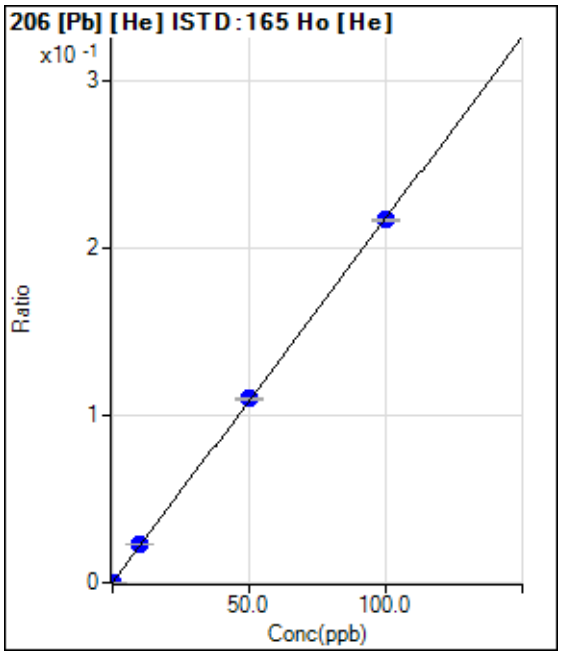
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	114.44	0.0000	P	28.6
2	☐	10.000	9.245	360093.82	0.0959	P	1.4
3	☐	50.000	50.244	1927785.41	0.5211	A	1.9
4	☐	100.000	99.954	3665287.49	1.0365	A	0.7
5	☐			1866.80	0.0005	P	19.7

y = 0.0104 * x + 3.0687E-005
R = 1.0000
DL = 0.002535
BEC = 0.002959

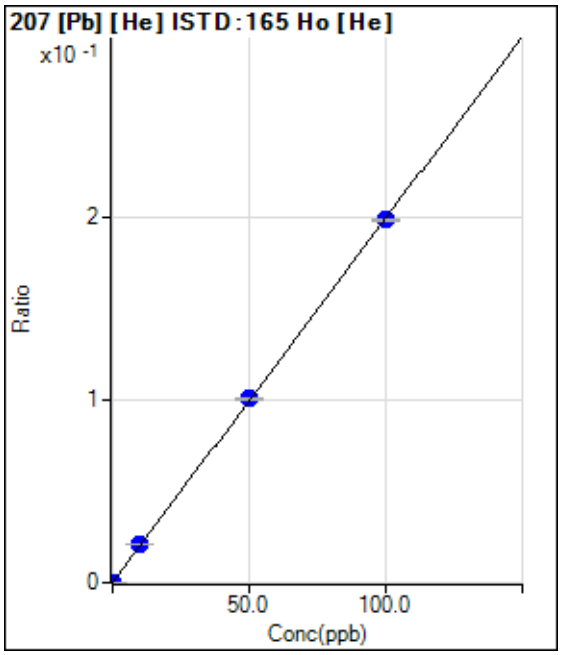
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	450.01	0.0001	P	11.0
2	☐	10.000	10.707	120828.00	0.0234	P	1.1
3	☐	50.000	50.554	576553.94	0.1101	P	1.2
4	☐	100.000	99.652	1113984.68	0.2170	P	0.4
5	☐			1580.10	0.0003	P	2.4

y = 0.0022 * x + 8.7961E-005
R = 1.0000
DL = 0.01331
BEC = 0.04042

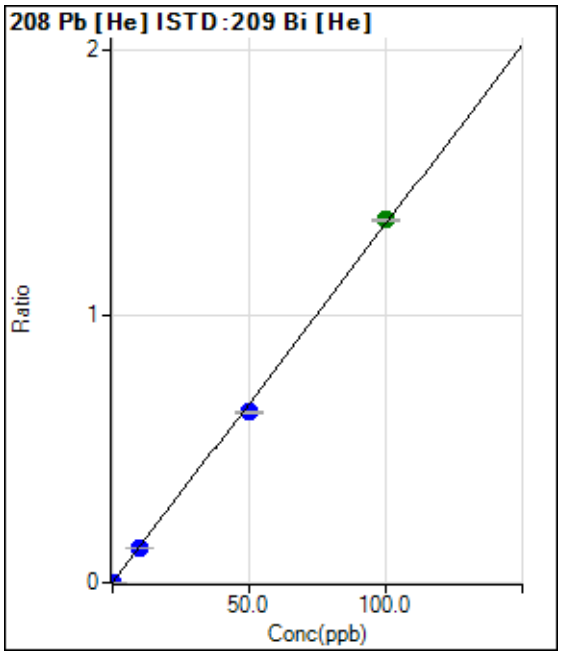
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	367.79	0.0001	P	10.2
2	☐	10.000	10.520	108727.95	0.0210	P	1.8
3	☐	50.000	50.558	528293.50	0.1009	P	1.5
4	☐	100.000	99.669	1020838.92	0.1988	P	0.6
5	☐			1296.74	0.0002	P	7.6

y = 0.0020 * x + 7.1887E-005
R = 1.0000
DL = 0.011
BEC = 0.03605

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1823.40	0.0005	P	5.7
2	☐	10.000	9.726	492510.23	0.1312	P	2.0
3	☐	50.000	47.620	2369327.39	0.6403	P	1.2
4	☐	100.000	101.218	4810705.85	1.3604	A	0.6
5	☐			6128.32	0.0015	P	6.8

y = 0.0134 * x + 4.8980E-004
R = 0.9995
DL = 0.006236
BEC = 0.03645

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:32:14-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	396	4.32
B	11	45	2	NoGas	7717	0.06
Na	23	45	1	He	22429	0.01
Mg	24	45	1	He	1530	0.29
Al	27	45	1	He	710	2.38
K	39	45	1	He	40699	0.01
Ca	44	45	1	He	531	0.79
Ti	47	45	1	He	16	210.41
V	51	45	1	He	172	149.62
Cr	52	45	1	He	2294	0.10
Mn	55	115	1	He	800	0.59
Fe	56	103	1	He	17144	0.05
Co	59	103	1	He	92	11.97
Ni	60	103	1	He	866	1.06
Cu	63	103	1	He	3984	0.12
Zn	66	103	1	He	1599	0.46
As	75	103	1	He	136	7.26
Se	78	103	1	He	61	29.80
Sr	88	103	1	He	109	11.71
Mo	95	103	1	He	487	4.75
Ag	107	103	1	He	72	51.25
Cd	111	103	1	He	1748	0.09
Sn	118	115	1	He	1189	1.36
Sb	123	115	1	He	1505	1.44
Ba	137	115	1	He	48	36.75
W	182	209	1	He	6750	0.11
Tl	205	209	1	He	122	5.61
Pb	208	209	1	He	2045	0.12

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1728429	1.86
Sc	45	1	He	1024267	0.41
Sc	45	2	NoGas	7990312	1.83
Rh	103	1	He	3056668	1.07
In	115	1	He	1970412	1.18
Tb	159	1	He	5065116	1.48
Ho	165	1	He	5171103	1.07
Bi	209	1	He	3732371	1.40

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:36:07-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	311	12.09
B	11	45	2	NoGas	7335	0.13
Na	23	45	1	He	22303	0.01
Mg	24	45	1	He	1485	0.24
Al	27	45	1	He	656	0.70
K	39	45	1	He	40442	0.01
Ca	44	45	1	He	568	2.70
Ti	47	45	1	He	9	1061.63
Cr	52	45	1	He	2324	0.13
Mn	55	115	1	He	836	1.39
Fe	56	103	1	He	14131	0.02
Co	59	103	1	He	70	36.00
Ni	60	103	1	He	876	1.07
Cu	63	103	1	He	3802	0.14
Zn	66	103	1	He	1448	0.57
As	75	103	1	He	142	11.55
Se	78	103	1	He	69	17.68
Sr	88	103	1	He	146	21.47
Mo	95	103	1	He	311	2.93
Ag	107	103	1	He	83	29.20
Cd	111	103	1	He	1702	0.30
Sn	118	115	1	He	1137	1.89
Sb	123	115	1	He	983	1.11
Ba	137	115	1	He	52	42.92
W	182	209	1	He	5579	0.14
Tl	205	209	1	He	114	25.62
Pb	208	209	1	He	1823	0.28

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1729956	1.68
Sc	45	1	He	1045873	0.53
Sc	45	2	NoGas	8041241	0.61
Rh	103	1	He	3067946	1.41
In	115	1	He	1978772	1.99
Tb	159	1	He	5013529	0.37
Ho	165	1	He	5115781	0.16
Bi	209	1	He	3723643	0.89

Calibration Standard Report

Sample Table

Sample Name	STD1-1906323
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:39:58-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	32296	0.01
B	11	2	NoGas	33695	0.01
Na	23	1	He	8780380	0.00
Mg	24	1	He	5075041	0.00
Al	27	1	He	28765	0.00
K	39	1	He	5147060	0.00
Ca	44	1	He	270206	0.00
Ti	47	1	He	3020	0.15
V	51	1	He	75549	0.00
Cr	52	1	He	92108	0.00
Mn	55	1	He	356064	0.00
Fe	56	1	He	21665588	0.00
Co	59	1	He	128418	0.00
Ni	60	1	He	32786	0.01
Cu	63	1	He	88269	0.00
Zn	66	1	He	18714	0.01
As	75	1	He	11438	0.02
Se	78	1	He	1303	0.20
Sr	88	1	He	91841	0.00
Mo	95	1	He	44158	0.00
Ag	107	1	He	140915	0.00
Cd	111	1	He	26565	0.00
Sn	118	1	He	60809	0.00
Sb	123	1	He	56119	0.00
Ba	137	1	He	27959	0.01
W	182	1	He	152610	0.00
Tl	205	1	He	360094	0.00
Pb	208	1	He	492510	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1752847	1.49	1729956	101.32	30	120	
Sc	45	1	He	1068202	1.53	1045873	102.13	30	120	
Sc	45	2	NoGas	8223475	1.43	8041241	102.27	30	120	
Rh	103	1	He	3067096	0.95	3067946	99.97	30	120	
In	115	1	He	1986212	2.78	1978772	100.38	30	120	
Tb	159	1	He	5081681	0.75	5013529	101.36	30	120	
Ho	165	1	He	5165339	0.86	5115781	100.97	30	120	
Bi	209	1	He	3755227	0.79	3723643	100.85	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1904110
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:43:47-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	173047	0.00
B	11	2	NoGas	144539	0.00
Na	23	1	He	46134574	0.00
Mg	24	1	He	26145648	0.00
Al	27	1	He	150983	0.00
K	39	1	He	26509817	0.00
Ca	44	1	He	1447546	0.00
Ti	47	1	He	15542	0.05
V	51	1	He	386438	0.00
Cr	52	1	He	461503	0.00
Mn	55	1	He	1913978	0.00
Fe	56	1	He	110143751	0.00
Co	59	1	He	644404	0.00
Ni	60	1	He	160091	0.00
Cu	63	1	He	419260	0.00
Zn	66	1	He	86623	0.01
As	75	1	He	57716	0.01
Se	78	1	He	6303	0.07
Sr	88	1	He	467871	0.00
Mo	95	1	He	218855	0.00
Ag	107	1	He	699076	0.00
Cd	111	1	He	124645	0.00
Sn	118	1	He	304152	0.00
Sb	123	1	He	286715	0.00
Ba	137	1	He	140157	0.00
W	182	1	He	746582	0.00
Tl	205	1	He	1927785	0.00
Pb	208	1	He	2369327	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1809071	2.03	1729956	104.57	30	120	
Sc	45	1	He	1148490	7.97	1045873	109.81	30	120	
Sc	45	2	NoGas	8480977	0.93	8041241	105.47	30	120	
Rh	103	1	He	3086915	2.04	3067946	100.62	30	120	
In	115	1	He	2015770	1.13	1978772	101.87	30	120	
Tb	159	1	He	5146691	1.48	5013529	102.66	30	120	
Ho	165	1	He	5235489	1.66	5115781	102.34	30	120	
Bi	209	1	He	3700169	2.10	3723643	99.37	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1906333
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:47:36-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	402689	0.00
B	11	2	NoGas	8376	0.05
Na	23	1	He	87976343	0.00
Mg	24	1	He	49936218	0.00
Al	27	1	He	285350	0.00
K	39	1	He	50186678	0.00
Ca	44	1	He	2720376	0.00
Ti	47	1	He	30	133.51
V	51	1	He	740614	0.00
Cr	52	1	He	877877	0.00
Mn	55	1	He	3534735	0.00
Fe	56	1	He	211952245	0.00
Co	59	1	He	1222558	0.00
Ni	60	1	He	297648	0.00
Cu	63	1	He	784292	0.00
Zn	66	1	He	160597	0.00
As	75	1	He	107799	0.00
Se	78	1	He	11573	0.00
Sr	88	1	He	895244	0.00
Mo	95	1	He	2910	0.41
Ag	107	1	He	1309943	0.00
Cd	111	1	He	232329	0.00
Sn	118	1	He	4623	0.07
Sb	123	1	He	3809	0.24
Ba	137	1	He	269423	0.00
W	182	1	He	15842	0.05
Tl	205	1	He	3665287	0.00
Pb	208	1	He	4810706	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1788352	1.56	1729956	103.38	30	120	
Sc	45	1	He	1071350	1.76	1045873	102.44	30	120	
Sc	45	2	NoGas	8334682	0.51	8041241	103.65	30	120	
Rh	103	1	He	2889295	1.11	3067946	94.18	30	120	
In	115	1	He	1908886	0.95	1978772	96.47	30	120	
Tb	159	1	He	5071303	0.25	5013529	101.15	30	120	
Ho	165	1	He	5134279	0.35	5115781	100.36	30	120	
Bi	209	1	He	3536229	0.65	3723643	94.97	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1906536
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:51:20-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	430	4.56
B	11	2	NoGas	256668	0.00
Na	23	1	He	46167	0.03
Mg	24	1	He	6813	0.24
Al	27	1	He	2119	0.36
K	39	1	He	61494	0.02
Ca	44	1	He	952	0.92
Ti	47	1	He	35789	0.03
V	51	1	He	212	175.87
Cr	52	1	He	4801	0.25
Mn	55	1	He	1985	0.40
Fe	56	1	He	303802	0.01
Co	59	1	He	221	7.90
Ni	60	1	He	1146	1.14
Cu	63	1	He	4124	0.09
Zn	66	1	He	1709	0.95
As	75	1	He	699	1.29
Se	78	1	He	134	4.01
Sr	88	1	He	242	5.69
Mo	95	1	He	488130	0.00
Ag	107	1	He	428	3.36
Cd	111	1	He	2132	0.48
Sn	118	1	He	686200	0.00
Sb	123	1	He	638827	0.00
Ba	137	1	He	231	6.25
W	182	1	He	1736481	0.00
Tl	205	1	He	1867	1.01
Pb	208	1	He	6128	0.11

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1811249	1.21	1729956	104.70	30	120	
Sc	45	1	He	1306222	9.56	1045873	124.89	30	120	ISTD Failed
Sc	45	2	NoGas	7987039	0.22	8041241	99.33	30	120	
Rh	103	1	He	3472423	5.43	3067946	113.18	30	120	
In	115	1	He	2222144	4.94	1978772	112.30	30	120	
Tb	159	1	He	5449426	3.81	5013529	108.69	30	120	
Ho	165	1	He	5529301	2.66	5115781	108.08	30	120	
Bi	209	1	He	3986622	2.79	3723643	107.06	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1905741
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:55:12-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	40.978	4.110	157461	2.11	40	102.4	89.5	110.5	
B	11	45	NoGas	47.642	1.228	130334	1.88	40	119.1	89.5	110.5	ICV Failed
Na	23	45	He	20348.572	3.436	36388536	4.24	20000	101.7	89.5	110.5	
Mg	24	45	He	20232.237	4.731	20510267	2.91	20000	101.2	89.5	110.5	
Al	27	45	He	201.972	3.719	117618	3.94	200	101.0	89.5	110.5	
K	39	45	He	20424.619	4.028	20877189	3.67	20000	102.1	89.5	110.5	
Ca	44	45	He	20002.109	1.724	1110012	6.03	20000	100.0	89.5	110.5	
Ti	47	45	He	41.547	8.815	12385	2.17	40	103.9	89.5	110.5	
V	51	45	He	40.675	5.184	305408	2.43	40	101.7	89.5	110.5	
Cr	52	45	He	40.483	4.965	362283	2.71	40	101.2	89.5	110.5	
Mn	55	115	He	205.345	2.166	1487765	4.91	200	102.7	89.5	110.5	
Fe	56	103	He	10067.527	1.838	86733988	1.55	10000	100.7	89.5	110.5	
Co	59	103	He	40.328	2.604	502488	2.31	40	100.8	89.5	110.5	
Ni	60	103	He	41.564	2.821	127033	2.51	40	103.9	89.5	110.5	
Cu	63	103	He	41.515	2.730	334677	2.40	40	103.8	89.5	110.5	
Zn	66	103	He	42.085	2.020	69903	1.69	40	105.2	89.5	110.5	
As	75	103	He	39.997	3.438	44145	3.13	40	100.0	89.5	110.5	
Se	78	103	He	41.761	2.863	4992	2.54	40	104.4	89.5	110.5	
Sr	88	103	He	40.817	2.901	371779	2.62	40	102.0	89.5	110.5	
Mo	95	103	He	43.355	0.593	180359	0.38	40	108.4	89.5	110.5	
Ag	107	103	He	41.615	2.452	557078	2.16	40	104.0	89.5	110.5	
Cd	111	103	He	41.190	2.663	98718	2.33	40	103.0	89.5	110.5	
Sn	118	115	He	41.069	1.465	246030	1.86	40	102.7	89.5	110.5	
Sb	123	115	He	36.019	5.578	201252	2.39	40	90.0	89.5	110.5	
Ba	137	115	He	41.027	1.749	112325	1.58	40	102.6	89.5	110.5	
W	182	209	He	38.154	0.555	596380	0.66	40	95.4	89.5	110.5	
Tl	205	209	He	39.013	5.130	1467933	6.27	40	97.5	89.5	110.5	
Pb	208	209	He	39.619	0.144	1932450	1.26	40	99.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1760309	2.05	1729956	101.75	30	120	
Sc	45	He	1094611	7.79	1045873	104.66	30	120	
Sc	45	NoGas	8203026	1.19	8041241	102.01	30	120	
Rh	103	He	2952662	0.29	3067946	96.24	30	120	
In	115	He	1945842	3.27	1978772	98.34	30	120	
Tb	159	He	5011007	0.73	5013529	99.95	30	120	
Ho	165	He	5181310	1.92	5115781	101.28	30	120	
Bi	209	He	3626875	1.13	3723643	97.40	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T11:58:58-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.056	53.7	27	33.1	20	
W	182	1	He	0.933	9.3	20989	6.3	10	
Ca	44	1	He	-0.609	-57.7	578	5.6	1000	
Na	23	1	He	6.077	22.3	35257	6.4	400	
Mg	24	1	He	2.146	23.2	3838	10.0	1000	
K	39	1	He	7.131	7.9	51148	3.8	1000	
V	51	1	He	0.074	66.8	341	111.2	2	
Cr	52	1	He	0.025	52.0	2736	7.9	2	
Mn	55	1	He	-0.029	-8.4	667	4.1	2	
Fe	56	1	He	14.706	17.0	155249	14.1	50	
Co	59	1	He	0.002	27.1	108	7.1	1	
Ni	60	1	He	-0.013	-150.5	891	9.7	2	
Cu	63	1	He	-0.141	-4.9	2807	0.3	2	
Zn	66	1	He	-0.328	-8.7	951	4.2	20	
As	75	1	He	0.058	28.5	222	11.4	2	
Se	78	1	He	0.116	103.5	89	20.1	2	
Sr	88	1	He	0.007	62.2	224	17.2	10	
Mo	95	1	He	0.666	13.4	3396	11.7	2	
Ag	107	1	He	0.009	13.1	223	6.0	0.2	
Cd	111	1	He	0.038	10.5	1913	1.9	0.2	
Ba	137	1	He	0.007	76.6	78	21.6	5	
Sn	118	1	He	0.274	8.0	2989	4.3	10	
Tl	205	1	He	0.021	12.3	969	10.2	0.5	
Pb	208	1	He	0.025	16.8	3174	6.9	1	
Al	27	1	He	0.169	76.6	811	13.6	50	
Sb	123	1	He	1.730	23.7	11487	20.1	1	ICB Failed
B	11	2	NoGas	0.763	20.7	9607	4.7	20	
Be	9	2	NoGas	0.051	19.0	515	6.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1766210	1.96	1729956	102.10	30	120	
Sc	45	1	He	1128728	4.60	1045873	107.92	30	120	
Sc	45	2	NoGas	8340200	0.74	8041241	103.72	30	120	
Rh	103	1	He	3272473	2.42	3067946	106.67	30	120	
In	115	1	He	2113848	2.08	1978772	106.83	30	120	

Tb	159	1	He	5271839	0.70	5013529	105.15	30	120	
Ho	165	1	He	5325749	0.89	5115781	104.10	30	120	
Bi	209	1	He	3830932	1.16	3723643	102.88	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:02:50-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.890	0.890	10.566	3860	9.00	1	89.0	69.5	130.5	
B	11	2	NoGas	21.481	21.481	1.349	64100	2.16	20	107.4	69.5	130.5	
Na	23	1	He	1061.480	1061.480	0.728	1884862	1.52	1000	106.1	69.5	130.5	
Mg	24	1	He	1054.877	1054.877	1.611	1051701	1.33	1000	105.5	69.5	130.5	
Al	27	1	He	51.398	51.398	3.762	29879	3.04	50	102.8	69.5	130.5	
K	39	1	He	1048.518	1048.518	1.035	1091530	0.14	1000	104.9	69.5	130.5	
Ca	44	1	He	1013.082	1013.082	0.487	55687	1.40	1000	101.3	69.5	130.5	
Ti	47	1	He	10.490	10.490	8.883	3086	9.70	10	104.9	69.5	130.5	
V	51	1	He	5.263	5.263	4.090	38628	3.43	5	105.3	69.5	130.5	
Cr	52	1	He	2.184	2.184	4.340	21449	2.93	2	109.2	69.5	130.5	
Mn	55	1	He	4.881	4.881	1.919	37331	0.34	5	97.6	69.5	130.5	
Fe	56	1	He	98.654	98.654	1.095	916328	0.96	100	98.7	69.5	130.5	
Co	59	1	He	1.004	1.004	4.519	13350	4.75	1	100.4	69.5	130.5	
Ni	60	1	He	2.059	2.059	0.755	7529	1.20	2	102.9	69.5	130.5	
Cu	63	1	He	1.927	1.927	3.338	20188	3.28	2	96.3	69.5	130.5	
Zn	66	1	He	20.153	20.153	0.880	36298	0.82	20	100.8	69.5	130.5	
As	75	1	He	4.905	4.905	1.189	5873	0.53	5	98.1	69.5	130.5	
Se	78	1	He	4.981	4.981	3.086	694	3.07	5	99.6	69.5	130.5	
Sr	88	1	He	9.504	9.504	0.840	91989	1.02	10	95.0	69.5	130.5	
Mo	95	1	He	10.382	10.382	0.562	46081	1.04	10	103.8	69.5	130.5	
Ag	107	1	He	1.038	1.038	2.644	14828	2.00	1	103.8	69.5	130.5	
Cd	111	1	He	1.033	1.033	2.414	4323	1.03	1	103.3	69.5	130.5	
Sn	118	1	He	10.092	10.092	1.560	63310	0.33	10	100.9	69.5	130.5	
Sb	123	1	He	2.358	2.358	1.673	14554	1.92	2	117.9	69.5	130.5	
Ba	137	1	He	4.904	4.904	2.754	13914	1.93	5	98.1	69.5	130.5	
W	182	1	He	9.390	9.390	1.752	157553	1.18	10	93.9	69.5	130.5	
Tl	205	1	He	1.883	1.883	2.382	74056	0.85	2	94.1	69.5	130.5	
Pb	208	1	He	1.047	1.047	4.158	55137	2.71	1	104.7	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1820391	1.08	1729956	105.23	30	120	
Sc	45	1	He	1072475	0.93	1045873	102.54	30	120	
Sc	45	2	NoGas	8362492	1.10	8041241	104.00	30	120	
Rh	103	1	He	3133637	0.66	3067946	102.14	30	120	
In	115	1	He	2009360	1.68	1978772	101.55	30	120	
Tb	159	1	He	5098378	1.39	5013529	101.69	30	120	
Ho	165	1	He	5202484	0.41	5115781	101.69	30	120	
Bi	209	1	He	3787947	1.58	3723643	101.73	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1912681
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:06:40-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	-0.002	-768.9	256	22.6	1	
B	11	45	2	NoGas	0.916	29.6	8317	6.8	20	
Na	23	45	1	He	50017.876	3.0	78586460	2.3	75200	
Mg	24	45	1	He	50354.575	2.4	44902710	2.8	75200	
Al	27	45	1	He	48425.801	2.3	24652261	3.0	75200	
K	39	45	1	He	50083.296	2.2	44966578	3.0	75200	
Ca	44	45	1	He	50740.460	1.9	2472822	3.3	75200	
Ti	47	45	1	He	1022.609	2.3	268536	2.9	1505	
V	51	45	1	He	-0.013	-732.1	-279	-221.0	4	
Cr	52	45	1	He	0.718	1.8	7753	4.5	4	
Mn	55	115	1	He	0.274	7.1	2485	5.2	4	
Fe	56	103	1	He	50197.847	0.8	378278376	2.7	75200	
Co	59	103	1	He	0.030	16.3	387	15.8	2	
Ni	60	103	1	He	0.083	26.2	958	6.5	4	
Cu	63	103	1	He	0.205	3.1	4626	1.3	4	
Zn	66	103	1	He	1.260	7.2	3015	6.3	10	
As	75	103	1	He	0.121	17.9	235	7.5	4	
Se	78	103	1	He	0.115	43.9	70	8.2	4	
Sr	88	103	1	He	0.351	1.0	2916	2.3	20	
Mo	95	103	1	He	1110.912	2.9	4034454	0.9	1505	
Ag	107	103	1	He	0.014	2.7	232	2.2	1	
Cd	111	103	1	He	0.063	93.4	1563	9.6	1	
Sn	118	115	1	He	0.232	15.6	2211	8.3	20	
Sb	123	115	1	He	0.278	9.2	2222	5.6	1	
Ba	137	115	1	He	0.074	16.3	226	12.6	2	
W	182	209	1	He	0.417	7.7	10997	5.6	20	
Tl	205	209	1	He	0.009	7.6	408	7.6	1	
Pb	208	209	1	He	0.133	6.0	7611	2.9	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1456523	1.37	1729956	84.19	30	120	
Sc	45	1	He	961371	5.25	1045873	91.92	30	120	
Sc	45	2	NoGas	6932466	0.26	8041241	86.21	30	120	
Rh	103	1	He	2582709	2.02	3067946	84.18	30	120	
In	115	1	He	1721626	0.68	1978772	87.00	30	120	
Tb	159	1	He	4672224	1.31	5013529	93.19	30	120	
Ho	165	1	He	4775108	1.49	5115781	93.34	30	120	
Bi	209	1	He	3353837	1.83	3723643	90.07	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1883162
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:10:27-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	114.434	2.445	352374	1.79	100	114.4	79.5	120.5	
B	11	45	2	NoGas	124.343	3.608	273484	2.71	100	124.3	79.5	120.5	Fail
Na	23	45	1	He	49423.954	0.492	72888697	1.75	50000	98.8	79.5	120.5	
Mg	24	45	1	He	50209.640	0.952	42018165	1.83	50000	100.4	79.5	120.5	
Al	27	45	1	He	48015.172	1.853	22934493	1.29	50000	96.0	79.5	120.5	
K	39	45	1	He	49704.585	1.368	41872167	0.94	50000	99.4	79.5	120.5	
Ca	44	45	1	He	50804.764	2.083	2322646	0.57	50000	101.6	79.5	120.5	
Ti	47	45	1	He	1127.651	1.336	277854	1.11	1100	102.5	79.5	120.5	
V	51	45	1	He	100.503	1.359	623321	0.96	100	100.5	79.5	120.5	
Cr	52	45	1	He	102.519	1.344	754337	1.29	100	102.5	79.5	120.5	
Mn	55	115	1	He	94.687	1.879	592850	1.19	100	94.7	79.5	120.5	
Fe	56	103	1	He	48799.623	1.911	360415737	1.59	50000	97.6	79.5	120.5	
Co	59	103	1	He	98.965	1.764	1057174	1.43	100	99.0	79.5	120.5	
Ni	60	103	1	He	98.821	1.294	257965	0.95	100	98.8	79.5	120.5	
Cu	63	103	1	He	99.089	1.188	680557	0.84	100	99.1	79.5	120.5	
Zn	66	103	1	He	99.041	0.562	139435	0.38	100	99.0	79.5	120.5	
As	75	103	1	He	99.848	1.397	94317	1.07	100	99.8	79.5	120.5	
Se	78	103	1	He	100.958	1.807	10265	1.46	100	101.0	79.5	120.5	
Sr	88	103	1	He	99.434	1.650	776374	1.34	100	99.4	79.5	120.5	
Mo	95	103	1	He	1188.977	1.627	4234253	1.95	1100	108.1	79.5	120.5	
Ag	107	103	1	He	101.183	1.589	1161229	1.27	100	101.2	79.5	120.5	
Cd	111	103	1	He	102.179	1.922	207886	1.57	100	102.2	79.5	120.5	
Sn	118	115	1	He	101.590	2.428	524460	1.62	100	101.6	79.5	120.5	
Sb	123	115	1	He	107.269	1.908	516738	1.11	100	107.3	79.5	120.5	
Ba	137	115	1	He	102.734	1.984	243002	1.25	100	102.7	79.5	120.5	
W	182	209	1	He	98.138	0.867	1395966	0.41	100	98.1	79.5	120.5	
Tl	205	209	1	He	100.755	0.503	3467870	0.84	100	100.8	79.5	120.5	
Pb	208	209	1	He	102.765	0.966	4584183	0.32	100	102.8	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1411840	1.04	1729956	81.61	30	120	
Sc	45	1	He	901520	2.24	1045873	86.20	30	120	
Sc	45	2	NoGas	6838680	0.96	8041241	85.05	30	120	
Rh	103	1	He	2531576	0.34	3067946	82.52	30	120	
In	115	1	He	1681118	0.82	1978772	84.96	30	120	
Tb	159	1	He	4616590	0.63	5013529	92.08	30	120	
Ho	165	1	He	4708815	0.29	5115781	92.04	30	120	
Bi	209	1	He	3319185	1.25	3723643	89.14	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:14:12-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.096	4.570	187889	2.34	50	96.2	89.5	110.5	
B	11	45	2	NoGas	56.634	0.126	159559	0.28	50	113.3	89.5	110.5	CCV Failed
Na	23	45	1	He	25187.538	0.912	43792403	1.75	25000	100.8	89.5	110.5	
Mg	24	45	1	He	25215.365	2.782	24864462	0.81	25000	100.9	89.5	110.5	
Al	27	45	1	He	258.511	1.684	146198	0.64	250	103.4	89.5	110.5	
K	39	45	1	He	25552.248	1.829	25390135	0.87	25000	102.2	89.5	110.5	
Ca	44	45	1	He	25348.992	1.388	1366736	3.04	25000	101.4	89.5	110.5	
Ti	47	45	1	He	52.193	3.200	15167	3.06	50	104.4	89.5	110.5	
V	51	45	1	He	51.443	0.855	375983	1.70	50	102.9	89.5	110.5	
Cr	52	45	1	He	51.211	0.525	445373	1.98	50	102.4	89.5	110.5	
Mn	55	115	1	He	253.617	1.508	1827546	1.06	250	101.4	89.5	110.5	
Fe	56	103	1	He	12467.245	0.149	108037689	0.98	12500	99.7	89.5	110.5	
Co	59	103	1	He	49.580	1.056	621374	0.99	50	99.2	89.5	110.5	
Ni	60	103	1	He	49.704	0.815	152646	1.52	50	99.4	89.5	110.5	
Cu	63	103	1	He	50.098	0.744	405477	0.78	50	100.2	89.5	110.5	
Zn	66	103	1	He	49.905	0.525	83121	1.25	50	99.8	89.5	110.5	
As	75	103	1	He	49.755	0.497	55207	1.07	50	99.5	89.5	110.5	
Se	78	103	1	He	50.193	1.481	6021	1.52	50	100.4	89.5	110.5	
Sr	88	103	1	He	49.516	0.739	453652	1.06	50	99.0	89.5	110.5	
Mo	95	103	1	He	70.061	4.695	292947	4.39	50	140.1	89.5	110.5	CCV Failed
Ag	107	103	1	He	50.969	0.996	686287	0.99	50	101.9	89.5	110.5	
Cd	111	103	1	He	50.797	0.752	122073	0.11	50	101.6	89.5	110.5	
Sn	118	115	1	He	50.275	1.472	299493	0.19	50	100.5	89.5	110.5	
Sb	123	115	1	He	51.184	1.867	284499	1.85	50	102.4	89.5	110.5	
Ba	137	115	1	He	49.961	1.507	136134	0.81	50	99.9	89.5	110.5	
W	182	209	1	He	48.816	1.412	762081	1.04	50	97.6	89.5	110.5	
Tl	205	209	1	He	51.244	0.891	1928872	1.12	50	102.5	89.5	110.5	
Pb	208	209	1	He	48.708	0.949	2377075	0.53	50	97.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1790337	2.22	1729956	103.49	30	120	
Sc	45	1	He	1062584	2.22	1045873	101.60	30	120	
Sc	45	2	NoGas	8525852	0.18	8041241	106.03	30	120	
Rh	103	1	He	2969932	0.84	3067946	96.81	30	120	
In	115	1	He	1936235	1.29	1978772	97.85	30	120	
Tb	159	1	He	5070344	0.50	5013529	101.13	30	120	
Ho	165	1	He	5216019	1.53	5115781	101.96	30	120	
Bi	209	1	He	3629597	0.44	3723643	97.47	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:17:57-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	-0.009	-240.3	274	28.5	1	
B	11	45	2	NoGas	1.444	8.0	11274	2.4	20	
Na	23	45	1	He	9.429	12.6	39588	11.1	400	
Mg	24	45	1	He	3.407	19.0	4949	18.6	1000	
Al	27	45	1	He	1.467	30.8	1519	22.9	50	
K	39	45	1	He	9.099	17.8	50773	9.1	1000	
Ca	44	45	1	He	2.311	38.1	711	11.5	1000	
Ti	47	45	1	He	0.303	12.5	98	8.6	20	
V	51	45	1	He	0.096	61.0	494	84.5	2	
Cr	52	45	1	He	0.027	46.3	2626	9.2	2	
Mn	55	115	1	He	0.021	26.9	1021	8.5	2	
Fe	56	103	1	He	19.193	15.4	194945	19.5	50	
Co	59	103	1	He	0.005	71.1	136	29.5	1	
Ni	60	103	1	He	-0.040	-34.0	781	0.9	2	
Cu	63	103	1	He	-0.130	-10.9	2848	8.8	2	
Zn	66	103	1	He	-0.071	-71.2	1389	11.2	20	
As	75	103	1	He	0.041	23.0	198	10.9	2	
Se	78	103	1	He	-0.036	-89.7	68	7.8	2	
Sr	88	103	1	He	0.001	254.9	164	16.4	10	
Mo	95	103	1	He	3.016	5.2	13929	10.0	2	CCB Failed
Ag	107	103	1	He	0.017	24.1	341	21.6	0.2	
Cd	111	103	1	He	0.027	74.6	1847	7.9	0.2	
Sn	118	115	1	He	0.321	6.5	3178	7.5	10	
Sb	123	115	1	He	0.456	18.2	3687	17.5	1	
Ba	137	115	1	He	0.015	68.8	98	34.1	5	
W	182	209	1	He	0.840	10.6	19231	9.5	10	
Tl	205	209	1	He	0.031	18.1	1337	18.4	0.5	
Pb	208	209	1	He	0.041	17.1	3916	10.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1716057	1.87	1729956	99.20	30	120	
Sc	45	1	He	1075162	5.78	1045873	102.80	30	120	
Sc	45	2	NoGas	8254136	0.82	8041241	102.65	30	120	
Rh	103	1	He	3201913	5.03	3067946	104.37	30	120	
In	115	1	He	2039389	4.31	1978772	103.06	30	120	
Tb	159	1	He	5191375	1.29	5013529	103.55	30	120	
Ho	165	1	He	5284059	2.19	5115781	103.29	30	120	
Bi	209	1	He	3777838	1.98	3723643	101.46	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	014SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:21:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2342.362	2342.362	0.67	7608882	0.03	10000	
B	11	45	2	NoGas	263.033	263.033	0.48	595960	0.04	300	
Na	23	45	1	He	19741.763	19741.763	2.40	34074339	0.06	500000	
Mg	24	45	1	He	20282.171	20282.171	1.78	19856732	0.10	500000	
Al	27	45	1	He	19351.285	19351.285	2.00	10814603	0.18	200000	
K	39	45	1	He	20054.988	20054.988	2.89	19786914	0.10	500000	
Ca	44	45	1	He	19003.263	19003.263	5.79	1017523	1.87	500000	
Ti	47	45	1	He	200.760	200.760	1.35	57886	0.35	2500	
V	51	45	1	He	1947.821	1947.821	1.73	14138799	0.01	10000	
Cr	52	45	1	He	1996.836	1996.836	1.54	17148243	0.01	10000	
Mn	55	115	1	He	2037.357	2037.357	1.08	13803006	0.01	10000	
Fe	56	103	1	He	20158.120	20158.120	1.93	165606905	0.01	200000	
Co	59	103	1	He	2034.302	2034.302	1.59	24169325	0.01	10000	
Ni	60	103	1	He	2074.219	2074.219	1.88	6006542	0.03	10000	
Cu	63	103	1	He	2066.485	2066.485	2.91	15717181	0.01	10000	
Zn	66	103	1	He	2133.063	2133.063	1.91	3312879	0.06	10000	
As	75	103	1	He	2086.263	2086.263	2.18	2189397	0.10	10000	
Se	78	103	1	He	1985.185	1985.185	2.97	223338	0.89	10000	
Sr	88	103	1	He	2082.288	2082.288	1.64	18081739	0.01	10000	
Mo	95	103	1	He	209.869	209.869	1.68	831540	0.03	2000	
Ag	107	103	1	He	221.135	221.135	3.35	2822716	0.01	300	
Cd	111	103	1	He	2164.188	2164.188	1.41	4865902	0.04	4000	
Sn	118	115	1	He	2240.883	2240.883	0.86	12506427	0.02	2000	>LDR
Sb	123	115	1	He	213.306	213.306	1.10	1111865	0.02	300	
Ba	137	115	1	He	2208.907	2208.907	1.50	5656607	0.04	10000	
W	182	209	1	He	210.589	210.589	1.14	3164048	0.01	2500	
Tl	205	209	1	He	504.067	504.067	1.39	18359761	0.00	5000	
Pb	208	209	1	He	2099.215	2099.215	1.41	99070113	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1490227	0.51	1729956	86.14	30	120	
Sc	45	1	He	1054836	3.91	1045873	100.86	30	120	
Sc	45	2	NoGas	7129021	0.30	8041241	88.66	30	120	
Rh	103	1	He	2815774	0.86	3067946	91.78	30	120	
In	115	1	He	1820636	2.69	1978772	92.01	30	120	
Tb	159	1	He	4934141	1.06	5013529	98.42	30	120	
Ho	165	1	He	4978308	1.19	5115781	97.31	30	120	
Bi	209	1	He	3512577	0.87	3723643	94.33	30	120	

Sample Report

Sample Table

Sample Name	240-49171-A-18-B@50
Data File Name	015SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:25:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.489	0.489	5.82	2004	0.02	10000	
B	11	45	2	NoGas	2.961	2.961	3.33	13817	0.02	300	
Na	23	45	1	He	13.538	13.538	3.38	40390	0.03	500000	
Mg	24	45	1	He	672.209	672.209	2.19	581062	0.12	500000	
Al	27	45	1	He	2816.701	2816.701	1.07	1387610	0.20	200000	
K	39	45	1	He	200.348	200.348	1.28	209773	0.10	500000	
Ca	44	45	1	He	198.680	198.680	1.20	9868	2.01	500000	
Ti	47	45	1	He	21.401	21.401	2.74	5445	0.39	2500	
V	51	45	1	He	5.026	5.026	2.09	31954	0.02	10000	
Cr	52	45	1	He	4.383	4.383	1.41	35220	0.01	10000	
Mn	55	115	1	He	107.715	107.715	1.05	732765	0.01	10000	
Fe	56	103	1	He	5778.791	5778.791	1.16	47001120	0.01	200000	
Co	59	103	1	He	2.339	2.339	0.52	27570	0.01	10000	
Ni	60	103	1	He	4.997	4.997	0.57	15118	0.03	10000	
Cu	63	103	1	He	4.729	4.729	2.05	39046	0.01	10000	
Zn	66	103	1	He	20.029	20.029	2.16	32091	0.06	10000	
As	75	103	1	He	3.867	3.867	0.48	4145	0.09	10000	
Se	78	103	1	He	1.141	1.141	6.60	190	0.60	10000	
Sr	88	103	1	He	1.278	1.278	1.96	11116	0.01	10000	
Mo	95	103	1	He	3.555	3.555	14.13	14215	0.03	2000	
Ag	107	103	1	He	0.038	0.038	26.45	550	0.01	300	
Cd	111	103	1	He	0.166	0.166	26.92	1916	0.01	4000	
Sn	118	115	1	He	9.662	9.662	8.77	55120	0.02	2000	
Sb	123	115	1	He	0.617	0.617	19.97	4131	0.01	300	
Ba	137	115	1	He	14.389	14.389	1.45	37024	0.04	10000	
W	182	209	1	He	2.633	2.633	15.70	46264	0.01	2500	
Tl	205	209	1	He	0.252	0.252	19.09	9581	0.00	5000	
Pb	208	209	1	He	3.588	3.588	2.71	176867	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1607074	1.78	1729956	92.90	30	120	
Sc	45	1	He	929298	1.94	1045873	88.85	30	120	
Sc	45	2	NoGas	7496735	0.79	8041241	93.23	30	120	
Rh	103	1	He	2787039	0.31	3067946	90.84	30	120	
In	115	1	He	1826723	1.29	1978772	92.32	30	120	
Tb	159	1	He	4784689	1.27	5013529	95.44	30	120	
Ho	165	1	He	4904334	1.45	5115781	95.87	30	120	
Bi	209	1	He	3632775	0.97	3723643	97.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177128/1-a@2
Data File Name	016_Blk.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:29:12-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.293	13.9	1259	18.5	1	
B	11	45	2	NoGas	3.114	9.7	13257	5.4	20	
Na	23	45	1	He	40.287	1.5	81337	5.5	400	
Mg	24	45	1	He	33.801	2.1	30582	5.3	1000	
Al	27	45	1	He	6.133	4.0	3619	8.6	50	
K	39	45	1	He	25.816	9.1	58620	8.8	1000	
Ca	44	45	1	He	109.077	3.2	5666	6.3	1000	
Ti	47	45	1	He	0.520	49.2	138	39.4	20	
V	51	45	1	He	0.197	132.8	1013	162.6	2	
Cr	52	45	1	He	0.946	2.5	9256	5.2	2	
Mn	55	115	1	He	0.325	8.7	2898	9.3	2	
Fe	56	103	1	He	31.202	9.7	264888	11.9	50	
Co	59	103	1	He	0.050	1.4	652	4.0	1	
Ni	60	103	1	He	0.159	2.4	1242	4.2	2	
Cu	63	103	1	He	2.601	11.4	22916	13.5	2	Blank Failed
Zn	66	103	1	He	3.563	7.2	6740	7.5	20	
As	75	103	1	He	0.574	2.1	720	5.5	2	
Se	78	103	1	He	0.428	16.9	110	11.5	2	
Sr	88	103	1	He	0.277	4.4	2491	6.6	10	
Mo	95	103	1	He	1.712	6.2	6953	9.7	2	
Ag	107	103	1	He	0.027	25.0	416	22.1	0.2	
Cd	111	103	1	He	0.040	37.3	1622	3.9	0.2	
Sn	118	115	1	He	24.436	6.9	133982	9.8	10	Blank Failed
Sb	123	115	1	He	0.613	6.7	3986	1.8	1	
Ba	137	115	1	He	0.928	3.0	2359	1.5	5	
W	182	209	1	He	0.897	3.6	19835	5.5	10	
Tl	205	209	1	He	0.110	17.5	4373	20.0	0.5	
Pb	208	209	1	He	0.508	5.3	27220	7.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1530541	10.72	1729956	88.47	30	120	
Sc	45	1	He	933034	6.54	1045873	89.21	30	120	
Sc	45	2	NoGas	7032697	10.13	8041241	87.46	30	120	
Rh	103	1	He	2766594	4.49	3067946	90.18	30	120	
In	115	1	He	1772760	3.70	1978772	89.59	30	120	
Tb	159	1	He	4682591	2.94	5013529	93.40	30	120	
Ho	165	1	He	4860417	2.27	5115781	95.01	30	120	
Bi	209	1	He	3719713	2.92	3723643	99.89	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177128/2-a@2
Data File Name	017LCSS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:33:03-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	536.948	536.948	0.844	1695345	0.80	500	107.4	78.6	110.5	
B	11	2	NoGas	69.957	69.957	2.010	154561	1.09	50	139.9	79.5	120.5	LCSS Failed
Na	23	1	He	5145.331	5145.331	0.623	7827808	1.88	5000	102.9	79.5	120.5	
Mg	24	1	He	5115.956	5115.956	1.480	4408023	2.67	5000	102.3	79.5	120.5	
Al	27	1	He	4895.304	4895.304	0.324	2407371	1.17	5000	97.9	79.5	120.5	
K	39	1	He	5026.386	5026.386	3.015	4391842	4.24	5000	100.5	79.5	120.5	
Ca	44	1	He	4683.936	4683.936	1.835	220928	3.08	5000	93.7	79.5	120.5	
Ti	47	1	He	50.810	50.810	1.572	12896	2.83	50	101.6	79.5	120.5	
V	51	1	He	508.481	508.481	1.689	3247168	2.77	500	101.7	71.5	110.5	
Cr	52	1	He	510.278	510.278	0.769	3856283	1.05	500	102.1	69.5	110.5	
Mn	55	1	He	476.135	476.135	0.185	3100347	2.48	500	95.2	79.5	120.5	
Fe	56	1	He	4689.362	4689.362	0.799	37508822	1.47	5000	93.8	79.5	120.5	
Co	59	1	He	475.607	475.607	1.081	5500645	2.05	500	95.1	73.9	110.5	
Ni	60	1	He	478.453	478.453	4.489	1349630	5.60	500	95.7	74.9	110.5	
Cu	63	1	He	488.840	488.840	0.777	3621844	2.02	500	97.8	72.6	110.5	
Zn	66	1	He	442.553	442.553	1.941	670075	2.48	500	88.5	71.5	113.4	
As	75	1	He	422.855	422.855	0.893	432046	1.64	500	84.6	73.4	110.5	
Se	78	1	He	409.231	409.231	1.033	44866	2.12	500	81.8	64.6	110.5	
Sr	88	1	He	476.847	476.847	1.950	4030517	2.33	500	95.4	79.5	120.5	
Mo	95	1	He	50.867	50.867	0.988	196383	1.77	50	101.7	29.5	140.5	
Ag	107	1	He	50.208	50.208	1.017	623890	1.61	50	100.4	59.5	114.5	
Cd	111	1	He	468.779	468.779	1.312	1027140	1.70	500	93.8	73.5	110.5	
Sn	118	1	He	559.597	559.597	1.449	3002230	1.23	500	111.9	79.5	120.5	
Sb	123	1	He	48.573	48.573	1.264	244011	1.72	50	97.1	67.5	113.4	
Ba	137	1	He	482.267	482.267	1.712	1186994	1.01	500	96.5	69.5	110.5	
W	182	1	He	45.855	45.855	1.981	699837	2.32	50	91.7	74.6	125.4	
Tl	205	1	He	118.390	118.390	0.513	4353994	0.65	125	94.7	70.6	110.5	
Pb	208	1	He	489.246	489.246	1.011	23313569	0.59	500	97.8	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1448294	0.37	1729956	83.72	30	120	
Sc	45	1	He	927770	1.26	1045873	88.71	30	120	
Sc	45	2	NoGas	6749472	1.28	8041241	83.94	30	120	
Rh	103	1	He	2741002	1.99	3067946	89.34	30	120	
In	115	1	He	1749895	2.65	1978772	88.43	30	120	
Tb	159	1	He	4796619	1.70	5013529	95.67	30	120	
Ho	165	1	He	4849093	1.57	5115781	94.79	30	120	
Bi	209	1	He	3546583	1.13	3723643	95.24	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-d@20
Data File Name	018SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:36:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.466	0.466	6.97	2160	0.02	10000	
B	11	45	2	NoGas	8.890	8.890	2.21	32188	0.03	300	
Na	23	45	1	He	209.761	209.761	2.12	401598	0.05	500000	
Mg	24	45	1	He	1276.265	1276.265	0.24	1307623	0.10	500000	
Al	27	45	1	He	4973.094	4973.094	1.51	2904908	0.17	200000	
K	39	45	1	He	1770.324	1770.324	1.37	1865218	0.09	500000	
Ca	44	45	1	He	28.548	28.548	52.14	2211	1.29	500000	
Ti	47	45	1	He	36.375	36.375	1.71	10969	0.33	2500	
V	51	45	1	He	8.287	8.287	3.53	62645	0.01	10000	
Cr	52	45	1	He	8.677	8.677	1.99	80292	0.01	10000	
Mn	55	115	1	He	1148.126	1148.126	2.23	8726192	0.01	10000	
Fe	56	103	1	He	10401.682	10401.682	2.28	96219427	0.01	200000	
Co	59	103	1	He	3.906	3.906	3.60	52305	0.01	10000	
Ni	60	103	1	He	10.188	10.188	2.04	34122	0.03	10000	
Cu	63	103	1	He	10.370	10.370	2.46	92716	0.01	10000	
Zn	66	103	1	He	24.970	24.970	2.76	45137	0.06	10000	
As	75	103	1	He	22.631	22.631	1.93	26887	0.08	10000	
Se	78	103	1	He	0.710	0.710	8.33	162	0.44	10000	
Sr	88	103	1	He	185.481	185.481	2.56	1813461	0.01	10000	
Mo	95	103	1	He	56.143	56.143	0.79	250782	0.02	2000	
Ag	107	103	1	He	0.018	0.018	19.53	338	0.01	300	
Cd	111	103	1	He	0.144	0.144	13.43	2123	0.01	4000	
Sn	118	115	1	He	2.338	2.338	6.18	15797	0.01	2000	
Sb	123	115	1	He	0.128	0.128	19.88	1759	0.01	300	
Ba	137	115	1	He	31.048	31.048	2.57	89261	0.03	10000	
W	182	209	1	He	2.023	2.023	1.92	38551	0.01	2500	
Tl	205	209	1	He	0.119	0.119	10.64	4817	0.00	5000	
Pb	208	209	1	He	38.499	38.499	2.46	1968736	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1807053	0.98	1729956	104.46	30	120	
Sc	45	1	He	1102358	3.43	1045873	105.40	30	120	
Sc	45	2	NoGas	8684356	0.53	8041241	108.00	30	120	
Rh	103	1	He	3172135	3.95	3067946	103.40	30	120	
In	115	1	He	2043484	3.57	1978772	103.27	30	120	
Tb	159	1	He	5227727	1.97	5013529	104.27	30	120	
Ho	165	1	He	5323212	0.84	5115781	104.05	30	120	
Bi	209	1	He	3803745	2.24	3723643	102.15	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49171-a-3-d@100
Data File Name	019SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:40:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.207	0.207	4.68	1104	0.02	10000	
B	11	45	2	NoGas	2.123	2.123	12.51	13294	0.02	300	
Na	23	45	1	He	40.736	40.736	0.11	92400	0.04	500000	
Mg	24	45	1	He	252.266	252.266	3.20	247526	0.10	500000	
Al	27	45	1	He	995.712	995.712	3.52	555014	0.18	200000	
K	39	45	1	He	348.864	348.864	1.30	382885	0.09	500000	
Ca	44	45	1	He	8.557	8.557	49.91	1027	0.83	500000	
Ti	47	45	1	He	6.732	6.732	1.26	1942	0.35	2500	
V	51	45	1	He	1.828	1.828	5.39	13008	0.01	10000	
Cr	52	45	1	He	1.790	1.790	3.37	17642	0.01	10000	
Mn	55	115	1	He	229.911	229.911	1.05	1704545	0.01	10000	
Fe	56	103	1	He	2059.264	2059.264	4.25	18490541	0.01	200000	
Co	59	103	1	He	0.776	0.776	3.28	10139	0.01	10000	
Ni	60	103	1	He	1.919	1.919	3.79	6947	0.03	10000	
Cu	63	103	1	He	1.939	1.939	4.01	19915	0.01	10000	
Zn	66	103	1	He	5.375	5.375	2.40	10567	0.05	10000	
As	75	103	1	He	4.631	4.631	3.43	5450	0.08	10000	
Se	78	103	1	He	0.176	0.176	20.75	91	0.19	10000	
Sr	88	103	1	He	34.140	34.140	3.65	323924	0.01	10000	
Mo	95	103	1	He	11.908	11.908	2.74	51823	0.02	2000	
Ag	107	103	1	He	0.005	0.005	26.93	152	0.00	300	
Cd	111	103	1	He	0.051	0.051	35.17	1830	0.00	4000	
Sn	118	115	1	He	0.557	0.557	3.75	4542	0.01	2000	
Sb	123	115	1	He	-0.039	-0.039	-13.54	769	-0.01	300	
Ba	137	115	1	He	6.179	6.179	3.67	17368	0.04	10000	
W	182	209	1	He	0.450	0.450	7.95	13013	0.00	2500	
Tl	205	209	1	He	0.026	0.026	15.29	1155	0.00	5000	
Pb	208	209	1	He	7.569	7.569	2.97	388711	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1749071	2.33	1729956	101.10	30	120	
Sc	45	1	He	1050579	0.30	1045873	100.45	30	120	
Sc	45	2	NoGas	8422769	1.63	8041241	104.74	30	120	
Rh	103	1	He	3075815	0.82	3067946	100.26	30	120	
In	115	1	He	1991741	0.82	1978772	100.66	30	120	
Tb	159	1	He	5110080	0.97	5013529	101.93	30	120	
Ho	165	1	He	5158695	0.30	5115781	100.84	30	120	
Bi	209	1	He	3803539	0.58	3723643	102.15	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49171-a-3-d@20
Data File Name	020SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:44:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1137.555	1137.555	1.30	3863295	0.03	10000	
B	11	45	2	NoGas	137.717	137.717	2.21	330293	0.04	300	
Na	23	45	1	He	10127.209	10127.209	4.73	18225072	0.06	500000	
Mg	24	45	1	He	11142.639	11142.639	3.68	11376225	0.10	500000	
Al	27	45	1	He	14181.381	14181.381	3.88	8263717	0.17	200000	
K	39	45	1	He	11578.770	11578.770	4.15	11930353	0.10	500000	
Ca	44	45	1	He	9070.947	9070.947	3.49	506611	1.79	500000	
Ti	47	45	1	He	134.429	134.429	4.81	40388	0.33	2500	
V	51	45	1	He	1001.391	1001.391	3.80	7578627	0.01	10000	
Cr	52	45	1	He	1010.067	1010.067	4.68	9039125	0.01	10000	
Mn	55	115	1	He	2155.032	2155.032	3.37	15358457	0.01	10000	
Fe	56	103	1	He	20450.394	20450.394	2.43	177277002	0.01	200000	
Co	59	103	1	He	1023.482	1023.482	2.26	12830601	0.01	10000	
Ni	60	103	1	He	1062.197	1062.197	2.52	3245925	0.03	10000	
Cu	63	103	1	He	1056.105	1056.105	3.36	8478861	0.01	10000	
Zn	66	103	1	He	1096.035	1096.035	2.19	1796758	0.06	10000	
As	75	103	1	He	1005.112	1005.112	2.35	1113041	0.09	10000	
Se	78	103	1	He	999.090	999.090	2.39	118634	0.84	10000	
Sr	88	103	1	He	1212.290	1212.290	2.32	11107323	0.01	10000	
Mo	95	103	1	He	157.339	157.339	0.62	657497	0.02	2000	
Ag	107	103	1	He	37.391	37.391	1.59	503612	0.01	300	
Cd	111	103	1	He	1092.242	1092.242	1.13	2591496	0.04	4000	
Sn	118	115	1	He	1102.675	1102.675	0.64	6473738	0.02	2000	
Sb	123	115	1	He	105.248	105.248	1.33	577554	0.02	300	
Ba	137	115	1	He	1130.828	1130.828	2.57	3046216	0.04	10000	
W	182	209	1	He	104.722	104.722	2.31	1623994	0.01	2500	
Tl	205	209	1	He	250.485	250.485	1.86	9402907	0.00	5000	
Pb	208	209	1	He	1089.867	1089.867	2.29	53012975	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1558000	1.11	1729956	90.06	30	120	
Sc	45	1	He	1102436	10.32	1045873	105.41	30	120	
Sc	45	2	NoGas	7472352	0.44	8041241	92.93	30	120	
Rh	103	1	He	2969739	2.84	3067946	96.80	30	120	
In	115	1	He	1914622	3.32	1978772	96.76	30	120	
Tb	159	1	He	4987693	2.81	5013529	99.48	30	120	
Ho	165	1	He	5108223	3.03	5115781	99.85	30	120	
Bi	209	1	He	3619460	1.38	3723643	97.20	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-e du@20
Data File Name	021SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:47:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.563	0.563	7.34	2282	0.02	10000	
B	11	45	2	NoGas	8.955	8.955	1.32	28489	0.03	300	
Na	23	45	1	He	188.390	188.390	0.81	316639	0.06	500000	
Mg	24	45	1	He	1109.868	1109.868	1.02	991606	0.11	500000	
Al	27	45	1	He	4230.773	4230.773	1.54	2155410	0.20	200000	
K	39	45	1	He	1578.003	1578.003	0.13	1453502	0.11	500000	
Ca	44	45	1	He	48.739	48.739	15.65	2898	1.68	500000	
Ti	47	45	1	He	36.855	36.855	4.03	9690	0.38	2500	
V	51	45	1	He	7.674	7.674	2.58	50570	0.02	10000	
Cr	52	45	1	He	8.119	8.119	0.56	65662	0.01	10000	
Mn	55	115	1	He	514.608	514.608	2.73	3543512	0.01	10000	
Fe	56	103	1	He	9370.245	9370.245	1.56	78277530	0.01	200000	
Co	59	103	1	He	3.597	3.597	0.72	43527	0.01	10000	
Ni	60	103	1	He	9.214	9.214	2.52	27941	0.03	10000	
Cu	63	103	1	He	8.040	8.040	1.11	65712	0.01	10000	
Zn	66	103	1	He	21.029	21.029	0.81	34552	0.06	10000	
As	75	103	1	He	21.279	21.279	0.34	22839	0.09	10000	
Se	78	103	1	He	1.162	1.162	6.75	198	0.59	10000	
Sr	88	103	1	He	124.467	124.467	0.32	1099154	0.01	10000	
Mo	95	103	1	He	55.199	55.199	0.10	222608	0.02	2000	
Ag	107	103	1	He	0.012	0.012	28.22	237	0.01	300	
Cd	111	103	1	He	0.140	0.140	9.39	1908	0.01	4000	
Sn	118	115	1	He	7.287	7.287	9.36	42380	0.02	2000	
Sb	123	115	1	He	0.189	0.189	9.86	1922	0.01	300	
Ba	137	115	1	He	27.345	27.345	2.88	71241	0.04	10000	
W	182	209	1	He	3.247	3.247	5.32	55775	0.01	2500	
Tl	205	209	1	He	0.200	0.200	18.08	7659	0.00	5000	
Pb	208	209	1	He	23.873	23.873	0.89	1166087	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1619890	1.72	1729956	93.64	30	120	
Sc	45	1	He	961123	0.32	1045873	91.90	30	120	
Sc	45	2	NoGas	7644821	1.77	8041241	95.07	30	120	
Rh	103	1	He	2863296	1.19	3067946	93.33	30	120	
In	115	1	He	1850950	1.41	1978772	93.54	30	120	
Tb	159	1	He	4852136	0.22	5013529	96.78	30	120	
Ho	165	1	He	4931971	0.48	5115781	96.41	30	120	
Bi	209	1	He	3629808	0.37	3723643	97.48	30	120	

Sample Report

Sample Table

Sample Name	240-49171-a-3-f ms@20
Data File Name	022SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:51:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.171	5.171	3.99	19567	0.03	10000	
B	11	45	2	NoGas	13.811	13.811	4.01	42861	0.03	300	
Na	23	45	1	He	664.163	664.163	1.83	1141277	0.06	500000	
Mg	24	45	1	He	1631.717	1631.717	1.10	1562275	0.10	500000	
Al	27	45	1	He	4839.629	4839.629	0.41	2643300	0.18	200000	
K	39	45	1	He	1982.818	1982.818	0.70	1947808	0.10	500000	
Ca	44	45	1	He	469.864	469.864	2.59	25114	1.87	500000	
Ti	47	45	1	He	47.366	47.366	2.82	13351	0.35	2500	
V	51	45	1	He	12.451	12.451	1.23	88100	0.01	10000	
Cr	52	45	1	He	12.446	12.446	0.83	106697	0.01	10000	
Mn	55	115	1	He	954.385	954.385	2.37	6843676	0.01	10000	
Fe	56	103	1	He	9626.159	9626.159	2.08	84262672	0.01	200000	
Co	59	103	1	He	8.067	8.067	1.07	102183	0.01	10000	
Ni	60	103	1	He	13.689	13.689	1.35	43091	0.03	10000	
Cu	63	103	1	He	13.754	13.754	0.69	115149	0.01	10000	
Zn	66	103	1	He	26.834	26.834	1.25	45802	0.06	10000	
As	75	103	1	He	24.578	24.578	0.21	27621	0.09	10000	
Se	78	103	1	He	4.922	4.922	4.44	658	0.75	10000	
Sr	88	103	1	He	196.959	196.959	1.64	1822315	0.01	10000	
Mo	95	103	1	He	57.320	57.320	1.78	242181	0.02	2000	
Ag	107	103	1	He	4.833	4.833	0.66	65816	0.01	300	
Cd	111	103	1	He	4.809	4.809	0.25	13181	0.04	4000	
Sn	118	115	1	He	7.472	7.472	1.53	45261	0.02	2000	
Sb	123	115	1	He	1.691	1.691	0.96	10284	0.02	300	
Ba	137	115	1	He	32.695	32.695	3.81	88681	0.04	10000	
W	182	209	1	He	5.230	5.230	0.66	88090	0.01	2500	
Tl	205	209	1	He	4.283	4.283	1.64	164253	0.00	5000	
Pb	208	209	1	He	41.406	41.406	1.18	2058062	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1708667	0.59	1729956	98.77	30	120	
Sc	45	1	He	1030402	0.11	1045873	98.52	30	120	
Sc	45	2	NoGas	8159414	1.10	8041241	101.47	30	120	
Rh	103	1	He	3000275	0.96	3067946	97.79	30	120	
In	115	1	He	1928000	2.49	1978772	97.43	30	120	
Tb	159	1	He	5068342	0.45	5013529	101.09	30	120	
Ho	165	1	He	5097508	0.64	5115781	99.64	30	120	
Bi	209	1	He	3696183	0.37	3723643	99.26	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-9-b@20
Data File Name	023SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:55:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.557	0.557	5.77	2623	0.02	10000	
B	11	45	2	NoGas	2.793	2.793	3.59	16126	0.02	300	
Na	23	45	1	He	20.485	20.485	2.61	61942	0.03	500000	
Mg	24	45	1	He	1722.676	1722.676	1.68	1808113	0.10	500000	
Al	27	45	1	He	7357.788	7357.788	0.72	4405416	0.17	200000	
K	39	45	1	He	606.952	606.952	1.89	683993	0.09	500000	
Ca	44	45	1	He	202.327	202.327	1.08	12205	1.66	500000	
Ti	47	45	1	He	45.755	45.755	0.79	14139	0.32	2500	
V	51	45	1	He	12.755	12.755	1.42	98949	0.01	10000	
Cr	52	45	1	He	11.399	11.399	0.59	107345	0.01	10000	
Mn	55	115	1	He	127.044	127.044	0.38	980314	0.01	10000	
Fe	56	103	1	He	15101.665	15101.665	0.93	140862297	0.01	200000	
Co	59	103	1	He	5.608	5.608	1.59	75721	0.01	10000	
Ni	60	103	1	He	13.178	13.178	1.56	44230	0.03	10000	
Cu	63	103	1	He	10.924	10.924	1.58	98273	0.01	10000	
Zn	66	103	1	He	32.517	32.517	2.04	58823	0.06	10000	
As	75	103	1	He	7.728	7.728	1.30	9354	0.08	10000	
Se	78	103	1	He	0.778	0.778	9.51	171	0.45	10000	
Sr	88	103	1	He	2.694	2.694	1.83	26710	0.01	10000	
Mo	95	103	1	He	1.477	1.477	4.09	6965	0.02	2000	
Ag	107	103	1	He	0.016	0.016	10.51	326	0.01	300	
Cd	111	103	1	He	0.098	0.098	25.05	2023	0.00	4000	
Sn	118	115	1	He	2.393	2.393	4.88	16398	0.01	2000	
Sb	123	115	1	He	0.017	0.017	69.92	1129	0.00	300	
Ba	137	115	1	He	38.293	38.293	0.67	111695	0.03	10000	
W	182	209	1	He	0.258	0.258	15.97	10015	0.00	2500	
Tl	205	209	1	He	0.119	0.119	9.56	4860	0.00	5000	
Pb	208	209	1	He	6.843	6.843	0.81	355925	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1879473	0.82	1729956	108.64	30	120	
Sc	45	1	He	1129646	0.37	1045873	108.01	30	120	
Sc	45	2	NoGas	9009492	0.35	8041241	112.04	30	120	
Rh	103	1	He	3196796	0.54	3067946	104.20	30	120	
In	115	1	He	2072300	1.34	1978772	104.73	30	120	
Tb	159	1	He	5205689	1.47	5013529	103.83	30	120	
Ho	165	1	He	5330134	0.37	5115781	104.19	30	120	
Bi	209	1	He	3850676	0.84	3723643	103.41	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	024_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T12:59:09-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	45.987	4.800	181552	5.26	50	92.0	89.5	110.5	
B	11	45	2	NoGas	55.255	2.689	153968	3.61	50	110.5	89.5	110.5	CCV Failed
Na	23	45	1	He	25273.266	2.843	47743804	5.45	25000	101.1	89.5	110.5	
Mg	24	45	1	He	25293.690	3.507	27101475	5.12	25000	101.2	89.5	110.5	
Al	27	45	1	He	253.136	1.557	155575	4.76	250	101.3	89.5	110.5	
K	39	45	1	He	25729.363	1.743	27796254	6.32	25000	102.9	89.5	110.5	
Ca	44	45	1	He	25330.147	2.338	1483843	5.58	25000	101.3	89.5	110.5	
Ti	47	45	1	He	50.211	3.507	15839	2.16	50	100.4	89.5	110.5	
V	51	45	1	He	49.646	1.780	394139	4.16	50	99.3	89.5	110.5	
Cr	52	45	1	He	49.884	2.354	471273	4.31	50	99.8	89.5	110.5	
Mn	55	115	1	He	258.511	1.494	1934889	4.33	250	103.4	89.5	110.5	
Fe	56	103	1	He	12664.508	2.399	113332262	4.96	12500	101.3	89.5	110.5	
Co	59	103	1	He	50.841	1.529	657918	4.09	50	101.7	89.5	110.5	
Ni	60	103	1	He	50.946	1.057	161495	3.25	50	101.9	89.5	110.5	
Cu	63	103	1	He	51.241	1.384	428087	3.58	50	102.5	89.5	110.5	
Zn	66	103	1	He	50.966	1.870	87628	4.58	50	101.9	89.5	110.5	
As	75	103	1	He	51.103	2.298	58551	4.81	50	102.2	89.5	110.5	
Se	78	103	1	He	51.310	0.806	6354	3.68	50	102.6	89.5	110.5	
Sr	88	103	1	He	49.934	1.654	472357	4.13	50	99.9	89.5	110.5	
Mo	95	103	1	He	51.378	2.159	221977	5.09	50	102.8	89.5	110.5	
Ag	107	103	1	He	50.935	0.904	707940	2.53	50	101.9	89.5	110.5	
Cd	111	103	1	He	50.688	1.339	125726	1.89	50	101.4	89.5	110.5	
Sn	118	115	1	He	49.763	0.543	307861	3.02	50	99.5	89.5	110.5	
Sb	123	115	1	He	50.317	1.489	290410	2.98	50	100.6	89.5	110.5	
Ba	137	115	1	He	49.975	1.073	141388	2.41	50	100.0	89.5	110.5	
W	182	209	1	He	47.810	0.696	753096	1.29	50	95.6	89.5	110.5	
Tl	205	209	1	He	51.337	1.402	1949388	1.88	50	102.7	89.5	110.5	
Pb	208	209	1	He	48.405	0.922	2383024	0.38	50	96.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1807948	2.11	1729956	104.51	30	120	
Sc	45	1	He	1154690	5.42	1045873	110.40	30	120	
Sc	45	2	NoGas	8421554	2.06	8041241	104.73	30	120	
Rh	103	1	He	3066013	3.09	3067946	99.94	30	120	
In	115	1	He	2010544	3.18	1978772	101.61	30	120	
Tb	159	1	He	5186523	1.71	5013529	103.45	30	120	
Ho	165	1	He	5256524	1.84	5115781	102.75	30	120	
Bi	209	1	He	3661626	1.30	3723643	98.33	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	025_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:02:57-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.129	17.2	859	21.9	1	
B	11	45	2	NoGas	1.029	5.0	10722	13.3	20	
Na	23	45	1	He	4.632	9.9	30300	8.7	400	
Mg	24	45	1	He	1.183	18.2	2634	7.7	1000	
Al	27	45	1	He	0.392	35.6	871	3.9	50	
K	39	45	1	He	6.834	28.5	47152	6.0	1000	
Ca	44	45	1	He	0.302	550.3	584	14.5	1000	
Ti	47	45	1	He	0.065	30.7	28	25.0	20	
V	51	45	1	He	0.111	66.2	600	89.5	2	
Cr	52	45	1	He	0.013	108.9	2439	8.8	2	
Mn	55	115	1	He	0.040	27.0	1140	8.7	2	
Fe	56	103	1	He	17.002	12.8	167748	9.5	50	
Co	59	103	1	He	0.010	15.2	203	11.5	1	
Ni	60	103	1	He	-0.097	-5.7	577	5.5	2	
Cu	63	103	1	He	-0.176	-7.7	2369	5.9	2	
Zn	66	103	1	He	-0.103	-7.6	1287	3.4	20	
As	75	103	1	He	0.072	27.4	227	12.6	2	
Se	78	103	1	He	0.054	93.1	77	8.5	2	
Sr	88	103	1	He	0.013	41.0	276	21.3	10	
Mo	95	103	1	He	0.724	7.7	3467	4.5	2	
Ag	107	103	1	He	0.008	5.0	198	5.4	0.2	
Cd	111	103	1	He	0.024	116.2	1778	5.6	0.2	
Sn	118	115	1	He	0.463	5.2	3978	6.0	10	
Sb	123	115	1	He	0.348	20.9	2969	11.8	1	
Ba	137	115	1	He	0.010	80.6	82	30.4	5	
W	182	209	1	He	0.734	10.2	17162	6.8	10	
Tl	205	209	1	He	0.032	10.7	1350	8.8	0.5	
Pb	208	209	1	He	0.106	1.6	7083	2.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1848927	12.10	1729956	106.88	30	120	
Sc	45	1	He	1047333	6.25	1045873	100.14	30	120	
Sc	45	2	NoGas	8669846	12.05	8041241	107.82	30	120	
Rh	103	1	He	3099703	2.57	3067946	101.04	30	120	
In	115	1	He	1994091	2.42	1978772	100.77	30	120	
Tb	159	1	He	5076802	2.66	5013529	101.26	30	120	
Ho	165	1	He	5131175	2.01	5115781	100.30	30	120	
Bi	209	1	He	3706498	1.92	3723643	99.54	30	120	

Sample Report

Sample Table

Sample Name	240-49172-a-10-b@20
Data File Name	026SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:06:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.459	0.459	14.61	2052	0.02	10000	
B	11	45	2	NoGas	1.812	1.812	10.01	12353	0.01	300	
Na	23	45	1	He	19.981	19.981	3.25	54626	0.04	500000	
Mg	24	45	1	He	1171.854	1171.854	1.16	1101563	0.11	500000	
Al	27	45	1	He	6573.057	6573.057	2.42	3522943	0.19	200000	
K	39	45	1	He	397.308	397.308	2.72	414306	0.10	500000	
Ca	44	45	1	He	191.257	191.257	0.35	10359	1.85	500000	
Ti	47	45	1	He	56.533	56.533	3.08	15635	0.36	2500	
V	51	45	1	He	13.593	13.593	2.72	94405	0.01	10000	
Cr	52	45	1	He	9.569	9.569	1.39	81030	0.01	10000	
Mn	55	115	1	He	427.185	427.185	2.58	2966584	0.01	10000	
Fe	56	103	1	He	12832.892	12832.892	1.37	109663622	0.01	200000	
Co	59	103	1	He	6.121	6.121	1.43	75708	0.01	10000	
Ni	60	103	1	He	8.990	8.990	2.91	27904	0.03	10000	
Cu	63	103	1	He	6.804	6.804	2.66	57432	0.01	10000	
Zn	66	103	1	He	28.980	28.980	1.46	48179	0.06	10000	
As	75	103	1	He	5.962	5.962	1.60	6643	0.09	10000	
Se	78	103	1	He	0.597	0.597	9.86	136	0.44	10000	
Sr	88	103	1	He	2.077	2.077	3.64	18895	0.01	10000	
Mo	95	103	1	He	0.878	0.878	8.35	3918	0.02	2000	
Ag	107	103	1	He	0.016	0.016	14.63	288	0.01	300	
Cd	111	103	1	He	0.073	0.073	63.62	1793	0.00	4000	
Sn	118	115	1	He	1.856	1.856	8.04	11690	0.02	2000	
Sb	123	115	1	He	0.123	0.123	23.13	1587	0.01	300	
Ba	137	115	1	He	39.240	39.240	1.86	103076	0.04	10000	
W	182	209	1	He	0.169	0.169	5.43	8158	0.00	2500	
Tl	205	209	1	He	0.098	0.098	3.48	3861	0.00	5000	
Pb	208	209	1	He	7.797	7.797	0.96	386533	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1736844	0.45	1729956	100.40	30	120	
Sc	45	1	He	1011356	1.02	1045873	96.70	30	120	
Sc	45	2	NoGas	8339062	0.88	8041241	103.70	30	120	
Rh	103	1	He	2929272	2.00	3067946	95.48	30	120	
In	115	1	He	1866305	0.49	1978772	94.32	30	120	
Tb	159	1	He	4927556	0.48	5013529	98.29	30	120	
Ho	165	1	He	5027113	1.36	5115781	98.27	30	120	
Bi	209	1	He	3672743	0.85	3723643	98.63	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-1-b@20
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:10:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.402	0.402	14.15	2137	0.02	10000	
B	11	45	2	NoGas	2.474	2.474	9.07	16171	0.02	300	
Na	23	45	1	He	24.190	24.190	1.94	68649	0.04	500000	
Mg	24	45	1	He	1491.575	1491.575	0.39	1562301	0.10	500000	
Al	27	45	1	He	5048.877	5048.877	2.30	3018064	0.17	200000	
K	39	45	1	He	405.790	405.790	0.46	470705	0.09	500000	
Ca	44	45	1	He	2618.208	2618.208	1.35	150342	1.74	500000	
Ti	47	45	1	He	47.684	47.684	1.28	14706	0.32	2500	
V	51	45	1	He	9.360	9.360	0.78	72381	0.01	10000	
Cr	52	45	1	He	8.969	8.969	0.74	84825	0.01	10000	
Mn	55	115	1	He	283.164	283.164	3.64	2172521	0.01	10000	
Fe	56	103	1	He	11451.838	11451.838	0.92	106636094	0.01	200000	
Co	59	103	1	He	4.154	4.154	1.58	56023	0.01	10000	
Ni	60	103	1	He	10.382	10.382	0.37	34979	0.03	10000	
Cu	63	103	1	He	6.501	6.501	2.41	59997	0.01	10000	
Zn	66	103	1	He	25.832	25.832	1.89	46969	0.05	10000	
As	75	103	1	He	7.121	7.121	0.63	8617	0.08	10000	
Se	78	103	1	He	0.496	0.496	1.98	135	0.37	10000	
Sr	88	103	1	He	6.528	6.528	2.34	64407	0.01	10000	
Mo	95	103	1	He	0.635	0.635	3.70	3173	0.02	2000	
Ag	107	103	1	He	0.022	0.022	7.45	401	0.01	300	
Cd	111	103	1	He	0.121	0.121	32.31	2080	0.01	4000	
Sn	118	115	1	He	1.896	1.896	2.43	13161	0.01	2000	
Sb	123	115	1	He	0.114	0.114	14.56	1698	0.01	300	
Ba	137	115	1	He	28.906	28.906	2.22	83878	0.03	10000	
W	182	209	1	He	0.129	0.129	27.87	7865	0.00	2500	
Tl	205	209	1	He	0.070	0.070	6.68	2890	0.00	5000	
Pb	208	209	1	He	7.745	7.745	0.87	401722	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2022785	2.24	1729956	116.93	30	120	
Sc	45	1	He	1127174	4.47	1045873	107.77	30	120	
Sc	45	2	NoGas	9577115	2.86	8041241	119.10	30	120	
Rh	103	1	He	3191129	2.53	3067946	104.02	30	120	
In	115	1	He	2060729	1.67	1978772	104.14	30	120	
Tb	159	1	He	5220866	2.01	5013529	104.14	30	120	
Ho	165	1	He	5317480	1.21	5115781	103.94	30	120	
Bi	209	1	He	3842649	2.12	3723643	103.20	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-2-b@20
Data File Name	028SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:14:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.448	0.448	20.42	2482	0.02	10000	
B	11	45	2	NoGas	1.831	1.831	4.33	15666	0.01	300	
Na	23	45	1	He	15.366	15.366	1.81	55881	0.03	500000	
Mg	24	45	1	He	1061.327	1061.327	2.36	1186542	0.09	500000	
Al	27	45	1	He	7377.718	7377.718	0.63	4703164	0.16	200000	
K	39	45	1	He	371.798	371.798	2.14	464063	0.08	500000	
Ca	44	45	1	He	420.266	420.266	2.24	26289	1.60	500000	
Ti	47	45	1	He	35.484	35.484	1.88	11677	0.30	2500	
V	51	45	1	He	14.837	14.837	2.88	122558	0.01	10000	
Cr	52	45	1	He	10.337	10.337	1.66	103895	0.01	10000	
Mn	55	115	1	He	352.898	352.898	1.60	2848053	0.01	10000	
Fe	56	103	1	He	13081.001	13081.001	0.68	128417386	0.01	200000	
Co	59	103	1	He	5.310	5.310	1.77	75458	0.01	10000	
Ni	60	103	1	He	9.814	9.814	2.76	34908	0.03	10000	
Cu	63	103	1	He	6.349	6.349	1.31	61856	0.01	10000	
Zn	66	103	1	He	34.467	34.467	2.48	65515	0.05	10000	
As	75	103	1	He	8.284	8.284	1.59	10543	0.08	10000	
Se	78	103	1	He	0.714	0.714	3.21	172	0.42	10000	
Sr	88	103	1	He	2.665	2.665	1.41	27812	0.01	10000	
Mo	95	103	1	He	0.823	0.823	2.30	4239	0.02	2000	
Ag	107	103	1	He	0.046	0.046	6.15	797	0.01	300	
Cd	111	103	1	He	0.121	0.121	5.12	2192	0.01	4000	
Sn	118	115	1	He	1.787	1.787	2.26	13128	0.01	2000	
Sb	123	115	1	He	0.069	0.069	7.80	1506	0.00	300	
Ba	137	115	1	He	36.731	36.731	1.54	112114	0.03	10000	
W	182	209	1	He	0.060	0.060	86.07	6961	0.00	2500	
Tl	205	209	1	He	0.107	0.107	3.39	4532	0.00	5000	
Pb	208	209	1	He	11.753	11.753	1.15	629314	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2158345	4.75	1729956	124.76	30	120	ISTD Failed
Sc	45	1	He	1202786	1.16	1045873	115.00	30	120	
Sc	45	2	NoGas	10527699	4.03	8041241	130.92	30	120	ISTD Failed
Rh	103	1	He	3364810	1.54	3067946	109.68	30	120	
In	115	1	He	2168675	1.08	1978772	109.60	30	120	
Tb	159	1	He	5414526	1.27	5013529	108.00	30	120	
Ho	165	1	He	5560378	0.77	5115781	108.69	30	120	
Bi	209	1	He	3973206	0.96	3723643	106.70	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-3-b@20
Data File Name	029SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:18:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.402	0.402	17.43	1982	0.02	10000	
B	11	45	2	NoGas	2.042	2.042	11.17	14328	0.01	300	
Na	23	45	1	He	16.983	16.983	3.82	60117	0.03	500000	
Mg	24	45	1	He	1030.263	1030.263	1.51	1172531	0.09	500000	
Al	27	45	1	He	7172.812	7172.812	1.95	4652772	0.15	200000	
K	39	45	1	He	390.936	390.936	1.73	494189	0.08	500000	
Ca	44	45	1	He	732.770	732.770	1.57	46153	1.59	500000	
Ti	47	45	1	He	43.974	43.974	3.15	14724	0.30	2500	
V	51	45	1	He	14.262	14.262	2.45	119941	0.01	10000	
Cr	52	45	1	He	11.274	11.274	1.88	115085	0.01	10000	
Mn	55	115	1	He	428.872	428.872	1.86	3460781	0.01	10000	
Fe	56	103	1	He	12699.655	12699.655	1.22	128166528	0.01	200000	
Co	59	103	1	He	6.425	6.425	1.06	93871	0.01	10000	
Ni	60	103	1	He	9.841	9.841	1.28	35992	0.03	10000	
Cu	63	103	1	He	6.305	6.305	0.88	63197	0.01	10000	
Zn	66	103	1	He	33.658	33.658	2.41	65803	0.05	10000	
As	75	103	1	He	8.107	8.107	2.51	10608	0.08	10000	
Se	78	103	1	He	0.786	0.786	28.71	186	0.42	10000	
Sr	88	103	1	He	3.603	3.603	1.76	38594	0.01	10000	
Mo	95	103	1	He	0.802	0.802	4.58	4252	0.02	2000	
Ag	107	103	1	He	0.039	0.039	3.58	710	0.01	300	
Cd	111	103	1	He	0.095	0.095	21.24	2182	0.00	4000	
Sn	118	115	1	He	1.871	1.871	9.03	13677	0.01	2000	
Sb	123	115	1	He	0.116	0.116	0.90	1797	0.01	300	
Ba	137	115	1	He	35.360	35.360	1.81	107939	0.03	10000	
W	182	209	1	He	0.065	0.065	18.95	7057	0.00	2500	
Tl	205	209	1	He	0.106	0.106	1.75	4497	0.00	5000	
Pb	208	209	1	He	12.373	12.373	1.27	663303	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1875541	0.60	1729956	108.42	30	120	
Sc	45	1	He	1224653	5.19	1045873	117.09	30	120	
Sc	45	2	NoGas	9223958	1.46	8041241	114.71	30	120	
Rh	103	1	He	3459629	3.88	3067946	112.77	30	120	
In	115	1	He	2168190	1.47	1978772	109.57	30	120	
Tb	159	1	He	5442788	2.27	5013529	108.56	30	120	
Ho	165	1	He	5530669	1.81	5115781	108.11	30	120	
Bi	209	1	He	3979179	2.62	3723643	106.86	30	120	

Sample Report

Sample Table

Sample Name	240-49173-a-4-b@20
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:21:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.397	0.397	13.23	2141	0.02	10000	
B	11	45	2	NoGas	2.948	2.948	7.23	18009	0.02	300	
Na	23	45	1	He	24.457	24.457	4.44	79364	0.03	500000	
Mg	24	45	1	He	891.774	891.774	2.07	1073339	0.08	500000	
Al	27	45	1	He	3848.143	3848.143	1.74	2641297	0.15	200000	
K	39	45	1	He	257.401	257.401	1.76	361303	0.07	500000	
Ca	44	45	1	He	2931.521	2931.521	0.72	193210	1.52	500000	
Ti	47	45	1	He	45.786	45.786	2.60	16230	0.28	2500	
V	51	45	1	He	8.656	8.656	0.99	76894	0.01	10000	
Cr	52	45	1	He	10.269	10.269	1.72	111124	0.01	10000	
Mn	55	115	1	He	435.854	435.854	1.30	3664089	0.01	10000	
Fe	56	103	1	He	11408.524	11408.524	1.92	117022115	0.01	200000	
Co	59	103	1	He	5.266	5.266	0.36	78187	0.01	10000	
Ni	60	103	1	He	11.474	11.474	0.86	42478	0.03	10000	
Cu	63	103	1	He	6.689	6.689	1.18	67841	0.01	10000	
Zn	66	103	1	He	25.166	25.166	1.68	50441	0.05	10000	
As	75	103	1	He	14.125	14.125	0.72	18667	0.08	10000	
Se	78	103	1	He	0.504	0.504	18.62	150	0.34	10000	
Sr	88	103	1	He	9.019	9.019	0.74	97928	0.01	10000	
Mo	95	103	1	He	0.682	0.682	4.17	3729	0.02	2000	
Ag	107	103	1	He	0.058	0.058	5.42	1016	0.01	300	
Cd	111	103	1	He	0.120	0.120	32.34	2286	0.01	4000	
Sn	118	115	1	He	1.936	1.936	0.86	14703	0.01	2000	
Sb	123	115	1	He	0.172	0.172	11.80	2232	0.01	300	
Ba	137	115	1	He	43.029	43.029	0.50	136810	0.03	10000	
W	182	209	1	He	0.044	0.044	32.18	6842	0.00	2500	
Tl	205	209	1	He	0.079	0.079	3.21	3444	0.00	5000	
Pb	208	209	1	He	13.970	13.970	0.89	764101	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2047532	0.92	1729956	118.36	30	120	
Sc	45	1	He	1294969	3.90	1045873	123.82	30	120	ISTD Failed
Sc	45	2	NoGas	9796648	0.65	8041241	121.83	30	120	ISTD Failed
Rh	103	1	He	3514929	2.31	3067946	114.57	30	120	
In	115	1	He	2258870	1.12	1978772	114.16	30	120	
Tb	159	1	He	5540108	1.31	5013529	110.50	30	120	
Ho	165	1	He	5629881	1.50	5115781	110.05	30	120	
Bi	209	1	He	4060322	0.44	3723643	109.04	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-4-b@20
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:25:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.374	0.374	4.62	2237	0.02	10000	
B	11	45	2	NoGas	0.978	0.978	6.85	13420	0.01	300	
Na	23	45	1	He	13.840	13.840	5.98	54764	0.03	500000	
Mg	24	45	1	He	970.844	970.844	2.08	1124700	0.09	500000	
Al	27	45	1	He	5769.995	5769.995	2.69	3810398	0.15	200000	
K	39	45	1	He	290.311	290.311	2.16	385997	0.08	500000	
Ca	44	45	1	He	252.329	252.329	5.64	16620	1.52	500000	
Ti	47	45	1	He	48.538	48.538	0.82	16548	0.29	2500	
V	51	45	1	He	13.286	13.286	2.14	113688	0.01	10000	
Cr	52	45	1	He	8.000	8.000	2.93	83910	0.01	10000	
Mn	55	115	1	He	1671.979	1671.979	3.54	13667485	0.01	10000	
Fe	56	103	1	He	12017.630	12017.630	1.68	121686026	0.01	200000	
Co	59	103	1	He	5.919	5.919	1.34	86764	0.01	10000	
Ni	60	103	1	He	7.232	7.232	0.97	26798	0.03	10000	
Cu	63	103	1	He	4.791	4.791	1.99	49192	0.01	10000	
Zn	66	103	1	He	54.104	54.104	1.81	105166	0.05	10000	
As	75	103	1	He	6.540	6.540	2.51	8620	0.08	10000	
Se	78	103	1	He	0.468	0.468	11.77	143	0.33	10000	
Sr	88	103	1	He	2.977	2.977	1.97	32024	0.01	10000	
Mo	95	103	1	He	0.793	0.793	1.48	4225	0.02	2000	
Ag	107	103	1	He	0.167	0.167	0.73	2718	0.01	300	
Cd	111	103	1	He	0.156	0.156	24.60	2355	0.01	4000	
Sn	118	115	1	He	1.657	1.657	4.55	12427	0.01	2000	
Sb	123	115	1	He	-0.005	-0.005	-284.00	1057	0.00	300	
Ba	137	115	1	He	46.580	46.580	2.38	144051	0.03	10000	
W	182	209	1	He	0.318	0.318	4.69	11401	0.00	2500	
Tl	205	209	1	He	0.117	0.117	1.21	4974	0.00	5000	
Pb	208	209	1	He	20.805	20.805	0.45	1117901	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2250543	4.95	1729956	130.09	30	120	ISTD Failed
Sc	45	1	He	1246624	3.92	1045873	119.19	30	120	
Sc	45	2	NoGas	11000008	3.46	8041241	136.79	30	120	ISTD Failed
Rh	103	1	He	3470398	0.80	3067946	113.12	30	120	
In	115	1	He	2197665	1.36	1978772	111.06	30	120	
Tb	159	1	He	5488929	0.32	5013529	109.48	30	120	
Ho	165	1	He	5628898	0.96	5115781	110.03	30	120	
Bi	209	1	He	3992032	0.69	3723643	107.21	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-6-b@20
Data File Name	032SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:29:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.276	0.276	20.04	1515	0.02	10000	
B	11	45	2	NoGas	1.365	1.365	5.22	12671	0.01	300	
Na	23	45	1	He	13.116	13.116	0.08	52401	0.03	500000	
Mg	24	45	1	He	905.283	905.283	0.94	1031328	0.09	500000	
Al	27	45	1	He	6091.522	6091.522	1.13	3955761	0.15	200000	
K	39	45	1	He	352.012	352.012	0.28	450057	0.08	500000	
Ca	44	45	1	He	98.955	98.955	3.33	6811	1.45	500000	
Ti	47	45	1	He	44.839	44.839	1.37	15023	0.30	2500	
V	51	45	1	He	13.716	13.716	1.10	115409	0.01	10000	
Cr	52	45	1	He	8.452	8.452	1.20	87024	0.01	10000	
Mn	55	115	1	He	765.649	765.649	2.19	6277906	0.01	10000	
Fe	56	103	1	He	11344.023	11344.023	1.86	115088073	0.01	200000	
Co	59	103	1	He	5.009	5.009	1.28	73566	0.01	10000	
Ni	60	103	1	He	7.604	7.604	3.92	28186	0.03	10000	
Cu	63	103	1	He	4.176	4.176	2.71	43522	0.01	10000	
Zn	66	103	1	He	28.801	28.801	1.74	56854	0.05	10000	
As	75	103	1	He	5.461	5.461	2.56	7237	0.08	10000	
Se	78	103	1	He	0.585	0.585	13.31	160	0.37	10000	
Sr	88	103	1	He	1.687	1.687	2.35	18260	0.01	10000	
Mo	95	103	1	He	0.662	0.662	7.63	3586	0.02	2000	
Ag	107	103	1	He	0.043	0.043	14.26	764	0.01	300	
Cd	111	103	1	He	0.115	0.115	15.40	2246	0.01	4000	
Sn	118	115	1	He	1.758	1.758	7.01	13143	0.01	2000	
Sb	123	115	1	He	-0.004	-0.004	-369.58	1067	0.00	300	
Ba	137	115	1	He	44.138	44.138	2.71	136906	0.03	10000	
W	182	209	1	He	0.053	0.053	36.29	6843	0.00	2500	
Tl	205	209	1	He	0.092	0.092	7.43	3902	0.00	5000	
Pb	208	209	1	He	10.338	10.338	1.80	552731	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1939869	1.42	1729956	112.13	30	120	
Sc	45	1	He	1224957	2.33	1045873	117.12	30	120	
Sc	45	2	NoGas	9447691	1.54	8041241	117.49	30	120	
Rh	103	1	He	3476614	1.61	3067946	113.32	30	120	
In	115	1	He	2203704	1.43	1978772	111.37	30	120	
Tb	159	1	He	5497977	1.18	5013529	109.66	30	120	
Ho	165	1	He	5608270	0.50	5115781	109.63	30	120	
Bi	209	1	He	3965252	0.25	3723643	106.49	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-8-b@20
Data File Name	033SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:33:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.382	0.382	4.89	1967	0.02	10000	
B	11	45	2	NoGas	1.572	1.572	13.20	13042	0.01	300	
Na	23	45	1	He	12.944	12.944	6.61	50920	0.03	500000	
Mg	24	45	1	He	898.362	898.362	0.35	1001113	0.09	500000	
Al	27	45	1	He	7093.477	7093.477	1.62	4505163	0.16	200000	
K	39	45	1	He	370.364	370.364	0.94	460789	0.08	500000	
Ca	44	45	1	He	154.041	154.041	3.93	10016	1.54	500000	
Ti	47	45	1	He	42.486	42.486	1.80	13930	0.30	2500	
V	51	45	1	He	15.354	15.354	1.03	126414	0.01	10000	
Cr	52	45	1	He	9.798	9.798	0.33	98263	0.01	10000	
Mn	55	115	1	He	732.788	732.788	2.03	5917697	0.01	10000	
Fe	56	103	1	He	12245.035	12245.035	1.28	121889817	0.01	200000	
Co	59	103	1	He	6.468	6.468	1.49	93191	0.01	10000	
Ni	60	103	1	He	10.002	10.002	1.13	36063	0.03	10000	
Cu	63	103	1	He	6.005	6.005	0.30	59555	0.01	10000	
Zn	66	103	1	He	31.597	31.597	0.71	61043	0.05	10000	
As	75	103	1	He	6.598	6.598	1.72	8546	0.08	10000	
Se	78	103	1	He	0.714	0.714	13.04	174	0.41	10000	
Sr	88	103	1	He	1.764	1.764	2.04	18717	0.01	10000	
Mo	95	103	1	He	0.768	0.768	3.47	4034	0.02	2000	
Ag	107	103	1	He	0.035	0.035	3.18	629	0.01	300	
Cd	111	103	1	He	0.071	0.071	56.21	2084	0.00	4000	
Sn	118	115	1	He	1.668	1.668	1.35	12346	0.01	2000	
Sb	123	115	1	He	0.010	0.010	128.51	1140	0.00	300	
Ba	137	115	1	He	49.581	49.581	1.11	151449	0.03	10000	
W	182	209	1	He	0.029	0.029	37.04	6428	0.00	2500	
Tl	205	209	1	He	0.103	0.103	1.69	4354	0.00	5000	
Pb	208	209	1	He	11.464	11.464	0.59	613063	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1941653	1.29	1729956	112.24	30	120	
Sc	45	1	He	1198390	1.22	1045873	114.58	30	120	
Sc	45	2	NoGas	9274866	0.90	8041241	115.34	30	120	
Rh	103	1	He	3411563	0.14	3067946	111.20	30	120	
In	115	1	He	2170528	1.47	1978772	109.69	30	120	
Tb	159	1	He	5414558	0.47	5013529	108.00	30	120	
Ho	165	1	He	5495907	1.62	5115781	107.43	30	120	
Bi	209	1	He	3967618	1.01	3723643	106.55	30	120	

Sample Report

Sample Table

Sample Name	240-49171-A-18-B@20
Data File Name	034SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:37:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.399	0.399	6.23	2011	0.02	10000	
B	11	45	2	NoGas	1.452	1.452	8.39	12916	0.01	300	
Na	23	45	1	He	18.739	18.739	4.40	61953	0.03	500000	
Mg	24	45	1	He	1615.820	1615.820	1.60	1789674	0.09	500000	
Al	27	45	1	He	6588.311	6588.311	0.87	4162564	0.16	200000	
K	39	45	1	He	464.259	464.259	1.12	562890	0.08	500000	
Ca	44	45	1	He	455.034	455.034	2.02	28154	1.62	500000	
Ti	47	45	1	He	50.287	50.287	3.54	16395	0.31	2500	
V	51	45	1	He	12.023	12.023	2.02	98397	0.01	10000	
Cr	52	45	1	He	10.104	10.104	1.56	100707	0.01	10000	
Mn	55	115	1	He	291.129	291.129	0.21	2300158	0.01	10000	
Fe	56	103	1	He	14484.102	14484.102	1.93	141878199	0.01	200000	
Co	59	103	1	He	5.615	5.615	1.93	79619	0.01	10000	
Ni	60	103	1	He	12.527	12.527	2.29	44201	0.03	10000	
Cu	63	103	1	He	10.684	10.684	1.61	101031	0.01	10000	
Zn	66	103	1	He	47.402	47.402	2.14	89325	0.05	10000	
As	75	103	1	He	7.296	7.296	0.58	9285	0.08	10000	
Se	78	103	1	He	0.565	0.565	9.62	152	0.37	10000	
Sr	88	103	1	He	2.978	2.978	1.13	31001	0.01	10000	
Mo	95	103	1	He	0.696	0.696	6.13	3627	0.02	2000	
Ag	107	103	1	He	0.014	0.014	19.66	302	0.00	300	
Cd	111	103	1	He	0.118	0.118	25.92	2178	0.01	4000	
Sn	118	115	1	He	1.742	1.742	1.94	12553	0.01	2000	
Sb	123	115	1	He	-0.039	-0.039	-31.41	818	0.00	300	
Ba	137	115	1	He	35.838	35.838	1.43	107085	0.03	10000	
W	182	209	1	He	0.012	0.012	191.64	6202	0.00	2500	
Tl	205	209	1	He	0.089	0.089	4.12	3796	0.00	5000	
Pb	208	209	1	He	7.563	7.563	1.21	408372	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1916947	1.52	1729956	110.81	30	120	
Sc	45	1	He	1192047	0.63	1045873	113.98	30	120	
Sc	45	2	NoGas	9439305	0.23	8041241	117.39	30	120	
Rh	103	1	He	3357836	1.56	3067946	109.45	30	120	
In	115	1	He	2122899	1.03	1978772	107.28	30	120	
Tb	159	1	He	5367580	0.53	5013529	107.06	30	120	
Ho	165	1	He	5452384	0.63	5115781	106.58	30	120	
Bi	209	1	He	3999820	0.59	3723643	107.42	30	120	

Sample Report

Sample Table

Sample Name	240-49171-A-18-B@50
Data File Name	035SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:40:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.141	0.141	16.60	937	0.02	10000	
B	11	45	2	NoGas	0.766	0.766	3.23	10685	0.01	300	
Na	23	45	1	He	6.865	6.865	2.37	38100	0.02	500000	
Mg	24	45	1	He	665.017	665.017	1.44	724155	0.09	500000	
Al	27	45	1	He	2836.368	2836.368	1.12	1759875	0.16	200000	
K	39	45	1	He	197.245	197.245	1.12	260829	0.08	500000	
Ca	44	45	1	He	194.479	194.479	0.72	12178	1.60	500000	
Ti	47	45	1	He	20.877	20.877	3.60	6688	0.31	2500	
V	51	45	1	He	4.970	4.970	1.06	39802	0.01	10000	
Cr	52	45	1	He	4.208	4.208	0.73	42691	0.01	10000	
Mn	55	115	1	He	113.625	113.625	0.32	902560	0.01	10000	
Fe	56	103	1	He	5935.622	5935.622	1.14	57865193	0.01	200000	
Co	59	103	1	He	2.295	2.295	0.99	32435	0.01	10000	
Ni	60	103	1	He	4.989	4.989	1.55	18093	0.03	10000	
Cu	63	103	1	He	4.241	4.241	1.70	42404	0.01	10000	
Zn	66	103	1	He	21.279	21.279	2.87	40777	0.05	10000	
As	75	103	1	He	2.959	2.959	1.40	3838	0.08	10000	
Se	78	103	1	He	0.268	0.268	33.68	111	0.24	10000	
Sr	88	103	1	He	1.218	1.218	3.73	12706	0.01	10000	
Mo	95	103	1	He	0.265	0.265	5.11	1585	0.02	2000	
Ag	107	103	1	He	0.006	0.006	6.01	180	0.00	300	
Cd	111	103	1	He	0.052	0.052	27.78	1991	0.00	4000	
Sn	118	115	1	He	0.630	0.630	7.97	5346	0.01	2000	
Sb	123	115	1	He	-0.088	-0.088	-6.56	522	-0.02	300	
Ba	137	115	1	He	14.428	14.428	2.74	43347	0.03	10000	
W	182	209	1	He	0.028	0.028	67.24	6413	0.00	2500	
Tl	205	209	1	He	0.037	0.037	1.81	1649	0.00	5000	
Pb	208	209	1	He	3.129	3.129	1.22	168468	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1916051	2.61	1729956	110.76	30	120	
Sc	45	1	He	1170328	0.49	1045873	111.90	30	120	
Sc	45	2	NoGas	9267485	0.36	8041241	115.25	30	120	
Rh	103	1	He	3340887	0.79	3067946	108.90	30	120	
In	115	1	He	2133050	1.18	1978772	107.80	30	120	
Tb	159	1	He	5347932	0.18	5013529	106.67	30	120	
Ho	165	1	He	5425260	0.58	5115781	106.05	30	120	
Bi	209	1	He	3961728	1.24	3723643	106.39	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	036_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:44:38-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.666	3.968	209868	8.56	50	101.3	89.5	110.5	
B	11	45	2	NoGas	58.641	1.791	172663	7.06	50	117.3	89.5	110.5	CCV Failed
Na	23	45	1	He	25269.291	2.247	43221992	0.52	25000	101.1	89.5	110.5	
Mg	24	45	1	He	25299.913	2.554	24549634	0.52	25000	101.2	89.5	110.5	
Al	27	45	1	He	254.273	2.542	141495	0.52	250	101.7	89.5	110.5	
K	39	45	1	He	25531.555	2.467	24961268	0.42	25000	102.1	89.5	110.5	
Ca	44	45	1	He	26025.732	2.096	1380357	1.60	25000	104.1	89.5	110.5	
Ti	47	45	1	He	51.671	4.052	14769	2.17	50	103.3	89.5	110.5	
V	51	45	1	He	51.147	2.886	367729	1.10	50	102.3	89.5	110.5	
Cr	52	45	1	He	51.375	1.652	439568	1.12	50	102.7	89.5	110.5	
Mn	55	115	1	He	257.552	4.324	1811459	2.94	250	103.0	89.5	110.5	
Fe	56	103	1	He	12311.818	1.724	104938111	1.61	12500	98.5	89.5	110.5	
Co	59	103	1	He	49.660	0.990	612172	0.90	50	99.3	89.5	110.5	
Ni	60	103	1	He	50.378	1.166	152161	1.12	50	100.8	89.5	110.5	
Cu	63	103	1	He	50.489	1.083	401915	0.94	50	101.0	89.5	110.5	
Zn	66	103	1	He	49.928	1.193	81793	1.04	50	99.9	89.5	110.5	
As	75	103	1	He	49.976	1.204	54541	1.09	50	100.0	89.5	110.5	
Se	78	103	1	He	49.756	1.900	5871	1.73	50	99.5	89.5	110.5	
Sr	88	103	1	He	48.874	0.576	440418	0.43	50	97.7	89.5	110.5	
Mo	95	103	1	He	50.960	1.332	209690	1.35	50	101.9	89.5	110.5	
Ag	107	103	1	He	50.847	0.626	673423	0.50	50	101.7	89.5	110.5	
Cd	111	103	1	He	50.440	0.831	119241	0.68	50	100.9	89.5	110.5	
Sn	118	115	1	He	49.938	3.791	290398	2.44	50	99.9	89.5	110.5	
Sb	123	115	1	He	51.132	1.760	277459	0.41	50	102.3	89.5	110.5	
Ba	137	115	1	He	50.438	2.167	134175	1.10	50	100.9	89.5	110.5	
W	182	209	1	He	48.127	0.289	730768	0.20	50	96.3	89.5	110.5	
Tl	205	209	1	He	51.961	0.651	1902021	0.52	50	103.9	89.5	110.5	
Pb	208	209	1	He	49.172	1.065	2333745	1.06	50	98.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1897340	7.91	1729956	109.68	30	120	
Sc	45	1	He	1045690	2.77	1045873	99.98	30	120	
Sc	45	2	NoGas	8922547	6.25	8041241	110.96	30	120	
Rh	103	1	He	2921200	0.15	3067946	95.22	30	120	
In	115	1	He	1890470	1.41	1978772	95.54	30	120	
Tb	159	1	He	4967557	0.31	5013529	99.08	30	120	
Ho	165	1	He	5089373	0.42	5115781	99.48	30	120	
Bi	209	1	He	3529772	0.13	3723643	94.79	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	037_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:48:27-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.027	68.1	407	15.0	1	
B	11	45	2	NoGas	0.358	12.3	8247	1.7	20	
Na	23	45	1	He	4.098	25.7	30059	9.7	400	
Mg	24	45	1	He	1.889	24.8	3386	8.8	1000	
Al	27	45	1	He	0.345	12.4	868	6.9	50	
K	39	45	1	He	6.513	38.4	48039	10.6	1000	
Ca	44	45	1	He	0.427	450.9	601	11.7	1000	
Ti	47	45	1	He	0.082	33.6	33	30.0	20	
V	51	45	1	He	-0.001	-9378.9	-207	-395.1	2	
Cr	52	45	1	He	0.026	39.4	2607	2.5	2	
Mn	55	115	1	He	0.009	41.5	929	8.3	2	
Fe	56	103	1	He	18.009	15.8	181841	19.0	50	
Co	59	103	1	He	0.003	61.7	110	19.9	1	
Ni	60	103	1	He	-0.152	-12.0	411	17.5	2	
Cu	63	103	1	He	-0.232	-6.2	1941	10.4	2	
Zn	66	103	1	He	-0.267	-15.0	1028	4.7	20	
As	75	103	1	He	0.040	31.4	193	3.8	2	
Se	78	103	1	He	0.049	80.8	78	3.4	2	
Sr	88	103	1	He	0.001	315.8	164	27.6	10	
Mo	95	103	1	He	0.625	17.0	3121	19.4	2	
Ag	107	103	1	He	0.006	46.5	172	20.1	0.2	
Cd	111	103	1	He	0.015	130.7	1797	7.0	0.2	
Sn	118	115	1	He	0.223	19.4	2567	16.2	10	
Sb	123	115	1	He	0.319	11.2	2874	13.7	1	
Ba	137	115	1	He	0.015	40.7	98	23.9	5	
W	182	209	1	He	0.694	10.9	16724	9.1	10	
Tl	205	209	1	He	0.023	16.5	1003	16.9	0.5	
Pb	208	209	1	He	0.036	3.0	3631	1.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1713581	1.84	1729956	99.05	30	120	
Sc	45	1	He	1071837	5.96	1045873	102.48	30	120	
Sc	45	2	NoGas	8049052	0.37	8041241	100.10	30	120	
Rh	103	1	He	3168920	4.27	3067946	103.29	30	120	
In	115	1	He	2033835	6.38	1978772	102.78	30	120	
Tb	159	1	He	5123038	3.43	5013529	102.18	30	120	
Ho	165	1	He	5197677	3.30	5115781	101.60	30	120	
Bi	209	1	He	3746504	2.63	3723643	100.61	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	038_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:52:18-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.594	1.933	184292	0.89	50	97.2	89.5	110.5	
B	11	45	2	NoGas	56.720	3.125	152835	2.61	50	113.4	89.5	110.5	CCV Failed
Na	23	45	1	He	24672.970	1.465	44419763	10.12	25000	98.7	89.5	110.5	
Mg	24	45	1	He	24789.763	2.373	25306139	9.46	25000	99.2	89.5	110.5	
Al	27	45	1	He	249.055	1.536	145961	10.84	250	99.6	89.5	110.5	
K	39	45	1	He	24963.715	1.612	25708065	11.19	25000	99.9	89.5	110.5	
Ca	44	45	1	He	25050.768	2.110	1397742	9.58	25000	100.2	89.5	110.5	
Ti	47	45	1	He	50.060	3.379	15043	8.21	50	100.1	89.5	110.5	
V	51	45	1	He	48.861	3.815	369331	8.85	50	97.7	89.5	110.5	
Cr	52	45	1	He	49.267	3.172	443156	8.37	50	98.5	89.5	110.5	
Mn	55	115	1	He	254.924	3.122	1833652	8.79	250	102.0	89.5	110.5	
Fe	56	103	1	He	12358.188	2.040	106211482	7.76	12500	98.9	89.5	110.5	
Co	59	103	1	He	49.853	1.735	619663	7.65	50	99.7	89.5	110.5	
Ni	60	103	1	He	50.138	1.665	152692	7.55	50	100.3	89.5	110.5	
Cu	63	103	1	He	50.008	1.750	401338	7.16	50	100.0	89.5	110.5	
Zn	66	103	1	He	49.775	1.151	82201	6.91	50	99.5	89.5	110.5	
As	75	103	1	He	50.031	2.548	55068	8.32	50	100.1	89.5	110.5	
Se	78	103	1	He	50.361	3.232	5995	9.14	50	100.7	89.5	110.5	
Sr	88	103	1	He	48.975	1.894	444996	7.67	50	98.0	89.5	110.5	
Mo	95	103	1	He	50.857	0.932	210935	6.78	50	101.7	89.5	110.5	
Ag	107	103	1	He	50.080	0.774	668289	5.78	50	100.2	89.5	110.5	
Cd	111	103	1	He	50.084	1.536	119263	4.83	50	100.2	89.5	110.5	
Sn	118	115	1	He	48.913	1.812	290719	7.17	50	97.8	89.5	110.5	
Sb	123	115	1	He	50.075	1.223	277572	6.18	50	100.2	89.5	110.5	
Ba	137	115	1	He	49.299	1.488	133953	6.13	50	98.6	89.5	110.5	
W	182	209	1	He	47.436	0.914	725998	3.04	50	94.9	89.5	110.5	
Tl	205	209	1	He	51.031	1.916	1882520	3.15	50	102.1	89.5	110.5	
Pb	208	209	1	He	48.479	1.050	2318603	2.35	50	97.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1737189	1.24	1729956	100.42	30	120	
Sc	45	1	He	1101412	11.65	1045873	105.31	30	120	
Sc	45	2	NoGas	8155390	0.57	8041241	101.42	30	120	
Rh	103	1	He	2943475	5.87	3067946	95.94	30	120	
In	115	1	He	1930964	6.41	1978772	97.58	30	120	
Tb	159	1	He	4993017	3.95	5013529	99.59	30	120	
Ho	165	1	He	5104367	3.59	5115781	99.78	30	120	
Bi	209	1	He	3557093	2.33	3723643	95.53	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	039_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:56:04-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.039	84.6	448	25.4	1	
B	11	45	2	NoGas	0.661	40.4	8747	7.4	20	
Na	23	45	1	He	4.327	10.9	29465	2.1	400	
Mg	24	45	1	He	1.332	18.7	2752	5.9	1000	
Al	27	45	1	He	0.380	14.3	859	2.4	50	
K	39	45	1	He	7.703	9.8	47601	3.9	1000	
Ca	44	45	1	He	-0.050	-1177.2	561	7.8	1000	
Ti	47	45	1	He	0.059	108.9	26	71.8	20	
V	51	45	1	He	0.124	84.8	663	108.5	2	
Cr	52	45	1	He	0.025	14.5	2515	3.7	2	
Mn	55	115	1	He	0.005	26.4	876	2.9	2	
Fe	56	103	1	He	16.696	15.7	166566	13.4	50	
Co	59	103	1	He	0.004	46.6	122	20.8	1	
Ni	60	103	1	He	-0.128	-2.7	482	0.8	2	
Cu	63	103	1	He	-0.237	-4.2	1873	5.9	2	
Zn	66	103	1	He	-0.240	-26.1	1061	9.6	20	
As	75	103	1	He	0.039	30.8	190	6.2	2	
Se	78	103	1	He	0.040	241.2	75	14.9	2	
Sr	88	103	1	He	0.000	-1542.2	147	15.9	10	
Mo	95	103	1	He	0.644	12.7	3147	10.5	2	
Ag	107	103	1	He	0.006	35.3	177	16.8	0.2	
Cd	111	103	1	He	0.031	71.5	1811	1.7	0.2	
Sn	118	115	1	He	0.290	7.1	2911	2.3	10	
Sb	123	115	1	He	0.332	17.3	2879	10.0	1	
Ba	137	115	1	He	0.010	99.5	80	33.1	5	
W	182	209	1	He	0.720	15.3	16880	9.7	10	
Tl	205	209	1	He	0.023	16.8	993	14.2	0.5	
Pb	208	209	1	He	0.039	14.3	3754	6.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1696496	1.87	1729956	98.07	30	120	
Sc	45	1	He	1037756	2.85	1045873	99.22	30	120	
Sc	45	2	NoGas	7811222	1.22	8041241	97.14	30	120	
Rh	103	1	He	3126729	1.55	3067946	101.92	30	120	
In	115	1	He	1991055	1.94	1978772	100.62	30	120	
Tb	159	1	He	5145001	2.68	5013529	102.62	30	120	
Ho	165	1	He	5194482	2.14	5115781	101.54	30	120	
Bi	209	1	He	3693918	0.70	3723643	99.20	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	040CRIA.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T13:59:55-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.853	0.853	4.692	3467	4.85	1	85.3	69.5	130.5	
B	11	2	NoGas	21.081	21.081	3.297	59284	2.69	20	105.4	69.5	130.5	
Na	23	1	He	1064.679	1064.679	0.955	1789719	1.24	1000	106.5	69.5	130.5	
Mg	24	1	He	1058.311	1058.311	1.415	998985	1.72	1000	105.8	69.5	130.5	
Al	27	1	He	51.959	51.959	1.652	28595	1.91	50	103.9	69.5	130.5	
K	39	1	He	1059.820	1059.820	1.006	1044172	1.29	1000	106.0	69.5	130.5	
Ca	44	1	He	1040.308	1040.308	1.958	54122	2.19	1000	104.0	69.5	130.5	
Ti	47	1	He	10.910	10.910	3.019	3037	3.32	10	109.1	69.5	130.5	
V	51	1	He	5.317	5.317	0.763	36955	0.59	5	106.3	69.5	130.5	
Cr	52	1	He	2.184	2.184	2.048	20306	2.14	2	109.2	69.5	130.5	
Mn	55	1	He	4.773	4.773	1.456	35429	2.03	5	95.5	69.5	130.5	
Fe	56	1	He	99.272	99.272	1.998	880255	1.37	100	99.3	69.5	130.5	
Co	59	1	He	1.003	1.003	2.340	12728	1.95	1	100.3	69.5	130.5	
Ni	60	1	He	1.910	1.910	2.679	6729	1.79	2	95.5	69.5	130.5	
Cu	63	1	He	1.833	1.833	3.713	18515	2.44	2	91.7	69.5	130.5	
Zn	66	1	He	20.489	20.489	2.218	35210	1.86	20	102.4	69.5	130.5	
As	75	1	He	4.915	4.915	1.570	5619	0.99	5	98.3	69.5	130.5	
Se	78	1	He	5.050	5.050	2.904	671	2.27	5	101.0	69.5	130.5	
Sr	88	1	He	9.530	9.530	2.434	88064	1.94	10	95.3	69.5	130.5	
Mo	95	1	He	10.194	10.194	2.430	43201	1.84	10	101.9	69.5	130.5	
Ag	107	1	He	1.042	1.042	1.268	14220	1.15	1	104.2	69.5	130.5	
Cd	111	1	He	1.034	1.034	4.801	4128	2.55	1	103.4	69.5	130.5	
Sn	118	1	He	9.812	9.812	1.075	59743	1.98	10	98.1	69.5	130.5	
Sb	123	1	He	1.951	1.951	2.439	11848	1.44	2	97.6	69.5	130.5	
Ba	137	1	He	4.860	4.860	1.520	13377	0.48	5	97.2	69.5	130.5	
W	182	1	He	9.347	9.347	0.878	152803	0.76	10	93.5	69.5	130.5	
Tl	205	1	He	1.851	1.851	1.452	70930	1.46	2	92.5	69.5	130.5	
Pb	208	1	He	1.042	1.042	1.687	53448	1.64	1	104.2	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1700386	1.76	1729956	98.29	30	120	
Sc	45	1	He	1015331	0.32	1045873	97.08	30	120	
Sc	45	2	NoGas	7864041	0.37	8041241	97.80	30	120	
Rh	103	1	He	2991999	0.61	3067946	97.52	30	120	
In	115	1	He	1948906	1.05	1978772	98.49	30	120	
Tb	159	1	He	4931169	0.98	5013529	98.36	30	120	
Ho	165	1	He	5090132	1.69	5115781	99.50	30	120	
Bi	209	1	He	3689565	0.09	3723643	99.08	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-178129/1-a
Data File Name	041_Blk.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:03:47-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.015	132.9	333	23.3	1	
B	11	45	2	NoGas	2.165	7.5	11452	3.1	20	
Na	23	45	1	He	91.722	0.6	183379	6.9	400	
Mg	24	45	1	He	49.628	2.8	50782	5.4	1000	
Al	27	45	1	He	3.647	4.1	2736	4.3	50	
K	39	45	1	He	34.970	8.2	76348	8.1	1000	
Ca	44	45	1	He	158.896	3.0	9195	4.5	1000	
Ti	47	45	1	He	0.176	30.4	61	31.5	20	
V	51	45	1	He	0.200	36.7	1254	44.0	2	
Cr	52	45	1	He	0.729	1.9	8724	6.0	2	
Mn	55	115	1	He	0.624	9.0	5315	10.8	2	
Fe	56	103	1	He	15.405	5.3	151157	7.9	50	
Co	59	103	1	He	0.005	9.0	140	6.3	1	
Ni	60	103	1	He	-0.041	-50.7	741	10.5	2	
Cu	63	103	1	He	0.662	12.9	9241	10.6	2	
Zn	66	103	1	He	4.412	4.9	8860	7.4	20	
As	75	103	1	He	0.149	20.6	310	12.1	2	
Se	78	103	1	He	0.083	106.1	79	15.5	2	
Sr	88	103	1	He	0.316	3.5	3118	6.1	10	
Mo	95	103	1	He	0.181	19.1	1087	16.7	2	
Ag	107	103	1	He	0.011	25.8	234	19.3	0.2	
Cd	111	103	1	He	0.024	63.5	1750	5.5	0.2	
Sn	118	115	1	He	1.029	1.1	7213	4.3	10	
Sb	123	115	1	He	0.372	7.7	3019	5.8	1	
Ba	137	115	1	He	0.776	7.3	2166	9.4	5	
W	182	209	1	He	0.203	5.9	9314	6.0	10	
Tl	205	209	1	He	0.007	13.7	416	13.3	0.5	
Pb	208	209	1	He	0.132	1.7	8902	2.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1562962	3.06	1729956	90.35	30	120	
Sc	45	1	He	1070399	7.19	1045873	102.34	30	120	
Sc	45	2	NoGas	7191691	0.55	8041241	89.44	30	120	
Rh	103	1	He	3047639	3.36	3067946	99.34	30	120	
In	115	1	He	1935039	3.42	1978772	97.79	30	120	
Tb	159	1	He	5007940	3.75	5013529	99.89	30	120	
Ho	165	1	He	5118986	3.27	5115781	100.06	30	120	
Bi	209	1	He	3933651	3.87	3723643	105.64	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-178129/3-a
Data File Name	042_LCS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:07:38-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1066.790	1066.790	2.732	3275233	1.95	1000	106.7	79.5	120.5	
B	11	2	NoGas	134.671	134.671	1.938	280493	1.85	100	134.7	79.5	120.5	LCS Failed
Na	23	1	He	9671.940	9671.940	0.857	13505662	2.50	10000	96.7	79.5	120.5	
Mg	24	1	He	9790.590	9790.590	1.757	7748462	0.90	10000	97.9	79.5	120.5	
Al	27	1	He	9189.989	9189.989	0.815	4152481	1.86	10000	91.9	79.5	120.5	
K	39	1	He	9517.625	9517.625	0.886	7611160	2.57	10000	95.2	79.5	120.5	
Ca	44	1	He	8736.220	8736.220	0.977	378195	2.00	10000	87.4	79.5	120.5	
Ti	47	1	He	95.119	95.119	1.692	22171	1.15	100	95.1	79.5	120.5	
V	51	1	He	953.775	953.775	0.404	5596956	2.37	1000	95.4	79.5	120.5	
Cr	52	1	He	961.017	961.017	0.235	6672723	2.22	1000	96.1	79.5	120.5	
Mn	55	1	He	897.564	897.564	0.780	5405282	1.62	1000	89.8	79.5	120.5	
Fe	56	1	He	8915.503	8915.503	1.495	65462755	1.66	10000	89.2	79.5	120.5	
Co	59	1	He	915.620	915.620	1.933	9721415	1.59	1000	91.6	79.5	120.5	
Ni	60	1	He	951.977	951.977	2.079	2463720	1.26	1000	95.2	79.5	120.5	
Cu	63	1	He	951.985	951.985	0.371	6472329	0.63	1000	95.2	79.5	120.5	
Zn	66	1	He	910.326	910.326	1.369	1264206	1.71	1000	91.0	79.5	120.5	
As	75	1	He	884.841	884.841	1.237	829907	1.43	1000	88.5	79.5	120.5	
Se	78	1	He	923.761	923.761	1.098	92906	1.36	1000	92.4	79.5	120.5	
Sr	88	1	He	920.810	920.810	0.945	7145910	1.56	1000	92.1	79.5	120.5	
Mo	95	1	He	96.318	96.318	0.877	341162	0.62	100	96.3	79.5	120.5	
Ag	107	1	He	97.517	97.517	0.965	1112463	1.09	100	97.5	79.5	120.5	
Cd	111	1	He	1032.330	1032.330	0.858	2075183	1.71	1000	103.2	79.5	120.5	
Sn	118	1	He	1030.893	1030.893	2.204	5116418	3.03	1000	103.1	79.5	120.5	
Sb	123	1	He	96.578	96.578	0.626	448026	1.19	100	96.6	79.5	120.5	
Ba	137	1	He	1032.263	1032.263	1.053	2350461	1.15	1000	103.2	79.5	120.5	
W	182	1	He	86.614	86.614	0.153	1245593	0.64	100	86.6	79.5	120.5	
Tl	205	1	He	224.698	224.698	0.337	7814849	0.78	250	89.9	79.5	120.5	
Pb	208	1	He	950.427	950.427	0.563	42830545	1.09	1000	95.0	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1408641	1.25	1729956	81.43	30	120	
Sc	45	1	He	852626	2.43	1045873	81.52	30	120	
Sc	45	2	NoGas	6486606	1.58	8041241	80.67	30	120	
Rh	103	1	He	2516387	0.96	3067946	82.02	30	120	
In	115	1	He	1618461	0.91	1978772	81.79	30	120	
Tb	159	1	He	4456463	1.39	5013529	88.89	30	120	
Ho	165	1	He	4597371	1.20	5115781	89.87	30	120	
Bi	209	1	He	3353837	0.53	3723643	90.07	30	120	

Sample Report

Sample Table

Sample Name	240-49777-a-1-a
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:11:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.291	0.291	15.56	1108	0.03	10000	
B	11	45	2	NoGas	51.606	51.606	0.76	106957	0.05	300	
Na	23	45	1	He	59897.084	59897.084	1.51	79646947	0.08	500000	
Mg	24	45	1	He	9015.339	9015.339	1.61	6803594	0.13	500000	
Al	27	45	1	He	160.503	160.503	3.44	69629	0.23	200000	
K	39	45	1	He	6846.681	6846.681	1.18	5229080	0.13	500000	
Ca	44	45	1	He	49255.399	49255.399	1.32	2030982	2.43	500000	
Ti	47	45	1	He	2.098	2.098	47.69	471	0.45	2500	
V	51	45	1	He	0.537	0.537	33.23	2856	0.02	10000	
Cr	52	45	1	He	3.010	3.010	2.02	21724	0.01	10000	
Mn	55	115	1	He	140.213	140.213	1.02	750181	0.02	10000	
Fe	56	103	1	He	388.504	388.504	1.73	2712600	0.01	200000	
Co	59	103	1	He	0.228	0.228	4.24	2350	0.01	10000	
Ni	60	103	1	He	0.980	0.980	8.36	3081	0.03	10000	
Cu	63	103	1	He	3.822	3.822	5.70	27555	0.01	10000	
Zn	66	103	1	He	10.233	10.233	3.04	14573	0.07	10000	
As	75	103	1	He	1.673	1.673	3.76	1596	0.10	10000	
Se	78	103	1	He	1.038	1.038	14.70	153	0.68	10000	
Sr	88	103	1	He	182.721	182.721	1.80	1343211	0.01	10000	
Mo	95	103	1	He	8.465	8.465	1.58	28622	0.03	2000	
Ag	107	103	1	He	1.396	1.396	1.24	15146	0.01	300	
Cd	111	103	1	He	0.080	0.080	28.91	1475	0.01	4000	
Sn	118	115	1	He	2.718	2.718	12.33	12805	0.02	2000	
Sb	123	115	1	He	0.659	0.659	3.31	3423	0.02	300	
Ba	137	115	1	He	43.712	43.712	1.05	88411	0.05	10000	
W	182	209	1	He	1.044	1.044	16.60	19057	0.01	2500	
Tl	205	209	1	He	0.144	0.144	30.05	4874	0.00	5000	
Pb	208	209	1	He	0.530	0.530	6.35	24335	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1358948	0.98	1729956	78.55	30	120	
Sc	45	1	He	812945	1.66	1045873	77.73	30	120	
Sc	45	2	NoGas	6242227	0.77	8041241	77.63	30	120	
Rh	103	1	He	2383630	0.25	3067946	77.69	30	120	
In	115	1	He	1436938	0.74	1978772	72.62	30	120	
Tb	159	1	He	4338536	0.80	5013529	86.54	30	120	
Ho	165	1	He	4493212	1.14	5115781	87.83	30	120	
Bi	209	1	He	3198130	0.63	3723643	85.89	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	044_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:15:01-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.273	4.475	185783	1.90	50	96.5	89.5	110.5	
B	11	45	2	NoGas	55.552	1.839	151656	0.34	50	111.1	89.5	110.5	CCV Failed
Na	23	45	1	He	25036.663	1.491	41050375	0.33	25000	100.1	89.5	110.5	
Mg	24	45	1	He	25054.928	2.364	23305291	1.62	25000	100.2	89.5	110.5	
Al	27	45	1	He	250.686	1.934	133733	1.00	250	100.3	89.5	110.5	
K	39	45	1	He	25366.360	3.406	23771995	2.74	25000	101.5	89.5	110.5	
Ca	44	45	1	He	24615.826	2.943	1251465	2.86	25000	98.5	89.5	110.5	
Ti	47	45	1	He	50.701	3.447	13893	2.30	50	101.4	89.5	110.5	
V	51	45	1	He	49.488	1.528	341086	0.81	50	99.0	89.5	110.5	
Cr	52	45	1	He	50.096	1.745	410883	0.94	50	100.2	89.5	110.5	
Mn	55	115	1	He	246.316	2.141	1682805	0.50	250	98.5	89.5	110.5	
Fe	56	103	1	He	12105.467	0.466	98942647	1.73	12500	96.8	89.5	110.5	
Co	59	103	1	He	48.855	1.521	577443	1.00	50	97.7	89.5	110.5	
Ni	60	103	1	He	49.289	1.110	142762	1.30	50	98.6	89.5	110.5	
Cu	63	103	1	He	49.625	1.405	378844	1.54	50	99.2	89.5	110.5	
Zn	66	103	1	He	49.677	1.313	78037	0.93	50	99.4	89.5	110.5	
As	75	103	1	He	49.141	0.706	51429	1.49	50	98.3	89.5	110.5	
Se	78	103	1	He	49.059	2.095	5551	0.33	50	98.1	89.5	110.5	
Sr	88	103	1	He	48.318	1.408	417476	0.85	50	96.6	89.5	110.5	
Mo	95	103	1	He	50.268	1.331	198386	3.12	50	100.5	89.5	110.5	
Ag	107	103	1	He	50.397	1.187	639976	1.01	50	100.8	89.5	110.5	
Cd	111	103	1	He	50.297	1.767	114002	0.46	50	100.6	89.5	110.5	
Sn	118	115	1	He	48.681	2.637	274961	0.28	50	97.4	89.5	110.5	
Sb	123	115	1	He	49.548	1.186	261170	1.46	50	99.1	89.5	110.5	
Ba	137	115	1	He	49.347	2.374	127478	0.44	50	98.7	89.5	110.5	
W	182	209	1	He	47.628	0.403	712401	1.03	50	95.3	89.5	110.5	
Tl	205	209	1	He	51.505	1.768	1856917	1.13	50	103.0	89.5	110.5	
Pb	208	209	1	He	48.354	1.164	2260421	0.32	50	96.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1763914	2.51	1729956	101.96	30	120	
Sc	45	1	He	1002074	1.16	1045873	95.81	30	120	
Sc	45	2	NoGas	8255278	1.83	8041241	102.66	30	120	
Rh	103	1	He	2801399	2.19	3067946	91.31	30	120	
In	115	1	He	1836223	2.64	1978772	92.80	30	120	
Tb	159	1	He	4876060	1.27	5013529	97.26	30	120	
Ho	165	1	He	4946617	1.27	5115781	96.69	30	120	
Bi	209	1	He	3476868	0.86	3723643	93.37	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	045_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:18:50-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.082	43.7	656	19.5	1	
B	11	45	2	NoGas	0.899	22.1	10025	4.1	20	
Na	23	45	1	He	7.515	26.3	38457	11.0	400	
Mg	24	45	1	He	0.898	56.2	2582	22.1	1000	
Al	27	45	1	He	0.400	22.6	959	6.1	50	
K	39	45	1	He	6.621	10.6	51270	3.0	1000	
Ca	44	45	1	He	-1.263	-62.2	547	7.1	1000	
Ti	47	45	1	He	0.058	58.0	28	38.6	20	
V	51	45	1	He	0.026	244.3	-19	-2697.6	2	
Cr	52	45	1	He	0.029	51.3	2814	6.2	2	
Mn	55	115	1	He	0.002	920.8	906	19.3	2	
Fe	56	103	1	He	15.924	18.7	168621	19.4	50	
Co	59	103	1	He	0.007	35.4	176	21.0	1	
Ni	60	103	1	He	-0.149	-4.9	437	3.3	2	
Cu	63	103	1	He	-0.182	-5.0	2465	5.6	2	
Zn	66	103	1	He	-0.191	-35.3	1208	11.8	20	
As	75	103	1	He	0.087	28.3	259	11.7	2	
Se	78	103	1	He	0.084	40.2	85	7.6	2	
Sr	88	103	1	He	0.006	77.1	214	22.7	10	
Mo	95	103	1	He	0.622	15.0	3223	15.7	2	
Ag	107	103	1	He	0.009	28.3	220	18.6	0.2	
Cd	111	103	1	He	0.026	103.4	1896	6.0	0.2	
Sn	118	115	1	He	0.269	13.3	2934	6.7	10	
Sb	123	115	1	He	0.420	18.4	3573	15.2	1	
Ba	137	115	1	He	0.008	92.4	80	30.0	5	
W	182	209	1	He	0.771	14.2	18226	11.3	10	
Tl	205	209	1	He	0.029	13.6	1266	13.6	0.5	
Pb	208	209	1	He	0.075	4.6	5695	4.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1830074	3.13	1729956	105.79	30	120	
Sc	45	1	He	1142948	1.58	1045873	109.28	30	120	
Sc	45	2	NoGas	8395724	1.10	8041241	104.41	30	120	
Rh	103	1	He	3293187	2.44	3067946	107.34	30	120	
In	115	1	He	2100904	2.61	1978772	106.17	30	120	
Tb	159	1	He	5238660	1.90	5013529	104.49	30	120	
Ho	165	1	He	5328692	1.78	5115781	104.16	30	120	
Bi	209	1	He	3799397	1.74	3723643	102.03	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-177246/1-a@2
Data File Name	046_Blk.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:22:39-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.099	53.6	667	26.8	1	
B	11	45	2	NoGas	1.754	7.5	11701	4.7	20	
Na	23	45	1	He	33.883	4.2	77385	3.8	400	
Mg	24	45	1	He	33.665	2.4	32934	0.6	1000	
Al	27	45	1	He	5.857	2.6	3760	1.1	50	
K	39	45	1	He	23.339	5.9	60970	3.2	1000	
Ca	44	45	1	He	112.262	1.9	6289	3.3	1000	
Ti	47	45	1	He	0.183	29.7	59	23.6	20	
V	51	45	1	He	0.290	13.4	1805	13.5	2	
Cr	52	45	1	He	1.004	5.0	10479	2.0	2	
Mn	55	115	1	He	0.422	0.7	3727	1.2	2	
Fe	56	103	1	He	20.744	5.3	192194	6.0	50	
Co	59	103	1	He	0.017	17.2	284	11.9	1	
Ni	60	103	1	He	0.032	122.3	939	11.4	2	
Cu	63	103	1	He	0.697	0.4	9205	1.3	2	
Zn	66	103	1	He	9.044	1.4	16104	2.4	20	
As	75	103	1	He	0.210	15.6	367	8.6	2	
Se	78	103	1	He	0.136	35.4	83	6.0	2	
Sr	88	103	1	He	0.269	2.4	2590	2.6	10	
Mo	95	103	1	He	0.294	0.9	1520	2.0	2	
Ag	107	103	1	He	0.016	11.1	299	8.5	0.2	
Cd	111	103	1	He	0.022	76.8	1689	1.3	0.2	
Sn	118	115	1	He	17.794	3.7	103129	3.0	10	Blank Failed
Sb	123	115	1	He	0.364	8.0	2876	4.8	1	
Ba	137	115	1	He	1.112	1.4	2978	2.0	5	
W	182	209	1	He	0.348	7.6	11034	2.9	10	
Tl	205	209	1	He	0.020	16.3	883	14.1	0.5	
Pb	208	209	1	He	0.194	3.8	11477	3.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1694066	2.30	1729956	97.93	30	120	
Sc	45	1	He	1008352	2.18	1045873	96.41	30	120	
Sc	45	2	NoGas	7993476	2.09	8041241	99.41	30	120	
Rh	103	1	He	2950190	1.30	3067946	96.16	30	120	
In	115	1	He	1871177	0.65	1978772	94.56	30	120	
Tb	159	1	He	4909370	1.34	5013529	97.92	30	120	
Ho	165	1	He	4961311	1.25	5115781	96.98	30	120	
Bi	209	1	He	3698415	0.86	3723643	99.32	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-177246/2-a@2
Data File Name	047LCSS.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:26:29-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	555.702	555.702	0.708	1869965	0.97	500	111.1	78.6	110.5	LCSS Failed
B	11	2	NoGas	71.942	71.942	1.177	168113	0.78	50	143.9	79.5	120.5	LCSS Failed
Na	23	1	He	5266.596	5266.596	2.589	8079768	4.78	5000	105.3	79.5	120.5	
Mg	24	1	He	5289.300	5289.300	1.581	4597183	5.30	5000	105.8	79.5	120.5	
Al	27	1	He	5007.110	5007.110	2.514	2482854	4.00	5000	100.1	79.5	120.5	
K	39	1	He	5089.586	5089.586	0.176	4487615	6.68	5000	101.8	79.5	120.5	
Ca	44	1	He	4797.054	4797.054	1.097	228374	6.86	5000	95.9	79.5	120.5	
Ti	47	1	He	52.003	52.003	1.167	13318	6.16	50	104.0	79.5	120.5	
V	51	1	He	507.990	507.990	1.882	3271606	4.68	500	101.6	71.5	110.5	
Cr	52	1	He	516.736	516.736	2.302	3939147	5.08	500	103.3	69.5	110.5	
Mn	55	1	He	492.841	492.841	1.268	3219530	4.52	500	98.6	79.5	120.5	
Fe	56	1	He	4886.951	4886.951	2.278	38872626	5.11	5000	97.7	79.5	120.5	
Co	59	1	He	492.206	492.206	1.072	5659939	4.16	500	98.4	73.9	110.5	
Ni	60	1	He	493.450	493.450	5.749	1384885	8.90	500	98.7	74.9	110.5	
Cu	63	1	He	511.948	511.948	2.229	3771937	5.31	500	102.4	72.6	110.5	
Zn	66	1	He	455.177	455.177	2.235	685368	5.29	500	91.0	71.5	113.4	
As	75	1	He	432.141	432.141	2.181	439110	5.26	500	86.4	73.4	110.5	
Se	78	1	He	423.626	423.626	2.501	46187	5.57	500	84.7	64.6	110.5	
Sr	88	1	He	491.966	491.966	0.516	4134026	3.44	500	98.4	79.5	120.5	
Mo	95	1	He	52.453	52.453	0.135	201297	3.06	50	104.9	29.5	140.5	
Ag	107	1	He	51.454	51.454	0.930	635647	3.58	50	102.9	59.5	114.5	
Cd	111	1	He	474.186	474.186	1.097	1033062	4.14	500	94.8	73.5	110.5	
Sn	118	1	He	575.563	575.563	0.686	3098263	4.03	500	115.1	79.5	120.5	
Sb	123	1	He	50.041	50.041	0.431	252144	3.21	50	100.1	67.5	113.4	
Ba	137	1	He	489.039	489.039	0.980	1207692	3.83	500	97.8	69.5	110.5	
W	182	1	He	48.394	48.394	0.865	716707	2.73	50	96.8	74.6	125.4	
Tl	205	1	He	123.165	123.165	1.496	4397724	3.34	125	98.5	70.6	110.5	
Pb	208	1	He	511.728	511.728	0.334	23672485	2.26	500	102.3	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1543557	0.71	1729956	89.23	30	120	
Sc	45	1	He	936504	6.54	1045873	89.54	30	120	
Sc	45	2	NoGas	7145747	0.54	8041241	88.86	30	120	
Rh	103	1	He	2724582	3.09	3067946	88.81	30	120	
In	115	1	He	1755082	3.34	1978772	88.70	30	120	
Tb	159	1	He	4726152	1.79	5013529	94.27	30	120	
Ho	165	1	He	4772234	2.54	5115781	93.28	30	120	
Bi	209	1	He	3442606	1.94	3723643	92.45	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-d@20
Data File Name	048SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:30:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.594	0.594	4.53	2634	0.02	10000	
B	11	45	2	NoGas	1.901	1.901	18.15	12757	0.01	300	
Na	23	45	1	He	29.656	29.656	4.73	75872	0.04	500000	
Mg	24	45	1	He	1081.978	1081.978	1.97	1092637	0.10	500000	
Al	27	45	1	He	7059.295	7059.295	1.24	4065781	0.17	200000	
K	39	45	1	He	342.053	342.053	1.69	388977	0.09	500000	
Ca	44	45	1	He	214.667	214.667	4.80	12405	1.73	500000	
Ti	47	45	1	He	63.477	63.477	1.39	18869	0.34	2500	
V	51	45	1	He	15.080	15.080	0.95	112557	0.01	10000	
Cr	52	45	1	He	9.379	9.379	1.58	85353	0.01	10000	
Mn	55	115	1	He	1687.721	1687.721	0.79	12379468	0.01	10000	
Fe	56	103	1	He	11907.159	11907.159	1.01	107772311	0.01	200000	
Co	59	103	1	He	7.922	7.922	1.98	103769	0.01	10000	
Ni	60	103	1	He	10.167	10.167	0.72	33311	0.03	10000	
Cu	63	103	1	He	6.909	6.909	2.44	61731	0.01	10000	
Zn	66	103	1	He	34.069	34.069	1.74	59732	0.06	10000	
As	75	103	1	He	6.675	6.675	2.43	7861	0.08	10000	
Se	78	103	1	He	1.039	1.039	6.49	199	0.52	10000	
Sr	88	103	1	He	10.407	10.407	2.22	99709	0.01	10000	
Mo	95	103	1	He	1.338	1.338	3.63	6153	0.02	2000	
Ag	107	103	1	He	0.043	0.043	11.17	688	0.01	300	
Cd	111	103	1	He	0.145	0.145	9.63	2080	0.01	4000	
Sn	118	115	1	He	2.227	2.227	3.37	14588	0.02	2000	
Sb	123	115	1	He	0.134	0.134	7.89	1736	0.01	300	
Ba	137	115	1	He	57.694	57.694	0.81	160068	0.04	10000	
W	182	209	1	He	0.461	0.461	7.65	13009	0.00	2500	
Tl	205	209	1	He	0.172	0.172	13.11	6809	0.00	5000	
Pb	208	209	1	He	12.072	12.072	2.22	610664	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1785404	1.56	1729956	103.21	30	120	
Sc	45	1	He	1086683	4.20	1045873	103.90	30	120	
Sc	45	2	NoGas	8448324	0.63	8041241	105.06	30	120	
Rh	103	1	He	3101824	1.36	3067946	101.10	30	120	
In	115	1	He	1971307	1.83	1978772	99.62	30	120	
Tb	159	1	He	5093849	2.50	5013529	101.60	30	120	
Ho	165	1	He	5161066	2.04	5115781	100.89	30	120	
Bi	209	1	He	3753418	0.51	3723643	100.80	30	120	

Sample Report

Sample Table

Sample Name	SD 240-49233-a-1-d@100
Data File Name	049SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:33:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.117	0.117	25.03	741	0.02	10000	
B	11	45	2	NoGas	0.863	0.863	22.26	9381	0.01	300	
Na	23	45	1	He	15.779	15.779	6.55	56443	0.03	500000	
Mg	24	45	1	He	221.783	221.783	2.62	248609	0.09	500000	
Al	27	45	1	He	1455.562	1455.562	2.80	925611	0.16	200000	
K	39	45	1	He	73.308	73.308	3.42	128371	0.06	500000	
Ca	44	45	1	He	49.459	49.459	4.55	3651	1.35	500000	
Ti	47	45	1	He	12.857	12.857	4.37	4232	0.30	2500	
V	51	45	1	He	3.134	3.134	4.25	25686	0.01	10000	
Cr	52	45	1	He	1.953	1.953	4.56	21702	0.01	10000	
Mn	55	115	1	He	357.366	357.366	3.02	2829073	0.01	10000	
Fe	56	103	1	He	2500.208	2500.208	4.07	24339190	0.01	200000	
Co	59	103	1	He	1.636	1.636	5.01	23102	0.01	10000	
Ni	60	103	1	He	2.042	2.042	4.13	7953	0.03	10000	
Cu	63	103	1	He	1.304	1.304	4.85	15869	0.01	10000	
Zn	66	103	1	He	9.604	9.604	5.23	19235	0.05	10000	
As	75	103	1	He	1.406	1.406	0.54	1900	0.07	10000	
Se	78	103	1	He	0.244	0.244	32.83	108	0.23	10000	
Sr	88	103	1	He	2.190	2.190	4.22	22686	0.01	10000	
Mo	95	103	1	He	0.266	0.266	13.24	1586	0.02	2000	
Ag	107	103	1	He	0.009	0.009	30.68	227	0.00	300	
Cd	111	103	1	He	0.068	0.068	33.76	2028	0.00	4000	
Sn	118	115	1	He	0.428	0.428	2.20	4008	0.01	2000	
Sb	123	115	1	He	-0.050	-0.050	-4.22	753	-0.01	300	
Ba	137	115	1	He	11.405	11.405	1.10	34161	0.03	10000	
W	182	209	1	He	0.105	0.105	2.24	7498	0.00	2500	
Tl	205	209	1	He	0.033	0.033	5.77	1420	0.00	5000	
Pb	208	209	1	He	2.472	2.472	2.15	130017	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1700042	1.76	1729956	98.27	30	120	
Sc	45	1	He	1199297	8.92	1045873	114.67	30	120	
Sc	45	2	NoGas	7927414	0.67	8041241	98.58	30	120	
Rh	103	1	He	3331608	3.58	3067946	108.59	30	120	
In	115	1	He	2125326	4.46	1978772	107.41	30	120	
Tb	159	1	He	5325481	2.08	5013529	106.22	30	120	
Ho	165	1	He	5381525	3.40	5115781	105.19	30	120	
Bi	209	1	He	3855942	2.27	3723643	103.55	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-49233-a-1-d@20
Data File Name	050SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:37:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1177.066	1177.066	1.76	3891130	0.03	10000	
B	11	45	2	NoGas	131.899	131.899	1.88	307126	0.04	300	
Na	23	45	1	He	10074.000	10074.000	2.72	16291990	0.06	500000	
Mg	24	45	1	He	11226.982	11226.982	2.44	10294280	0.11	500000	
Al	27	45	1	He	16498.732	16498.732	2.06	8636415	0.19	200000	
K	39	45	1	He	10436.368	10436.368	2.77	9662270	0.11	500000	
Ca	44	45	1	He	9395.217	9395.217	3.18	471000	1.99	500000	
Ti	47	45	1	He	162.084	162.084	3.09	43757	0.37	2500	
V	51	45	1	He	1020.815	1020.815	1.59	6940634	0.01	10000	
Cr	52	45	1	He	1026.709	1026.709	2.37	8257719	0.01	10000	
Mn	55	115	1	He	2647.117	2647.117	1.38	17426579	0.02	10000	
Fe	56	103	1	He	21651.960	21651.960	0.75	174852962	0.01	200000	
Co	59	103	1	He	1009.408	1009.408	1.00	11789392	0.01	10000	
Ni	60	103	1	He	1058.641	1058.641	0.31	3013767	0.04	10000	
Cu	63	103	1	He	1036.800	1036.800	1.45	7753811	0.01	10000	
Zn	66	103	1	He	1103.442	1103.442	1.38	1685259	0.07	10000	
As	75	103	1	He	969.716	969.716	0.74	1000406	0.10	10000	
Se	78	103	1	He	979.842	979.842	0.54	108390	0.90	10000	
Sr	88	103	1	He	1019.192	1019.192	0.59	8698734	0.01	10000	
Mo	95	103	1	He	102.548	102.548	0.95	399476	0.03	2000	
Ag	107	103	1	He	37.128	37.128	0.61	465896	0.01	300	
Cd	111	103	1	He	1090.126	1090.126	1.01	2409836	0.05	4000	
Sn	118	115	1	He	1122.287	1122.287	0.98	6088331	0.02	2000	
Sb	123	115	1	He	105.869	105.869	1.06	536899	0.02	300	
Ba	137	115	1	He	1176.596	1176.596	1.18	2928976	0.04	10000	
W	182	209	1	He	92.131	92.131	1.61	1378873	0.01	2500	
Tl	205	209	1	He	247.993	247.993	0.70	8978925	0.00	5000	
Pb	208	209	1	He	1052.286	1052.286	0.55	49368736	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1516515	0.62	1729956	87.66	30	120	
Sc	45	1	He	988347	4.73	1045873	94.50	30	120	
Sc	45	2	NoGas	7247623	0.78	8041241	90.13	30	120	
Rh	103	1	He	2767719	1.42	3067946	90.21	30	120	
In	115	1	He	1769441	1.29	1978772	89.42	30	120	
Tb	159	1	He	4776695	1.13	5013529	95.28	30	120	
Ho	165	1	He	4933723	1.13	5115781	96.44	30	120	
Bi	209	1	He	3491703	1.33	3723643	93.77	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-e du@20
Data File Name	051SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:41:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.718	0.718	7.17	3034	0.02	10000	
B	11	45	2	NoGas	2.609	2.609	9.64	14365	0.02	300	
Na	23	45	1	He	33.642	33.642	4.01	75239	0.04	500000	
Mg	24	45	1	He	1248.170	1248.170	0.36	1143552	0.11	500000	
Al	27	45	1	He	8266.259	8266.259	0.51	4318384	0.19	200000	
K	39	45	1	He	395.515	395.515	2.12	402184	0.10	500000	
Ca	44	45	1	He	225.945	225.945	1.75	11829	1.91	500000	
Ti	47	45	1	He	61.716	61.716	0.31	16638	0.37	2500	
V	51	45	1	He	17.196	17.196	0.91	116459	0.01	10000	
Cr	52	45	1	He	10.773	10.773	0.84	88646	0.01	10000	
Mn	55	115	1	He	1870.857	1870.857	1.54	12996233	0.01	10000	
Fe	56	103	1	He	12972.434	12972.434	1.79	110134285	0.01	200000	
Co	59	103	1	He	9.736	9.736	0.62	119624	0.01	10000	
Ni	60	103	1	He	11.555	11.555	2.08	35403	0.03	10000	
Cu	63	103	1	He	7.940	7.940	2.42	65986	0.01	10000	
Zn	66	103	1	He	38.492	38.492	1.44	63129	0.06	10000	
As	75	103	1	He	7.194	7.194	0.89	7937	0.09	10000	
Se	78	103	1	He	1.551	1.551	4.00	246	0.63	10000	
Sr	88	103	1	He	10.988	10.988	0.83	98759	0.01	10000	
Mo	95	103	1	He	2.714	2.714	9.04	11391	0.02	2000	
Ag	107	103	1	He	0.042	0.042	13.75	633	0.01	300	
Cd	111	103	1	He	0.212	0.212	4.49	2106	0.01	4000	
Sn	118	115	1	He	7.072	7.072	9.57	41485	0.02	2000	
Sb	123	115	1	He	0.222	0.222	22.65	2110	0.01	300	
Ba	137	115	1	He	64.305	64.305	2.52	168939	0.04	10000	
W	182	209	1	He	1.614	1.614	17.69	30478	0.01	2500	
Tl	205	209	1	He	0.279	0.279	13.43	10613	0.00	5000	
Pb	208	209	1	He	12.826	12.826	1.25	628294	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1739353	2.66	1729956	100.54	30	120	
Sc	45	1	He	985690	1.25	1045873	94.25	30	120	
Sc	45	2	NoGas	8291860	0.60	8041241	103.12	30	120	
Rh	103	1	He	2910599	2.69	3067946	94.87	30	120	
In	115	1	He	1867700	3.08	1978772	94.39	30	120	
Tb	159	1	He	4929601	1.17	5013529	98.33	30	120	
Ho	165	1	He	5011185	1.61	5115781	97.96	30	120	
Bi	209	1	He	3635987	1.34	3723643	97.65	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-1-f ms@20
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:45:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.635	5.635	4.85	23697	0.02	10000	
B	11	45	2	NoGas	6.724	6.724	4.74	27554	0.02	300	
Na	23	45	1	He	517.034	517.034	1.01	974579	0.05	500000	
Mg	24	45	1	He	1696.385	1696.385	1.31	1771697	0.10	500000	
Al	27	45	1	He	8334.873	8334.873	0.58	4965683	0.17	200000	
K	39	45	1	He	863.877	863.877	1.08	950336	0.09	500000	
Ca	44	45	1	He	694.655	694.655	1.16	40211	1.73	500000	
Ti	47	45	1	He	59.988	59.988	0.24	18443	0.33	2500	
V	51	45	1	He	20.619	20.619	1.68	159290	0.01	10000	
Cr	52	45	1	He	14.847	14.847	1.03	138371	0.01	10000	
Mn	55	115	1	He	1358.733	1358.733	0.19	10435999	0.01	10000	
Fe	56	103	1	He	12268.899	12268.899	1.43	113460213	0.01	200000	
Co	59	103	1	He	12.314	12.314	1.08	164755	0.01	10000	
Ni	60	103	1	He	16.257	16.257	0.81	53890	0.03	10000	
Cu	63	103	1	He	12.195	12.195	2.42	108294	0.01	10000	
Zn	66	103	1	He	44.132	44.132	1.16	78619	0.06	10000	
As	75	103	1	He	11.318	11.318	0.58	13516	0.08	10000	
Se	78	103	1	He	5.432	5.432	1.09	759	0.72	10000	
Sr	88	103	1	He	13.586	13.586	1.62	132946	0.01	10000	
Mo	95	103	1	He	5.833	5.833	1.53	26328	0.02	2000	
Ag	107	103	1	He	4.815	4.815	1.52	69262	0.01	300	
Cd	111	103	1	He	4.953	4.953	0.00	14292	0.03	4000	
Sn	118	115	1	He	6.841	6.841	1.10	44474	0.02	2000	
Sb	123	115	1	He	1.418	1.418	0.65	9403	0.02	300	
Ba	137	115	1	He	61.035	61.035	0.86	177307	0.03	10000	
W	182	209	1	He	3.279	3.279	0.85	58670	0.01	2500	
Tl	205	209	1	He	4.326	4.326	2.16	169833	0.00	5000	
Pb	208	209	1	He	16.245	16.245	1.63	827710	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1901796	0.64	1729956	109.93	30	120	
Sc	45	1	He	1124108	0.99	1045873	107.48	30	120	
Sc	45	2	NoGas	9107010	0.43	8041241	113.25	30	120	
Rh	103	1	He	3169800	1.29	3067946	103.32	30	120	
In	115	1	He	2064382	1.59	1978772	104.33	30	120	
Tb	159	1	He	5175647	0.99	5013529	103.23	30	120	
Ho	165	1	He	5277051	1.20	5115781	103.15	30	120	
Bi	209	1	He	3784362	1.39	3723643	101.63	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-2-b@20
Data File Name	053SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:48:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.464	0.464	6.00	2689	0.02	10000	
B	11	45	2	NoGas	3.283	3.283	2.65	20483	0.02	300	
Na	23	45	1	He	30.222	30.222	1.33	96489	0.03	500000	
Mg	24	45	1	He	1088.275	1088.275	1.39	1379222	0.08	500000	
Al	27	45	1	He	5966.937	5966.937	2.77	4310555	0.14	200000	
K	39	45	1	He	368.778	368.778	0.87	522211	0.07	500000	
Ca	44	45	1	He	756.544	756.544	1.58	53053	1.43	500000	
Ti	47	45	1	He	48.272	48.272	4.02	17990	0.27	2500	
V	51	45	1	He	12.495	12.495	2.59	116935	0.01	10000	
Cr	52	45	1	He	8.876	8.876	1.23	101537	0.01	10000	
Mn	55	115	1	He	1021.490	1021.490	2.13	8713883	0.01	10000	
Fe	56	103	1	He	11214.101	11214.101	0.79	117329893	0.01	200000	
Co	59	103	1	He	5.514	5.514	0.39	83503	0.01	10000	
Ni	60	103	1	He	10.132	10.132	1.17	38382	0.03	10000	
Cu	63	103	1	He	5.891	5.891	0.96	61471	0.01	10000	
Zn	66	103	1	He	39.249	39.249	0.79	79283	0.05	10000	
As	75	103	1	He	5.526	5.526	1.75	7547	0.07	10000	
Se	78	103	1	He	0.764	0.764	6.80	190	0.40	10000	
Sr	88	103	1	He	4.352	4.352	1.55	48276	0.01	10000	
Mo	95	103	1	He	0.910	0.910	3.48	4949	0.02	2000	
Ag	107	103	1	He	0.063	0.063	5.95	1118	0.01	300	
Cd	111	103	1	He	0.222	0.222	6.42	2624	0.01	4000	
Sn	118	115	1	He	2.436	2.436	2.49	18440	0.01	2000	
Sb	123	115	1	He	0.029	0.029	48.94	1327	0.00	300	
Ba	137	115	1	He	46.970	46.970	2.57	151519	0.03	10000	
W	182	209	1	He	0.304	0.304	20.35	11386	0.00	2500	
Tl	205	209	1	He	0.127	0.127	5.51	5501	0.00	5000	
Pb	208	209	1	He	11.695	11.695	1.37	641344	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2262163	11.08	1729956	130.76	30	120	ISTD Failed
Sc	45	1	He	1363497	2.93	1045873	130.37	30	120	ISTD Failed
Sc	45	2	NoGas	10534016	8.34	8041241	131.00	30	120	ISTD Failed
Rh	103	1	He	3585372	2.50	3067946	116.87	30	120	
In	115	1	He	2292837	2.28	1978772	115.87	30	120	
Tb	159	1	He	5588161	2.06	5013529	111.46	30	120	
Ho	165	1	He	5696051	0.83	5115781	111.34	30	120	
Bi	209	1	He	4069285	1.05	3723643	109.28	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-9-b@20
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:52:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.432	0.432	13.21	2256	0.02	10000	
B	11	45	2	NoGas	1.697	1.697	6.03	13924	0.01	300	
Na	23	45	1	He	9.533	9.533	5.29	44588	0.02	500000	
Mg	24	45	1	He	996.437	996.437	3.58	1117501	0.09	500000	
Al	27	45	1	He	6134.421	6134.421	2.89	3923159	0.16	200000	
K	39	45	1	He	270.833	270.833	3.14	351841	0.08	500000	
Ca	44	45	1	He	97.744	97.744	4.33	6637	1.47	500000	
Ti	47	45	1	He	42.751	42.751	1.34	14125	0.30	2500	
V	51	45	1	He	11.183	11.183	2.75	92669	0.01	10000	
Cr	52	45	1	He	8.302	8.302	3.21	84234	0.01	10000	
Mn	55	115	1	He	229.229	229.229	2.04	1821763	0.01	10000	
Fe	56	103	1	He	10695.345	10695.345	1.03	104462689	0.01	200000	
Co	59	103	1	He	5.797	5.797	1.19	81926	0.01	10000	
Ni	60	103	1	He	8.448	8.448	2.35	30043	0.03	10000	
Cu	63	103	1	He	5.690	5.690	1.90	55588	0.01	10000	
Zn	66	103	1	He	29.417	29.417	0.66	55871	0.05	10000	
As	75	103	1	He	4.932	4.932	0.90	6306	0.08	10000	
Se	78	103	1	He	0.432	0.432	8.53	133	0.32	10000	
Sr	88	103	1	He	1.376	1.376	5.24	14357	0.01	10000	
Mo	95	103	1	He	0.652	0.652	6.99	3406	0.02	2000	
Ag	107	103	1	He	0.024	0.024	17.98	461	0.01	300	
Cd	111	103	1	He	0.130	0.130	21.18	2204	0.01	4000	
Sn	118	115	1	He	2.045	2.045	0.40	14607	0.01	2000	
Sb	123	115	1	He	-0.029	-0.029	-50.79	882	0.00	300	
Ba	137	115	1	He	28.072	28.072	1.09	84362	0.03	10000	
W	182	209	1	He	0.099	0.099	31.73	7521	0.00	2500	
Tl	205	209	1	He	0.085	0.085	3.35	3593	0.00	5000	
Pb	208	209	1	He	8.142	8.142	0.51	430495	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2014683	2.51	1729956	116.46	30	120	
Sc	45	1	He	1208037	6.51	1045873	115.51	30	120	
Sc	45	2	NoGas	9628353	3.52	8041241	119.74	30	120	
Rh	103	1	He	3346930	2.94	3067946	109.09	30	120	
In	115	1	He	2134536	2.15	1978772	107.87	30	120	
Tb	159	1	He	5303459	1.31	5013529	105.78	30	120	
Ho	165	1	He	5431456	2.67	5115781	106.17	30	120	
Bi	209	1	He	3917608	1.37	3723643	105.21	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-10-b@20
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T14:56:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.545	0.545	0.75	2967	0.02	10000	
B	11	45	2	NoGas	1.835	1.835	7.49	15440	0.01	300	
Na	23	45	1	He	13.888	13.888	6.48	59341	0.02	500000	
Mg	24	45	1	He	1139.455	1139.455	2.01	1427079	0.08	500000	
Al	27	45	1	He	7028.385	7028.385	1.56	5018670	0.14	200000	
K	39	45	1	He	401.400	401.400	2.27	557149	0.07	500000	
Ca	44	45	1	He	92.614	92.614	0.51	7057	1.31	500000	
Ti	47	45	1	He	43.295	43.295	2.13	15946	0.27	2500	
V	51	45	1	He	14.805	14.805	1.16	136991	0.01	10000	
Cr	52	45	1	He	9.207	9.207	0.65	103936	0.01	10000	
Mn	55	115	1	He	799.204	799.204	0.95	6794111	0.01	10000	
Fe	56	103	1	He	13476.034	13476.034	2.20	138992052	0.01	200000	
Co	59	103	1	He	7.438	7.438	1.10	111012	0.01	10000	
Ni	60	103	1	He	9.465	9.465	2.32	35408	0.03	10000	
Cu	63	103	1	He	5.284	5.284	2.88	54823	0.01	10000	
Zn	66	103	1	He	32.891	32.891	1.84	65750	0.05	10000	
As	75	103	1	He	6.445	6.445	2.56	8655	0.07	10000	
Se	78	103	1	He	0.741	0.741	13.30	185	0.40	10000	
Sr	88	103	1	He	4.346	4.346	2.07	47544	0.01	10000	
Mo	95	103	1	He	0.732	0.732	3.89	3996	0.02	2000	
Ag	107	103	1	He	0.026	0.026	13.57	518	0.01	300	
Cd	111	103	1	He	0.163	0.163	19.21	2422	0.01	4000	
Sn	118	115	1	He	1.949	1.949	2.95	14955	0.01	2000	
Sb	123	115	1	He	-0.022	-0.022	-38.84	993	0.00	300	
Ba	137	115	1	He	41.101	41.101	1.17	132143	0.03	10000	
W	182	209	1	He	0.079	0.079	15.85	7313	0.00	2500	
Tl	205	209	1	He	0.099	0.099	2.28	4221	0.00	5000	
Pb	208	209	1	He	10.410	10.410	0.88	558555	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2169910	1.63	1729956	125.43	30	120	ISTD Failed
Sc	45	1	He	1346761	3.78	1045873	128.77	30	120	ISTD Failed
Sc	45	2	NoGas	10372313	1.02	8041241	128.99	30	120	ISTD Failed
Rh	103	1	He	3534299	3.14	3067946	115.20	30	120	
In	115	1	He	2284338	2.83	1978772	115.44	30	120	
Tb	159	1	He	5543101	1.81	5013529	110.56	30	120	
Ho	165	1	He	5626815	1.90	5115781	109.99	30	120	
Bi	209	1	He	3979892	2.22	3723643	106.88	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	056_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:00:10-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.673	4.093	186539	3.88	50	97.3	89.5	110.5	
B	11	45	2	NoGas	55.754	3.241	150388	2.78	50	111.5	89.5	110.5	CCV Failed
Na	23	45	1	He	25330.611	1.875	44198894	1.72	25000	101.3	89.5	110.5	
Mg	24	45	1	He	25267.440	1.940	25012779	1.77	25000	101.1	89.5	110.5	
Al	27	45	1	He	253.753	1.429	144085	2.76	250	101.5	89.5	110.5	
K	39	45	1	He	25664.776	1.116	25601981	2.49	25000	102.7	89.5	110.5	
Ca	44	45	1	He	25099.374	1.559	1358268	3.14	25000	100.4	89.5	110.5	
Ti	47	45	1	He	50.474	0.505	14729	4.05	50	100.9	89.5	110.5	
V	51	45	1	He	50.440	1.672	369992	1.96	50	100.9	89.5	110.5	
Cr	52	45	1	He	50.861	1.057	444000	2.59	50	101.7	89.5	110.5	
Mn	55	115	1	He	260.029	0.997	1849337	2.75	250	104.0	89.5	110.5	
Fe	56	103	1	He	12574.543	2.081	107364876	2.45	12500	100.6	89.5	110.5	
Co	59	103	1	He	49.916	1.554	616398	1.92	50	99.8	89.5	110.5	
Ni	60	103	1	He	50.265	2.798	152086	3.05	50	100.5	89.5	110.5	
Cu	63	103	1	He	50.321	2.147	401294	2.56	50	100.6	89.5	110.5	
Zn	66	103	1	He	50.088	2.802	82193	3.00	50	100.2	89.5	110.5	
As	75	103	1	He	50.425	1.988	55127	2.43	50	100.9	89.5	110.5	
Se	78	103	1	He	50.766	1.780	6000	2.35	50	101.5	89.5	110.5	
Sr	88	103	1	He	49.019	2.032	442488	2.30	50	98.0	89.5	110.5	
Mo	95	103	1	He	50.492	0.928	208111	0.38	50	101.0	89.5	110.5	
Ag	107	103	1	He	50.224	1.565	666300	1.70	50	100.4	89.5	110.5	
Cd	111	103	1	He	50.098	2.211	118650	2.53	50	100.2	89.5	110.5	
Sn	118	115	1	He	49.178	0.860	289169	2.46	50	98.4	89.5	110.5	
Sb	123	115	1	He	50.006	0.369	274319	1.98	50	100.0	89.5	110.5	
Ba	137	115	1	He	50.021	0.047	134509	1.75	50	100.0	89.5	110.5	
W	182	209	1	He	47.623	0.464	719049	0.57	50	95.2	89.5	110.5	
Tl	205	209	1	He	51.476	1.034	1873612	1.47	50	103.0	89.5	110.5	
Pb	208	209	1	He	48.720	1.197	2299280	1.95	50	97.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1755527	1.66	1729956	101.48	30	120	
Sc	45	1	He	1066777	3.61	1045873	102.00	30	120	
Sc	45	2	NoGas	8156957	0.82	8041241	101.44	30	120	
Rh	103	1	He	2926159	0.66	3067946	95.38	30	120	
In	115	1	He	1910632	1.77	1978772	96.56	30	120	
Tb	159	1	He	5008671	1.40	5013529	99.90	30	120	
Ho	165	1	He	5079069	2.42	5115781	99.28	30	120	
Bi	209	1	He	3509738	0.98	3723643	94.26	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	057_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:03:58-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.044	52.9	519	21.1	1	
B	11	45	2	NoGas	0.813	36.4	10129	8.2	20	
Na	23	45	1	He	3.775	35.2	29565	6.3	400	
Mg	24	45	1	He	0.958	35.0	2482	11.9	1000	
Al	27	45	1	He	0.575	12.2	1002	3.3	50	
K	39	45	1	He	5.965	13.2	47593	0.8	1000	
Ca	44	45	1	He	-0.212	-316.2	572	4.9	1000	
Ti	47	45	1	He	0.101	13.8	39	9.9	20	
V	51	45	1	He	0.008	1137.2	-147	-465.8	2	
Cr	52	45	1	He	0.041	31.2	2754	5.5	2	
Mn	55	115	1	He	0.007	24.0	907	1.3	2	
Fe	56	103	1	He	18.610	14.3	184709	13.1	50	
Co	59	103	1	He	0.005	16.9	140	8.2	1	
Ni	60	103	1	He	-0.141	-3.0	442	3.4	2	
Cu	63	103	1	He	-0.258	-0.6	1698	0.8	2	
Zn	66	103	1	He	-0.211	-3.8	1114	1.0	20	
As	75	103	1	He	0.049	22.6	202	6.6	2	
Se	78	103	1	He	0.015	218.8	73	5.3	2	
Sr	88	103	1	He	0.001	462.0	156	19.4	10	
Mo	95	103	1	He	0.612	14.2	3017	12.6	2	
Ag	107	103	1	He	0.005	51.9	151	22.3	0.2	
Cd	111	103	1	He	0.057	44.4	1882	3.6	0.2	
Sn	118	115	1	He	0.345	2.2	3293	1.9	10	
Sb	123	115	1	He	0.346	26.5	3004	18.5	1	
Ba	137	115	1	He	0.003	204.6	63	32.9	5	
W	182	209	1	He	0.737	12.0	17039	7.6	10	
Tl	205	209	1	He	0.025	12.5	1051	10.7	0.5	
Pb	208	209	1	He	0.058	10.5	4631	5.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1865448	2.55	1729956	107.83	30	120	
Sc	45	1	He	1076036	1.75	1045873	102.88	30	120	
Sc	45	2	NoGas	8673582	1.26	8041241	107.86	30	120	
Rh	103	1	He	3136216	0.31	3067946	102.23	30	120	
In	115	1	He	2019973	0.84	1978772	102.08	30	120	
Tb	159	1	He	5124876	0.82	5013529	102.22	30	120	
Ho	165	1	He	5192950	0.38	5115781	101.51	30	120	
Bi	209	1	He	3667538	0.53	3723643	98.49	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-11-b@20
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:07:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.460	0.460	17.67	2215	0.02	10000	
B	11	45	2	NoGas	1.460	1.460	3.55	12375	0.01	300	
Na	23	45	1	He	13.293	13.293	6.22	49211	0.03	500000	
Mg	24	45	1	He	1137.991	1137.991	2.45	1210033	0.09	500000	
Al	27	45	1	He	7383.718	7383.718	2.33	4473154	0.17	200000	
K	39	45	1	He	350.034	350.034	2.11	417760	0.08	500000	
Ca	44	45	1	He	99.081	99.081	4.82	6359	1.56	500000	
Ti	47	45	1	He	50.759	50.759	2.36	15865	0.32	2500	
V	51	45	1	He	15.238	15.238	1.94	119658	0.01	10000	
Cr	52	45	1	He	9.739	9.739	3.08	93169	0.01	10000	
Mn	55	115	1	He	678.092	678.092	2.43	5115513	0.01	10000	
Fe	56	103	1	He	13020.779	13020.779	2.26	120376564	0.01	200000	
Co	59	103	1	He	7.375	7.375	3.05	98672	0.01	10000	
Ni	60	103	1	He	10.034	10.034	3.43	33596	0.03	10000	
Cu	63	103	1	He	6.106	6.106	2.10	56176	0.01	10000	
Zn	66	103	1	He	32.777	32.777	3.01	58756	0.06	10000	
As	75	103	1	He	6.095	6.095	3.88	7343	0.08	10000	
Se	78	103	1	He	0.684	0.684	12.73	158	0.43	10000	
Sr	88	103	1	He	2.087	2.087	0.37	20548	0.01	10000	
Mo	95	103	1	He	0.878	0.878	2.89	4236	0.02	2000	
Ag	107	103	1	He	0.026	0.026	11.22	461	0.01	300	
Cd	111	103	1	He	0.129	0.129	10.78	2084	0.01	4000	
Sn	118	115	1	He	1.849	1.849	2.48	12653	0.01	2000	
Sb	123	115	1	He	0.108	0.108	13.95	1631	0.01	300	
Ba	137	115	1	He	48.067	48.067	1.48	137152	0.04	10000	
W	182	209	1	He	0.194	0.194	13.32	8747	0.00	2500	
Tl	205	209	1	He	0.101	0.101	2.70	4045	0.00	5000	
Pb	208	209	1	He	10.767	10.767	1.14	545927	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1868440	1.60	1729956	108.01	30	120	
Sc	45	1	He	1143434	4.36	1045873	109.33	30	120	
Sc	45	2	NoGas	9025819	0.43	8041241	112.24	30	120	
Rh	103	1	He	3168564	0.24	3067946	103.28	30	120	
In	115	1	He	2027266	0.58	1978772	102.45	30	120	
Tb	159	1	He	5112999	0.90	5013529	101.98	30	120	
Ho	165	1	He	5209711	1.02	5115781	101.84	30	120	
Bi	209	1	He	3760877	0.42	3723643	101.00	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-12-b@20
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:11:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.468	0.468	10.98	2389	0.02	10000	
B	11	45	2	NoGas	1.239	1.239	2.40	12453	0.01	300	
Na	23	45	1	He	11.966	11.966	0.39	48416	0.02	500000	
Mg	24	45	1	He	1085.666	1085.666	0.14	1194836	0.09	500000	
Al	27	45	1	He	6395.483	6395.483	1.21	4013134	0.16	200000	
K	39	45	1	He	366.852	366.852	1.74	451364	0.08	500000	
Ca	44	45	1	He	165.945	165.945	4.21	10606	1.56	500000	
Ti	47	45	1	He	54.485	54.485	1.44	17643	0.31	2500	
V	51	45	1	He	12.426	12.426	2.00	101017	0.01	10000	
Cr	52	45	1	He	8.759	8.759	1.51	87051	0.01	10000	
Mn	55	115	1	He	551.339	551.339	2.07	4381997	0.01	10000	
Fe	56	103	1	He	10989.580	10989.580	1.40	105906369	0.01	200000	
Co	59	103	1	He	6.844	6.844	1.26	95452	0.01	10000	
Ni	60	103	1	He	10.900	10.900	2.63	37959	0.03	10000	
Cu	63	103	1	He	6.258	6.258	1.57	59903	0.01	10000	
Zn	66	103	1	He	31.589	31.589	0.01	59082	0.05	10000	
As	75	103	1	He	5.336	5.336	1.89	6720	0.08	10000	
Se	78	103	1	He	0.660	0.660	6.62	162	0.41	10000	
Sr	88	103	1	He	2.030	2.030	1.89	20831	0.01	10000	
Mo	95	103	1	He	0.772	0.772	6.39	3923	0.02	2000	
Ag	107	103	1	He	0.020	0.020	21.68	397	0.01	300	
Cd	111	103	1	He	0.150	0.150	20.14	2228	0.01	4000	
Sn	118	115	1	He	1.735	1.735	3.55	12587	0.01	2000	
Sb	123	115	1	He	0.037	0.037	63.29	1287	0.00	300	
Ba	137	115	1	He	44.979	44.979	1.21	135209	0.03	10000	
W	182	209	1	He	0.119	0.119	14.34	7776	0.00	2500	
Tl	205	209	1	He	0.094	0.094	4.94	3904	0.00	5000	
Pb	208	209	1	He	9.502	9.502	0.74	496971	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1993988	2.15	1729956	115.26	30	120	
Sc	45	1	He	1183862	0.36	1045873	113.19	30	120	
Sc	45	2	NoGas	9568324	0.52	8041241	118.99	30	120	
Rh	103	1	He	3302821	1.33	3067946	107.66	30	120	
In	115	1	He	2135929	1.20	1978772	107.94	30	120	
Tb	159	1	He	5274848	0.84	5013529	105.21	30	120	
Ho	165	1	He	5403713	0.41	5115781	105.63	30	120	
Bi	209	1	He	3877885	1.03	3723643	104.14	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-13-b@20
Data File Name	060SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:15:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.403	0.403	12.06	2119	0.02	10000	
B	11	45	2	NoGas	1.127	1.127	14.28	12030	0.01	300	
Na	23	45	1	He	10.038	10.038	6.83	45631	0.02	500000	
Mg	24	45	1	He	890.543	890.543	0.69	1001099	0.09	500000	
Al	27	45	1	He	6056.672	6056.672	0.25	3880756	0.16	200000	
K	39	45	1	He	310.334	310.334	0.43	397083	0.08	500000	
Ca	44	45	1	He	98.887	98.887	5.08	6718	1.47	500000	
Ti	47	45	1	He	47.617	47.617	1.84	15746	0.30	2500	
V	51	45	1	He	12.934	12.934	1.67	107372	0.01	10000	
Cr	52	45	1	He	9.014	9.014	0.76	91399	0.01	10000	
Mn	55	115	1	He	659.343	659.343	0.35	5341605	0.01	10000	
Fe	56	103	1	He	10512.303	10512.303	1.84	103901349	0.01	200000	
Co	59	103	1	He	7.003	7.003	1.65	100171	0.01	10000	
Ni	60	103	1	He	8.415	8.415	2.88	30278	0.03	10000	
Cu	63	103	1	He	4.933	4.933	1.95	49321	0.01	10000	
Zn	66	103	1	He	26.848	26.848	1.93	51741	0.05	10000	
As	75	103	1	He	5.039	5.039	2.05	6517	0.08	10000	
Se	78	103	1	He	0.593	0.593	7.37	157	0.38	10000	
Sr	88	103	1	He	1.766	1.766	1.95	18603	0.01	10000	
Mo	95	103	1	He	0.683	0.683	1.13	3600	0.02	2000	
Ag	107	103	1	He	0.017	0.017	19.68	358	0.00	300	
Cd	111	103	1	He	0.147	0.147	11.53	2278	0.01	4000	
Sn	118	115	1	He	1.867	1.867	0.73	13710	0.01	2000	
Sb	123	115	1	He	-0.013	-0.013	-144.26	1001	0.00	300	
Ba	137	115	1	He	41.372	41.372	1.21	126778	0.03	10000	
W	182	209	1	He	0.082	0.082	12.22	7184	0.00	2500	
Tl	205	209	1	He	0.083	0.083	6.16	3465	0.00	5000	
Pb	208	209	1	He	9.251	9.251	0.27	484944	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1998827	1.78	1729956	115.54	30	120	
Sc	45	1	He	1208865	0.46	1045873	115.58	30	120	
Sc	45	2	NoGas	9500708	0.67	8041241	118.15	30	120	
Rh	103	1	He	3387777	1.13	3067946	110.42	30	120	
In	115	1	He	2177244	0.95	1978772	110.03	30	120	
Tb	159	1	He	5319384	0.63	5013529	106.10	30	120	
Ho	165	1	He	5421425	0.77	5115781	105.97	30	120	
Bi	209	1	He	3886118	0.82	3723643	104.36	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-15-b@20
Data File Name	061SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:19:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.449	0.449	13.21	2282	0.02	10000	
B	11	45	2	NoGas	2.000	2.000	4.93	14559	0.01	300	
Na	23	45	1	He	21.194	21.194	3.88	67253	0.03	500000	
Mg	24	45	1	He	1442.887	1442.887	3.30	1610302	0.09	500000	
Al	27	45	1	He	6850.345	6850.345	1.84	4360821	0.16	200000	
K	39	45	1	He	443.253	443.253	2.47	543546	0.08	500000	
Ca	44	45	1	He	1448.309	1448.309	1.79	88869	1.63	500000	
Ti	47	45	1	He	57.069	57.069	2.16	18746	0.30	2500	
V	51	45	1	He	14.321	14.321	1.29	118162	0.01	10000	
Cr	52	45	1	He	11.985	11.985	1.40	119868	0.01	10000	
Mn	55	115	1	He	569.021	569.021	0.89	4471064	0.01	10000	
Fe	56	103	1	He	14749.263	14749.263	1.23	142699661	0.01	200000	
Co	59	103	1	He	6.017	6.017	0.12	84258	0.01	10000	
Ni	60	103	1	He	12.659	12.659	1.39	44109	0.03	10000	
Cu	63	103	1	He	8.293	8.293	0.77	78374	0.01	10000	
Zn	66	103	1	He	34.669	34.669	0.59	64949	0.05	10000	
As	75	103	1	He	10.744	10.744	0.46	13430	0.08	10000	
Se	78	103	1	He	0.696	0.696	4.87	167	0.42	10000	
Sr	88	103	1	He	7.525	7.525	0.22	77104	0.01	10000	
Mo	95	103	1	He	2.922	2.922	3.42	13965	0.02	2000	
Ag	107	103	1	He	0.021	0.021	10.91	406	0.01	300	
Cd	111	103	1	He	0.188	0.188	10.45	2337	0.01	4000	
Sn	118	115	1	He	1.865	1.865	4.87	13284	0.01	2000	
Sb	123	115	1	He	-0.009	-0.009	-103.38	992	0.00	300	
Ba	137	115	1	He	51.052	51.052	1.34	151721	0.03	10000	
W	182	209	1	He	0.348	0.348	13.80	11453	0.00	2500	
Tl	205	209	1	He	0.091	0.091	5.36	3754	0.00	5000	
Pb	208	209	1	He	10.373	10.373	0.75	536863	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1968171	0.73	1729956	113.77	30	120	
Sc	45	1	He	1201277	1.97	1045873	114.86	30	120	
Sc	45	2	NoGas	9450371	1.56	8041241	117.52	30	120	
Rh	103	1	He	3315935	0.42	3067946	108.08	30	120	
In	115	1	He	2111671	0.36	1978772	106.72	30	120	
Tb	159	1	He	5300684	0.64	5013529	105.73	30	120	
Ho	165	1	He	5362466	0.30	5115781	104.82	30	120	
Bi	209	1	He	3838658	0.69	3723643	103.09	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-16-b@20
Data File Name	062SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:22:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.411	0.411	6.99	2237	0.02	10000	
B	11	45	2	NoGas	1.353	1.353	14.07	13339	0.01	300	
Na	23	45	1	He	14.423	14.423	0.83	54499	0.03	500000	
Mg	24	45	1	He	1022.983	1022.983	0.28	1154016	0.09	500000	
Al	27	45	1	He	5807.485	5807.485	0.97	3734860	0.16	200000	
K	39	45	1	He	342.220	342.220	2.11	434651	0.08	500000	
Ca	44	45	1	He	932.663	932.663	1.28	58049	1.61	500000	
Ti	47	45	1	He	49.581	49.581	1.19	16455	0.30	2500	
V	51	45	1	He	12.965	12.965	1.76	108041	0.01	10000	
Cr	52	45	1	He	9.881	9.881	0.55	100306	0.01	10000	
Mn	55	115	1	He	876.812	876.812	0.98	7043203	0.01	10000	
Fe	56	103	1	He	12381.021	12381.021	1.82	121880586	0.01	200000	
Co	59	103	1	He	7.714	7.714	1.15	109900	0.01	10000	
Ni	60	103	1	He	9.675	9.675	1.33	34532	0.03	10000	
Cu	63	103	1	He	10.787	10.787	1.26	102469	0.01	10000	
Zn	66	103	1	He	43.754	43.754	2.45	82979	0.05	10000	
As	75	103	1	He	6.485	6.485	0.17	8310	0.08	10000	
Se	78	103	1	He	0.647	0.647	12.79	163	0.40	10000	
Sr	88	103	1	He	4.282	4.282	1.96	44710	0.01	10000	
Mo	95	103	1	He	1.153	1.153	5.05	5817	0.02	2000	
Ag	107	103	1	He	0.060	0.060	5.55	1006	0.01	300	
Cd	111	103	1	He	0.239	0.239	2.73	2515	0.01	4000	
Sn	118	115	1	He	1.866	1.866	4.41	13591	0.01	2000	
Sb	123	115	1	He	-0.015	-0.015	-30.54	979	0.00	300	
Ba	137	115	1	He	44.181	44.181	0.16	134249	0.03	10000	
W	182	209	1	He	0.079	0.079	28.69	7109	0.00	2500	
Tl	205	209	1	He	0.089	0.089	1.62	3689	0.00	5000	
Pb	208	209	1	He	13.338	13.338	1.02	695578	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2080472	0.85	1729956	120.26	30	120	ISTD Failed
Sc	45	1	He	1213382	0.81	1045873	116.02	30	120	
Sc	45	2	NoGas	9976567	1.28	8041241	124.07	30	120	ISTD Failed
Rh	103	1	He	3374139	0.81	3067946	109.98	30	120	
In	115	1	He	2158892	0.38	1978772	109.10	30	120	
Tb	159	1	He	5344636	0.68	5013529	106.60	30	120	
Ho	165	1	He	5442150	1.06	5115781	106.38	30	120	
Bi	209	1	He	3871039	0.92	3723643	103.96	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-17-b@100
Data File Name	063SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:26:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.088	0.088	15.26	815	0.01	10000	
B	11	45	2	NoGas	0.140	0.140	100.47	10133	0.00	300	
Na	23	45	1	He	2.032	2.032	52.47	34129	0.01	500000	
Mg	24	45	1	He	244.841	244.841	5.81	316803	0.08	500000	
Al	27	45	1	He	1221.964	1221.964	4.26	898522	0.14	200000	
K	39	45	1	He	78.005	78.005	4.58	154675	0.05	500000	
Ca	44	45	1	He	144.729	144.729	6.10	10927	1.32	500000	
Ti	47	45	1	He	8.567	8.567	0.77	3264	0.26	2500	
V	51	45	1	He	2.791	2.791	3.32	26371	0.01	10000	
Cr	52	45	1	He	1.922	1.922	5.39	24764	0.01	10000	
Mn	55	115	1	He	1090.842	1090.842	1.65	9602694	0.01	10000	
Fe	56	103	1	He	2504.365	2504.365	0.62	26891312	0.01	200000	
Co	59	103	1	He	1.212	1.212	1.53	18895	0.01	10000	
Ni	60	103	1	He	3.875	3.875	2.85	15714	0.02	10000	
Cu	63	103	1	He	1.684	1.684	2.94	21284	0.01	10000	
Zn	66	103	1	He	6.305	6.305	4.37	14531	0.04	10000	
As	75	103	1	He	1.314	1.314	3.62	1971	0.07	10000	
Se	78	103	1	He	0.160	0.160	23.06	106	0.15	10000	
Sr	88	103	1	He	1.122	1.122	3.28	12902	0.01	10000	
Mo	95	103	1	He	0.178	0.178	1.48	1292	0.01	2000	
Ag	107	103	1	He	0.005	0.005	54.74	177	0.00	300	
Cd	111	103	1	He	0.091	0.091	8.91	2309	0.00	4000	
Sn	118	115	1	He	0.279	0.279	10.87	3386	0.01	2000	
Sb	123	115	1	He	-0.090	-0.090	-6.33	566	-0.02	300	
Ba	137	115	1	He	15.550	15.550	2.63	51806	0.03	10000	
W	182	209	1	He	0.100	0.100	22.46	7813	0.00	2500	
Tl	205	209	1	He	0.017	0.017	7.78	857	0.00	5000	
Pb	208	209	1	He	1.985	1.985	2.41	110170	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2192305	1.95	1729956	126.73	30	120	ISTD Failed
Sc	45	1	He	1389110	7.37	1045873	132.82	30	120	ISTD Failed
Sc	45	2	NoGas	10600426	1.41	8041241	131.83	30	120	ISTD Failed
Rh	103	1	He	3678553	2.07	3067946	119.90	30	120	
In	115	1	He	2366469	3.07	1978772	119.59	30	120	
Tb	159	1	He	5658718	1.28	5013529	112.87	30	120	
Ho	165	1	He	5744712	2.31	5115781	112.29	30	120	
Bi	209	1	He	4058163	1.70	3723643	108.98	30	120	

Sample Report

Sample Table

Sample Name	240-49233-a-18-b@20
Data File Name	064SMPL.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:30:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.363	0.363	10.12	2093	0.02	10000	
B	11	45	2	NoGas	1.266	1.266	6.03	14054	0.01	300	
Na	23	45	1	He	14.016	14.016	5.77	64610	0.02	500000	
Mg	24	45	1	He	1560.296	1560.296	1.65	2118068	0.07	500000	
Al	27	45	1	He	6137.704	6137.704	0.69	4752746	0.13	200000	
K	39	45	1	He	427.021	427.021	0.46	639121	0.07	500000	
Ca	44	45	1	He	754.303	754.303	2.38	56661	1.33	500000	
Ti	47	45	1	He	40.512	40.512	5.64	16170	0.25	2500	
V	51	45	1	He	11.019	11.019	2.72	110489	0.01	10000	
Cr	52	45	1	He	9.752	9.752	2.09	119198	0.01	10000	
Mn	55	115	1	He	1870.067	1870.067	3.17	16629413	0.01	10000	
Fe	56	103	1	He	15187.412	15187.412	2.31	162846127	0.01	200000	
Co	59	103	1	He	6.343	6.343	3.80	98433	0.01	10000	
Ni	60	103	1	He	17.875	17.875	2.25	68596	0.03	10000	
Cu	63	103	1	He	12.331	12.331	2.94	126927	0.01	10000	
Zn	66	103	1	He	39.242	39.242	2.93	81241	0.05	10000	
As	75	103	1	He	8.953	8.953	4.19	12431	0.07	10000	
Se	78	103	1	He	0.746	0.746	11.69	192	0.39	10000	
Sr	88	103	1	He	5.993	5.993	3.19	68097	0.01	10000	
Mo	95	103	1	He	0.834	0.834	0.22	4685	0.02	2000	
Ag	107	103	1	He	0.011	0.011	14.28	290	0.00	300	
Cd	111	103	1	He	0.199	0.199	18.62	2624	0.01	4000	
Sn	118	115	1	He	1.626	1.626	2.66	13287	0.01	2000	
Sb	123	115	1	He	-0.033	-0.033	-18.59	959	0.00	300	
Ba	137	115	1	He	86.247	86.247	2.13	290064	0.03	10000	
W	182	209	1	He	0.133	0.133	18.68	8432	0.00	2500	
Tl	205	209	1	He	0.133	0.133	1.46	5746	0.00	5000	
Pb	208	209	1	He	8.523	8.523	0.34	469508	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2155578	0.54	1729956	124.60	30	120	ISTD Failed
Sc	45	1	He	1461212	4.20	1045873	139.71	30	120	ISTD Failed
Sc	45	2	NoGas	10728136	0.98	8041241	133.41	30	120	ISTD Failed
Rh	103	1	He	3675043	0.89	3067946	119.79	30	120	
In	115	1	He	2390084	1.13	1978772	120.79	30	120	ISTD Failed
Tb	159	1	He	5716095	0.81	5013529	114.01	30	120	
Ho	165	1	He	5817148	0.77	5115781	113.71	30	120	
Bi	209	1	He	4082310	1.34	3723643	109.63	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-1945747
Data File Name	065_CCV.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:34:26-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	52.898	1.077	233806	2.55	50	105.8	89.5	110.5	
B	11	45	2	NoGas	58.856	1.860	185505	2.01	50	117.7	89.5	110.5	CCV Failed
Na	23	45	1	He	24695.867	2.180	54390229	0.75	25000	98.8	89.5	110.5	
Mg	24	45	1	He	24679.533	2.351	30837102	1.39	25000	98.7	89.5	110.5	
Al	27	45	1	He	250.367	1.999	179425	1.43	250	100.1	89.5	110.5	
K	39	45	1	He	25607.468	3.069	32231035	0.22	25000	102.4	89.5	110.5	
Ca	44	45	1	He	25274.237	2.517	1725771	0.67	25000	101.1	89.5	110.5	
Ti	47	45	1	He	49.791	1.569	18335	2.58	50	99.6	89.5	110.5	
V	51	45	1	He	48.543	1.411	449468	1.49	50	97.1	89.5	110.5	
Cr	52	45	1	He	48.676	2.122	536363	0.79	50	97.4	89.5	110.5	
Mn	55	115	1	He	272.589	1.688	2207848	0.91	250	109.0	89.5	110.5	
Fe	56	103	1	He	13279.109	1.636	128434426	1.41	12500	106.2	89.5	110.5	
Co	59	103	1	He	52.901	1.066	740026	1.11	50	105.8	89.5	110.5	
Ni	60	103	1	He	53.036	2.121	181730	2.14	50	106.1	89.5	110.5	
Cu	63	103	1	He	52.915	1.257	477814	1.46	50	105.8	89.5	110.5	
Zn	66	103	1	He	52.539	0.677	97593	1.12	50	105.1	89.5	110.5	
As	75	103	1	He	52.972	0.443	65595	0.53	50	105.9	89.5	110.5	
Se	78	103	1	He	52.750	1.958	7059	1.85	50	105.5	89.5	110.5	
Sr	88	103	1	He	51.067	0.465	522200	0.44	50	102.1	89.5	110.5	
Mo	95	103	1	He	51.769	1.400	241722	1.42	50	103.5	89.5	110.5	
Ag	107	103	1	He	51.273	1.539	770574	1.42	50	102.5	89.5	110.5	
Cd	111	103	1	He	50.440	0.671	135313	0.71	50	100.9	89.5	110.5	
Sn	118	115	1	He	48.984	2.919	328033	2.35	50	98.0	89.5	110.5	
Sb	123	115	1	He	49.669	1.382	310346	0.61	50	99.3	89.5	110.5	
Ba	137	115	1	He	49.807	1.935	152562	1.87	50	99.6	89.5	110.5	
W	182	209	1	He	47.903	1.717	773027	1.48	50	95.8	89.5	110.5	
Tl	205	209	1	He	51.768	1.085	2013962	1.34	50	103.5	89.5	110.5	
Pb	208	209	1	He	48.536	0.855	2448218	0.91	50	97.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2024361	1.48	1729956	117.02	30	120	
Sc	45	1	He	1346438	2.92	1045873	128.74	30	120	ISTD Failed
Sc	45	2	NoGas	9556210	1.69	8041241	118.84	30	120	
Rh	103	1	He	3314928	0.49	3067946	108.05	30	120	
In	115	1	He	2176404	0.78	1978772	109.99	30	120	
Tb	159	1	He	5417604	1.29	5013529	108.06	30	120	
Ho	165	1	He	5465156	0.59	5115781	106.83	30	120	
Bi	209	1	He	3751370	0.32	3723643	100.74	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	066_CCB.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:38:12-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.024	83.6	422	19.0	1	
B	11	45	2	NoGas	0.163	73.5	8121	4.1	20	
Na	23	45	1	He	3.059	44.2	27922	7.5	400	
Mg	24	45	1	He	0.999	22.2	2489	7.7	1000	
Al	27	45	1	He	0.466	24.2	927	6.3	50	
K	39	45	1	He	5.598	12.6	46568	0.6	1000	
Ca	44	45	1	He	0.180	1044.1	586	17.8	1000	
Ti	47	45	1	He	0.038	31.4	20	16.7	20	
V	51	45	1	He	0.083	29.7	395	46.5	2	
Cr	52	45	1	He	0.024	38.8	2564	2.3	2	
Mn	55	115	1	He	0.041	25.1	1146	5.6	2	
Fe	56	103	1	He	19.179	18.6	188216	15.6	50	
Co	59	103	1	He	0.002	119.9	94	28.7	1	
Ni	60	103	1	He	-0.164	-5.3	366	7.8	2	
Cu	63	103	1	He	-0.268	-2.2	1603	2.3	2	
Zn	66	103	1	He	-0.230	-30.3	1076	12.5	20	
As	75	103	1	He	0.036	50.1	185	10.0	2	
Se	78	103	1	He	0.061	45.4	78	3.5	2	
Sr	88	103	1	He	-0.003	-91.0	123	18.9	10	
Mo	95	103	1	He	0.602	20.8	2948	17.0	2	
Ag	107	103	1	He	0.007	25.7	183	14.2	0.2	
Cd	111	103	1	He	0.051	120.3	1853	7.1	0.2	
Sn	118	115	1	He	0.257	21.1	2711	10.6	10	
Sb	123	115	1	He	0.323	23.5	2829	13.7	1	
Ba	137	115	1	He	0.003	172.0	62	27.5	5	
W	182	209	1	He	0.756	17.2	17277	10.8	10	
Tl	205	209	1	He	0.022	22.0	940	18.4	0.5	
Pb	208	209	1	He	0.027	14.2	3134	5.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1814179	0.20	1729956	104.87	30	120	
Sc	45	1	He	1060994	1.09	1045873	101.45	30	120	
Sc	45	2	NoGas	8430761	0.82	8041241	104.84	30	120	
Rh	103	1	He	3113265	1.52	3067946	101.48	30	120	
In	115	1	He	1994175	1.82	1978772	100.78	30	120	
Tb	159	1	He	5087015	0.96	5013529	101.47	30	120	
Ho	165	1	He	5159960	1.45	5115781	100.86	30	120	
Bi	209	1	He	3658598	1.02	3723643	98.25	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1959555
Data File Name	067CRIA.d
Data Path Name	D:\Analytical Runs\I10042815C.b
Acq Date Time	2015-04-28T15:42:03-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

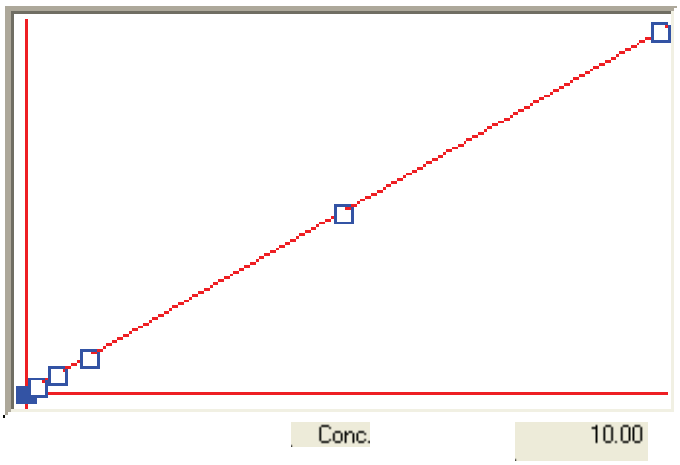
QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.956	0.956	7.167	4760	7.60	1	95.6	69.5	130.5	
B	11	2	NoGas	21.421	21.421	3.660	74442	1.90	20	107.1	69.5	130.5	
Na	23	1	He	1064.401	1064.401	1.011	2224686	0.83	1000	106.4	69.5	130.5	
Mg	24	1	He	1084.735	1084.735	1.023	1273021	0.34	1000	108.5	69.5	130.5	
Al	27	1	He	51.833	51.833	3.096	35462	1.86	50	103.7	69.5	130.5	
K	39	1	He	1093.903	1093.903	0.275	1338525	1.16	1000	109.4	69.5	130.5	
Ca	44	1	He	1028.541	1028.541	1.165	66536	0.19	1000	102.9	69.5	130.5	
Ti	47	1	He	10.429	10.429	4.764	3609	4.32	10	104.3	69.5	130.5	
V	51	1	He	5.105	5.105	2.644	44112	3.58	5	102.1	69.5	130.5	
Cr	52	1	He	2.138	2.138	0.680	24778	1.09	2	106.9	69.5	130.5	
Mn	55	1	He	5.196	5.196	2.939	42964	2.03	5	103.9	69.5	130.5	
Fe	56	1	He	105.844	105.844	0.719	1068865	0.80	100	105.8	69.5	130.5	
Co	59	1	He	1.046	1.046	1.699	15123	0.29	1	104.6	69.5	130.5	
Ni	60	1	He	1.949	1.949	1.266	7812	2.12	2	97.5	69.5	130.5	
Cu	63	1	He	1.869	1.869	4.538	21437	2.25	2	93.5	69.5	130.5	
Zn	66	1	He	21.016	21.016	3.017	41120	1.57	20	105.1	69.5	130.5	
As	75	1	He	5.204	5.204	0.675	6773	0.76	5	104.1	69.5	130.5	
Se	78	1	He	5.441	5.441	5.159	818	3.81	5	108.8	69.5	130.5	
Sr	88	1	He	9.996	9.996	1.771	105288	0.85	10	100.0	69.5	130.5	
Mo	95	1	He	10.457	10.457	1.376	50507	0.53	10	104.6	69.5	130.5	
Ag	107	1	He	1.067	1.067	2.393	16584	2.59	1	106.7	69.5	130.5	
Cd	111	1	He	1.117	1.117	3.957	4933	2.12	1	111.7	69.5	130.5	
Sn	118	1	He	10.065	10.065	2.113	68367	1.88	10	100.6	69.5	130.5	
Sb	123	1	He	2.012	2.012	3.095	13604	2.53	2	100.6	69.5	130.5	
Ba	137	1	He	5.068	5.068	1.239	15567	0.22	5	101.4	69.5	130.5	
W	182	1	He	9.439	9.439	0.861	161509	0.80	10	94.4	69.5	130.5	
Tl	205	1	He	1.878	1.878	3.006	75340	2.08	2	93.9	69.5	130.5	
Pb	208	1	He	1.051	1.051	2.711	56430	1.71	1	105.1	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2102247	4.47	1729956	121.52	30	120	ISTD Failed
Sc	45	1	He	1262525	1.31	1045873	120.71	30	120	ISTD Failed
Sc	45	2	NoGas	9744924	4.45	8041241	121.19	30	120	ISTD Failed
Rh	103	1	He	3410744	1.42	3067946	111.17	30	120	
In	115	1	He	2175483	1.18	1978772	109.94	30	120	
Tb	159	1	He	5381724	1.29	5013529	107.34	30	120	
Ho	165	1	He	5435650	0.87	5115781	106.25	30	120	
Bi	209	1	He	3863084	0.95	3723643	103.74	30	120	

Protocol: Hg-7471A



Linear

Calibrated

Accepted

A

B 2.28718e-4

C -9.49840e-3

Rhc .999998

Accepted Date: 21-Apr-15 08:29

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
01	.00000	.0040	.0040	59	1	59				
02	.20000	.1989	-.0011	911	0%	911				
03	.50000	.4893	-.0107	2181	0%	2181				
04	1.0000	1.000	.0003	4416	0%	4415				
05	5.0000	5.014	.0141	21964	0%	21964				
06	10.000	9.993	-.0065	43736	0%	43735				
07										
08										
09										
10										

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Standard: 1 Rep: 1				Seq: 1		08:18:41 21 Apr 15			HG
Hg	.0000	ppb	59						
*** Standard: 2 Rep: 1				Seq: 2		08:21:29 21 Apr 15			HG
Hg	.2000	ppb	911						
*** Standard: 3 Rep: 1				Seq: 3		08:23:16 21 Apr 15			HG
Hg	.5000	ppb	2181						
*** Standard: 4 Rep: 1				Seq: 4		08:25:23 21 Apr 15			HG
Hg	1.000	ppb	4415						
*** Standard: 5 Rep: 1				Seq: 5		08:27:15 21 Apr 15			HG
Hg	5.000	ppb	21964						
*** Standard: 6 Rep: 1				Seq: 6		08:29:22 21 Apr 15			HG
Hg	10.00	ppb	43735						

*** Check Standard: 2 Ck2ICV Seq: 7 08:31:40 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		94.60	4.730	5.000	ppb	.0000

*** Check Standard: 3 Ck3ICB Seq: 8 08:33:39 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		^^^^^^	-.0532	.0000	ppb	.0000

*** Check Standard: 4 Ck4CRA\MRL Seq: 9 08:35:28 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.06	.1961	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 10 08:52:19 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.3	5.066	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 11 08:54:15 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0559	.2400	ppb	.0000

*** Sample ID:				Seq: 12	08:56:01 21 Apr 15		HG
			mb 240-177025/1-a				
Hg	-.0017	ppb	.0000	-.0017			
*** Sample ID:				Seq: 13	08:57:47 21 Apr 15		HG
			lcs 240-177025/2-a				
Hg	5.042	ppb	.0000	5.042			
*** Sample ID:				Seq: 14	09:00:26 21 Apr 15		HG
			180-38961-c-1-a				
Hg	12.64 H	ppb	.0000	12.64			
*** Sample ID:				Seq: 15	09:02:26 21 Apr 15		HG
			180-38961-c1b ms@10				
Hg	15.17 H	ppb	.0000	15.17			
*** Sample ID:				Seq: 16	09:04:34 21 Apr 15		HG
			180-38961c1c msd@10				
Hg	14.17 H	ppb	.0000	14.17			

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:				Seq: 17		09:07:30 21 Apr 15			HG
				180-38961-c-2-a@10					
Hg	13.09 H	ppb	.0000	13.09					
*** Sample ID:				Seq: 18		09:09:38 21 Apr 15			HG
				180-38961-c-17-a@10					
Hg	32.45 H	ppb	.0000	32.45					
*** Sample ID:				Seq: 19		09:12:05 21 Apr 15			HG
				180-38961-c-18-a@10					
Hg	69.17 H	ppb	.0000	69.17					
*** Sample ID:				Seq: 20		09:14:43 21 Apr 15			HG
				180-38961-c-19-a@10					
Hg	53.94 H	ppb	.0000	53.94					
*** Sample ID:				Seq: 21		09:17:25 21 Apr 15			HG
				180-38961-c-20-a@10					
Hg	83.65 H	ppb	.0000	83.65					
*** Check Standard: 6 Ck6CCV				Seq: 22		09:19:35 21 Apr 15			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		94.18	4.709	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB				Seq: 23		09:21:31 21 Apr 15			HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg		.0035	.2400	ppb	.0000				
*** Sample ID:				Seq: 24		09:23:50 21 Apr 15			HG
				180-38890-b-11-a@10					
Hg	7.914	ppb	.0000	7.914					
*** Sample ID:				Seq: 25		09:25:57 21 Apr 15			HG
				180-38890-b-12-a@10					
Hg	8.252	ppb	.0000	8.252					
*** Sample ID:				Seq: 26		09:27:55 21 Apr 15			HG
				180-38841-b-9-a@10					
Hg	6.572	ppb	.0000	6.572					
*** Sample ID:				Seq: 27		09:30:11 21 Apr 15			HG
				180-38841-b-10-a@10					
Hg	8.294	ppb	.0000	8.294					
*** Sample ID:				Seq: 28		09:32:19 21 Apr 15			HG
				180-38841-b-11-a@10					
Hg	3.580	ppb	.0000	3.580					
*** Sample ID:				Seq: 29		09:34:39 21 Apr 15			HG
				180-38841-b-12-a@10					
Hg	.0902	ppb	.0000	.0902					
*** Sample ID:				Seq: 30		09:36:40 21 Apr 15			HG
				180-38394-c-1-a@10					
Hg	28.35 H	ppb	.0000	28.35					
*** Sample ID:				Seq: 31		09:39:02 21 Apr 15			HG
				180-38618-b-6-a@10					
Hg	1.611	ppb	.0000	1.611					
*** Sample ID:				Seq: 32		09:40:54 21 Apr 15			HG
				180-38392-b-1-b@10					
Hg	4.541	ppb	.0000	4.541					

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 33 09:42:46 21 Apr 15 HG
180-38392-b-2-b@10

Hg	11.34 H	ppb	.0000	11.34				

*** Check Standard: 6 Ck6CCV Seq: 34 09:45:04 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.6	5.080	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 35 09:47:03 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0626	.2400	ppb	.0000

*** Sample ID: Seq: 36 09:48:49 21 Apr 15 HG
180-38392-b-5-b@10

Hg	10.94 H	ppb	.0000	10.94				

*** Sample ID: Seq: 37 09:51:50 21 Apr 15 HG
240-49430-a-1-a

Hg	.1870	ppb	.0000	.1870				

*** Sample ID: Seq: 38 09:53:49 21 Apr 15 HG
240-49430-a-2-a

Hg	.2913	ppb	.0000	.2913				

*** Sample ID: Seq: 39 09:55:36 21 Apr 15 HG
240-49430-a-3-a

Hg	.0228	ppb	.0000	.0228				

*** Check Standard: 6 Ck6CCV Seq: 40 09:57:23 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.3	5.267	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 41 09:59:43 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0411	.2400	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 42 10:02:14 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.8	5.239	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 43 10:04:21 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0287	.2400	ppb	.0000

*** Sample ID: Seq: 44 10:06:21 21 Apr 15 HG
mb 240-177100/1-a

Hg	.0266	ppb	.0000	.0266				

*** Sample ID: Seq: 45 10:08:19 21 Apr 15 HG
lcs 240-177100/2-a

Hg	5.037	ppb	.0000	5.037				

*** Sample ID: Seq: 46 10:11:08 21 Apr 15 HG
240-49422-h-1-d

Hg	.0260	ppb	.0000	.0260				

*** Sample ID: Seq: 47 10:13:08 21 Apr 15 HG
240-49422-h-1-e ms

Hg	1.307	ppb	.0000	1.307				

*** Sample ID: Seq: 48 10:15:05 21 Apr 15 HG
240-49422-h-1-f msd

Hg	1.047	ppb	.0000	1.047				

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 49 10:17:02 21 Apr 15 HG
240-49422-f-2-b
Hg .0269 ppb .0000 .0269

*** Sample ID: Seq: 50 10:18:50 21 Apr 15 HG
240-49422-g-3-b
Hg .2076 ppb .0000 .2076

*** Sample ID: Seq: 51 10:20:40 21 Apr 15 HG
240-49422-f-4-b
Hg .1595 ppb .0000 .1595

*** Sample ID: Seq: 52 10:23:18 21 Apr 15 HG
240-49422-h-5-b
Hg .0616 ppb .0000 .0616

*** Sample ID: Seq: 53 10:25:16 21 Apr 15 HG
240-49422-h-7-b
Hg .0781 ppb .0000 .0781

*** Check Standard: 6 Ck6CCV Seq: 54 10:27:02 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.2	5.158	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 55 10:29:00 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.1213	.2400	ppb	.0000

*** Sample ID: Seq: 56 10:31:38 21 Apr 15 HG
240-49422-h-8-b
Hg .0683 ppb .0000 .0683

*** Sample ID: Seq: 57 10:33:40 21 Apr 15 HG
240-49422-g-9-b
Hg .2078 ppb .0000 .2078

*** Sample ID: Seq: 58 10:35:58 21 Apr 15 HG
240-49422-g-10-b
Hg .0632 ppb .0000 .0632

*** Sample ID: Seq: 59 10:38:06 21 Apr 15 HG
240-49422-f-13-b
Hg .0820 ppb .0000 .0820

*** Sample ID: Seq: 60 10:40:04 21 Apr 15 HG
240-49422-f-14-b
Hg .0591 ppb .0000 .0591

*** Sample ID: Seq: 61 10:42:06 21 Apr 15 HG
240-49422-b-15-b
Hg .0710 ppb .0000 .0710

*** Sample ID: Seq: 62 10:44:03 21 Apr 15 HG
240-49419-b-13-b
Hg .0296 ppb .0000 .0296

*** Sample ID: Seq: 63 10:45:51 21 Apr 15 HG
240-49419-b-14-b
Hg .0424 ppb .0000 .0424

*** Sample ID: Seq: 64 10:47:41 21 Apr 15 HG
240-49419-b-15-b
Hg .0390 ppb .0000 .0390

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID:				Seq: 65		10:50:11 21 Apr 15			HG
				240-49419-b-16-b					
Hg	.0834	ppb	.0000	.0834					
*** Check Standard: 6 Ck6CCV				Seq: 66		10:52:48 21 Apr 15			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		103.2	5.158	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB				Seq: 67		10:54:47 21 Apr 15			HG
Line	Flag	Found	Range(+/-)	Units		SD/RSD			
Hg		-.0706	.2400	ppb		.0000			
*** Sample ID:				Seq: 68		10:56:57 21 Apr 15			HG
				240-49419-b-17-b					
Hg	.0472	ppb	.0000	.0472					
*** Sample ID:				Seq: 69		10:58:45 21 Apr 15			HG
				240-49419-b-18-b					
Hg	.0205	ppb	.0000	.0205					
*** Sample ID:				Seq: 70		11:00:42 21 Apr 15			HG
				240-49419-b-19-b					
Hg	.0568	ppb	.0000	.0568					
*** Sample ID:				Seq: 71		11:02:31 21 Apr 15			HG
				240-49419-b-20-b					
Hg	.0916	ppb	.0000	.0916					
*** Sample ID:				Seq: 72		11:04:48 21 Apr 15			HG
				mb 240-177137/1-a					
Hg	-.0003	ppb	.0000	-.0003					
*** Sample ID:				Seq: 73		11:06:49 21 Apr 15			HG
				lcs 240-177137/2-a					
Hg	4.947	ppb	.0000	4.947					
*** Sample ID:				Seq: 74		11:08:52 21 Apr 15			HG
				240-49171-a-3-g					
Hg	.0459	ppb	.0000	.0459					
*** Sample ID:				Seq: 75		11:10:41 21 Apr 15			HG
				240-49171-a-3-h du					
Hg	.0774	ppb	.0000	.0774					
*** Sample ID:				Seq: 76		11:12:32 21 Apr 15			HG
				240-49171-a-3-i ms					
Hg	1.069	ppb	.0000	1.069					
*** Sample ID:				Seq: 77		11:14:25 21 Apr 15			HG
				240-49172-a-9-c					
Hg	.1117	ppb	.0000	.1117					
*** Check Standard: 6 Ck6CCV				Seq: 78		11:16:14 21 Apr 15			HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		103.3	5.163	5.000	ppb	.0000			
*** Check Standard: 1 Ck1CCB				Seq: 79		11:18:13 21 Apr 15			HG
Line	Flag	Found	Range(+/-)	Units		SD/RSD			
Hg		-.0690	.2400	ppb		.0000			
*** Sample ID:				Seq: 80		11:20:00 21 Apr 15			HG
				240-49172-a-10-c					
Hg	.2137	ppb	.0000	.2137					

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 81	11:21:48 21 Apr 15	HG		
				240-49173-a-1-c				
Hg	.2304	ppb	.0000	.2304				
*** Sample ID:				Seq: 82	11:23:36 21 Apr 15	HG		
				240-49173-a-2-c				
Hg	.2602	ppb	.0000	.2602				
*** Sample ID:				Seq: 83	11:25:38 21 Apr 15	HG		
				240-49173-a-3-c				
Hg	.2483	ppb	.0000	.2483				
*** Sample ID:				Seq: 84	11:27:26 21 Apr 15	HG		
				240-49173-a-4-c				
Hg	.2053	ppb	.0000	.2053				
*** Sample ID:				Seq: 85	11:29:35 21 Apr 15	HG		
				240-49233-a-4-c				
Hg	.3301	ppb	.0000	.3301				
*** Sample ID:				Seq: 86	11:31:23 21 Apr 15	HG		
				240-49233-a-6-c				
Hg	.2871	ppb	.0000	.2871				
*** Sample ID:				Seq: 87	11:33:21 21 Apr 15	HG		
				240-49233-a-8-c				
Hg	.3116	ppb	.0000	.3116				
*** Sample ID:				Seq: 88	11:35:30 21 Apr 15	HG		
				180-38618-c-1-b@10				
Hg	1.198	ppb	.0000	1.198				
*** Sample ID:				Seq: 89	11:37:23 21 Apr 15	HG		
				180-38618-c-2-b@10				
Hg	2.510	ppb	.0000	2.510				
*** Check Standard: 6 Ck6CCV				Seq: 90	11:39:30 21 Apr 15	HG		
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		104.5	5.226	5.000	ppb	.0000		
*** Check Standard: 1 Ck1CCB				Seq: 91	11:41:28 21 Apr 15	HG		
Line	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg		-.0559	.2400	ppb	.0000			
*** Sample ID:				Seq: 92	11:43:26 21 Apr 15	HG		
				180-38618-c-5-b@10				
Hg	16.31 H	ppb	.0000	16.31				
*** Sample ID:				Seq: 93	11:45:50 21 Apr 15	HG		
				180-38618-b-7-b@10				
Hg	31.17 H	ppb	.0000	31.17				
*** Sample ID:				Seq: 94	11:48:00 21 Apr 15	HG		
				180-38618-b-8-b@10				
Hg	45.04 H	ppb	.0000	45.04				
*** Sample ID:				Seq: 95	11:51:03 21 Apr 15	HG		
				180-38618-b-9-b@10				
Hg	5.506	ppb	.0000	5.506				
*** Sample ID:				Seq: 96	11:53:01 21 Apr 15	HG		
				180-38618-b-10-b@10				
Hg	1.102	ppb	.0000	1.102				

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 97 11:54:49 21 Apr 15 HG
190-7098-a-1-d
Hg -.0061 ppb .0000 -.0061

*** Sample ID: Seq: 98 11:56:42 21 Apr 15 HG
190-7098-a-2-b
Hg .0404 ppb .0000 .0404

*** Check Standard: 4 Ck4CRA\MRL Seq: 99 11:58:31 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		97.60	.1952	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 100 12:00:19 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.2	5.209	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 101 12:02:27 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0433	.2400	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 102 12:06:00 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.7	5.236	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 103 12:07:56 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0811	.2400	ppb	.0000

*** Sample ID: Seq: 104 12:09:46 21 Apr 15 HG
180-38841-b-12-a
Hg 1.167 ppb .0000 1.167

*** Sample ID: Seq: 105 12:11:39 21 Apr 15 HG
180-38961-c-1-a@20
Hg 6.395 ppb .0000 6.395

*** Sample ID: Seq: 106 12:13:58 21 Apr 15 HG
180-38961-c1b ms@20
Hg 7.656 ppb .0000 7.656

*** Sample ID: Seq: 107 12:16:09 21 Apr 15 HG
180-38961c1c msd@20
Hg 7.332 ppb .0000 7.332

*** Sample ID: Seq: 108 12:18:07 21 Apr 15 HG
180-38961-c-2-a@20
Hg 6.528 ppb .0000 6.528

*** Sample ID: Seq: 109 12:20:27 21 Apr 15 HG
180-38392-b-2-b@20
Hg 2.224 ppb .0000 2.224

*** Sample ID: Seq: 110 12:22:20 21 Apr 15 HG
180-38392-b-5-b@20
Hg 5.622 ppb .0000 5.622

*** Sample ID: Seq: 111 12:24:18 21 Apr 15 HG
180-38394-c-1-a@50
Hg 1.605 ppb .0000 1.605

*** Sample ID: Seq: 112 12:26:17 21 Apr 15 HG
180-38961-c-17-a@100
Hg 3.425 ppb .0000 3.425

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 113 12:28:35 21 Apr 15 HG
180-38961-c-18-a@100

Hg	7.682	ppb	.0000	7.682

*** Check Standard: 6 Ck6CCV Seq: 114 12:31:04 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.5	5.224	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 115 12:33:01 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0834	.2400	ppb	.0000

*** Sample ID: Seq: 116 12:34:50 21 Apr 15 HG
180-38961-c-19-a@100

Hg	5.616	ppb	.0000	5.616

*** Sample ID: Seq: 117 12:37:20 21 Apr 15 HG
180-38961-c-20-a@200

Hg	4.816	ppb	.0000	4.816

*** Sample ID: Seq: 118 12:39:19 21 Apr 15 HG
180-38618-c-5-b@50

Hg	3.404	ppb	.0000	3.404

*** Sample ID: Seq: 119 12:41:21 21 Apr 15 HG
180-38618-b-7-b@100

Hg	3.210	ppb	.0000	3.210

*** Sample ID: Seq: 120 12:43:13 21 Apr 15 HG
180-38618-b-8-b@100

Hg	4.663	ppb	.0000	4.663

*** Check Standard: 6 Ck6CCV Seq: 121 12:45:37 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.9	5.294	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 122 12:47:53 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0253	.2400	ppb	.0000

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 6 Ck6CCV Seq: 123 13:13:02 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		106.1	5.304	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 124 13:14:59 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0697	.2400	ppb	.0000

*** Sample ID: Seq: 125 13:16:49 21 Apr 15 HG
mb 240-177215/1-a

Hg	.0234	ppb	.0000	.0234

*** Sample ID: Seq: 126 13:19:05 21 Apr 15 HG
lcs 240-177215/2-a

Hg	5.337	ppb	.0000	5.337

*** Sample ID: Seq: 127 13:21:03 21 Apr 15 HG
680-111445-a-3-r

Hg	-.0303	ppb	.0000	-.0303

*** Sample ID: Seq: 128 13:22:53 21 Apr 15 HG
680-111445-a-3-s ms

Hg	1.057	ppb	.0000	1.057

*** Sample ID: Seq: 129 13:24:59 21 Apr 15 HG
680-111445-a-3-t msd

Hg	1.062	ppb	.0000	1.062

*** Sample ID: Seq: 130 13:26:49 21 Apr 15 HG
680-111445-a-2-m

Hg	-.0479	ppb	.0000	-.0479

*** Sample ID: Seq: 131 13:28:56 21 Apr 15 HG
680-111445-a-4-h

Hg	-.0022	ppb	.0000	-.0022

*** Sample ID: Seq: 132 13:30:55 21 Apr 15 HG
680-111445-a-5-h

Hg	.6170	ppb	.0000	.6170

*** Sample ID: Seq: 133 13:32:58 21 Apr 15 HG
680-111445-a-6-h

Hg	.0664	ppb	.0000	.0664

*** Sample ID: Seq: 134 13:34:45 21 Apr 15 HG
180-38392-b-6-b@10

Hg	6.166	ppb	.0000	6.166

*** Check Standard: 6 Ck6CCV Seq: 135 13:36:42 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.2	5.208	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 136 13:38:39 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0708	.2400	ppb	.0000

*** Sample ID: Seq: 137 13:40:37 21 Apr 15 HG
180-38392-c-7-b@10

Hg	7.965	ppb	.0000	7.965

*** Sample ID: Seq: 138 13:42:39 21 Apr 15 HG
180-38392-b-8-b@10

Hg	1.060	ppb	.0000	1.060

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 139 13:44:45 21 Apr 15 HG
180-38667-c-6-b@10
Hg 8.623 ppb .0000 8.623

*** Sample ID: Seq: 140 13:47:03 21 Apr 15 HG
180-38669-c-1-a@10
Hg 5.104 ppb .0000 5.104

*** Sample ID: Seq: 141 13:49:01 21 Apr 15 HG
180-38669-c-31-a@10
Hg 16.94 H ppb .0000 16.94

*** Sample ID: Seq: 142 13:51:19 21 Apr 15 HG
180-38669-c-32-a@10
Hg 19.27 H ppb .0000 19.27

*** Sample ID: Seq: 143 13:53:32 21 Apr 15 HG
180-38669-c-33-a@10
Hg 22.09 H ppb .0000 22.09

*** Sample ID: Seq: 144 13:55:45 21 Apr 15 HG
180-38669-c-34-a@10
Hg 31.49 H ppb .0000 31.49

*** Sample ID: Seq: 145 13:58:06 21 Apr 15 HG
180-38669-a-35-a@10
Hg 25.34 H ppb .0000 25.34

*** Sample ID: Seq: 146 14:00:13 21 Apr 15 HG
180-38669-b-36-a@10
Hg 21.91 H ppb .0000 21.91

*** Check Standard: 6 Ck6CCV Seq: 147 14:02:22 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.3	5.163	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 148 14:04:41 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0276	.2400	ppb	.0000

*** Sample ID: Seq: 149 14:06:28 21 Apr 15 HG
180-38669-b-37-a@10
Hg 18.03 H ppb .0000 18.03

*** Sample ID: Seq: 150 14:08:37 21 Apr 15 HG
180-38669-b-38-a@10
Hg 15.77 H ppb .0000 15.77

*** Sample ID: Seq: 151 14:10:37 21 Apr 15 HG
180-38394-b-16-a@10
Hg 34.90 H ppb .0000 34.90

*** Sample ID: Seq: 152 14:12:37 21 Apr 15 HG
180-38394-b-17-a@10
Hg 39.27 H ppb .0000 39.27

*** Check Standard: 6 Ck6CCV Seq: 153 14:14:55 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.7	5.087	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 154 14:16:54 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0877	.2400	ppb	.0000

Line Conc. Units SD/RSD 1 2 3 4 5

*** Check Standard: 6 Ck6CCV Seq: 155 14:30:17 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.2	5.162	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 156 14:32:14 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0802	.2400	ppb	.0000

*** Sample ID: Seq: 157 14:34:03 21 Apr 15 HG
180-38669-c-31-a@50

Hg	3.315	ppb	.0000	3.315

*** Sample ID: Seq: 158 14:36:02 21 Apr 15 HG
180-38669-c-32-a@50

Hg	3.871	ppb	.0000	3.871

*** Sample ID: Seq: 159 14:37:51 21 Apr 15 HG
180-38669-c-33-a@50

Hg	4.268	ppb	.0000	4.268

*** Sample ID: Seq: 160 14:39:50 21 Apr 15 HG
180-38669-c-34-a@50

Hg	6.279	ppb	.0000	6.279

*** Sample ID: Seq: 161 14:41:59 21 Apr 15 HG
180-38669-a-35-a@50

Hg	4.924	ppb	.0000	4.924

*** Sample ID: Seq: 162 14:44:06 21 Apr 15 HG
180-38669-b-36-a@50

Hg	4.303	ppb	.0000	4.303

*** Sample ID: Seq: 163 14:46:14 21 Apr 15 HG
180-38669-b-37-a@50

Hg	3.579	ppb	.0000	3.579

*** Sample ID: Seq: 164 14:48:16 21 Apr 15 HG
180-38669-b-38-a@50

Hg	3.069	ppb	.0000	3.069

*** Sample ID: Seq: 165 14:50:16 21 Apr 15 HG
180-38394-b-16-a@50

Hg	7.262	ppb	.0000	7.262

*** Sample ID: Seq: 166 14:52:14 21 Apr 15 HG
180-38394-b-17-a@50

Hg	7.886	ppb	.0000	7.886

*** Check Standard: 6 Ck6CCV Seq: 167 14:54:13 21 Apr 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.5	5.124	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 168 14:56:09 21 Apr 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0838	.2400	ppb	.0000

TestAmerica North Canton Hg Data Review Checklist

Run/Project Information:

Circle Methods used: 7470A / 245.1 (7471) Batch: 177294

Run Date: 4-21-15 Analyst: B. Walpole Instrument: #4

Review Items				
A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRA run?	✓			✓
B. Sample Results				
1. Were samples with concentrations > high calibration standard diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/ Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?		✓		✓
4. MSD or DU run at required frequency and RPD within SOP limits?		✓		✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current IDL/MDL data on file?	✓			✓
3. Calculations and Transcription checked for error?	✓			✓
4. All client/project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Level I

Analyst: B Walpole Date/Time: 4-21-15 Reviewed from 8:18 to 14:56

Analyst: _____ Date/Time: _____ Reviewed from _____ to _____

Comments: _____

Level II

Reviewer: [signature] Date/Time: 04/22/2015 Reviewed from 08:18 to 14:56

Reviewer: _____ Date/Time: _____ Reviewed from _____ to _____

Comments _____

Curve Date 4-20-15 Curve Time 8:28-8:58 DILUTION H20 00034

Revised 11/29/2012

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Batch Number: 177128 Batch Start Date: 04/20/15 12:52 Batch Analyst: Elshaw, Dale

Batch Method: 3050B Batch End Date: 04/20/15 17:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	MT1TO1HN03 00949	MTH202 00042	MTICPMS2 00020
MB 240-177128/1		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	
LCS 240-177128/2		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	1 mL
240-49173-A-1-A	079SS-0347M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.13 g	100 mL	10 mL	10 mL	
240-49173-A-2-A	079SS-0348M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.24 g	100 mL	10 mL	10 mL	
240-49173-A-3-A	079SS-0349M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.16 g	100 mL	10 mL	10 mL	
240-49173-A-4-A	079SS-0350M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.25 g	100 mL	10 mL	10 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICPMSA 00022	MTICPMSB 00022	MTTMHCL 00063	MTTMHNO3 00054		
MB 240-177128/1		3050B, 6020				10 mL	5 mL		
LCS 240-177128/2		3050B, 6020		1 mL	1 mL	10 mL	5 mL		
240-49173-A-1-A	079SS-0347M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49173-A-2-A	079SS-0348M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49173-A-3-A	079SS-0349M-0001-SO	3050B, 6020	T			10 mL	5 mL		
240-49173-A-4-A	079SS-0350M-0001-SO	3050B, 6020	T			10 mL	5 mL		

Batch Notes	
Balance ID	b039
Blank Soil Lot Number	K565-4i009
Filter Paper Lot Number	9605292
Hot Block ID number	a1 a2 c3
Pipette ID	64-66
Digestion Tube/Cup Lot #	150204

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Batch Number: 177128 Batch Start Date: 04/20/15 12:52 Batch Analyst: Elshaw, Dale

Batch Method: 3050B Batch End Date: 04/20/15 17:30

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Batch Number: 177030 Batch Start Date: 04/20/15 08:28 Batch Analyst: Walpole, Barbara

Batch Method: 7471A Batch End Date: 04/20/15 08:58

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 01001	MTHGCALW 00885	MTHgStd 00016	MTKMN04W 00081
ICV 240-177030/7		7471A, 7471A		100 mL	100 mL	5 mL		0.5 mL	15 mL
ICB 240-177030/8		7471A, 7471A		100 mL	100 mL	5 mL			15 mL
CRA 240-177030/9		7471A, 7471A		100 mL	100 mL	5 mL	0.2 mL		15 mL
CCV 240-177030/10		7471A, 7471A		100 mL	100 mL	5 mL	5 mL		15 mL
CCB 240-177030/11		7471A, 7471A		100 mL	100 mL	5 mL			15 mL

Batch Notes	
Hot Block ID number	C1
Pipette ID	59L-64-66
Digestion Tube/Cup Lot #	1408268

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Batch Number: 177137 Batch Start Date: 04/20/15 15:40 Batch Analyst: Elshaw, Dale

Batch Method: 7471A Batch End Date: 04/20/15 16:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 01002	MTHGCALW 00885	MTKMN04W 00081	
MB 240-177137/1		7471A, 7471A		0.60 g	100 mL	5 mL		15 mL	
LCS 240-177137/2		7471A, 7471A		0.60 g	100 mL	5 mL	5 mL	15 mL	
240-49173-A-1-A	079SS-0347M-0001 -SO	7471A, 7471A	T	0.59 g	100 mL	5 mL		15 mL	
240-49173-A-2-A	079SS-0348M-0001 -SO	7471A, 7471A	T	0.59 g	100 mL	5 mL		15 mL	
240-49173-A-3-A	079SS-0349M-0001 -SO	7471A, 7471A	T	0.51 g	100 mL	5 mL		15 mL	
240-49173-A-4-A	079SS-0350M-0001 -SO	7471A, 7471A	T	0.66 g	100 mL	5 mL		15 mL	

Batch Notes	
Balance ID	b039
Blank Soil Lot Number	K565-4i009
Hot Block ID number	c2 c1
Pipette ID	59L-64-66
Digestion Tube/Cup Lot #	1408268

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Project: Ravenna Army Ammunition Plant

Client Sample ID	Lab Sample ID
079SS-0347M-0001-SO	240-49173-1
079SS-0348M-0001-SO	240-49173-2
079SS-0349M-0001-SO	240-49173-3
079SS-0350M-0001-SO	240-49173-4

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49173-1

SDG Number: CC RVAAP-79 Rt 80 Tank Farm

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture LOQ Date: 01/28/2010 09:24

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49173-1

SDG Number: CC RVAAP-79 Rt 80 Tank Farm

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	XRL (mg/L)	
Percent Moisture		10	
Percent Solids		10	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			10:47																										
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240-49173-1	1	T	10:47	X	X																								
240-49173-2	1	T	10:47	X	X																								
240-49173-3 DU	1	T	10:47	X	X																								
240-49173-3	1	T	16:38	X	X																								
240-49173-4	1	T	16:38	X	X																								
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			16:38	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 04/15/2015 10:47 End Date: 04/15/2015 17:54

Lab Sample Id	D/F	Type	Time	Analytes																									
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ZZZZZZ			17:48																										
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Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49173-1

SDG No.: CC RVAAP-79 Rt 80 Tank Farm

Batch Number: 176546 Batch Start Date: 04/15/15 10:46 Batch Analyst: Matheny, Sarah

Batch Method: Moisture Batch End Date: 04/16/15 09:48

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-49173-A-1-A	079SS-0347M-0001-SO	Moisture	T	4.2418 g	17.1586 g	16.9697 g			
240-49173-A-2-A	079SS-0348M-0001-SO	Moisture	T	4.2418 g	17.2522 g	16.9760 g			
240-49173-A-3-A DU	079SS-0349M-0001-SO	Moisture	T	4.2418 g	11.4683 g	11.3079 g			
240-49173-A-3-A	079SS-0349M-0001-SO	Moisture	T	4.2418 g	12.4016 g	12.2178 g			
240-49173-A-4-A	079SS-0350M-0001-SO	Moisture	T	4.2418 g	19.3170 g	19.1273 g			

Batch Notes	
Balance ID	B047 No Unit
Date and Time Samples in Desiccator	4/15/15; 05:30
Date and Time Samples out of Desiccator	4/15/15; 10:15
Date samples were placed in the oven	4/15/2015
Oven Temp when samples are put in oven	103.1 Degrees C
Time samples were place in the oven	18:20
Date samples were removed from oven	4/16/15
Oven Temp when samples removed from oven	103.9 Degrees C
Time Samples were removed from oven	6:30
Oven ID	002
ID number of the thermometer	Tempguard Box-C #6

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS

240-49173 Chain of Custody

4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

Test America Project #: 24009157

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/8/2015	COC No: 002
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	1 of 1 COCs
33 Boston Post Rd. W	Analysis Turnaround Time			For Lab Use Only:
Marlborough, MA, 01752	☑CALENDAR DAYS ☐WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☐ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Rt 80 Tank Farm	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler: KP - FR

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW71471A/ Mercury	Sample Specific Notes:
079SS-0347M-0001-SO	6-Apr-15	1710	ISM	SO	1	N	N			X						X	
079SS-0348M-0001-SO	7-Apr-15	1510	ISM	SO	1	N	N			X						X	
079SS-0349M-0001-SO	7-Apr-15	0000	ISM	SO	1	N	N			X						X	
079SS-0350M-0001-SO	7-Apr-15	1205	ISM	SO	1	N	N			X						X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments: Samples with "M" denote ISM samples.

Custody Seals Intact: ☑Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company: ECC	Date/Time: 4/9/15 1243	Received by: R. Rolan	Company: TestAm	Date/Time: 4-9-15 / 243
Relinquished by:	Company: TestAm 4/9/15	Date/Time: 1625	Received by:	Company: TA	Date/Time: 4-9-15 1457
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

TestAmerica Canton Sample Receipt Form/Narrative Login # : 49173
Canton Facility

Client ECC Site Name

Cooler unpacked by:

Cooler Received on 4-9-15 Opened on 4.9.15

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off ~~TestAmerica Courier~~ Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box (Other)

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

~~IR GUN# A (CF +4.0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C ☑ See Multiple Cooler Form

~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 4 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? Yes (No)
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the sampler(s) clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC425511
12. Were VOAs on the COC? (Yes) No
13. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
14. Was a trip blank present in the cooler(s)? Trip Blank Lot # (Yes) No

Contacted PM Date by via Verbal Voice Mail Other

Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.

Time preserved: Preservative(s) added/Lot number(s):

TestAmerica Multiple Cooler Receipt Form/Narrative
Canton Facility

Login #: 49173

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
client	4	2.8	3.3	Ice
↓	↓	4.0	4.5	↓
		3.6	4.1	
		3.8	4.3	